

For 10 yr, from 1976 through 1985, one melanistic and one light-phase adult attended the nest, and in 1982 a third (melanistic) adult was also in attendance. On 19 June 1993, the adult female had been preyed upon on her nest, presumably by a golden eagle (*Aquila chrysaetos*) or a great horned owl (*Bubo virginianus*); no young hawks were present. In 1994, the nest was occupied by two light-phase adults.

The productivity at this nest seems remarkable (1) in terms of 32 consecutive years of unailing production and (2) in the number of young fledged. The average number of fledglings per year, 3.5 ( $N = 25$  recorded successful attempts), is well above the long-term average of 3.1 for the remainder of the Kindersley-Elna pasture ( $N = 133$ ) and 2.8 for western Saskatchewan outside of the K-E pasture ( $N = 567$ ; Fig. 1).

I wish to thank Josef Schmutz, Denver Holt, and Dick Clark for constructive comments, and Dick Clark for making the graph.—**C. Stuart Houston, 863 University Drive, Saskatoon, Saskatchewan S7N 0J8, Canada.**

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#### CARRION USE BY NORTHERN GOSHAWKS

Northern goshawks (*Accipiter gentilis*) feed on a wide variety of birds and mammals (R.T. Reynolds, et al. 1992, USDA For. Ser. Gen. Tech. Rep. RM-217. Fort Collins, CO U.S.A.), but few accounts describe goshawks feeding on carrion. J.H. Schnell (1958, *Condor* 60:377–403) stated that, "It seems highly unlikely that the goshawk would forage for carrion under normal circumstances." However, G.M. Sutton (1925, *Wilson Bull.* 37:193–199) reported a goshawk shot while feeding on a black bear (*Ursus americanus*) carcass in Pennsylvania. Carrion use has also been reported for two species of Australian goshawks (*A. fasciatus* and *A. novaehollandiae*; G.V. Czechura 1980, *Raptor Res.* 14:62–63).

Since 1992, four observations of northern goshawks using carrion have been reported to me. Three observations (two in 1992, one in 1993) describe goshawks feeding on gut piles of mule deer (*Odocoileus hemionus*) left by hunters in late October. Two of these cases involved adult birds and in the third case the bird's age was not reported. One observer reported the bird fed on the gut pile for at least 1 hr before departing. Another person observed a bird on the same gut pile during two subsequent days, but it was unknown if it was the same bird on both occasions. All three observations were from the Medicine Bow National Forest in southcentral Wyoming. The fourth observation of carrion use was an adult goshawk seen feeding on a bison skull near Lewistown, Montana in early January 1995. The skull was on top of an unused, wire dog kennel approximately 40 m from an occupied house. These reports suggest that carrion use by northern goshawks in the Rocky Mountain region may occur more often than generally believed. It is unclear whether carrion is used by goshawks whenever available or only during periods of low prey availability. However, switching to carrion only during stress periods seems unlikely given that observations occurred in three different years. These observations may simply indicate that goshawks, like most predators, are opportunists and will readily use carrion when available.

I thank K. Rodgers, S. Haas, J. Balcomb, and an observer, name unknown, for sharing with me their field observations.—**John R. Squires, Rocky Mountain Forest and Range Experiment Station, 222 S. 22nd St., Laramie, WY 82070 U.S.A.**

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#### PEREGRINE FALCON TAKES A FISH IN IDAHO

Records of peregrine falcons (*Falco peregrinus*) catching or carrying fish are rare (D.A. Ratcliffe 1980, The peregrine falcon, Buteo Books, Vermillion, SD U.S.A.). In the following we give an account of a peregrine falcon returning to its nest site with a fish and summarize reported observations of fish predation or consumption by peregrine falcons.

On 8 July 1994, in southcentral Idaho we observed an adult peregrine falcon deliver a 15–20 cm salmonid to its eyrie. The falcon could have acquired the fish in one of three ways: (1) by taking it from another bird such as an osprey (*Pandion haliaetus*), (2) by capturing it alive, or (3) by scavenging a dead fish. We could find only three accounts

of scavenging by peregrine falcons, all upon birds or mammals by immature peregrine falcons (D. Dekker 1980, *Can. Field-Nat.* 94:371–382; D.C. Holland 1989, *J. Raptor Res.* 23:184; J.B. Buchanan 1991, *Northwest. Nat.* 72:28–2). W. Heinrich (pers. comm.) saw a fish-bearing peregrine falcon in Yellowstone National Park, Wyoming, and believed kleptoparasitism upon ospreys was the likely explanation.

