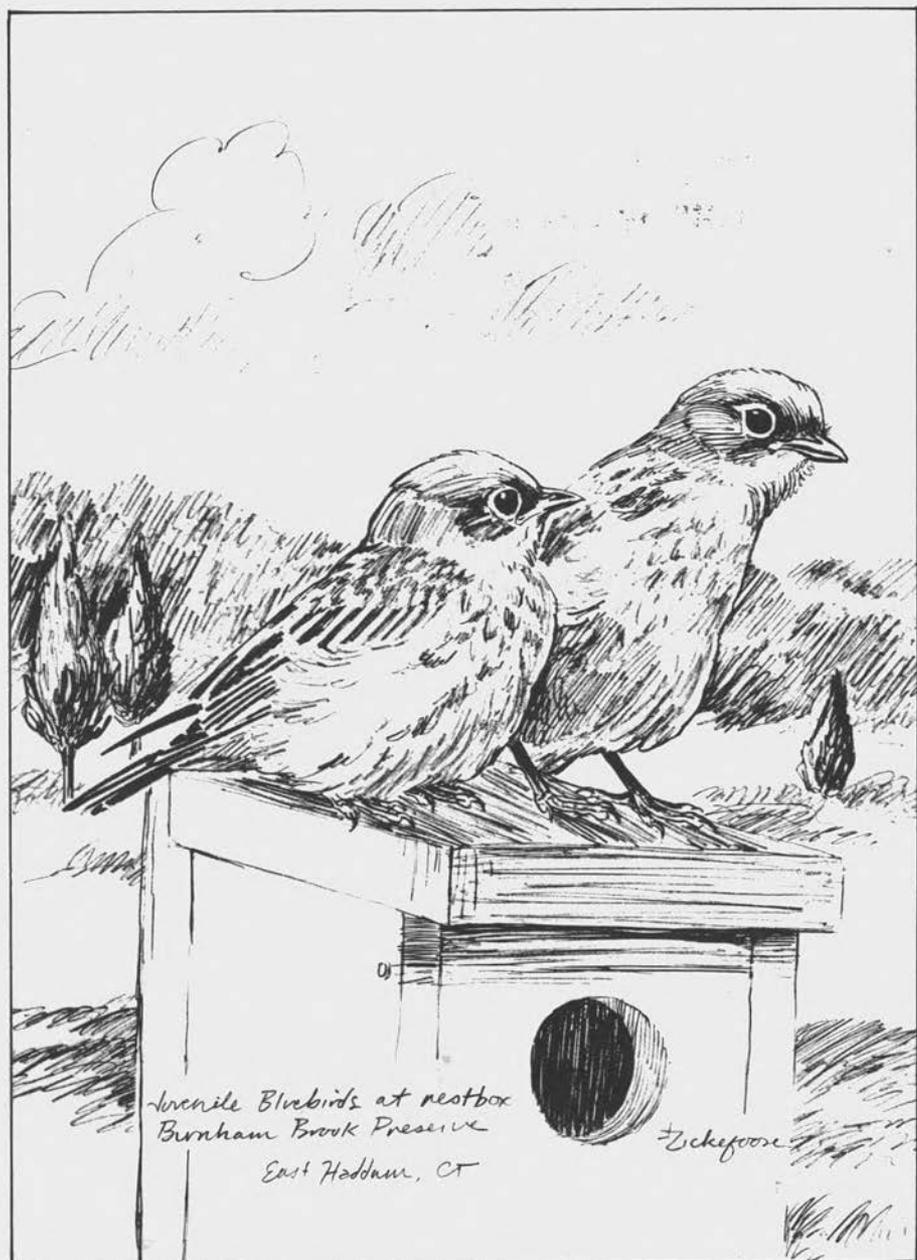


BIRD OBSERVER



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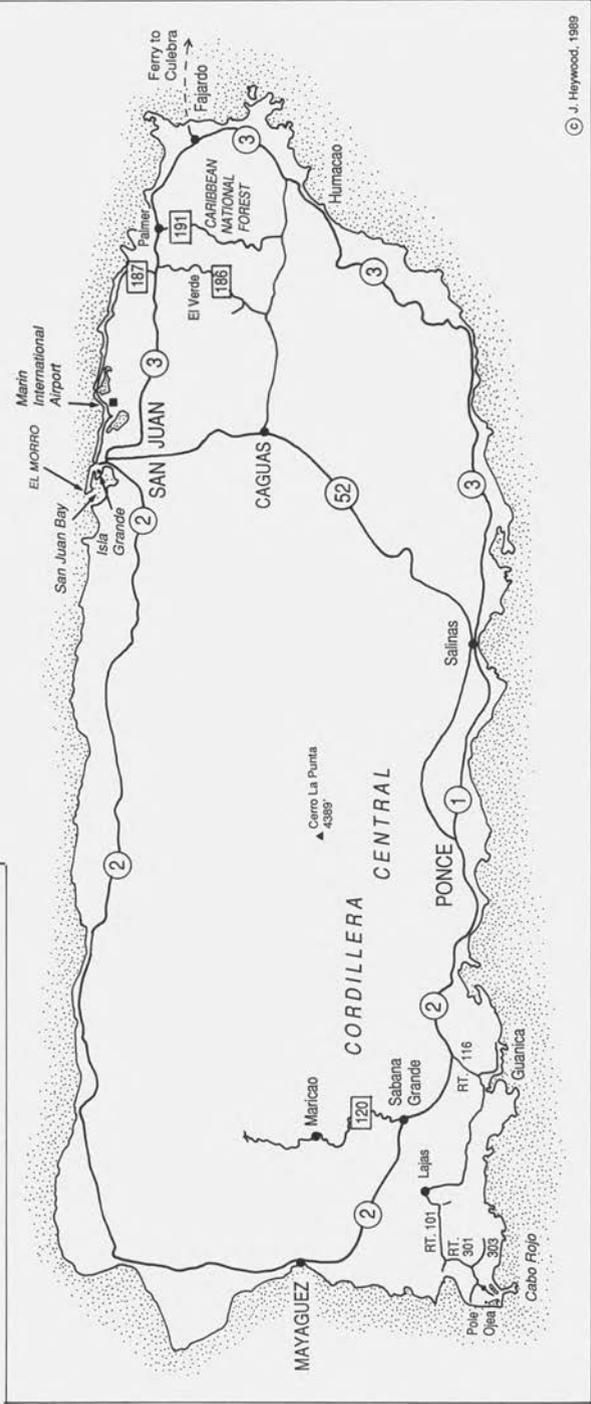
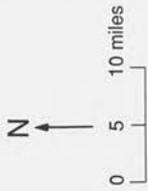
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PUERTO RICO



BIRDWATCHING IN PUERTO RICO

by Brian E. Cassie

Puerto Rico offers a lot to the birdwatcher: it has a goodly number of West Indian endemics; its area is small; transportation and lodging are easily arranged; and the climate is ideal. In addition, since Puerto Rico is a commonwealth of the United States, a U. S. citizen does not need a passport.

Puerto Rico lies at the northern end of the West Indies and is part of the island group known as the Greater Antilles. Of the four Greater Antillean islands, which include Cuba, Jamaica, and Hispaniola, Puerto Rico is the smallest, comprising 3435 square miles (less than half the area of Massachusetts). Maximum elevation is obtained in central part of the island, where Cerro La Punta rises to 4389 feet.

In Puerto Rico birdwatchers will likely concentrate most of their efforts on seeing the Antillean species, especially the Puerto Rican endemics. I have included five areas in this account which, when worked for about a day each, should yield most or all of the island's specialties. The information provided is based mostly on field work in January 1987 and February-March 1988.

San Juan and vicinity. The starting point for any trip to Puerto Rico is the Marin International Airport, which lies just to the east of San Juan. Greater Antillean Grackles are common here, as on most of the island, but there is little need to linger at the airport grounds. Take Route 26 west through the downtown area, and follow signs for Old San Juan, a historic district at the northern end of San Juan Bay. Most famous of the many landmarks of Old San Juan is the fortress of El Morro, which guards the entrance to the bay. From El Morro one can often see Brown Booby, Magnificent Frigatebird, and Royal and Sandwich terns. White-tailed Tropicbirds were numerous in February but absent in January. After a walking tour of the area, travel back toward San Juan. Watch for signs for "Santurce" as you approach the bridge that crosses into San Juan, and follow them. Just across the bridge, follow the sign to the Isla Grande Airport. Pass the airport entrance, and turn at the next road to the right. This leads to the entrance to the Isla Grande Naval Reserve. This area is open to the public and comprises many acres of ball fields, lawns, government buildings, and parking lots. It serves as a sort of manicured oasis in the midst of an intensely developed capital district.

Isla Grande has two main drawing points for the birdwatcher. The first is its attractiveness to exotic birds. Puerto Rico has numerous introduced species, many more than the other Antillean islands. In a couple of hours walking the grounds, it is possible to see numbers of Saffron Finches, Singing Green Finches, Pin-tailed Whydahs, Orange-cheeked Waxbills, Warbling Silverbills,

Bronze Mannikins, and Java Finches. All of these are well established on the island. Monk Parakeets are common, and Orange-fronted and Canary-winged parakeets should be looked for. Of course, seeing a few native bird species would be welcome to the visiting birder. Mangrove Cuckoo, Smooth-billed Ani, Zenaida Dove, Gray Kingbird, Pearly-eyed Thrasher, Red-legged Thrush, Bananaquit, Black-whiskered Vireo (arrives in February), Glossy Cowbird, Stripe-headed Tanager, and Black-faced Grassquit, among others, occur here, especially in the trees along the south side of the complex. The second feature of Isla Grande of ornithological interest is its geographical position: some of the best sandbars in San Juan Bay lie just to the southwest within scoping distance from shore. Gulls are a scarce commodity in Puerto Rico, but on one February day the sandbars had Laughing, Herring, Great Black-backed, and Lesser Black-backed gulls, the latter two species supposedly vagrants to the island. If more adequately investigated, this spot would doubtless provide many interesting regional records of shorebirds, gulls, and terns.

Caribbean National Forest. Twenty-five miles southeast of San Juan are the 28,000 acres of the only tropical forest of the national forest system of the United States. This area is also known as the Luquillo National Forest (for its range, the Luquillo Mountains) and El Yunque (for the high peak near the recreation area). To reach the forest from San Juan, travel east along Route 3, the main highway, or, better, take the small coastal road, Route 187, along which Monk Parakeets nest in coconut palms. Route 187 emerges at Route 3 just south of the little town of Rio Grande.

There are two approaches to the forest. The first is Route 191, which passes through Palmer and winds up into the mountains for about six miles. Near the upper reaches of the road, there are several parking areas and fine panoramic overlooks of the forest and northeast coast. A small visitor center and restaurant are nearby. At least ninety-eight percent of the tourist traffic in the forest restricts itself to this road, and although the area is heavily forested and supports most of the Puerto Rican specialties, a birder's time is better spent in quieter surroundings. Route 186, approximately three and a half miles west of Route 191 also runs south from Route 3 and ascends into the area known as El Verde. Six miles from the highway Parador El Verde is located in a clearing on the right. This lodging is truly rustic but an excellent base for exploring the forest. The grounds of Parador El Verde are small but lush, and here and along the roadside for two miles downhill, such birds as Puerto Rican Lizard-Cuckoo, Puerto Rican Woodpecker, Scaly-naped Pigeon, Ruddy Quail-Dove, Puerto Rican Emerald, Puerto Rican Tody, Red-legged Thrush, Black-whiskered Vireo, Puerto Rican Tanager, and Puerto Rican Bullfinch are common. A wide trail leading into the forest two hundred feet downhill and cross the road from Parador El Verde is an excellent spot for all of the aforementioned birds,

especially Ruddy Quail-Dove, and passes through the territory of a pair of Puerto Rican Parrots, one of the world's rarest birds. If you plan to stay overnight at the parador, bring along a tape of the Puerto Rican Screech-Owl. Loss of appropriate habitat has threatened this spectacular little owl, but at El Verde it is common and readily responds to a recording. (Note that tape recordings are not necessary for diurnal species.)

Culebra. Twenty minutes east of the forest along Route 3 is the town of Fajardo, jumping-off point for the ferry ride to Culebra, seventeen miles offshore. The birdlife of Culebra and its associated cays has been well documented in two articles by Robinson (1986) and the Keplers (1978). In short, this is the best seabird area in Puerto Rico, with breeding Audubon's Shearwaters, Red-billed and White-tailed tropicbirds, and Brown Boobies, as well as Red-footed and Masked boobies in small numbers, and Roseate, Bridled, Sooty, Royal, Sandwich, and Brown Noddy terns. On a late February trip our group saw numerous Brown Boobies on the crossing and small numbers of both of the tropicbirds from shore at Culebra. Visiting later in the year would ensure looks at the pelagic terns. The road system on Culebra is not extensive but leads to all the good bird habitat. Take a bus out to Flamenco Beach, where seabirds and sea turtles are visible from shore. We saw both tropicbirds and Green, Hawksbill, and Loggerhead turtles. Check ponds for White-cheeked Pintail and Least Grebe, mangroves for rails, and any flowering plant for Green-throated Caribs and Antillean Crested Hummingbirds, both of which are common here. Scaly-naped Pigeons, arboreal pigeons, typically difficult to see in the Caribbean National Forest, sit on telephone wires on Culebra. The round-trip to Culebra may be made in a day, though the island deserves a bit more time.

Southwestern Lowlands. Southwestern Puerto Rico, in the rain shadow of the Cordillera Central, presents an entirely different countryside from most of the rest of the island. Open farmland predominates, and various cacti are common. The autopista, or turnpike, gets one from San Juan to the southwest in a couple of hours. Alternatively for those with more time, Route 3 continues around the eastern and southern coasts, ending at Ponce. This route runs past cane fields (good for exotic finches, including Red-eared Waxbill and Black-headed Nun), over coastal hills, and along some fine shell beaches. The best spot for birds is a large lagoon along the highway just north of Humacao. Caribbean Coot, White-cheeked Pintail, and other waterfowl are possible here. Half an hour west of Ponce on Route 2, turn south onto Route 116 toward Guanica. Before reaching town, watch for Route 333 on the left. This leads to a series of beaches and the southern edge of the Guanica Forest Reserve. The "forest" is mainly acacia with cactus undergrowth, a good place to watch where you are walking!

An acceptable place to base at Guanica is the Hotel Copamarina, right on the beach along Route 333. The Puerto Rican Whip-poor-will is common on the north side of the road and calls most often just before dawn and just after dusk. Check out the mangrove pool adjacent to the hotel grounds early in the morning. It is often swarming with birds, including Black-necked Stilts, Stilt Sandpipers, and various other shorebirds and herons. Adelaide's Warblers are easily observed here, and the Antillean Mango and Mangrove Cuckoo are reasonably common. The main road dead-ends a few miles to the east, passing through good habitat for Caribbean Elaenia, Pearly-eyed Thrasher, and Troupial. Visitors who are here between May and August may see an uncommon summer resident and breeding bird, the Antillean Nightjar. The Puerto Rican Tody, which usually becomes everybody's favorite island bird, is common here and much easier to see than in the rain forest. In early March we saw a Plain Pigeon at the parking lot at the end of the road, a very unusual sighting for this area. Very small numbers of this species survive in Puerto Rico. If time allows, take a launch out to nearby Gilligan's Island (no kidding), where the snorkeling is great.

Other good birdwatching localities are fairly nearby. An hour's drive west of Guanica is the sweeping headland known as Cabo Rojo. To reach it, drive west from Guanica on Route 116, and at Lajas, turn onto Route 101, continuing to Route 301. Turn south, and follow Route 301 toward Cabo Rojo, also signposted as "El Faro." At Pole Ojea check the series of diked impoundments at the north end of the lagoon for shorebirds, herons, and waterfowl. Continue south to Cabo Rojo (do not turn toward El Combate). The salinas, or saltworks, just before the cliffs at Cabo Rojo are said to be great for birds. I have never seen much here, but shorebirds, including Wilson's and Snowy plovers, do occur. Brown Pelicans and one or two Brown Boobies may be expected at the cliffs. Try to be in this area in late afternoon, for this is the time to see the endemic Yellow-shouldered Blackbird. The most productive site is in the mangroves east of Cabo Rojo. Drive north on Route 301 to Route 303, turn east, and go 2.1 miles until the pavement ends at a crossroads. Turn right here, and drive an additional 2.1 miles over a hard-packed, single-lane road to its end. There is a parking area here. The blackbirds are most easily observed as they fly across the channel with numerous grackles and cowbirds in the late afternoon. Do not arrive at dusk; that is too late.

Maricao. North of Guanica and east of Mayaguez, in the hill country typical of much of western Puerto Rico, is the town of Maricao. The paradox Hacienda Juanita, a charming establishment just west of town, is the logical choice for a headquarters. To reach the area, drive north on Route 120 through Sabana Grande and twelve miles beyond, up a winding, climbing road toward Maricao. At a T intersection, turn left, and drive a couple of minutes to

Hacienda Juanita. The grounds of the parador and the adjacent hillsides (visible from the road) have some interesting bird species such as Puerto Rican Screech-Owl, Puerto Rican Lizard-Cuckoo, Puerto Rican Woodpecker, Puerto Rican Emerald, Green Mango, Puerto Rican Tody, Loggerhead Kingbird, Puerto Rican Flycatcher, Red-legged Thrush, Black-cowled Oriole, Blue-hooded Euphonia, Stripe-headed Tanager, Puerto Rican Tanager, and Puerto Rican Bullfinch.

Another good place to see birds is the fish hatchery. Follow the main road to town. As you approach the near edge of town, look for a sign on the right for "Los Viveros," the fish hatchery. Turn right here, and drive a short distance to the hatchery at the road's end. The Lesser Antillean Pewee is regular here. Walk up the streambed behind the fish pools, and look carefully for Puerto Rican Vireo and Elfin Woods Warbler. The warbler is best known and indeed is named for its association with the elfin woods high in the Caribbean National Forest. However, the bird also occurs here in western Puerto Rico and is easier to see here than along the narrow muddy trails of El Yunque. The Elfin Woods Warbler is very active, moving continuously, though not very rapidly, through the tree foliage. I have often seen the birds in pairs. The woods along Route 120 downhill from Maricao are quite dry and not towering and provide good habitat for the warbler and many other endemics. A couple of miles down there is a short side road to the right leading to a few buildings and picnic tables. This is a good spot for the warbler.

If you have time, visit Mayaguez, where there is an interesting zoo. Hispaniolan Parakeets occur in the vicinity.

Notes on Puerto Rico's Fourteen Endemic Species.

Puerto Rican Screech-Owl. Easy to find at Parador El Verde and Hacienda Juanita.

Puerto Rican Lizard-Cuckoo. Exhibits the cuckoo-like trait of being much easier to hear than see. With patience or luck, you should get good looks at this magnificent bird.

Puerto Rican Woodpecker. Many in the Caribbean National Forest but easier to see at Maricao.

