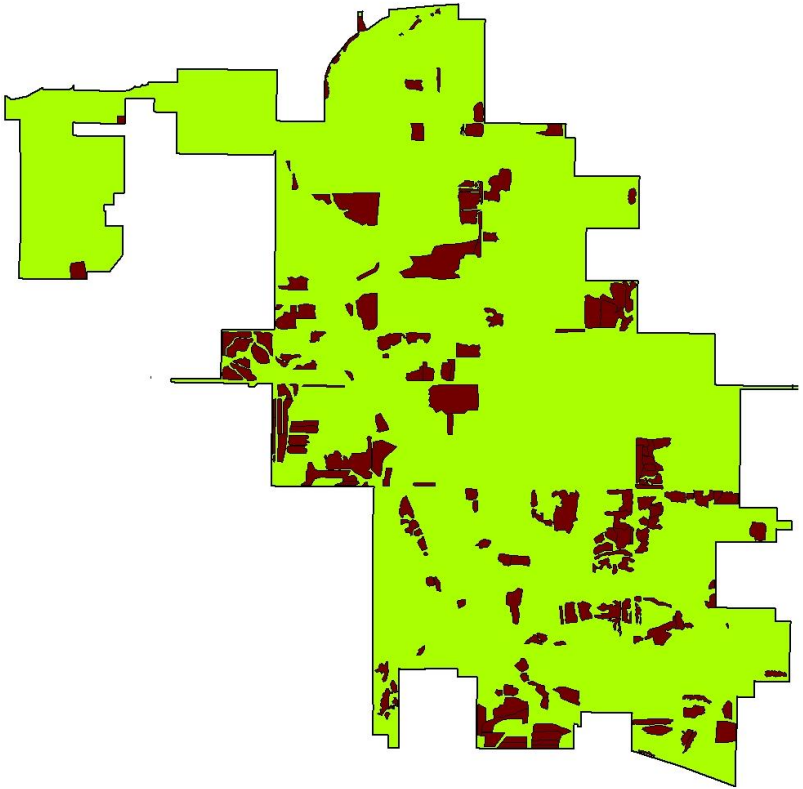
METROPARKS TOLEDO

# OAK OPENINGS PRESERVE PINE MANAGEMENT PLAN: 2018-2019

10/24/2018

# OAK OPENINGS PRESERVE (4,180 acres)

481 acres of non-native conifers (pine and spruce) planted from 1930s until 1980s



<u>How much was planted?</u>

- 12% of park
- Same area as Wildwood Preserve

<u>Why were they planted?</u>

- Best management practice (at the time)
- Soil stabilization
- Revenue for park operations

# OAK OPENINGS PRESERVE: PINE MANAGEMENT TIMELINE

1990 to 2001: No management

2002 to 2006: 157 acres thinned or removed

2010 Tornado: 55 acres thinned or removed

Today: 395 acres of planted conifers remain (many stands are rapidly declining)

# PINE MANAGEMENT PLAN: WHY NOW?

- Pine stands are reaching the end of their natural life
- If we wait:
  - pine stands will collapse
  - future management will become cost prohibitive

# PINE MANAGEMENT PLAN: OBJECTIVES

- Salvage timber from dead & collapsed pine stands
- Restore Oak Openings habitat
- Promote the health and vigor of culturally significant pine stands

All proceeds from the sale will be used to manage and restore sites at Oak Openings Preserve

# PINE MANAGEMENT PLAN: BENEFITS

- Hazard Mitigation
- Aesthetics
- Park Access
- Invasive Species Management
- **Wildlife Habitat**
- **Ecological Benefits**

# BENEFITS: OAK REGENERATION

Oak regeneration after pine removal

(Photo: Reed Rd. & Wilkins Rd.)

