

# Wildlife Division's Human-Wildlife Conflict Workgroup Overview

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Krista Hubbard, Policy & Regulatory Specialist  
Casey Reitz, Wildlife Permit Specialist



# Issue to Address

- Internal workgroup formed in March 2018
- There is a lack of consistency and coordination in responding to human-wildlife conflicts across the state
  - In some cases, no streamlined process
  - Inconsistent practices across the state
  - Lack of internal guidance



# Workgroup Charge

- The *internal* process for responding to human/wildlife conflict issues is to be streamlined to ensure consistency across the state.



# Workgroup Members

- Core Team made up of Wildlife Division staff:
  - Policy and Regulations Unit
  - Species Specialists
  - Representatives from UP, NLP, SE, and SW
  - Public Outreach and Engagement Unit





# Progress

- Survey
  - Address inconsistencies statewide
  - Provide clear and updated guidance
  - Provide educational materials to staff
- Internal workgroup meeting
  - Ideal Process
- Document and information gathering



# Workshop

- Breakout groups: Migratory Birds, Cervids, Furbearer and Small Game, Turkey, and Large Carnivores
- Wildlife Division representatives from UP, NLP, SW, and SE
- Species Specialist lead each group
- Goal: Develop ways to eliminate barriers and provide *internal* consistent statewide guidelines for addressing human-wildlife conflicts



# Where are we now?

- Several areas need improvement or additional work
  - Internal flowcharts
  - Training opportunities
  - Permitting procedures



# Moving Forward

- The core workgroup continues to work on identified items that need improvement and meets quarterly
- Nuisance regulations package in the spring



A close-up photograph of a beaver with thick brown fur, sitting in a snowy environment. The beaver is holding a piece of wood in its mouth and appears to be eating. The background shows snow-covered ground, some dry leaves, and the trunks of trees under a bright sky.

# Beaver Management in Michigan

Adam Bump  
DNR Wildlife Division



# Overview

- Brief history of beavers
- Current status
- Ecological value
- Finding a balance



# Brief History

- Beaver are native to Michigan- statewide
- Populations were reduced dramatically due to commercial harvest and habitat loss/destruction
- Harvest was carefully regulated and kept low
  - Registration and sealing was required
- Gradual liberalization over time



# Current Status

- Beaver are abundant throughout most of Michigan
  - Populations on local streams can fluctuate significantly
  - Seems to be increased presence in some parts of southern Michigan
- Liberal harvest, no bag limit, history of expansions of opportunity





# Ecological Value

- Beavers create and maintain wetland habitats and brushy “young forest” habitats in riparian areas
  - Important for waterfowl (in particular black ducks), reptiles, amphibians, songbirds, woodcock, etc
  - Abandoned dams can create and maintain open wet meadows which also create critical habitats



# More Benefits

- Riparian areas with beaver activity are more biologically diverse (reptiles and amphibians, avian communities, etc)
- Beaver influenced wetlands are often preferred over wetlands without beaver activity
- Can create multiple layers of benefit
  - Girdled/flooded trees create snags for woodpeckers which create cavities for secondary nesters
  - Open foraging for flycatchers, bats



# Beaver Issues

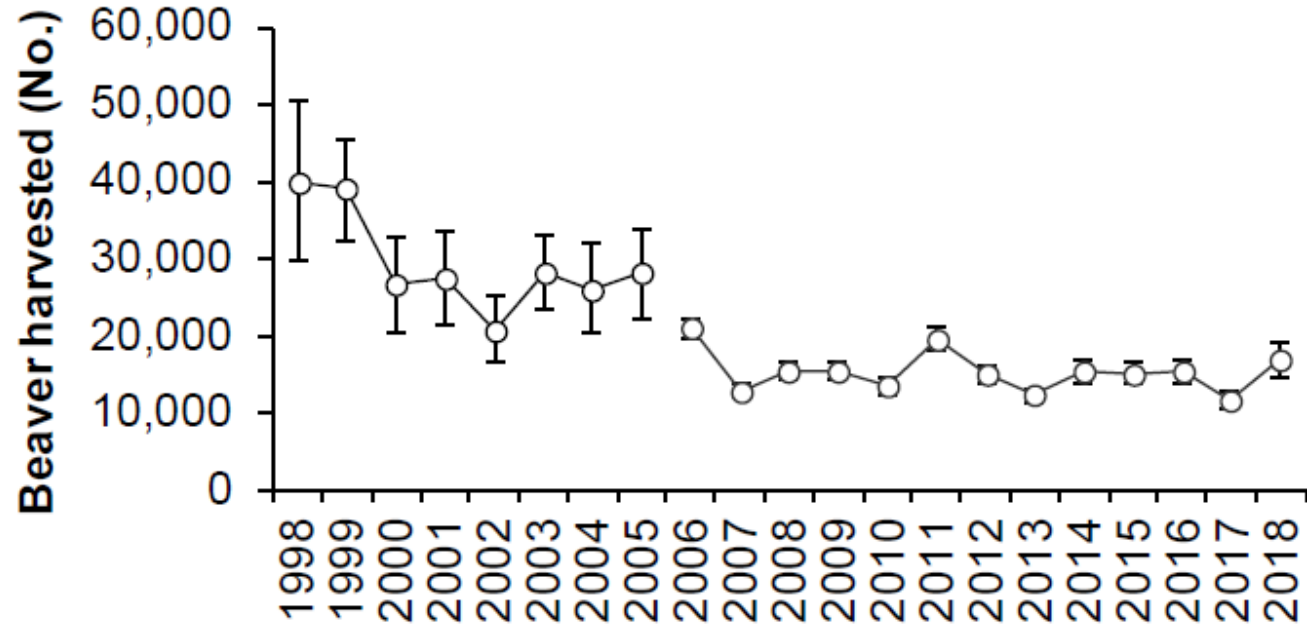
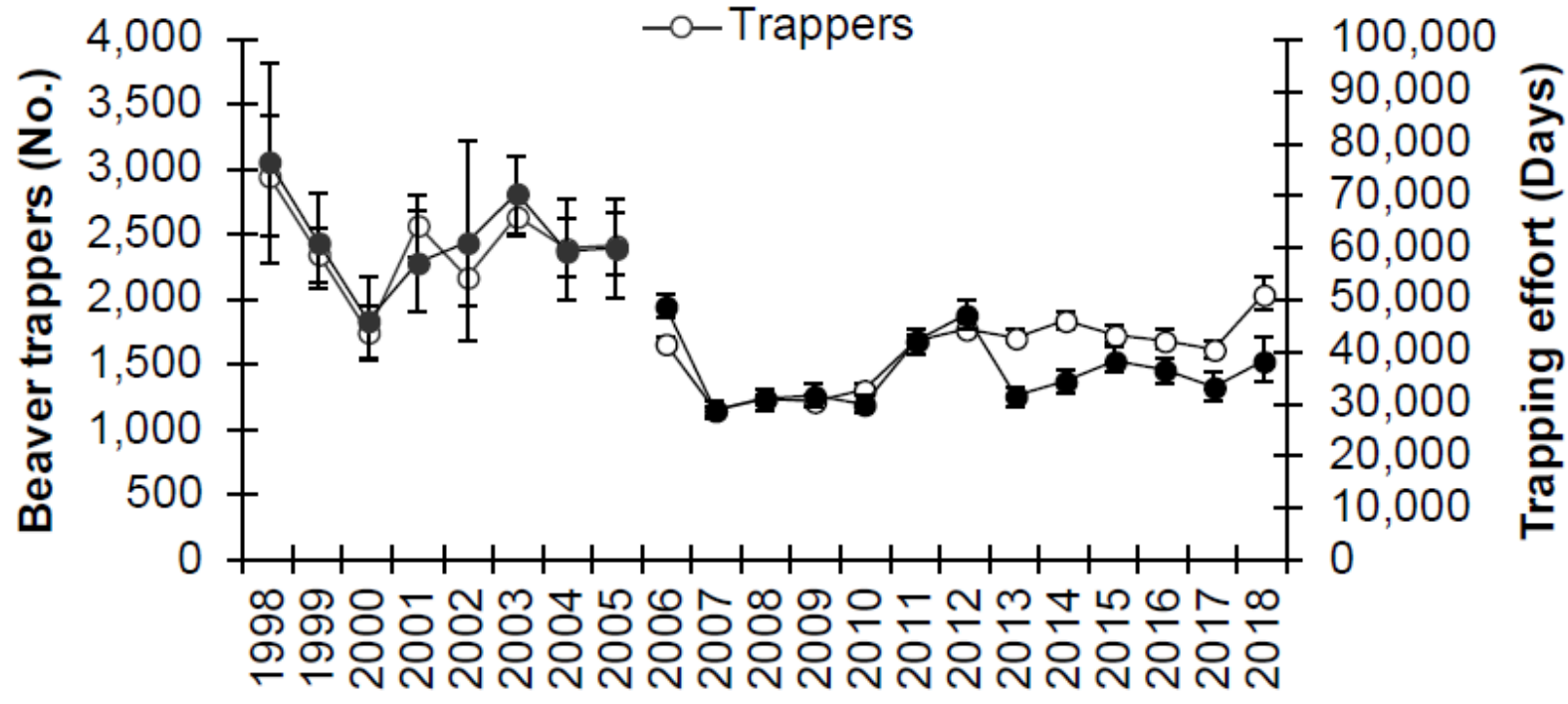
- While beaver provide many ecological benefits in addition to being a valuable furbearer, they can and do cause undesirable impacts
- Tree destruction
- Flooding
- Infrastructure damage
- Alterations to streams and riparian zones

