Grubb & Coffey 1982

upward from the main trunk about 12 m above the ground. Two epiphytic cacti on the north side of the nest provided protection from the mid-day sun. No nest material was apparent, coinciding with observations of others (Brown and Amadon, Eagles, Hawks and Falcons of the World, McGraw-Hill, New York, New York, 1968; Wolfe 1954).

Evidently the nestling was several weeks old as judged by its size (nearly as large as the adult), its ability to feed itself, and the amount of whitewash at the nest-site. The nestling closely resembled the adult in plumage, but the rectus was yellower than the adult's. During the period of observation (11:20–16:36) the adult(s) brought three snakes to the nestling.

The first snake, originally 45 cm long, was delivered (less the anterior 8 cm previously eaten by the adult) at about 11:28. The nestling received an intact snake of the same size at 15:31. At 15:40 an adult arrived at the nest with a larger snake, similar in appearance but lacking its head.

The usual nest-site of this falcon is in a tree cavity, although it has previously nested in the crotches of trees (Haverschmidt 1968, Brown and Amadon 1968). In the apparent absence of cavities it has used old nests of other raptors in southwestern Ecuador (Grossman and Hamlet, Birds of Prey of the World, C. N. Potter, New York, New York, 1964). In the locality where we observed the nest, large trees that could potentially provide cavities were scarce. This may explain why the above nest was in a crotch of a *Bombax*.

On the west slope of the Peruvian Andes the Laughing Falcon was previously recorded only from Lechugal, Dpto. Tumbes, ca. 210 km north of our observation (Hellmayr and Conover, Catalogue of Birds of the Americas 13:242, Field Museum, Chicago, Illinois, 1949). J. William Eley and Thomas S. Schulenberg (pers. comm.), however, saw this species in late October 1977 on the Río Quiróz, southwest of Ayabaca, Dpto. Piura, suggesting that this falcon may be local but widespread in the little-known canyons of northwestern Perú.

We thank J. V. Remsen, Jr., J. P. O'Neill, M. D. Williams and T. S. Schulenberg for comments on the manuscript. We are most grateful to John S. McIlhenny, H. Irving and Laura R. Schweppe, and Babette M. Odom for their support of our fieldwork. Antonio Brock E., Marc Dourojeanni R., Susana Moller H., and Carlos Ponce P. of the Dirección General Forestal y de Fauna, Lima, Perú, continue their support and issued the necessary permits. We acknowledge the continued collaboration of Aero Perú.—MARK B. ROBBINS AND DAVID A. WIEDENFELD, *Museum of Zoology, Louisiana State Univ., Baton Rouge, Louisiana 70893.* *Accepted 9 Dec. 1980.*

Wilson Bull., 94(1), 1982, pp. 84–85

Evidence of Bald Eagles feeding on freshwater mussels.—A 1978 study of the winter habitat of the Bald Eagle (*Haliaeetus leucocephalus*) in the Coconino National Forest, Arizona, indicated repeated and potentially heavy use of a freshwater mussel (*Anodonta corpulenta*) in the eagles' diet. As many as 10 eagles (five adults and five immatures) were observed at Upper Lake Mary near Flagstaff when the junior author collected field data between 27 February and 10 March. However, only 2–3 eagles were present in the area through most of the winter. No foraging activity was seen, but a variety of circumstantial evidence was collected, suggesting more than casual use of this mussel.

Innumerable shell fragments and pieces of mussel tissue, as well as 4–5 broken shells and three intact shells with the contents removed, were scattered on the snow beneath favored eagle perch trees along the shoreline. Pieces of shell also were found in five of seven identifiable eagle castings. In the shoreline mud, where mussels were trapped and exposed after a rapid lowering of the water level, eagle tracks were abundant; however, no sign of other birds or mammals was observed there or in the snow beneath the perches. In Texas, wintering Bald Eagles have been reported feeding on fr
of receding lake waters (Nielson, p. 93 *in* Wintering
48 States, Spencer, ed., Natl. Agric. Chem. Assoc.

Invertebrates are mentioned infrequently in Bald
as insignificant prey items. The only other record
serving as eagle food came from Dunstan and Harpe
study of prey remains at six eagle nests in Minnesot
silis sp.] and one crayfish [*Cambarus* sp.]) accou
western Washington, less than 2% of the food o
crustaceans (Retfalvi, Condor 72:358–361, 1970). M
an analysis of 435 eagle stomachs showed an averag
[*Cancer magister*], one octopus, one shrimp and on
Fish & Wildl. Serv., Circ. 30, 1955); on Kodiak Isl
[*Mytilus* sp.] and one shrimp) were recorded in 11
59:70–72, 1978); and on Amchitka Island less thar
brate (four octopi and one amphipod) (Sherrod et a
in the Aleutian Islands, Murie (Condor 42:198–20
invertebrate composition (one squid, six snails, fo
invertebrates were recorded.

