Significant Essex County Nest Records, 2002-2003

Jim Berry

In three previous *Bird Observer* articles, cited often in the following species accounts, I discussed the nesting history and some recent individual nests of nineteen species of birds that are either recent nesters in Essex County, Massachusetts, or uncommon nesters, or whose nests are otherwise not often found. In this article I write about the nesting of twelve species during the 2002 and 2003 nesting seasons, eight of which are follow-up reports on species previously dealt with, and four of which are new accounts. This time, a few of the birds are rather common nesters in the county, but the nests described are remarkable for one reason or another. The intent of this series of articles is to give the reader a more complete picture, both historical and technical, of the nesting status of the various species in northeastern Massachusetts.

Least Bittern *Ixobrychus exilis*

In my third nesting article (Berry 2002) I discussed the Least Bittern's status as never more than a rare and local breeder in the county, and the consequent excitement caused by the discovery of two nesting pairs in 2001, the first nesting evidence here since 1987. Those pairs were in the beaver marsh in Willowdale State Forest in Ipswich and a brackish seaside pond in Rockport. The nests were not found, as they rarely are, but fledged young were seen in both cases.

On June 20, 2002, after an entire spring of not hearing Least Bitterns calling in the Willowdale marsh, as they had done frequently the two or three years before, I

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finally spotted a male bittern flying into a stand of cattails where I had seen young in 2001. I had just bought a kayak, and took it into the marsh on July 9. Paddling around the perimeter of the same cattail stand, I heard the *unk-unk* call of a Least Bittern — in this case clearly an alarm call — and moved toward it. Very soon a male bittern flew straight up and away (both sexes incubate), and within minutes I found the nest. It was a shallow platform of bent-over dead cattail stalks, a flimsy affair about ten inches above the water and a perfect match to the nest photograph in Harrison (1975). There were three white eggs on it. Fortunately, I had the presence of mind in my euphoria to take several photographs before leaving the bitterns to their incubating.

I made two return trips by kayak but could not refind the nest. (I kept these searches short for the sake of the bitterns.) On August 1 I saw the female flush from the same area; her constant clucking signaled the presence of young, which given a 16-20-day incubation period would have hatched by then. I never found any young from the kayak, but on August 6 I set up my telescope on the eastern bank of the marsh and was able to spot a downy chick, less than half-grown, preening and climbing about at the edge of the cattails. It had moved many yards from the nest, which was in the interior of the stand. The small size of the baby made me think it was not much over a week old; they don't fly for about 25 days, but can climb out of the nest in as little as 4-5 days (Baicich and Harrison 1997). I suspect the other two eggs hatched as well, but I did not see any more bitterns that summer, nor were the birds evident in 2003. But as it was, this was one of the most gratifying nests I have ever found.

Great Blue Heron *Ardea herodias*

Great Blue Herons are common birds over most of North America, but as nesters they have been somewhat of an enigma in Essex County. In fact, it has not been until recently that they have been found to be nesting much of anywhere in southern New England. For example, while Knight (1908) described the species as a "common summer resident" in most Maine counties, Howe and Allen (1901) called it "a rather common migrant; rare in winter" in Massachusetts, and did not mention a single nest record for the entire state! Forbush (1925) agreed, calling it a "common migrant and local summer resident" in the three northern states, but only a "common migrant" in the three southern states. He did say that it "bred not many years ago in Massachusetts" but was not more specific. Zeranski and Baptist (1990) state that the species "was probably a common nester in [Connecticut] during the early colonial period," but suffered from hunting pressure in the 1800s and was not found nesting in modern times until 1975.

With regard to Essex County, Townsend (1905, 1920) was never able to record the Great Blue Heron as a breeding bird, "although it undoubtedly bred in former years." Nor did Oscar Root (1957-58), who birded the Andover region as thoroughly as anyone, find any evidence of nesting in the western reaches of the county. As recently as midcentury, Griscom and Snyder (1955) called the bird a "rare and extirpated summer resident [in Massachusetts], first found breeding in the Harvard Forest at Petersham [Worcester County] (1925-1938)…at least 20 nests in tall pines in

the nearly primeval forest which was destroyed by the hurricane of 1938." They mentioned subsequent reports of "possible nestings" but did not seem convinced that the birds had returned as certain nesters anywhere. Apparently they were skeptical of a 1947 report of a colony of 14 nests in Groton, in nearby Middlesex County, that had been "occupied for several years" (*Records of New England Birds* 3: 83). Unfortunately, this colony was never mentioned again in *RNEB* and was apparently not followed up to verify what would have been the only known nesting colony in the state at the time.

Veit and Petersen (1993) discuss the remote, isolated nature of Great Blue Heron nesting colonies, inland and strictly apart from the offshore mixed-species colonies of the other herons, and suspect that Griscom and Snyder "may have overlooked some of them." Be that as it may, it was not until 1966 that the birds began to be found breeding again in the state, when colonies of up to 21 nests were discovered in Phillipston and Hawley (*RNEB*). Another colony was found in West Becket/Tyringham in 1968. The floodgates had opened; the map reprinted in Veit and Petersen (1993) from the unpublished 1974-1979 Massachusetts breeding-bird atlas project showed nesting confirmations from no fewer than 37 locations, but none in Essex County. By 1989 there were an estimated 266 nesting pairs in 22 colonies from Middlesex County westward (*ibid.)*. The birds had finally taken off, beginning one of the most gratifying population explosions of any nesting species in Massachusetts.

