BIRD OBSERVER



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VOL. 25 NO. 3 JUNE 1997



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BIRD OBSERVER

• bimonthly journal • To enhance understanding, observation, and enjoyment of birds.

VOL. 25, NO. 3 JUNE 1997

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Manuscripts should be typed double-spaced on one side only on 8½" x 11" paper. Manuscripts longer than 15 typed pages (about 4500 words) may be shortened when edited. Use the current A.O.U. Check-List for bird names and sequence. Type tables on separate pages. Black-and-white photographs and graphics are best. Include author's or artist's name, address, and telephone number and information from which a brief biography can be prepared. Indicate whether an IBM-compatible diskette containing the article can be supplied. Scientific and technical articles are peer reviewed. Views expressed in *BIRD OBSERVER* are those of the authors and do not necessarily reflect an official position of Bird Observer of Eastern Massachusetts, Inc.

CONTENTS

BIRDING ADDISON, VTTERRY HALL	132
FOREST-POWERLINE EDGES, CLEARCUTTING, AND BIRD COMMUNITIESWilliam E. Davis, Jr.	144
FIRST NESTING RECORD FOR GREAT EGRET ON	
OUTER CAPE COD Jennifer Lynn Megyesi	144
LOOKING FOR WHERE TO LOOK: MAPS AND BIRD-FINDING	
	150
BOOK REVIEW: The Origin and Evolution of Birds, by Alan Feduccia	
	154
FIELD NOTES FROM HERE AND THERE	
Unusual Ruffed Grouse BehaviorTom Pirro	156
Gyrfalcon in Lowell, MA Linda Hunnewell	158
BIRD SIGHTINGS: Jan./Feb. 1997 SUMMARY	160
ABOUT THE COVER: Pileated Woodpecker	171
ABOUT THE COVER ARTIST: Barry van Dusen	172
AT A GLANCE Wayne R. Petersen	173
Cover Illustration: Pileated Woodpecker by Barry van Dusen	

ERRATA

Due to an editing error, five publications were attributed to the wrong author in the list of references in Wayne E. Petersen and William E. Davis, Jr.'s article, "Winter of the Butcher-bird: the Northern Shrike Invasion of 1995-1996" (Bird Observer 25:2, 77-83, April 1997). This information appeared correctly in the manuscript submitted by Petersen and Davis, and we regret the error. The list of references from that article should read in part:

Davis, D.E. 1937. A Cycle in Northern Shrike Emigrations. Auk 54:43-49.

Davis, D.E. 1949. Recent Emigrations of Northern Shrikes. Auk 66:293.

Davis, D.E. 1960. Recent Emigrations of Northern Shrikes. Auk 77:347-348.

Davis, D.E. 1974. Emigrations of Northern Shrikes 1959-1970. Auk 91:821-825.

Davis, D.E. and M.L. Morrison. 1988. Changes in Cyclic Patterns of Abundance in Four Avian Species. American Birds 41:1341-1347.

Davis, W.E., Jr. 1997. Hungry Northern Shrike Trapped. Bird Observer 25:99.

Davis, W.E., Jr. and W.R. Petersen. 1995. Red-breasted Nuthatches and the Winter of 1993-1994. Bird Observer 23:38-42.



BIRD OBSERVER

DEAD CREEK WMA, ADDISON, VT

by Terry Hall

Several carloads of birders had pulled into the Viewing Area along Route 17 to scope the thousands of Greater Snow Geese, looking for their smaller cousin. "Got a Ross' front and center at 150 feet and beyond the Barnacle!" came the cry. Later that month at the same spot, an incredulous group witnessed a large, long-winged bird nearly land with the geese, then fly slowly to the east towards the Green Mountains. Someone yelled, "That was a Northern Gannet!" Later that fall, two local birders were looking over these fields, now snowcovered and with few geese remaining, and spotted a Snowy Owl—with a darkmorph Gyrfalcon in hot pursuit!

These events took place in the fall of 1996 at Dead Creek Wildlife Management Area in Addison, Vermont, and illustrate the appeal of this Champlain Valley birding spot. One of sixty wildlife management areas administered by the Vermont Department of Environmental Conservation, Dead Creek consists of 2850 acres of marsh, woodlands, cultivated farmland, and dry fields. Located entirely within Addison County, Dead Creek itself flows north in three branches from Bridport for about 8 miles until the branches merge into a series of impoundments created to form the Dead Creek Waterfowl Area. This wetland extends north for another 9 miles until it joins Otter Creek west of the "city" of Vergennes. Bordered and crossed by numerous roads, most notably VT Route 17, and with several public access roads ending at the water's edge, the area can be birded easily by automobile.

No formal trail system exists, but many areas are accessible for walking. It is also possible to canoe most of the Creek, allowing closer approach to wildlife. Generally, signs indicate areas off limits to vehicles or walking, or private land if posted, so the birder can assume that entry is permitted in any area without such signs. All of the Management Area is surrounded by private land, which may or may not be posted. Discretion should always be used when entering any area that looks private, but most Vermont land owners are birder-friendly and will give permission if asked.

A retired University of Vermont professor, Bob Fuller, is credited with the creation of the Dead Creek WMA back in the 1950s. The area is managed primarily to enhance waterfowl breeding and resting. Hunting is allowed in certain areas, and fishing, wildlife study, and other forms of recreation are encouraged. At present, the State is preparing a broad-based management plan to accommodate Dead Creek's many uses, consumptive and non-consumptive alike. Interpretive displays, viewing areas, and raised platforms are either being planned or have been completed along Route 17 to provide the public easier access to the fall spectacle of Snow/Canada Goose migration stopover.

BIRD OBSERVER

Also of interest to birders are irregularly-scheduled drawdowns of one or two of the impoundments as a management tool to enhance the growth of certain plant species critical to waterfowl. First begun in 1974, drawdowns over the years have produced most of the total 38 species of shorebirds on the Vermont list, including Whimbrel, Buff-breasted Sandpiper, and Wilson's Phalarope. Since the last drawdown, in 1994, the permit process has become more complicated, but state managers have assured me that drawdowns will continue in the future.

Birding is a year-round proposition at Dead Creek, and this article will offer directions and expected species for each season. Directions to the best birding spots will be given from a starting point at the blinker light on Route 22A at the south edge of the small city of Vergennes, just past a bridge over Otter Creek. Vergennes is just off Route 7 twenty miles south of Burlington, and the town is bisected by Route 22A. A useful resource for visiting birders is the Ninth Edition of the Vermont Atlas and Gazetteer, published by DeLorme in 1996, as the Dead Creek area as described in this article is shown entirely on map 38. Older editions use a different grid system and do not show road names; I will indicate the names in this article as they appear on the road signs, even if they differ from the Atlas (as sometimes happens).

Summer

As summer approaches, fields and hedgerows along West and Slang Roads offer visiting birders a look at some unusual breeding birds. West Road can be reached from Route 22A: marked by a sign 2.4 miles from the blinker light in Vergennes, it runs west for 2.2 miles to the Stone Bridge (a new gate blocks access over the bridge), then left to a dead end and turnaround loop at 2.5 miles. Alternatively, approach this area from Slang Road by going right at the Vergennes blinker, passing unmarked Basin Harbor Road at 1.4 miles, and turning left on Slang Road at 2.9 miles. Slang Road intersects unmarked West Road at a "T" intersection 1.4 miles south of this point.

Grasshopper Sparrows, often somewhat colonial, change nesting locales from year to year, but with good conditions their buzzy songs can be heard somewhere along West Road, as can the beautiful song of the Vesper Sparrow. In some years, Bobolinks can be so numerous that their constant singing obscures more subtle songs. Early morning is a good time to listen for the plaintive whistle of Upland Sandpipers, which are known to nest in the larger fields in this area. The Loggerhead Shrike, a bird probably gone from Vermont, last nested along the fencelines of Slang Road. One can only hope for its reappearance here, as it has been nearly fifteen years since the last sighting.

Also worth a summer visit is the Brilyea Impoundment. (The name "Brilyea" will not be seen on any signs, and along with the "Farrell" and "Stone Bridge" accesses, will be referred to in this article but are no longer marked as

such.) To reach the Brilyea Impoundment, go south from the blinker light on Route 22A in Vergennes for 5.8 miles to the double blinker in Addison. Turn right (west) on Route 17 and proceed past the Headquarters buildings at 1.0 miles to the concrete bridge over Dead Creek at 2.4 miles. Immediately after the bridge, go left (south) onto an unmarked dirt road, the access to the Brilyea area. This road goes south along the marshy creek for 0.7 miles, past a parking area on the right, and at this point is blocked by a closed metal gate. Before the gate, the road forks left and continues over a bridge and raised dike (marked as a dam on the map) to the end, a turnaround parking area at 1.0 miles with a second closed metal gate.

These two gates block the lanes off to vehicles, but the birder can walk down either side of the impoundment, picking up mixed habitat nesting species such as Pileated, Downy and Hairy woodpeckers, Great Crested Flycatcher, Eastern Wood-Pewee, both cuckoos (Yellow-billed is rare), Wood Thrush, Cedar Waxwing, Red-eyed Vireo, several warblers, Field Sparrow (local), Baltimore Oriole, Rose-breasted Grosbeak, and many others. Each lane leads deep into the habitats, and the east path is shown on the Atlas map as continuing all the way out to the Nortontown Road after about a mile (I have never walked the whole way). The westerly path passes through a wooded area, a gated pasture, along a raised dike past two small impoundments, and further into woodlands. These lanes are fruitful in any season except winter, and will be discussed again in later sections.

Another productive walk for the summer birder is along Town House Road, a small dirt lane off Nortontown Road. A gravel road, Nortontown Road runs 4.1 miles between Route 22A and Jersey St., bisecting all three branches of Dead Creek. Go south on Route 22A from the double blinker at Addison for 1.8 miles, then right (west) on Nortontown Road. After 1.4 miles, the road dips down and crosses the East Branch, then climbs, and at 1.7 miles Town House Road is a left (south) turn. This road soon passes a lane to a farm to the east, then continues into the most southerly section of the Management Area. Don't try to drive all the way in, but park along the side out of the way and walk. This area has been good for sparrows (especially Grasshopper and Vesper), Bobolink, Upland Sandpiper, and many other grassland and edge birds. Not as frequently birded as West or Slang Roads, this section could produce surprises (Loggerhead Shrike or Henslow's Sparrow?) for a careful and very lucky observer.

One last summer birding technique is worth mentioning: canoeing through the marshy waterways of the Creek itself. The broader impoundments are often a bit sterile, but even the edges of these can be explored by canoe. There are places to launch a canoe or rowboat in the Brilyea access, along Route 17, at the end of West Road at the Stone Bridge area, and also in the "Farrell Access." To get to the Farrell Access road, continue west along Panton Road beyond the bridge, to the Panton four corners at 4.3 miles from the blinker on Route 22A. Turn left (south) here along Jersey St. for 2.6 miles (do not bear right anywhere; go straight) to a dirt road on the left with a Fish and Wildlife Access sign. This lane leads through the fields, crosses a raised dike, and dead-ends after about 0.75 miles at a turnaround on the west bank of Dead Creek. This is a good place to put in a canoe and go either north to the Stone Bridge impoundment or south to the bridge over Route 17 and Brilyea. In summer, this area may hold unusual waders such as Glossy Ibis, Little Blue Heron, Snowy and Great egrets, perhaps even a Tricolored or Yellow-crowned Night-Heron, in addition to the common marsh birds. A word of caution here: summer birders should come prepared with insect repellent, sun screen, and a broad-brimmed hat!

Fall

Fall migration can be the most exciting time in the Dead Creek area, but shorebirding is dependent on the drawdown of one of the impoundments. Two gates control the levels, one at the dam in Brilyea, the other under the Stone Bridge at the end of West Road. In an effort to allow seed germination of plant species utilized by waterfowl, water levels are lowered slowly, starting in July, and the moist edges are soon covered by new growth. As the plants go to seed, water levels are allowed to rise again in September so that by fall the waterfowl can dabble in the lush shallows. This period coincides with shorebird migration; by August, if conditions are right, these new mudflats teem with birds. The feeding frenzy continues right into October, when water levels are usually back to normal, and late migrants such as American Golden-Plover, Long-billed Dowitcher, and Dunlin may be on the scene. If a drawdown is scheduled, the word gets out early and we prepare to monitor it closely. Several strategies are useful and will be discussed in some detail.

It appears impossible to predict when and where birds will drop in once suitable habitat shows, so frequent visits are the key. At the Brilyea impoundment, which has been lowered most frequently, one must check several areas that are some distance apart and cannot be viewed from one spot. A walk down either the east or west paths, beyond the red metal gates, is necessary to view the shallower spots; on the west side in particular, you will come to an arm of the creek just beyond the pasture and before the dike area. Here numerous old stalks of flooded bushes are used by shorebirds as shelter from predators. Careful searching may yield peeps or phalaropes hiding in this growth.

The further up this arm, the drier it gets, as this area drains first. A walk along the edge of this impoundment can be a good way to see the entire pool, but be VERY careful to avoid deep mud and stay on the dry edges. Back down toward the dam, the water is deeper, forming many pools along the edges. It was here a pair of American Avocets spent over two weeks in 1994, along with yellowlegs, Stilt Sandpipers, both Red-necked and Wilson's phalaropes, and Baird's Sandpipers. Keep an eye out for raptors, especially Merlins and Peregrine Falcons, harassing these shorebirds. Studying a flushed flock can result in a quick view of a good bird, like the Curlew Sandpiper that was seen only briefly and then disappeared for good.

As fall progresses, the emphasis changes from shorebirds to waterfowl, and the Viewing Area (a half-mile gravel pull-out along Route 17) becomes center stage. By the middle of October, a buildup of geese is evident, with Canada and Greater Snow Geese making up the bulk of the birds. A mixture of alfalfa, weeds, and corn fields provides the geese with ample food, and the large pond behind the fields offers a roosting area at night. A farm with pastures and more cornfields is set just behind this area, to the south, and then in all directions there are many more fields of all descriptions interlaced with woodlots, hedgerows and white pine groves.

Over the years, the numbers of Canada Geese appear to be declining, and Snow Geese now far outnumber them. Data from neck bands on many of the snows indicate that these birds arrive mainly from northeast Canada via the St. Lawrence flyway; apparently they are spending less time in Quebec and more in the Champlain Valley, on both sides of the lake. Once the number of Snow Geese grew to several thousand, it was only a question of time before the first Ross' Goose was found, an immature bird in late October of 1990. A first for New England, this species has been annual ever since. Two years ago a very rare blue-phase bird was carefully studied and photographed. Usually fewer than ten birds are counted each year, never all together, but scattered among the thousands of Greater (and Lesser) Snows. Their arrival and departure changes each year, but the best time to look seems to be late October into early November. Once found, their presence is noted on the Vermont Rare Bird Alert or internet list services. In 1996, a Barnacle Goose put in a brief appearance here, its origin unknown, but quite possibly the same bird seen the previous spring in the Champlain Islands. Rarely, a Greater White-fronted Goose is found, usually in the company of Canada Geese.

The flocks of geese usually scatter by midmorning and will visit the many neighboring farm fields to forage, only to return in late afternoon to feed again and prepare to roost. A drive throughout the rest of the area is usually pointless unless no geese are along Route 17, but one other area worth checking is nearby Gage Road, down behind the farm visible to the south of the Viewing Area. Gage Road leaves Route 22A 0.9 miles south of the double blinker in Addison, goes west down the hill, and dead-ends just past the farm. Often the goose flocks can be scoped from this area, and Ross' Goose has been seen here more than once. Hunters are numerous here, however, and have permission to set up decoys in these fields. Respect the hunters' rights, giving them wide berth and never walking into these fields, which are private and outside of the boundaries of the Management Area. It is never necessary to walk into any fields to view the geese, and in fact it is not permitted under any circumstances. The geese are usually relaxed and will feed close to the fenceline along the Viewing Area, as this area is off limits to hunting and the birds seem to know it. Walking into the fields to get closer, allowing dogs to run free, or engaging in any noisy activity can put additional stress on the birds, which are in need of rest before continuing their migration. A good plan is to be here in the afternoon, search for the Ross' (or just enjoy the spectacle), and then perhaps witness the incredible sight (and sound!) of ten thousand Snow Geese as they pick up at dusk and all try to land on the pond!

