Early Successional Habitat Management on Eastern Region National Forests

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Map of the Eastern Region
Eastern Regional Office
NATIONAL FOREST
CHIPPEWA
SUPERIOR
Cass Lake
Duluth
OTTAWA
Ironwood
Lake Superior
HIAWATHA
Minnesota
Michigan
CHEQUAMEGON
Rhinelander
Gladstone
MINNEAPOLIS
NICOLET
HURON
Lake Huron
Lake Michigan
Wisconsin
Cadillac
MILWAUKEE
MANISTEE
Iowa
DETROIT
CHICAGO
Michigan
Lake Ontario
New York
FINGER LAKES
Lake Erie
MIDEWIN
Wilmington
Warren
ALLEGHENY
CLEVELAND
PITTSBURGH
Pennsylvania
Missouri
Illinois
Indiana
Ohio
PHILADELPHIA
NJ
NEW YORK CITY
HOOSIER
WAYNE
Nelsonville
MD
ST. LOUIS
Rolla
SHAWNEE
Bedford
Elkins
DE
MARK TWAIN
Harrisburg
West Virginia
MONONGAHELA
Maine
Vermont
WHITE MOUNTAIN
GREEN MOUNTAIN
Campton
Rutland
NH
BOSTON
Massachusetts
CT
RI

Forest Lands

STATE	TOTAL LAND AREA (1,000 acres)	FOREST AREA (1,000 acres)	FOREST AREA	PRIVATE LAND FOREST (% of forest land)	PUBLIC LAND FOREST (% of forest land)	NATIONAL FOREST (% of forest land)
Indiana	22,980	4,656	20%	86%	14%	4%
Illinois	35,608	4,525	13%	85%	15%	6%
Michigan	36,275	19,545	54%	63%	37%	13%
Minnesota	51,024	16,391	32%	46%	54%	12%
Missouri	44,093	15,078	34%	83%	17%	10%
Ohio	26,207	7,894	30%	91%	9%	3%
Wisconsin	34,791	16,275	47%	69%	31%	9%

Source: Miles, P.D. 2010, Forest Inventory EVALDator. Version 4.01 beta USDA FS Northern Research Station


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Chequamegon-Nicolet National Forests

Early Successional type: *aspen/birch*

Average treatment per year/Forest Plan Objective:

- Aspen – forest plan projected 3,700 acres
- 27% less than projected, 2,700 acres (2011)

Golden-winged warbler

What contributes or detracts from success:

- Capacity for Stewardship contracting

+ Partners associated with North Central Wisconsin Young Forest Initiative

North central Wisconsin Young Forest Initiative

- Forest management for grouse and woodcock habitat
- Early successional forests and shade intolerant tree types
- Increasing age class diversity of aspen
- Assists private landowners
- Wisconsin DNR, WMI, RGS, NRCS, private landowners, Forest Service, AFWA, counties

Superior National Forest

- Increase jack pine
- Early Successional types: *aspen/birch and jack pine*
- Average treatment per year/Forest Plan Objective:
  - *Approximately 2,800 acres of regeneration harvest per year*
  - *Forest plan objective = 10% young forest*
  - *2012 conditions = 13% young forest*

Superior National Forest

- What contributes or detracts from success:

  + Partners include Deer Hunter Association, Minnesota DNR

  - *Timber industry response to low quality forest and economic value of wood*

  - *Limited internal and external capacity for stewardship contracts*

Ruffed grouse nests

Superior National Forest

Current early successional forest management focused on moose population management

- Forest Plan focus on young forest
- Moose habitat
- Seven grouse hunter walking trails
- Collaborative projects

Wayne National Forest

Oak Forest

Early successional shrub type

- Early Successional types
- Average treatment per year/Forest Plan Objective:

3-6% herbaceous/shrub habitat

8% of early successional even-aged hardwood forests (<10 years)

Wayne National Forest

- What contributes or detracts from success/effort:
  - \+ Partnership for a shared biologist
  - \+ Treatment of Tree of Heaven projects
  - \+ Treatment of open lands
  - \- Need $ for Tree of Heaven treatments prior to cutting any forests
  - \- Updated forest vegetation data needed

Tree of Heaven – invasive species

Huron-Manistee National Forest

Early Successional types: aspen, jack pine, short-lived oaks, jack pine barrens, oak savannahs, forest openings

