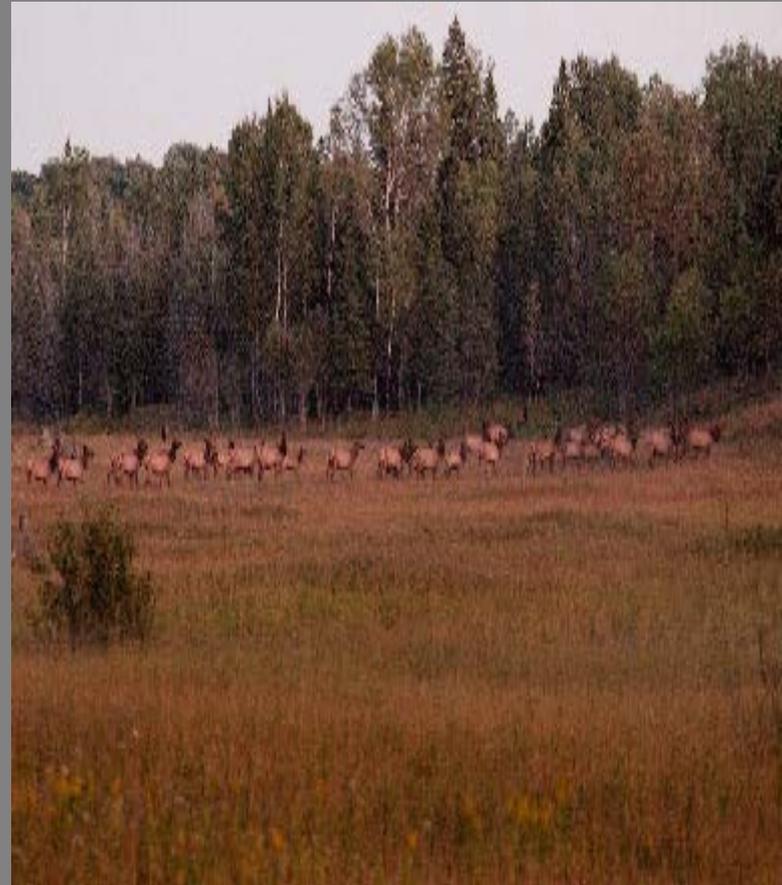


Prescribed Fire's role in Elk Management in Michigan



Prescribed Fire's role in Elk Management in Michigan

- Overview of the History of Elk in Michigan
- Prescribe Fire's Role in Elk Management



1918 Michigan Elk Introduction



Elk Range Habitat in 1918



History of elk in Michigan

- Late 1800's – elk extirpated
- 1918 - 7 animals released
- 1939 – 300 to 400
- 1958 – 900 to 1000
- 1964/5 – ~1500 – elk hunt
- 1975 – 200 elk



History of elk in Michigan

1975 Plan

- Goal 500-600 elk
- Increase habitat work
- Increase law enforcement
- Manage for viewing

2012 Plan

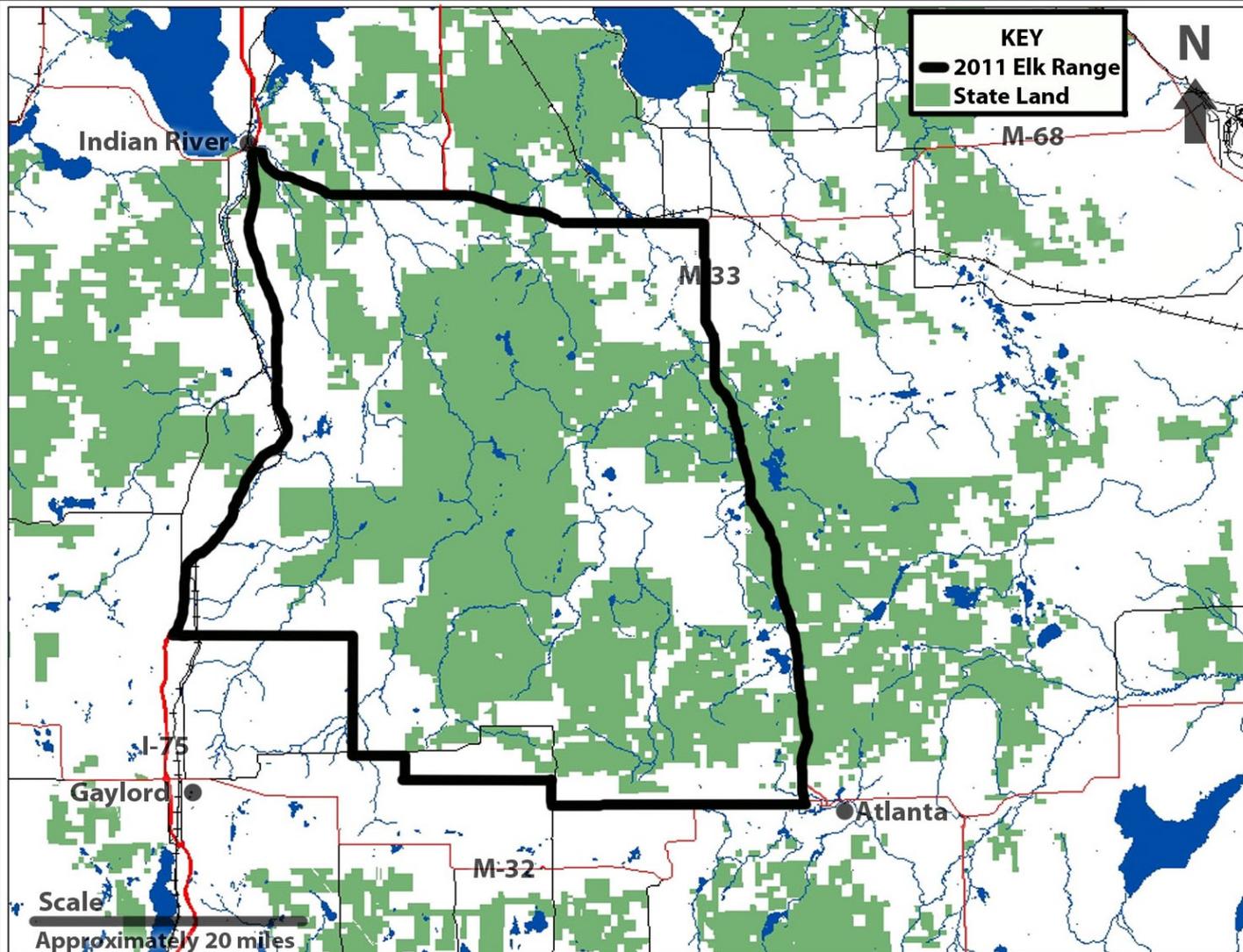
- Goal 500-900 elk
- Continue habitat work
- Continue hunting
- Increase public understanding