This many waterfowl is an attraction for more than birders, and each fall predators appear, adding excitement and suspense. Bald Eagles are regular, and Golden Eagles are nearly annual, most often in November. Golden Eagles may stay a week or more, preying on the geese, and are easily watched from the Viewing Area. Other fall birds here include late shorebirds like American Golden Plover and Upland and Pectoral sandpipers. I am amazed that Sandhill Crane is not seen here more often than it has been. Cranes have been seen recently to the north along Slang and West Roads, but given the vast area of suitable habitat, especially cornfields, it is easy to see how one or more could be missed each year. Perhaps a visiting birder will spot one for us Vermonters. Good luck!

Winter

Winter at Dead Creek can be bleak and cold, but exciting as well. Most of the geese head south when the area freezes or when the food supply is depleted. With luck, a few Snow Geese will remain until mid-December to be counted on the first weekend of Christmas Bird Counts. If Lake Champlain is still wide open, the usual scenario for December, then huge flocks of Canadas with fewer numbers of Snows will remain on the Lake and feed in whatever fields in the area still have corn. But at this time of year, the birder's attention turns to wintering raptors and open country birds. The Ferrisburgh CBC is noted each year for its raptor list: 1996 was no exception, as a record ten species of hawks were found (not all at Dead Creek, but any one of them could have been). Oddly, Peregrine was the only miss (twelve or more pairs nest in Vermont), and the Golden Eagle seen earlier in the fall had departed, but following are the numbers found in the count circle December 21st: Bald Eagle (9), Northern Harrier (9), Sharp-shinned Hawk (6), Cooper's Hawk (5), Northern Goshawk (2), Red-tailed Hawk (49), Rough-legged Hawk (30), American Kestrel (1), Merlin (2) and Gyrfalcon (1). After the Golden Eagle had left, a dark-morph Gyrfalcon was seen several times harassing the few geese left near the Viewing Area along Route 17, and then after some snow fell in November, a Snowy Owl was seen there also. Two different gray-morph Gyrfalcons were seen later and throughout the winter, and even a white-phase bird was noted a couple of times

in Cornwall, to the south of Dead Creek. Perhaps the highest concentration of Rough-legged Hawks anywhere in the East is to be found here, with both color phases easily found. Of course these birds are spread throughout a much larger area than just Dead Creek, but if one were to spend time just within the area described in this article, then any of the above species can be expected.

Other possible owls include Great Horned, Long- (rare) and Short-eared, Saw-whet (rare at Dead Creek) and Eastern Screech-Owl. Nearly impossible to find in Maine, New Hampshire or even other parts of Vermont, the screech-owl often ranges up into the Champlain Valley, perhaps reaching the most northerly part of its range in New England here. Most of these owls can be located by either playing tapes at night (Great Horned, Saw-whet or Long-eared), in the daytime (Eastern Screech) or by waiting until dusk for Short-eared. During the winter of 1996-1997, up to four Short-eared Owls were regular at the intersection of Slang and West Roads, especially in the north-east corner. Unless conditions are brutally cold or windy, they will come off the roosts, sit on posts or snags, and then take flight over the fields and hedgerows as it gets darker.

The second good reason to visit this area in winter is to see large flocks of open country birds using the fields and roadsides throughout the valley. Horned Lark (which breeds here), Snow Bunting, Lapland Longspur, and sometimes Common and Hoary Redpoll can be found, sometimes in impressive numbers. A recent ban on the spreading of fresh manure on snowy farm fields in winter has caused some changes in distribution of these birds. Concern for runoff of nitrates into Lake Champlain is the reason for the ban, but without such spreading, Snow Bunting and Horned Lark flocks often do not have a good place to forage if snow is recent or deep. Then, the birder must cruise the roads (gravel or paved), as the flocks will gather at the edges where the plows will have scraped down to dirt and grass.

An excellent route to follow is to start down the Nortontown Road from Route 22A south of Addison, turn right (north) on Jersey Street for 1.2 miles to Route 17, and go on Route 17 for 0.8 miles to where Jersey Street again heads off to the north at the curve in West Addison. Continue 6.0 more miles all the way to Panton (turn right at the "T" at unmarked Goodrich Corners), then east toward Vergennes. This long loop should yield many flocks; look over the fields for windswept areas cleared of snow where the birds may find food. Without snow it is usually difficult to find anything unless one is lucky. If it is a "redpoll year," flocks of dozens and sometimes many hundreds can be seen in early winter, foraging in weedy fields before the snow gets too deep. Look especially for alfalfa or similar crops, as these finches will go after small seeds and can be found in constant motion, swirling around from field to field. Just as with Snow and Ross' geese, the larger the flock of Common Redpolls, the better the chance of finding one or more Hoarys in the crowd.

Spring

Spring is a marvelous time to visit Dead Creek for the first time, and this location provides many Big Day and Birdathon groups with marsh birds and many other species; the Brilyea Impoundment (see directions under "Summer") offers a "one-stop-shopping" experience for the pre-dawn crowd. To experience the birding at its best, one should be here long before sunup and spend time listening and walking the access road between Route 17 and the dam. At this hour one can hear Pied-billed Grebe, American and Least Bitterns, Green Heron, Black-crowned Night-Heron, Sora and Virginia Rail, Common Moorhen, American Woodcock, Common Snipe, Black Tern, Eastern Screech-Owl, Great Horned Owl, plus the usual array of spring migrants and resident species. It is not unusual to check off eighty species if conditions are good. A record-setting Big Day count in Vermont is 150+ species, so almost 60 percent of the total is possible here.

In woodlots surrounding these marshy areas, orioles, grosbeaks, wood warblers, thrushes, flycatchers, and woodpeckers are all possible, but to get another group of birds, one should head back out from the Brilyea access, turn right (east) on Route 17 and go 0.3 miles to the marked Viewing Area. Glass the fields and small ponds for grassland and hedgerow birds, many of which will remain to breed: Blue-winged Teal, Turkey Vulture, Northern Harrier, Red-tailed Hawk, American Kestrel, Ring-necked Pheasant (probably released), Killdeer, Spotted Sandpiper, migrating Solitary, Least, and Semipalmated sandpipers (other peeps are possible), Horned Lark, Eastern Bluebird, Vesper, Savannah, Grasshopper, White-throated, and White-crowned sparrows, Bobolink and Eastern Meadowlark. In another 0.3 miles, a short access road, heading north (left) and marked "Wildlife Area," offers more of this habitat.

Three other areas are worth mentioning here for the Spring birder, the first one right near the Brilyea access road; to the north across Route 17 and about 150 feet to the west, an old gate in the fenceline leads to a rutted lane through the field and scattered trees, past some beehives into a "peninsula" of higher ground surrounded by cattail marsh. Be prepared for muddy, wet conditions here as whatever lane there was disappears into the long grass. Walk in about one hundred vards and head to the edge of the cattails on either side. Both bitterns, rails, Marsh Wren, Swamp Sparrow, and Common Moorhen can be heard readily. The judicious use of tapes may help bring these birds into view. A probable King Rail was heard (but never seen) here in 1994, and its call taped; the identification could have been more certain had not a specimen of Clapper Rail been obtained here some years ago! Managers have tried to enhance Black Tern nesting here by churning through the cattails with a machine on loan from the U.S. Fish and Wildlife Service, called the "cookie cutter," which opens up pools in the dense cattails. Perhaps this year the terns will utilize this spot again, as they did before the cattails took over.

BIRD OBSERVER

A more reliable spot for Black Tern is along Panton Road, to the north. From the blinker on Route 22A in Vergennes, go right (west) 1.4 miles past Basin Harbor Road (not presently marked), continue past Slang Road on the left at 2.9 miles to the concrete bridge over Dead Creek at 3.3 miles. Park on either side of the bridge in one of the pulloffs (often busy with fishermen) and walk to the bridge. Unless the water levels are too high, Black Tern usually shows up here first and will nest to the north; they will perch on old duck blinds and often cruise back and forth across the bridge, allowing close views. If water levels are low, the shallower edges may contain shorebirds (a black Ruff stayed here over a week one late summer). Look here for all five swallow species in early spring and listen for Willow Flycatcher along the drier brushy margins.

Directions and accommodations

A final word on logistics should help the visiting birder enjoy this area of Vermont. From southern New England, the area is best reached via I-93 or I-91 to I-89 to the Burlington area. Birders from western areas could use Route 7 all the way to Vergennes, or the Northway (I-87) from the Albany, NY area, and over the Champlain Bridge into Vermont on Route 17 at Chimney Point. Services are readily available, including gas and food, right to Vergennes, and even locally near Dead Creek. Two options for lodging depend on the season. In summer (after Memorial Day), camping is available on the Lake Champlain shore a couple of miles south and west of Dead Creek, along Route 17 at D.A.R. State Park, or a few miles north of this at Button Bay State Park. Both sites are marked on maps, and should cater to drop-in campers or tenters.

Out-of-season facilities include motels, which abound in the Burlington or Middlebury areas but are scarce near Vergennes itself, and a number of area bed-and-breakfasts. Restaurants can be found in Vergennes; the Bridge Family Restaurant, now open all year, is the intersection of Routes 17 and 125, near the Champlain Bridge. Sandwiches and drinks are available at several country stores near Dead Creek: Burnett's Country Store at the Panton Four Corners, the West Addison General Store 3.7 miles south-west of Brilyea on Route 17, or the Addison Four Corners General Store where the double blinker light is on Route 22A.

Vermont Bird Alert in Woodstock—802-457-2779—provides current information on sightings. Feel free to contact me on the internet; my Email address is terryhall@aol.com. A comprehensive Web Site is maintained by Scott Morrical at the University of Vermont:

http://www.uvm.edu/~smorrica/sightings.html.

George "Terry" Hall resides in Shelburne, Vermont. Having lived in Alaska for 17 years, Terry has birded across the country many times and boasts an ABA area life list of nearly 750 species. A past member of the American Birding Association's Board of Directors, he currently serves as Seasonal (Fall) Editor for *Records of Vermont Birds*, sits on the Vermont Bird Records Committee, and leads tours throughout New England. He has co-authored several articles and notes on bird-finding in Alaska, including first North American records of Siberian House Martin, Red-breasted Flycatcher, and Gray Bunting.

Bird Observer Workshops_

In its continuing series of workshops on bird identification, behavior and conservation, Bird Observer is pleased to offer summer program for 1997, led by Wayne R. Petersen, field ornithologist for the Massachusetts Audubon Society.

TERNS WITH A TWIST: _____A workshop on Massachusetts terns

Massachusetts is geographically situated on the Atlantic Coast in such a way that it lies at the southern terminus of the range of the Arctic Tern and the northern terminus of the range of Forster's Tern, and also hosts some of the largest colonies of Common and Roseate terns in the Western Hemisphere. In addition to supporting five breeding tern species, plus the Black Skimmer, the Bay State is a premier locality in which to study sternids.

Exhibiting some intriguing identification problems, migration mysteries, and breeding behaviors, terns also represent one of the most conspicuous and controversial wildlife management problems in the Commonwealth. In this workshop, these various topics will be investigated, and a field trip to Cape Cod will afford participants an opportunity to observe a variety of Massachusetts tern species.

Lecture:	Friday, July 25, 1997, 7:30-9:30 PM
	Glover Memorial Hospital, Needham, MA.
Field Trip:	Saturday, July 26, 1997
COST:	\$35 per person.

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BIRD OBSERVER

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FOREST-POWERLINE EDGES, CLEARCUTTING, AND BIRD COMMUNITIES

by William E. Davis, Jr.

Powerline corridors through forests produce substantial edge—the interface between forest and clearing—and often enhanced habitat for nesting birds. This "edge effect" —with higher concentrations of bird species and individuals in forests immediately adjacent to clearings—is well known (e.g., Small and Hunter 1989, Lay 1938). Further, forest edges, and particularly clearcut areas, often have a different mix of species from forest interior (e.g., Strelke and Dickson 1980), since they produce a different mix of vegetation types and structure. This report presents the results of a five-year census of a powerline corridor and adjacent forest, compares the "edge" and "corridor" species composition with the results of other studies, and assesses the effects, if any, of clearcutting the corridor.

In March, 1986, a powerline corridor was clearcut and the cuttings removed, leaving some stumps three to four inches in diameter, from trees which had been approximately 10-15 feet high. The vegetation had been cut off 3-4 inches above the ground. The census was conducted in a 4000 foot segment of this 300-foot-wide powerline corridor between Willow and East streets in Foxboro, Massachusetts. By 1987, the cut area had recovered to produce a dense shrub layer, about three feet high, and a qualitative census of the plant community indicated that the vegetation consisted mostly of alder, gray birch, maples, hickory, aspen, and choke cherry, interspersed with patches of ferns (bracken), wild blackberry, sumac, goldenrod, green briar, and lowbush blueberry. By 1988, there were emergent trees 6-8 feet tall. By 1989, sassafras was 6-12 feet, maple up to 10 feet, oak 6-8 feet, with some shrubs 5-6 feet tall. The area was clearcut again in 1990, but to only about two feet from the ground, and 3-4 foot high patches of shrubs were apparently not cut. The edge on both sides of the powerline corridor is composed primarily of oak-maple secondgrowth forest, with most trees 30-40 feet high.

The area was censused four times in 1986, twice in 1987, and three times in 1988, 1989, and 1990, in early mornings by walking a path which runs down the center of the powerline cut. All birds seen in the powerline cut and in the trees along the edge, and birds heard in the 50 feet of forest on both sides of the corridor, were recorded on a map. All species recorded during at least two years of the study are presented in table 1. Sightings of the same species in the same location on two or more census runs were considered indicative of a territorial pair; the numbers of pairs are presented in Table 1. Birds heard in the 50 feet of forest adjoining either side of the powerline corridor were not mapped as breeding pairs.

Species	1986	1987	1988	1989	1990
Red-tailed Hawk	x		x		x
Mourning Dove	x	x	x		x
Downy Woodpecker	x	x	~	x	^
Northern Flicker	x	A	x	x	
Eastern Wood-Pewee	x		x	x	
Great Crested Flycatcher	652	x		x	x
Eastern Kingbird	x	1	2	2	2
Blue Jay	x	x	x	x	x
Black-capped Chickadee		x	x	x	x
Tufted Titmouse	x		x	x	x
House Wren	x			x	
American Robin	x	x	x	x	х
Gray Catbird	x	x	1	2	1
Northern Mockingbird	x	550	x		
Brown Thrasher	1	x	x	1	x
Blue-winged Warbler			1	1	
Prairie Warbler	1	2	3	3	3
Black-and-white Warble	r x	x	x	x	x
Common Yellowthroat	2	3	3	3	3
Scarlet Tanager	x		x		
Indigo Bunting		1	x	1	
Rufous-sided Towhee	2	2	x	2	2
Field Sparrow	3	3	2	3	3
Song Sparrow	x				1
Common Grackle				x	x
Brown-headed Cowbird	x	x	х	x	x
Northern Oriole	2	2	2	1	1
American Goldfinch				x	x
House Sparrow	x			x	
Total species	24	17	22	24	20
Total pairs (where determined)	11	14	14	19	16

 Table 1: Presence or absence of all species recorded during at least two

 years of the census period. Sighting = x; breeding pairs indicated by numbers.

BIRD OBSERVER

These census results were consistent with those of Strelke and Dickson (1980) in a Texas study, which found that Indigo Buntings and Prairie Warblers were associated with clearcuts, and Great Crested Flycatchers and Eastern Wood-Pewees were primarily edge species. They also found the Black-andwhite warbler more commonly on woodland edge than in the interior but ranked it as a "woods" species. Anderson et al. (1977) found Prairie Warblers, Indigo Buntings, and Field Sparrows were particularly common species on their study corridors. Field Sparrows and Prairie Warblers did well on the Foxboro study plot, but Indigo Buntings appeared to be more marginal (Table 1). Kroodsma (1982), in a Tennessee study of edge effect of a powerline corridor, also ranked Prairie Warbler, Indigo Bunting, and Field Sparrow as corridor species. Johnston (1947) listed as forest-edge birds, among others, Field Sparrow, Mourning Dove, Goldfinch, Blue Jay, American Robin, Indigo Bunting, Common Yellowthroat, House Wren, and Eastern Wood-Pewee, all species found along our powerline. Shugart and James (1973) found Blue-winged Warbler to be primarily an edge species. Conner et al. (1983) suggested that clearcutting provides excellent habitat for birds specializing in early successional habitat, such as Prairie Warblers and Indigo Buntings. The Foxboro powerline corridor appears to support a typical mix of edge and shrub species.