Puerto Rican Parrot. A very small number survive in the Caribbean National Forest. Try the trail across from Parador El Verde or the visitor center early or late in the day. Do not harass birds near a nest site. Another good place to find this bird is along Route 191, in the vicinity of the restaurant in the Caribbean National Forest.

Puerto Rican Whip-poor-will. Common at Guanica. Take a flashlight along.

Puerto Rican Emerald. Easiest to see at Maricao, but common in the Caribbean National Forest.

Green Mango. Common in the Maricao area.

Puerto Rican Tody. Occurs throughout in rain forest, dry forest, scrub, and mangroves. Hardest to see in rain forest. Spectacular bird.

CHECKLIST OF PUERTO RICAN BIRDS

The following list is printed here as a convenience for birders using this where-to-go article when they visit these areas. It is not intended to be a complete compilation of Puerto Rican birds. A few birds appear on the list without any checkmarks, which indicates that the author saw them elsewhere in Puerto Rico but did not happen to find them in any of the five locations mentioned here.

*A = San Juan and Vicinity, including
Isla Verde and Isla Grande airports
B = Caribbean National Forest*

*C = Culebra
D = Guanica area, including Cabo Rojo
E = Maricao area*

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Pied-billed Grebe	x					Yellow-billed Cuckoo		x		x	x
Least Grebe			x			Mangrove Cuckoo	x		x		
White-tailed Tropicbird	x	x				Puerto Rican Lizard-Cuckoo		x		x	
Red-billed Tropicbird		x				Smooth-billed Ani	x	x	x	x	x
Brown Booby	x	x	x			Puerto Rican Screech-Owl		x		x	x
Brown Pelican	x	x	x			Chuck-will's-widow		x			
Magnificent Frigatebird	x	x	x			Antillean Nightjar	x			x	
Great Blue Heron	x	x	x			Puerto Rican Whip-poor-will				x	x
Great Egret	x		x			Puerto Rican Emerald		x			x
Snowy Egret		x	x			Antillean Mango				x	
Little Blue Heron		x	x	x		Green Mango					x
Tricolored Heron	x		x			Green-throated Carib	x		x		
Cattle Egret	x	x	x	x		Antillean Crested Hummingbird		x		x	
Green-backed Heron				x		Puerto Rican Tody		x		x	x
Black-crowned Night-Heron	x	x				Belted Kingfisher	x		x		x
Yellow-crowned Night-Heron		x	x			Black-headed Nunbird					
American Flamingo			x			Puerto Rican Woodpecker		x			x
White-cheeked Pintail		x	x			Gray Kingbird	x	x	x	x	x
Blue-winged Teal			x			Loggerhead Kingbird					x
Ruddy Duck						Puerto Rican Flycatcher					x
Turkey Vulture	x	x	x	x		Lesser Antillean Pewee					x
Osprey	x		x			Caribbean Elaenia	x		x	x	
Sharp-shinned Hawk (endemic resident subspecies)		x				Barn Swallow		x		x	
Broad-winged Hawk		x				Cave Swallow		x		x	x
Red-tailed Hawk	x	x	x	x	x	Caribbean Martin			x	x	
American Kestrel		x	x	x	x	Red-legged Thrush	x	x		x	x
Merlin	x	x		x		Northern Mockingbird		x		x	x
Helmeted Guineafowl			x			Pearly-eyed Thrasher	x	x	x	x	
Clapper Rail			x	x		Puerto Rican Vireo					x
Sora			x			Black-whiskered Vireo	x	x	x	x	x
Common Moorhen			x			Yellow-throated Vireo	x				
Caribbean Coot		x				Golden-winged Warbler		x			
Black-bellied Plover	x	x	x			Northern Parula	x	x	x	x	x
Wilson's Plover		x	x			Yellow Warbler	x		x	x	
Semipalmated Plover			x			Magnolia Warbler					x
Killdeer	x	x	x			Cape May Warbler					x
Black-necked Stilt	x		x			Black-throated Blue Warbler	x	x			x
Greater Yellowlegs	x	x	x			Yellow-rumped Warbler		x			
Lesser Yellowlegs		x	x			Elfin Woods Warbler		x			x
Willet			x			Adelaide's Warbler				x	x
Spotted Sandpiper	x	x	x			Yellow-throated Warbler					x
Whimbrel		x				Prairie Warbler	x	x			x
Ruddy Turnstone			x			Palm Warbler	x			x	
Sanderling			x			Black-and-white Warbler		x			x
Semipalmated Sandpiper			x			American Redstart	x	x	x	x	x
Western Sandpiper			x			Prothonotary Warbler					x
Least Sandpiper			x			Ovenbird		x			
Stilt Sandpiper			x			Northern Waterthrush	x		x	x	x
Short-billed Dowitcher			x			Louisiana Waterthrush		x			x
Common Snipe						Bananaquit	x	x	x	x	x
Laughing Gull	x		x			Blue-hooded Euphonia		x			x
Herring Gull	x					Stripe-headed Tanager	x				x
Lesser Black-backed Gull	x					Puerto Rican Tanager		x			
Great Black-backed Gull	x					Saffron Finch	x				
Royal Tern	x		x			Yellow-faced Grassquit	x	x	x	x	x
Sandwich Tern	x					Black-faced Grassquit	x	x	x	x	x
Roseate Tern		x				Puerto Rican Bullfinch		x			x
Common Tern	x					Troupial					x
Rock Dove	x	x	x	x	x	Black-cowled Oriole	x		x	x	x
Scaly-naped Pigeon		x	x			Yellow-shouldered Blackbird					x
White-crowned Pigeon						Greater Antillean Grackle	x	x	x	x	
Plain Pigeon				x		Glossy (Shiny) Cowbird	x		x	x	x
White-winged Dove	x	x	x			Green Singing Finch	x				
Zenaida Dove	x	x	x			(Yellow-fronted Canary)					
Mourning Dove		x				Orange-cheeked Waxbill	x				
Common Ground-Dove	x	x	x	x		Red-eared Waxbill					
Ruddy Quail-Dove		x				(Black-rumped Waxbill)					
Monk Parakeet	x					Silverbill	x				x
Canary-winged Parakeet	x					(White-throated Munia)					
Red-crowned Parrot						Bronze Mannikin	x				x
Yellow-headed Parrot	x					Spice Finch					x
Orange-fronted Parakeet	x					(Spotted Munia)					
Hispaniolan Parakeet						Java Finch	x				
Puerto Rican Parrot		x				Red Bishop	x				
						Pin-tailed Whydah	x				

Puerto Rican Flycatcher. Not common but occurs at Maricao.

Puerto Rican Vireo. Same status as above.

Elfin Woods Warbler. The trails in the Caribbean National Forest are slick, but the birds can often be seen close at hand here. Your best bet is the Maricao area, where this species can often be found along the road in low trees.

Yellow-shouldered Blackbird. Difficult to find except at roost site.

Puerto Rican Tanager. Very common in the hills, both east and west.

Puerto Rican Bullfinch. Common in hilly woodland. The loud "boink-boink-boink" call is distinctive.

Useful Information.

Books. Raffaele's *A Guide to the Birds of Puerto Rico and the Virgin Islands* has been out of print for two years but is scheduled for reprinting by Princeton University Press in the summer of 1989.

Maps. Good road maps are available on the island. *Hildebrand's TravelMap: Puerto Rico, Virgin Islands, St. Croix* is available in U. S. map stores.

Tourist Information. Write to the Tourism Company of Puerto Rico, Box 4435, Old San Juan Station, San Juan, Puerto Rico 00905. The monthly magazine *Que Pasa?* is sent free of charge. Ask for information on the paradors.

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DISTRACTION DISPLAYS OR "INJURY FEIGNING" IN BIRDS

by William E. Davis, Jr.

Everyone interested in birds knows about the broken-wing act of the Killdeer, but how widespread is this type of behavior among birds? A literature search revealed that a broad spectrum of birds perform such displays. Knowledge of distraction displays dates back at least to Aristotle. Alexander Wilson described this activity in a passerine, an Ovenbird (Hann 1937). By the early twentieth century published reports documented distraction behavior in Worm-eating and Kirtland's warblers (Chapman 1917), and Forbush (1925-1929) mentioned such displays in the species accounts of at least eight passerines.

Attention was focused on the subject by a letter in 1935 to the editor of *The Auk* from Harry Swarth, a noted ornithologist from the California Academy of Sciences. Swarth stated that he had never seen a passerine bird, a grouse, or a quail resort to injury feigning. A veritable deluge of letters in response bore witness to distraction displays in American Redstarts, in Yellow, Chestnut-sided, Kentucky, Magnolia, Black-throated Green, and Bay-breasted warblers, in Ruffed Grouse and Northern Bobwhite, Chipping and Vesper sparrows, Mourning Dove, American Woodcock, Whip-poor-will, Common Nighthawk, and in several owl and duck species. The uproar reached Australia, where A. H. Chisholm (1936) wrote of distraction displays by passerines including Australian robins, whistlers, Australian wrens, quail-thrushes, and Australian chats among others.

More recently, Griscom and Sprunt (1957) added Black-throated Blue and Yellow-rumped warblers to the list of birds observed giving distraction displays. Harrison (1984) described a Canada Warbler spending "several hours at my feet, dragging her wings and trying to lure me away." Alexander Skutch (1976) added a number of Neotropical species to the list. The number of bird families represented on the list is substantial. Margaret Morse Nice (1943) cited thirteen orders and sixteen passerine families in which distraction displays occur.

Ornithologists generally use the term "distraction display" rather than "injury feigning" or "broken-wing act" to refer to this type of behavior. Welty (1975) pointed out that this puts the emphasis on the "demonstrated effectiveness rather than the conjectured intent of the bird." Skutch (1976) uses the terms "feigning injury," "broken wing ruse," "parental ruse," "lure display," and "disablement reaction," as well as his preferred "injury simulation." He points out that distraction displays also include behaviors other than simulation of injury. An example is "false brooding," in which ground-nesting birds

simulate sitting on a nest some distance from their actual nest. Nice (1943) prefers "nest-protection display" or "distraction display."

Many different behaviors are categorized as distraction displays (Armstrong 1947). Some birds, like the Killdeer, seem to simulate a broken wing, whereas many of the warblers appear to be sick or with their wing-quivering simulate helpless baby birds. For example, on my census plot in Foxboro in 1976, my pishing call induced a Nashville Warbler to give a distraction display described in my field notes as follows: "At the edge of an open wooded area the warbler flew and lit within about six feet of me. It then hopped among the branches and finally onto the ground with its tail raised and all the time flapping its wings furiously. Its wings fluttered so furiously that it reminded me of a hummingbird." Another instance occurred in 1977 at the Seney National Wildlife Refuge in Michigan. A Common Yellowthroat responded to my pishing call by "hopping about on the ground, both wings flapping, fanning, furiously." In June 1979 I stumbled upon an adult Ruffed Grouse with young. The mother bird "waddled away, low to the ground, with both wings flipping (short flaps) wildly, tail fully cocked (perpendicular) and fanned, mewing like a kitten."

Skutch (1976) describes what he calls the "rodent run," or "rat trick," in which the displaying bird assumes a hunched posture and scurries about with tail dragging, looking like a small rodent. A Black-and-white Warbler in my census area really had me fooled with this trick: "Injured bird act, fluttering both wings, skulking along dragging its tail. I thought at first it was a small mammal or maybe a baby Blue Jay. I followed it for about forty feet before I lost it in the underbrush." Another time I flushed an ovenbird from a nest in my census area. "The mother (?) bird 'waddled' or skittered off, looking like a small rodent scurrying through the leaf litter—I didn't see wings flapping."

In some birds such as the pratincoles, group distraction displays occur, with a dozen or more feigning injury at the same time (Armstrong 1947). Skutch (1976) gives examples of group displays, mentioning McCown's Longspurs, Parasitic Jaegers, and American Avocets.

Do distraction displays work? Skutch (1976) cites examples of animals that have been observed being "fooled." Besides man and dogs, he lists birds displaying for otters, weasels, stoats, foxes, coyotes, agoutis, and deer. Skutch added his own observation of a Black-striped Sparrow leading away a snake and mentioned reports of a plover leading away an oystercatcher and of an ant-tanager displaying before a motmot.

The frequency and intensity of distraction displays appear to be related to the stage of the reproductive cycle. For example, Nolan (1978) studied the distraction displays of Prairie Warblers and found that display intensity and frequency of display correlated with the stage of nesting. During nest building

only six female Prairie Warblers displayed weakly to moderately, whereas hundreds did not; during incubation another half dozen displayed out of nearly two thousand nest inspections; but when week-old young were in the nest, displays were frequent. For older chicks, displays were always given if the young birds called. At highest intensity the bird had vibrating, fully extended wings held straight out with the head and tail depressed and the tail fanned and in extreme cases depressed nearly ninety degrees from the line of the back. Birds moved with a crawling motion with the apparent difficulty of movement increasing with the intensity of the display.

Nice (1943) noted that Song Sparrows also displayed when the week-old young shrieked. Tuck (1972) reported that the displays of the snipe peaked with the culmination of incubation and suggested that the display may be related to hormonal activity. Common Snipe may also give displays when accompanied by young, as I witnessed on a 1977 trip to the Connecticut Lakes in New Hampshire: "One particular boggy path was crossed by a narrow stream. As I approached, three snipe exploded from the grassy stream, two young birds flying in one direction, an adult bird fluttering a few feet in the opposite direction and then settling back into the stream. This bird, with tail erect showing the reddish undertail coverts, paddled along the stream with both wings, producing the most extraordinary distraction display I have witnessed. I followed the bird and it finally flushed after paddling eight or ten feet."

Distraction displays are widespread, variable, and complex. A future article will examine how these fascinating behaviors evolved.

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WILLIAM E. DAVIS, JR., chairman of the Division of Science in the College of Basic Studies at Boston University, has recently completed a biography of Ludlow Griscom. Ted regularly contributes articles and drawings to this publication and serves on the board of directors. He would like to thank John C. Kricher for reading earlier drafts of this article and Jean D. Allaway for proofreading.

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LIFE OF THE TANAGER by Alexander F. Skutch. 1989. Ithaca: Cornell University Press. xii + 114 pages; 24 color plates, 19 black-and-white illustrations; \$36.50.

Alexander Skutch, acknowledged dean of Neotropical ornithology, has for decades given us vivid accounts of the life histories of scores of Latin American bird species. Occasionally, Skutch sets to work on a book about a whole family of birds, and his previous fine works on hummingbirds and woodpeckers presented nontechnical overviews and outstanding illustrations. The present work continues in the same vein. *Life of the Tanager* is an admirable look at the various aspects of the tanagers' existence, from foraging, voice, and displays through enemies and longevity. The book is intended as an introduction to the 230 diverse, incredibly colorful members of the tanager group and as such succeeds. Dana Gardner's full-page plates are among his best work. The large format makes for a more attractive book but may be part of the reason for the rather hefty price.

RARE BIRDS OF THE WORLD by Guy Mountfort, A Collins/ICBP Handbook. 1989. Lexington, Massachusetts: Stephen Greene Press. 256 pages; 32 color plates, 50 line drawings; \$29.95.

BIRDS TO WATCH by N. J. Collar and P. Andrew, The ICBP World Checklist of Threatened Birds. 1988. Washington, D. C.: Smithsonian Institution Press. xvi + 303 pages; paperbound \$18.95.

Anyone seriously interested in birdlife and its conservation should make the acquaintance of these two volumes. The Mountfort book is the more readable of the two, and the Norman Arlott artwork is inspiring. *Rare Birds of the World* offers as introduction an essay on man's interaction with birds. The main body of the book is brief accounts of one thousand species of endangered birds, grouped according to zoogeographical region. Appendix I summarizes all threatened species, and Appendix II lists birds which have become extinct since 1600. There are two indexes, one for common, the other for scientific names.

Birds To Watch is more compartmentalized and technical in its approach to the same subject. The largest section of text comprises a world list of threatened species presented in phylogenetic order, again with brief accounts of species' status. This is followed by an extensive bibliography of over 700 entries and two appendices, one listing threatened birds by geopolitical unit, the other listing near-threatened species. There are separate indexes for scientific and common names.

Two books now available in paperback from Houghton Mifflin are *HAWKS IN FLIGHT* by Dunne, Sutton, and Sibley (\$9.95) and *A FIELD GUIDE TO MEXICAN BIRDS* by Peterson and Chalif (\$13.95).

TAPE REVIEW: *BIRDING BY EAR*

by Dorothy R. Arvidson

Birding by Ear: A Guide to Bird Song Identification by Richard K. Walton and Robert W. Lawson. 1989. Boston: Houghton Mifflin (Peterson Field Guides). Three sixty-minute cassette tapes and instructional booklet. \$35.

The Walton/Lawson tapes introduce a new concept in bird guides. Roger Tory Peterson writes in the Editor's Note: "Just as my Field Guide shows what to look for, *Birding by Ear* points out exactly what to listen for to tell one bird from another....The entertaining and educational narrative does the same job as the arrows in my Field Guide, pinpointing the precise differences between similar species." Walton and Lawson explain in the Introduction that "most bird-song recordings are simply collections....[that] constitute a valuable reference, but they do not provide techniques for distinguishing and remembering songs."

This cassette package does just that. It is a well-planned and masterfully presented instructional seminar in bird-song recognition that will enable anyone interested in birds, whether a novice or experienced birder (including those with a tin ear) to learn to recognize eighty-five eastern and central North American bird species by sound, thereby improving birding skills and enhancing the pleasures of birding. The price of the three-hour cassette package is very reasonable: an equivalent course of instruction would cost much more.

Birding by Ear was created by Richard K. Walton and Robert W. Lawson. Dick Walton is a Concord naturalist, birder, and writer, and, most important, an experienced educator. Walton, who narrates the tapes, has a pleasant teaching voice: mellow and unhurried. He suggests and persuades, rather than expounds. Bob Lawson, also a birder and a trained musician, is the owner of the Blue Jay Recording Studio, where the production was assembled and recorded. The tapes are of the highest acoustical quality and proved to be a pleasure to listen to on four different tape machines that varied in quality from hifi to portable players. The recorded songs, obtained from professional sources, are first-rate and have been well chosen. The slim instruction booklet is indispensable and fits neatly within the compact tape package (1 by 5 by 8.5 inches). For each species on the tapes, this guide offers a brief description of the bird, its voice, and habitat, a John Sill sketch, a page reference to the 1980 Peterson field guide, and space for personal notes. Most helpfully, a phonetic index is provided that lists alphabetically all of the phonetic units suggested by Walton as memory aids, i.e., words and phrases that represent the songs.

The first cassette begins with a beautifully phrased fifteen-minute introduction that summarizes methods useful in learning bird song. Phonetic units that represent the actual sounds made by birds are demonstrated. For

example, "Conkaree" is suggested as a commonly accepted phonetic rendition of the Red-winged Blackbird's carol, and "Who cooks for you, who cooks for you all?" as connoting for some birders both the sound and the rhythmic cadence of the Barred Owl's song. Other mnemonics discussed are comparison ideas, e.g., the likening of the Field Sparrow's song to "a ping-pong ball dropping on a table," and descriptive words that characterize some aspect of the song such as flutelike (thrushes), abrupt (Acadian Flycatcher), ascending (Northern Parula), or harsh (grackle). Another learning device introduced in the section on woodpeckers is "pairing"—listening to similar-sounding birds in close succession so as to emphasize any diagnostic differences.

