

A POSSIBLE AMERICAN KESTREL DUMP NEST

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Several scenarios have been documented in which more than one individual bird lays eggs in the same nest during the same period. These include intra- and interspecific brood parasitism, as well as a variety of cases where the behavior's function is less easily characterized but may involve competition over nesting sites (Dawson and Bortolotti 1997) or a response to the threat of nest predation (Neilsen et al. 2008). For instance, Littlefield (1981) observed what was believed to be a Sandhill Crane (*Grus canadensis*) dump nest; Cannell and Harrington (1984) observed intraspecific brood parasitism between Cliff Swallows (*Hirundo pyrrhonota*) and interspecific brood parasitism by a Black-crowned Night-Heron (*Nycticorax nycticorax*) on Snowy Egrets (*Egretta thula*), and by a Great Egret (*Camerodius albus*) on a Black-crowned Night-Heron nest. Govoni et al. (2009) documented a Northern Cardinal (*Cardinalis cardinalis*) and an American Robin (*Turdus migratorius*) sharing a nest containing two cardinal eggs and three robin eggs. Examples of similar behaviors among raptors include a case where an American Kestrel (*Falco sparverius*) incubated and fledged a Bufflehead (*Bucephala albeola*) egg along with two of her own chicks (Dawson and Barolotti 1997); a case in which an Eastern Screech-Owl (*Megascops asio*) hatched an American Kestrel egg (Breen and Parrish 1997); and a case documented via web-cam in which a Wood Duck (*Aix sponsa*) pirated an Eastern Screech-Owl nest and replaced the owl eggs with four Wood Duck eggs (Artuso 2007).

Since 2002, I have conducted a nest box management study involving American Kestrels on a 187,000-acre area in northern New York State, involving an average of 130 nest boxes annually (Manske 2011). During the study, there have been several cases where European Starling (*Sturnus vulgaris*) and Common Grackle (*Quiscalus quiscula*) eggs have been found in active kestrel nests. On some of these occasions there was enough evidence to determine that some of the eggs were laid in an active kestrel nest, but none of these nesting attempts produced fledglings.

On 24 June 2010, I checked a nest box and discovered three tiny chicks and two eggs, all identifiable as American Kestrels. The chicks were too small to band, so I left the area, planning to return after a few weeks. On 12 July, I returned to find four chicks which were approximately three weeks old and four brand-new kestrel eggs. The new eggs, which were very clean and shiny, appeared to have been recently laid and were positioned on top of the nest debris. I banded the chicks and felt the eggs to determine their relative temperature. The eggs felt very cold and did not appear as though they had been incubated recently. I returned to the nest on 18 July and found that the eggs were

beginning to be covered with fecal matter from the chicks and were partially buried in the nest box litter. The eggs still felt cold to the touch and appeared to have failed. On 24 July the eggs had been crushed and only egg fragments could be found in the nest debris. By 4 August the chicks had all fledged from the nest box and could be seen in the vicinity.

Bildstein (pers. comm.) believes that adult kestrels will linger near their nests in an attempt to discourage possible nest-dumping activities of other kestrels, as well as by other species. The advantage of dump nest behavior may be to dilute the affects of nest predation on a particular individual, but any advantage would be gained only if the eggs were laid in several nests. The average clutch size of nests found in my nest boxes is 3.6, so the number of additional eggs found in this nest box appears to have been a full clutch. Possibly the female laying the eggs was an inexperienced bird or her first nest was destroyed and this was her second clutch of the season.

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