This *Anodonta* was probably introduced from th
through the glochidial stage on the gills of yellow
(*Esox lucius*). We can only speculate from the a
that the eagles used their hooked beaks and strong
rather than dropping them onto rocks from the a
scavengers such as gulls (*Larus* sp.) and crow
73:337–341, 1977; Zach, Behaviour 68:106—117
chrysaetos) have been documented using the aer
et al., Beitr. Vogelkd. 21:275–287, 1975).

Wintering Bald Eagles are opportunistic feeder
mals as available. Although data were insufficien
comprised a notable portion of the eagles' diet at
Other food items included waterfowl (American
(*Ictalurus punctatus*), northern pike, rainbow trou
mammals. It is unlikely that freshwater mussels
they represent an alternate food source that m
readily accessible.

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for helpful information on the mussels and fishe
H. Hudak, R. Knight, D. Spencer and R. Szaro
provided by the U.S.D.A. Forest Service, South
C. Kennedy.—TERYL G. GRUBB, *Rocky Mount
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93271.* *Accepted 20 Feb. 1981.*

Wilson Bull., 94(1), 1982, pp. 85–87

Killdeers feeding on frogs.—On 13 July 1
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Aero Perú.—MARK B. ROBBINS AND DAVID
State Univ., Baton Rouge, Louisiana 70893.

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tering Bald Eagles have been reported feeding on freshwater clams under similar conditions of receding lake waters (Nielson, p. 93 *in* Wintering of the Migrant Bald Eagle in the Lower 48 States, Spencer, ed., Natl. Agric. Chem. Assoc., Washington, D.C., 1976).

Invertebrates are mentioned infrequently in Bald Eagle food habits literature and then only as insignificant prey items. The only other recorded observation of a freshwater bivalve serving as eagle food came from Dunstan and Harper's (J. Wildl. Manage. 39:140–143, 1975) study of prey remains at six eagle nests in Minnesota, where invertebrates (one clam [*Lampsilis* sp.] and one crayfish [*Cambarus* sp.]) accounted for 2% of the items collected. In western Washington, less than 2% of the food of nesting Bald Eagles was made up of crustaceans (Retfalvi, Condor 72:358–361, 1970). Most other reports are from Alaska, where an analysis of 435 eagle stomachs showed an average of less than 2% invertebrates (33 crabs [*Cancer magister*], one octopus, one shrimp and one amphipod) (Imler and Kalmbach, USDI Fish & Wildl. Serv., Circ. 30, 1955); on Kodiak Island three invertebrates (two blue mussels [*Mytilus* sp.] and one shrimp) were recorded in 114 food items (Grubb and Hensel, Murrelet 59:70–72, 1978); and on Amchitka Island less than 1% of the prey was found to be invertebrate (four octopi and one amphipod) (Sherrod et al., Living Bird 15:143–183, 1977). In 1936, in the Aleutian Islands, Murie (Condor 42:198–202, 1940) noted an apparently unusual 16% invertebrate composition (one squid, six snails, four crabs and one Nereid), but in 1937 no invertebrates were recorded.

This *Anodonta* was probably introduced from the Mississippi Valley in the 1930's or 1940's, through the glochidial stage on the gills of yellow perch (*Perca flavescens*) or northern pike (*Esox lucius*). We can only speculate from the abundance of broken shells below perches that the eagles used their hooked beaks and strong, sharp talons to break the molluscs apart, rather than dropping them onto rocks from the air as reported for other less well equipped scavengers such as gulls (*Larus* sp.) and crows (*Corvus* sp.) (Siegfried, S. Afr. J. Sci. 73:337–341, 1977; Zach, Behaviour 68:106—117, 1978). However, Golden Eagles (*Aquila chrysaetos*) have been documented using the aerial technique to break turtle shells (Fisher et al., Beitr. Vogelkd. 21:275–287, 1975).

Wintering Bald Eagles are opportunistic feeders, normally consuming fish, birds and mammals as available. Although data were insufficient for quantification, it appears that mussels comprised a notable portion of the eagles' diet at Upper Lake Mary during the study period. Other food items included waterfowl (American Coot [*Fulica americana*]), channel catfish (*Ictalurus punctatus*), northern pike, rainbow trout (*Salmo gairdneri*) and several unidentified mammals. It is unlikely that freshwater mussels are consistently a major prey item; however, they represent an alternate food source that may be heavily used when abundant and/or readily accessible.

The authors wish to thank D. Prigge, IV, for field assistance; D. Bancroft and J. Landry for helpful information on the mussels and fisheries of Upper Lake Mary; and T. Dunstan, H. Hudak, R. Knight, D. Spencer and R. Szaro for reviewing the manuscript. Funding was provided by the U.S.D.A. Forest Service, Southwestern Region, through the coordination of C. Kennedy.—TERYL G. GRUBB, *Rocky Mountain Forest and Range Experiment Station, Forestry Sciences Lab., Arizona State Univ., Tempe, Arizona 85287* AND MICHAEL A. COFFEY, *Resource Management, Sequoia-Kings Canyon National Park, Three Rivers, California 93271.* *Accepted 20 Feb. 1981.*

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Killdeers feeding on frogs.—On 13 July 1980 we observed several Killdeers (*Charadrius vociferus*) feeding on small anurans in an experimental fish pond near Starkville, Oktibbeha