Brown trout (*Salmo trutta*) remains were found in a Scottish peregrine eyrie (D.N. Weir 1979, *Bird Study* 26:200). T. Cade (1960, *Univ. California Publ. Zool.* 63:151–290) witnessed a peregrine falcon capture a live fish from an Alaskan river and J.B. Tatum (1981, *Br. Birds* 74:97) saw a peregrine falcon in British Columbia capture a Pacific sand lance (*Ammodytes hexapterus*). In Tasmania, A. Hardy (1992, *Australas. Raptor Assoc. News* 13:14–15) observed a male take two 15–20-cm-long fish from the sea.

We thank Joseph Buchanan and Steve Sherrod for their editorial comments.—**Larry J. Barnes and Robin R. Garwood, Sawtooth National Recreation Area, Sawtooth National Forest, Star Route, Ketchum, ID 83340 U.S.A.**

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#### AN AMERICAN KESTREL CAPTURES A WHITE-THROATED SWIFT IN FLIGHT

On 25 June 1994, at 1030 H, about 4 km south of the north entrance to Yellowstone National Park (Highway 89), we observed a female American kestrel (*Falco sparverius*) capture a white-throated swift (*Aeronautes saxitalis*) along the bank of the Gardiner River. We first observed the kestrel perched on a bare dead branch protruding above the greenery of a cottonwood (*Poplar* spp.) about 15 m above the ground. The falcon left the perch and flew in a slightly descending but essentially straight line, with continuous vigorous flapping, toward a small flock of white-throated swifts that were foraging over the river. As the kestrel reached a position slightly below and head to head with a swift she flared upwards, reached out and grasped the swift as it attempted a steep evasive climb. After grabbing the swift, the kestrel carried it back toward the perch tree when we subsequently lost sight of her.

This rapid head-on approach along with the falcon's position slightly below the swift may have forced the swift to use the only available escape route, which was a steep climb. By using precise timing at the beginning of its flair and climb, the kestrel's greater weight may have allowed it to catch the swift in the very early stages of a climb where the change of direction and gravity worked to slow down the swift. The easy and proficient manner with which the kestrel caught the swift suggested that she had successfully used such techniques previously.

Although American kestrels are known to capture insects, amphibians, reptiles, mammals, and a variety of birds, we could find no reference in the literature of a kestrel taking a swift or other fast flying highly maneuverable bird from the air in this head-on approach manner. Kestrels have been observed capturing prey species with flight characteristics that we consider similar to or approaching the aerial capabilities of white-throated swifts. For example, Freer (1973, *Wilson Bull.* 85:231–233) reported aerial captures of immature bank swallows (*Riparia riparia*), but all of these captures were cases in which the kestrel simply overtook the young swallows in flight and snatched them from the air. Windsor and Emlen (1975, *Condor* 77: 359–361), also observed kestrel predation on bank swallows, but with only one exception (reported as an aerial capture) all were nestlings taken from the entrance of their natal burrows. Another species of swallow, the cliff swallow (*Hirundo pyrrhonota*), was also reported taken from its nest (P. Bonnot 1921, *Condor* 23:136). Page and Whitacre (1975, *Condor* 77:73–83) saw kestrels taking a variety of small shorebirds including least sandpipers (*Calidris minutilla*) but the kestrel captured them on the ground, after a low gliding flight.—**Carl A. Johansson and Clayton M. White, Department of Zoology, Brigham Young University, Provo, UT 84602 U.S.A.**

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#### FURTHER EVIDENCE OF NESTING ADAPTABILITY IN OSPREY: NEST ATOP A 61-METER TELEVISION TOWER

Osprey (*Pandion haliaetus*) nests occur in a variety of settings including directly on the ground using plant materials gathered from wrack lines (D. Puleston 1977, pages 143–151 in J.C. Ogden [Ed.], *Transactions of the North American*