

INTRODUCTION

The purpose of this book is to provide an authoritative and up-to-date account of the status and distribution of New Jersey's birds at the end of the first decade of the twenty-first century. It can be considered an annotated list of all of the birds known or believed to have occurred in the state in modern times, including those that are now extinct. The official New Jersey State List is maintained by the New Jersey Bird Records Committee (NJBRC), but the committee relies on the efforts of many others who have contributed to the historical record and who help document the constantly changing face of the state's bird life.

Physical Geography and Natural Regions of New Jersey

The geologic processes that have formed New Jersey gave rise to four distinct landforms, or physiographic provinces. From the northwest to the southeast, these regions are called the Ridge and Valley, Highlands, Piedmont, and Coastal Plain Provinces (Dalton 2003). For the purpose of discussing bird distribution, I have followed Walsh et al. (1999) in separating some of the traditional provinces into smaller ones, where the regional ecology is different.

The Ridge and Valley Province, about 536 square miles or 7 percent of the state, includes the narrow northern Delaware River Valley, the Kittatinny Mountains, and the broad Kittatinny Valley. It lies entirely within Sussex and Warren counties. Ecologically, however, these areas are quite different and are separated into the Kittatinny Mountains (including the adjacent Delaware River Valley) and the Kittatinny Valley.

The Kittatinny Mountains range in elevation from 300 feet in the northern Delaware Valley to 1,803 feet at High Point and are dominated by the long ridge running from High Point in the northeast to Mount Tammany at the Delaware Water Gap in the southwest. This region has a distinctive northern flavor, supporting many bogs and coniferous woodlands, and the breeding birds include many northern species.

The Kittatinny Valley is characterized by the Walkill River in the north and the Paulinskill in the south, the two