The presence of Brown-headed Cowbirds each year (Table 1) underscores one of the drawbacks of forest edge for breeding birds. Cowbirds are nest parasites that frequent the forest edge and have been implicated in resent population declines of several species (Kricher 1990). Hence, there is a trade-off for in advantages (edge effect) and disadvantages for birds which frequent the edge and shrub habitat of powerline corridors.

An examination of Table 1 suggests that clearcutting on short rotation has not been detrimental to most of the edge and shrub community bird species. There were no obvious trends in the pattern of distribution over the five years for Northern Orioles, Black-and-white or Prairie warblers, Common Yellowthroats, Field Sparrows, or Rufous-sided Towhees. However, Eastern Kingbirds did not nest along the powerline during the year of the first clearcut, but did in subsequent years, and Blue-winged Warblers and Indigo Buntings, historically present as breeding species along the powerline, were both absent in the years when clearcutting occurred. The sample sizes in these cases are much too small to make definitive statements, but the data are suggestive.

The current powerline management program may even enhance breeding habitat for some species, such as Field Sparrows, by producing an enduring shrub habitat (arrested succession), not subject to normal succession to forest (Kricher 1988).

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William E. Davis, Jr., is a professor at Boston University and a frequent contributor to *Bird Observer*.

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BIRD OBSERVER

147

FIRST NESTING RECORD FOR GREAT EGRET ON OUTER CAPE COD

by Jennifer Lynn Megyesi

Although the Great Egret (*Ardea alba*) has been considered a common migrant and visitor to Massachusetts since the early 1920s, nesting was not documented in the state until 1954, when three or four nests were observed in Hanson Swamp, Plymouth County. Breeding efforts in the state have remained sparse, with no nests observed from 1974-1984 (Andrews 1990, Veit and Petersen 1993). Since a coastwide survey conducted in 1984, the number of nesting pairs in the state has increased to a high of sixty-five pairs at five coastal sites in 1994-1995 (B. Blodget, Mass. Div. Fisheries and Wildlife, pers. comm.). Kettle Island, Gloucester, is the state's largest colony, established in 1989 by fifteen pairs and growing to forty-two nesting pairs in 1994. Great Egrets also nest on Middle Brewster Island, Boston (8 pairs), Sarah or Sailor Island, Hingham (1 pair), at Coatue in Nantucket (11 pairs), and on Dead Neck-Sampsons Island, Cotuit (7 pairs in 1994, 0 pairs in 1995) (Blodget and Livingston 1996). Great Egrets are also increasing in Rhode Island (Chris Raithel, R.I. Div. of Fish and Wildlife, pers. comm.).

In 1996, Great Egrets bred for the first time on outer Cape Cod, specifically South Monomoy Island, Chatham. South Monomoy is part of Monomoy



Photo by Brian Tague

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Photo by Brian Tague

National Wildlife Refuge, managed by the U.S. Fish and Wildlife Service. The refuge, located below the "elbow" of Cape Cod, consists of 2750 acres of wood scrub, fresh and saltwater marsh, barrier beach, and dune habitat.

The Great Egret nest on South Monomoy was found during the annual heron census conducted by U.S. Fish and Wildlife Service personnel in June 1996. The nest was located on the west side of South Monomoy, south of Hospital Pond, in the main heronry. A flat platform was built from sticks and grasses, approximately 0.5 m from the ground in a clump of rugosa rose. The nest was slightly larger in circumference than a Black-crowned Night Heron (*Nycticorax nycticorax*) nest. Both Black-crowned Night Herons and Snowy Egrets (*Egretta thula*) nested within six meters of the Great Egret nest. The nest was similar in construction and location to other Great Egret nests in Massachusetts; further south, the species apparently nests slightly higher, typically between two and ten meters above the ground (B. Blodget, pers. comm.; Bent 1926).

The South Monomoy pair hatched at least one chick from three eggs laid, but Tropical Storm Bertha destroyed the eggs and young of all herons nesting in this area in mid-July. From May to August, four adult Great Egrets were regularly observed feeding in estuarine flats and marshes on North and South Monomoy and Chatham. As in much of their range, Great Egrets nest coastally in Massachusetts, usually in mixed heronries containing Snowy Egrets, Glossy Ibis (*Plegadis flacinellus*), and Black-crowned Night Herons. The species is increasing in the state, but it is uncertain whether the Momonoy pair originated from an existing colony or arrived from outside the state. In any case, South Monomoy is a protected site and one of just two established heronries on the Outer Cape, so it may prove to be a key location if this species attempts to extend its range on Cape Cod.

Addendum: The June 1997 Fish and Wildlife heron census found a pair of Great Egrets nesting on North Monomoy island in a patch of poison ivy and rugosa rose. As of June 18, two young had recently hatched and the third egg in the nest was pipping. No Great Egret nests were found on South Monomoy on the 1997 survey.

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Jennifer Lynn Megyesi has worked for the U.S. Fish and Wildlife Service since 1988, stationed in Hawaii and Maine before landing at Monomoy. She has a M.S. in Conservation Biology from the University of Massachusetts at Amherst.

LOOKING FOR WHERE TO LOOK: MAPS FOR BIRDING

by Marjorie W. Rines

I've only been birding for about eight years, but I've been a map nut my whole life. There's pleasure in looking at places from above as if you were flying, savoring the features of the land, imagining what it looks like on the ground. When I started birding, I found a whole new reason for buying more maps. I needed road maps of every town in the state, just in case I wanted to chase a rarity reported in some obscure location. But I also needed other types of maps to tell me what the road maps can't.

Topographic maps, or topos, can be one of the best tools a birder can use when looking for new birding locations. They literally show the "lay of the land." Woods, marshes, open areas, and cities are shown in different colors and textures. Hills and mountains are described by contour lines. Parks, recreation areas, and perhaps best of all, sewage treatment plants, are all outlined, just waiting for the enterprising birder to discover them.

A good way to start is at home. It might be tempting to go for the topo of a favorite hot spot, but you've already discovered the hot spot. What you want is to find new places. First, find your street on the map. If you live in an area where houses are close together, the background color of the map will be gray or red, telling you that individual buildings are not shown, but otherwise you may be able to find a black box representing your own home. Now look for habitat nearby.

If you are an urban dweller, this may be a little more of a challenge than for the rural or suburban birder, but it is surprising where you can find suitable birding habitat. Since property in urban areas is at a premium, virtually all undeveloped areas are likely to be public or "semi-public" property, so the urban birder can actually have advantages over the rural birder who has to be concerned over trespassing. Most areas in a city will appear in the red or gray that signifies "built-up area," but any place where there is a break in this background, showing green, white, or blue, has potential for birds. Parks, cemeteries, and school campuses often cover large areas with mixed habitat. Pay particular attention to wet spots within these areas. These can get overgrown and are not always obvious from a walking tour, but in season they are magnets for herons, Eastern Kingbirds, Warbling Vireos, several warbler species, and orioles. If the area is marshy, you could even find bitterns and rails.

In winter, the urban birder can even have an advantage over the rural birder at ponds and streams. Because of warm microclimates and effluents, urban water sources seem to stay open longer than those further afield; the result can be a winter birding bonanza. Look for dabbling ducks, herons, and even an overwintering warbler or two. Even if the map doesn't show a green spot, certain "semi-public" structures can be clues to pockets of habitat nearby. Churches, schools, shopping centers, industrial parks, and railroad tracks sometimes have adjacent scrub and trees, and while you probably don't want to make a special trip, it's worth checking out a few close to home. Such places can be surprisingly productive during passerine migration. A tired warbler who is flying over a city when he's ready to land doesn't insist on much foraging area. You will run into the occasional "no trespassing" sign, but for the most part these are areas that are open to the public within reason.

Farther afield in the suburbs or country, you have a lot more options. One of my favorite areas for birding is under powerlines. These areas are periodically clearcut by the utility companies to maintain access to the towers. Yes, this does contribute to the forest fragmentation we know can be so harmful to woodland species, but since powerlines are there, we might as well enjoy them. The low growth is ideal for species such as Brown Thrasher, Prairie and "winged" warblers, Common Yellowthroat, Indigo Bunting, and Field Sparrow. (See "Forest-powerline edges, Clearcutting, and Bird Communities" in this issue.) Under one short section of powerline that I discovered by topo, I found a Yellow-breasted Chat and a breeding Golden-winged Warbler within a oneweek period in June 1996.

Many of these powerlines abut woods where thrushes, warblers, and tanagers can be seen and heard. The view of the sky is largely unobscured for a good view of raptors flying overhead. Powerlines on topos are indicated by parallel lines (solid or dotted) punctuated by dots representing poles or towers. The color and texture of the background can give you clues to its accessibility. For example, if the background color is blue, expect to get wet—or better yet, look for a different section of the powerline to explore.

Gravel pits or sandpits are shown on topo maps as pink areas with tiny crossed shovels. As private property, many are inaccessible, and others are simply devoid of interest; however a few can offer interesting birding. A steam shovel, working on a hill of sand, leaves a cliff that makes an ideal place for a Bank Swallow colony. Abandoned gravel pits often have the low, scrubby vegetation that encourages species mentioned under power lines. In June 1997, I was exploring a gravel pit where I had seen a Vesper Sparrow a few years ago, and was delighted to discover a singing Clay-colored Sparrow.

Smaller airports and airstrips must keep grassy areas from growing into brush, and it is generally most economical to mow only once or twice a year. This results in excellent habitat for grassland species. Many Massachusetts birders are familiar with the airport on the Plum Island turnpike in Newburyport, where Upland Sandpipers can be found, and the Turner's Falls airport in Gill is known for its breeding Vesper and Grasshopper Sparrows. Look for labeled airstrips on topo maps, but be aware that not all are open to the public. Even if you can't actually enter airport land, careful listening or scoping from a good vantage point can yield a good bird.

A major element of "topography" is, of course, elevation. Topo maps show changes in elevation with contour lines. The further apart they are, the more gradual the slope. If you're looking for a pleasant walk without a lot of scrabbling up hills, this is useful information. However, tightly bunched lines showing a steep hill can give clues to habitat and hence bird species. Wormeating Warblers, for example, are partial to steep, wooded slopes with good undergrowth. You might be lucky enough to discover your own breeding pair.



1. A Marsh is indicated by "grass tufts," shown here with a railroad bed that may provide access. 2. A cemetery (shown by a cross) can offer semi-public space for birding in an urban area. 3. A trail or dirt road is shown as a dotted line. 4. Contour lines show the change in elevation. This example, with lines very close together, indicates a steep hill. 5. Powerlines are often a good place to look for species partial to short vegetation. 6. Sand and gravel pits are indicated by "crossed shovels."

When you see an expanse of solid green, this indicates a wooded area. This does not always mean solid woods, but can be mixed woods and open areas. If you see an area that piques your interest, look for a label. If it is a wildlife management area, park, or recreation area, it will generally be marked as such, and you can feel relatively sure that it will be accessible. Conservation areas sometimes have no access paths, but look for dotted lines which indicate trails. Even if a wooded area is unlabeled on a map, it may be accessible for birding and merit checking out. Because the "wooded area" symbol can cover a wide variety of habitats, it is impossible to predict species by just looking at the map, but exploration and discovery is the fun part of birding by map.

Marshes, of course, are a wonderful place for birds, but are often very difficult to gain access to. On topographical maps, the symbol for marsh is a blue, white, or green background, overprinted with symbols looking like tufts of grass. When you find a marsh on a topo, look for clues for access. A road or path beside the marsh is an obvious one, but sometimes you can find a dike or abandoned railroad bed running across the marsh that can double as a trail. Two years ago, when I started a new job, I immediately opened my topo map and found such a railroad bed through a marsh just yards from my office. In one short visit I found Virginia Rails, Soras, gnatcatchers, Yellow Warblers, yellowthroats, and innumerable Swamp Sparrows. The following fall, I discovered it was a wonderful evening blackbird roost, with hundreds of grackles, Red-winged and Rusty Blackbirds. I'm still waiting for my first bittern, but I remain optimistic.

Topos are not the only maps that can help find new birding locales. One of the best resources for birding by map can be as close as town hall. Many cities and towns have conservation departments, and often a map of the town outlining the conservation areas is available. Usually the charge for such a map is nominal, but I hold a special warm place in my heart for those towns that charge nothing. I recall a visit to the conservation office of a town near where I work. When I told the woman in charge I was interested in birding, she handed me map after map-beautiful, detailed little maps of each area, plus an overview map of the town showing me the location of each. All the while, she gave me a running commentary on the breeding birds at each location.

The advantages of town conservation areas are obvious: this is land set aside for pursuits like ours. In many cases, there aren't any signs indicating that they are public land, and you might otherwise pass by a fine birding area for fear of trespassing.

When I first started birding, I kept a stack of topo maps in my car, but recently I have been exploring topos on my computer. While several topographical map programs are available, the one I have includes a database that even lets you search for the nearest park, swamp, or cemetery. Unfortunately the database does not include sewage treatment plants.

Topographic maps are published by the USGS (U.S. Geological Survey) division of the Department of the Interior, and are available in outdoor stores such as REI (Recreation Equipment, Inc.) and EMS (Eastern Mountain Sports), or from map specialty stores such as the Map Shack in Winchester and the Globe Corner Bookstore in Harvard Square. Try your yellow pages under "Maps" for a place nearer you. For more information about topographic maps produced by the USGS call 1-800-USA-MAPS. For information on maps for a computer call Earthvisions at 1-800-627-7236.

Marjorie W. Rines is President of Bird Observer of Eastern Massachusetts, Inc., the non-profit corporation that publishes *Bird Observer*. She lives in Arlington, MA.

Book Review: The Origin and Evolution of Birds

by William E. Davis, Jr.

The Origin and Evolution of Birds by Alan Feduccia. 1996. New Haven: Yale University Press. 420 pages with about 500 black-and-white photographs and drawings. \$55 (hardcover).

Just about everyone is familiar with *Archaeopteryx*—the "urvogel" or "original" bird. But discoveries over the past few decades have vastly increased the paleontological evidence relating to the origin and evolution of birds. As often happens with scientific discoveries, this evidence, rather than making possible a unified and widely accepted view of avian evolution, has spawned ongoing controversies and conflicting interpretations. Actually, paleontology has always contained contentious elements—the Marsh/Cope controversies of the late nineteenth century are proverbial—and it appears that avian paleontology is carrying on this tradition. This book is loaded with information on the subject, and Feduccia has done a marvelous job of organizing this information, as well as describing the controversies that differences in methodology have inspired. Moreover, Feduccia articulates his own interpretations cogently.

The book is divided into eight chapters, the first of which, "Feathered Reptiles," describes the distinctive attributes of birds, particularly their morphological and physiological adaptations for flying, foraging, and perching. Feduccia then describes at length both the various specimens of *Archaeopteryx* from late Jurassic limestones, and the more recently discovered bird fossils from the late Jurassic and early Cretaceous of China. The second chapter, "Descent of Birds," details the different methodologies employed in attempting to work out evolutionary patterns in birds, especially the newer numerical taxonomic schools, the "Cladists." This chapter also introduces some jargonesque terminology such as *plesiomorphy*, *synapomorphy*, and *symplesiomorphy* and offers some rather complicated descriptions and arguments. This part of the book is heavy going.

Other chapters deal with the beginning of avian flight, the evolution of flightlessness in birds, the divers and seabirds of the Cretaceous, flamingos, ducks, long-legged waders, birds of prey, and the rise of land birds.

The controversy over whether birds evolved flight from the ground up (running, leaping, and finally flying in evolutionary sequence) or from the top down (the "arboreal" theory with an evolutionary sequence of parachuting, gliding, and finally powered flight) is explored, as is the hot-blooded/coldblooded dinosaurs controversy. The major controversy over the descent of birds from dinosaurs or from earlier dinosaur ancestors is thoroughly elaborated. Feduccia postulates that most birds, along with the dinosaurs, became extinct at the end of the Cretaceous, and that an explosive evolutionary radiation of birds occurred in the early Tertiary. Biochemical systematics (e.g., DNA hybridization) is discussed whenever appropriate throughout the text.

