

# DEER MANAGEMENT, FOREST MANAGEMENT & COOPERATIVES

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# WILDLIFE AND FORESTRY MIX



**HERD MANAGEMENT**  
**HABITAT MANAGEMENT**  
**HUNTER MANAGEMENT**  
**HERD MONITORING**

# 1. HERD MANAGEMENT

## **Antlerless deer:**

- how many – per year, per person, per area?
- where – which areas of property?
- when – all season, late season only?
- which ones – all ages or adults only?
- penalties for harvesting button bucks?

## **Antlered bucks:**

- buck harvest restrictions (age, spread, score)
- management buck guidelines
- guest policies

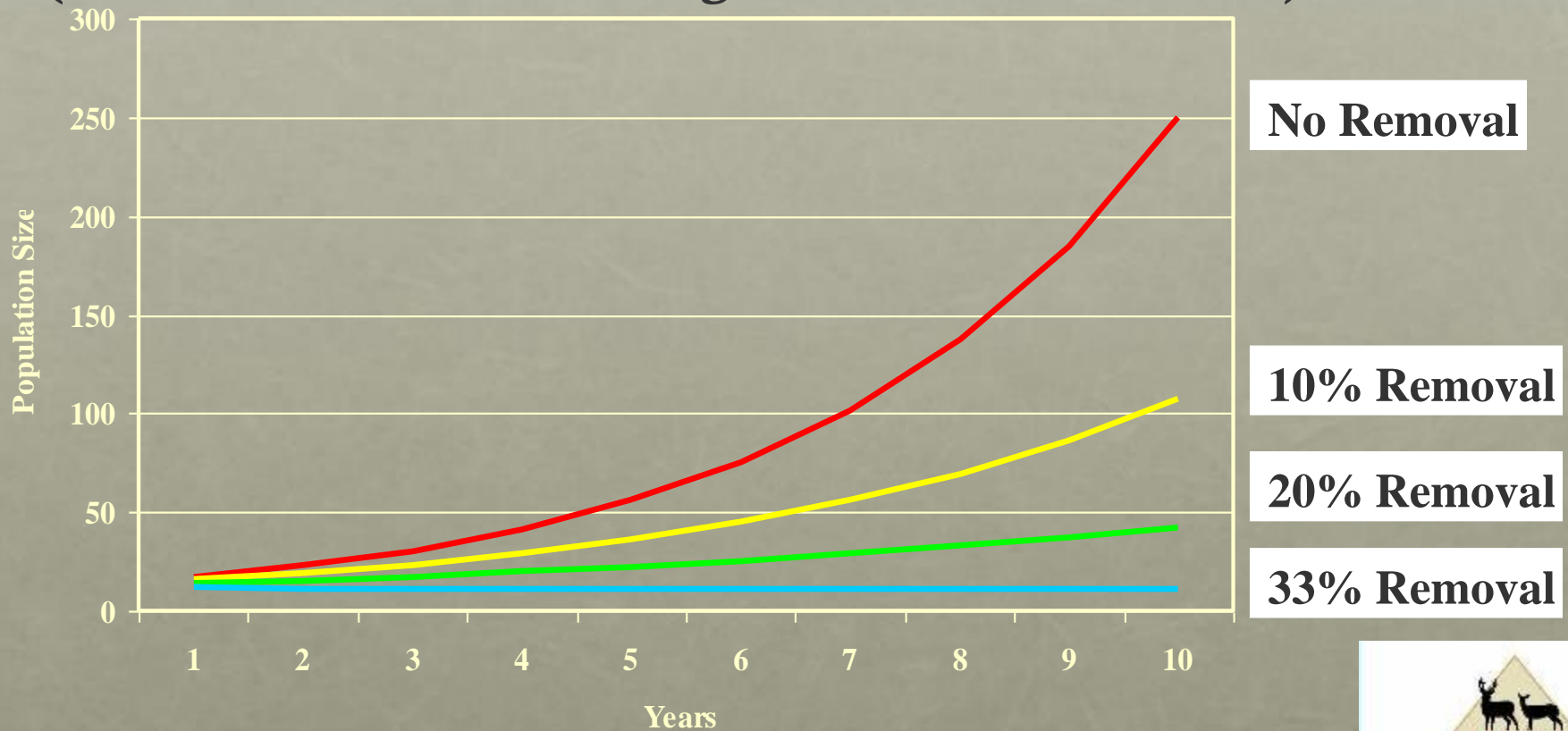
***Make goals and guidelines specific and realistic!***



