



July, 1992

FROM THE PRESIDENT'S DESK....

During the past few months, PSO has made some exciting changes in the organization, and we have held an outstanding annual meeting at Presque Isle State Park.

At the winter meeting of the Board of Directors in State College, we approved an agreement to form an alliance with *Pennsylvania Birds*, published by Barb and Frank Haas. *Pennsylvania Birds* is now the official journal of PSO. We will provide information and articles to *Pennsylvania Birds* on a regular basis. This will give PSO contact with many potential new members. Also, a discount is offered to persons wishing to join PSO and to subscribe to the magazine. If you are not already receiving *Pennsylvania Birds*, please consider this offer. If you have subscribed to *Pennsylvania Birds*, please inform fellow birders of this offer; be sure to utilize the subscription/membership form in this newsletter. Barb and Frank have done an excellent job publishing this magazine which provides valuable information to the birding community in Pennsylvania. Please support their effort and help maintain the existing statewide birding communications.

This agreement required changes in our membership categories; renewal of membership dates will be discussed elsewhere in this newsletter.

Our 1992 annual meeting was an outstanding success with 64 birders registering. Even the weather was good after many weekends of rain this spring. Presque Isle State Park maintained its reputation as the place to bird during spring migration. Over 150 species, including

Wilson's Phalarope and Piping Plover, were seen this weekend. Good food and interesting presentations rounded out the busy weekend. I appreciate the efforts made by the following members to help make the meeting successful: Shonah Hunter, Doug Gross, Margaret Higbee, Jane Earle, Dan Brauning, Ed Kwater, Jerry McWilliams, and Barb and Frank Haas. Before the meeting adjourned, we voted southeastern Pennsylvania as the site of our 1993 annual meeting. Information will be available in our next newsletter.

Welcome, new members! We have added more than 65 new members in May and June. Our goal is to double our membership this year.

Please send me your ideas concerning activities that interest you and your comments concerning PSO.

Again, I hope that we can support *Pennsylvania Birds* by maintaining our individual subscriptions and by informing our birding friends about the magazine.

--Bob Martin, President

1992 ANNUAL PSO MEETING

The third annual meeting of the PSO was held May 15-17, 1992, at Presque Isle State Park, Erie, Pa. Birders attended various activities at the meeting. On Friday evening, we joined with the Presque Isle Audubon Society for a program, "Hooded Warbler: Following a Migrant from the Yucatan to Pennsylvania," presented by Dr. Bridget Stutchbury, Post Doctoral Fellow, National Zoo, Smithsonian Institute, Washington, D.C. Dr. Stutchbury discussed problems encountered by the Hooded Warbler in both its breeding and winter

ranges. She also presented interesting information on behavior of the species during the breeding season. This excellent program was open to the public and well attended.

Field trips, bird banding, and pontoon boat birding tours were the Saturday morning activities. The highlights of the Gull Point outing included Wilson's Phalarope and Little Gull. Because many of the migrants were flying high overhead, leaders Ed Kwater and Jerry McWilliams termed it "stratospheric birding"; however, we did have excellent views of many of the species listed. (See the complete bird list elsewhere in this newsletter.)

Saturday afternoon, we enjoyed three very interesting presentations. Frances Stein, Environmental Education Specialist at Presque Isle, discussed the park's geological and biological backgrounds and its historic significance. This peninsula offers ecologists rare opportunities to study plant life successions. A sand and water lake shore changes to a climax forest within two miles. The many ponds offer a unique chance to study aquatic biology in ponds of varying ages. Geologically, Presque Isle is one of the rare spots in the world where one can study the actions of winds, currents, and waves on glacial sands in a recurving sand spit formation. The shores and waters of Presque Isle protected Commodore Perry's fleet during construction until he sailed forth into Lake Erie to engage the British fleet in the War of 1812. Perry Monument enshrines these events which are part of our nation's heritage.

David S. deCalesta, Wildlife Biologist, U.S. Forest Service, Warren, discussed the impact of White-tailed Deer on the diversity of woody species, songbirds, and herbs. Densities of 4, 8, 15, and 30 deer per square kilometer were maintained for ten years in fenced enclosures at four replicate sites in northwestern

Pennsylvania. Within each deer density enclosure, 10% of each area was clear-cut harvested, 30% was thinned, and 60% was left uncut. Species richness and abundance of woody and herbaceous species were derived from counts of stems and percent cover obtained from 20-30 milacre plots on clear-cut, thinned, and uncut areas of each deer density enclosure. Species richness and abundance of songbirds were obtained on these same areas by detecting songbirds at fixed census stations five times during the breeding season. Impact was greatest at 30 deer per square kilometer and least at 4 deer per square kilometer. Deer have a significant, negative impact on the diversity of forest resources. Their density should be brought down to and kept at 4-8 deer per square kilometer; this corresponds to estimates of deer densities in pre-colonial North America.

