

cessful hunts means that few falcons continued to hunt after the first attempt. This is not surprising since a certain trade-off must exist between reasonable energy expenditure and profitable caloric intake.

Cade (1982) states that Peregrines will not stoop into a massed flock of birds. We found, however, that a stoop into a compact flock was the most common technique used by Peregrines hunting Dunlins in western Washington. The rarity of the high stoop may be related to the apparent ease with which Peregrines capture Dunlins using other techniques. Also, such an effort may be energetically inefficient considering the probable low caloric value of a small species such as the Dunlin.

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### Golden Eagle Capture of an American Coot

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Previous food habit studies of the Golden Eagle (*Aquila chrysaetos*) list the American Coot (*Fulica americana*) as a prey item (Dixon, *Condor* 39:49-56, 1937; Olendorff, *Am. Midl. Nat.* 95:231-236, 1976; Bloom and Hawks, *Raptor Res.* 16:110-115, 1982; Marr and Knight, *Murrelet* 64:73-77, 1983). Dixon (1937) reported several observations of Golden Eagles capturing coots. The eagle positioned itself between the lake and the coots, using natural barriers to conceal its approach, and then quickly attacked its prey. Dixon believed that this was a learned method that was often used.

On 14 April 1982 at ca 0900 H near Malheur Lake in southeastern Oregon, accompanied by M. Rule, I observed an estimated 500 coots feeding in a partially flooded alfalfa field bordering Malheur Lake. I also observed a Golden Eagle flying directly toward the coots at a height of 20 m. The coots began running toward the lake when the eagle was within ca 200 m. The eagle flew over the coots, turned into the wind and briefly hovered, holding its position as they passed underneath. The eagle made 2 unsuccessful dives at the coots before capturing one on the

third attempt starting from a height of ca 2 m. The eagle then stood on the coot for about 30 sec before flying north for 50 m and accidentally dropping its prey in the water, where the coot was observed splashing in the water. The eagle immediately flew down, picked up the coot and flew to a fence post 50 m away and 3 min later began feeding.

Collopy (*Auk* 100:747-749, 1983) found that Golden Eagles typically orient into the wind, presumably to reduce flight speed and to at-

tack prey from close quarters. The same technique apparently was used by the eagle in this observation.

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### Bilateral Bumblefoot in a Wild Red-Tailed Hawk

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Bumblefoot is the falconer's term for any abnormal enlargement of a raptor's foot or a portion thereof. It is the most common clinical condition associated with captive raptors (Riddle, K., *Recent Advances in the Study of Raptor Diseases*, London, 1980). Raptors with high wing-loading, such as the larger falconids, seem more prone to the condition than other hawks with lower wing-loading (Halliwell, W., *J. Zoo. Anim. Med.* 6 (4): 8-10 1975). Bumblefoot in captive raptors is most often management related; usually caused by improper perches (Riddle, 1980).

Bumblefoot often starts when the integument of the metatarsal pad is injured and inflammation results. Inflamed areas then may become infected resulting in formation of an abscess. Continued trauma to the infected area may cause the fissure of abscess material into surrounding uninfected areas. The disease will often continue to spread until much of the foot is infected. In many cases bumblefoot is followed by osteomyelitis and/or septicemia, endocarditis, and finally death (Riddle, 1980). Bumblefoot can also be directly caused if the foot is punctured by a talon or other sharp object. Bacterial agents associated with bumblefoot as secondary agents include *Staphylococcus* spp., *Escheria coli*, *Streptococcus* spp. and *Clostridium* spp. Fungi have also been associated with bumblefoot in-



Figure 1: Swollen metatarsal pad and digits on both feet.