The breakthrough in Essex County came in 1990, when two active nests each with four young were found in the Puritan Lawn Cemetery in West Peabody (H. Wiggin. Bird Sightings. *Bird Observer* 18: 234). The pond containing the nest trees was later severely disturbed (Bob Stymeist, pers. comm.), and no further nest efforts were reported there. Next came the discovery in 1993 of two nests along a swampy power line in West Boxford, about on the North Andover line. That colony grew to at least eight active nests in 1994 (T. Walker. Bird Sightings. *Bird Observer* 22: 214). I

GREAT BLUE HERON NESTING COLONY IN WEST BOXFORD BY JIM BERRY

have no data for the next two years, but when I walked this section in June 1997 during Bob Stymeist's annual power line survey of breeding birds, which some of us have done in that area since 1991, I found at least 40 active nests. And the colony kept growing for several more years: 55+ active nests in 1998, 61 in 1999, 72 in 2000, and 84 in 2001. That was the peak. There were about 77 active nests in 2002 and a maximum of 70 in 2003. And, I am happy to report, the colony was not affected by the laying of the new gas pipeline along that power line in the winter of 2003. The work was finished by early spring, just before the birds arrived back on territory (Tim Walker, pers. comm.). Some cleanup work occurred far along into the birds' nesting cycle, but another neighbor does not think it disrupted their activity (Bev Ingalls, pers. comm.).

Perhaps one reason the colony had fewer nests the last two years is that new colonies have been springing up literally all over the place, as if the county had suddenly become prime real estate for Great Blue Herons. I suspect that some of the birds from the Boxford colony, sensing that it was getting too big, discovered other suitable sites and started using them. The biggest so far known is one in a swamp in Georgetown discovered by Phil Brown in spring 2003, which had nest counts ranging from nine to seventeen. Unfortunately, there is evidence that it was disturbed and might have failed to produce young (Rick Heil, pers. comm.). Pike Messenger, the Middleton conservation agent, showed me a new colony of four nests in a recently dammed beaver swamp in that town, and the habitat is so thick with dead trees that there is plenty of potential for more herons. A single pair nested this year in the Willowdale State Forest beaver marsh in Ipswich and raised one chick to fledging; other herons fed here, and I expect this to become a small colony in 2004. In addition, some of us have suspected for several years that there may be a colony in Andover near the I-495/I-93 interchange. I was unable to find any nests when I searched the area in July 2003, but I did find four fresh juvenile herons in a creek.

When I reported these developments to the listserve *Massbird* in July and asked for more information, I learned of two more incipient colonies. Paul Guidetti told me of a single nest in Den Rock Park in Lawrence in 2002 and another one or two this year, and Steve Mirick reported a single nest ready to fledge a chick in Haverhill, near Kenoza Reservoir. And then there is the colony on a small island in Suntaug Lake on the Peabody/Lynnfield line that has been around at least since 1997, when six nests were observed in live white pines (W. Petersen. Bird Sightings. *Bird Observer* 25: 270). Dave Williams (pers. comm.) reports that it has been growing and had up to twenty nests in 2002. (I have no reports from 2003.) Finally, there is a recent colony in a beaver swamp in South Hampton, NH, only a mile north of the Essex County line. That one had eight active nests in 2002 and seventeen in 2003.

Essex County has therefore seen a change from no nesting Great Blue Herons as recently as 1989 to seven or eight colonies, or the beginnings thereof, in 2003, with another a mile north of the county line. The birds are clearly in a population boom, but why? Almost certainly one of the main reasons is the increase in beaver swamps. Most of these heron colonies are in them, and there is a lot more such habitat around nowadays. For example, it was in 1996 that the North Andover power line swamp was

flooded by beavers (Bob Stymeist, pers. comm.); the very next year the colony had ballooned to 40 nesting pairs. The Middleton colony started four years after that swamp was dammed. The Ipswich pair nested a comparable number of years after that marsh was dammed. And so forth. One can argue about the costs and benefits of the ban on leghold traps passed in Massachusetts a few years ago, but one result has been more beavers, more dams, and a lot more excellent wildlife habitat. Let's hope that enough humans become educated to the benefit of these industrious animals, and their positive effect on all wildlife, that their numbers will not be seen as a nuisance, as so many "inferior" species are labeled by people unwise in the ways of the natural world around them.

Osprey *Pandion haliaetus*

In my first nesting article (Berry 2000) I mentioned the historical gap in the Osprey's nesting range between southeastern Massachusetts and coastal Maine, and the opinion of Townsend, Forbush, and other writers a century ago that they had not bred in this gap for many years, at least not since the early nineteenth century. Forbush (1927) stated, "There is every reason to believe that it was once a common breeding bird along the whole coast of New England and locally in the interior." But for whatever reasons it ceased to nest in northeastern Massachusetts and coastal New Hampshire. I then summarized the comeback of the Osprey in this area from its modern beginning in 1989, listing five current nest sites in Essex County, several in Rockingham County (NH) to the north, and one in Suffolk County to the south.

The trend since 2000 has been all positive. I know of at least three more nesting sites in Salisbury, Essex, and Ipswich. The Salisbury pair used one of the several platforms erected in the salt marsh along Ferry Road starting in 2003. The Essex pair has nested on the spindle at the mouth of the Essex River since 2002. These are typical nest sites for Ospreys. The third new site, perhaps reflecting what now amounts to an Osprey housing shortage, was built on the thatched roof of a *duck blind* in the Ipswich salt marsh in 2003. At least two young fledged from this nest the first week of August. Young hawks often return to the nest to receive food from their parents after fledging, so the determination of fledging dates is tricky without constant surveillance, and this nest was over half a mile from the nearest vantage point. But I knew they had fledged by August 4 when I saw one of the birds crash into the side of the blind when attempting to land on the nest. Clearly that was not an adult bird! (The poor thing recovered its composure and landed successfully on the next attempt.)

OSPREY PLATFORM ON NELSON'S ISLAND BY JIM BERRY

There is ample precedent for Ospreys building nests on low structures (this blind was only about five feet high) or even on the ground. The literature is replete with references to such nests, as well as nests on a wide variety of high structures and tall trees. The nest on the duck blind is a good sign, in that the local platforms have mostly been occupied, forcing new pairs to seek alternative sites. In fact, this nest is within sight of two occupied platforms, those on Nelson Island in Rowley and Plum Island in Ipswich. The species has made a rapid comeback over the last fifteen years, and is now at the point of nesting almost colonially, as they do farther south and north. What a welcome — and overdue — addition to the county's breeding avifauna.