The great merit of these cassettes lies in the selection and pinpointing of a recognizable feature of a particular bird song, a "handle," as Walton repeatedly calls it, that is not only distinctive of the species' song but that can be learned and retained by even a nonmusical person. The amount of field experience, acoustic perception, and educational expertise required to conceive and create these tapes is incalculable. Numerous specific memory aids are suggested, but early on, Walton asks, "Does this work for you?" At intervals listeners are urged to be active and independent, to find a personal "handle" in the song or to create their own phonetic paraphrases and ideas that will serve to associate the bird with its song.

The bird vocalizations selected cover a broad range of widespread and vocal birds. The focus of attention is on primary song and song substitutes (like the drumming of the ruffed grouse) that are heard chiefly in the breeding season. But also included are call notes that are sufficiently distinctive to be helpful in recognition.

How is the subject matter arranged for ease of learning? The bird songs are organized into sensible "learning groups," based mostly but not entirely on acoustic similarity. The number of species included in any one unit varies between three and ten. Ten of the seventeen learning groups compare the songs of only three or four species, an arrangement that makes for easy mastery. The groups have been given descriptive titles, such as Sing-Songers, Chippers and Trillers, High-pitchers, Whistlers, Name-sayers, and Warbling Songsters, which often provide a useful association to the sound produced by the birds in that category. Other groups are titled Mimics, Woodpeckers, Hawks, Owls and a Dove (why not hooters?), Commoners, Wood Warblers and a Warbling Wren; Simple Vocalizations, Complex Vocalizations, and Thrushes.

The sequence of these learning groups has been arranged to provide contrast, with the result that the listener's interest is held, the ear is stimulated by the constant change of pace, and sensory fatigue is avoided. For example, the varied and musical vocalizations of the mimicking thrushes are followed by the unmusical squeaks and rattles of woodpeckers; the melodic caroling of robin

sound-alikes in Sing-Songers precedes the screams and whistles of hawks, which are followed by the mechanical songs of Chippers and Trillers (Swamp and Chipping Sparrows, junco, and Pine Warbler). I repeat, it is a pleasure just to listen.

The most complex of the learning groups—it includes ten species—is Wood Warblers and a Warbling Wren. Here the selection and arrangement of songs are indicative of the creative educational professionalism that went into this project. The unit begins with the two-noted songs of the Black-and-white Warbler and Ovenbird, both fairly easy to learn. This creates confidence in the listener. Then a challenge is presented: the Kentucky Warbler, which also has a two-noted song, is paired with the very similar-sounding Carolina Wren. The student is thus reminded that there are complexities even in simple songs, that "this could be tough" as Walton says of the Chippers and Trillers. But because the differences are pointed out intelligibly, the listener is encouraged to continue. The next five warbler songs are very distinctive: one feels certain they can be mastered with a few repetitions. Several variations of each are introduced while the narrator emphasizes the basic song pattern of each species. This segment concludes with the American Redstart, a varied vocalizer and difficult but not impossible to master. The similarity of one of its songs to the Black-and-White's song is noted, which is somewhat disconcerting. However, the listener is immediately reassured by Walton that even the most experienced birder can be confused by the redstart. Thus, the learner is led step by step, reasonably and encouragingly, through a series of ten bird vocalizations and offered a "handle" for recognizing and eventually remembering each species' song, without avoiding or minimizing the complexities that will be met in the field.

The category Commoners emphasizes the importance of becoming familiar with the sounds made by common birds such as Blue Jays, House Sparrows, blackbirds, grackles, and Song Sparrows so that one is not constantly distracted by them. The group called Miscellaneous Vocalizations includes a few birds unsuited to other categories, although the Chimney Swift might reasonably have been put with the "high-pitchers" group.

On cassette side 3B nearly all of the vocalizations are played again, randomly without commentary, the species grouped this time by habitat, e.g., eastern forest edges, freshwater wetlands, etc. and announced by number. This provides a test for checking your progress as you wish or a fine review anytime.

This reviewer recommends *Birding by Ear* without qualification to beginner and old pro alike and encourages Walton/Lawson and Houghton Mifflin to do more. A guide to western bird songs is perhaps already in the works, but how about a more advanced, side-by-side analysis of sound-alike birds across the continent? And then, of course, there's Mexico...

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HOARDING BEHAVIOR IN BLUE JAYS

While putting out peanuts in the shell for a tame squirrel (she climbs up the screen door and hangs upside down chattering until served and sometimes sits on my lap to eat), I noticed that the resident Blue Jays began to pick up the peanuts and carry them off. One October afternoon, a jay made over twenty trips to the back steps while I sat two feet away. This jay was recognizable due to a foot injury. It was presumed to be a female from observations of springtime mating behavior. The jay watched the squirrel bury a peanut in the ground. When the squirrel left, the Blue Jay dug up the nut and flew off with it. Another time, she watched from a tree as the squirrel took one nut to bury, leaving a second behind. The jay swooped down, claimed the second nut, and flew off with it. I have seen jays do this in one continuous motion.

An interesting behavior occurs if two or more peanuts are available. The Blue Jays will pick up one and then the other (unless able to carry both) carefully and repeatedly as if measuring the weight of each. This seems to be a careful decision-making process that indicates a complicated level of thinking. Robert Burton in *Bird Behavior* (Granada 1985) reports that before the southwestern Piñon Jay stores pine seeds, it "first tests the soundness of each seed by appearance, weight, and tapping it with its bill."

Peanuts in the shell have proven very popular with the jays. Even in a winter when the species was scarce, I had up to six to eight coming regularly to the back door. They usually come when I call to them with a "tee-a-dee" call. Some mornings, however, the birds perch in a Norway maple by the door and call or give a fly-past near the window. Once, when I responded to the "tee-a-dee" call, I discovered it was a mockingbird imitating. Another favorite is pizza crusts. Titmice also enjoy peanuts in the shell, and it is amusing to watch them struggle to carry a large-size peanut.

Do Blue Jays actually retrieve the nuts they hide? Unlike the chickadees who hide seeds near the source—even in pockets of clothes hanging on the clothesline, jays tend to be more secretive and go farther afield to store. I have not witnessed them finding stored food. But the Blue Jay's storing behavior was known to me in childhood when a pet jay belonging to my aunt and uncle was fond of storing table scraps around the house. More than once it flew into the children's bedroom with a spherical piece of Kix cereal and deposited it in a napping cousin's ear.

Dorothy Louise Case, Needham Heights

A TITMOUSE STAKES ITS CLAIM

One warm and sunny July day I was sitting on a lounge chair on my deck, camera propped on my lap, waiting to photograph the birds coming to our hanging bird feeder. I had also filled a small ceramic dish with sunflower seeds and placed it on the deck railing. Every now and then some of the House Finches, nuthatches, goldfinches and other regulars would be pushed off the feeder by more aggressive members of these species. The displaced birds would then go over and grab a seed from the dish. Some remained on the railing to eat the seeds, others flew off with seeds to a nearby tree.

A group of House Finches were eating together around the dish when a titmouse came by and chased them away. The titmouse then sat in the dish on top of the sunflower seeds and stayed there a minute or so, just looking at the seeds and glancing around. Then the bird moved lower in the dish, looking up and chattering out some call notes as if claiming the seeds. The titmouse continued to squat down lower and lower until finally it was lying prostrate over the contents of the dish. I took pictures as the bird went into each new position until the wings spread out over the edges and just the tip of the crest stuck up. The bird did not pick up or eat any of the seeds although it left twice and returned, each time landing in the dish again. The sounds from my camera seemed not to disturb it.

This behavior was interesting because even though this titmouse appeared to be claiming the dish of seeds, it never ate any or took any away. Since the titmouse assumed a position similar to that of a bird sunbathing, perhaps that is what it was doing and the dish of seeds made a comfortable "lounge chair." Or, maybe the seeds rubbed against its chest in a soothing manner as when a bird takes a dust bath. Whatever the reason, it made an unusual photo.

Sandy B. Selesky, Westford



LE CONTE'S SPARROW AT NEWBURY

February 4-20, 1989

The Le Conte's Sparrow of 1989, the eleventh record in the state, was flushed from the "knee-high weedy sector" of the fields to the south of Little's Lane in Newbury in the late afternoon of a very cold, sunny, breezy February day by a group of twelve birders. Among them were Wayne Petersen, who identified the sparrow, Rich Brown of New Jersey, Charles Duncan of Maine, Blair Nikula, and Simon Perkins. The following excerpts are from Petersen's field report.

As the group of observers spread out over the fields,...2-3 sparrows flushed nearby and then landed about 100' ahead. One caught my eye as being particularly small, and Brown noted that it looked yellowish....The bird landed in a small cherry tree....[where it remained]....for nearly 25 minutes, thus giving everyone superb views before it...dropped...into the dense growth near the base of the tree.

In general appearance, the bird was superficially like a Grasshopper Sparrow or even a brightly colored Savannah Sparrow. Most striking was a rich, buffy orange coloration about the face, lower throat, and upper breast, coupled with a prominent white median stripe on the crown. The sides of the upper breast and the sides and flanks were plainly marked with dark streaks. These failed to form a necklace as in Henslow's Sparrow. A broad, orange buff eyebrow stripe bordered a gray cheek patch but was not clearly bounded below as in the Sharp-tailed Sparrow. The nape was grayish violet with rich reddish streaks, somewhat suggestive of the Grasshopper Sparrow. The crown was blackish, and the white median stripe widened toward the back of the crown and appeared somewhat buffy in that region of the head. The back and scapular feathers were buffy with distinctive black centers. No wingbars were apparent, and the greater coverts appeared quite colorful, being rusty red in color. The bird's underparts were white below the richly colored upper breast, as well as in the belly area. The dark streaks on the sides and flanks were washed with the same orange buff as the upper breast. Only a faint suggestion of pale eyelids gave the bird a quite different look from the prominent eye ring shown by the Grasshopper Sparrow. The head shape was not as flat on top as a Grasshopper Sparrow, nor was the pinkish bill as large. The brownish, unnotched tail seemed slightly longer than that of a Grasshopper Sparrow. At no time did the bird make any audible sound.



Le Conte's Sparrow
Photo by Dr. Joseph F. Kenneally

Newbury, MA
February 18, 1989

The bird remained in the field at the end of Little's Lane in Newbury over two weeks (February 4-20), long enough to be photographed by several people and to be well seen by many.

Ammodramus leconteii occurs in the state as an irregular vagrant. Most appearances have been in the fall, chiefly October, with an occasional spring record. The earliest records of this species in Massachusetts include a bird at Truro October 19-22, 1969 (Clem, Bailey et al.), one at Eastham on November 18, 1970 (Kenneally), and a specimen collected at Manomet on September 4, 1971 (Museum of Comparative Zoology #330035).

Like its fellow congeners the Grasshopper, Henslow's, Sharp-tailed, and Seaside sparrows, Le Conte's is secretive, difficult to flush, and quickly settles out of sight in the grass. Because it produces only a brief, nondescript, buzzing or hissing, insectlike song, it is hard to find, to hear, and to observe. It tends to scurry mouselike through weedy tangles, giving the birder only brief glimpses through a cross-hatching of grasses. It is one of the smallest (five inches) of the sparrows. Its most striking features are well described in Petersen's report.

The habitat preferred by this species is wet grass or sedge meadows and the shrubby tangles and matted or tall rank grasses on the edges of marshes and bogs. During migration and in winter, these birds are found in weedy fields, as well as in areas of broomsedge or in cattails. Le Conte's Sparrows nest in the prairie marshes of Canada and north central United States and migrate regularly through the Great Plains east to the Mississippi Valley, irregularly through the Ohio Valley, and only "casually" to the east coast.

Dorothy R. Arvidson

COUNT THE NUMBERS

There is no denying the fact that many species of birds are much lower in numbers today than they were ten, or even five, years ago. And, other than the annual Christmas counts, scarcely any of the birders and trip leaders record on their daily field cards, except for the rarer birds, the numbers of the different species they see or hear. Because I have always done this, I can look back at my records of bird trips prior to World War II and note some interesting differences. For example, between forty-five and fifty Eastern Bluebirds were counted on almost every half-day trip to the Sudbury River Valley. In those halcyon days bluebirds were a common bird, but I still recorded the number of Eastern Bluebirds on each trip as best I could.

Unless this is recorded during the trip, it is hopeless to try to reconstruct numbers at the day's end. Two examples spring to mind. The first was a trip with friends during which we saw numerous American Kestrels. When we checked our lists after the trip, I asked, "Kestrels?" One person said four, another twenty. I said, "We had one on Pine Island Road, two in the common pastures, two going out toward Plum Island, and three migrating down the island, a total of eight. The other answers varied from "I guess you're right to "I don't remember all of those."

Another example was a May trip to Mount Auburn. We were only there about two hours, because we were headed for Newburyport thereafter. On the way out the gates, I asked, "How many Cape Mays?" The answers again ranged from "I haven't the foggiest" to "I think twelve." I said, "We had one opposite Mary Baker Eddy Pond in the tree where we sometimes have Orchard Orioles, two on Indian Ridge (I could still hear the first bird singing), and three more on the tree below the Dry Dell—a total of six."

Fellow birders, please start counting the numbers of each species that you see every field trip. Old coots like me won't be around forever. If others don't pick up the burden, no one will be able to supply answers to the questions such as "Are Wilson's Warblers more common this year than last? How do they stand compared to five years ago? Is there a real decline, and if so, how much?"

Believe me, as the days, weeks, months, and years go by, memories blur. Today, if I see or hear two Least Flycatchers a year, I am happy. Yet, I remember Ruth Emery telling me the story of the field trip her late husband Maurice went on with a group of birders, including Ludlow Griscom. This was a "lethal" tour, and Ruth reported that Maurice was terribly tired coming home. But the complaint he voiced was that all he could hear in his mind was, "Chebec, chebec, chebec, chebec."

Count those birds!

Henry T. Wiggin, Brookline

Sprague's Pipit
Provincetown, MA
December 22, 1988
Photo by Roger Everett



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JAN./FEB. 1989

by Glenn d'Entremont, George W. Gove, and Robert H. Stymeist

December 1988 through February 1989 was a mild, dry, snow-deficient winter season. At Boston the temperature for the period averaged 32.6 degrees, 1.3 degrees above normal. The high mark was 66 degrees on February 1, and the low was 2 degrees on December 12. Precipitation totaled just 4.14 inches, 8.03 inches less than normal and the second least amount on record for the period. The lowest precipitation was just nine years ago, December 1979-February 1980. Snowfall was only 11.9 inches, 19.6 inches under the normal for these months. The ground was bare or had just a trace of snow until February 25, a record least amount. Sunshine was 45 percent of possible at Boston. Clear days numbered 22; partly cloudy, 17; and cloudy, 51.

Observations from December 1988 through February 1989 have been combined and are presented here. The results of the annual Christmas Bird Counts (CBCs) are not included in this tabulation, but the complete figures from the eastern Massachusetts CBCs, except Westminster, are displayed in table form elsewhere in this issue. We will return to the usual monthly compilations with March 1989 in the next issue.

The Boston Harbor monitoring program continued through the period. These observations are shown as reports from Boston Harbor (includes the area from East Point in Nahant to the Weir River in Hingham) with MAS/TASL (Massachusetts Audubon Society/Take A Second Look) listed as the observers. R.H.S.

LOONS THROUGH WATERFOWL

The Cape Cod Bird Club (CCBC) conducted its sixth annual Lake and Pond Waterfowl Survey on the weekend of December 3-4, 1988. A total of thirty-five observers censused 284 ponds and recorded a total of 11,756 birds of twenty-six species. According to compiler Blair Nikula only four species were found in numbers notably above last year's totals: Canada Goose (up 36%), American Wigeon (up 86%), Common Merganser (up 68%) and Red-breasted Merganser (up 173%). Eight species were down substantially from last year: Pied-billed Grebe (down 65%), Northern Pintail (down 43%), Gadwall (down 47%), Redhead (down 46%), Ring-necked Duck (down 58%), Common Goldeneye (down 29%), Ruddy Duck (down 75%), and American Coot (down 69%). In the field records, these observations are shown as reports from Cape Cod with CCBC Lake and Pond Survey listed as the observers. Anyone interested in a town-by-town summary, as well as a five-year summary, should send a self-addressed, stamped, business-sized envelope to Blair Nikula, 23 Atwood Lane, Chatham, MA 02633.

The Massachusetts Division of Fisheries and Wildlife conducted its annual midwinter coastal waterfowl survey on January 3 and 10, 1989. On January 3, the area covered the coast from Salisbury to New Bedford. On January 10, a team flew over the Elizabeth Islands, Martha's Vineyard, and Nantucket. In all, the Division counted 21,615 American Black Ducks, up from the 19,035 counted last year. The Common Eider count of 22,625 was the lowest since 1962. Other interesting results included 12,455 Canada Geese, down from the record high of 18,135 last year. It should be noted that in 1988 the ground was covered with snow during the survey period. This year geese were able to remain on inland fields and golf courses. For more information about this survey, contact H W Heusmann, Division of Fisheries and Wildlife, Field Headquarters, Westboro, MA 01581.

A presumed Pacific Loon was found near Bass Rocks in Gloucester in mid-February but could not be found later. A Western Grebe, first noted off Marconi Station in South Wellfleet on January 18, was seen later the same day farther north off LeCount Hollow Beach. Another Western Grebe was present in Rye, NH through most of the period.

As many as 110 Red-necked Grebes were counted at Gun Rock in Hull with several reports of nearly breeding-plumaged individuals by the end of February. A maximum of 76 Double-crested Cormorants was noted in Boston Harbor in early December and as many as 10 were still around in late February.

There were good numbers of Great Blue Herons observed throughout the period. Great Egrets were found in North Scituate and on Nantucket, but only 3 Black-crowned Night-Herons were reported in addition to those seen on the CBCs.

Four **Tundra Swans**, first found on the Martha's Vineyard CBC, were still around or returned on February 20. Along the Acushnet River in New Bedford, 2 or 3 Greater White-fronted Geese and a **Barnacle Goose** were found on December 18 during the New Bedford CBC. The Barnacle Goose remained there through January 25, and the white-fronted geese continued throughout February. The origin of these birds will probably remain a mystery. Barnacle Goose is a western Palearctic species breeding in eastern Greenland and wintering in northwestern Europe. There are few records for the United States. This species is not an unusual one to be kept in captivity.

The relatively mild winter kept many ponds open during the winter, though unfortunately a cold spell just before the CBC period froze many ponds for a short time. The **Tufted Duck** found on the Buzzards Bay CBC was seen off and on in the Sandwich area through the end of February. Other highlights included reports of 7 Eurasian Wigeons, 5 King Eiders, and good numbers of Harlequin Ducks and Barrow's Goldeneyes. R.H.S.

