

## CHANGING HABITATS FOR NESTING BIRDS

by Neil Clark, Chestnut Hill

During the past few centuries, certain species of birds have radically changed their nesting habitat requirements. Many species (such as the Wood Duck) have become partially dependent on human-made structures, and some (such as the Purple Martin) have adapted so well that they are now totally dependent on civilization for their temporary homes.

Of the birds mentioned here, only two species, the Osprey and the Eastern Bluebird, have declined in great numbers in recent years, the Osprey because of a residue of hard pesticides still present in its watery environment, and the bluebird possibly because of competition from other species for its nesting sites. Numerous nesting sites are available for both species, but the areas surrounding the sites (like waterfronts for the former and orchards for the latter) are rapidly disappearing. It is sometimes not enough simply to provide a pole or box for a species and expect that it will benefit.

Four main types of human-made nesting sites are: the birdhouse, roofs and gutters, barns, and chimneys. Many species use the birdhouse, or nesting box: the Tree Swallow, the Eastern Bluebird, and especially the Purple Martin. The locally common martin now rarely nests in vast colonies in riddled old trees; instead it utilizes martin houses put up by concerned people. These houses contain 10-100 compartments (all measuring 6"x6"x6"), many of these apartments being occupied simultaneously. The large houses stand on poles usually fifteen feet up or higher. The martins seem to prefer being close to one another, as well as to water. Once they set up house, they will return April after April, paying off the rent by helping to rid the area of flying insects.

Some birds, such as Wood Ducks, American Kestrels, Great-crested Flycatchers, and House Wrens, use nesting boxes only part of the time. The Wood Duck will nest high in a natural cavity of a hollow tree, but also can nest in boxes placed in wooded swamps and at lake borders. Locally, Wood Ducks have been quite successful nesting in these large boxes at Great Meadows National Wildlife Refuge in Concord, and in surrounding towns.

The American Kestrel will take to a box in a suitable spot such as a farm, orchard, and even a town park. The nest box must be placed fairly high - 20 feet or more - in order to entice the sleek little hoverer into settling down and fiercely defending its territory with high, excited calls of, "Killy, killy, killy!"

The Great-crested Flycatcher often nests in a birdhouse instead of its natural site high in a dead tree. Curiously, this bird often lines its nest with a cast-off snakeskin. Most ornithologists reject the not implausible theory that the bird uses the skin to ward off intruders. Could it be used solely for decoration?

Another frequent box-user is the noisy, yet diminutive House Wren, familiar to most gardeners as well as birders. It inhabits farmlands, parks, and suburban gardens, and has been known to nest in mailboxes, flowerpots,

boots, an empty cow skull, and even in clothes on the line!

While some birds prefer birdboxes, others nest in roofs and the adjacent gutters and drainpipes. The roof provides height away from ground predators, while gutters provide protection all around, as does the top of a drainpipe.

When nesting in the city, the swooping Common Nighthawk, or Bullbat, utilizes flat roofs. No nest is made on this gravel surface for the two eggs, but their coloration camouflages them quite well.

The tail-wagging Eastern Phoebe now nests almost exclusively on or around buildings and bridges. It is so tame on the nest that you can almost reach in and lift the female off before she will move. The parasitic Brown-headed Cowbird, rather than building its own nest, often lays its eggs in the thick, moss-cloaked phoebe nest. The smaller flycatcher is not always fooled, however, because it sometimes abandons that nest to build a new one alongside.

The familiar American Robin will nest not only in shrubs and trees, but also on beams, girders, and ledges of all kinds. It raises a couple of broods a season in a sturdy, mud-based nest, one so durable that even during a severe winter you can still spot the whitened clay cups clinging tenaciously in a blowing snowstorm.

