

Common Loons: Strange Land-landings

A frequent and puzzling behaviour: why?

When you consider that except mating or at the nest, a healthy “feathered fish” should never be on land, this earthly thump is a potential death sentence. Those with fresh injuries showed how jarring the impact with the ground must have been for a body designed to land on water. The heavy-bodied Common Loon can neither fly from the earth nor walk on it, and though humping along for a short distance is possible, it soon abrades the soles. This is when the finder excitedly reports, “A loon with two broken legs!” because they expect all birds to stand up, and of course, a loon cannot—like the Little Mermaid, it is the price to pay for being such a superb diver.

Yet there are many witnessed accounts of loons being found away from their medium, particularly on roads. I call them land-landers, and we have admitted 36 of them-- 34 Common Loons (and Two Red-throats, much smaller, lighter loons which can stand for a few steps and fly from land if forced to). “Land-landers” have been 29.2% of our flighted Common Loon admissions, i.e., all hatchlings, chicks and preflight juveniles have been excluded from this report.

There is a small chance that a loon found on a road near water might be leaving a frozen lake where there is not enough water to taxi off (see Loons on Ice, pg 5) or might be a grounded parent leading chicks overland from a low-level lake to higher-level one nearby, a touching scene reported several times, even crossing roads. Given how frequently we alter lake levels to suit our own preferences, and the variations in rainfall, these appear to be more or less natural causes.

A prevalent theory is that they mistake shining, wet, paved asphalt for water. This seems a possibility in rare reports of more than one stranded, perhaps encouraged by a leader. Several loons were once described on a highway during an early spring snowstorm, yet one wonders how such sharp eyes and brains could allow such a fatal mistake.

Our own experiences have been with single strandings, occasionally related to a thunderstorm, heavy rain, or a foggy night, and a once, flooded field. At least seven landed early in the morning. But it is hard to understand mud puddles, ditches, a baseball diamond, skating rink, two bridges and all those dry, fine-weather landings. These inappropriate sites of about 75% of land-landers suggest that they were previously injured, ill, or visually or cerebrally clouded, perhaps by small accumulations of mercury, selenium, PCBs, etc. In five loons we found evidence—shotgun pellets, hooks, a fishing swivel and a lead sinker. Severe weather would leave them flying blind; they may well become fatigued, and then again, who knows? Maybe birds get a headache or a charley-horse just as we do.

These findings provide a set of questions to ask of each new case: what sort of surface? What time of day? What kind of weather? Where, geographically? For example, loons in winter plumage have been found dead on highways in the southern U.S. But in each case it would be fascinating to know *why did they land at all?*

We banded and released 91.1% of our land-landers, all but two by the second day. This small cross-section (*con't on pg 4*)



*# 6797 napping in our loon-pool. Note band on tarsus.
See pg 5*

C-A-SE	Mo-nth	SITE FOUND	AGE	Sex	PROBLEM BEFORE?	SOME IMPACT INJURIES	END
56-0	09	flooded field	HY	U			r 1
97-9	12	4-lane highway, Ottawa	HY	U	*	blood in mouth. Toes bleeding	r 2
10-47	05	paved highway	AHY	U			r 1
16-55	10	dirt road	HY	U			r 2
17-19	04	witnessed coming from ditch	AHY	U			r 1
23-53	11	bush country far from water	AHY	U	old Fx radius-ulna from shot		r 2
26-49	11	small muddy puddle in field	AHY	M		coracoid damage, int. haem	e 1
29-12	12	road, surface unknown	AHY	U		toes bleeding	r 1
31-26	12	skating rink in Toronto	AHY	U	* hook in esophagus. Thin		r 2
31-74	05	orchard; water not far away	AHY	U	not fully well		r 1
35-14	06	gravel rd 8 a.m. after rainstorm	AHY	U			r 1
37-81	11	unknown	HY	U	*	Fx radius/ulna/clavicle toe. & beak tip broken	r 17
39-21	06	baseball diamond	AHY	U			r 1
39-45	07	dry asphalt road	AHY	U			r 1
40-12	07	dry road	AHY	U	shot	broken beak tip toes bleeding	r 1
40-46	07	country parking-lot in a.m.	AHY	U	hook, swivel in gizzard	toes bleeding	r 1
41-61	08	dirt road after a foggy night	AHY	M	sinker, hook, ruptured esophagus		e 1
43-32	12	road near Lk Ontario, a.m.	HY	F	aspergillosis	toes bleeding	r 1
44-24	05	yard of concrete factory, a.m.	AHY	M		dislocated elbow, Fx radius	e 1
46-25	08	road, a.m.	AHY	U	old healed Fx tarsus		r 1
47-56	11	in field	HY	F	* cataract	paralyzed leg, Fx clavicle	e 1

