Ohio Department of
NATURAL RESOURCES

Ohio Division of Forestry

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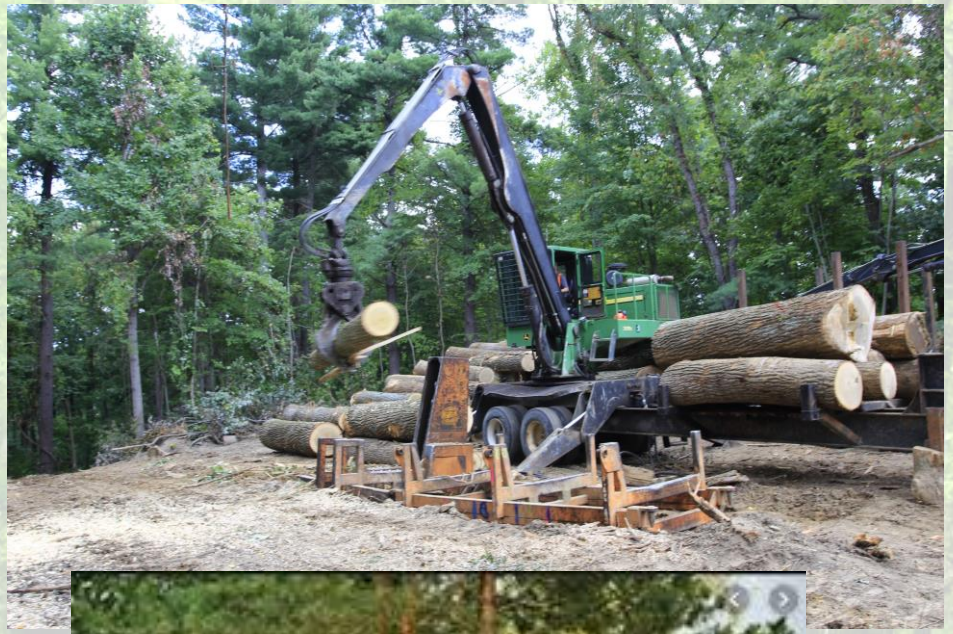
Mission Statement: Promote and apply management for the sustainable use and protection of Ohio's private and public forestland.

Vision Statement: The Ohio Division of Forestry envisions healthy, diverse forests valued for the life-sustaining benefits they provide now and forever.

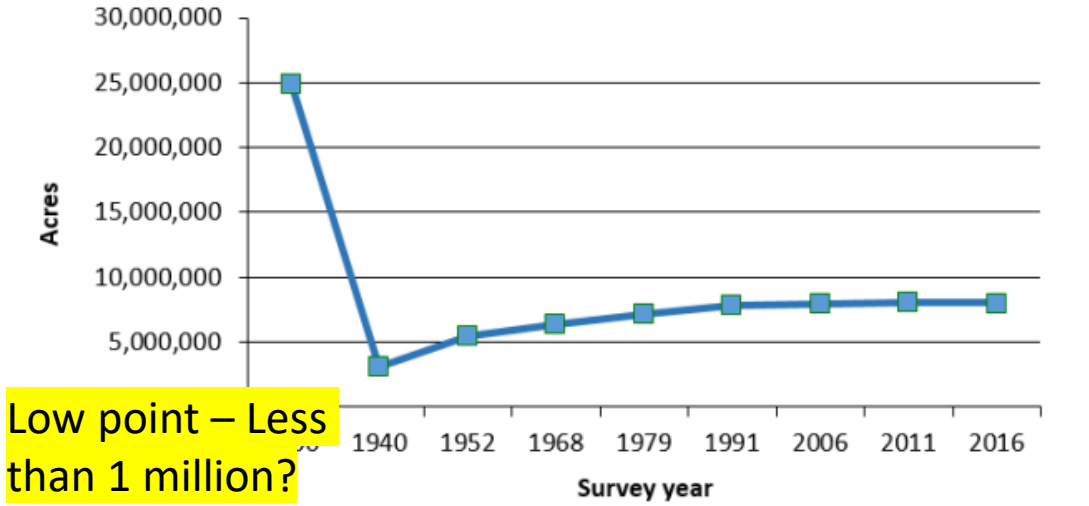
Purpose Statement: Manage state forests to maintain forest health, a sustained yield of forest products, and promote diverse forest habitats across the landscape, while considering a multiple use mandate. The division strives for state forests to be the best example of the benefits resulting from long-term forest management

Shawnee State Forest (West Portsmouth)

State Forests: Mixed Use!!



State Forest History



Low point – Less than 1 million?

Figure 1. The change in total forest land acres in Ohio over time (Albright et al. 2018; Griffith et al. 1993).

1906 – DOF created as part of Ohio Agricultural Experiment Station

(1911 Weeks Act)

1915 – General Assembly appropriated funds for SF acquisitionn. Limited to $10/acre

1916 – Waterloo & Dean SF acquired

1922 – Shawnee SF acquisition began

Depression era programs – Resettlement act, WPA, CCC

1949 – ODNR created, state parks transfered

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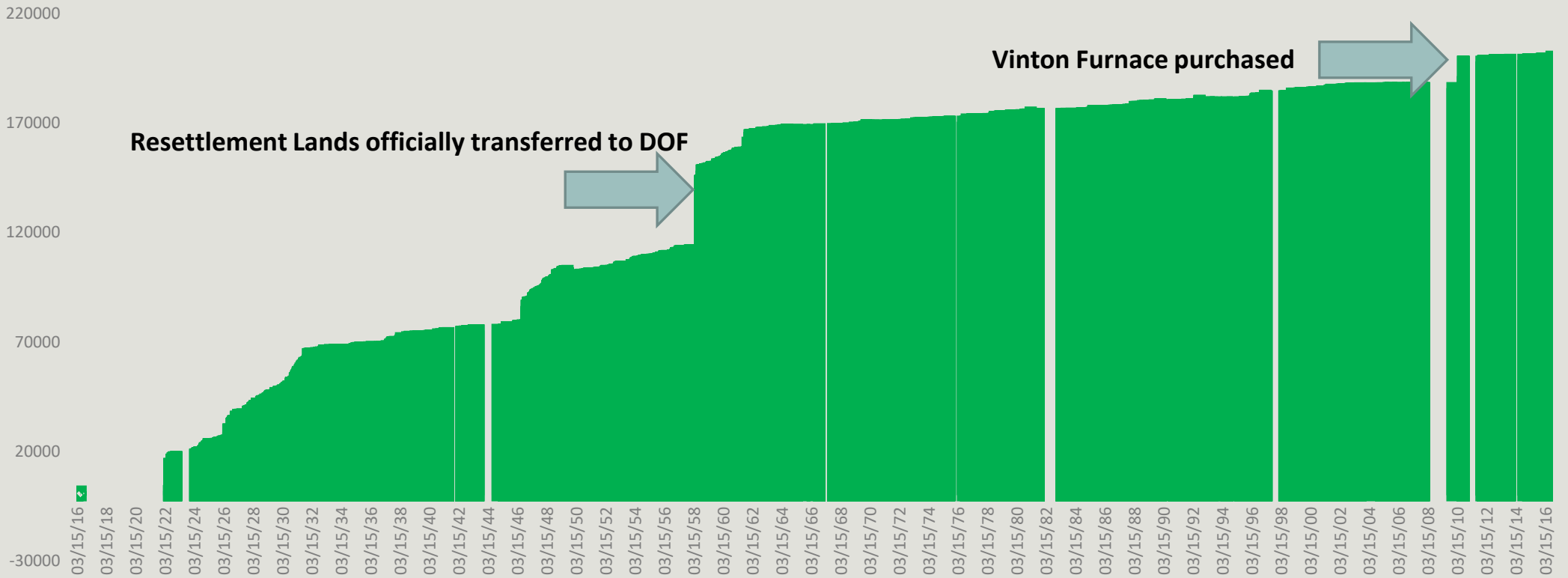
Ohio State Forests – Cumulative Acres