1984 Plan

- Goal 600-800 elk
- Control numbers through recreational hunting
- Maintain a viewable population with a high proportion of bulls

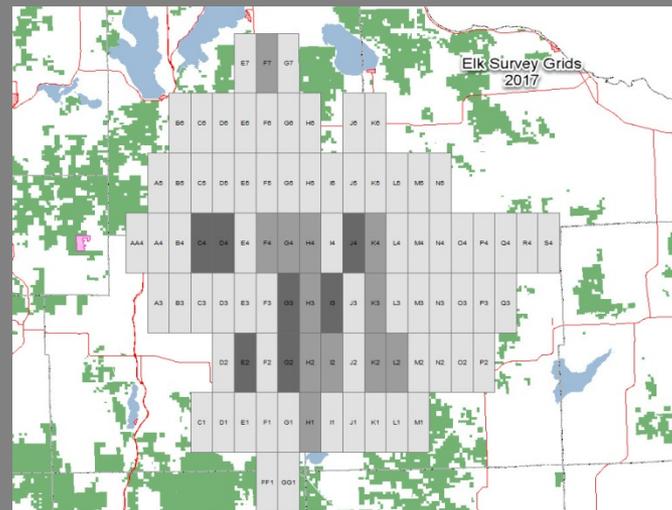


2017 Michigan Elk Range



Elk Population Survey

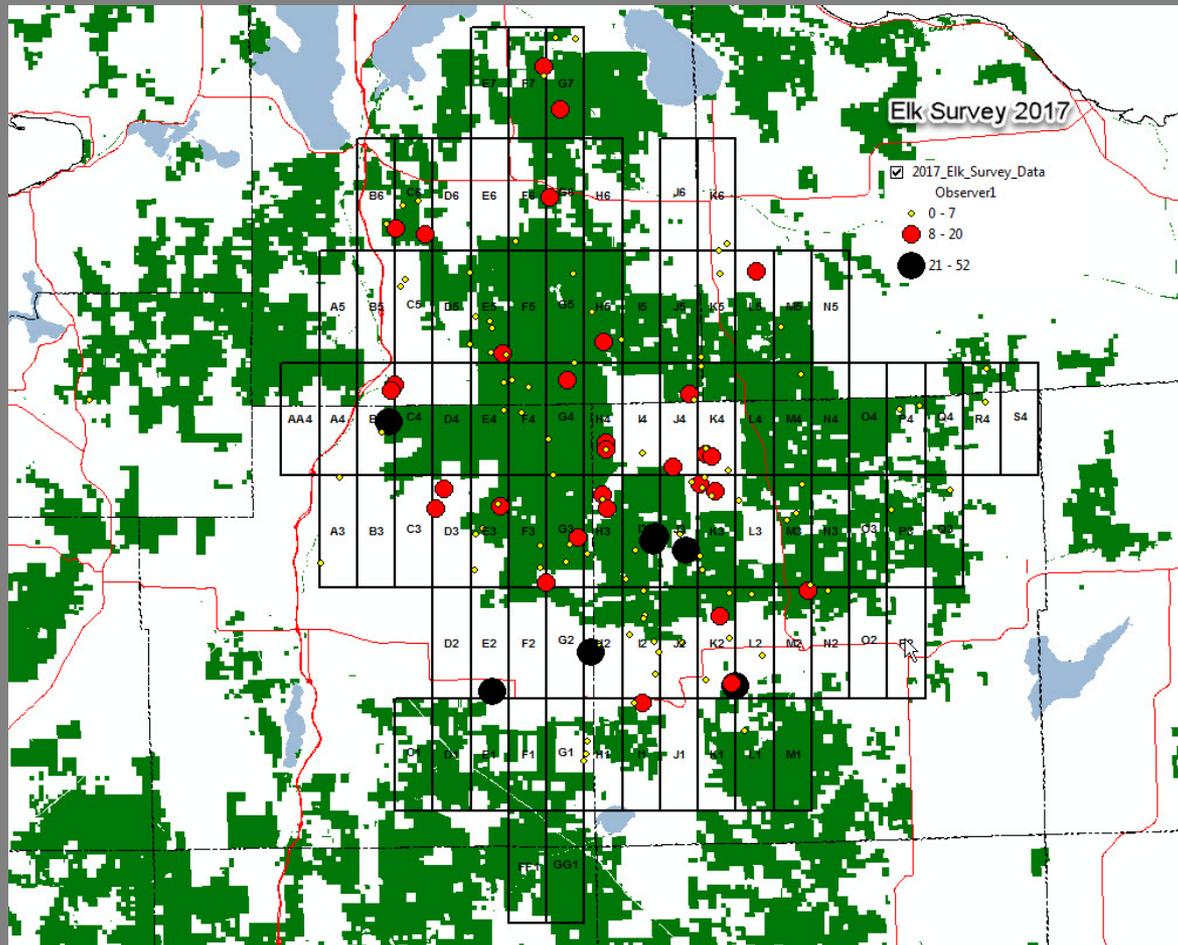
- Fixed wing with sightability model
 - Behavior (bedded, standing, both)
 - % Conifer cover
 - Group Size
 - Light conditions
 - Snow conditions