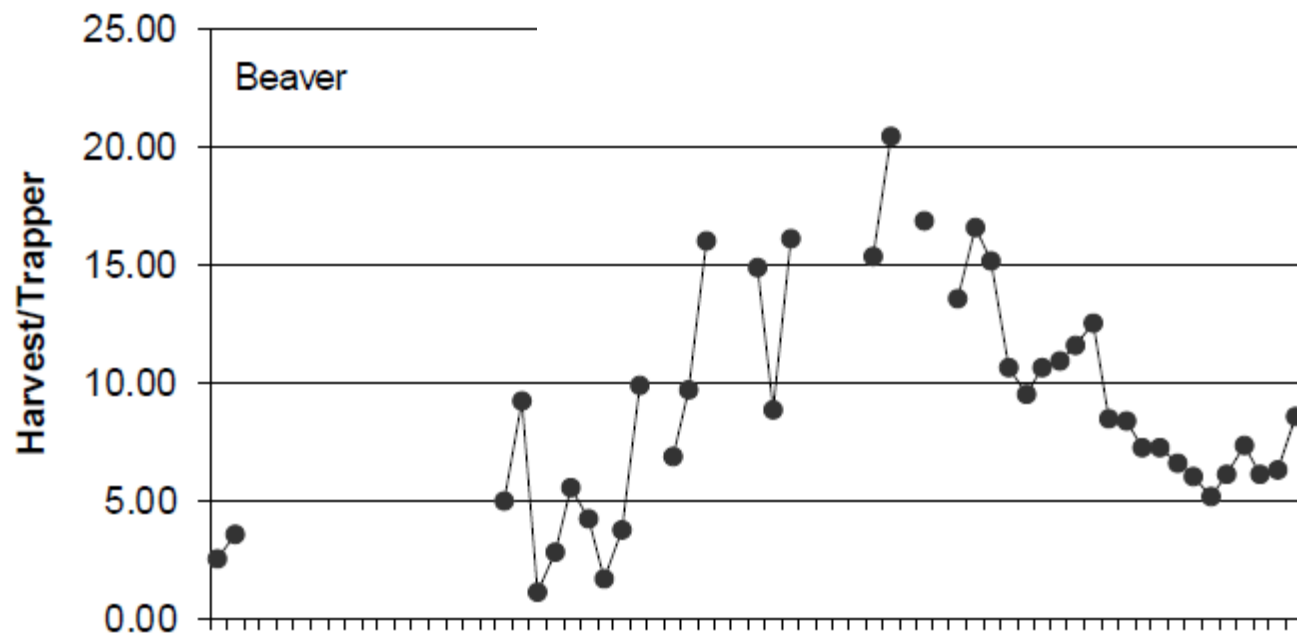
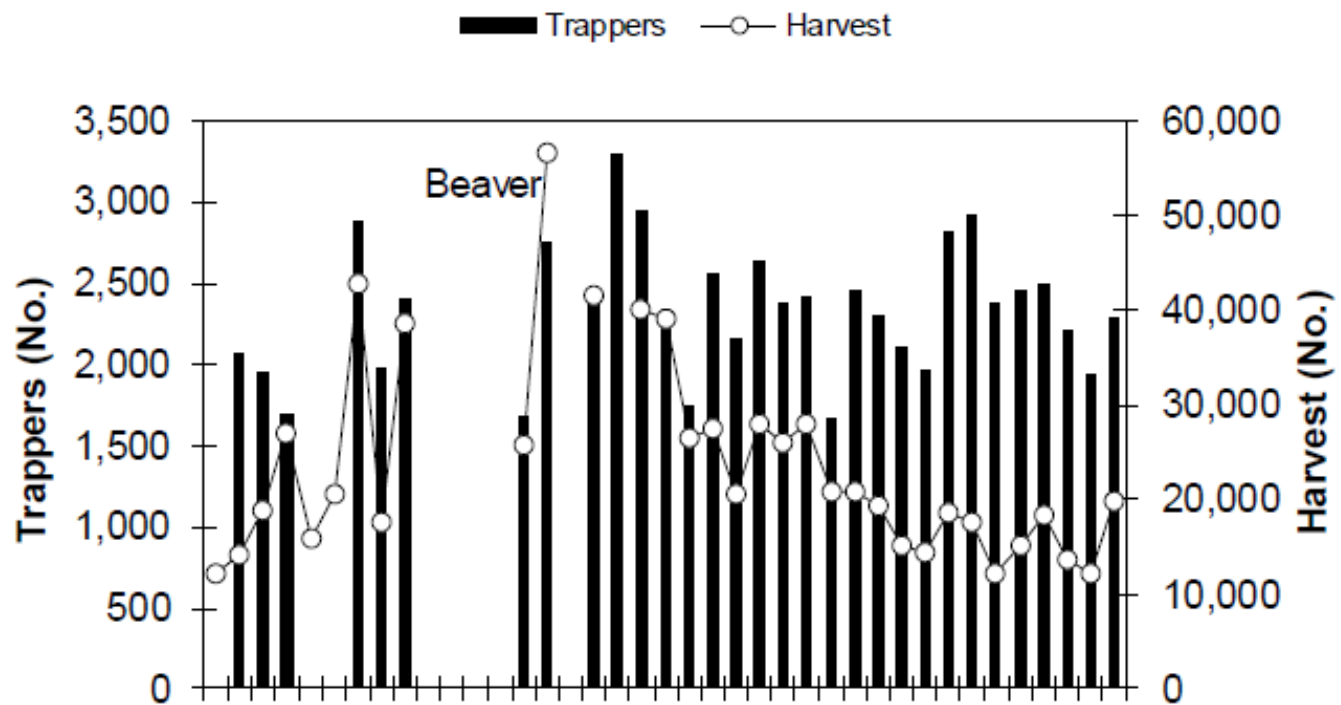


# Finding a Balance

- Use of regulated trapping to help control populations and provide harvest opportunities
- Permitting is used to resolve undesirable impacts out of season
  - Provides opportunity for education and evaluation of alternatives
  - Evaluate actual impacts
  - Locally issued, some regional permitting







# General Permitting Info

- Permits for infrastructure issues are issued broadly and liberally
- Private land issues
  - Encourage more permanent solutions, in-season trapping
  - Permit issuance is typically for property damage, loss of access or similar
- State land issues resolved through internal communications between Divisions
  - Often conflicting goals/values that require consideration and deliberation

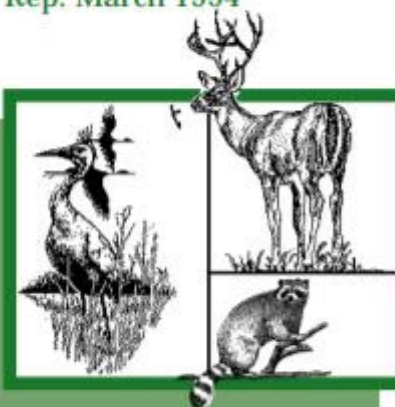






Photo courtesy of [www.beaversolutions.com](http://www.beaversolutions.com)

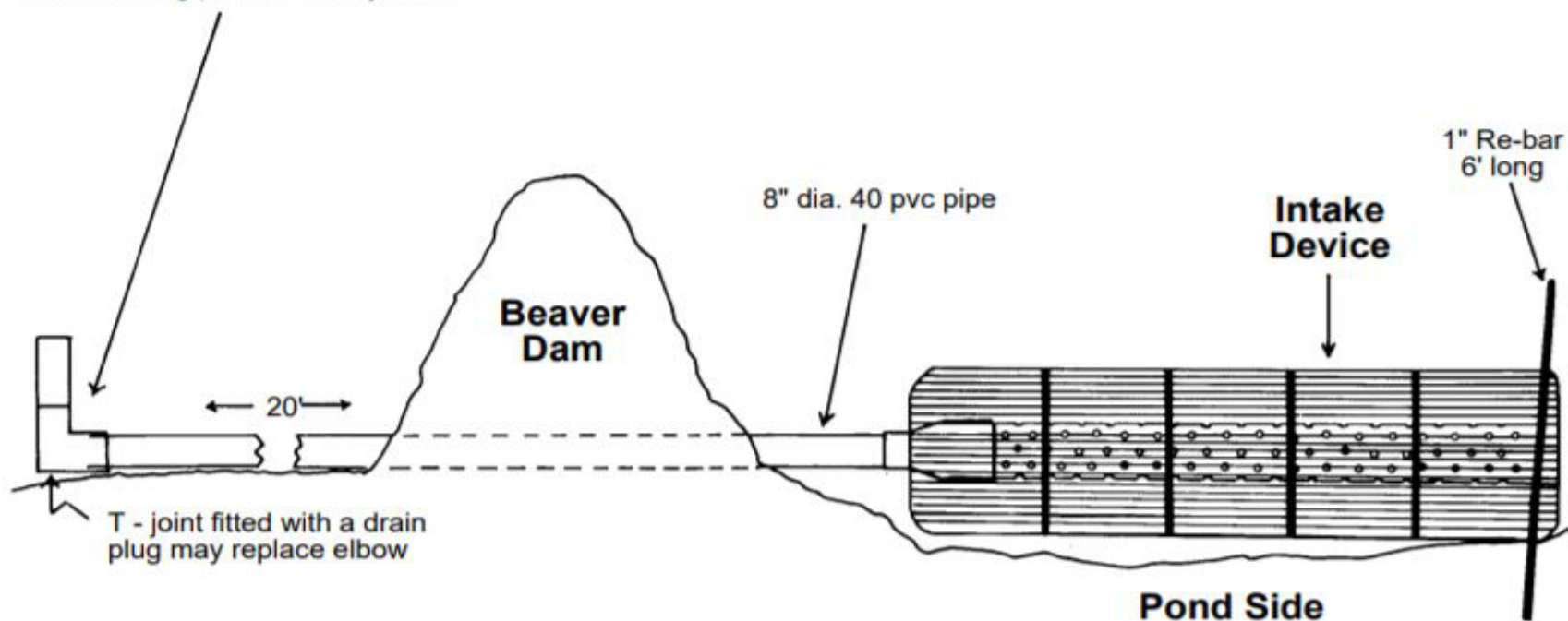




# THE CLEMSON BEAVER POND LEVELER

DEPARTMENT OF AQUACULTURE, FISHERIES AND WILDLIFE

Elbow and stand pipe are optional.  
Needed only to manage water level  
if maintaining pond is an objective



# More on Permitting

- All out of season beaver take AND dam removal require a DNR permit
- Dam removal MAY require a EGLE permit
- Nuisance workgroup recommendations include some liberalization of nuisance beaver resolution
  - Recognition of likely harvest/population trends
  - Streamline (if always issue why issue)
  - Still property damage based





# Beavers and Streams





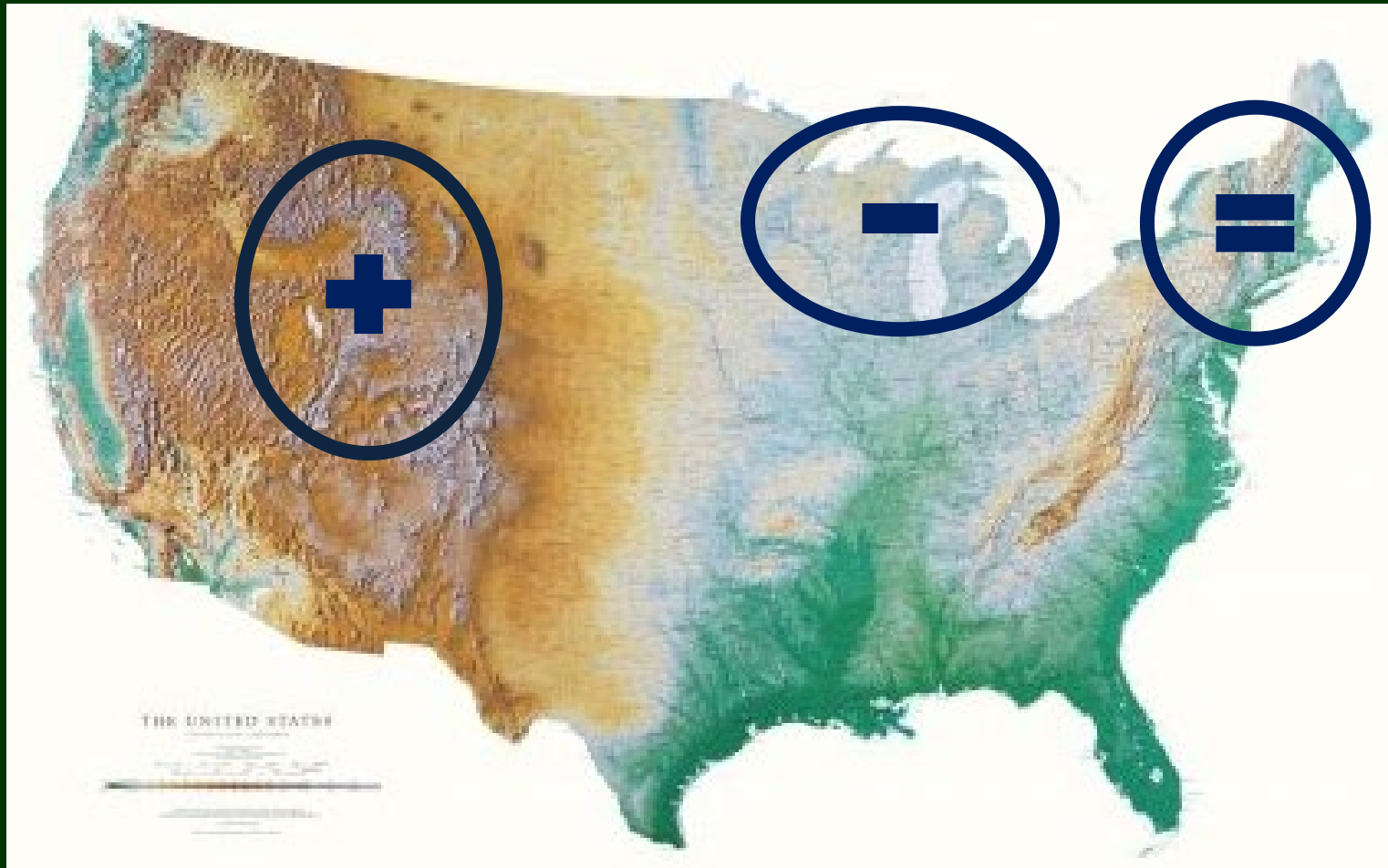
# Summary of Literature

“Qualitative and quantitative effects of reintroduced beavers on stream fish” (Kemp et al. 2012)

