

Minutes
MAFWA Annual Meeting
June 23 – June 26, 2019
Maumee Bay Lodge & Conference Center
Oregon, Ohio

Final Program – Exhibit 1
Sunday, June 23, 2019

MAFWA Executive Committee Meeting 5:00 pm

President's Welcome Reception (MAFWA) – Sponsored by Pheasants/Quail Forever
Jim Inglis made remarks

Hospitality Room – Sponsored by Bass Pro Shops

Monday, June 24, 2019

Breakfast – Sponsored by National Wild Turkey Federation
Ross Melinchuk made remarks.

GREETINGS and WELCOME to Ohio

Kendra Wecker – Welcome to Ohio

Honor Guard and Pledge of Allegiance

Kendra – Discuss topics, feel free to ask questions. Great events planned, known for wetlands, had a lot of rain and look good. Going to oldest duck club in the country tonight at Winous Point. Tomorrow to Howard Marsh, started talking about it 20 years ago, lot of negotiations and partners to the table, now on the ground. Opening had 10,000 people, has duck hunting, archery, kayaking, canoeing and walking on boardwalk and trail. We will go by state to directors. Thank you to all of the sponsors who have supported this conference, came in with record sponsorships (*PowerPoint of Sponsors - Exhibit 2*). Have special guests here, Ron Regan, AFWA; Ed Carter, President AFWA.

STATE HOT TOPICS (*State of State Reports - Exhibit 4*)

Kendra Wecker, Facilitator – Each state will give a short report.

Kendra Wecker, OH – (*McGee Marsh PowerPoint - Exhibit 3*) Thank State of Ohio staff who helped plan this. Wonderful wetland, McGee Marsh, have dike issue, 2015 weather blew out the dike, \$10 million needed to pay for the dike. Working on capital bill and get money from General Assembly, habitat severely damaged. High water and water pooled on properties. At same location, best birding areas, bird event (The Biggest Week in American Birding) put on tours and programs, 80,000 non-paying users coming to that area, just renting restrooms is expensive. Ohio Legacy Stamp can be purchased, and we try to guilt them into it, but some will, and some won't purchase it. Set up tent at boardwalk and talk about benefit of conservation, habitat and birds but what gets them is when you tell them you are paying for the toilets and they will buy the stamp. Use what messaging you can use. Like to see participants have a hunting, fishing, or trapping license or Legacy Stamp to come to the event but not there yet. Staff needs to be recognized too for those 10 days of work. New governor is conservation minded, he has dedicated money to H2O Ohio Initiative to clean up the water in Lake Erie; may have heard

about Toledo water crisis a few years ago. \$90 million is being dedicated for two years to go to three agencies, Department of Natural Resources, Department of Agriculture, and Department of EPA. For natural resources the majority will come to wildlife and will be focused on wetlands and wetland restoration in northwest Ohio. Other agencies focusing on agriculture runoffs and EPA on storm water reduction and sewer system improvements. Wetland team ready with a plan, have wetland chosen and trying to tie together to show public how to embrace wetlands. Ohio budget finished by June 30, have license fee increase for residents first time in 16 years for fishing, deer and turkey; attempted before in 2013, 2015 and 2017 but failed at all three. Expect increase in revenue of about \$4 million.

Kelly Hepler, SD – Have a new governor this year, first female in South Dakota history. Governor grew up on farm and ranch, runs lodge; was also congresswoman for eight years. Interesting to see, she talks about the family and what it means, this initiative, that drives her. First governor ever to talk about importance of hunting, fishing and trapping in inaugural speech. She talks about importance of pheasant hunting that drives South Dakota. Governor identified bounty program, had discussions on how to set that up; at same time trapping is lost art in South Dakota so wanted to get that going again. To go along with that we set up a live trap give-a-way, every family could have five, thought we would give away a few thousand traps. Opened on Saturday, exciting the interest it generated, in ten hours gave away 16,500 traps, cut back at \$1 million and cut back to three per family. Give \$10 per tail bounty of five species, with raccoons as primary. Most importantly it got people outside; used to identify species, target biology, not show statewide decrease of predators, but got kids live trapping. People don't like bounties and live trapping, Humane Society made me a target, teaching children to kill; an interesting conversation. We combined both programs with trapping education program and talk about conservation. Asked governor if it turned out the way she thought, and she wasn't sure. We are making sure we have habitat into the second century, cool things we are doing around that. You need money to drive habitat but also need people talking about it. Working lands program; Governor got about \$1 million from legislature so we are got 5,000 acres, working lands in five-year programs; can put livestock on there and graze, pay per acre, 10 acres up to 160 acres, working land and getting families engaged. Longer term program, every acre counts; never get enough money out of federal programs to truly to be in Soil Bank or CRP days, would need \$100 million, but gets landowners engaged, working with South Dakota State University on five-year, program parallels the working lands program and trying to show landowners to leave marginal habitat alone. When landowner comes in to borrow money, have conservation agronomist go with you to the bank who will explain your business plan and will provide more money for insurance and crop insurance. Long time look, 25-30 years down the road, so it makes sense to the family to do that and transfer down to that every acre counts; it is an exciting program.

Scott Loomans, WI – We also have a new governor who has a clean water initiative with drinking water focus. He has asked for new research staff and program funding for our side of the department also. It could have wildlife impact, run off management, nonpoint source pollution, legislative committee interested in agricultural runoff management. Our department is in the middle of that project so will see results. CWD continues to be a big part of what we do, one part of state where present since 2002, and some people are weary of working on the issues. People going through learning about it for the first time and are concerned for the first time, board members and legislators torn on which way to go. We will remind people that we have staff experts on this, systems in place for testing, surveillance permit areas; think we need to remind residents what we are already doing, that is the way to get through different views. Planning to hold a conference in Madison on July 24 and 25; inviting regional states and have eight so far. We want to learn what you are doing in your states and get some new direction on

CWD. First elk hunt last fall, tribes got five permits and state hunters got five permits; result of great partnership with Kentucky and RMEF. We believe we will have a self-sustaining program, should take care of itself and be a great success story. Lead nation on black bear harvest, have a new plan in place; new trout management plan, 11,000 trout streams, good extra water with increase of 3,000 miles of trout streams, ground water recharge is strong, have class one naturally reproducing trout streams, now high quality. Good walleye fishing and Great Lakes in good shape and water level is high.

Karen Waldrop, KY – No new governor, in place for three years. Pension plan in place, agency contribution used to be 34% match, went up to 84% and next year up over 100%, so employee that costs me \$50,000 in salary, that will cost me over \$100,000 per employee. Looking at new ways to combat that. Started conversations with partners but we need to look at options for getting things done for resources in Kentucky. Fixing pension is important but is going to be a challenge for our agency. Looking at restructuring and we just had a license fee increase in last couple of years, not an option right now. Looking outside normal hook and bullet, becoming something more than traditionally. Program coming up on one-year anniversary, check out Kentucky Wild, we have memberships and looking for sponsors; one of first large sponsors was a brewer. Memberships start at \$25 and up, with membership you get t-shirt, bandanna and things like that, but you get to support wildlife. Reaching out to non-consumptive users, let them know what we are doing for conservation in our state. Working on trying to get a fulfillment package and going to really start pushing the program. Asian carp is also a challenge, working with Tennessee on ideas and programs. New Kentucky fish center, public/private partnership, providing seed funds and will be distribution center for Asian Carp. Commercial fisherman will have place to sell the fish always. A lot of small fish, providing eight-cent subsidy to commercial fisherman for bringing in these fish. Working on experimental harvest methods to training commercial fisherman on the Ohio and in western Kentucky as well. Even put in a seven-ton flake ice machine for commercial fisherman, whatever we can do to incentivize people to come catch fish. Focus on lakes and into rivers as well. Partnering with USGS on sound barrier technology being implemented in Tennessee in Cumberland rivers to divert fish from coming up through locks and dams. Refocused efforts and put employees in critical species branch working on invasive species. Kentucky was last hold out on concurrent archery and crossbow seasons, started in 2006, was difficult but got this last year, first two weeks are archery only, then two weeks of crossbow. Had grassroots effort and some individuals formed an organization that came up through the process and moved that forward. Every time I go in front of legislators, I am running joke because it took a 2.5-hour meeting to get that regulation passed. Good relationship with legislators right now and working well together and have a lot of communication and meetings and engaged them on anything we are doing going forward, no surprises. Elk program is doing well and paying for itself, now had elk for 20 years in the state. Pigs are another thing and looking for advice on wild pigs, targeting populations and have numbers down, work with Farm Bureau, Dept of Ag and other nonprofits and groups on ways to educate our landowners on ways to get rid of pigs. Don't have strong hunting interest right now for pigs, looking at things both Tennessee and Missouri as far as legislation as next big move. Working on education side right now, looking for advice.

Ollie – It would be good for the benefit of the audience to have directors please introduce yourselves (introduced previous directors who spoke (Kelly Hepler, Scott Loomans and Karen Waldrop).

Dan Eischinger, MI – Came into role in January, returning to Department of Natural Resources, I worked there for 6-7 years previously, happy to be back. CWD talked about, state legislature

made general fund appropriations, which is unique in wildlife management. Got \$4.5 million focused on CWD research, working with Michigan State University, Bill Moritz working with Department of Natural Resources and set up research collaborative where we received a number of RFPs on critical research areas we want to focus on, making awards in next few months. Another \$2 million in governor's budget proposal to continue allocating research dollars towards CWD. Invite you to submit research proposals, then scale up information to all colleagues. Most of state game and wildlife areas are in southern part of state, state forests in northern 2/3 of state. We have about 340,000 acres in southern Michigan public land opportunities and 4-5 years ago started cooperatives program with Michigan United Conservation Club, Quality Deer Management Association and Pheasants Forever to do more private land wildlife management and make public land more productive, the state's ownership footprint is 95 percent private. Another wildlife cooperative was enrolled in that program and now we have under active management through that program, 360,000 acres in southern Michigan, surpassed public land with private land owners who are networked together. Doing thoughtful plan and conservation work for deer, turkey, and pheasants, working in pollinators too. Infrastructure challenges, roads and bridges in terrible shape, and infrastructure challenges in department as well. Our state agency has parks, celebrating 100th anniversary of park system; have 103 state park and recreation areas, 28 million visitors a year. Have a \$270 million back log of infrastructure work that needs to happen, no good way to pay for it or way to effectively argue for general funds. Thinking creatively on resolving that issue and expand presence for state parks in urban areas. DNR took over management of Bell Island State Park, in Detroit River half way between Michigan and Ontario and welcome about four million people a year and need to do \$90 million of work in that area. We have been scanning available options, have recreation bonding authority and having conversations with philanthropic community in southeast Michigan to leverage \$35 to \$40 million and match with endowment, and then get another third of funding from private and corporate donations, to get work done there, at end won't have to touch corpus. Long term business planning when we talk about developing recreation areas, easy to build a park, but when want to repair it has not been figured out. Trying to front load recreation development planning with long-term business planning and long-term forecasting of how we can solve 50 years of O&M without having to increase footprint; a creative way to tackle that problem using existing authority and capitalizing on partnerships we have built with philanthropic community.

Sara Pauley, MO – Finalized new strategic plan last year with three goals: 1) Take care of nature; a few challenges related to that. Feral hogs, 20 years ago when began to see increased populations, should have dealt with that, now have culture in entrenched in the Ozarks and some making money guiding hunts, now engaging politicians at state and federal level and more challenging for us. We did shut down hunting on our land, Corps of Engineers, State Parks, Fort Leonardwood and others followed suit, those that haven't yet are Mark Twain National Forest and Ozark National Scenic Riverways, a missing piece in the puzzle to eradicate feral hogs. USDA found PRRS (porcine reproductive and respiratory syndrome), a respiratory related disease, which is devastating to the hog industry. USDA is testing feral hogs they have trapped but a game changer in Missouri, but it activated our Ag partners in a new way. Working with Ag partners we were able to convince Mark Twain National Forest and hopefully Scenic Riverways soon after. Have been doing mandatory sampling in CWD counties, 800 to 1,000 staff spent weekend of firearm deer season doing that, an intensive effort. Critically important for us; we are beginning to use partners and volunteers with that effort, and new relationship with University of Missouri vet school who is doing majority of testing. Just went through series of LEAN exercises to see how we can shorten time lines and sampling protocols to refine and reduce efforts there as it is resource intensive. New elk season in 2020 and bear season shortly after. Prioritizing landscapes, comprehensive conservation strategy, where we identify priority geographies to start

management, includes working with Midwest Landscape Initiative to develop Landscape Health Index to determine what success means on the landscape and then move on to next priority geography. 2) Connect people with nature. Discussion on relevancy. Private Lands Division is trying creative things; helping private landowners with technical assistance and going to urban areas, St. Louis and later Kansas City; St. Louis has spent millions of dollars on clean water and we are coming alongside with 20 other partners to take abandoned lots and turning them into green spaces to make connection to nature in urban areas. We are very involved with Audubon on conservation, bird friendly beef effort. Just announced first nature school, where we will partner conservation area with public school district to have nature education for every 5th grader in the county. Once a year involving tier one partners, we come together for one day, pick a topic, engage them in conversation. Close to 200 partners and last year topic was relevancy, this year the topic is health. 3) Maintain the public trust. Sending staff through LEAN training. Outcome teams and action items. We are beginning to send all staff through training so they can look at the processes in the agency to determine if there are more effective and efficient ways to do the business of conservation. Through the strategic plan we are also focused on outcome teams that are multi-divisional who look for specific action items for each year. Need to know what success looks like, have specific measures and dashboard to make sure we are engaging the public. We have 1 million acres; 12,000 conservation areas, and we need to get a handle on what infrastructure or assets we own. We hoped to do that in ten years and the Commission said we would do that in two years, using consultants to have a game plan for taking care of infrastructure. Recruit and retain the best staff, launched new compensation plan that is market-based and every year there is a market evaluation of job classes to make sure we have competitive salary ranges. This year have new performance-based evaluation program which will lead to compensation-based pay to retain the best and brightest.

Karen Waldrop – Tell me more about market-based salary. How are you setting that up, survey of states every year? *Sara Pauley* – Hired CBIZ and this is what they do nationally. We asked them to expedite their review. They just did it for state of Missouri 1 ½ years prior and we were not involved in that. It depends on the position, if wildlife veterinarian that might be more national review, common positions to surrounding states, focus on those states, depending on position description. We can give you all the information you want. That was first piece of multi-phase effort. Defined new job classes, 50% of staff was not to minimum of the market range, so first step to get them to minimum range and folks established in new classes. Across the board this year did cost of labor market adjustment for all classes and next year will launch compensation piece.

Pat Rivers, MN – We will have a new director soon, interviews a week ago. New governor, one of his pledges was to bring in new Governor's turkey hunting opener, concerned but had a nice event and one of our commissioners harvested a nice bird. Governor's office interested in getting people outside, working on that as well as relevancy. On CWD, discovered one deer this winter in north-central Minnesota, first in forested region, continue to have front in southern part of state, about 50 positive wild deer with CWD, now in north so adds challenges of logistics. CWD did catch attention of legislature and for the first time will have general fund dollars to support that. In addition, regulation relating to deer farms have been reviewed and changes made related to redundant gates; didn't go as far as we would have liked but step in the right direction. Deer hunters bringing deer carcasses back from other states is banned now through statute. Invasive carp is increasing, mainly because of high water and that trend likely will continue. Deer license revenue change; in 2016, the legislative state auditor took a look at our deer program, how we manage, deer, regulations, and how we spend our money. They noted we spend \$4 out of \$30 license on dedicated deer management, remaining \$26 is put into game and fish operating

account and appropriated back to divisions of wildlife and enforcement. There is not a good way to tie those license dollars directly to deer activities, lost in general fund. We talked to deer hunting public to let them know that they were not getting 15% investment from license but getting 85% to 100%. It was difficult to show that to them. In 2017, we went for fee increase on deer license and in order to get support of deer hunting public, they wanted to see additional dollars from their deer license dedicated to specific accounts. That came true this year and about 50% of deer licenses will be dedicated to specific account. There will be increased transparency, but the challenge is more restrictions on how we spend dollars. Challenging to work on habitat for all species and harder to do projects when you have to figure where the funding needs to come from. Concerning is, Quid Pro Quo, the need to provide something for support for fee increases and have concerns that will come true for anglers and other licenses going forward.

Terry Steinwand, ND – 14 years as director. Don't have a new governor, but he has five initiatives. One is main street initiative, to energize rural economy or the center of small towns. We are small populated state, only 760,000 people. We did a study last year that said hunting and fishing in North Dakota is worth \$2.1 billion a year, of which 60% is spent in rural populations of less than 2,500 people. We have played on that and how important hunting and fishing is to the state. Hunting and fishing is taken for granted, having had 3.3 million acres of CRP and good pheasant populations which has declined dramatically because of losses of CRP, we are trying to get that back on the landscape. That is relevancy of hunting and fishing. We didn't measure bird watching, but that is becoming more popular also. Another of his initiatives is title engagement, we have five tribes/reservations, and approximately 11 years ago we went into a MOU with the major tribe who had problems with fishing access to a major lake, no problems since then. About three years ago on Standing Rock Reservation, they were developing an elk population and expanding to private land who thought they had too many. We entered into MOU with them on that and worked well. All of non-tribal members were having trouble getting onto tribal lands, now all they have to do is contact the tribal headquarters to let them know they are going out there, not getting permission just letting them know. Another one that hasn't happened yet is with the Berthold Reservation, contacted by a reservation in Montana who wanted to give big horn sheep to tribal members. As it turns out, had pneumonia outbreak, stabilized that, but looking at working with that reservation and for the first time the tribal council supported that. We didn't get it done this year because the capture crew had break down in Wyoming so will do next year. We have herd in southwest that has never recovered from pneumonia outbreak. CWD herd in Saskatchewan, wanted to monitor, and found one mule deer buck in northwest part of state last year, and a doe this year. We went in and killed 50 deer, didn't find anymore; shout out to AFWA, we are followed their program, did baiting ban, carcass transport restrictions, not happy but hunting community is supporting that. Last legislative session positive, got specific funding for aquatic nuisance species, about \$2 million a year. Two months after the legislature adjourned we had zebra mussel infestations in Red River area, Lake Ashtabula on Sheyenne River. Wind farms have become a huge issue, not much info until two years ago when a five-year study was completed. Indirect impact on ground nesting birds. They have always been permitted, and we have worked hard to educate people on what it means, and whether there should there be offsets and mitigation associated with that; 2-3 weeks ago, first major wind farm was denied by Public Service Commission, largely because of work staff has put into educating those people, a grass roots effort.

Tim McCoy, NE – Jim Douglas will be here tomorrow. Don't have a new governor, but he has been supportive of outdoor sports. Issues in our legislature revolves around inadequate dollars coming into general fund budget and huge demand for property tax relief. We don't see support coming if it involves money. He has been supportive of turkey hunting, declared Nebraska as the

best turkey hunting state in the country, some of directors here have hunted them and turkeys continuing to do well. Interesting spring, a wet spring, got nailed by bomb cyclone which gave us 10-foot drifts in northwest part of state, rain and flooding. Getting around first weekend of shotgun turkey season was hard. Fishing also, because of weather. In R3, did a lot of work and had RDR plan about 15 years ago, recruit, develop and retain, now new R3; have been working on that. Doing a lot of programming and planning, and rolling out challenge this year, take em fishing, challenging anglers to take someone new fishing, or someone who hasn't fished for a few years, and bring them back. They can register, receive a pin and sticker and take picture and put it online and are registered to get prizes that we obtained through partners, like guided fishing trips, fishing kayaks, and grand prize is bass tracker classic fishing boat. Seeing impact and participation, had 1,200 registered and taken someone with them and taken a photo. Bring this up to anglers. We don't think we can program our way out of it, so challenge to engage sportsmen in this. Working on a take em hunting campaign. Not as many organization partners in fishing, have fishing clubs and groups but working with major partners. Lot of energy and excited about that. Have to engage orange army to make it happen. Governor does participate in hunting and fishing, there is a fall turkey hunt in northwest part of state, now Governor's turkey hunt. Started trying to work with him a few years ago on a spring hunt, but legislature meets during spring and all turkey season, hard to do that. Working on a Governor's fishing event, there is a historical Governor's cup walleye tournament. CWD, testing began in 1997, first positive in 2000, growth in prevalence in southwest part of state and in northwest panhandle. In northwest part, where we had some of first high numbers following a high fence facility and ended up killing that herd; starting to approach 20% prevalence, so concern. Prevalence rates drops as we go across the state, from zero in some units and 10% in southwest part of state. Continuing to work on that. In midst of mule deer research in southwest and northwest part of state, looking at survivability and recruitment of fawns. Significant losses in captured does and watching that and reduced permit allocations because of the 10% bomb cyclone loss. Working on access program that essentially doubles access for hunters. Focus on access is upland birds and developing next phase of pheasant research, looking for information to help us make where and how decisions, believe scale things in effect and feel if we reach thresholds on landscapes we are working in, see increases in pheasant population and try to track management. We did get wildlife conservation plates this year, been working on that for four years. Have mountain lion conservation plate which was not directed by us, developed in response to try and stop season, about \$200,000 a year. Wildlife conservation plates will be available in 2021; three options, big horn sheep, sandhill crane; we wanted a fish, had cutthroat trout but a senator had an idea for an ornate box turtle plate; it originates back from our agency because four years ago we did something with all of the 4th graders in the state in rail trails magazine and asked them to vote on state reptile because we didn't have one and the ornate box turtle won. However, didn't talk to us, the Governor and the legislature did that, so we have ornate box turtle in order to get conservation plates.

Brad Loveless, KS – Brand new, governor is new too. Grew up in Ohio and went to college just east of here, feels like home and felt welcome last night thanks to Kendra and her staff. Background is in utility business, after Ohio State went to Kansas State for a fisheries masters; ran environmental program for Westar Energy for 34 years. New governor has background with parks and recreation association, not necessarily a hunter and angler but thoroughly invested in the environment so a great partner. One of her initiatives in western Kansas is struggling, small towns getting smaller, going out to visit to help with economic revitalization. Tourism is part of our agency and ties into agri-tourism, need to tell that story better. Have walk-in hunting program, 1.2 million acres, we are 49th of 50 states in terms of amount of public land. Some legislators don't think we should own any ground. Started iWIHA that involves signing up

electronically to hunt, tailored to landowners close to urban areas where the demand is high. This limits number of people that can go into area on any given day, landowner does not have to manage, good program to tailor to walk-in hunting program. Pheasant numbers holding their own, quail in east, their traditional stronghold, continue to struggle but coming back. In western Kansas, with CRP changes, quail are at historic high levels, exceptional hunting. Deer nonresident deer draw just completed, we allow about 25% of deer tags overall to nonresidents; first time those all gone and no leftover tags, demand is high. Legislature wants us to figure out ways to get more permits out there and landowners want to transfer them, so we fight that every year. Wind farms, controversial but right now a big wind state, a lot of development in western part of state and limitations because of low human population demand. As development moving to east, folks don't want it in their back yard, some counties are excluding wind from their counties, so that is a change. Working with Nebraska to connect a couple of rivers and Asian carp and white perch that goes with that, concern of ours as those rivers run into Kansas. Started new aquatic propagation center in southeast Kansas, got expertise from Missouri who is strong in this area; opened last year and recognizes the connect between fish and mussels, and interdependence of those. Without great water protection, lost several long-lived mussel species. This center is partnership with USFWS and Health and Environment in Kansas to reestablish those species; now with better water quality think those mussels will be viable again. Aquatic nuisance species, continued progression zebra mussels, last year first time with no new impoundments and not 100% infestation rate. Safest hunting season ever, no fatalities and only a few incidents. Good spring in terms of fisheries production. Had tremendous flooding in state, campgrounds struggling, losing revenue and will have repairs and maintenance costs; hard for state parks. Hatcheries have done well and had great reproduction on stripers and walleye this year. Will share some with Nebraska who had flooding in their hatchery.

Dale Gardner, IA – We have had an interim director for over a year, expecting new director soon. In 2018 legislative session, they used to control our funding, but they gave that ability for license fee increases back to our commission. We went through a 17% overall license increase, this is first year since started on December 15. General fund supported parks and forestry is 50% down, but passed legislation for dynamic pricing in parks, rules in place for that and will be able to go out within 60 miles from state parks, assess public entities and adjust our fees; designed to keep more heads in the beds. Agency can't do any of this on our own because we are a government body, but NGOs have carried the ball on all of these; shout out to NWTF, PF and DU. In 2010, 63% of Iowans voted for natural resource and outdoor recreation trust fund, 3/8 of one percent of sales tax; similar to Missouri, Minnesota and Arkansas; but it has never been funded. Rural Iowa is governors focus, shout out for Gido and DU for all the work he did in Iowa; hope to get it this year. CWD, breeders involved and certified to be able to move deer under national USDA, but little money to pay for indemnity. We had shooting facility that was positive for a number of years, no money for indemnity and few states do because dead end source for deer. Wanted that facility off the landscape and worked with the owner and he donated deer to us and got a tax benefit for it.

Amanda Wuestefeld, IN – Filling in for Mark Reiter, working on R3 before his retirement. Started strategic planning process 18 months ago, not done for 20 years, started at beginning. Sent key staff through governance training at AFWA, started looking at principles and values for our agency and created and developed goals; still working through finals of tactics, hope to have by August. Trying to close gaps on pieces identified, funding is top of list, no fee increase for 12 years, whole department is seeing declines legislatively. In last budget cycle held our own on basic budget, but lost maintenance funds, lost by not having dedicated line items added to our agency, but ends up being a win, not sure what that looks like. State put in line item for entire

state of \$150 million for aging infrastructure, hope to get a share of that. Lessons learned, beginning of discussion on budget, governor put in line item for new hatchery; paid for study to look at our hatchery system and newest is 60-70 years old, aging systems and in desperate need of an overhaul. Did tours with governor's office, did a good job of getting them to understand why, we asked for a \$20 million-line item, a big win for us. Governor's office has a piece of that, and legislators have a tremendous role in setting that and didn't spend enough time with them, so did not make it into the budget. Learned from that and will be starting legislative tours next week; share what facilities look like and the impact those facilities have on our fishery and how that all fits into R3, good governance and good customer service. As a department focusing on R3, part of that is understand our customer base, actively looking for online sales platform to roll all of services under one; parks, forestry, fish and wildlife, outdoor recreation; a tremendous asset if we get there. Customers that hunt and fish, area also camping and learn where overlaps are and get customer profiles to help build marketing and outreach.

Colleen Callahan, IL – New director for Department of Natural Resources and we also have a new governor. Thank you to Ollie, for interaction, he took time to come to Illinois a couple of weeks ago to show me what MAFWA is and encouraged me to attend and participate. I took a lot of notes and learned that I didn't ask enough questions. A lot of things I could say ditto to. Don't think that would do Illinois justice. I have learned that if I will ever be known for anything, I asked John Rogner to come back to the department and we will all be beneficiaries of him coming back. He is a disciple of what we are here to discuss. Lot in common with governor of Kansas, in that I don't have the same background as most everyone in this room has. Variety of backgrounds and interest here; I grew up, and still live, on a farm in corn and soybean country and when hunters from Chicago came down to hunt pheasants, I listened and learned. We raised hogs and cattle and needed fences; when you drove down the road pheasants would fly up, like deer show up on the road today. Landscape has changed a great deal, literally and figuratively. I don't have degree in wildlife biology or come from same background but am supportive of kinds of work done by AFWA, not immune to realization that there are always questions. My background in Ag, not a consideration, hoping it was 30-plus years in communication business, doing radio and television work and interviewing people over the years educating about agriculture and rural issues. I could share what I was learning then and I can here. Communication, connections and partnerships were discussed and other issues in many of your states, all talking about informing and educating. Our staff would say this new director starts every interaction with communicate/collaborate/connect and ends every conversation with that as well. No relationship has a future without foundation of communicating with each other. If we don't tell each other what we are thinking or what you think we need to know, there is no future to relationship. Collaborate, don't always agree, but have input, we do have to interact and sometimes disagree. Compromise is part of collaboration. We are all connecting here today, part of communication is listening, that is where you build opportunity to ask a question. Thank you for helping me learn what I need to know, I won't know unless I ask questions. Not talking about CWD, have that in our state report. We may not do things the way everyone else is, have differences and what works for some may not work for others. One of first things I recognized, is we have not done much thoughtful analysis of programs or personnel, and policy procedure not updated for a while. Being in state with no budget for two years, there is uncertainty, and most of the staff felt they were in survival mode. We now have a budget and a capital plan for first time in 20 years, we have survived and can make plans. We are doing SWAT analysis, to be done by July 1 and 2, then we will bring in strategic planning professional in each department and then overall for DNR. When agency went from 2,400 full time employees to 1,156 a lot of adjustments had to be made; we now have budget and can hire up to 1,250 people back in 2020. We learned we can do a lot, more than we realized with so few and now will be able to do even

more. Asian carp, Brandon Road Lock and Dam, met last week with Dan in Milwaukee at Governor's conference, we jointly signed a letter inviting stakeholders to a meeting July 16 and 17, at Brandon Road at the Lock and Dam. They will be able to see it and ask questions in presence of Army Corp of Engineers, to interact and answer questions. Corps has proposed project with Illinois as non-federal sponsor. Monarch butterfly project, when on Governors transition team for agriculture and rural development we discussed nutrient loss strategy, cover crops, talking about natural resources, water and soil; beginning to work across agencies because synergies and similarities in topics and need to work together; and pollinators is one of those. Working with Illinois Farm Bureau and the Department of Transportation, have competition going on grounds of our offices where we planted pollinator plants and whoever has best plot wins, prize not known yet. Would accept a tie, but we are in it to win it. On legislative effort, and need to upgrade hatcheries, experience is what you get when you don't get what you want; chalk it up to experience. Putting a legislative liaison in Chicago, we do ourselves a disservice if we wait to engage with those elected officials when they are in session, we need to interact in their own districts. We need to work to encourage and improve interaction within a variety of different groups, constitute diversity and encouraging people to participate in outdoor activities and to improve diversity within our own personnel; we will work with area caucuses to engage and have conversations in their own districts as well. Communicate, collaborate, connect.

Kelly Hepler – Ron, how many new directors in the U.S.? *Ron Regan* – We had 26 in 18 months. *Kelly* – Almost a record and we have four women directors, more than any other Association, congratulations ladies.

Kelly – I want to talk about a R3 program we have called three-splash-rule; this is not a new idea it has come up through flyway councils before. South Dakota has seen a drop from 25,000 waterfowl hunters 10-15 years ago to below 10,000. A lot of states are following suit, but at same time, bird production is at an all-time high. We asked ourselves why and complexity of regulations and access is top on that report. People new to sport it is intimidating to determine type of duck. For people new to sport or can't see very well, hard to identify species and sex. This idea is the first three birds you shoot is your limit for new hunters. For people who have hunted a lot there would be a second-tier license which would be normal season for those seasoned hunters. Governor believes in this and we talked about this, contacted Secretary of Interior who thinks it is a good idea, who called Margaret and I will talk to her in next couple of weeks. Within that, this is something unique, there will be biological discussions on whether this is good for species or not; but this is non-biological issue. We are looking for support from directors at this table. Important for R3 and have to deal with this sooner or later. Don't want to put Noreen or others in position to have to overrule the regulatory bod. Work from ground up but if that doesn't work be prepared to say this is important for the country; we can focus on this in the Central Flyway only, maybe get Ducks Unlimited involved.

Ron – Kelly, did you need new regulatory or statutory authority to do bounty thing and did you get plus in budget to do that? *Kelly* – We have ability to spend, we have \$94 million budget and can move things around. This is controversial topic, particularly biological side and told to find a different way to recruit, don't put \$1 million in live traps. We went to Commission and they wanted public engaged, but Governor had made decision and we decided not to do that. Which created some problems of separation and independence, and that gets into legislature, so same question came up there, where did you get money to buy live traps; we had but they forgot. The Governor is direct and clear on where she wants to go, so created some problems, but we have authority to do it regulatory- and statutory-wise. *Dale Garner* – Paying for traps is one thing, but paying \$10 per tail, where did that come from? *Kelly* – Same thing, we told the Governor that we

could do it for one year but could be a problematic after that. It worked out well, about 50,000 predators shot and trapped every year; 25,000 to 30,000 raccoons turned in. *Kevin Robling* – 27,000 tails turned in so far. *Kelly* – Supposed to trap animal, not take off of roadside or shoot them. *Doug Austin* – Sara, AFS for a number of years has done salary search designed to be used by states as a way of benchmarking salaries. We spoke with fisheries administrators earlier this year to see if they wanted to do it again; that was mixed because there are limitations in states to be able to use that. For you in Missouri, it sounds like it was productive. Can we get access to that? Is it worthwhile to do something like that at the national level that might be valuable as you look at internal jobs? This is a big task and I would love to see how they benchmarked and how you would equate one state to another? It is a lot of work, we used a consultant and ran it through fish administrators, basically fish chiefs. I would like feedback from you and see if this is something we would like to do down the line and if worthwhile. We could go together and ask other regional Associations as well. *Sara Pauley* – My answer would be yes. I would be surprised if all agencies are not struggling with the ability to recruit and retain good staff. The more information we have to go into that market-based assessment the better. CBIZ won't release specific states but will give general description of how they went about review of job classes. Every 3-5 years we intend to internally review those job classes to make sure they are still aligned; and an annual review of market. We will do deeper dive into individual job classes so any additional information that can go into that analysis would be beneficial. *Karen Waldrop* – Kelly, when are you having discussion on three-splash-rule? *Kelly* – During business meeting. *Karen* – Spent 12 years in Mississippi Flyway Council, so believe these discussions will be interesting. In Kentucky we are trying to repeal beaver bounty, which is based on tails; it was paid out of counties and they don't have money anymore and are trying to have the agency cover those funds.

Relevancy Roadmap – *Sara Pauley* – With so many state directors, who may not be as familiar with recommendations coming from Blue Ribbon Panel related to relevancy. Mark Humpert, AFWA and I will go through slides quickly (*Exhibit 5 – PowerPoint; Exhibit 6 - Handout*). There are some Missouri-specific items in this PowerPoint as it was used for my staff. In 2014, Blue Ribbon Panel on sustaining America's diverse fish and wildlife resources; contained folks from industry, state fish and wildlife agencies, energy industry and beyond. It was put together to come up with a new funding model for all fish and wildlife, recognize for nongame species, all looking for sustainable, dedicated model of funding. Recovering America's Wildlife Act and we are hoping for movement in this congressional cycle. There was a second recommendation, we were struggling with disconnect in society with nature, traditional hunting and fishing and all agencies struggle with making sure nature and the outdoors in urban areas and into the future. Anytime to go to national meeting you will talk about relevancy, a lot of effort in this regard. Darwin said, "It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change". For our traditional agencies this is a struggle. Historically defined relevant conservation from an agency perspective; population management, habitat management, sensitive species, enforcement of regulations and others. Through history of conservation story, we have always needed to adapt to change, this is evolution this initial response to market hunting. In 1930s state agencies began to emerge with more modern-day conservation model, in 1960s rise of environmental agencies, began to see human dimensions, then more work with communication, outreach and education and now talk about landscape wildlife conservation; so, we have evolved, but society has as well. There is increased urbanization, increased minority populations, lack of trust in government and a detachment from nature. Provided reader profile of our magazine, touch about a million readers a month and went through changes on how that magazine looks about a year ago. We surveyed readers and over 90% were over 60, 96% white, 75% male, but that is not profile of Missouri citizenry. One out of

six visit nature center each year, one in four hunt or fish, one of three watch wildlife; what about the others, how do we connect with them. Who are we missing? Think about how society defines relevant conservation. When we talk to the public we talk about nature, it was a struggle to get them to understand and our actions would still represent the language and management that we understood but needed to be talking in terms the general public understood and valued; clean air and clean water. What you want to say as agency folks, say what they are interested in hearing. You know your own mission, my staff knows first part of our mission statement, but many forget we have a second part; “to facilitate and provide opportunities for all citizens to use, enjoy, and learn about these resources”, talking about relevance. The funding model in Missouri is 60% of revenue from general sales tax, but whatever the funding source relevancy is important topic, but we should be looking for opportunities to connect them to nature. Blue Ribbon Panel second recommendation, “impact societal changes on relevancy of fish and wildlife conservation and make recommendations on how programs and agencies can transform to engage and serve broader constituencies”, last two words are critical. Working group brain storming session in Denver, co-chaired by Steve Williams, WMI and Tony Wasley from Nevada and state director champions, Sutton, Florida, Pauley, Missouri and Johansson, West Virginia and Canadian partner Risley and Myers in North Carolina. There is also a coordinating team as well. Group said we need to define what we are talking about when talking about relevance. The definition they came up with is, “enhanced conservation through broader engagement”. Came up with guiding principles; non- prescriptive, non-judgmental, every state is different and talked about changes in Governors, their priorities and recognized differences state to state. Bringing together shared successes, tools that are working and lessons learned. Strategy team formed and barrier themes and 2-4 strategies have been drafted for each barrier and now working on tactics and action. An example of a barrier: lack of agency expertise; what critical need is needed first; how do we know we are being successful; all the way down to tactics to confront the barriers. Barriers identified are: agency capacity, agency culture, constituent capacity, constituent culture and political restraints. An example going through agency capacity barrier: lacks diverse internal and external advocates needed to help agency serve broader constituency. Think about profile of your own staff, do they represent the diversity of society in your state. Agency lacks capacity, what about social science capacity, communications capacity and other capacities you confront. Agency culture barriers, anyone have silent divisions within your agency? Constituent capacity, broader constituents don’t value benefits you provide. I mentioned our partners meeting focusing on health this year, bringing in Health and Human services and other entities to talk about why nature is so important. When nature thrives, people thrive. Barriers for constituent culture, perspectives by broader constituents of fish and wildlife agencies; we only care and serve hunters and anglers; fear and misconceptions of risks in nature, etc. Political and legal constraints. Examples of types of things we are working on in Missouri: focusing human dimensions research on relevancy and barriers, community conservation, how to connect with urban core and make nature relevant wherever you live. We talked about round tables, stakeholder summits, NCLI, and R3 efforts to name a few. Next steps, reviewed barriers and strategies in March by state directors; strategy teams beginning to work on tactics, actions and draft roadmap to be available for director approval at fall meeting. Looking for states to provide examples of practices. *Mark Humpert* – In home stretch of roadmap. Tactic teams are a lot of same people from strategy team and have been working since North American and finishing up. When done coordinating team will spend two days in retreat looking at consistency and how they work together. Expecting, by latter part of July, after Tony’s and Steve’s review, to send out for review. We have identified one person in every state agency to look at roadmap. Missouri will administer the survey; asking what is missing, what’s not clear, what you don’t agree with; not looking for fine editing. We will provide a full draft with an introduction, discussion about why we need a roadmap. Get high level review done before it goes to directors. One of the things we

would like to do is pair case studies or best practices states are currently using with proposed tactics. A lot of great work, every agency doing something to increase relevancy and reach broader constituencies, want to hear those and document successes and share. Request on Director's Line but would like one person for every state. Great things happening in Midwest we want to document, just asking for short descriptions and contact.