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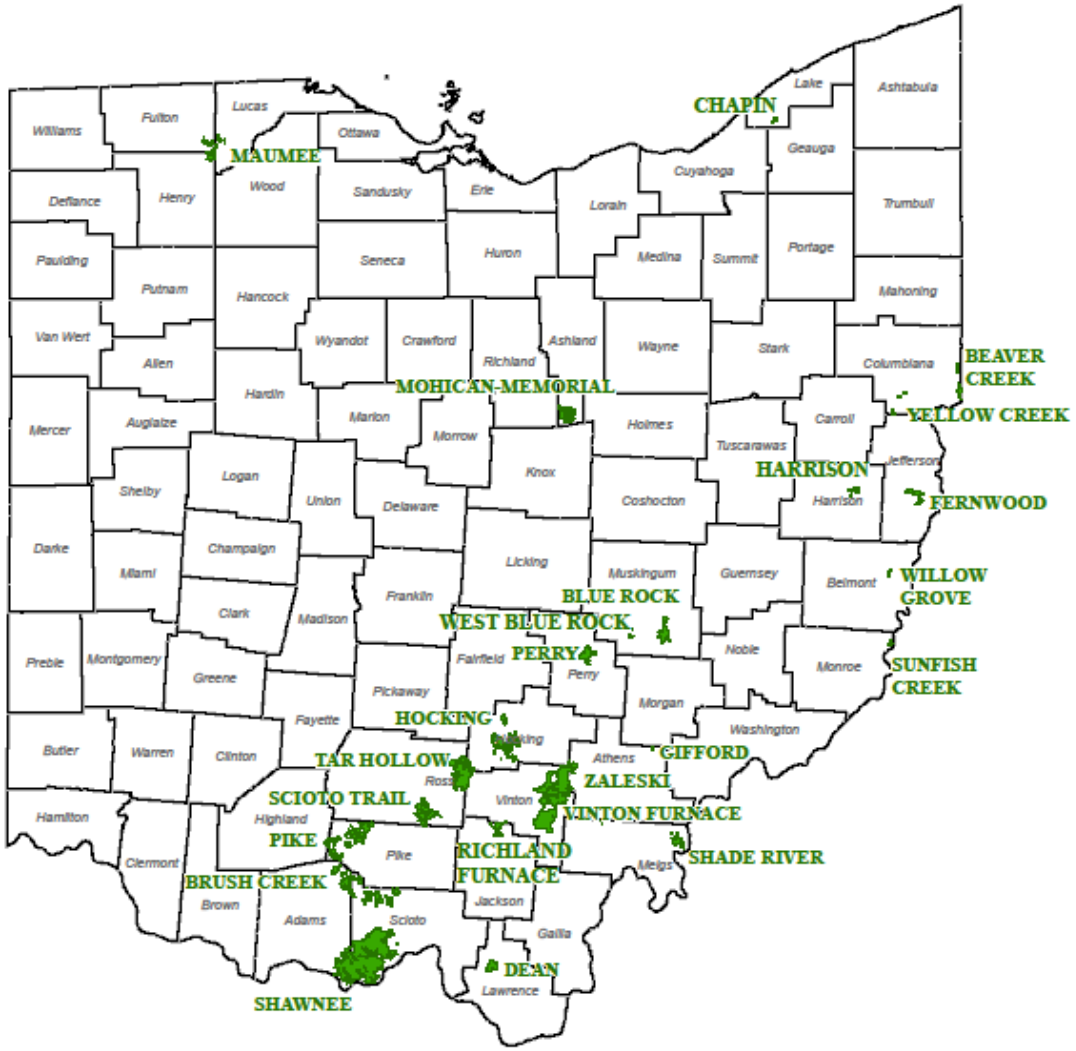
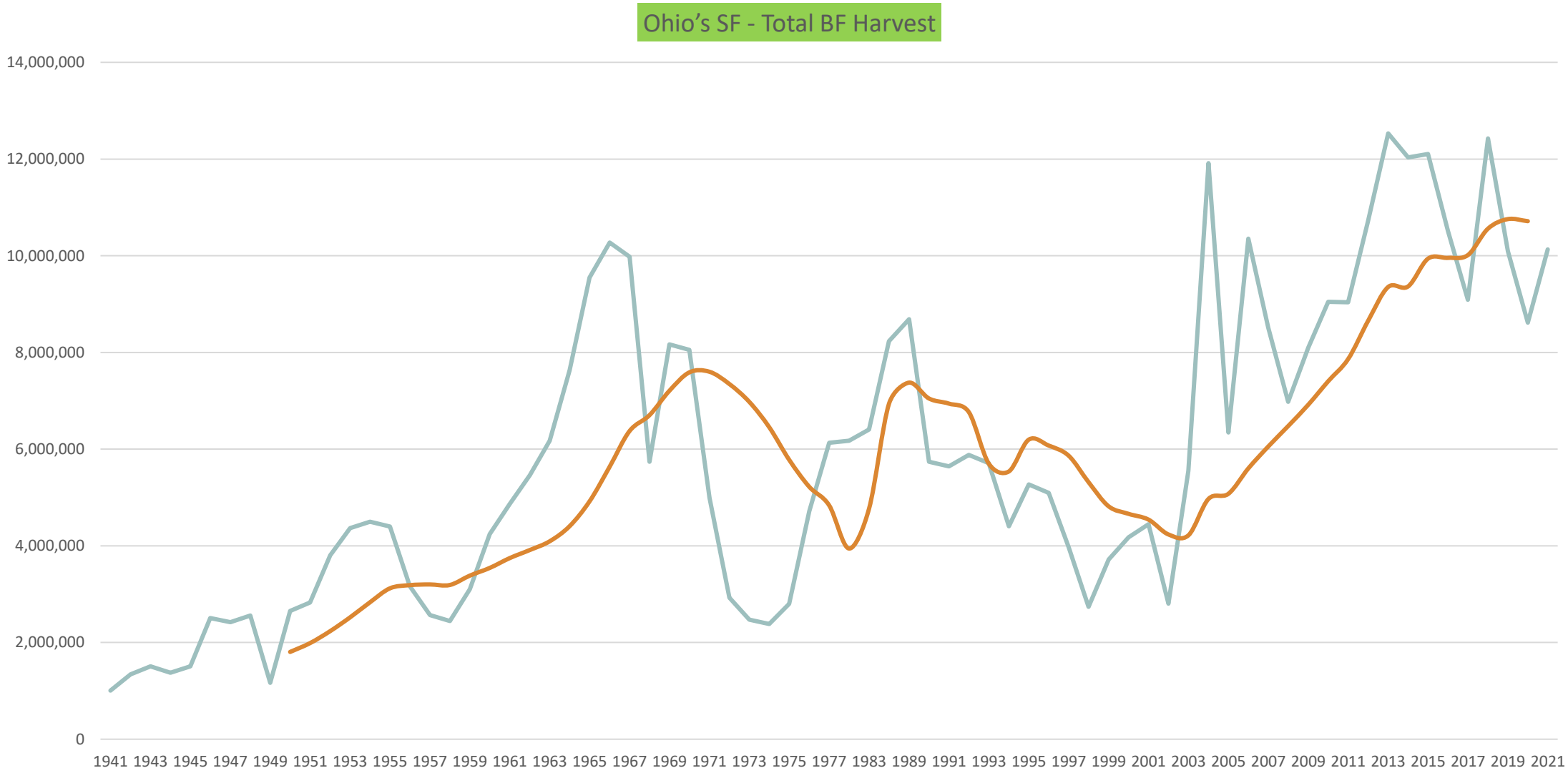
Ohio's State Forests