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Red-throated Loon 12/4, 12/31	Rockport, E. Orleans	3, 5	M. Lynch#, A. Williams	
Arctic/Pacific Loon 2/12	Gloucester	1	T. French	
Common Loon thr	Ipswich (Cranes B.)	15-35	D. Rimmer	
thr	P.I.-Newburyport	29 max 2/28	D. Chickering + v. o.	
thr	Cape Ann	14 max 2/26	G. d'Entremont + v. o.	
Pied-billed Grebe 12/3-4	Cape Cod	56	CCBC Lake and Pond Survey	
2/11	Nantucket H.	3	R. Stymeist#	
Horned Grebe thr	Boston H.	196 max 2/26	MAS/TASL + v. o.	
thr	N. Scituate	32 max 1/2	SSBC (S. Higginbotham) + v. o.	
thr	Cape Ann	20 max 2/5	J. Berry + v. o.	
Red-necked Grebe thr	Hull (Gun Rock)	110 max 12/1	P. Thayer + v. o.	
thr	Cape Ann	23 max 1/29	J. Berry + v. o.	
thr	N. Scituate	35 max 12/27	T. Aversa + v. o.	
Western Grebe (details submitted) 1/18	Wellfleet (two locations)	1	H. + N. Ober	
Northern Gannet thr	Cape Ann	50+ max 1/31	J. Brown + v. o.	
12/3	Chatham	2000	B. Nikula#	
1/3, 1/21	Provincetown	100, 350	R. Titus, SSBC (R. Fox)	
2/25	Eastham (F.E.)	500+	W. Petersen#	
Great Cormorant thr	Boston Harbor	56 max 2/26	MAS/TASL + v. o.	
thr	Newburyport Harbor	76 max 2/14	T. Aversa + v. o.	
12/13, 12/18	Waltham, Jamaica Plain	1 imm, 1 imm	R. Forster, H. D'Entremont	
1/18, 1/20	Nahant	85, 85	T. Aversa, R. Forster	
2/20, 2/26	Lakeville, Rockport	2, 44	W. Petersen#, G. d'Entremont#	
Double-crested Cormorant thr	Boston Harbor	76 max 12/4	MAS/TASL + v. o.	
12/7, 12/30	P.I., Hyannis	2, 1	W. Drew#, D. Brown#	
1/29	Plymouth	11	D. F. Oliver#	
2/18	Newburyport	1	H. Wiggin#	
American Bittern 1/29, 2/16	S. Dart. (Allens Pd)	1	LCES (D. Christiansen)	
Great Blue Heron thr	S. Dart. (Allens Pd)	11 max 12/6	LCES (D. Christiansen)	
12/4, 12/26	Boston H., Milton	19, 31	MAS/TASL, G. d'Entremont	
1/17	Plymouth	18	W. Drew#	
1/19-2/28	Hull	6 max	P. Thayer	
Reports of 1-3 individuals from many locations.				
Great Egret 1/16	N. Scituate	1	S. Hecker	
2/26	Nantucket	1	M. Litchfield	
Black-crowned Night-Heron 1/2, 1/7	Ipswich	1 imm	J. Nove	
2/9, 2/12	Orleans, Nantucket	1 ad, 1 ad	E. Williams, M. Litchfield#	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Tundra Swan				
2/20	M. V.	4	V. Laux	
Mute Swan				
thr	Gloucester	33 max 1/2	J. Brown + v. o.	
thr	Acoaxet	260 max 2/11	G. Gove + v. o.	
thr	P.I., Arlington	7 max 2/14, 2	T. Aversa + v. o., L. Taylor + v. o.	
thr	Plymouth (Billington Sea)	32 max 1/1	R. Timberlake + v. o.	
2/4, 2/11	Nantucket, New Bedford	80, 40	R. Stymeist#, M. Lynch#	
Greater White-fronted Goose				
12/18-2/28	New Bedford (Acushnet R.)	2 or 3	v. o.	
12/31	Wenham	1	R. Humphrey#	
1/31	Danvers	1	J. Brown	
Snow Goose				
12/1, 12/7	Brewster, P.I.	1, 1	P. Trull#, W. Drew#	
12/13-15	Belmont	1 imm	J. Heywood	
12/19, 1/3	Essex, WBWS	1 imm, 1 imm	J. Berry, R. Titus	
1/11, 2/11	Hamilton, Clinton	1 imm, 5	R. Humphrey, M. Lynch#	
2/14, 2/24	Dartmouth, N. Middleboro	1, 2	P. Trimble, K. Holmes	
"Blue" Snow Goose				
2/23-28	Framingham	1 ad	R. Forster	
Brant				
thr	Boston Harbor	1975 max 2/26	MAS/TASL + v. o.	
12/30	Hyannis	500	G. d'Entremont#	
1/8	Marion	500	SSBC (K. Anderson)	
Barnacle Goose				
12/18-1/25	New Bedford	1	CBC + v. o.	
Canada Goose				
thr	P.I.-Newburyport	805 max 12/26	M. Lynch# + v. o.	
thr	Wenham (Wenham Lake)	2000+	J. Brown	
thr	S. Dart. (Allens Pd)	519 max 12/6	LCES (D. Christiansen)	
thr	Sherborn	365 max	E. Taylor	
12/3-4	Cape Cod	1291	CCBC Lake and Pond Survey	
1/11	Hamilton (Myopia)	375	R. Humphrey	
1/16	Lakeville, Somerset	215, 900	W. Petersen#, R. Titus	
1/22	Arlington, Brighton	96, 290	T. Aversa, R. Stymeist	
1/28, 2/18	Harvard, Cambridge	388, 190	M. Lynch#, J. Barton	
Many reports of flocks up to 100 birds from various locations.				
Wood Duck				
12/3, 12/4	Mashpee, Harwich	6, 1	CCBC Lake and Pond Survey	
2/12	Nantucket	6	R. Stymeist#	
Green-winged Teal				
thr	P.I.	20 max 12/7	W. Drew# + v. o.	
12/3-4	Barnstable, Yarmouth, Falmouth	42, 4, 1	CCBC Lake and Pond Survey	
12/10, 12/11	Arlington, Nantucket	4, 12	L. Taylor#, R. Stymeist#	
2/15	W. Roxbury	9	T. Aversa	
American Black Duck				
thr	Boston Harbor	3462 max 1/29	MAS/TASL + v. o.	
thr	Newburyport Harbor	600 max 1/22	M. Lynch#	
thr	S. Dart. (Allens Pd)	444 max 12/20	LCES (D. Christiansen)	
thr	PRNWR	1434 max 12/26	W. Drew# + v. o.	
12/4, 12/10	Plymouth, Duxbury	600, 1300	W. Petersen#	
Mallard				
thr	Stoneham	600+ max 12/20	T. Aversa	
12/3-4	Cape Cod	1596	CCBC Lake and Pond Survey	
12/4	Boston Harbor	186	MAS/TASL + v. o.	
12/31	Natick	160	E. Taylor	
1/1	Plymouth	200+	BBC (R. Timberlake)	
2/12	Lynn	200	G. d'Entremont	
Northern Pintail				
12/12-1/22	Hull	2	P. Thayer	
12/16-28	Stoneham	3 f	T. Aversa	
12/3, 12/4	Yarmouth, Barnstable	33, 2	CCBC Lake and Pond Survey	
12/26, 12/31	P.I., W. Newbury	1, 1	W. Drew#, J. Brown	
1/15, 1/24	Westport, New Bedford	11, 1 f	G. Gove#, R. Forster	
1/26, 1/29	Boston, E. Gloucester	2 m, 1 f	T. Aversa, J. Berry#	
2/11, 2/19	Yarmouthport, Newbypt	30, 1	B. Nikula, v. o.	
Northern Shoveler				
12/20-1/22	Hull	1	P. Thayer	
1/2	Marshfield	2	SSBC (S. Higginbotham)	
1/4, 1/21	Holliston, Plymouth	1, 1	R. Hildreth, R. Titus	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Gadwall				
thr	Sandwich	29 max 2/20	W. Petersen# + v. o.	
1/1-2/28	Plymouth (Billington Sea)	12 max 2/12	W. Petersen# + v. o.	
2/10-2/14	P.I.	2	W. Drew# + v. o.	
Eurasian Wigeon				
thr	Plymouth (two locations)	2 m	v. o.	
thr	Chatham	1 m	v. o.	
thr	Nantucket	1 m	v. o.	
1/7-1/31, 2/20	Hyannis, M. V.	1, 2	S. Clifton, V. Laux#	
American Wigeon				
thr	Belmont (Clay Pit Pd)	32 max	v. o.	
thr	Plymouth (Billington Sea)	45 max	v. o.	
12/10, 12/21	Arlington, Chatham	16, 32	C. Black#, T. Aversa	
1/2	Plymouth (Bartlett Pd)	100	SSBC (S. Higginbotham)	
1/29	New Bedford	60+	M. Lynch#	
Canvasback				
thr	Falmouth	210 max 2/11	SSBC (A. Leggett) + v. o.	
thr	Nantucket	140 max 2/11	R. Stymeist# + v. o.	
thr	Westport	200 max 2/20	G. Gove# + v. o.	
thr	Lakeville	150 max 12/10	K. Holmes + v. o.	
2/19	Newburyport Harbor	1 m	W. Petersen#	
Redhead				
thr	Plymouth (Billington Sea)	12 max 1/1	M. Lynch# + v. o.	
thr	Plymouth (Jenny Pd)	16 max 1/17	W. Drew# + v. o.	
thr	Nantucket	80 max 2/12	R. Stymeist# + v. o.	
thr	Falmouth	6 max	v. o.	
Ring-necked Duck				
12/3-4	Cape Cod	73	CCBC Lake and Pond Survey	
1/2, 1/16	Plymouth, Newbypt	70, 1	SSBC (S. Higginbotham), J. Berry	
1/20-2/12	Lynn	1	R. Forster + v. o.	
2/12, 2/25	Sandwich, Arlington	150+, 1	B. Nikula, L. Taylor#	
2/26	Winchester, Lakeville	3, 5	BBC (R. Clayton), K. Holmes	
Tufted Duck				
12/17-2/28	Sandwich area	1 m	CBC (E. Nielsen#) + v. o.	
Greater Scaup				
thr	Boston Harbor	2379 max 1/8	MAS/TASL + v. o.	
thr	Falmouth	2300 max 2/19	SSBC (A. Leggett) + v. o.	
1/3, 1/29	Westport, New Bedford	160, 400+	T. Aversa, M. Lynch#	
2/4, 2/5	Lakeville, Gloucester	20, 16	K. Anderson, J. Berry#	
Lesser Scaup				
12/4	Lakeville, Harwich	20+, 20	K. Anderson, R. Rozsa	
12/31, 1/2	W. Newbury, Nantucket	2, 2	J. Brown, C. Floyd#	
1/8, 1/29	Newbury, New Bedford	1, 2	D. Chickering, M. Lynch#	
2/26	Nahant, Lakeville	2, 4	J. Berry#, K. Holmes	
scaup species				
12/3-4	Cape Cod	3395	CCBC Lake and Pond Survey	
Common Eider				
thr	Boston Harbor	7312 max 2/26	MAS/TASL + v. o.	
thr	Plymouth	1500+ max 1/1	BBC (R. Timberlake) + v. o.	
King Eider				
1/12, 1/21	Rockport	1 f	H. Coolidge#, M. Argue#	
2/5, 2/20	Hull, M. V.	1 m, 2	J. Barton, V. Laux	
2/25	Eastham (F.E.)	1 m	W. Petersen#	
Harlequin Duck				
thr	Nantucket, M. V.	8-13, 38 max	v. o., v. o.	
thr	Rockport, N. Scituate	3 or 4, 2 or 3	v. o., v. o.	
2/18-25	Provincetown	1 m	R. Rozsa# + v. o.	
Oldsquaw				
thr	Nant.-Tuckermuck I.	142000 max	CBC	
thr	Newburyport Harbor	100 max	v. o.	
Black Scoter				
thr	Rockport	2 or 3	v. o.	
Surf Scoter				
1/15, 1/29	Rockport, Plymouth	9, 18	J. Berry#, D. F. Oliver#	
2/5, 2/26	Boston Harbor	11, 6	MAS/TASL + v. o.	
White-winged Scoter				
thr	Boston Harbor	192 max 2/26	MAS/TASL + v. o.	
thr	P.I.-Newburyport	642 max 12/26	M. Lynch# + v. o.	
thr	Cape Ann	115 max 12/4	M. Lynch# + v. o.	
1/7, 1/29	P'town, Manomet	50, 35	G. d'Entremont#, D. F. Oliver#	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Common Goldeneye				
thr	Boston Harbor	2477 max 2/26	MAS/TASL + v. o.	
thr	Newburyport area	600+ max 1/14	E. Taylor# + v. o.	
12/11, 1/29	Quabbin, E. Gloucester	30, 100+	BBC (M. Lynch), J. Berry	
Barrow's Goldeneye				
thr	Nantucket, Newbypt	8-10, 1-6	v. o., v. o.	
12/5-2/18	Hull	1 or 2	P. Thayer + v. o.	
12/6	S. Carver	1 m	J. Shaw	
1/8-2/26	Boston Harbor	1-3	MAS/TASL + v. o.	
1/1-31, 1/8	Hyannis, P'town	2, 1	S. Clifton#, R. Comeau	
1/19	Manchester	1 m	A. Williams	
2/28	S. Dart. (Allens Pd)	1 m	LCES (D. Christiansen)	
Bufflehead				
thr	Boston Harbor	3051 max 1/29	MAS/TASL + v. o.	
thr	Newburyport Harbor	200+ max 2/11	G. d'Entremont# + v. o.	
12/3-4	Cape Cod	1727	CCBC Lake and Pond Survey	
Hooded Merganser				
thr	Falmouth	203 max 12/3	CCBC Lake and Pond Survey + v. o.	
thr	Plymouth	53 max 12/7	T. Aversa+ v. o.	
thr	Arlington (Spy Pd)	98 max 12/10	L. Taylor + v. o.	
12/5, 12/12	Stoneham, S. Carver	14, 15-20	T. Aversa, J. Shaw	
1/16, 1/20	Lakeville, Eastham	13, 7	W. Petersen#, E. Williams	
2/12, 2/19	Nantucket, Fall River	25, 12	R. Stymeist#, SSBC (A. Leggett)	
Common Merganser				
thr	Newburyport	298 max 12/26	CBC + v. o.	
thr	Plymouth (Billington Sea)	300 max 1/1	M. Lynch# + v. o.	
12/9, 12/10	Stoneham, Arlington	55, 79	T. Aversa, L. Taylor#	
12/11, 12/16	Quabbin (G35), S. Carver	150+, 73	BBC (M. Lynch), J. Shaw	
12/25, 12/26	Harwich, Milton	100+, 118	R. Rozsa#, G. d'Entremont	
2/11, 2/18	Arlington, Cambridge (F. P.)	43, 81	L. Taylor#, J. Barton	
2/26	Wayland	33	R. Forster	
Red-breasted Merganser				
thr	Boston Harbor	1429 max 2/26	MAS/TASL + v. o.	
1/16	Newbypt, P'town	75+, 1000+	J. Berry, W. Drew#	
Ruddy Duck				
12/1, 12/3	Arlington, Marlboro	7, 7	L. Taylor#, R. Graefe	
12/3, 12/10	Framingham	100, 50	G. Gove, J. Gordon	
12/9, 12/10	Stoneham, Waltham	2, 15	T. Aversa, L. Taylor#	
1/2, 1/10	Falmouth, Plymouth	3, 3	R. Stymeist#, R. Titus	
1/7, 1/31	Plymouth, Danvers	1, 1	T. Prince#, J. Brown	

RAPTORS

As many as 8 Turkey Vultures were reported during the period with 1-3 individuals lingering in the Blue Hills area through mid-January. Last year just 3 birds were reported in the same period. A late Osprey report was of an individual seen in Harwich on December 4.

Up to 8 Bald Eagles were found along the Merrimack River during the period, two more than last year. Other eagles were noted in East Quabbin, Lakeville, and South Dartmouth. Eight reports of Red-shouldered Hawks were received during the period, and one individual returned to its nest site as early as February 20. An adult Golden Eagle was present throughout the winter in the East Quabbin area, and Peregrine Falcon reports came from six locations including downtown Boston. R.H.S.

Turkey Vulture				
12/9-1/11	Wellfleet area	1	W. Swift + v. o.	
12/14-1/29	Blue Hills area	1-3	N. Smith + v. o.	
1/3, 1/28-2/2	Westport, Middleboro	1, 1	T. Aversa, R. Fox# + v. o.	
1/29, 2/19-20	New Bedford, Dart. area	1, 1	H. Weissberg#, P. Trimble + v. o.	
Osprey				
12/4	Harwich	1	R. Rozsa#	
Bald Eagle				
thr	East Quabbin	11 max 2/12 (4 ad + 7 imm)	M. Lynch# + v. o.	
12/4-2/18	Lakeville	3 max 1/13 (1 ad + 2 imm)	K. Holmes + v. o.	
12/26-2/28	Newburyport	6-8 (including 2 ad)	v. o.	
1/29	S. Dart. (Salters Pd)	1 imm	D. Christiansen	
Northern Harrier				
thr	P.I.-Salisbury	3-7	v. o.	
thr	Middleboro-Halifax, DWWS	2-5, 2-5	v. o.	
thr	S. Dart. (Allens Pd)	1-3	LCES (D. Christiansen)	
1/1, 1/22	E. Orleans, Duxbury B.	3, 3	A. + E. Williams, R. Fox#	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Sharp-shinned Hawk				
12/26, 12/31	Newbury, E. Orleans	1, 1	D. Chickering, A. Williams	
1/1-31	Reports of individuals from 14 locations.			
2/1-28	Reports of individuals from 6 locations.			
Cooper's Hawk				
1/1	Plymouth, Eastham (F. H.)	1, 1	BBC (R. Timberlake), R. Comeau	
1/15, 1/16	Newbury, Somerset	1, 1 ad	J. Brown#, R. Titus#	
2/4, 2/5	Salisbury, Belmont	1, 1 imm	W. Petersen#, R. Stymeist	
2/11, 2/27	Cambridge, Chatham	1 imm, 1	G. d'Entremont, P. Trull	
Northern Goshawk				
12/17, 12/19	Brookline, Natick	1, 1	H. Wiggin, E. Taylor	
1/1, 1/3	P.I., Harwichport	1, 1 imm	H. Wiggin#, B. Nikula	
1/6, 1/21	Scituate, Lakeville	1, 1	D. Clapp, K. Holmes	
1/29	Halifax, Newburyport	1 ad, 1 ad	W. Petersen, J. Brown	
2/4, 2/13	Westboro, Middleboro	1, 1 ad	E. Taylor, D. Brown#	
2/25	Chatham	1 imm	P. Trull	
Red-shouldered Hawk				
12/3, 12/9	E. Middleboro, Easton	1, 1	K. Anderson, K. Ryan	
12/26-1/14	DWWS	1	D. Ludlow# + v. o.	
1/14	Lakeville, N. Scituate	1 imm, 1	K. Holmes, SSBC (D. Ludlow)	
2/19	Fall River, Marshfield	1, 1	SSBC (A. Leggett), K. Anderson	
2/20-28	E. Middleboro	1	K. Anderson	
Red-tailed Hawk				
1/10	Braintree-Plymouth	6	R. Titus	
1/28	Salisbury Beach Reservation	5	R. Stymeist#	
2/20	Newburyport-Salisbury	12+	L. Taylor#	
2/26	Mass. Pike (Weston to Auburn)	9	L. Taylor#	
Rough-legged Hawk				
thr	P.I.-Salisbury	1-4	v. o.	
12/18-1/6	N. Middleboro	1	K. Holmes	
12/26-1/31	DWWS	1 dark, 1 light	D. Ludlow + v. o.	
1/4, 1/21-22	Ipswich, Middleboro	1, 1 light	D. Rimmer, W. Petersen#	
1/29, 2/5	Rowley, Halifax	1 dark, 1	R. Forster, W. Petersen	
Golden Eagle				
12/11-2/12	East Quabbin	1 ad	v. o.	
American Kestrel				
12/3, 1/14	Newburyport	6, 3	BBC (J. Nove), G. Gove#	
1/28, 1/29	New Bedford, Middleboro	4, 3	G. d'Entremont#, D. F. Oliver#	
Many reports of 1 or 2 individuals from a wide area.				
Merlin				
12/4, 12/20	Plymouth, Sandwich	1, 1	W. Petersen#, R. Stymeist#	
1/19, 1/21	Barnstable (S.N.), Eastham	1, 1	H. + N. Ober, SSBC (R. Fox)	
2/12, 2/24	Nantucket, Marshfield	2, 1	R. Stymeist#, D. Ludlow#	
Peregrine Falcon				
12/6	S. Dart. (Allens Pd)	1	LCES (D. Christiansen)	
12/27	DWWS	1	T. Aversa	
1/25	P.I.	1 ad (eating Bufflehead)	W. Drew#	
2/4, 2/8	Boston, Roxbury	1, 1	K. Griffiths#, N. Komar	
2/18, 2/20	P.I., Fall River	1, 1	H. Wiggin#, R. Fox#	

GALLIFORMES THROUGH DOVES

Note that the Christmas Bird Counts (CBCs) for eastern Massachusetts are summarized elsewhere in this issue and that CBC birds are not included here. Also note that the mild, snowless winter meant that many bird species lingered and apparently successfully overwintered.