The book is profusely illustrated with diagrams, photographs (I particularly like the photographs of fossil birds), pen-and-ink drawings (previously published) by George Miksch Sutton, and half-tone paintings by John P. O'Neill. I found the book fascinating and informative, although much of it consists of analysis and argument about fossil evidence and different techniques in avian systematics, and this rigorous content may not be to everyone's liking. There is enough jargon to cause discomfort, but Feduccia writes well and is even-handed in his arguments, and hence avoids a polemical tone. The book underscores the difficulties in reconstructing evolutionary history when the fossil evidence is sparse and fragmentary, and where evolutionary relations are often masked by convergence (unrelated or distantly related organisms evolving similar features in response to similar selective pressures, as in the case of New World vultures and hawks).

Should you buy this book? It may prove too complex and technical for many people's taste, and a glossary of the many technical terms would have made it more user-friendly. But it is by far the best overview of avian evolution yet produced, an important reference book, and a thoughtful and provocative exposition of what is known about the origin and evolution of birds. If you are interested in dinosaurs, birds, and evolution, you probably should have a copy of this book, even if you view it primarily as a reference source.

Brookline Bird Club Web Page

http://world.std.com./~jane/bbc.html

Come visit the BBC online! Our home page offers excerpts from the quarterly *BBC Bulletin*, including a list of club trips, as well as numerous links of interest to birders: New England rare bird alerts, Massachusetts checklist, weather, tide table, and more.

FIELD NOTES FROM HERE AND THERE

UNUSUAL RUFFED GROUSE BEHAVIOR

by Tom Pirro

On April 9, 1997, I spent my lunch break birding at a public boat ramp on the Nashua River in Groton, MA, along Route 119. I was entering the woods to bird when I heard scratching among the leaves. I looked down and saw a Ruffed Grouse fifteen or twenty feet away. I don't often get such a close look at grouse, at least not while they're still on the ground and my heart is not up in my throat.

I stopped to watch it, assuming it would discover me and flee. Not today! It began to approach me, so I stood still again, assuming it had not discovered me yet. When it came within about five feet, I made a slow movement, figuring it would fly, but instead, looking directly at me, it approached to within one foot and investigated me.

About five minutes had passed. At this point I took a few steps to the left; the bird moved the same direction. Then I stepped right; it went right! At this stage I figured I might as well talk to it; so I asked if it wanted to look for Rusty Blackbirds. Apparently it did, because as I proceeded slowly into the wooded swamp, it followed me for a hundred yards. While following, it would not walk directly behind, but through the underbrush beside my path. When I stopped, it came within one foot of me again. I gently reached to it, and the grouse only stepped back to maintain the one-foot distance.

After fifteen minutes, I had to return to work, so I strolled back to my car. Once again the grouse followed along, about ten to twenty feet behind and coming within a foot when I stopped. A quick reach for it, not to touch it or harm it but to observe its reaction, caused it to "flutter" in the air to waist height, settling right back down without retreating. The grouse followed me back across a dirt parking area to my car. Twenty-five minutes after I met the grouse, I got into the car only to see the grouse begin to approach me while I was in the driver's seat! I got back out and led it away so I wouldn't inadvertently run it over. Then I then got back into the car, started the engine, and drove slowly away. Guess whom I saw in the rear view mirror? It followed the car for 100 feet; I then outran it so it wouldn't follow me into the busy street.

I've birded since the mid-1980s and have come across Ruffed Grouse literally hundreds of times. I've seen Spruce Grouse and Willow Ptarmigan in Alaska, which can be quite tame. But I've never witnessed anything close to this. Might the bird have been fed by nearby residents, coming to view humans as food sources rather than threats? Could it (I hope not!) have confused me with a potential mate? I assure you, I've not added one bit of fiction to this story. I kept track of the distances walked, and the total time that passed was about half an hour.

The bird followed me again on April 14, and again, more briefly, a month after that. It displayed much the same behavior on these later occasions. Regrettably, though, WE never found any Rusty Blackbirds.

Tom Pirro lives in Gardner, MA, with his wife Sharon and 7-year-old son Ian. A birder since the mid-1980s, he does most of his birding close to home: his Gardner life list is closing on 200 species. Tom has a B.S. in Fisheries Biology from the University of Massachusetts, Amherst, and is currently employed as a buyer for a printing company in Groton, MA.



GYRFALCON IN LOWELL, MA

by Linda Hunnewell

Saturday, February 1, 1997, started out as just another soggy winter weekend day but ended as the most exciting day of birding I have ever had. By late afternoon, tired of being in the house, I decided to go out and photograph some foggy winter landscapes along the Merrimack River in Lowell, MA. When I arrived at the public beach, I found several hundred Mallards and about forty Canada Geese.

I had just begun photographing when wings started flapping and water started to splash. I noticed a large raptor flying low over the mass of waterfowl. At first I assumed it was a Red-tail, but when it circled back and showed a falcon-like shape, I began to think it was a Peregrine. It passed overhead one more time, and as I watched, I kept saying to myself, "It seems awfully big to be a Peregrine." I noticed, also, that the underwing looked two-toned. That's when I remembered that I was holding my camera. As the bird passed by one more time, I snapped off a frame that I hoped would show the underwing pattern. I only managed to get that one shot of the bird in flight before it flew off down the river.



BIRD OBSERVER



I could see where it landed in a tree, and after grabbing my binoculars from the car, I went after it. It was perched on the top of a tree, preening and scanning the river. I watched for ten minutes, trying to get down everything I could about the bird: it was big, dark, and heavily streaked on the breast, and its wings didn't reach the end of its tail. I got several shots of the perching bird before dark, and I just didn't feel sure that it was a Peregrine. Thoughts of a Gyrfalcon came to mind.

That night, I looked through every field guide I own and still didn't feel 100 percent sure about that bird. Having never seen a Gyrfalcon before, and knowing how rare they are in Massachusetts, I kept trying to make the bird into something else. Even after the film came back and I saw the slides, I continued to have doubts. A Gyrfalcon in Lowell? Ten minutes from my house? No way. I thought about it, studied the slides, searched for the bird in the hope of another look. It was driving me crazy! Finally, the following weekend provided an opportunity for me to solve the problem: I had prints made and brought them to a Massachusetts Audubon birding program I was attending. Paul Roberts and Simon Perkins confirmed that I had seen an immature dark morph Gyrfalcon! I kept returning to that spot nearly every day for weeks, but I've never seen the bird again. It was truly a once-in-a-lifetime experience, one that I will never forget.

Linda Hunnewell lives in Lowell, MA, where she works as a graphic artist. A birder for about ten years, she's happy to watch anything that flies.

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BIRD SIGHTINGS JANUARY/FEBRUARY 1997 SUMMARY

by Marjorie W. Rines and Robert H. Stymeist

January 1997 was mild, dry and on the sunny side. There were wide variations in temperature, with seven days recording readings of 50° or higher. The high was 55° on January 25. The low recorded at Boston was zero on January 19, the first zero reading since January 27, 1994. Precipitation totaled 2.5 inches, 1.09 inches less than average, and snowfall was recorded at 9.7 inches, 2.9 inches less than normal. On the 31st, a prolonged period of light rain produced very slippery surface conditions and caused numerous accidents. The very dangerous conditions continued into the morning of February 1. February was also mild, averaging 5.7° above normal. This was the seventh warmest February in 129 years. The high was 66° on the 22nd, and the temperature reached 64° on the 19th and 61° on the 21st. Rainfall reached 1.55 inches, 1.25 inches less than average, and snowfall totaled 4.8 inches, 6.9 inches under the average. The deepest snow cover was 3 inches, a great contrast to last year.

LOONS THROUGH WOODPECKERS

An "Arctic/Pacific" type loon reported from Boston Harbor was seen by two observers on February 9, but later attempts to relocate the bird were unsuccessful. This species is included on the Review List of the Massachusetts Avian Records Committee (MARC), and beginning with this issue of *Bird Observer*, Review List species will be noted with an asterisk (*) to indicate that the report is pending a vote by the MARC. An **Eared Grebe**, initially discovered in October 1996, remained at Eastern Point in Gloucester through the beginning of February. One or two American Bitterns are routinely reported in midwinter, but seldom from as far north as the one seen on Plum Island in January. The **Least Bittern** reported from Cotuit represented only the third ever in Massachusetts in winter, the second being a bird discovered in Newburyport during the 1996 Newburyport Christmas Bird Count in December.

Mild temperatures in late December and early January kept many lakes and ponds free of ice, and as a result, waterfowl were reported in above-average numbers. Among these were a few unusual species. Tundra Swans on Nantucket and in Newton were a pleasant surprise, and Greater White-Fronted Geese were reported from several locations, including individuals in Wellesley and the Ipswich area that lingered for most of the reporting period. Unusually high numbers of Snow Geese were reported. Eurasian Wigeon are regular visitors to Plymouth and Cape Cod during winter months, but reports from Plum Island and in the Belmont area were unusual. The Belmont Eurasian Wigeon frequented areas where another individual was seen last winter, and is presumably the same one reported later from the adjacent town of Arlington. Tufted Duck, historically rare in Massachusetts, has become almost an annual winter visitor to the state, with two individuals reported during January and February. King Eider are usually seen singly in our waters, so reports of three individuals in Rockport and two in Sandwich were noteworthy.

A large Turkey Vulture roost on the Westport/Dartmouth town was found to include two **Black Vultures**. As the vulture flies, Bourne is a short glide from Westport, and Chatham not much more, so reports from these towns could have involved the same birds. Bald Eagles were widely reported, as were Red-shouldered Hawks, but it was a poor winter for Rough-legged Hawks. Three inland reports of Merlin were unusual, and suggest the changing status of this interesting little raptor. A **Gyrfalcon** in Lowell was photographed, and is described in more detail in this issue of *Bird Observer*.

An exceptionally warm day on February 22 coincided with the first reports of migrant Killdeer and displaying American Woodcock. Black-headed Gulls were more widely reported than usual, but reports from the Winthrop area, where they have recently wintered in greater numbers, were low. This decline may relate to a reduction in the discharge of sewage into Boston Harbor from the Deer Island waste water facility. A **Mew Gull** in Winthrop was reported by numerous observers, although no details have been submitted to the MARC. A report of a second **Mew Gull** in South Boston (possibly the same individual) was accompanied by

details. Among alcids, Razorbills were very poorly reported. Two oiled Common Murres were discovered in early February on Cape Cod beaches, but as is usually the case, the source of the oil remained a mystery.

Snowy Owls were well reported, especially from Logan Airport in Boston, Duxbury and Nantucket. The bird of the season was Boston's Back Bay Boreal Owl. Originally reported in November, it continued to delight hundreds of visitors into the new year. Five reports of Red-headed Woodpeckers represented a relatively high midwinter total. M. W. R.

T. Statestern

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Date	Location	Number	Observers	Date	Location	Number	Observers
Red-throa	ated Loon			1/1	Wood's Hole	81	G. d'Entremont#
1/12	Boston H.	4	TASL (M. Hall)	1/4	Rockport	300	P. + F. Vale
1/20	Provincetown	25	W. Ellison	1/18	Lawrence	10	J. Hogan
2/8	Winthrop	3	M. Pelikan	2/8-9		70	
2/9				2/8-9			K. Godfrey
	Boston H.		TASL (M. Hall)		Rockport	85	J. Berry
	acific Loon (deta			2/9	Boston H.	7	TASL (M. Hall)
2/9	Boston H.	1	B. Zuzavich#	2/15	Gloucester	45	J. Berry
Common	Loon			2/16	Newbypt	35	J. Berry
1/4	Rockport	8	P. + F. Vale	Double-c	rested Cormorar	nt	
1/12	Boston H.	3	TASL (M. Hall)	1/1	Wood's Hole	6	R. Stymeist#
1/20	Provincetown	13	W. Ellison	1/4	Provincetown	1	B. Nikula#
1/20	Ipswich	11	J. Berry	1/5	Nantucket	2	G. d'Entremont#
2/2	Salisbury	15	M. Lynch#	1/11	Cambridge	ĩ	R. Stymeist
2/9		15	J. Berry	1/18	Lawrence	î	J. Hogan
	Rockport					1	
2/9	Boston H.		TASL (M. Hall)	1/20	Lakeville	2	D. Sandee
2/23	Cape Ann	8	J. Berry	2/1	Falmouth		H. Wiggin#
Pied-bille		-350	250324 2023	2/12	Boston	3	J. Berry
1/1-3	1 Lynn	1-2	J. Quigley	American	Bittern		
1/2-1	6 Salem	1	L. Healy	1/15	P.I.	1	fide B. Gette
1/3	Medford	1	D. + I. Jewell	2/7	Eastham (F.H.	.) 2	P. Trull#
1/4	Arlington	2	M. Pelikan	Least Bit			
1/4	Nantucket		G. d'Entremont#	1/12	Cotuit	1	R. Lancaster
1/7	Framingham	1	K. Hamilton	Great Blu		-	
1/9	Wareham	5	R. Finch	1/3	Nantucket	6	G. d'Entremont#
				1/7	Framingham	3	K. Hamilton
1/19	Bolton	1	L. Hennin	1/21		3	
2/1	Falmouth	2	S. + L. Hennin		Boston		K. Hudson
2/8	Wayland	1	N. Patterson	1/26	S. Dart. (A.Pd	1) 5	LCES (J. Hill)
2/16	Eastham	2	W. Petersen#	2/8	Chatham	5	R. Finch
2/21	Marstons Mill	s 1	G. d'Entremont	2/14	Boston	3	K. Hudson
Horned C	Grebe			2/21	Plymouth	5	G. d'Entremont
1/1	Winthrop	28	P. + F. Vale	Black-cro	wned Night-He	ron	
1/4	Rockport	15	P. + F. Vale	1/4	Nantucket	5	G. d'Entremont#
1/12	Boston H.	40	TASL (M. Hall)	1/20	Boston	1	K. Hudson
1/19	P.I.		BBC (D. Oliver)	2/1	Falmouth	1	H. Wiggin#
1/21	Truro	7	W. Ellison	2/1	Saugus	î	J. Quigley
2/2	Salisbury	20	M. Lynch#	Tundra S			J. Quigicj
2/8	Newbypt	12	R. Donovan	1/16	Nantucket	1	E. Ray
				2/28	Newton 1		epburn, D. Oliver
2/9	Boston H.		TASL (M. Hall)			С. п	spourn, D. Onver
2/23	Cape Ann	25	D. Chickering	Whooper			D 0
	ed Grebe			2/22	Ipswich	1	R. Stymeist#
1/1	Winthrop	15	P. + F. Vale	2/23	P.I.	4	BBC (M. Burns)
1/2	Hull	55	N. Swirka	Mute Swa	an		
1/4	Rockport	8	P. + F. Vale	2/9	Boston H.	20	TASL (M. Hall)
1/12	Winthrop	12	F. Bouchard	Greater	White-fronted	Goose	
1/12	Boston H.		TASL (M. Hall)		6 Ipswich/Hami		2 v.o.
2/1	Newbypt H.	3	J. Berry		25 Wellseley		R. Forster + v.o.
2/8	Eastham	1	R. Forster	1/20	New Bedford	1	M. Boucher
	Boston H.		TASL (M. Hall)	2/10	Newbury	î	D. + I. Jewell
2/9						1	D. + I. Jewell
2/15	E. Gloucester		J. Berry	Snow Go			M Dines
2/23	Cape Ann	8	J. Berry	thr	Arlington	1	M. Rines
2/23	Gloucester	15	D. Chickering		1 Ipswich	1	J. Berry
2/28	N. Scituate	22	v.o.	1/1	P.I.	1	P. + F. Vale
Eared G	rebe (details sub	mitted) *		1/4	Wellfleet H.	1	G. Martin
1/1-0	2/8 Gloucester	1	J. Soucy + v.o.	1/7	Melrose	1 im	n D. + I. Jewell
Northern	Gannet			1/12	Ipswich	1	D. Sandee
1/19	Duxbury B.	2 SS	SBC (N. Swirka)	1/18	Hamilton	1 a	d R. Stymeist
1/23	Provincetown		J. Sones	1/24	Dighton	2	E. Brunkhurst
2/2	P.I.	1	M. Pelikan	2/2	Nantucket	ĩ	fide E. Ray
2/2			TASL (M. Hall)	2/22	P.I.	5	R. Heil
	Boston H.			2/22			mm R. Finch
2/22	Rockport	25 ac	R. Heil		E. Bridgewate		
Great Co	rmorant			2/24	Newbypt/P.I.	5	S. Perkins#

Data Logation

M.