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* Carrying shotgun pellets in the body without symptoms is not so unusual. we have admitted and released 7 whose causes of admission had nothing to do with the shot we found on X-ray. Lead is not absorbed when encased safely in muscle or fat.

49-58	06	dirt road	AHY	U			r 1
50-91	09	laneway	HY	F	*	disloc coracoid, Fx keel & sternum	e 1
54-85	11	frozen puddle in field	HY	U			r 1
55-02	12	a back yard	HY	U	*		r 1
55-72	04	a deep, wet ditch	AHY	U			r 1
57-92	01	road	AHY	M	*	pectoral & femoral damage Haemorrhage	e 1
58-91	07	road, 8 a.m. after thunderstorm	AHY	U			r 1
60-70	05	main bridge, 9 a.m.	AHY	U		toes bleeding	r 1
61-70	08	main highway, 9a.m. after rain	AHY	U			r 1
---	05	main highway	AHY	U		roadburn feet	r 1
62-79	05	railway tracks	AHY	U	traumatic blind eye		r 1
---	07	main road, 8 a.m.	U	U		put in lake immediately	r 1
64-10	08	gravel drive, 4p.m. sunny	AHY	U	old healed torn web		r 1
---	09	dry paved country rd, 1p.m. sunny	AHY	U		put in lake immediately	r 1
---	?	on bridge nr Niagara	U	U		put in lake immediately	r 1
70-12	07	gravel driveway			dislocated elbow loss w'proofing		e 2
67-97	07	paved road, sunny, noon	AHY	F	bleeding from mouth (g.i.) bleeding toes	put in lake. BAND RETURN 7wks later; v healthy but massive int haem and ? Fx spine	r 5

-----reported, not seen by us
 * taken first to another centre
 Fx= fracture
 r=released (returned to a lake)
 r 1= rel Day 1 (same day)
 e= euthanasia
 HY= hatch-year (young of the year)
 AHY= after hatch-year (adult)



suggests that many *appeared* reasonably healthy. Though a few did not seem fully well, without a strong reason for euthanasia, we thought their best chances were back into their own world as quickly as possible.

CASE HISTORIES OF SOME LAND-LANDERS

4424 adult male, May. Found in the yard of a concrete factory at least a kilometre from the nearest lake. Really terrible dislocation, wing inside-out over back, split open, foul and swollen. Thin, feet not worn, large amount of beaktip broken off from contact with tarmac. Euthanasia. ALA-d ratio (a lab test for lead) 1.45, normal. Healthy findings internally.

4161 adult male, August. On dirt road, at least 3 km from nearest loon-possible water. Foggy night, transmission towers and many power wires nearby. Very soiled with earth, not feisty, eyes not round, hardly bothered to nip when handled, no waterproofing. X-ray showed an arrowhead-shaped sinker and four metal pieces (see photo). On post-mortem some airsacs were thickened at site where longest shaft had partly exited the gizzard; interior of the gizzard was mucky, foulish and black-brown from the lead, with lining separated and a clear hole through lining and muscle. The rupture spill contents were well walled off in neat small lumps (see note pg 6). Feet had flat wear patches from exiting water frequently.

3126 adult, Dec. 27. Landed on a skating-rink in Toronto's Centennial Park. Small, strong, lively, wailing, round-eyed and bit me hard (this is a good diagnostic tool!) No findings in rather underdeveloped X-ray. Banded and released in less than a day in an open part of the St. Lawrence River. Later, when I re-examined the neck in the X-ray using a focusing frame, I saw a piece of thin, slightly curved metal there; broken half a hook.



Partial X-ray of # 4161 (gizzard, over R femur) showing worn lead jig and three lengths of metal

A verbal report, May. A witnessed landing on a main highway in daytime, sunny clear weather. Road burn on feet; hyperventilated after being transported in a cooler on way to being released into a river.

