



Division of Ecological & Water Resources
Nongame Wildlife Program
1601 Minnesota Drive
Brainerd, MN 56401

Hello Loon Watchers!

After a brief hiatus in 2019, the Loon Watcher survey is re-launching in 2020! Time was taken in 2019 to re-evaluate the program objectives, compile the data collected, and revise the survey methodology in attempts to better capture insights into the health of our state's loon populations.

What began modestly in 1979 with 56 volunteers on 73 Lakes has grown to over 300 volunteers encompassing almost 400 Minnesota lakes. This incredible dataset has provided essential insights into Minnesota loon biology, behavior and population dynamics. We are incredibly thankful for the volunteer enthusiasm, expertise, and commitment to our Loon Watcher Survey over the first 39 years. Without you, this program would not be possible.

Now entering our 40th year of monitoring loons, there is still growing interest in protecting and watching over our state bird. Your enthusiasm for this important work is greatly appreciated. Enclosed is your Volunteer Loon Watcher Survey packet for 2020.

In this year's packet you will find the following:

- Survey form for your lake – to summarize your observations throughout the season
- Survey instructions and tips – to assist you with your observations
- Map of your lake – to record nesting locations
- Loon nesting platform tips – to help you with the decision of whether or not a loon platform is needed
- A filled out example of the survey form and map
- Volunteer Agreement – one time form to be signed

Please note: If you have interest in "Loon Watching" multiple lakes, a survey form and map will need to be completed for each lake surveyed. Please reach out to the Loon Watcher Coordinator via the contact information below to request additional survey forms and lake maps. We encourage you to coordinate efforts with other residents and your lake association.

Don't forget to "**Look for the Loon**" on your Minnesota income and property tax forms. It's your opportunity to make a tax deductible donation to help loons and other wildlife. Or donate online at the website listed below.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Andrew Herberg'.

Andrew Herberg
Nongame Wildlife Specialist
Email: andrew.herberg@state.mn.us
Website: <https://www.dnr.state.mn.us/eco/nongame/index.html>
Phone: (218) 203-4371



DEPARTMENT OF
NATURAL RESOURCES

Minnesota Loon Watcher Survey

Observer Name:

Address:

Telephone:

Email Address:

Lake Name: Auto Lake

Lake Code: 69-731

County: St. Louis

Size: 96

Mode of Observation

- ☒ Motorized Boat
☐ Non-motorized Boat
☐ Shoreline

Equipment Used

- ☒ Binoculars
☐ Spotting Scope
☐ Other (e.g. naked eye)

Percent (%) of Disturbed/Developed Shoreline

- ☐ 0% - No disturbed or developed shoreline
☒ 0-25%
☐ 26-50%
☐ 51-75%
☐ 76-100% - Lake surrounded by cabins, or other development (e.g. agriculture)

Lake Ice Data (Optional)

Date ice completely melted in the spring: 5/4/2020

Date ice completely formed in the fall: Not observed
(mm/dd/yyyy)

Please record observed nesting locations on the enclosed map.