- 108 articles, 88% from North America
- Most frequently cited species: brook trout (22), coho salmon (15), rainbow trout (14), cutthroat trout (14), Atlantic salmon (13), brown trout (12)
- Positive effects cited 184 times
- Negative effects cited 119 times



# Regionalized Impacts



# Fish Movement



- Johnson-Bice et. al. (2018)
  - Only 2 studies in WGL
  - “Because most of the published research on this topic from the WGL region is speculative...”
- Lokteff et. al. (2013)
  - Brook, brown, & Bonneville cutthroat trout, 2 Utah streams, 21 dams, PIT tags
  - 4% of browns, 19% of brooks, and 16% of cutthroats passed at least one dam





# Sediment Transport



- Interrupts sediment movement processes
  - Suspended load
  - Bedload
- Can store multiple year's worth of load
- Failure or rapid removal risk instability of channel
- Depends on longevity of dam
  - Slope
  - Flashiness



# Temperature Impacts

Thermal drone imagery of Wisconsin stream and beaver dam

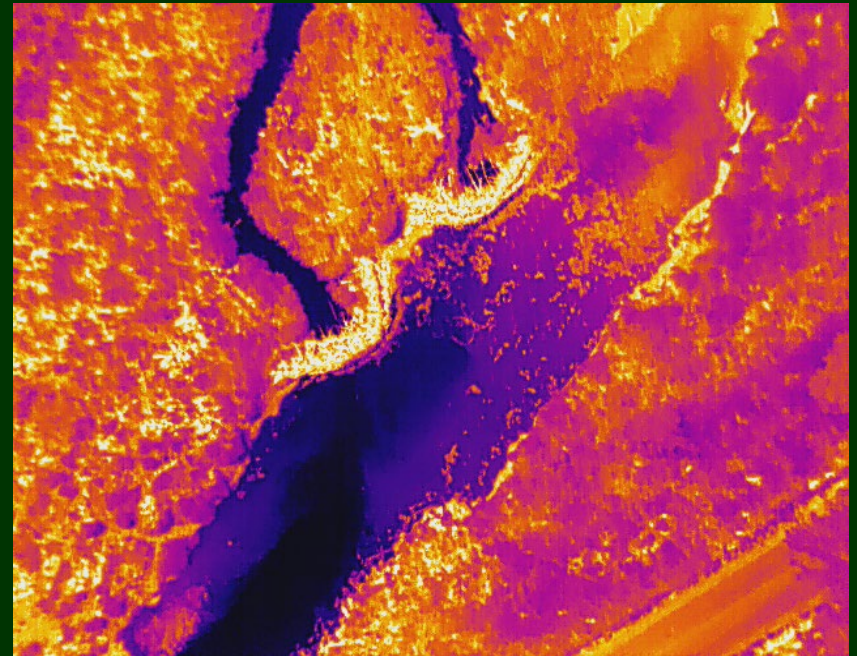


Photo Credit: Matt Mitro (Wisconsin DNR)





# Management Decisions



- No “one size fits all”
- Each dam/set of dams needs analysis compared to limiting factors of the stream
- Context is important
- Stream by stream, reach by reach assessment.
- Age of dam

# Removal Considerations

- Rapidity of drawdown
- Sediment storage behind dams
- Order of removal
- Capacity of stream to move sediment





# Long-term strategy

2005



2013



2021





MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

# Water Resources Division Regulations Applicable to Beaver Dam Removal

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Anne Garwood

Michigan Department of Environment, Great Lakes and Energy

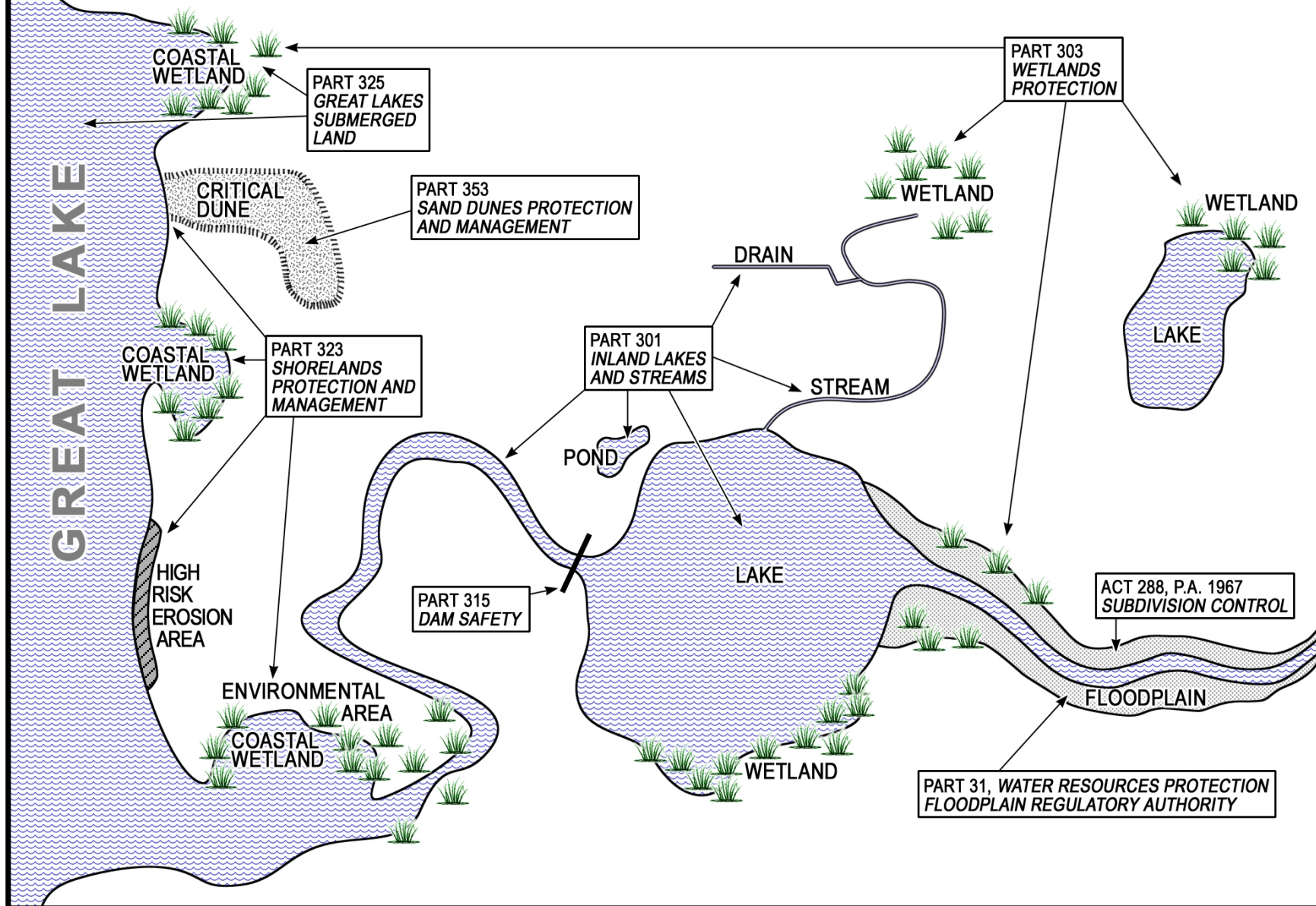
December 2022



# MICHIGAN RESOURCE PROGRAM LAWS ADMINISTERED BY **EGLE** WRD

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT

ACT 451 OF THE PUBLIC ACTS OF 1994 & RELATED STATUTES



## Part 301, Inland Lakes and Streams

Protects inland waters by regulating work in inland lakes and streams.

## Part 303, Wetlands Protection

Protects wetland functions and values by requiring permits for activities within wetlands.

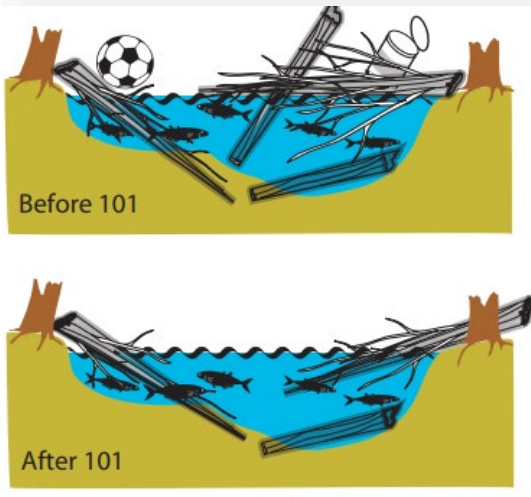
## Part 31, Water Resources Protection (Floodplain Regulatory Authority)

Reduces property damage caused by flooding through regulation of activities in floodways and floodplains.