4332 juv. female, Dec. Weak, ill, gasping. Post-mortem revealed widespread small colonies of aspergillosis (found in 12% of our admitted Common Loons), but no previous injury to account for it, and she had lots of fat. As she was found on a road near a lake that was still partly open she may have climbed out rather than flown there; in late December there would not have been much open water for taxiing.

5091 juv. female, Sept. Three days at another centre, minimal access to water, force-fed 6 small mice each day (this centre had apparently not addressed the problem of finding fish-market sources, though it was in a big city.) The loon was emaciated and severely injured with very little waterproofing (either because of, or made worse

by, limited periods in a bathtub), and she consistently listed to one side. Then, as we lifted her out of the pool, we felt and heard a strange, rattling vibration. Her X-ray showed a severely dislocated coracoid, with accompanying wracking of the clavicles, and a fracture of the keel, so she was given euthanasia.

On post-mortem we found a vertical rip punched right through the sternum, with the dislocated foot of the coracoid poking out, causing the bony rattle. Liver much damaged. All this probably occurred during a crash landing, unless she was subsequently hit by a vehicle.

6797 Ad ult female, July. Found on country paved road, sunny day, noon. Gave me an argument about being picked up, but in clinic much too quiet to be healthy. Nictating membranes often half across. Feet very hot, rectal temperature 39.6 (103 F) thin smear of blood on thermometer and some serosanguinous fluid dripping from beak, which was itself undamaged. One toe bleeding on each foot, producing a surprising amount of blood. Smallish loon. Carried her to pool of cold fresh water; she just floated there, unmoving. Later lifted her out easily to X-ray, weigh and measure – 2970g, 340mm wing-chord; X-ray negative for metal. She had slight waterproofing loss. When resting quietly on scale, I took the opportunity to band her. If one is slow and quiet, loons don't mind small physical attentions, and I often check their feet by crouching beside them and gently lifting a foot, rather than resorting to the wet and stressful chase-and-grab. We routinely X-ray our live loons just like our dead ones, resting peacefully on the cassette without any form of restraints.

Decided to keep her until she was stronger, so added a dozen large live suckers and three smaller ones; she easily caught and gobbled down half of the fish immediately. Later, she slept (see photo).

Day 2. On sodden mat. Curiously, all the loons we have had have periodically come out of water to rest onto rug-sample mats and preen rather than stay in the water. Bright blood was sprayed about from her road-burned toes. XR adm=neg for metal. Struck me hard (good sign).

Day 3. Ate about 900g of large shiners. Out often. Toes still bleeding.

Down to the bait shop for two dozen more large shiners averaging 150mm long, 38g each. Ate four at once without even going in, just snatching them up as they swam by. No bleeding today, but not much activity either.

Day 5. Still on mat much of time, still soiled wet contour feathers but gave a lot of fight when being set on scale to weigh; now 3810g, huge gain. Released into a conservation lake near where she had been found, and she swam out at once. With Conservation area manager watching with us, we were delighted to see her liven up— preen, flap, dive good distances, roll, flutterkick, and preen, preen, preen in every conceivable position for at least a half-hour with no intention of going ashore. This says early release is better than later. Only one breeding pair of loons there, residing at the other end of the lake. Three others reported to be cruising about together, apparently unmated.

HER BAND RETURN SEVEN WEEKS LATER

Found freshly dead in same lake. Condition excellent, now 4075g, a gain of 275g since release. Feet perfect, no fresh wear patches. Waterproofing some minor surface loss as before. Leaking watery blood from mouth.

XR= First time we have found a large snail shell intact internally and fragments of another. No metal. Spinal fractures are usually too subtle to be seen in the confusion of vertebral processes and thoracic spinal fusion. Finding a jagged edge with eye or finger is a surer way.

PM= On making a tiny opening in abdomen I could see the body was sloshing with free blood. Ovary. Gizzard healthy with some crushed snail bits. After examining each organ I removed them until the body was empty, rinsed the cavity to search for a spinal fracture (see column called 32 Cases of Broken Backs.) There was a small sharp blood spot under skin of lower back. The liver was greatly lac-erated, and of the bony plates that internally top each of the thoracic vertebrae and are about finger-

nail size, one was broken.

