

1970 that we interpret as an active nest-searching technique. This searching behavior consisted of the female making a series of short flights a few feet above the shrubbery and then landing abruptly in the leaves with considerable wing flapping. The female repeated these actions while working her way along the thick shrub edge of a woodlot. She seemed to be making noise intentionally, as if trying to flush a bird from hiding.

On 17 June a female cowbird was performing the sequence along a dense deciduous hedge in an urban habitat where we had found a Chipping Sparrow nest. When the noisy cowbird approached the nest site closely the incubating sparrow flushed from the nest. Immediately the cowbird flew to where the sparrow had flushed and remained out of view for several minutes. After the cowbird reappeared and flew away, we investigated the nest and found no cowbird egg in it, but the next morning the nest contained one cowbird egg.

Although all of the nest locating techniques described above involve visual cues presented by the host species in the vicinity of the nest, it should be noted that sighting or location of a completed nest *per se* is sufficient stimulus to induce cowbirds to lay eggs. Andrew P. King (pers. comm.) found that cowbirds in an aviary at Cornell University would lay eggs when suddenly presented with a completed nest containing 2 host eggs, but they would not lay in an empty nest or in one that contained 4 eggs.

In summary the Brown-headed Cowbird was noted to use three habitat specific nest searching strategies: (1) cryptic, silent watching of nest-building hosts in semiopen habitats; (2) secretive searching by walking on the ground in dense woods; and (3) active, intentionally noisy searching in dense shrubbery along forest edges and garden hedges.

We thank Robert Bailly for helpful criticisms of the manuscript.—RICHARD F. NORMAN and RALEIGH J. ROBERTSON, *Department of Biology, Queen's University, Kingston, Ontario*. Accepted 15 Jul. 74.

**Loon predation on a Canada Goose gosling.**—Common Loon (*Gavia immer*) predation on waterfowl broods has seldom been documented. Meinertzhagen (1941, *Ibis* 5: 110) described an instance in Scotland where loons preyed on eider ducklings coincidentally with predation by skuas. Other authors describe harassment of broods without observing any predation. Forbush (1912, *The history of game birds, wild-fowl, and shore-birds of Massachusetts and adjacent states*, Massachusetts State Board of Agr., p. 55) reports loons chasing merganser ducklings in New England, and Anderson (1970, *Passenger Pigeon* 34: 123) describes a loon harassing a Mallard (*Anas platyrhynchos*) brood in Wisconsin. Munro (1939, *J. Wildl. Mgmt.* 3: 344) suggested from indirect evidence that some casual or sporadic mortality to ducklings from attacks by loons does occur. Olson and Marshall (1952, *The Common Loon in Minnesota*, Minneapolis, Univ. Minnesota Press, p. 33) suggested Mallard and Wood Duck (*Aix sponsa*) broods avoid loons in Minnesota.

On 8 July 1973 about 1030 at the Crex Meadows Wildlife Management Area near Grantsburg, Wisconsin I watched a loon catch a Canada Goose (*Branta canadensis*) gosling. Visibility was excellent with clear weather and a light breeze. A pair of geese with three goslings 3 or 4 days old had been loafing and feeding along one of the gravel-surfaced dikes in the area. As my car approached, the family moved from the dike to the open water. I stopped the car to watch the

geese and noticed two loons on the open water approximately 400 m from the dike. When the geese had swum about 200 m, they stopped. At this time I saw the loons swimming slowly toward the geese. When within 200 m of the geese, one loon dove underwater and soon surfaced some 20 m from them. Before this loon surfaced, the adult geese charged toward the spot, running along the water flapping their wings, and the goslings scattered. The loon that surfaced nearby submerged immediately. The adult geese rose high in the water, wings outstretched, and with their heads and necks bent as though looking into the water. They then moved some 20 m in a different direction to where I could see the loon's head above the water. As the geese rushed toward the loon, it submerged. This sequence of events was repeated twice more, after which the loon surfaced about 100 m away. At this time the second loon was swimming some 150 m away toward a patch of floating sedge mats, and through a 30× scope I saw it held a motionless gosling in its bill. The two loons disappeared behind a floating sedge mat before I learned the gosling's fate. The pair of geese and the two remaining goslings reunited immediately and swam to the nearest sedge mat where they climbed out of the water.

On 12 June 1974 I watched a pair of geese with six 4-week-old goslings avoid a loon. In this case, the family swam from a dike to the open water as I approached. A single loon some 100 m away swam towards the geese. When about 20 m away the loon submerged. The adult geese immediately rushed the brood to a sedge mat 10 m away and scrambled out. Apparently the adult geese were more concerned with my presence while the loon was on the surface but immediately shifted their attention and reacted to the loon when it submerged.

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**Close proximity of Red-tailed Hawk and Great Horned Owl nests.**—In the course of banding nestlings in 892 nests of the Great Horned Owl (*Bubo virginianus*) in Saskatchewan, I have been impressed by the close interrelationships of this species with the Red-tailed Hawk (*Buteo jamaicensis*). In the "aspen-parkland" regions they are complementary species: the Great Horned Owl is the major nocturnal raptor and usually uses old nests of the Red-tailed Hawk, the major diurnal raptor. They prey on the same species, except that the owls take few of the diurnal ground squirrels, *Spermophilus*, and the hawks take few of the nocturnal pocket gophers, *Thomomys*.

In Saskatchewan, interspecific conflict is not always sufficient to cause the wide separation of active nests of the two species that has been reported elsewhere by Craighead and Craighead (1956: 209), Hagar (1957), Luttitch et al. (1971), and Seidensticker and Reynolds (1971). In Alberta, Luttitch et al. found that "the minimum interspecific distance between nesting pairs was 350–700 yards." Smith (1970) reported these two species nesting only 21 m apart in a cliff in Utah, but both deserted. Freemyer and Freemyer (1970) found a Great Horned Owl nesting only 30 yards from another buteo, the Harris' Hawk (*Parabuteo unicinctus*) in Texas, but did not indicate whether either species was successful.

In good habitat in Saskatchewan, we often have Great Horned Owls and Red-tailed Hawks nesting in the same quarter-section (160 acres), and it is not infre-