- Regulate dredge, fill, and construction activities
- Require applicants to **avoid** and **minimize** impacts to these regulated

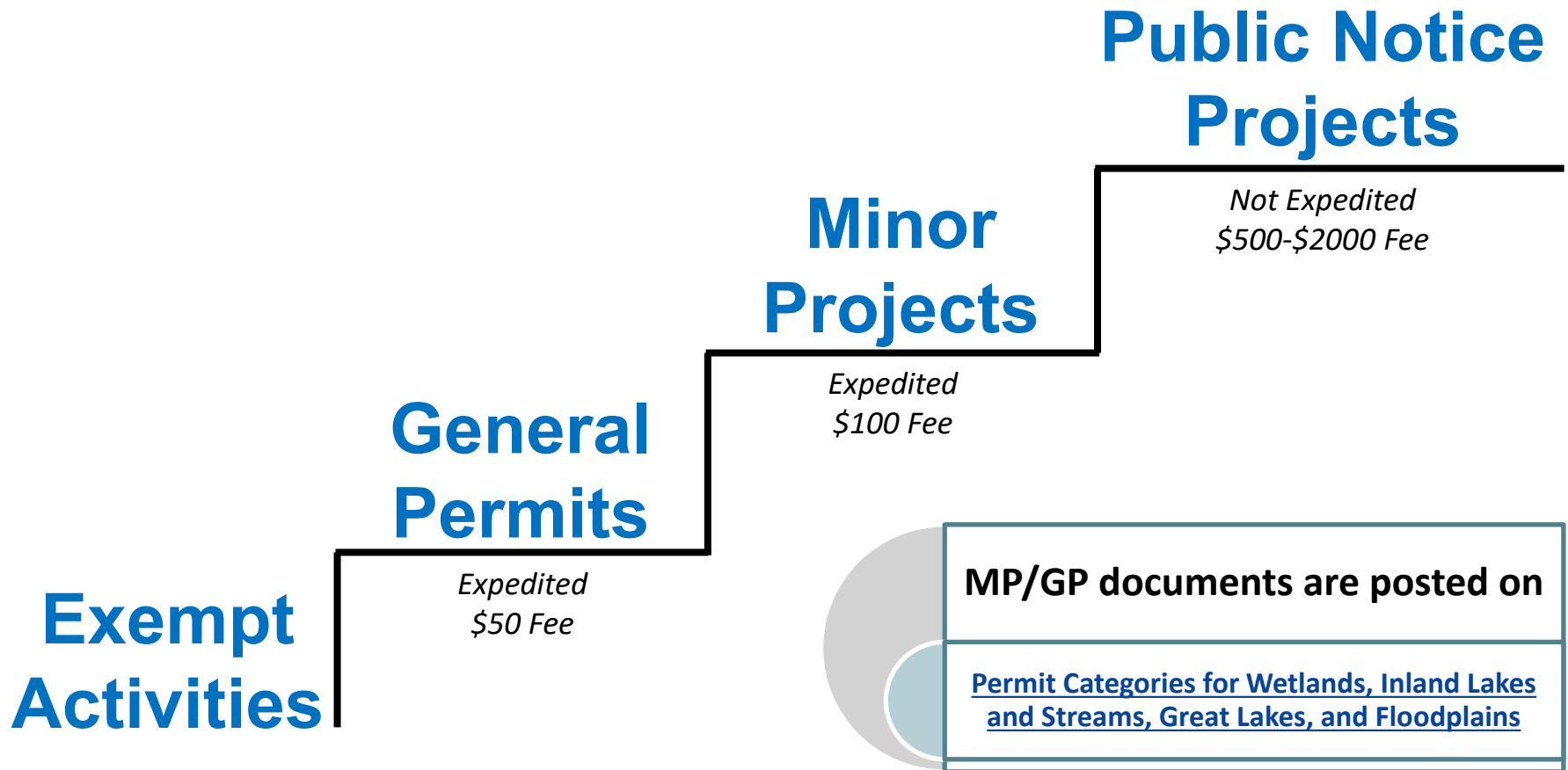


# No Permit Required



- Hand removal of an obstruction (such as beaver dams or log jams) that does not alter the soil, sediment, bed, or banks of a wetland or stream.
- Typically, this would follow the “Clean and Open Method” where the woody material is cut and removed within the main channel area to allow the natural flow of water, without removing woody or soil material that is in the bed or banks.
- When beaver dam removal cannot be done without soil or sediment removal, a permit is required.

# 3 Tiered Permitting System







# Category Set Up

## Exclusions (*examples*)

- Major Discharge of Dredged or Fill Materials – EPA Redfile
- Sensitive Natural Resources (i.e., T/E Species or Habitat, Wild and Scenic River, etc.)
  - Sites with Contaminated Sediment
  - More than Minimal Adverse Impacts
  - Permit required under another statute, for which the project does not meet the GP/MP category under that statute
  - Permit required under Parts 323 or 353

## Applicable Statutes

- Part 31, Floodplain Authority
- Part 301, Inland Lakes and Streams
- Part 303, Wetlands Protection
- Part 325, Great Lakes Bottomlands

## Category Criteria

- Best Management Practices

# General Permit U. Removal of Structures

(in pertinent part)

Parts 31, Floodplains, 301, Inland Lakes and Streams, 303, Wetlands, and 325 Great Lakes Bottomlands

Removal of natural obstructions that obstruct flow or navigation (e.g., log jams, beaver dams, etc.) in streams that meet all of the following:

- a. All removed materials shall be disposed of in an identified upland (non-floodplain, non-wetland) site.
- b. The site must be restored to its original condition or to a condition that is consistent with the surrounding area. Any bare soil or disturbed areas shall be promptly stabilized to prevent erosion. Plants and seed native to Michigan shall be used in the restoration.
- c. The fisheries and wildlife habitat values of the natural obstruction shall be considered and impacts to those values minimized.
- d. The drawdown shall not negatively impact the downstream receiving waters, habitat, or structures.

# General Permit U. (cont'd)

This GP category does not include:

- Removal of woody structure from significant segments of streams.
- More than de minimus excavation of soil and sediment or the use of water jetting to remove structures.
- The removal of man-made dams (or weirs).
- Maintenance dredging, dredging of sediments in order to recover vessel, shoal removal, or riverbank snagging. Natural obstruction does not apply to shoal material or sediment.
- Abandoned property as defined in Part 761, Aboriginal Records and Antiquities, of the NREPA.



# In General, We Recommend BMPs

- Remove the minimum amount of the obstruction necessary to alleviate flooding
- Minimize disturbance of sediments and river bottom
- Obstruction should be removed to minimize/manage release of sediment
- Material removed from river should be disposed of properly, in a location where flood waters won't reclaim it

## ***BMP Don'ts***

- Create access paths through wetland areas
- Place material in a wetland or floodplain
- Grub or mechanically land clear in wetlands
- Other activities that will result in draining of wetlands



## Anne Garwood

Wetland, Lakes and Streams Unit Supervisor

Water Resources Division

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2022

# Michigan's Water Withdrawal Policy- Prairie River Temperature Redesignation Recommendation

December 8, 2022

NRC Meeting

Lansing

Jay Wesley- Lake Michigan Basin Coordinator, Fisheries Division



Get the digital guide at [Michigan.gov/DNRDigests](https://Michigan.gov/DNRDigests)



# Background

- ▶ Great Lakes-St. Lawrence River Basin Water Resource Compact (2008)
- ▶ Part 327, of the Natural Resources and Environmental Protection Act
  - ▶ Requires registration of large quantity withdrawal (100,000 gallons per day)
  - ▶ Development of the Water Withdrawal Tool
    - ▶ How does the withdrawal relate to stream flow and fish populations
    - ▶ Provides guidance to minimize an impact
    - ▶ Stream classification based on temperature and fish community
  - ▶ Managed and Regulated by Department of Environment, Great Lakes, and Energy (EGLE) - Water Resources Division - Water Use Program
- ▶ Part 328, Water Use Advisory Council (WUAC)



SR55

STATE OF MICHIGAN  
DEPARTMENT OF NATURAL RESOURCES

May 2011

## Michigan's Water Withdrawal Assessment Process and Internet Screening Tool

David A. Hamilton  
and  
Paul W. Seelbach



[www.michigan.gov/dnr](http://www.michigan.gov/dnr)

FISHERIES DIVISION  
**SPECIAL REPORT 55**



# Background

## Water Withdrawal Tool

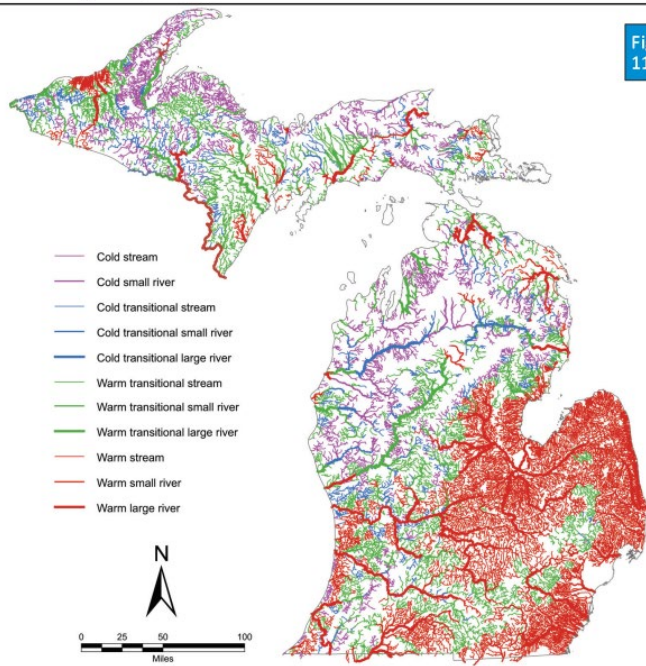
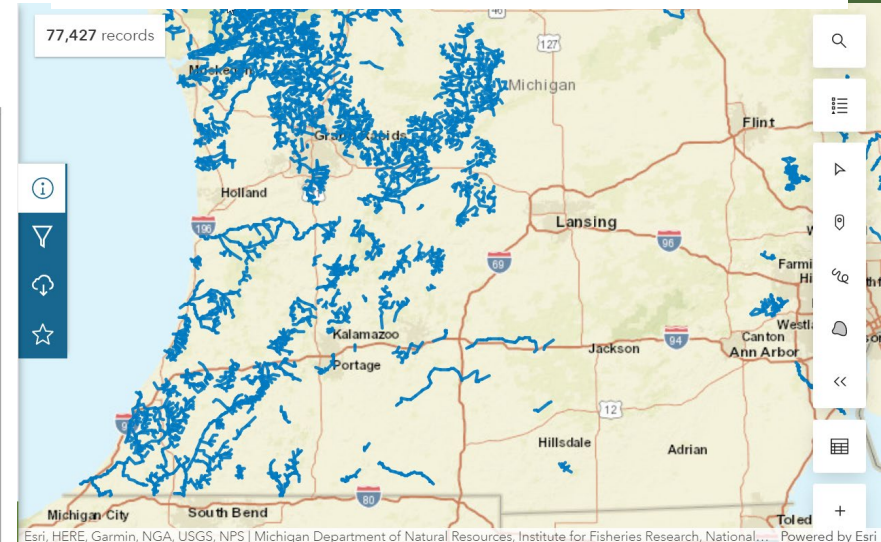


Figure 1. Distribution of Michigan's 11 stream and river habitat types.

Source: Zorn, T.G., P.W. Seelbach, E.S. Rutherford, T.C. Wills, S. Cheng, and M.J. Wiley. 2008. A regional-scale habitat suitability model to assess the effects of flow reduction on fish assemblages in Michigan streams. Michigan Department of Natural Resources, Fisheries Research Report, Ann Arbor.

## FO 210 Designated Trout Streams





# Water Use Advisory Council - Technical Underpinnings

- ▶ TU 4.2 - The DNR should write up the procedures and criteria used to modify stream classification. The procedures and criteria should be reviewed by the Council, or similar stakeholder group, before adoption by the Department.
  - ▶ Completed and resulted in the Fisheries Division's Stream Classification and Redesignation Policy and Procedure (02.02.024).





