mitters (Microwave Telemetry Inc., Columbia, MD U.S.A.) were attached. Adults defended the nest again during replacement of nestlings into the nest and returned to the nest immediately after our departure from the nest area.

Both young fledged successfully and both adults returned to the nest site the following year and defended their territory but did not produce young. This breeding failure was correlated with lower productivity that was observed throughout the area in 2003, possibly due to poor spring weather conditions (T. Chubbs unpubl. data). Although the anchor-bolt ladder did not deter adults from returning to the nest site, additional monitoring would be necessary before a reasonable impact assessment of the ladder on Osprey productivity can be made.

Cost is an important factor to consider when using anchor-bolt ladders over conventional climbing techniques using experienced, qualified climbers in remote areas. The associated hardware and welding costs were ca. $80 U S per 150-cm ladder section. Rental costs for installation equipment were ca. $40 U.S. per day. We required a helicopter to access our remote site at a cost of approximately $2000 U.S. (ca. $1000 U.S./hr). Our technique also offers permanent access at nest sites with high reoccupancy rates, at no additional costs for future nest visits during subsequent years.

In our particular situation, the utilization of a permanent ladder was appropriate for a remote-inaccessible area that would be accessed repeatedly during our study. We do not advise using this type of access structure where there is human access or predators capable of accessing the nest or where this would bias study results. This technique proved valuable, not only as a tool for accessing nestlings, but as a mechanism for quick access to retrieve trapped birds, lessening the chance of injury and stress on the birds.

In areas that are relatively accessible, alternative techniques involving climbing and the attachment of a static rope may be more economical. In our situation, professional climbers were unavailable locally and the travel and contract costs of acquiring such expertise were prohibitive.

We recommend that fall-safety equipment be used when employing anchor-bolt ladders to scale any high rock face. To eliminate disturbance to raptors, access structures should be installed where possible on known nesting rocks during the nonbreeding season. Preinstalled access structures will decrease the disturbance time associated with the use of climbing equipment and negate the requirement for experienced climbers. We recommend that in regions where access by predators may be of greater concern, the bottom ladder section be temporarily attached using bolts or a quick release mechanism. Researchers could carry the bottom section to each nest site, further reducing the set up cost at each site by $80 U.S. Once the study has concluded, ladder sections can be removed from rock surfaces, returning natural aesthetics to sites. Our technique was effective for accessing Osprey nests and may be applicable to a variety of studies where the scaling of rocks or low cliffs is required to capture raptors.

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ATTEMPTED PREDATION ON A LARGE-TAILED NIGHTJAR (*CAPRIMULGUS MACRURUS*) BY AN EASTERN MARSH-HARRIER (*CIRCUS SPILONOTUS*) IN COASTAL VIETNAM

This note describes a predation attempt on a Large-tailed Nightjar (*Caprimulgus macrurus*) by an Eastern Marsh-Harrier (*Circus spilonotus*) at Nha Trang Airport (109°11′0″E, 12°14′0″N), Vietnam. Observations took place from 0650–0700 H on 28 February 2004.

An adult male Eastern Marsh-Harrier was observed slow quartering at varying heights (between 2–10 m above the ground) over the airport terrain of concrete interspersed with overgrown grass and scrub. I observed no predation attempts within the first 5 min of observations. The marsh-harrier then glided very low (1–2 m above ground), braked abruptly in flight, almost turning over, and dropped toward the ground. The apparent attack was unsuccessful, and the presumed intended prey, a Large-tailed Nightjar, flew from the exact location where the marsh-harrier landed and rose rapidly to a height of ca. 10–15 m. The marsh-harrier remained grounded for 1–2 sec and did not actively pursue the nightjar, which flew eastward at a constant height (10–15 m) toward the coast some 80–100 m away and out of sight. The marsh-harrier continued its systematic quartering ca. 3 sec after its failed strike, but no further predation attempts were made in the following 5 min.

