



Topic: Common Merganser

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Title: Common Merganser Control Policy and Procedures

INTRODUCTION

Common Merganser populations across North America have been slightly declining according to the North American Breeding Bird Survey. However, in Michigan their populations have increased according to the Michigan Breeding Bird Survey. They are found on many northern Michigan waterways. Research has found an association between Common Mergansers and the lifecycle of one species of parasite causing swimmer's itch.

Swimmer's itch is a skin irritation that is caused by the larvae of a parasitic flatworm that is fairly common in many northern Michigan lakes. The flatworm parasite (schistosome) lives as an adult in a suitable host such as waterfowl (the definitive host). The adult worm lays its eggs, which are released into the water through the host's feces where they hatch into a free-swimming stage called a miracidium. The miracidia then enter particular species of snails that serve as intermediate hosts where the miracidia develop further. After that, another free-swimming stage called a cercaria emerges from the snail in search of another definitive host such as waterfowl. Sometimes cercariae encounter swimmers instead of birds, and penetrate into their skin and die, causing a painful itch.

Previous research has indicated that Common Mergansers are a definitive host for the swimmer's itch schistosome on several northern Michigan lakes. Common Mergansers were found to have much higher parasite loads than other waterfowl species. Researchers have also found that reducing the number of hours Common Mergansers spend on a lake (e.g., through capture and relocation) can reduce the number of infected snails. Since the cercariae from the snail infect humans, fewer infected snails may result in less cases of swimmer's itch.

Swimmer's itch is a concern for many lake residents and communities, and they are working on developing a science-based swimmer's itch program that includes education and outreach, prevention, control, and monitoring. Lake residents are interested in breaking the cycle of the swimmer's itch parasite, and controlling Common Mergansers is one aspect of a comprehensive swimmer's itch control program. This policy is focused on Common Merganser control procedures, developed to assist communities.

Common Mergansers have many values associated with them, including hunting and viewing. This policy was developed with the consideration for a wide diversity of stakeholder interests in Common Merganser control.

POLICY

The goal of the Common Merganser control program is to help meet the interests of multiple stakeholders, specifically associated with swimmer's itch, while protecting Common Merganser populations.

This policy contains detailed procedures for the Wildlife Division (WLD) staff to manage Common Mergansers, including issuance of site permits to private landowners, lake associations, municipalities, public agencies, and issuance of permits to nuisance animal control firms and agencies. The WLD Common Merganser Control Program Policy and Procedures will be reviewed in 2023; however, the management and control program will be revised and updated as needed. WLD has the right to discontinue the program at any time.

I. Authority

Federal Authority

The Common Merganser is afforded protection under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703–712). Accordingly, Common Merganser, their nests, and their eggs cannot be taken, possessed, imported, exported, transported, purchased, bartered, destroyed, or offered for sale without a federal permit.

State Authority

The Michigan Department of Natural Resources (Department), under Public Act 451 of 1994, is empowered to “manage animals in this state”. In managing animals, the Department may issue orders to “determine conditions under which permits may be issued by the Department.” [MCL 324.40107 (1i)]. In addition, MCL 324.40105 states, “All animals found in this state, whether resident or migratory and whether native or introduced, are the property of the people of the state, and the taking of all animals shall be regulated by the Department as provided by law.” Further, the Department has authority to issue permits to authorize “the taking of animals to prevent or control damage to crops or feed, disease, or nuisance caused by the animals” [MCL 324.40114 (4b)]

The Department exercises its regulatory authority for resolving Common Merganser-human conflicts through the Wildlife Conservation Order (WCO) and in compliance with 50 CFR 21.27. The WCO specifically authorizes permitting to capture and relocate Common Mergansers, to destroy Common Merganser eggs and nests, and to conduct lethal harassment activities [WCO 5.51d and 5.52d]. Limited lethal take by lawful hunting methods while conducting harassment activities may be authorized on a case-by-case basis.

Regulatory authority for hunting Common Merganser is provided in Public Act 451 of 1994 as the Common Merganser is a game species in Michigan. In addition, the Natural Resources Commission has delegated authority regarding method and manner of take of game species under MCL 324.40113a. Specific hunting regulations such as seasons, dates, and bag limits are articulated in the WCO and adhere to federal frameworks.

II. Procedures

A. Public Health, Safety, or Welfare Considerations

If Common Mergansers are endangering or about to endanger public health, Common Mergansers may be trapped and relocated, and Common Mergansers and their eggs and nests may be taken on public and private property under Department permit or letter of authorization issued by the WLD to local units of government, private citizens or a contracted nuisance animal control firm or agency.