Common Moorhens, scarce this year, were seen at two locations this winter with one bird spending the period near a feeder on Nantucket. Approximately 200 coots were in the Billington Sea in Plymouth. The usual shorebirds seen in winter were reported in all three months. A dowitcher (probably Long-billed) was noted in December and in February in the Hyannis-Osterville area.

There was only one report of Little Gull for the period, and up to 14 Common Black-headed Gulls were counted in the Boston Harbor area. A Mew Gull was seen at least three times through the period at Raccoon Island in Quincy, probably the same bird that has appeared there the last few winters. An adult Thayer's Gull was present in Provincetown Harbor for a few days, and Lesser Black-backed Gulls were noted at four locations.

There were two reports each of Dovekies and Atlantic Puffins during the period, and four Black Guillemots in breeding plumage were noted in Boston Harbor on a MAS/TASL count. G.W.G.

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Ruffed Grouse 12/28, 1/17	Holliston, Quabbin (G40)	3, 6	T. Aversa	
Wild Turkey 1/15, 2/12	S. Dartmouth, Hardwick	1, 8	J. Gordon#, M. Lynch#	
Northern Bobwhite 1/4, 1/10	W. Bridgewater, Mansfield	15, 6	T. Aversa	
Virginia Rail 1/2-2/12 1/21	Nantucket Eastham	4-8 1	M. Litchfield# + v. o. SSBC (R. Fox)	
Common Moorhen thr 12/3-4	Nantucket Sandwich	1 1	E. Ray fide B. Nikula	
American Coot 12/1-1/29 12/3-2/25 1/29, 2/26	Plymouth Arlington Falmouth, Lynn	200 max 1-19 12, 5	v. o. L. Taylor# D. F. Oliver, J. Berry#	
Black-bellied Plover 12/7, 1/1-2/26 2/26	P.I., Quincy Nantucket	2, 2-10 9	W. Drew#, v. o. M. Litchfield	
Killdeer 12/6-2/16 2/20	S. Dart. (Allens Pd) Westport	1 or 2 2	LCES (D. Christiansen) J. Gordon#	
Ruddy Turnstone 12/11 12/27 1/6-2/18 1/29, 2/11	Cape Ann Osterville Scituate Boston H., Nantucket	16 4 80 max 1/21 12, 37	BBC (S. Bolton) R. Jenkins# D. Clapp + v. o. MAS/TASL, M. Litchfield#	
Red Knot 1/6-2/18	Scituate	20-35	D. Clapp, R. Abrams#	
Sanderling 1/1-31 1/14, 1/29 2/5, 2/26 2/5, 2/26	Hull Lynn H., Boston H. Salisbury, Nahant Lynn	90 max 100, 140 20, 60 200, 36	P. Thayer J. Brown, MAS/TASL W. Petersen, J. Berry# MAS/TASL	
Purple Sandpiper thr thr 1/6-25	Rockport, P.I. Boston H. N. Scituate	90 max, 90 max 228 max 1/8 350 max 1/21	v. o., v. o. MAS/TASL D. Clapp + v. o.	
Dunlin thr 12/8, 1/7 1/8-2/5 2/20	S. Dartmouth Hull, Eastham Boston H. Acoaxet	53 max 1/25 35, 75 39 max 2/5 50	LCES (D. Christiansen) + v. o. P. Thayer, G. Gove# MAS/TASL G. Gove	
dowitcher species 12/27, 2/27	Osterville, Hyannis	1, 1	R. Jenkins#, P. Trimble	
Common Snipe 1/14-22, 1/22 2/4, 2/12	Ipswich, W. Newbury Salisbury, Lexington	1, 3 1, 1	J. Berry, BBC (D. + D. Oliver) W. Petersen#, L. Taylor#	
American Woodcock 12/23, 1/22 2/8-28, 2/19	Chatham, Hyannis Chatham, Sandwich	1, 1 1, 1	B. Nikula, P. Trimble L. Roscoe#, I. Giriunas#	
Little Gull 12/14	Lynn	1	J. Quigley	
Common Black-headed Gull thr 12/11-1/29 1/2-2/19	Boston Harbor Gloucester Newburyport	14 max 1 1 or 2	MAS/TASL + v. o. v. o. BBC + v. o.	
Bonaparte's Gull thr 12/4, 2/5 12/28, 2/12	Newburyport Boston Harbor Lynn	60-70 max 1152, 85 700, 14	v. o. MAS/TASL J. Quigley + v. o.	
Mew Gull 12/15-2/12	Quincy	1	D. Brown, R. Fox, G. d'Entremont	
Ring-billed Gull 12/4-31, 2/21	Plymouth	750 max, 126	W. Petersen#, J. Quigley	
Thayer's Gull 1/16-21	Provincetown Harbor	1 ad	W. Bailey, SSBC (R. Fox)	
Iceland Gull thr thr	Cape Ann Newburyport	14 max 15 max	J. Quigley# + v. o. W. Petersen# + v. o.	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Iceland Gull (continued)				
thr	Boston Harbor	1-3	v. o.	
12/29-1/8	N. Scituate	1 or 2	v. o.	
1/1-29	Provincetown	4	B. Nikula + v. o.	
Lesser Black-backed Gull				
12/6-2/5	Lynn	1 or 2	J. Quigley	
1/1-28, 1/24	Gloucester, New Bedford	1, 1	v. o., R. Forster	
2/1-28	Boston Harbor	1 or 2	R. Stymeist# + v. o.	
Glaucous Gull				
12/29-2/26	Gloucester	1 or 2	v. o.	
12/31-2/19	Newburyport	1	v. o.	
12/9, 1/1-21	Wayland, Provincetown	1 ad, 1	R. Forster, v. o.	
1/1-2/7	Hull	1	v. o.	
Black-legged Kittiwake				
12/20-2/11	Rockport	100 max	SSBC (J. Kenneally) + v. o.	
1/21, 2/25	Provincetown, Eastham	300, 600	SSBC (R. Fox), W. Petersen	
Dovekie				
12/29, 1/21	N. Scituate, Cape Ann	1, 1	R. Titus, D. Chickering	
Thick-billed Murre				
12/10, 12/25	Provincetown	1, 1	R. Comeau#, R. Rozsa#	
1/7	Provincetown	3	G. d'Entremont	
1/15, 1/31	Rockport	1, 1	J. Berry#, J. Brown#	
Razorbill				
12/31, 1/7	Nantucket, Provincetown	500, 125	G. d'Entremont#	
1/15-2/11	Cape Ann	1 or 2	v. o.	
large alcid species				
1/22	Provincetown	350	B. Nikula#	
Black Guillemot				
thr	Cape Ann	1-12	v. o.	
12/4, 1/14	Manomet, Provincetown	1, 11	W. Petersen#, B. Nikula#	
2/26	Boston Harbor	6 (4 br pl)	MAS/TASL	
Atlantic Puffin				
1/31, 2/13	Rockport, Provincetown	1, 1	J. Brown#, S. Highley	

OWLS THROUGH SWALLOWS

Owls in the Middleboro area during the period included Common Barn, Eastern Screech, Great Horned, Snowy, Barred, Short-eared, and Northern Saw-whet. Long-eared Owls were noted at three locations, and Short-eared Owls were noted at four locations with 5 or 6 birds in the Cumberland Farm fields in Halifax.

An immature Red-headed Woodpecker was seen in Wayland, and Red-bellied Woodpeckers were reported from seven locations including a male at the Daniel Webster Wildlife Sanctuary throughout the period and one or two birds at the Lloyd Center in South Dartmouth. (See CBC tabulation.) A Yellow-bellied Sapsucker was found at Nantucket. Eastern Phoebe were present through late January. G.W.G.

Common Barn-Owl				
12/26, 1/8	Bridgewater, Boston H.	1, 1	K. Holmes, MAS/TASL	
1/1-31	Nantucket	2	M. Litchfield	
Eastern Screech-Owl				
12/26, 1/1	Middleboro area	8, 14	K. Holmes	
12/17	Randolph, Holbrook, Braintree	5, 3, 2	G. d'Entremont#	
1/20, 2/11	Topsfield, Newbury	1, 1 red	BBC (C. Schubarth), E. Taylor	
Great Horned Owl				
thr	Ipswich	2	J. Berry	
12/26, 1/1	Middleboro area	3, 5	K. Holmes	
12/10, 1/2	P.I., Petersham	2, 3	BBC (W. Drummond), M. Lynch#	
Snowy Owl				
thr	P.I.	1 or 2	v. o.	
12/14-18	Boston (Logan airport)	2 or 3	N. Smith	
1/1-31	Nantucket	2 or 3	M. Litchfield	
2/15	S. Dart. (Allens Pd)	1	LCES (D. Christiansen)	
2/26	Lakeville	1	K. Holmes	
Barred Owl				
12/26-1/1	Middleboro area	2	K. Holmes	
12/26-1/23	P.I.	1	F. Burrill	
2/19	Boxford	2	W. Petersen#	
Long-eared Owl				
12/11, 1/29-2/19	Ipswich, Essex	1, 1 or 2	J. Berry#	
2/19	Nantucket	2	D. Ludlow	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Short-eared Owl				
12/30-2/20	Nantucket	1-4	D. Brown#, D. Ludlow#	
12/25, 1/18-2/19	Truro, Rowley	1, 2	R. Rozsa#, J. Berry	
1/3-2/5	Halifax-Middleboro	5 or 6	W. Petersen + v. o.	
Northern Saw-whet Owl				
12/26, 1/1	N. Middleboro, Bridgewater	1, 1	K. Holmes	
12/30, 2/18	Nantucket	1, 2	G. d'Entremont#, D. Ludlow#	
2/20	P.I.	1	L. Taylor#	
Belted Kingfisher				
12/10, 1/16	Lakeville, Newburyport	2, 2	K. Holmes, J. Berry	
2/20	Acoaxet	2	G. Gove#	
Reports of individuals from 13 locations.				
Red-headed Woodpecker				
12/20	Wayland	1 imm	T. Aversa	
Red-bellied Woodpecker				
thr	DWWS	1 m	D. Ludlow + v. o.	
12/27, 1/2	Sandwich, Nantucket	1, 1	S. Parsons#, I. Giriunas#	
1/1-31	Sterling, Westboro	1, 1	H. + N. Ober	
1/1-2/12	Hardwick	1	H. + N. Ober	
1/6-2/28	S. Dartmouth	1 or 2	LCES (D. Christiansen)	
Yellow-bellied Sapsucker				
1/2	Nantucket	1	I. Giriunas#	
Northern Flicker				
12/10, 1/1-31	Lakeville, Essex county	1, 5	K. Holmes, J. Berry	
1/25, 2/13	Orleans, Middleboro	4, 5	T. Aversa, G. d'Entremont#	
Pileated Woodpecker				
12/28-1/15	Westford	1	S. Selesky	
1/24, 2/11	Sherborn, Boxford (CP)	2, 2	R. Forster, J. Brown	
Eastern Phoebe				
12/18-1/10	Boston	1	T. Prince# + v. o.	
12/11-19	Topsfield	1	J. Brown	
12/20-21	S. Orleans	1	S. Thompson	
12/29	Waquoit	1	A. Poole	
1/21-22	Wellfleet	1	fide R. Prescott	
Horned Lark				
1/1-2/28	Ipswich	10-25	D. Rimmer	
1/5-2/19	Newbury	150-500	v. o.	
1/27	Rochester	100	R. Forster	
Tree Swallow				
12/10-1/1, 12/12	Eastham, Wellfleet	1-2, 6	R. Comeau#, J. Jacques	
1/1, 1/3	Truro, Provincetown	3, 1	D. Ludlow, R. Titus	

CROWS THROUGH SHRIKES

The Framingham crow roost consisted of up to 4200 American Crows and 200 Fish Crows. As is often true in a mild, snowless winter, Carolina Wrens were at many locations throughout the period, including 5 in Framingham. (See CBC tabulation.) Winter Wrens also survived through early February, and a Marsh Wren was seen at Nantucket.

Up to 15 Eastern Bluebirds were at a feeder in Middleboro through the winter, and 2 to 4 birds of this species were noted at four other locations. Hermit Thrushes were also present, and robins were around in large numbers with 9000 tallied on the eastern Massachusetts CBCs this year as compared with 3000 last year. A large robin roost was seen in Cambridge where there was also a Bohemian Waxwing. Other reports of Bohemian Waxwings included a flock of 20 in Millis. Catbirds were noted at 13 locations, and a Brown Thrasher was seen in South Dartmouth.

A Water Pipit was seen at Georges Island in Boston Harbor in late January, but the bird of the period was the Sprague's Pipit that was found on the Stellwagen CBC at the Provincetown airport and was seen by many people at least through February 12. (If anyone knows of a later date, please let us know.) This sighting of the Sprague's Pipit constitutes the first Massachusetts state record for the species. G.W.G.

American Crow			
thr	Framingham	4200 max	E. Taylor
12/10-1/29	Bridgewater	500 max	W. Petersen
2/20	Lawrence	2000	E. Taylor
Fish Crow			
thr	Framingham	200 max	E. Taylor
Common Raven			
1/15-2/12	Quabbin	1-5	M. Lynch#

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Red-breasted Nuthatch				
thr	Quabbin	3-6	M. Lynch#	
12/10	Hamilton	4	J. Berry	
Brown Creeper				
12/21, 2/19	Quabbin (G40), Nantucket	3, 5	M. Lynch#, D. Ludlow#	
Carolina Wren				
12/6-30	Reports of individuals from 6 locations.			
1/6, 1/7	Berkeley, Framingham	4, 5	R. Titus, R. Forster	
1/15-2/20	Westport	6	G. Gove#	
2/4-19	Reports of individuals from 5 locations.			
Winter Wren				
12/3	Holbrook	1	G. d'Entremont#	
12/3, 12/6	Nahant	1, 1	C. Floyd, T. Aversa	
1/7, 1/17	Quabbin (G40), Falmouth	2, 1	M. Lynch#, W. Drew#	
2/6	Sandwich	1	P. Trimble	
Marsh Wren				
2/12	Nantucket	1	M. Litchfield	
Golden-crowned Kinglet				
12/1-1/7	Quabbin (G40)	16 max 1/7	M. Lynch#	
12/17, 1/21	N. Middleboro, Hamilton	2, 2 or 3	K. Holmes, J. Berry	
1/30, 2/4	Mashpee, Boxford (C.P.)	4, 5	P. Trimble, J. Brown	
Eastern Bluebird				
thr	Middleboro	15 max 12/5	K. Holmes + v. o.	
1/1-31, 1/29	S. Dartmouth, Lakeville	2, 3	D. Christiansen, K. Holmes	
2/11, 2/11-19	ONWR, Nantucket	4 m, 1 or 2	M. Lynch#, E. Ray	
Hermit Thrush				
1/1, 2/26	E. Orleans	1, 1	A. Williams, B. Nikula	
2/12, 2/26	Nantucket, Hamilton	1, 2	R. Stymeist#, J. Berry	
American Robin				
12/4, 12/20	Plymouth, Provincetown	50, 165	W. Petersen#, R. Stymeist#	
1/7, 1/14	Eastham, Provincetown	150, 350	SSBC (A. Leggett), B. Nikula	
1/29-2/18	Cambridge	750 max 1/30	J. Heywood + v. o.	
2/15	W. Roxbury	135	T. Aversa	
Gray Catbird				
12/30-2/26	E. Orleans	1-3	A. Williams, B. Nikula	
1/2-8, 1/15	Ipswich, Westport	1, 1	J. Berry, J. Gordon#	
1/2, 1/29	Marshfield, Squantum	2, 2	D. Ludlow, J. Barton	
2/20	Westport	3	G. Gove#	
1/2-2/3	Reports of individuals from 7 locations.			
Brown Thrasher				
2/28	S. Dartmouth	1	LCES (D. Christiansen)	
Water Pipit				
1/28	Boston H. (Georges I.)	1	J. Nove#	
Sprague's Pipit				
12/17-2/12	Provincetown Airport	1 ph	J. Smith, R. Heil# + v. o.	
Bohemian Waxwing				
1/14-2/24	N. Middleboro	4	K. Holmes	
1/29-2/5	Cambridge	1	L. Taylor# + v. o.	
2/19	Millis	20	R. Forster	
Cedar Waxwing				
12/4, 12/15	Plymouth, Middleboro	75, 20	W. Petersen#, K. Anderson	
1/2-2/24	N. Middleboro	30 max 1/14	K. Holmes	
1/2, 2/11	Barre, ONWR	32, 25	M. Lynch#	
2/9, 2/28	Billerica, Framingham	50, 40	K. Griffis, R. Forster	
Northern Shrike				
12/7-1/28	P.I.	1 or 2	W. Drew# + v. o.	
1/7	Provincetown, Hardwick	1, 1	R. Fox#, M. Lynch#	

WARBLERS THROUGH FINCHES

The abundance and availability of food, especially cedar berries and bayberries, resulted in increased numbers of Yellow-rumped and Pine warblers compared with recent years. An **Ovenbird** in Eastham was unusual, although not unprecedented.

