LITERATURE CITED

BLANCHER, P. J., AND R. J. ROBERTSON. 1982. Kingbird aggression: does it deter predation? Anim. Behav. 30:929–930.

FOLKERS, K. L. 1982. Host behavioral defenses to cowbird parasitism. Bull. Kansas Ornithol. Soc. 33:32–34.

FRIEDMANN, H. 1963. Host relations of the parasitic cowbirds. U.S. Natl. Mus. Bull. 223.

LOWTHER, P. E. 1983. Chickadee, thrasher, and other cowbird hosts from northwest Iowa. J. Field Ornithol. 54:414–418.

NICE, M. M. 1943. Studies in the life history of the Song Sparrow. II. The behavior of the Song Sparrow and other passerines. Trans. Linn. Soc. N.Y. 6:1–328.

MAYFIELD, H. 1965. The Brown-headed Cowbird with old and new hosts. Living Bird 4: 13–28.

PAYNE, R. B. 1977. The ecology of brood parasitism in birds. Annu. Rev. Ecol. Syst. 8: 1–28.

ROBERTSON, J., AND R. F. NORMAN. 1976. Behavioral defenses to brood parasitism by potential hosts of the Brown-headed Cowbird. Condor 78:166–173.

SLACK, R. D. 1976. Nest guarding behavior by male Gray Catbirds. Auk 93:292–300.

SOKAL, R. R., AND F. J. ROHLF. 1981. Biometry, 2nd ed. W. H. Freeman and Co., San Francisco.

KAREN L. FOLKERS, *Box 173, Armstrong, Iowa 50514, and* PETER E. LOWTHER, *Department of Biology, University of Northern Iowa, Cedar Falls, Iowa 50614.* Received 10 Feb. 1984; accepted 4 Feb. 1985.

Use of a Mirror Trap to Capture Territorial Waterfowl.—As part of a study on the breeding ecology of Barrow's Goldeneye (*Bucephala islandica*) in central British Columbia, I wanted to capture and mark adult drakes to facilitate the study of territorial behavior (Savard, J.-P.L., Can. J. Zool. 60:3439–3446, 1982). I could not obtain hand-reared birds to use as decoys and decided to try mirrors. Instead of a clover-leaf trap with open entrances as used by Donaghey (Spacing behaviour of breeding Bufflehead (*Bucephala albeola*) on ponds in the southern boreal forest. M.Sc. thesis, Univ. Alberta, Edmonton, Alberta, Canada, 1975), I used a spring-door decoy trap made from a folding wire dog cage (0.5 × 1 m) which I fitted with a tripping mechanism similar to that described by Anderson et al. (J. Wildl. Manage. 44:217–219, 1980).

A glass mirror (.4 × .8 m) was fixed with wires at the closed end of the trap. To reach the mirror, the bird had to swim over the treadle that closed the trap door. Each trap was positioned within a Barrow's Goldeneye territory in 1 m of open water. Four aluminum poles held the cage fixed so that the treadle and the mirror base were underwater. It took less than 10 min to install a trap. Results reported here are from 519 trap hours (daylight only): 12 h/trap in 1982 (2 traps), 35 h/trap in 1983 (5 traps), and 80 h/trap in 1984 (4 traps). Each trap was checked at least in early morning and at sunset. All trapping was done during egg laying and early incubation when territorial behavior was the strongest.

Results.—We captured 41 Barrow's Goldeneyes, 27 males and 16 females with mirror traps (Table 1). In territories where a goldeneye drake was captured, effort per trap averaged 10.7 h and ranged from 4 to 28 h (n = 25). In those where a female was captured, trapping effort averaged 17.5 h and ranged between 17 and 33 h (n = 16). Female Barrow's Goldeneyes usually do not take part in territorial defense, but have been observed to attack other females (Savard 1982).

Whenever a female goldeneye was captured, her mate swam around the trap and stayed close to it. If two traps had been located side by side, it is likely that the male would have been captured also. When a male was captured, his mate never came close to the trap.

TABLE 1. Bird species captured using mirror traps.

Species	Year		
	1982	1983	1984
Horned Grebe (*Podiceps auritus*)		3	
Gadwall (*Anas strepera*)		1/0[a]	
American Wigeon (*Anas americana*)	1/0	2/0	
Blue-winged Teal (*Anas discors*)		6/2	
Northern Shoveler (*Anas clypeata*)		1/0	0/1
Barrow's Goldeneye (*Bucephala islandica*)	7/0	8/6	12/10
Bufflehead (*Bucephala albeola*)	1/0	1/0	1/0

[a] Males/females.

Traps set up in Barrow's Goldeneye territories also captured other species (Table 1). These species, with the exception of the American Wigeon (*Anas americana*) are known for aggressive behavior during the breeding season (Fjeldsa, Sterna 12:161–217, 1973; Donaghey 1975; Titman and Seymour, Wildfowl 32:11–18, 1981).

Birds must see their reflection in the mirror before entering the trap. Improper orientation, wind, and sun often reduced the mirror's efficiency. In addition, individual birds may vary in their reaction to mirrors. Although mirror traps cannot be used to capture large numbers of birds, they may prove useful when accessibility or costs prohibit the use of captive decoys.

I thank A. Breault, Y. Turcotte, R. Emery, and J. Gareau for assistance in the field. Special thanks to G. W. Kaiser, C. L. Gass, and J. N. M. Smith for comments on the manuscript. The study was funded by the Canadian Wildlife Service and the Canadian Sportsman Fund and done in cooperation with the Department of Zoology of the University of British Columbia.—JEAN-PIERRE L. SAVARD, *Canadian Wildlife Service, P.O. Box 340, Delta, British Columbia V4K 3Y3, Canada.* Received 13 Jan. 1984; accepted 25 Jan. 1985.

Influence of Band Size on Rates of Band Loss by Common Terns.—Two aluminum band sizes have been used on Common Terns (*Sterna hirundo*) in North America: 4.8 mm internal diameter (size 3) and 4.0 mm internal diameter (size 2). Size 2 bands have been used generally since 1970. In an earlier paper (Hatch and Nisbet, J. Field Ornithol. 54: 1–16, 1983), we reported that size 2 bands wore significantly less rapidly than size 3 bands. Although we estimated loss rates for size 3 bands, we could not do so for size 2 bands, because we had only two bands that had been carried for more than 7 yr. This note extends our earlier study by incorporating data on 96 more size 2 bands, including 72 carried for 8–14 yr.

In May and June 1983, we trapped 96 Common Terns carrying size 2 aluminum bands at colonies in Massachusetts. All birds had been banded at colonies in Massachusetts (68), New York (24), or Connecticut (4). All bands were removed and replaced with incoloy bands. For analysis here, we combine data on the aluminum bands with data previously