B. Participation in Common Merganser Control Activities

i. Lakes with Single Ownership shall:

For control activities of Common Mergansers on lakes with a single riparian or bottomland owner, permit requests must be submitted in writing for Common Merganser removal by the land manager, owner or their designee to the DNR; this can include township, city, and residential or commercial private properties. Permits will be issued by the WLD permit specialist on behalf of the Department and will be valid for three years.

Single bottomland owners must notify all landowners adjacent to the water body of Common Merganser control activities planned before they commence and provide proof of notification to the WLD.

ii. Lakes with Multiple Ownership shall:

For control activities of Common Mergansers on lakes with multiple riparian or bottomland owners, Common Merganser control efforts may be conducted under a permit issued by the WLD. Permits will be issued by the WLD permit specialist on behalf of the Department and will be valid for three years pursuant to the following:

- Petition
 - The lakeshore landowners, or lake association representing lakeshore landowners, or other riparian landowners must document the eligibility requirements described in subsection iii and must concur through a petition offered to the WLD that Common Merganser control activities are desirable.
 - This petition is approved by 70 percent of the lakeshore landowners.
 - The lake association, or other petition circulators, certifies that the list of names on the petition has been verified by the township or other local unit of government, and that the governmental unit has a list of all eligible property owners.
 - The lake association, or other petition circulators, certifies that a reasonable attempt to contact all lakeshore landowners was made, and must indicate when/where the petition is available for public review.
 - The petition document(s) presented to the lakeshore landowners for signature and made available for public review, specifies what Common Merganser control activities are proposed.
 - Petitions will be considered valid for six years.

- Resolution
 - A county commission may issue a resolution of support that approves Common Merganser control activities on the waterbody. A copy of the resolution must be offered to the WLD with the application for a permit.
 - A local government official (township, city, etc.) representing the property owners on the subject lake, body of water, defined riparian area, and/or site may issue a resolution that approves Common Merganser control activities for that site. A copy of the resolution must be offered to the WLD with the application for a permit.
 - When proposed control activities will affect more than one unit of municipal government with an interest in the waterbody, resolutions that approve Common Merganser control activities for the related areas must be obtained for each unit. Copies of the resolutions must be offered to the WLD with the application for a permit.
 - If the control activities cannot be confined to the areas related to the consenting governmental unit(s), a resolution of support from the county commission can allow for control activities on the waterbody to take place.
 - The resolution must specify what Common Merganser control activities are approved.
 - Resolutions will be considered valid for six years.

iii. Eligibility requirements:

To be eligible for Common Merganser control activities, a lake must provide a Letter of Authority documenting the swimmer's itch lifecycle present on their lake and include the following information at a minimum:

- Presence of the swimmer's itch parasite and evidence that Common Mergansers are the host associated with the parasite's lifecycle on the lake.
- Documentation of Common Merganser broods on the lake.
- Evidence of increasing swimmer's itch cases or severity.

The Letter of Authority must describe the lake's plans for Common Merganser control and management activities for the three-year period of the site permit and specify which control activities are proposed. In addition, one of the following criteria must be met to be eligible for participation in Common Merganser control activities; this data will be required again if the site reapplies in three years:

- Snail infection rate for the lake is greater than 0.5 percent with a minimum sample of 1,000 snails taken from a minimum of five sampling locations on the lake.
- A qPCR assessment of the lake that is greater than 50 cercariae/25 L of water with a minimum of five sampling locations.

As methods and technologies to detect parasites are developed and improved, the policy will be updated to provide improved eligibility options and thresholds.

C. Issuance of Permits

Permits to conduct Common Merganser control activities may be issued as authorized by the WCO section 5.51d and 5.52d. Permits will be issued by the WLD permit specialist on behalf of the Department.

i. *Site Permits*

Site permits shall be valid for three years or until the control needs identified in the WCO are no longer applicable. Permits may be revoked prior to expiration date if the guidelines in this policy are not followed or if control activities result in a threat to public health or safety. Permits shall be issued to landowners, lessees, or land managers that represent a lake and shall contain the following:

- a. Name of landowner, land manager, or lessee;
- b. Name of the lake or other body of water;
- c. Name of the nuisance animal control business, public nuisance animal control agency, or non-profit nuisance animal control organization to conduct the Common Merganser control activities;
- d. Authorized Common Merganser capture, transportation, and/or relocation methods. Methods of capture and relocation must be as outlined in Section D of this document;
- e. Authorized methods of take of Common Mergansers and/or their nests and eggs as outlined in Section E of this document; and
- f. Authorized methods of harassment as outlined in Section F of this document.