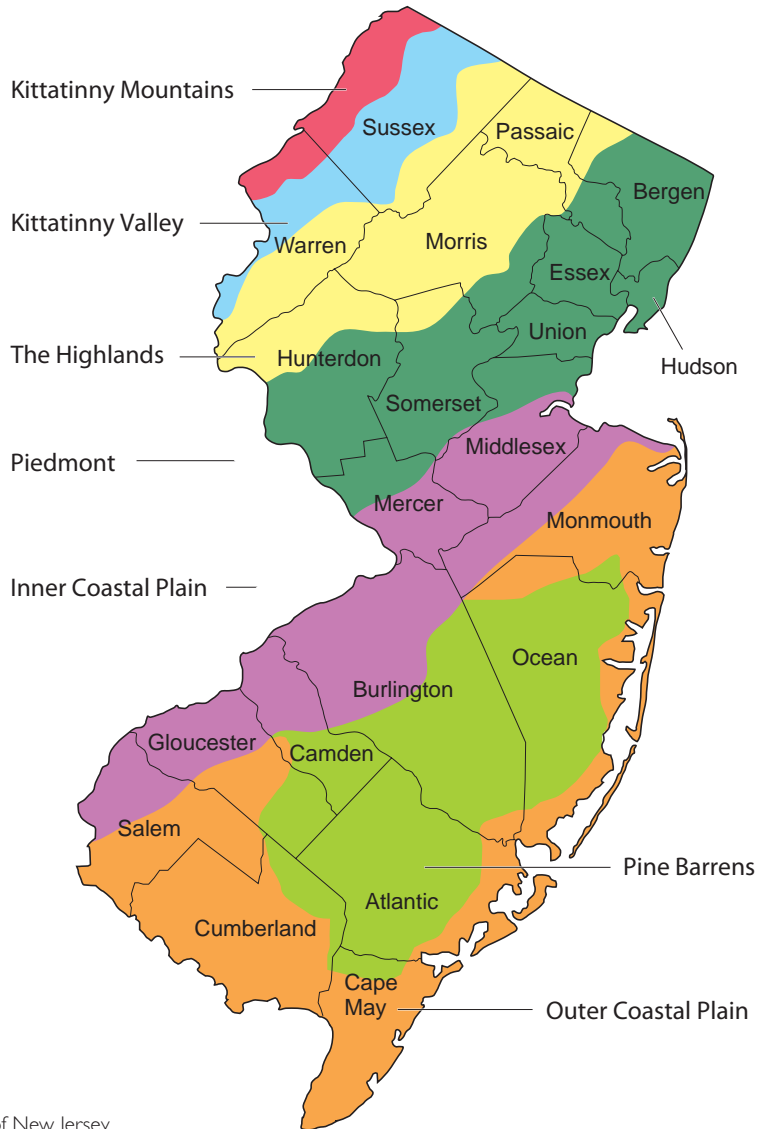


Figure 1. Natural Regions of New Jersey

rivers flowing in opposite directions. With elevations ranging from about 300 to 1,000 feet and containing a wide variety of habitats, this region has the highest diversity of breeding birds in the state.

The Highlands, occupying approximately 980 square miles or 12.5 percent of the state, exhibits a rugged topography consisting of a series of broad, discontinuous ridges separated by steep, narrow valleys. Elevations range from below 300 feet along the Delaware River to almost 1,500

feet at Hamburg, Wawayanda, and Bearfort mountains. The birds of the Highlands are similar to those of the Kittatinny Mountains.

The Piedmont, with approximately 1,600 square miles or 20 percent of the state, cuts a wide swath across some of the most heavily populated areas of New Jersey, from Bergen, Essex, and Hudson counties in the northeast to most of Hunterdon and Mercer counties in the southwest. Although elevations range from sea level to 914 feet, much of the province is a broad plateau sloping gradually from about 400 feet to sea level, but cut by a series of steep, linear ridges such as the Watchung Mountains and the Palisades.

The Coastal Plain adjoins the Piedmont along a boundary known as the Fall Line, which runs roughly from Carteret, Union County, to Trenton, and includes all of the state south and east of that line. It is by far the largest province, occupying approximately 4,667 square miles or 60 percent of the state. For bird distribution purposes, the Coastal Plain can be divided into two provinces, the Inner Coastal Plain and the Outer Coastal Plain. The Outer Coastal Plain includes the Pine Barrens, which are treated separately below.

The Inner Coastal Plain is separated from the Outer Coastal Plain by a series of low hills, which reach their highest point at Crawford Hill (391 feet above sea level) in northern Monmouth County. The division between these two regions continues southwest, reaching Delaware Bay near Salem, Salem County. Extensive agricultural, urban, and suburban development has diminished the available natural habitat, but the Inner Coastal Plain still has some excellent grasslands, hardwood swamps, and river marshes.

The Outer Coastal Plain takes in most of the state's tidal wetlands and barrier islands that provide breeding and feeding habitat for many of the state's resident and migrant water-associated species. In addition, this province includes the mostly deciduous, and often wet, woodlands of Monmouth, western Salem, and Cumberland counties, and parts of Cape May County. Except in Monmouth County, this province is far less developed than is the Inner Coastal Plain.

The Pine Barrens, although technically part of the Outer Coastal Plain, has a less diverse vegetation than the rest of the Coastal Plain and is dominated by dry, sandy soils supporting pitch pine and various scrubby oaks. Along streams and in wet, swampy areas, dense stands of Atlantic white

cedar break the monotony of the pine forest. The Pine Barrens runs from extreme southern Monmouth to north Cape May counties and includes most of Ocean, Burlington, and Atlantic counties, plus parts of Camden and Gloucester counties.

History

Philadelphia was home to many of the well-known ornithologists of the nineteenth century, and it is from there that the first useful compendium of *The Birds of East Pennsylvania and New Jersey* originated in 1869 (Turnbull 1869). It treats 343 species, many of which are not recognized today, but it lacks thorough documentation. Nevertheless, it is interesting to read the names given many birds at that time and to wonder about some historical references. This was followed some decades later by *The Birds of Eastern Pennsylvania and New Jersey*, written by Witmer Stone and published by the Delaware Valley Ornithological Club in 1894. Stone's book lists 352 species and is much better documented than is Turnbull's.

