

SEASONAL PREDATION ON MOLES BY THE RED-TAILED HAWK

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On 10 March 1972, a known pair of Red-tailed Hawks (*Buteo jamaicensis*) were sighted at 133 m elevation 2 km N of Clayton, Contra Costa County, California. At 08:45 the male dove and landed on the ground. After 5 min on the ground, the hawk flew toward the female, clutching a western mole (*Scapanus latimanus*). Perching beside his mate, the male regurgitated a pellet, then began to feed on the mole held in its talons. Both the mole (a juvenile) and the regurgitated pellet were collected. The pellet contained remains of an adult mole.

Significantly, it appears that moles occur as prey of

Red-tailed Hawks exclusively during winter and spring (Austing, *The world of the Red-tailed Hawk*, J. B. Lippincott Co., Phila., 1964; Fisher, *Bull. U.S. Dept. Agri., Div. Ornithol. and Mammal.* 3:48, 1893; Roest, *J. Mammal.* 33:110, 1952; pers. observ.). This seasonal vulnerability is apparently related to their reproductive period. During breeding and dispersal of the young, moles temporarily abandon their burrows (Arlton, *J. Mammal.* 17:349, 1936), and only then are readily available as prey. The ability of "general feeders" such as adult Red-tailed Hawks to utilize other species when rodents tend to be scarce could explain the occurrence of moles as prey (Craighead and Craighead, *Hawks, owls and wildlife*, Dover Pub., New York, 1969).

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