WLD will issue only one site permit per lake. If more than one application is received per lake, applications will be returned, and applicants will be asked to submit one application.

A lake must provide an assessment of the Common Merganser control activities to renew a site permit after three years that includes the following information at a minimum:

- The amount and type of Common Merganser control activities conducted in the last three years.
- Documentation that Common Merganser control activities have had a measurable impact on reducing swimmer's itch by at least two of the following:
 - Significant reduction in the number or severity of swimmer's itch cases.
 - Significant reduction in the percentage of snails infected with a minimum sample of 1,000 snails taken from a minimum of five sampling locations on the lake. Sampling locations and dates must be consistent across years.
 - Significant reduction in the number of cercariae/25L of water detected by qPCR methods with a minimum of five sampling locations. Sampling locations, dates, and time of day must be consistent across years.

ii. *Nuisance Animal Control Businesses, Public Nuisance Animal Control Agencies and Non-Profit Nuisance Animal Control Organizations Permits*

Nuisance animal control businesses, public nuisance animal control agencies, and non-profit nuisance animal control organizations conducting Common Merganser control activities must be permitted by the Department and follow all procedures as described in this document.

To be eligible to conduct Common Merganser control activities, a nuisance animal control business, public nuisance animal control agency, or a non-profit nuisance animal control organization must provide a Letter of Authority documenting their qualifications and proficiency with live trapping and relocating waterfowl, bird handling, bird identification skills, boater safety, and data reporting. In addition, all permittees must submit letters of recommendation and references from sources that can effectively comment on their credentials (e.g., other nuisance animal control businesses, public nuisance animal control agencies, non-profit nuisance animal control organizations, past clients, etc.). WLD may require the applicant to receive additional training.

Permits will be issued by the WLD permit specialist on behalf of the Department and shall be valid for one year. Permits may be revoked prior to expiration date if the guidelines in this policy are not followed or if control activities result in a threat to public health or safety. If limited lethal take is approved, additional permits or authorizations from the USFWS and the WLD may be required.

iii. Non-refundable permit fees are as follows:

- Lakeshore landowners, or lake association representing lakeshore landowners, or other riparian landowners:
 - \$100 for single family residence.
 - \$200 for all others.
- Nuisance animal control business, public nuisance animal control agency, or non-profit nuisance animal control organization:
 - \$200 fee for Contractor Permit to conduct Common Merganser nest and egg destruction.
 - \$200 fee for Contractor Permit to conduct harassment activities with limited lethal reinforcement.
 - \$300 fee for Contractor Permit to capture and transport Common Merganser.
 - \$500 fee for Contractor Permit to conduct all Common Merganser control activities.

D. Approved Methods of Capture, Transportation, and Relocation

The relocation of Common Mergansers may be an effective control measure for swimmer's itch in lakes. The Department and the United States Fish and Wildlife Service (USFWS) personnel work with lake associations, landowners, businesses, private licensed wildlife-control firms, and local governments to provide trapping and relocation information for Common Mergansers. This program is available between May 15 and August 15 of each year. Banding Common Mergansers at the trapping location is encouraged and may be required for research needs.

Transportation standard practices:

- i. Hens and broods shall not be held more than 24 hours.
- ii. Hens must be trapped and relocated with ducklings whenever possible.
- iii. Upon initial permit, crates must be approved by the Department via submission of photos. Crates must allow adequate space for hen and brood:
 - 12 or fewer ducklings per 2' x 1' crate.
 - Ensure adequate ventilation.
 - Use breathable cloth to cover crates to keep birds calm.

Relocation requirements:

- i. Release sites must be approved by the Department's designee as indicated on the permit and meet the following minimum criteria:
 - a. *Stagnicola* snails are not present on the water body.
 - b. Habitat can support Common Mergansers.
 - c. Written approval of the relocation by the land manager, owner or their designee of the release site.
- ii. The Department's designee as indicated on the permit must be contacted prior to release to verify relocation sites.
- iii. There must be a Common Merganser hen present at the release site during the release if no hen is captured with the ducklings.

Additional relocation criteria may be added in the future to address potential issues such as conflicts with recreational users at the release site, disease transmission issues, etc.

E. Egg and Nest Destruction Out of Natural Cavities

Department personnel will work with lake associations, landowners, and municipalities to provide nest and egg removal out of natural cavities. This program is available from April 1 to July 1 of each year. Destruction of eggs and nests in artificial nest boxes is prohibited.