Brant			
1/12	Boston H.	692	TASL (M. Hall)
2/1	Plymouth	25	H. Wiggin#
2/9	Boston H.	873	TASL (M. Hall)
2/21	Newbypt	100	D. Chickering
Canada G 1/1		17001	PDC (L de la Fler)
1/11	Newbypt Ipswich	1500	BBC (L. de la Flor) J. Berry
1/19	Hamilton	800	G. d'Entremont
1/22	Medford	600	M. Rines
1/26	Westport	512	M. Lynch#
2/9	Boston H.	389	TASL (M. Hall)
Wood Du			D 0
1/12 1/25, 2	Lynn 2/8 Medford	1	R. Stymeist#
1/25, 1	S. Dartmouth		D. Oliver BBC (R. Stymeist)
2/22	Wayland	1	M. Pelikan
2/26	Cumb. Farms	7	R. Finch
2/27	Wayland	4	N. Patterson
2/28	Concord (NAC)) 2	S. Perkins
Green-win			
thr	Cambridge		max J. Campbell
1/1 1/3	Marston's Mills	30 6	B. Nikula#
1/3	Sudbury Nantucket	9	R. Forster G. d'Entremont#
1/9	Marlboro	5	R. Forster
2/21	DWWS	2	v.o.
2/22	P.I.	40	R. Heil
2/22	Wakefield	3	P. + F. Vale
2/23	Ipswich	2	J. Soucy
2/27	Concord	13	G. Ferguson
2/28	Wayland Black Duck	2	N. Patterson
1/6	P.I.	700	W. Drew#
1/12	Boston H.	1128	TASL (M. Hall)
1/14	S. Dart. (A.Pd)	166	LCES (J. Hill)
2/7	P.I.	457	W. Drew#
2/9	Boston H.	1097	TASL (M. Hall)
Northern 1			
1/3 1/9	Sudbury Marlboro	4	R. Forster
2/20	Wellesley	3	R. Forster R. Forster
2/22	Wayland	4	M. Pelikan
2/24	Newbypt/P.I.	11	S. Perkins#
2/27	Concord	6	G. Ferguson
2/28	P.I.	6	M. Pelikan
thr	Reports of or 2	indiv.	from 10 loc.
Blue-wing 1/5		1	A Vaith
Northern S	Squibnocket	1	A. Keith
	Kingston	1	v.o.
	Marstons Mills		E. Salmela + v.o.
1/5	Belmont	1	D. + I. Jewell
1/5-2/2		1	R. Kelly $+$ v.o.
1/19	Lakeville	1	D. Small#
1/26	Seekonk DWWS	1	M. Boucher
Gadwall	DWWS	1	v.o.
1/1	Marstons Mills	40	M. Lynch#
1/3	Sudbury	4	R. Forster
1/4	Gloucester	10	J. Brown#
1/4	P.I.	3	P. + F. Vale
1/9	Marlboro	7	R. Forster
1/23	Belmont	3	M. Rines
2/7	DWWS Marstons Mills	41 9	D. Clapp G. d'Entremont
2/22	P.I.	8	R. Heil
2/24	Newbypt/P.I.	3	S. Perkins#
Eurasian	Wigeon		
1/1	Plymouth	1	M. Lynch#
1/3-25		1	v.o.
1/3	Oak Bluffs	1	A. Keith

1/02	Number		
1/23 1/30-2	Nantucket	1	E. Ray
2/1	2/18 Arlington Oak Bluff	1	v.o. V. Laux#
2/9	N. Chatham	2	m B. Nikula#
2/22	P.I.		m W. Taitrow
American			
1/3	Belmont	10	J. Campbell
1/3	Salem	11	L. Healy
2/2	Arlington	12	P. + F. Vale
2/8 2/15-2	Sudbury 23 E. Glouceste	6	E. Taylor
2/22	Topsfield	r 3 4	J. Berry P. + F. Vale
Canvasba		4	T. + P. Vale
1/1-2/	28 Falmouth	501	max v.o.
1/4	Cambridge	3	R. Stymeist
1/6	Wareham	16	F. Smith
1/8	Lakeville	7	R. Finch
2/12	Boston	2	J. Berry
2/23 Redhead	Westport	185	F. Bouchard
1/1	Falmouth	5	R. Forster
1/4	Nantucket	22	G. d'Entremont#
2/1	Oak Bluffs	2	V. Laux#
2/1	Falmouth	64	E. Banks#
2/21	Plymouth	2	G. d'Entremont
2/23	Chilmark	1	A. Keith#
2/26	Danvers	1 1	n R. Perez
Ring-neck		50	D 0
1/4 1/7	Cambridge	52 66	R. Stymeist
1/18	Framingham Medford	22	K. Hamilton M. Rines
2/1	Falmouth	50	H. Wiggin#
2/8	Framingham	50	E. Taylor
2/22	Arlington Res.	25	M. Pelikan
2/25	Wayland	25	R. Forster
2/28	S. Hanson	200	W. Petersen
Tufted D			
	2/17 Nantucket		N. Brooks + v.o.
Greater Se	Plymouth	11	n B. Harrington
1/1	Falmouth	600	M. Lynch#
1/12	Boston H.	96	TASL (M. Hall)
2/9	Boston H.	990	TASL (M. Hall)
2/13	Winthrop	100	M. Telfer
2/19	Lakeville	75	K. Anderson
Lesser Sci 1/1		5	M. Lunch#
1/4	Falmouth Nantucket	5 9	M. Lynch# G. d'Entremont#
2/9	Plymouth	15	J. Hoye#
2/10	Lakeville	2	B. Parker
Scaup spe			
2/17	Nantucket	243	fide E. Ray
Common			
1/1	Salisbury	1000	J. Berry
1/1	Winthrop	100+	P. + F. Vale
1/12 1/18	Boston H. Newbypt	6195	TASL (M. Hall) BBC (S. Grinley)
1/20	Ipswich	200	J. Berry
2/1	Salisbury	1200	J. Berry
2/9		9491	TASL (M. Hall)
King Eide			
thr	Rockport	1-3	
1/4	Sandwich	2 f	
2/8	Sandwich	1 f	
2/16	E. Orleans	1 f	W. Petersen#
Harlequin 1/4	Rockport	23	R. Finch
1/28	Nantucket	18	E. Ray
2/8	Rockport	31	G. d'Entremont
2/16	E. Orleans	3	W. Petersen#
2/23	Duxbury B.	2	E. Cleveland

Oldsquaw	/		
1/12	Boston H.	4	TASL (M. Hall)
1/18	Newbypt H.	500	H. Wiggin#
2/2	Newbypt	250	M. Lynch#
2/9	Boston H.	27	TASL (M. Hall)
Black Sco	oter		
1/3	Nant. Sound	27	G. d'Entremont#
2/23	Rockport	45	M. Lynch#
Surf Scot			
1/1	Winthrop	3	P. + F. Vale
1/3	Nant. Sound	400	G. d'Entremont#
1/12	Boston H.	27	TASL (M. Hall)
2/9	Boston H.	46	TASL (M. Hall)
	nged Scoter		THOS (IN. Mull)
1/3	Nant. Sound	250	G. d'Entremont#
1/12	Boston H.	243	TASL (M. Hall)
2/9	Boston H.	621	TASL (M. Hall)
	Goldeneye	021	IASL (M. Hall)
and provide the state of the st		25	D . E Vala
1/1	Winthrop	35	P. + F. Vale
1/7	Framingham	14	K. Hamilton
1/12	Boston H.	337	TASL (M. Hall)
1/20	Rowley	36	J. Berry
2/2	Newbypt	,100	D. Chickering
2/9	Boston H.	675	TASL (M. Hall)
2/15	Rowley	90	J. Berry
2/16	Newbypt/Salis.	800	M. Lynch#
Barrow's	Goldeneye		
thr	Newbypt	1-1	2 v.o.
1/1-2/	13 Winthrop	1	v.o.
1/1	Chilmark	11	
1/2	M.V. (East Cho	ora: 0.215	
1/12	Quincy	21	
1/12	Boston H.	3	TASL (M. Hall)
1/18	New Bedford	2	G. Gove
1/21	Beverly	1 r	
1/21		1	B. Zuzavich
	Quincy	2	
1/29	Osterville		fide J. Sones
2/1	Oak Bluffs	2	V. Laux#
2/2	Chappaquiddick		
2/15	Plymouth	1 f	
2/17	Nantucket	2	fide E. Ray
2/22	Gloucester	1 r	n R. Heil
Bufflehea			22.2
1/11	Lynn	300	M. Lynch#
1/12	Boston H.	953	TASL (M. Hall)
2/2	Newbypt/Salis.	1200	M. Lynch#
2/9	Boston H.	1484	TASL (M. Hall)
Hooded N	1 erganser		
1/1	Plymouth	40	M. Lynch#
1/7	Framingham	43	K. Hamilton
1/18	Medford	17	M. Rines
2/1	Oak Bluffs	75	V. Laux
2/8	Eastham	35	R. Forster
thr	Reports of 1-8 i		
and the state of the second state	Merganser	1017.11	1011 12 100.
1/4	Cambridge	25	R. Stymeist
1/7	Framingham	161	K. Hamilton
1/18	Medford	34	M. Rines
1/20	Wareham	42	M. Boucher
2/22	N. Andover	60	E. Stromsted
2/22	Southboro	100	E. Taylor
2/22	Wayland	67	N. Patterson
Red-breas	ted Merganser		
1/12	Boston H.	524	TASL (M. Hall)
2/9	Boston H.	716	TASL (M. Hall)
Ruddy Du			
thr		49 r	nax M. Rines
	Nection		
	Medford Plymouth		
1/1	Plymouth	2	M. Lynch#
1/1 1/1	Plymouth Lakeville	2 6	M. Lynch# M. Boucher
1/1 1/1 1/4	Plymouth Lakeville Nantucket	2 6 1 f	M. Lynch# M. Boucher G. d'Entremont#
1/1 1/1	Plymouth Lakeville	2 6	M. Lynch# M. Boucher

1/6 Bourne 1 M. Boucher# 1/26-2/28 Dartmouth 1-2 BBC (R. Stymeist) 2/1 Chatham 1 W. Bailey# Turkey Vulture 1/1-31 Dartmouth 50+ J. Clancy 2/16 Pocasset 1 L. Cocca 2/18 Arlington 1 D. Chickering 2/22 Newbury 1 R. Forster 2/22 Waltham 1 R. Forster 2/22 Maynard 6 L. Nachtrab 2/22 GdhNWR 1 M. Pelikan 2/23 General arrival Bald Eagle 1/1/1 1/2 Natick 1 M. Pelikan 2/23 Wayland 1 N. Patterson 1/5 Natick 1 Imm M. Signe 1/16 Lawrence 4 J. Hogan 1/17 Lakeville 1 D. Small# 1/20 Wareham 1 M. Boucher# 1/21 Pembroke 2 C. Sherman 1/22 Waltham	Black Vu	lture			
1/26-2/28Dartmouth1-2BBC (R. Stymeist)2/1Chatham1W. Bailey#1/1-31Dartmouth50+J. Clancy2/16Pocasset1L. Cocca2/18Arlington1D. Chickering2/22Newbury1R. Stymeist#2/22Dedham1E. Kile2/22Dedham1E. Kile2/22Dedham1K. Stymeist#2/22Dedham1K. Stymeist#2/22Dedham1M. Pelikan2/23-28General arrivalBald Eagle1N. Patterson1/5Natick1 immM. King1/7Winchendon1 adC. Crosby1/8Salisbury1B. Gette1/8Duxbury1 immD. Ludlow1/10-15M.V.2fide V. Laux1/18Lawrence4J. Hogan1/19Lakeville1D. Small#1/20Wareham1M. Beckwith + v.o.1/21Pembroke2C. Sherman1/22Fall River1F. Thurber1/23Danvers1 adL. Healy1/24Lakeville2B. Wicks1/24Lakeville2B. Wicks1/24Sudbury1 immR. Forster1/28Dracut2R. LeTendre1/28Boylston2J. Liller1/29Wachusett Res.1 mmM. Lynch# <tr< td=""><td>1/6</td><td>Bourne</td><td></td><td>1</td><td>M. Boucher#</td></tr<>	1/6	Bourne		1	M. Boucher#
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1/24Amesbury1 adD. + I. Jewell1/24Lakeville2B. Wicks1/24Sudbury1 immR. Forster1/28Dracut2R. LeTendre1/28Dracut2R. LeTendre1/28Boylston2J. Liller1/29Wachusett Res.2 immM. Lynch#1/30S. Carver1 adJ. Shaw1/31Wareham1M. LeBossiere2/1-10Hanson1 adJ. Hall2/2Westport2F. Thurber2/7P.I.1W. Drew#2/7Pepperell1 immE. Stromsted2/12-15W. Tisbury1 immv.o.2/12Chilmark1 adS. Kelly#2/22Petersham4SSBC (D. Ludlow)2/23Newbypt area3 BBC (M. Burns)2/24-25Wayland1 immK. Hamilton2/28S. Hanson3W. PetersenNorthern HarrierthrCumb. Farms2-8v.o.1/1DWWS2D. Furbish1/91/9Dedham1N. Komar1/19Turo2W. Ellison#1/19Bourne1R. Finch2/24Salisbury2S. Perkins#Sharp-shinned HawkthrReports of indiv. from 39 locationsNorthern Goshawk1/4, 2/1Newbury11/7Groton1T. Pirro1/6Beverly1J.				1 ad	I. Healy
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1/30S. Carver1 adJ. Shaw1/31Wareham1M. LeBossiere2/1-10Hanson1 adJ. Hall2/2Westport2F. Thurber2/7P.I.1W. Drew#2/7P.I.1W. Drew#2/7P.I.1W. Drew#2/12Chilmark1 adS. Kelly#2/22Petersham4SSBC (D. Ludlow)2/23Newbypt area3BBC (M. Burns)2/24-25Wayland1immK. Hamilton2/28S. Hanson3W. PetersenNorthern HarrierthrCumb. Farms2-8v.o.1/1DWWS2D. Furbish1/9Dedham1N.Komar1/12Rowley1J. Berry1/19Barnstable1N. Komar1/19Turo2W. Ellison#1/19P.I.2D. Oliver1/19Bourne1R. Finch2/24Salisbury2S. Perkins#Sharp-shinned HawkthrReports of indiv. from 28 locationsCooper's Hawk1P. + F. Vale1/7Groton1T. Pirro1/16Beverly1J. Brown#1/25Middleboro1S. + L. Hennin2/4Chatham1R. Clem2/11Hopkinton1R. Wolanin2/22Newbypt1infm2/20Hopkinton1R. Wola	1/29	Wachusett Res.		2 imm	M. Lynch#
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2/22 Newbypt 1 imm R. Heil					
2/22 Groton 1 E. Stromsted		Newbypt			
	2/22	Groton		1	E. Stromsted
Red-shoul	ldered Hawk				
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	DWWS	1 im	m v.o.		
1/3	Wayland	1	R. Forster		
1/15	Essex	1	J. Brown#		
1/18	Westport	1	G. Gove		
1/27	S. Dartmouth	1	M. Boucher		
1/30	Norwell	1	R. Shea		
2/2	Halifax	1	K. Anderson		
	E. Middleboro		K. Anderson		
2/8 2/9	Lexington S. Dertmouth	1	C. Cook		
2/12	S. Dartmouth Hanover	3	D. Larson W. Petersen		
2/16	Lincoln	2	R. Stymeist#		
2/16	Sudbury	1 ad	J. Hoye#		
2/18	Westport	1	D. Chickering		
2/21	Medford	î	M. Rines#		
2/22	GMNWR	1	M. Pelikan		
2/22	Carlisle	1	D. Sandee		
2/28	S. Hanson	1	W. Petersen		
2/28	E. Boxford	2	K. Disney		
	ged Hawk				
1/4-2/3		1-2	v.o.		
1/6	Cumb. Farms	1	R. Finch		
1/10	Salisbury	1 lt	D. + I. Jewell		
1/12	Rowley	1 lt	J. Berry		
1/12	Ipswich	1	D. Sandee		
1/21 2/3	Ipswich	1	K. Disney		
2/17	Cumb. Farms Nantucket	1	M. Boucher		
American		1	fide E. Ray		
	29 Boston	7,3	N. Smith		
thr	Reports of indi				
Merlin	reports or ma		rooutions		
1/22	Wayland	1	N. Patterson		
2/14	Cambridge	1	C. Cook		
2/11, 2	8 Wellesley	1	R. Forster		
thr	Reports of indi	v from 14	coastal loc.		
and the second se		v. nom r-			
Gyrfalcor	1				
Gyrfalcor 2/1	Lowell	1	L. Hunnewell		
Gyrfalcor 2/1 Peregrine	Lowell Falcon	1	L. Hunnewell		
Gyrfalcor 2/1	Lowell Falcon Boston		L. Hunnewell v.o.		
Gyrfalcor 2/1 Peregrine thr	Lowell Falcon Boston Gloucester	1 1-2	L. Hunnewell v.o. H. Wiggin#		
Gyrfalcor 2/1 Peregrine thr 1/4	Lowell Falcon Boston	1 1-2 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11	Lowell Falcon Boston Gloucester Newbypt Peabody	1 1-2 1 1	L. Hunnewell v.o. H. Wiggin#		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury	1 1-2 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts		
Gyrfalcor 2/1 Peregrine 1/4 1/11 1/17 1/24 1/26 2/17	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick	1 1-2 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket	1 1-2 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/28	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I.	1 1-2 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/18 Ruffed Gr	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Grn 1/5	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. Ouse Kingston	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow#		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/24	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Nattick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB)	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/24 2/8	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/28 Ruffed Gr 1/5 1/5 1/5 1/24 2/8 2/9	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/17 2/18 Ruffed Gr 1/5 1/5 1/24 2/8 2/9 2/12	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/28 Ruffed Gr 1/5 1/24 2/8 2/9 2/12 2/24	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Nattick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Nattick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/5 1/5 1/24 2/8 2/9 2/12 2/12 2/12 2/12 2/12 1/15 1/15 1/15	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natuck Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-31 1/15 1/16 1/24	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB)	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/24 1/26 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/24 2/9 2/12 2/24 Wild Turk 1/1-31 1/15 1/16 1/24 2/8	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/28 Ruffed Gr 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-31 1/15 1/16 1/24 2/8 2/8 2/8	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch#		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/28 Ruffed Gr 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-5 1/16 1/24 2/8 2/8 2/21	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham Medford	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch# M. Rines#		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-5 1/16 1/24 2/8 2/8 2/8 2/21 2/22	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch#		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/24 2/9 2/12 2/24 Wild Turk 1/1-31 1/15 1/16 1/24 2/8 2/8 2/8 2/8 2/8 2/21 2/22 Northern F	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham Medford Petersham Bobwhite	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch# M. Rines# C (D. Ludlow)		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/28 Ruffed Gr 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-31 1/15 1/16 1/24 2/8 2/9 2/12 2/22 Northern E 1/7	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham Medford Petersham Medford Petersham Medford Petersham Sobwhite Newton	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch# M. Rines# C (D. Ludlow) H. Miller		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/28 Ruffed Gr 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-51 1/16 1/24 2/8 2/8 2/21 2/22 Northern E 1/7 2/15	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham Medford Petersham Medford Petersham Medford Petersham Medford Petersham Sobwhite Newton Cumb. Farms	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch# M. Rines# C (D. Ludlow)		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/28 Ruffed Gr 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-31 1/15 1/16 1/24 2/8 2/9 2/12 2/22 Northern E 1/7	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. Ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham Medford Petersham Sobwhite Newton Cumb. Farms ail	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Pelikan D. Ludlow# N. Pelikan B. Rasku P. + F. Vale R. Finch D. Ludlow P. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch# M. Rines# C (D. Ludlow) H. Miller G. d'Entremont		
Gyrfalcor 2/1 Peregrine thr 1/4 1/11 1/17 1/24 1/26 2/17 2/17 2/17 2/28 Ruffed Gr 1/5 1/5 1/24 2/8 2/9 2/12 2/24 Wild Turk 1/1-5 1/16 1/24 2/8 2/8 2/8 2/21 2/22 Northern E 1/7 2/15 Virginia R	Lowell Falcon Boston Gloucester Newbypt Peabody Salisbury Newbury Natick Nantucket P.I. ouse Kingston Wayland Worc. (BMB) Boxford Topsfield Medford Kingston ey Braintree Gardner S. Dartmouth Worc. (BMB) Newbypt Petersham Medford Petersham Bobwhite Newton Cumb. Farms ail Barnstable (S.1	1 1-2 1 1 1 1 1 1 1 1 1 1 1 1 1	L. Hunnewell v.o. H. Wiggin# E. Tarry P. Roberts D. + I. Jewell J. Brown# D. Larson fide E. Ray M. Pelikan D. Ludlow# N. Patterson B. Rasku P. + F. Vale R. Finch D. + I. Jewell D. Ludlow Campbell + v.o. T. Pirro M. Boucher B. Rasku C. Cook M. Lynch# M. Rines# C (D. Ludlow) H. Miller		

