

## Dark-eyed Junco *Junco hyemalis*



**Folk Name:** Snowbird, Snow Sparrow

**Status:** Winter Resident

**Abundance:** Common to Abundant

**Habitat:** Pinewoods, mixed woods, short grass lawns and grassy roadsides, wooded neighborhoods

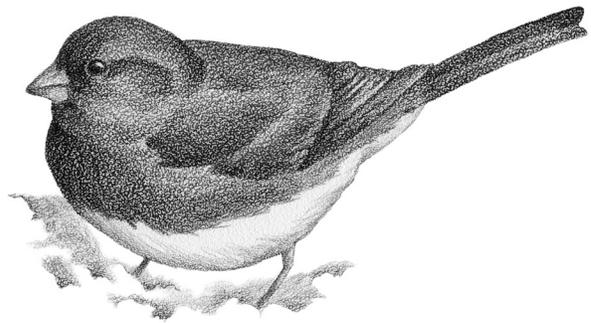
“Probably the best known of our winter visitors is the little Junco, or Snowbird, as he is commonly called. This bird is about six inches long, with a plump body covered with dark [slate gray] feathers. His head, throat and breast are dark. His underparts are white to match the snow which so often brushes them, and his beak is also nearly white. The outside feathers of his tail are of the same color, and, though he bravely defies the cold and snow, yet, when danger threatens, he always shows the white feather, as he flies into the branches of a near-by bush or patch of weeds and grass.” —Webb’s *Our Bird Book* (NC adopted science text), 1917

The Dark-eyed Junco is a widespread breeding bird in North America. It breeds in Alaska, Canada, much of the western United States, New England and south along the Appalachian Mountains into the Carolinas and Georgia. The birds that nest in the Carolinas are considered a separate subspecies, *J.h. carolinensis*. These “Carolina” Juncos are known to migrate short distances vertically in winter, up and down the mountains, not the long distances latitudinally that other juncos migrate.

In North Carolina, the Dark-eyed Junco has been documented breeding mostly at elevations above 3,000 feet. In the early 1960s, singing birds were found on territory above 1,900 feet at several spots in the Brushy Mountains, although no nest was ever confirmed there. In South Carolina, this bird has only been found breeding at Sassafras Mountain, Caesars Head, Table Rock, and the Walhalla Fish Hatchery.



Dark-eyed Junco. (Will Stuart)



“The nesting of the snow-bird in the North Carolina mountains is a point of importance, as showing a much more Northern phase of life than one might expect who had not realized how much a high altitude modifies a low latitude. The presence of the so-called pheasant (ruffed grouse) in these regions is another instance along the same lines and so also is the nesting of a number of smaller birds, such as the American crossbill, black-throated green warbler, gold-crowned kinglet, black-throated blue warbler, yellow-bellied sapsucker, etc.” —H.H. Brimley, *News and Observer* April 8, 1902

The junco is a widespread winter resident throughout the Carolinas. Our winter birds have migrated south from breeding sites far to the north. Flocks of these small “snowbirds” are customary visitors to backyard feeder stations, parks, lawns, the edges of woods, and in wooded residential areas in all parts of the Carolina Piedmont. Most arrive in October and depart by the end of April. Our earliest arrival date on file is 20 September, and our latest departure date is a bird Vivian Sprehe photographed at her feeder in Charlotte on June 8, 2013. Our peak one-day tally is an estimated 965 birds recorded on the Charlotte



Dark-eyed Junco in early December. (Leigh Anne Carter)

CBC in 1961.

Unfortunately, in recent years, some breeding populations of juncos have declined. According to Birds of North America, Breeding Bird Survey data indicate declines averaging about 2% per year in the eastern *hyemalis* subspecies since the 1960s.

An analysis of 32 years of Bill Hilton Jr.'s banding records at his Hilton Pond banding station in York County indicate a distinct downward trend in numbers of juncos banded between 1982 and 2017. Hilton speculated this decline could be site dependent and the result of many environmental factors, and that a cause-effect relationship could not be adequately determined. Still, his local data can be added to BBS data and other data to build a case that climate change or some other widespread environmental factor is beginning to impact this species.

There are at least 15 different subspecies or "races" of the Dark-eyed Junco across the North American continent. Occasionally, individuals of these different junco subspecies show up in the Carolina Piedmont. These birds have noticeably different colorations, and they often draw immediate attention when they are in a flock with our "standard" juncos.

For years, taxonomists have had their hands full studying these multiple subspecies. These experts report: "The variation is responsible for a 'turbulent' taxonomic history and a reputation as a 'nightmare' for systematists." In fact, they currently are quite unclear as to how to classify many forms and have temporarily placed them into "groups" that include various subspecies. They state at the present time: "The phylogenetic relationships of all junco taxa clearly involve more complex questions than can be answered by presently available data."

A few reports of different subspecies of juncos that have shown up in our region are presented here.

The "Oregon" Junco (*Oreganus* group includes several subspecies) was first reported in North Carolina as early as January 15, 1948. Jack Potter collected one in Zebulon on March 3, 1960, and deposited the specimen at the North Carolina State Museum. Richard H. Peake

Jr. sighted one on a Christmas Bird Count in Jackson County on December 30, 1964. On January 15, 1965, Ronnie Underwood discovered one at his backyard bird feeders in Statesville, providing the first report from the Central Carolinas. Two showed up in Clemmons, Forsyth County, in January 1966. After this point, they began to be reported with an "increased frequency of occurrence throughout the Piedmont of North Carolina." Details of all of these initial sightings were published in *The Chat*.

The first verified record of this subspecies in South Carolina is a specimen of a female collected by Albert Conway in York County on December 23, 1984. Albert and his wife June reported "quite an array of juncos in their yard at Catawba, SC," for a couple weeks around Christmas that year. In addition to this female, they banded an individual of what appeared to be a "White-winged" Dark-eyed Junco. They later found it dead and collected it. The "White-winged" Junco subspecies had never before been found in the Carolinas. It breeds in the north-central United States. Both specimens were submitted to the Charleston Museum for further study. The Oregon race Dark-eyed Junco was later confirmed, but the report of the "White-winged Junco" had to be retracted, as upon closer examination, it proved to be just an aberrant Dark-eyed Junco.

"Oregon" Juncos have been reported in the Carolinas every few years since the 1990s. On May 25, 2004, Jill Shoemaker discovered a "Gray-headed" Junco (*J.h. caniceps*) that showed up at her backyard feeder in Charlotte. This bird lingered there several days, and it was seen and photographed by many birders. This bird was recognized as the first record of this subspecies in Georgia or the Carolinas. In December 2014, Kevin Metcalf photographed a possible "Cassiar" Junco, an intergrade between "Oregon" and "Slate-colored Juncos," in Huntersville. Metcalf remarked: "If you are studying the juncos around here, just keep in mind that a few brownish feathers on the sides doesn't make it an Oregon or even a Cassiar. The key is the cleaner break in color, and the clear color difference between the 'hood' and the flanks. Makes for interesting study in junco variation."