# HOW MANY IS THE RIGHT AMOUNT?

## Population Growth

(Doe harvest needed with growth rate of  $\lambda = 1.35$ )



# 2. HABITAT MANAGEMENT

## **Natural habitat:**

- determine % of property in each habitat type
- prioritize and schedule management activities
- develop timber management plan

## **Food plots:**

- determine necessary food plot acreage & distribution
- develop annual/perennial and crop rotation plans



# HABITAT MANAGEMENT - THE BASICS

- Provide a diversity of stand types (species composition)
  - Pine
  - Hardwood
  - Open/Field
- Provide a diversity of age classes
- Smaller is generally better; higher diversity of age classes is better
- Habitats well interspersed



# A DEER'S DIET



HERD MANAGEMENT  
HABITAT MANAGEMENT  
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Hard Mast Species

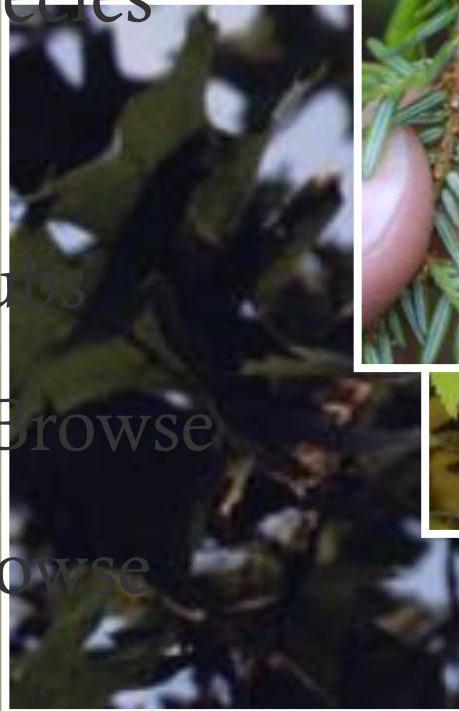
Soft Mast Species

Forbs

Vines & Shrubs

Hardwoods Browse

Softwood Browse



The quality, not the quantity, of nutrition

# *DEER PREFERENCE*



## High Preference

- Yellow birch
- Sugar maple
- Red maple
- Sumac
- Red-osier dogwood
- Nannyberry
- White cedar
- White pine

## Mid Preference

- Ash
- Oaks
- Aspens
- White birch
- Witch hazel
- Jack pine
- Eastern hemlock

## Low Preference

- Beech
- Willow
- Cottonwood
- Hickories
- Spruces
- Balsam fir
- Red pine



# 3. HUNTER MANAGEMENT

- **Neighborhood landowners and hunters:**
  - should attempt to form a QDM cooperative
  - continue to inform and encourage regardless of initial resistance
  - creating goals and objectives for group
    - establish guidelines
    - collect data → create harvest goals



# 4. HERD MONITORING

- **Herd condition:** (*from harvested deer*)
  - harvest data (age, weight, antlers)
  - reproductive info (lactation, conception date)
- **Herd structure:** (*from live deer, generally with game cameras or observation data*)
  - density, sex ratio, & age structure,
  - harvest expectations (shoot, don't shoot list)
- **Habitat Impacts:**
  - Deer Browse Impacts Survey



Oct 28th

6 hours to do 5 transects w/ 2 people

### Deer Density/Impact Data Sheet 2011

Date 10/28/2011 Observer(s) Matt Ross Bill Dudgeley Weather partly sunny / scattered clouds

Transect Line	Pellet Groups				
	1	2	3	4	5
Number Plots	38	26	53	52	
Number Pellet Groups	10	16	7	18	
Number Dead Deer			2		

### Deer Impact & Canopy Closure (record impact & canopy closure data at every other pellet group plot. First plot taken at 1st density plot.)

