



Instructions for the 2015 Annual Lake Monitoring Form

Remember to use only one form per lake. Please mail the form and the lake map to LoonWatch by **Nov 15, 2015**.
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Annual Lakes Monitoring Program (ALMP) Background

Since 1978, LoonWatch has gathered information about the distribution and reproductive success of Common Loons on Wisconsin lakes. Each year, volunteers observe loon activity on one or more lakes of their choice from ice-off to fall migration and fill out lake monitoring forms, which they return to LoonWatch. An annual report summarizes observations from LoonWatch volunteers. The annual survey provides comprehensive information on individual lakes that is useful for recommending protective actions.

***Enhanced Monitoring Opportunity

Volunteers who are able to collect 6 or more observations between May 15 and July 15 -- as well as 2 observations of chicks in August, (if any are hatched) will have their data added to an important analysis of population dynamics to determine the status of loons in the state. If you want to be included in this advanced effort, please indicate by checking the box at the top of your monitoring form.

We want to collect data that provides the most comprehensive understanding of loon productivity (reproduction rate) throughout northern Wisconsin. **If you are not able to monitor every week, don't worry.** Observations from volunteers are critical to statewide efforts to protect loons and their habitat. All contributions are welcomed.

Before you fill out your monitoring form, please remember the following information:

- ❖ Fill out the 2014 form, **not** monitoring forms from past years.
- ❖ Please fill out **one form per lake**, answering as many questions as possible. (You will be able to break this information into loon territories if more than one pair use your lake.)
- ❖ Answer as many questions as possible. If you cannot answer a question, write "unknown". **Please do not leave a question blank.**
- ❖ If you received your packet by mail, then a map of your lake is provided in your monitoring packet. If you are obtaining your monitoring form via the LoonWatch website, please obtain your lake map from the DNR website <http://www.dnr.state.wi.us/lakes/Documents/LakeMaps.aspx> Indicate loon territories and nests on your lake. **Please return the lake map with your monitoring form!**

Contact Information

- ❖ Please enter your contact information – this helps us keep our mailing list current. We will call or write if questions arise about your monitoring report.
- ❖ Please indicate how many years you have volunteered for LoonWatch.

Information About Your Lake and Monitoring Coverage

Please provide as much information as possible about the location of your lake. The DNR website below provides the Township, Range and its WBIC number (Water Body Identification Code) <http://www.dnr.state.wi.us/lakes/Documents/LakeMaps.aspx> .

Question 1: If your lake has a lake association, they can be a valuable partner in our activities, such as educational presentations and resources.

Questions 2 & 3: Tell us about when you started and stopped monitoring this season. This helps us understand if loons are on your lake during the nesting season, or if they visit only during migration. This also helps us understand how much detail you observed (i.e. Did you observe the loons from their spring arrival, or were you observing them only during the breeding season?)

Question 4: Please indicate if you surveyed your entire lake, or a portion of the lake. If you observed a portion of your lake, please mark the area surveyed on your lake map.

Loon Observations and Migration Information

Question 5: We wish to determine if the loons using your lake are a breeding pair.

- a. If you did not have loons on your lake during the summer months, circle "No loons were seen on this lake."
- b. If you have loons that visited your lake, but did not stay for the summer, circle "Loons visit this lake but do not stay for the summer."
- c. Did you have non-territorial loons present on your lake? These loons are unsuccessful claiming a territory, finding a mate, or are relatively young loons. They are often seen alone, and do not reproduce. Non-territorial loons may also fight with a resident breeding pair. If this describes the loons on your lake, then circle "Loons stayed on this lake all summer, but there were no signs of nesting or territorial behavior." (Usually, these loons are not in pairs.)
- d. A territorial pair is a pair of loons that you observed together who were NOT aggressive with each other, and may have nested and raised chicks.
- e. Remember, you may have both non-territorial AND territorial loons present on your lake.

Question 6: Report the spring arrival and fall departure dates of loons on your lake. If you are unable to witness the arrival or departure of the loons, perhaps another resident on the lake may be able to help. If not, write "unknown".