The first book devoted solely to the birds of the state dates back to 1897, when the New Jersey Fish and Game Commission published *The Birds of New Jersey*, compiled by Charles A. Shriner, whose title was State Fish and Game Protector. This book has a much more expanded treatment of each species, but lacks any documentation.

By the time of the publication of Stone's *The Birds of New Jersey, Their Nests and Eggs*, written for the annual report of the New Jersey State Museum in 1908, the number of species had been whittled down to 340, including a few questionable ones. Stone's famous *Bird Studies at Old Cape May* includes reference to all of the species occurring in the state of which he was aware. The next publication to try to document all of the state's known species was David Fables Jr.'s *Annotated List of New Jersey's Birds*. This 1955 book listed 370 species, plus an additional 19 "hypothetical" species supported only by historical references or insufficient documentation. Of these, 5 were subsequently accepted by the NJBRC based on the historical evidence and all but 2 of the others have occurred since 1955.

Charles Leck, in his book *The Status and Distribution of New Jersey's Birds* (1984), listed 455 species, of which he considered 37 "hypothetical" for various reasons and 418

“well-confirmed.” Of the 37 hypothetical species, all but 5 were subsequently removed from the State List by the NJ-BRC; 15 of them have been returned to the list based on records documented after 1983. In addition, 5 of the “well-confirmed” species were deleted from the list because of doubts about their natural origins. The “official” New Jersey State List, prepared by the newly reorganized Records Committee in 1991, listed 421 species, only 6 of which were not included in Leck’s list of well-confirmed or hypothetical species. Both editions of *A Guide to Bird Finding in New Jersey* (Boyle 1986, 2002) included status and distribution information on species expected to occur within a five-year period, plus a list of extreme rarities seen at least once in the preceding twenty-five years.

Birds of New Jersey (1999) included the results of the 1993–1997 New Jersey Breeding Bird Atlas. In addition to breeding birds, the book contained an entry on all other species known to have occurred in the state, as accepted by the NJBRC through 1998. The State List then stood at 443, as some older records were accepted as a result of work by the Historical Project of the Records Committee, and an amazing 15 species were documented in the state for the first time in the years from 1991 to 1998. As of mid-2010, the official New Jersey State List includes 465 species, the additions being due to one split, one specimen discovery, one deletion, one species accepted based on wild provenance that was formerly considered of questionable provenance, one established introduction, and 19 records of species with no previously accepted reports. Inevitably, this rate of increase cannot continue, however, and in 2008 and 2009 there were, in fact, no new species added to the list.

The New Jersey Bird Records Committee (NJBRC)

The first group organized to gather and analyze data on the birds of New Jersey was the State List Committee of the Urner Ornithological Club, an organization based in Newark. Its efforts resulted in the publication in 1955 of the *Annotated List of New Jersey Birds* by David Fables Jr. A new committee was formed in 1958 to continue the work of the first, to present data collected through the end of 1958, and to serve the ongoing function of updating the status and distribution of the state’s birds. The *First Supple-*

ment to the Annotated List was published in 1959 (Kunkle 1959), but no subsequent publications appeared.

In February 1976 the New Jersey Bird Records Committee was organized under the auspices of the New Jersey Audubon Society. It met a number of times over the next several years but soon became inactive, having failed to publish a state list or update the previous publications. The committee was reorganized in 1990 as an independent entity, and has been in continuous operation since then. In 1996 Chair Richard Crossley explained the goals of the committee in an article in *Records of New Jersey Birds*, and in 1998 the goals were summarized by Chair Paul Lehman in that same journal. They are:

- to solicit and maintain all data pertinent to records of rare birds reported in New Jersey;
- to establish standards of observation and reporting;
- to review reports of species and subspecies on the review list;
- to increase knowledge of the birds of New Jersey by publishing articles, data, and an official state list.