# Stream Classification and Redesignation Policy and Procedure (02.02.024)

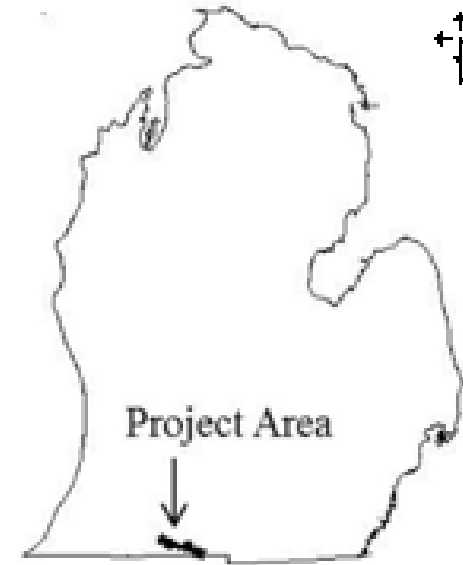
- ▶ DNR Fisheries Division and EGLE Water Resources Division representatives will:
  - ▶ Collect and gather relevant data
  - ▶ Enter fisheries community and stream temperature data into StreamCheck
  - ▶ Independently interpret the outcome of the StreamCheck analysis along with relevant data
  - ▶ Make one of the following determinations:
    - ▶ No change in the stream classification;
    - ▶ No change in the stream classification, although additional information should be collected and analyzed in the future; or
    - ▶ Evidence does merit a change in stream classification





# Prairie River (Branch County)- Water Management Area 20781

- ▶ Random survey conducted in 2011
- ▶ Classification - warm
- ▶ Temperature loggers at 13 locations from 2012-2016
- ▶ Annual fish surveys at Orland and Bowers roads 2012-2015
- ▶ StreamCheck Tool in 2021
  - ▶ Fishery - Cold
  - ▶ Temperature - Cold-Transitional



Orland Road 2012





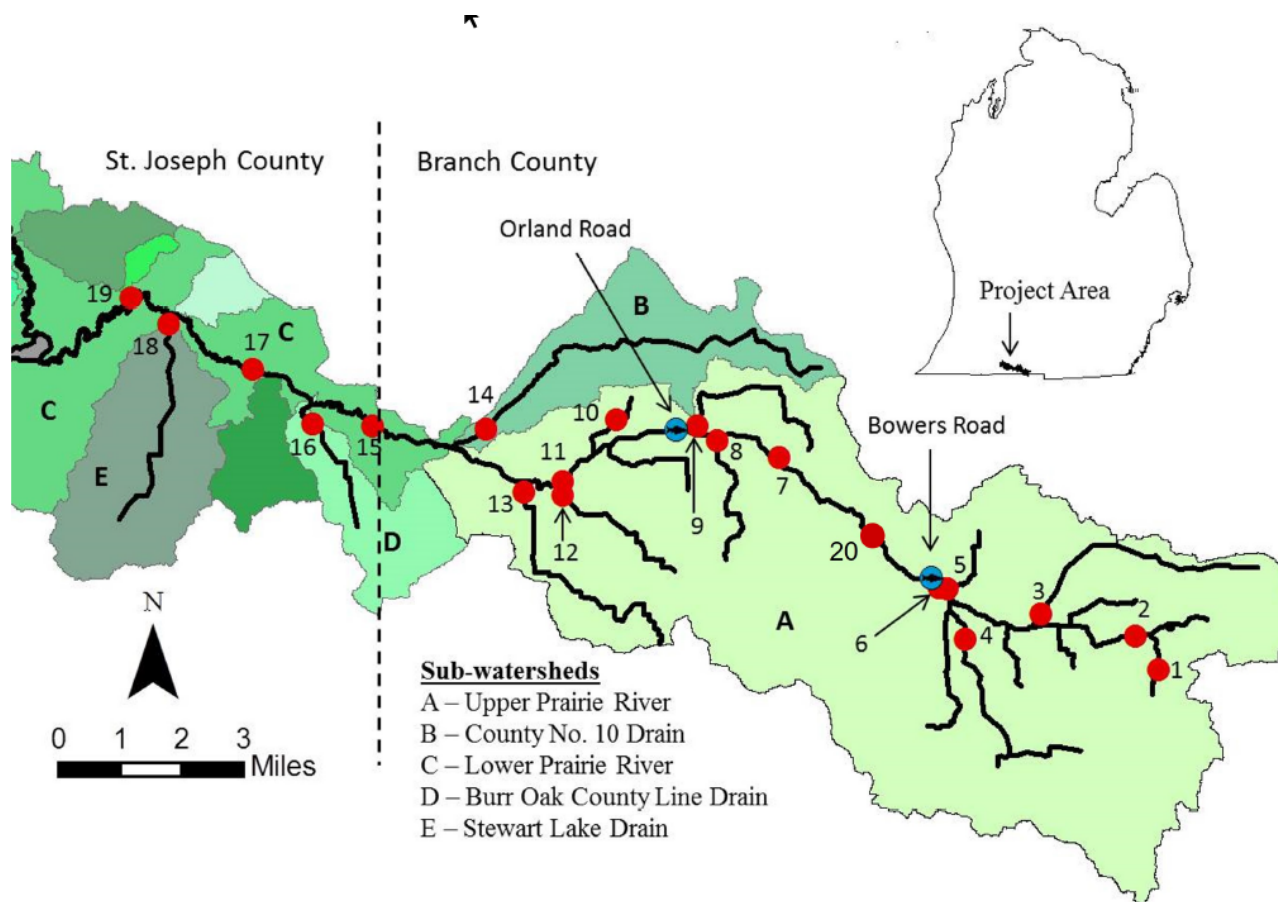


Figure 1.—Sampling locations and select sub-watersheds (letters) within the Prairie River watershed. Dots with fish indicate locations where electrofishing was conducted during 2012-2015. Solid dots indicate sites where temperature loggers were deployed during 2012-2016. See Table 1 for 2015-2016 temperature logger deployment information. See Table 2 for temperature logger site descriptions.







# Prairie River Recommendation

- ▶ Change water management area 20781 from warm to cold-transitional
- ▶ EGLE confirmed the recommendation on June 1, 2022, via letter
- ▶ Higher risk of Adverse Resource Impact
- ▶ Water Use Advisory Council presentation December 5, 2022
- ▶ Director memo presented to NRC for information December 8, 2022
- ▶ Decision by Director January 12, 2023



# Questions?



**2022**

## Michigan Fishing Guide

Rules apply from April 1, 2022 – March 31, 2023



# Recommendations for Fisheries Orders

Fisheries Division

Seth Herbst, Ph.D.

Aquatic Species and Regulatory Affairs Unit Manager

Dec. 8, 2022

## Fisheries Order 216 – Regulations for the Taking of Minnows for Commercial Purposes

- Director has authority to designate the waters from which minnows, wigglers, and crayfish may be taken for commercial purposes and make rules, regulations, and restrictions for taking, possessing, and transporting minnows, wigglers, and crayfish. (MCL 324.48730)





# Fisheries Order 216.23

*For Information*

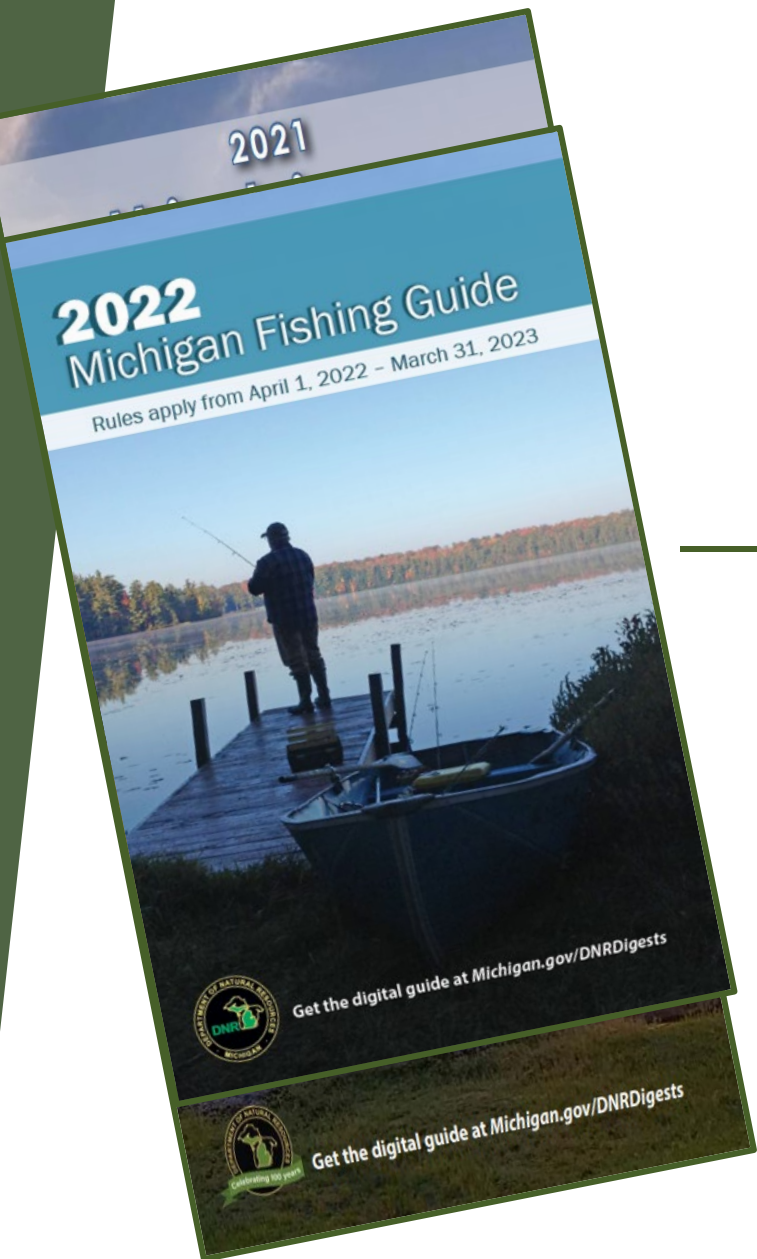
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- Public Act 30 of 2022 created a new “export permit” that allows for minnows, wigglers, and crayfish that are taken from Michigan waters to be exported.
- Need to define implementation aspects of updated statute

## **Recommendation:**

- Define reporting deadlines as “on or before the 10<sup>th</sup> day of the following month for each month during which the license is valid”.
- Require monthly commercial bait harvest reports and bait export reports be submitted using the online Fishing Activity & Catch Tracking System (FACTS) reporting system.





# Thank You!

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## Questions?

Seth Herbst, Ph.D.  
ASRA Unit Manager  
Herbsts1@Michigan.gov

# Proposed Wildlife Rehabilitation Regulations

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Krista Hubbard, Policy &  
Regulatory Specialist

Casey Reitz, Wildlife Permit  
Specialist



# Background

- Permitting process to rehabilitate sick, injured, or orphaned wildlife for the purpose of releasing them back into the wild
- ~120 current wildlife rehabilitators
- Regulations last reviewed 2014





# Engagement Process

- Initial survey in January to engage satisfaction on current regulations
- Virtual engagement meeting in April to discuss proposed recommendations and engage satisfaction
- Virtual informational meeting in October to share proposed recommendations



# New Applicants

- 18 years of age or older
- 30 hours of logged experience under a licensed veterinarian or being an approved subpermittee
- Own land where wildlife rehabilitation activities will occur or have an agreement with property owner



# New Applicants

- Ensures applicants are adults who have qualified experience
- Agreement that more requirements are needed to obtain a permit
- 57% of wildlife rehabilitators are satisfied
  - Some rehabilitators asked for a written exam, however DNR does not have the staff to administer an exam
  - Exploring options for a voluntary, self-administered online exam



# Facility Structures

- Be of sufficient strength for the species
- Maintained in good repair to prevent escape or injury
- Prevent ingress or egress
- Cannot pose a threat to human or animal safety
- Health and safety of both humans and wild animals
- Aligns with NWRA and IWRC standards
- 78% of wildlife rehabilitator are satisfied





# Care and Treatment of Wild Animals

- All wild animals:
  - Be kept separate from high traffic living quarters and activities
  - Cannot have contact with the public and must have limited contact with wildlife rehabilitators
  - Cannot co-mingle with domestic animals
  - Must be of compatible species when housed together
  - Not be tamed, kept as pets, or habituated
- Prevents distress, discomfort, and habituation
- Aligns with IWRC and NWRA standards
- 91% of wildlife rehabilitators are satisfied