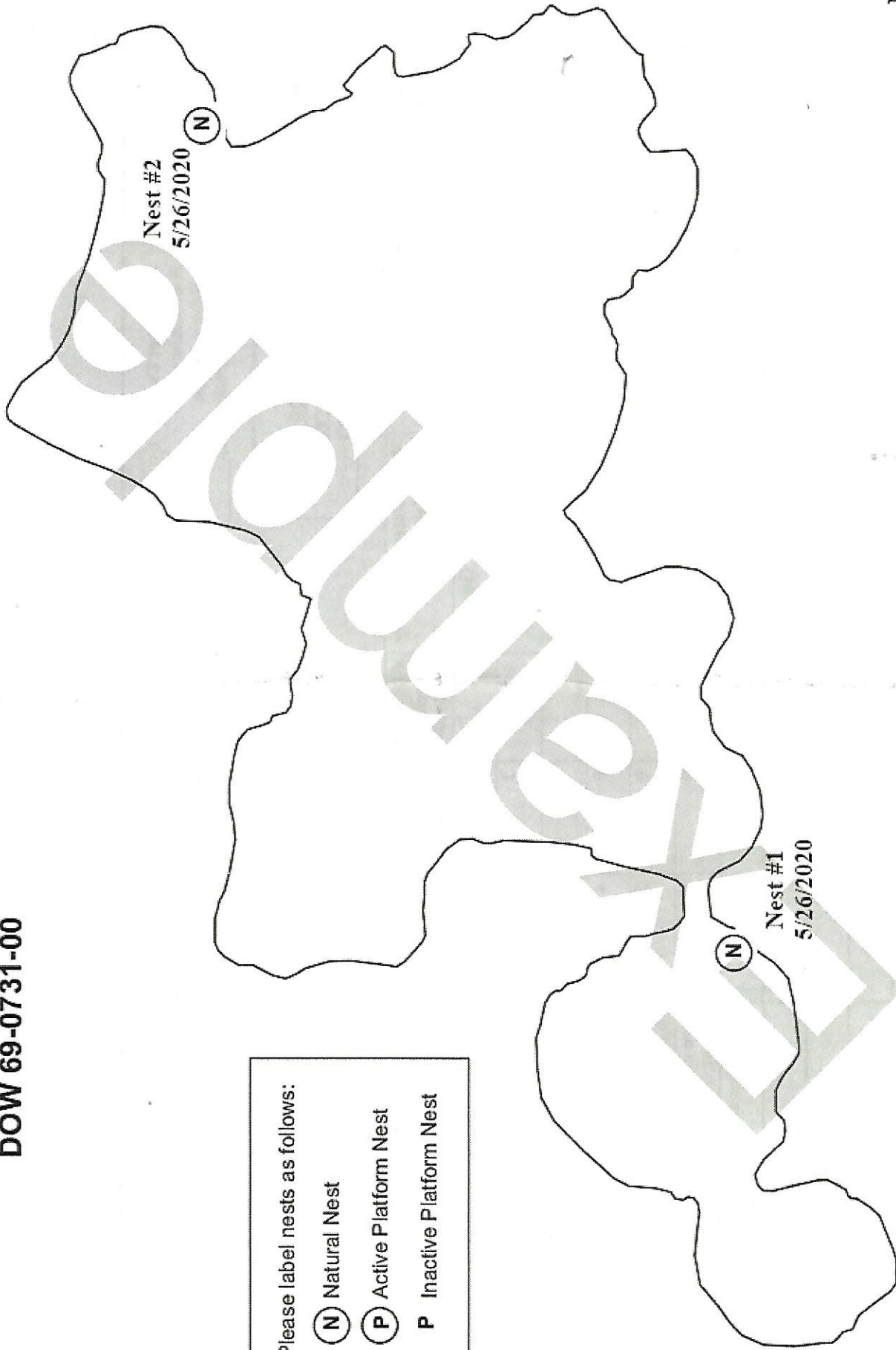
Date	Start Time	End Time	Area of the Lake Surveyed	Wind/Water Conditions	Visibility	# of Adult Loons Observed	# of Active Nests Observed	# of Juvenile Loons Observed	Comments	
1	5/15/20	8:00	11:00	Entire lake	Calm	Good	2	0	0	First pair observed on the lake
2	5/26/20	7:30	10:00	Entire lake	Calm	Good	4	2	0	Two pairs observed nest building, nests labeled on map (nest #1, nest #2)
3	6/12/20	8:30	11:00	Entire lake	Calm	Good	3	2	0	One adult observed incubating on nest #1, two adults observed near nest #2
4	7/5/20	7:00	9:00	Entire lake	Calm	Good	4	0	4	Both adults and 2 chicks observed near nest #1
5	7/27/20	7:30	10:00	Entire lake	Calm	Good	4	0	3	Two chicks observed with adults near nest #1, 1 chick observed with adults near nest #2
6	8/10/20	8:30	11:00	Entire lake	Calm	Good	3	0	3	Two juveniles observed foraging with 1 adult near nest #1, 1 juvie with adults near nest #2
7	9/26/20	9:30	11:30	Entire lake	Calm	Good	0	0	3	3 juveniles observed together in the SW bay
8										
9										
10										
11										

*Questions? See instructions on the back.