An annual report is published in *Records of New Jersey Birds* and an updated State List is published periodically. The Committee maintains a Web site, www.njbrc.net, where the most recent versions of the New Jersey State List, the Accepted Records List, and the New Jersey Review List can be found, along with other information useful to birders.

Criteria for Acceptance of Records of Review Species and New Species

When the New Jersey Audubon Society decided in 1995 to publish *Birds of New Jersey* as a major reference work beyond the scope of simply a breeding bird atlas, the NJBRC was asked to undertake the research to provide a basis for evaluating rare bird reports prior to 1990. The Committee established a Historical Project Subcommittee that spent hundreds of hours “combing the avian literature, contacting observers requesting documentation of specific bird reports, organizing the historical database, and evaluating the documentation received.” The subcommittee established a set of criteria for assessing historical reports, recognizing that little or no documentation existed for many older records, that rare birds seen by dozens of observers were sometimes not documented, and that many photographs,

specimens, and written notes had been lost over the years. Using these criteria, the Committee voted on which records would be “accepted” and which were “not accepted.”

The Historical Report of the New Jersey Bird Records Committee, “Rare Bird Reports Through 1989” by Tom Halliwell, Rich Kane, Laurie Larson, and Paul Lehman, was published in *Records of New Jersey Birds* in 2000. Other members of the NJBRC who served on the subcommittee at various times were Pete Bacinski, Bill Boyle, P. A. Buckley, Shawneen Finnegan, and Greg Hanisek. The “accepted” records, which form the basis for inclusion on the Accepted Records List and the New Jersey State List, were chosen using the following standards:

- Accepted with documentation at contemporary standards. This normally means that there is accepted written documentation, photographs, videos, sketches, and/or sound recordings on file with the NJBRC.
- Accepted by the State List Committee of the Urner Club and published in *Fables* (1955) or *Kunkle* (1959). Unfortunately, the files from that committee have been lost, and many of the records accepted by the committee lack full documentation. Nevertheless, because these records were subject to a high level of scrutiny, the NJBRC is confident of their validity.
- Accepted via the Historical Standard. This standard was applied for certain rare bird reports that were almost certainly correct, but which lacked the documentation required by contemporary standards. Examples of such records included specimens that were reported but are now lost and otherwise unverified by photograph or description; photographed birds whose photos have been lost; birds once well documented in writing, to a regional editor or Christmas Bird Count compiler, for example, but whose descriptions have since been lost; birds seen by several competent observers, but for which no documentation is available.

Records that were not accepted fell into two main categories: those that lacked documentation of any kind and those that were supported by inconclusive documentation or possible misidentification. Many of the birds in the latter category were probably correctly identified, but the evidence is not good enough to support acceptance.

All records accepted since 1990 have met the first criterion cited above. The requirements are the same for any

species on the Review List as well as any first state record. Records of birds that would be new to the State List do receive more intense scrutiny, however. Fortunately, almost all new species found since 1990 have been well photographed and/or seen by multiple observers.

Nomenclature

The species sequence and taxonomy used in the New Jersey State List and in this book follow the *Check-list of North American Birds*, seventh edition (AOU 1998), and all supplements through 2009. Supplements in recent years have included numerous changes to both common and scientific names, as well as rearrangement of taxonomic sequence and even relocation of some groups, e.g., tanagers, to a different family.

Species Accounts

The official State List of New Jersey birds, maintained and updated annually by the New Jersey Bird Records Committee, contains every species known to have occurred within the state in modern times. For each of these species, I have attempted to indicate the abundance and distribution for the different seasons and different regions of the state. For migrants, I have given the approximate migration periods and some reference to extreme dates, but I have not attempted to list specific early arrival and/or late departure dates for most species. Migration timing can vary widely from one end of the state to the other. Although the distance from High Point to Cape May is only 166 miles, the seasonal occurrence of some species may differ by weeks. For example, Yellow Warblers and American Redstarts are common breeders and migrants in northwestern New Jersey, but they are very scarce there after the beginning of September. In Cape May, however, these two species are regularly seen into early October, with a few seen as late as the end of that month.