Refreshment Break - Sponsored by D.J. Case & Associates

WIND ENERGY

Kate Parsons – Entire next session is on wind energy.

Ohio Wind Program

Erin Hazelton, Wind Energy/Wildlife Administrator, Ohio DNR Division of Wildlife – Topic of wind energy is timely and all of us in Midwest have wind energy facilities except Kentucky (*PowerPoint - Exhibit 7*). Hope to provide useful information to take back to your states. Presenting two case studies, North Dakota and Ohio as well as presentations from USFWS and American Wind and Wildlife Institute. History of wind turbines evolved over years as technology has changed, small turbines 100 feet tall with lattice base, notorious for killing eagles because of where they were placed; monopole design came about, come in various sizes but most we see are under 500 feet, ones offshore are slightly larger. Getting much larger on land, near 500 feet. When you think about wildlife habitat it isn't just fragmentation from roads and paths, but airspace of what animals use. Need to determine, as turbines get larger, how that impact airspace animals are using. Generally, facilities are located mostly in central U.S., Ohio just getting started and not as many as other states; 729 megawatts currently and looking at offshore wind in Great Lakes. Located mostly in northern, northwest and north-central Ohio; 327 so far. Many more in several phases of development so expect more in next five years. Started 2010 with two projects up to 2014, started to get data around 2012, just getting heads around trends; anticipate trend to continue for next five years as companies take advantage of incentives. Mostly coal, oil and natural gas in Ohio, and wind energy makes up about half our energy portfolio. If you assumed 25% capacity factor of households, 10,000 kilowatt hours, it powers 148,000 homes in Ohio, about 3% of households. Our role is to assist Ohio Power Siting Board, the state regulatory authority, were permitting energy facilities. For wind the trigger is five megawatts or larger, when a single turbine is three megawatts a project is just two turbines that go through this review process. Have a seat at the table and staff helps review applications and provides recommendations to the Board and staff writing reviews. USFWS is also one of our partners and they get involved when federal nexus, which is usually a federal take permit. Almost all of facilities are now are getting them for bald eagles. In addition to providing technical expertise, is to determine if facility will have impacts to wildlife that requires minimization to mitigation, we use scientifically sound data to do that. We have four years of consistent data to analyze. Created model in 2009, served well, based off habitat as well as locations with Indiana bats or bald eagles; called a risk map. That is linked to amount of pre-construction surveys that companies would need to do. If they want to build in more protected areas need to complete the required surveys and in highest risk areas also recommend radar. Every facility also does two years of post-construction mortality monitoring. Bird fatalities, mostly horned larks and songbirds are biggest groups impacted, 2-12 birds per turbine per year under curtailment regimes of 6.9 meters per second. Bats are higher, 434 bats per turbine per year and spread out in three species, red, hoary and silver-haired. Of 327 grid turbines this is annual mortality for only 3% of households. Need to figure out what logical next steps are. Not attributed to climate change, there are impacts, take next step with developers so we can make a

better product. In future, trends, windspeed at hub height is 80 meters, with technology expect to get taller and larger and that will open up the entire state for suitable wind resources. Won't mean they will go there but resources available at that point. Don't assume what we have now is what we will have moving forward. Research ongoing to try and find ways to deter wildlife from turbine areas, use technology to acoustically deter, visual, smart curtailment trying to use technology so facilities can operate when there aren't animals in the air and turn off when animals in the air to maximize profits; doing that with radar and infrared detectors. Keeping eye on legislation, setbacks from property lines and homes, as well as tax credits. One offshore project proposed for Lake Erie, a pilot project with six turbines. It has been about 10 years and have some good data now so looking at protocols and decide what we might want to tweak and how we can work with companies to move forward for Ohio's wildlife and energy facilities.

Bird Migration Radar

Dr. Beth Rigby, U.S. Fish and Wildlife Service – Talk about wind energy in terms of airspace (*PowerPoint – Exhibit 8*). Know Great Lakes is great fresh water resource, over 21% of world's fresh water, and also home to vast wildlife resources and millions of birds migrate through this area every year, some hundreds of thousands of miles; and also have bats moving through. Wind energy is important in Midwest; in U.S. have 60,000 turbines, with nearly 100,000 megawatts of energy and increasing. USGS has a database of wind turbines in the U.S. so, you can see what is going on in your state. There are negative impacts as well, they do kill birds and bats. Bird mortality is modest compared to other sources, but negative impacts to bats and still trying to figure out what that might mean to a population. How can we avoid and minimize negative impacts and look at conservation opportunities; can we look at airspace and where migrants are moving through in order to site conservation efforts. There is a challenge in studying migrants moving through; many move at night and you can't just go out and count them, can't see them and not vocalizing much. One of the solutions is to use radar. USFWS has projects since 2010 to use avian radar to track bird and bat migration in the Great Lakes basin. We use one that has a vertical and horizontal radar, it can spin and detect birds and bats using the airspace; we use s-band radar, which is different than weather radar, one benefit is it eliminates smaller critters like insects and filters out airplanes and rain. One of the downsides is we are not able to identify by species, just know something in the air about the size of a bird or bat. We have been all around the Great Lakes basin, more than 40 sites in last decade. We also put out acoustic monitors at many locations and have additional locations and use partners to collect some of that data; we have a lot of acoustic information about bats, often species-specific, around the Great Lakes. Have a collection of reports that are site specific and you can go to fws.gov/radar to see report, graphics and information, but those tend to be for specific sites. Talk about magnitude of migration, some nights a lot of migrants moving through and some very little activity; dependent on weather, cloud cover, wind and can lead to big differences in how the space is being used. You can also see differences in day and night times. Look at color of graphics and that indicates directions; at night mostly to southwest, a dominate direction; at dawn direction changes more to southeast, a turn towards shore; sun comes up and it gets light, they realize they are over water and they want to take a rest, have protection or find food so they head toward shore. That creates an accumulation along the shoreline and makes them useful. Have good information on altitude of flight; 150 meters above the ground, about the height of rotor sweeps. In Cleveland area, information showed migration a little higher than that, but varies site to site. Transitioning from site-specific focus to provide region-wide inference so people can use information to compare sites across the region; developing decision support tool to help form conservation decisions. We will use radar and bat acoustic data and combine with partner data to try and improve instances. Because migration moves south to north or north to south, make inferences out to east and west more easily. Data is still preliminary but getting hot

and cool areas about where migrants are using the Great Lakes basin. We hope to turn this into a ribbon of inference along the Great Lakes shoreline and be able to tell where cool, like Lake Michigan or where higher densities can be found. For bat data, overall bat activity varies it a lot. Bat acoustic monitoring can be a tricky dataset to work with because one bat flying 100 times past your detector can look like 100 bats, that is why we go to a lot of different places and believe overall you can use it as index of bat activity. We have been able to use bat acoustic data to build a model of bat activity on the Great Lakes, using covariates like land cover, whether ag, developed or forest land; distance to lake shore or other features on the landscape. All species lumped together shows bats are using developed areas more than we expected; not all concrete but suburban and edge areas. Those edge areas seem to be important for some bat species. We are looking at splitting into different bat species to see if different conservation efforts for different species. As we build decision support tool, trying to build partner lists, decision makers who will be using the tool; don't want to develop in a vacuum and release into the world. Working inter-agency partners in USFWS, working with migratory birds' division, coastal partners program and joint venture on how they might use information and combine with information they already use to make decisions. Hoping to continue to collaborate with states, local governments, public utilities making decisions, tribes and NGOs too. Come talk to me if interested in using tool or partnering. Lake Erie shoreline is focal area for coastal program within USFWS, focus for restoration efforts; using land cover map to make decisions on restoration and can overlay with our information. For instance, if you want to do an upland restoration where would you do it to have most benefit to bats or where is most value added. Developing tool and will release to partners later this year and get feedback and hope to have version 2.0 available to the public in late 2020.

Institute Update

Abby Arnold, Executive Director, American Wind and Wildlife Institute – AWWI is made up of conservation science community, including AFWA and wind industry (*PowerPoint - Exhibit 9, Handouts – Exhibit 10*). We are not American Wind Energy Association Mike Speerschneider represents the wind industry. *Mike Speerschneider* – I am senior director for environmental affairs and permitting policy, around wildlife primarily but also nonwildlife. Traditionally focused on federal level, USFWS, and we want to become more engaged at state level. *Abby* - Made up of AFWA and nine national conservation organizations and three wind companies. We have been around for 10 years; Jeff Vonk who some of you may know has been on board of directors of AFWA helped found this. Board is made up equally of science community and wind industry, balance has been important to us and we have liaisons with different agencies. Our mission is “To facilitate timely responsible development of wind energy while protecting wildlife and wildlife habitat”. Mission set a decade ago and continues today. Small nonprofit, we have built research program with 10 staff; two scientists and supporting staff. Developed National Research Plan, starting in 2018 with engagement from many people in this room and from around the country. It highlights priority questions, specific areas of research and outcomes to specific species and use this to inform strategies. Plan focuses on understanding risk, developing minimizations and strategies to address that risk. We focus on eagles, bats, other migratory birds and grouse. In the Midwest the overlap of current wind facilities and areas that those birds cover is why we are looking at concerns. Program is divided into three areas 1) accessing risk, 2) developing solutions, and 3) trying to work with you to take advantage of resources we have produced. We have a database made up of public and confidential data, representing 22% of all operating assets; emailed data lead this morning, for Midwest states, that represents 30%, database can be used to test hypothesis. Developing and producing reports that you can see on our website. We are developing second phase of database for various users to ask questions and get answers, not statewide but region where your state is located, because many

states don't produce enough data. Get funding from partners and friend pledges; states, including California Energy Commission and other states interested in projects; applied for and was awarded funding from U.S. Dept of Energy, USGS, Electric Power Research Institute; in-kind contributions and industry foundations as well as individual donors. Science we produce is independent, peer reviewed and seen as legitimate by conservation science entities. The wind energy last year created a research fund that invests in priority questions; decided to do it in 2018, in 2019, decided Ed or I should be secretariat and manager of the fund. This year doing seven projects, raised \$800,000 for those projects. In 2020, received 47 proposals for funding, \$16 million. Budget is between \$1.5 million and \$4 million, so to pare that down will be interesting, leaders are setting priorities, went through peer review process and industry will make a decision on what they want to invest in. Need to do a lot more and partner with states wherever possible. We would welcome idea of you inviting our director of research back to this meeting to give more information on any of these studies; or to any state. Prior speakers spoke about importance of bats and challenges, using database to model bat fatality risk, when stop turbines from turning, is that necessary or does it minimize impacts. Doing ongoing study to see when fatalities are occurring to try and fine tune collision risk. Upcoming project in Iowa, to improve bat detection system and potentially doing another one with another technology on timers. Dr. Rigby talked about using technology to minimize impact. Working in this field for 25 years and advent of technology, artificial intelligence and machine learning is phenomenal and encouraging; need to use that as much as possible. Eagles use similar verification tests for detection and current technology to minimize impacts on bald eagles and other eagles; working on a couple of projects funded by the U.S. Department of Energy; that money has to be matched. Looking at carcass persistence studies, how long does it take for a carcass to degenerate because it helps you understand how many hits are actually occurring. Improving curtailment, algorithms and we have also developed compensatory mitigation models so that companies know how much to mitigate for power poles, only mitigation strategy the USFWS utilizes. Grouse, not a lot of good data on impacts, policy decisions are made on impacts of other technologies on Grouse. AWWI is starting the development of a technical white paper which will document what we know about grouse species and research caps and raise funds for top research priorities. Supporting other analysis of other data collected to see if we can learn what is happening across grouse species. We have a Results Catalog available on our website. AFWA is one of our partners; we have small budget and the weakest part of AWWI is the ability to get out and talk with states, USFWS staff and we depend on directors and your staff to contact us. AFWA has a technical working group, sometimes staff sometimes not, we are a resource and have information we want to get out. We will conduct training in any state, have curriculum to tailor what we know about impacts and want to modify that training for your state and come work with you. So, you have a learning opportunity and it will help with whether you should or shouldn't permit something. Talking with Kelley Myers on Midwest Landscape Initiative about what we can do as technical resource for initiative, we want to collaborate with you. Every other year AWWI hosts a wind wildlife research meeting, used to be funded by Department of Energy, it has two or three main events, we will be doing 13th meeting of its kind, groups from around the world will come in and report on what we know and solutions to address. Thank current AFWA board member, Brad for participating on our board and taking time to represent and also there are former directors here who have participated on AWWI board. Watch a five-minute video online to celebrate our 10th anniversary.

David Brakhage – Is there good information about impacts offshore versus on land? *Abby* - Have my director of research respond to that. I know there has been some studies, a lot of studies in Europe, but we don't have a lot near shore or offshore in the U.S.; one project off the east coast right now. Fabulous research opportunity. *Unknown audience* – Have we looked into vortex bladeless technology and how do they compare to this? *Abby* – Ask industry rep to answer that. I

know energy lab doing a lot of studies on that but unfortunately the economics haven't worked out. *Mike* – Lots of experimental technology out there for how to do this. Main thing is getting cost of power to the level it is now. *Unknown audience* – Do you think there is a future with bladeless technology at all? *Mike* – Far away in terms of cost and volume or scale of energy coming out of those. *Kelley Myers* – Looking into impacts of transmission lines or focused on turbines? *Abby* – No wind development without transmission to market. No, have enough to do with wind. Avian Power Interaction Committee, which the Service uses, and industry does, they are like a power research institute, but not something AWWI has done.

North Dakota Wind

Elisha Mueller, ND Game and Parks – Timeline, over past decade department has submitted letters to our permitting commissioner, mostly work with native prairie should be avoided wherever possible (*PowerPoint - Exhibit 11*). In 2008, a forum was created with North Dakota and South Dakota; our first attempt at collaborative effort, and it didn't go very far, failed in 2011. In August 2016, commissioners asked for more input, wanted us to be involved. There were holding hearings and meetings lasting 10-15 hours and things were getting contentious. The general public was asking what they were doing about wildlife and that was a big turning point. In 2016, second attempt at collaborative, ND Wind and Wildlife Collaborative; between game and fish, USFWS and energy partners. In 2016, got a new governor who was more supportive of us being vocal on these issues. In August 2017, we drafted an approach for guidelines using SWAP; Nebraska has voluntary guidelines on wind energy development and looked to them as example. In October 2017, notified of hearing on Foxtail wind area, another big turning point for us; there is native prairie, a historic battlefield, a pristine area and not an ideal spot to put a wind farm, over 15 miles of new roads was also in native prairie. In November had a hearing, did not approve right away as they had received our letter and USFWS letter of our concerns and they told company to come back and work with us on these issues. Worked with Terry and came to agreement on offset dollars for habitat being impacted, sent letter that impacts were being addressed. In February vice-president met with Terry with half the amount promised; March and April we provided several presentations to different legislators, to PSC commissioners, our Governor to try to educate people on these issues. There is a trade-off with wind energy, land footprint is two times any other type of energy based on megawatts per kilowatt used, so, educated commissioners and legislators. Game and Fish, in Admin code, PSC is required to seek input on these specific things, do have exclusions for wind development which includes areas critical to threatened and endangered animals and animals that are unique or rare and avoidance areas like wetlands and woodlands. SWAP, started state wildlife action plan in 2002 to keep common species common, prevent listing and preserving the state's fish and wildlife resources for the foreseeable future. We have 115 species, almost half are birds, as well as amphibians, reptiles, mammals, fish, mussels and insects; a few game species like sharptailed grouse. Take home message that resonates with public, the western meadowlark is our state bird, almost completely eradicated from eastern one-third of the state, because almost completely developed by agriculture so very little grass; and people connect with them. Another resonance is endangered species, we have 12, and 11 petitioned to be listed, like the monarch; one or two possibly coming off. We went about this process to help these species, do that by focusing on habitat, 48 species of highest priority depend on native grasslands; also, wetlands, a lot of ducks produced in prairie pothole region, 54 on conservation species list; woodlands not huge, but 15 species depend on it. North Dakota has lost almost 75% of grassland in 200 years, all those species that depend on grassland, if displaced where can they go; believe already at carrying capacity on remaining native grass; so being displaced or taken out of population. Also lost about 60% of our wetlands. North Dakota is not quite Kansas in terms of private land, but 93% so, to save these species not going to do it on public land alone; important to work with landowners

and commissioners. When talking about impacts, bird strikes and collisions, we have a study specifically for backyard that shows 30 species of birds killed in grasslands versus nine species in ag lands. A breakdown of a wind farm, 6-7 months of data, 278 fatalities, 100 turbines so three per turbine in 7 months; only straight data not taking into account probability of detection so actual number probably a little higher. Another direct impact would be loss of habitat, 2,400 acres lost; if add turbines and roads, 2,000 acres. Indirect impacts are harder for commissioners, legislators and public to understand. We have two great studies that were done; Shaffer and Buhl, 2015, a study of two years pre-construction and five years post-construction and compared wind farms to undeveloped sites, and effects of climate. Saw up to 55% displacement, after analysis 53% of grassland nesting birds. For ducks, Chuck Loesch's paper, saw 20% few ducks breeding within a half mile of wind turbines in North and South Dakota.

On timeline, May 31, 2018, received comments from guidelines; process not collaborative, didn't want indirect impacts included and said science was not good. In June and July, the NDWWC expanded, and every energy and every ag entity wanted a seat at the table. In July 2018, paused process, a little political; in August 2018, we testified in front of Energy Development and Transmission Interim Committee and after that continued to provide input on these projects, stopped collaborative effort the third time. In October 2018, started working with South Dakota area office and had more support. With USFWS and PSC is still seeking our input to understand impacts of these projects. In February new legislation introduced; couldn't condition a permit on getting offset dollars, second created an impact review committee to distribute those dollars; most ag groups so you can tell which direction that council is biased, can choose to put dollars in but don't have to. If wind company wants to provide offset dollars they don't have to. Lessons learned: if developer given opportunity to score themselves they will always get a passing grade, using as a check box to say we did this great thing. We found 26 sharptailed leks with an average of 13 males on each lek. We found whooping cranes and bats they thought they did good; to them there is never a bad place to build. Critical for wildlife agencies and conservation partners to be in agreement because if not, they will use that against you. Stay rooted in the science, we tried to come up with realistic methods and numbers instead of using the science; and they used that against us. When I tell them, my science tells me that they should restore 700 acres of wetland, that is what they want, they want you to stay rooted in the science even if that is a scary number. Don't waste years on an unsuccessful collaborative, we tried three times and failed three times. Be careful on who you let to the table. Nationally there needs to be a more concerted effort to educate the public; people don't understand what the actual impacts are, some think you will stop the wind by putting up turbines. In June 2018, Xcel Energy said, the science was not good enough and indirect impacts were being discussed and they were walking away from the collaborative. In March 2019, NextEra presented a package, not a really great project, we considered direct and indirect impacts, this is a win as they are accepting that projects have direct and indirect impacts. In June 2019, PSC denied the first wind project based on environmental and wildlife concerns. They did not meet burden of proof to show minimal adverse effects on the environment, minimal effects to human and environmental impacts; they did not follow siting criteria. That battle is not done, they have 30 days to submit for reconsideration. Great to see in state with philosophy of development at all costs.

Brad Loveless – Phrase you mentioned, unacceptable level of impact, you had ability as a state to say yes or no to a project; is that the case? Erin – In Ohio work with siting board and they are the regulatory authority to say yes or no. But like North Dakota they lean on ODNR heavily to establish that; have a good relationship and if we felt no we could make that recommendation.

Terry Steinwand – Abby, most of research is on direct strikes, a lot of impacts in northern plains appear to be indirect; for example the one in the middle of the grouse lek, northwest of Bismarck a wind farm was developed about 10 years ago and we knew it was in the middle of grouse land,

one of our transect sites, and we no longer have grouse there, that is an indirect impact. Any plans to do research on that? After the wind farm has already been built and impacts already occurred, what happens? *Abby* – Raised funds for multiyear study on greater prairie chickens (GPC), and results were published in three separate journals, a six-year study called BACI (before-after-control-impact) design, before/during/after, the kind of study experts prefer. Similar project on sage grouse, raised funds did pre-construction work on three sites, two did not proceed and third one continued on in Wyoming; we are doing a third year on pre-construction studies on lesser prairie chickens (LPC). Doing these kinds of multi-million-dollar studies will require not just science sector, but state and feds to agree that the priority question and reason we are moving ahead with it. Why doing white paper on what we know about the impacts of wind on grouse is because there are many different opinions and whether we know what the effects are and where they are. On grouse species, habitat type, location and other variables going on regarding weather and management of the habitat. If you want to partner with me to identify and study design; a lot of areas because they effect sage grouse or other prairie chicken range it requires USFWS to agree to do study and have to have enough lek population if order to have the study. Any state or federal person in room, if interested in partnering with me to come up with study design, for example across MAFWA region, we can get the Service and private sector and I can work with you and industry to put something together. We don't have all of the science answers, need collaboration and to bring the parties together. One study is not enough, you have to have replication across a certain number of sites in order for us to know what impacts are. Mediator for over 30 years and have facilitated many collaborative projects that have worked, don't want to leave with negative that you shouldn't try to pull together. We can't give up, be willing to recognize differences to come up with solutions in order to move forward.

Director Group Photo

Awards Luncheon – Sponsored by Ducks Unlimited and Canadian North American Waterfowl Management Plan (NAWMP) Partners

Kelly Hepler – Short presentations from David Brakhage and Tim Sopuck, then Awards Committee Chairman Terry Steinwand will present the awards. We want to thank Ducks Unlimited and Canadian Wildlife Partners for all they do.

David Brakhage, DU and Tim Sopuck, Canadian NAWMP made remarks

Terry Steinwand, Awards Committee Chairman, Facilitator – Introduced award winners and presented awards to state representative if winners were not present.

Law Enforcement Officer of the Year – Mitch Boyum, Minnesota; award accepted by Pat Rivers? .

Wildlife Biologist of the Year – Laura Kearns, Ohio; award accepted by Laura.

Fisheries Biologist of the Year – Paul Michaletz, Missouri; award accepted by Sara Parker Pauley.

Spirit of the Shack – Bill White, Missouri; award accepted by Sara Parker Pauley.

Excellence in Conservation – Kansas Certified Angler Instructor Program; award accepted by Brad Loveless.

Sagamore – Mark Reiter, Indiana Department of Natural Resources; award accepted by Amanda Wuestefeld.

Sagamore – Wayne Rosenthal, Illinois Department of Natural Resources; award accepted by Colleen Callahan.

Special Recognition – Carolyn Caldwell, MAFWA CITES Representative; accepted by Carolyn.

Past President's Award will be presented at a later date.

President's Award; given by President Hepler – Presented to Dave Nomsen, PF/QF for his invaluable contribution to the passage of the 2018 Farm Bill and unwavering commitment to improving habitat conservation; award accepted by Jim Inglis.

LAKE ERIE

Commission Overview

John Dettmers, Great Lakes Fishery Commission – I want to give you sense of how cooperative management has evolved, realize many of you directors are not from Great Lakes states but lessons are relevant even though not in Great Lakes state (*PowerPoint – Exhibit 12*). These lakes are big systems, hold 20% of world's fresh water and you can see them from space. Long history of human interactions going back to indigenous people who used lakes heavily for sustenance and transportation; early European settlers used resource to help sustain their growing population and economies. Early in history of governance of the Great Lakes, see strong tradition of state and provincial government ordinance over these large inland seas. The early fisheries characterized by limited resources, low exploitation and state authority dates back to just after the Revolution. States and provinces are principle guardians historically localized management. Fish swim throughout the Great Lakes and there was a proliferation of regulations locally based, free access to resources. In late 1800s see transition, heavy resource exploitation, timbering around the lakes and construction of mills produced huge changes in the watershed. By the 1860s there were over 7,000 mills in New York tributaries alone and began to see construction of dams and canals, which allowed for greater access and movement of people and invasive species. Human activity has shaped the landscape for fish in the Great Lakes. Shipping channels took out huge areas for designated fish and fishing intensity increased. Also, movement of invasive species. Changes to fisheries in early to mid-twentieth century. By mid-1950s fishery in Lake Erie had gone away but blue pike is extinct and sauger is extirpated from Great Lakes, as well as many others as a result of these changes. By 1900s deforestation and transportation were driving changes in the lakes that allowed invasive species, increased fish harvest and many species extirpated or extinct which lead to series of crises in terms of fish management. Between 1880s and 1940s many attempts at cooperation to bridge locally-derived regulations and two failed treaties. Because no individual entity wanted to give up sovereign rights. Got around that by establishing the Great Lakes Fishery Commission, established by treaty between Canada and the U.S. in 1955. They make recommendations to government, coordinate fishery research, and have specific responsibility to control sea lampreys and other jurisdictions and it helps to coordinate fish management. The structure consists of a series of advisory panels; a secretariat that deals with many problems; commission duties, deals with sea lamprey control and science and maintaining working relationships. Every sea lamprey kills about 40 pounds of fish, mostly lake trout that is the species with restoration importance; also, Pacific salmon and steelhead. Fishery commission has to treat streams effectively to maintain control of sea lamprey, it does that by working collaboratively and contracting with federal agencies like USFWS, Fisheries and Oceans Canada, U.S. Army Corps of Engineers and U.S. Geological Survey. The Fishery Commission operates in a different way, it facilitates agreements and relationships with eight Great Lakes states, two federal governments and three U.S. tribal organizations, all who have some responsibility for fishery management. Not only is scale large spatially but large organizationally to have common understanding among these groups. The groups decided to work collaboratively under a document called, A Joint Strategic Plan for Management of Great Lakes Fisheries, first signed in 1981 and revised in 1997. It is a voluntary, non-binding agreement that all agreed to and is signed by state directors and allows jurisdictions to come

together and work collaboratively in a setting that has ability to understand the science, translate it into management and balance competing interests; they work together in a publicly-accountable forum and the Commission facilitates (not signatory authority) that process on behalf of parties to the plan. Key principles: work happens, consensus important part of work, agree to move forward and occurs when management would significantly affect the interests of more than one jurisdiction; be accountable; share information by cooperative means to develop measuring and predicting the effects of fishery and environmental management decisions; ecosystem-based management, parties must exercise full authority and influence to meet biological, chemical and physical needs of the desired fish community. Lake committees deal with management of individual lakes, every group with direct management authority sits on the lake committee (i.e. Lake Erie Committee). Senior lake managers generally report to fish chiefs consisting of states, province and tribe. When issues are relevant to whole basin a council of lake committees takes care of that larger scale and also have advisory groups, Great Lakes law enforcement committee and health committee. Field level biologists serve on a technical level and provide technical support and feed into decision making of various lake committees that integrate technical information with social, political and economic committees. At the top there is Council of Great Lakes Fishery Agencies, generally fish chief level along with federal counterparts as well as tribal counterpart; they move ahead with plan and provide support for operational work. Plan works, because recognition of shared issues; cooperation has to occur and is reinforced at very high levels, reliance on partnerships and the idea that all together you can get more done than individually; accountability and responsibilities are clear and there is strong commitment by parties to invest resources within agencies; long standing community of experts in third party facilitator in Joint Strategic Plan. Accomplishments: Lake Erie committee influenced water quality for decades, dating back to first harmful algae blooms of 1970s, currently advice taken into account by Great Lakes Water quality agreement, it has common assessment strategy and all five agencies that participate know they are getting the same information across the entire lake. They involve stakeholders directly in advisory process and that allows for wise harvest policies for yellow perch and walleye which have fantastic fisheries and more recently treated threat of grass carp in the Great Lakes and is actively leading that charge.

Walleye Fishery

Travis Hartman, Ohio Division of Wildlife – Welcome to walleye capitol of the world. Broke 50 years into a handful of time periods (*PowerPoint – Exhibit 13*). Common story in Midwest, leading up to 1960s large commercial walleye fishery in Lake Erie, 15 million pounds harvested in 1956, 7,000 metric tons. After late 1950s highest harvest was 1.3 million pounds in 1960s. Pollution concerns were a concern as mercury levels were rising in walleye, which led to the U.S. and Canada closing the basin for commercial walleye harvest from 1970 to 1972. This is 50-year anniversary of fire on the Cuyahoga River that led to Clean Water Act of 1972, there were many fires leading up to that one; clear signs that we had environmental issues. In 1970s and 1980s went through environmental recovery, beginning of coordinated management and walleye responded, things lined up and in 1980s walleye fishery exploded, from angling standpoint. Clean Water Act cleaned up worst problems. Lake Erie committee also started coordinated management in 1973, which led to interagency quota management which started in 1976. We are fortunate on Lake Erie to have five partners that collaborate and manage together. An example of how a migratory species should be managed. We all work in our own jurisdictions, survey our own fisheries. Collectively we all have our own data sets to contribute to the walleye task group population model where technical experts, field biologists, work with the data to do population estimates. Apply harvest policy to that and Lake Erie Committee sets total allowed capture tags each year, what we believe is a safe level of harvest for each year at

March meeting. Maintain regulatory authority and manage quotas and bag limits within our own jurisdictions to stay within safe level of harvest. Walleye boom in 1970s, set stage for world-class walleye fishery. In 1980s the Ohio angling fishery responded; saw targeted effort levels of 10 million hours for anglers in Ohio waters of Lake Erie, harvest approached five million fish. Thanks to clean up and collaborative management. By end of 1980s, Ohio was harvesting four to five million walleye per year. In background, harvest rates were most impressive, they are regionally unique, goals of .1 or .15 fish harvested per hour, .5 doesn't sound high but is the standard for large fisheries. New time period in 1990s and 2000s, environment and fish community changing, led to reduction in walleye recruitment; fewer walleye with less consistent year classes and required a management response. Angling had reduced participation, with evolving angling methods. Environmentally, had less productivity, clearer water, lower water levels and on top of that had aquatic invasive species like zebra mussels, goby and white perch. Sampling became more difficult. All that led to changes in population and smaller year classes. Went into utilizing coordinated percid management program strategy, from 2001-2003. The idea was to reverse declines to achieve broad distribution of benefits, an important time. If you look at what total allowable catch had been, 10 million total allowable catch each year in late 1990s, everyone agreed we needed to be more conservative and harvest fewer walleye; went through three-year period of 3.3 million walleye per year, an impact to commercial and sport fishing. Had reduced participation, saw drastically declined targeted hours, reduction of harvest and lower catch rates from casting. Started supporting trolling more than before. Effort driven, less effort, lower harvest. Were a 1 million fish fishery until 2003-year class; bump in 2006 and 2007 was because of 2003-year class. In background angling catch rates were still good, saw catch rates as low as .25 or .3, but when 2003-year class hit we beat some of 1980s catch rates. Wasn't efficiency or catch rate, but due to reduced participation. Angler creel going on since 1980s, people target walleye primarily by casting 70% but as environment and fishing changed, switched to 80% trolling fishery. Proud of stakeholder engagement and new walleye management plan and continue to see environmental changes and new challenges. Lake Erie Percid Management Advisory Group are stakeholders from around the lake who are formally represented in group, facilitated by Michigan State University QFC. Brings needs and concerns to the table to better understand what needs and objectives are. This group led to 2015 to 2019 walleye management plan and harvest policy that it contained. It has been so successful we extended it to 2024. Changes that have led to where we are: higher productivity, higher water level, similar to 1980s, and results have been four of last five years has had higher than normal year classes. That latest task group population estimate, consistently high in 1980s, decline in 1990s, high 2003-year class, and most recent projection for 2020 will be one of highest we have ever seen. Trolling, prior to 2014, only three hatches at or above median, only a few near median beyond 2003-year class. Since 2014, two largest we have ever seen and sitting on solid year class contributions and good outlook for the future. Angler success is showing that same result, highest target catch rate Ohio-wide, not just western basin and also seen central basin walleye reproduction. Challenges ahead, can we maintain this amount of predators in the system, do we have enough prey. With increased production we have to address this and can't keep having large algae blooms that threaten health and human safety, and AIS are continuing threat. Harvest is increasing and predict 2-3 million range for the future, catch rates are incredible. Blowing the 1980s out of the water, harvest rates this past season .8 walleye harvested for entire year, fishery-wide. Increasing trend since 2000, due to anglers getting better at what they do, learning how to troll and being more effective; now a lot of walleye. Challenges include algae blooms that are more frequent, have to find way of hitting balance of productivity. If we continue to have great hatches, how do we have enough prey; we feel good, but we will see if harvesting safe numbers of walleye. Aquatic nuisance species; grass carp working from action plan and learning every day how to remove more of them; goal is to control and get as close as we can to eradication.

Prevention is the best strategy, keep those silver and big head carp out of the system. Had sustainable harvest despite changes in fishery and environment which will continue to present challenges, but sustainability can only be accomplished through collaboration. In new era of the good old days for the foreseeable future.