thr	Arlington	85 max	M. Rines
1/2	Eastham	65	R. Forster
1/20	Lynn	14	R. Forster
1/28 2/1	Nantucket	36	E. Ray
2/16	Wareham	9	J. Titus
Killdeer	Lynn	12	J. Brown#
1/1	Chilmark	4 G.	d'Entremont#
1/9	Plymouth	1 0.	R. Finch
1/19	Orleans	î	B. Parker
2/8	Cumb. Farms	1	R. Finch
2/22	P.I.	4	S. Moore
2/22	Ipswich	7	R. Heil
2/22	Newbury	5	R. Heil
2/22	Essex	1	J. Hoye#
2/22	Winthrop	2	R. Forster#
2/22	Arlington Res	1	M. Pelikan
2/22 Duddu T	Lexington	1	M. Pelikan
Ruddy Tu 1/3		0 0	JTT- to a state
2/3	Nantucket Gloucester		d'Entremont#
2/16	Rockport	2 2	B. Parker L. Nachtrab
Red Knot		2	L. Nachuao
1/4	P'town (R.P.)	2	G. Martin
2/9	No. Scituate	2 3	K. Godfrey
Sanderlin		5	n. oounoy
1/12	Boston H.	208 TA	SL (M. Hall)
1/19	Yarmouth	15	N. Komar
1/21	Brewster	50	W. Ellison#
2/9	Boston H.	72 TA	SL (M. Hall)
Purple Sa			
	/16 Westport	9	M. Boucher
1/12	Boston H.		SL (M. Hall)
1/19	Rockport	25	J. Berry#
1/20	Marblehead	60	R. Forster
2/7	Marshfield	65	D. Clapp
2/8	Winthrop	4 S.	+ L. Hennin
2/9 2/9	Manomet Boston H.	15 11 TA	E. Kile
2/15	Newbypt		SL (M. Hall) de S. Grinley
2/28	N. Scituate	250	v.o.
Dunlin	II. Sendate	250	v.o.
1/12	Boston H.	184 TA	SL (M. Hall)
1/21	Brewster	280	W. Ellison#
2/7	Marshfield	90	D. Clapp
2/9	Duxbury	275	E. Cleveland
2/9	Boston H.	15 TA	SL (M. Hall)
Common			
1/8	Cumb. Farms	1	R. Finch
1/24	Worc. (BMB)	1	B. Rasku
2/24	MNWS	1	L. Healy
	Woodcock	3	A 17 . 14 . 11
1/1	Chilmark	1	A. Keith#
2/3	Barnstable	1 m 1	E. Miller
2/10 2/19	Marshfield Brookline	1	D. Ludlow L. Kaplan
2/19	Wayland	1	N. Patterson
2/27	Newton	5	B. Chiasson
2/22-2			
Black-hea			
1/1	Katama	1	A. Keith
1/4	Lynn	2	L. Healy
1/6	Winthrop	-	R. Cressman
1/1-2/2		1	v.o.
1/10-2		1-2 1	R. Donovan#
1/31	Cotuit	1 ad.	G. Martin
	/28 Gloucester	1-2 1W	
1/25	E. Boston	1 ad	J. Quigley
1/26	Rockport	1	S. Gaulin
2/2	Nantucket	1	fide E. Ray
2/9	Boston H.	3 TA	SL (M. Hall)
2/19	Lynn	1	J. Quigley

Bonaparte			I D.
1/1	Salisbury	1	J. Berry
1/6	Bourne	23	M. Boucher
1/11	Lynn	170	M. Lynch#
1/28	Nantucket	500	É. Ray
2/2	Newbypt	7	M. Lynch#
2/9	Boston H.	13 7	TASL (M. Hall)
	ll (no details)*		
	28 Winthrop	1	v.o.
	I (details submitte		
	S. Boston	1 R.	Donovan + v.o.
Iceland G			
1/4	Acton	3	C. Paine
1/8	Newbypt	4	B. Gette
1/11	P'town	5+	J. Young
1/22	Gloucester	2	R. Forster
2/2	Nantucket	28	fide E. Ray
2/8	Newbypt	5	S. Perkins#
2/8	Gardner	1	T. Pirro
	ack-backed Gull		
1/4	Edgartown	1	A. Keith
1/5	Boston	1 ad	R. Kelley
2/15	Acton	1	M. Rines
2/17	Nantucket	î	fide E. Ray
Glaucous		-	
1/2	Orleans	1 1 1	R. Forster
	9 S. Boston	1	R. Donovan
1/4	Acton	2	C. Paine
1/4	Gloucester	ĩ	J. Soucy#
1/4	Gardner	1 2W	
1/8	Newbypt	1	B. Gette
1/12	Provincetown	1	S. Clifton
2/2	Nantucket	1	fide E. Ray
2/22	P.I.	1 ad	H. Wiggin#
	ged Kittiwake	1 ad	II. WIggin#
1/4		35	B. Nikula#
	Provincetown Recknort (A P)	5	
2/22 Dovakia	Rockport (A.P.)	5	J. Hoye#
Dovekie	Bookmant (II D)	1	P. Crosser
1/1	Rockport (H.P.)	1	R. Cressman
1/1 Common	Sandwich	1	P. Trimble#
Common		Ed. V	Van das Dasta
2/1	Eastham 2	fide K.	Von den Deale Von den Deale
2/6	Truro 1	nde K.	von den Deale
	led Murre	~	C 14
1/4	P'town (R.P.)	2	G. Martin
Razorbill		25	
1/4	P'town (R.P.)	25	G. Martin
1/12	Rockport	10	M. Lynch#
Black Gu			120 120 12000
1/4	Rockport	2	P. + F. Vale
1/12	Gloucester	7	M. Lynch#
1/20	P'town (R.P.)	1	W. Ellison#
2/9	Boston H.		rASL (M. Hall)
2/15	E. Gloucester	9	J. Berry
2/16	P'town	2	W. Petersen#
2/22	Cape Ann	19	R. Heil
2/26	Gloucester	7	R. Forster
Barn Owl			I. I OISTOI
1/1	Chilmark	1	R. Stymeist#
	creech-Owl	1	R. orymeist#
		1	I Barry
1/1, 2		1	J. Berry
1/1	Chilmark		R. Stymeist#
1/4	Lexington	1 rec	
1/18	Worcester	1	M. Lynch#
2/1	Newbury	1	D. Jacques

2/17 Wayland	1	N. Patterson
Great Horned Owl		
1/1, 2/9 Ipswich	1, 2	J. Berry
1/2 Mt.A.	1	R. Stymeist
1/3, 2/2 Bolton	2, 1	S. + L. Hennin
1/16 Boston	2	F. Sutton
1/19 Essex	1	D. + I. Jewell
1/31 E. Boston	1	C. Warren H. Wiggin#
2/2 Brookline	1	H. Wiggin#
2/7 Cumb. Farms	1	R. Finch
2/9 Lexington	1	C. Cook
2/13 Medford	1	M. Rines
2/16 Concord	1	D. + I. Jewell
2/23 S. Dartmouth	2	M. Boucher
2/23 Newbury	pr	D. Sandee
Snowy Owl	P	D. buildee
thr Newbypt/P.I.	1-2	v.o.
1/5, 1/29 Boston	5, 4	N. Smith
1/14-2/18 Salisbury	1	V.O.
1/17 Duxbury	2	D. Ludlow
1/23, 2/14 Nantucket	4,5	E. Ray
2/1-28 Chatham (S. B.)	1	V.O.
2/8-15 Edgartown	1	E. Leslie
2/9 Barnstable (S.N.)	2	N. Handy#
2/23 Duxbury B.	3	E. Cleveland
Barred Owl		
1/9 Foxboro	1	T. Davis
2/9 Topsfield	1	R. Finch
Short-eared Owl		
thr Cumb. Farms	1-4	V.0.
1/19 Katama	1	L. McDowell
2/17 Nantucket	1	fide E. Ray
	114	
Boreal Owl (details submitte		
1/1-2/13 Boston	d)* 1 ph	v.o.
1/1-2/13 Boston Red-headed Woodpecker	1 ph	
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans	1 ph 1 im	m v.o.
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn	1 ph 1 im 1	m v.o. E. Taylor
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex	1 ph 1 im 1 1 im	m v.o. E. Taylor m v.o.
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester	1 ph 1 im 1 im 1 im	m v.o. E. Taylor m v.o. m M. Lynch#
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester 2/8 Amesbury	1 ph 1 im 1 1 im	m v.o. E. Taylor m v.o.
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester 2/8 Amesbury Red-bellied Woodpecker	1 ph 1 im 1 im 1 im 1 im 1	m v.o. E. Taylor m v.o. m M. Lynch# fide S. Grinley
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester 2/8 Amesbury Red-bellied Woodpecker 1/1-31 Pepperell	1 ph 1 im 1 im 1 im 1 im 1	m v.o. E. Taylor m v.o. m M. Lynch# fide S. Grinley
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester 2/8 Amesbury Red-bellied Woodpecker 1/1-31 Pepperell 1/1 Chilmark	1 ph 1 im 1 im 1 im 1 im 1	m v.o. E. Taylor m v.o. m M. Lynch# fide S. Grinley
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester 2/8 Amesbury Red-bellied Woodpecker 1/1-31 Pepperell 1/1 Chilmark 2/1-28 Sherborn	1 ph 1 im 1 im 1 im 1 im 1	m v.o. E. Taylor m v.o. m M. Lynch# fide S. Grinley
1/1-2/13 Boston Red-headed Woodpecker 1/1-31 Orleans 1/1-2/28 Sherborn 1/1-2/28 Essex 1/31 Worcester 2/8 Amesbury Red-bellied Woodpecker 1/1-31 Pepperell 1/1 Chilmark 2/1-28 Sherborn 2/15 Medford	1 ph 1 im 1 im 1 im 1 im 1	m v.o. E. Taylor m v.o. m M. Lynch# fide S. Grinley
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FLYCATCHERS THROUGH GROSBEAKS

This group of birds benefited from the exceptionally mild and snowless weather of the winter of 1997. Either birders were able to get out more often, or these species survived in significantly higher numbers than during last year's snow-glutted winter. The open, snowless fields, such as those on Littles Lane in Newbury

and the Cumberland Farms area of Middleboro, played host to good flocks of Horned Larks, Snow Buntings, and fair numbers of American Pipit and Lapland Longspurs. Carolina Wren reports were typical of the past three winters. The winter of 1994 was particularly harsh, and reports of this species since that time have been lower than in the early 1990s. Winter Wrens were well reported, and three Marsh Wrens, reported from Boston and areas north, is unusual for midwinter. A **Townsend's Solitaire**, originally discovered in December, lingered through the entire reporting period, affording many birders the opportunity to see this rare western vagrant. There are often reports of Hermit Thrushes, Gray Catbirds and Brown Thrashers during January and February, but seldom as many as were reported from the northern part of the state. The scattering of **Bohemian Waxwings** reports were lucky finds for only a few observers. While nothing to compare to the invasion of 1996, Northern Shrikes were reported in good numbers. A surprising lingerer was a Black-throated Blue Warbler seen on New Year's Day on Martha's Vineyard. Winter occurrences of this species are extremely unusual, so it was some solace to observers searching unsuccessfully for the Northern Lapwing seen for a few days at the end of December.