Elk Population Survey



Elk Population Survey

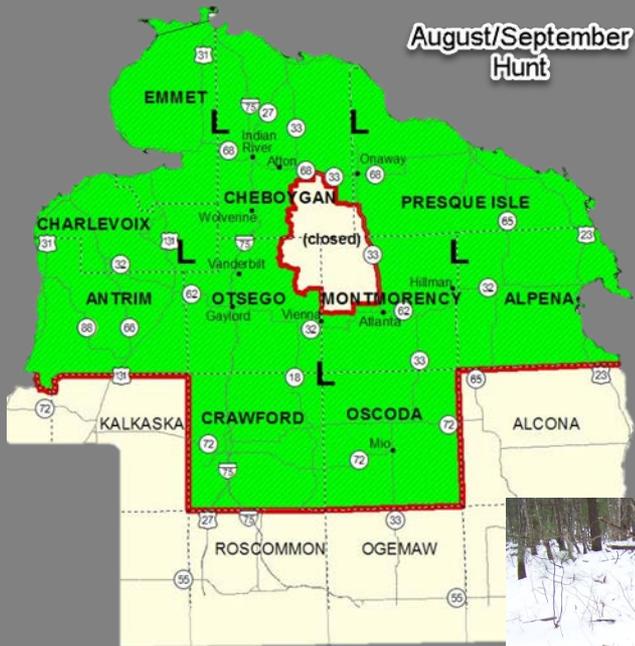


Elk Populations are controlled through hunting

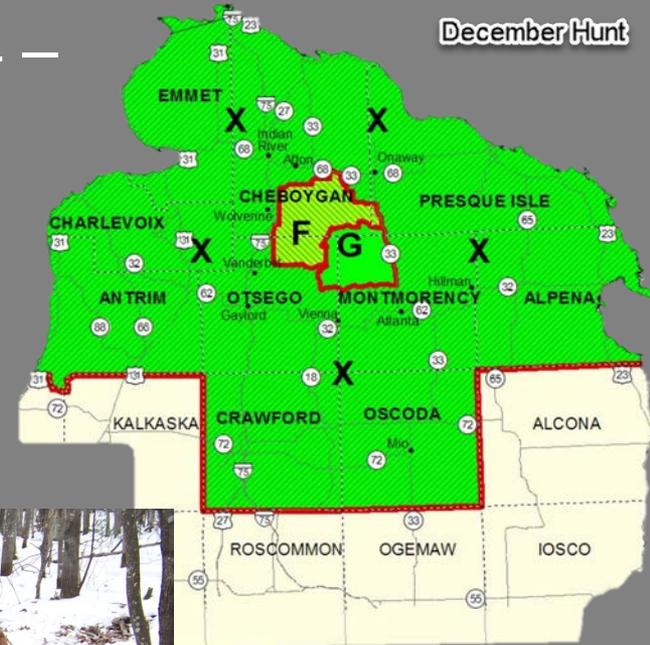
- 1964/1965 – 596 hunters took 452 elk



Elk Populations are controlled through hunting



Since 1984 –
over 4000
elk have
been
harvested



Michigan Elk Use both Forested and Non-Forested Areas



We have had many plans that stress the importance of opening management for elk

MICHIGAN ELK MANAGEMENT PLAN



JULY 1975

A CONCEPT OF MANAGEMENT
FOR THE
PIGEON RIVER COUNTRY



MICHIGAN DEPARTMENT OF NATURAL RESOURCES
November 2007

AN ANALYSIS OF MICHIGAN ELK MANAGEMENT ALTERNATIVES



APRIL 1976

ELK MANAGEMENT PLAN

Goal: A viable elk population, in harmony with
the environment, affording optimal
recreational opportunities.

1984

MICHIGAN ELK MANAGEMENT PLAN



2012



Prescribe burn's role in Elk Management

ELK Management in Michigan




Prescribe burning is important to these two goals

Goal 1:
Manage for a Sustainable Elk Population in Balance with Habitat

Goal 2:
Use Hunting as the Primary Method to Control Elk Numbers, Herd Composition and Distribution

Goal 3:
Enhance Public Understanding of Elk Management in Michigan

Goal 1 Manage for a Sustainable Elk Population in Balance with Habitat



- Monitor elk numbers, distribution and habitat
 - Aerial surveys will be performed every other January to determine elk numbers and distribution. The population will be maintained within the goal range of 500-900 elk so that crop damage, disease concerns and forest regeneration are minimized and recreational opportunities are maximized.
- Monitor Elk Herd Health
 - Testing of all hunter-killed elk for bovine tuberculosis is mandatory. Disease monitoring in elk will continue at the current level and will be evaluated annually and modified as necessary to maintain effectiveness.




- Focus habitat management efforts within the elk management area where the benefits are greatest and will have the greatest impact.
 - Forests on state-land will be managed to contain roughly 26 percent aspen trees, approximately 1000 acres of wildlife openings, and the total amount of open or upland brush acres will increase to 6.7 percent. Private landowners within the elk range will be offered information and assistance to help them meet both DNR and landowner needs.

Goal 3 Enhance Public Understanding of Elk Management in Michigan




- Coordinate with partners to develop and implement an elk communication strategy to ensure consistent and accurate information is available to the public concerning elk management.
 - Working with conservation partners, the DNR will provide information to facilitate successful viewing, and will designate viewing sites and make their locations known through printed materials and the internet. The DNR will prepare an annual report concerning elk management that will be available to everyone and will relate results of habitat management actions, surveys and hunts and identify potential management opportunities for the future.

For more information on elk or to view the complete management plan visit:
www.michigan.gov/elk



The Rocky Mountain Elk Foundation is a proud supporter of elk management in Michigan.
www.rmeff.org

Report All Poaching (RAP) Hotline:
1-800-292-7800

Prescribe burn's role in Elk Management



Fig. 17. Grassy openings are important for breeding and calving. Watercourse bottomlands produced high quality forage in spring, summer, and fall.



Fig. 18. Elk fed heavily on openings in early spring. Dense young pine in background served as escape and loafing cover. Note collar-marker on cow. Foch Lakes Airstrip, March, 1964.



Main three components of openings importance in Elk Management:

- Food
- Social – Breeding/Calving
- Elk Viewing



Elk Eat Different Foods:



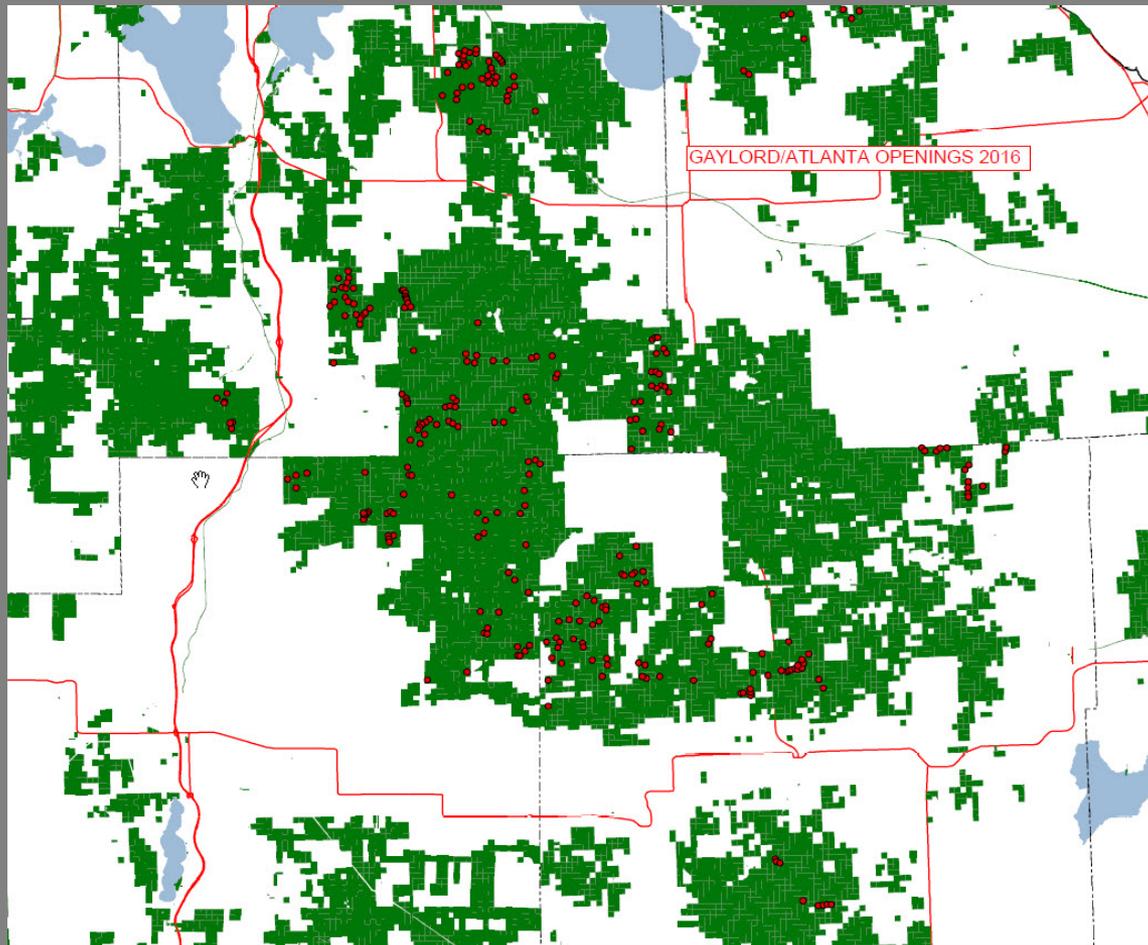
Grass and Forbs are especially important for food:

– In Summer....

– And Winter



Managed Openings within and near the Elk Range



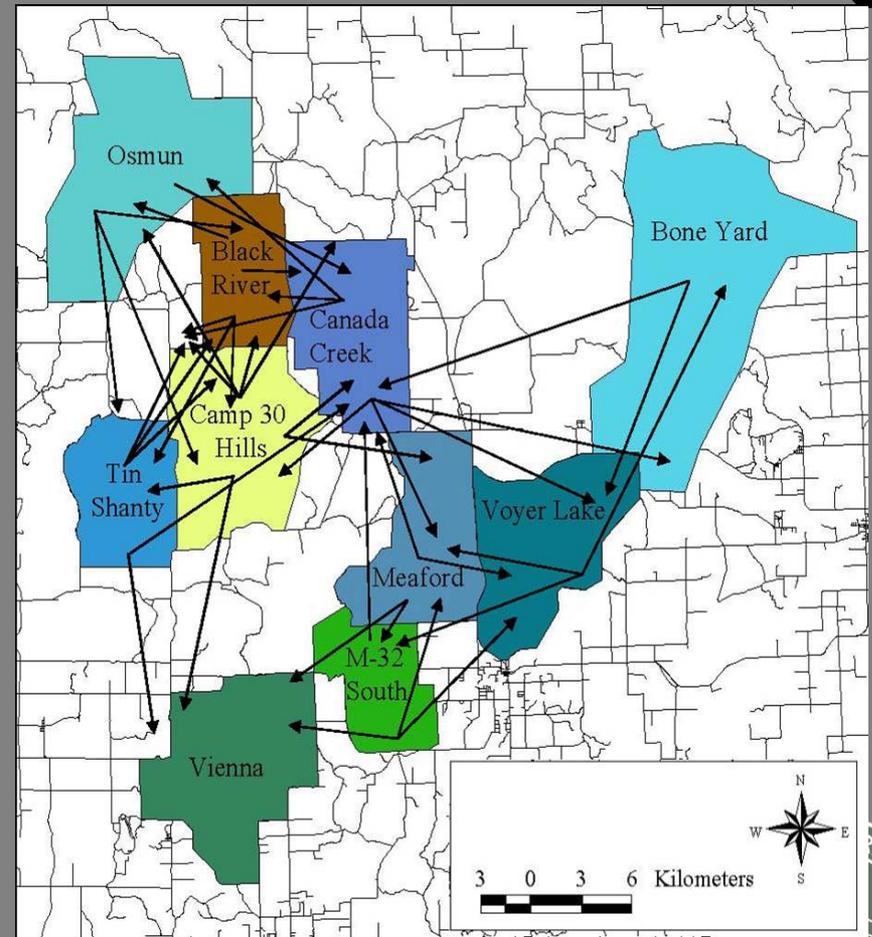
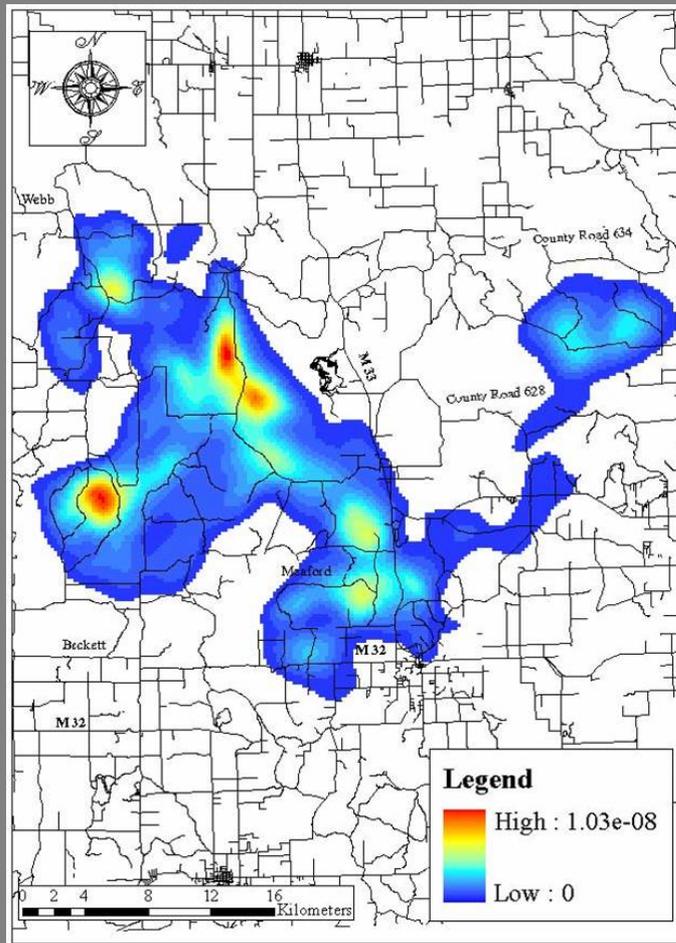
Elk Use Openings for Breeding and Calving