Harmful Algae Bloom

John Navarro, Aquatic Invasive Species Program Administrator, ODNR – Invasive carp, everyone wants to refer to Asian carp when talking about any of four species and the only thing they have in common is they were brought in as biological control for something, otherwise they are very different (*PowerPoint – Exhibit 14*). Silver and big head brought in by aquaculture used in catfish ponds to keep water clean; these are the ones we are terrified of getting into Great Lakes. Black carp used to eat snails which are a host for diseases so also used for aquaculture to keep fish healthy. I want to talk about grass carp, a good tool for controlling aquatic vegetation in small water bodies. When Ohio allowed, we only allowed triploid sterile version, because if they got out of ponds they wouldn't be a threat. Started seeing grass carp in Lake Erie in 1980s, assuming triploids, but we were wrong. We have regulations and enforcement in place. Concerned about impact to habitat, young fish use vegetation as a nursery and also important for waterfowl. Restrictive states don't allow any, some allow triploids, and some allow diploids which are fertile fish in their regulations. Through Great Lakes panel for invasive species and Great Lakes Fish Commission we combined forces to send letters to diploid states and asking them to go to triploid state, which could cut down on the problem. Dealing with big head, silver; escaped and moving up Mississippi into Ohio and Illinois rivers, so we have line in sand with Great Lakes states to keep out of Great Lakes watershed. We have spawning grass carp in Lake Erie, which is about the size of Vermont, hard to catch fish that exist in low densities. Coming into tributaries to spawn so through good science figuring out when vulnerable and work in tributaries; testing and seeing a lot of fertile fish, more than sterile fish. Working with commercial fishermen to collect them; also, USGS has been collecting them for eggs and larvae, got our attention when they got into Sandusky River. Found eggs, but eggs doesn't mean fish and we haven't seen larvae, but they did catch larvae in the Maumee River. Doing modeling on flows and look at egg in development stage and backtrack to see where it originated. Doing vegetation mappings because they have to eat. Tagging grass carp and putting back with tags on them; have an array of receivers to track them and setting up real time receivers that ping our phone when grass carp passes a location like Sandusky River. This tells you when they are moving into the tributaries. We have been using it to drive our control action; when you get 10 pings, that is actionable. Some people not on board with putting live fish back into the system but we wouldn't be as far as we are without those judas fish telling us where they are. In past three years doing big actions, use mutual aid agreement in Great Lakes, if we need personnel and resources we call to come and help, they send boats, equipment, gear and people for 3-day events where we hit the system hard. These are preplanned events and not using science to drive when we should be in there. In 2018, it happened that when everyone showed up there was a micro-event that triggered spawning movement and we got our hands on a lot of fish. Have enough fish out there to test year efficiencies, have been able to work closely with partners and get information on where fish are. We have plans, concentrate on grass carp strategy. We went through SDM (structured decision making) process; had states, federal agencies and universities in the room to look at this problem. Get clear objectives on how you want to move forward, look at tradeoffs, transparent process and integrated public values. We developed plan with two goals, 1) keep from expanding from western basin of Lake Erie, and 2) suppress population in the western basin where they are so not able to expand and cause a problem. Came up with plan to keep densities low, trying to get them out of the system. Trying to minimize risk of grass carp, no unlimited funds and would not be able to do it without GLI money and avoid collateral damage. Getting away from pre-

planned events, have strike team working through the University of Toledo to go after these fish. Using real-time receivers and working with Michigan DNR, Great Lakes Fish Commission and USGS to come up with a seasonal barrier. Had scoping meeting last week; don't need permanent barrier, there is a small window to keep them from moving up and spawning. Could be a way to keep from getting to spawning ground. In 2019, Province of Quebec came down as well as other people, did electrofishing, trammel nets and the USFWS brought sampling devices on Sandusky River. We found combination of electrofishing and trammel nets, pushing and herding was very good; caught 20 grass carp. One fish was tagged, it died so we did not put back in the water and found out later one of the other fish was tagged but had no external tag, found inside during autopsy; we usually release those back in the system. Also did Maumee River and got one. Diploids and triploids out there so do have a problem. Statutory authority is with management agencies, Ohio and Michigan DNRs, we manage fishery but do have a coordinating body to make decisions, the Lake Erie Committee, and important partners that help us get science and drive our actions. We have a list of injurious species in Ohio, cannot possess them alive so you think it would be simple, but people try to circumnavigate laws. Need to define what dead is, invasive species need to be eviscerated, remove head or preserved in formaldehyde and had a request to remove gills for presentation purposes but we didn't put that in administrative code. In Canada, someone tried to move live big head and silver carp to Toronto live fish market, when he got close to the border he drained the water, put ice on them, went through but Canadian Mounties saw fins and gills moving, put them on water and they were alive; the guy got caught so we made clear what dead is. Also worried about supply chain because you can't tell the difference between diploids and triploids; worried people were laundering diploids as triploids because triploids are more expensive. We put wildlife officers out undercover into outlets and they would buy 10 fish from different vendors and send to USFWS in LaCrosse to be tested; 600 fish tested over two years, all triploid; felt supply chain was secure. Also do surveillance of bait shops, person behind the counter might not know what a big head or silver carp fish might be, or not know difference between juvenile gizzard shad or juvenile silver carp because they look similar when small. We sent a live bait guide to 500 bait shops to help bait industry identify fish. Work with Wildlife Forever, good at outreach, have campaign going on, billboards and print ads that say, don't dump bait bucket, give to someone or dispose of properly to not put invasive in the lake.

Implementation of Farm Bill

Jim Inglis, Pheasants Forever – Have a video shown on first season of Pheasants Forever TV show, a piece on Lake Erie (*PowerPoint – Exhibit 15*). In 2005, when 2003 age class came on board we still had a decent wild pheasant population in northwest Ohio in Lake Erie watershed. Peak season for CRP for Ohio was from 1997 to 2005, lost about one third of those acres and a lot has shifted out of Lake Erie watershed to other parts of the state. Land in Ohio, pre-settlement, was forested but had some tall grass prairie. In late 1700s as folks came across the Ohio River, this was the first prairie south of Columbus and European settlers didn't know what it was, tall grass not like a meadow; prairie is a French word. Figured not productive because didn't grow trees. Fast forward 150 years and there was farm ground in the state and housing units, 40 acres or less. What has happened is urban sprawl, 11.7 million people, not concentrated in one area. During that time, we lost about seven million acres. In 2000, there were some remaining wild pheasants, but few pheasants now in northwest Ohio; lost 100,000 acres in CRP. Doing private lands work with buffers. Issue with algae bloom is being fed by phosphorus, legacy effect, a lot across the landscape and often gets into Lake Erie and the watershed. Toxicity is fueled by nitrogen, put pieces of puzzle together on whether point source or nonpoint source pollution; coming from urban areas and Ag operations. Not only an Ohio problem, happened along 650 miles of the Ohio River as well. Look at reality, figure out how to keep nutrients out

of water and no question that we can do that through the Farm Bill. Our only opportunity to do work on private lands, \$30 billion to spend by 2023. Farm Bureau one of first ones to do analysis; over 10 years, well over \$30 billion during that time. CRP used to be equal to EQIP, even though acres have come down, for last 20 years CRP costs about \$2 billion a year. Even when peak acres of 37 million, estimated cost on \$82 an acre across the country. In Texas probably getting CRP for \$25 an acre, highest rental rates are Illinois and Iowa. Had decrease in CSP program, the donor program to increase EQIP, RCPP and others. CRP cap increased from 24 to 27 million acres and includes more working lands program, like grasslands, more beneficial to graze cattle or use for forage, codified crop language the conservation enhancement reserve program which is important to western states, usually a partnership with DNR or Department of Ag. or other partners who help match those funds. Concerns with cost share incentives, CREP program was another great opportunity for you to work with farm service organizations to address needs. Also, part of CRP is Clean Lakes, Estuaries and River program, called Clear30, which will allow 30-year contracts on environmentally sensitive areas. Tried to advocate and push for permanent easement on CRP, not able to get that done but able to have opportunity to work on riparian and sensitive areas and place longer term easements on them. Senator Thune from South Dakota came up with a program called Soil Health and Income Protection Program that provides a three- to five-year contract to take areas that don't produce well put into conservation. Without rules published not clear on all new projects but hope that comes out by this fall. Agriculture conservation easement program got \$450 million per year, more funding than ever before, it was widely supported in House and Senate. Game changer is Environmental Quality Incentives Program, used to have 5% of overall funding going towards wildlife, now 10%; also, EQIP increased, lose CSP program but that increased over \$2 million a year, a three-fold increase from last Farm Bill. Talked about working lands practices, whether quail conservation or invasive species removal in forested ecosystem, timber thinning and other opportunities. Have open fields, voluntary public access habitat improvement program \$50 million; opportunity for more walk-in programs. Regional conservation partnership program, Senator Stabenow, Michigan advocated for that and is \$300 million per year, \$1.5 billion to do partnership programs; possibly state agencies can put in money and pick targeted initiative on a certain species, like bobwhite quail or pheasant initiative. One of largest RCPTs in 2014 Farm Bill was western Lake Erie basin between Michigan, Indiana and Ohio and expect to go back in there with cover crops or new conservation practices. There is a lot of conservation happening on the landscape but challenge to get conservation practices adopted. South Dakota, for example, a lot of CRP dollars, they are innovative, and producers adopt the practices; we can take this opportunity to get conservation out there on many properties, farms and ranches as possible. There is room for conservation on every piece of property, whether agriculture land or backyard, an opportunity to get more out there. Early practice in Lake Erie watershed, work with landowners on large scale wetland conservation practices, maybe a permanent easement or like Howard Farms that you are going to see this week. Work and cultivate relationships so they know there are opportunities to permanently protect their lands for conservation long term. The reality is, in northwest Ohio, trying to just get buffers put in place. There can be an area that has potential for wildlife habitat, but they hold soil in place and filter out nutrients with fescue and brome grass and not have the wildlife benefit; concerned with shift to that. Issues of water quality, need to be more targeted, can't have larger blocks of CRP, looked at as negative, but we need these large blocks in the grand scale of agriculture to be able to do business. In Lake Erie watershed, worked with partners, with farmer, to look at edge of field; asked to deliver the practice, farmers have a ditch buffer around every field they have, have wood block, CP33, quail buffer, upland buffer around wood lots and also do 100% cover crops; have been doing cover crops for 10 years. This family was on TV two weeks ago, farmed 4,500 acres and had 75 acres planted because of weather; more of what we see, especially in Lake Erie watershed, but many

areas in the Midwest. Areas out there no matter what you do not make money, return on investment is not there, that should go into something else and hopefully put access on top of that. Partnered with John Deere last two years, started at national convention in South Dakota, did precision ag workshop, and this year in Illinois at national convention we did it again; seeing efforts. We signed agreement with Land O Lakes working with their producers to look at farm plan, where losing money, look at risky environmentally-sensitive ground, from water quality or soil erosion standpoint or wildlife species. Slow out of gate on some of Farm Bill programs some because of federal shut-down, number of changes in Farm Bill going through rule-making process. NRCS is doing good job of getting money out where they can, but slow on CRP. We have 7.7 million acres under cap expiring or already expired and need to be enrolled by 2020; it will take all of us and partnerships to make sure that happens. Conservation priorities are water quality focused, wildlife not coming up as much as it should, CRP sign up is open but not all practices are available because Administratively they decided not to run them. Efforts in your states, calls to Governor's offices to say these conservation reserve enhancement programs are good for habitat and access; state acres for wildlife, two million acres, is a state-led program and not able to enroll acres. Up to 2023, if we don't get \$30 billion spent they will take it back and we will have struggle in next Farm Bill. NRCS is understaffed, so will take partnership of fish and wildlife agencies, NGOs and private sector to help deliver these acres. *Kendra* – Can't thank you enough for advocacy on the Hill for us and these programs, appreciate all you do for conservation out there. *Karen* – Jim, met with many states yet on differences in CRP and how it will be hard for sign up and getting people to enroll? *Jim* - On implementation side of CRP, this week's meeting is part of that, working with USDA to try and get idea of when they are going to announce the actual days and be able to enroll. When details come out after final rule we will know how to do the scoring. (*Showed video*)

Refreshment Break - Sponsored by Rocky Mountain Elk Foundation

Offsite Dinner Event: Winous Point Shooting Club, the oldest duck hunting club in the country

Sponsored by Sovereign Sportsman Solutions

Eric Richey made remarks at event.

Board Buses depart at 3:30 pm

Board Buses to return to Park 9:00 pm,

Hospitality Room – Sponsored by Airgun Sporting Association

Tuesday, June 25, 2019

Breakfast – Sponsored by Archery Trade Association

Dan Forster made remarks.

Kendra - Forgot to recognize sponsor last night, Sovereign Sportsman Solutions, Bill can come up a say a few words. He didn't want to cease the merrymaking last night to talk.

Bill Creighton - Thanks for team putting on a great conference and for letting us be a part of this. With new directors some of you have no clue who Sovereign Sportsman is; we are a technology company that provides licensing solutions to four MAFWA states, Ohio, Missouri, Ontario and Michigan. It is campground and park reservation systems, marketing solutions and things like that. Our CEO, Eric Richey is here as well. Thanks for letting us be a part of it.

How a Shift in Wildlife Values Can Affect Wildlife Management in the U.S.

Tara Teel, Associate Professor, Colorado State University (PowerPoint - Exhibit 16) – Back in 2015, presented right after we received grant from multi-state grant program, four years ago. Pleased to talk about results of the project. Structure of team: have collaborators including myself; Mike Manfredo, Andrew Donparlo, one of lead investigators; Andres Don Carlos, project manager; and we have an advisory panel consisting of representatives from all 50 states, useful to make sure results would be useful and issues would be relevant. We also have collaborators at Iowa State University, Alia Dietsch and Jeremy Bruskotter; David Fulton from University of Minnesota; Mark Duda from Responsive Management who handled bulk of data collection with mail survey; and project advisors Lou Cornicelli and Loren Chase. Grant was administered through MAFWA and WAFWA. We had 18 level two and three states, who contributed funds to allow them to look at state specific issues and also, in some cases, collect data with finer degrees of resolution. Some states collected at county level, some at regional level. Societal changes are at root of many wildlife challenges. Declining support for traditional forms of management, increases in ballot initiatives, increased controversy over wildlife-related issues, declines in hunting, concerns about alternative funding mechanisms; which mostly revolve around emerging public interest and competing demand for different uses. Rooted in culture shift, changes in societal values, defined from a psychological perspective; motivational goals that direct human individual behavior, formed early in life and tend not to change much in an individual; usually by 12 or 13 years old. Values imbedded in everything around us and adapt us to social and environmental world. Key questions asked in research and underlying challenges are: How do agencies adapt and remain relevant in face of societal change to an increasingly diverse constituency? What are ways for agencies to more effectively engage new audiences while still being responsive to the needs of traditional stakeholders? How can they garner broad-based support to ensure sustainable funding exists in the future? Response to these questions and underlying challenges first demands knowledge of social and demographic changes that are taking place and how those changes are affecting public values, including how people think about wildlife. Model looking at culture shift, forces of modernization daily role and changes in thought patterns. Increased education...shifts occurring over time. Insulation from dependency on natural resources, more removed from where food comes from; people removed from day-to-day interaction with wildlife and wildlife-related issues. Forces of modernization have played a primary role in affecting daily circumstances of life in America, which have led to changes in thought patterns. Modernization: like increased income, increased urbanization, increased education, which all contribute to shifts in values that are occurring inter-generationally over time. Some of these changes include: inflation, dependency on nature resources; with urbanization people are more removed from where their food comes from. People are more removed from direct day-to-day interaction with wildlife; learning about wildlife through

indirect experiences, on TV, social media, social experiences and less from direct experience. Anthropomorphism, the assignment of human characteristics to wildlife, like commercials and Disney movies. With modernization, in urban environment there is less social support for things like hunting and requires more effort like driving further distances to do it. All contributing to value shift. We identify two primary dimensions of thought or wildlife value orientations in long-term research. Domination: utilitarian orientation towards wildlife, prevalent cultural ideology in America. They view wildlife as subordinate, should be used in ways to benefit humans, using animals in research and hunting are two ways these benefits can accrue, should be killed if threaten safety or to protect property, and abundant populations for hunting and fishing. Mutualism: more reflective of society changes, people being brought up in different cultural environment and think about wildlife in different ways. Believe equal treatment assigned to other living things, tied to anthropomorphism and to social affiliation and belongingness needs which is increasing with modernization, see as part of extended social network of life, wildlife viewed as family or companions, care for wildlife as we would humans, deserving of rights like humans, and vision of humans and wildlife as living side-by-side without fear. They are less likely to support actions resulting in death or harm. We have identified a classification scheme with four different types of people, based on wildlife value orientation. What we do on the survey is have people rate their level of agreement with a series of statements that represent beliefs about wildlife or wildlife management. We looked at patterns of response to get a sense for one's orientation as well as how they might fit into different classification categories. 1) Traditionalists, these are individuals who score high on domination/utilitarian and low on mutualism. 2) Mutualists are intuitively score on high on mutualism and low on domination. 3) Pluralists score high on both dimensions; found on follow-up research, depending on situation, this group may behave either way. 4) Distanced group are individuals who don't have a well-formed value or orientation, less interested in wildlife and wildlife-related issues and tend to express greater fear about recreating in outdoors because of concerns about potential interaction with wildlife. Summed up model to study values and impacts on wildlife management and related issues. Post WWII, modernization that included increased wealth, urbanization and education is resulting in a shift in social ecological context, which affects cognitive processes as a result of wildlife being removed from daily experiences; anthropomorphism and increased societal needs like social affiliation and belonging. That is contributing to a shift toward mutualism wildlife value, which has direct implications on wildlife management in terms of increased social conflict and pressure on state agencies to adapt. All of this is resulting in population level shift, broken down to individual level and how people are looking at wildlife to cultural level in terms of societal change which occurs in inter-generational replacement as well as migration, people moving in and out of states or in and out of the country. Study draws on three sources of data: study in 2004, wildlife values in the west study, 12,000 participants across 19 WAFWA states; 2018 America's Wildlife Values study, all 50 states, so, have baseline for WAFWA states and an opportunity to look at longitudinal changes in the western U.S.; agency culture survey, surveyed employees in agencies, 30 states participated. The method for the 2018 project had two extensive pilot tests that allowed us to compare different methods; phone, mail and email and ended up with combined mail and email samples in final data collection. Two waves for email panel, one was boosting numbers overall because of concerns about low response rates with mail surveys. Also, one that targeted diverse populations, felt the need after looking at representation we had to more adequately represent different diverse populations. We had a total of close to 44,000 survey participants, high number because of level two and three states, 18 states who wanted to collect data on state-specific issues with finer degrees of resolution. Agency survey administered through email to agency employees and had 10,600 who participated. In all 18 states that collected additional data and 30 states from agency survey. For public survey, questions centered around common themes; hunter and angler recruitment and

retention, human conflict issues, predator control, carnivore management, and alternative funding. Geographic distribution of different wildlife value types across all 50 states: highest percentages were in the Rocky Mountains and Plains states and the southeast; lowest percentages in northeast and the west coast. Range was from 17-18% in California and northeastern states up to 50% in Dakota's and Wyoming; 28% nationally classified as traditionalists. The pattern is reversed for mutualists, highest percentages in northeast, west coast, Florida and Hawaii; range from 16-18% in Mississippi, North Dakota and Alaska to close to 50% in California. National level shows 35% can be classified as mutualists. Pluralists, highest 30% in Alaska and North Dakota and some southern states Mississippi, Arkansas and West Virginia; lowest percentages, 15-20% in coastal states, western and northeast, like California and Massachusetts; 21% at national level. Distanced group had low percentages overall; 21% in California, New York, Maryland and New Jersey were highest; lowest in Wyoming with 5%; national level 15%. Shift in values, societal changes may be impacting value composition, look at variables such as income, education and urbanization; modernization factors at state level. Income, states with higher percentages of mutualists, have higher percentages of people with more income; pattern holds for all 50 states for urbanization. We made a separation because of limited geography that we find in high population densities of coastal northeast, so separated those out. See higher percentages of mutualists found in states that have higher percentages of people living in urban environments. Not talking about situation where someone moves from rural area to an urban area or suddenly acquires more income and then changes their values; talking about inter-generational change, children brought up in new life circumstances of higher income, more urban environments, likely to be more impacted, as opposed to individual whose values would be relatively stable. Changes in western U.S., based on longitudinal data when we compared 2004 to 2018. Looking specifically at rate of change, percent change proportional to 2004 data. In California, 10% decline in traditionalists, from 28% to 18%; 36% decline when we account for percent of traditionalists in 2004. We can look at raw percent change and rate of change. Declines across all states except Wyoming and North Dakota that increased 3-5%. Rate of change for mutualists in the west; increases in all states except Colorado, 3% decline; biggest increase was 50% in South Dakota, Montana and Wyoming. Distanced percentages increased in most states, what we expect with urbanization; most striking increases in Texas, Idaho and Kansas at 40%. Information useful for wildlife management, what are implications for wildlife-related issues linking back to challenges. Environmental attitudes globally; states with more mutualists also have higher percentages of people who prioritize environmental protection over economic growth. States with more traditionalists have higher percentages of people agreeing that private property rights are more important than protecting declining or endangered fish or wildlife species. Urban/human wildlife conflict, with coyotes attacking pets in urban areas; states with higher percentages of mutualists are less supportive of lethal removal of coyotes that kill pets in residential areas. This example starts to show how there is less support among emerging interests for traditional forms of management and also a sign of more social conflict over wildlife-related issues with shift towards mutualism. Wolves that kill livestock; states with higher percentages of mutualists have lower levels of support for lethal removal. County level findings, examples from California, a level three state, more depth in looking at state-specific questions to collect data at finer degrees of resolution; issue of wolves as wolves are moving into their state; question was acceptability of allowing wolves to recolonize and establish new populations on their own; support was high overall, 67%, varied by wildlife values and region. See where rural/urban divide is and areas of potential conflict or hot spots around wolf recovery may be needed. Same question taking into account habitat suitability, lower levels of support in regions likely to have wolves in the future; where we can link social and ecological data and a more holistic understanding of where hot spots might be and where we can link social and environmental information and need for outreach. Looked at trust, in different levels in

government; federal, state and state fish and wildlife agency; most or almost always trust, is higher for agencies with traditionalists and pluralists are more trusting. State level, looking at agencies, states with higher levels of mutualists have higher levels of trust. Not just function of percent of mutualists in a state, although do find lower levels of trust in those states, we broke down and found that traditionalists are the ones that are less trusting in those states, mutualists more constant. Cultural backlash happening; if you look at rise in ballot initiatives trying to protect the right to hunt and different opportunities related to hunting; traditionalists are pushing back. Differences in wildlife attitude with funding concerns; one question was, how should your state fish and wildlife agency be funded in the future and looked at whether they were aware of where funding currently comes from; 50% funding should come equally from hunting and fishing license revenue and public tax funds. Across the states, see level of mutualism does play a role in that, more mutualists, prefer funding model that prioritizes more public taxes. A behavior example, percent of mutualists by percent of active hunters; higher percentage of mutualists have lower percentage of active hunters (people who hunted in the last 12 months or in the past). Shows how shifting values can be relating to these trends of declines in hunting. From agency culture survey, 30 agencies; we see a values gap, a disconnect between agency and public values; more traditionalists and less mutualists in agencies compared to public. With pluralists we see equal distribution, 20% each. Growth in mutualism across states may relate to levels of mutualism in agencies, hasn't kept pace with the public, but do see an increase of mutualism values in agencies in mutualist states. This includes influx of pluralists. Strong core set of values around which agency employees operate; values identified: upholding values of the agency, acting as expert scientists, enforcing the law, being model employees, advocates, wildlife protectors and compassionate. Strong responses which shows how agencies are focused on core values, and also shows that institutions such as agencies are relatively slow to embrace change relative to changes that are happening within the public. While influx of people seeing mutualism values and diverse interests needs to be embraced there are strong core institutional values that may make change difficult. We have 50 different overall national reports, have reports for level two and three states, and for agency culture survey as well as an interactive map on our website. *Mike Reynolds* – Next steps? *Tara* – Having conversations with folks working on Roadmaps to Relevancy to try to figure out things we can do to go beyond project reports, look at how these findings might be used by different agencies; talked about workshops and opportunities to explore those questions. One of the challenges we run into with this type of work is essentially it is a project report and questions are, how do we use this information. In 2004 survey we did in the west, we found value in doing workshops with state agencies where we could sit down with employees and have them talk about what results mean and identify potential action steps for embracing different audiences; we hope to move to that direction. *Brad Loveless* – Can we get copy of this presentation? *Tara* – Yes, it is on the laptop and we can get that to you. *Brad* – How are the workshops funded? *Tara* – They aren't currently, project ended, Mike Manfredo is working on that through NCN process, but exploring other outlets as well.

PRESENTATIONS and PANEL DISCUSSION - Eastern Massasauga Rattlesnake Recovery

Research

Greg Lipps, Amphibian and Reptile Conservation Coordinator, The Ohio State University – (PowerPoint - Exhibit 17) Brief overview on ecology and natural history; massasaugas are part of pit viper family, venomous, have heat sensitive pit between the eye and the nostril, not more than two feet in length, stocky, blotched patterns with spots down the side although melanistic individuals aren't uncommon, a Midwest snake centered around the Great Lakes and into Canada. Use early successional habitat, disturbance dependent and hibernate in water table in the

ground to avoid freezing, use borrows, typically crayfish borrows to get there. Life cycle is three years to reach sexual maturity, live to five or six years so are only reproducing 2-3 times. In Ohio, once found throughout glaciated portion of state, but today limited to very few sites, 12 overall in five general areas. In Southwest, part of Ohio peninsula is where largest population is, prairie represented by Killdeer Plains Wildlife Area; north is inland marsh, one site; northeast corner with two big river systems (Grand and Mosquito) found in valleys there. All of the sites we monitor we use capture/mark/recapture technology. People involved: Doug Wynn, 32nd year at Killdeer Plains WA; Jeff Davis focuses on southwest Ohio population; I cover northern area and do habitat assessments across the state; and have active genetics program at Ohio State University in the Lisle Gibbs lab and one student, Scott Martin, is currently using genetic data to try and understand movement patterns and gene flow among sites. Lab is also working on; is there a cost to small populations and adaptive differences in populations and what are genetic basis? Occupied fields where they occur, typically old field habitat, most common plant is goldenrod, but some differences in vegetation, one grass field and in northeast Ohio, no grass; do see similar structure, snakes respond more to structure than vegetation types. Home range, 3.5 acres for female and 35 acres for males. Balancing act for snake, need sunlight to get body temperature where they need to be, but also need cover from temperatures that are too hot or too cold and to avoid predators such as raptors. When we did habitat assessments we didn't find much in common, a lot of variation, but did digital image vegetation analysis (DIVA) looking at thickness and height of vegetation; low DIVA value is short grass, not very thick, and high DIVA value is thick. We saw relationship with lower DIVA values corresponding with higher body condition index of the animal, they are better conditioned, but not a huge spread of values (35-55% DIVA). Methods include visual and artificial cover, we put out sheets of barn roofing metal, 2-3 pieces per acre, and find it works well, especially later in the season. Detection probability, accumulation curve, we find them in about three visits on most sites. If we stick all data into probability model; find search effort, 1.5 person hours per hectare we have 90% detection if they occur there. In 2002 and 2003, conducted survey at Rome State Nature Preserve, we spent a lot of time there, and recently completed three years of surveys there; estimated mean size is 95% confidence intervals; spent a lot of hours and caught a lot of snakes. Mean population from 2002/2003 was 72, now 33; only 10 acres of field we surveyed, covered in tin, 100 pieces; spent 175 hours, confidence levels overlap so we either had a 46% decline or if 23 use 95% confidence we don't have any confidence that there was a decline; not new for snake research, just can't get enough recaptures. Looking for other ways to detect, so relationship to birds, see no relationship. What do we know, 110 fields with documented occurrences, 1,100 hectares, 51% occupied; but if look at actual hectares, the area the snakes are occupying we see that most of sites are small, six are below five hectares where snakes are found. The outlier is 932 at Killdeer Plains, but not a big area. Population sizes, mean is 59, take out 433 at Killdeer Plains, the true population for the whole state is twice to three times that, number drops to 25. Habitat is small so looking at population densities we have high densities. At two of the sites we have 15 snakes per hectare. Let fields go fallow and snakes move in quickly from adjacent fields; largest populations in largest fields, most contiguous areas with low road density as they are a big problem; Species Status Assessment by USFWS points this out. Biggest problems is woody succession and herbaceous plants. Managing fields to keep suitable, leave alone and it turns into forest and snakes disappear; most of sites are on protected property. Most studied snake in U.S., we know a ton about them, 160 publications with a large portion of those conservation management and natural history focused. They seem to be a recoverable species, don't have a life cycle like a turtle where it would take a long time to see results; don't have strict vegetation requirements, more structural, and will eat all kinds of small mammals, which is positive. Can recover species. Snake fungal disease, new to us, not spreading like White-nose syndrome, may have been here a long time, seeing difference in prevalence and

resistance to susceptibility among taxa, in water snake up to 50% of population will test positive, but not killing a lot of individuals, susceptibility is low. Don't find many positives where other species have it. Only found one, about 15% incidence rate. Understanding how it works and what it means.

Ron Regan – Seems like a lot of rattlesnakes, how does public respond to these data? *Greg* – Most areas are closed to the public, some on private land and don't know they have it; snakes are good at sitting still, not about fleeing or striking and can step over them most of the time. *Brad* – Use of crayfish borrows in the winter, do you get mortality with high water conditions? *Greg* – There are documented occurrences when there is prolonged flooding they will die, they can stand several days of flooding, 2-3 days; oxygen requirements are so low that they don't need to breathe through their lungs. *Karen* – What reason for so much variance in those three years, technique or amount of time spent? *Greg* – One guy was working alone, and I had a crew of six people, more time spent there and number of recaptures, brought confidence level down but still not where we want it. *Kelly* – Funding source? *Greg* – I work for Ohio State University and have conservation partnership which is funded through state wildlife grants through Division of Wildlife from USFWS and Ohio State matches it. PARC, partners and reptile conservation, is largest collaborative focused on all species of herps, not just rare and endangered; national and regional PARC groups and state chapter here in Ohio, encourage you to get involved. One of the things they do is provide information necessary for state agencies. Have white papers out there, like impacts of raccoons, turtle nesting and others that are useful. A good collaborative of people, everything from agencies, hobbyists, zoos, aquariums and museums. *Mike Reynolds* – Tell us about snake poaching. *Greg* – Whenever someone sends me a photo and they don't want to tell me where they found the massasauga it is easy to stripe off exit data and find latitude and longitude, especially if taken on an i-phone (geo-tag). We do have an issue with poaching, anything that becomes rare, people want to see it. I was just in Virginia, talking to state herpetologist and discussing posts where people are driving across the country herping and you see them in 24-hour period going from one state to the next and the same pair of snake tongs picking up one snake after another; spreading diseases and hurting snakes with operation shell shock. Had one individual who said they just wanted to see massasauga's, took to site in Windsor Canada and the USFWS later traded that person for 33 snakes, they wiped out the population and brought them across the border to trade for timber rattlesnakes. There is poaching that goes on, we know there is a strong group of highly motivated people that are interested in looking at these and bringing them out; we try to keep quiet about where they are.

Land Management

Bob Ford, Wildlife Management Supervisor, Ohio DNR Division of Wildlife – (PowerPoint - Exhibit 18) I am wildlife management supervisor for District 2, northwest Ohio, 20 counties. As you were traveling in I'm sure you saw a sea of agriculture on landscape, true here, but northwest Ohio is rich in diversity, habitats, and animals' communities; have natural prairie remnants, centered in western basin of Lake Erie we have coastal marshes and wetland habitat, Lake Erie islands. Have three counties that include 130 square miles of Oak Savanna habitat, home to Karner blue butterfly recovery efforts, as well as other critters and McGee Marsh WA, important wetland habitat and one of most important destinations for birders in the world. For about 2½ months in the spring 60,000 to 80,000 visitors come to the boardwalk. Unique challenges, unique constituency and unique opportunities for our agency. From public lands management perspective, have four different work units responsible for managing 83 properties in 19 of 20 counties, which includes Lake Erie island properties. Total acreage is about 36,000 acres; not a lot but significant proportion is intensively managed wetland habitat. From recreational standpoint we provide 40 controlled hunting and trapping opportunities on 15 properties, have trap shooting ranges, mobility and impaired access lanes and augment wild

populations for hunter opportunities, specifically pheasants. Do a wide variety of wildlife management and habitat efforts, mostly wetland-habitat related, and grassland are next biggest task; specific to Lake Erie islands we do cormorant control to enhance nesting opportunities for colonial nesting birds. When we get into massasauga sites, our agency owns and manages four different locations across the state, two which are in our district, Killdeer Plains and Willard Marsh, a 1,700 acre wildlife area in area known as New Haven Marsh, has tremendous peat deposits, adjacent property uses intensive vegetable farming, from soil richness perspective, in one year blackberries would grow 12-15 feet tall, so woody succession makes it a difficult property to manage. Snake area on the property, we use cooperative farming contracts to control succession, snake area contains several small fields with two fields that have historically been in grassland habitat which sustains population, other fields have been in rotation with cooperative farming and once the species was rediscovered we pulled majority of fields from crop rotation which has been beneficial for the species, however in the next few years we will have to face how we are going to control succession and invasive species. Killdeer Plains is 9,000 acres, our biggest wildlife area in our district, home to several controlled hunting and trapping opportunities, a 2,500-acre wildlife refuge; with exception of some detached parcels, snakes occur throughout property. It is in an area historically known for mixed grassland, with interspersed wetlands and forest land. Challenges for snake habitat management; woody succession, invasive species, have stands of monocultures of grass mixed in with woody succession. Over last several years we have been conservative when thinking of approaches of habitat management with regard to avoiding adverse impacts to the population. Losing battle to succession, proving a huge challenge. Best management practices, restrictions, parameters outlined in the biological opinion for the snake is how we need to do business, with that comes reduced window of opportunity to get things done on the landscape. We also have species conflicts as well; have Indiana and Northern long-eared bats, if doing habitat for one doesn't necessarily benefit the other critters. Have to make a decision, continue to revert to forest to benefit the bats or restore to grassland to benefit snakes. Also have to take into consideration the parameters and best management practices for both groups. Solutions to our challenges: came up with different techniques that have proven beneficial and effective, 1) aerial spraying, local contractor if we supply herbicide he will do application for us at a reasonable price; we can cover a lot of habitat in a short amount of time but it takes multiple applications to get an area under control and ready for restoration planting; 2) mulching heads, done contract work using this machinery with partners, recently acquired one of our own at Killdeer and staff can take advantage of right weather and field conditions; and 3) prescribed fire, effective and efficient management tool, used responsibly, in biological opinion we monitor soil temperature below the service, and once it exceeds measurement for 10 days, burning window is closed. When we get close to burn window closing we need to think about whether some snakes may have come out early, with use of backfires even though not most effective fire technique as far as staff time is concerned is still most conducive to preventing adverse impacts to the population. Using those three techniques, we have fields with invasive species, large woody succession, we can take them and turn them into prairie; however, it took us three years to get to that point. It took multiple applications, multiple approaches and techniques. Turning table on battle succession but still a long way to go. Most important solution to land management is partnerships and open communication. Historically speaking we may not have had as strong of relationship with folks conducting research, USFWS and our agency as what we have now. Happy to say we have a good relationship, a strong partnership, and we have all sat at the table and acknowledged we need to do habitat management because we are losing the battle to succession and need to do that in the most responsible manner; share successes and failures, learn from each other, which helps our efforts. In the early spring, people come together, our staff, partners and sister agency staff who are land managers and USFWS and participate in snake survey. We line up and walk fields

and collect snakes to collect data; a good way to collect a large number of critters in a short amount of time, an opportunity to interact with partners as well. Interested in all data, more specifically from land manager perspective, interested in body condition. If take out thought process of number of individuals, Killdeer Plains is important population from numbers standpoint and body condition, high quality in perspective of genetics. Want to link our efforts to habitat techniques, build strong toolbox to restore snake habitat in effective manner. Lot of other species benefit from our efforts, other state listed species that are grassland dependent species as well as other critters; benefitting constituents from consumptive and non-consumptive perspective as well.

Elisha Mueller – Why area (couldn't hear question). *Bob* – This area, grassland wetlands in nature historically speaking, but challenge is invasive species, from 20 years ago to now has really changed as far as pressure we receive from conflicts they create and challenges of management. We have more struggles because more prevalence of invasive species on the landscape. The other thing we had at Killdeer specifically, historically known as field trial area, so we would do contract mowing with an individual who physically mowed 1,000 acres in a grid pattern every year. That was a tool in our toolbox, while not focusing on massasauga itself, it provided opportunity to control succession. Now that we no longer have field trials, don't do contract mowing, now have extra duties.

Kendra – Last snake survey was beneficial because we had new attorneys on staff, we had them out looking for snakes; a good experience for them and could help them understand what we were talking about and why we needed strange pieces of equipment.

