

2004 Common Loon Seasonal Highlights

By Daniel Poleschook, Jr. and Ginger Gumm

There were many highlights of the 2004 common loon breeding season in Washington. Our observations combined with other statewide reports of several exciting events, along with some near tragedies, led to the following determinations and statistics for the common loon. Most noteworthy are the apparent success of a common loon nesting and the fledging of one chick west of the Cascade Range again this year. This information determined that the production of common loon chicks to fledge in Washington is the same as in 2003. The banding of this year's juveniles, including territorial adults that had not been previously banded, has helped with new determinations of adult and fledgling migration pathways from the breeding territories to the winter regions.

Common Loon Nesting Success in Western Washington

Common loon nesting records indicate that common loons had nested on approximately ten lakes west of the Cascade Range divide in the historic past. However, successful nesting in that area has gradually declined to three remaining territorial/nesting pairs. This is most likely due to several factors that are known to threaten loon production such as; fluctuating reservoir water levels flooding or stranding loon nests, scavengers and predators, especially noting the increased population of bald eagles with increased predation of loon eggs/chicks, and the loss of nesting habitat due to human development and disturbance. Dwayne Paige, Fish and Wildlife Unit Supervisor with the Watershed Management Division of the Seattle Public Utilities, reports that there was a successful second nesting this year at Chester Morse Reservoir where one common loon juvenile will likely fledge. The other two territorial/nesting pairs that he observes either had nest failures or lost their eggs/chicks to predation, most likely by bald eagles. Scott Fitkin, biologist for the DF&W, reports that the Blue Lake Sinlahekin territorial/nesting pair continues to have nesting failures possibly due to predation by scavengers or eagles and/or problems with the fluctuating lake levels.

2004 Common Loon Productivity

Fossil evidence, nesting records, and recent observations indicate a current gradual decline in the number of young common loons produced and fledged in Washington State. However, in 2003 and 2004, there was no decline in common loon productivity of chicks fledging. There is a slight increase in the egg/chick mortality in 2004. The following table indicates the comparison of various categories between 2003 and 2004.

<u>Category</u>	<u>2003</u>	<u>2004</u>
Territorial nesting pairs	8-9	8-9
Eggs produced	13-14	10-11
Young produced	8	8
Young fledged	5	5

Lake Summaries

The following are 2004 lake summaries from the common loon territorial/nesting lakes in northeastern Washington: **Lost Lake** had a series of loon misfortunes in 2004. The territorial male exhibited symptoms of lead poisoning (most likely due to ingesting a lead sinker) and succumbed soon after the chick had hatched. Without defensive help from the male loon, whose role is to defend the nesting territory and the chick, the female was unable to effectively defend against an eagle attack and the chick was easily predated. Thus, the loss of this chick could be considered a secondary death due to lead toxicity and demise of the parent. However, a new male has claimed Lost Lake as his territory and we hope to learn more about him during next year's banding session in 2005.

Bonaparte Lake also has had its problems with a repeat of last year's common loon eggs being predated or vandalized. Broken egg shells were found on the nest at the time when the egg/ eggs were to hatch, but no chicks were seen. Both Lost Lake and Bonaparte Lake have been very productive with successful nesting and fledging of chicks in the past, but are struggling with nest failures due to fluctuating lake levels (as a result of possible vandalism of a control gate to regulate the water level), and egg/chick vandalism and/or predation by bald eagles. The **Ferry Lake** territorial pair successfully hatched and fledged two juveniles this season. The **Swan Lake** pair fledged one chick from one egg this year. The **South Twin Lake** adults produced one fledgling from two eggs with one egg failing to hatch and the aforementioned **Chester Morse Reservoir from Western Washington** will have a successful fledging of one juvenile in 2004.

Fishing Tackle and Lead Problems

This season, five situations involving common loons with complications from ingesting fishing tackle were identified. The problems arose when loons ingested fishing lures and/or lead sinkers or when loons swallowed fish with hooks, assorted tackle, lead sinkers and monofilament fishing line attached. Two of these situations were deadly and both common loons expired of lead toxicosis. They were; the Lost Lake territorial male who exhibited symptoms of lead toxicity, although no autopsy was accomplished, and a loon who had beached itself and then expired on the shoreline of Omak Lake on the Colville Federated Tribes Reservation. This common loon was autopsied by Darwin Long IV and Lucas Savoy, biologists from BRI, and was found to have a lead sinker in its gizzard. Otherwise, it appeared to have been a very healthy, young, non-territorial adult.

