was 36.3°C (35.0–37.5, n = 9) or only 10% less than the mean body temperature 39.4°C (38.6–40.0, n = 6) of incubating females on the study tract; a situation similar to that in young Great-Horned Owls when they become efficient thermoregulators (Turner and McClanahan 1981). Nestling plumage developments that might affect thermoregulation ability are the unfurling of the prepennaceous down over much of the body beginning at about age 7 days and the unfurling of the tips of the contour feather quills, especially on the wings, scapulars, and dorsal tract, beginning at about age 14 days.

When Florida Screech-Owls achieve temperature regulation at about 14–16 days of age at a mean weight of 72–84 g (n = 15, Lohrer, unpublished data), they are similar in certain aspects of development to California Great Horned Owls that achieve temperature regulation at 28 days of age at a weight of about 700 (♂♂) or 1000 (♀♀) g (Turner and McClanahan 1981). Both species become efficient thermoregulators at about halfway through their respective nestling periods. In addition, both species are close to or have just reached peak nestling weights (*Otus* 80–93%, sexes combined; *Bubo* 95% ♂♂, 100% ♀♀), and both are about ¾ of adult weight (*Otus* 66–75% of 109 g, *O. a. floridanus*, sexes combined, Lohrer, unpublished data; *Bubo* 70% of 991 g ♂♂, 76% of 1312 g ♀♀, *B. v. pacificus*, Earhart and Johnson 1970, Condor 72:251–264). The development of thermoregulation ability at about the same nestling stage in these 2 species of greatly different size suggests that this may be a general pattern for owls. However, more data are needed from intermediate-sized owl species to confirm this suggestion.—Fred E. Lohrer, *Archbold Biological Station, P.O. Box 2057, Lake Placid, Florida 33852.* Received 6 July 1983; accepted 5 Nov. 1984.

First Record of Black Noddy Nesting at Kure Atoll.—During 13–15 July 1982 I visited Green Island, Kure Atoll, to assist with a survey on wildlife status and distribution. I recorded Black Noddies (*Anous minutus*) nesting; this is the first recorded nesting of Black Noddies at Kure Atoll, although they breed on most island groups in the tropical Pacific and nest on most of the leeward Hawaiian Archipelago islands (Berger 1981).

Background.—Kure Atoll is the farthest northwest atoll in the Hawaiian Archipelago. Green Island is the only inhabitable island in Kure Atoll; the other islands of the Atoll are little more than sandbars which vary in size and shape over the years.

Green Island is dominated by the U.S. Coast Guard LORAN Station, built in 1960–1961 and continuously occupied since 1961. The station includes an airplane runway, a 191 m antenna tower, and a variety of support facilities and crew quarters. Prior to this, the only major disturbance by humans was in 1955 when a radar reflector was built on Green Island.

Before 1957, there were only two population estimates for Black Noddies on Green Island; neither reported nesting birds (Woodward 1972). In June 1957, Kenyon and Rice (1958) found "no indication of nesting" although 44 adults were seen.

The most comprehensive seabird inventory at Kure occurred from 1963 to 1969 during the Pacific Ocean Biological Survey Program (POBSP). Black Noddies were then recorded as visitors in all months of the year, although generally absent from late December through mid-March. Peak numbers occurred from May to September, with a maximum estimate of 2000 in June and July of 1967. Although immatures as well as adults were recorded roosting on Green Island, and at least 3 adults were seen molting with bare brood patches in 1967, Woodward (1972) said "No indication that this species bred at Kure was noted during POBSP studies." He further speculated that the Black Noddies at Kure were post-breeding birds from Midway Atoll, where "thousands breed," mainly in the winter.

Various biologists representing the Hawaii State Division of Forestry and Wildlife (DOFAW) have visited Kure Atoll. Nine trip reports and one letter in the files of DOFAW in Honolulu summarize seabird observations from short visits which occurred from 1967 to 1982. No visits were reported from the months of January, August, October, or November during those years. In one or more of the years, Black Noddies were seen in the other months, except for May 1973 when the biologist stated that no Black Noddies were seen. The reports from March 1967, April 1978, and December 1977 (Walker 1977) specifically state that chicks and/or eggs and/or nests were *not* noticed.

On 14 July 1982, I saw approximately 80 adult or fully-feathered Black Noddies; some were on nests and chicks. Nests were in tree heliotrope (*Tournefortia argentata*) south of the runway and in ironwood trees (*Casuarina* spp.) behind the pumphouse near the Northwest Beach.

In June 1983, another Division wildlife biologist reported some Black Noddies on nests in tree heliotrope south of the airport runway, but no nests were noticed in the ironwood trees around the buildings (Ralph Saito, DOFAW, pers. comm.).

Elsewhere in the Hawaiian Archipelago, Black Noddies are reported to nest on "shrubs, trees, on rock ledges, in clefts of rocks, or holes in cliffs" (Berger 1981). They build a nest with grass, twigs, leaves, and/or seaweed. On Midway, Laysan, and Lisianski islands in the northwest chain, they are reported to nest on ironwood branches; on Laysan they also nest on naupaka bushes (*Scaevola*), *Pluchea*, clumps of bunchgrass (*Eragrostis*), and coconut trees (*Cocos nucifera*) (Ely and Clapp 1973).