Ohio Divison of Forestry, 8/12/2020




Ohio’s SF - Total BF Harvest
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
1941 1943 1945 1947 1949 1951 1953 1955 1957 1959 1961 1963 1965 1967 1969 1971 1973 1975 1977 1983 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021

State Forest Management Goals

Managing and Promoting Oak-Hickory Forests

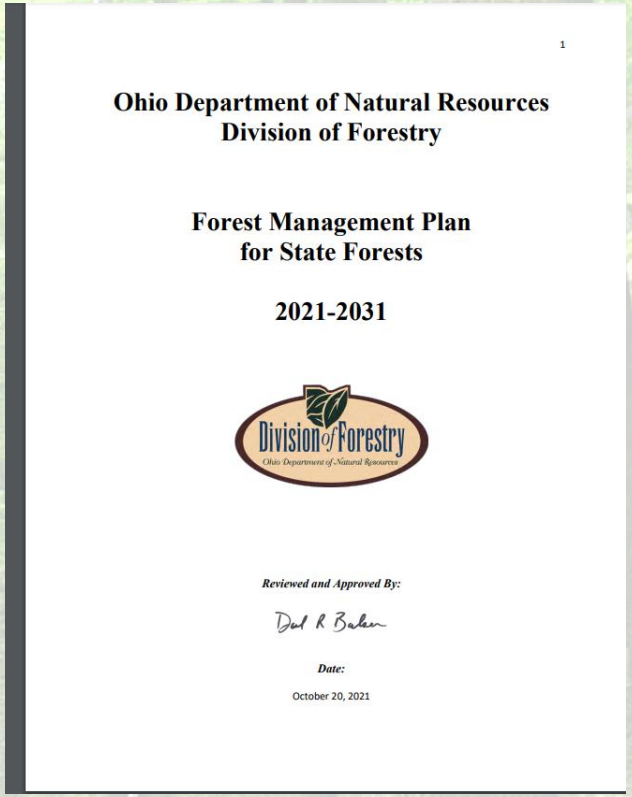
- Enhancing oak regeneration
- Favoring oak forests for investment
- Preserving oak-hickory components when regen is not feasible

Protect RTE species and rare communities

- Protecting HCVF designated areas
- Assessing all areas for RTE species, avoiding and mitigating as necessary

Maintaining and promoting diverse habitats

- Maintain a sustainable distribution of stand ages
- Increase early successional habitat
- Manage HCVF's for future old growth



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Forest Management Plan
for State Forests