**Auto Lake
DOW 69-0731-00**

Please label nests as follows:

- (N)** Natural Nest
- (P)** Active Platform Nest
- P** Inactive Platform Nest



VOLUNTEER AGREEMENT WITH TALENT RELEASE

(2 Page Agreement)

(Revised 10/17)

Notice of Intent to Collect Private Data of Volunteer: Certain data on this form is classified as private data under Minnesota Statutes, section 13.43. You are asked to provide private data, including address, telephone number, and email address, in order to facilitate your volunteer placement. You are not required by law to provide this information, but if you don't, DNR will not be able to contact you or place you appropriately for volunteer activities and you may not receive important documents. Your private data will be available to DNR personnel whose work position or duties require access, to those involved in your volunteer activities, to those required or allowed by state or federal law or pursuant to court order, and to those with your written consent.

Volunteer's Name		Daytime Phone Number (with area code)	
Address (number and street)		Email address	
City	State	Zip	
Volunteer Job Title/Type of Project Loon Watcher Volunteer		Specific Location of Work Site (if different than DNR staff person's address below)	
Purpose (why we are doing this) Desired outcomes: To assist with monitoring the state's loon population via the Minnesota Loon Watcher Survey Program Impact this position will have: To allow us to better understand nesting success, productivity, and interesting occurrences/problems that may negatively affect Minnesota's loons			
Responsibilities (duties and tasks) Authorized work: To collect data on the number of adult and juvenile loons observed on an assigned lake(s) as well as nesting locations throughout the season as described in Loon Watcher Survey volunteer packet, program website, and/or in other program communications. Restricted work: N/A			
Qualifications Desired (education, skill, experience, physical abilities) Willingness and ability to survey according to the Loon Watcher protocol, as described in the Loon Watcher Survey instructions provided to volunteers.			
<u>Safety Topics</u> Volunteers should be aware of of: • Ticks • Heat and Cold Related Illness		• Hazard Recognition • Poisonous and Hazardous Plants • Other	
DNR Staff Person supervising the volunteer Andrew Herberg	Title Nongame Wildlife Specialist	Division/Unit EWR / Nongame	Region 2
Address (DNR facility name, number and street) Minnesota DNR – Brainerd Office, 1601 Minnesota Drive			
City Brainerd	State MN	Zip 56401	Email address Andrew.herberg@state.mn.us

DNR STAFF DIRECTIONS: Some of the data collected on this form are classified as private data. Access is limited to employees with a work assignment that reasonably requires access to the data and it may only be used for activities related to volunteering. Prior to sharing or releasing any data about a volunteer, contact and work with your division data practices designee. This agreement is used to officially register your volunteers for liability coverage. **This form must be kept in a secure location and handled according to Op Order 127.** Complete all work details and your contact information prior to saving as a PDF to give to the volunteer. Provide a copy of *Workers' Compensation information* for volunteer to read and *Guide to Department Policies* to sign (found under forms on [DNR Intranet Volunteer Programs Page](#))

TIME COMMITMENT: Negotiable? ☐ Yes ☒ No Dates: April – November. Dates each season are approximate and will depend on weather conditions and migration timing.

Minimum volunteer time commitment acceptable for this project: 1 weekday or weekend morning per month ☒ Weekdays ☒ Weekends

REIMBURSEMENT FOR EXPENSES: Mileage: ☐ Yes ☒ No Meals: ☐ Yes ☒ No

VEHICLES:

- Is driving a requirement of this volunteer position? ☐ Yes ☐ No
- If yes, does volunteer hold a valid driver's license? ☐ Yes ☐ No
- Does volunteer have current auto insurance on personal vehicle if to be used as part of the volunteer assignment?
☐ Yes ☐ No ☒ Not Applicable
- Has the volunteer taken a defensive driving course within the past 3 years? ☐ Yes ☐ No

Refer to the requirements in the DNR Fleet Policy Manual and Op Order 114 Volunteer Management before driving is authorized.

VOLUNTEER EXPECTATIONS: Volunteers are expected to follow the same rules and regulations as employees concerning use of computers, email, Internet use, phones, workplace behaviors, alcohol and drug use, violence prevention, harassment, discrimination, and code of ethics (M.S. 43A.38). Zero tolerance of workplace violence applies to volunteers. (Op Order 104.)