Three other established territorial loons were observed swallowing fishing lures or had caught fish with monofilament fish lines trailing behind them (either cut or broken) with lead sinkers and other fishing tackle/spinners

attached. We have occasionally seen some loons attempt to capture fish that are being reeled-in by fisherman. These struggling fish seem to attract the loon's attention and become easy prey since their movement has been slowed down making them easier for the loons to catch. We have photographed bill marks produced by the loon's grip on the sides of the fish when the fisherman was successful. When the loons are successful, it may be their death sentence if they ingest any lead with the fish that they have taken. Occasionally, a fish will "get away" breaking the monofilament fishing line with assorted tackle, lead sinkers, bobbers and etc. and they may also become an easier catch for the loons.

This poses another problem for loons and all other water birds that consume fish in their diet. No only can they ingest possible lead in fishing, but they may also become entangled in the fishing line and possibly drown or become so entrapped that they are unable to forage for food. An unusual migrant visitor, an emperor goose observed in the Port Angeles area, had a fishing line wrapped so tightly around its left leg that the foot became gangrenous and sloughed off leaving only a stump for a leg. Two Dungeness crabs were found off the coastline of Washington wrapped tightly in a monofilament fishing line and were unable to escape. Another instance occurred at Loon Lake where a red-necked grebe was found beached on the shoreline with a monofilament fishing line entangling its body and bill preventing it from eating. Another red-necked grebe was not as fortunate and was found expired wrapped in fishing line and assorted tackle.

On May 30, 2004 (when the Ferry Lake chicks were one and two days old) the Ferry Lake male ingested a yellow fishing lure that had two lead sinkers and a bobber attached to the monofilament fishing line from a youngster's fishing rod. The loon struggled desperately for hours to free itself from the line that entangled him. At that time, we were not certain if the loon had ingested the lead sinkers that were tied to the fishing line reportedly four and six inches above the lure. Our attempts to capture the loon were unsuccessful as he kept diving and circling the lake trying to free himself from the line. Almost on queue, another non-territorial male, "Longneck," came to the lake and challenged the territorial male. The two circled, dove and chased each other in the center of the lake for some time. The Ferry Lake male was at a definite disadvantage and had great difficulty sustaining a "wing-rowing" chase. "Longneck" finally flew away from the lake with the Ferry Lake male following closely behind him. Apparently, during this altercation, the Ferry Lake male had finally broken the fishing line that had entrapped his wings and was able to fly.

Early the next morning we were unable to find the Ferry Lake male on any of the nearby lakes, and we feared the worst. Then in mid-morning he returned to Ferry Lake without any sign of the fishing line or tackle that had previously entrapped him. The potential still existed of the possibility of ingestion of lead and, if so, the probable prognosis would be lethal. Many renowned biologists,

veterinarians, doctors and loon specialists were consulted regarding this incident. We thank Dr. Dave Evers, Kate Taylor Evers, Dr. June Koonz, Darwin Long, IV, Dr. Mark Pokras, Dr. Flo Sang, and Steve Zender, who all contributed valuable time and advice towards a possible intervention regarding this situation. Thankfully, the Ferry Lake male survived this incident and was able to defend and fledge two chicks from his territory.

Later in the summer, another territorial/nesting loon, the Swan Lake male, ingested a fish with fishing tackle and trailing monofilament line. A swivel with a large bi-lobe lead sinker was seen hanging on the fishing line about five inches from its bill. The chick made several attempts to capture the lead sinker as though it were a food source. That could have been another tragic incident if the chick had been successful. Luckily, the Swan Lake male survived this incident and migrated later in September.

On August 23, the Ferry Lake territorial female swallowed a fish and about twenty feet of broken fishing line was trailing in the water behind her. A lead sinker was identified on the line that draped from her bill. She became entrapped in the line, and after several hours of diving and struggling, she flew to nearby Long Lake. Three days later, on August 26, she flew off and was not seen again. At this time, her outcome is not known and we do not know if Ferry Lake will have the same territorial female (or any female loon) for next year's breeding season. Because of this stressful incident, the female flew off Ferry Lake several weeks earlier than she normally would to begin her fall migration. Her two chicks were left to feed and fend for themselves as the male loon had just migrated a few days before. This put the chicks at risk and they were attacked twice by non-territorial loons arriving on the lake.