Recovery Planning

Angie Boyer, Endangered Species Coordinator, Ohio Field Office, U.S. Fish and Wildlife Service – (PowerPoint - Exhibit 19) Working in Ohio field office, USFWS division of ecological services, since 1999. One of favorite things is Killdeer Plains survey picking up snakes. Providing overview of general recovery plan and implementation process and how it is being implemented for massasauga. General recovery planning under approach USFWS is using is that recovery plan is informed by species status assessment (SSA), the analytical framework we use to assess status. Recovery plans are broad vision and are concise, includes introduction with recovery vision and strategy; and three statutorily required elements, which are recovery criteria; recovery actions and estimate of time and cost to carry out actions. Implemented using recovery implementation strategy, which contains on the ground activities stepped down from the recovery plan, specific actions needed to get conservation done. Unlike recovery plan which is required to go out for public review and comment, the recovery implementation strategy does not have that requirement. Provides flexibility and relies heavily on states and priorities for recovery. Many of you seen eastern massasauga rattlesnake species status assessment. The analytical approach used to assess species and purpose is to describe viability of species in a way that supports our Endangered Species Act. The fundamental components of an SSA: species needs, all compiled information on life history and ecological relationships; current condition of species relative to historic conditions and describes why species is in that condition; future species condition, projects future condition of the species based on probable scenarios and synthesizes all of that information into what it means for the species. The intent of the SSA is to provide a single scientific basis for all of our ESA decisions. It is the hub of information to be used across all of our programs; creates efficiency, consistency and provides for streamlined conservation for the species. The recovery plan is very concise document, has introduction with general recovery strategy; statutorily required elements of recovery criteria, recovery actions and time and cost estimates. We do engage states in recovery planning. Recovery implement strategy is one of the biggest changes in the way we are implementing recovery. Recovery plan provides overall strategy for recovery, it is recovery implementation strategy that is how you achieve

actions in recovery plan. It is a near term revisable implementation document that lays out who does what, where, when, and how. It is a separate document than recovery plan and because of that it does not undergo public review and comment and is flexible and adjustable over time and is driven by state's priorities. An example: plan is to establish additional populations in a drainage, like Lake Erie; recovery implementation strategy would tell you how you are going to achieve that; may want to identify number of populations needed, habitat surveys, monitor those, very detailed. Recovery Implementation Strategy lays out the process for getting there, which allows us to adjust recovery actions in response to new information; for example, fungal snake disease. Provides opportunity for adaptive management. Get new invasive species, for example, that wasn't foreseen, you can adjust in response to how you manage. While we might identify management in recovery plan as being necessary, how you manage would be in the strategy. You wouldn't have to go back to revise recovery plan, which is involved and takes a lot of time and money; you could update strategy, is efficient and helps avoid situation where we have been for many years where recovery plans become quickly outdated. Eastern massasauga was listed federally threatened in 2016, due to loss of populations throughout the range, reduction in numbers of individuals in remaining populations as well as the fact that the threats are continuing to cause declines to the species and is going to happen into the future, without listing. We want to stop that trend. Main threats are habitat related; habitat loss, habitat fragmentation, and vegetation succession, which is biggest threat to the species. Species status assessment (SSA) completed in June 2016, listed as federally threatened that fall and started recovery planning process. We engaged states and now there is a draft being reviewed and I believe that will be coming out for public review and comment in the near future. Once draft put together started developing recovery implementation strategy, kicked off in Ohio last fall. Held series of meetings with states, led by states so they could identify unique priorities; and what species needs in Ohio for recovery. Currently all states in species range are working on narratives for strategy; Ohio is leading the pack, is completed. Examples of actions Ohio has identified as being necessary for massasauga recovery, not in order of priority. Managing habitat at locations where we have them, within just a few years sites can become unsuitable if not managed. There are more detailed metrics or measurable criteria, are site specific, know how big sites are and how many fields and how many acres. This needs to be done on a rotation as needed. This is very detailed, and you can see, if you try to put something like this in a recovery plan, you could quickly be outdated. Shout out to Kate Parsons, she led implementation strategy team and all of Ohio team, a pleasure to work with; enthusiasm, dedication and commitment is wonderful. Ohio expressed that strategy process is a good fit for them; worked well and my experience has been great. They already had a statewide conservation plan in place for the species and they knew what they wanted and needed to do; a good fit.

Panel Q&A

No additional questions.

Refreshment Break – Sponsored by The Mule Deer Foundation

AFWA REPORT

Ed Carter, AFWA President; Director, Tennessee Wildlife Resources Agency –A great pleasure to be president, a great deal of work but at same time interesting and given me a chance to see other places and visit with other people with similar goals. Second time to Ohio in a month, Secretary Bernhardt made announcement at Ottawa National Refuge that they were going to open 1.4 million acres of additional hunting and fishing on national wildlife refuges; I was fortunate to be a part of that; visited with Margaret Everson, principal deputy director of USFWS

was here as well, visited with her and the Secretary as well. Margaret has opened communications when I first became president, we swapped phone numbers and emails and made a pledge that we could call each other whenever we needed to; have met with Secretary Bernhardt on four different occasions, impressed on how much he was aware of a lot of the issues. Thanks for hospitality here in Ohio. Last meeting here, we talked about hunt/fish chiefs, USFWS started to put together a group of positions, in regions and national, called hunt/fish chief. The whole purpose was to mesh state regulations, federal regulations and do everything they could to blur the lines between state and federal properties so public would have better access. This is my first MAFWA meeting, and I wondered why the president of AFWA goes to regional meetings; it has been good for me and I have learned every time I go to regional meetings and see how each one operates a little different. I can see what problems are, issues that come up that each region is working on, some overlap in that, but when meet with Secretary or Margaret I am more informed and prepared on questions and conversations. Open symbiotic relationship here, some of things we are trying to put across at AFWA is also some of the things that would be important to you. For some of you, this is your first meeting of MAFWA; for directors, welcome. Whatever any other director can do to help you pick up the phone and they are more than happy to do that. We are doing that at AFWA too, trying to make life as easy as we can. Started this year with orientation for new directors and some of that information is still available; some directors put together a presentation about what it has been like to be in this role, can get that from Sara. Connecting with groups and organizations we need to this year, legislative efforts in Washington and AFWA meetings to further our cause. Didn't see trip to Africa coming, Committee on International Conservation made contact with Ron; they were holding first international world conference on sustainability of wildlife, North America, South America, Europe and Asia were invited and asked AFWA to spearhead the North American side of that. Ron and I made that trip and it was enlightening to hear what is going on in other countries and their view on the world, especially in Africa. We went to Namibia, a contrast to be in an ultramodern hotel and 15 minutes away it would be what you expect in the middle of Africa, with native wildlife almost in city limits. Other African countries highlighted local issues; they said it would be great if Canada, the U.S. and Great Britain would butt out and let them manage their wildlife. They had 400 non-government organizations that deal with just rhinos and elephants and they went into animal damage and crop damage; but when an elephant runs through your house or lion comes in and chases you out, that puts a little different perspective on it. They had different examples of loss of life, loss of crops and subsistence farming; what a different world. Love to have to time to tell you what we learned, great one-on-one perspective, but another time. AFWA interacts with Canadian counterparts, have all provinces, but one, who are now AFWA members and think that one is about to come on board. We go to their meetings too, which are similar to our regional meetings; so much similarity in what is going on here, CWD, greatest conservation need of species, etc. Thank Sara as chair of executive committee and Kelly as vice chair and Glenn Normandeau, vice-president of AFWA, has not been able to be engaged much because of health problems in his family. Recovering America's Wildlife Act may be introduced this Thursday, we hope; made changes and thank you for that help. Partisanship going on, when we send this out, satisfied as they can be with introduction, getting it on the floor is big thing. Marksmanship bill passed and is in legislation now, because of changes on PR side, the match on range construction and acquisition of land to build a range, changes match to 90/10 instead of 75/25; expect it to go into effect with new federal fiscal year. It has been a discussion topic in joint taskforce on federal aid and expect guidance soon. The PR modernization bill, we hope this helps R3 initiatives; partisanship that people look at, concerns with guns and/or other aspects, doesn't have anything to do with what we are trying to do, but concern by some people. Another bill, AFWA and some states involved, in New York City where there was a proposed ban on any trapped animals, had people there to

testify on that, but don't believe any got to the floor to testify and don't know where that is, but could spill over into other states; that is NYC council, not necessarily legislature. CWD, as Tennessee became 26th state, know what it is to deal with some of that; with legislation in DC, have people from four states testifying today before Congress, hopefully that will move forward; we are looking forward to the day we can get some federal help on that. A little mentioned about invasive species, Asian carp in particular, little bits of federal money that pops up occasionally. Asked Secretary Bernhardt if he was hearing from other folks at federal government on Asian carp, he said during his confirmation hearing he had 40 U.S. senators ask about Asian carp. We need some help, he said no guarantee, but he thought we would see some movement out of federal government to help with that. Talked about coop units of USGS and how important they are to state governments, he was aware of that as well, funding has been up from where it was, but not home free yet. Letter about tariffs (Exhibit 20), every day in news right now; President Trump talks about them, especially those to China. Caused great concern, especially among fishing community and the American Sportfishing Association asked AFWA to weigh in to help as well as the Archery Trade Association. Dan mentioned problems with that this morning. There is too much partisanship in politics; when director works for a governor who has a different stand than the President, sometimes that causes problems. If AFWA weighed in that puts directors, agencies in conflict, we never want to cause that to happen. In that respect what we tried to do was develop a letter that outlines problems if those tariffs go through; essentially the 25% tariff, on China especially, according to ASA two-thirds of fishing equipment is imported and 65% of that is from China. Since they already pay the excise tax in terms of Dingell Johnson and Wallop Breaux the extra 25% causes great concern and if price point goes up it could cause participation to go down; if participation goes down and sales go down the amount of money in Wallop Breaux DJ side would go down and license sales and participation would go down; a downward spiral. A huge uphill battle, if car industry, steel and aluminum folks had such a hard time, with the weight they had, so will we. At the hearing last week, we understand several people at the hearing didn't know about the excise tax, first time brought forward, so maybe this is a concern we need to look at. That is AFWA's stand and we are trying to take a stand in a way to not put state agencies or directors in a bad position. Next joint memo from Margaret and myself (Exhibit 21), as result of meeting at North American. Looking at best way to develop better communications, Margaret and I collaborated on issues, along with staff folks on both sides. We talked about three general areas, communication, personal relationships and trust; broke down each one of those into actions that could be taken and put time lines with them. When Secretary Zinke was just about to leave office, he sent out a letter saying we were changing policies and procedures, talked about hunt/fish chiefs and other policy changes to help coordinate USFWS and BLM and other federal agencies under his control to better work with state agencies. They sent that letter to the governor's about November 1, a lot of states never saw that because it was in governor's offices. We asked if we could reissue that letter because we got terrible feedback and it appeared states didn't care about policy changes. That will be reissued, and you will have a chance to comment back on that. Ideas under each one, better communication and joint task force on what issues are coming up and what you would like to see there. The joint taskforce has already put together a roadmap and how to vet that within states and task force, think that will work well. Executive communications council, another committee from state and federal folks, like joint task force, and when there are issues it is a way to vet those, get conversation going on both sides to raise awareness. Timelines associated with all of those. Marksmanship bill (Exhibit 22). AFWA Strategist (Exhibit 23) put out by Ron and his staff that brings you up to speed on bullet points as we try to move through legislative efforts; contact Jen Mock Schaffer if you want to get involved in legislative issues, she will tell you what it means to your state. Look through those things, see who is on different committees in Congress, see how your state is lined up and help at personal level. People in elected positions respond more readily and openly if they hear

from hometown folks than they do if they hear from a national association. Appreciate opportunity to serve as president, it has been a joy for me, and I hope we make a difference.

Ron Regan, AFWA Executive Director – Ed Carter has been a great president and continues to be. When I went to work for AFWA in 2007, one of the portfolios I was given was reauthorization of Wallop-Breaux. AFWA put together a team of state folks representing directors' offices and national association of voting law administrators. Glad that Ed and I hit it off years ago when we first met, he has been director for 10 years, a 40 plus year career in Tennessee; despite the fact he breaks out in song when on the road, he is quiet and humble, a southern gentleman; he is conscientious to a fault and we send him a lot of email. He wants to pay attention to everything we do so he can do the best job possible for us and you. He also has been working the CWD issue through the Department of Interior, and we anticipate that sometime in the near future he will be coming to DC to meet with David Bernhardt on that. The Department of Interior has renewed interest in being a leader on CWD issue, but also being careful and cautious about getting involved with state trust species. Regarding the coop units, that is a big deal and Doug Austin from AFS and Ed Thompson from The Wildlife Society and myself are meeting with director of USGS, Dr. Riley, for second time in six months, to make the case for, don't blow this up when it's working well. The coop units have been caught up in some of this discussion about reorganization at the Department of Interior and we are trying to advocate for a reasonable approach to that. Ed covered policy items; I will focus a few more comments on administrative or organizational items. Our annual meeting is coming to the Midwest, September 22-26, in St. Paul. Thanks to Pat Rivers and his staff for helping us put together a good plenary and retreat on Sunday. Make appeal to new folks, it is a long time, but if you have the luxury of coming in on Saturday the 22nd so you can be there for all day Sunday the 23rd, a full day of director-only meetings and events, including a nice dinner hosted by DU in evening; that is the most important day to be at meeting. Hope you can be there for plenary, which is going to focus on relevancy issues and stay through business meeting on Wednesday afternoon. If you can only be there for a couple of days, we will take what we can get. Building on letter that went out under Ed and Margaret's signature, talking about how to structure that time. Anticipate senior leadership of USFWS being with us for part of Sunday to advance that agenda. The other handout, the Organization Chart for AFWA (Exhibit 22)/ we have changed after North American after I talked to the executive committee about ways to benefit with a little change. Important to note, finally filled ag policy position, Greg Pilchak who will be starting on July 1, he will be at WAFWA for those in Manhattan, Kansas in a few weeks. We had a little extra unobligated general fund money, turned that into a brand-new government affairs position; that world in Washington DC is nuts, people who work in that field it never ends, concluded that Jen could use some additional resources in her shop; we are recruiting now, give government affairs greater depth and capacity to serve you. Thank you for being members of the Association and enabling us to have resources to do that. Interested in Herp presentations this morning, many of you will recall that Priya Nanjappa our go to person for herps left us to go to work for private sector last summer and that position is open and beginning recruiting. Our director of leadership development, Gina Mains former position, have had that out multiple times, the job pays in six figures, is in Shepherdstown WV, but having trouble recruiting the right candidate for that position; if you know of anyone who has demonstrated leadership and managerial skills and would like to apply we would like to know. AFWA also did a market salary study this winter, hired a consulting firm that looked at job descriptions and positions across the board and came back with report on how competitive we are and how well we are doing in compensating our employees; in the ballpark for compensation, a couple anomalies that needed tweaking and in process of making those adjustments; a very instructive exercise; a tool that will help us for the future as well.

Kendra – Excellent way to spend funds, on government affairs position. One the best services AFWA has provided to me through the years. The help from Gary Taylor and Jen Mock Schaffer has helped me navigate congressional avenues and has been helpful; we have our hands full with state legislatures. Dealing with Congress is a different beast.

MAFWA COMMITTEE REPORTS

Ollie Torgerson, MAFWA Executive Secretary, Facilitator – We have 13 committees, 11 active, committees have a 3-year assignment or life, if functioning well directors reauthorize for another three years. Each committee has a director assigned to be a mentor or liaison, several vacancies. Each director has one or more staff on each of these committees. Thanks for support for out-of-state travel to attend committee meetings because committees do a lot of work for our Association. They recommend actions to you and you decide to approve, amend or dismiss them. We have 11 reports this morning, it goes fast but that doesn't diminish the value of the work they do for us.

Ollie – Carolyn Caldwell was recognized for award yesterday; she has been CITES rep since 2003. Our President Kelly Hepler is director/liaison.

CITES (Report - Exhibit 25) – *Carolyn Caldwell, MAFWA CITES Representative* – Copies of report in the back, not go through report. CITES is international treaty that provides control in regulations on species that are listed within one of three appendices of plants and animals. There are 30,000 species listed in the three appendices; controls placed on these species can and do have implications to state fish and wildlife agencies, positive or negative. The CITES Technical Work Group, I am Midwest representative, we have representatives from each of four regional associations as well as Deb Hahn with AFWA. We serve as your conduit for all things CITES, whether involvement in actual treaty or involvement working with USFWS who administers the treaty for the U.S.. The treaty was signed or enacted in 1975; a lot of actions related to this over the course of time. Our technical work group works closely with USFWS, make sure we stay engaged on all activities of CITES, both globally and nationally, and keep directors informed on what is going on and also reach out to you to get feedback on potential proposal that may or may not affect you and the way you manage your wildlife resources. We are available to you and encourage you, or staff, if you have questions on implementation of CITES and what proposals mean at state levels, reach out to any of CITES work group representatives. Update to report provided a month ago; they have rescheduled the conference of parties, where all of the changes to the treaty occur, to August in Geneva, Switzerland; was Sri Lanka, but bombing occurred in Columbo so postponed, relieved they chose to do that. Week before they postponed I got all my shots, so I won't get those things here in Ohio. *Ollie* – Carolyn retired from Ohio DNR, Mike Budzik offered her to us, and she has served ever since and done a remarkable job.

Ollie – Our only Ad Hoc committee and MAFWA President is director/liaison.

Feral Swine (Report - Exhibit 26) – *Clint McCoy, Wildlife Research Biologist, Ohio Division of Wildlife* – The feral swine committee and the Southeast Association (SEAFWA) wild hog working group met jointly as part of third national wild pig task force meeting held the day after the 2019 wildlife damage conference. The meeting was hosted by Mississippi State University and held March 28. We had biologists from IN, KY, MO and MN in attendance. It has become customary in recent years to meet in conjunction with larger meetings to combine efforts and facilitate professional networking to enhance overall exchange of information. Things happen fairly rapidly on feral swine and elimination efforts, mostly due to a lot of toxicant research and things like that. Notable discussion, general reliance on partnership with USDA-WS to conduct elimination efforts within majority of the states. On a positive note, feral swine removals

continue to increase; might mean more pigs but means more work is getting done. Missouri eliminated almost 10,000 feral swine last year; Kansas 500 last year; some significant reductions occurring in some states. Seen significant reductions in more isolated populations in states that are less densely populated, a positive. Some states like IL, MI, MN and NE had few if any breeding populations so in monitoring effort, only receive a handful of reports each year, unfortunately most are escaped domestic pigs, which is one of the problems that continues to plague states to keep off the landscape. The 2018 farm bill increased from \$20 million to \$75 million for feral swine elimination efforts, split between USDA-Wildlife Services and NRCS, who is new player to the game. Two issues that most of the discussion focused on was obstacles to effectively removing feral swine: 1) resistance of landowners to allow access on their property to remove feral swine, which creates a refuge and acts as a source population; 2) poorly confined or illegally released animals is also a significant concern and the reason most states have feral swine issues in the first place. Information item to consider; Mississippi State University, due to some restructuring, can no longer support the international wild pig conference or the national wild pig task force; over the past decade they have housed the website and helped organize these conferences and meetings, and we need to replace that nationally. Right now, the national wild pig task force is considering a proposal from the Berryman Institute out of Utah State to house the national wild pig task force, organize meetings, maintain website, etc. They have been guaranteed \$20,000 to operate for the first year, to get more time to secure more permanent funding. One proposed funding mechanism is to secure membership funding in the form of regional or organizational dues from MAFWA and SEAFWA or other organizations who want to be a part. The committee wanted to ask the directors to consider how this might be accomplished or pursued. *Kelly* – We need to have someone continue on managing this, the question is long term funding, not sure where \$20,000 came from for seed money. Could take action tomorrow, dues would be voluntary not mandatory, is there interest from states involved? Comments. *Karen* – On communication, is that with states regarding action or market or education/information things? *Clint* – Not sure, they do maintain a website that has all of communication articles and marketing, but as far as education materials for general public, not sure they do that. *Karen* – I heard they had mentioned trying to create more of a regional material, like bear aware, on pig side. That is more difficult for southern states versus Midwest states, where we are trying to keep them out where others are trying to manage them, like in the deep south. We would have interest with your efforts. *Kelly* – I can work with you and Ollie and get more information out to directors. *Clint* – In basic phase. *Ollie* – Come forward with specific action item next year, with amount of money and who should be part of that, mentioned two regional associations so it could be something from each state that has feral hogs could contribute; need to flesh that out.

Ollie – Vacant director/liaison position.

Hunter & Angler Recruitment & Retention (now called R3) (Report - Exhibit 27) – ***Eric Postell, Outdoor Education Program Administrator, Ohio Division of Wildlife*** – Overview of AFWA R3 College student project, individual state reports and highlights. Goals: 1) understanding, to evaluate short and long term understanding of hunting related beliefs, attitudes and behaviors of college students and evaluate protentional support for hunting. As of April 2019, 11,000 surveys were completed across 13 universities, this information is being compiled and a more detailed report is due in December, some preliminary data has already been presented and publications created. 2) Evaluate short- and long-term success of R3 programs designed for college students. Some accomplishments: created detailed agenda for hunting 101 workshop; workshops have taken place in five states ranging in size from 10-24 participants, more states will offer workshops in fall 2019, making strides but there has been some delay. The delays are twofold, arrival of USFWS funding was delayed which pushed entire timeline back six months; and unexpected challenges with award distribution from state research office. State reports: the

Division of Fish and Wildlife will release their first R3 workshop calendar with goal of increasing public awareness of R3 events; they created a report of internal challenges and barriers facing R3 efforts. Also, released workshop curriculum to agency partners. In Iowa, developed and evaluated “let’s go fish” local community-based R3 initiative, completed two data dashboards in 2015 and 2016 for hunting which allowed for additional insight into customer base. Iowa DNR shooting sports program conducted first “field to fork” in October 2018. Kansas hired a full time R3 coordinator in 2018; held first R3 summit in Jan 2019; formed R3 committee with representation from 30 different organizations. Kentucky planned three “field to fork” events; partnered with NASP to co-host wildlife outdoor fair with 7,000 archers and 15,000 spectators; introduced to new outdoor adventure and created a marketing plan for 2019 outlining strategies and improvements. Michigan DNR hosted bi-weekly meetings with DNR staff and partners; received RBFF grant to develop an angler R3 plan; launched marketing campaign in March to increase license sales to nonresident customers through research driven and targeted marketing. Minnesota DNR developed set of requirements, expectations and benefits of participating MN mentor network; next R3 grant cycle announced for projects beginning July 2019; revamped adult learn to deer hunt 101, two programs, and pilot learn to pheasant hunt with DNR staff. Missouri DOC, state R3 plan completed and next step is presenting it to their partners; using management system for all agency events that is integrated with licensing system; completed 2017 data dashboard and 2018 will be completed soon. Wisconsin shared new angler R3 brochure that represents evolution from traditional angler-based education to adult-oriented fishing for dinner program; conducted an email reminder study that resulted \$400,000 increase in hunting license sales; employed R3 dashboard that enables staff to evaluate resources and opportunities. Ohio implemented participation registration to capture event data that can be compared to license sales data; in 2018 awarded over \$800,000 to conservation partners for hunting, shooting and angling events; poised to award \$1 million this July; two large shooting range projects are underway totaling more than \$13 million and both will include outdoor education, training centers for R3 clinics with more range improvements to come. Moving into partner reports: NWTf Ohio hosted internal comment period for Ohio R3 strategic plan with employees; utilizing staff consulted with conservation partners on R3 efforts providing guidance and resources; implemented wild Ohio harvest community with communication in marketing as part of a one-stop-shop for learners visiting the department’s webpage. NWTf Nebraska developed standards for pre- and post-evaluation questions in partnership with Iowa DNR, Virginia Department of Fish and Game and Inland Fish and Pheasants Forever; implemented three different mentor competitions including “take em fishing”, “take em hunting”, and internal staff mentoring challenge; will be hosting first R3 summit since hiring a R3 coordinator. NWTf Wisconsin coordinated and conducted five “hunt for food”, four “fishing for dinner” courses and five follow-up skills trainings; worked with PF staff to develop mentoring materials; consulted on creation of “fishing for dinner” training materials. PF Wisconsin co-hosted first combined training for hunter mentors and “train the trainer” and developed a virtual hunter mentor training program to pilot in Wisconsin. Archery Trade Association (ATA) launched ATA resource website to provide access for state agencies, educators and instructors; upcoming explore bowhunting and bowfishing workshops in Nebraska on August 1 and Isaak Walton explore bowhunting and archery academies in Iowa and Indiana. *Sara* – What is wild Ohio harvest community initiative? *Eric* – It is a brand, our magazine is called Wild Ohio, brand for what division of wildlife does; a one-stop community where participants can access data off of our website, sign up for classes and we can capture that data and market to them; offer them extensions, either, basic, intermediate or advanced opportunities. *Sara* – In event management? *Eric* – Works in parallel with event management system. Our focus has changed from typical hunter more food-based; people showing up to events are more interested in how much protein and not necessarily the tradition of hunting. *Karen* – Our “field to fork” said always trying to get

interest in that group and it seems to be stalling somewhat. On shooting ranges, the \$13 million, is there somebody I could talk to as far as process you went through to determine the what, the where, surveys of public to determine what types of shooting interests or what? *Eric* – We have a range committee that represents wildlife management and information and education from around the state, identified need. All of our ranges are 40 years old or older, not interested in this point of building new ranges. *Karen* – This is \$13 million in updates of current facilities. *Eric* – Yes.

Ollie – One of oldest committees, goes back to 1970s when I was a deer biologist in Missouri. Dr. Dale Garner, Iowa is director/liaison.

Deer and Wild Turkey (Report - Exhibit 28) – ***Clint McCoy, Wildlife Research Biologist, Ohio Division of Wildlife*** – We just had 42nd meeting last year at Camp Ripley in Little Falls, Minnesota, August 27-30, 2018. Attended by 51 biologists, participants and speakers, which included deer and turkey biologists from member states and all but Michigan's biologist at last year's meeting. We had members from NWTF, QDM, University of Minnesota Extension, Michigan State, Purdue, University of Nebraska and USGS Wildlife Health Center. There were joint-session presentations over two days; discussed citizen science, habitat degradation and equality, disease, population inference, management goals and season structure. In afternoons had break-out sessions; CWD dominated deer portion, several states shared perspective, experiences and plans dealing with the disease, which is helpful to others. Turkey break-out included presentations on genetics, regional productivity trends, and attending biologists unanimously adopted brood survey standardization protocol that was developed by southeast wild turkey working group, drafted list of future research priorities. No action items. Appreciate support in allowing us to go to these meetings and exchange information and ideas. *Ollie* – This is the only committee that meets in previous year, wish you could figure out how to meet in same year closer to this meeting; when health committee tried to coordinate with you on a resolution you had already met, and you are out of sync with the rest of committees.

Ollie – Kelly Hepler, South Dakota is the director/liaison.

Furbearers (Report - Exhibit 29) – ***Katie Dennison, Wildlife Research Biologist, Ohio Division of Wildlife*** – Met during joint furbearer conference in Enid, Oklahoma, joint conference between Midwest and Southeast. We had 50 participants, including 10 Midwest states. Workshop included presentations on topics related to harvest surveys, population monitoring, furbearer management, ecology, genetics and trapping. Formal sessions, breaks and evening socials were an important venue for exchanging information on furbearer management concerns and emerging regional issues. Grateful for providing funding for travel to these workshops. No action items but several informational items based off conversations. Trapping best management practices: recognize importance of BMP program and support testing of trapping devices and techniques in order to inform BMPs, also recognize there is need for public outreach related to BMP program and controlling modern trapping; spotted skunk review: a 12-month review for Endangered Species Act listing of sub-species, set to begin in 2021, committee discussed listing of species could potentially impact trapping in Midwest states and impacted states should be prepared for data requests. Bounties: committee discussed there is a rise in questions regarding bounty programs for furbearers, especially predators, some biologists have concerns about effectiveness and practicality, agreed that states should be prepared to answer questions. Predator contests: furbearer biologists discussed that a few states had movement toward banning them as a result of public concerns, Midwest states be prepared to answer questions regarding these contests and consider whether human dimensions research would be beneficial on the topic in order to address future concerns. Large carnivore report: in Appendix 5 will continue to provide that. Muskrat population decline: consensus of MAFWA, SEAFWA and NEAFWA furbearer

groups that over the past several decades there has been a decline in muskrat abundance throughout much of their range in eastern North America, given decline and ecological and economic importance of muskrats the working group plans to work with SEAFWA and NEAFWA to develop cooperative research projects to address declines with focus on developing management actions. *Ollie* – Any ideas what is going on with muskrats? *Katie* – A lot of theories but we don't know if it is one of them or multiple reasons.

Ollie – This committee has been in force since 1944, a long-standing committee which is larger in geography than our Association but has been a very effective committee.

Director/liaison position is currently vacant.

Law Enforcement (Association of Midwest Fish and Game Law Enforcement Officers (AMFGLEO) (Report - Exhibit 30) – ***Dick Cochran, Law Enforcement Program***

Administrator, Ohio Division of Wildlife – Three areas to highlight in this year's report. Adding to next generation; good news, eight agencies reported hiring new officers, keeping roster filled with quality people is critical to achieving agency goals, policy mandates and conservation resource protection; recruitment of qualified candidates can be a challenge but achievable; successional planning is critical to agency's success and reloading with next generation of leaders is a pivotal role. More officers equals better morale for current officers and demonstrates to current employees we have invested in them; better service internal and external, better resource protection that makes the agency timely, appropriate an expert professional, and relevant. There is a strain on existing staff to train officers however, it is understood and there is buy-in, quality training takes time, 3-6 months for basic training, an additional year of resource protection training, it takes resources, money, staff, time however, that training provides the foundation for future employee success. It is a 30-plus year commitment both for the agency and the employee when we bring them on. High standards and qualifications create a challenge for hiring process, but we must maintain those in all agencies. The goal is to find good people for a great job. Conservation enforcement in today's world, digital expectations, the world beyond paper; the challenge is what to do with everything, every digital item we obtain and store. Completing reports, keeping records, gathering data; how do we store and manage it. Constant connections, cell phones, mobile data terminals, GPS equipped vehicles, radios, social media; everyone wants the answer at the touch of a button and then wants to be the first one to post it for everyone else to see. Internet crimes, everything is for sale and every report needs to be investigated. The diverse and challenging roles and duties, what we know and understand as traditional role of our game warden. Boat is getting full and sometimes we need to determine what it is, where it came from, and what do I do with it now. In today's world we serve the public and people doing outdoor recreation as much as those pursuing fish and game resources. Priority-based enforcement is being utilized to achieve regulation compliance goals, this tool can be budget and/or workforce driven and typically involves planning, review, training and implementation. Utilization of force multipliers including technology such as remote cameras, observation systems or multi-agency operations is a must. Data analysis, data is collected so we need to look at it to determine trends, it lets us know where to be and when to be most effective. Working smart also takes into consideration public expectations of high-profile poaching cases and working cases that have the potential for biggest impact, catching the worst of the worst. Conservation law enforcement, meeting the challenges in an ever-changing world. *Kelly* – How many agencies have body cams? *Dick* – Not a majority, overall concern with body cams that everyone is dealing with is what to do with the data. How do we download from remote locations to a server, how do we store it, how do we put it together, how long do we keep it from public records standpoint, how do we release it? Technology exists, how do we deal with the data. *Kelly* – Work closely in South Dakota with patrol and we went through and identified all those questions you just asked. How long you hold something may be different in each state depending

on what statutes are. There are enough players out there and if there are states interested in that, a lot of the ground work has been completed already. Contact Andy with our agency and he can provide that. Another example; had a complaint the other day, back-to-back, same type of circumstances; went back and looked at videos and it was very clear that our officer handled himself professionally, nothing wrong with interactions with those individuals and we report that back to the family. It went away because the other side was, “he said she said”. It is invaluable when it comes to training. *Ollie* – Where is law enforcement on use of drones in work? *Dick* – In Ohio, we have an aviation section and overarching rules from Department of Transportation. What we have dealt with is understanding liabilities that comes along with flying a drone over property where people are, over roadways, all of those issues. The other concern is search and seizure, there may be a different standard for flying drone over private property; Open Field Doctrine, can use aircraft that is well established but once you go into a remote setting what will be challenge, coming from courts or court rulings for search functions. It is clearly a search to fly a drone over private property. Ohio is not using them in enforcement at all, some other agencies may at certain levels. *Ollie* – This committee meets with us every third year, met with us in Bismarck last year and will meet with us in Wisconsin in 2021.

Ollie – Jim is chair of committee, Kelly Hepler and Dale Garner serve on committee. The President is director/liaison.

National Conservation Needs (NCN) (Report - Exhibit 30) – ***Jim Douglas, Nebraska Game and Parks Commission*** – In January this year, Ollie assisted MAFWA national conservation needs committee in soliciting proposals from state directors in MAFWA for 2020 multistate grant cycle. One submittal from Dale Garner and it was good, it was through MAFWA Wildlife and Fish Health Committee, titled “Binational Notification System for Chronic Wasting Disease Carcass Risk Management”. This proposal supports best management practices, risk number 13 in the AFWA BMP list. Movement of hunter-harvested cervid carcasses and AFWA’s BMP for surveillance, management and control of CWD. MAFWA’s executive committee met and approved this proposal on January 22, 2019, submitted on time to national grants committee of AFWA by Ollie. It became NCN number 11 on national list. *Dale* – I believe there were four CWD-related submittals, they all met criteria, so will be asking for full proposal now. *Kelly* – More than four, and that is one thing we want to talk to President Carter about.

Ollie – Director/liaison position is currently vacant.

Private Lands (Combined Report - Exhibit 32) – ***Jeff Burris, Private Lands Program Administrator, Ohio Division of Wildlife*** – Met in conjunction with public lands working group, May 21-23 here at Maumee Bay State Park, nine states represented. This is a close-knit group who is in contact monthly if not more often. We had three featured speakers from Farm Service Agency in Ohio, the conservation chief; from NRCS, the state biologist; both covered programs and issues relative to private lands programs across the region. Third speaker was Claire Beck; engaged group on ongoing efforts and challenges related to the monarch strategy. We like to claim Claire as our own as she started her wildlife career in our office; proud of her and her work with monarchs. The bulk of the discussion dealt with the sharing of successful programs from each state; the highlight was the tour, featured wetlands here in Lake Erie region, relevancy with ongoing water quality issues. Had opportunity to look at pollinator monarch planting here at the state park to put milkweed plugs into the ground and took that opportunity for group picture. One information item, no action required. To make you aware of special issue to be published in Wildlife Society Bulletin in September focused on topic of private lands conservation. Directors are encouraged to evaluate their involvement and your states commitment to private land conservation. No action items. *Karen* – John Morgan worked with you, asked me to talk about what you mentioned. The plan is to publish in September; there are nine different manuscripts in

that all dealing with private lands conservation and management in the U.S., looking at state agencies in particular. They are planning on social at AFWA this year and hope directors will be in attendance to kick off private lands discussion and looking into the future. The Midwest has been active in private lands and it has been noted by the Association so the hope is that MAFWA will take lead and offer assistance in this as well. Following the AFWA discussions, the hope is to have a representative from each Association to be referenced during speaking points at the social and also to take back to their Associations meetings and have these discussions at the next break out meeting as well as regional meetings. I have an appendix from one of the papers from the presentation; if you want a copy I will pass it around or get you a copy. It shows the breakdown of each state and amount of resources they put towards private lands based on the size of their state and how much private land is in it; also based on amount of resources you have, looking at wildlife division or branch as a whole. I wanted to put out a plug for MAFWA and the amount of work this Association has done on private lands and make you aware of things going on at AFWA. *Mike Reynolds* – Jeff Burris is retiring Friday, 36 ½ years. *Applause.*

Ollie – Vacant director/liaison position.

Public Lands (Combined Report - Exhibit 32) – *Mike Ervin, Public Lands Program*

Administrator, Ohio Division of Wildlife – Met jointly with private lands group right here in this room a month ago, 11 states sent representatives. Three points: Monarch conservation strategy, specific to public lands in MAFWA states; use for data on wildlife area use; and 2016 neonicotinoid resolution. Update on discussion led by Claire Beck on monarch conservation on public lands. She worked us through four questions to query states on where they are in terms of monarch conservation specific to public lands; 1) have the states set goals for monarch habitat on public lands and several states reported that they had and set goals on number of stems. Several other states who had not set goals expressed an interest and concern on how to go about quantifying what monarch habitat really is and how you would count and report it. 2) led to next discussion that Claire offered as a service of MAFWA, to offer BMP for monarch conservation and asking states if that would be useful or not; consensus was it would be useful. Some states struggling on how to quantify. A good product from Claire to get product on the ground. 3) She asked if stem counts in states were in the millions, asked what cost to deliver that was and portion on public lands. Again, conversation went back to, how do you quantify it; would depend on restoration, if coming out of crops or idled habitat or in some type of pollinator habitat. Had decent understanding of how to estimate the cost, but question was exactly what we were trying to deliver. 4) How do states track habitat accomplishments; several states are using technology, GIS and things along those lines; some don't have a system set up. Good discussion. The second topic was the need for data on wildlife area use; and how we can improve the product we are delivering to the public. Significant portion of state budgets for wildlife management are spent on public lands. Discussion led us to conclusion that most states conduct survey about once every decade, not at scale fine enough to drive management on wildlife areas. Came to conclusion that constituent use is relatively poorly understood in terms of data. Kansas reported use of technology called iSportsman used to collect daily use data of wildlife areas, interesting to group. Last point was the 2016 resolution that came out of MAFWA to evaluate how we can reduce neonicotinoid use on public land areas. In 2017 and 2018 the public lands group reaffirmed our support for the resolution and in 2019 we went back over any progress made; several states reported progress to completely eliminate the use on farming on public lands. Good progress in 4-5 states and several others made progress in requiring soy bean seeds to be untreated on wildlife areas planted in farming agreement, but haven't extended to corn, some states had no progress. A couple states found a way to source the seed that is untreated for corn and soy beans and several states still working on getting that solution out there. *Ollie* – Importance of tracking monarch work, but also very important to enter that into the USFWS

database so we can track what is going on for monarchs on the landscape; not only public lands but all lands.

Ollie – Greg Link, ND, is director/liaison.

