



Resources Inventory and Assessment Division

CEAP Wildlife Component

Purpose

To quantify the effects of USDA conservation programs and practices on select fish and wildlife and their habitats.

Approach

Unlike other CEAP components, which focus on specific land use/land cover categories, the wildlife component focuses on fish and wildlife habitat resource concerns, regardless of land use or land cover. It relies on partnerships with the fish and wildlife conservation community to focus regional efforts on the most important conservation practices and programs and the fish and wildlife resources likely to be affected by them. In partnership with the Association of Fish and Wildlife Agencies, other government agencies and academia, CEAP wildlife efforts are assessing data gaps and setting priorities for quantifying the effects of key conservation practices on high priority species and habitats at broad regional scales.

Effects Measures

Documented effects of conservation programs and practices on fish and wildlife may include any of the following attributes that are quantified in a scientifically based, technically credible way:

1. Documented **habitat use** by target species or groups associated with conservation actions
2. Changes in **habitat quality** for target species or groups attributable to conservation actions
3. Target species **population response** to conservation actions

The CEAP wildlife approach attempts to compile documentation of each of these categories of effect, wherever feasible and to the extent possible, with an emphasis on measures relating to habitat availability and condition.

Status

Literature syntheses on the effects of conservation programs and practices on fish and wildlife have been completed in partnership with The Wildlife Society. The National Agricultural Library is preparing a CEAP wildlife bibliography. Since 2005, 21 regionally based fish and wildlife assessment projects have been initiated. Each of these projects leverages resources and expertise of science partners and seeks to use existing data to draw inferences on how conservation practices affect various fish and wildlife species or groups.

CEAP-Related Studies

Contributions to our understanding of the effects of conservation practices and programs are being made by others, including assessments of the effects of CRP on select bird populations by the Farm Service Agency and various studies supported by the NRCS National Agricultural Wildlife Conservation Center. The wildlife component is working with these entities to link relevant findings to CEAP.

Future Opportunities

Future efforts will focus on addressing additional priority regional assessment topics and coordinating with other CEAP components and related studies. Efforts will be made to integrate CEAP wildlife findings into the habitat objectives and goals established by elements of the fish and wildlife conservation community (e.g., Partners in Flight habitat goals for priority bird species) to enhance program evaluation and strategic conservation planning in the future. In addition, information generated from the wildlife component is being made available to inform internal agency functions, including interaction with the National Technical Guide Committee and development of programmatic environmental assessments.

Contact: Charlie Rewa, NRCS/RIAD, charles.rewa@wdc.usda.gov;

Ray Evans, AFWA, rayevans24@embargo.com

June 12, 2008

Further Information: <http://www.nrcs.usda.gov/Technical/nri/ceap>

Assessment projects sponsored by the CEAP wildlife component

Project Lead	Year Initiated	Practice type(s) addressed/Region	Wildlife focus	Assessment topic	Status
The Wildlife Society	2004	All/National	All	Literature synthesis of documented effects of conservation programs and practices on fish and wildlife	Program-based synthesis complete 11/2005, Practice-based synthesis complete 10/2007
NatureServe	2005	All practice types, with emphasis on pasture and hay planting/ Midwest	At-risk terrestrial and aquatic species	Using NatureServe information to assess conservation practice effects on at-risk species: Missouri Pilot	Final report complete 2/2007, CEAP science note complete 6/2007
University of Northern Colorado	2005	Conservation cover, CRP enrollments/ Midwest, South, East	Grassland nesting birds	Grassland bird response to CRP-related land use changes: Using NRI and Breeding Bird Survey data to assess landscape-level bird response	Final report complete 2/2007, CEAP science note in development
University of Missouri	2006	Wetland restoration, WRP enrollments/ Midwest	Wetland birds, amphibians	Assessing wildlife habitat value on restored wetlands in Missouri through analysis of WRP ecological monitoring data	Interim report complete 9/2007, CEAP conservation insight released 12/2008
Playa Lakes Joint Venture	2006	Conservation cover, wetland restoration, CRP & WRP/Great Plains	Grassland dependent birds, wetland birds	Estimated contributions of CRP and WRP habitats toward conservation goals of priority grassland and wetland birds in the Mixed-grass Prairie region	Final reports complete (CRP-12/2007, WRP-6/2008) conservation insights in development
Mississippi State University	2006	Upland buffers/ Southeast, Midwest	Northern bobwhite, songbirds	National Evaluation of Wildlife Benefits of CRP practice CP33 (Habitat Buffers for Upland Birds)	Interim reports complete 12/2006, 10/2007; final report due 6/2009
University of Massachusetts-Amherst	2006	Early successional habitats/Northeast	Scrub-shrub birds	Assessing the Benefits of Conservation Practices for Scrub-shrub Birds in New England	Literature review complete 9/2007, final report due 9/2009
The Nature Conservancy	2007	Soil and water practices applied to cropland/ Upper Midwest	Freshwater aquatic biota	Development of a freshwater aquatic health indicator for use with CEAP Cropland modeling output in the Upper Miss. Basin	Final report received 6/2008, led to follow-up study below
USDA National Agriculture Library	2007	All/North America	All	Literature bibliography on the effects of conservation practices on fish and wildlife	Final bibliography due 9/2008
Missouri Resource Assessment Partnership at the Univ. of MO	2007	Upland, riparian, and in-stream practices/ Midwest	Freshwater aquatic biota	Use of Aquatic GAP species predicted distributions and practice application data to assess practice effects on aquatic biota in the Missouri River Basin	Multi-year effort, Missouri River Aquatic GAP analysis report due 10/2008
University of Nebraska-Lincoln	2007	Conservation cover, CRP enrollments/ Midwest	Northern bobwhite, ring-necked pheasant	Use of rural mail carrier wildlife surveys to assess benefits of Farm Bill programs in the Great Plains	Final report due 5/2009
Pennsylvania State University	2007	Fish passage, dam removal/ Northeast	Freshwater aquatics	Evaluating biological effects of dam removal on streams in PA	Final report due 5/2009
USGS National Wetlands Research Center	2007	Wetland restoration/ West	Waterfowl, shorebirds	Use of Doppler weather radar to determine bird use of WRP restored wetlands in California	Final report due 9/2010

