Our observation is of ethological interest, since no author cites this bird's ability to carry food in its claws (Bernis *Ardeola*, 12:45-99, 1966), Valverde (*Ardeola*, 12:101-115, 1966), Cramp and Simpson (Handbook of the Birds of Europe, the Middle East and North Africa, Vol II, Hawks to Bustards, R.S.P.B., Oxford University Press, 1980)). We must nevertheless mention the observation of Hiraldo (*Donana acta vertebrata* 3(1):19-31, 1976) referring to a Black Vulture presumably capturing a lizard (*Lacerta* sp.). These observations confirm the fact that the Black Vulture, the only species of Palearctic vulture known to us to have this behavior, maintains the grasping capacity of its claws to a greater extent than other species of the group.

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THESIS ABSTRACTS

Ecology of Breeding Burrowing Owls in the Columbia Basin, Oregon

The ecology of breeding Burrowing Owl (*Athene cunicularia*) was studied in northcentral Oregon during the spring and summer of 1980 and 1981. Pairs began arriving on the study areas as early as the first week of March; however, most arrivals were during April. Egg-laying began the first week of April and continued into the first week of May. Whole family groups left the nesting areas as early as the first week in July while members of other families remained until at least the end of September.

Nest success was 57% for 63 nests in 1980 and 50% for 76 nests in 1981. Desertion was the major reason for nest failure and may have been related to the proximity of other nesting pairs. Badgers (*Taxidea taxus*) were the major nest predtors. Nests which were lined with cow or horse dung were significantly less prone to predation than nests not lined, suggesting dung masks odors of nest occupants.

Diets were determined by pellet analysis. Arthropods comprised 91.6% of the total prey by number; however, they contributed only 22.0% of the total biomass. Vertebrates, mostly small mammals, comprised the balance. *Perognathus parvus* (Great Basin Pocket Mouse) was the most important vertebrate prey and *Stenopelmatus fuscus* (Jerusalem Cricket; Gryllacridadae) was the most important arthropod. Coleoptera were preyed upon very heavily, but they were dominated by very small (< 10 mg) beetles and, therefore, contributed little to the total biomass. Burrowing Owls preyed on mammals during the spring then shifted to insects during the summer. Burrowing Owl diets were influenced by soil type, and owls selected mammals in proportion to their occurrence in the environment.

Burrowing Owls selected 3 of 5 habitats for nesting. Hole availability and possibly food availability as important prerequisites function analysis indicated variables responding to horizontal visibility and possibly food availability as important prerequisites for nest selection. Soil texture greatly influenced re-use and longevity of nest burrows. — **Green, Gregory A. 1983. M.S. thesis, Oregon State Univ., Corvallis.**

Reproductive Ecology and Habitat Utilization of Richardson's Merlins in Southeastern Montana

Reproductive ecology, food habits, habitat utilization, and eggshell quality of Richardson's Merlin (*Falco columbarius richardsonii*) in southeastern Montana were examined. Breeding activity spanned five months. Clutch size, brood size, and fledging success at active nests were similar ($P > 0.05\%$) among four years. Birds comprised >90% of individual prey items, and 61% of avian prey species were typically associated with predominantly open habitats. Horned Lark (*Eremophila alpestris*), Lark Bunting (*Calamospiza melanocorys*), and Vesper Sparrow (*Pooecetes gramineus*) collectively comprised 57% of all prey. Home ranges of three breeding male Merlins encompassed approximately 13, 23, and 28 km^2, and each male traveled a maximum of 8 to 9 km from his nest. These home ranges encompassed five physiognomic habitat types. Percentages of total observations by habitat type indicated greatest us of sagebrush and grassland habitats. Sagebrush, riparian, and pondrosa pine habitats were used more ($P < 0.05$) than expected, but grassland and agriculture habitats received less ($P < 0.05$) use than expected. Comparisons of Montana eggshells with pre-pesticide (pre-1946) eggshells indicated 12% and 20% reductions in eggshell weight and eggshell thickness indices, respectively. These reductions were significant ($P <$). Seven organochlorine compounds were detected in eggs collected on the study area. The overall management goal should be maintenance of a viable Merlin population and the habitat features essential for its continued existence. Management recommendations include limitation of alteration of ponderosa pine sideslope habitat, restriction of activities from 10 March through 20 July, rescheduling of activities, establishment of 400 m zones of no disturbance surrounding nests, limiting loss of prairie habitat and sagebrush removal, limiting use of organochlorine compounds, reviewing potential impacts of activities prior to their occurrence, and maintaining confidentiality of nest locations. — **Becker, Dale M. 1984. M.S. Thesis, University of Montana, Missoula.**