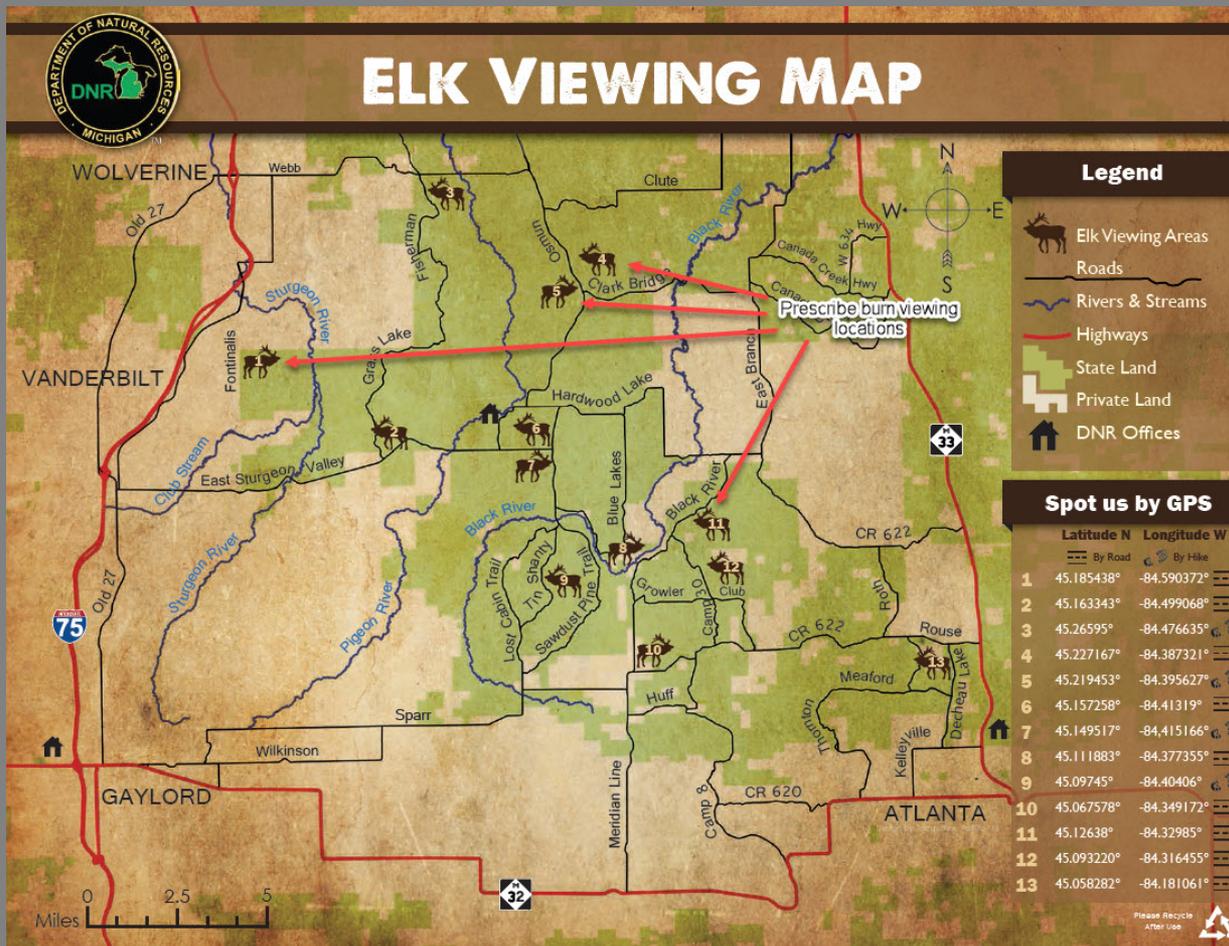
FRONTISPIECE. Rutting season in the Pigeon River country. Photograph by Bob Harrington.



Both breeding and feeding contribute to elk movements.



Elk Viewing



Utilization of prescribe fire in elk openings management

• Year	Prescribe burns acres	Total	%
• 2013	500 acres	2156	23%
• 2014	1345	3498	39%
• 2015	953	3234	30%
• 2016	829	3077	27%
• Average	907 acres	2991	30%

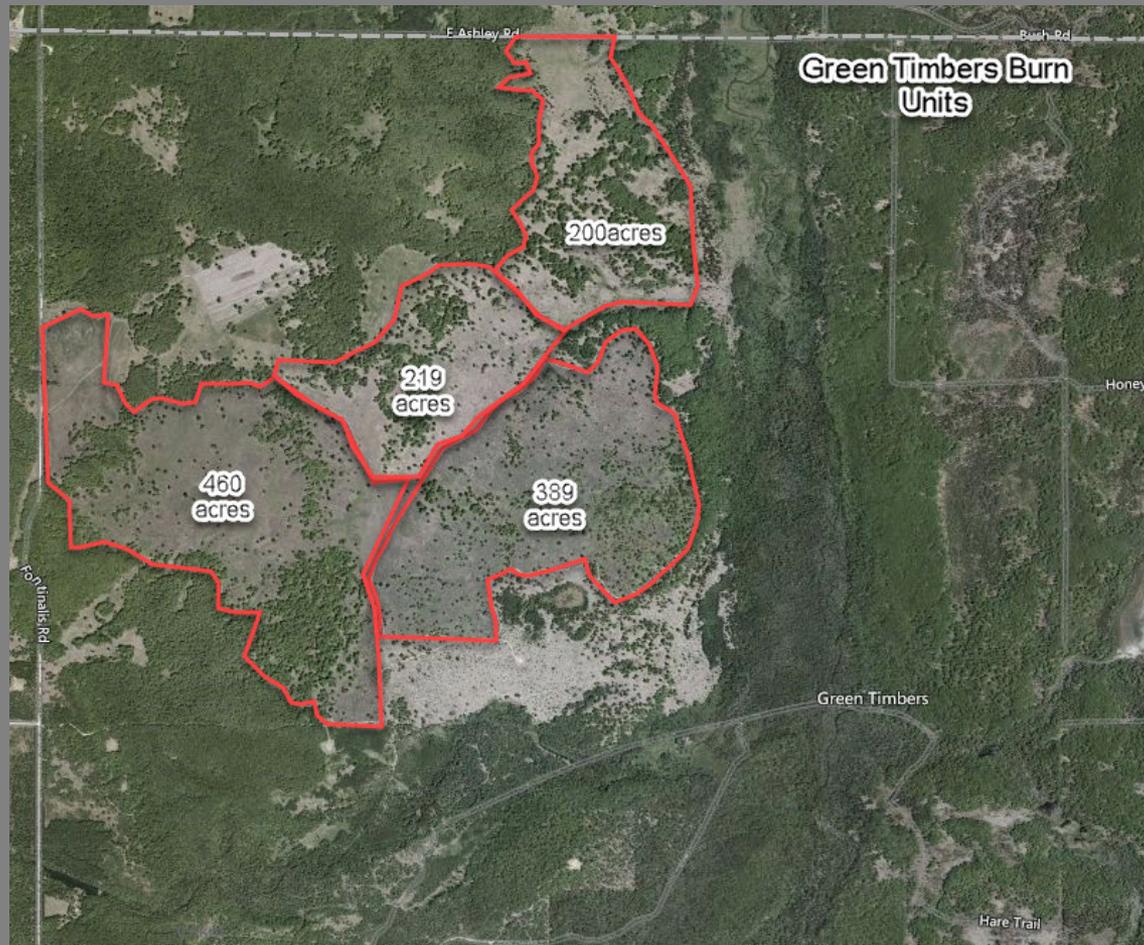


Why use prescribe fire as a tool for openings management for elk?