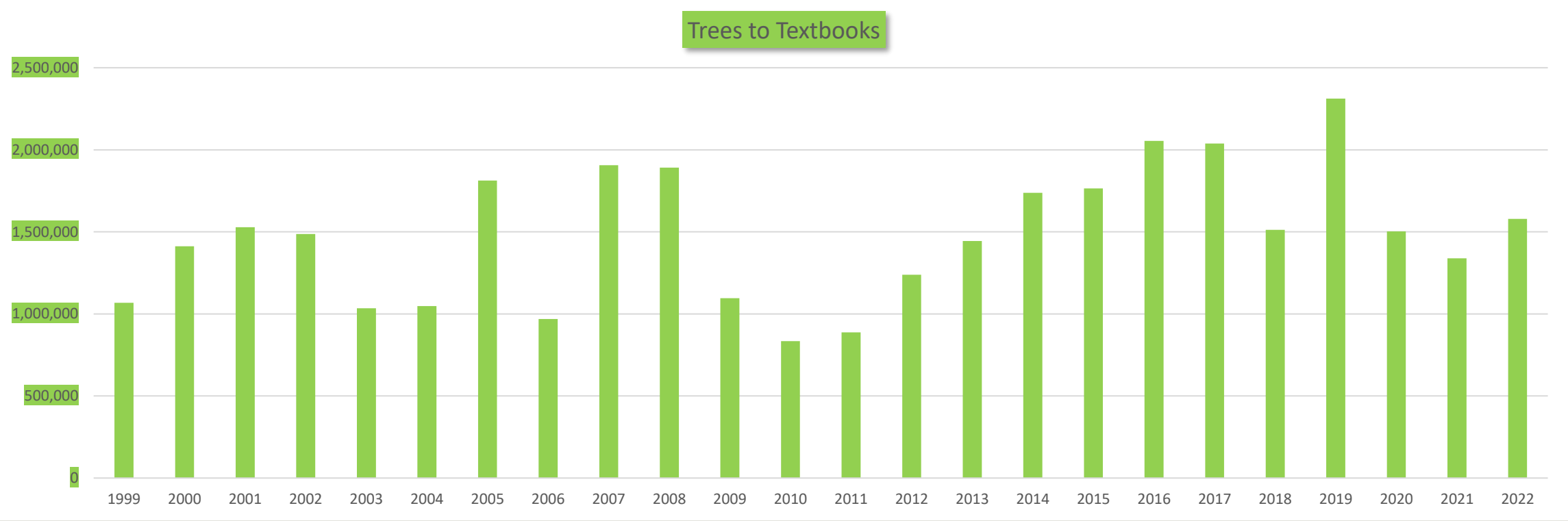
2021-2031

Division of Forestry
Ohio Department of Natural Resources

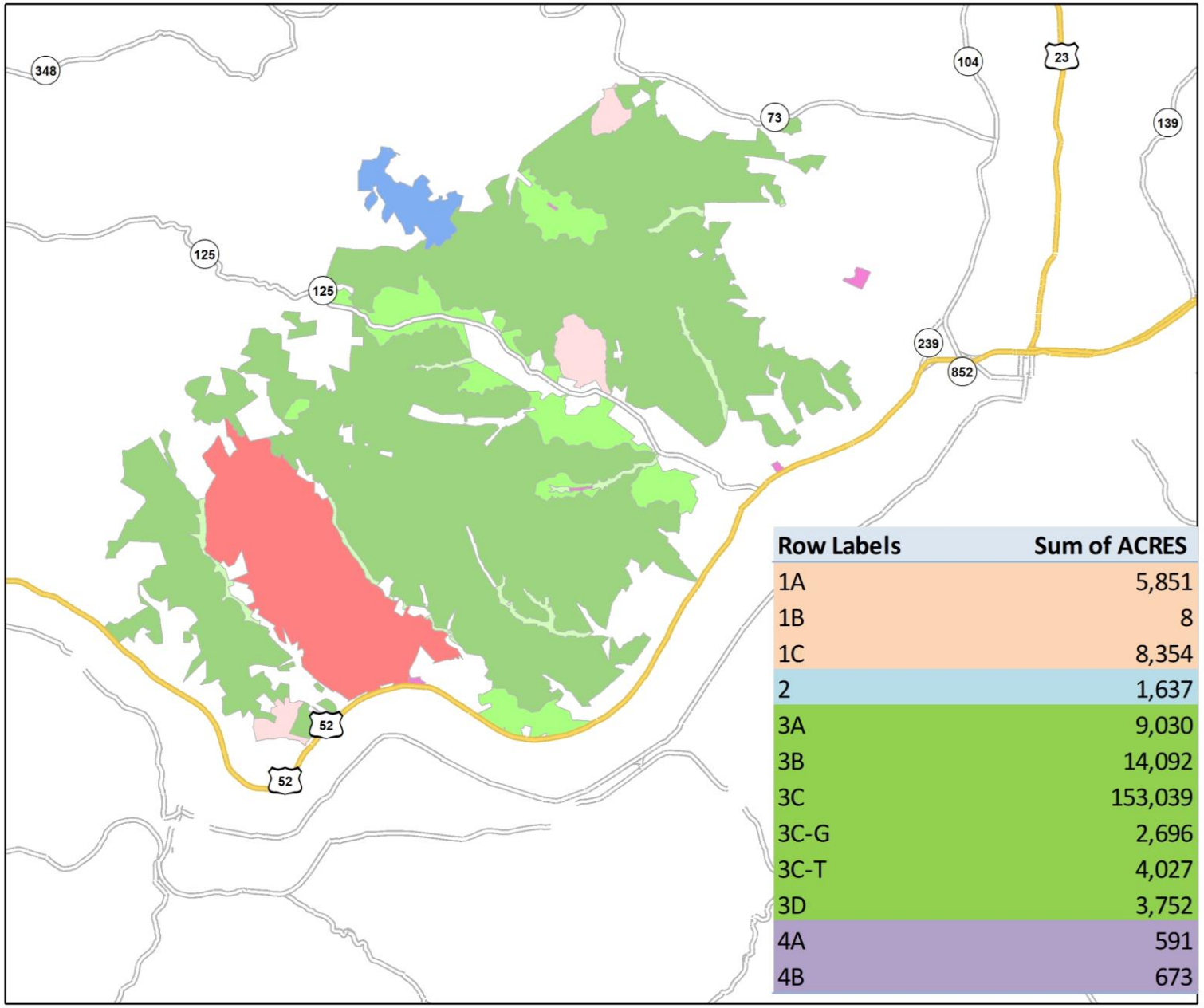
Reviewed and Approved By:

Date:

October 20, 2021



Community Investment



Row Labels	Sum of ACRES
1A	5,851
1B	8
1C	8,354
2	1,637
3A	9,030
3B	14,092
3C	153,039
3C-G	2,696
3C-T	4,027
3D	3,752
4A	591
4B	673

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State Forest Land Management Manual 2016

Reviewed by the Forest Advisory Council
October 2016

Approved

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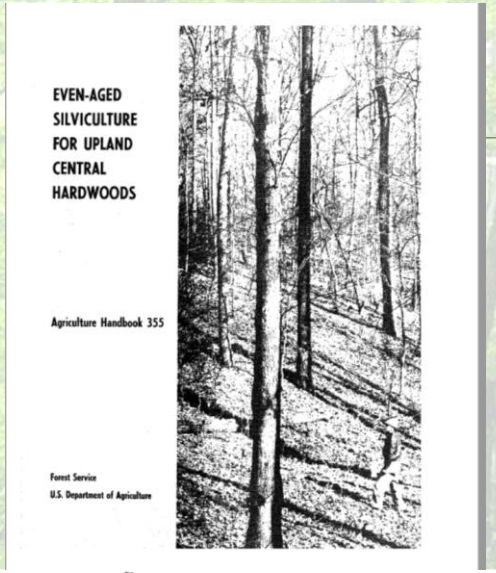
EVEN-AGED
SILVICULTURE
FOR UPLAND
CENTRAL
HARDWOODS

Agriculture Handbook 355

Forest Service
U.S. Department of Agriculture

FIGURE 17.—Upland hardwoods on a *poor* site.

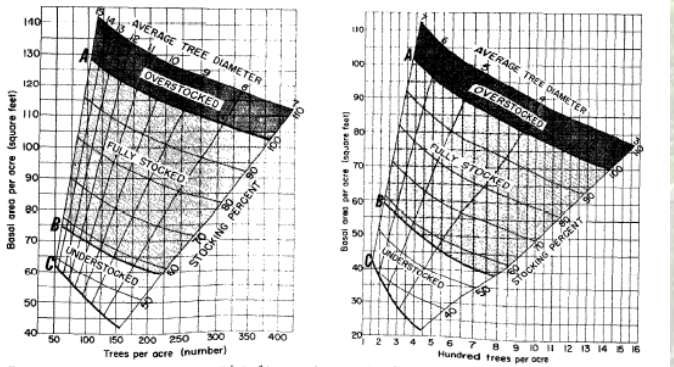

FIGURE 18.—Relation of basal area, number of trees, and average tree diameter to stocking percentage for upland central hardwoods. Tree-diameter range is 7–15 inches in chart at left; 3–7 inches in chart at right. The area between curves *A* and *B* on both charts indicates the range of stocking where trees can fully utilize the growing space. Curve *C* shows the lowest limit of stocking necessary to reach the *B* level in 10 years on average sites. (Average tree diameter is the diameter of the tree of average basal area.)

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United States Department of Agriculture

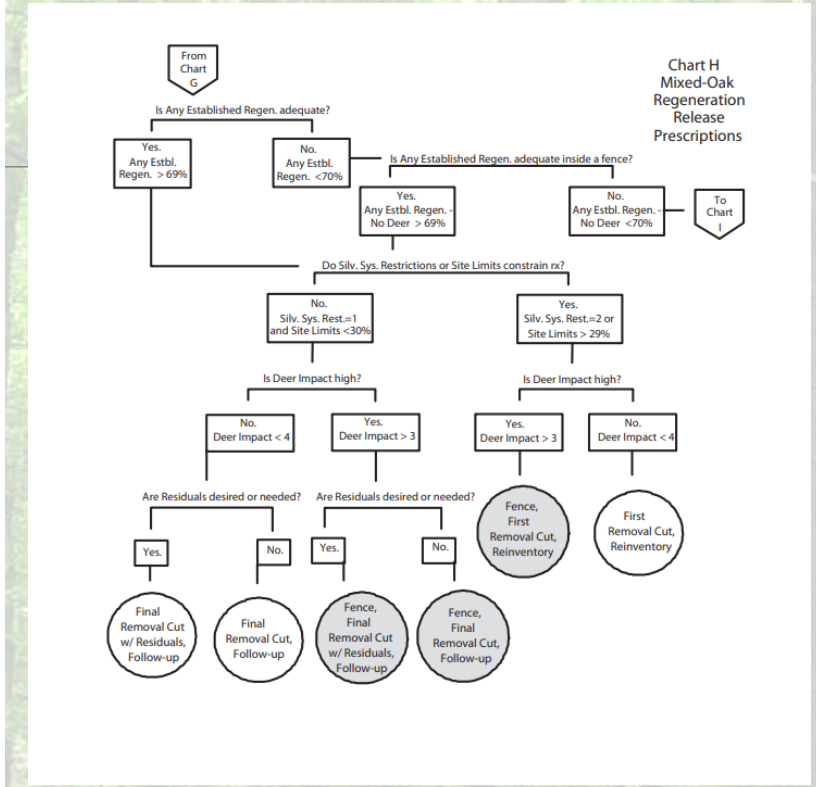
Forest Service

Northern Research Station

General Technical Report NRS-33

USDA

Prescribing Regeneration Treatments for Mixed-Oak Forests in the Mid-Atlantic Region



