

1). Percent occurrence values ranged from a high of 70% for feathers to a low of 6% for the hairs of forest-dwelling mammals. Only feathers, and sheep and opossum remains were found to occur in more than 26 of the pellets (50%), suggesting that Turkey Vultures regularly find carcasses of these species. The feathers were primarily from chickens. A few pellets contained what appeared to be vulture feathers. Some pellets contained feathers which could not be identified to species. In approximately 70% of the pellets there was hair, feathers, or other material which could not be identified to species of origin. It would appear during the autumn that this group of Turkey Vultures ingests chicken remains more often than other types of food.

Past studies have not mentioned Turkey Vultures commonly ingesting vegetation or mole and shrew remains. Each of these less common food types occurred in approximately 25% of the pellets. Fourteen of the pellets contained some plant material which could not be identified to species, but appeared to be herbaceous. In six of the pellets plant material comprised more than one-half of the contents. Small amounts of plant material in pellets might be attributed to accidental ingestion while feeding on a carcass. However, a pellet comprised of nearly 70% plant material suggests more than accidental ingestion. Koford (Natl. Audubon Soc. Resear. Rept. 4:1-154, 1966) stated that California Condors (*Gymnogyps californianus*) ate grass and cast the undigested material. McIlhenny (Auk 56:472-474, 1939) mentioned that Black Vultures (*Coragyps atratus*) ingested cow excrement, which might have served as a source of vegetation, but gave no indication that Turkey Vultures did this. Bent (Smithson. Inst. Bull. 167:12-28, 1937) and Brown and Amadon (Eagles, Hawks, and Falcons of the World, McGraw Hill, New York, New York, 1968) have both suggested that Turkey Vultures eat rotting fruit and vegetation on rare occasions.

The frequency of mole and shrew hairs in the pellets indicate that during the autumn this group of Turkey Vultures is regularly ingesting these species. The regular ingestion of moles and shrews seems unusual because of their small size and the potential difficulty Turkey Vultures might have locating a small carcass. However, Brown and Amadon (1968) mentioned that the ability of Turkey Vultures to find bits of food in dense vegetation was "fabulous." These data support their belief that Turkey Vultures are skillful at finding small food items.

These data were based on pellets obtained from vultures in southwestern Virginia. Although the composition of the diet may not reflect the types of autumn foods used by these birds throughout their range, it does confirm that vultures eat a wide variety of items during this time of year.

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**Osprey preys on Canada Goose gosling.**—At 08:00, 19 May 1983, while working at the Pratt Fish Hatchery in Pratt Co., Kansas, I observed an Osprey (*Pandion haliaetus*) dive from a 20-m hover over a pond 50 m north of my location. A pond dike blocked my view of the lower portion of the bird's descent. The osprey remained out of sight for approximately 4-5 sec before flying back into view carrying a bird in its talons. The Osprey circled over ponds to the west before landing on a large, dead cottonwood (*Populus deltoides*) on a river bank approximately 70 m north of where the attack took place.

I observed the Osprey and its prey through 7 × 35 binoculars, and, after moving to within

25 m of the perch, identified the prey as a Canada Goose (*Branta canadensis*) gosling. The gosling was flapping its wings as the Osprey began to tear pieces of flesh from the gosling's back. Observation was continued for 5 min. Consumption of the gosling continued through this time. At the attack site, I found two adult Canada Geese and three, 2-week-old goslings near the waters edge.

An Osprey had been seen catching fish at the hatchery for 5 weeks prior to the attack. In addition to fish production at the hatchery large Canada Geese are also reared in hopes of establishing a resident flock in Kansas. During the spring of 1983 65 goslings were hatched at the fish hatchery. Only two gosling mortalities were recorded the entire spring. One, as described, was the result of Osprey predation. The cause of the second mortality was unknown.

Canada Geese at the hatchery do not react to the Osprey's presence in a noticeable manner (T. Dorzab, pers. comm.). With an abundance of fish in the shallow culture ponds and in the adjacent river, it is puzzling that the Osprey preyed upon the gosling.

Ospreys occasionally catch prey other than fish (Wiley and Lohrer, *Wilson Bull.* 85:468–470, 1973). Bert (U.S. Natl. Mus. Bull. 167, 1937) describes the lining of nests with various items including the wings and parts of shorebirds and waterfowl. I could find no references to Osprey predation on Canada Geese goslings in the literature.—WILLIAM G. LAYHER, *Environmental Services, Kansas Fish and Game Commission, RR #2, Box 54A, Pratt, Kansas 67124. Accepted 23 May 1984.*

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**Pellet casting by Common Grackles.**—While conducting field tests in central Tennessee during the winter of 1982–83, I noted numerous cylindrical, pellet-shaped masses among the accumulated guano deposits in blackbird (Icterinae)-starling (*Sturnus vulgaris*) roosts. These 'pellets' appeared to have been 'cast' or regurgitated. They were composed primarily of corn hulls and chaff, and contained no discernible guano. Based on the size of these pellets (about 1 cm in diameter and 1–3 cm in length) and the species composition of these roosts, I assumed they were produced by Common Grackles (*Quiscalus quiscula*). This assumption was later supported when captive grackles, fed cracked corn, produced similar pellets. European Starlings held in captivity at the same time, failed to produce these pellets. Conversely, captive Brown-headed Cowbirds (*Molothrus ater*) produced a similar, albeit considerably smaller (5 × 7 mm) pellet, when fed a mixed corn and poultry mash diet. Hansen (Internatl. Bird Pellet Study Group, Bull. No. 7, 1977; G. E. Duke, pers. comm.) found that Shiny Cowbirds (*Molothrus bonariensis*) cast similar pellets. Whether Red-winged Blackbirds (*Agelaius phoeniceus*) produce similar pellets is not known. However, since red-wings and cowbirds represented only a small proportion of the bird population at the roosts containing these pellets, it is doubtful they contributed significantly to their deposition.

To obtain a rough estimate of the number of these pellets produced, a total of 30, 0.5 m<sup>2</sup>-paper plots were randomly placed within a 1.2-ha roost of small (3–5 m) hardwoods near Lawrenceburg, Lawrence Co., Tennessee. Ten plots were placed on each of the evenings of 8, 14, and 15 February 1983, collected the following morning, and the number of pellets deposited during the night enumerated. This roost had an estimated bird population of 0.6–0.8 million birds, comprised of an estimated 61% grackles, 35% European Starlings, 3% Red-winged Blackbirds, and 1% cowbirds. Therefore, the estimated density of grackles in this roost was between 31 and 41 grackles/m<sup>2</sup>.