Wildlife Action Plan (Report - Exhibit 33) – ***Kate Parsons, Wildlife Diversity Program***

Administrator, Ohio Division of Wildlife – Our team met in North Dakota in early May, high of 22 degrees one morning; meeting in balmy Ohio next year. Had 10 of 13 states represented and had good discussions. No action items but several information items. This group is made up of not only state wildlife action plan coordinators, but also wildlife diversity program managers and endangered and threatened species coordinators; a diverse group. 1) The first item is about state wildlife grants, want continued support for increasing this form of funding; main funding states use to work on state wildlife action plans, species of greatest conservation need, doing a lot with this funding, which has been secure for 20 years, a great resource to agencies. Not only annual appropriation but competitive part of state wildlife grants. In the past couple of years, we have seen some line item priorities within that program develop and that can make it difficult for states to work together if that priority doesn't speak to MAFWA region. For example, something about ungulate migration that popped this past year and that would make it difficult for many of the Midwest states to work together. We do get competitive SWIG projects to help implement our shared priorities across state boundaries. Your continued support for these programs would be great. 2) Recovering America's Wildlife Act (RAWA). This group of people is there to help your state show support for this effort; they have technical expertise to talk about species and the projects that would benefit from this funding. AFWA, with state input, created a guidance document released in April 2019 to help states develop ideas for how they can support this effort. Lean on your staff to show more support for RAWA. 3) Continuing to look for ways to cooperate with USFWS, especially Region 3. One of benefits of having states like Kentucky be in multiple Associations is that we get to learn what Region 4 is doing or what Region 6 is doing in the west. This is an area where we think we can improve in Region 3, we can collaborate on prioritization of national listing work plan for the species that would be included in MAFWA region, reaching out to Service to do that. 4) We would like your continued support for Midwest Landscape Initiative. We see a lot of synergy with this group; Brad Potter from Science Applications has been meeting with our team for years and we have a lot of the same discussions about how we look across MAFWA landscape and know we are doing a good job restoring habitat. How do we keep our finger on the pulse of some of the species that we don't traditionally have a role in monitoring, like insects and monarch butterflies? What can we do, as a region, to get in front of the threat of wind energy development for a particular species in a particular region? We feel there is a lot of shared work we could do with this group. Three working groups starting, participate fully in this effort and MAFWA would benefit greatly.

Daniel Eichinger – She brought up Alliance for Wildlife and the role that organization is playing in helping coalesce and coagulate the report among the states for RAWA. Want to let everyone know that shortly after RAWA is introduced, my governor is going to circulate a letter among her colleagues across the region asking them to sign on to show collectively regional support for RAWA and try to get more action taken on that bill in Congress. I will get back to Ollie and he can help circulate among us when ready and it will also be going out to each Governor as well. If you haven't briefed your administration on RAWA, take steps to do that in next couple weeks so groundwork is there when letter arrives. I will follow up to see if we can generate many to sign-on to the letter once it gets around to all of you. *Ollie* – Great initiative.

Ollie - Dale Garner is director/liaison.

Wildlife and Fish Health (Exhibit 34) – Mike Reynolds, Ohio Division of Wildlife – It is my pleasure to provide the wildlife and fish health committee report, Dr. Mike Tonkovich could not be here. He sent me an email yesterday and instructed me to read this letter verbatim.

“June 23, 2019. Greetings MAFWA directors. On behalf of the fish and wildlife health committee I hope you are enjoying the director’s meeting in beautiful Ohio. Many good things have come out of Ohio, the first traffic light, the first ambulance service, the Wright Brothers, Neal Armstrong and me; me being Kelly Straka. How can you possibly go wrong? As for the health committee update we had another ragingly successful meeting in Duluth, Minnesota on April 23 and 24. Much of the success was due to our hosts. I would like to issue a special thank you to the Minnesota Department of Natural Resources. A total of 37 individuals participated in the meeting, either remotely or onsite, representing 15 state and provincial fish and wildlife agencies, three federal agencies and at least two tribal entities. Guest speakers from Michigan State University, the University of Minnesota and the Southeastern Cooperative Wildlife Disease Study addressed several of our most pressing emerging diseases from West Nile Virus to Chronic Wasting Disease. We want to sincerely thank every state that sent a representative or two to our meeting. The committee provides invaluable support to those of us on the controversial front lines of health-related issues. While the health committee did not submit any action items for you today, we feel it is important to highlight one presentation from this year’s meeting. Leland Brown from the Oregon Zoo spoke in person to our committee about the North American Non-Lead Partnership (NANP). A collaborative hunter led initiative designed to engage stakeholders and encourage the use of non-lead ammunition. This nonconfrontational, non-regulatory approach garnered broad support from the health committee and other representatives in the room. Several state agencies and leading conservation organizations have expressed support for this partnership. The NEAFWA directors scheduled range time and in a conversation with NANP to explore different bullet material options and impacts. I have asked Leland to assemble additional information to share with you. This will be emailed to you through our director/liaison Dale Garner. We hope the sharing of these materials will stimulate lively discussion amongst you and your colleagues and perhaps additional contact with NANP for a more formal conversation. That is all from the fish and wildlife health committee. As always we truly appreciate your support of our group as well as the hard work you put in every day to protect our fish and wildlife resources. Thank you. Sincerely, Kelly Straka, State Wildlife Veterinarian, Michigan Department of Natural Resources.” If there are questions I will defer to the director/liaison, Dale Garner. *Dale* – Ollie, I sent you that thing from Leland to give to everybody. *Ollie* – I will get that out when I get back on my computer.

Ollie – I want to recognize Sheila Kemmis for printing committee reports and the state of state reports. *Kendra* – I would like to get a picture of Ohio folks outside before lunch. Conclude and go to lunch sponsored by Kalkomey.

Lunch – Sponsored by Kalkomey Enterprises LLC
Remarks by **Mitch Strobl**

OHIO PARTNERSHIPS

Kendra – Partnered with Toledo Zoo on several projects, good partners as well as the other zoos in Ohio who do animal husbandry as we don’t have those facilities or know how.

The Toledo Zoo

Kent Bekker, Director of Conservation, The Toledo Zoo – (PowerPoint - Exhibit 35)
Unique programs in conservation at the Toledo Zoo through partnerships. Most of funding for

local projects comes from Ohio Division of Wildlife or in some cases, USFWS, depending on the project. Zoos are unique partners, with unique set of skills and resources. We do conservation all across the globe. We are most interested in local projects and we are proud of this and gives us the ability to reach a lot of our constituents and educate a lot of people about issues facing wildlife. We have a long history of doing federally endangered recovery and research. The Karner Blue butterfly in Lucas County we have been working on for over 20 years, helped to establish population and done a lot of research on that population. A great example of multi-state work; some animals coming out of Michigan, reproduced at Toledo Zoo and reintroduced into Lucas County. Doing Mitchell Satyr work, which has proven to be successful for us. A lot of advances recently in Karner Blue and Mitchell Satyr efforts as result of technology. Temperature data at micro-habitat in Allegan, MI that is allowing us to compare Allegan, Michigan to Lucas County, OH where being reintroduced. Doing big advances in husbandry; artificial fin system with chilled water, which is allowing us to reproduce larval Mitchell Satyr differently than other institutions. Recently, in greenhouse facility opened new butterfly conservation facility and lab is on display at the Zoo. We get a million visitors at the Zoo and this leverages education value and lets partners know how much we value their input and allows them to get more exposure. State-of-the-art lab gives us better control of climate that is allowing us to manage their life cycle better and moved into environmental chambers for over-wintering. One thing these two species have in common is that people don't care about these animals. For 20 years we have been trying to educate people about habitat issues facing Mitchell Satyrs, about the climate issues and too easy to say that is a species they won't see or a habitat they won't get into. In recent years, we have started bundling efforts in butterfly conservation initiatives. This species has been a great ambassador for two things, for lepidopteran projects as a whole, people care about monarch and care that it is not in their backyard where it used to be; and a great segway into federally endangered species that we are doing in our lab and releasing into unique habitats. We have ramped up efforts, have a whole greenhouse dedicated to production of monarch butterflies. We raise all of our own milkweed from seed every year; put same diligence and effort into monarchs that we do to our endangered species as far as biosecurity perspective. We use original founders for reproduction in this greenhouse, but where this really benefits us is when we do releases throughout the season; we can use in a lot of our education efforts, had preschoolers release tagged monarchs in the fall, and use for donor events. A great segway into other initiatives like urban prairies. These are small partner properties and our property that we have been developing with native material; you understand benefits, but we are able to leverage better from educational perspective. We are taking vacant lots that were weeds and converting into urban prairies where they provide an ecosystem function and habitat. Why it is unique is we mix in a lot more herbaceous material, more than just forbs, so we are getting more color in first years; which makes this more successful. We have 60 locations, over 40 acres, we don't own these properties but are helping our partners develop these habitats; a great educational outreach. What is interesting is we had a lot of partners that didn't like weeds we were installing but as soon as we did a monarch release there they became real advocates. Our niche is small vacant properties in urban areas. We are reducing competition with neighbors because these are properties that other groups don't do. Branded with simple signage, why we are doing habitat transformation and benefits of it and gotten nice installations. We put a prairie in front of one of the libraries; OI corporate headquarters, not happy early on but once we did monarch release they were behind it. Integrated into education and outreach, have education program, virtuous project prairie where we are developing curriculum to use some of the prairies we have installed on school properties, pre-school to high school, has been successful to the point where school districts are actually paying directly for these installations and yearly management. Integrated a lot of native plant material into the Zoo; something we did not do historically and is serving as great ambassador for backyard habitats. We have had people come to us about where they can buy native plant

material, so we have started selling it at Farmer's markets and online. It is interesting to demonstrate that you can do conservation to a degree, raise a modest amount of revenue and cover your expenses. Our Wild Toledo initiative is selling plants. Farmer's markets are great outreach to talk to people again, about backyard land transformations that we as conservations sometimes undervalue and don't pay attention to vacant lands. Turtle initiative, some locations, where we are studying three imperiled species here in Ohio, some for a long time. We don't need to get students graduated or get publications done. In context of what we know about turtles, studying them takes a long time. I don't make it out to field any more, but interesting when conservation biologists bring back turtles marked 12 years before. Long term studies to get answers to demographic issues we are facing. Do standard field techniques, mark for capture, microchipping, but doing with volunteers and staff, paid dividends in the community for turtle conservation as a whole; individuals get out and see methodology used, worry about turtles and have become community ambassadors. Other techniques for short term research, like radio telemetry units, used to develop a habitat suitability model with a finer scale, more applied to Lucas County to provide guidance on landscape level issues. Next step, years ago did side project where we put GPS units on turtles, technology is so cheap that we are building these in house and manufacturing for \$50 each, so there is an army of box turtles in Lucas County carrying these GPS logging units, which is paying us benefits, because we don't need to be out there every day tracking animals, can track once every couple of months. Recently, Toledo Zoo with partners, got a competitive state wildlife grant for blanding's turtle work; MI, IN and OH and we hired five staff members. Ohio broken into two different groups, Toledo Zoo alone, since April has caught 1,570 turtles, 137 blanding's turtles. We have populations that don't appear to be doing well but other populations that are. With our reach and interest from the community we get a lot of other projects that develop on their own. Had an individual that attended a talk I did in 2014 about blanding's turtles and he made a comment that in his neighborhood sees them all the time nesting and asked what he could do; told him he could take photos of plastron, came back three years later and made comment that he had been taking photos, did some photo recognition software and helped to identify all of those individuals. This is a great example of citizen science; now revisiting this location and caught 64 blanding's turtles in four days at that location. Had a box turtle that was burned as part of prescribed burn, students learned about that individual's fate and were able to follow it over time. Not just doing radio telemetry interpreting, but context of habitat management issues and habitat scale. Use in summer camps, great opportunity for youth to get in field and see research we are doing and projects. Integrated a lot of conservation efforts into new museum; installed a native prairie in a greenhouse with monarchs flying around but also had box turtles with radio telemetry units to interpret kind of research being funded and undertaking in their backyard. Undertook Kirkland snake work, captive animal we know little about, deploy radio telemetry and follow them around for short period of time, spend a lot of time in crayfish borrows, learning interesting things about these animals. On x-ray noticed they had gastroliths in them, produced by crayfish, feeding on crayfish like other native snakes. Found some populations are large, 64 individuals found in borrow pit in Fulton County. Hellbender efforts, that we have undertaken with Division of Wildlife, NGO representatives and USFWS, a whole group in Ohio dedicated to recovery of the hellbender. Toledo Zoo's role is doing the rearing, eggs are harvested from healthy populations, rear them at Toledo Zoo. It is not all butterflies and fish where you can rear them in a few months and let them go, for hellbenders it takes three years to get them to a size where they are releasable and microchip-able. They are not difficult, but they require space and as they get larger they need proportionally more space. This afforded us two great opportunities, one through funding from Williams and Division of Wildlife we built a modular facility on grounds and demonstrated we could increase capacity in a trailer scenario. A great way to rear more animals for Division of Wildlife. We reached out to career tech center across river from the zoo, integrated hellbender

rearing in their curriculum so during the school year they help raise state endangered animals, a win/win because we have increased capacity and able to participate. In our new museum we have a display of hellbenders and you can go under the stream and look up at them. More recently we undertook sturgeon reintroduction on Maumee River; hasn't been a sturgeon fishery since late 1800s early 1900s. Lake Erie had an incredible sturgeon fishery back in the day with greatest harvest in 1885. Like most of the Great Lakes we had 19 reproducing populations on Lake Erie, down to two. The Zoo has undertaken a stream-side rearing effort, we are pumping water through trailer, rearing animals in June and releasing them in October. What makes this project unique is that half of the eggs are going to a fish hatchery in Wisconsin where they are raised on spring water. All of the animals are microchipped and/or acoustic tags and will be followed by Division of Wildlife, USGS or USFWS and will be able to compare those two treatments as years go on. Zoos are well suited for turtle research; hellbenders and sturgeon long projects. We will be doing sturgeon rearing for next 15-20 years. Our media outreach is incredible when we do a release, rather than just do standard release we use in social media, outreach incredible, residents and locals engage in this whole process, we had 1,000 people show up on release day and we had politicians and dignitaries there and they all, bucket by bucket, released the sturgeon into Lake Erie. Rather than just reaching conservation initiative we took it one step further and got educational component where everyone was engaged in process. We integrated a sturgeon touch tank into the museum next to the hellbenders. A good integration of conservation message.

Ohio Pollinator Habitat Initiative

Marci Lininger, Ohio Department of Transportation – (PowerPoint - Exhibit 36) Ohio Pollinator Habitat Initiative (OPHI) was developed in face of listing for monarch butterflies in 2015. When I was at USFWS I was serving as transportation liaison for Ohio DOT, started thinking of doing something else. Started speaking with partners across the state, asked what we could do to pool efforts to divert a listing. We got partners together and started developing goals to try and do that work. We created and improved pollinator habitat and awareness of pollinators and monarchs. Our problem is we have pollinators in decline, monarchs, native bees and other pollinator species, vital nesting resources these species need were in decline as well. Fall migrating species and milkweed in decline. We have a lot of factors in decline which are causing this reaction of issues that has prompted petition to federal list species. In 2015, Ohio was included with other Midwest states as priority for monarch butterfly conservation. Ohio is an ag state so we have a lot of area we could cover to help monarchs and other pollinators. We were given targets, the Midwest by 2035 we want 1.3 billion stems of milkweed, in Ohio we want 95 million stems. Trying to take Initiative to do something good for monarchs but want to be inclusive, work with partners across the state for all species of pollinators and wildlife, these are all connected habitats. The Midwest is important because we have 38% of eastern migrating monarchs that are over-wintering in Mexico, responsibility to help species out. When putting this together we realized if we made it about one species, not have longevity to help other things. Monarch is flagship species, to roll out new practices on the landscape; we want to include areas working for other species, like grass nesting birds and other mammals. Many bumblebee species in Ohio, one of greatest pollinating species are native plants; we have sweat bees, flower fly, flower scarab beetles who are sometimes overlooked, hummingbirds and other species that all hang out in these areas and you need to think bigger than one species. Cover a lot of ground. Trying to advance our partnerships, working with schools and universities and other groups in the state looking at other species. Looking at bumble bee survey to see how they are doing; how many things are out there and where are they occurring the most. Starting to put components together out on the landscape to better understand where things are and what they need. Love working with bee team; Ohio Bee Atlas, if anyone has iNaturalist on your phone, you can upload photos and we try to get people in Ohio to do things like this, do citizen science. An important

factor is to make sure we are educating Ohio public. In most states, agencies are working with a single species, a target to build off of but in order to meet priorities you have to have a landscape level organization put in place to help that species. Put an inclusive plan together incorporating multiple species including target species and get the most bang for your buck. I help develop guidelines to share with partners across the state. We don't make any money, things we do are partner-based, things that people donate to projects, all grass-based. Doing well in state. Because we are diverse we have lots of different areas where we are working with state agencies to try and enhance and restore; working with DOT to look at areas wanting habitat restored to what it once was. We have grasslands, woodlands, lakes, ponds, streams and wetlands, a lot of opportunity in Ohio. Doing landscape level partnerships, everything we do is grasslands, we don't have a bank, the partnership is our bank. Have partnerships all across the state working on various projects, working on this Initiative, working on outreach and those collectively form OPHI. We do outreach which is an excellent tool and gets people involved; the public want to be involved because they want to take ownership of these projects, they are part of this Initiative and they should be. This is their state too so why not let them have a bite of the pie. We have Facebook and twitter, and we participate in numerous outreach events across the state, if we can't do it we reach out to a partner locally. We have over 3,400 Facebook followers, work with Ohio Division of Wildlife on twitter feeds sharing things happening in the field; share messages and stories with everything we are doing because that is what OPHI is, it is all of our stories helping monarch and other species. To date, our most expansive partner is the Pod Collection, with a lot of partnerships. We have multiple partners, 88 counties, and all participate in Pod Collection, have almost all water districts, ODNR, Ohio Department of Corrections, ODA, USFWS, NRCS, Waste Management, EPA, ODOT and multiple others and adding more. Essentially local communities reach out to the public to collect pods and each area brings pods in; we get them collectively cleaned and dispersed back out for statewide initiative. Some go a step further, dry them, packaged and delivered them to be grown into plugs and shared with one of our prisons in Marion County. This shows if you work collectively across the state you can do great things. No matter the entity, if you have one goal in mind you can achieve it, if you work together towards a common goal.

Mike Retterer, *Pheasants Forever* – Uncommon partnerships are nontraditional partners people don't think about; ODOT is one of our bigger partners and do all of their roadside vegetation management which includes some of the pollinator plots and make recommendations for vegetation management. To establish high value pollinator habitats, connecting habitats and looking at sustainable habitat on the landscape. We have other partnerships, one is Soil and Water Conservation districts who put out a billboard to support one of our symposiums we had in 2016. Talking about ODOT, they have 19,000 miles of roadway and they don't need to spend time on grass areas; we worked together with them on different ways to do this and yes, the potential listing of the monarch butterfly helped facilitate conversations and get them moving. Just over 800 acres, 120 projects which are large high value pollinator areas, it doesn't include the roadways. Started last spring rolling out roadside mowing reduction plan to follow monarch guidelines and that equated to 59,000 acres of potential habitat, this year that will go to just over 83,000 since we will have all 12 districts on board. Those are large numbers with landscape level changes and all sustainable over time; doesn't mean they are perfect or won't need work but helps us get down the right road. ODOT saved \$2.2 million in mowing last year. Other ones we are doing is golf courses, they have idle areas, they sometimes maintain them, sometimes don't. We worked with Mt. Vernon Golf Course to get them to set up a plan of maintenance, started doing site preparation to get things going; they did all the work themselves, prepared plan and what to do, when to do it and where to do it and we are already seeing the benefits. There are a lot of members out there looking at the plots, flowers and different wildlife utilizing it. Chapel Hills is another one, in partnership with USFWS and OPHI to do projects on idle areas. Just over

a dozen golf courses, presenting at a meeting later this year which will put me in front of 250 golf course superintendents. One of the big things we do at OPHI is statewide milkweed pod collection. Another partner is Pollinator Partnership (P2), they have project wingspan which is similar to milkweed pod collection except they collect about 22 different species of plants across the state that gets cleaned and put back out free of charge to landowners who want to do projects around the state, both private and public entities. One of other partners, Division of Wildlife, at 58,000 acres of habitat since 2014. Cincinnati Nature Center put out about 3,000 milkweed packets since 2014. Energy group and right-of-way crew is an ever-expanding, quickly growing region we have been working it. Great Parks of Hamilton County has a native seed nursery. Warren County Parks put in a two-acre solar array and put pollinator habitat underneath it. At Pheasants Forever one of my duties is to do statewide seed mixes we use in a lot of programs and a lot of state and federal agencies use them as well; we create affordable statewide mix to get most bang for our buck. Through USDA, through Farm Bill programs, mainly CRP, in 2017 and 2018 we rolled out statewide pollinator and monarch save programs. We hear a lot about planting milkweed for the monarch which is so important, but also need to understand, when we are talking about this, we are looking at long term sustainable landscape; so, doing more than just monarchs. Doing a lot of pollinator and nectar resources as well. One of the ways we have been influential for partners is working with them to understand the benefits, need many different sizes, shapes and colors for various reasons; certain insects only like certain colors, height structure and availability of resources. When we put together affordable mixes make sure we have a lot of those species readily available, so we are meeting those standards, generally want to make sure we have all three seasons of bloom, which is important. We are trying to focus on late September, early October blooming plants to have them out there for fall migration and/or native bees, honey bees and bee-keeping groups, having resources out there so those insects can get fat and happy going into winter. Monitoring is often overlooked, like how do we know if what we are doing is working. With help of Monarch Joint Venture (MJV), put out tools, integrated monitoring program which is more research focused, intense and takes a lot of time but important. Through OPHI, looked at these and talked to partners about setting standardized points across the state that we are going to monitor four times a year. With a program just like this we might make alterations for a couple of other species so we can determine what is going on around the state and what health of pollinator and habitat is. At the same time, have rapid assessment tool that compares to get more sites looked at, more anecdotally. Regardless of how got to this point, we are all part of solution moving forward, we have to address habitat loss, disease, parasites, environmental contaminates and many other things; that reflect more on honey bee populations, but partners in trying to get things moved forward. How do we do it? Through OPHI, trying to get long-term landscape sustainable projects in anywhere USA. Some of the programs we work through, use Farm Bill biologists, private land biologists with Division of Wildlife; work through CRP and WRP, which are low hanging fruit, large acreages in rural acres. Now as new ones come on, looking at roadways, railways, rights-of-way, utilities; 19 million acres of potential ground across the United States, we can start connecting other ones. Schools, churches and businesses, putting native plant gardens out there, working on small projects through school programs and look at other areas to establish some of these. Golf courses, cemeteries, all partners that are coming on who want to do more. Then prisons, airports, and fairgrounds; our Department of Corrections stepped up and asked how they could help. Put a lot of federally-deeded acres, taken out of farming production into prairie or pollinator habitat. Backyards are not too small, with migrating insects every little stem helps and makes a difference. Through partnerships with state and federal agencies as well as private, local and individuals; that is what is connecting the entire habitat, making landscape change and sustainable long-term. All hands-on-deck, no matter where you are at, what you are doing, it is all you can, where you can; no amount is too little or too big. OPHI has 84 partners across the

state. Thank you for giving us an opportunity to talk. Symposium coming up in Columbus on August 22. *Kendra* – Our Department of Transportation got a lot of good press about cost savings and they were sharing, and we were re-tweeting it and sharing it; the public liked that. Praising ODOT because we want them to do more of it. Saving money is how you get them motivated sometimes.

Building Partnerships to Restore Lake Erie Coastal Wetlands

Tim Sheeter, Ph.D., Director of Natural Resources, Metroparks Toledo –
(PowerPoint - Exhibit 37) Partnerships is what Howard Marsh is all about, this is a property that Metro Parks could have not done without strong support from the Ohio Division of Wildlife, Ducks Unlimited and many other partners. Touch on four aspects of project. Start with significance of Lake Erie coastal wetlands which sits on the crossroads of two Flyways and provides habitat for over 300 species of migratory birds, 60 species of fish and for water quality. There was a study that showed one acre of new restored wetlands can remove 13 pounds of phosphorus a year. As we look at the Lake Erie water crisis, marsh restoration is a critical component of meeting that challenge. The other important thing to focus on is significance for economics and tourism, big with bird watching; biggest week in American Birding has been promoted by Black Swamp Bird Observatory really showcasing this, thousands of visitors annually, \$30 million annual contribution to northwest Ohio economy just for bird watching. And that doesn't count the significance of recreational and commercial fishing. Region is 300,000 acres historically, where Great Black Swamp met Lake Erie, which ebbed and flowed as water levels rose and receded over time, stretching between Maumee Bay and wrapping around Sandusky Bay. Existing coastal marshes have lost 90% of historic wetlands, primarily to conversion to agriculture through ditching and tiling. Important to protect marshes that are left and do restoration where we can. Howard Marsh sits in confluence of 15,000 acres of state and federal protected land. Shown on map as Howard Farms, was a working farm up to two years ago, Metroparks acquired this site, just under 1,000 acres in 2008; the last big chunk in farmland left in one ownership with a direct hydrologic connection to Lake Erie. Gave us ability to restore marshes where we could make connection back to Lake Erie. This was a collaboration by itself in terms of acquisition process with huge support from the Ohio Division of Wildlife with federal funds, \$3 million; we utilized \$1.8 million through Clean Ohio Fund; and remainder came through a local tax levy that Lucas County voters passed specifically for Metroparks to acquire new park land. This was a long-term process to negotiate and acquire this property and could not have happened without major support from those agencies as well as others like DU. Acquiring property was overcoming one of a number of challenges in the process. Based on Lake Erie lake levels as of May 2019 you can see that everything except for tip, would have been inundated along with 400 residential areas. Most of northwest Ohio is heavily ditched and tiled, two major drainage ways that drain that 400 acres of residential area surrounding the property that we had to be able to accommodate, an engineering challenge. Planning and development was a 3-year process, started in May 2013 and mostly concluded in May 2016, still a few loose ends when we out for bid. The core planning team of partners was Metroparks with Ohio Division of Wildlife and NOAA, which came in a partner grant to Ducks Unlimited who we contracted with to do wetland engineering and design; then contracted with a separate park engineering design firm, Smith Group out of Ann Arbor to do park-related infrastructure. To build collaboration we went out of our way to be all-inclusive receiving input from other outside agencies and organizations and assembled a technical advisory committee early on of roughly a dozen organizations to provide meaningful feedback for how to design this, about a three month process, held two public meetings and had public comment period which we incorporated into overall project goals and objectives and final design. Permitting, engineering and design was about a 3-year process. Intermittently throughout the whole process we did an independent check

with other technical agencies; as we made milestones in planning process we stopped and vetted plans with other groups who had not seen it before to make sure there wasn't something critical that we were missing. With all of the input, we ended up with three projects we had to deliver on; 1) restore coastal wetlands, one of big objectives is hydrologic connection to Lake Erie, without it no ability to provide extra benefit for water and fish community; 2) public access, a huge component of project, integrating traditional park use like hiking, biking, bird watching, picnicking with more active recreation like hunting and fishing, which was an important deliverable for Pittman-Robertson and federal funding, a critical aspect to achieve for sporting groups; and 3) drainage was another deliverable, without obtaining the needs of our neighbors there was no way to do first two. Key objectives: restoring coastal wetlands was the easiest challenge to overcome; key stakeholders were a good group to work with, there were challenges with blending emergent marsh and upland reforestation areas, will show how we met those challenges with overview plan. Public access more challenging, Metroparks is more traditional park recreation agency familiar with designing areas for hiking, biking, bird watching but this is first park where we actually had recreational hunting a big component of this. One other major objective we wanted to be able to meet was ability to introduce casual park user to this direct connection with the resource. We want people to be able to experience wetlands and the best way to do that is to get out on them so we wanted to design a park where, in addition to restoring habitat, people would be free to explore it. Accessibility was a big thing, make it accessible for all, regardless of mobility and wanted to make this a regional destination. Something we, and local businesses, could point to as a source of pride for drawing recreational and tourism dollars. Drainage was most challenging to overcome, area had been farmed for over 100 years, surrounded by residential development, where property is critical to the long-term well-being of these communities. The park and surrounding property is at, or below, lake level, draining these areas through our property and had to work with key stakeholders to come up with drainage solutions that would work for them as well as our project. Final plan: in order to restore wetlands key aspect was building perimeter dyke around the entire project area; for this to be cost effective we couldn't afford to haul dirt on or off site, so we came up with balanced cut and fill equation; borrow areas were used to construct the dykes and serve as permanent deep water habitat areas for fish and recreational connection. Three distinct cells or units; cell two is still in process, 240 acres on west side of Howard Road, with limited funding we weren't able to do the entire 1,000-acre property, but it is currently in the works and plan to have more habitat on the ground in next 2-3 years. You can drive around the perimeter of unit 3 and center of recreational areas is in the center and once you are there you are surrounded by the marsh. One of objectives was reforestation, which is long-term, but want to develop songbird, warbler habitat, migratory and resident habitat but also for people to be able to see these remarkable birds, the perimeter areas are reforestation, about 70 acres total, planted around 20,000 trees, and other component of this is we have ability to manage these units; separately, collectively or individually, which give us ability to different habitats and maximizes options for changing water levels. There are integrated kayak launches in each area, portage structures to do loops around the entire property. Folks can choose their own adventure to maximize the property. The other challenge was avoiding conflicts between hunting and casual passive use; the main unit is open for waterfowl hunting in the fall, closed to all other activities during that period but still able to maintain two lower units open for the public during those times; the first fall was successful, no conflicts, people okay with not having access to the large unit for casual recreation as long as they could still go out and enjoy the day. Permitting part of this process was a nightmare, first three Corps permits, Section 408, we had to modify a Corps of Engineers flood protection dyke because of the acre-feet of water we were hold; Ohio Dam and Safety classified us as a class one dam in Ohio. We needed approval of three agencies to do drainage modifications to make this project happen. As part of process it is important to not have an adversarial relationship with permitting

agencies; had great working relationship, we needed to understand their regulatory requirements, but we worked well together. It took three years for planning, two years for construction, total cost was about \$11 million, mostly in site prep and earth moving; another \$2 million was tied to main pump structure. Strong collaboration with Ohio Division of Wildlife and NOAA through Ducks Unlimited, without that additional funding and expertise there is no way we could have made this project happen. Proud of taking time to do monitoring up front, preconstruction and in process of postconstruction monitoring. We moved 700,000 cubic yards of dirt, could fill first 24 floors of the Empire State Building or fill a football field up 300 feet. The pump structure, coffer dam and canal to drain the water, to build water control structure. Once completed we can pump 120,000 gallons a minute to manage water levels, fill an Olympic size swimming pool in a half hour. The integrated fish passage structure and visitor amenities including ADA assessable kayak launches. First 10 days the park opened we had 10,000 people, right before biggest weekend in American Birding in 2018; even more during biggest week this year. The most remarkable thing about documenting success, in just over a year we have documented over 228 bird species on the property, over half of all known bird species documented in Ohio. *Kendra* – Powerful project that we worked on for a long time; appreciate partnerships.

Refreshment Break – Sponsored by The Nature Conservancy

MIDWEST LANDSCAPE INITIATIVE

Kelley Myers, Senior Advisor for Landscape Conservation, U.S. Fish and Wildlife Service – (PowerPoint - Exhibit 37) Born out of last year MAFWA meeting, developing over last year. Lot of new faces at the table. Two years ago, led conversation on what the future of landscape level collaboration was, talking about how to work together going forward on large landscape level issues. Outreach of a lot of conversations that had been happening with National Academy of Science Review, Landscape conservation cooperatives and that sparked conversations in AFWA community. At that point I was the director of Iowa so working with Tony Wasley, Nevada, and Gordon Meyers, North Carolina, responding to that review of LCCs to make sure we were doing landscape level collaborations at the state level. Had conversation two years ago as part of national effort to look at landscape level collaborations. Got to work in MAFWA and started looking at priorities. Landscape collaborative became named MLI (Midwest Landscape Initiative), and we have been developing principals, concepts and governing structure around resolution adopted last year at AFWA annual meeting. You can find it on AFWA website with a lot of direction on what we need to consider putting together these landscape level collaborations. We have used that in the Midwest as guiding principle to put this group together. Jim (Douglas) led work group for year and a half to get to that resolution and find bright spots around the country where working on these collaborations to build something and learn something from not-so-bright spots. In Midwest jumping onto successful initiatives like monarch conservation strategy. Working on how those are working and how we can replicate those. Landscape level conservation is a forum for stakeholders to share ideas and information for users to initiate actions to benefit management of fish and wildlife resources. It allows us to explore new ways to address our most challenging issues with complexities across industry, across geography, across private lands and the MLI is not constrained by habitat type or species. Have a geography we are working in and have flexibility to make it work. We come together around shared responsibilities to help fish and wildlife resources and focused on people in our system. Talk a lot about relevancy but that is something we talked about from beginning, we want to make sure we incorporate social science in all we do. With first meeting of the steering committee last September I was asking about our priorities, heard a lot about relevancy and social science and if we needed to make that a stand-alone-priorities, heard resounding no,

but we needed to incorporate it into everything we do to make sure people were central of what we were trying to do. In Midwest landscape approach we are looking at exploring and sharing conservation priorities among states and wildlife agencies and the Service. Next year we are going to try to look at Canadian provinces and tribes. Looking at making recommendations around goals for shared priorities and defining strategies and actions that will address them, in partnership with others. Not just state fish and wildlife agencies, but greater conservation community to figure out how to move them and incorporate social science connections to people in all we do. There is no requirement to participate in MLI, just looking at coordination, looking things being done on same lands, leveraging, a timeline. Not getting more money. Don't step on each other but support each other. Developed structure, from meeting last year MAFWA gave direction to create a steering committee and for them to create a technical committee and working group. The steering committee contains members from the Midwest and Service representation from the three regions of the USFWS. As coordinator, I wake up thinking about this, my job is to pull us together and schedule meetings, ask questions, and tried to go from getting started to facilitating, which is a change of role for me. The technical committee is charged with drafting and implementing an action plan, tracking accomplishments and communicating and engaging. Ultimately technical committee will put together work groups around particular priority areas we identify. That is where the work happens, recommendations are made on what research we have and actions we need to take to arrive at results. The steering committee provides strategic direction, the why; the technical committee identifies the challenges of needs, the what; and the working group that identifies solutions or approaches, the how we are going to do it. We built this so all agencies can have communication up and down the chain and access to different networks that touch all of these levels of organization. Overall MLI is not just a state fish and wildlife agency or USFWS organization, it is meant to have membership from all interested organizations; academic institutions, conservation organizations, other federal and state agencies; some of the same you will see around LCC tables such as the energy sectors, regulative communities and all interested parties. We have been working on addressing how to get that engagement to happen. We have had a series of meetings starting to engage in with broader constituencies. Our answer in the Midwest is to bring them in at working group level and make sure we are getting as much participation as possible. The steering committee members are: co-chair Kelly Hepler, SD; Jim Douglas, NE; Dale Garner, IA; Sara Parker Pauley, MO; Craig Czarnecki is co-chair, science application and regional director in Region 3; Greg Watson, assistant regional director for science application, Region 6; and Bill Uihlein, assistant regional director for science application, Region 4. Technical committee members are listed, we have good membership from the Service and states; have all three USFWS regions represented; have assistant regional directors, communications specialists, fish chiefs, wildlife chiefs, field people and the three listed at the end are not official members of technical committee but they participate regularly as observers or as people we asked to help us until we can make them more permanent. If you don't see your state or program represented, call me. Put out an open call for nominations, wanted bigger technical committee because we wanted to be sure we had robust participation from around the region. In our region identifying conservation priorities and trying to bring diverse perspectives together to work toward common ideas. Held retreat for technical committee last spring because this group of people don't typically work together and we had a hard time getting dialog going on the phone, when all together in same room they asked questions. Questions like, what sets the MLI apart; why it is so special; and discussed a number of ways we work together, coordinate and collaborate to help in a lot of different ways; what contributions can MLI make that other organizations can't; what role we envision in this region; what we should focus on to achieve impact; and what makes what we are embarking on special. On first question, what contributions we made: focused on fact that we had federal and state fish and wildlife agencies at core establishing priorities was