Lead in fishing continues to present a problem for loons and other water birds (including the birds that prey upon them) and the environment. Lead sinkers and miscellaneous lead tackle are also problematic when ingested by birds as they gather small stones for their gizzard to aid in digestion. When loons ingest lead, the prognosis is death usually within two weeks as their gizzard's action begins to break down the ingested lead immediately. Only a small amount of lead absorbed by the loon is enough to begin the toxicity process. Symptoms of lead toxicosis are devastating for the loons and dementia and ataxia are soon followed by death, which is always imminent.

Common Loon Banding

Banding of loons, which entails the placement of color-coded leg bands and a DF&W identification number, is important for many reasons. In the banding process, leg bands are placed bilaterally on the tarsus of the loons, physical measurements and weight are recorded, blood is drawn and feathers are cut to determine various lab studies such as, hemoglobin, lead and mercury levels, DNA indications and general health of the individual. Records kept of these results help to determine longevity, dispersal,

and migration information, and to assist with information for other current research studies/grants being conducted at the time. This knowledge assists greatly in conservation of the species.

With the financial help of LLLA and BRI, under the direction of Dr. Dave Evers, funding is provided for banding Washington loons every year. Lucas Savoy and Darwin Long IV, biologists associated with BRI, provided the expertise to capture and band this year's chicks and unbanded adults. A group of volunteers, biologists and other people involved with loons began banding at Swan Lake on July 7th. We were unable to capture the new Swan Lake territorial/nesting pair for banding in 2003, even after patient hours of pursuit and playing recorded chick calls. However, our efforts were different in 2004. The male and the female, as well as their healthy chick were caught and processed this year. We were elated by this accomplishment, even though the male ("Dagger") pulled out all the large staples holding together the sides of the animal container that he was placed in.

The following night, we banded the two chicks at Ferry Lake which were nearly identical in size and weight. Their leg band colors that we emplaced gave them their respective names for the season, simply "Blue" and "Yellow." Two youngsters, Kaylee and Adam, were excited to help place a leg band on these two chicks. We did not know it at the time of banding, but "Blue" and "Yellow" would become the most observed of all loon chicks that we had worked with. Our discovery of them later in the season, on nearby regional lakes, supplied us with key indications of the route some of the region's fledglings use for fall migration to a winter territory.

A few days later we banded a large, healthy chick at South Twin Lake. It had hatched a few weeks earlier than all other of the region's hatchlings and now weighed 8.2 pounds at only seven weeks of age! This chick is near the top of the chart of Dr. Dave Evers Indicator of chicks to fledge-age versus weight scale. This juvenile was last observed in late September at South Twin Lake in the company of the territorial male who was continuing to feed the chick.

We find that banding is one of the most enjoyable and interesting parts of loon conservation. Banding usually is scheduled when the chicks are at least four weeks of age. We camp-out, stay up all night, and share a large amount of loon talk. We would like to extend a very "special thank-you" to everyone that took part in the 2004 banding: Frankie Disautel and husband, and Rick Disautel from the Colville Federated Tribes, Kaylee Gumm and Adam Trevino who were interested youngsters, Kate Odneal, biologist for the Republic FS, Ryan Hansen, Jackson Key, and Silver Sahlter also employed by the Republic Forest Service. We welcome everyone who would like to observe and learn more about loons during next year's banding season.

Migration

Until the 2004 loon observational season, we knew little about the migration route of common loon fledglings and adults from their breeding range in northeastern Washington to their winter territories. The only prior confirmed information that we had was an April 5, 2002, "band return" from a 2001 Ferry Lake fledgling at Hobuck Beach, at the western edge of the Olympic Peninsula. Over the years that we have been observing Washington's loons, we have kept notes and records of where we have seen common loons on various lakes and rivers during spring and fall migration. This year, we decided to try to locate the 2004 fledglings from Ferry Lake and Swan Lake as soon as they had fledged from their natal lakes.

"Yellow" and "Blue" fledged from Ferry Lake on August 26, 2004 to nearby Swan Lake. They were not



Ginger Gumm and Daniel Poleschook, Jr.

