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ADDITIONAL EVIDENCE OF MIGRATIONAL HOMING BY A PAIR OF MALLARDS

ROBERT J. BLOHM
U.S. Fish and Wildlife Service
Office of Migratory Bird Management
Washington, D.C. 20240 USA

KENNETH A. MACKENZIE
P.O. Box 10A
Roberts, Idaho 83444 USA

Abstract.—Numerous citations exist in the literature documenting homing tendencies of female ducks. There are noticeably fewer references for homing males, however, and accounts of returning pairs are scarce. The return of a pair of Mallards (*Anas platyrhynchos*) to a wetland complex in Alberta, Canada, in two successive years is documented. A number of plausible hypotheses to explain this infrequent but interesting observation are discussed.

MÁS EVIDENCIA SOBRE FIDELIDAD MIGRATORIA POR PARTE DE *ANAS PLATYRHYNCHOS*

Sinopsis.—En la literatura existen referencias que documentan la tendencia de hembras de patos de regresar a las mismas áreas durante la migración. No obstante, hay muy pocas referencias sobre individuos machos y mucho menos de parejas que exhiben esta fidelidad migratoria. En este trabajo se documenta el regreso, por dos años consecutivos, de una pareja de *Anas platyrhynchos* a un anegado en Alberta, Canada. Se ofrecen varias hipótesis para explicar el evento.

Migrational homing to breeding areas by North American waterfowl has received considerable attention in the literature, particularly the tendency of female ducks to return to natal and breeding areas in consecutive years (e.g., Hochbaum 1944:62, 93, McKinney 1965, Sowls 1955:25–45). Homing of unmated males to their breeding grounds is less well-documented, but supporting evidence has increased as more investigators have included individually-marked males in their studies (Alison 1975, Barclay 1970, Bengston 1972, Blohm 1978, Donaghey 1975, Poston 1974, Savard 1985). Evidence supporting homing tendency of pairs to breeding areas is scarce (Dwyer et al. 1973, Lebret 1961, Savard 1985). For most holarctic ducks, long-term pair bonds are not common, but the low incidence of observation is likely due as well to the infrequent marking of known pairs during various investigations. The purpose of this note is to report the observations of a marked pair of Mallards (*Anas platyrhynchos*) during two successive breeding seasons and to present possible underlying mechanisms for this behavior.

METHODS AND RESULTS

From 1981 to 1985, Mallards were captured and banded across Prairie Canada as part of a series of investigations designed to evaluate the Stabilized Duck Hunting Regulations Program (Brace et al. 1981) that was

in progress in the United States and Canada during this period. On 26 Apr. 1984, a Mallard pair was captured in a decoy trap (Sharp and Lokemoen 1987) near Vermilion, Alberta, banded, and released. The following year, on 27 Apr. 1985, the same pair was captured in a decoy trap on the same wetland complex, within 50 m of the trap site of the preceding season. Upon release each year, the pair remained together when departing the trap area, but no other observations were obtained during either season. A review of Mallard banding and recovery records in 1992 at the Bird Banding Laboratory, Laurel, Maryland, revealed no subsequent encounters for either bird.

DISCUSSION

A number of plausible hypotheses have been proposed by various investigators to explain this phenomenon. Lebret (1961) reported several cases of mate retention for a residential Mallard population in the Netherlands. He suggested two possible explanations: (1) following a destroyed clutch, a female rejoined her mate and molted with him, and (2) the female joined her mate on molting areas after nesting activities had been completed. Savard (1985), on the basis of observations from wintering areas in British Columbia, contended that most Barrow's Goldeneye (*Bucephala islandica*) pairs reunite on the wintering grounds rather than on fall staging areas. This conclusion was based on observations of strong fidelity to wintering areas by both sexes in this species, thus facilitating pair reunion in successive years. Fedynich and Godfrey (1989) reported a Gadwall (*Anas strepera*) pair that returned in successive winters to their Texas study area. They speculated that their observations could be attributed to chance repairing following the breeding season, the probability of which was enhanced if a particular subpopulation was small and individuals tended to breed, migrate and winter together (Munro 1943). They also discussed the possibility that both birds were broodmates when initially captured and subsequently remained together or mated during the second year, although Martinson and Hawkins (1968) presented information earlier suggesting independent migration by ducks banded as broodmates.

In our situation, it is difficult to support one particular explanation without additional information on activities of each bird following the first breeding season. Given the general tendency for most ducks to initiate pair bond formation on wintering areas or during migration, and some evidence for philopatry of Mallards to particular wintering areas (K. Reinecke, pers. comm.), it is possible that the probability for remating of individuals is greater than previously expected. Alternatively, higher predation rates on prairie breeding areas in recent years have likely resulted in a greater incidence of renesting over the breeding season. This, in turn, may have increased the probability of a hen remaining with her mate through successive nesting attempts, and ultimately, molting together. This scenario would also improve the chances of a pair homing to the same breeding area in successive years. Undoubtedly, continued efforts

to mark both pair members will help quantify frequency of occurrence and clarify mechanisms underlying mate retention in ducks.

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