unique, we felt that was special and we had a long track history of working together and didn't feel constrained. Second question, contributions MLI can make that other organizations can't; focused on shared priorities of Service and states, relevant working on current issues of today and proactive working to find solutions. Third question, what should we focus on to achieve impact; good buy-in, offer something beneficial, actions, reducing redundancy and focusing on priorities that are established, not getting too diluted. Question four, what makes what we are working on so special; the fact that we are proactive, looking ahead, looking at most challenging issues, looking at relevancy and working across landscape scale. We have used those to build our identity and stay true to that. Steering committee will continue to work on that this summer to make sure we stay focused and be action oriented. Laid out priorities, established last summer, they have been refined at technical committee and work groups have been established. Priorities: Priority One): prioritize at risk species and/or species of greatest conservation need. The Service and states do speak a different language, so we wanted to get on same page with what species we should be working on. 1) Preclude need of threatened or endangered listings; 2) keep states with jurisdictions managing species by coordinating efforts for priority species-at-risk that cross jurisdictions, reducing burden on any individual entity, not just one states problem, how do we work together for that species. Priority Two): Develop habitat, look at species and establish threats centered around the species, what habitats they are in and how do we affect those and have tools across landscape that allow us to work in that habitat. 1) Inform strategic use of conservation resources towards natural communities and landscapes with increased probability for conservation success. 2) Provide assessment tools that allow for integration and interoperability with other regional tools. We all have tools how do we get them to work together when we want them to. 3) Evaluate the effectiveness of conservation management actions within landscapes. Sara talked yesterday about health initiatives going on in Missouri; how can we make sure what we are doing, how can we measure conservation investments so we can make smart investments going forward on the landscape. Priority Three): Wind, last year there was a lot of discussion about wind, so our priority is to provide wind energy development support to avoid or mitigate negative wildlife interactions. 1) Avoid or minimize the direct and negative impacts of wind power generation on wildlife and the surrounding environments. The group has identified a few objectives: to identify resources most critical to us and minimize impacts, where are those habitats and species we are concerned about; and synthesize and share existing best practices across the region and with other regions. Priority Four): Develop a long-lasting governance model and unifying conservation vision across the region. 1) Provides sustainable and long-term vision of what conservation challenges face the Midwest, into next 5-20 years. 2) Create unity among the various partners and a forum to support challenging and informing dialog about conservation needs. Objectives: to create a strategic vision of conservation with robust input from and consideration of members and other practitioners affected by conservation decisions; and draft a charter and communication plan, which is malleable to change but not weakened by it. Durable structure with strong conservation vision. We have worked on governance structure, have a working charter that has been approved that goes into how we are going to handle meetings and communicate. Got steering and technical committees meeting regularly, and we have had work groups around a couple of areas, and they have adopted preliminary charters as well. We have had members of technical committee spearhead those work groups to get them going, with a goal to get them populated more broadly. Around at-risk goal we are trying to get more integration with FWS presence on some of MAFWA committees. There seems to have been an open acceptance of having more FWS voices at some of those committee meetings. Ed Boggess has been working on monarch conservation as the MAFWA liaison under MidAmerican Monarch Conservation Strategy, so he will be expanding his role from pollinators to all at-risk species. Also, looking at making Claire's position full time so we will have that technical capacity to help at-risk with MLI. Looking to continue to support

monarch and pollinator conservation work around the region. With habitat, the group is currently designed surveys to look at work tools. Groups are meeting in the region and we have provided funding to the expansion of the Landscape Health Index, which started in Missouri and now Iowa and Nebraska are doing it to see how to push it through and do it in other states. Continuing to develop the conservation blueprint; to look at BMPs along Mississippi river basin, continuing to support development of that, interfacing with Southeast Conservation Adaptation Strategy (SECAS), Mr. Mallory Martin out of Region 4, used to work for North Carolina, advisor member to technical committee and he participates frequently and we do a lot of information sharing back and forth and Bill Uihlein is on steering committee, also use some of relationships we have with CHAT and figure out how they can work together in the Midwest; investigating those areas. So many groups formed around wind in last few years, getting involved in a lot of them, interfacing with Abby Arnold and her board on how to utilize some of those existing groups to help us answer questions on wind. AFWA has a wind advisory group, so trying to tie into some of those existing organizations. The steering committee will be meeting soon to look at priorities and reevaluate them and change or refine them as needed. With continued approval working on action plan to take in those priorities and possibly more. In process of learning as we go, figuring this out together, not taking model and conforming to it, we are collaborating and figuring out what the Midwest needs to address our big conservation challenges and trying to do that with staff at technical level with direction and policy advice of steering committee. We want to have coordinated policies, science decision support to decrease duplication of effort and increase transparency of conservation planning, expand communities of practice and engage with broader constituencies and focus on people. Focusing energy and resources in the right place, with the right people; eager to get to work and looking to expand who we are engaged with. Focus on looking at science-based priorities and getting to action of this initiative and that plan. Spent last year getting organized, now get more strategic and intentional. Tomorrow you will be asked to sign resolution to continue MLI and in that resolution is a directive to start working on comprehensive action plan that will be taking all of these ideas around and asking, what do we need to do and who do we need to be working with to get things done. That will give us a good roadmap. In doing so you will be sanctioning working charter and also be asked to approve funding for positions to support these efforts. A good relationship with MAFWA, between the Service and MAFWA and hope is to continue that and build upon it. Charged to make science-based decisions and in doing so we need an avenue to apply actionable and innovative science. Refining priorities, looking at organization as landscape organization; what are we, and working with identity statement. Start looking at, what can we do here and now; what can we do at next MAFWA conference; and what do we need to be doing to make our science actionable. *Kelly* – Outstanding job. One of those things, everyone busy, we all have jobs to do back home and things to balance in our minds. This started off with Terry and Jim and tighter than we were looking for. If you go back and look at priorities, drop wind energy out of it, the rest of the three priorities is something you are working on and those fit in perfectly with what you are talking about and can fit in any region in this country right now. A neat opportunity because working with the FWS has been seamless, Craig is wonderful co-chair, great people. There is certain responsibility to further these goals down the road and it stimulates your thinking. Kelley Myers is outstanding, we got Dale, but got her into this, so best of both worlds. This is a template for the other regions and Noreen Walsh in Region 6 is working on something similar. Wonderful deal and has a lot of applicability at national level. You can take what we just described and roll those ideas up and if you could roll all four regions together you would have exactly what you are being asked for from the President; if only it could be that simple. Thank USFWS, thank steering committee and technical committee members; this is a journey worth taking. Thank Kelley in particular. *Craig Czarnecki* – From FWS perspective, it is seamless as well and enjoying working with you all, thank you.

FEDERAL PARTNERS SESSION

U.S. Fish and Wildlife Service

Charlie Wooley, Region 3 Director – (PowerPoint - Exhibit 39) Honored to be here representing the upper Midwest for USFWS. Start with my favorite topic, the Department of Interior's reorganization; I am one of three Service folks involved in this for the last year and a half. Lost a little steam since Secretary Zinke resigned in January, Secretary Bernhardt is engaged but not at level that Secretary Zinke was. The thing that causes us concern is having Missouri and Iowa go into another region; we have a great relationship with our state partners, it works for us and our state partners. My commitment with Sara and Dale, is they will hear directly from me of any changes coming. There was a part of manual, unified Region 4, that came out in May that codifies these regions, but haven't heard anything since. The House appropriations committee has rescinded money from the Department of Interior for this fiscal year and nothing in House budget for Interior reorganization next year. Heard from Kelley on Midwest Landscape Initiative, wonderful work and proud of the partnership Kelly Hepler referenced, great work relationship between state and federal partners, keep it up; a great forum that allows us to cooperate on a whole host of issues important to states and FWS; will keep this moving forward and do everything we can to make it work. Chronic Wasting Disease (CWD) a huge issue for state partners, USFWS is frustrated and we want to help, don't see a need for us with our expertise at the moment but let us know if anything we can do. Working with sportfish restoration programs to get some grants for it. Gray wolves, the best day for USFWS is the day that management goes back to the appropriate place, with state partners. We proposed delisting March 15, 2019, public comment period has been extended through July 15, holding last public meeting in Minnesota today. We would like to get to a point where they are delisted and appropriate management is back where it belongs with the states, our goal is by the end of the year. Lake sturgeon, petitioned in May to list, this petition triggered a preliminary review by internal USFWS biologists and it is looking like we will probably have a positive 90-day finding; not through Washington office yet and not in federal register, a low bar with 90-day positive finding but what will happen is we will start the next step, prioritize lake sturgeon for possible listing, complete work plan, complete status assessment and will take a couple of years for all of this to happen but important point for you is that petition was well done. Tremendous amount of work conducted by all partners at the table, tribes and FWS the last 20 years to restore lake sturgeon, work is ongoing out there. When the FWS comes to states and says, please tell us what we are doing in your states, we need to know about it. There is a tremendous amount of work being done in Michigan. Let's work closer together as we get this information in which will help us make informed decision on whether we need to list or not; years away from a decision but processes that will occur and it will be important for us to be joined hip-to-hip and arm-in-arm with you. Monarchs, 12-month finding extension to December 15, 2020. This has been a little controversial, have lead for monarchs in Midwest, what happened was there pressure to extend and I can tell folks no; what happened was we came back from government furlough in February, we had a tight deadline to meet a June 30 deadline and it looked to be impossible to make a determination based on losing 36 days to furlough, but also the fact that we had positive information coming out of over-wintering numbers in Mexico. Asked Washington office for extension for two reasons; the last three years the trajectory with monarchs has been on an upward swing and it is not lost on us that you and your partners have put a lot of habitat on the ground, millions of acres of milkweed habitat for pollinators and that is producing benefits. See more attention to protecting wintering habitat in Mexico too. The bottom line is we got an extension through December 15. Database we have is open. Rumors going around that monarch conservation is closing, and we are not involved in putting any more data out there but that is the furthest thing from the truth, it is going to be open for years and please continue populating with

your information, it will make a difference as we start analyzing information. Claire, Bill and Ed, tip the hat to you, the Mid America Monarch Conservation Strategy has been wonderful to watch, another example of great work relationship between Service and Midwestern states; it has been enjoyable and pleasurable to work with them, speaking for Kelly and Craig Czarnecki also, thank you for hard work and dedication. Moose, this only impacts a couple of states here, we have 12-month finding petition to list U.S. population of northwestern moose in 2020; analyzing information we have received from four states here on whether this is DPS or not; haven't made a decision yet, once we do that will give us a clear path to start the listing process or whole process ends at that point in time. Will have determination this year. Asian carp, involved in this battle for 10 years, particularly in Illinois, the Service is co-chair of Asian Carp Regional Coordinating Committee; we have held the line in keeping Asian carp out of the Great Lakes; tremendous work relationship between the Service and Illinois, proud of it, in bigger broader sense, Committee contains a couple of federal and state agencies, and now expanding to Kentucky and Tennessee and other areas; best working relationship in my 40 years working for USFWS; we have had 10 years of working hand-in-hand reducing numbers of Asian carp, keeping them out of Great Lakes and knocking them back in the waterway system. Getting with Kentucky to start process to help develop some other tools and techniques for Barclay Dam. Also, \$10 million in funding added on this issue. This is only species I have ever been associated with that we actually had to tell Congress we had enough money, what we need, with what we had for base fund and GLI, incredible support we have had, and all goes back to great work relationship with you, and particularly Illinois. Great Lakes Restoration Initiative, a great example of partnership between Service and state partners also; great habitat work in Great Lakes, been able to acquire land that we brought into the refuge system and we were able to use dollars and do some of that work. Able to help state partners with clean-up and work with Wisconsin DNR for 10 years on clean up. A banded Great Lakes piping plover on a restoration area, wonderful Great Lakes Initiative work with partnership with EPA and state partners. Cormorants, an issue and concern for us, working closely with Andy and his crew here in Ohio trying to develop options for managing cormorants. We have court order that ties our hands to what we can do but looking for areas where we can help. Held series of meetings in upper Midwest, getting information from state partners so we can provide management plans and tools based in science because we will probably be challenged again in court; if we have good biological technical reasons why we want to control cormorants, whether to control predation on certain fish populations, reduce impact on habitat on islands, we will be able to make progress in controlling cormorants; shout out to Wildlife Services and great work partners have provided. The same with black vulture, a new species on the horizon for USFWS to be issuing depredation permits for. It is an issue in Ohio, Indiana and Illinois; they are opportunistic as they prey on newborn livestock, we have been issuing permits to deal with predation in those three states; we have never denied a permit and permit increased tremendously over last two to three years up to about 50 permits a year. Our Wildlife Sport Restoration program, Ron Regan and Ed Carter thanks for work in Washington and with office staff; great to have assistance coming on administrative funding cap issue. From my perspective and Jim Hodgson's perspective, we want to do best job we can to provide grant assistance to state partners. We have vacancies, with a little administrative relief we could fill those and have quicker turn-around time on grant reviews; thanks to you and AFWA staff. Partner efforts, targeted Iowa and Missouri to connect tax paying manufacturers with state partners because they have a better understanding of what actually is utilized for fish and wildlife restoration fund, working closely on three Rs, engaged and happy to be part of. Hunting and Fishing Chiefs, Secretary Zinke came out a few years ago and wanted to expand opportunities on wildlife refuge, we took to heart, have seen our people roll up their sleeves and look for opportunities. Nationwide we have identified 1.5 million acres of refuge land to open for hunting. Just two weeks ago, at Ottawa Wildlife Refuge, Secretary

Bernhardt came out and we had an announcement about where we are with advancing hunting and fishing on refuge and Interior lands and we have added new opportunities; also opened areas at Green Bay National Wildlife Refuge, Long Creek Bay, expanded opportunities along upper Mississippi River; taking this seriously and we want to expand hunting and fishing opportunities in the Midwest and we have done that. Thank you for making USFWS feel like a welcome partner.

U.S. Forest Service

Leah Rathbun, Assistant Director of Renewable Resources Eastern Region –Start off by saying this is my first meeting, thanks for making me feel so welcome; one year in this position. Lot of change in positions, nationally and regionally, Kathleen Adkinson retired a month and a half ago, currently have acting regional forester, Bob Lukel who is normally our deputy regional forester. Two directors retired last month, planning and information manager directors; deputy regional forester moving back to Montana; so, a lot of movement going on in agency. Heard from you that filling positions is challenging right now. Closed two announcements Wayne National Forest for supervisor position and Allegany National Forest; a lot of new faces. Tough to lose knowledge with retirements but exciting to gain new energy. Taken state and private organization in Region 9 and folded into the regional office, now working together as one team, New Town office for that group will be closed in October and everyone will be joining us in Milwaukee; vacancies from that change as well. May have heard of reversal in secretary's decision to move Job Corp organization under the Department of Labor, happy about that because in a lot of states they help with fire programs, and prescribed burns happen because of them. Furlough was rough, not on program of work but more on staff and employees. Research coming out, study showed 36 percent of federal employees in Idaho had to ask for help; from food pantries, family and friends. If on October 1 there is no budget that will impact the staff, so you may feel some of that as you interact with federal agencies. We have focused our workload on flagship targets, on timber and fuel reduction. Emphasis on work in next few years. This is first time we have had an executive order that lined out what our timber targets and fuel targets will be, so that is where our focus lies. Using new tools and methods to help us get to those targets. A new strategy the Secretary put in place is shared stewardship, and we are taking that to heart. In eastern region a challenge because we have a lot of states to work with; focus Forest Service to work with the states so we can have larger impact on the landscape. We are working to put in place formalized shared stewardship agreements, and those will be at your Governor's offices and you have an opportunity to influence what those agreements look like, we need your help to get our work done and join in efforts to make sure we are doing what is the highest priorities in your states. Had a change in Good Neighbor agreements, which now allows us to work together and some of changes are both from new Farm Bill and internal changes in legal department. Funding changes have happened for states we are working on timber agreements with, but also new opportunities through the Farm Bill to work with counties and tribes. That is exciting because anytime we can find additional capacity that is great. Have an initiative to change NEPA structure, out for comment in federal registry and some of the things you will find in there are new categorical exclusions to get work done and a couple new ones focused around infrastructure. Another piece of that is to identify CEs or EAs use in EIS situation; public comment closes end of August. New hiring initiatives, have strike team, a group of employees who travel around the region and helps with work; a real bonus for us. Targeting that team as a way to bring people into the agency to travel around different states and work on national forests and then give them opportunities to permanently work on a forest after they have had a year or two in that organization; using as a stepping block for folks to get into the agency, get experience and then place them in a location. A new federal hiring authority is the Stem Authority, having a hard time hiring folks in stem disciplines, science/technology/

engineering/math, so new way to hire folks in those disciplines noncompetitively. Focused on people with experience, not entry level; GS 11-15, can fill with biological scientists and fisheries biologists. This is a way for us if we don't have internal interest, scope internally first, we can go out and find somebody and offer them a job as long as qualified for position; without having to post or go through regular process of hiring. Hopefully a big help as we go through this generational change and shifts in our work force. Specific highlights: Wayne National Forest is working on hand-in-hand with states to walk through the plan revision process, currently working on assessments, a large effort and we want to thank the states for helping with that, couldn't do without you. Mark Twain is walking through a new law, Dingle Act or Sportsman's Access to Federal Land Act, put in place to create a formalized process to banning access for hunting and fishing; Mark Twain is banning hunting for feral swine, trying to end up with initiative, held two public meetings last week to provide public comments, tell us what they think and provide options or ideas around the topic; comment period closes in middle of July. We are the first to walk through this new law and we are learning as we go, hoping to have some influence on what process looks like through our legal department as we moved ahead of them, will inform us of how this looks as we move forward. The change in that law removes the decision to close an area to hunting or fishing from the forest supervisor to the Secretary. Have workshops working on, one on aquatic organism passage and registration is currently open, it will take place in Michigan and everyone is welcome to attend; a shared opportunity for training. Another is a workshop focused on large wood, streams and rivers, no date set yet, but Amanda Kunsman can help with information on that, again open training for anyone to attend, happy to help with that, also in Michigan. *Sara* – Thank you on behalf of Missouri where all of the effort has gone into trying to figure out how to move forward on closure of hunting feral swine. It has been challenging, especially with Dingle Act and struggled because feral swine are not a regulated huntable species, no season, navigating through complexities is challenging; appreciate effort going into that. *Leah* – Appreciate partnership work you provided as well. *Unknown Audience* - The stem authority you mentioned, general biologists as well? *Leah* – General biologists and fisheries biologists' series and engineering, mathematics and statistics degrees. *Unknown Audience* – Process of how that came to be? *Leah* – I am guessing government committee that put that together and processing that through OPN. *Unknown Audience* – That says wildlife biologists are a dime a dozen and fish people are not. *Leah* – We are having a hard time getting wildlife biologists at higher grade in key areas.

USDA-APHIS-Wildlife Services

Willie Harris, Eastern Region Director – (PowerPoint - Exhibit 40) Focus today will be on discussion of Wildlife Service role in APHIS, discussing funding of APHIS programs, identifying the leadership of Wildlife Services and feral swine. Acknowledge Jason Suckow, he is western region director; two regions east and west and Andy Montoney is the state director for Wildlife Services from Ohio. APHIS is to protect health and value of American agriculture and natural resources. There are six organizations in APHIS with boots on the ground that tie into this mission; Wildlife Services; Animal Care; Biotechnology; Veterinary Services; Plant Protection and Quarantine; and Investigative and Enforcement Services. Wildlife Services, protecting people, agriculture and wildlife. The only agency in APHIS that is nonregulatory, we do not get a lot of funds from Congress to help us do our work, so we rely on partnerships with you, industry and others to do our work. Animal Care program, with mission to protect animals through the Animal Welfare Act, goes out and conducts work by monitoring and regulating exhibitors like zoos, dealers, transporters and research facilities. In large areas, like Sea World with veterinarians going out day in and day out, we are making sure they are protecting welfare of the animals. In addition, doing work to protect horses under Horse Protection Act; monitor this industry to be sure horses are not being harmed in any way. Biotech, regulating genetically

modified organisms. Veterinary Services, has veterinarians regulated on farms, regulating cattle, etc. to ensure our food sources are protected. Plant Protection and Quarantine, worked 19 years in this division, conducted port work, inspected cargo, inspecting passengers looking for plants and exotic other pests coming into the United States that would harm agricultural resources, acts under the Plant Protection Act, Federal Seed Act, Endangered Species Act, Honey Bee Act and Agriculture Bioterrorism Protection Act. Investigative Enforcement Services, spent last nine years as regional director for investigations; conducted investigations for five regulatory organizations; Plant Protection and Quarantine, Biotech; Animal Care; Vet Services, etc. Investigators with boots on the ground that went out day-in day-out to conduct investigations based on regulatory regulations where fines and penalties were assessed, about ten percent were criminal in nature. Private industry is important to this organization because of how we are funded. In 2018, APHIS was appropriated \$1.2 billion, \$107 million of that went to Wildlife Services, we have to rely on partners and industry to do a lot of the work getting done out there. Some work being done throughout the U.S. under reimbursement appropriations, like predator control, feral swine work and some other activities, however reimbursement funding important on what we need to do with things like bird strikes and ensuring birds are not getting into aircraft. Leadership of Wildlife Services is led by Janet Bucknall for five years, taking on leadership of Biotech and then coming back as regional director and deputy administrator. Larry Clark, director of National Wildlife Research Center, he heads up research done with Wildlife Services partnerships with you. He has announced retirement at end of year. I head east region; Jason Suckow in the west; Ginger Murphy, administrative portion of Wildlife Services; and Martin Mendoza heading up national programs. We have one vacancy in the west in New Mexico; in the east we have several vacancies, filled Missouri with Travis Durant, from Illinois where he was formerly assistant director; Parker Hall left Missouri and moved to Florida. Feral swine, under 2018 Farm Bill the USDA received \$75 million to be split between APHIS and NRCS to be used in five years; \$37.5 million goes to Wildlife Services to conduct operational work and reduce populations; and \$37.5 million to NRCS for on farm trapping and other things. Under the 2018 Farm Bill funding, in category 4 and 5 states, is where we are seeing most heavily populated states with feral swine. California, Texas and states east of Texas are in southeast and will receive service, work and additional staffing under the \$37.5 million. With Farm Bill funding, we intend to increase aviation assets, currently in 2019, we have six helicopters in the east 13 in the west, plan on increasing by five; three to east and two to west. In 2020, increase by five additional helicopters, two to east and three to west. Effective tool dealing with feral swine. (*video on using helicopters to deal with feral swine*). Heard from Kentucky, said you have feral swine problems and you need to contact Fred Dunlap. *Karen* – We have used him a lot and we had huge population of feral swine and they are gone now, cleared them out, used tracking to get a couple of others, then hired one guy at night and now they are gone. *Unknown Audience* – Wildlife Services gets about \$30 million in federal appropriations for feral swine. *Andy* – Was \$20 million then in 2014 increased to \$30.5 million, categories 0, 1, 2 and 3, feral swine work will be conducted in those states under that and in the event the state needs a special project done they can reach out to state director to develop special projects with you, that will go to national program committee and they determine what additional monies would be needed to do additional feral swine work in those states. *Brad* – You mentioned you regulate horse health, in Kansas we have had wild mustangs transported from BLM in west and are being babysat in Kansas. Do you oversee health of those mustangs? *Willie* – Not in Wildlife Services, some areas not done at all. What I mentioned was under Animal Care and they do it to protect horses from harm, Horse Protection Act is tied to animal welfare. On investigative side we did investigations looking at violations of those laws. *Andy* – That is Bureau of Land Management, they are ones that have wild burro and horse regulations. Veterinary Services and Animal Care

may go in to make sure handling them correctly, but BLM takes care of it. *Kelly* – Get helicopter in South Dakota on coyotes? *Andy* – You have a fixed wing.

USGS Cooperative Fish and Wildlife Research Units

John Thompson, Deputy Chief (Acting Chief) – (PowerPoint - Exhibit 41) A little history, Units were born in 1930s, came out of Game Policy Act; it was recognized that game populations throughout the country were declining and realized we needed to manage populations based on science, also recognized lack of knowledge of science on wildlife but a lot of individuals trained to manage wild populations. Ding Darling started the first Unit with his own money, he put up \$3,000 a year for three years in Iowa in 1932. He was tasked by President Roosevelt to lead the Bureau of Biological Survey when first formed, he was first director. He went to Washington and worked with other conservation leaders and Congress and established Cooperative Research Unit program across the landscape with nine Units. Units were developed to enable not only science-based wildlife management but to train the next generation of wildlife managers. Received federal legislation funding in 1960 through Cooperative Research Units Act. Also, in 1960, they brought fisheries into the equation. Mission of the program has stayed consistent through 84-year history. It is three-pronged mission: 1) train future workforce of fish and wildlife managers, we do that through graduate education; 2) actionable research to meet cooperators needs, science needs of state and federal cooperators; and 3) technical assistance to our cooperators, not only in applications but interpretation of new science. The Research and Training Units Act, Public Law 86-686, legislation established CRU program within the federal budget; set up a line item in federal budget. At that time, we were in the Fish and Wildlife Service, moved over to USGS in mid-1990s. That law allowed the Secretary of Interior to enter into cooperative agreements with state agencies and universities to establish this program. It did have strict requirements, federal control could be part of the units, but also established the basis for federal scientists to be embedded in universities and to have university status. There are a lot of things afforded to federal scientists and Cooperative Research Units that you can't get at other science centers. That limit of federal control was used only for paying salaries of federal scientists imbedded in those host universities, no federal research dollars. For the first 44 years of this program no research dollars could go into that, only state research dollars. It was only with the Fish and Wildlife Improvement Act of 1978, that allowed for federal funding of research. Through that developed the research work order process, unique to Cooperative Research Units, which allows us to sole source money from the federal government to host university, capped overhead rates at 15%. These funds then go to universities to study five-year revolving accounts managed by federal scientists stationed in that Unit. The intent of this is cooperation with federal control. Every Unit is established through long-term cooperative agreements, signature on those agreements are state fish and wildlife agency, host university, USGS, Wildlife Management Institute and in a few cases the Fish and Wildlife Service (FWS). In order to limit federal control, the FWS is a non-voting member. Agreements get sent to every cooperator, so when we talk about a Unit, we do not view that as a federal entity, but that Unit is owned equally by all cooperators; the program is within the USGS, administered by federal government but individual Units are not federal entity. Research agenda does not come from federal government it is set locally, approved by cooperating committee from each Unit and that committee consists of signatory partners of cooperative agreement. Who brings what to the table, how does it work; USGS funds federal scientists and provides salary, place two to five scientists within Units in universities; universities provide facilities, dedicated administrative person who is paid by the university, provide reduced overhead on research work orders but also on state grant funds and faculty appointments for our people so our people can actually teach and direct graduate students; every state provides an operating expense, an annual operating contribution, average about \$50,000 a year, also provides research funding; federal partners, not just FWS but

other partners who are not signatory provide research funding; and Wildlife Management Institute provides organizational support. There are 40 units in 38 states. The federal investment of this program in 2019 was \$18.4 million, 94% of that goes to salaries, none of those allocated dollars goes into research except in rare circumstances. Last year had one of those rare circumstances, directed by Congress to put \$250,000 into moose research in the northeast. That \$18.4 million leverages to about \$40 million a year in state and federal research grants, another \$20 million in university in-kind support, leverage to \$80 million program. Our research portfolio is broad, it ranges from means to landscapes all done through graduate students through graduate education. At any one time we will have upwards of 600 grad students engaged in the process. Gap in the Midwest states, something we would like to work on, in fact we have had requests to add four new units, three in the Midwest, if we get the funds to do it, in Michigan, Indiana and Kentucky, and Nevada is the fourth. The scope of science includes things like species of conservation need, energy and wildlife, prelisting conservation, endangered species, human dimensions, and more. One of most common questions I get asked by states is, when are you going to fill position; have vacancies all over the program right now, when fully funded we have 119 science positions, after budget cuts in 2011 or 2012 and federal sequestration we were flat budgeted from 2013 to 2018 at \$17.4 million. Costs and salaries have gone up, had to manage program through attrition, so we have lost people through retirement, or they have moved into other positions; so, we have lost research capabilities. Right now, carrying 38 vacant positions across 31 states. Science is not priority in this administration, and we have been zeroed out in 2019 budget, thanks to you, AFWA and National Cooperators Coalition that consists of non-federal partners, who is an organization that works behind the scenes; Congress rejected elimination of the program and gave us a \$1 million increase. We are zeroed out again in 2020, House has already rejected that and has recommended a \$5.6 million increase. We have a long way to go before that is reality on Senate side, but we are hopeful, and hopefully we will be able to fill vacancies and add units soon. Research funding has remained fairly stable, generally split about 50/50 between state funding and federal funding, seeing some erosion in federal funding because we have fewer people chasing research dollars and tight federal and state budgets. The program has other challenges like changes in traditional university programs that house our Units, in many cases they have moved away from traditional fish and wildlife management in their curriculum, also being asked to teach more courses which we can't always meet. Also struggle with variation in state budgets, variation in Unit help, sometimes personalities, sometimes priorities, but see Units that cycle in. Struggling with getting money to Units in timely manner because any federal dollars that go through USGS, has to be approved by Secretary of Interior, slowing things down 4-6 months. Partners remain strong, doing research important to all of you, we remain efficient and productive, producing 400 manuscripts a year, teaching 65-70 university courses, presentations, seminars and workshops as well as having 600 graduate students engaged in the program.

U.S. Fish and Wildlife Service

Noreen Walsh, Region 6 Director – (PowerPoint - Exhibit 42) I serve as regional director for the mountain prairie region, we cover four rocky mountain states, Montana, Colorado, Wyoming and Utah, and four great plains states, North Dakota, South Dakota, Nebraska and Kansas. Charlie shared with you, have DOI reorganization hanging over us. If reorganization goes forward my region will be split into three DOI regions; a portion of Montana will move and the rest of Montana and the rest of the great plains stays will be Region 5; then Wyoming, Utah and Colorado will be in the upper Colorado region. Before this got started I thought it was going to work out well, but it doesn't seem to be playing out that way as this moves forward. It is hard to say what will happen, but I do think it is likely that DOI will align the bureaus to these regional lines. Not seeing lot of difference, expect to manage same states

that I do now. Science application program, evolving to have a few focal areas, great plains grasslands and in sagebrush landscapes where we have been working for a while it is our desire to try applied science to report strategic conservation in those two landscapes to address priorities cooperatively identified by our partners. Grassland and sagebrush systems are both rich in migratory bird resources and we see natural linkages between what we are focusing on with Midwest Landscape Initiative and WAFWA's developing sagebrush eco-system conservation strategy; continue to work cooperatively in those areas. Internally, my science application and migratory bird assistant regional directors are both vacant right now. Because we have such an overlap with migratory bird resources in those two landscapes I will be advertising to fill one position which will combine science applications and migratory birds under one leadership position; expect to advertise soon. In terms of grassland birds and grassland bird conservation, the Bird Conservancy of the Rockies, is working to plan a grassland summit for next summer, a 3-day workshop; they are spearheading this with partners; an important meeting to develop framework for grassland bird conservation that should guide us for the next decade. Heard Terry Steinwand speak about wind energy development and Alisha Mueller gave great presentation about new science that is showing us indirect effects on grassland birds. It is our desire to continue using the Service's science resources with partners on wind energy development and what the impacts are. In the Dakotas the Service has a long-term program acquiring wetland and grassland easements, in the prairie pothole region, purchased with duck stamp monies; remains high interest in this program by landowners, maintain good waiting list of landowners who want to enter into these perpetual easements, usually around 1,000 landowners on list. Also, high interest in Congress and from Administration on how easements are administered, on how we advise landowners to place tile drainage to ensure they are not draining wetlands protected by perpetual conservation easements. Planning fall workshop with our partners to dig into that question and if there is any science we can use to inform how we advise people to be sure they are not impacting wetlands when they place tile drainage. Concept of species at risk and can we address them before they are in need of listing. Conservation Without Conflict is a growing national coalition of organizations that are interested in being able to preclude need to list species through conservation effort and at the same time respect the uses of the land; keep working lands working. That grew initially out of mega-petitions that USFWS received in the southeast region for a lot of aquatic species, 100 or more species at a time; we couldn't deal with all of those immediately because of statutory timeframes so there was a growing coalition, groups in the southeast decided it was going to take a while with a petition so they decided to also look at what is being done and what we can do to apply conservation and legitimately preclude listing species. That effort had a lot involvement from the Forest Products Industry, a national alliance of forest owners, grew and replicated in the northeast and nationwide effort to take that approach of coming together for species at risk without needing to get to listing. Western Governors Association (WGA) is working in a similar vein to look at where species are that states identified, species of greatest conservation need, and their overlap with Services ESA listing work plan; looking at how WGA can come together in a task force and support local, sub-regional or regional efforts for addressing species at risk. Zach Bodain is policy advisor for WGA has been reaching out to states asking for input on how WGA can support those efforts. Charlie also mentioned expanding hunting and fishing opportunities, a few completed in Region 6; Kirwin in Kansas, Valentine National Refuge in Nebraska, Sand Lake in South Dakota; in coming years continuing to look for and at opportunities to expand hunting to more closely match state seasons; had Otto Josie of WSPR program working on this for past year but he has gone back to his day job; we have hired a full time hunt/fish coordinator Aaron Mies who is coming to us from headquarters office. Reach out to us with anything else on your horizon you want us to be considering in terms of hunting expansions; reach out if something we should start to consider. Also working on some new fishing opportunities last year, at Valley City we

codified recreational fishing and a couple of new projects at Gavin's Point National Fish Hatchery, reestablishing a blue catfish population in the Missouri River and working to strengthen fishing in western South Dakota. ESA downlisting and delisting actions: in Nebraska, Colorado butterfly plant will have final delisting, taking off endangered species list; Canada lynx, in 2017 the Service worked closely with the states within the range of the lynx, appreciated state involvement in species status assessment and five-year review, we released that recommending delisting, anticipate proposed rule on the street late this year. Original reason listed had to do with federal forest land, which has been taken care of with revisions to those management plans; lot of questions about climate change during review of the species which we addressed in the five-year review and you will also see in proposed rule to delist; climate change is going to have an impact but conclusion was species likely to remain secure and occupy multiple units in foreseeable future. Expect plenty of comments about delisting and about climate change when this comes out. American burying beetle, announcement of proposed rule moving from endangered to threatened status; public comment period is open until July 2; in a good place with them only known in two states to nine states; saw Columbus Dispatch article this week where American burying beetles were caught in pit trap from last year's introduction, so wild American burying beetles caught for first time after several years of reintroduction here in Ohio. Along with proposed downlisting rule a proposed 4(d) rule will relax some of the prohibitions applied to endangered species, don't feel we need to apply under threatened status. Interior least tern is on the horizon, proposed delisting, can't estimate when it will hit the street, hopefully soon, in a good place with this bird, many more individuals than when it was listed and widely distributed, hope to see before end of the year too. Topeka shiner recovery plan, thank you to states for biologist's involvement, participating with species status assessment and development of draft recovery plan, good input into recovery criteria; you will see required five-year review of this and expect on the street within next three months; expect to be out for public comment by the end of the year. Kendra, thanks to you and whole team for welcome to federal partners. *Kelly* – Secretary of Interior Bernhardt wants me to make sure states go online and react favorably to the increase in hunting opportunity and decrease in regulations. Do you know the deadline of when states are supposed to respond? *Noreen* – Don't know. *Charlie* – Will get answer. *Kelly* – I hope every state takes the opportunity to show support of what Secretary is doing because there will people who do not.

Kendra - Our director, Mary Mertz will be joining us this evening and assistant director Steve Gray, who was former chief of Ohio Division of Wildlife.

Charlie – August 12 is the deadline.

Ron – Positive news from Congress, approved spending bill this afternoon \$15 million for CWD to go to the states.

Offsite Dinner Event: Howard Marsh Metropark

(the newest park in the Metroparks Toledo system and the DU award-winning coastal wetland restoration project)

Sponsored by National Archery in the Schools Program

Roy Grimes made a few remarks.

Board Buses depart at 5:00 pm

Board Buses to return at 9:00 pm

Hospitality Room – Sponsored by JMT Technology Group

Minutes
MAFWA Annual Business Meeting
Wednesday, June 26, 2019
Maumee Bay Lodge & Conference Center
Oregon, Ohio

Wednesday, June 26, 2019

Breakfast – Sponsored by National Shooting Sports Foundation
Remarks by **Jim Curcuruto**

MAFWA BUSINESS MEETING

Kelly Hepler, MAFWA President – Officially called to order at 8:02 AM

Call to Order and Roll Call

Ollie - All states present. We have three proxies, Minnesota (Pat Rivers, Deputy Director in place of Grant Wilson), Indiana (Amanda Wuestefeld, in place of Mark Reiter) and Kentucky (Karen Waldrop, in place of Rich Storm, Commissioner). (*Proxies - Exhibit 43*); no Canadian provinces present.

Agenda Review

Kelly – Moved Sara's presentation up front. Midwest Landscape Initiative was discussed yesterday. Will go over 3-splash rule again so I can report to my Governor. **Sara** – Go over 3-splash rule before I need to leave.