A **Black-headed Grosbeak** was discovered at Felix Neck Wildlife Sanctuary on Martha's Vineyard on December 3. The bird was not seen for a few weeks but was relocated during the Vineyard CBC. It was then monitored closely through February 26. On that day it was observed being taken by a Sharp-shinned Hawk.

Sparrows benefited from the lack of snow cover. A **Clay-colored Sparrow** was found in Middleboro among 150 American Tree Sparrows, 4 Field Sparrows, and 20 Savannah Sparrows. A Dickcissel was

present most of the winter at a feeder in Newbury. A **Grasshopper Sparrow** was seen well at close range in a Halifax field on February 5. Other lingering sparrows included 2 Lincoln's, 2 White-crowned, and 9 Vesper. The highlight was the discovery of a cooperative **Le Conte's Sparrow** in the cornfields of the Little Estate in Newbury. Once located, this bird would walk a few feet in front of observers, providing excellent views and easy photographs. In the same field, over 90 Lapland Longspurs and over 50 Snow Buntings were found.

Rusty Blackbirds were reported from three locations with as many as 22 noted at Gethsemane Cemetery in West Roxbury, a traditional winter spot for this species. Good numbers of Eastern Meadowlarks were observed, once again probably the result of the lack of snow cover. Several Northern Orioles were noted, most at feeders. Except for Evening Grosbeaks, winter finches were absent. G.d'E. and R.H.S.

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Yellow-rumped Warbler				
12/16-2/6	S. Dart. (Allens Pd)	11 max 2/23	LCES (D. Christiansen)	
12/7-26	P.I.	46 max 12/26	M. Lynch# + v. o.	
12/24-1/1	P'town	25	v. o.	
1/14	Newburyport	1	BBC (C. Schubarth)	
2/5-18, 2/20	Essex, Millis	2 or 3, 2	J. Berry#, R. Forster	
Pine Warbler				
thr	Middleboro	20 max 1/29	R. Stymeist + v. o.	
1/30-2/28	Mashpee	1	P. Trimble	
2/24	Nantucket	1	M. Litchfield	
Palm Warbler				
1/3, 1/15	S. Dart., Middleboro	1, 1	T. Aversa, W. Petersen	
2/12, 2/13	Halifax, Middleboro	1, 1	K. Anderson, G. d'Entremont#	
Ovenbird				
12/16-17	Eastham	1	fide D. Reynolds	
Common Yellowthroat				
12/3, 1/2	MNWS, Salisbury	1, 1 f	C. Floyd, J. Berry#	
Northern Cardinal				
thr	Sherborn, Topsfield	6-8, 3-13	E. Taylor, J. Brown	
Black-headed Grosbeak				
12/3-2/26	Felix Neck WS	1	D. Small# + v. o.	
Dickcissel				
12/26-2/28	Newbury	1	CBC + v. o.	
Rufous-sided Towhee				
12/15-1/3	Easton	1	K. Ryan	
12/17, 1/2	Middleboro, Nantucket	1 f, 4	K. Holmes, R. Stymeist	
1/21, 1/28	Manomet, IRWS	3, 1	SSBC (R. Fox), B. Sims	
2/11, 2/20	Acoaxet, S. Dart.	2, 1	J. Gordon#, G. Gove#	
2/28	S. Dart. (Allens Pd)	2	LCES (D. Christiansen)	
American Tree Sparrow				
12/10-1/29	Lakeville	15 max 1/29	K. Holmes	
12/7-26	P.I.	10 max 12/26	W. Drew#	
1/15-2/13	Middleboro	150 max 1/15	v. o.	
1/2, 1/18	Salisbury, Rowley	30+, 12	J. Berry	
2/5, 2/11	Halifax, ONWR	50, 14	W. Petersen#, M. Lynch#	
Chipping Sparrow				
12/18-19, 1/15	Essex, Westport	1 ad, 1	J. Cushing#, G. Gove#	
Clay-colored Sparrow				
1/15-2/13	Middleboro	1	W. Petersen + v. o.	
Field Sparrow				
12/10	Braintree (3 locations)	1, 10, 4	G. d'Entremont	
12/26, 1/2	Milton, N. Middleboro	2, 4	G. d'Entremont, K. Holmes	
1/14, 1/18	Holliston, Eastham	5, 12	R. Hildreth, H. + N. Ober	
2/14, 2/20	Newbypt, Westport	2, 6	T. Aversa, J. Gordon#	
Vesper Sparrow				
1/14, 2/4-19	Sandwich, Newbury	2, 1	P. Trimble, v. o.	
2/27	Halifax	6	K. Anderson	
Savannah Sparrow				
12/4, 1/15	Gloucester, Middleboro	1, 20+	M. Lynch#, W. Petersen	
12/20	S. Dart. (Allens Pd)	2	LCES (D. Christiansen)	
1/12, 1/29	Salisbury, Halifax	3, 10	H. Wiggan#, W. Petersen	
2/5-19	Newbury	12 max	v. o.	
2/25	Provincetown	2	W. Petersen	
"Ipswich" Savannah Sparrow				
2/5	Salisbury	1 or 2	J. Brown	
Grasshopper Sparrow				
2/5	Halifax	1	W. Petersen#	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
Le Conte's Sparrow (details submitted)				
2/4-20	Newbury	1 ph	W. Petersen# + v. o.	
Fox Sparrow				
1/2, 1/16	Squantum, Somerset	1, 1	J. + T. Cameron, R. Titus#	
Lincoln's Sparrow				
12/8, 12/11-17	Barnstable, Belmont	1, 1	M. Tuttle, L. Taylor# + v. o.	
Swamp Sparrow				
1/7, 1/8	Ipswich, E. Boston	4, 1	J. Berry, T. Aversa	
1/29-2/26	Lakeville	1	K. Holmes	
1/16, 2/13	Newbypt, Middleboro	1, 1	J. Berry, D. Brown#	
White-throated Sparrow				
12/6-11	Topsfield	1	J. Brown	
12/19	Brookline	5	H. Wiggin	
1/1-2/28	Ipswich	4 or 5	J. Berry	
2/3, 2/12	Brookline, Cambridge	4, 20	B. Rielly#, L. Taylor#	
White-crowned Sparrow				
1/6	S. Dart. (Allens Pd)	1	LCES (D. Christiansen)	
1/20-2/28	Nantucket	1	M. Litchfield	
Dark-eyed Junco				
thr	Topsfield, Brookline	15 max, 11	J. Brown, H. Wiggin	
12/11	Quabbin (G40)	16	BBC (M. Lynch)	
1/1-2/28	Ipswich	18 max 2/25	J. Berry	
2/13	Middleboro	25	G. d'Entremont#	
Lapland Longspur				
thr	Newbury	90 max 1/14	v. o.	
1/3, 1/22	P'town, Duxbury	2, 18	R. Titus, R. Fox#	
1/29	Halifax	25	W. Petersen	
Snow Bunting				
thr	S. Dart. (Allens Pd)	29 max 12/16	LCES (D. Christiansen)	
thr	Hull	13	P. Thayer	
12/7-26	P.I.	30 max 12/7	W. Drew#	
12/11	Quabbin	6	BBC (M. Lynch)	
1/1-2/28	Newbury, Ipswich	10 max 1/14, 50 max	v. o., v. o.	
1/21, 1/28	Rockport, Boston H.	15, 13	H. Wiggin, J. Nove	
2/5	Boston Harbor	15	MAS/TASL + v. o.	
Red-winged Blackbird				
12/3, 12/16	Belmont, Natick	4, 1 m	J. Heywood, E. Taylor	
12/26, 1/1	Milton, Wayland	1, 1	G. d'Entremont, R. Forster	
2/1-11	W. Bridgewater	20+	v. o.	
2/5, 2/6	Belmont, Sandwich	7, 2	R. Stymeist#, P. Trimble	
2/20	Ipswich, Easton	2 m, 60	BBC (J. Berry), G. Gove#	
Eastern Meadowlark				
12/1-2/23	S. Dart. (Allens Pd)	15 max 1/17	LCES (D. Christiansen)	
1/24-2/28	Halifax-Middleboro	40+ max 1/29	W. Petersen + v. o.	
2/12, 2/26	Rowley, N. Middleboro	1, 7	J. Berry, K. Holmes	
Rusty Blackbird				
12/15, 1/2	Brookline, Hardwick	1, 3	H. Wiggin#, M. Lynch#	
12/27-2/19	West Roxbury	22 max 2/19	I. Giriunas + v. o.	
Common Grackle				
12/4	Belmont	1	C. Black#	
1/1	Sudbury, Wayland	2, 3	R. Forster	
1/26, 1/29	Boston, Belmont	7, 1	T. Aversa, J. Heywood	
Brown-headed Cowbird				
1/6-2/28	Burlington	60 max	M. Hall	
1/17, 1/29	Petersham, Millis	21, 70	T. Aversa, R. Forster	
2/11, 2/26	W. Bridgewater, Petersham	24, 25	G. Gove, L. Taylor#	
Northern Oriole				
12/30-early Jan	E. Orleans	2	A. + E. Williams	
12/18	Harwich	1	J. Stewart	
1/1-31	Lawrence	1	J. Hogan	
1/2, early Jan	Nantucket, Truro	1, 3	M. Litchfield, fide R. Prescott	
2/6	Sandwich	1	P. Trimble	
Purple Finch				
12/16, 2/12	Randolph, Nantucket	1, 1	G. d'Entremont, M. Litchfield	
2/12, 2/14	Quabbin (G43), Scituate	1, 1	M. Lynch#, R. Abrams	
House Finch				
12/10, 12/28	Braintree, S. Carver	25, 70	G. d'Entremont, K. Anderson	
1/1, 1/2	Ipswich, Newbypt	40, 100+ (one flock)	H. Wiggin#, J. Berry	

DATE	LOCATION	NUMBER	OBSERVERS	12/1988; 1, 2/1989
American Goldfinch				
12/31, 1/14	W. Newbury, Ipswich	10, 6	J. Brown, J. Berry	
1/8, 1/16	Lakeville, Middleboro	25, 100	K. Holmes, W. Petersen#	
2/11, 2/19	ONWR, Beverly	30, 38	M. Lynch#, J. Brown	
Evening Grosbeak				
1/2	Nantucket	1	G. d'Entremont	
1/7-15	Quabbin (G40)	23 max 1/15	v. o.	
1/15, 1/21	Hardwick, Duxbury	13, 25	H. + N. Ober, W. Bartlett	
2/16	Brookline, Whitman	1 f, 15	H. Wiggin, K. Holmes	

CORRIGENDA TO SEPTEMBER RECORDS (VOL. 17, NO. 1)

Semipalmated Sandpiper (page 42)				
8, 14	Duxbury, Chatham	169, 800	M. Kasprzyk, B. Nikula	
should read				
8, 14	Duxbury, Orleans (New I.)	169, 800	M. Kasprzyk, B. Nikula	
Buff-breasted Sandpiper (page 42)				
3, 10	S. Monomoy, Chatham	2, 2	B. Nikula	
should read				
3, 10	S. Monomoy, Orleans (New I.)	2, 2	B. Nikula, V. Abel	

PEREGRINE UPDATE

from a news release of the Massachusetts Division of Fisheries and Wildlife, 6/5/89

Two pairs of endangered Peregrine Falcons, one in Boston and one in Springfield, successfully hatched six chicks in mid-May. The first reports came when two of the four eggs in the Boston nest hatched on Saturday, May 13. The other eggs in Boston hatched, and the Boston peregrines are presently caring for a full nest, monitored by concerned and watchful neighbors.

In Springfield, the birds have nested on the twenty-first floor ledge of the Monarch Place Building, almost three hundred feet above the street. The female of the pair had selected the site, and a crew from the building prepared a "nesting tray" for her convenience should she choose this site to lay eggs. This spring she returned with her mate and settled into the tray. Of the three eggs laid, two hatched, one on May 13 and one on May 14. On Wednesday, May 17, Dr. Tom French, Assistant Director in charge of the Natural Heritage and Endangered Species Program for the Massachusetts Division of Fisheries and Wildlife, descended to the ledge to take the third egg to an incubating facility. "With only eighty pairs of peregrines along the east coast," French explains, "every individual counts." The egg, however, candled at the incubation facility, proved to be infertile.

The city of Springfield has been sharing much of the excitement of raising the young peregrines as activities are being transmitted via live television throughout the area. On Thursday, May 25, viewers reported that one of the Springfield chicks was not eating and was struggling to breathe. Once again, French rappelled down the side of the building to rescue the chick. The chick was transported to the Tufts Veterinary School's Wildlife Clinic where it was found that the chick was choking on a piece of meat lodged in its crop with a sinew that had looped around the base of its tongue. The offending piece of meat was removed and within a few days the chick had doubled its weight. On June 1, French made a third trip down the outside of the Monarch building to replace the chick in its nest. For a day the mother ignored it, and during the afternoon of June 2 the chick fell out of the nestbox onto the adjacent ledge, sending viewers into a telephone frenzy. For nearly two hours, the chick struggled to return to the nestbox, hampered in its efforts by its small size and by a violent thunderstorm. Finally, about 4 P.M. the chick managed to wedge itself against the building, gain a toehold, and catapult itself back into the nest. At that point it was herded into a corner and groomed and warmed by its mother—both the Division and the city of Springfield breathed a sigh of relief and settled in to await further developments.

Press release contact: Ellie Horwitz, Division of Fisheries and Wildlife, 508-366-4470 or 617-727-2864.

BIRD OBSERVER FIELD RECORDS

Bird Observer monthly field records represent observations from the ten counties of eastern Massachusetts (Essex, Middlesex, Worcester, Suffolk, Norfolk, Plymouth, Bristol, Barnstable, Duke, and Nantucket). Although space does not permit the inclusion of all sightings submitted, the compilers attempt to present sufficient data to document early and late dates for migratory species, maximum counts for migrants, and high or low numbers for the more common species and to note species outside of their normal ranges.

Please send eastern Massachusetts field records of any given month, no later than the 8th of the subsequent month, to Robert H. Stymeist, 98 Boylston Street, Watertown, MA 02172. The basic information that should be submitted is species name, date and place of observation, an accurate count or careful estimate, sex (if determinable), immature or adult plumage, vocalizations (if any), and observers. Species should be arranged in the current A.O.U. (American Ornithologists' Union) checklist order. Reports of species that can be difficult to identify should include details of the diagnostic characteristics observed or heard that led to the identification.

All field records received by *Bird Observer* are archived at the Massachusetts Audubon Society.

LIST OF ABBREVIATIONS

ad	adult	F.P.	Fresh Pond, Cambridge
b	banded	G37 or 40	Gate 37 or 40, Quabbin
br	breeding	H.	Harbor
dk	dark (phase)	H.P.	Halibut Point, Rockport
f	female	I.	Island
imm	immature	M.V.	Martha's Vineyard
ind	individuals	Mt.A.	Mount Auburn Cemetery, Cambridge
juv	juvenile	Nant.	Nantucket
loc	location	Newbypt	Newburyport
lt	light (phase)	P.I.	Plum Island
m	male	Pd	Pond
max	maximum	P'town	Provincetown
mi	mile	Quab.	Quabbin
migr	migrating	Res.	Reservation
n	nesting	R.P.	Race Point, Provincetown
ph	photographed	S. Dart.	South Dartmouth
pl	plumage	S.N.	Sandy Neck, Barnstable
pr	pair	Stellw.	Stellwagen (Bank)
S	summer (1S = first summer)	BBC	Brookline Bird Club
thr	throughout	BOEM	Bird Observer of Eastern Massachusetts
v.o.	various observers	CBC	Christmas Bird Count
W	winter (2W = second winter)	CCBC	Cape Cod Bird Club
w/	with	DFWS	Drumlin Farm Wildlife Sanctuary
yg	young	DWWS	Daniel Webster Wildlife Sanctuary
#	additional observers	EMHW	Eastern Massachusetts Hawk Watch
A.A.	Arnold Arboretum	FCBC	Felix Cutler Bird Club
A.P.	Andrews Point, Rockport	GMNWR	Great Meadows National Wildlife Refuge
B.	Beach	IRWS	Ipswich River Wildlife Sanctuary
B.I.	Belle Isle, E. Boston	LCES	Lloyd Center for Environmental Studies
B.R.	Bass Rocks, Gloucester	MAS	Massachusetts Audubon Society
Buzz.	Buzzards Bay	MBO	Manomet Bird Observatory
C.	cape as in Cape Cod	MNWS	Marblehead Neck Wildlife Sanctuary
Cambr.	Cambridge	NEHW	New England Hawk Watch
Corp. B.	Corporation Beach, Dennis	ONWR	Oxbow National Wildlife Refuge
C.P.	Crooked Pond, Boxford	PRNWR	Parker River National Wildlife Refuge
E.P.	Eastern Point, Gloucester	SRV	Sudbury River Valley
F.E.	First Encounter Beach, Eastham	SSBC	South Shore Bird Club
F.H.	Fort Hill, Eastham	WBWS	Wellfleet Bay Wildlife Sanctuary
F.M.	Fowl Meadow	WMWS	Wachusett Meadow Wildlife Sanctuary

CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

by Robert H. Stymeist

Data processing by Janet L. Heywood

The Eighty-ninth Annual Christmas Bird Count (CBC) sponsored by the National Audubon Society was held from December 16, 1988 to January 3, 1989. In eastern Massachusetts and a portion of Rhode Island, there are 23 count areas (see map). This summary includes the results of all these count circles with the exception of Westminster, from which no results were received. A total of 179 species, plus "Ipswich" Sparrow, were recorded in this area during the three-weekend period.

The Martha's Vineyard CBC led these counts with 122 species. The Nantucket count, the leader last year, came in second with 115 species.

The unusual species seen this year included Tundra Swan (Martha's Vineyard), Greater White-fronted and Barnacle geese (New Bedford), Blue-winged Teal (Marshfield), Tufted Duck (Buzzards Bay), Golden Eagle (Quabbin), Common Moorhen (Nantucket), Dovekie (Nantucket), **Sprague's Pipit** (Stellwagen), Black-headed Grosbeak (Martha's Vineyard), Lincoln's Sparrow (Greater Boston), and Brewer's Blackbird (Westport).

December 1988 was a bit on the cold side. To the dismay of compilers, a new record low temperature was set just before the count period. The mercury dropped to two degrees on December 12, surpassing the previous low for that date of five degrees set in 1977. The continued low temperatures of December 10-13 froze most of the ponds in our area and sent ducks moving. Waterfowl numbers dropped from some record highs in early December to just a few individuals at most freshwater ponds. The weather on the first weekend of the count period was miserable with over three inches of snow in the Boston area. Conditions improved for the next two weekends.