Every current NJBRC Review List species is identified as such in the account header. For those species with five or fewer accepted records, each record is listed below the species account with date(s) of occurrence, location, the NJBRC record number (except for historical records), museum specimen number (if applicable and available), and NJPF (for New Jersey Photo File, where applicable). Some records, especially those prior to 1990, also include a lit-

erature reference to the sighting. Documentation and photos are currently stored with individual members of the committee, but will hopefully find a permanent home in the future. Inevitably, some of the data in a book such as this is out of date as soon as it appears, but the records of Review Species are complete through June 2010.

Maps

Each species account, except those for species that are extinct, is accompanied by a map that is intended to show the normal range for that species within New Jersey. Within that range, however, the species is ordinarily found only in “appropriate habitat,” especially during the breeding season. For those species that are on the NJBRC Review List, the location of each accepted record is shown on the accompanying map as a red dot or, where there are multiple records for a location, a red dot with a number beside it. Figure 2 explains the colors and symbols used for depicting distribution. Dashed lines mean former, unknown, or irregular range.

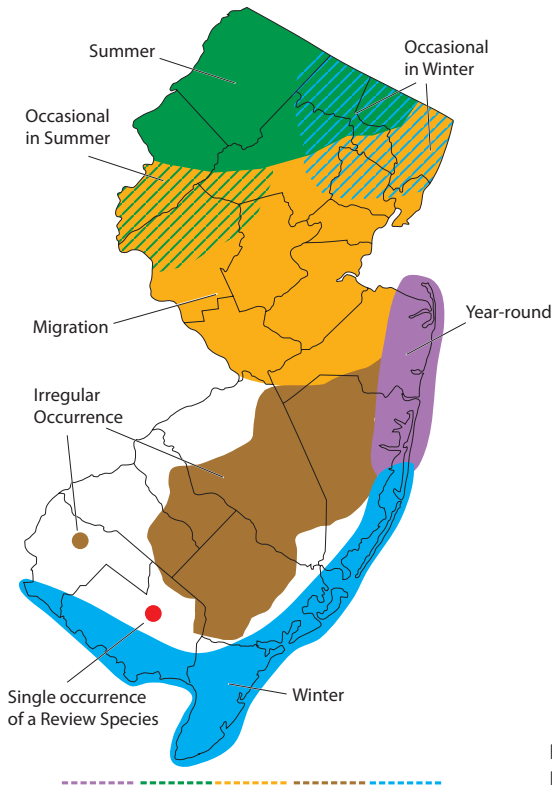


Figure 2. Color Key to Distribution Maps

Status and Abundance Terminology

The status of each species is treated for each of the four seasons. For abundance, I have chosen to use a more expanded list than that chosen by the authors of *Birds of New Jersey*, including such categories as “abundant” and “accidental.” Each of these terms is explained below.

Permanent resident: Occurs throughout the year within the range defined by the map and the text. Most of these species have stable breeding populations, but some are in flux. Some birds present in the summer versus the winter may not be the same individuals; in other words, some summer breeders may depart the region, to be replaced by breeders from farther north during the winter months.

Summer resident: Typically present from May through July, although many arrive earlier and most depart later. All of these species breed in New Jersey at the present time.

Summer visitor: Nonbreeding species present during the warmer months. These are typically pelagic species that nest in Europe (e.g., Cory’s Shearwater), or especially the Southern Hemisphere (e.g., Wilson’s Storm-Petrel), or are regular postbreeding visitors (e.g., Sandwich Tern).

Winter resident: Mainly migrants from farther north that spend the colder months in the state, but do not stay to breed.

Winter visitor: Migrants from other parts of the country that do not occur with sufficient regularity or in sufficient numbers at this season to be considered winter residents.

