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Adult Common Loon feeding behavior is related to food fed to chicks.—We observed adult Common Loons (*Gavia immer*) feeding their young from hatching through fledging to determine the food types fed to chicks and to relate changes in adult feeding behavior to changes in the food types fed to the young.

Study area and methods.—We studied loons on lakes 55–100 km north of Sudbury, Ontario, that varied from 5.3 to 15.7 ha in area. Summer lake pH ranged from 6.7 to 8.4. We observed loons from 50–400 m with a 20×–60× spotting scope. We studied five loon families on five lakes between 25 July and 14 September, 1983 (50 h) and recorded the parents' dive durations, their foraging success rates (proportion of dives after which they surfaced with food and fed the young), and when possible, the types of food fed to the young. Chick age was estimated by using nest dates and the size of the chicks.

We also observed adults foraging for themselves (lone adults) on five lakes between 13 June and 11 July, 1983 (10 h). Lone adults were either non-breeders or breeders from other lakes. These birds never brought food to the surface, so we could not measure their foraging success rates nor determine what they were eating. We simply recorded dive durations.

Feeding.—We saw parents feeding their chicks vegetation and fish, as well as small items that we could not identify. The amount of vegetation decreased significantly from 65% of the identifiable food items for 4–15 day-old chicks to 4% for 46–74 day-old chicks, while fish increased significantly from 35% to 96% ($\chi^2 = 42.7$, $P < 0.001$, $N = 169$). The percentage of feedings for which we could identify the food item increased significantly from 18% to 48% for the same age groups ($\chi^2 = 32.0$, $P < 0.001$, $N = 878$). Correspondingly, foraging success rates of parents decreased significantly from 70% to 27% ($\chi^2 = 86.6$, $P < 0.001$, $N = 1482$), while mean successful dive durations (dives after which a parent surfaced with food) increased significantly from 18.2 ± 11.3 sec to 36.9 ± 15.0 sec (t -test, $P < 0.005$, $N = 369$ dives).

Mean successful dive durations of parents feeding their young were shorter than mean unsuccessful dive durations (dives after which parents surfaced without food), regardless of chick age. Since we could not distinguish successful dives from unsuccessful dives for lone adults, the only way to compare dive durations of lone adults to those of parents feeding chicks was to combine successful and unsuccessful dives. The mean dive duration for lone adults (45.8 ± 18.1 sec) was only slightly, though significantly, longer than the mean combined dive duration for parents feeding the oldest chicks (42.4 ± 14.3 sec, t -test, $P < 0.03$, $N = 467$).

Discussion.—Parents changed their feeding behavior according to the food they were securing for the chicks. During the first 4–6 weeks, the parents made short dives and brought up small food items that were often too small to identify. Later the parents made longer dives, often bringing up fish that were large enough to identify. These relatively large fish were presumably more difficult to catch than the smaller food items, and it appeared that the foraging success rate decreased. During the prefledging period, the mean dive duration of parents feeding their young increased almost to the mean dive duration of lone adults, suggesting that the food fed to chicks approached the adult diet of fish.

Other studies on loons indicate the importance of vegetation and invertebrates during the early pre fledging period, as well as to a shift to fish. Young Arctic Loon (*G. arctica*) and Pacific Loon (*G. pacifica*) chicks are fed a diet consisting mainly of aquatic insects (Lehtonen 1970, Bergman and Derksen 1977, Sjolander 1978), which shifts to a diet of mostly fish after 40 days (Lehtonen 1970). As Red-throated Loon (*G. stellata*) chicks become older, the parents feed them fewer but larger fish (Reimchen and Douglas 1984). Vegetation may be important for young Yellow-billed Loon (*G. adamsii*) chicks, comprising about 15% of the food items fed to chicks less than about 35 days old (Sjolander and Agren 1976). Observations on Common Loon chicks (Munro 1945, Parker 1988) and Pacific Loon chicks (Bergman and Derksen 1977) indicate that they can be raised on a diet that does not include fish, provided that invertebrates (aquatic insects, crustaceans, and gastropods) are sufficiently abundant. All this suggests that invertebrates may have accounted for a significant proportion of the unidentifiable food items in our study, particularly for young chicks.

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Movement of a nestling between American Crow nests.—Intraspecific brood parasitism by egg moving and egg laying has been reported for 79 avian species (Yom-Tov 1980, MacWhirter 1989). MacWhirter (1989) pointed out that this is a newly reported and little-understood phenomenon. We located no published accounts of transferring nestlings between nests, and we found documentation of only two corvid species, the Black-billed Magpie (*Pica pica*) and the Pinyon Jay (*Gymnorhinus cyanocephalus*), moving eggs (Trost and Webb 1986). We here report evidence of nestling movement by the American Crow (*Corvus brachyrhynchos*).