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## Common Loon Migration Update: March 13, 1997

### From the 'Journey North'

*Dave Evers*

We have exciting news to report. Loon biologist Dave Evers just called to say he will travel to Apalachicola Bay, Florida next week. There he will attempt to outfit loons with satellite telemetry equipment and track their spring migration. If you followed Journey North [last spring](#), you know how difficult this research is. Loons are hard to capture, especially on the wintering grounds. Little is known about the route loons take from Florida to their breeding lakes, so if the scientists succeed we'll be able to watch this migration as it happens, for the first time. We'll keep you posted as their work progresses



According to Evers, Florida's coasts represent one of the most important wintering areas for Common Loons in the U.S. Loons wintering in Florida and the southeastern US face a variety of threats. Surveys of beached birds along Florida's coasts have found more dead loons than all other seabird species combined. Although some is due to natural causes, elevated mercury levels may be increasing mortality. Mercury can be toxic, or poisonous, to loons. It can also interfere with reproduction. One purpose of Ever's research is to gather information about mercury levels in loons. Mercury pollution enters the atmosphere from such sources as garbage incinerators and the burning of coal. How do you suppose loons become contaminated?

### **A Race Against Time**

Let's hope the scientists hurry! By March 28 last year, migrating loons had already been spotted in 10 states and 1 province. Today's field notes from Lucy Vliestra suggest the migration will soon begin:

"I am noticing fewer loons in the past week on Apalachicola Bay than in the earlier winter. Some people believe that loons gather into large groups before migrating. (Because loons arrive on the breeding grounds so close together, we expect them to depart over a short period--to suddenly "disappear"). This may be where the loons at this site have gone. However, the loons may also follow their food, fish, around the bay. Maybe there are fewer fish, and therefore loons, inshore this time of winter. It is hard to say what is happening at this point. I will certainly keep my eyes open for large groups in the area from now on."

"I am also noticing that many loons are now putting on their breeding plumage. This week I have noticed that most loons have the black-and-white checkered backs that we



see on loon up north. However, most of their heads are still gray and white. But today I saw one loon with most of its head black, as though dipped in black paint. Since loons don't migrate until they are in full breeding plumage, this is surely a sign that migration will start soon."

*Dr. F.G.Irwin*

Breeding plumage? Hmmmmm.....maybe this information will help answer Challenge Question # 2, "*At what time of year was this picture taken, and how do you know?*"

Stephanie Armstrong & Kaleigh Burne of Bobcaygeon Public School in Bobcaygeon, Ontario saw two clues in this single photo: "The photograph was taken in the summer because the loon's eyes are red. In the winter they are a grayish colour. The second clue is the loon's feather colouring. During the summer months in Bobcaygeon, Ontario, the loon is black. In the winter, they colour is a grayish-white."

Minnesota students in Mr. Boyd's class (jboyd@pop3.cloquet.k12.mn.us) were equally clever. They answered the question without looking at the loon! "It is summer time because the rushes (in the background) are green," they noticed. Also from Minnesota, students at Katherine Curran School (sue\_dewit@hopkins.k12.mn.us) said, "We believe this picture is a Common Loon in the summer. The head and beak are dark and there appears to be the beginning of a white band near the throat. We found out that there is less contrast in color in the loon during the winter." What great observations! Here Dave Evers tells us more about loon plumage and eye color:

"Loons are flightless for about 2-3 weeks while their new feathers develop. This is the time when loons are in greatest danger. Not only are they unable to fly, but they must expend significant energy to grow feathers. (There are 11 primary feathers and 22-23 secondary feathers on each wing-- that's a lot of feathers and they're big!) Since they are using their energy stores they are less able to deal with diseases at this time. When the molt is finished, they have brand new feathers for their trip north.

"With regards to the reasons loons have red eyes, this is a tough one. Maybe their red eyes are part of attracting mates, since they only have red eyes during the summer. In winter, while they are in their grayish plumage, their eyes are not red but gray. Perhaps loons have red eyes because any other color would be a disadvantage in deep water. You see, visible light really has many colors (like a rainbow) and red is one of the first colors of the rainbow to be filtered out by water. In other words, beyond a certain depth (like 15 feet) the red part of the light is no longer there. (Blue and indigo colored light travels deepest and that's why you see blue water reflected back to your eyes.) This suggests red eyes might help loons see under water, but then why don't the loons retain their red eyes in the winter when they need to dive in deep ocean water? Also, why do other diving waterbirds NOT have red eyes (exceptions are birds called grebes)?"

### **More Practice Looking at Loons**

In our last report we mentioned a report of 10 loons fishing and sitting on poles, and then asked Challenge Question # 3, "What kind of bird do you think the observer saw? How do you know it's not a loon?"

Here are Stephanie and Kaleigh from Bobcaygeon, Ontario, once again: "The birds that were sitting on the poles are not loons. I can tell because loons do not sit on poles. We have watched the loons in Bobcaygeon, Ontario in the summer time and they do not do this. It takes them a long time to take off and land on water. They are not able to land or take off from a pole like pelicans or sea-gulls." (bob1@knet.flemingc.on.ca)

*Dave Evers*

Very true, loons can't sit on poles--they can barely even walk! Their legs are so far back on their bodies they can't balance on land. This is one reason their nests are always so close to water. There are countless stories of loons who land in areas they mistake for water--and can't even take off because they need a water runway .



This brings us to our last question, the one we're all waiting for: Challenge Question #1 "When do you predict loons will migrate? Why do you think so?"

"April, when the ice goes out!", agree students in Massachusetts, Maine, Minnesota and Ontario. [Click Here](#) to read their explanations. In fact, loons are known for their ability to appear on their nesting lake the very day the ice melts!

Here Dave Evers shares what he's learned: "Loons can travel a long distance without having to sit on water. Each spring thousands of Common Loons cross the eastern U.S, from the Gulf of Mexico to northern Indiana, Illinois, and Ohio. Since there are very few lakes along the way they must fly hundreds of miles before finding water. Their northerly progression continues as lake ice thaws. Most adults arrive on their territory by mid to late April--usually when the lake ice only partially open. Males arrive a few days before females, but pairs are known to return together."