- Average treatment per year/Forest Plan guidance:
  - Aspen - 438 acres
  - Jack Pine – 1,629 acres
  - Short-lived Oak – 684 acres
  - Create barrens – 932 acres
  - 4-10% forest openings

Aspen Clearcut

Chestnut-sided warbler

Huron-Manistee National Forest

- What contributes to success:
  - Partners include Michigan Department of Natural Resources, Ruffed Grouse Society, National Wild Turkey Federation, Arbor Day Foundation, American Forests
  - Kirtland's warbler and Karner blue butterfly management
  - Ruffed Grouse Management areas
  - Markets for aspen and jack pine
  - Prescribed burning
  - Great Lakes Restoration Initiative

Karner blue butterfly habitat

Huron-Manistee National Forest

- What detracts from success:
  - Limited Capacity to plan and implement timber projects
  - Low value of jack pine and oak
  - Cost of follow up treatments; additional higher value timber, limits capacity for other early succession harvest

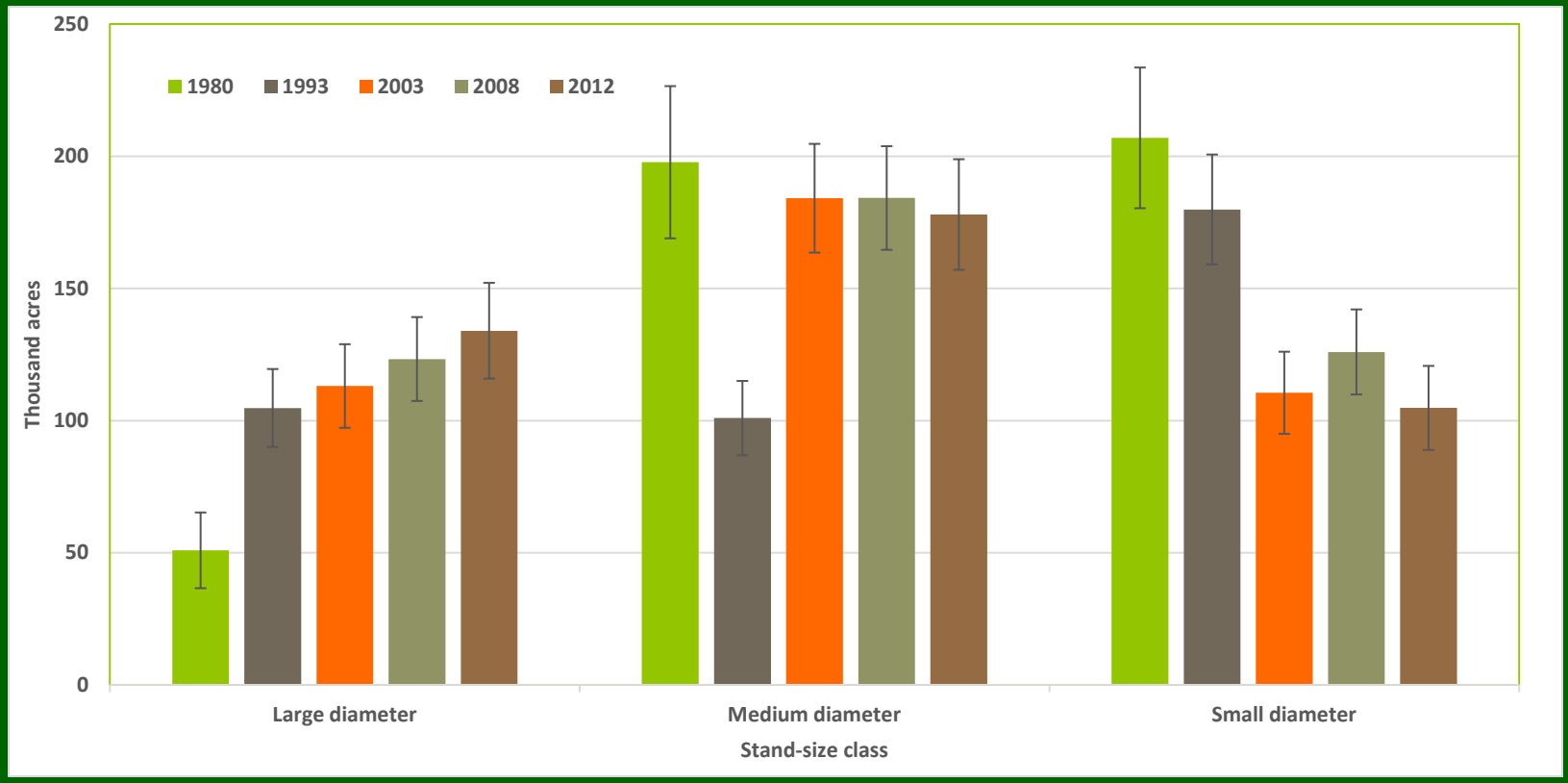
Jack Pine Regeneration

Huron-Manistee NF Early Successional

High Intensity Prescribed Fire

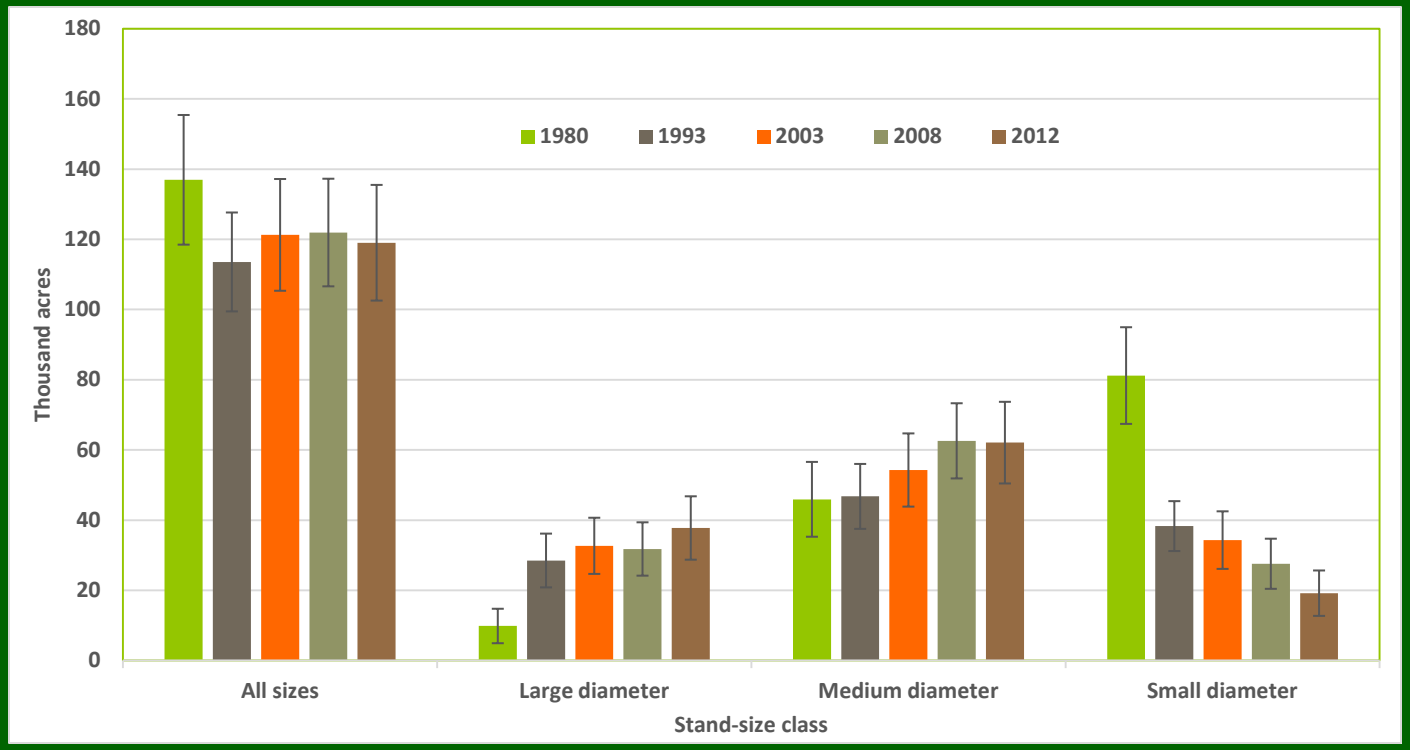
Michigan National Forest Trends

- *Area of forest in aspen-birch group, by stand-size class, Michigan National Forests, 1980 to 2012 (error bars depict 1 standard deviation)*