- Manage large blocks of openings
- Able to manage where not feasible mechanically
- Complement or in concurrence with other management
- Elk Viewing
- Low Cost
- Compliments other species management



Large Burn Complexes – Green Timbers



Large Burn Complexes – Green Timbers



Large Burn Complexes – Green Timbers



Able to manage where not feasible mechanically-Atlanta Burns



Able to manage where not feasible mechanically-Atlanta Burns

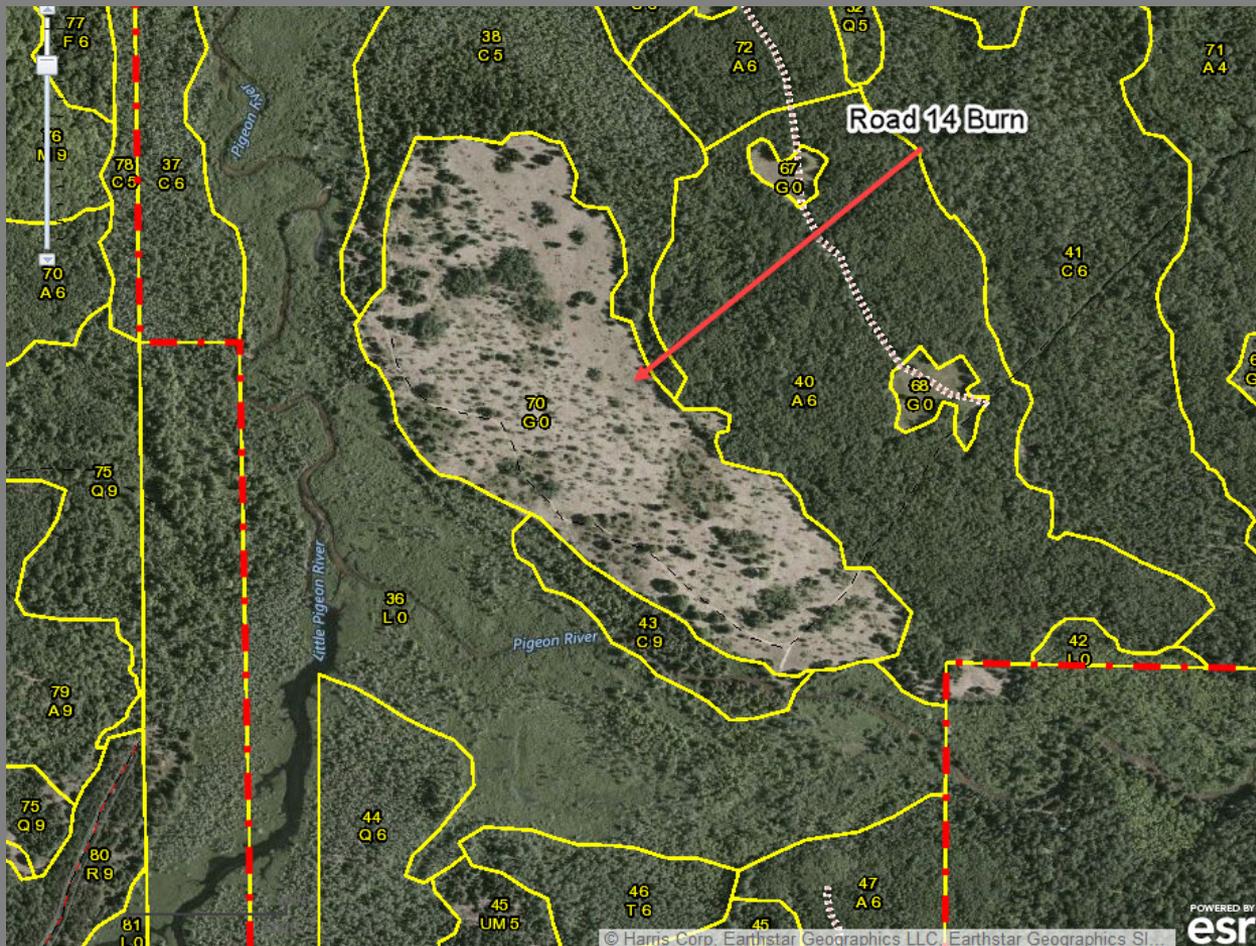


Able to manage where not feasible mechanically-Atlanta Burns

16 days later



Enhance Current Management – Road 14 opening



Enhance Current Management – Road 14 opening



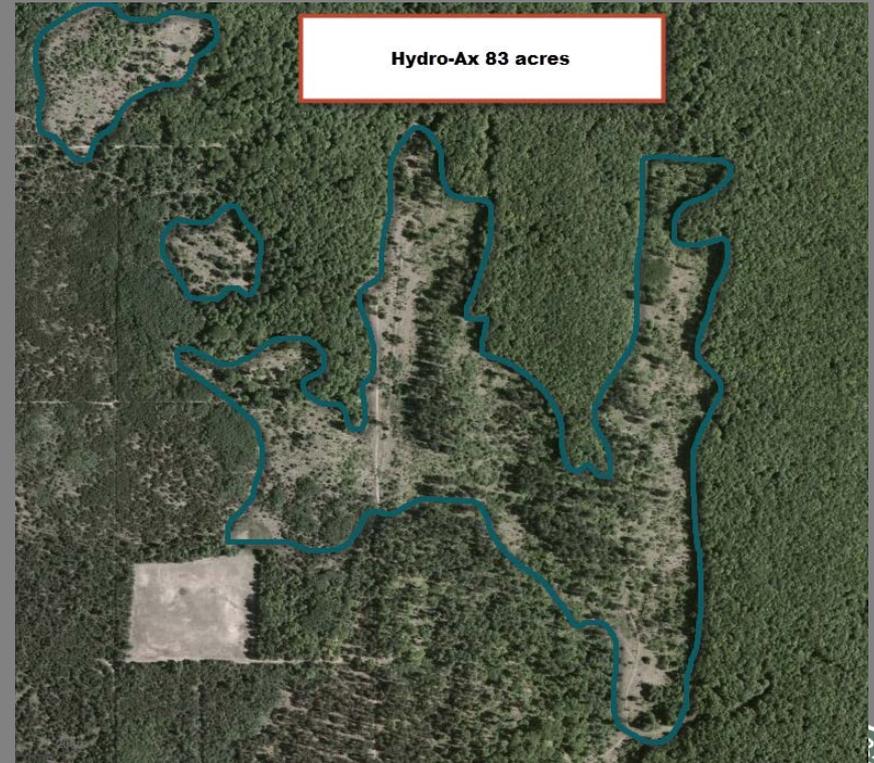
Enhance Current Management – Road 14 opening