An abundance of food, notably cedar berries and bayberries, encouraged some species to linger. American Robins totaled 9239 individuals on the 22 counts tallied here compared with 2407 counted on the 21 counts listed last year. Robins were recorded in every count circle (except Stellwagen) with some large evening roosts noted. Other species that lingered were Gray Catbird, Cedar Waxwing, Yellow-rumped Warbler, and Pine Warbler. The Carolina Wren count total on these counts reached 354 this time compared to 241 during the last Christmas count. The lack of snow cover for most of the fall and winter before the count period also contributed to increased numbers of sparrows.

The new Quabbin count had an impressive beginning with 61 species, including a noteworthy 23 adult and 13 immature Bald Eagles as well as an adult Golden Eagle. This count also recorded the only Common Ravens for eastern Massachusetts and tallied a total of 7 Barred Owls.

In its second year, the Stellwagen count takes the honors for the rarest individual bird. The pelagic portion of the count was aborted shortly after the boat left Boston Harbor, but the land crew working the tiny section of the circle at the tip of Provincetown found a Sprague's Pipit along the runway at the Provincetown airport. This was a first state record; the bird obligingly remained for many to see through February 12, 1989.

The New Bedford CBC recorded three Greater White-fronted Geese and a Barnacle Goose along the Acushnet River. The origins of exotic waterfowl are always suspect, but these birds were reported to be of the Greenland races of their species. Perhaps they travelled by some common path to New Bedford. Twenty-one Turkey Vultures were also reported on this count.

The presence of 10 Northern Saw-whet Owls on Nantucket was impressive. Other noteworthy count totals included 379 Great Blue Herons, 34 Red-bellied Woodpeckers, 29 Eastern Bluebirds, 176 Gray Catbirds, 5300 Yellow-rumped Warblers, and 93 Eastern Meadowlarks. The Blue Jay count rebounded with 7802 tallied on the counts listed this time compared with a low count of 4660 last count period. The winter finch flight was a disappointment for the second year in a row. The Purple Finch total on the counts here was only 77 compared with 305 for last time. Evening Grosbeaks were reported on just three counts and only 62 individuals were located in our area. No crossbills were seen on the counts tabulated here.

We wish to thank all of the compilers who contributed their expertise to prepare the results for this summary. They are as follows: **Robert Coyle**, Athol (December 17); **Richard Harlow**, Buzzards Bay (December 17); **John Nove**, Cape Ann (December 18); **Blair Nikula**, Cape Cod (December 18); **Richard Walton**, Concord (January 1); **Robert Stymeist**, Greater Boston (December 18); **Warren Harrington**, Marshfield (December 26); **Sue Whiting**, Martha's Vineyard (January 3); **Peter Trimble**, Mid Cape Cod (December 27); **Brian Cassie**, Millis (December 17); **Edith Andrews**, Nantucket (January 1); **Gil Fernandez**, New Bedford (December 18); **James Berry**, Newburyport (December 26); **Trevor Lloyd-Evans**, Plymouth (December 28); **Scott Sumner**, Quabbin (December 31); **Sibley Higginbotham** and **Bob Abrams**, Quincy (December 18); **Simon Perkins**, Stellwagen (December 17); **John Kricher**, Taunton-Middleboro (December 31); **Marcia Litchfield**, Tuckernuck (December 31); **Richard Hildreth**, Uxbridge (December 31); **Dave Emerson**, Westport MA-Newport RI (December 17); **Fran McMenemy**, Worcester (December 17).

Map on facing page: Each Christmas Count Circle was located by the latitude and longitude (in degrees and minutes) of its center. Athol (1), Buzzards Bay (2), Cape Ann (3), Cape Cod (4), Central Berkshire (5), Concord (6), Greater Boston (7), Greenfield (8), Marshfield (9), Martha's Vineyard (10), Mid Cape Cod (11), Millis (12), Nantucket (13), New Bedford (14), Newburyport (15), Northampton (16), Northern Berkshire (17), Plymouth (18), Quincy (19), Springfield (20), Taunton-Middleboro (21), Tuckernuck Island (22), Uxbridge (23), Westminster (24), Worcester (25), Westport, MA/Newport, RI (26), Stellwagen Bank (27), and Quabbin (28).

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
Red-throated Loon	0	0	2	6	0	1	2	75	2	0	757
Common Loon	0	19	68	26	0	0	13	630	34	0	168
Pied-billed Grebe	0	10	0	1	0	5	0	2	6	0	3
Horned Grebe	0	93	33	3	0	42	33	45	114	0	33
Red-necked Grebe	0	0	5	5	0	8	7	9	2	0	120
Northern Gannet	0	0	4	86	0	0	3	26	1	0	316
Great Cormorant	0	20	199	85	0	223	11	284	11	0	57
Double-cr. Cormorant	0	2	0	1	0	58	0	0	0	0	28
cormorant species	0	0	0	0	0	0	0	0	8	0	0
American Bittern	0	0	0	1	0	0	0	0	0	0	0
Great Blue Heron	0	47	1	42	8	22	10	62	44	1	31
Black-cr. Night-Heron	0	1	0	12	0	3	0	1	2	0	11
Tundra Swan	0	0	0	0	0	0	0	4	0	0	0
Mute Swan	0	59	34	3	0	2	10	156	19	0	49
Gr. White-fr. Goose	0	0	0	0	0	0	0	0	0	0	0
Snow Goose	0	0	3	0	2	0	0	0	1	0	0
Brant	0	29	0	997	0	781	225	21	213	0	168
Barnacle Goose	0	0	0	0	0	0	0	0	0	0	0
Canada Goose	9	1238	2094	1762	5093	698	610	1466	1518	1796	548
Wood Duck	0	4	0	0	1	1	0	1	0	4	10
Green-winged Teal	0	3	0	17	1	9	0	7	22	0	6
American Black Duck	16	2024	1046	2857	136	1794	3032	1529	3737	146	627
Mallard	0	667	501	253	784	1493	282	491	791	848	292
Northern Pintail	0	1	1	0	0	3	1	17	54	0	0
Blue-winged Teal	0	0	0	0	0	0	2	0	0	0	0
Northern Shoveler	0	0	0	0	0	0	2	2	0	1	0
Gadwall	0	0	10	0	0	0	0	13	35	0	2
Eurasian Wigeon	0	0	0	1	0	0	0	2	0	0	1
American Wigeon	0	2	1	55	0	38	2	19	36	0	34
Canvasback	0	90	0	65	0	0	0	114	691	1	124
Redhead	0	0	0	2	0	0	0	6	0	0	64
Ring-necked Duck	0	36	1	5	8	13	0	5	210	6	6
Tufted Duck	0	1	0	0	0	0	0	0	0	0	0
Greater Scaup	0	3486	14	67	0	628	102	1025	401	0	460
Lesser Scaup	0	2	0	8	0	0	1	0	0	0	7
scaup species	0	0	0	0	0	0	0	0	29	0	0
Common Eider	0	23	206	3097	0	5420	14111	5408	8064	0	6673
King Eider	0	0	0	0	0	1	0	0	0	0	0
Harlequin Duck	0	0	3	0	0	1	0	32	0	0	8
Oldsquaw	0	56	54	25	0	0	27	105	119	0	70691
Black Scoter	0	13	12	22	0	22	30	1110	25	0	96
Surf Scoter	0	145	11	162	0	1	0	54	95	0	230
White-winged Scoter	0	198	240	239	0	69	478	9841	258	0	615
scoter species	0	0	0	0	0	0	0	0	0	0	20
Common Goldeneye	7	609	530	275	6	928	142	1707	374	0	1750
Barrow's Goldeneye	0	0	0	3	0	0	0	1	2	0	10
Bufflehead	0	1547	396	1409	0	922	507	1873	1349	0	1001
Hooded Merganser	30	208	0	114	1	75	0	41	75	4	22
Common Merganser	2	95	5	92	17	67	4	87	345	0	12
Red-br. Merganser	0	260	319	5109	0	726	200	1912	146	0	2634
Ruddy Duck	0	2	0	10	0	45	0	40	1	0	1
duck species	0	0	0	0	0	0	0	0	0	0	0

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell.	Tau-Mb.	Tuck.	Uxbr.	Westp.	Worc.
RTLO	0	17	2	0	1	1	0	0	0	6	0
COLO	2	70	62	2	4	15	0	6	0	49	4
PBGR	1	0	0	0	0	0	0	0	0	2	2
HOGR	48	31	25	39	33	0	0	0	0	86	3
RNGR	0	4	37	0	136	1	0	1	0	15	0
NOGA	0	1	4	0	0	55	0	43	0	0	0
GRCO	8	91	60	0	100	15	3	46	0	605	0
DCCO	2	0	0	0	4	1	0	5	0	3	0
cor. sp.	0	0	0	6	0	0	0	0	0	0	0
AMBI	0	0	0	0	0	0	0	0	0	0	0
GBHE	21	3	14	0	5	1	2	5	13	44	2
BCNH	0	0	2	0	2	0	0	5	0	4	0
TUSW	0	0	0	0	0	0	0	0	0	0	0
MUSW	44	4	146	0	0	0	15	0	0	285	0
GWGO	3	0	0	0	0	0	0	0	0	0	0
SNGO	0	2	2	0	0	0	1	0	0	9	0
BRAN	26	0	1	0	1468	0	0	4	0	62	0
BAGO	1	0	0	0	0	0	0	0	0	0	0
CAGO	646	2784	836	0	187	0	2548	61	794	6253	967
WODU	0	0	0	0	0	0	1	0	3	2	0
GWTE	1	11	2	0	0	0	1	0	0	2	1
ABDU	354	2931	1652	77	1562	238	295	358	125	2693	402
MALL	420	761	455	195	512	13	274	1	296	593	999
NOPI	0	4	0	0	0	0	1	1	1	12	1
BWTE	0	0	0	0	0	0	0	0	0	0	0
NOSH	0	0	0	0	0	0	0	0	0	0	1
GADW	0	1	58	0	0	0	0	0	0	2	0
EUWI	0	0	2	0	0	0	0	0	0	0	0
AMWI	0	0	97	0	11	0	10	17	0	2	1
CANV	1	0	0	0	0	0	162	0	0	26	0
REDH	0	0	9	0	0	0	1	0	0	30	0
RNDU	0	1	56	17	0	0	0	0	0	0	2
TUDU	0	0	0	0	0	0	0	0	0	0	0
GRSC	602	1	6	0	971	0	1	130	0	1455	25
LESC	423	2	4	0	0	0	1	0	0	61	0
scaup sp.	0	0	14	0	0	0	0	0	0	0	0
COEI	14	85	1364	0	643	90	0	11382	0	23	0
KIEI	0	0	0	0	0	0	0	0	0	0	0
HADU	0	0	0	0	0	0	0	0	0	36	0
OLDS	40	87	45	0	126	10	0	142000	0	10	0
BLSC	46	26	23	0	0	0	0	0	0	58	0
SUSC	85	39	769	0	2	12	0	13	0	22	0
WWSC	46	767	295	0	116	1801	0	186	0	102	0
scoter sp.	0	50	500	2	0	0	0	0	0	0	0
COGO	239	606	418	65	740	40	69	407	0	1140	26
BAGO	1	2	0	0	2	0	0	0	0	2	0
BUFF	809	311	155	10	1059	93	55	65	0	733	0
HOME	4	0	44	7	1	0	8	3	0	8	4
COME	0	298	293	399	32	1	40	5	16	115	18
RBME	128	414	352	2	523	928	11	1141	0	526	0
RUDU	0	1	3	0	0	0	0	0	0	6	1
duck sp.	0	0	0	0	0	0	0	0	16	0	0

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
Turkey Vulture	0	0	0	1	0	0	0	0	0	0	0
Bald Eagle	0	0	0	0	0	0	0	0	0	0	0
Northern Harrier	0	2	2	17	2	3	18	32	9	1	25
Sharp-shinned Hawk	1	4	1	12	6	7	4	9	10	2	6
Cooper's Hawk	0	0	2	0	1	2	0	0	1	1	1
Northern Goshawk	1	0	1	1	0	0	0	0	0	4	1
Red-shouldered Hawk	0	1	0	0	1	0	1	0	0	2	0
Red-tailed Hawk	1	4	26	13	64	38	15	48	10	13	26
Rough-legged Hawk	0	0	1	0	0	0	1	2	0	1	2
Buteo species	0	0	0	0	0	0	0	0	0	0	0
Golden Eagle	0	0	0	0	0	0	0	0	0	0	0
American Kestrel	0	6	4	6	6	11	7	3	2	7	12
Merlin	0	0	0	1	0	1	0	5	3	0	4
Peregrine Falcon	0	0	0	0	0	1	0	3	0	0	2
Ring-necked Pheasant	10	1	14	0	14	54	2	4	0	14	36
Ruffed Grouse	3	5	5	0	6	0	0	1	2	27	0
Wild Turkey	43	0	0	0	0	0	0	0	0	0	0
Northern Bobwhite	0	9	0	8	10	0	5	39	22	0	7
Clapper Rail	0	1	0	1	0	0	0	0	0	0	0
Virginia Rail	0	0	0	0	0	0	1	1	4	0	9
Common Moorhen	0	0	0	0	0	0	0	0	0	0	1
American Coot	0	5	0	1	0	9	1	0	2	0	5
Black-bellied Plover	0	0	0	0	0	0	0	12	0	0	16
Killdeer	0	3	0	2	0	1	1	6	0	1	0
Greater Yellowlegs	0	0	0	0	0	0	0	0	4	0	1
Ruddy Turnstone	0	0	0	0	0	0	0	0	0	0	21
Red Knot	0	0	0	1	0	4	0	1	16	0	0
Sanderling	0	0	1	179	0	55	0	176	24	0	220
Purple Sandpiper	0	0	89	0	0	32	0	10	0	0	35
Dunlin	0	15	17	379	0	81	141	62	5	0	0
dowitcher species	0	0	0	0	0	0	0	0	1	0	0
Common Snipe	0	3	2	2	0	1	1	20	3	0	1
American Woodcock	0	0	0	0	0	2	0	4	0	0	1
Laughing Gull	0	0	0	0	0	1	0	0	0	0	0
Little Gull	0	0	0	0	0	2	0	0	0	0	0
Common Bla.-hea. Gull	0	0	0	0	0	10	0	0	0	0	4
Bonaparte's Gull	0	4	24	2	0	137	18	18	0	0	3078
Ring-billed Gull	1	287	64	380	9	4672	195	537	444	162	76
Herring Gull	358	4863	15324	9553	1447	10739	6579	5993	10087	1900	6205
Iceland Gull	1	0	9	0	0	1	0	0	1	1	21
Lesser Bla.-bac. Gull	0	0	1	0	0	1	0	0	0	0	0
Glaucous Gull	1	0	0	0	0	0	0	0	1	0	0
Great Bla.-bac. Gull	37	382	3978	1970	236	838	771	732	1658	160	795
Black-legged Kittiwake	0	0	56	205	0	0	15	142	1	0	337
gull species	0	0	0	0	0	0	0	0	0	0	0
Dovekie	0	0	0	0	0	0	0	0	0	0	1
Thick-billed Murre	0	0	0	0	0	0	0	0	0	0	1
Razorbill	0	0	1	93	0	0	0	31	3	0	2405
Black Guillemot	0	0	30	0	0	1	0	0	0	0	4
alcid species	0	0	0	18	0	0	0	0	0	0	0
Rock Dove	357	327	561	74	894	3627	313	174	227	880	72
Mourning Dove	227	216	320	303	1362	352	140	810	209	348	516

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell.	Tau-Mb.	Tuck.	Uxbr.	Westp.	Worc.
TUVU	21	0	0	0	0	0	0	0	0	0	0
BAEA	0	2 imm	0	36	0	0	1	0	0	0	0
NOHA	6	19	2	0	0	1	1	5	0	20	0
SSHA	4	7	0	0	1	0	1	0	3	3	3
COHA	0	2	0	1	1	0	1	0	1	1	0
NOGO	0	1	0	0	0	0	0	0	1	0	1
RSHA	0	0	0	0	1	0	0	0	1	0	0
RTHA	7	40	6	11	7	0	16	2	26	24	15
RLHA	1	7	0	0	0	0	3	0	0	2	0
<i>Buteo</i> sp.	0	0	0	0	0	0	0	0	1	0	0
GOEA	0	0	0	1	0	0	0	0	0	0	0
AMKE	4	12	2	0	3	0	5	0	3	22	0
MERL	0	0	0	0	1	0	0	0	0	0	0
PEFA	0	0	0	0	0	0	0	1 ad	0	0	0
RNPH	0	20	0	1	2	0	0	1	1	8	3
RUGR	0	6	2	7	1	0	3	0	22	0	3
WITU	0	0	0	62	0	0	0	0	0	0	4
NOBO	0	0	0	0	0	0	4	0	0	0	0
CLRA	0	0	0	0	0	0	0	0	0	0	0
VIRA	0	0	2	0	0	0	0	0	0	4	0
COMO	0	0	0	0	0	0	0	0	0	0	0
AMCO	0	0	275	0	0	0	0	0	0	0	0
BBPL	2	0	0	0	15	0	0	0	0	5	0
KILL	0	1	0	0	1	0	1	0	0	2	0
GRYE	1	0	0	0	0	0	0	0	0	0	0
RUTU	1	0	0	0	7	0	0	0	0	7	0
REKN	0	0	0	0	0	0	0	0	0	0	0
SAND	0	36	21	0	45	6	0	78	0	58	0
PUSA	1	3	0	0	12	0	0	0	0	137	0
DUNL	14	2	0	0	82	1	0	7	0	103	0
dow sp.	0	0	0	0	0	0	0	0	0	0	0
COSN	0	6	5	0	2	0	0	0	0	20	0
AMWO	1	0	0	0	0	0	0	0	1	0	1
LAGU	1	0	0	0	0	0	0	0	0	1	0
LIGU	0	0	0	0	0	0	0	0	0	0	0
CBHG	0	0	0	0	0	0	0	0	0	0	0
BOGU	12	119	4	0	252	15	0	7	0	189	0
RBGU	1059	336	592	6	811	28	179	7	31	284	136
HEGU	1860	10063	8920	99	6585	2900	1407	1350	501	1983	1166
ICGU	0	14	0	0	1	10	0	0	0	0	1
LBBG	0	0	0	0	0	0	0	3	0	0	0
GLGU	0	0	0	0	0	0	0	0	0	0	0
GBBG	209	1082	1047	1	1153	990	315	585	36	207	502
BLKI	0	18	0	0	0	300	0	158	0	0	0
gull sp.	0	0	0	246	0	0	0	0	1	0	0
DOVE	0	0	0	0	0	0	0	0	0	0	0
TBMU	0	0	0	0	0	0	0	0	0	0	0
RAZO	0	0	0	0	0	0	0	83	0	0	0
BLGU	0	0	0	0	0	0	0	0	0	0	0
alcid sp.	0	0	0	0	0	13	0	0	0	0	0
RODO	663	457	263	73	454	102	380	0	609	318	718
MODO	269	823	105	122	93	11	79	0	487	748	257