Eastern Towhee was another species that benefited from the mild winter, and a **Spotted Towhee**, seen by at least two observers at Marblehead Neck sanctuary, was an exceptional find. An excellent variety of sparrows were reported. Chipping, Clay-colored, Field, Savannah, Fox and Swamp Sparrows are regular overwinterers, but seldom in as good numbers as during this reporting period. An obliging **Harris' Sparrow** which was discovered at a Salisbury feeder in mid-January, and stayed through the reporting period. Several "Northern" and Baltimore orioles spurred many discussion on the field identification of oriole females. Winter finches? What winter finches!

Horned L				2/21	Northboro	5	A. Boover
1/1	S. Dartmouth	75	M. Boucher	2/23	Melrose	3	P. + F. Vale
1/1	Newbury 6	10 B	BC (L. de la Flor)	2/27	Petersham	5	C. Phillips
1/4	P.I.	50	P. + F. Vale	2/27	Medford	3	M. Rines
1/9, 2	/8 Cumb. Farm	s 175,	100 R. Finch	Carolina '	Wren		
1/11	Ipswich	60	J. Berry	1/1-31	Natick	2	R. Natt
1/19	Bourne	10	N. Komar		DWWS	2 2	D. Furbish
1/19	Bridgewater	150	D. Small#	1/1	Ipswich	2	J. Berry
2/1	Duxbury B.	17	D. Clapp	1/1	Chilmark	20	R. Stymeist#
2/04	Newbury	150	R. Heil	1/3	Northboro	1	B. Volkle
2/7	DWWS	16	D. Clapp	1/4	East Bridgewate		R. Finch
2/22	Rowley	12	R. Heil		Sherborn	2	E. Taylor
American		12	R. Hell	2/1-20	Rockport	1	J. Rose
	28 Framingham	0000.	nax E. Taylor	2/15	Acton	1	M. Rines
1/12	Brookline	1000+		2/15	Westboro	-1	A. Boover
1/26	Lawrence						
2/8		6500	J. Hogan	2/23	Marshfield	6	N. Swirka
	Woburn	4-5000	S. Perkins	Winter W			N/ D'
Fish Crow		-		thr	Medford	1	M. Rines
1/9	Watertown	2	R. Stymeist	1/2	MNWS	1	L. Healy
1/11	Falmouth	1	S. + L. Hennin	1/4	Gardner	1	T. Pirro
1/12	Newbury	1	C. Corley	1/5	Harvard	1	S. + L. Hennin
1/26	Lawrence	2	J. Hogan	1/20	Worc. (BMB)	1	B. Rasku
2/1	Woburn	20	M. Rines	1/30	Gloucester	1	M. Rines
2/1	Salisbury	1	M. Rines#	2/4	Marshfield	1	D. Ludlow
2/6	Duxbury	1	F. Bygate	2/8	MNWS	1	J. Smith
2/8	Braintree	1	G. d'Entremont	2/22	Rockport	1	R. Heil
2/9	Arlington	1	J. Soucy	Marsh Wi	ren		
2/23	Worcester	1	M. Lynch#	1/13	Dorchester	1	R. Donovan
2/28	S. Hanson	2	W. Petersen	2/04	Newbypt	1	R. Heil
Common	Raven			2/22	Gloucester	1	R. Heil
1/12	Gardner	1	T. Pirro	Golden-cr	owned Kinglet		
1/28	Boylston	2	J. Liller	1/17	Marshfield	4	D. Furbish
1/29	Wachusett Res		M. Lynch#	1/30	Stoneham	4	D. + I. Jewell
2/21	Groton	ĩ	T. Pirro	2/1	Gardner	4	T. Pirro
2/22	Athol		SBC (D. Ludlow)	2/9	Ipswich	5	J. Berry
	sted Nuthatch	2 0	SDC (D. Ludiow)		wned Kinglet	5	J. Dony
1/4	Nantucket	4	G. d'Entremont#	1/1	S. Dartmouth	1	M. Boucher
1/4	Mt.A.		R. Stymeist	1/23	Lexington	1	M. Rines#
2/8		3 2 2 3	D. Ludlow	Eastern B		1	IVI. KINCS#
	Kingston	2				9	M D:#
2/16	Cohasset	2	N. Swirka	1/1	Chilmark		M. Rines#
2/16	Weston	3	M. Rines#	1/9	Sherborn	24	E. Taylor
2/27	Petersham	2	C. Phillips	1/11	Pepperell	20	S. Hill
Brown Cr		1072.5	100 mm	1/15	Duxbury	6	D. Murphy
1/4	Mt.A.	2	R. Stymeist	1/17	Sudbury	7	R. Crissman
1/25	Lincoln	3 4	M. Rines	1/17	Norfolk	20	J. Clancy
2/6	Melrose	4	D. + I. Jewell	1/25	Lincoln	12	M. Rines
2/16	Cohasset	6	N. Swirka	1/27	Mattapoisett	8	F. Smith

Eastern DI	wahind (continu	(h.	
2/2	luebird (continu Rochester	12	J. Titus
2/10	Norfolk	20	J. Clancy
2/17	Eastham	20	fide MAS
2/23	Needham	8	J. Samulson
Townsend	l's Solitaire (de		nitted) *
1/1-2/2	28 W. Barnstab	le 1	v.o.
Hermit Th	rush		
1/1	Chilmark	4	M. Rines#
1/2	Marshfield	2 2	D. Furbish
1/11	Boston	2	J. Young
	Westport	2	G. Gove
1/30	Gloucester	2	M. Rines
thr American	Reports of indi	v. from 2	0 locations
1/1	Osterville	150	B. Nikula#
1/4	Mt.A.	180	R. Stymeist
1/8	Wellesley	200	R. Forster
1/27	Boston	775	K. Hudson
2/6	Wayland	175	R. Forster
2/8	Maynard	100	L. Nachtrab
2/8	Halifax	189	R. Finch
Gray Catb			
1/1	Acoaxet	5	E. Salmela#
1/1	Chilmark	5	M. Rines#
1/9	Westport	1	R. Finch
1/10	Cambridge Truro	1	M. Rines J. Young
1/20	Barnstable	2	W. Ellison#
1/20	Wellesley	1	R. Forster
1/21	Stoneham	î	D. + I. Jewell
2/8	Worcester	î	H. Tibbetts
2/15	Dartmouth	1	R. Heil
2/23	Marshfield	1	N. Swirka
Brown Th			
1/1	Chilmark	1	D. Lange#
1/18	Westport	1	G. Gove
1/28	Nantucket	1	E. Ray
1/28 2/8	Lexington Orleans	1	J. Stetson R. Forster
American		1	R. POISter
1/11	Cumb. Farms	4	S. Henin
2/1	Cumb. Farms	1	M. Lynch#
2/22	Katama	1	A. Keith
	Waxwing		
	2 Brewster	2	G. Martin
2/6	Brewster	1	S. Highley
2/7	Eastham (F.H.)) 1	J. Sones#
2/11 Cedar Wa	Lincoln	1	B. Sisson
1/1	Ipswich	30	J. Berry
1/1	Österville	80+	B. Nikula#
1/4	Rockport	40	H. Wiggin#
1/23	Boxford	40	D. + I. Jewell
1/27	Maynard	68	L. Nachtrab
2/6-28	Taunton	125 max	G. d'Entremont
2/7	Westboro	33	A. Boover
2/8	Gardner	120	T. Pirro
2/12	Malden	100+	D. MacDonald
2/15	IRWS	95	J. Brown#
2/17	Ipswich	75	J. Berry
Northern S 1/1	Barnstable (S.1	I (.N	E. Salmela#
1/3	Wayland	1 ad	
1/4	Gardner	1 im	
1/9	Groton	1 im	
1/19	Bourne	1	R. Finch
1/22	Provincetown	i	J. Sones
1/22	Lexington	ĩ	D. + I. Jewell
1/23	Westport	1	D. Bowen
1/30	Sudbury	1	K. Smith
2/2	Nantucket	1	fide E. Ray

2/3-8	Gardner	1	T. Pirro	
2/9			(W. Drummond)	
2/17	Barnstable (S.N.)	1	W. Petersen#	
2/17	Bolton	1	S. + L. Hennin	
2/20	Chatham	î	W. Bailey	
2/22	Wayland	2	S. Cronenweth	
2/23	Cumb. Farms	2	M. Rines	
	owned Warbler	-		
1/5	Nantucket	1	G. d'Entremont#	
1/18	Gloucester	1	V.0.	
Black-thro	ated Blue Warbler			
1/1	Chilmark	1	R. Stymeist#	
Yellow-run	mped Warbler			
1/19	S. Middleboro	12	D. Small#	
1/30	Gloucester	5	M. Rines	
2/2	P.I.	15	M. Pelikan	
2/23	Marshfield	8	N. Swirka	
Pine Warb				
1/10	M.V.	1	J. Verner	
1/19	Kingston	1	D. Ludlow	
2/9	Duxbury	1	F. Bygate	
Palm Warl				
1/1	Chilmark	1	G. d'Entremont	
	Yellowthroat			
1/1	Scusset	1	R. Forster	
1/1	Acoaxet	1	E. Salmela#	
	easted Chat			
1/1	Westport	1	E. Salmela#	
1/1	S. Dartmouth	1	W. Miller#	
1/1	Falmouth	1	M. Lynch#	
1/3-5	Nantucket		M. Rines $\#$ + v.o.	
	23 Essex	1	D. Brown	
Dickcissel	7 Maushum	1.0		
1/1-2/1 1/1-2/2		1-2		
1/1-2/2		1	V.O. P Erogoou	
1/26-3		1	B. Fregeau S. Denison	
Eastern To		1	5. Demson	
	N. Dartmouth	2	M. Boucher	
	1 Gardner	ĩ	T. Pirro	
1/1	Chilmark	15	R. Stymeist#	
1/17	Westford	1	M. Leggett	
1/18	Westport	2	G. Gove	
1/19-3			G. d'Entremont#	
1/24	Marshfield	1	D. Ludlow	
1/26	S. Dartmouth	3 B	BC (R. Stymeist)	
	E. Middleboro	1	K. Anderson	
2/1-8	Gloucester	1 m		
2/12	Marblehead	2	L. Healy	
Spotted T	owhee (no details)	*		
2/6	MNWŚ	1 m	L. Healy + v.o.	
American	Tree Sparrow			
	Dedham	15	N. Komar	
2/8	IRWS	30	P. + F. Vale	
2/16	Westboro	31	A. Boover	
2/23	Cumb. Farms	45	M. Rines	
2/25	West Roxbury	25	N. Komar	
Chipping S	Sparrow			
1/15	Chilmark	1	L. McDowell	
1/19	S. Middleboro	1	D. Small#	
	ed Sparrow			
1/1-27	Rockport	1	v.o.	
2/8	Dorchester	1	R. Donovan	
Field Spar	row			
1/1-31	Truro	5	W. Ellison#	
1/1	Chilmark	8	D. Lange#	
1/5	Wachusett Res.	3	M. Lynch#	
1/19	Essex		P. + F. Vale T. Pirro	
2/1	Templeton	1	T. Pirro	
2/3	Rochester	1	M. Boucher	
2/8	Dorchester	4	R. Donovan	
2/16	Harvard	1	R. Stymeist#	

	Carrier		
Savannar 1/1	n Sparrow Melrose	5	P. + F. Vale
1/14	P.I.	1	D. + I. Jewell
2/04	Newbury	13	R. Heil
2/23	Cumb. Farms	13	
2/25	W. Roxbury	2	M. Rines
		2	N. Komar
Fox Spar	0 Mt.A.	1	
1/16	Norfolk	1	V.O.
1/20			N. McGlynn
1/20		1	D. + I. Jewell
	Middleboro	1	R. Finch
1/29,	2/17 Arlington	1	K. Dorsey
2/13	Mattapoisett	1	M. LeBossiere
2/13	Wenham	3	C. Leahy D. Larson
	Natick	3	D. Larson
Swamp S		3	M. T
1/1	Plymouth		M. Lynch#
1/2	Marshfield	8	N. Swirka
1/4	Nantucket	1	G. d'Entremont#
1/11	Melrose	1	P. + F. Vale
1/20	Worc. (BMB)	1	B. Rasku
2/3	Rochester	1	M. Boucher
2/8	Dorchester	3	R. Donovan
2/15	IRWS	1	J. Brown#
2/16	Ipswich	2	J. Berry
White-cro	owned Sparrow		
1/2	Nantucket	1	M. Rines#
2/4	Marblehead	1	L. Healy
	owned Sparrow (C		
2/12	MNWS	1 i	imm R. Heil
Harris' S	Sparrow		
1/18-2		1	S. Bolduic + v.o.
Dark-eye	d Junco		
1/2	Marshfield	55	N. Swirka
	ed" Junco		
	7 Medford	1	D. Oliver + v.o.
Lapland I			
	2 Newbury		max v.o.
2/8	Cumb. Farms	2	R. Finch
2/9	No. Scituate	1	K. Godfrey
Snow Bu	nting		
1/1	Salisbury	70	J. Berry
1/11	Winthrop	10	M. Lynch#
1/24	Brant Rock	8	v.o.
2/1	Newbury	60	D. Jacques
2/1	Duxbury B.	17	D. Clapp
2/3	Wareham	150	L. Robinson
2/6	Gardner	200	Т. Рігто
2/7	Marshfield	2	D. Clapp
2/7 2/8		2 50	D. Clapp I. Romanow
2/8	Ipswich	50	I. Romanow
2/8 2/9	Ipswich Gloucester	50 40	I. Romanow M. Flor
2/8 2/9 2/21	Ipswich Gloucester Groton	50	I. Romanow
2/8 2/9 2/21 Red-wing	Ipswich Gloucester Groton ed Blackbird	50 40 2	I. Romanow M. Flor T. Pirro
2/8 2/9 2/21 Red-wing thr	Ipswich Gloucester Groton ed Blackbird DWWS	50 40 2 118 r	I. Romanow M. Flor T. Pirro max D. Furbish
2/8 2/9 2/21 Red-wing thr thr	Ipswich Gloucester Groton ed Blackbird DWWS Dedham	50 40 2 118 r 56 r	I. Romanow M. Flor T. Pirro max D. Furbish max E. Cutler
2/8 2/9 2/21 Red-wing thr thr 1/1	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley	50 40 2 118 r 56 r 30	I. Romanow M. Flor T. Pirro max D. Furbish max E. Cutler D. + I. Jewell
2/8 2/9 2/21 Red-wing thr thr 1/1 1/3	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket	50 40 2 118 r 56 r 30 50	I. Romanow M. Flor T. Pirro nax D. Furbish nax E. Cutler D. + I. Jewell G. d'Entremont#
2/8 2/9 2/21 Red-wing thr thr 1/1 1/3 1/6	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket Cumb. Farms	50 40 2 118 r 56 r 30 50 12	I. Romanow M. Flor T. Pirro nax D. Furbish nax E. Cutler D. + I. Jewell G. d'Entremont# R. Finch
2/8 2/9 2/21 Red-wing thr thr 1/1 1/3 1/6 1/17	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket Cumb. Farms DWWS	50 40 2 118 r 56 r 30 50 12 40	I. Romanow M. Flor T. Pirro nax D. Furbish nax E. Cutler D. + I. Jewell G. d'Entremont# R. Finch D. Ludlow
2/8 2/9 2/21 Red-wing thr thr 1/1 1/3 1/6 1/17 1/19	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket Cumb. Farms DWWS Cumb. Farms	50 40 2 118 r 56 r 30 50 12 40 325	I. Romanow M. Flor T. Pirro nax D. Furbish nax E. Cutler D. + I. Jewell G. d'Entremont# R. Finch D. Ludlow D. Small#
2/8 2/9 2/21 Red-wing thr 1/1 1/3 1/6 1/17 1/19 1/19	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket Cumb. Farms DWWS Cumb. Farms Bridgewater	50 40 2 118 r 56 r 30 50 12 40 325 250	I. Romanow M. Flor T. Pirro nax D. Furbish max E. Cutler D. + I. Jewell G. d'Entremont# R. Finch D. Ludlow D. Small#
2/8 2/9 2/21 Red-wing thr 1/1 1/3 1/6 1/17 1/19 1/19 1/19 1/29	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket Cumb. Farms DWWS Cumb. Farms Bridgewater Norfolk	50 40 2 118 r 56 r 30 50 12 40 325 250 15	I. Romanow M. Flor T. Pirro nax D. Furbish nax E. Cutler D. + I. Jewell G. d'Entremont# R. Finch D. Ludlow D. Small# D. Small# B. Riddoch
2/8 2/9 2/21 Red-wing thr 1/1 1/3 1/6 1/17 1/19 1/19	Ipswich Gloucester Groton ed Blackbird DWWS Dedham Rowley Nantucket Cumb. Farms DWWS Cumb. Farms Bridgewater	50 40 2 118 r 56 r 30 50 12 40 325 250	I. Romanow M. Flor T. Pirro nax D. Furbish max E. Cutler D. + I. Jewell G. d'Entremont# R. Finch D. Ludlow D. Small#