Figure 1. "Yellow" photographed on August 24, 2004, at age 13 weeks, making a practice flight around Ferry Lake preparatory to fledging two days later to nearby Swan Lake. "Yellow" migrated to Owhi Lake, 19.4 air-miles to the south, where she was observed and photographed on September 10, 2004.

entirely welcome there as the Swan Lake territorial pair and chick were still present on the lake. The two Ferry Lake chicks left Swan Lake two days later and "Yellow" was located at Owhi Lake with four other adult loons. As we stood on a bluff on the southeast side of the lake, we could see four adult loons as small specks near the middle of the lake about one-half mile away. At that distance, we had no hope of seeing identification leg bands. Ginger began calling and hooting to the loons. It was very windy that day, and I had doubts that her sound would even reach the loons. She had successfully "called-in" other loons using these calls, but none so dramatically as on that day. Both of us were astonished to see one of the loons steadily diving and approaching nearer to us as she continued her calls. With binoculars, we were delighted to notice that the approaching loon was a juvenile. We were truly elated when we spotted the leg bands that identified the now close-in juvenile as "Yellow" from Ferry Lake. "Yellow" swam around in small circles directly below us and made small hooting calls as she would look up at us on the bluff. It was a golden moment of our loon observations to stand there at a different lake, having a loon juvenile obviously recognizing us. We now

knew that at least one Ferry Lake juvenile had made its initial migration voyage to Owhi Lake and possibly both fledglings flew there together before becoming separated.

On the following day we identified the other Ferry Lake fledgling “Blue” coincidentally on Blue Lake, south of Banks Lake in the Grand Coulee Corridor. “Blue” was in the company of five other adult loons.



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Figure 2. “Blue” photographed on Blue Lake, 85 miles south-southwest from its natal Ferry Lake, September 11, 2004. The 16-week-old juvenile is listening intently as Ginger makes hoot and clucking calls to draw him nearer in order to visualize his leg bands. Seen in color and with higher magnification is the identifying right leg band of blue with a white stripe, indicating he is the Ferry Lake chick that hatched on May 29, 2004, and was banded on July 8, 2004. Without this juvenile being banded, no migration information could be determined from this sighting.

It too responded to Ginger’s calls and made several close-in excursions circling along the edge of the west bank, hooting and making small calls. We also identified the female loon from Swan Lake by her leg bands as she too swam towards us. “Blue” and the Swan Lake female remained on the lake for several weeks and were in the company of (thirty-five in all) migrating common loons when last seen. We now have some information of the initial migration stops of both of the 2004 Ferry Lake fledglings and the female from Swan Lake. This information will be helpful to determine the future possible

fall migration routes that common loon juveniles and adults use from northeast Washington.

Importance of the Northeast Washington Loon Breeding Area

Ferry Lake, Swan Lake, and all other Washington State lakes used for nesting by common loons, are highly important as locations where common loon young are produced each year. Dr. Dave Evers, from BRI, has reported that Washington State (out of all the states with common loon nesting territories) is the closed to having its population of loons extirpated. Loon observations and conservation efforts of the common loons at Ferry and Swan Lakes have helped bring attention to the common loon and the abundance of wildlife in this region. This area has now been designated as a “Watchable Wildlife” location by the Washington Department of Fish and Wildlife. Both the Ferry and Swan Lakes territorial/nesting loon pairs are the most recent and consistently productive nesting pairs of common loons in this State. These two pairs, in close proximity to each other, are extremely valuable as they have produced 60% of the chicks to fledge in the last two years in Washington.

In the year of 1999, after it was noted that a new hatchling at Ferry Lake had expired due to a shortage of small-fry fish, Loon Lake Loon Association established a fund called, “Keep the Gift Alive.” Those funds have been used at Ferry Lake to enhance the chances of survival of the newly hatched chicks to fledglings, and will also be used in the future to help promote the use of non-lead fishing tackle.

Thank you for your prior donations to this fund, your interest in this project, and mostly for your appreciation of the loons.

Daniel Poleschook, Jr. and Ginger Gumm, October 6, 2004

All donations are welcome for the “Keep the Gift Alive Fund,” and can be made to:

“Keep the Gift Alive”
C/o Loon Lake Loon Association
Box 75
Loon Lake, WA. 99148