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
Common Barn-Owl	0	0	0	0	0	0	0	1	0	0	2
Eastern Screech-Owl	0	10	18	2	26	32	20	3	6	39	0
Great Horned Owl	1	3	11	6	11	13	8	0	12	15	0
Snowy Owl	0	0	0	0	0	2	1	1	0	0	1
Barred Owl	0	0	0	0	0	1	0	0	0	0	0
Long-eared Owl	0	0	0	0	0	0	0	1	0	0	1
Short-eared Owl	0	1	0	0	0	1	0	0	0	0	2
Northern Saw-whet Owl	0	0	0	1	0	0	0	0	0	0	10
Belted Kingfisher	1	22	3	15	7	8	4	21	21	4	5
Red-bel. Woodpecker	0	3	0	1	5	0	2	15	1	1	1
Yellow-bel. Sapsucker	0	0	0	1	0	1	0	0	0	0	0
Downy Woodpecker	55	89	98	45	568	198	26	63	67	198	23
Hairy Woodpecker	18	5	11	4	136	22	4	17	11	36	0
Northern Flicker	0	76	19	65	14	26	27	189	87	14	161
Pileated Woodpecker	3	0	3	0	3	0	0	0	0	0	0
Eastern Phoebe	0	1	0	0	0	1	0	1	0	0	0
Horned Lark	0	19	78	52	130	55	17	2	7	0	53
Tree Swallow	0	0	0	9	0	0	0	1	0	0	0
Blue Jay	243	656	597	413	1600	210	160	308	416	312	116
American Crow	149	450	692	400	1844	1421	425	1509	636	1400	653
Fish Crow	0	0	0	0	44	1	0	0	0	2	0
Common Raven	0	0	0	0	0	0	0	0	0	0	0
Black-cap. Chickadee	932	780	1119	764	3434	1153	336	1214	491	1323	308
Tufted Titmouse	38	170	168	71	714	255	78	0	77	264	0
Red-br. Nuthatch	11	9	18	2	3	0	0	5	2	1	26
White-br. Nuthatch	63	76	127	23	494	139	20	118	27	152	11
Brown Creeper	9	11	10	5	57	5	4	11	7	36	8
Carolina Wren	0	120	4	15	4	4	6	76	21	2	0
House Wren	0	0	0	0	0	0	0	0	0	0	0
Winter Wren	0	6	2	0	2	3	1	3	1	0	0
Marsh Wren	0	0	0	1	0	0	0	2	6	0	1
Golden-cr. Kinglet	32	61	20	35	46	26	12	21	18	37	22
Ruby-crowned Kinglet	1	0	0	0	0	1	0	2	0	0	0
Eastern Bluebird	0	0	0	0	0	0	0	9	2	0	0
Hermit Thrush	0	23	4	9	0	2	1	0	4	0	4
American Robin	6	1103	160	1655	165	284	88	190	3095	51	718
Gray Catbird	0	16	1	8	3	1	2	41	23	0	18
Northern Mockingbird	11	108	112	93	282	188	45	70	105	72	46
Brown Thrasher	0	1	0	0	0	0	0	3	0	0	0
Water Pipit	0	0	2	0	0	0	0	0	0	0	0
Sprague's Pipit	0	0	0	0	0	0	0	0	0	0	0
Cedar Waxwing	65	212	39	231	433	31	43	31	174	521	67
Northern Shrike	0	0	1	0	0	0	0	0	0	0	0
European Starling	706	1544	11822	3053	3824	193668	8693	5205	3395	2700	4443
Orange-cr. Warbler	0	0	0	0	0	1	0	0	0	0	0
Yellow-rumped Warbler	0	268	73	943	0	23	52	596	298	1	2280
Pine Warbler	0	0	0	0	0	0	1	1	0	0	4
Palm Warbler	0	6	1	1	0	1	0	2	0	0	30
Common Yellowthroat	0	0	0	1	0	0	0	0	0	2	0
Yellow-breasted Chat	0	0	0	0	0	0	0	1	0	0	0
Northern Cardinal	37	278	172	162	345	244	49	180	164	224	78
Black-headed Grosbeak	0	0	0	0	0	0	0	1	0	0	0

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell.	Tau-Mb.	Tuck.	Uxbr.	Westp.	Worc.
COBO	0	0	0	0	0	0	1	0	0	2	0
EASO	2	29	0	2	18	0	8	0	14	10	1
GHOW	2	16	0	5	4	1	4	0	5	11	1
SNOW	0	3	0	0	0	0	0	0	0	0	0
BAOW	0	0	0	7	0	0	2	0	1	0	0
LEOW	0	1	0	1	0	0	0	0	0	0	1
SEOW	0	1	0	0	0	0	0	1	0	3	1
NSWO	0	0	0	0	0	0	1	0	0	0	0
BEKI	4	5	4	3	2	0	4	0	3	4	3
RBWO	1	0	0	1	0	0	0	0	1	2	0
YBSA	0	0	0	0	0	0	0	0	0	0	0
DOWO	45	167	36	82	28	1	54	1	70	48	84
HAWO	6	16	2	29	3	0	4	0	14	5	14
NOFL	24	35	32	0	19	3	17	20	14	73	0
PIWO	0	0	0	13	0	0	0	0	0	0	2
EAPH	0	0	0	0	0	0	0	0	0	0	0
HOLA	18	608	2	33	23	0	100	0	75	87	3
TRSW	0	0	0	0	0	0	0	0	0	0	0
BLJA	206	900	317	137	128	8	109	3	279	245	439
AMCR	252	878	145	164	230	22	599	22	558	434	398
FICR	0	0	0	0	0	0	1	0	0	0	0
CORA	0	0	0	8	0	0	0	0	0	0	0
BCCH	254	1700	619	955	257	30	400	11	833	426	762
TUTI	107	242	181	39	70	0	131	0	178	42	164
RBNU	1	9	4	48	0	3	4	0	1	0	5
WBNU	29	187	32	93	15	0	41	0	124	20	97
BRCR	6	13	9	32	2	1	13	0	24	3	4
CAWR	16	0	11	0	3	0	20	0	1	51	0
HOWR	0	1	0	0	0	0	0	0	0	0	1
WIWR	0	0	1	2	0	0	0	0	1	2	0
MAWR	0	0	0	0	0	0	0	0	0	1	0
GCKI	5	27	36	155	8	0	30	0	7	10	16
RCKI	0	0	1	0	1	0	0	0	0	2	1
EABL	0	0	0	10	0	0	0	0	8	0	0
HETH	0	1	2	0	1	0	0	0	0	3	0
AMRO	109	488	188	40	114	0	36	3	22	710	14
GRCA	2	4	4	0	1	0	1	1	0	50	0
NOMO	34	131	39	13	39	7	45	1	64	103	31
BRTH	0	0	2	0	0	0	0	0	0	2	0
WAPI	0	0	0	0	0	0	0	0	0	0	0
SPPI	0	0	0	0	0	1	0	0	0	0	0
CEWA	11	320	189	79	96	0	53	0	121	105	15
NOSH	0	2	0	0	0	0	0	0	0	0	0
STAR	2031	24843	5700	682	75000	47	2977	2	1831	15832	1562
OCWA	0	0	1	0	0	0	0	0	0	0	0
YRWA	61	69	131	0	77	50	134	98	4	141	1
PIWA	0	0	8	0	0	0	0	0	0	0	0
PAWA	0	2	0	0	2	0	0	0	0	4	0
COYE	0	1	1	0	0	0	0	0	0	0	0
YBCH	0	0	0	0	0	0	0	0	0	1	0
NOCA	88	145	90	12	77	10	55	0	99	210	64
BHGR	0	0	0	0	0	0	0	0	0	0	0

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
Dickcissel	0	0	0	0	0	0	0	0	0	0	0
Rufous-sided Towhee	0	14	20	8	3	0	0	32	22	1	13
Amer. Tree Sparrow	139	64	200	19	1076	326	39	52	52	767	4
Chipping Sparrow	0	2	1	2	0	0	0	0	5	0	0
Field Sparrow	0	46	2	8	10	26	8	37	28	12	0
Vesper Sparrow	0	0	0	0	0	0	0	1	0	0	0
Savannah Sparrow	0	9	1	23	1	1	0	30	24	0	24
"Ipswich" Sparrow	0	0	0	2	0	0	4	0	1	0	0
Sharp-tailed Sparrow	0	1	0	12	0	0	1	1	2	0	0
Fox Sparrow	0	1	1	0	3	0	0	1	0	0	0
Song Sparrow	1	289	111	246	206	378	63	331	202	124	252
Lincoln Sparrow	0	0	0	0	0	1	0	0	0	0	0
Swamp Sparrow	0	14	2	25	8	7	5	27	35	7	12
White-thr. Sparrow	1	341	109	168	143	111	31	219	178	37	99
White-cr. Sparrow	0	0	0	2	0	1	0	0	0	0	1
Dark-eyed Junco	342	91	277	18	1395	738	75	178	31	776	46
Lapland Longspur	0	0	0	2	1	5	0	0	0	0	0
Snow Bunting	220	0	46	7	1	5	5	20	0	2	3
Red-winged Blackbird	0	2	0	41	3	55	70	10	6	0	202
Eastern Meadowlark	0	0	0	3	0	0	10	20	27	0	15
Rusty Blackbird	0	0	0	0	3	1	18	0	1	0	0
Brewer's Blackbird	0	0	0	0	0	0	0	0	0	0	0
Common Grackle	0	1	31	0	17	2	0	1002	2	0	4
Brown-headed Cowbird	0	0	1	0	21	0	1	12	7	0	0
Northern Oriole	0	0	1	0	0	1	0	2	0	0	0
Pine Grosbeak	0	0	0	0	13	0	0	0	0	0	0
Purple Finch	10	1	6	4	11	0	3	0	1	20	1
House Finch	73	757	445	1166	867	703	257	839	761	511	376
Pine Siskin	0	0	2	0	0	0	0	0	0	18	0
American Goldfinch	138	205	108	166	552	238	81	178	279	314	60
Evening Grosbeak	58	0	0	0	0	0	0	0	0	0	0
House Sparrow	457	739	1236	510	2094	1251	328	717	521	700	257
number of species	47*	98	99	109+	71	110	90	122	106+	63	115
total birds	4925	25832	44311	40657	30737	236653	39200	50721	42942	17027	112093

	Athol	B. B.	C. Ann	C. Cod	Conc.	Gr. Bos.	Marsh.	M. V.	Mid C.	Millis	Nant.
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*plus on Athol count, a Ringed Turtle-dove

89th CHRISTMAS BIRD COUNT, 12/16/88-1/3/89

species	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell.	Tau-Mb.	Tuck.	Uxbr.	Westp.	Worc.
DICK	0	1	0	0	0	0	0	0	0	0	0
RSTO	7	0	8	0	2	0	1	2	1	16	0
ATSP	19	367	87	147	92	2	35	0	262	107	120
CHSP	0	0	0	0	0	0	2	0	0	0	0
FISP	10	7	14	0	4	0	65	0	91	16	2
VESP	0	0	0	0	0	0	0	0	0	0	0
SASP	3	2	0	0	1	0	0	1	0	12	0
"IPSP"	0	0	0	0	0	0	0	8	0	2	0
STSP	0	0	0	0	0	0	0	0	0	1	0
FOSP	1	0	0	0	0	0	0	0	1	2	0
SOSP	46	79	98	8	94	2	46	31	88	257	41
LISP	0	0	0	0	0	0	0	0	0	0	0
SWSP	2	6	16	0	5	1	0	0	1	40	4
WTSP	168	120	103	3	23	2	19	6	32	492	13
WCSP	0	0	0	0	0	0	0	0	0	17	1
DEJU	131	428	63	355	214	7	154	0	851	170	402
LALO	0	86	0	0	2	0	0	0	0	0	0
SNBU	0	91	0	157	46	72	0	0	0	14	0
RWBL	0	3	1	0	4	0	0	0	2	24	0
EAME	7	3	0	0	6	0	0	4	0	21	0
RUBL	0	0	0	3	0	0	0	0	2	0	0
BRBL	0	0	0	0	0	0	0	0	0	1	0
COGR	1	8	0	0	1	0	1	0	0	85	0
BHCO	8	12	0	0	0	0	16	0	107	12	0
NOOR	0	0	0	0	0	0	0	0	0	0	0
PIGR	0	0	0	0	0	0	0	0	0	0	0
PUFI	7	5	1	2	0	0	1	0	4	0	0
HOFI	396	760	325	76	159	0	102	0	484	642	582
PISI	0	0	0	0	0	0	0	0	0	0	0
AMGO	64	252	48	14	37	0	63	0	126	65	89
EVGR	0	0	0	3	0	0	0	0	0	0	1
HOSP	309	1386	300	280	338	0	314	0	678	481	583
# of species	86	100	87	61	87	48	75	52+	62	111+	66
total birds	12644	56941	27904	5180	95016	7962	11558	158387	10071	40347	10791
	N. B.	Newbpt.	Ply.	Quab.	Quin.	Stell.	Tau-Mb.	Tuck.	Uxbr.	Westp.	Worc.

ABOUT THE COVER: Eastern Bluebirds

Within fifteen to twenty days of hatching, the young bluebirds leave the nest, their distinctive juvenile plumage of spotted breasts and large eye rings giving them a definite "rookie" look, especially when compared with their more striking parents. Adult male Eastern Bluebirds have rich blue upperparts and chestnut underparts with a contrasting white belly and undertail. A. C. Bent said, "He carries on his back the blue of heaven and the rich brown of the freshly turned earth on his breast." Females are similar to males in distribution of colors but are paler with a brownish wash across the back that contrasts with the color of the rump and back of the head. In areas where they overlap with Western and Mountain bluebirds, female bluebirds present some identification problems, and emphasis should be placed on throat, flank, and wing colors, feather edging, and relative wing length.

Eastern Bluebirds, *Sialia sialis*, are distributed over a wide area. They breed from the Atlantic coast over eastern North America west to the foothills of the Rocky Mountains and southern Canada. The highest concentrations of Eastern Bluebirds occur in regions where the frost-free period averages at least 180 days and where there is more than twenty-four inches of precipitation a year.

Winter populations occur mainly in the middle portions of the eastern United States south throughout the breeding range. Most of the birds from the Gulf States southward are sedentary. Some hardy Eastern Bluebirds spend the winter in the northern states including New England where they sustain themselves mainly on wild berries, a necessary departure from their usual insect diet. To survive the wind and cold, they roost separately and together in hollow trees or nesting boxes. Forbush recounts a story from a woman in Stowe, Vermont, who, during a snowstorm, heard a bluebird calling in her living room and found two in the stove. They had sought shelter in the chimney and had come down the stovepipe.

During this century, the Eastern Bluebird has faced a precipitous decline and uncertain future. Reforestation of open fields, increased development, loss of natural cavity nesting sites, and competition with House Sparrows and starlings have all taken their toll. Fortunately, the downward trend apparently has reversed itself due to a nest box program. The boxes are effective substitutes for scarce natural cavities and are sometimes all that is needed to attract the birds to a particular area. This is a good thing, for it is easy to wish to encounter more bluebirds. Forbush felt the same way when he wrote, "There must be something wrong with the man who, hearing this brave and happy bird and seeing him fluttering and warbling in his lovely vernal dress, does not feel a responsive thrill."

Chur-lee, chur-lee.

J. B. Hallett, Jr.

MEET OUR COVER ARTIST

JULIE ZICKEFOOSE has created our covers for two issues in a row, and the pencil drawing of young bluebirds is the third illustration from this Connecticut artist and writer to appear on the front of *Bird Observer*. Published work by the artist has appeared in *American Birds*, on the cover of *Bird Watcher's Digest*, and in other wildlife periodicals. She is illustrating *Birds of Insular Newfoundland* and a book on Ospreys, and her paintings and drawings have been exhibited in New England and in Newfoundland.

Julie is also a wildlife rehabilitator and has written that the young birds on the cover are

... two orphaned bluebirds I raised last season (1988). Cobalt is on the left, Sapphire on the right. Their parents were killed by a cat in Durham, CT, and they were brought to us near death from hunger and exposure. But puppy chow and mealworms brought them around and they were given the run of the bedroom. They learned to come to my hand for food and soon knew how to pick up their own crickets and mealworms we tossed onto the rug for them.

I turned them loose here in the yard, where our resident bluebird family had recently fledged their brood. To my dismay, one young male took offense and repeatedly attacked Cobalt and Sapphire. Sapphire disappeared, but Cobalt survived and joined up with the resident family.

Well into the fall, I would call her name when I saw the flock, and she would drop back and circle over me. She had a distinctive three-part call note that I'll listen for this spring (1989).

Those interested in information about exhibits and commissioned work should write her at Box 84, Hadlyme, CT 06439.

Dorothy R. Arvidson

April's mystery species presents a real identification challenge. It is impossible to detect the bird's coloration or to see any pattern that may exist on the bird's underparts. Careful scrutiny of the characteristics that are visible reveals that the bird has a very thin and pointed bill, a faint suggestion of an eye ring, extensively white outer tail feathers (note especially the left rectrix), extensive pale margins on the folded tertial feathers, and a faintly streaked back.

Using the slender bill as a starting point for analysis, it is possible to dismiss immediately most seed-eating species, such as sparrows and finches, as candidates. Likewise, the presence of white outer tail feathers and the fineness of the bill eliminate will species of eastern thrushes. Thus, the options are quickly limited to only a few other bird families. Foremost of these would seem to be a warbler of some type. Fortunately, because the bird's outer left rectrix is visibly white along its entire outer edge, it is possible to eliminate all of the eastern wood-warblers. Many warblers possess white in the tail in one configuration or another, but none have entirely white outer tail feather edges. Nor do North American warblers exhibit the wide, pale tertial edges shown by the mystery bird. This characteristic is actually more typical of certain small flycatchers—a group that can be discounted by the bird's posture, small head, and thin bill. These same pale feather edges, along with the streaks on the back, also remove the Blue-gray Gnatcatcher as a possibility despite the pictured bird's white-bordered dark tail and thin eye ring.

Having eliminated these species as identification candidates, the only remaining viable possibility is that the bird in the photograph is a pipit of some type. Until December 1988 when a Sprague's Pipit appeared in Provincetown for a first state record, the Water Pipit was the only pipit species to be expected in Massachusetts. Indeed, the mystery bird's white outer tail feathers, pale-margined tertials, faintly streaked back, and thin bill all serve to identify the bird as a Water Pipit, *Anthus spinoletta*. A corresponding view of Sprague's Pipit would reveal a scaly back, a pale face and larger eye, and a finely striped crown.

This photo of an immature Water Pipit was taken in August in Colorado.



Photo by Wayne R. Petersen

AT A GLANCE

Photo by Alan Bennett



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