Approval of 2018 Annual Business Meeting Minutes

Annual meeting minutes (*Exhibit 44*); **Dale Garner, Iowa** *moved to accept minutes as printed*, **Terry Steinwand, North Dakota** *second. Motion passes.*

3-Splash Rule – **Kelly** – My Governor would like to know how many state directors would be interested in this; Governor will take this to Western Governors meeting which some of you are members of. In addition, I will be talking to Margaret next week. Not asking for resolution, just trying to get a sense; a lot of what we are talking about is the Central and Mississippi Flyways. Concern or discussions? It still has to go through the normal Flyway process. **Scott** – Calling for a vote? **Kelly** – Not sure that formal. This is not a new idea, what are landmines out there. If support, great. **Dan** – You answered the main concern I had when you said this is going to go through harvest work group, up through Flyways. Concern that team had, was we would be acting outside that process. If goes that way comfortable with that and coming up with their recommendation. **Kelly** – Paper Ollie sent out, articulated in there. Not sure they are viewing it as an R3 movement. Interjecting policy into the normal process and wanted to alert people at political level, process has to work too. **Sara** – Went through this last year and what Mississippi was doing, and it caused a lot of anxiety and concern that one state was removing themselves from the process. Giving direction back to Flyway Council, if we are suggesting that directors strongly support expediting efforts to look at recruitment simplifying

requirement; I am all for that at principle level; here are principles we want to consider; but to already suggest here is what we want suggests a predetermined response; I have concerns with that. Stay true to the process. Support communicating that whatever we can do to expedite R3 considerations, we are asking you to do that. Governors communicate, but stay true to this process, making sure as directors we are locked in consensus form with direction; appreciate you wanting to get our counsel and direction before having conversations at a higher level. *Terry* – Talked to my folks and Dan yesterday, this is a new idea, will take the process and coordination; a concept Mississippi and Central Flyway, there will always be the perception that somebody is going to lose, and somebody is going to win. We believe we will see less than 4% increase in mallard harvest, see problem with pintails which are species of concern. *Jim* – Discussed with staff in Nebraska and at Central Flyway in past years. Some momentum and support in Central Flyway, but not in Mississippi Flyway and need to follow that. Nebraska Commission is independent from the Governor, and we are not happy when they think they can go up and over us and talk to the governor; items go from us to him, but not him to us, don't want him interfering in our duck season. *Kelly* – Understand that. We brought to our governor, it was a Central Flyway idea a number of years ago. We are just trying to be consistent, simplify regulations to bring people into hunting, that is what discussion is about. *Jim* – There is a lot of moving pieces on something like this, good to put on radar so I can talk to my commission and talk to governor; find out what constraints might be. Nobody will be in position to say we are ready to roll.

Resolutions Committee Report

Sara Parker Pauley, MO (Exhibit 45) – WHEREAS, the Ohio Division of Wildlife has so sufficiently and enthusiastically organized and conducted the 2019 annual meeting of the Midwest Association of Fish and Wildlife Agencies; AND WHEREAS, Director Kendra Wecker and staff have worked together with local and national conservation partners making all of the participants feel very welcome; AND WHEREAS, the members of the Midwest Association of Fish and Wildlife Agencies wish to express their extreme gratitude for all of the collaborative efforts of the Ohio Division of Wildlife; NOW, THEREFORE, BE IT RESOLVED, that the Midwest Association of Fish and Wildlife Agencies at its annual meeting at Maumee Bay State Park, Ohio, on June 26, 2019, acknowledges the hard work and hospitality of Director Wecker and her staff and the great state of Ohio and hereby passes this resolution showing great appreciation.

Applause to show passage.

Kelly – Thank you, appreciate all you have done; appreciate the DNR director showing up last night; the food has been outstanding, and everything has worked very well.

Sara – A little history on MLI while we are waiting for copies. Kelley did an amazing job yesterday, as a reminder that at the Midwest director's annual meeting last year in Bismarck the board of directors approved a motion to proceed with Midwest Landscape Initiative (MLI). MAFWA president Terry Steinwand appointed steering committee and assigned a committee charge. This action was a result of a national push when Jim was chair of AFWA Resource Policy Committee. MLI steering committee formed a technical committee who has been busy in cooperation with Region 3 staff, excited about progress made. The resolution is in support of MLIs continued good work. There are a number of whereas statements related to conservation challenges; important role and responsibility

of state and provincial wildlife agencies concerning fish and wildlife and their habitats; cooperation with Fish and Wildlife Service, in particular Regions 3, 4 and 6; that MLI steering committee has developed preliminary co-identified priorities, goals and objectives; and established working groups under the technical committee. You heard about all of this yesterday. The Association of Fish and Wildlife Agencies adopted a resolution to promote landscape-level collaborations and provided guidance related to development and implementation of the MLI. THEREFORE, BE IT RESOLVED clauses include: that the Association, in annual assembly on June 26, 2019 in Oregon, OH hereby enthusiastically supports and endorses the continuation of the Midwest Landscape Initiative and further directs it to: 1) The work groups must be populated with robust and diverse membership from groups and individuals interested in fish and wildlife conservation in the Midwest Region. 2) The MLI should continually evaluate the co-identified priorities and make recommendations for adjustments or modifications to them (incredibly relevant as we discussed other research priorities the last couple of days, like CWD). The MLI may hold workshops or use other appropriate mechanisms to engage in such evaluation. 3) The MLI should develop a Comprehensive Regional Conservation Action Plan (Action Plan). This Action Plan will be a regional framework intended to address the co-identified conservation priorities of the MLI and to coordinate voluntary conservation actions and investments in the region. The Action Plan should include clear, specific, practical and measurable objectives, performance measures and outcomes. 4) All work of the MLI must be based on sound scientific principles, including but not limited to social science and human dimension. 5) The work of the MLI should align to the principles of the AFWA Resolution described above. 6) The work of the MLI should, to the extent possible, integrate with and inform the work of other regional landscape initiatives, particularly in instances where landscapes overlap. Clearly directing the MLI with guidance on its purposes. **Brad Loveless, Kansas moved to pass resolution, Dale Garner, Iowa second. Motion carries.**

Kelly – The other part of report Kelley talked about yesterday; thank Service for providing this opportunity, as much as we appreciate Kelley working on this it can't be her fulltime job. The model we are trying to duplicate on the monarchs including having Ed and Claire work on that, which provides the horsepower behind it. The intent is to borrow that same model and put it into this Landscape Initiative. Claire is interested in spreading her wings beyond monarchs, which we appreciate, and we want to provide that opportunity; it keeps the winning formula which Kelley Myers was looking for from us, an approval to move forward to USFWS for money, we have solid funding for a year and then long term would be another discussion. *Ollie* – Need motion to accept the grant.

Kelly – Grant is coming through us? *Ollie* – Yes, from USFWS. **Dale Garner, Iowa moved, Sara Pauley, Missouri second. Jim** – Success breeds success. When we went through major effort on monarch conservation, certain things became evident. What made that work, already good existing relationship between USFWS and MAFWA, essential ingredient, little daylight between states and Service on how to move forward. Having structure that allowed Midwest states to be informed, engaged and contribute. Also, ability of Midwest states and MAFWA to take steps forward using bigger ideas to solve bigger programs and Ollie encouraging and supporting that as well. Lot of work to do, in approaching things that became evident. Having structure and a couple key positions like we are talking about was important. That success has led to borrowing

many elements of that and larger more comprehensive effort moving forward. Looking back on monarch initiative, and when prairie chickens were on the table, takes a lot of work to approach landscape-scale problems. How do you scale that, more instances where we are looking at taking action to prevent listing; that is still a big question mark. With MLI, we would have organization in place to approach priorities to figure out what you are going to do next and be proactive, look ahead on the horizon. Having MLI structure allows that, it won't work if we don't fill key liaison positions we are talking about. *Kelly* – Acknowledge your leadership at national level to make this happen, thank you. When we were discussing Recovering Americas Wildlife Act, when it goes through we will have the ability to use state funds to put into this type of landscape initiative; the USFWS is supportive of working through that. States will have hard time mapping money we are going to get, and this will provide the perfect vehicle for that. Kelley laid out some of those priority areas, a lot dealt directly with RAWA and it is another way to go back to Congress and say that we have a vehicle in place that has collaboration between the states, federal government and NGOs to reassure them we take this seriously and use this as a model. *Ron* – In reviewing final legislation, one of things Mr. Fortenberry wanted was innovation grants, not all details filled out, but we work with him to make that happen. Talks about Secretary distributing 10% of funds from RAWA into a competitive grant program and regional associations will be able to compete and legislation provides for composition of a review committee. Space for regional associations, with new capacity, through RAWA, and what you do on your own. *Jim* – At a point in time when looking nationally and regionally about, if not LCCs then what?; and looking at comments from administration and Congress, one of the things was there may be a larger role for cooperative fish and wildlife research units in some of these large landscape research projects, haven't proactively done anything in that regard but need to look at that. *Kelly* – There are some tangents we need to work on to get this modeled and that would be worthwhile. ***Motion carries.***

Bylaws Committee Report

Sara Parker Pauley, MO (*Constitution and Bylaws with proposed changes - Exhibit 46*) – Minor revisions to the bylaws. Change of date on title page; others in the back. Most significant addition is under Article 1, Section 2, add last sentence, “All board members are required to annually sign conflict of interest and compensation policy form.”. To provide some history, turn to President Kelly Hepler. *Kelly* – After what happened at WAFWA a few years ago; had a particular individual who created financial concerns and cost the Association about \$750,000 because they didn't have the right internal controls in place, which they do now. A number of recommendations grew out of that; still paying for that in a big way in the west. Wanted to insure we don't go down the same road, so suggestion was to look at this seriously and hold people accountable, and people like Ollie too. Legally to ensure that you sign the conflict of interest form, similar on foundations and commissions. Have grants coming through, not same level of WAFWA, but doesn't matter what dollar amount is, same principle, intent is to make that clear, there is a responsibility we all have. *Ollie* – Kelly will send out forms to you to sign and Sheila will keep on file, an annual requirement. In addition, staff needs to sign confidentiality policy; all contracted personnel and volunteers including me, Roger, Sheila, Ed and Claire will annually have to sign that as well. *Sara* – The only other

changes relate to timeframe for technical working committees, under Article 11, they have a lifespan of three years at which time the board can decide to extend life of committees or not. Climate change extended to 2022, Midwest public lands technical working committee to 2022, and Midwest wildlife and fish health committee extended to 2022. We heard reports yesterday from public lands and wildlife and fish health, but did not here from climate change, committee has not met. A discussion may be, do we or do we not extend climate change committee? *Kelly* – Thoughts? *Dan* – This is my first meeting, what was history behind establishing committee, have we ever populated it with folks, was there a body of work assigned and completed, where is it in life cycle? *Ollie* – The main function, was Administration came in and stopped funded climate change at the federal level and this committee basically stopped functioning, not met because not meeting at federal level. *Dan* – Notwithstanding, position of administration on climate, still body of work to do there. We are working on climate change and expect many of you are as well. Needed a director/liaison, I would be willing to do that. I would be willing to take that on and put a plan together to scale up work we are doing. *Brad* – I agree with your sentiments, should have group charged with watching what is going on and determining when right time is to reinstate our efforts, entirely appropriate. *Ollie* – Agree, we would need a good chairwoman or chairman for committee, sometimes chair is member of host state, some committees elect their own chair; sometimes each meeting votes to elect a new chair for next year, sometimes follows rotation of this committee. Depends on how active the state is in climate change, for this committee to be viable it needs a good strong chairperson. *Dan* – I have any number of folks that could step into that role and articulate a body of work to get sea legs under us. *Ollie* – That would be great, especially if you are going to be the liaison. *Kelly* – Thank you for that *Dan*. Brought up by our own policy, regardless of the content, if they don't meet, do we still need them, the same conversation no matter the committee. *Karen* – In last version of wildlife action plan, states had to put something in there on climate change and managing populations, a place for that committee as far as politically, common things to focus on as actions. *Sara* – Only other minor thing is amended date change to June 26, 2019. ***Brad Loveless, Kansas made a motion to accept revisions; Dan Eichinger, Michigan second. Motion carries.***

Midwest Fish and Wildlife Conference

Sara Parker Pauley, MO – Cindy Delaney will come up and we will tag team. A little bit of history, others can provide some more history to this as well. MAFWA had been different than other regions, scientific conference in other regions held same time as directors meet and directors had a connection to that. Couple years ago, we began to talk about that there was some benefit to MAFWA and directors having more engagement and oversight of conference. As states would host, you would start from scratch on the planning each year, there was a need to show greater consistency in planning and administration of the conference. As directors, an Association could perhaps provide guidance on priorities and topics of the conference. So, we began process of making those connections and decided our foundation (Conservation Enhancement Fund) was the proper venue. Had a task group work on an amazing planning document, so now have a conference planning handbook in place. Subcommittee was formed, including, Sara, Kelly and Dale, and subcommittee has responsibility to serve as the liaison between CEF

board and the Conference and provide oversight. One of the things we did was put into place a three-year contract with Delaney; Cindy and her team does an amazing job with this conference, our national conference and other regional conferences. Delaney is helping with planning of that. Cindy provided documents (*Exhibit 47*). *Cindy* – Thanks for confidence in our team; involved since 2011, first conference in 2012; every year a little bit of a different adventure, depends on how engaged the host state is, how willing they were to let us help them, whether under contract with MAFWA or not; a little messy in the past in terms of oversight. We are the administrative backbone, manage website, financial logistics and contractual things, and we let host state take free rein on the program and hospitality side of it, which is what they do best. Work in planning process and make sure they stay on track, bring technical tools to the table. There are 450 technical talks in every year, give or take. Have seen sequestration some years and government shutdown this year. This new structure is going to be good for everyone. We report to MAFWA's CEF, a recipe for success and a long time coming, thanks for making that happen. If there is anything we can do or do differently let us know. Trying to stay ahead of the curve, where you can help is getting us engaged as soon as possible, want to be on the ground when picking the location so we can provide guidance. Tell your team that we have this great resource in us and that will go a long way. *Kendra* – Ohio hosted both of these events in one year, it was a little bit much as we had a new director and governor, but Cindy's team was amazing, very helpful, organized, on time and professional which allowed us to do what we needed to do and customize what we needed. We appreciate your service. *Sara* – That concludes my report.

Treasurer's Report

Roger Luebbert – Passed out two reports, Treasurer's Report (*Exhibit 48*) and Proposed 2020 budget; go over Treasurer's report now and the proposed budget later. Thank Ollie for help and Sara for signing checks. This treasurer's report summarizes actual receipts, disbursements and account balances for all MAFWA and Conservation Enhancement accounts for the most recent completed fiscal year, MAFWA uses a calendar year so this report is as of December 31, 2018. The first page is account balance summary comparing 2017 and 2018, increases in all accounts except for Banking Services account. Page 2 is banking services account which handles banking services for any non-federal special projects such as national pheasant coordinator. All accounts in this report line numbers are shown on the left for reference. As you can see on lines 2, 3, and 4 under receipts, the three major receipts were Conservation Leaders for Tomorrow, National Pheasant Coordinator and 2018 Midwest Furbearer's Conference held in Wisconsin. These three were also the major disbursements shown on lines 8, 9 and 12. Line 13 shows funds Kansas had in this account being transferred to the Conservation Enhancement account for their contribution for new process of handling Midwest Fish and Wildlife conferences. Lines 14, 15 and 16 are MAFWA administrative fees being transferred to MAFWA's conference account. Line 18 shows December 31, 2018 account balance was \$185,546. Designations of the ending balance are listed at the bottom of the page. Line 26 shows designation total of \$174,276. Page 3 is the conference account which is our main operating account; major receipts are line 5, conference receipts for this annual director's meeting; line 7, membership dues and administrative banking fees on lines 8-12. Major expenditures are line 19, disbursements for this annual director meeting. Lines 20 and 21,

executive secretary pay and travel; lines 22 and 23 are treasurer pay and travel expenses. Line 31 shows December 31, 2018 balance of \$207,952. Page 4 is Southern Wings account, a pass-through account, receives contributions from various states which are disbursed primarily to the American Bird Conservancy after deducting a 5% banking fee, typically balance is very small as was the case the end of 2018. Page 5 is the Federal account, the major receipts are line 2, state contributions to Monarch NFWF project; line 3 is USFWS reimbursements from state liaison; line 4 is NFWF reimbursements for monarch project. Disbursements are lines 7 and 8, state liaison pay and travel; lines 9 and 10, monarch coordinator pay and travel; line 11 monarch planning travel and meeting expenses; line 12 monarch steering committee participation; and line 13 is indirect cost transfer to conference account. Line 15 shows December 31, 2018 balance of \$53,176 and the footnote shows \$45,833 of ending balance is state cash matching contributions designated for the NFWF monarch projects. Page 6 is the credit union share account where we have \$25 required minimum balance at end of 2018. Page 7 is our big account, our money market and securities investment account showing interest, dividends and capital gains income. Line 6 shows there were no disbursements; line 7 shows positive change in money market value of underlying investments was a negative \$50,366; the latter half of 2018 was a tough period for the market. Over the last three calendar years this fund experiences a 6.8% annual return, done well over longer term. After I go through the rest of the report Ollie will give background on this account. Page 8 is conservation enhancement fund account at the credit union, this account was established in 2018 and hosts contributions from the states; the new procedure for handling the Midwest Fish and Wildlife conference. Line 2 shows contributions of \$55,000. Page 9 is conservation enhancement fund held at the broker. Lines 2 and 3 are dividends and capital gains received; line 5 shows no disbursements; line 6 shows a negative change in market value. This account experienced a 4.4% average annual return over last three years. Audit committee received a highly detailed version of this report showing each receipt and disbursement for all categories of all accounts. Concludes report. *Ollie* – History on the large account. In 1996, skies opened up and a big chunk of money fell in our lap, \$209,500 came to our Association and an equal amount went to Ducks Unlimited and Audubon Society from a man in Milwaukee Wisconsin, that no one knew. Somehow in his estate planning his estate was divided among those three organizations. In 1996 our board invested that money and developed a policy to protect corpus and used earnings off that fund to fund various worthy conservation projects. They developed a policy on what could be funded and not funded; over time it was used for Teaming with Wildlife, CARA, CITES, contribution to AFWA's AWARE foundation and used money to fund farm bill work. We have not funded from that for a while and that is why it has grown. Encourage any of you in your estate planning, throw money this way. No one knew this man, we tried to find out background on him. *Kelly* – In executive committee we asked him to share that story. ***Dale Garner, Iowa, moved to accept Treasurer's Report, Kendra Wecker, Ohio, second. Motion passes.*** *Brad* – Great report, how often do we audit? *Kelly* – That leads perfect into next report.

Audit Committee Report

Dale Garner, IA – (Exhibit 49) Roger provided banking services account and disbursements detail to South Dakota Game, Fish and Parks on February 8, 2019.

President Hepler and Jeremy Tentinger, his chief accountant with Administrative Services, did an audit of the Banking Services Account. Mr. Tentinger requested 56 transactions that were distributed throughout the receipts and disbursements within the Banking Services Account. Mr. Tentinger found the documentation to be sound and had only a few minor questions that Roger provided satisfactory answers to. Overall, Mr. Tentinger reported that the Banking Services Account appeared to be in good order. Roger does a great job, reports easy to understand and answers every question. *Kelly* – Jeremy does a lot of account audits across the state, he is skilled at doing that. He looked at 56 items and there were some minor things Roger took care of right away. *Jim* – On subject of audits, like brief discussion of whether wise to hire an independent outside audit firm to do audit on regular basis. Don't denigrate the ability of any state to use their personnel to the audit as we have done historically, but some value in the long run in having an independent audit not done by a person associated with any members of our group. Recommend potentially having an audit of investment accounts as well, something we haven't done. We trust, but it is verifying doing business in business-like fashion. Things that happened in other places; a couple of independent joint ventures who do separate audits so it might be something we should talk about. *Kelly* – In WAFWA are we doing it every three years? *Jim* – Every two years. It could be a combo too, annual audit and independent audit every 2-3 years. *Kelly* – Make that as part of acceptance of the report or separate action? *Ollie* – Give Sara credit for her department doing professional audits in the past gratis, two or three times when this board has asked for a professional audit. Now that we have implemented new policy on controls for cash her firm checks all of our books and can no longer do an audit. The previous audit committee recommended we hire a professional audit, so when we get down to proposed budget on the agenda Roger will provide an amendment to the proposal to add line item in there for professional audit for next year. Jim brought up that he is chair of investments committee that he would like to have an oversight of investments process, which we have never done. We have fiscal agent committee within the United States, Ron and four regional associations that meet quarterly, so Roger has asked that group to provide RFPs for professional audits. With your approval we will put out an RFP for professional audit if you approve budget to get that done, including oversight of investments if there is such a firm that does that. We don't know that much about that. Our financial advisor is Shane Hessman in Kansas, never had an oversight of his services; I guess there are firms out there that do oversight on financial advisors. Brad Loveless has agreed to be on investments committee with Jim and Roger. He is in Kansas and knows some firms. *Kelly* – Do that in new business. Dale – Appreciate that and audit is a great idea and we are on the right path. ***Jim Douglas, Nebraska moved to accept audit report, Brad Loveless, Kansas second. Motion carries.***

Investments Committee Report

Jim Douglas, NE – Didn't get any written reports. I prepared something I am handing out (*Exhibit 50*). We had transition in the committee, Wayne Rosenthal was the chair and meeting in January I couldn't be part of, and I did not get minutes from that meeting. By virtue of his departure I became chair of this committee, tried to set up a conference call meeting; Roger and I were on first call, Brad not appointed yet. Shane wasn't on the call, later tried again to put together a call, then only Shane and I were on that call. I had a fair

amount of questions, couldn't locate background materials on previous reports. I put this together from notes and Shane provided second page of this report; put in narrative form of what that second page means. Starred areas on front page, could be decision points for the directors. Shane Hessman is an independent investment broker out of an area near Wichita, Kansas with a firm called Great American Investments, but he is independent. He does not charge us an overall fee, gets monies from investment percentages, but not very much. He is very conservation minded and not trying to make a lot of money, he believes in the mission of what we are doing, and the result is good investments over time. Again, from original dollars Ollie talked about, invested through his processes have been 50/50 mix between mutual funds and bonds. The account balance has gone from \$220,000 to \$633,000 at end of May. He advises that 50/50 ratio is advisable for the next year but may want to adjust 60/40 with more bonds in the mix. Money market fund, he recommends, unless we need to keep more, to move \$150,000 money market funds, invest into 70% mutual and 30% bonds. Bond ladder that Southwest Securities have had good yields, up and down on face value. Good interest rates and long-term maturation time period. Next year about this time, one will mature, and he advises we replace with another bond. Main recommendation is, don't how much flexibility he has to move from 50/50 and may take action of this board in the future. *Ollie* – 50/50 is board policy set by this group. *Jim* – If he advises, at some point he might advise differently, and we will need to take that up and maybe we wouldn't want to change that; just making as a comment. *Ollie* – Typically very conservative and the reason we put in bonds and mutual. The original was 75% mutual and 25% bonds, very conservative and it didn't grow very fast. Two years ago, you changed to 50/50. *Jim* – Not now but at some point in time. He does want to know if we want to transfer any amount from money market. *Dan* – Do we have a written board investment policy? *Ollie* – Yes we do, should be reviewed. We need another member on this investments committee, someone with interest and background in this. Always looking for volunteers. Get policy before you so you can look at it. *Dan* – I would appreciate it. *Kelly* – Dan are you interested in being on the committee? *Dan* – No. *Kelly* – The question he is asking is should we move money from that money market account. We have more flexibility there to pull money out if we need to. I don't know how much working capital we need. *Ollie* – Roger, opinion? *Roger* – Keep \$20,000. One of the reasons the account is as high as it is right now is that we transferred \$160,000 from our conference account because when we totaled accounts at the credit union we were higher than our insurance limit, so we transferred \$160,000. Our conference account has \$30,000, a little low so may need to move some out, I don't think so, but maybe \$10,000. If we keep \$20,000 that would leave leeway if we needed it. *Kelly* – Jim, what do you want to do? *Jim* – Move \$150,000, leaves \$27,000 in that account. **Brad Loveless, Kansas, moved to accept report and recommendation, Dale Garner, Iowa, second.** *Jim* – That comports with your comment Roger? *Roger* – Yes, we are good. *Brad* – Investment guidance language in review of investment committee makes sense. *Pat* – Go into 50/50 bond? *Kelly* – Yes, until the board changes, need to look at investment guidelines to decide if we want to make change in mix or not; advisor knows more than I do. *Jim* – May be good if motion includes condition as transferred it maintains 50/50 ratio. *Kelly* – 50/50 until we change it we can also make it clear in this motion that we are taking 70/30 under advisement. *Jim* – \$150,000 that would be transferred to different places he could put that; he recommended 70% one place and 30% another place,

whatever he should do it should maintain 50/50 ratio. *Kelly* – Yes, that is clear intent of this motion. ***Motion carries.*** *Jim* – Did we cover, recommendation to have a professional audit of investments? *Kelly* – In new business under budget, line item. *Jim* – He (Shane) has asked that we give consideration to have him attend a part of this summer meeting every couple of years so we could have him in front of us and ask him questions. He did volunteer to be on the phone today, he said it was advisable to have that happen. *Kelly* – Opportunity at WAFWA to sit down, as part of executive committee, to talk to them. We go through same types of questions we are having here, good idea, we will make that one of the recommendations. *Ollie* – He will want to come to South Dakota, and he will want travel expenses. Do we want to pay part of his travel or all of his travel? Have him come to executive committee meeting, main board meeting or come to business meeting? Come for Sunday executive committee meeting and address us there too? He will be asking. *Kelly* – Money part doesn't bother me much. Timing wise, not meeting at WAFWA coming up in Kansas so will have to be at Custer State Park. He needs to be for business meeting. *Ollie* – He has been here in the past occasionally. We can cover his room or total expenses. *Sheila* – We have covered his expenses in the past because he doesn't take very much of a fee at all. *Kelly* – That seems reasonable to me, he has made quite a bit of money for us. *Ollie* – Cover his expenses? *Kelly* – Yes. We had motion to approve Jim's report and besides that have financial advisor talk in South Dakota. ***Motion carries.***

Awards Committee Report

Terry Steinwand, ND (*MAFWA Award Winner Nominations – Exhibit 51*) – Had awards yesterday, had 18 for five main awards; one special recognition and two Sagamore awards. I was remiss yesterday in not thanking Sheila, she was helpful in whole process and thanks to committee members also. We do need to replace Mark Reiter as a committee member since he is allegedly retiring. *Amanda* – Officially July 12. *Terry* – Need to replace Mark. This has been my first year so a learning curve for me too; one thing I am going to institute for myself next year, is to contact director from award winner states to pressure them into coming to this conference. *Sheila* – I do contact the nominator to let them know their person has won, it goes up the chain that way. But I didn't do Kelly's President's award, that is where we fell down. *Kelly* – We will figure that out. I felt a little like a deer in the headlights. *Terry* – Urge all agencies to nominate more people because there are a lot of deserving employees out there that deserve to have that opportunity. *Kelly* – Don't have to be directors who do this, any of you here who are interested; Pat, think about this, a good committee. I realize as directors and staff hard to do this but people receiving those awards, it is meaningful to them; one of few things we can do to recognize our employees and NGOs too.

Executive Secretary's Report

Ollie Torgerson (*PowerPoint - Exhibit 52*) – Sum up state of Association in one word, unprecedented. This is my 16th year in this position. Unprecedented number of new directors, unprecedented amount of conservation actions beyond our borders, unprecedented amount of integration and cooperation with USFWS, and unprecedented level of support from sponsors. Welcome to new directors, Ron Regan and I have been busy getting out to meet you. Had wonderful 32-year career with Missouri Department of

Conservation, retiring in 2002 as wildlife chief. At that time this Association had no staff, Joe Kramer and Sheila Kemmis from Kansas held this Association together as volunteers. My directors in Missouri thought this Association could become more effective if you had a part-time staff person and they offered to pay my services for two years. Since then this Association has become an effective force regionally and nationally, but not because of me, effective because you directors took control of your Association instead of delegating your seat. The recent example, two years ago you decided to bring in the nation's bat experts to assemble the science on northern long-eared bats, which provided data to the USFWS to keep that species from being listed. Next, you took initiative to stand up National Pheasant Management Board and raise the funds to hire a coordinator to implement our pheasant committee's conservation plan. You hired two staff to develop and implement the Mid America Monarch Conservation Strategy and the governance model you set up captured national attention for replication. The latest is the Midwest Landscape Initiative. All of these things have influence beyond this Association's borders because of leadership this board has provided; congratulations, it illustrates the importance of you sitting in your seats here and at national level at AFWA. You have a lot of power and can get a lot done, there are only 50 of you in the country and if you combine that collective force of state fish and wildlife agencies it makes an amazing difference. We need to get RAWA done, can't think of anything that would make a bigger difference for fish and wildlife agencies at local, regional and national level, than an influx of federal money for species of greatest conservation need. Used Jaschek account, TWW and CARA, we have been working on this for 40 years now; need to get it over the finish line. We lost eight directors due to elections and retirement. Six new directors, all here except Rich Storm, second from left on the top, he had two daughters with birthdays this week and he sent Karen Waldrop who is an excellent addition here, will be in St. Paul. Have two holes yet to fill, Minnesota about to fill and Amanda said Mark is departing from Indiana soon. Recap of last year: excellent meeting in Bismarck hosted by Terry and his staff; approved Mid America Monarch Conservation Strategy there, now have to implement the plan. Action you took on grant from USFWS will allow Ed and Claire to continue that work plus Midwest Landscape Initiative. USFWS provided money for Ed and we got two NFWF grants to underwrite Claire's work which will end the end of October and we can move her to our staff. Sheila updated history of our Association and published it, thanks for that work, you got that in Bismarck and I am handing them out to new directors. Our foundation is taking oversight for the Midwest Fish and Wildlife Conference (MFWC), excellent conference that has been independent since 1935, but it ran into trouble because states couldn't sign hotel contracts, set up independent banking accounts and they kept coming to us for help. We don't want to change the conference, we want to help it, and help our states that host it. In the meantime, South Dakota has decided to join in, so will have 11 states hosting MFWC in rotation. Our foundation set up this committee with Sara as chair, Kelly and Dale to do the work and make decisions on oversight process. Executed two new 3-year contracts with Delaney Event Meeting Management to provide services for this conference and MFWC. Extended my contract for this year last October. Midwest Landscape Initiative under leadership of President Kelly and Craig Czarnecki from USFWS, nice leadership for us. Your staff, in technical working committee, is involved in this under guidance of Ed Bogges and Kelley Myers, both sat on this board in the past, Ed was past president of

this Association. In October we transitioned presidents from Terry Steinwand to Mike Miller from Ohio; Mike was unable to retain his position so in January the first vice president moved up, according to our bylaws; Kelly moved up to president in January and he will continue to be president all next year through his normal term. In December, Kelly sent me to Atlanta to participate in the RBFF state marketing workshop; we attended, better suited to directors because in breakout sessions you learn a lot and get good ideas to bring back home. Marketing workshop at end of February this year, RBFF will pay for your expenses and up to two staff to attend; two days in February in Atlanta. Operated on \$160,000 budget, comes from dues, sponsorships and money off this conference, involved in a lot of banking that Roger handles, and sponsorships, record this year, hit \$65,000 for first time. Next conference at Custer State Park in Black Hills, June 28 to July 1. Shout out to Kendra and her staff for this conference and MFWC; Wildlife Society met here for their annual meeting, Fisheries Society is coming to Ohio soon and Mississippi Flyway Council coming here for their meeting. Thanks to Roger and Sheila for work they do for us in this Association. Thank you for allowing me to be your executive secretary, an honor and privilege.

Kelly – Been involved with Association (AFWA) for a long time and for many years had strong directors coming from Southeast, now Midwest, a lot of leadership in MAFWA, now we are the mafia. Sara's leadership, she is in line behind Glen, as first vice president, look forward to her being president of AFWA.

Approval of Affiliate Members

Ollie Torgerson – One application, have 27 affiliate members; Northern Bobwhite Conservation Initiative has applied for membership, which requires a vote of this group. They are an effective group based out of Tennessee and Don McKenzie is the leader. This would be our 28th affiliate. *Dale Garner, Iowa moved to accept new affiliate member, Terry Steinwand, North Dakota, second. Motion carries.*

OLD BUSINESS

National Wild Pheasant Plan Update

Scott Taylor, Executive Director – (Exhibit 53). – Background of pheasant plan, once upon a time there existed the Midwest Pheasant Study Group which included agency pheasant biologists from across the Midwest, they met every two years. In 2006, they got the idea that they needed a national pheasant conservation plan; at a time when a lot of bird conservation groups were getting together and writing plans. Pheasants Forever was late to the party but jumped in. Invited national level participation, western states and northeast states throughout the pheasant range; put a plan together and finished it in 2013, approved through MAFWA/AFWA process and up and running. Rescinded Midwest pheasant study group name and formal association with this body in 2015 and became the National Wild Pheasant Tech Committee. They hired a coordinator, so this body (MAFWA) took the lead to raise funds to hire coordinator, completed around 2015, I was hired in spring 2016. Every Midwest state with a pheasant population contributed, thank you for your continued support. We set up a national management board composed of funding states, have 14 members, a number of directors and wildlife chiefs. Meets twice a year with AFWA and North American conferences. Our mission is science-based policy.

We identify areas where states can work together in a more efficient way, more than each individual state can work by itself. We identified work items to advance state interests. On policy side, front and center has always been the Farm Bill, we bring science underpinning to the table. From a pheasant perspective, with regard to Farm Bill and CRP in a lot of cases people on the tech committee are the ones that offer scientific papers upon which policies are based. Pheasants Forever has a big footprint in policy arena; in some cases, to our partnership's benefit for me to be in the room in those conversations and in some situations we are feeding information to Pheasants Forever and other conservation organizations to be sure science is being well represented in whatever we are advocating. Initial three years was pushing for right things to be put in the Farm Bill; looking at opportunities now for implementation and ready to go when opportunity arises. Spent more time on R3 than anticipated, plan is based on pheasant harvest goals that each state defined for itself; plan lays out how much habitat needed to make harvest goal. We soon discovered you need two things for harvest, birds and hunters; if hunters not there it doesn't matter how many birds you produce you will not meet harvest goals. Began examining subjects we could take on that others were not spending as much time on, from small game R3 perspective. All familiar with emphasis waterfowl world was putting on human dimensions R3, the third leg of the stool. Over the last 25 years, migratory bird hunters reduced by 22%, but on small game side we have lost 54% of small game hunters, it is a much bigger problem. You could argue the small game R3 issue is driving overall hunter R3 issue as a whole. We have tried to think of ways to bring issue to the forefront. Currently working through Resident Game Bird Working Group, chaired by Karen Waldrop, to raise profile of that issue among the directors and get direction with regard to working cooperatively with them and Hunting and Shooting Sports Committee to come up with an assessment of this problem to predict where we are going and mitigate decline. We haven't talked about how to adapt to lower level of participation that we are likely to be in within next 10-20 years. What can we do to adapt to that new reality? On science side, trying to come up with habitat model across pheasant range that will help us predict effects of land use change on pheasant abundance, which has implications for agencies doing habitat work in respective states. Also, many agencies and Pheasants Forever are starting to work in precision agriculture states. That works on precept that there is spatial variation and return on investments. We have those same principles with wildlife, we don't have the same tools, not able to speak same language, but trying to work together. These types of GIS models will help us integrate better in precision ag space when we are trying to reach conservation with those interests. Good interest within USDA to start developing support tools on top of active Farm Bill and active furlough, busy with other things so funding decision is still pending. One other topic the tech committee wanted to tackle was, many states use brood survey results to come up with hunting forecast and many states were less than satisfied with their ability to forecast based on brood counts. Whenever we get it wrong it comes back, to some degree, on biologists, which is one reason they think this is a priority to help them get it right; getting forecasts right does have R3 and agency credibility implications. Seven states pledged funding to do cooperative work and a dozen states that have agreed to collect brood count data in a standardized way so we can start to look at accounting factors that influence brood counts from year to year. Looking to collect pilot data this August and student will start this fall or coming spring. First foray into pooling money

from states to do actual science; anxious to get started. Looking forward, at last management board meeting in March, expressed desire to revise our plan which was approved in 2013, most of data in plan at least that old or older; we have a new Farm Bill, new plan organization and increasing interest in R3 and those need to be incorporated in new version of the plan. Management Board and Tech Committee are going to have a joint meeting this fall in North Dakota to start discussion on that new revision; if you could support travel for tech committee and management board member that would be fantastic. In regard to my funding, completed first three-year term in March; initial budgets were falling a little short of what actual expenditures were. Currently we have 20 states contributing and projections are that current pledges going forward are about where last year's expenditures were, so in good shape. Appreciate continued support of MAFWA states, the heart of our organization. On right track and continue to deliver good work products for your states. *Jim* – For new directors, we owe a lot to Pheasants Forever because they are providing office space in South Dakota and support. *Scott Taylor* – MAFWA and Roger invoices states of pledges each year, PF makes a financial contribution as well as administrative position and providing office space and PF invoices MAFWA quarterly for my expenses; a good partnership. *Kelly* – Fortunate to get you with your background. Brood counts are life blood of letting people know where to go hunting in our state and that news release gets edited more than any other, all the way up to the chief of staff and now this year probably the governor since she is involved; it goes from candid appraisal to, things are not bad, to things are outstanding; you can play games with counts. The bottom line is they do drive a lot of people on where they are going hunting.