Northern Harrier *Circus cyaneus*

Last year (Berry 2002) I summarized the surprising nesting of a pair of Northern Harriers on Plum Island in 2001, the first documented Essex County nest since the early 1960s. The pair repeated in 2002, nesting in the same area of dead cattails near the north end of the North Impoundment near the Rowley-Newbury line. The pair was observed by various people from courtship in April through the fledging of two young by the end of July. But there was apparently no nest there in 2003. Birds were observed at times during the summer, but evidence of nesting was not obtained, or at least not published. With the future of the North Impoundment up in the air in terms of whether it will remain a fresh marsh or continue to be flooded with salt water, as it has been for several years, the future nesting of this state-listed species there is in some question. Fortunately Northern Harriers will nest in either fresh or salt marsh (Baicich and Harrision 1997, Bent 1937), so in this case it is probably the water level that matters more than salinity.

Sharp-shinned Hawk *Accipiter striatus*

This is my third report on nesting Sharpshins. First (Berry 2000) I recounted a nesting chronology on a spruce-covered island in Essex Bay in 2000, and later (Berry 2002) summarized a similar successful nesting event in a white pine grove in Willowdale State Forest in Ipswich in 2001. I speculated then that despite the lack of nests found in the county over the past century, the species has probably been nesting right along in small numbers.

That hunch was given additional support by the discovery of *two* Sharpshin nests in 2002 and another in 2003. The Willowdale pair nested again in both years, making it at least three years in a row in the same small area. But the results were quite different. In spring 2002 I went to look for them where they nested the year before, but instead found a pair of Great Horned Owls, *Bubo virginianus*, nesting in an old hawk nest very close to the one used in 2001 by the Sharpshins. But the hawks were not dissuaded from nesting; they simply moved about 150 yards west into a red pine grove, where they built a nest only about 50 yards from busy U.S. Route 1. On April 14 and 17 I watched the male break off pine twigs and take them to a nest about 60 feet up in a red pine at the edge of the grove while the female gave *peeep* calls. Remarkably, the male worked on this nest despite my standing not 50 feet from it! I saw the hawks a couple more times, but by mid-May they had evidently deserted the

nest, and I saw no more of them. The reason may have been a pair of Broad-winged Hawks, *Buteo platypterus*, that moved into the neighborhood and nested in a white pine within 50 yards of the Sharpshins, but I cannot prove this, since I observed no interactions and have no information on how these two species get along.

In 2003 the pair built again in the same grove, this time in a nearby red pine about 75 feet up, more in the middle of the grove. I saw the pair copulating near the nest on April 23, and the female incubating on May 9, 15, and 23, each time eyeing me as I watched briefly from a distance through the scope. On none of these occasions did she move or make a sound. But on June 15 I could not spot the nest; it was simply missing. I walked over to the tree and to my dismay found the nest on the ground, with half a Sharpshin eggshell next to it. By this time the eggs had probably hatched, and a predator had most likely found the nest, eaten the young, and incidentally knocked the nest to the ground. It is possible that the wind knocked it down, but I think this much less likely, unless it blew down after predation had occurred and the nest had been loosened from its moorings.

The third Sharpshin nest had a happy outcome. This nest was found, of all places, in Breakheart Reservation in Saugus, an otherwise built-out town with much less open space than towns farther north in the county. It was found on May 25, 2002, when Inge and Dana Jewell saw a bird incubating about 45 feet up in a white pine. The site was a grove of the same species, but a small grove, and very open compared with most conifer groves. This nest, like those of the Ipswich pair, was beside a trail, and quite easy to observe. The Jewells, along with Fay and Peter Vale, monitored the nest throughout its use. The Jewells showed it to me on July 13, when I watched a food exchange from male to female, who then fed two fairly large but still white downy young. By July 25 one of the young had branched, and by May 28 both had fledged.

There have thus been at least five Sharp-shinned Hawk nests in Essex County in the last four years, 2000-2003. Either the birds have been here all along, or they are making a comeback as a breeding species. The most interesting thing to me about these birds at the nest is the variation in their reaction to people. Much has been written about the sensitivity of accipiters to human intrusion into their nesting territories. I now think this is most true of Northern Goshawks, *Accipiter gentilis*, judging by their fierce reactions to humans near the nest; they clearly evince stress. I think our viewing also affects many Cooper's Hawks, *Accipiter cooperii*, which tend to slink off the nest at our approach. But my experience in 2003 watching a Cooper's nest in Danvers, in a tall oak behind Mollie Taylor's house in a suburban neighborhood, showed me that, with this pair at least, stress from humans watching them was virtually zero. They seemed not to care at all about being observed, and were obviously used to human activity all around them. This amiable pair fledged three young by mid-July (Mollie Taylor, pers. comm.)

The Sharpshins on Choate Island in 2000 (Berry 2000) were as laid-back around the nest as hawks can be, as were the birds in Saugus. The Willowdale pair built their nests three years running right over the Bay Circuit Trail, which gets moderate daily use by pedestrians and mountain bikers. These birds were clearly used to humans

walking or riding through their territory. They were aggressive while they had young in the nest (if one were so rude as to stop), but were much less alarmed at human visits before hatching and after fledging, the more aggressive female even posing for photographs after her babies were safely flying. But this has not always been my experience. I have been attacked or at least chastised by Sharpshins in three other nesting situations in other states. I don't mean to suggest that it is all right for birders to spend a lot of time around raptor nests, or any other nests. I believe in making quick observations and leaving the area without delay, unless the nest can be watched through a telescope from a distance far enough away that the birds don't even notice. The less stress we cause them, the better, even if they don't always exhibit it.

