

# Articles

## Interspecific Aggression by Common Loons

by  
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The popularity of loons is reflected in the many books which have been written about them in recent years (see Dunning 1985, Klein 1985, McIntyre 1988, Miller 1987). The inherent beauty of their appearance and calls, plus their apparently docile and confiding nature, make loons extremely attractive to outdoor enthusiasts. The Common Loon (*Gavia immer*) is often considered symbolic of our northern wilderness. And yet despite this high profile and the increased availability of published information, relatively few people are aware of attacks by loons on other species of birds.

Kirkham and Johnson (1988) reviewed reported instances of this behaviour, noting that "in all cases to date, the aggression was directed at waterfowl intruding on the loon's feeding or nesting territory... when they were reproductively active". This report will review published cases of loon aggression, and provide additional observations — including occurrences outside the breeding season, and apparently unrelated to feeding or nesting territories.

### Published Reports

The literature contains numerous reports of attacks by Common Loons on various species of water birds, where the aggression was limited to chasing and harassing. Species

recorded include: Canada Goose (*Branta canadensis*) young (Zicus 1975); Wood Duck (*Aix sponsa*) adults (Olson and Marshall 1952); American Black Duck (*Anas rubripes*) adult (Olson and Marshall 1952); Mallard (*A. platyrhynchos*) adults (Sperry 1987) and young (Anderson 1970, Kennedy 1981, Olson and Marshall 1952); Ring-necked Duck (*Aythya collaris*) young (Sperry 1987); Common Goldeneye (*Bucephala clangula*) adult and young (Sperry 1987); Common Merganser (*Mergus merganser*) adults (Barr 1973) and young (Forbush 1912); Red-breasted Merganser (*M. serrator*) adults (Sperry 1987); and American Coot (*Fulica americana*) adults (Taverner 1937). It appears that the harassment and displacement of birds by Common Loons during the breeding season occurs regularly.

However, Common Loons have also been reported to actually kill the following waterfowl: Canada Goose adult (Sperry 1987) and young (Zicus 1975); Mallard young (Sperry 1987); Ring-necked Duck young (Sperry 1987); Common Eider (*Somateria mollissima*) young (Meinertzhagen 1941, Brooks 1941); Common Goldeneye adult and young (Sperry 1987); Common Merganser adults (Barr 1973); and Red-breasted Merganser young (Kirkham and Johnson 1988). In addition, Munro (1939) considered it likely that

Common Loons had killed several unspecified young "diving ducks" which he found with puncture wounds.

In passing, it should be noted that a similar pattern of fatal attacks has been reported for the Pacific Loon (*G. pacifica*), involving: Snow Goose (*Chen caerulescens*) young (Kirkham and Johnson 1988); Canada Goose adult (Jones and Obbard 1970); and Oldsquaw (*Clangula hyemalis*) adult (Alison 1975) and young (Kirkham and Johnson 1988). Also, an Arctic Loon (*G. arctica*) was reported to have severely wounded a Great Crested Grebe (*Podiceps cristatus*), which may have died later (Higgott and MacKay 1991).

#### Additional Observations

The following records of interspecific aggression by Common Loons were made in Algonquin Provincial Park, Ontario. They fit the previously reported pattern of attacks during the breeding season within the loon's feeding or nesting territories.

— On 11 May 1964, a Common Loon chased a pair of Common Mergansers on Found Lake, forcing them to go on shore to escape. (Reported by R.J. Rutter and R. Tozer.)

— On 23 May 1992, a Common Loon approached a male Mallard on the surface of Lake Travers; the Mallard took flight when the loon was one metre away. (Reported by R. Tozer.)

— On 25 June 1992, a Common Loon attacked from below twice, making contact with a female Common Merganser that was swimming with her brood of young on Pen Lake. The adult and young mergansers flapped across the surface to escape. (Reported by canoeists.)

— On 26 July 1989, a Common Loon attacked and killed the single young of a female Common Merganser on Crow Lake. Earlier mortality of other young in this brood may also have been due to loons. (Reported by K. Knox.)

— On 6 August 1989, a Common Loon cornered a female Common Merganser with six non-flying young in a small, shallow bay of Jack Lake. The loon rushed at the mergansers each time they attempted to leave the bay, forcing them up onto the shore. (Reported by D. Tozer and R. Tozer.)

— On 15 and 19 August 1987, a Common Loon chased a brood of young Common Mergansers across the surface of Burnt Island Lake, forcing them to scatter. (Reported by canoeists.)

— On 23 August 1990, a Common Loon attacked three large young Common Mergansers from below the surface of Big Porcupine Lake. The loon emerged with its bill full of merganser down feathers, and the ducklings scattered wildly. (Reported by R. MacKay.)

— On a day in August 1991, a Common Loon burst to the surface on Costello Lake, directly under a female Common Merganser, which flapped across the water to escape. (Reported by M.W.P. Runtz.)

The additional sightings of Common Loon interspecific aggression reported below apparently differ from previously published accounts in that they did not occur within nesting or feeding territories during the breeding season.

— On 28 August 1990, a Common Loon surfaced among six adult Red-breasted Mergansers on Lake Ontario

off Thickson's Point, Durham R.M.; the mergansers scattered wildly across the water to escape. The loon and mergansers were migrants at this location. (Reported by D. Tozer and R. Tozer.)

— On 3 October 1992, a Common Loon surfaced several times directly under a Herring Gull (*Larus argentatus*) on Smoke Lake (Algonquin Provincial Park). Each time, the gull sprang into the air and landed nearby on the water, only to be attacked again by the loon. (Reported by B. Charlton and R. Dobos.) The Herring Gull has apparently not been previously reported as a target of loon aggression.

— On a day in early November 1990, a Common Loon shot to the surface among a small flock of Red-breasted Mergansers on the Ottawa River at Ottawa, R.M. of Ottawa-Carleton, causing them to scatter in all directions. The loon and mergansers were migrants at this location and date. (Reported by M.W.P. Runtz.)

### Conclusion

Aggression by loons toward other species of water birds occurs in two basic forms. The loon may approach on the surface, with neck held low and outstretched, and attempt to seize birds in its bill or stab them with the bill. Alternatively, loons often approach underwater. They surface explosively directly under the intended victims, again using their bills to attempt to seize the birds or stab them on the underside. The puncture wounds which can result from such attacks have been sufficient to kill birds as large as adult Canada Geese. However, loons

often do not make contact with the birds they attack due to the latter's alertness and evasive behaviour.

Why do loons attack other birds? Researchers have varied in their assessment of just how loons might benefit from interspecific aggression. Kirkham and Johnson (1988) considered hypotheses concerning the function of this behaviour, which included predation, defence of scarce resources against competitors, demonstration of reproductive fitness, and non-discriminatory aggression toward territorial intruders. They concluded that the latter hypothesis best fit the observed behaviour, and that it was aberrant or non-adaptive, with no apparent benefit to the aggressor. (However, we have noted in this report that loon aggression also occurs outside the breeding season, away from feeding or nesting territories.) Also, Barr (1973) reported that "sufficient overlap does occur in the use of habitat and prey, that such overlap may account for the conflict frequently observed between the Common Merganser and the Common Loon". And Sperry (1987) speculated that the cost of interspecific aggression in loons is low, and that it may provide limited benefits to loons in "protection of young, defense of food resources from marginal competitors, sexual selection, and practice for intrageneric combat".

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