RELEASE OF INTELLECTUAL PROPERTY RIGHTS: All right, title, and interest in all intellectual property which may be conceived or originate, either individually or jointly by others, and which arises out of the performance of my activities with the DNR, will be the property of the State of Minnesota and must be assigned to the State. I also agree, upon request of the State to execute all papers and perform all other acts necessary to assist the State to obtain and register copyrights and patents on such materials. Works of authorship created by me in the performance of my activities with the DNR shall be considered "works made for hire" as defined in the U.S. Copyright Act.

VOLUNTEER PHOTOGRAPHS AND VISUAL IMAGES: Photographs and visual images of volunteers collected by the DNR may be considered private data under Minnesota Statutes, section 13.43. The DNR is providing you with the following notice regarding photographs and visual images of you that it may collect. Photographs or visual images of you may be taken while you are volunteering for the DNR. These images may appear on websites, in public information communications, including videos, newsletters, bulletins, brochures, honors and award recognitions, and booklets. These photographs or visual images may be made available to DNR employees and the public at large now and at any time in the future.

TALENT RELEASE: I give permission and rights to the State of Minnesota and the DNR to record my performance and to use images of me, my performance and my sounds. I understand that this use includes the rights to reproducing, publishing, publicly displaying, distributing, licensing and assigning said recordings together with the copyright to these recorded images in all formats. I authorize my name to be used in connection with all uses of these recorded images and sounds. I understand that I will not be paid for any uses of these recorded images and sounds. I waive all rights to inspect, approve or control how these recorded images and sounds will be used by the State of Minnesota and the DNR. I understand that the State of Minnesota and the DNR will not intentionally distort or misrepresent these images and sounds in use of them. I agree to not sue and to hold harmless the State of Minnesota and its officials, employees, contractors and licensees from any claims or damages arising from the use of these recorded images and sounds of me and my performance.

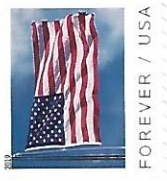
I have read, understand, agree to abide by the terms of this agreement and have the right to contract in my own name. If I am unable to meet this commitment, I will contact my DNR supervisor.

Volunteer's Signature	Date
If under 18 years, parent/guardian must approve and sign. Parent/Guardian's Signature	Date
DNR Staff's Signature (who is supervising the volunteer)	Date



Minnesota Department of Natural Resources

**NONGAME WILDLIFE PROGRAM
1601 MINNESOTA DRIVE
BRAINERD MN 56401**



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MINNESOTA DNR
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BRAINERD MN 56401**

Loon Nesting Platform Tips

Artificial nesting platforms have been used to increase loon nesting success in many states. While they have been effective at enhancing loon productivity and are very popular with lakeshore residents, artificial platforms do not insure nesting success. The best way to enhance the long-term health of loons is to protect natural nesting sites.

If you are considering an artificial platform, there are a number of questions that should be considered.

If you can answer yes to any of the first three questions, a platform is probably not the right management tool for your lake.

- Do loons produce chicks on your lake once every three years?
- Do your loons successfully nest on a nearby lake?
- Are there natural nesting locations on your lake that could be enhanced rather than place a platform?
- Do you know the history of loon nesting attempts on your lake?

If you answered yes to the last question your first step should be to document loon use. You need to determine if:

1. The loons are territorial (exhibiting defensive postures such as the penguin dance); non-breeding residents; or just occasional visitors.
2. If nesting has been attempted, data on nest locations, cause, and number of failures is important.

If you do not have loons nesting, there may be a number of reasons such as poor food base, high levels of human disturbance, or simply that the loons are successfully nesting on a nearby lake.

If territorial loons nest on your lake but have a history of nest failures you should first work to enhance natural nesting sites. This might be through regulations such as a slow-no-wake zone near the nest, contacts with the landowners about naturalizing shorelines, or educational programs for lake residents or users.

If natural nest sites are not available, you may want to consider an artificial nesting platform. The most appropriate locations for artificial platforms are lakes where all natural nesting sites have been developed, water levels fluctuate severely (such as reservoirs), or where loons nest on mainland shores and have lost their eggs to shore predators such as raccoons for at least three consecutive years.

