Observations on the "Homing Instinct of Cowbirds" (*Molothrus ater*).—My experiments with the cowbird were inspired by the excellent results of similar experiments conducted by the late W. I. Lyon, of Waukegan, Illinois.

My observations are as follows:

COWBIRD♀—Band No. 36-228764—Originally banded at Park River, North Dakota, May 19, 1937. Returned June 12, 1938. Returned May 13, 1939. Retrapped and released in the heart of Winnipeg, Canada at 7.30 P.M., Saturday, June 3, 1939. It returned to my traps at Park River, North Dakota some time between 8.00 A.M. and 2.00 P.M., Monday, June 5, a distance of 107 miles as the "cowbird flies."

The same bird was released at the Great Plains Field Station, Mandan, North Dakota, at 6.00 P.M. (M.S.T.), Wednesday, June 7. It was recaptured in my trap at Park River, North Dakota, at 5.00 P.M. (C.S.T.), June 14, one week after releasing. The cross country distance traveled was 184 miles.

On June 23 the bird was shipped to O. A. Stevens at Fargo, North Dakota, where he released it at 8.30 A.M., Saturday, June 24. It was recaptured in its home territory at Park River, at 8.00 A.M., Wednesday, June 28, after traveling 115 miles.

COWBIRD♀—Band No. 37-117498—Originally banded at Park River, North Dakota, June 3, 1937. Returned June 12, 1938. Returned May 29, 1939. It was retrapped at Park River and carried by car to Leeds, North Dakota, where it was released at 10.00 A.M., Wednesday, June 7, 1939. Apparently being hungry, it flew into the barnyard and started feeding with other cowbirds. It was not until 5.00 P.M., Wednesday, June 14, that it was recaptured at Park River. It flew only 80 miles in approximately the same time that Cowbird No. 36-228764 flew 184 miles from Mandan to Park River. Possibly association with other cowbirds delayed its return.

On Saturday, June 30, at 4.20 P.M. it was released at St. Norbert, which is near Winnipeg, Manitoba, Canada. Unfortunately, my station was discontinued at Park River, and a return record for this release has never been completed.

It was observed during these experiments that the birds apparently made no immediate attempt to orient themselves, as they often started out and continued in the opposite direction to which they should have gone.

While being transported by car or train, the birds were carried in an old canary cage partly darkened by black cloths to prevent fluttering about and possible injury. Water and feed were available in the cage at all times. In spite of these precautions, it was observed that both birds lost considerable weight during their longest flights.—ADRIAN C. FOX, Mandan, North Dakota.

A Note on the Dissemination of Mallophaga.—On October 28, 1939, I trapped a Slate-colored Junco, *Junco hyemalis hyemalis*, heavily infested with Mallophaga, *Degeeriella* sp., at Princeton, New Jersey. Other birds trapped in this locality during October had shown a low incidence of ectoparasitism, so that this individual was unique.

The undoubted explanation for its condition was apparent in a deformity of its bill. The distal half of the upper mandible was missing, though whether as a congenital anomaly or a post-natal accident I could not tell. Whatever the cause, the condition must have been of long standing, for the anterior margin of the mandible was perfectly smooth and showed no sign of recent injury.

The bird appeared to be in reasonably good general health, though I did not weigh it to make sure that its nutrition was wholly normal. At least it must have been able to feed itself sufficiently with its deficient beak to maintain life.

But as for preening its feathers or otherwise dressing them, it must have been severely handicapped. These operations are carried out mainly through employment of the very tip of the bill. The feather is grasped near its base and then drawn through the sharp tip as through a fine aperture, slight nibbling motions of the mandibles serving to put the minute parts of the feather in place.

Birds probably rid themselves of many ectoparasites during their preening exercises. The parasites might be picked out intentionally by the birds, or else be destroyed inadvertently by the "nibbling" motions of their bills. Thus a bird would either keep itself entirely free of vermin or at least practice a definite check on the increase of its feather-inhabitants.

In the case of my Junco (band number, 138-12743) the population of ectoparasites was enabled to increase without any check other than that which might be exerted by scratching with the feet or by taking dust baths. But neither of these would dislodge Mallophaga readily, nor is either practiced over a prolonged