Enhance Current Management – Road 14 opening



Enhance Current Management – Bobcat Trail



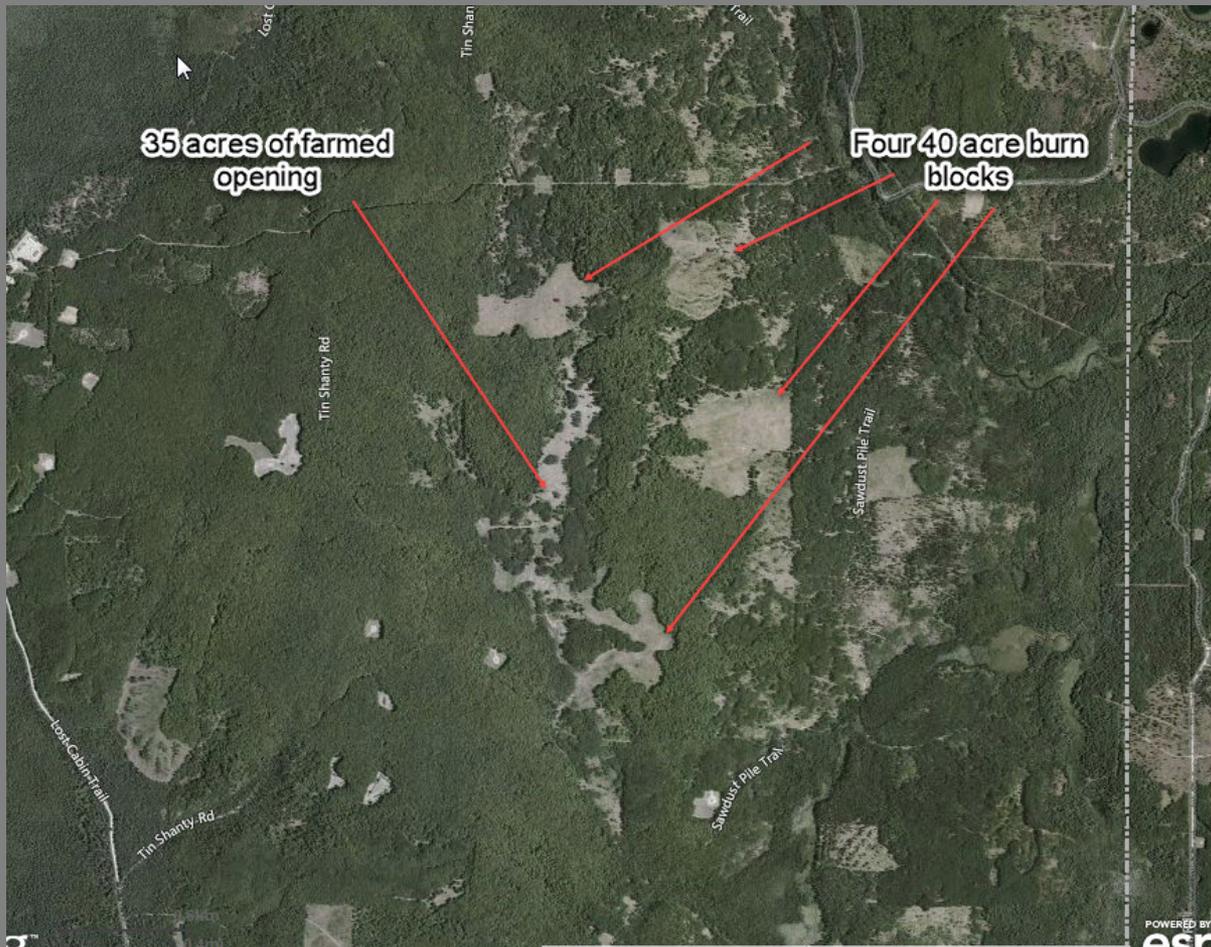
Enhance Current Management – Bobcat Trail