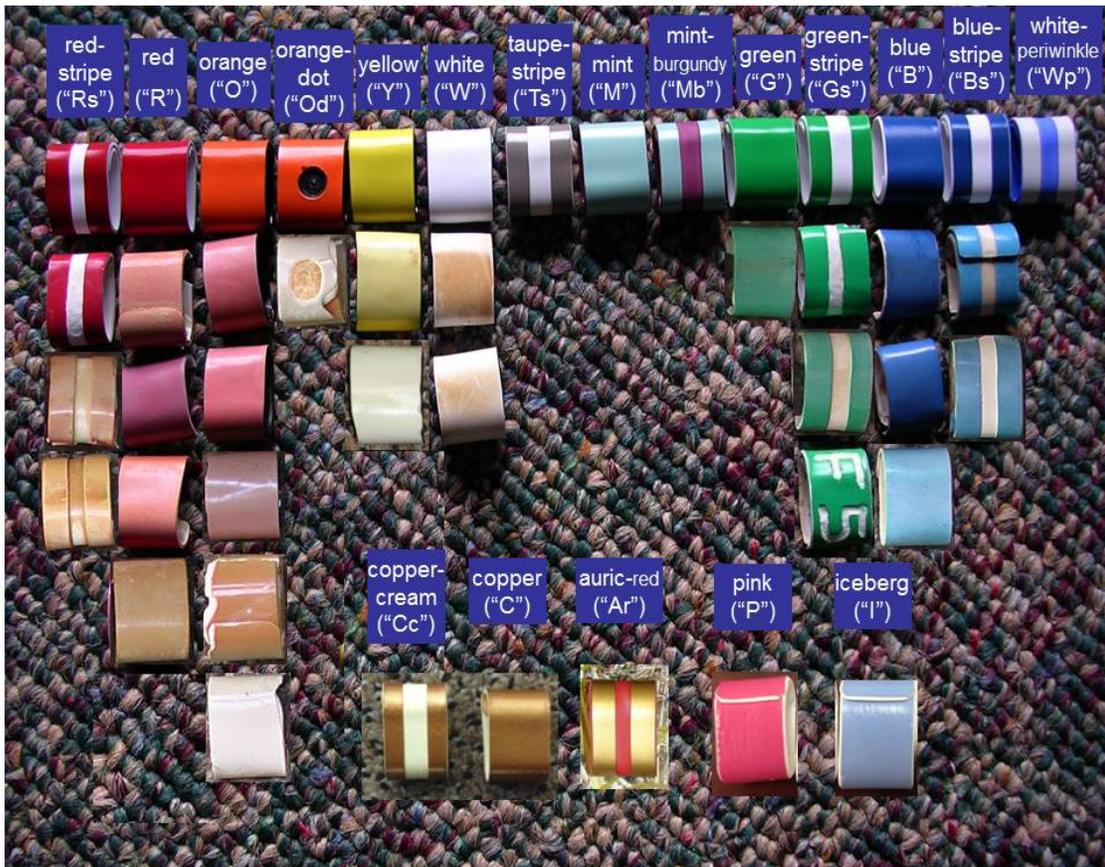
Question 7: The presence of migrating loons is important in our study. If you can, please note the maximum number of loons you observed during the spring and fall migration season.

Loon Color Band Observations

If the loons on your lake are banded, we'd like to know the unique color combination. Scientists in north central Wisconsin (Vilas, Forest, Iron, Price, Oneida, Lincoln, and Langlade counties) have been banding loons for over 20 years. You are more likely to see banded loons in this area because they return to within 10 to 40 miles of their nesting lake, but they have discovered a few loons with leg bands as far north as Houghton, MI, south to Portage county, and west to the Hayward area. It is very important to identify the loons who have strayed farther from their nesting lake, since this gives us an idea about the farthest distance a loon might breed from its "birth" lake.

Leg bands are placed on loons to help researchers identify the birds without having to recapture them. Each loon is fitted with a unique band color combination, allowing scientists to identify an individual loon's behavior and track their location. To see band combinations, look for the loon to "foot waggle" (when the loon sticks its foot out of the water) and roll-over preening, when a leg is usually out of the water.

The below photograph shows the unique color bands that may be found on loons in Wisconsin. This can be tricky – the first row of bands in the photo is new bands. Subsequent rows show the same bands, but they have faded due to exposure. Scientists try to replace these bands before they become un-identifiable, but you'll want to take a good look at all the bands to make sure you are correctly identifying the color combination.



All banded loons should have 1 silver metal band and 3 plastic color bands. Describe the leg bands from the loon's view, with the top band being closest to the loon's body. For example, a red band over a white band on the loon's left leg would be written "red/white" and placed in the Left Leg column.

Left Leg	Right Leg
Red/White	/

Weekly Loon Survey Log

The survey log will help you keep track of your weekly observations. Fill out **one row for each week** you observed loons on your lake. Indicate the date, number and type of loons you observed.