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Silviculture on State Forests

Typical harvest prescriptions

- Shelterwood – 2-stage
- Deferment – 10-20 BA/acre retention
- Thinning (crown, free, improvement)
- Clearcut
- Uneven-aged selection

Items considered when implementing sale

- Economic feasibility
- SMZ width
- Aesthetic buffers
- Access
- Adjacency
- Legacy trees
- Acceptable retention
- Acceptable advanced regeneration
- Specialized equipment requirements

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Economic Feasibility

Hardwood stumpage sales

- 100 MBF total, prefer 250 MBF/sale
- Minimum 2,500 BF/acre, prefer 3,500
- Trees <14” dbh should be incidental

Harvest contracts up to 2 years or more with extensions

Merchantability varies by logger and markets, but generally hardwood pulpwood is marketable

Precommercial / Non-commercial treatments

- Typically, <300 acres/year invasive treatments
  - Hoping to increase treatments
- Gypsy moth not a primary concern

RX Fire

- Prefer large units without including stands that will degrade
- Cannot use on current timber sale areas
- Prefer not to use on soon-to-be timber sale areas
- Challenging to implement with acceptable windows

Certification – since 2010

Multiple ecological indicators to meet
- Landscape level analysis
- Stand level features

HCVF management

FSC

SUSTAINABLE FORESTRY INITIATIVE

Requires investment in logger training

Values forest research

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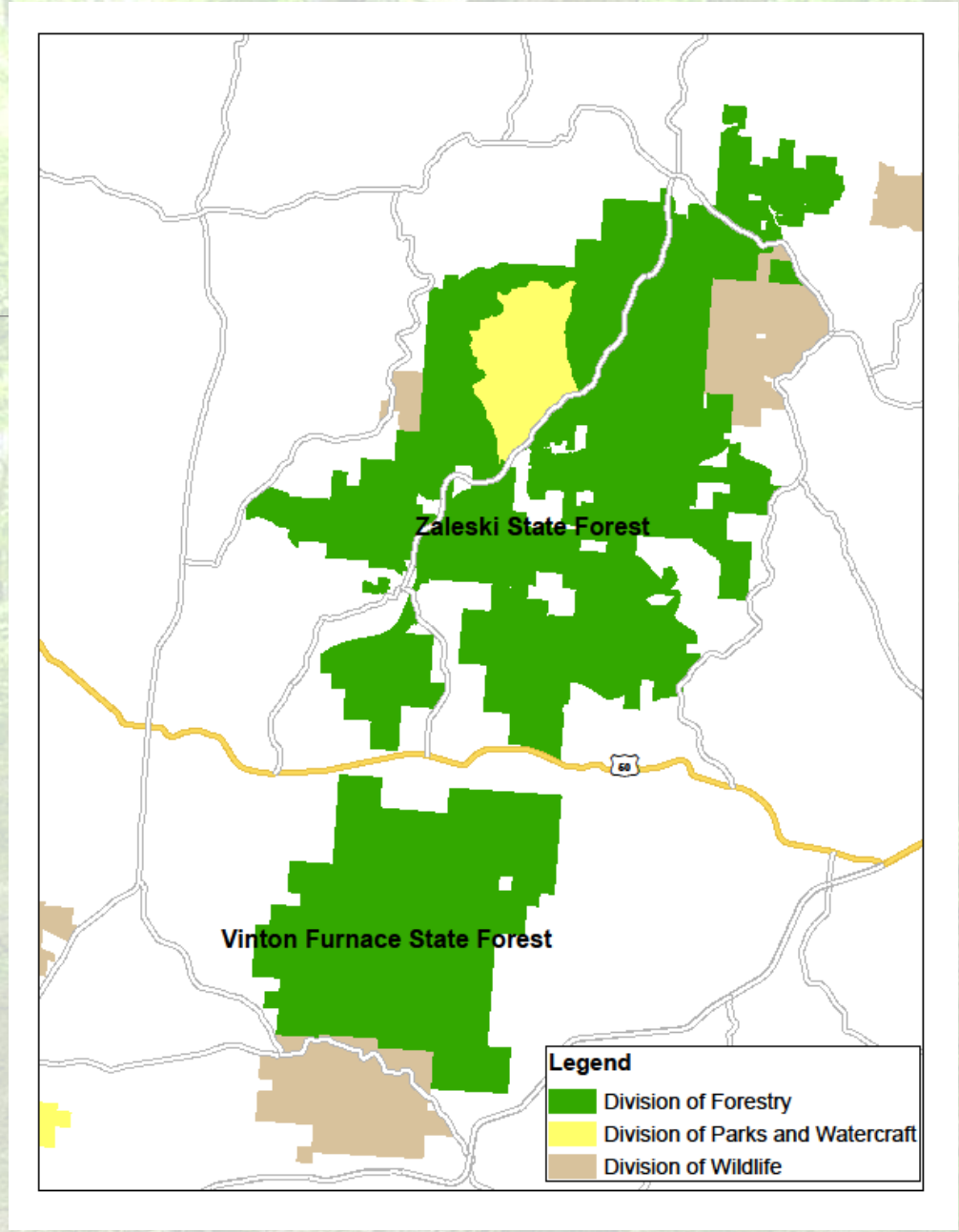
Zaleski State Forest

27,822 acres, second largest state forest

Recreation: backpack trail, bridle trails, horse camp, shooting range, hunters camp, hunting