Red-bellied Woodpecker *Melanerpes carolinus*

I reported in my first article (Berry 2000) on the establishment of this species as a breeder in Essex County from the discovery of the first two known nestings in 1993. I also cited Marjorie Rines's observations of a consistently double-brooded pair of Red-bellies in Medford, Middlesex County, through the 1990s. Double-brooding had apparently not been previously witnessed in New England, but is consistent with the birds' behavior farther south.

The last two breeding seasons have been a watershed for me in the discovery of Red-bellied Woodpecker nests in Essex County. In 2002 I documented three nestings in two nests, and in 2003 *six* nestings in *five* nests. In each of these years one of the pairs has been double-brooded, and the proximity of those two nests, on opposite sides of the same Ipswich beaver marsh in consecutive years, makes it likely that it was the same pair both years.

The 2002 nests belonged to that pair and another at the other end of Ipswich (actually in a corner of Topsfield), in the beaver marsh in Willowdale State Forest. The latter nest was about 30 feet up in a deciduous snag just below the beaver dam, and very close to a nest of Brown Creepers, *Certhia americana*, and a nest of Red-breasted Nuthatches, *Sitta canadensis*. I last saw the adult woodpeckers feeding young on June 20; fledging, if it occurred, happened by June 30, when there was no activity at the nest. The cavity was not reused that season. The double-brooded pair fledged their first brood from a cavity 22 feet up in a deciduous snag near the New England Biolabs property on the early date of May 30, then reused the same cavity for a second brood. I last saw the pair feeding young on July 26; there was no activity on August 1. The young were not yet coming to the hole on July 26, but were sizable enough that the adults had only to lean into the cavity to feed them, so it is likely that they fledged by the end of July, two months after the first brood fledged.

In 2003 I began finding Red-belly nests almost everywhere I went. Two of them were seen only once: one in the construction phase in a small beaver swamp in Martin Burns WMA in Newbury on April 30, and one in which the adults were feeding young in the huge beaver swamp in West Boxford on June 30. The other three were all in the Ipswich area: the two nesting pairs from 2002, and another pair in the interior of Willowdale State Forest. That nest, the only one of the five not in a beaver swamp, was about 40 feet up in a red oak in an oak/beech/hickory stand on a dry

hillside. I didn't make enough visits to know for certain whether the pair was single- or double-brooded, but they were feeding young on June 25 and July 9.

The pair below the beaver dam in Willowdale excavated a cavity in the same snag used the year before, on the opposite side of the trunk and one foot lower, about 29 feet above the water. This nest, observable from the beaver dam itself, was also hard to figure out in terms of the number of broods, for I saw activity as early as April 24 but did not see the birds feeding young until June 26. Since last year's brood would have fledged between June 20 and 30, and with an incubation period of 12-14 days and a nestling period of 24-27 days (Erlich et al. 1988), it is likely that the actual laying did not start until late May or early June, and there was only one brood. At any rate, I last saw the birds feeding young on July 9, when they were big enough to come to the hole to receive food. When I returned on July 14, the hole had been enlarged, most likely by a mammalian predator. I can only hope the young had fledged before the raid; on the other hand, why would a predator open up the hole unless it thought there was life inside? The lack of woodpecker activity in the area on subsequent visits did not foster optimism.

Meanwhile, the trusty New England Biolabs pair again raised two broods in the same cavity, this one about 30 feet up in a beech snag, very close to noisy construction activity where the company is building its new facility on the former Don Bosco property. The nest tree was about 200 yards across the swamp from last year's nest and easily observable from a horse/pedestrian bridge across the Miles River. This pair was also active in late April but did not duplicate last year's end-of-May fledging. They were feeding small young on May 27, indicated by their entering the hole completely with each delivery. This brood probably did not fledge until at least the middle of June, but their behavior on June 19 persuaded me that they were no longer feeding young. An exchange of places on the nest July 4 without a food delivery signaled incubation, and entering the nest all the way with food on July 14 again indicated the presence of small young. A happy note on this date was the female's chasing off one or two young from the first brood (no color on the head), virtually proving that the first nesting had been successful. Subsequent feedings on July 21 (still entering completely), July 25 (leaning in to feed larger young), and July 29 (leaning in only slightly, or young coming to hole to take food) revealed the progress of the nestlings' growth. There was no activity at the nest on August 3, but woodpecker calls nearby gave hope that the young had fledged.

Yellow-throated Vireo *Vireo flavifrons*

Earlier (Berry 2001) I summarized the status of this species as an uncommon nester in the county whose nests are seldom found and described two nests I found in late June 2000 in the Bald Hill Reservation in Boxford. Another nest was discovered by Susan Hedman around the end of June 2002, this one in the Ipswich River Wildlife Sanctuary in Topsfield. It was situated about 30 feet up in a red maple overhanging the Waterfowl Pond and visible from the stone bridge that crosses the inlet stream to that pond. Following Susan's directions, I found the nest on a very hot July 4. The female was on the nest, either incubating eggs or sheltering young from the hot sun,

while the male sang nearby. I returned July 14 to find the male singing from the nest as he performed one of the above duties. I did not observe feeding on either visit and did not return again, so I cannot report the results of this nesting.

Blue-headed Vireo *Vireo solitarius*

In the article cited above, I recounted the paltry history of Blue-headed Vireo nest confirmations in Essex County and its status as a less common nesting bird than the previous species. (Only the White-eyed Vireo, of the five nesting vireos in the county, is rarer, and that species, at the very northern end of its range, is rare indeed.) I went on to describe a Blue-headed Vireo nest I found in Willowdale State Forest in the far western corner of Ipswich on June 26, 2000.

Two years later to the day, I discovered a pair of these birds building a nest only a few hundred yards away, though this site was over the town line in the extreme eastern tip of Boxford. The site was also different: instead of the upland habitat of mixed pine/oak/maple of the earlier nest, this one was at the edge of a red maple swamp at the base of a hill entirely covered with eastern hemlock. It was also the highest nest of this species I have ever found, about 23 feet in a red maple sapling; most nests are less than 20 feet in height and often less than ten feet (Harrison 1975, Baicich and Harrison 1997). The nest was suspended in a crotch within a foot of the trunk and was easily viewable from the hillside, where I could sit and watch at a distance without disrupting the pair at work.

