

CHANGES IN THE BIRDLIFE OF PRINCETON, NEW JERSEY:
A COMPARISON OF 1900 AND 1974¹

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In September 1901 the bird club of Princeton University printed a bulletin with a list of club members and an article by William A. Babson, entitled "Birds of Princeton, New Jersey, and vicinity." The vicinity included a circular area described with an eight-mile radius from the town as center, and was thus just slightly larger than the modern Princeton Christmas Count circle. The twenty-page article reviewed the status of 230 birds known from the area at the turn of the century.

Since the region has been rather well covered through the present it is most interesting to compare Babson's list with our knowledge of Princeton's current birdlife—the comparison summarizes the important changes during the last seventy-five years. One encouraging improvement of note over the years has been the elimination of most indiscriminate hunting—in the past Babson lists many non-game species suffering from the gun (for example, Pied-billed Grebe and Great Blue Heron).

Permanent residents. Birds that Babson listed as permanent residents, breeding in the region, included a total of 31 species. At least four of these are not now included in our nesting residents. Most notable are the losses of the birds-of-prey with the Marsh Hawk (formerly occasional), Cooper's Hawk, and Sharp-shinned Hawk (formerly nested every year). These birds have generally had diminishing breeding ranges in the northeast. The Cedar Waxwing as listed by Babson was an irregular resident nesting in late June, but we have very few recent nesting records for the Princeton area. Other species that remain as tenuous permanent residents are the rare Ruffed Grouse, the local Long-eared Owl, and the Bobwhite. The Bobwhite was abundant in the 1890's but then rapidly declined to the rare status of today, albeit sometimes supplemented with released birds from State game farms. The Ring-necked Pheasant was liberated here in the spring of 1900 and slowly reached its current level of abundance. A final residential change occurred with the Carolina Wren as it was formerly a rare summer resident (with no nest records), and it now is a common breeder in mild years.

Summer residents. Of the seventy species of summer residents listed by Babson ten birds have probably been lost or have at least become uncommon. Most notable are reductions in field birds of former farmlands, including the Vesper, Grasshopper, and Henslow's Sparrows. Habitat loss also accounted for the elimination or decline of several marsh species such as the American and Least Bitterns, and Long-billed Marsh Wren, which were all former nesters. Babson listed the Mourning Dove as a summer resident, rare in winter—now it

¹ This paper is dedicated to the Senior ornithologist at Princeton University, Charles H. Rogers.

is regularly common through the winter months. The Whip-poor-will and Prairie Warbler were infrequent and local summer residents suspected of breeding by Babson, but no longer. The Yellow-breasted Chat was formerly more common, "breeding in many briar patches," while the nesting Red-headed Woodpecker was already declining by 1900. Again, these declines noted in the Princeton area are often characteristic of the northeast in general.

Summer visitants. Two of the former seven summer visitants have become permanent residents with northward expansions of their ranges, the Turkey Vulture and Red-bellied Woodpecker. Babson listed only a few records from the 1870's for the woodpecker, while we now find it regularly nesting. The Summer Tanager was represented by one August record, but now the rare bird is usually sighted in the spring. The endangered Bald Eagle retains its former status as a summer visitant only because of a 1974 bird at the southwest of the area (from the Trenton Marshes).

Winter residents. Of fifteen species of winter residents, one has been unrecorded in recent years, the Northern Shrike. The Short-eared Owl was a regular winter visitor but decreasing in numbers at the turn of the century with "indiscriminate shooting," and it is now rarely reported. Babson described the shrike as regular and tolerably common as a winter visitant; he saw *ten* in the winter of 1900-01. Our loss of this species may well be attributed to the milder years of today. Babson claimed that no Black-capped Chickadees remained during the summer while we find it nesting today.

Winter visitants. Several of sixteen species of winter visitants listed by Babson have not been recorded in recent years, including Thick-billed Murre, Hawk Owl, and Hoary Redpoll. The murre and owl were each represented by two older records, and the redpoll was taken once in 1872 (Princeton University collection). Two other species have changed status to common year-round visitants (Herring and Ring-billed Gulls) with continued population increases in the northeast since 1900.

Regular transients. Babson listed 65 regular transients, some of which have clearly changed status. He described the Black-crowned Night Heron as a tolerably common migrant with a Stony Brook rookery of 30 pairs as late as 1880; now it is rarely seen and there are no modern nest records here. In contrast, the Canada Goose was simply an "overhead" transient at the turn of the century, while we now find it common on local ponds with some breeding. The Cliff Swallow nested as a common summer resident as late as 1896, but then declined to its present status of an uncommon transient. The Yellow Rail, unlisted in recent years, is represented by two old records (April 10, 1895 and Sept. 20, 1899).