Migrant: Transient species that pass through in spring and/or fall. Some occur only in migration, whereas others may breed or winter in some parts of the state, but are found only as migrants in other parts.

Irregular: Species whose occurrence in the state is unpredictable. Some, like Dickcissel and Sedge Wren, occur annually as individuals or pairs, may rarely breed here, and may be found at almost any time of the year. Others, like White-winged Crossbill and Common Redpoll, tend to appear as individuals or small flocks in winter, but aren’t expected every year.

Local: Typically found only in specific habitats or areas within a particular region. A few, like Upland Sandpiper, occur as breeders only at a handful of sites, whereas others, like Least Bittern, are widely distributed but have specialized habitat requirements.

Abundant: Present in such numbers that many individu-

als should be seen during a visit to the appropriate habitat on any given day at the proper season.

Common: Almost always present, easily encountered, and often numerous, in the proper habitat at the proper time of the year.

Fairly common: Usually present, and likely to be encountered but not necessarily numerous, in the proper habitat at the proper time of the year.

Uncommon: Usually present in limited numbers in the proper habitat, but one cannot be certain of finding an individual on any given day.

Scarce: Infrequently encountered and usually not present daily, even in the proper habitat at the proper time of the year.

Rare: On average, seen only a few times a year in a given area.

Very rare: Occurs regularly, but not expected every year.

Casual: Between six and fifteen records accepted by the NJBRC. Most can be expected to occur again within a five-year period.

Accidental: Five or fewer records accepted by the NJBRC. Many years may elapse between occurrences.

Abbreviations

AB	<i>American Birds</i>
ANSP	Academy of Natural Sciences, Philadelphia
AMNH	American Museum of Natural History, New York
AOU	American Ornithologists' Union
AR	Annual Report of the NJBRC
AFN	<i>Audubon Field Notes</i> , predecessor of <i>North American Birds</i>
BNB	Beach Nesting Birds
CBC	Christmas Bird Count
CWS	Colonial Waterbird Survey, NJ Division of Fish and Wildlife
ENSP	Endangered and Nongame Species Project, NJ Division of Fish and Wildlife
MMS	Minerals Management Service
MWWS	Mid-Winter Waterfowl Survey
NWR	National Wildlife Refuge
NJBRC	New Jersey Bird Records Committee
NJB	<i>New Jersey Birds</i> , successor to and predecessor of RNJB, 2003–2009

NJDFW	New Jersey Division of Fish and Wildlife
NJPF	New Jersey Photo File
pers. comm.	Personal communication
pers. obs.	Personal observation
RNJB	<i>Records of New Jersey Birds</i>
SP	State Park
UMMZ	University of Michigan Museum of Zoology
USNM	United States National Museum
WMA	Wildlife Management Area
*	Specimen

Glossary of Place Names

Avalon	Cape May County
Florence	Delaware River, Florence, Burlington County
Forsythe NWR	Brigantine Unit, Forsythe NWR, Galloway Township, Atlantic County
Hackensack Meadowlands	Wetlands, including parks and WMAs, along the Hackensack River, Bergen and Hudson counties
Higbee Beach	Higbee Beach WMA, Cape May
Hudson Canyon	Deepwater trench into the Continental Shelf, approximately 80–90 miles ESE of Barnegat Inlet
Island Beach	Island Beach SP, Ocean County
Mannington Marsh	Near Salem, Salem County
Oldman's Creek	Near Pedricktown, Gloucester and Burlington counties
Pedricktown	Gloucester County
Raccoon Creek	Near Bridgeport, Burlington County
Reeds Beach	Reeds Beach Road and Viewing Area, Middle Township, Cape May County
Round Valley	Round Valley Recreation Area and Reservoir, Hunterdon County
Sandy Hook	Sandy Hook Unit, Gateway National Recreation Area, Monmouth County
Spruce Run	Spruce Run Reservoir and SP, Clinton, Hunterdon County
Trenton Marsh	Hamilton-Trenton-Bordentown