Adjacent to Lake Hope State Park

Grouse and Turkey Management areas



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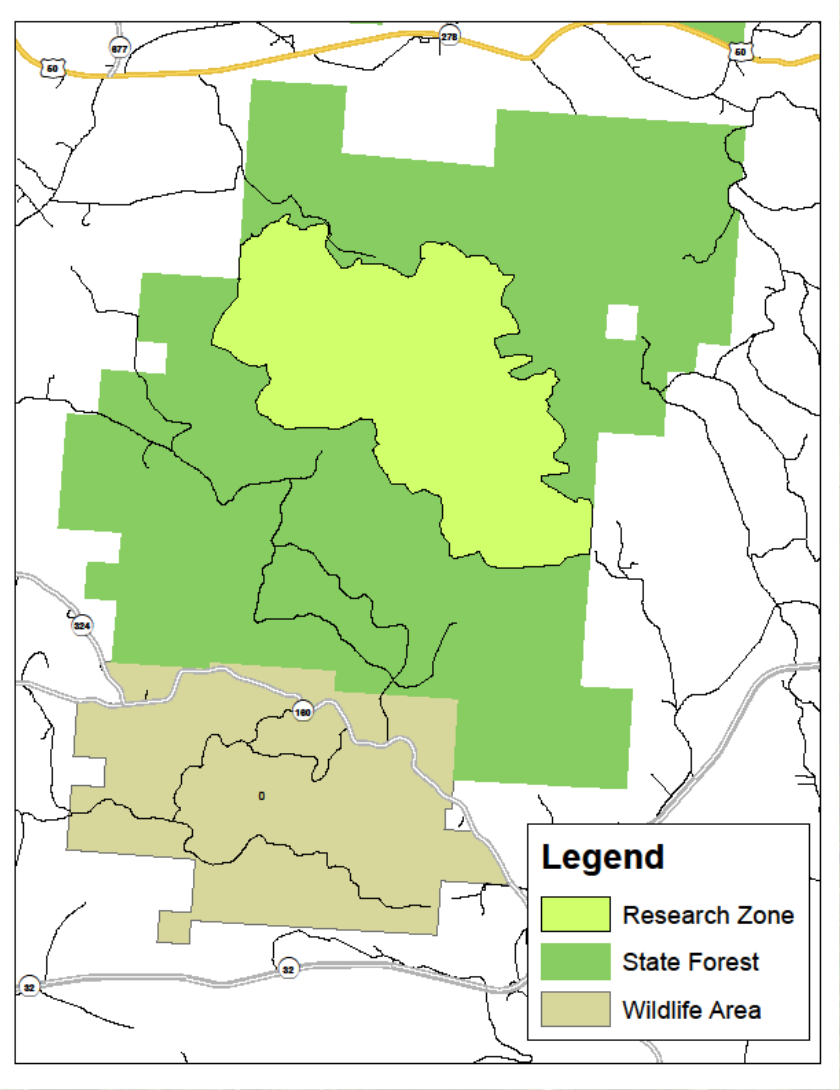
Vinton Furnace State Forest

15,849 acres total

- Research Zone
  - 2,882 acres
- State Forest
  - 9,393 acres
- Wildlife Area
  - 3,547 acres

USFS Research Station



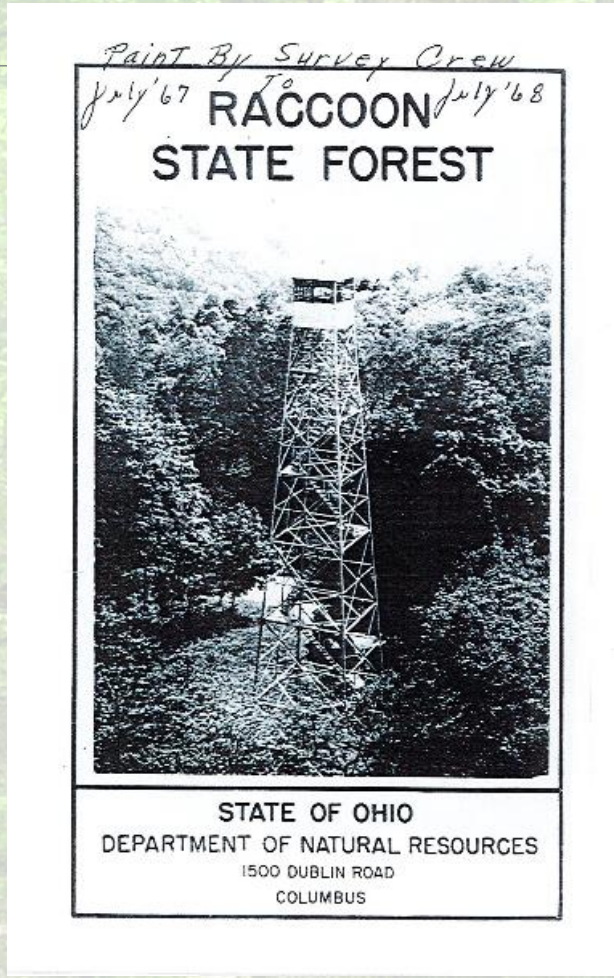
Land History

1930s- Resettlement Act pushed out remaining locals. Land was then owned by USFS.

Federal Government turned land over to state of Ohio and became Raccoon State Forest. (Southern area) 1939-1950s Raccoon state forest

Baker Wood Preserve Co. used it as company lands and later sold to Mead Paper Company in 1963.

Mead traded Raccoon SF land with state



Vinton Furnace Experimental Forest, established 1952

USDA Forest Service research station

Emmett Conway Sr. went to experimental forest in Arkansas and came back to Ohio and convinced his supervisor at Baker Wood Preserving Co. to establish an experimental forest in Ohio.

Originally set aside 1,200 acre tract

Vinton Furnace State Forest, established 2010

State of Ohio obtained private and federal assistance to purchase lands in 2010.

- American Electric Power
- The Nature Conservancy
- USDA Forest Service
- The Conservation Fund

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Vegetation

Primarily oak hickory dominant forest type

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Wildlife

Reintroduction of wild turkeys. Ten birds released in 1956 and eight more in 1957.

Bobcat population

Timber rattlesnake population

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Early forest research studies

Stand density study

Gingrich 1967, Stocking chart for upland hardwoods

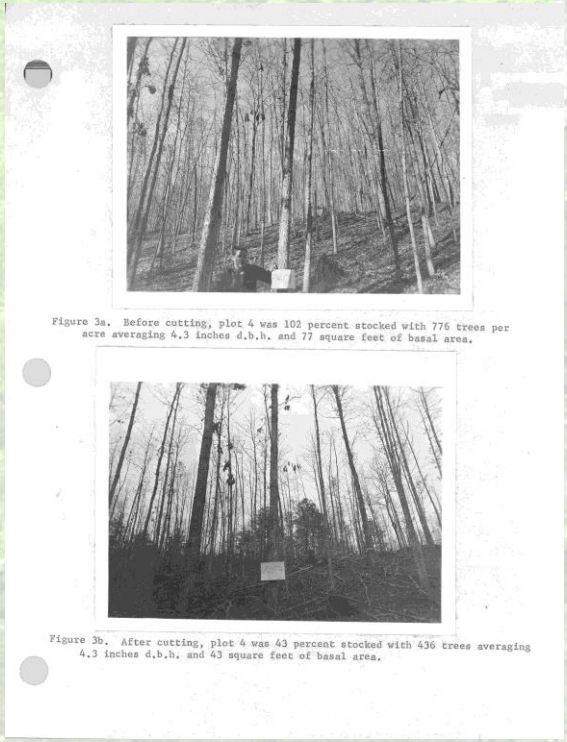
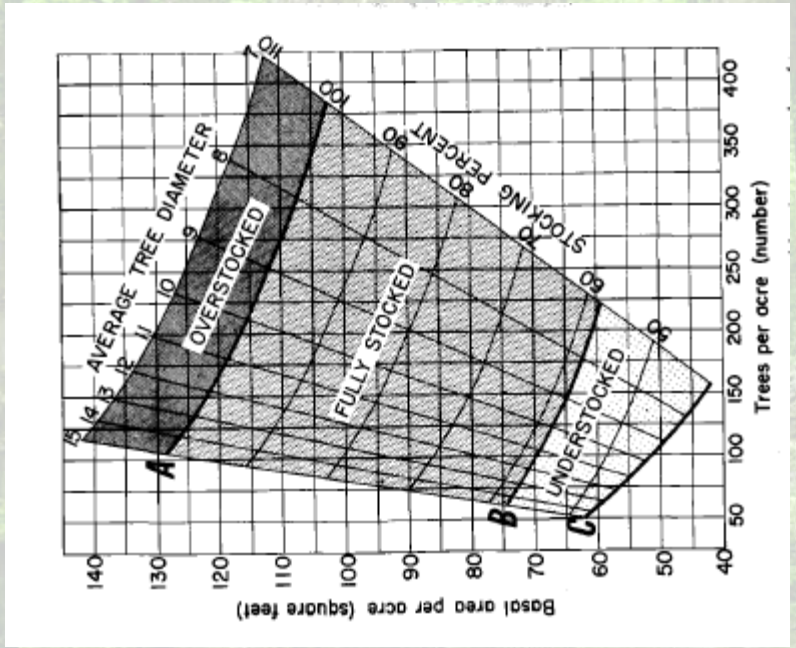