2/19	W. Bridgewater	35	G. d'Entremont
2/21	Concord	60	R. Forster
2/23	Westboro	103	A. Boover
2/23			A. BOUVER
	W. Harwich	200+	B. Nikula#
2/24	Newbury	150+	S. Perkins#
2/24	Wakefield	100	S. Perkins#
Eastern N	leadowlark		
1/11	Middleboro	2	S. + L. Hennin
1/14	S. Dart. (A.Pd)	14	LCES (LUIII)
		-	LCES (J. Hill)
2/7	DWWS	31	D. Clapp
2/7	E. Boston (B.I.)	5	R. Cressman
2/8	Princeton	1	H. Tibbetts
2/19	Cumb. Farms	35	R. Finch
2/27	Burlington	1	K. Ohmart
	alchied	1	R. Onnart
Rusty Bla	ickbird		
1/6	Belmont	2	C. Cook
1/24	Sudbury	4	R. Forster
2/1	Rowley	14	R. Stymeist#
2/3	Middleboro	13	M. Boucher
2/19		4	
	Lexington		M. Telfer
2/22	Westwood	3	E. Nielsen
Common	Grackle		
1/1	Oak Bluff	2	G. d'Entremont#
1/3	Nantucket	ĩ	G. d'Entremont
1/19			
	Essex	1	J. Amirault
1/20	Lynnfield	1	R. Forster
2/19	W. Bridgewater	10	G. d'Entremont
2/22	Framingham	40	E. Taylor
2/23	Methuen	800	D. Duxbury
2/23		200	D. Duxbury
	W. Harwich		B. Nikula#
2/24	Burlington	100 +	S. Perkins#
2/24	Framingham	200	E. Taylor
2/27	Billerica	150	S. Wedge
	aded Cowbird		o. neage
1/1	Belmont	1	I Comphall
			J. Campbell
1/3	Nantucket	1	G. d'Entremont
1/7	E. Middleboro	1	K. Anderson
1/19	Gloucester	1 m	G. d'Entremont
2/1	Rowley	6	M. Rines#
2/9	Somerville	2	J. Young
2/19	W Dridgewater	5	
	W. Bridgewater	2	G. d'Entremont
Baltimore	Oriole		
1/1-2/	8 Gloucester	1	V.O.
1/15	Gay Head	1	A. Fisher
1/18-2	Gay Head 2/26 Andover	î	D. Duxbury
1/23-2	8 Nantucket	2	
		2	E. Ray
Northern	Oriole		10000 1000 a - 131 10
1/1-2/	8 Sherborn	1	S. Brodie
Purple Fin	nch		
1/25	Lexington	2	M. Pelikan
1/25	Middleboro	9	R. Finch
1/23			
1/27	S. Dartmouth	1	M. Boucher
2/3	E. Gloucester	1 f	B. Parker
2/6	Maynard	6	L. Nachtrab
2/6	Mattapoisett	5	F. Smith
2/7	Westford	5 2	S. Wedge
2/8	Marlboro		B. Parker
		1 f	
2/9	Wayland	14	G. Long
		7	C. Phillips
2/18	Barre	1	
2/18 2/22			
2/22	Essex	1	R. Stymeist#
2/22 2/22	Essex GMNWR		
2/22 2/22 Evening (Essex GMNWR Grosbeak	1 1	R. Stymeist# S. Cronenweth
2/22 2/22	Essex GMNWR	1	R. Stymeist#

HOW TO CONTRIBUTE BIRD SIGHTINGS TO BIRD OBSERVER

Sightings for any given month must be reported in writing by the eighth of the following month. Send to Bird Sightings, Robert H. Stymeist, 94 Grove Street, Watertown, MA 02172. Please organize reports by month and by species in current A.O.U. checklist order.

LIST OF ABBREVIATIONS

* Indicates a species on the review list of the Massachusetts Avian Records Committee (MARC). These sightings are usually published before the MARC votes, so they normally have not been voted on by the MARC. The editors only publish records supported by detailed description, multiple observers, or both.

ad	adult	H.	Harbor
alt	alternate	I.	Island
b	banded	L.	Ledge
br	breeding	M.V.	Martha's Vineyard
dk	dark (phase)	Mt.A.	Mount Auburn Cemetery, Cambridge
f	female	Nant.	Nantucket
fl	fledged	Newbypt	Newburyport
imm	immature	P.I.	Plum Island
ind	individuals	Pd	Pond
juv	juvenile	P'town	Provincetown
loc	location	Quab.	Quabbin
lt	light (phase)	Res.	Reservoir
m	male	R.P.	Race Point, Provincetown
max	maximum	S.B.	South Beach, Chatham
migr	migrating	S. Dart.	South Dartmouth
n	nesting	S.N.	Sandy Neck, Barnstable
ph	photographed	Stellw.	Stellwagen Bank
pl	plumage	Worc.	Worcester
pr	pair	BBC	Brookline Bird Club
S	summer (1S = first summer)	BBS	Breeding Bird Survey
thr	throughout	BMB	Broad Meadow Brook, Worcester
v.o.	various observers	CCBC	Cape Cod Bird Club
W	winter $(2W = second winter)$	DFWS	Drumlin Farm Wildlife Sanctuary
w/	with	DWWS	Daniel Webster Wildlife Sanctuary
yg	young	EMHW	Eastern Massachusetts Hawk Watch
#	additional observers	GMNWR	Great Meadows National Wildlife Refuge
A.A.	Arnold Arboretum	HRWMA	High Ridge Wildlife Management Area,
A.P.	Andrews Point, Rockport		Gardner-Westminster
A.Pd	Allens Pond, S. Dartmouth	IRWS	Ipswich River Wildlife Sanctuary
Arl.	Arlington	LCES	Lloyd Center for Environmental Studies
В.	Beach	MARC	Massachusetts Avian Records Committee
B.I.	Belle Isle, E. Boston	MAS	Massachusetts Audubon Society
B.R.	Bass Rocks, Gloucester	MBO	Manomet Observatory
Cambr.	Cambridge	MBWMA	Martin Burns Wildlife Management Area,
C.B.	Crane Beach, Ipswich		Newbury
Corp. B.	. Corporation Beach, Dennis	MDFW	MA Division of Fisheries and Wildlife
C.P.	Crooked Pond, Boxford	MNWS	Marblehead Neck Wildlife Sanctuary
Cumb. F	Farms Cumberland Farms,	MSSF	Myles Standish State Forest
	Middleboro-Halifax	NAC	Nine Acre Corner, Concord
E.P.	Eastern Point, Gloucester	NBC	Needham Bird Club
F.E.	First Encounter Beach, Eastham	NEHW	New England Hawk Watch
F.H.	Fort Hill, Eastham	ONWR	Oxbow National Wildlife Refuge
F.M.	Fowl Meadow	SRV	Sudbury River Valley
F.P.	Fresh Pond, Cambridge	SSBC	South Shore Bird Club
F.Pk	Franklin Park, Boston	TASL	Take A Second Look Harbor Census
G40	Gate 40, Quabbin	USFWS	US Fish and Wildlife Service
G45	Gate 45, Quabbin	WBWS	Wellfleet Bay Wildlife Sanctuary
H.P.	Halibut Point, Rockport	WMWS	Wachusett Meadow Wildlife Sanctuary

ABOUT THE COVER: PILEATED WOODPECKER

The Pileated Woodpecker (*Dryocopus pileatus*) is a crow-sized bird, the largest North American woodpecker except for the probably extinct Ivory-billed Woodpecker. Its genus name, *Dryocopus*, means "tree cleaver" and its folk names, "big black woodpecker," "log-cock," "carpenter bird," and "cock of the woods," provide insight into the size and behavior of this spectacular bird with a chisel-like bill. The species name, *pileatus*, means "capped," and refers to its flaming red crest. In males the red area includes the forehead, while in the female the forehead is brownish or blackish; females lack the red mustache stripe of the male. On perched birds, the rest of the plumage appears black except for white chin and facial stripes which extend down the neck and disappear under the folded wings. In flight the wing linings and the base of the flight feathers are white, and from above a splash of white decorates the base of the primaries of each wing. Young birds are duskier than adults. Pileated Woodpeckers have slightly undulating flight with slow wingbeats. The species is polytypic with two to four subspecies recognized by various authorities.

Pileated Woodpeckers are permanent residents of deciduous and coniferous forests across much of southern Canada, most of the eastern half of the United States, and south to central California on the West Coast. In Massachusetts the species is considered an uncommon resident, local east of Worcester and largely absent on Cape Cod and the islands.

Pileated Woodpeckers are monogamous and most birds probably mate for life. Territorial pairs defend their "turf" year-round. They prefer older forests but are also found in younger forests with scattered old trees and snags where they can nest and roost. Their call has been described by various authors as a loud *cuk-cuk-cuk-cuk*, *Waa*, *Wok*, *Wuk*, *Woick*, *G-Waick*, or *Wichew*. Syllables may be given singly or in series, and females' calls are higher pitched than males'. Calls may involve courtship or territorial advertisement. The drumming, which is done by both sexes, is distinctive, starting slowly and then accelerating, ending in a roll up to three seconds later. Pileated Woodpeckers tend to choose drumming spots, such as knotholes on hollow limbs, that produce loud, resonating sounds. Territorial disputes may involve chases, frequent calling, and at close quarters, wing-flapping and bill-jabbing. Displays include crest-raising and head-swinging.

Males select the nest site, usually in a large dead tree, and do most of the excavating. The nest cavity may be one-and-a-half feet or more in depth, and may take several weeks to excavate. The openings are typically a distinctive oblong shape, and the pile of chips under a hole looks like someone has been working with an axe. Nests are rarely reused for nesting, but may be used for roosting. By May or June the usual clutch of four glossy-white eggs will be laid. Both males and females have brood patches and both birds incubate, the male

mostly at night. The incubation period is between two and three weeks, followed by a fledging period of about a month. Both parents feed the young by regurgitation. After about two weeks things get crowded, and the adults feed the young birds, heads sticking out of the nest-hole, from the outside. After fledging, the young stay with the parents for several months and may stay in the natal territory for nearly half a year.

The main prey of Pileated Woodpeckers are carpenter ants and wooddwelling beetle larvae, which they reach by scaling bark off trees, stumps, and fallen logs with their chisel-like bills. They use their long, protrusile tongue (which is sticky and barbed) to extract prey. They are opportunistic and will glean branches for prey such as spruce budworm larvae. They also eat various fruit and nuts and will eat suet in winter.

The Pileated Woodpecker was rare in the east by the end of the nineteenth century due to deforestation, but began to recover by the 1930s and continued to increase as reforestation has progressed. Interestingly, it has been suggested that the Dutch Elm blight may have benefited Pileated Woodpeckers by providing a source of large dead trees. Habitat alteration, particularly where old-growth forest is eliminated and harvest rotations shortened, is a current and future problem, since these woodpeckers need large dead trees for nesting and roosting. The birds are subject to predation by large accipiters and owls, lightning is a problem, and in the past they were shot for food. But Pileated Woodpeckers have become fairly tolerant of humans, and Breeding Bird Survey data suggest that populations are increasing, especially in the eastern United States and Canada. It appears that birders can hope to encounter the "log-cock" with increasing frequency.

W.E. Davis, Jr.

ABOUT THE COVER ARTIST

The work of Barry van Dusen appears frequently on the cover of Bird Observer. He is presently illustrating a pocket laminated guide on butterflies for the Massachusetts Audubon Society. The fifth such guide Barry has worked on, "A Guide to Butterflies and Butterfly Gardening" will portray about sixty species. Another current project for Barry is adding a studio onto his central Massachusetts home.

AT A GLANCE June 1997 _____ Wayne R.Petersen

In the April issue of Bird Observer, readers were invited to identify a Gadwall in a plumage other than that of a breeding drake. The challenge highlighted the difficulties associated with identifying ducks in juvenal, female, and eclipse drake plumages. It was further suggested that most male ducks in breeding plumage are relatively easy to identify.

April's mystery duck undermines this contention. In at least one species pair-the Greater and Lesser scaup-identifying males in breeding plumage is nearly as problematic distinguishing the females of the two species. Scaup are difficult not only because of their similarity, but also because of the difficulty in observing and interpreting their features correctly under field conditions.

Before proceeding with a discussion of scaup identification, other duck species should first be eliminated. The male Ring-necked Duck is the bird most apt to be confused with male scaup, but it can readily be distinguished by its entirely black back, more angular head shape, prominent white ring around the tip of the bill (scaup have plain, powder-blue bills), and vertical white slash behind the black sides of the chest. In a black and white photograph, the male Redhead also resembles a male scaup; however, its light eye shows less contrast



Lesser Scaup

Photo by Hugo H. Schroder, Courtesy of MAS

BIRD OBSERVER

Vol. 25, No. 3, 1997

with the face, its bill possesses a dark end with a distinct pale ring near the tip, and its back and sides are grayer and less contrasting with the black chest.

To determine that the mystery bird is a scaup species is relatively simple. No other North American waterfowl displays the combination of a black head and chest, grayish back and sides, and black tail and flank area. In other words, male scaup are "black at both ends and gray in the middle." The problem lies in the fact that males of the two scaup species differ only in subtle ways.

When faced with the problem of identifying a single male scaup, always examine the head first. Head shape, and sometimes head color, are especially useful field marks. Greater Scaup tend to have a puffy-headed look, and a flatlooking top to the head. Lesser Scaup exhibit an abrupt forehead, an angular peak on the rear of the head, and less of a puffy look on the sides of the face. In good light, the gloss on the head of a Lesser Scaup is characteristically violet; that of a Greater Scaup tends to be greenish, though it sometimes appears to have violet highlights. The Greater Scaup is the greater chameleon in this regard. And finally, the bill of the Greater Scaup appears wide and flat at the distal end, while the bill of a Lesser Scaup is more narrow and shows a smaller nail at its tip.

The body of a Lesser Scaup tends to have more extensive dark vermiculations on the back and sides than the Greater Scaup, which often looks gleaming white on the sides rather than dusky gray. In a flock of scaup, try to get a sense of all of these features by looking at various individuals, not just one bird. But remember, the two species occasionally flock together during migration and winter. A more reliable feature than the body coloration, when it can be seen, is the extent of the white stripe on the trailing edge of the wing. The wing stripe of a Greater Scaup is bold, flashing, and extends nearly to the end of the outer primaries; that of a Lesser Scaup usually extends only through the secondaries, ending fairly abruptly in the middle of the wing.

After considering the field marks discussed above, it should be clear that April's mystery bird is a male Lesser Scaup (*Aythya affinis*). In Massachusetts, Lesser Scaup tend to concentrate on fresh water, especially lakes and ponds in the southeastern portion of the state, including Cape Cod and the islands. Greater Scaup, while they do visit fresh water, tend to be most numerous on salt ponds and on saltwater bays and harbors.

AT A GLANCE



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CONTENTS

BIRDING ADDISON, VTTerry Hall	132
FOREST-POWERLINE EDGES, CLEARCUTTING, AND	
BIRD COMMUNITIESWilliam E. Davis, Jr.	144
FIRST NESTING RECORD FOR GREAT EGRET ON	
OUTER CAPE COD Jennifer Lynn Megyesi	148
LOOKING FOR WHERE TO LOOK: MAPS AND BIRD-FINDING	
Marjorie W. Rines	151
BOOK REVIEW: The Origin and Evolution of Birds, by Alan Feduccia	
William E. Davis, Jr.	155
FIELD NOTES FROM HERE AND THERE	
Unusual Ruffed Grouse Behavior	157
Gyrfalcon in Lowell, MA Linda Hunnewell	159
BIRD SIGHTINGS: Jan./Feb. 1997 SUMMARY	161
ABOUT THE COVER: Pileated Woodpecker	171
ABOUT THE COVER ARTIST: Barry van Dusen	172
AT A GLANCE	173
Cover Illustration: Pileated Woodpecker by Barry van Dusen	