Mid-America Monarch Strategy Report

Bill Moritz – Wildlife Management Institute – I will have Ed Boggess and Claire Beck present the report.

Ed – I will do introduction and pass out a few handouts (*Strategy - Exhibit 54, Handout – Exhibit 55*). Retired after 30 plus year career with Minnesota DNR 3½ years ago, then find myself at these meeting and interacting with you which has been a positive experience. Our chair of our Mid-America Monarch Board, Bill Moritz, thought good to underscore importance role of this organization, Ollie did a nice job of setting it up in his executive secretary report. Northern long-eared bat is one of the big issues that got MAFWA involved in a larger scale; USFWS had proposed an endangered listing which would have had serious implications for private and public land managers, with rights of ways, transportation and energy. MAFWA was concerned with amount of information in preliminary proposal and wanted to bring to bear the expertise of scientists and state agency staff. In 2014, this board decided to host that workshop and USFWS was open to getting state input. Opened comment periods and ultimately ended up not listing endangered but as threatened with 4D rule with more workable situation. I was in the rotation to be president of MAFWA in 2015 and just as dealing with long-eared bats the monarch butterfly was petitioned to listed in August of 2014. Also, I was chairing Wildlife Resource Policy committee at AFWA at that time, so within a few weeks that petition being filed with USFWS, AFWA passed a resolution in cooperation with USFWS supporting monarch butterfly conservation. By the end of 2014, USFWS made a finding that petition was significant, and they would begin the process to decide if listing

was warranted. MAFWA decided, while still working on long-eared bats, to jump into monarch world. We started working with partners, applied for NFWF grants with National Wildlife Federation, Pheasants Forever, MAFWA to try to get a coordinator and get a plan going, partially successful in 2015. In 2015, MAFWA decided to put up money for a conference and Iowa was host state for that. Brought in all states and other agencies from 38 states in the monarch range, brought in experts from Midwest and south-central to that meeting and kicked off work on this. After I retired it continued with Kelly Myers in Iowa taking the lead and applied for another NFWF grant. In 2016, began working with this organization and USFWS under a grant. Important partnership with USFWS and Midwest states. As a liaison I was able to participate in USFWS monarch teams and provide state perspective; and in state teams to bring back federal perspective. What made this go was getting NFWF grants and hiring Claire Beck as our technical coordinator. She has been working for 2½ years and on through October, and with action you took this morning, both of us will be able to move into continuation of monarch work and broadening of work into Midwest Landscape Initiative. A year ago, in North Dakota, when the Mid-America Monarch Conservation Plan was approved, was the end of the beginning as far as getting regional plan together. All states are working on, or have developed their own plans, and will have Claire talk about what has happened since that time and where we go from here. One of key elements in Strategy is that it is great thing to get people engaged and excited about conservation, part of a broader landscape scale effort. Excited to be part of seeing that broaden out into landscape scale and integrate modern conservation with species of greatest conservation need and at-risk species. I will let Claire talk about what happened last year or so, then Bill Moritz may have a few closing comments.

Claire – Finishing out grant that ends in October. After we adopted the Mid-America Monarch Conservation Strategy last June, that was end of first NFWF grant, then went into second grant which was to implement Strategy itself. The main thing, one of big deliverables, was to put on monarch conservation partners conference; we partnered with Monarch Joint Venture which reduced redundancy and able to bring in different set of people; had 150 people attendees representing 30 states and 100 organizations; held in Nebraska in November 2018. Main point of meeting was to get participants to think about moving from strategies to actions; had breakout groups a couple of times and they brainstormed and gave us a lot of notes to work with on what they thought needed to be done to move from idea to implementation. Worked closely with Monarch Joint Venture to convert those notes to actionable items with timelines and federal partners to make those things happen. Scheduling calls with key partners to get those things going; had a lot of success with that especially with rights of way folks and agriculture partners; working with Keystone Monarch Collaborative quite a bit. Successful moving from strategies into discrete action items. Another deliverable of NFWF grant right now was to put on state agency technical staff workshop; initially planned to be a debrief and what's next after listing decision which was scheduled for this month; that has been delayed, so shifted focus on that meeting but that is still happening. Have a 2-day workshop planned for August 6-7 just outside of St. Louis; mostly state agency staff and partners that have been involved in Mid-America project. Will focus on how to can use the delayed listing decision timeline to our advantage to get more conservation on the ground, finish up plans and make sure we are documenting conservation we are doing so that can be taken

into account by USFWS; talk about adjustments we need to make to Strategy based on science or anything that has happened since we finalized that last year. Also talk about what is the Mid-America project moving forward after listing decision and how we can tie that into larger landscape scale conservation, such as Midwest Landscape Initiative. *Bill Moritz* – Conservation database, people put in 4 million acres so far; while a lot of work on monarchs, the petition was for call to action for state agencies to get involved. In a short period of time, staff from all the states, federal partners, nonprofit partners, with leadership of Ed and Claire, put together an amazing document. Moved when sense of urgency to transition that into landscape initiative which will be the next step in the evolving timeline with timely and appropriate responses to petitions as well as other conservation needs. *Kelly* – Very impressive and makes USFWS job easier. Claire, glad you are staying around. Great report, thank you.

R3

John Frampton – Thanks for opportunity, half this table is new, limited exposure to Council of Advanced Hunting and Shooting Sports (CAHSS). In about 2004 and 2005, AFWA and industry were having discussions on where PR/DJ dollars were going, and industry, based on vested interest, were not getting information and not understanding where dollars were going. AFWA put in place an industry agency coalition with directors meeting annually with industry folks, which gave us an opportunity to understand what their issues were and what states issues were. Almost immediately, when we started those meetings, there was discussion about RBFF being there for fishing and boating industry, no council that represented interest of hunting and shooting sports. In 2009, with support of National Shooting Sports Foundation, Archery Trade Association and Wildlife Management Institute (WMI) we were chartered in 2009 and started functioning in 2010. RBFF was getting money off the top of DJ, roughly \$12 million, a cut right off the top. We started talking about that from the Council standpoint; to move Council forward where do we get the dollars; idea came up to take it off the top but that didn't go over too well with NRA and National Shooting Sports Foundation. We went to states and asked if this was something the states wanted to do. WMI had been looking at various programs and had identified over 400 separate recruitment-type programs that states, NGOs and industry were involved in. Hardly any of them had any measure of success, weren't bad programs. If states contributed dollars to the Council we could get it up and running, and they did; contributions from \$4,000 to \$200,000 and has kept the Council going up to this point; 83% of funding came from state agencies. In January 2013, Ron Regan and Steve Williams called me and asked me to take over and I said I would do it for one year, that was five years ago. We brought groups together in Denver and talked about all the programs out there, everybody is doing their own thing and there is no coordination, no facilitation; spending a lot of money and asked them what they wanted to do. We suggested a national plan to work together, states, NGOs, industry and anyone with desire to work towards recruitment, retention and reactivation. That is when we came up with R3 logo; some discussion before then, but it had not moved. Put 22 individual mid-level staff in that group and handpicked leaders in R3 and challenged them to come up with a national plan. In October 2016, we released the National Shooting Sports Action Plan, which kicked off interest around the country in terms of R3. That group looked at the capacities and strategies out there; the group identified 26 different threats to hunting and

shooting sports. We were not trying to tell anyone what to do but be a facilitator, our role from day one, not coordinating; what is working and what will move the needle into the future. We had a symposium in 2018, took a chance and signed a contract, hoping to have 250 people, had 327, 50 over capacity of the hotel; went over well and moved the needle from our hands more into hands of NGOs and industry. We are planning another symposium in Tulsa, OK in May 12-14, 2020. Trying to do it as inexpensive as possible to get more mid-level staff that will be making the decisions for the future of conservation. Hotel rate is between \$94 and \$101. Put in process, started another group, implementation and planning work group, we chartered in District of Columbia and cannot have a committee under DC law unless it is composed of 100% of the executive board, a weird thing. We convened new group with 24 members, 10 states and 14 from NGOs and industry, challenged them to go to the next step. Look at plan, current adoption of R3 from standpoint of best management practice, identify factors holding up forward progress of R3. We challenged them to work together and come up with results by symposium of 2020. Optimistic this group will be able to take process to the next level. Continue to do hard work as relates to R3. If you look at survey that was recently done; numbers are dropping off, the age group is much higher than what is coming in at the front end. Some states think they don't have a problem, if you look at the age of hunters they will have a problem in another 10 years. Lost 5.7 million hunters based on national Fish and Wildlife survey. The trend is real, whether 2.2 million over last 5-7 years, it doesn't matter, the bottom line is it is going down and we have to do something to stop it; I believe we can stop this decline. There was some discussion at the North American meeting in the executive session, relative to the Council and our future; wanting to know what return on investment was. We had a meeting with several of our board members and some AFWA directors in Chicago a month ago; we looked at need for metrics to justify the value of Council, in terms of benefits for the states. We talked about developing a business plan. Didn't know where we were going when we started this Council; we are a staff of three. Hand it to our staff, doing a heck of a job. Came out of meeting, was we need to do a survey of directors and others relative to value of the Council, do directors want to continue the Council and are they willing to fund it into the future; also, what we are doing right or wrong. We sent surveys out to state directors, 37 of 51 directors responded; looking at results. Also, got responses from 41 NGOs and 25 state agency staff, not directors, and nine from industry. There is competition for dollars states have within the states. Thirty-seven states have some form of R3, four years ago we had none. Those staff are going to directors saying we need more money, directors are put in a position of, do I give money to the Council or our own staff, we realize that is a problem and we are trying to make adjustments through multistate action plan grant program and are pushing the PR modernization as hard as we can. There is nothing negative in that piece of legislation, but trying to get something through the Hill in DC is a struggle; last year we got it through the House, basically through the Senate and made it a constitutional issue, now have change of parties in DC and go through Democratic House, two individuals there that can move this piece of legislation or hold it; Congressmen from CA and AZ. They keep trying to throw the gun issue in the middle of it. If we can get that through that gives you a lot more flexibility and moves \$5 million from R3 side of excise tax to multistate grant program earmarked for R3. We made a commitment from day one to go after part of those dollars, never more than \$1 million.

When we first started talking about PR modernization, talking about trying to move \$1 million into that account and Jay McAninch with ATA stood up and said we need money for the states; came up with idea to take \$5 million from archery excise taxes and put in multistate grant and the entire archery industry got behind that. We would like to see, assuming PR modernization passes, recommend to AFWA, from Council standpoint, is they form some type of committee, similar to what they did with fish habitat plan, where a group of directors, a representative from NSSF or ATA or whoever to pick projects that will coming from R3 community. You will get a ton of projects. NCN group that reviews those, don't have much time, had 40-some projects submitted and would expect more than that; hope there would be more consistency from standpoint of groups looking at projects. Had a lot of R3 projects approved in the past that were not bad, but in the future find best possible projects. Part of PR modernization requires we do a report to Congress after 10 years. Hope the AFWA group will look at that. Not asking for money, you know our situation, the future of Council rests in the hands of AFWA, they started it and looking into the future AFWA needs to make decision of where you want to see the Council go, not modeled after RBFF, a whole different equation. I believe if the Council doesn't exist, don't know who is going to coordinate or facilitate between the different regions; in the past focused on individual states moving R3 model on their own. We need, from regional aspects, good facilitation regional and national level states are developing their own plans. R3 movement is here to stay whether the Council is here or not. Had conversation earlier, expect in next 3-5 years see university programs developed around R3. If we lose hunting folks, we have lost the Turkey Federation, Ducks Unlimited and Pheasants Forever and the economic impact will be huge. I am not going to be in this much longer, I want to spend time with my grandkids. *Kelly* – We talked to President Carter this morning, talked about R3 and CWD projects and the ability to look at those ahead of time and get them to work together, similar to what the board does; he wants to move forward with that. *John* – This region is well represented on the Work Group, you have Keith Warnke and Jeff Rawlinson, but also Megan Wisecup; those are good leaders. *Kelly* – They have a lot of enthusiasm.

MAFWA R3 Committee –

Jeff Rawlinson, Nebraska Game and Fish – Start out with, appreciate new line of communication, which we hope will continue annually. Keith and I here from R3 MAFWA committee to ask for nod or support in a direction we would like to discuss with R3 committee at the January meeting. Want to paint a picture on how this conversation started. At the R3 national summit held in Nebraska last year directors were blown away by the massive amount of effort being undertaken, both nationally and locally. It became clear there are a lot of things happening and not the communication needed to move efforts forward. The words Matt Dunfrey spoke in his closing comments, referenced greater need for regional efforts and support. After the summit, one of the things that became clear was that states were implementing media recommendations of the plan, which is step one, but struggled putting together strategies and efforts in the rest of the plan. In the Work Group John referenced, we are working diligently on implementation priorities for eight key strategies that are outlined in the plan. It became clear that many of those priorities filtered into various categories that could be addressed; some local, some national but a good amount were critical priorities at regional level. If

our Midwest R3 committee would evolve a little bit it could start addressing some of those regional efforts. From discussions, Kelly and Jim Douglas convened meetings at the North American, with several R3 committee members, Dale Garner and Amanda Wuestefeld present as well, talked about those ideas and communication efforts amongst the directors and how that could evolve to garner more support for this effort and be sure everybody was on the same page. We felt we had our marching orders as we move forward with these efforts. From that meeting Keith will share a communications strategy that we think will be beneficial moving forward and some of those priority concepts we believe could be attacked at the regional level to further needs and efforts of R3 movement in the Midwest.

Keith Warnke, Wisconsin DNR – From that North American gathering; myself, Jeff and Megan Wisecup got together on the phone with USFWS to talk about funding ideas, a possible PR grant to implement some of these things. We are presenting broad brush proposals to get approval of directors, to take back to R3 Working Group, filter out the details, dot I's and cross T's to figure out strong outcomes and come back to this group for approval and implementation of those strategies. We have four ideas for strategies: 1) regional evaluation, which will cause some consternation because it involves data sharing across the states, you may have heard of the data dashboard where you can look at hunter and angler participation by age, gender, demographic, area, etc. We could build one of those across entire region and could look at similarities and participation across state borders, for instance the Minnesota/Wisconsin border, a lot of those folks are basically in the Minneapolis/St. Paul metro area, evaluate that on a regional level, which could help us shape ideas and find out differences and similarities to decide which direction we want to go. 2) Standardize program evaluations, we all evaluate programs, do pre- and post-surveys and find out what people like and don't like; if we could do standardized evaluations across the region, a few simple questions we ask every participant it will allow us to find out which programs are working in each state and how to improve our programs based on that research and share our state information with other states. Could collect regional information to give us regional look at where we want to go and can go. 3) Nebraska is piloting a mentor recruitment program. We would like to see if we can regionalize and standardize that across the Midwest states. This would be part of a larger national research project on mentoring going out of WMI, who received funding for that earlier this year. If we could do a regional mentor plan it would allow us to pool resources and reach across state lines with mentors coming from one state to another and allow us to pool our data and evaluate programs from broader perspective. 4) Also, considering R3 outreach effort that could involve radio, digital, snap chat, outreach pop up ads with individual states, standardized images and messages across the region. It would allow us to promote great regional opportunity and create a regional brand with consistent images/messages. And allow greater evaluation of activities and actions we have taken. Recently put together Midwest R3 newsletter (*Exhibit 56*), which picks highlights of states and what they are doing and addresses top actions and activities and allows good opportunity with quick easy to read, easy to update, easy to promote, easy to distribute, information and communicate with a lot of people, hopefully quarterly. We have someone in Wisconsin who is putting that together; we will send to agencies, directors, staff, R3 coordinators, partners, customers and R3 community website to give us opportunity at regional level to communicate broadly what we are doing. This could

also serve as template for other states or regions to follow as well, thus improving ease of and frequency of communications. Here to get approval to move forward with broad brush ideas, to come back to directors with details at next meeting.

Dan – Had conversations with our R3 team and our department, asked them this question, if no answer, encourage ways to do it. Know that we are trying to recruit hunters, but who are we trying to recruit? One of challenges we have is I don't know we have good understanding of who we are trying to recruit into hunting community. The population is not monolithic, and I don't think we have landed on an understanding of what profile of individuals are the most likely to be receptive to the R3 efforts we are putting out on the landscape today. A lot of paths can lead into hunting, some paths wider than others. Not every person is going to walk down same path. In some respects, we are outdriving our headlights, in the sense that we are all putting programs and money out and partners are doing that but doing that a little abstract on who we are trying to connect to those programs. There is a lot of difference on how likely someone is to respond to our efforts or not. Talked about this in Nebraska, are there typologies of folks that are 90% there already and we need to get them the next 10%, like recreational shooters; already own a firearm and are proficient; can we identify who those folks are and start to push them through those programs? This is a foundational question and my folks didn't have a good answer; if no answer we need to lean into that. *Keith* – I agree, good comments. There is some information from NSSF on recreational shooters and their interest in being trained for hunting; typologies of recreation target shooters and possibilities. We have discussed a R3 prescription in Wisconsin; thinking about females, foodies and children of current hunters are three big priorities, in addition to current recreational shooters and archers and their level of interest. This is brand new, moving fast; there is a Lincoln/Larson study going on in colleges and interest level in colleges. Starting to explore typology, a well taken point. *Colleen* – Was going to bring this up in new business, but to tap onto your question, prefaced with Ron first. This is an observation, not a criticism; we may want to consider a communications committee, there is one at national level, a subcommittee that includes marketing and public relations. Those are different forms of communication but does get back to question you asked Dan, we have a lot of different audiences and you have to get to know your audiences. We had a presentation yesterday that addressed that; how values should affect wildlife management, hand in glove with what we are talking about. The presenter yesterday, their background was in human dimensions of natural resources, different than we talk about with each other when we have these meetings. We may need not only a business plan but communication plans for new initiatives. Ollie, when we talked about the future of what we need to get done next, was RAWA. I googled RAWA; it is the middle part of durum wheat and the second definition is Revolutionary Association of Women of Afghanistan. It does not come up highly among other audiences when we start talking about our own internal communication and we have internal and external communication we need to focus on as well. I cheer you because all of these things identified as what needs to be done. Do we have the right path in place to get to where you have already identified we need to be? If we explain, not complain, to communicate is the beginning of understanding and we have misunderstandings even among ourselves. Consider adding another committee down the road. If this calls for a vote, I vote yes. *John* – The Council hired an individual, a manager of communications and human dimensions, so we are well aware of that

situation and when you think about retention, recruitment and reactivation there is no silver lining, not one group we need to concentrate on, there are dozens of them. We have learned more in the last 5-6 years than we did in the last 50 as it relates to R3. We know we can get young adults and youth and have concentrated so heavy on youth, but they don't have transportation, don't have decision process, but if we get young adults and families involved. We need to go with Archery in the Schools, Scholastic Shoot and all these things bring people in. That is why it is so important to build big partnerships and not try to rely on activities and resources that individual states have, that is not going to get it. It is a tough sell and iffy but if we all stick together, do it and explore every opportunity we can move the needle. *Jim* – Colleen, you are correct. Acknowledge something from both of you; in my opinion R3 effort takes different disciplines to make it work, including human dimensions, communications and marketing. Sometimes we do, not necessarily intentionally, but leave them out of equation. To your point, Nebraska did a tapestry project 10 years ago to look at proclivities of our hunters, not just demographics, but what news media they used, how they get their information, their profile regarding economic situation and a lot of different factors; we repeated it last year. That is mainly giving us information about who our current hunters are and how we communicate with them, but there is other work like that which needs to be done on prospective hunters. There is a lot of work that hasn't been done but needs to be done. In some cases, we have gone on with programs without knowing if effective or if communicating to or targeting the right people. We need to stop and think about what we are trying to find out. We recently looked at Archery in the Schools graduates to see how many of them are hunting, have proclivity to hunt, if they have the opportunity and if there is more we can do with that program moving forward. We have 2,500 high school trap shooters that gather every year and we looked at them; 80% were already hunting, but that means they have a peer group of 20% who aren't. There are things like that we need to do to find out who we are trying to reach. I agree with John, there are going to be multiple audiences to reach if we are going to be successful. Lot of work to be done. *Colleen* – This is a difficult topic; during this meeting I got a call from our governor's office about a news release we had put out; concern from governor's staffers. We are homogenous looking group of people, individual reviewing news release was concerned about the phrase, shooters of all ages. I know the context but someone who comes from different background or culture, alarming phrase to her. I explained it, welcomed her to our office, hope to do a road show soon that will include parks and different places. We will get there but there are sensitives we don't think about. We do have a lot of different audiences and have great stories to tell, every state and every division have incredible compelling stories to tell to address a variety of audiences. Thanks for support as far as confirming we need to address this, not easy but do it well and effectively we are going to have to approach it. *Jim* – I would support another working group or committee. Hard to separate communications and marketing, might be one in the same for working group or committee. A lot of good work going on in states in human dimensions and a lot of those things blend together, even with permitting, marketing, communications and human dimensions that have to coordinate to make sure you are trying to get message out to the right people in the right way and to analyze permitting base. I don't know how to design that but key to success. *Kelly* – Two different animals. One suggestion from Colleen, to establish a communication committee and I am still trying to process what the charge of

that committee would be, working directly with R3 or broader area within MAFWA and what message we are trying to get out. We have communications built into Midwest Initiative already, that was one of the priorities. John brought up fact that they just hired what we are talking about for the Council. The question is, do we need our own if primary purpose is to use the Council, that is what they are there for. Trying to figure that out and open to discussions from the directors on how you want to move forward with this. Maybe Colleen and I could work together, and maybe Jim, and get a subgroup together to talk about this. Hard once we leave but could get together on the phone and flesh that out, not ready to move forward. *Colleen* – I didn't expect it to; happy to be part of working group. *Kelly* – I like to move and make decisions but this one we need to think about. It goes back to broader question Dan asked, a question I know Jeff and others are working on. Think about it. Dan showed interest in running the R3 so we can work out how we want to do that. Even if not chairing committee, having directors involved is great. R3 felt disconnected and we had that symposium which highlighted to me that directors need to be definitely more engaged and purpose of having Jeff and committee here today was to start that engagement. Appreciate the work you do, and directors appreciate your willingness to talk about it. *Jim* – How would you like to provide the feedback that was asked for? *Kelly* – To me, when we charge a committee like that, you are brains behind this thing, the broad feedback, if you want it, makes sense what you are saying but you are committee and we are sitting here. Appreciate touch but don't need official action out of this board. Generally, the broad categories you are looking for, Dan added another broad category into mix. Does that make sense for directors to work on? Let record reflect Sheila, there are a lot of nodding heads. Do you need more? *Keith* – That is perfect.

TRACS Go-Live

Kelly – Worked for many years on Joint Taskforce for Federal Aid (JTF), one of more successful collaborations we have had between the Service and states. It is key to us because what drives most of the states is federal aid dollars. There are differences in opinion between regions on how to administer those grants. Have to bring those ideas together with state and federal people. It is an active committee. When Paul came into the process, he is outstanding to work with, very straightforward and I have faith when he talks to me. There were trust concerns before Paul came into this; those have been erased. He is committed to working with the states and at the same time he understands what his mission is and where his responsibilities are.

Paul Rauch – (PowerPoint - Exhibit 57) Wanted to take opportunity to talk to you about TRACS enhancement. Used to collect information about good work that gets done through Sport Fish and Restoration grants through a system called FAME and in 2011 we were notified by the Department of Interior that system was going to be taken down because it could not meet the new security standards. We need to, when you have a billion dollar a year federal program, there is an expectation and requirement that there will be some level of performance reporting going along with that. In 2012, we launched new system which became known as TRACS (tracking and reporting accomplishments from conservation species). There was a lot of consternation around that first TRACS for a variety of reasons; the end product was not very user friendly or intuitive and didn't put enough attention up front on what data was collected, why and how it was going to be

presented; challenges on that end. The biggest issue was the way we developed that system was more from prescriptive instead of collaborative approach. When I came into this role in April 2016 I called around to many state directors to get a sense of what issues this program was facing. Near the top of everybody's list was TRACS and challenges going on with that. We were just getting ready to launch the enhancement, which is a misnomer. We decided, in working with AFWA and WMI, to host a meeting of the parties, held at the arsenal in Denver and a big group of state folks as well as some NGOs and Service representatives and had a "come to Jesus" meeting. Talked about difficult issues we were facing and how we were going to resolve those. With this version of the system we will be in much better place. Four things came out of that meeting and four things guided us over last 2 ½ to 3 years as we worked to get this new system on the doorstep of being available. We took collaborative approach this time. The states have been at the table every step of the way as we developed this new system. We also spend an inordinate amount of time figuring out what information we needed to track, how that was going to be constructed because we wanted to end up with a system that had meaningful information in it, presented in a nationally consistent way. With 50 states and six territories that can be a challenge. If you don't you end up with a system that is all over the place, has a lot of information in it but no way of looking at it in a meaningful way. We also wanted to make sure we ended up with a system that was user friendly and intuitive because we failed miserably on that in the first effort. The goal of establishing a technology system is to make people's lives easier not harder. Our hope is that it makes this burden we have to report performance easier than in the past. What is TRACS going to be? A visual data system for reporting WSFR's grants for status and performance. It also means it standardizes the reporting of accomplishments. It will also be license certification and apportionment tool, simplifying process on both ends. It will be a tool for maintaining and reconciling real property records, an ongoing and recurring audit finding for us and we look forward to being able to resolve. There are new requirements coming out through new Department of Interior financial assistance regulation that if we don't have this system in place it will be onerous on the states. There will also be a GIS platform that allows us to view projects visually and spatially. It will be a means of presenting accomplishments to the public on a national scale, which is something industry has been asking for. Talk about how we are going to view our success; if we can hit mark on these three things we will have been successful. 1) Accountability and this system goes a long way towards that. 2) Be efficient, so building into the system as many ideas as we can about how to make annual process of generating grant paperwork and getting it through the system more effective. 3) Be effective at demonstrating successes nationally and at the local level. Heart of collaboration; in meeting of parties in 2016 we developed MOU between AFWA and ourselves, with concurrence of the states, spells out expectations and key things like how we are going to manage this. One of other things that came out of that was JTF chartered TRACS working group made up of state and federal technical representatives, 16 state representatives who have rotated over time, who sit down and develop requirements that we vet across all 50 states and through JTF before we agree on the next step. Over the last 2 ½ years this group has had three face-to-face meetings, 27 conference calls and done a great job and put a lot of work into this effort. Steve Williams sketched out, on the back of a cocktail napkin, what became known as the communications protocol which has really made a difference. When you

think about how this body works and have 50 states, various levels in the states, various levels in the Service, all with stake in outcome of these decisions, difficult how to figure out how to keep everybody engaged. We have done three major efforts, all centers around data element; we have sent information out to all 50 states directors, received data calls, over 1,000 comments specific to this effort. Each one of those comments has been reviewed, vetted and addressed by the TRACS working group, a huge amount of effort, but made end product better. Before decisions we made we held six national webinars that included 400 participants, both state and federal, to explain what was being reviewed and to make sure people understood what we were asking before they submitted their comments. Working on alpha testing, have 18 state folks and a number of federal folks helping us with this first phase of testing; a handful of subject matter experts get in there, play around and start identifying an issues; going extremely well. Half way through and feedback has been exceptionally positive. At the end of September, we will start beta testing and the entire system will be open to anybody state or federal who wants to participate. You will be able to see how the system works, play with it, ask questions and provide suggestions. On JTF, part of it is spatial wiring diagram, but shows complexity of engaging all of the parties that need to be engaged when making decisions; used to success to give all states opportunity to weigh in on decisions. Done appropriate amount of work in advance so getting well thought out and developed products to review; using this in WSFR more broadly than issues outside TRAC program. When you look at the system in alpha testing, first one is nuts and bolts of this and where information is being entered; the other three available for beta testing in September. Complete 8-week alpha testing process, tweak system from information we get from that, complete final three modules, open for beta testing October and November, during same time completing TRACS user training materials, integrate Lands and Facilities Matrices comments that just went out, collect those and update accordingly, complete testing and make system available for all users end of December. At end of December, January through April provide extensive user training. People will find this system is night and day better than previous system; it is intuitive, user friendly, and follows the logic people are using when looking at grants; much better. Development is continuing, strong development team who is staying on schedule working on this, have met every milestone so far and confident that at end of December it will be ready for all users. We will have robust training program to make sure everybody that needs to be in the system gets adequate training, continue to provide technical support going forward so folks are comfortable with it. At North American in March we notified the states that we expect to, by North American in March 2020, ready to turn over to states for data entry. States will be responsible for data entry, never made that a requirement in first version of TRACS; part of MOU from meeting of the parties; expectations on our part and commitments we have to meet like delivering a fully functional system and provide adequate training for all participants. You will have opportunity to evaluate that for yourselves and vote on whether you accept the system. Ultimately this is going to be the system of record for WSFR grants performance. The expectation and hope is that we have done a good enough job with enough collaborative effort up front that states will be more accepting of this version and the process we have gone through to arrive at it. I can't blame you after seeing how the first version turned out, the push back we got on it. In much better place now. We will deliver a really good system, provide support you need, and it will be an overall good

thing for the program. Still have to do public view piece of it; the piece that won't be included in this and two other little things. *Jim* – Shout out to Paul, night and day difference in process before and positive way after Paul became leader over WSFR program and culture he has developed on USFWS side makes all the difference in the world. For new directors, Paul is responsive to issues states may have in anything regarding WSFR program. Nebraska had issues with a Section 6 grant that seemed insurmountable and Paul found a way forward. *Ron* – Remind directors where does SWIG grants fall out? *Paul* – They are coming, not in this first program. On SWIG going through same process we went through on PR/DJ grants with identifying the data fields that will be entered, working with Mark Comfort and have work groups sessions coming on that. Along with public view, that will be one module that comes in later, within the year after we get first version out. *Kelly* – The other issue is the increase in administrative costs, which has been as long of discussion as TRACS has. Any questions from directors on administrative costs that Paul spent a lot of time and effort communicating that, done a good job going back and showing on how money is to be spent. Some states, like Alaska still have some concerns, but is always what they are going to do. Thank you Paul.

NEW BUSINESS

2020 Budget Approval

Roger Luebbert, Treasurer (Exhibit 58) – On 2020 budget, first two pages of this report show budget status from last year and serves as a reference. Last two pages are 2020 budget. We have line on numbers on left side for easy reference. Page one shows budget actual receipts for 2018, line five shows actual conference receipts were almost \$25,000 higher than the budget. Two reasons are budget receipts was too conservative and conference had higher actual receipts than a typical conference. The proposed 2020 budget for this line is approximately \$86,000 which will show later. 2018 budget also appears too conservative for lines 10, 11 and 12 for administrative fees for national pheasant coordinator, federal NFWF grants and Conservation Leaders for Tomorrow, you will see proposed later for 2020 budget it is based on actual receipts for 2018 you see on this page. Line 15 shows total actual receipts exceeded total budgeted receipts by approximately \$50,000. Next page, 2018 budget status for disbursements; line 20 see actual conference disbursements were approximately \$20,000 higher than budget, while this is an unfavorable difference keep in mind that actual conference receipts exceeded budget receipts by approximately \$25,000. The other major variance is line 22, executive secretary pay budget not adjusted for new contract. Other expenditure lines are reasonably in line with budget. Line 34 shows total actual disbursements exceeded budget by approximately \$26,000. Line 35 shows actual receipts exceeded actual disbursements by \$27,500; a good year. Move onto 2020 proposed budget on page 3, actual receipts 2017 and 2018, budget and receipts for current year and proposed budget for 2020; far right column shows source for proposed amounts. Lines 5 and 6 cover membership dues and are increased for inflation. If this budget is approved line 6 shows the calendar year 2020 member dues of \$4,010.83 for states, which represents an increase of less than 1%. Line 15 shows proposed budget receipts of approximately \$163,000 which is a little higher than 2017 actual receipts and current year 2019 budget, about \$16,000 lower than 2018 actual receipts, but 2018 had higher conference receipts than

typical years. The last page shows proposed 2020 budget for expenditures. Line 16, Delaney is increased for inflation per contract. Line 21, total conference disbursements shows 2020 proposed budget of approximately \$54,000, close to 2017 actual budget and 2019 budget amount. Line 24, treasurer pay has 50 additional hours which the executive committee approved for 2019 last January, also increased for inflation per the contract. Line 33, total disbursements shows 2020 budget of \$151,500, which is in line with 2018 actual expenditures and current year 2019 budget. Line 34 shows 2020 proposed budget receipts exceed proposed budgeted disbursements by approximately \$11,600. Executive committee met at beginning of conference and approved proposed budget with one amendment. That amendment added a budget disbursement for an external CPA audit and investment review for \$7,000. With that amendment the 2020 proposed budget receipts exceed budget disbursements by approximately \$4,600. *Kelly* – Director Douglas brought up and I concur to discuss, is to do second review of investment account. I am not sure what kind of money is involved for that and I don't know if we need to get a dollar amount exactly but need to put some side boards on it so we can build something, whether you double it to \$15,000 total? *Jim*, any thoughts? *Jim* – It might be a viable increase, but I don't have a clue on how much? *Kelly* – Roger is going to follow protocol and don't want him to have to come back and have to ask for more money. *Jim* – I think it is important. ***Jim Douglas, Nebraska moved to increase line item another \$8,000 to bring it to \$15,000 to include outside audit of operation budget to review investment account, Dale Garner, Iowa second.*** *Kelly* – Approving amended budget for 2020. ***Motion passes.***

Ollie – Remind everyone that you will receive email from Delaney Meeting Event Management, to do an evaluation of this conference, that is important to help Kelly and his crew plan next year's conference. What you like and don't like. Another important part of that is what topics you would like to see on program next year, which helps Kelly as host state. Be looking for that and fill it out.

Ed Carter – This is the first MAFWA meeting I have been through, very impressive; the content and hospitality has been first class. Thanks for allowing me to be part of that and for the time on the program. You had discussion about communications, that is really important, and Jennifer who came to work for us from Georgia, I was talking the other day and told her I didn't use the word fisherman or fisher person, I used angler and she said I shouldn't do that, we have tested that and people don't know what angler means. There is a lot to know. We no longer refer to northern long-eared bat but now northern hearing-enhanced bats. When you go to Disney World, see a ride and stand in line a long time you get almost there only to find out the line turns and goes back the other way, with deference to Revolution of Afghanistan Women, RAWA was supposed to be introduced tomorrow but now not going to be introduced until after July 4 recess in Congress. Don't know exactly when, rumor is July 10, not tomorrow but sometime in the near future. Thanks Mr. President appreciate being part of this. *Kelly* – One of highlights of annual AFWA meeting is awards ceremony, obviously for accolades we get to give our staff, but as you can see Ed is very funny, professional but entertaining. I can't imagine what it was like traveling all the way to Africa with him.

Refreshment Break – Sponsored by National Wildlife Federation

Passing of Gavel to Next State

Kelly Hepler, SD – This is normally where president hands gavel to incoming state president, but I can't hand it to myself.

We will not pass the gavel as South Dakota is the next rotation and Kelly is staying in as president.

Closing Comments

President's Remarks

Kelly Hepler, SD – It has been a pleasure to meet everyone. Thank you Jim for hospitality in Nebraska at symposium. This is a different type of meeting than the Western Association, which is run like AFWA, is committee driven and directors get isolated and don't interact with the committees. We come together for business meeting, then AFWA is really large and you are even more isolated and if on executive committee like I am now you are really removed from everything. At the business meeting you have 50 people sitting around the table and it is not set up to have an exchange of ideas, it is set up to get business of the committees done and move on. This is a lot different and that is what Ed is seeing too; the directors are sitting at the table all the way through the whole meeting and we get to interact. It is a much better way to do business. We hear the committees, all of the same information. I have been privileged to be in leadership role, but always try to make things better than when I came in. I am also interested in collectively how we do our business. If there are ways to do this better Ollie and I want to do that. I think it is neat to have biological presentations and mix it in with other business. We are open to ideas on how you want to do it better. I think it is a well-run meeting, about the right length, but if ways to do that or ways to spend more time with committees, you let us know how we can do business better. Thank you all for time and effort, Ollie, Sheila and Roger, Ed Carter. Ron and everybody present, thank you all.

Conference Adjourns

Dale Garner, Iowa moved to adjourn, Brad Loveless, Kansas second.
Meeting adjourned at 11:32 pm.

Appendix A – PowerPoint Photos

DRAFT

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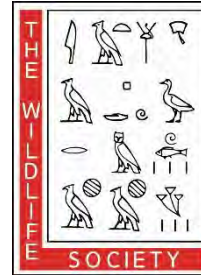
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Thanks

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