The birds were still building on the late date of June 26, perhaps having had an earlier false start. The female did most of the work, lining the nest with dried grass stems from the ground and strips of loose inner hemlock bark, which I saw her tear off a nearby tree. The male accompanied her and occasionally sang. The one time he sang repeatedly, he had a mouthful of nest material! I made two return visits to the nest on July 4 and 15 but saw no activity either time, nor did I hear the vireos. The nest looked intact, but it was clear that it had been deserted.

Blue-gray Gnatcatcher *Polioptila caerulea*

Blue-gray Gnatcatchers are fairly common birds in southern New England today, but this was not always the case. It is another species that has colonized our area only in the last half-century, perhaps related to the gradual warming of the climate in recent decades. A hundred years ago the species was a rare straggler from the south; Townsend (1905) knew of only two Essex County records, and when his *Supplement* was published fifteen years later there were only five (Townsend 1920). By the late 1920s there were 35 state records and nine from Essex County (Forbush 1929).

By midcentury things had begun to change. Griscom and Snyder (1955) reported "flight years" in the 1940s and early 1950s, and steadily increasing reports almost every year. They saw "no convincing breeding evidence" anywhere in the state, but they either missed or ignored a convincing account of a successful nest in Amesbury, very close to the New Hampshire line, in 1930 (Emerson 1930). But no matter; by 1993 the Blue-gray Gnatcatcher had become an "increasingly widespread and locally

fairly common breeder" in Massachusetts (Veit and Petersen 1993). These authors also missed the early Essex County nest, stating that, with the exception of a unique early breeding record in Maine mentioned by Forbush, "gnatcatchers did not breed in New England until the late 1950s." But the important part is that "They now breed practically throughout the state at scattered localities in both mature and secondary-growth deciduous forests, usually near water." There are also recent nest records in all three northern New England states.

Forbush (1929) gives a good summary of gnatcatcher nest specifications: "Usually in a tall coniferous or deciduous tree, rarely in a small sapling; from 10 to 70 feet up, usually high; saddled on a limb; composed of soft materials felted together and ornamented outside with tree lichens, fastened with spiders' webs, resembling a hummingbird's nest." I have found eight nests in Essex County since 1977, three of them this year (2003), plus one in New Hampshire, two in Ohio, and two in the west. They are invariably coated with lichens and saddled on a horizontal branch or in a crotch, though I have never seen an eastern nest in a conifer. (The only one I have seen so situated was six feet in a pinyon pine in Colorado.) I would disagree with Forbush that the nests are usually in tall trees, as several I have found were in saplings. Others, however, were very high in large trees, showing the species' versatility in selecting nest sites.

BLUE-GRAY GNATCATCHER NEST BY JIM BERRY

The three nests I found in 2003 were in quite different situations, and together are probably representative of the birds' nesting habitats in Essex County. The first was discovered on May 10 in Willowdale State Forest in Ipswich, near a red maple swamp but not in it. Both birds were working on this half-finished nest directly over an esker trail with swamp on each side. It was about 30 feet up on a horizontal branch of a hophornbeam at an intersection with a vertical branch. (The field guides I have are in some disagreement about the naming of two species variously known as American hornbeam, hophornbeam, and ironwood, both species being in the birch family. The tree I'm talking about is the one with thin rectangular strips of shaggy bark. Most of the guides call this tree hophornbeam or ironwood, *Ostrya virginiana*, though one

FEMALE BLUE-GRAY GNATCATCHER BUILDING A NEST BY JIM BERRY

calls it American hornbeam. They all agree that it is *Ostrya virginiana*.) I checked this nest five more times in May and June but did not see any further activity and concluded that it had been deserted.

I discovered the second nest May 11 along Ash Street in West Newbury. This was by far the lowest gnatcatcher nest I have ever found, only three feet over the water in a tiny red maple snag in a brushy deciduous swamp without any canopy. The nest was sandwiched between two thin vertical stems and vertically elongated to conform to the shape of the crotch. It was also within ten feet of the road, and very easy to observe from the road, though at a distance if the birds were going to continue their activity. The female gnatcatcher was building on May 11, and the male lining the nest on May 15 with blades of grass. I was not able to return until June 18, when I found the nest destroyed by a predator. The likely suspects were the abundant blackbirds in the swamp, given the complete exposure of the nest to any prying eyes.

The third nest was a high one, about 45 feet in an ash snag in a beaver swamp in Middleton, the swamp containing one of the Great Blue Heron colonies mentioned above. When I discovered it on July 7, both adults were feeding two large young, one of which stood on the edge of the nest and appeared ready to fledge. This nest, like the first, was on a horizontal branch at its intersection with a vertical branch. The tree had drowned, and the nest had no leaf cover — not atypical given the species' proclivity to build on bare horizontal branches, often over water.

Scarlet Tanager *Piranga olivacea*

Scarlet Tanagers are fairly common nesters in large forest tracts. But sometimes a nest is so unusual that it merits documentation no matter how common the species. And, it can be added, tanager nests are not as easy to find as those of many less secretive species. Until this summer (2003) I had seen only two in thirty years of birding in Essex County.

On August 18, 2003, I encountered a pair of Scarlet Tanagers carrying food in a fragmented forest near my home in Ipswich—unusual enough in itself, since they are known to prefer large, unfragmented forests. The male, given the late date, was well along in his molt from alternate to basic plumage and was mottled red and yellow-green. The birds were giving alarm calls and not moving from a small area only fifty yards from a polo field. This forest also differed from normal tanager habitat in that it was almost entirely coniferous, with a predominance of Norway spruce and red pine, and a scattering of eastern white pine, Douglas-fir (introduced), and northern red oak. I could not wait long enough that day to determine whether the birds were feeding nestlings or fledglings. As late as it was in the season, I suspected fledglings, though of course I was hoping to find a nest.