Transect Line		Pellet Groups				
Number Plots		1	2	3	4	5
Plots Without Regeneration		19	23	26	26	
Plots With Regen, No Impact				17	20	
Canopy Closure (Open)/(Closed)						
RED MAPLE	0	L	M			
		H	S			
OAK	0	L	M			
		H	S			
SUGAR MAPLE	0	L	M			
		H	S			
cherry	0	L	M			
		H	S			
BIRCH	0	L	M			
		H	S			
Beech	0	L	M			
		H	S			



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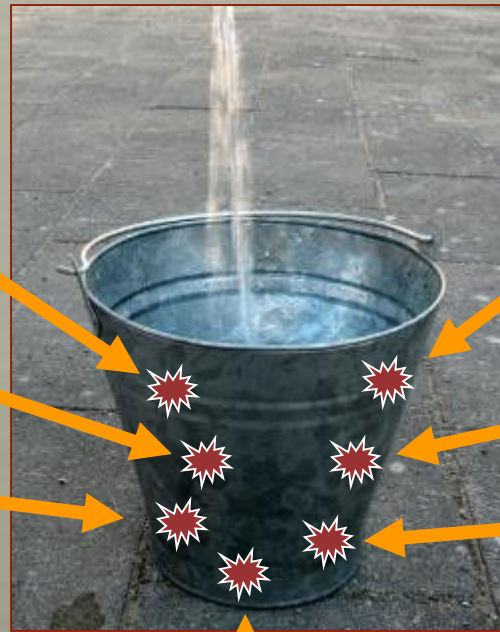
# WHERE TO START?

“Plug the Lowest Hole in the Bucket!”

Unbalanced sex ratio

Uncooperative neighbors

Lack of early successional habitat



High predator or competitor pops.

Young buck age structure

Poor nutrition

Too many deer

# WILDLIFE COOPERATIVES



# WHAT IS A WILDLIFE COOPERATIVE?

Like-minded landowners and hunters working together to improve their wildlife quality and hunting experience.