# Release Methods

- Released in a location that provides adequate habitat where they will not create a nuisance
- Soft release methods are not allowed except for migratory birds at the facility



# Release Methods

- Reduces risk of human-wildlife conflicts
- Reduces risk of disease spread
- Methods outlined in NWRA and IWRC standards



# Rehabilitating and Releasing Fawns

- Fawns from Montcalm County cannot be rehabilitated
- Fawns must continue to be released by October 1
  - Exception: Written request received no later than September 16
  - Recommended by licensed veterinarian and DNR approval



# Rehabilitating and Releasing Fawns

- Releasing in the late fall lowers the chance of survival
- Reduces risk of disease spread and habituation
- May keep fawns past Oct. 1 on a case-by-case basis
- 58% of wildlife rehabilitators are satisfied





# Permit Sanction & Revocation

- Revocation – No longer effective
  - Apply after 5 years
  - Small wild mammals only: Raccoon, opossum, rabbit, hare, chipmunk, squirrel, and woodchuck
- Sanction – Suspension or a fine/penalty
  - Apply after violation is addressed
- Provide evidence that issue is resolved
- DNR directs disposal or placement of animals



# Permit Sanction & Revocation

- Provides proper procedures on how to apply
- Clarifies administrative process/creates consistency
- Addresses compliance issues
- 39% of wildlife rehabilitators are satisfied
  - Some expressed that 5 years is too long, and it should be based on individual offense



# Permit Renewals

- Change expiration date from December 31 to March 31
- Additional time for renewal
- Keeps permittees in compliance
- Aligns with the USFWS
- 93% of wildlife rehabilitators are satisfied



# Subpermittees

- Assists with wildlife rehabilitation under a permittee's supervision
- Clarify what species can be rehabilitated
- Add definitions to reduce confusion
- 81% of wildlife rehabilitators are satisfied



# Annual Reports

- Align report form with USFWS
- All wild animals kept over winter must be reported
- Reduces time filling out report
- Allows DNR to monitor species
- Aligns with USFWS reporting requirements
- 75% of wildlife rehabilitators are satisfied





# Facility Operations

- Clarification that only 1 authorized person is issued a permit
  - All others must be listed as subpermittees
- Exception for another individual to temporarily care for the wild animals, if requested
- Allows communication with one permittee
- Aligns with USFWS
- 67% of wildlife rehabilitators are satisfied



# Good Samaritan Clause

- An individual will have 24 hours Monday-Friday and 48 hours Saturday-Sunday to transport an injured or orphaned wild animal to a permitted wildlife rehabilitator or licensed veterinarian for care
- Regulate and enforce temporary possession
- Allowed at federal level for migratory birds
- 100% of wildlife rehabilitators are satisfied



# Use of Non-releasable Migratory Birds for Fostering

- Permanently injured, non-releasable migratory birds or raptors may be used for fostering orphaned young or juveniles
  - Must have both the Wildlife Rehabilitator and Scientific Collector's Permits or Falconry Permit
  - Must follow USFWS requirements
- Helps with release into the wild
- Allowed by USFWS
- 96 percent of wildlife rehabilitators are satisfied



# Non-Regulatory Changes

- More guidance and information
  - Create guidance documents
  - More information on DNR website
- Provide Conservation Officers with more detailed inspection reports
- Provide guidance on the use of social media for public display





# Thank You





# Preliminary 2022 Firearm Deer Season Results



Chad Stewart  
Wildlife Division  
December 8, 2022



# Special Thanks

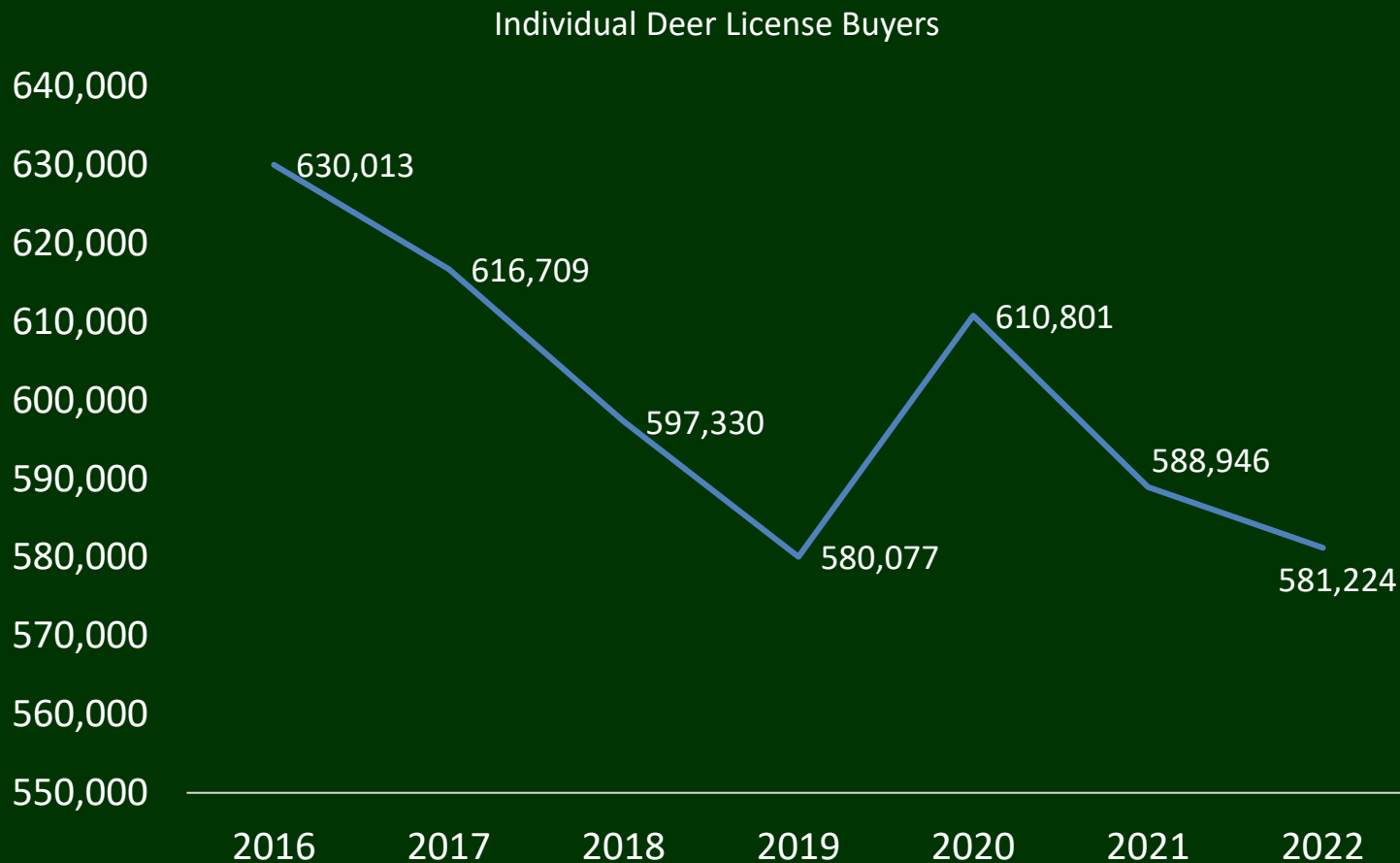
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Melinda Cosgrove, Brian Frawley,  
Sarah Mayhew



# License Buyers

- License sales (As of 11/30/2022)
  - Unique deer license buyers down 1.2%



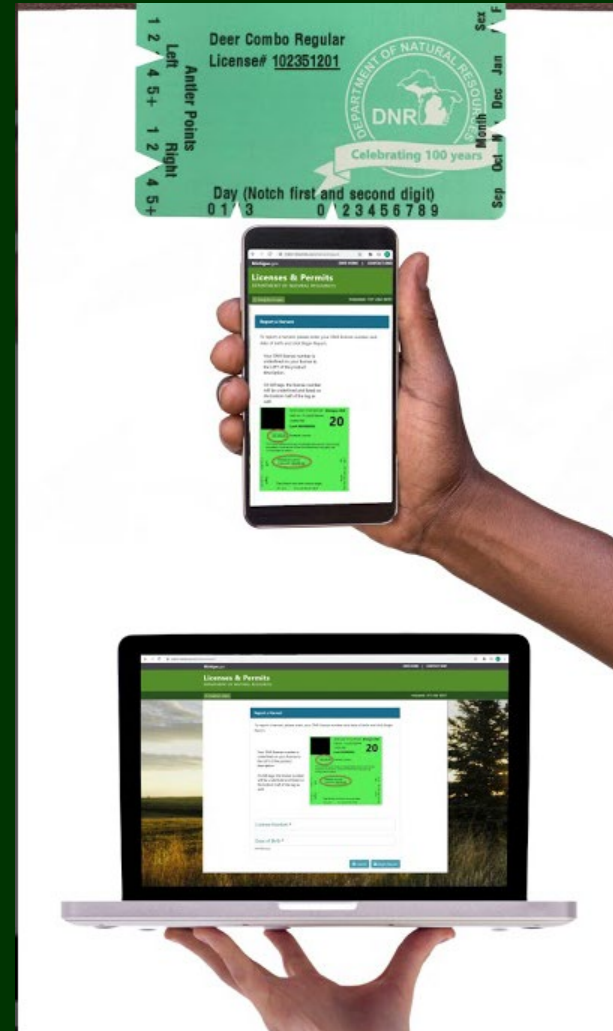
# A Few Disclaimers

- Data presented as “Reported Harvest”
  - Not meant to reflect Actual Harvest
  - Compliance is unknown, but will be estimated
- Data pulled as of 11/30\*
  - Subject to change as reports continue
  - \*Some data are on different timelines
    - Shouldn’t affect overall analysis, but will explain some discrepancies



# Harvest Reporting Statistics

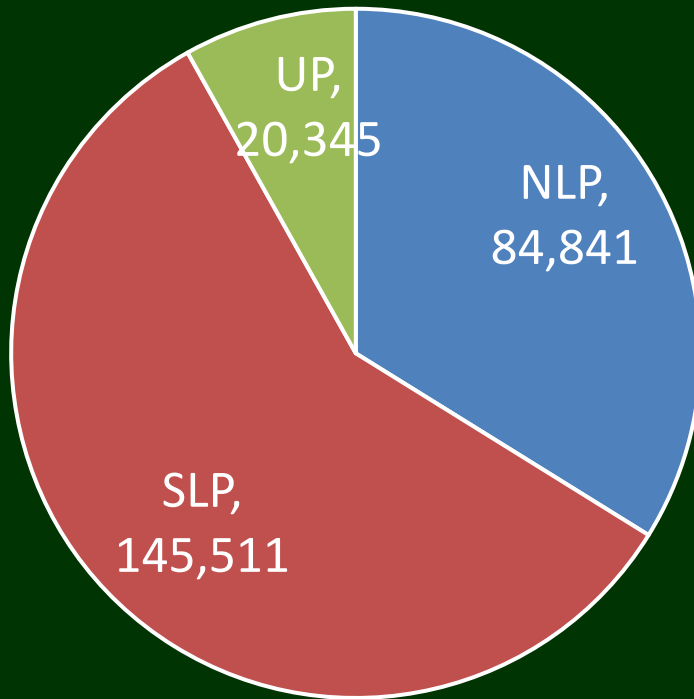
- 81% of hunters spent <5 minutes reporting their harvest
- 95% of reports were submitted within 72 hours
- 87% of reports completed via the internet