- ❖ In the Date column, indicate all dates you observed during the week.
- ❖ # Floater Adult Loons: Floaters are loons that are not territorial pairs. These individuals are usually seen on the lake but were unsuccessful claiming a territory, finding a mate, or are relatively young loons. They are often seen alone, and do not reproduce. Please indicate the maximum number of floaters you observed at one time. Do not add up individual observations, as you may be counting the same bird more than once.
- ❖ # Territorial Pairs: Territorial pairs are loons that have a mate and actively defend a territory against other intruding loons. On a large lake, loon territory can be a part of the lake; on smaller lakes, it tends to be the entire lake. Also on small lakes, some pairs may defend two lakes close together claiming both as their territory. Please indicate the number of territorial pairs observed.
- ❖ # Nests with Incubating Adults: A nesting pair is any territorial pair that you observe building a nest and/or incubating eggs on a nest. If you've been observing your loon pair for a couple weeks and abruptly only one loon is present, then second bird might be incubating eggs. To be sure, scan for at least 10 minutes to see if the other loon appears. If only one loon is still observed, it may be time to look for a nest. Loons nest close to the water's edge and prefer to use islands, but will also use wetland and boggy areas on a lake. If you are unable to locate the nest, you may want to take a few hours to observe the loons. If you observe and exchange – one loon emerging from a grassy or marshy area and the other loons swimming past its mate toward the area its mate just came from, then you have likely located the nest.
- ❖ # Chicks: During the first 10 days of a chick's life, you will likely observe the chick on its parent's back. At 4 weeks of age, they still have mostly downy feathers, but are too large to sit on their parent's back. At 8 weeks they are 1/2 to 2/3 the size of an adult and have sleek brown feathers on their back and white feathers on their necks and bellies, making them look like smaller, drab versions of their parents. If they survive to 8 weeks, they are likely to survive until they migrate south.

Territorial Disputes: If you observe 2 or more adult loons in close proximity to each other and interacting aggressively in May, June or July, one or more loons are likely floaters and they are likely have a dispute over territory, and this behavior may continue for several minutes to over an hour. Please indicate in your comments section if a territorial dispute occurs, along with the time of day of the dispute.

Loon Territory Summary

Loon Territory Description: If you have more than 2 loon territories on your lake, you may want to make copies of this page. For multiple nest sites, if you have a GPS unit, you can provide us with the lat and long coordinates for each nest (please collect GPS coordinates after the loons are no longer using the nest.) If you do not know the coordinates, you may name nests by a unique geographic reference (i.e. South Bay nest, Twin Island nest, north lakeshore nest). Either way, be sure to mark it on your map!

Question 1: Please indicate if you located the nest. If yes, indicate locations on the map. Describe the nest used.

Question 2: Indicate who owns the land (if known) at the nest site. We may want to contact the folks to ensure they are aware loons are using the site.

Question 3: Did your loons have a failed nesting attempt? Often pairs will re-nest, however it helps us to know if one or more of the nesting attempts failed. We are also interested in the cause of failure (if known). If you don't know what caused the nest failure, then mark "unknown."

3a. Did your loons 2nd nesting attempt fail? Rarely loons will attempt to nest a 3rd time.

If the loons nested a 2nd or 3rd time at a new location, please map the 2nd and 3rd nest location.

Loon Season Summary

Use the information you recorded in your survey log to provide the most accurate summary possible

- ❖ Number of Territorial Pairs present: Enter the total number of territorial pairs that have established territories on your lake this summer – for each pairing of 2 birds, you have ONE TERRITORIAL PAIR.
- ❖ Number of Territorial Pairs with 1 or more nest attempts: Record the number of Territorial Pairs that have attempted to nest this season – in other words, they have built a nest and were seen incubating, or a failed nest was found with egg shell fragments or no eggs.
- ❖ Number of Territorial Pairs with successful hatch: Record the total number of Territorial Pairs that have successfully nested and hatched chicks. Please record this number even if the chick(s) did not survive.
- ❖ Total Chicks Hatched: Record the total number of chicks that have hatched on this lake. Please record this number even if the chick(s) did not survive.
- ❖ Total Chicks Fledged: Record the number of chicks that survived to at least 8 weeks.
- ❖ Number of Floaters present on this lake: Record the maximum number of floaters that you observed at one time. Do NOT add up the floaters from each day, or you will likely be counting the same birds more than once.
- ❖ Number of Nest Locations Determined: Record the different number of nest locations (or attempted nest locations) that you have mapped this breeding season.
- ❖ Number of Known Nest Attempts: Record the number of nest attempts for each nest location. Loons may lose their first nest due to predation, territorial disputes, or changes in water level, for example.