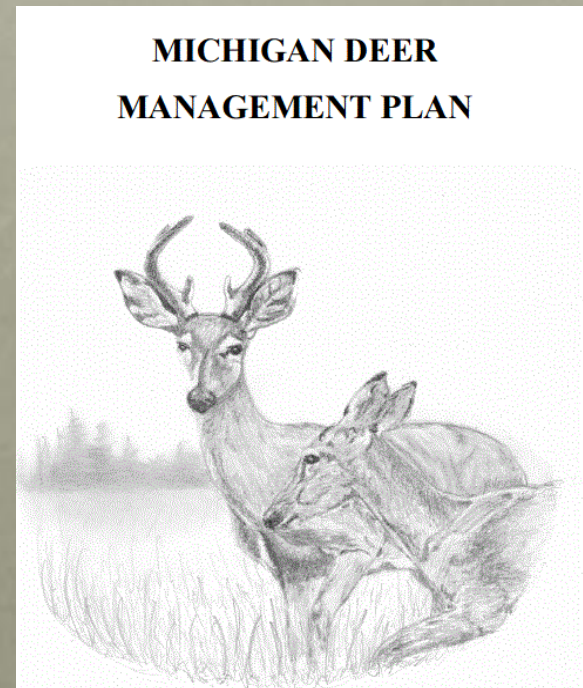
# THE HISTORY

2008 - Statewide deer management planning

2010 - Started research on deer cooperatives

2013 - Presented findings of research

2015 - Michigan Wildlife Cooperatives



# DEER COOPERATIVE RESEARCH OBJECTIVES

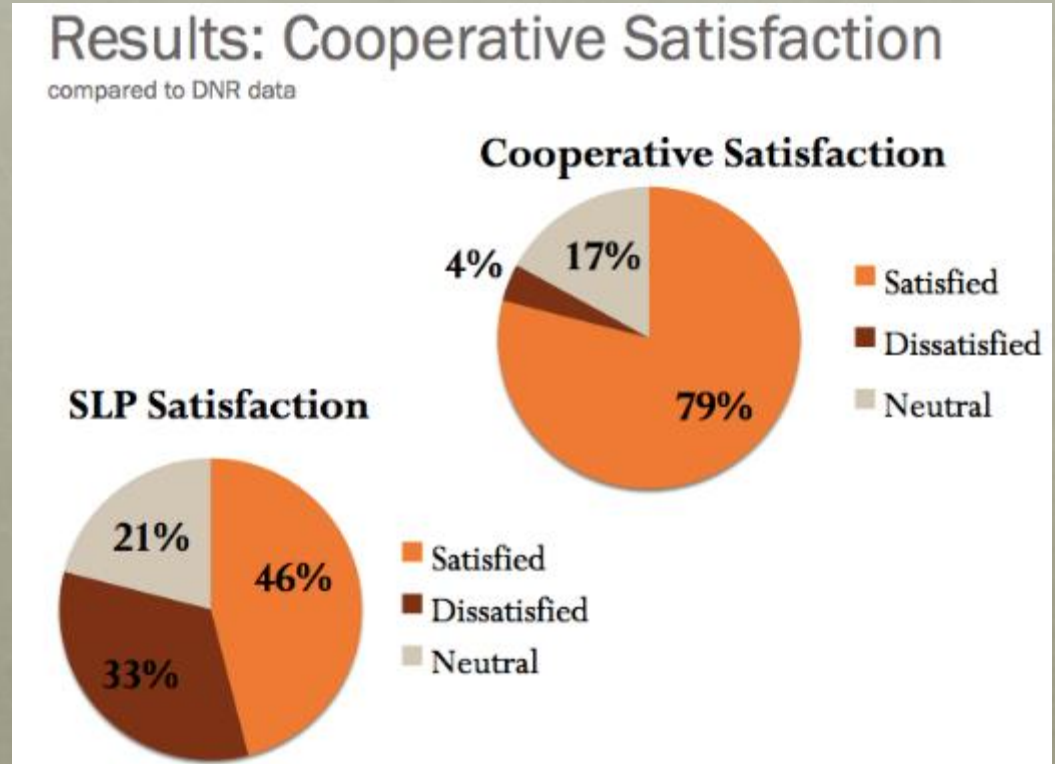
- To understand if social networks within deer cooperatives influence individual doe harvest behavior
- To understand satisfaction changes between current satisfaction levels and those prior to joining a cooperative among deer cooperative members





# DEER COOPERATIVE RESEARCH FINDINGS

- Influence on doe harvest
- Satisfaction with overall hunting experience
- Satisfaction with cooperative experience
  - Fitness



# MICHIGAN WILDLIFE COOPERATIVES

## **Mission:**

To create, implement, and maintain a program that fosters and supports wildlife cooperatives of private landowners around the state to create and maintain improved habitat for area wildlife



# MICHIGAN WILDLIFE COOPERATIVES

## Core Values:

- Collaboration with other groups/organizations/agencies
- Improved hunter satisfaction
- Improved wildlife habitat