The nesting season in other parts of the northwest chain is apparently prolonged and/or variable. Black Noddies are reported as nesting from January to June on Lisianski (Clapp and Wirtz 1975), from November to July on Laysan (Ely and Clapp 1973) and on Necker Island in every month of the year, although not in all months every year (Clapp and Kridler 1977). Therefore, July nests with chicks on Kure are consistent with observations from other nearby islands.

Discussion.—Green Island, Kure Atoll, is a flat coral island with no rocky cliffs or ledges which could be used as nest sites by Black Noddies. The common native shrub naupaka evidently does not provide sufficiently attractive nest sites, although it is used for Black Noddy nesting on other nearby islands.

Visiting botanists have documented significant vegetative changes on Green Island, Kure Atoll, coincident with the advent of man-caused habitat alterations. Green Island received a large influx of non-native plants: especially accidentally introduced weed species and deliberately introduced ornamentals, beginning in the mid-1950's during construction and human habitation. Some weedy species were probably brought in as seed on construction equipment or in soil of potted plants. Lamoureux (1961) reported 22 species of newly introduced weeds and cultivated plants present immediately after the LORAN Station was constructed. Among these newly recorded plants were shade and ornamental trees or tree-like species: hala (*Pandanus odoratissimus*), coconut trees, and some of the ironwoods. Other ironwoods evidentally were introduced around 1955 when the radar reflector was built (Woodward 1972, Clay 1961). The tree heliotrope, which occurs as a shrubby tree just behind the beach, was first recorded in October of 1959 (Clay 1961, Christophersen and Caum 1931). It is the only tree species on Green Island which may have established itself there without the aid of man (Carolyn Corn, DOFAW, pers. comm.). Another three tree species have been planted on Green Island since the early 1970's: Norfolk Island pine (*Araucaria heterophylla*), Madagascar olive (*Noronhia emarginata*), and sea grape (*Coccoloba uvifera*) (Carolyn Corn, DOFAW, pers. comm.).

Of the seven introduced tree or tree-like species on Green Island, the tree heliotrope and ironwood trees apparently represent new nesting habitat into which Black Noddies have lately expanded their breeding range, although nesting habitat which is adequate on other islands (e.g., naupaka bushes) has been available for many years.

Summary.—Black Noddies (*Anous minutus*) were first noticed and reported as nesting on Green Island, Kure Atoll, on 14 July 1982; the nests were situated in tree heliotrope and ironwood trees. Seven tree or tree-like species, none of which occurred there in 1923, now occur on Green Island. All of these species, except possibly the tree heliotrope, were brought to the island on or after 1955 as intentional or accidental introductions. This habitat alteration has apparently created new nesting habitat on this flat coral island; although the native naupaka bush is used on other islands for nesting Black Noddies, it has not yet been recorded as a nest site substrate on Green Island.

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MARIE MORIN, *Division of Forestry and Wildlife, Department of Land and Natural Resources, 1151 Punchbowl St., Honolulu, Hawaii 96813.* Received 13 Jan. 1984; accepted 31 Oct. 1984.

Mirrored Windows for Use in Blinds.—In field studies the activity of one species often interferes with the study of another. The presence of 6000 Glaucous-winged Gulls (*Larus glaucescens*) on Cleland Island, British Columbia (7.7 ha) caused problems during my study of American Black Oystercatchers (*Haematopus bachmani*). At my slightest movement within the blind the gulls flew into the air, calling and alerting the oystercatchers close by. I used mirrored windows in my blinds to avoid this disturbance.

These windows are similar to 1-way mirrors and function as windows from inside the blind and as mirrors from outside. The windows permit unrestricted use of binoculars and large windows can be used without the birds detecting movements inside the blind. Although commercially produced 1-way mirrors are available, the mirrored windows described here are less expensive, unbreakable and can be easily cut to needed sizes.

Windows were constructed from 6 mm thick sheet acrylic (Plexiglas, Rohm and Hass Co., Philadelphia, Pennsylvania) with a reflective self-adhesive film (Solar Window Film, Spartan Plastics Inc., Holt, Michigan) applied to the inner surface. This film is available at auto supply stores as van owners often apply it to windows to limit visibility to the interior. A 50 × 300 cm sheet was purchased locally for $22.30. I used silver-colored film although other colors including gold, green, red, blue, and gray were also available. The acrylic sheet was purchased for $45.80/m², giving an overall cost of $2.40 to $14.40 for windows ranging in size from about 200 cm² to 1575 cm².

Larger windows were especially enjoyed during long watches and when it was necessary to have a view of a wide area. It is particularly important with the big windows to ensure that the surface of the blind behind the observer be darkened. My blinds were constructed with dark fabric or lined with black plastic. In cloth blinds the mirrored windows were suspended in front of the viewing holes with string from the frame or were mounted into pockets sewn onto the fabric around the viewing hole.

This film does reduce visibility slightly under poor lighting conditions but the problem can be reduced by using larger windows or by cutting a small opening in the film for observation in poor light. Rain and salt spray on the surface, and scratches on the film and acrylic also decrease visibility. Substituting glass for acrylic may eliminate the latter problem, although this would reduce the portability of the windows. The advantages of