maptera, Blattodea, Odonata y Scolopendromorpha complementaron la dieta. Solamente unos pocos roedores pequeños fueron registrados. La proporción de los principales grupos de presa fue similar a lo largo de Free State, pero cambio marcadamente en la estación invernal. Con la progresión del verano austral, la proporción de Solifugae decreció, mientras que los otros grupos de presa aumentaron. La gran proporción de presas crepusculares y nocturnas en la dieta del cernícalo sugiere que este es al menos parcialmente crepuscular en sus hábitos de forrajeo.

[Traducción de César Márquez]

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### LITERATURE CITED

- Anderson, P.C., O.B. Kok, and B.H. Erasmus. 1999. Diet, body mass, and condition of Lesser Kestrels *Falco naumanni* in South Africa. *Ostrich* 70:112–116.
- BIJLSMA, S., E.J.M. HAGEMEIJER, G.J. VERKLEY, AND R. ZO-LLINGER. 1988. Ecological aspects of the Lesser Kestrel Falco naumanni in Extremadura (Spain). Rapport 28, Werkgroep Dieroecologie, Vakgroep Experimentele Zoologie, Katholieke Univ. Nijmegen.
- Brown, L.H., E.K. Urban, and K. Newman. 1982. The birds of Africa. Vol. 1. Academic Press, London, U.K.
- COLAHAN, B.D. 1993. Status of the Lesser Kestrel in urban and peri-urban areas in the Orange Free State, South Africa. *Mirafa* 10:33–39.
- CRAMP, S. AND K.E.L. SIMMONS. 1980. The birds of western palearctic. Vol. 2. Oxford Univ. Press, Oxford, U.K.

- DEL HOYO, J., A. ELLIOTT, AND J. SARGATAL (EDS.). 1992. Handbook of the birds of the world. Vol. 1. Lynx Edicions, Barcelona, Spain.
- GONZALEZ, J.L. AND M. MERINO. 1990. El cernicalo primilla (*Falco naumanni*) en la Peninsula Iberica. Situacion, problematica y aspectos biologicos. Serie Tecnica. ICONA, Madrid, Spain.
- KOK, O.B., A.C. KOK, AND C.A. VAN EE. 2000. Diet of migrant Lesser Kestrels Falco naumanni in their winter quarters in South Africa. Acta Ornithol. 35:147–151.
- LAWRENCE, R.F. 1955. Solifugae, scorpiones and pedipalpi. S. Afr. Anim. Life 1:152–262.
- McCann, K.I. 1994. Habitat utilisation and time-energy budgets of the Lesser Kestrel *Falco naumanni* in its southern African non-breeding range. M.S. thesis, Univ. of Witwatersrand, Johannesburg, South Africa.
- Roos, Z.N. AND M.M. Roos. 1986. First report: Lesser Kestrel survey. *Mirafra* 3:46–48.
- SCHOLTZ, C.H. AND E. HOLM. 1985. Insects of southern Africa. Butterworths, Durban, South Africa.
- SIEGFRIED, W.R. AND D.M. SKEAD. 1971. Status of the Lesser Kestrel in South Africa. *Ostrich* 42:1–4.
- Tucker, R.M. and M.F. Heath. 1994. Birds in Europe their conservation status. BirdLife International, Cambridge, U.K.
- Van Zyl., A.J. 1993. Foraging of the South African Rock Kestrel. *In* Nicholls and Clarke [Eds.] Proc. 1991 Hawk and Owl Trust Conference, The Hawk and Owl Trust, London, U.K.
- WHARTON, R.A. 1981. Namibian Solifugae (Arachnida). Cimbebasia Mem. 5:1–87.

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# RED-SHOULDERED HAWK FEEDS ON CARRION

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KEY WORDS: Red-shouldered Hawk; Buteo lineatus; feeding, carrion.

At 0804 H on 1 June 1999 at Avon Park Air Force

Range, Highlands County, Florida, I observed an adult Red-shouldered Hawk (*Buteo lineatus*) drop off a fence post about 65 m away and land on the grassy shoulder of a paved road. The hawk picked up an object in its talons, flew back to a fence post, and began manipulating the item. Through Zeiss  $10 \times 25$  binoculars, I identified the prey as a Common Nighthawk (*Chordeiles minor*), with conspicuous white bars on the long, blackish wings. The nighthawk remains appeared to consist solely of feathers

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and skin attached to bones of the wings and breast. No meat was visible on the nighthawk's body, and the remains appeared very much like that of a flat study skin.

For 4-5 min, the hawk plucked feathers from what remained of the breast and belly of the nighthawk, then began tearing off and consuming pieces of skin and bone. After the hawk had consumed the edible parts of the breast, it plucked all flight feathers from each of the wings and consumed what remained. Once it had finished eating, the hawk wiped its bill on the post, defecated, and flew off.

The ground around the fence post was littered with numerous flight and body feathers of the nighthawk. There was no blood on the top of the fence post where the hawk plucked and consumed the remains. On the road shoulder where the hawk had picked up the carcass, I found a large "puddle" of nighthawk body feathers, including the rectrices. The area within 0.3 m of the feather "puddle" contained many dozens of small ants, probably red imported fire ants (*Solenopsis invicta*). It appeared that the nighthawk had been killed earlier in the day and its flesh had been consumed by the ants, leaving mostly skin, bones, and feathers. Common Nighthawks roosting on roadsides pre-dawn at the Air Force Range are frequent traffic casualties (D. Leonard pers. observ., and D. Swan pers. comm.).

This observation is one of few published reports of a Red-shouldered Hawk feeding on carrion, and possibly the first observation of the species consuming avian carrion. The only mention in Crocoll (1994) of Red-shouldered Hawks eating carrion refers to Palmer (1988), who mentions a hawk in Florida that was observed to rob crows (*Corvus* spp.) of catfish heads that had been discarded by a river otter (*Lutra canadensis*). On 9 February 2000 at Northampton, Pennsylvania, an adult Red-shouldered Hawk was photographed as it perched on the carcass of a white-tailed deer (*Odocoileus virginianus*). In this case, extremely cold temperature was suggested as the cause for this unusual feeding event (R. Wiltraut *in* Bur-

geil et al. 2000). The reason for the Florida hawk feeding on a bird carcass was unclear, but a shortage of food probably was not an impetus; herpetofauna was abundant in central Florida during the summer rainy season when I made the observation. Perhaps this simply was a case of opportunistic feeding.

RESUMEN.—Observe un halcón de hombros rojizos (*Buteo lineatus*) alimentándose del cadáver de un chotacabras común (*Chordeiles minor*) en Avon Park Air Force Range, Florida. Esta es una de las pocas observaciones de esta especie comiendo carroña, y posiblemente el primer reporte de alimentación sobre los restos de un ave. La razón para este tipo de comportamiento es desconocida, pero un déficit de comida probablemente no fue el factor.

[Traducción de César Márquez]

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# LITERATURE CITED

BURGEIL, J.C., R.O. PAXTON, AND D.A. CUTLER. 2000. Hudson Delaware [Winter 1999–2000 regional bird report]. N. Am. Birds 54:35–39.

CROCOLL, S.T. 1994. Red-shouldered Hawk (Buteo lineatus). In A. Poole and F. Gill [EDS.], The birds of North America, No. 107. The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, DC U.S.A.

PALMER, R.S. 1988. Handbook of North American birds, Vol. 4. Diurnal raptors. Yale Univ. Press, New Haven, CT U.S.A.

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