# 2022 Reported Harvest\*

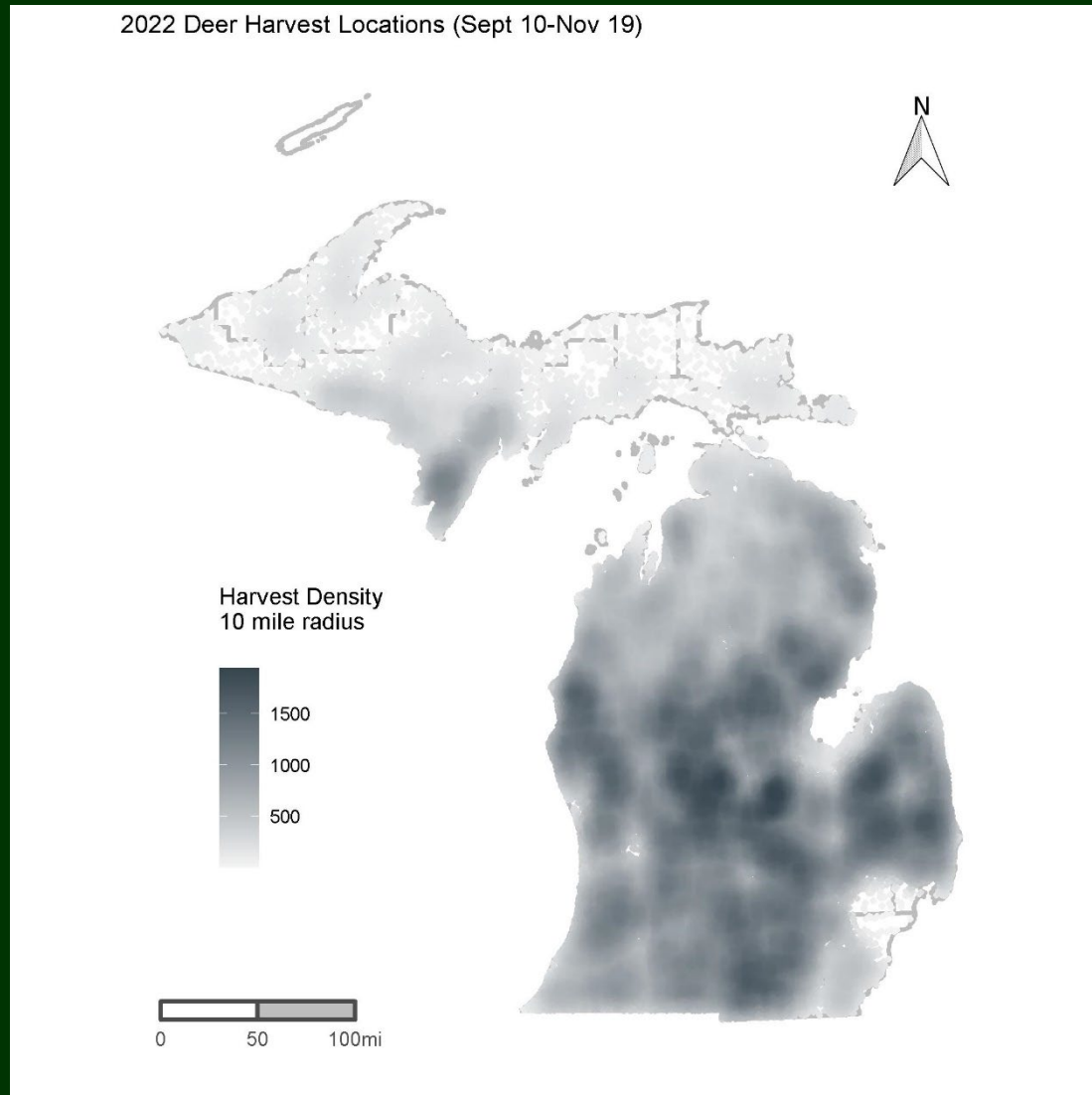
- Reported Harvest:  
– 250,697



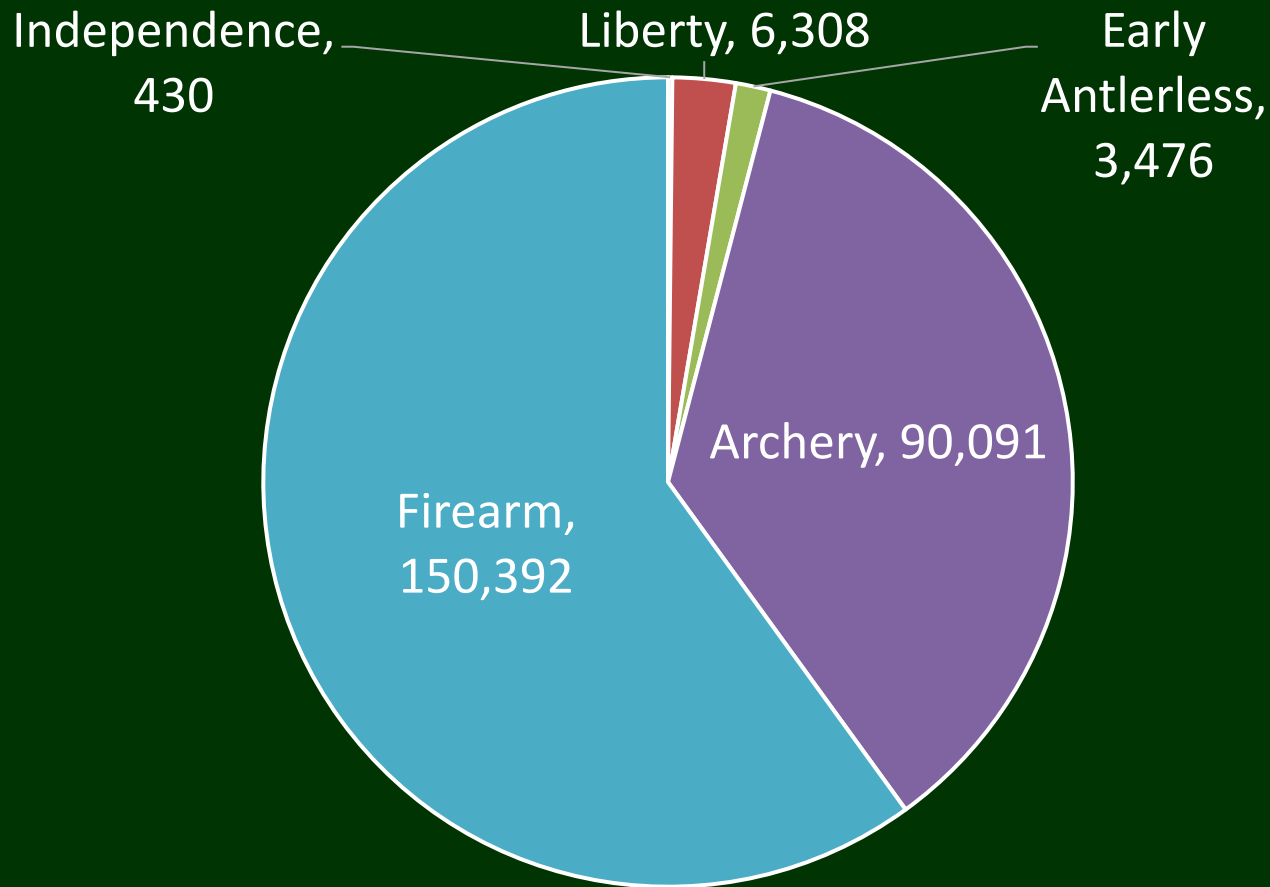
	2021 Harvest Distribution	2022 Reported Harvest Distribution
UP	8.9%	8.1%
NLP	34.5%	33.8%
SLP	56.7%	58.0%



# Reported Harvest Distribution



# Harvest by Season



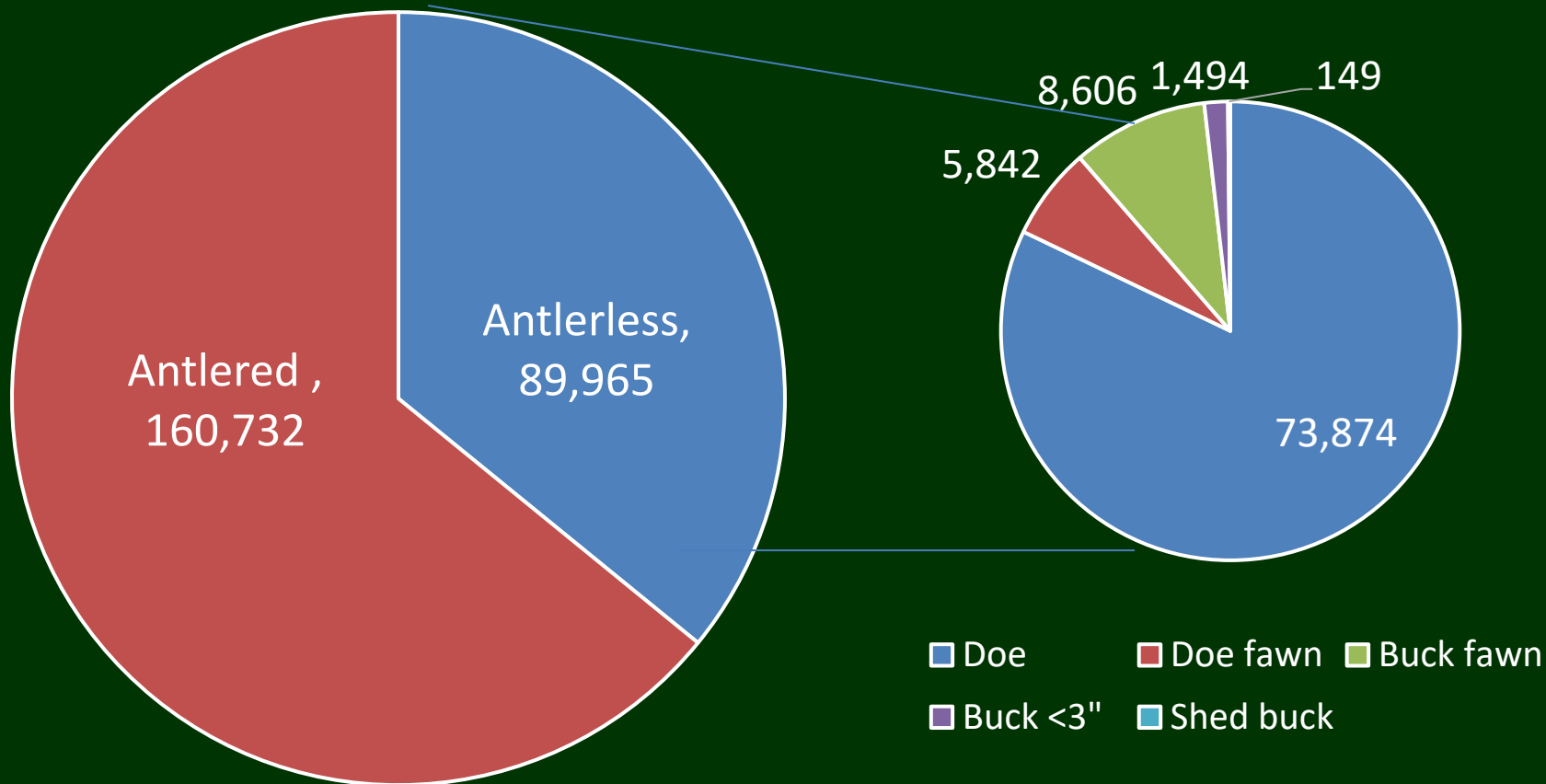
# Opening Day Harvest

- 45,720 deer reported harvested on opening day
  - 34,629 antlered deer
  - 11,091 antlerless deer