I returned two days later, August 20, to find the same pair still carrying food in the same small area and again giving alarm and/or scolding calls (*chip-burr*, sometimes without the second syllable) as long as I was near them. My dog and I withdrew about fifty yards and sat quietly. Soon the female delivered her food to a nest, about eighteen feet up in a Norway spruce, nestled on top of a fork near the end of a branch. After she made a second feeding, I knew it was time to seriously study this nest. I took the dog home and returned with my telescope.

Between 10:20 a.m. and 11:40 a.m. I observed twelve feedings by the adults (six each) to two large young easily visible in my scope from about forty yards away. They fed them large invertebrates, no doubt mostly insects, the male in two cases feeding immediately after the female. Another time the female fed twice within two minutes, and the male a minute later. The longest interval between feedings was seventeen minutes. At least twice the male removed fecal sacs from the nest after delivering food. On August 22 I again observed the feeding process at length, and saw eight feedings between 8:00 a.m. and 9:35 a.m. There followed a forty-minute gap with no feeding, whereupon I left, in case there was any possibility I was affecting the process. When I returned the morning of August 23, the nest was empty, the parents were giving alarm/scolding calls in either direction from the nest, and the male was carrying food. Alhough I didn't see or hear the babies, this was excellent evidence that they had fledged, and each was being tended by a parent.

Two things were remarkable about this nest. First was the coniferous habitat. Scarlet Tanagers are known to prefer oaks, and that is where most of their nests have historically been found. Oaks were the host trees for the two other nests I have seen, and there were a few red oaks interspersed with these conifers. The various nest guides, life histories, and breeding-bird atlases I checked occasionally mention nests in pines and hemlocks, but never spruces. The highest percentage of conifer nests I ran across was in Vermont, where "more than 50%" of 15 nests found during the Vermont atlas period were in conifers, "predominantly hemlock" (Laughlin and Kibbe 1985). Of two references I have thus far seen on Scarlet Tanagers nesting in spruces, one was from a field note in *Auk* 13:3 (1896) by one Henry Hales of Ridgewood, New Jersey, who watched a pair nest outside his upstairs window on a Norway spruce branch two years running. In fact, they built in 1895 in the same spot on the same branch where they had nested the year before! (The male in 1895 was driven so

strongly to feed young that he fed nearby nestling Chipping Sparrows, to the consternation of their parents, until his own young were born.) The second reference (Mowbray 1999) mentions four nests found in spruces in Ontario.

More remarkable was the late date of this nest. First, some numbers. Scarlet Tanagers incubate for 13-14 days, and nestlings fledge anywhere from 9-15 days after hatching. (The books differ significantly on this, and I doubt that the range in the nestling period is actually that wide.) The young are cared for by their parents for another two weeks after fledging. The two young in this nest fledged either late on August 22 or the morning of August 23. Conservatively assuming that they fledged on August 22 and had taken a full 15 days to fledge, that would put the hatching date at August 7. Again assuming the maximum incubation of 14 days, that in turn would mean laying was completed and incubation begun on July 24. On the other hand, if they fledged in only 9 days on August 23 and were incubated 13 days, hatching would have occurred on August 14 and incubation begun on August 1. Those dates establish the range within which incubation, hatching, and fledging must have occurred.

The question, then, is whether this was a second brood. All the books I checked say the species is single-brooded; Mowbray, who reviewed sources exhaustively in writing the definitive *Birds of North America* species account, states that no second brood has ever been documented. The only semi-exception to this widespread conclusion that I found is in Peterjohn and Rice (1991), which contains the statement, "Renesting attempts and pairs raising second broods are responsible for nests with eggs through August 3 and recently fledged young during the first half of August." (The source cited by those authors as giving those dates [Williams 1950] did *not* include evidence that the birds were raising second broods.) Given the May and June egg dates and late-June/early-July fledging dates commonly cited in the literature (e.g., Forbush 1929, Bent 1958, Mowbray 1999), and the late-July laying evident for the nest I found, it is clear that in terms of the calendar this could possibly have been a second complete nesting cycle. Would that I had birded this site earlier in the season.

That possibility notwithstanding, it is generally assumed that late Scarlet Tanager nests are probably a consequence of failed first attempts, which of course don't take up as much time as a successful nesting. The BNA account listed several nests in northern states roughly equivalent to this one in the degree of lateness: egg-laying (presumably incomplete clutches observed) on August 1 and 2; a nest with eggs on August 9; nestlings on August 14; and fledglings in New York on the incredibly late date of September 19. (One trusts that the last of these sightings was of fledglings still being fed by their parents, which would indicate a September fledging date.) Those being the latest nestings heretofore recorded, this nest with young still in it on August 22, 2003, is one of the latest ever documented for the species.

Saltmarsh Sharp-tailed Sparrow *Ammodramus caudacutus*

This is another species that is common in the right habitat, and another whose nests are not often found. Until the summer of 2003 I had found only one nest, in the salt marsh between the road and the main salt pan on the Plum Island section of the

Parker River National Wildlife Refuge in Newbury. The nest held four young, eyes not yet open, which an adult was feeding on August 2, 1987. It was probably a second nesting, since the species can be double-brooded (Harrison 1975, Erlich et al, 1988, Baicich and Harrison 1997).

On June 24, 2003, Rick Heil and I took a canoe into the marsh opposite the boat launch on Plum Island and spent several hours looking for nesting evidence for several species in the Newbury salt marshes, mostly outside the refuge. We covered an area of several acres and counted about 115 Saltmarsh Sharp-tailed Sparrows and 21 Seaside Sparrows, *Ammodramus maritimus*. (We found no Nelson's Sharp-tailed Sparrows, *Ammodramus nelsoni*, and, despite published evidence to the contrary, are not yet convinced that that species nests as far south as Massachusetts.) Though we found no Seaside Sparrow nests, we did find six nests of Saltmarsh Sharp-tailed Sparrows. Four of the nests had four eggs, one had three eggs, and one had no eggs, though it was clearly a new nest. In each case the nest was found (all but one by Rick) when the adult bird flushed from it. Otherwise they would have been extremely hard to find because they were well hidden in the matted salt meadow grass (salt hay), *Spartina patens*. These were almost certainly the first clutches of the year for these birds. We did not revisit the site and therefore have no follow-up data. (It is unlikely that we would have been able to relocate the nests anyway, since we did not flag them.)