If you are considering an artificial platform for your lake, there are several things to consider:

- Contact your local DNR Nongame Wildlife Biologist or Volunteer Loon Watcher Survey Coordinator andrew.herberg@state.mn.us for help in selecting an appropriate location.
- In Minnesota, check with your local Boat & Water Safety unit or Sheriff's Office to see if a permit is needed before you place a loon nesting platform on your lake.
- The platform should be placed in five to six feet of water and far enough away from shore to deter land predators. It is important that the platform not interfere with boating traffic or be located in close proximity to a predator such as a bald eagle nest. We encourage you to monitor platform success and record your observations.
- We encourage you to involve your lake association in your plans.
- Monitor the nesting success of loons using the platform and include your observations on your Volunteer Loon Watcher Survey form.

Important: You will be the person responsible for maintaining the artificial nesting platform for its lifetime. This includes placing it on your lake soon after ice-out, removing it in late summer, and making necessary repairs at the end of the season. This is an important long-term responsibility. If the nesting platform is not properly maintained, it may cause the nest to fail.

Artificial nesting platforms are not always the answer.

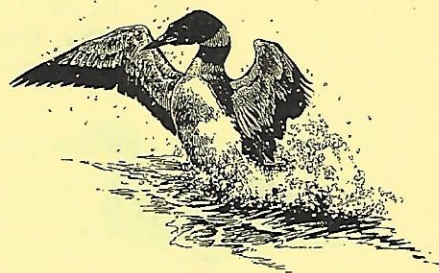
- Platforms can be an easy “out” from the true challenge of balancing human lake use and the habitat needs of loons and other species. Protection of nest sites from development, coordination of water level fluctuations to protect nests, and an understanding of the habitat suitability are essential.
- The best way to enhance long-term health of loons is to protect natural nesting sites.
- There is no guarantee that loons will use a platform and, in fact, artificial nesting platforms can sometimes create problems for loons. For example, predators such as crows, gulls, or eagles may more easily locate nests on platforms. In addition, curious humans can impact loons by boating too close to a platform and frightening loons from the nest.
- Education is the best way to encourage loon awareness and good boating behavior. Contact Volunteer Loon Watcher Survey Coordinator andrew.herberg@state.mn.us if you are interested in an educational brochure to share with lake residents and users titled “Be Loon Aware” that describes responsible watercraft use to help limit conflicts between boaters and loons.



Volunteer Loon Survey – Survey Tips

Minnesota Dept. of Natural Resources

Nongame Wildlife Program



General survey tips

1) When to Survey:

- **Do not survey in heavy rain or whitecap conditions.** Loons are very difficult to see in choppy waves and are next to impossible to see in whitecaps (i.e. BIG waves). If the weather is bad, reschedule your survey for another day. Watch the forecast and plan your surveys accordingly.
- Early morning and late evening generally provide the best survey conditions.
- **Try to avoid disturbing the loons – observe from a distance.**

2) What you will need:

- **Binoculars** and/or spotting scope
- **Map of lake for navigation and marking nest locations**
- **Be careful – wear life vests in boats and canoes**
- **Bird Identification Guide Book** – you may note other bird species present on the lake that you may want to add to your comments section on the data sheet.
- **Ask for permission before crossing private land**

Other important Information

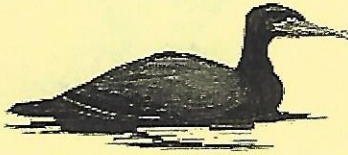
1) Loon Facts

- Most breeding pairs of loons will have 0 - 2 young
- Lakes smaller than 150 acres are unlikely to have more than 1 breeding pair of loons, which means that most small lakes will not have more than 1 or 2 juvenile loons.
- Adult loons frequently fly to other lakes for feeding and social interactions, thus while you survey your lake, the loon(s) may be off the lake or “extra” loon could be visiting.
- Chicks up to 1 – 2 weeks of age have gray downy feathers. Juvenile loons are brown and gray from 2 – 4 weeks and then turn gray and white after about 4 weeks of age.
- Female and male adult loons are indistinguishable by feather pattern and color. Males tend to be slightly larger. They share nest and chick-raising duties equally on average (it's a myth that only “mom” tends to the nest and young).