Dan Brauning, Wildlife Biologist, Pa. Game Commission, presented a program on identification of warbler songs. Dan made some very valuable suggestions on how to remember songs. Putting words to songs aids some persons, but a visual drawing of the song is another approach. Dan also suggested that we learn the songs of the less common warblers, such as the Yellow-throated Warbler. Dan stymied many of the birders present by playing tapes of bird songs that we should recognize. He then discussed each species' song in detail.

Those registered for the PSO annual meeting included:

Henry and Marge Bakkila
Helene Basile
Gloria Bickel
Dan Brauning
Becky Byerly
Dick Byers
Greg Cook
Robert and Ruth Cook
Lori Davis
Nancy Dennis
Jane Earle



Wes Egli
 Pauline England
 Glen Faught
 Randy and Toni Flament
 Janet Fetterolf
 Paula Ford
 Mr. and Mrs. Ken Gabler
 James and Diane Greeley
 Doug Gross
 Frank and Barb Haas
 Virginia Harner
 Randy Harrison
 Roger and Margaret Higbee
 Shonah Hunter
 Roy Ickes
 Joe Im'Brogno
 Rudy Keller
 Ralph Kelly
 G. Anne Kutz
 Gloria Lamer
 Ron Leberman
 Jocelyn Little
 Tony Marich
 Bob Martin
 Robert Merideth
 Madeline Miles
 Cathy Miller
 Glenn Mitzel
 Bernard Morris
 Jean and Bill Moses
 Grace Randolph
 Willis Ratzlaff
 Bob Ross
 Brenda Root
 Joan and Harold Silagy
 Fred Stiner
 Cliff Stringer
 Randy Stringer
 Georgette Syster
 Genevieve Tvrdik
 Thomas and Edith Urban
 Deborah Werking
 Rachael Werking



BIRD BANDING AT PRESQUE ISLE

Jean and Jim Stull conducted bird-banding sessions all day Saturday and Sunday. The Stull family has banded birds at Presque Isle for over 30 years. Their database on the birds captured, banded, and recaptured has given us a terrific insight into the birds that migrate through

Pennsylvania's funnel to Canada.

We PSO birders joined the general public's visits to the banding station just behind the park office. Jean and Jim not only did scientific work at the station (taking notes on the sex, age, and plumage of each bird handled), but also demonstrated how banding birds helps people understand them better. Each band has a unique number on it which is kept on file at the U. S. Fish and Wildlife Office. This allows banders to know when and where a bird was banded when they encounter it somewhere else. Jim and their son Sam ably demonstrated how birds were captured by mist nets and how banders very delicately take the little birds out of the tangles. Jean identified each bird and explained its identification and conservation.

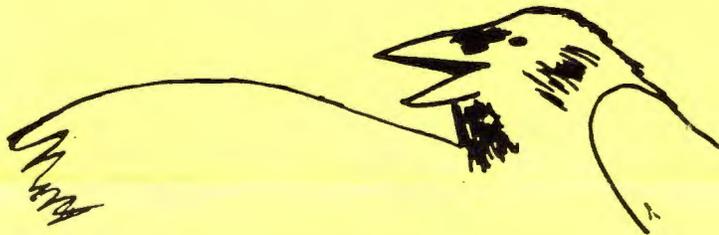
The banding session was enjoyed not only by PSO members but also members of the general public who knew little or nothing about birds and banding or any kind of research. For many visitors, it was eye-opening to see many of the warblers being held in the hand that we had struggled hard to glimpse in the Presque Isle brush. Banding surely brings intimacy to enjoyment of birds.

ROGER TORY PETERSON INSTITUTE

Ground was broken on July 17, 1992, for the Roger Tory Peterson Institute at a 27-acre natural area on Curtis Street in Jamestown, NY, hometown of Roger Tory Peterson. A 23,000-square-foot building will include staff offices, an art gallery, conference rooms, a library, and an all-purpose room. Eventually, the facility will house most of Dr. Peterson's papers, specimens, drawings, and paintings. Dr. Peterson was on hand for the ground breaking. "This building symbolizes all that Roger Tory Peterson has accomplished," said Paul A. Benke, Executive Director of the institute. "The building provides the institute with

the resources it needs to expand its work, and thus to promulgate Dr. Peterson's concerns and philosophy throughout the world."

Construction is expected to take 15 months. The institute is now housed in a residence at 110 Marvin Parkway, Jamestown, NY 14701. Phone: 716-665-2473.



THE RAVEN REPORTER

News of the Special Areas Project

No Feathers, No Fun!

Bird projects do not have to be boring. In fact, most of us think they are tons of fun. I mean, what else are you going to do at 7 o'clock in the morning in August or January? Count cornflakes? Do a mall walk? Become a permanent part of your mattress? Get out of the house and watch some birds! Even a bad morning of birding is better than a good morning of almost anything else.