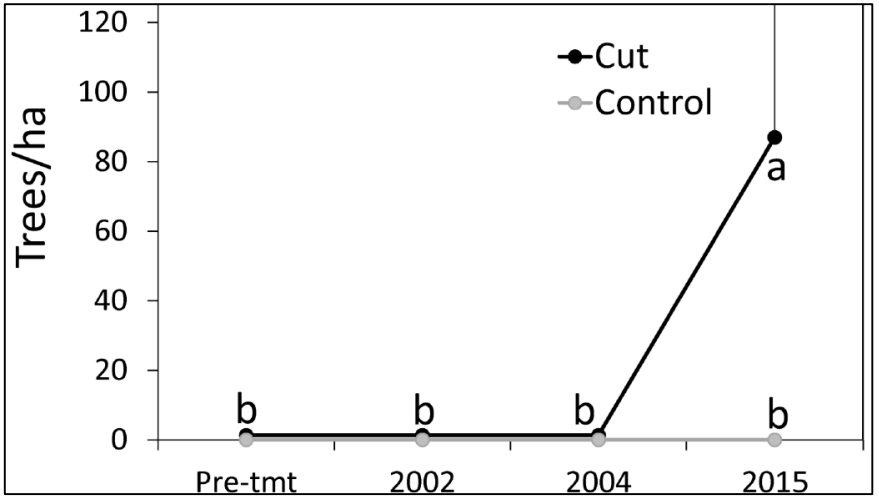
ELSEVIER

Biological Conservation

Volume 212, Part A, August 2017, Pages 265-273

Restoring and conserving rare native ecosystems: A 14-year plantation removal experiment

Scott R. Abella [a], Timothy A. Schetter [b], Timothy L. Walters [c]



# BENEFITS: NATIVE PLANT DIVERSITY

Native plant diversity increases after pine removal

(Photo: Reed Rd. & Wilkins Rd.)

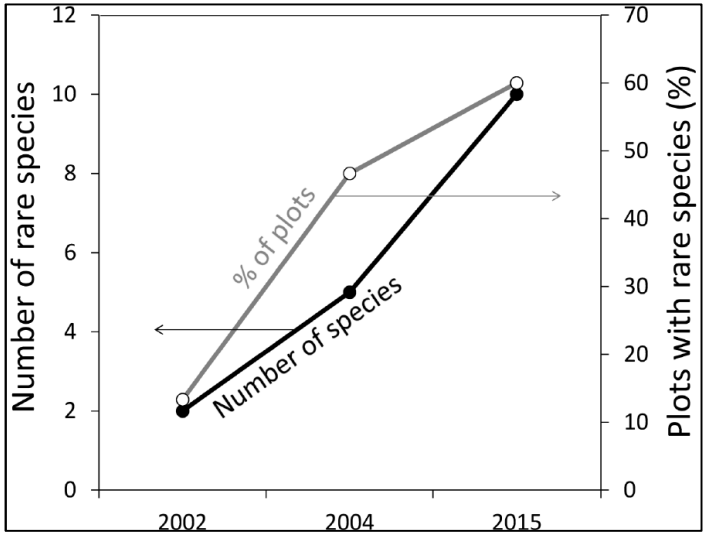
ELSEVIER

Biological Conservation

Volume 212, Part A, August 2017, Pages 265-273

## Restoring and conserving rare native ecosystems: A 14-year plantation removal experiment

Scott R. Abella [a], Timothy A. Schetter [b], Timothy L. Walters [c]

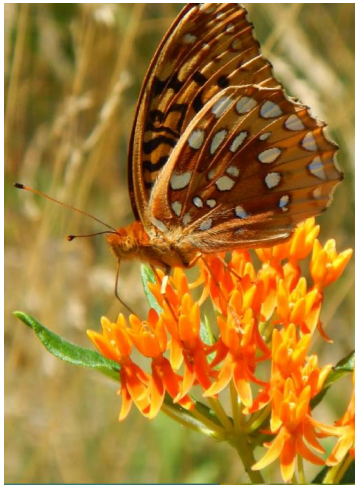


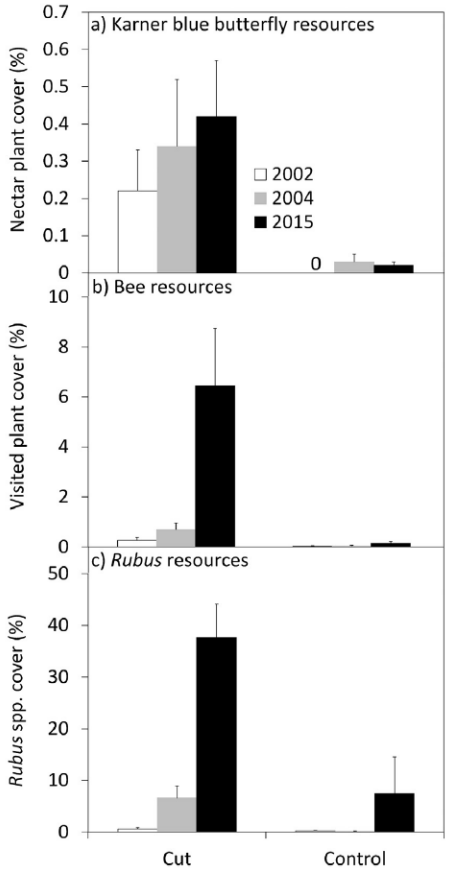
# BENEFITS: POLLINATOR HABITAT

Biological Conservation
Volume 212, Part A, August 2017, Pages 265-273

## Restoring and conserving rare native ecosystems: A 14-year plantation removal experiment

Scott R. Abella [a], Timothy A. Schetter [b], Timothy L. Walters [c]





# BENEFITS: REPTILE AND AMPHIBIAN HABITAT

“Pine plantations lack many of the attributes of suitable habitat for our native amphibians and reptiles and none of our native species are adapted to life in pine habitats.”