The most interesting thing about these nests was the difference in their structure. Five of them were domed affairs, with the entrance more or less on the side, as described in Baicich and Harrison (1997). These nests were covered with dried grass stems whose tan color contrasted with the green of the salt hay. Once the nest was

SALTMARSH SHARP-TAILED SPARROW NEST IN NEWBURY BY JIM BERRY

OPEN CUP NEST OF SALTMARSH SHARP-TAILED SPARROW IN NEWBURY BY JIM BERRY

located, it was relatively easy to see because of this difference in color, though for every nest there were countless other patches of dead grass! But the sixth was an open-cup nest, similar to those of most songbirds. It was a little higher than the others, about a foot above the ground level, as opposed to about six inches for the domed nests. It was sheltered by live *Spartina patens* stems rather than dried thatch. Another difference was that five of the nests were in broad expanses of salt hay, while the other was only a foot from the edge of a salt pan, akin to the nest I found in 1987.

Orchard Oriole *Icterus spurious*

Earlier I summarized the local nesting history of the Orchard Oriole, a species near the northern edge of its range in Essex County (Berry 2001). I briefly described the only two nests I had found in the county. I revisit this bird not because the nests are all that rare, but because I had such a great opportunity to study one this year. This was thanks to Sharon Stichter of Newbury, in whose yard a pair nested, and quite late.

Sharon and her husband Joe feed both hummingbirds and orioles, and had several individuals of both oriole species in the yard in the spring and summer of 2003. These birds visited the hummingbird feeders as well as the orange halves and containers of grape jelly set out for them. On June 20, Sharon observed two Orchard Orioles mating as the female was building a nest in a Katsura — a poplar-like tree from Japan. The male of this pair was a first-summer bird and had not developed the brick-red color of the adult male. This in itself was interesting in that the female chose this male as her mate despite the presence of two adult males in the same neighborhood (who of course could have had other mates). The nest was 14 feet off the ground amid the leaves and was, typically, constructed of dried grasses in the shape of a ball. It was

about half-finished on that date. More of the same was witnessed on June 23 — incidentally the date on which Sharon also saw three fledglings from a nearby Baltimore Oriole nest. Thus, the Orchard Orioles were a month behind their congeners in the nesting cycle, perhaps due to a failed earlier effort, or a late start in getting paired.

By June 30 the female was seen incubating on a completed nest. Both birds often ate jelly from the feeders and clearly liked this food. On July 14 the female was seen carrying away either eggshells or fecal sacs, meaning the young had hatched. The adult birds went frequently to the nest with food; the food most often carried by the male was…grape jelly! On July 16 Sharon noticed that he would make two feeding trips at a time, then take a break to eat more jelly himself. She inferred from this that there were two young, and that proved to be the case. One of the young fledged on July 19, and was fed by the male in nearby brush while the female continued to feed young in the nest. When I visited the site on July 22, it was evident that a second nestling had fledged, because the female stopped going to the nest with food either that morning or sometime the previous day and had commenced feeding this youngster in a brush pile yards from the nest. (Sharon last saw her take food to the nest early in the morning of July 21.) There were no more returns to the nest by either adult, establishing two as the number of live young.

It was remarkable that the two nestlings fledged two or possibly even three days apart, when they had almost certainly been incubated starting at the same time and most likely hatched the same day. Both Erlich et al (1988) and Baicich and Harrison (1997) give a nestling period of 11-14 days; in this case most if not the full range of variation applied to siblings, which seems unusual. This would put hatching around July 8 (Sharon noticed "lots more coming and going from the OROR nest" on July 7, implying that at least one young hatched that day), and the white objects removed on July 14 were therefore fecal sacs. With incubation lasting 12-14 days (same sources), the clutch would have been complete, and incubation started between June 23 and 26. This implies that the egg-laying started as early as June 22. Since building was still going on June 23—though some fine-tuning of the nest can occur after eggs have been laid—let's assume a 12-day incubation with eggs laid on June 24 and 25, and incubation starting that day. This in turn assumes that only two eggs were laid, whereas the normal clutch is four or five. Months later Sharon found the nest blown to the ground, and there was no evidence of an unhatched third egg. Perhaps the female was young as well as the male, and this was her first nesting; young birds often lay smaller clutches than older birds.

This is the kind of speculation one can engage in with a few reference points of observed behavior and the assistance of nesting field guides. Of course the real dates of laying, hatching, and fledging cannot be known with certainty without direct daily observation of the nest. In this case, while Sharon was never able to look into the nest; her regular observations and our luck in being able to isolate the fledging dates enabled the speculation to be reasonably accurate. It also enabled us to document a late nesting for the species, whose cycle starts in "early June in the north of range" (Baicich and Harrison 1997). I did not observe any specific activity at a nest I found

in Rowley on July 4, 2000, but a nest elsewhere in Rowley was under construction on May 25, 1981, almost four weeks earlier than the Newbury nest in 2003.