Contact: Charlie Rewa, NRCS/RIAD, charles.rewa@wdc.usda.gov;

Ray Evans, AFWA, rayevans24@embargmail.com

June 12, 2008

Further Information: <http://www.nrcs.usda.gov/Technical/nri/ceap>

Assessment projects sponsored by the CEAP wildlife component, cont.

Project Lead	Year Initiated	Practice type(s) addressed/Region	Wildlife focus	Assessment topic	Status
American Bird Conservancy, Intermountain West Joint Venture	2008	Conservation cover (CRP), wetland restoration (WRP), prescribed grazing/West	Prairie grouse, land birds, waterfowl	Assessing priority bird response to wetland and upland practices in the Great Basin Bird Conservation Region (BCR9)	HABS model for BCR9 under development, results due 5/2010
Ducks Unlimited	2008	Wetland restoration (WRP), Conservation cover (CRP)/Midwest	Mallards	Assessing the contribution of WRP and CRP enrollments to mallard migration habitats in the Mississippi and Central Flyways	Pilot effort initiated in 2008, Four-year full implementation phase planned beginning in 2009
Playa Lakes Joint Venture	2008	Conservation cover (CRP), rangeland practices (EQIP) restoration/Great Plains	Grassland dependent birds	Estimated contributions of CRP and EQIP enrollments toward conservation goals of priority grassland birds in the Short-grass Prairie region (BCR18)	Report due 12/2008
USGS Upper Midwest Environmental Science Center	2008	Wetland restoration (WRP), Conservation cover (CRP)/Midwest	Amphibians, wetland birds	Assessing WRP and CRP contributions to amphibian and wetland bird conservation in Iowa	Project initiated in Iowa, broader Midwest assessment planned beginning in 2009
Oregon NRCS	2008	Prescribed grazing, stream restoration/West	Aquatic biota	Assessing effects of prescribed grazing and stream restoration on aquatic biota in the Wood River watershed (Klamath), Oregon	Aquatic habitat and biota monitoring planned for 2008, to follow up 2003 "before" practice monitoring. Results due 5/2009
Utah State University	2008	Fish passage, stream restoration/ West	Freshwater aquatic biota (flannemouth and bluehead sucker, roundtail chub)	Use of stream and fish monitoring data to assess the effects of NRCS stream restoration practices on priority fish species in the San Rafael River, Utah	Results due 12/2010
The Nature Conservancy	2008	Soil and water practices applied to cropland/ Upper Midwest	Freshwater aquatic biota	Applying previously developed freshwater aquatic health indicator to CEAP Cropland modeling output data in the Upper Miss. Basin	Follow up on previous work to link with CEAP cropland model, results due 6/2009
Montana NRCS, Blackfoot Challenge	2008	Fish passage, stream restoration/ West	Aquatic biota (bull trout, west slope cutthroat trout)	Use of archived aquatic monitoring data to assess effects of NRCS stream restoration practices in Montana	Results due 6/2010
University of Maryland	2008	Conservation cover (CRP)/East	Northern bobwhite, grassland birds	Assessing local and landscape factors associated with quail and grassland bird use of CRP enrollments in eastern Maryland and Delaware	Landscape analysis initiated, to expand previous study, results due 5/2009
Purdue University	2008	Wetland restoration/ Midwest	Swamp sparrow	Assessing bird population recruitment in WRP wetlands in Wisconsin	Project to complete previously initiated study, results due 5/2009

Contact: Charlie Rewa, NRCS/RIAD, charles.rewa@wdc.usda.gov;

Ray Evans, AFWA, rayevans24@embargmail.com

June 12, 2008

Further Information: <http://www.nrcs.usda.gov/Technical/nri/ceap>