

Morning Serenade

When folks in the Northeast turn their thoughts to spring, most often the first ones are of the arrival of the colorful changes that occur in the plant world: flamboyant tulips, cadmium daffodils, and tender, glaucous buds on all the trees. It is usually secondarily that people consider the aural modifications to the mornings—including the discernable variations to the melodies of our songbirds. Among the most distinctive are those of the flashy cardinal, whose brilliant red plumage brightened our winters and whose calls now enliven our dawns.

The Northern Cardinal, *Cardinalis cardinalis*, is thought to have received the abbreviated form of its name, "cardinal," from the bright red robes and hats worn by the cardinals of the Roman Catholic Church; the "northern" was given to distinguish it from the several species of South American cardinal. This beautiful bird, which is the state bird for seven states (more than any other bird), is also known as the Red-bird, the Virginia Grossbeak (term coined by Audubon, in reference to its likeness to the evening and rose-breasted grosbeaks; "gros" is French for "big"), and the Virginia Nightingale (cardinals used to be favored cage birds, because of their brilliant plumage and lovely song, until the Migratory Bird Act of 1913 forbade their capture).

This avian backyard treat is a relatively recent one for those of us in Columbia County area, and a century ago it would probably not have been likely. John James Audubon, the 19th century artist and naturalist, considered the bird a Southern one. Although today the cardinal is omnipresent in much of the Northeast, even as few as thirty years ago, it was a rarity in New England. When a cardinal was spotted at Wellesley College in 1961, the Massachusetts Audubon Society recruited members to help track the cardinal infiltration, an unexpected occurrence.

Considering the cardinal's predilections and patterns, it is remarkable that we "upstaters" have this cheery addition to our woods and yards. Cardinals are one of the least migratory of the land birds, preferring not to move around much—once settled, they want to stay put. Even when they leave their nests as fledglings, they tend to remain in close proximity to their hatching sites. In the fall, when the pull of Nature calls migratory birds, such as warblers, to head South, cardinals may also sally forth a bit in response, but only for a mile or two.

So how, if before 1886 cardinals were seldom seen

north of the Ohio River, did they make it to this part of the country? The answer comes with some speculation, but there are several factors that are considered to have come into play. To start, the seemingly innocuous one- and two-mile excursions of cardinals each autumn may, over time, have accumulated to expand the birds' ranges.

But perhaps even more, the influence of humans has had a hand. As vast stretches of woodlands were replaced with roads and housing developments, the habitat actually became more favorable for cardinals. (Some forest birds, such as wood thrushes, were at a disadvantage and displaced by the changed environment.) Since cardinals prefer a mix of open spaces, trees, and low shrubs to deep woods, the housing developments suited them. Man's privet hedges, multiflora roses, honeysuckles, and evergreen trees proffered ideal nesting sites, and thus the cohabitation became an affable one.

A third contributing factor for the cardinal's range expansion has, at its root, human influence, unintentional as it may have been. Decades ago, feeding wild birds was not prevalent. Now, however, millions of people around the country set out sunflower seeds, cracked corn, and seed mix to attract cardinals and other birds. With the ability to fuel their inner fires throughout the year because of available food, it has been demonstrated that at least some species are more likely to survive bitter cold. If this applies to cardinals, our backyard feeders may have played a role in bringing the Red-bird to the North.

Fourthly, climate changes are thought to have played a role in the inflated range. Whether the rise in global temperatures during the last century can be ascribed to the greenhouse effect or natural shifts in the climate, or both, it is documented. As such, the geographic area in which the average winter temperature remains warm enough for cardinals to nest has grown, granting a wider habitable area to them. And, not only are there recent temperature increases on a global scale, but the afore-mentioned developments and suburbs also have an impact on urban temperatures: large areas of asphalt tend to hold heat and be warmer than the forests they replaced, which, again, makes for more favorable conditions for cardinals.

Some birds have just a single characteristic that makes them distinct or favored amongst bird watchers. But the cardinal has two (at least!): its sweet song and its fiery feathers. And the two are not necessarily mutually exclusive: both are flaunted when courting. The male's sonnets and finery woo the female with whom he pairs for life.

During the mating season, the male sings with an increased intensity, pausing only for what we interpret as a catching of his breath. As the melody is repeated again and again, his wings droop, his crimson tail spreads, his body leans alternately from left to right, and his throat swells. Beginning well before sunrise, his flute-like "what-cheer, what-cheer" is carried on the breeze.

Upon close examination of male cardinals, a wide range of discrepancies in color can be noted. The ostensibly scarlet breast may actually contain feathers that span the spectrum of pale, reddish pink to deep scarlet, and yellow or tawny feathers may speckle the chest and abdomen. To the female, these differences may actually matter, as they may reveal how desirable a mate and father a particular male is: studies indicate that the brightest males produced the greatest number of offspring. (Male cardinals were captured, had their colors logged, and then were followed through a breeding season.) Those with the reddest feathers staked out the best areas for breeding, places with the desirable dense plant cover for their nests. In addition, these vivid males bred with the females who were first ready to breed in the early spring, allowing them the opportunity to breed for a second (and perhaps third) time during the season.

Although a male cardinal may breed near birds of other species, he will not allow another cardinal to nest within his territory, and he will become combative in order to defend it. An interloper is driven away, and often the defending male will follow the intruder from bush to bush, diving after it and emitting a shrill cry. Upon his victory, the male will often take up a cheerful song.

The female, although not as showy as her companion, also has beautiful coloring. Warm olive, pink, yellow, brown, red, and gray hues give her a dressing that would hold its own on any designer's runway. This pretty bird will lay three to six eggs, which are dull white, speckled with brown, and will incubate them for twelve to thirteen days. About two weeks after they hatch, the chicks are ready to be on their own and will leave the nest. A thicket, briars, bushes, or thickly-branched trees are ideal for a cardinal's nest, which is fashioned in a circular form out of twigs, dry leaves, grapevine slips, and grass.

In the wild, cardinals feed on a varied diet of fruit, insects; and seeds; their cone-shaped bills are adapted so that they can eat most types of the last. If dining at a backyard feeder, they prefer sunflower seeds, but will also consume cracked corn and seed mixes.

It is worth taking a few minutes out of a busy morning for some quiet observation of these birds. Discern the seemingly infinite hues in their coloring and imagine the watercolor palette you would need to capture the shadings; watch for the male to feed his mate and see how their beaks touch briefly when they share; wait for a male to chase off a trespasser; make note of the different song patterns; respectfully track a cardinal to its nest; look for fledglings in the spring. Then close your eyes and let your ears take up the study: listen for a couple's duet; make note of different song patterns during the course of a day, a season, a year; eavesdrop on a male chastising another. This beautiful bird will enchant you!