Figure 3a. Before cutting, plot 4 was 102 percent stocked with 776 trees per acre averaging 4.3 inches d.b.h. and 77 square feet of basal area.

Figure 3b. After cutting, plot 4 was 43 percent stocked with 436 trees averaging 4.3 inches d.b.h. and 43 square feet of basal area.



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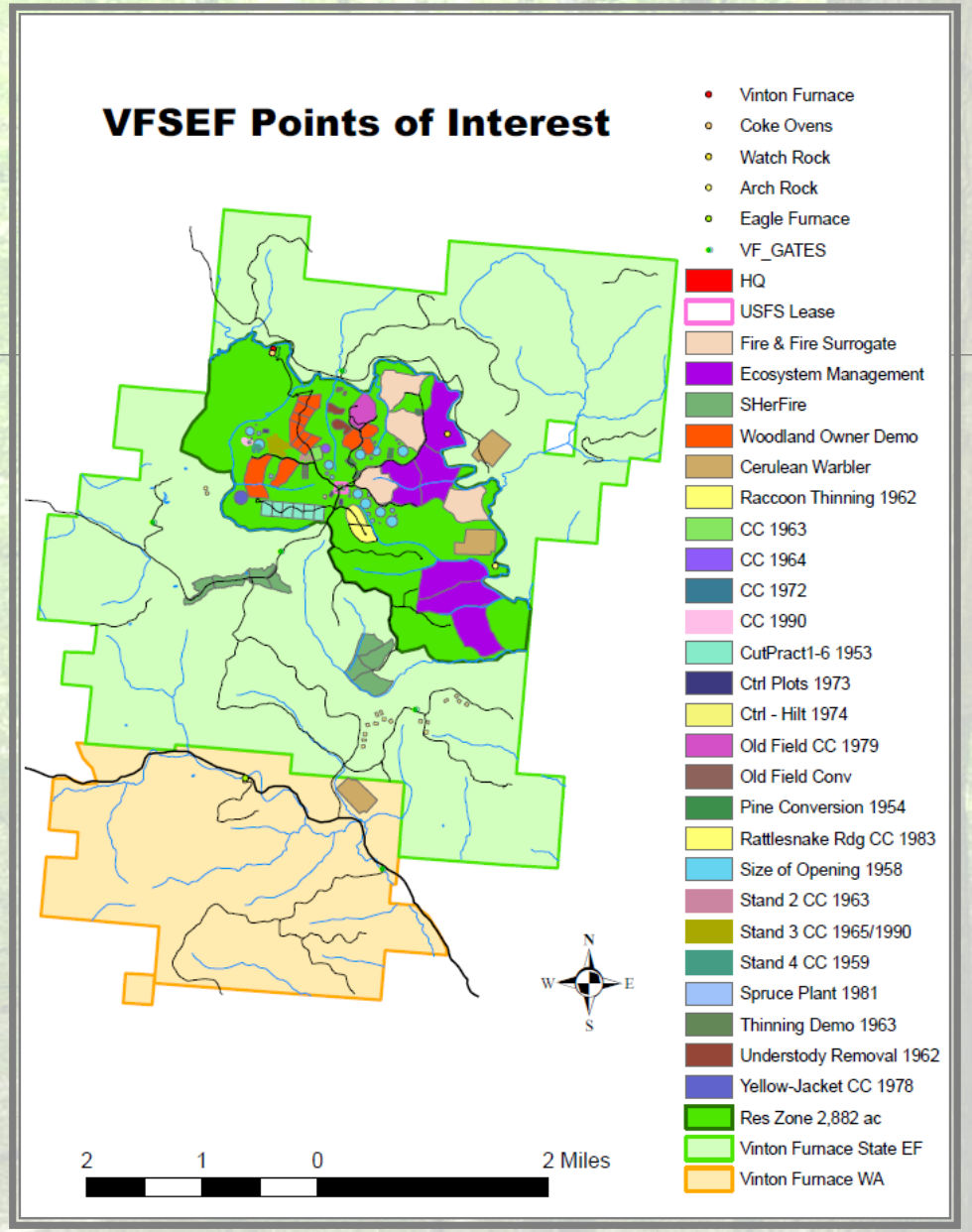
Recent/ Current Research

USDA Forest Service

Ohio University

Ohio State University

Division of Wildlife



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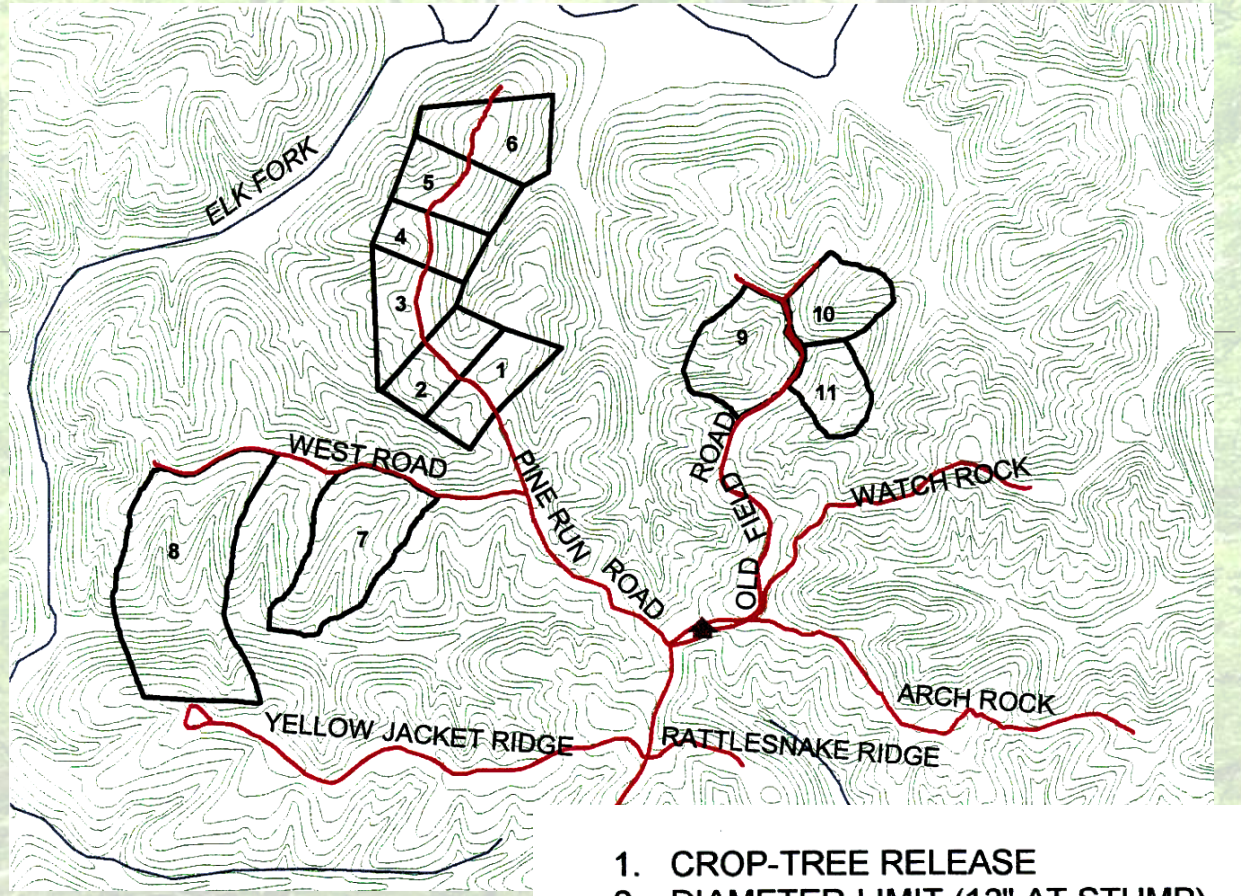
Education and Demonstration

