

GENERAL NOTES

Protracted Prebasic Head Molt in the Dark-eyed Junco.—From mid-November, when Dark-eyed Juncos (*Junco hyemalis*) begin to appear at Baltimore in some numbers (Brackbill, *Bird-Banding*, **41**: 131, 1970), until late December, I have trapped individuals with pinfeathers on the head and throat. I have found no mention in the literature of junco molt at this season; it seems probable that it is another example of protracted prebasic molt such as Yunick has reported for the Pine Siskin (*Carduelis pinus*) in New York state (*Bird-Banding*, **47**: 306-309, 1976).

The observed incidence of molt from 1974 through 1976 has been: 18 October to 13 November, none of 8 birds trapped; 15 November to 25 December, 16 of 36 birds (43.4 percent); 31 December to 22 February, 1 (on 27 January) of 9 birds (11.1 percent); 23 February to 13 April, 32 of 57 birds (56.1 percent). One bird that was in molt on 30 November showed no molt the following 7 December.

Presumably the birds were adults. None that I have trapped has been a "return," and so I have no such indication of age; however, most have been very dark-plumaged. Furthermore, Yunick, discussing juncos (op. cit., p. 307) also reports that in New York and New Jersey the prebasic molt of almost all immatures is complete by late September, although extending to mid-October in a few individuals.

Two of my juncos that were in molt on 7 and 10 December were retrapped on the following 1 and 9 March respectively; at that time they were undergoing the prealternate molt of which Dwight (*Annals N. Y. Acad. Sci.*, **13**: 201, 1900) wrote: "A few new feathers are acquired on the chin in early April." At Baltimore, over many years, I have noted prealternate molt on various areas of the head, from 1 March to 13 April.—Hervey Brackbill, *2620 Poplar Drive, Baltimore, Md. 21207*. Received 4 March 1977, accepted 18 September 1977.

Incidence of Oil Contamination on Breeding Common Terns—Although much has been written about the effects of massive oil spills on birds (e.g. Bourne, 1968; Nelson-Smith, 1972: 145) little information exists on the incidence or effects of chronic oil contamination. Since even very small amounts of oil on the plumage of incubating birds may contaminate eggs and reduce their hatchability (Hartung, 1965; Albers, 1977; Szaro and Albers, 1977) knowledge of such chronic situations may be necessary to understand fully the influence of oil on bird populations. In this note I present data on the extent of oil tar contamination on breeding Common Terns (*Sterna hirundo*) on eastern Long Island Sound from 1973 to 1976.

Adult terns were trapped at the nest and examined for oil contamination during banding. The terns came from a colony, with a 1976 population of 2,300 pairs of Common Terns and 950 pairs of Roseate Terns (*Sterna dougallii*), on Great Gull Island, located at the mouth of Long Island Sound between New York and Connecticut.

Common Terns routinely forage up to 20 km from Great Gull; however much of their feeding is done closer to the colony. In addition they feed more frequently in the relatively clean waters to the south and east than to the north along the moderately polluted Connecticut coast.

TABLE 1.
Incidence of oil contamination on Common Terns.

Year	n	Percent oiled
1973	1,206	0.74%
1974	1,379	1.60%
1975	1,463	0.75%
1976	1,260	0.85%

Contamination of the plumage of breeding Common Terns at Great Gull Island was infrequent (Table 1). In only one year (1974) was more than one percent of the birds oiled. This increase followed an oil spill of unknown origin the previous winter that contaminated much of the Great Gull shoreline; most of the oil washed away before the 1974 breeding season.

Most of the contaminated birds had only small (1–2mm) oil spots. The worst case examined had a 39 x 19mm tar mass on its belly and a broad oil smear across one wing. This had apparently not interfered with nesting because the bird was trapped over newly-hatched young.

It should be pointed out that the birds examined were preselected in that they were individuals sufficiently vigorous to have carried breeding at least as far as incubation when they were trapped. More severely oiled birds may not attempt to breed at all and would not have been examined. Additionally, Common Terns molt on the wintering grounds so that oil contamination might have occurred in Long Island Sound or the waters frequented during migration and winter.

Only comparative studies will provide an idea of whether the contamination reported here is high or not. Such studies would also be of use in assessing the effect of offshore oil drilling operations on east coast waterbirds in the future.

I would like to thank the many people who participated in the banding. I am especially grateful to Helen Hays, the Director of the Great Gull Island Project, for allowing my participation in the project and the use of data. H. Hays, D. Willard, and an anonymous reviewer improved the manuscript. This is publication No. 50 of the Great Gull Island Project.

LITERATURE CITED

- ALBERS, P. H. 1977. Effects of external applications of fuel oil on hatchability of Mallard eggs. In "Fate and Effects of Petroleum Hydrocarbons in Marine Ecosystems and Organisms", ed. by D.A. Wolfe. New York, Pergamon Press.
- BOURNE, W. R. P. 1968. Oil pollution and bird populations. *Fld. Stud.*, **2** (suppl.): 99–121.
- HARTUNG, R. 1965. Some effects of oiling on reproduction of ducks. *J. Wildl. Manage.*, **29**: 872–874.
- NELSON-SMITH, A. 1972. Oil Pollution and Marine Ecology. Elek, London.
- SZARO, R. C., AND P. H. ALBERS. 1977. Effects of external application of No. 2 fuel oil on Common Eider eggs. In "Fate and Effects of Petroleum Hydrocarbons in Marine Ecosystems and Organisms", ed. by D. A. Wolfe. New York, Pergamon Press.
- DAVID C. DUFFY, *Department of Biology, Princeton University, Princeton, New Jersey. 08540* Received 23 May 1977, accepted 1 September 1977.

Carabid Beetle Remains in an American Kestrel Nest.—On 24 June 1976, I collected an American Kestrel (*Falco sparverius*), nest from a nest box in Pompey, New York. The box was situated 5 m high in a dead tree and faced NNE. Four young had fledged (D. Crumb, pers. comm.), and I collected the nest one day after the last nestling fledged. Nearly all of the pellets in the nest contained fragments of ground beetles (Carabidae). Many other fragments, including legs, elytra, and heads, were in the nest debris. D. P. Schwert identified the species as *Calosoma frigidum* Kirby, a fairly common, large (20–23 mm) shining black beetle with punctate elytral striations.

No previous record exists for kestrels preying on *Calosoma*. Heintzelman (*Wilson Bull.*, **78**: 325, 1964) found parts of Carabid beetles in 54 out of 125 kestrel pellets examined in New Jersey. Before feeding, kestrels often discard parts of insects, such as elytra and legs (Balgooyen, *Univ. Calif. Publ. Zool.*, **103**: 58, 1976). While beetle remains in pellets may only be small bits, larger fragments that are more easily identifiable may be found in nest debris.

I thank D. Crumb, D. Merrill, and D. Schwert for their assistance.—JAMES R. PHILIPS, *Department of Forest Zoology, S.U.N.Y. College of Environmental Science and Forestry, Syracuse, New York 13210.* Received 23 December 1976, accepted 22 August 1977.