- Eggs may be sprayed with or submerged in 100 percent food-grade corn oil. The entire surface of the egg must be coated. Eggs that are oiled should be placed back in the nest to prevent re-nesting,
- Eggs may be shaken and placed back in the nest to prevent re-nesting,
- Eggs may be removed and disposed of according to local ordinances and applicable state laws,
- Nest material may be physically removed or altered to deter nesting and/or re-nesting

F. Harassment

Harassment, with or without limited lethal take, has been found to be effective in some instances in deterring Common Mergansers from establishing nests on a lake. Timing of harassment options should be taken into consideration with other control activities to ensure efficacy of each control method. Occasionally, limited lethal take is used to reinforce harassment activities. As stated in section II.B.iii, lakes must provide a Letter of Authority outlining desired control activities for the period of the permit.

Methods of harassment may include boat chases and scare devices such as the following:

- Shell crackers (may require a federal permit)
- Other pyrotechnics
- Bird bangers
- Screammers
- Rockets
- Bird alarm
- Motion detector accessories
- Electronic noise systems
- Bird scare balloons
- Mylar scare tape
- Lasers, flashing or rotating strobe lights
- Radio-controlled boats (prior authorization may be required by the Department's Law Enforcement Division)
- Limited lethal take by lawful hunting methods when authorized

Harassment of flightless birds is prohibited. To avoid potential conflicts, it is strongly advised that harassment activities do not occur during peak summer recreation on lakes. Harassment is prohibited during all of Michigan's waterfowl hunting seasons. Individuals participating in harassment activities must be trained on species identification; Red-breasted Mergansers may not be taken.

Limited lethal take requests will be handled outside of the permitting process outlined in this policy. Those requests will be submitted directly to the WLD permit specialist for processing in accordance with USFWS authorizations. Lethal take is not to be the primary means of Common Merganser control. Active harassment must continue in conjunction with any lethal take of Common Mergansers.

Prior to undertaking harassment activities, the permit holder must call 1-800-292-7800, and render any information requested by the Report All Poaching (RAP) office of the Department. It is advised that permittees also inform lake residents of control activities and notify their local law enforcement agency.

G. Monitoring

State and regional Common Merganser population status will be monitored by the WLD through the Spring Breeding Waterfowl Survey. Number of permits issued, and type of control activities will be tracked as well.

Lakes permitted for Common Merganser control activities will annually be required to document numbers of Common Mergansers and Common Merganser broods on the lake during control activities. Lake-wide Common Merganser surveys are encouraged before and after control activities to assess their effectiveness. Permittees must have a system in place to monitor trends in the number of swimmer's itch complaints. Lakes will also be required to determine snail infection rates and/or swimmer's itch parasites per volume of water (e.g., through qPCR methods) at least every three years.

H. Notification of Control Activities

Prior to undertaking an approved method of capture, transportation, and/or relocation or egg and nest destruction, the permit holder must call 1-800-292-7800, and render any information requested by the RAP office of the Department, including but not limited to:

- Location of control activity.
- Date and approximate time of control activity.
- Description and count of individuals involved in the control activity.
- Description of the equipment (boats, etc.) used in the control activity.

I. Incidental Take

Care must be taken during control activities to minimize harm to Common Mergansers and other wildlife. However, if there is incidental take or injury to birds or other wildlife, it must be reported, and carcasses turned over immediately to the Department's local law enforcement lieutenant or wildlife biologist.

J. Reporting

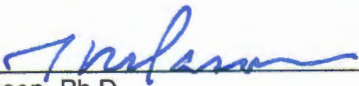
All marked Common Mergansers handled during control activities must be reported including placement of new leg bands or other auxiliary markers and markers on recaptured birds. This information must be included in annual reports (see below) and reported to the U.S. Geological Service's Bird Banding Laboratory's website www.reportband.gov.

Permittees must report control activities annually. The report is due to the permit specialist by September 30. If this report is not received as noted, the permittee is not eligible for permits in the following year. At a minimum, the following must be included in the annual report:

- Lake name (if site permit) or company name (if contractor permit).
- Contact name, address, phone number.
- Results of Common Merganser counts, and dates counts were conducted.
- Number of adult and juvenile Common Mergansers captured and dates of capture.
- Band numbers of all birds that were marked and/or recaptured.
- Release locations, number released at each site, and dates of releases.
- Number of Common Merganser nests and eggs destroyed and dates of activity.
- Number of Common Mergansers taken during lethal harassment.
- Dates and types of non-lethal harassment activities.
- Number of dead or injured birds taken incidentally.

The Department annually reports to the USFWS on control activities conducted under the federal permit issued to the Department. Department personnel will compile and submit a report with the information listed above to the USFWS Regional Migratory Bird Permit Office by December 31 of each year.

C. APPROVAL



Russ Mason, Ph.D.,
Wildlife Division Chief

2-28-2018
Date