A common yet unpopular species about the house is the Starling. Introduced from Europe to Central Park in 1890, it spread to Nova Scotia by 1915, and by 1952 had reached Alaska! The man responsible for the introduction did so because he wanted to see birds mentioned by Shakespeare brought over to this country. Soon after the Starling arrived, attempts were made to eradicate it, for, to most people, especially the farmers, it proved to be an aggressive, gluttonous pest. It is now a permanent resident in all fifty states, and even though it is rather a handsome bird (particularly in the winter with all its light spots surrounded by iridescent green and brown), the stigma of its scientific name (*Sturnus vulgaris*) seems to have stuck.

The ubiquitous House Sparrow, also an introduced species, now prefers cornices, shutters, and sills to natural tree cavities. Although it eats some insects in the spring and summer (mostly beetles and grasshoppers), it feasts mainly on plant matter, including grain crops. This species is still spreading throughout the world due to its innate aggressiveness, adaptability, and its habit of raising 2-3 broods per year.

A final bird that nests around roofs is the raspberry-colored House Finch. Since a number were shipped illegally from California to New York City in 1940 (as "Hollywood Finches"), they have extended their range considerably in the east. They often nest in colonies in the clinging vines on buildings, and are moderately tolerant of human activity. At the school in Brookline where I live, a pair built a nest in early June, 1977, and again in May, 1978, inside a hanging, encased light fixture of an entrance portico. The befouled nest was only eight feet up, and there was much human traffic underneath, but it wasn't the commotion that did them in. A broken light bulb, left on, looming inches above the nest, apparently was the killer,

for one morning that May, I came upon the male sitting stiffly on the edge of the nest with its head to the side and slightly back, while the female darted about, peeping. Upon inspection, I received a pretty good shock from the same light fixture...all in the line of duty of being a nosy birder!

A third type of nesting area located near humans is the barn, which provides food, shelter, and nest-building materials such as chicken feathers, rope, and horse hair. The brown-eyed Barn Owl, as its name indicates, is often found in this locale, and, even if not seen, can be heard hissing and screeching. This nocturnal raptor does not make a true nest; instead, its regurgitated pellets often form the only base for its half-dozen eggs. Barn Owls should be welcomed for they consume scores of rodents, mainly rats and mice.

The beautiful and graceful Barn Swallow is another which uses barns. Unlike the lazy Barn Owl, this energetic flyer makes hundreds of trips carrying mud-balls to use as bricks for its nest. This hefty bowl is sometimes used a second year after certain alterations are done, like the addition of a new chicken-feather lining. This swallow is the farmer's friend because it regularly feeds on beetles, bugs, and flies, while on the wing, and is also a joy to watch with its acrobatic flight and its deeply-forked, streamlined tail.

A chimney can be a dangerous location for a bird to nest in, but some species, like the Chimney Swift, have adapted well -- so well that it almost never nests in caves anymore, and is one species that has increased in numbers since colonial times. Nesting and roosting in the same chimney, the swift constructs its nest of twigs held together by the bird's saliva. The brown semicircular mass is then glued to the inside of a chimney not far above the hearth, making for disastrous conditions should the fireplace be used in the summer. Rain also can destroy nests. In spite of all this, the little "flying cigar" thrives.

Finally, the Osprey will occasionally nest on unused chimneys, as well as on poles, trees, or channel buoys. This magnificent Fish Hawk, with a five-foot wingspan, builds a bulky aerie to which it often returns year after year. Unfortunately, it is still threatened by hard pesticides in the environment, taken in through the fish on which it is almost totally dependent. This excellent fisher hovers perhaps fifty feet above a still lake, then, folding its wings, swoops down talons-first at a low angle into the water. It rises, shaking itself off, with a pan-sized fish grasped head-first in its trap-like talons. This is fishing at its very best.

Human-made nesting sites, whether specifically constructed for birds or not, serve an important role in today's built-up environment. They allow certain adaptable species to find refuge in the wake of the encroaching takeover of their native habitats. Birds add more to our world than just beauty, song, and the control of insect numbers: they are handy sources of education and inspiration, and daily proof that sometimes birds and people can live together under the same roof.