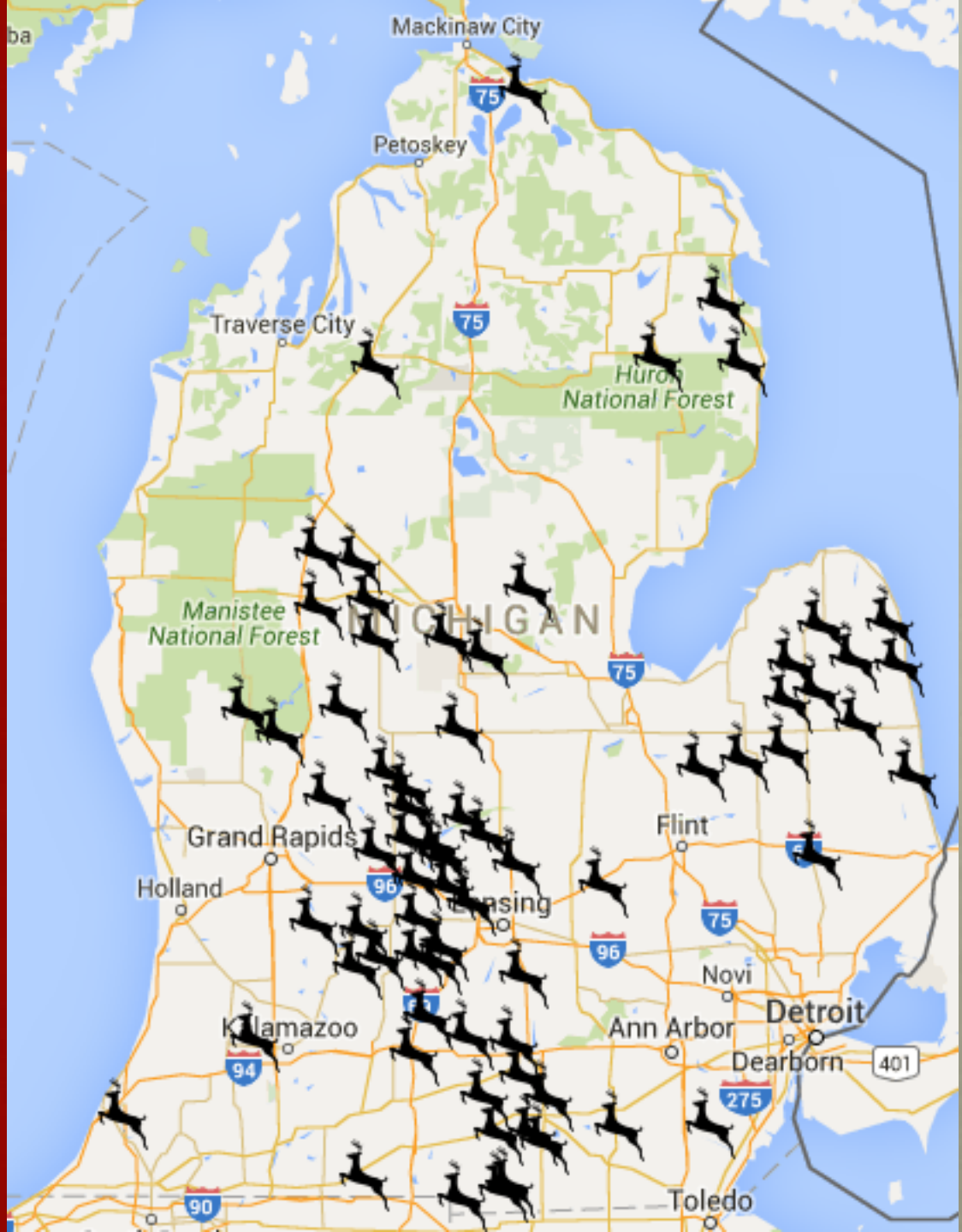
# MICHIGAN WILDLIFE COOPERATIVES

## Goals:

1. Promoting wildlife cooperatives
2. Creating a network of professionals to assist in the implementation and expansion of wildlife cooperatives
3. Assisting in organizing habitat improvement projects within wildlife cooperative properties and nearby/adjacent public lands



# MICHIGAN DEER COOPERATIVES



# PARCEL VS. LANDSCAPE MANAGEMENT



- Harvest Management
- Data Collection
- Habitat Collaboration

# COOPERATIVES & FORESTRY

- Questions about working with cooperatives?
- Benefits of working with cooperatives?
- How can cooperatives prepare to work with a forester?
- Challenges working with cooperatives?

# THANKS!

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