Non-industrial private forest plots demo area



1. CROP-TREE RELEASE
2. DIAMETER-LIMIT (12" AT STUMP)
3. CONTROL
4. HIGH-GRADE
5. CLEAR-CUT
6. DEFERRED CUTTING
7. SINGLE-TREE SELECTION
8. PATCH CLEAR-CUT
9. GROUP SELECTION
10. SHELTERWOOD
11. DIAMETER-LIMIT (SILVICULTURAL)

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A Day in the Woods Outreach Program

OSU Extension takes lead on program

Started 2012

Topics: managing woodlots, tree id, wildlife habitat, botany/ecology programs

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Annual Use of Facility

Average of 850 people/ year since 1992

Includes public outreach, meetings, and trainings

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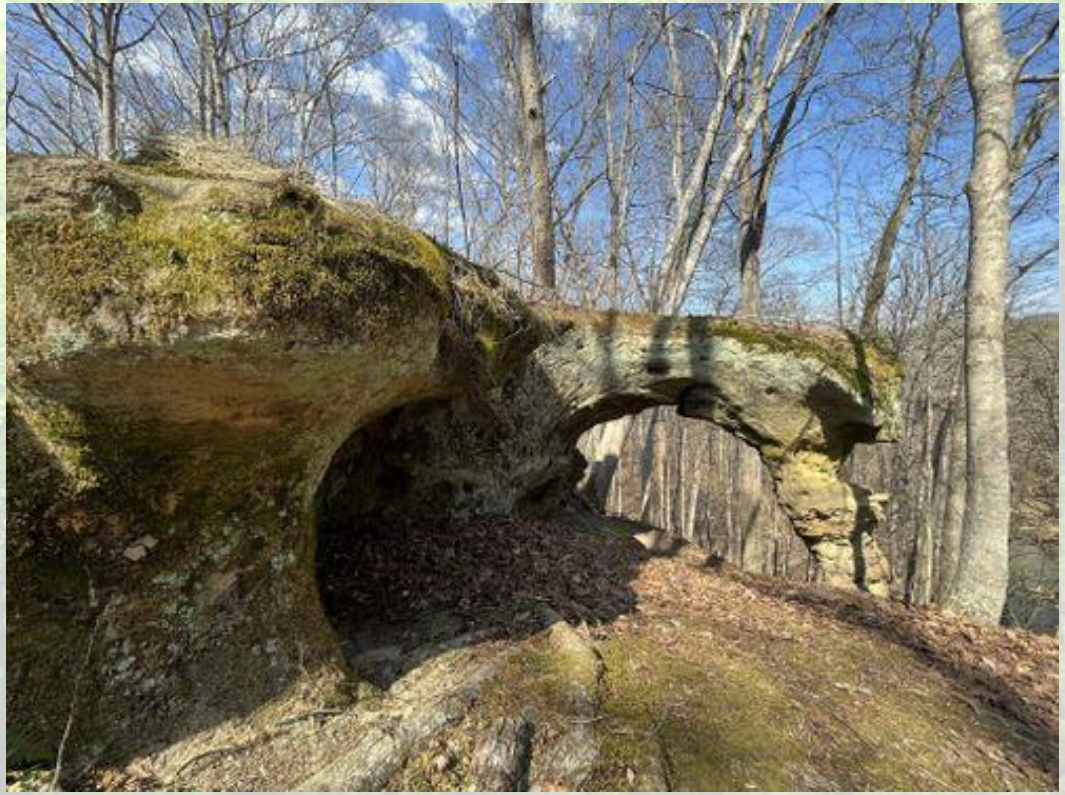
Neat Features within Vinton Furnace SF



Arch Rock

Watch Rock

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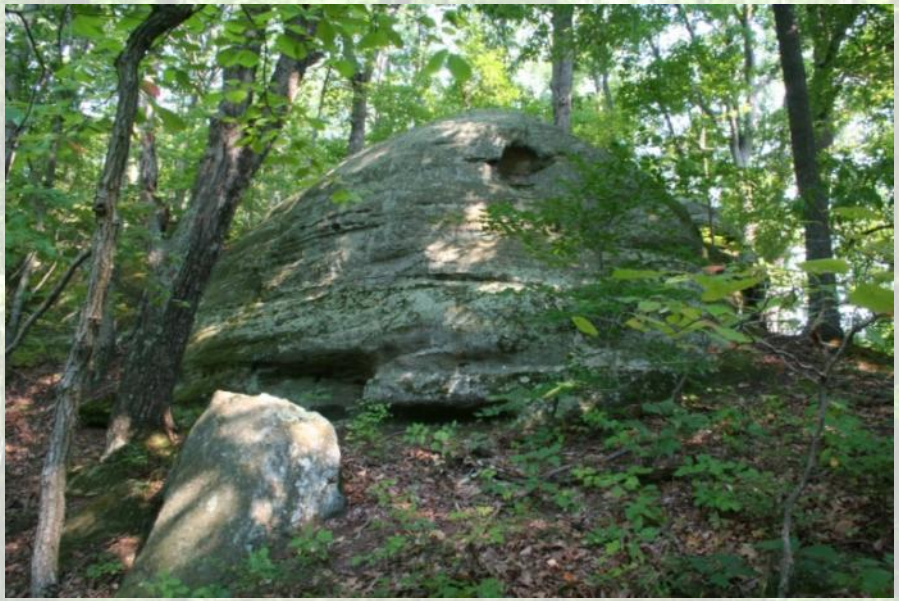
Questions?



Watch Rock