“Restoration of pine dominated areas, through thinning or removal, should increase the suitability of habitat for many of our native species.”

Gregory Lipps, Program Manager
Amphibian & Reptile Conservation
Ohio Biodiversity Conservation Partnership
The Ohio State University

Eastern Hog-Nosed Snake*

Woodland Box Turtle*

*Designated as ‘Species of Concern’ by Ohio Division of Wildlife
(photos: Ohio Division of Wildlife)

# BENEFITS: BIRD HABITAT (ESPECIALLY FOR SPECIES IN DECLINE)

Watch List Species*:

Henslow's Sparrow

Eastern Whip-poor-will

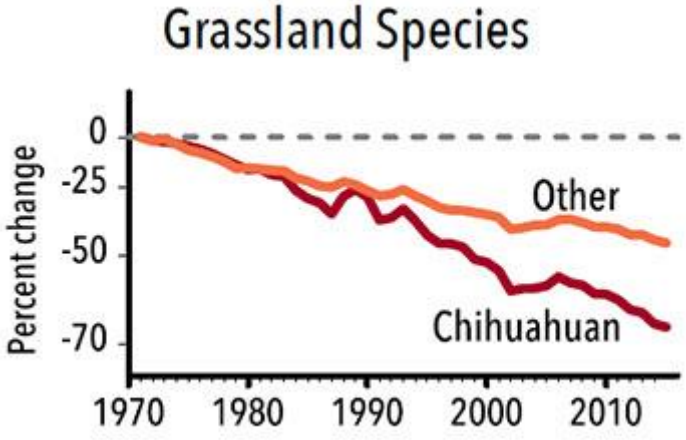
Red-headed Woodpecker

Common Species in Steep Decline:

Field Sparrow

Grasshopper Sparrow

Eastern Meadowlark

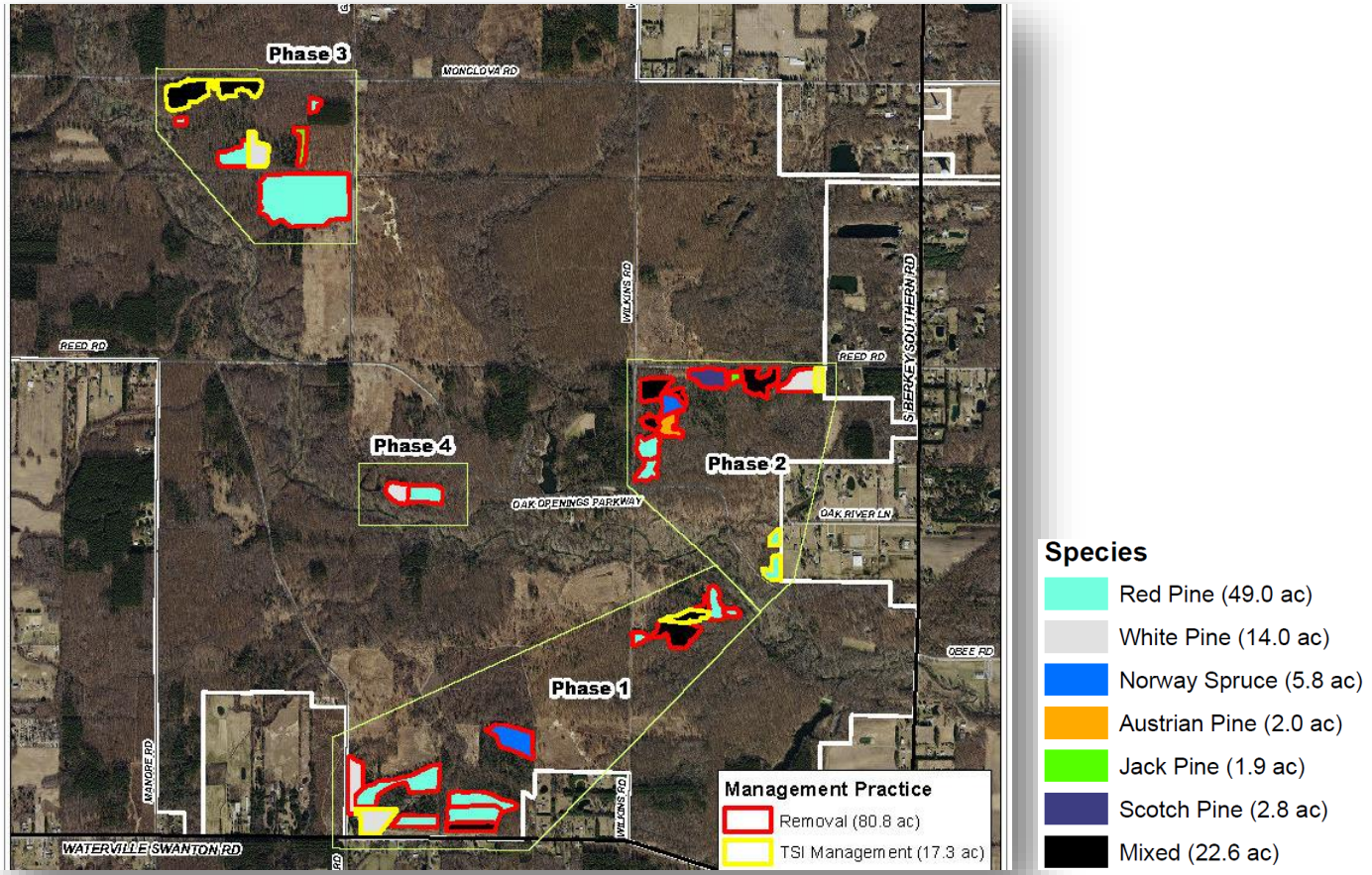



Data from U.S. Fish and Wildlife Service; Cornell Lab of Ornithology

All species found at Oak Openings Preserve
(photos: allaboutbirds.org)

* Watch List: includes bird species that are most at risk of extinction without significant conservation actions to reverse declines and reduce threats (North American Bird Conservation Initiative)

# PINE MANAGEMENT PLAN: 2018-2019 (approx. 100 acres)



# PINE MANAGEMENT PLAN: TIMBER STAND IMPROVEMENT VS REMOVAL

## Timber Stand Improvement:

Used to promote health & vigor of remaining pine stand through selective removal of suppressed or poorly formed trees

## Complete Removal:

Conversion to native oak woodlands, savannas and prairies

# PINE MANAGEMENT PLAN: EXAMPLE 1 (the “Spot”)

Red Pines: 4 acres (planted in 1955)

Removal: 0.5 acres killed by pine beetles

Remainder of stand: no management

# PINE MANAGEMENT PLAN: EXAMPLE 2 (Jeffers Rd. & Rt. 64)

Mixed Red & White Pines: 11 acres (planted 1952 – 1955)

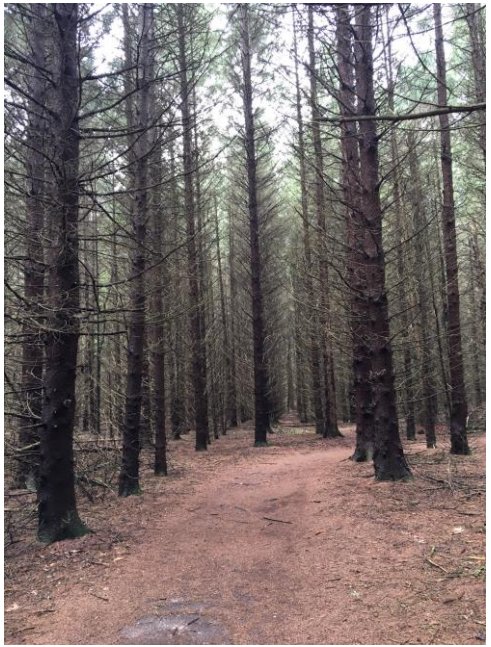
White Pines: Timbers Stand Improvement

Red Pines: Removal

# PINE MANAGEMENT PLAN: EXAMPLE 3 (Northwest of Ostrich Ln)

Norway Spruce: 4 acres (planted in 1955)

Removal



# PINE MANAGEMENT PLAN: WHAT TO EXPECT

- Public open house & guided walks: October 28
- Timber removal expected to begin: November 19
  - All work will be directly supervised by Metroparks personnel
  - Work will occur only when site conditions are suitable
  - Temporary trail closures and re-routes will be posted
  - Regular staff-led walks for members of the public
  - Cleanup & restoration to begin immediately after removal
- Timber removal expected to conclude: February 2019
  (may be extended to 2020 if needed based on site conditions)
- All proceeds from the sale will be used to manage and restore sites at Oak Openings Preserve