Huron-Manistee National Forest Trends

- *Area of forest in aspen forest type by stand-size class, Huron-Manistee National Forest, 1980 to 2012 (error bars depict 1 standard deviation)*



Huron-Manistee National Forest Trends

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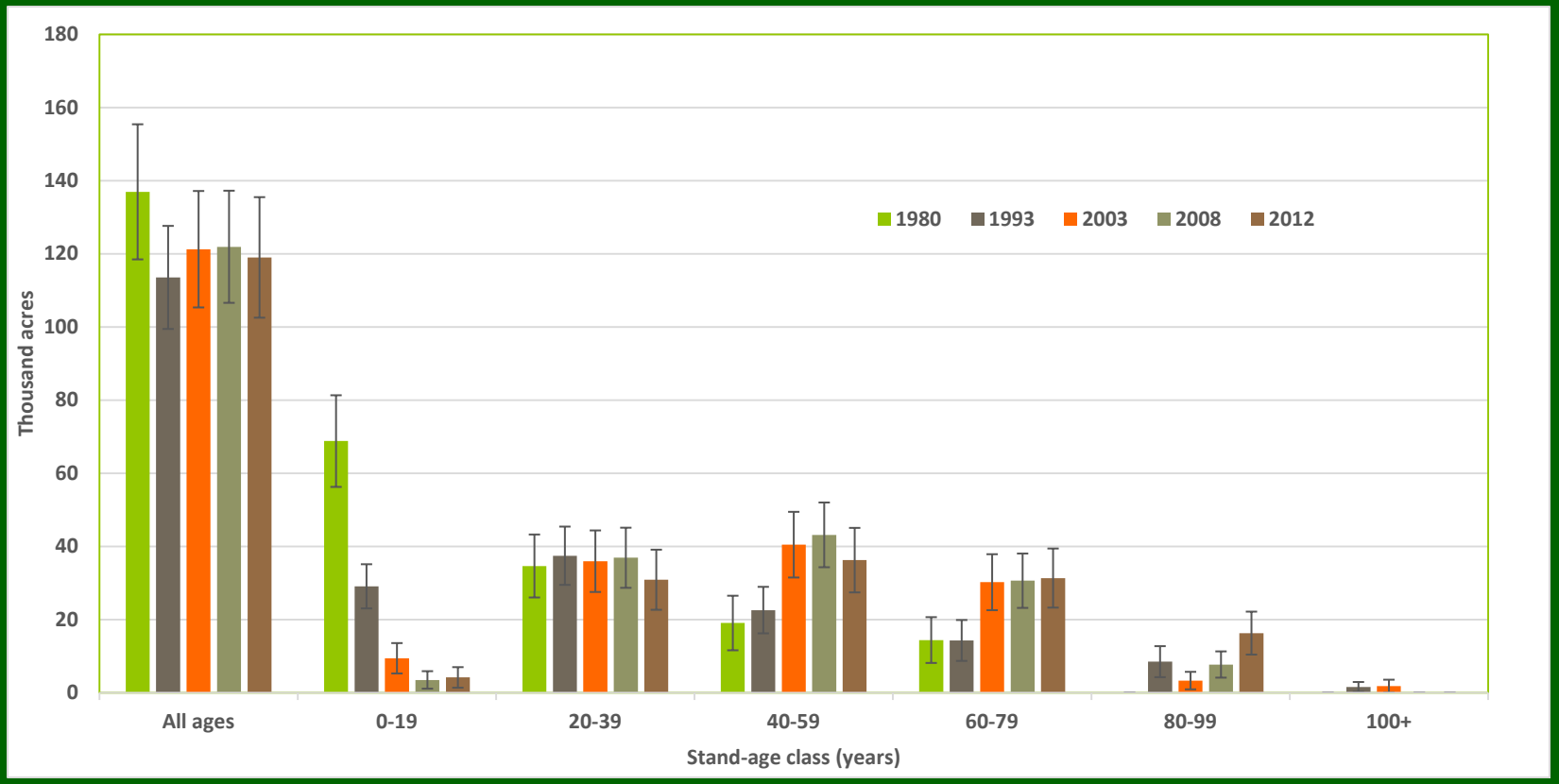

Early Successional Habitat Management