1 deer harvested every 0.8 seconds of daylight

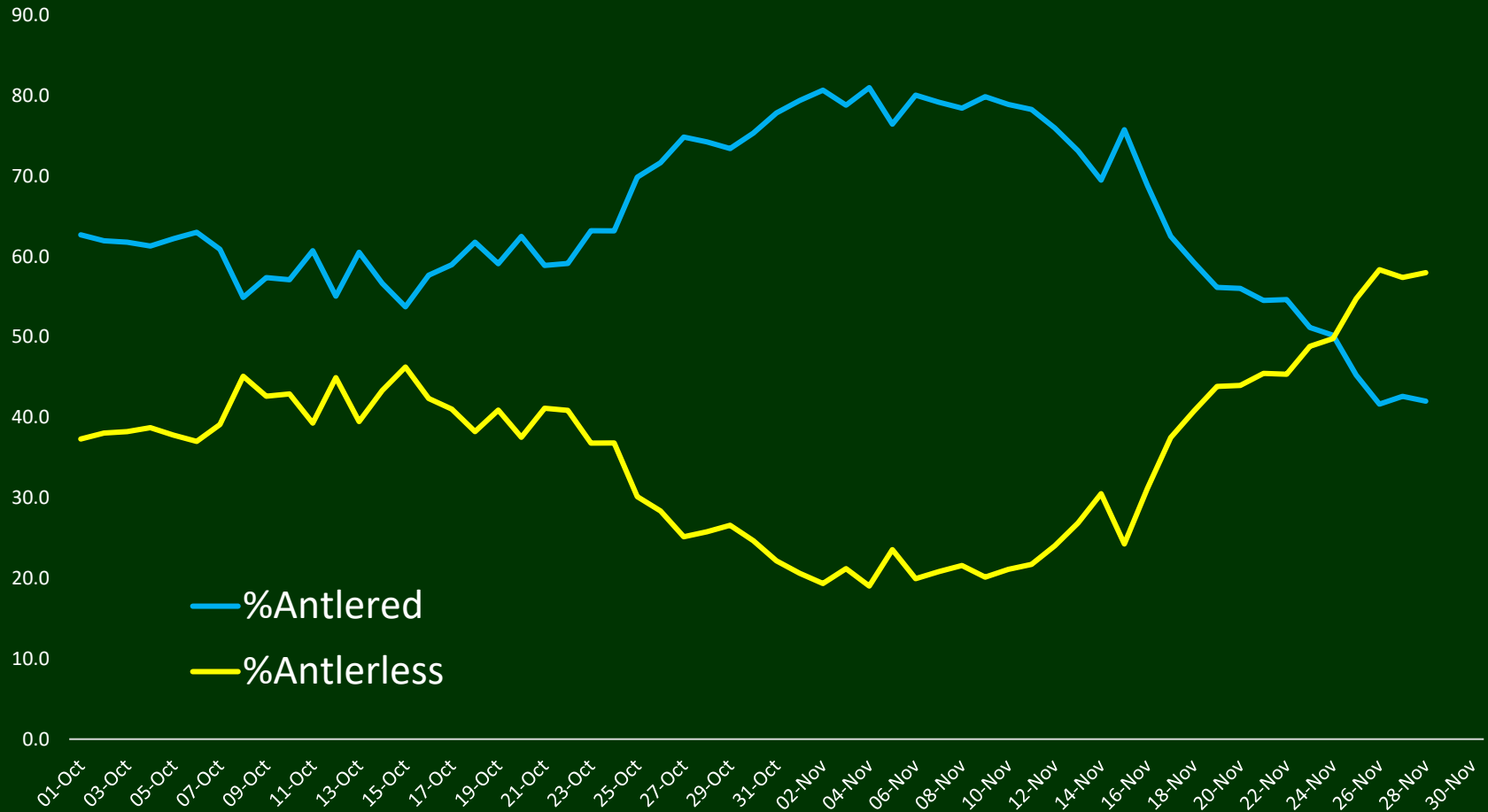


# Antlered/Antlerless Harvest





# Daily Antler/Antlerless Harvest



# Other State's Harvest Rates

State	Antlered	Antlerless	All deer	Percent Antlered	Percent Antlerless
Indiana	55,329	54,586	109,915	50%	50%
Iowa	45,179	57,634	102,813	44%	56%
Michigan	160,026	89,065	249,091	64%	36%
Minnesota	82,650	73,958	156,608	53%	47%
Missouri	135,787	130,660	266,447	51%	49%
Ohio	45,756	42,189	87,945	52%	48%
Wisconsin	156,265	145,275	301,540	52%	48%



# Reported County Harvests

Top 5	Antlered Harvest	Antlerless Harvest	Total Harvest
Montcalm	4,530	1,921	6,451
Sanilac	4,083	2,237	6,320
Newaygo	3,698	2,469	6,167
Jackson	3,800	1,919	5,719
Lapeer	3,529	2,027	5,556

Bottom 5	Antlered Harvest	Antlerless Harvest	Total Harvest
Keweenaw	146	2	148
Luce	257	14	271
Wayne	311	118	429
Gogebic	431	39	470
Alger	482	84	566



# Harvest Per Square Mile

Top 5	Antlered Harvest
Montcalm	6.3
Shiawassee	5.9
Arenac	5.8
Ionia	5.7
Clinton	5.6

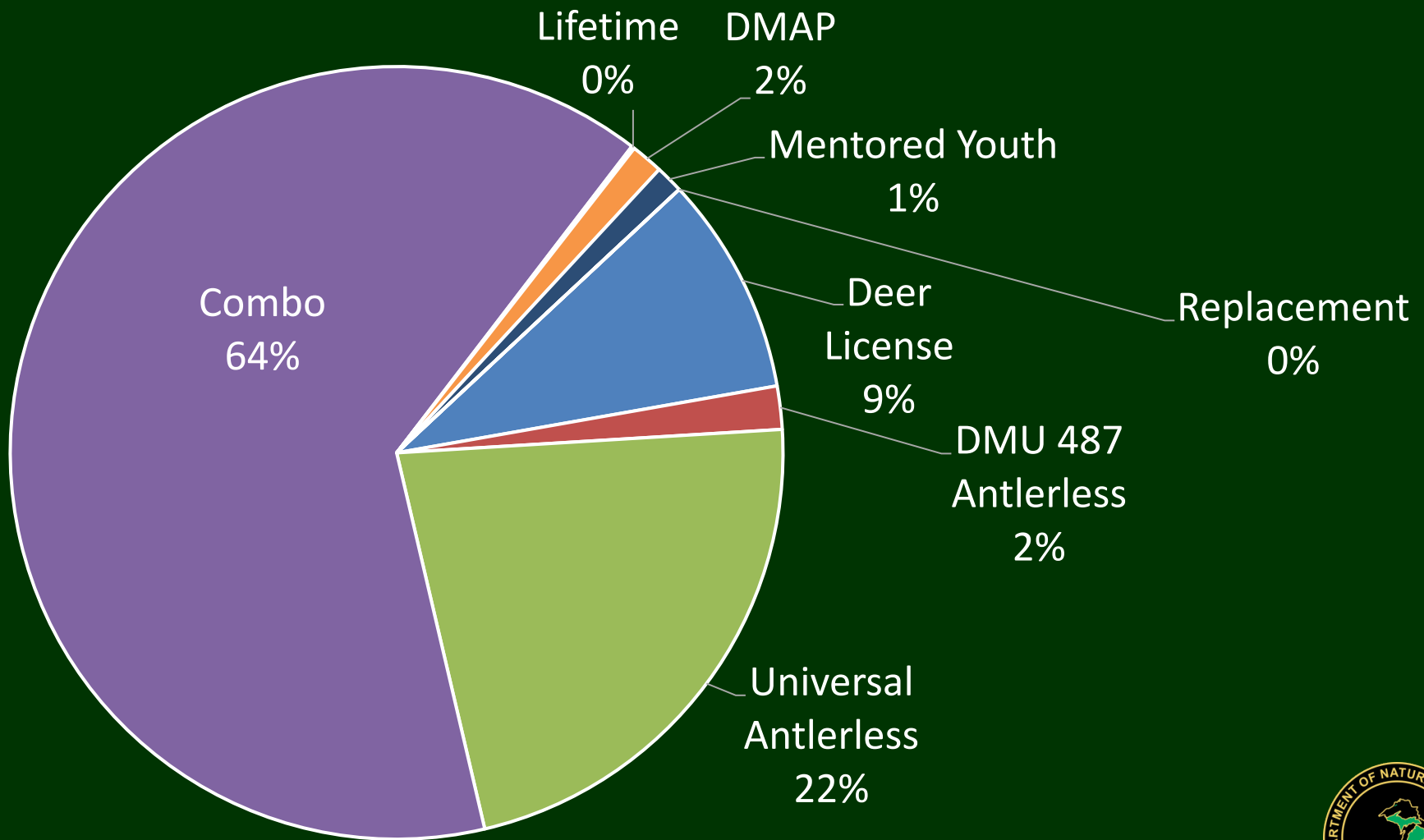
Top 5	Antlerless Harvest
Mason	4.2
Oceana	3.5
Gladwin	3.4
Lapeer	3.1
Clare	3.0

Bottom 5	Antlered Harvest
Keweenaw	0.3
Luce	0.3
Gogebic	0.4
Wayne	0.5
Alger	0.5

Bottom 5	Antlerless Harvest
Keweenaw	0.0
Luce	0.0
Gogebic	0.0
Baraga	0.0
Ontonagon	0.1



# Harvest by License



# Antlerless Harvest per Hunter

Antlerless Deer Harvested Per Hunter	Number	Percent	Cumulative Percent
0	118,541	63.2	63.2
1	56,186	29.9	93.1
2	9,700	5.2	98.3
3	2,113	1.1	99.4
4	643	.3	99.8
5	236	.1	99.9
6	107	.1	100.0
7	49	.0	100.0
8	17	.0	100.0
9	4	.0	100.0
10	4	.0	100.0
11	2	.0	100.0
Total	187,602	100.0	





# Antlered Harvest per Hunter

Antlered Deer Harvested Per Hunter	Number	Percent	Cumulative Percent
0	46,660	24.9	24.9
1	120,963	64.5	89.4
2+	19,979	10.6	100.0
Total	187,602	100.0	100.0



# CWD Update

- As of December 1, 2022
  - Completed tests on 5,990 deer statewide
    - 4,760 deer from priority surveillance area (25 counties + UP Core Area)
    - >2,200 pending results not yet accounted for
  - No new counties where CWD has been detected
    - 11 positives in previously identified locations
  - Met or exceeded surveillance goals in 10 counties
  - Total of 237 confirmed cases to date



# TB Update

- As of December 1, 2022
  - Completed tests on 12,460 deer statewide
    - 3,888 deer from priority surveillance areas, including 4-county area and 7 surrounding counties
  - Four confirmed cases thus far in Alpena, but testing for TB takes longer; more suspects awaiting confirmation.
  - Overall, 971 deer overall have tested positive for TB



# Final Season Estimates

- Mail survey sample of licensed hunters
- Submit after all 2022 hunting is complete



# Thank You

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[www.michigan.gov/deer](http://www.michigan.gov/deer)