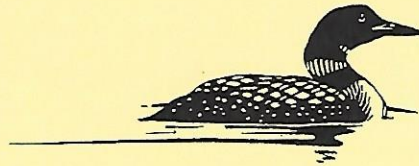
2) Monitoring Tips

- Count all loons on the lake including those leaving or landing. **Do not count loons that fly overhead and do not land.**
- Count only the loons **you** see, but use calls that you hear to help you find loons.

- Be careful not to count cormorants as loons – from a distance they can look alike. **Use binoculars and look for the white on the breast of the loon.** Cormorants are entirely dark.



Double-Crested Cormorant

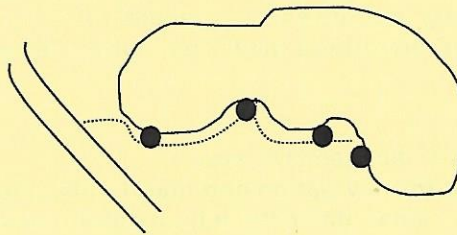


Common Loon

○ **Surveying from Shore:**

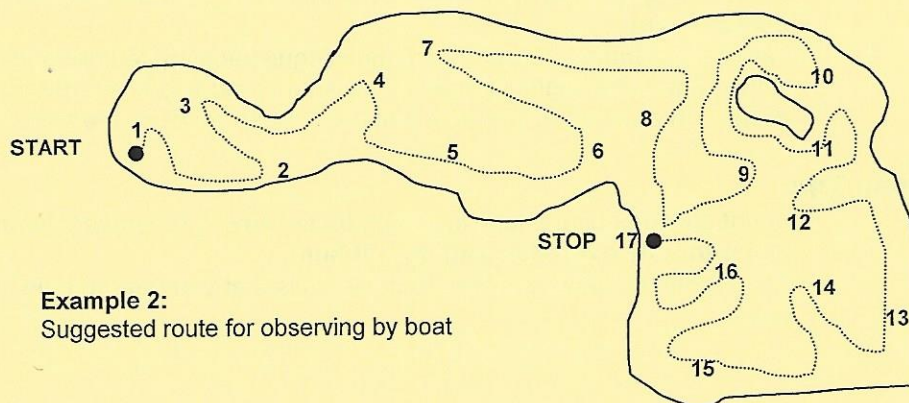
- Make sure you can see the entire lake.
- View the lake from multiple vantage points, if necessary (Example 1).
- If you cannot see the entire lake, view for a longer period of time in case there are loons “around the corner”.

Example 1:
Suggested
route for
surveying
by shore



○ **Surveying by Boat:**

- **Round Lakes:** stay about 200 feet from shore moving around the lake.
- **Narrow, long Lakes:** move back and forth (zig-zag) down the length of the lake.
- **Large lakes (>400 acres):** Survey under calm, no wind conditions (early morning- calm, less boat traffic). Have 3 people in the boat (1 driver, 2 observers). Scan FRONT, SIDES, BEHIND boat...if you see a loon, stop and survey for a minute. Note the location of the loon and what direction it is moving. Be careful not to double count loons as you move around the lake. Keep track of the loons you observe.
 - **Stop the boat every 400 yards to fully scan the lake** w/binoculars and eyes (steady and quiet). With the motor off, you can hear loon calls from all parts of the lake.
 - Be conservative...if you think you may have already counted some loons, do not count them again.



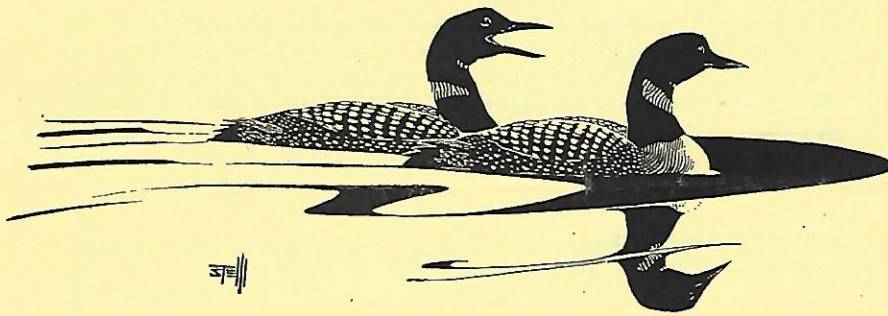
Example 2:
Suggested route for observing by boat

3) Additional Birds to Look for

- **DNR-Nongame Wildlife Program is seeking reports of certain bird species that may be nesting including:** White Pelicans, Herons, egrets, grebes, and terns, ospreys, eagles, and other rare species.
- Use the **comment** field on your DATA FORM and MAP to document additional bird species that you may see on your lake as you survey.