Enhance Current Management – Bobcat Trail



In conjunction with other management



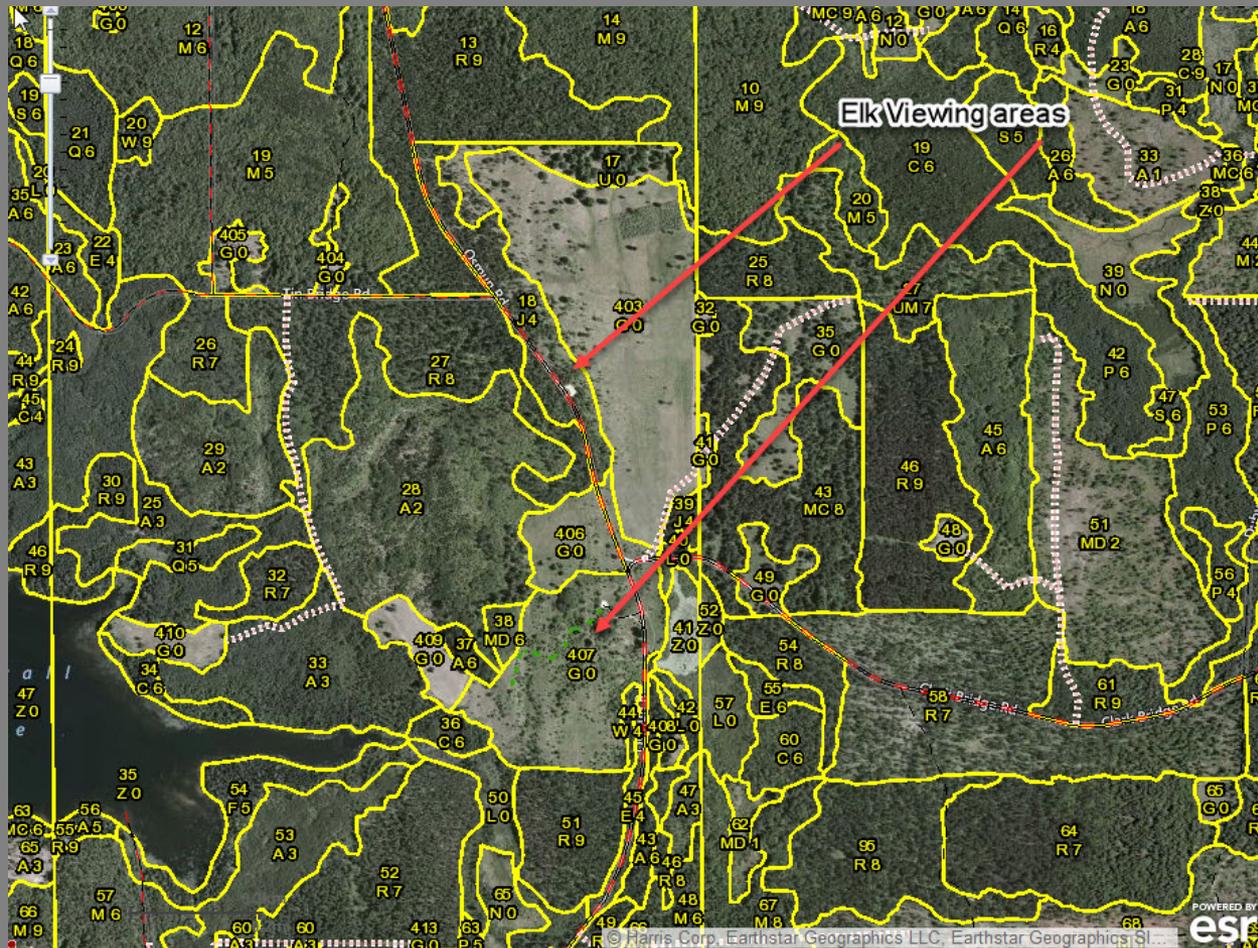
In conjunction with other management



In conjunction with other management



Elk Viewing – CCC Fields



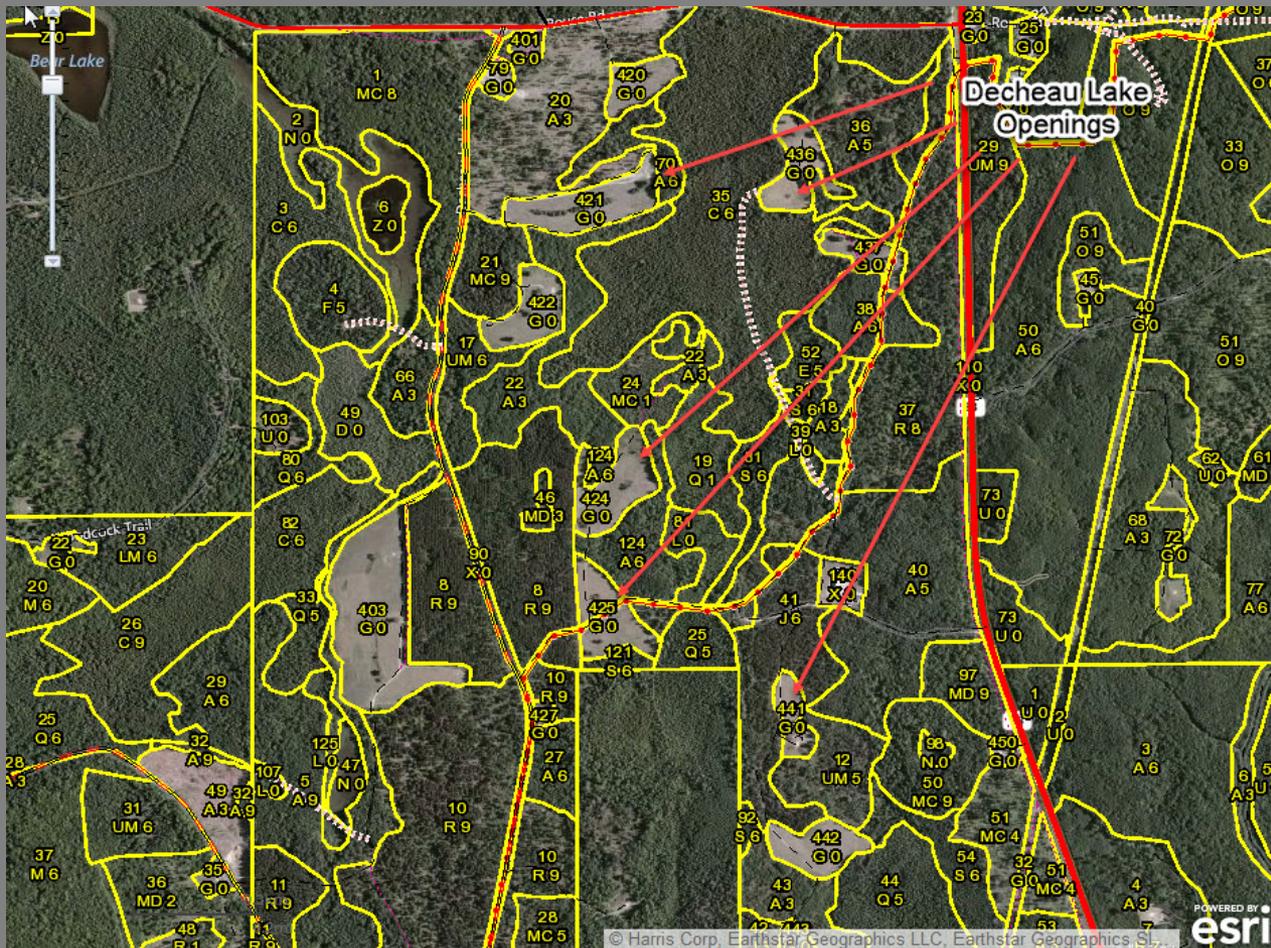
Elk Viewing – CCC Fields



Elk Viewing – CCC Fields



Low Cost – Decheau Lake Openings



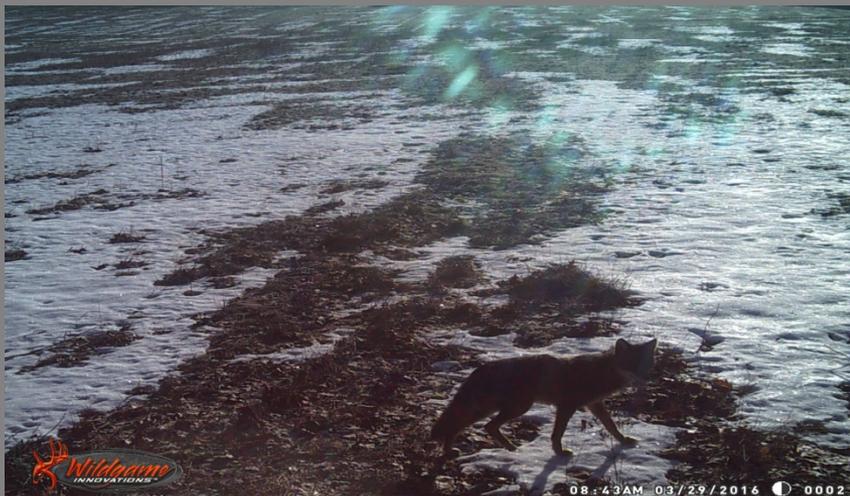
Low Cost – Decheau Lake Openings



Low Cost – Decheau Lake Openings



Compliments other species management



Questions?



08:40PM 08/17/2016 13

Contact Information

- Mark Monroe 989-732-3541 Ext 5431
monroem@michigan.gov



Thank You



www.michigan.gov/wildlife



11:44AM 08/07/2016 31