Observation of a Golden Eagle, Aquila chrysaetos, Attack on a Harlequin Duck, Histrionicus histrionicus, in Northern Labrador

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During an aerial survey on the Kingurutik River, northern Labrador, a Golden Eagle (*Aquila chrysaetos*) was observed attacking a female Harlequin Duck (*Histrionicus histrionicus*). Although the attack ended unsuccessfully, we believe this was only a result of disturbance by the presence of the helicopter. We overview previous reports of predation on Harlequin Ducks, and emphasize the need for further research investigating the importance of the influence of predators on populations of Harlequin Ducks.

Key Words: Harlequin Duck, Histrionicus histrionicus, Golden Eagle, Aquila chrysaetos, predation, Labrador

On 21 June 1999, we conducted a survey for Harlequin Ducks on the Kingurutik River system (57 0.5' N, 63 4.0' W) in northern Labrador using a Bell 206L helicopter. This river system is known to hold moderate densities of both Harlequin Ducks and various raptor species (Heath 2001). During this survey, we observed a Golden Eagle, Aquila chrysaetos, attacking a female Harlequin Duck, Histrionicus histrionicus, in mid-stream. It appeared that the Golden Eagle had captured the female; however, she managed to escape as the Golden Eagle, presumably startled by the helicopter, flew away. We believe that this would have been a successful predation event had the birds not been disturbed. We were unable to determine if the Harlequin Duck had been injured in the encounter; however, this is the first documented interaction between a Golden Eagle and Harlequin Duck.

Current literature on birds of prey as predators of Harlequin Ducks is limited to incidental reports, but indicates that predation can occur on both adults and broods. In Forillon Park, Quebec, Brodeur et al. (1998) located two adult female Harlequin Ducks (carrying satellite radios) killed and consumed by a Red-tailed Hawk (*Buteo jamaicensis*) and Great Horned Owl (*Bubo virginianus*). In Hebron Fiord, northern Labrador, a white-phase Gyrfalcon (*Falco rusticolus*) was observed circling and stooping on two adult female Harlequin Ducks (Rodway et al. 2000); however, the females avoided capture by diving (J. Gosse, personal communication). Bald Eagles (*Haliaeetus leucocephalus*) have been reported as a threat on both breeding and winter grounds (Dzinbal)

events on ducklings were most likely by raptors (4 by Red-tailed Hawk, 1 by Northern Goshawk Accipiter gentilis, 1 by unknown Owl spp., and 4 by unknown raptor spp.), and that fledging by Harlequin Ducks coincided with high numbers of raptors and their fledged young. Raven (Corvus corax), Arctic Skua (Stercorarius parasiticus) and several mammalian predators including Mink (Mustela vison), Marten (Martes americana) and Arctic Fox (Alopex lagopus) have also been identified as potential predators during the breeding season (Bengtson 1966, 1972, Kuchell 1977, Bruner 1997, Smith 2000*) and numerous Mink attacks have been observed on Harlequin Duck broods in southern Labrador (K. Squires and R. I. Goudie, personal communication).

Despite these incidental reports, the influence of predation on breeding populations of Harlequin Ducks has yet to be addressed in the literature (but see Heath 2001 and forthcoming publications). Previous studies have emphasized that Harlequin Ducks may be primarily limited by prey availability on the breeding grounds (Bengtson and Ulfstrand 1971; Gardarsson and Einarsson 1994; Rodway 1998); however, the growing list of direct predation encounters suggests that the role of predation should receive further attention.

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