REMEMBER:

- Survey the lake under calm water conditions
- Ask for permission before crossing private land
- Be careful – wear life vests in boats and canoes
- Try to avoid disturbing the loons
- USE binoculars
- Bring a data form, map, instructions, and bird ID book.
- Have fun!

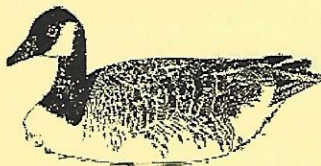


IV. Birds that are commonly confused with loons (at a distance)

- Although adult common loons are quite distinctive, distance, poor observation conditions, and lack of familiarity with similarly shaped birds could cause misidentification. Some birds that you may have specific problems with include:

**Double-Crested Cormorant**

Similar in size and shape to a loon, sits low in water, body completely black except for the orange throat pouch. When swimming it points its head and bill upward. Please let us know if you observe cormorants nesting.

**Canada Goose**

Larger than a loon, it sits higher in the water and has a black neck with no necklace stripes. Additionally, it has a solid white cheek-patch. Canada geese are no longer counted in the MLMP.

**Red-Breasted Merganser**

Half as large as a common loon, with a similar silhouette. The sexes differ - females are dull gray with rusty-colored heads, males have green head, white neck and rusty breast. Both sexes have crests on the back of their heads and bright orange bills.

**Common Merganser**

Similar to the red-breasted merganser, but lacks the rusty breast.

**Red-necked Grebe**

Smaller than a loon, similar silhouette, sits low in the water, gray body, red neck, and white throat and cheek. Has similar behavior as a loon - is a diver, carries their chicks on their backs. Please record on your data form any observations of red-necked grebes nesting or with young.

**Western Grebe**

Nearly as large as a loon, similar silhouette, sits low in the water, solid black body, long-white neck, and pale yellow bill. As with the red-necked grebe, has similar behavior as a loon (diver, chicks on back). Please record on your data form any observations of western grebes nesting or with young.

**Immature Common Loon**

The immature common loon is the same shape and size as an adult loon, with plumage that is gray or brown, and they have a white belly. They do not have a black head with white stripes. At the end of the summer/early fall the young-of-the-year will have this appearance.

~ Do Your Part to Protect Loons ~

- **Watch Loons from at least 200 feet away.** Close encounters can be deadly for swimming and nesting loons. Use binoculars or spotting scopes from a safe distance.
- **Use non-lead fishing tackle.** Ingesting one lead sinker or jig will kill a loon.
- **Avoid use of islands before July 15th of each year.** Loons prefer islands for nesting.
- **Protect native vegetation on all shores.** Loons often nest on natural shorelines and use natural materials to build their nests.
- **Conserve electricity.** Mercury emissions contaminate lakes and loon food.
- **Dispose of household garbage at a collection site.** Garbage draws raccoons, foxes, gulls, and eagles, which prey on loon eggs. Trash can ensnare wildlife like loons.
- **Be an ethical angler.** Never fish or cast near loon nests or swimming loons, and properly dispose of extra bait and trash on land.
- **Keep dogs and cats away from loons and nests.** Pets disturb nesting loons and destroy loon eggs.
- **Use only phosphorus-free fertilizers on shorelands, and only if needed.** Fertilizer that runs off into lakes increases aquatic plant growth, making it difficult for loons to swim and find food.
- **Report any unusual loon activity or harassment of loons to the Loon Watcher Coordinator.**
- **Monitor water quality or invasive species.** Check with your lake association, the Pollution Control Agency, and other organizations for ways that you can help.
- **Be a responsible boater.** Never chase loons or run motorboats or personal watercraft over areas where loons have been seen. Loons and loon chicks have died from being hit by boats and propellers.

~ Practice and Teach Wildlife Stewardship! ~

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