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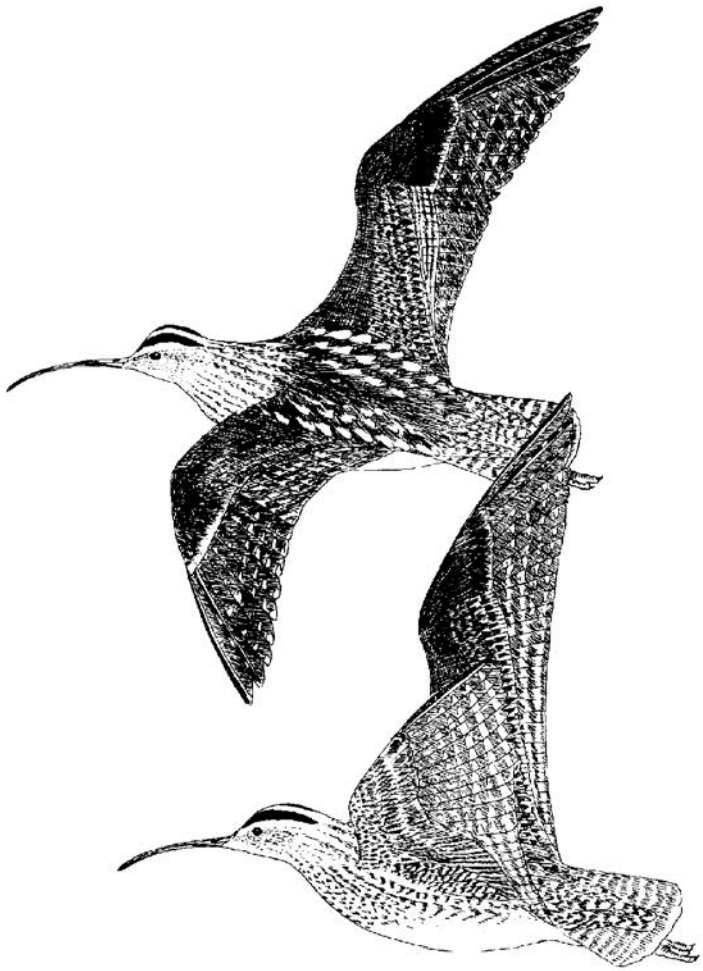
Jim Berry *is writing a book on the birds of Essex County. This series of articles is preliminary to some of the species accounts in the book, which will be adapted (and shortened!) from the accounts published in* Bird Observer. *Jim is also on the* Bird Observer *staff and is always looking for site guides from prospective authors on good birding locations in the six New England states.*



WHIMBRELS BY GEORGE C. WEST

104th Christmas Bird Count

Birders of all abilities are encouraged to join in the Christmas Bird Counts. For further information, please make contact with the listed compilers at least two weeks before the count date.

Sunday, December 14

Cape Cod: Blair Nikula, 508-432-6348, odenews@odenews.net

Central Berkshire: Thomas Collins, 413-499-2799, tcbirder@berkshire.rr.com

Greater Boston: Robert Stymeist, 617-926-3603, rstymeist@juno.com

Groton - Oxbow N.W.R.: Julie Lisk, 978-448-0147, jalisk@earthlink.net, and Peter Alden, (978) 369-5768

Northampton: Jan Ortiz, 413-549-1768, jortiz@aol.com and Mary Alice Wilson, 413-548-9078, mwilson@k12s.phast.umass.edu

Westminster: John Williams, 978-249-7831, cwstudio@yahoo.com

Tuesday, December 16

Sturbridge: Mark Lynch, moa.lynch@verizon.net

Saturday, December 20

Andover: Lou Wagner, 978-927-1122 x2705, lwagner@massaudubon.org

Athol: David Small, 978-249-2094, dhsmall@gis.net

Buzzards Bay: Jeremiah Trimble, jtrimble@oeb.harvard.edu

Millis: Elissa Landre, 508-655-2296, x7301, elandre@massaudubon.org

Newport County, RI - Westport, MA: David Emerson, 508-822-7430, emdav12345@aol.com, and Robert Emerson, 508-541-8364, remerson@duffysweeney.com

Northern Berkshire: Pamela Weatherbee, 413-458-3538, pambweath@aol.com

Quincy: Glenn d'Entremont, 781-344-5857, gdentremont@juno.com, and Patricia O'Neill, 617-696-0831

Springfield: George Kingston, 413-525-6742, gcking@yahoo.com

Stellwagen Bank: Simon Perkins, 781-259-2148, sperkins@massaudubon.org

Worcester: John Liller, 508-757-6377, jliller@worcesteracademy.org

Sunday, December 21

Cape Ann: Barbara Volkle, 508-393-9251, barb620@world.std.com

Mid-Cape Cod: Peter Trimble, 508-477-3847, merlin@capecod.net

Monday, December 22

Truro: Tom Lipsky, 978-897-5429, tlip@massed.net

Saturday, December 27

Cobble Mountain (Westfield): Seth Kellogg, 413-569-3335, skhawk@comcast.net

New Bedford: Michael Boucher, 508-990-3910, britmm@juno.com

Quabbin: Scott Surner, ssurner@aol.com

Uxbridge: Strickland Wheelock, 508-278-5885, skwheelock@yahoo.com

Sunday, December 28

Marshfield: Warren Harrington, 781-545-1325, hwharrington@att.net, and David Clapp, 781-738-9400

Martha's Vineyard: Robert Culbert, 508-693-4908, rculbert@dukescounty.org

Newburyport: Tom Young, 603-424-4512, redscreechowl@earthlink.net

Taunton-Middleboro: Russ Titus, 781-344-3516, rct6@cornell.edu

Thursday, January 1

Southern Berkshire: René Laubach, 413-637-0320, rlaubach@massaudubon.org

Friday, January 2

Tuckernuck: Simon Perkins, 781-259-2148, sperkins@massaudubon.org, and Richard Veit (tentative date)

Saturday, January 3

Nantucket: Ken Blackshaw, 508-228-0709, kenandcindy@copper.net, and Edie Ray, 508-228-1693, ackbird@aol.com

Sunday, January 4

Concord: Hank Norwood, 508-358-7524, hankn583@aol.com

No date released

Greenfield: Mark Fairbrother, 413-367 2695, bogelfin@crocker.com

Plymouth: Trevor Lloyd-Evans, 508-224-6521, tlloyd-evans@manomet.org

WHITE-WINGED CROSSBILL BY GEORGE C. WEST