Irregular transients. Of seventeen species, one has been lost through extinction (Passenger Pigeon) while one has increased with some breeding success (Common Gallinule). Babson comments on the Passenger Pigeon: "25 years ago a good many were trapped every autumn," and Scott saw a local flock of seven in the fall of 1900.

Accidental visitants. As would be expected, some of the eleven accidental birds listed by Babson have never again been recorded in the area: the Swallow-tailed Kite (two records), Mississippi Kite (once), Fork-tailed Flycatcher (once), and the Painted Bunting (possibly an escaped cagebird). Other former accidentals are now regular, although certainly rare: the Western Kingbird, Dickcissel, Yellow-throated Warbler, and Prothonotary Warbler (nesting in Princeton since the 1950's). Babson also listed two interesting western forms that have not been reported since, the "red-naped" sapsucker (*Sphyrapicus varius nuchalis*) and a hybrid flicker (*Colaptes auratus* x *C. cafer*). Both are represented by specimens in the University collection.

Additions to the avifauna since the 1901 list. The great majority of the additions to the local avifauna are migrants associated with lakes and ponds constructed after the 1920's. The important groups are the waterfowl (17 additions), shorebirds (9 additions), and gulls and terns (7 additions). Many of these new species are uncommon or rare as migrants. Man-made ponds have also added other waterbirds such as the loons and several southern species that are increasing in New Jersey, including the Glossy Ibis and Yellow-crowned Night Heron. Introduced birds included the Starling and recent House Finch (spreading from metropolitan areas), and the locally unsuccessful Turkey and Mute Swan. Most of the other additions are strictly rarities or accidentals. Northern species included the Snowy Owl and Boreal Chickadee, southern additions included the Black Vulture and Purple Gallinule, and western birds included the Townsend's Warbler, Yellow-headed Blackbird, and Lark Sparrow. Almost all of the species in the accidental category of additions have been recorded one or more times in the last decade. Only a few species have changed as possible additions as breeding species. The Blue Grosbeak is expanding from the south and has nested locally at least once. The Pileated Woodpecker is entering our area from northern New Jersey and may soon breed nearby. Finally, there is the addition of wintering Evening Grosbeaks in a dramatic and well documented expansion. At the turn of the century it was strictly a species of the far northwest, and in 1962 there were nesting records from northern New Jersey.

SUMMARY

The total list for the area of Princeton, New Jersey, now includes 289 species, fifty-nine more than listed by William Babson in 1901. In the next seventy-five years there will continue to be additions (with an upper limit probably near 300 species), while there will also be some unfortunate losses of other species, especially if habitat destruction continues at the current high rate. Over-all, it is clear that local avifaunas are quite dynamic with important changes within a human generation.

The following list of additions to birds of the Princeton area since 1901 has been compiled principally from the central New Jersey field note reports written by Edwin Bloor, Jr. for the *New Jersey Nature News*. I am indebted also to Charles H. Rogers and Raymond Blicharz for their assistance. The list below includes two forms or races no longer accorded full specific status.

Common Loon	Short-billed Dowitcher
Red-throated Loon	Stilt Sandpiper
Double-crested Cormorant	Western Sandpiper
Cattle Egret	Red Phalarope
Yellow-crowned Night Heron	Iceland Gull
Glossy Ibis	Great Black-backed Gull
Mute Swan	Bonaparte's Gull
Whistling Swan	Forster's Tern
White-fronted Goose	Least Tern
Snow Goose – "Blue" form	Caspian Tern
Gadwall	Black Tern
European Wigeon	Dovekie
American Wigeon	Monk Parakeet
Redhead	Rock Dove
Ring-necked Duck	Snowy Owl
Canvasback	Pileated Woodpecker
Common Goldeneye	Boreal Chickadee
Oldsquaw	Starling
White-winged Scoter	Orange-crowned Warbler
Surf Scoter	Townsend's Warbler
Black Scoter	Cerulean Warbler
Ruddy Duck	Western Meadowlark
Red-breasted Merganser	Yellow-headed Blackbird
Black Vulture	Black-headed Grosbeak
Turkey	Blue Grosbeak
Purple Gallinule	Evening Grosbeak
Semipalmated Plover	House Finch
Black-bellied Plover	Lark Sparrow
Whimbrel	Dark-eyed Junco – "Oregon" race
White-rumped Sandpiper	Harris' Sparrow
Dunlin	

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