

the same perches being used by both diseased and healthy birds. Examination showed that living organisms were exuded from infected feet, and wherever contact had been made either through feet or through intake of food, the bird ingesting such food could become infected. We further explored the possibility that birds in traps might make contact when putting their bills through the mesh and infect the base of their upper mandibles. Since some of the birds which contracted the disease were old favorites at my banding stations, various infected birds were kept and given individual treatment using several different materials in an effort to alleviate the condition. The most successful treatment consisted of a daily injection of a solution of streptomycin sulphate in a proportion of .008 grams per cc, with a dosage of one minim per day per ounce of body weight—for a five-day period. This made the dosage per ounce of body weight of streptomycin sulphate .0005 grams. The injections were made into the upper leg muscle, using a 1 cc tuberculin syringe and a #27 gauge $\frac{1}{2}$ inch needle.

Using this five day treatment on Brown Towhees, Oregon Juncos, House Finches, Golden-crowned Sparrows and one Fox Sparrow, we found that all of the birds responded well, with the exception of one junco in which the disease had already progressed so far that the entire head was involved in lesions and swelling. This bird succumbed the day following the start of the treatment. The balance of the birds that had lesions on both the feet and around the bill and head immediately improved, and within a short period of time the lesions healed and the birds were released, apparently in good health with the exception of the scar tissue formed where the lesions had existed.—DON BLEITZ, *Bleitz Wildlife Foundation, Los Angeles 38, California.*

A Winter Roost of Purple Finches (*Carpodacus purpureus*).—Not finding any reference in the literature to communal roosting of Purple Finches, my observations of one in Nashville, Tennessee from December, 1957 to May 1, 1958 are worthy of note.

During the 1956-1957 fall and winter season, no Purple Finches were found in the Nashville area (1957, Audubon Field Notes, 11 (3):274), but on October 20, 1957, the arrival of a singing male in a city park was reported by H. C. Monk. On the afternoon of December 19, 1957, I found a group of ten perched in a bare deciduous tree on a hillside thickly grown with cedar, interspersed with deciduous trees, on the south edge of Davidson County where suburban residence property adjoins farmland, and where I had been making regular weekly field trips. On later dates the number of birds arriving gradually increased and I found that they were using the densely-foliaged cedar trees as a roost.

On January 9, 1958, we counted 192 Purple Finches and a few Goldfinches (*Spinus tristis*) that could be seen from the roadside. This doubtless did not include the total number because it was impossible to enter the fenced woodland to examine the entire area which extended .3 of a mile along the road and a considerable distance north toward Nashville.

On the numerous occasions that I watched, usually with the aid of other observers, and attempted to count the birds as they went to roost, their behavior followed a regular pattern. On account of the sloping terrain and the obscuring evergreens, it was necessary for observers to take stations at intervals along the roadside. Small groups of birds began to arrive from the Nashville side of the woods and alighted in a deciduous tree to perch for a few minutes or perhaps for a half hour before dropping into the nearest cedar. Occasionally one or a few

would return to a bare tree for a short time before settling for the night. Early in the season, birds began assembling about 2:45 p.m. and all had gone to roost by 4:00 p.m., but as the days lengthened, arrival and roosting were correspondingly later.

A few of the birds occupied a small roost in cedar trees in an estate adjoining Percy Warner Park on the same road nearly a mile west, but the main concentration was in the larger area until a disturbance occurred there in mid-January. One afternoon when most of the birds had settled, something (unseen) frightened those in one tree and over twenty Purple Finches flew out and across the road. A few days later, it was noted that the larger number of the birds had moved to another cedar wood on the same road several hundred feet further east. On February 6 at 4:00 p.m., we found the flock using the three locations; the largest concentrations were in the most easterly area.

During winter days, Purple Finches were found feeding in residence areas on seeds fallen to the ground and upon the red fruit of coral berries (*Symphoricarpos orbiculatus*), locally called buck bushes. In March, elm seeds were the favorite food. In spring they also eat hackberries here, but this year the supply had been exhausted in early winter.

By April the numbers using the roosting places had decreased noticeably. The last, a group of 9 birds, was seen in the roost on May 1. On May 3, when 15 observers in several parties spent the day afield in the Nashville area, no Purple Finches were found.—AMELIA R. LASKEY, 1521 Graybar Lane, Nashville 12, Tenn.

Variation of Egg Size with Age of Parent.—It is well known that pullets lay smaller eggs than fully mature domestic fowls or "chickens." The Romanoffs (1949:67-69) discuss this briefly in terms of the weight of the egg. Their own results and those of other investigators reviewed by them, agree that the weight of the egg tends to increase during the first two or three years of the bird's life, and then to fall off, reaching in old age lower values even than those of pullets. This naturally raises the question as to whether something similar happens with other species in the wild. The evidence appears to be somewhat scanty, but on the whole to be confirmatory, at least for species that take more than one year to become fully mature, *i.e.*, for large birds.

Dixon (1937-50) in his studies of the Golden Eagle (*Aquila chrysaetos*) found a definite decrease in the size of the eggs as the birds increase in age. It does not seem to be precluded that no initial gain in size exists, though it was not observed. Dixon comments that as size decreased, shell thickness increased.

Andersen (1951:168-169) on the other hand found that egg size increased, in the case of the Ruff (*Philomachus pugnax*), for the first 2 to 4 years and then decreased (see also Andersen 1957 p. 2). This finding is similar to that of Richdale for Yellow-eyed Penguins (see below).

Andersen (1957:4-5) also reached the conclusion that in the Herring Gull (*Larus argentatus*) mature birds lay eggs of greater breadth than either young or aged birds.

In the case of the Common Tern (*Sterna hirundo*), Gemperle and Preston (1955:196) found that from New Jersey the eggs seemed significantly larger than those in England or New England. In the New Jersey case it was known that they were the first clutches of the season, and may have been laid by older birds. The younger birds might have laid a little later and might have laid smaller eggs, but it was not known to what extent the eggs in England and New England might include eggs of younger birds.