Probability is that she either hit a power-wire flying to or from the lake, or was run over by a power boat.

One of the two Red-throated Loon land-landings was so unusual it deserves description here.

2362 Red-throated Loon Dec. 2

This one crash-landed in front of a horsewoman in her paved trotting oval. Both loon and lady were stunned. Like her horse, the loon was bridled—there was a plastic six-pack holder over its head with two rings jammed in its mouth. The plastic was cut off by vets in a nearby clinic before being brought to us for checkup and banding. The little loon swam about in the pool, showing healthy responses to us and so was quickly released in Lake Ontario near the site of landing.

Incidentally, this is the only 6-pack entanglement we have ever seen in over 7,400 wild bird admissions in our database.

loons on ice. land-locked or land-landed?

Loons in freezing-winter latitudes are sometimes reported either trapped in a small puddle of open water in the middle of a lake, or frozen out altogether, squatting pathetically on the ice, cold, dehydrating and vulnerable. The young do lift off on their southern migration later than the adults, but loons have been designed for millions of years to respond appropriately to weather patterns, so the natural freezing of lakes ought to trigger them to leave in time. Have we an explanation why some loons stay too late?

Perhaps we do. Of the ten we have had “iced-out,” nine had been disabled.

Reports. One iced-out juvenile was picked up and taken to open water, and survived the winter there. Another iced-out juvenile was attacked by three Bald Eagles and died of the wounds.

NOTE. There is always the possibility that a loon found on ice land-landed there rather than being frozen out. We remember # 3126 from a skating rink, and the following case in which we were lucky to have reports from watchers.

3801 juv. Dec. 31. Had been seen flying around lake some weeks; then lake froze, leaving the loon on ice. Arrived overswaddled and heatstoked, gasping desperately—very hot feet—put straight into pool, quickly recovered. Wild, nervous, tremoloing, in and out of water, rested next to an adult loon, and struck ferociously at me. Think waterproofing perfect.

Day 3 managed to get him into a cardboard box and out to open water in Lake Ontario. Appeared in fine fettle, wild and difficult. In fact we were definitely afraid of handling him so forgot to weigh him, and (cardinal sin) even forgot to band him. Had to do his X-ray through the box; it turned out very well, revealing a swivel in his gizzard! Could he have been delayed by other fishing gear attached to swivel? This is past normal departure time for Common Loons in this inland area.

4333, adult, Dec. 28. Seen for several days swimming in small open-water area left as ice advanced in this bay and most of surface was frozen. Very small, thin female in adult moult, good condition, round-eyed, fairly lively. The wing, which had an old concurrent radius-ulna malunion, was quite limited in extension; a few secondaries were missing at the fracture site. Post-mortem showed gizzard clean yellow (meaning no lead absorption). Liver excellent. One airsac somewhat opaque. Several small, black, dried organic bits in a tangle of adhesions in airsac near duodenum, probably from a previous rupture of the esophagus.

We have seen evidence of such ruptures in 18 loons (to be addressed in a forthcoming column).

*Encounters with land-landers or iced-out loons:
what to do*

Unlike the gentleness of loons enfeebled or dying from line, lead, or severe disability, most land-landers behave as if they are quite healthy, strong and ready for an argument. It is usually urgent to get the bird off the road in a hurry, so you may have to use just what is at hand (or on body) to cover the eyes, but the most efficient weapon is that large rolled-up baggy sock pulled over the head. Again a reminder *never tape the beak*, as this is stressful and dangerous.

To pick up, tuck the head under your arm with beak at your back, loon feet and rear pointing away from your body (to keep those strong toes from digging into clothing, sometimes tearing out the nails or even dislocating the toes and to make sure the expected lusty loon-shoot is not aimed your way) and keep the loon cool, not bundled, as we see heatstroke often and it builds up rapidly.

In theory, the next step is to take it to the nearest rehabilitator *experienced* with loons, especially if it appears to be injured (when finders are not too far away, we encourage them to bring the loon for checkup and banding anyway, because such information is so rare and valuable) but if that is not possible, then the loon should be rushed to the nearest large body of water, large enough for them to take off—at least half a kilometre long, and released immediately. Every minute kept out of water is highly stressful, and very destructive to their waterproofing.

Kit Chubb



6410 temporarily disabled with our favourite weapon