The Eastern Marsh-Harrier is a medium-sized raptor (47–55 cm in body length) that has been described as an opportunistic hunter, capturing "disabled aquatic birds, or those caught unawares (and) small terrestrial passerines" as well as rodents (del Hoyo et al. 1994, Handbook of the birds of the world, Vol. 2, Lynx Editions, Barcelona, Spain) Fefelov (1996, *Russ. J. Ornithol.* 5:41–46) found that birds constituted 20% of the diet by number in Russia, although the total mass of birds caught exceeded that of mammals because the main avian prey taken were relatively large ducks and waders (Fefelov 2001, *Ibis* 143:587–592). Similarly, Hirano and Yasui (2001, *Strix* 19:43–47) found feathers of ducks (*Anas* spp.) in 22.6% of Eastern Marsh-Harrier pellets analyzed in Japan, with an additional 24.9% of pellets containing the remains of unidentified birds. However, detailed studies of the diet of this species are lacking, particularly from southeastern Asia (Simmons 2000, Harriers of the world: their behaviour and ecology. Oxford Univ. Press, Oxford, U.K.).

Fefelov (2001) found that male Eastern Marsh-Harriers prefer smaller prey than do females and although Large-tailed Nightjars (body length 25–29 cm, wingspan 53–56 cm) are only slightly smaller than aquatic birds, they are substantially lighter (54–72 g) (del Hoyo et al. 1999, Handbook of the birds of the world, Vol. 5, Lynx Editions, Barcelona, Spain; Higgins 1999, Handbook of Australian, New Zealand, and Antarctic birds, Vol. 4, Oxford Univ Press, Melbourne, Australia). Del Hoyo et al. (1994) noted that larger birds taken by the closely-related Western Marsh-Harrier (*Circus aeruginosus*) "tend to be those that are vulnerable (e.g., ducks that are wounded or in eclipse)," although Ring-necked Pheasants (*Phasianus colchicus*) were common prey in some areas (Ferguson-Lees and Christie 2001, Raptors of the world, Christopher Helm, London, U.K.). In a comprehensive review of the diet of the Swamp Harrier (*Circus approximans*; which forms part of a superspecies with *C. spilonotus, C. aeruginosus,* and a number of other harriers; del Hoyo et al. 1994) in Australasia, based both on detailed studies (e.g., Baker-Gabb 1984, *Aust. Wild Res.* 11:517–532) and incidental records, no nocturnal birds were recorded (Marchant and Higgins 1993, Handbook of Australian, New Zealand, and Antarctic birds, Vol. 2, Oxford Univ. Press, Melbourne, Australia).

Although Eastern Marsh-Harriers are likely to use a combination of visual and auditory cues to locate prey (as shown for the closely related Swamp Harrier; Baker-Gabb 1993, Pages 295–298 *in* P. Olsen [ED.], Australian raptor studies, Australasian Raptor Association, Melbourne, Australia) it is interesting that a nightjar, which is both well camouflaged and usually still and silent during full sunlight, was detected.

Holyoak (2001, Nightjars and their allies: the caprimulgiformes, Oxford Univ. Press, Oxford, U.K.) describes a "remarkable dearth of information on the predators . . . of Caprimulgiformes." No predators of the Large-tailed Nightjar were documented by either del Hoyo et al. (1999), Higgins (1999), or Holyoak (2001). Robinson (2000, *Bird Observer* 806:26–28) flushed the species from the rainforest floor in North Queensland, Australia, after which it was pursued (but not taken) by a Grey Goshawk (*Accipiter novaehollandiae*). Elsewhere, a review of the literature of predation on the European Nightjar (*Caprimulgus europaeus*) by Marèchal (1989, *het Vogeljaar* 37(6):271–273, cited in Holyoak 2001) identified five diurnal raptors as predators, including the Northern Harrier (*Circus cyaneus*). Wang et al. (1995, *J. Field Ornithol.* 66:400–403), speculated that two radio-tagged Common Poorwills (*Phalaenoptilus nuttallii*) had been taken by Northern Harriers (*Circus cyaneus hudsonius*) in Canada. This observation at Nha Trang furthers Holyoak's (2001) summation that the few records in the literature for other nightjar species suggests a similar mixture of predation from hawks, large falcons, owls, mammals, and reptiles.

When flushed in Australia, Large-tailed Nightjars usually "rise abruptly, fluttering and gliding low and erratically away through cover, often for 20–30 m" (Higgins 1999:1028). The extended escape flight observed at Nha Trang may have been due to the sparse cover present at the airport and the agility of the marsh-harrier at low heights.

Given that both birds are relatively common during winter in Vietnam and other parts of southeastern Asia (Nguyễn Cù et al. 2000, Chim Việt Nam, BirdLife International Vietnam Programme, Hanoi, Vietnam; Robson 2000, A field guide to the birds of south-east Asia, New Holland, London, U.K.), such interactions may occur more frequently in open environments than reflected in the published literature.

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