Contrary to the impression that some may have, the Special Areas Project is not a dour undertaking for the overly serious. If we didn't enjoy birdwatching, we wouldn't do it at all. The Special Areas Project just focuses our energies into a certain direction. It just captures the data we often take down as part of our personal field notes into forms and a program that makes the information more accessible to others. Relax, and enjoy your visits to your Special Area.

It is easy to count birds. Don't sweat it. You don't have to belabor each bird or cover the entire

park during each visit. One of the main purposes of the Special Areas Project is to examine the chances that birdwatchers have of observing different species at different times of year. (Yes, that's what many checklists really do.) If you just walk along the trails, birdwatch along the roads, and check the birds that can be seen from an overlook at the park's reservoir, you are duplicating what most visitors would do. So, the data you collect in this manner can be used as a fairly good predictor of what others would find.

Any extra efforts you make to find birds are often their own reward. We birders love to solve mysteries. Are there Solitary Vireos nesting in those hemlocks? Do Sedge Wrens visit that wet meadow near the lake? When do the Yellow Warblers migrate through here on their way south? Do the Wood Thrushes in this park nest only once each year or do they nest twice? Are those Red Crossbills just visiting those spruces or will they stick around to nest? You probably have dozens of questions about what birds do that only can be answered by returning to visit several times each year and keeping an open mind to the possibilities.

And, anyway, who says that you have to see over 100 species in a day to have a good time. Get a grip on it, folks! Enjoy the quiet moments with some of your favorite birds. Don't listen to high-anxiety types who call Indigo Buntings "trash birds" and don't enjoy a bird trip unless they've added a species to their state list. (Let's remember that even though Scarlet Tanagers and Red-eyed Vireos are among our most common forest birds, those little bundles of feathers flew several hundred miles from Venezuela to get here. They aren't trashy!) If you want to sit down and watch a pair of orioles build their nest or feed their young, go ahead--just remember to record your time as a "special

effort."

So, dear volunteers, please remember: count birds, take good notes, check out some new places, but.....don't let any of this get in the way of having fun.

Make the Forms Work For You

Don't be a slave to forms. The opposite should be true. The Daily Survey Field Form was designed to organize daily trip data, not to make it difficult. You don't need to use the form in the field if you find it cumbersome. It might help to gather data from various parties once you gather the field cards and notes at the end of the day or the morning.

I've received some complaints that the Daily Survey Field Form does not have all the species encountered. I decided to keep this form to one page and to allow space for tallying birds and taking extra notes. So, it was impossible to put all species on the form without making the print illegibly small. Some volunteers use field cards like the Pennsylvania Birds Checklist to keep daily notes (however, it is tough to keep notes on the number of each species in boxes of these small checklists) and then transfer their notes to the Daily or Seasonal forms later.

It is perfectly acceptable to cross out species names on the Daily Survey Form and fill in another species for the convenience of keeping notes on one page. This is particularly useful when it involves birds with similar names. For instance, Red-breasted Mergansers have been found in some Special Areas more than Common Mergansers. Simply putting a line through "Common" and writing in "Red-br." or "R-b." or some other abbreviation (even in red ink if you'd like) that the Local Coordinator can recognize is a very easy way of adapting the form to your needs. Since the Daily Survey Field Form is not sent into the State Coordinator, modifications may be freely

made to suit the volunteer or local coordinator. The Seasonal Summary Form lists essentially all species found in the state and is the form that is sent in to the State Coordinator. Also remember to use the Additional Notes sheet for special efforts to find or confirm breeding by certain species, or to add those extra species.

Personally, I find it very gratifying to write in "extra birds" on forms. It makes me feel as if I've made a particularly good find.

-- Douglas A. Gross

BREEDING BIRD ATLAS SOON TO BE AVAILABLE

The long-awaited publication of the Atlas of Breeding Birds in Pennsylvania is nearly completed. After seven years of field work (1983-1989), and three years in production, the Atlas will finally be available this summer (month?).

Published by the University of Pittsburgh Press, the Atlas of Breeding Birds in Pennsylvania is a remarkable compilation of information on the state's nesting birds. The major feature, the species maps, show the range of all wild birds that nested during the project--188 species in all. Each of the 4,928 Atlas blocks in which the bird was recorded appear on the two-color maps. Each is species illustrated, and a one-page discussion of habitats, population history, and interpretation of why a species occurs where it does is included as part of each species account. An introduction summarizes the results, and plastic overlays permit interpretation of the maps in relation to elevational patterns, forest types, climate, and other factors. A full-color cover painting of a Chestnut-sided Warbler nest scene sets the tone of this handsome and information-packed book. The following is an annotated list of the book's most

important contents:

History of Bird Atlases--where the idea came from
Methods Used in the Survey--the how and why
Results and Discussion--highlights, strengths, and a few weaknesses
Geography of Pennsylvania--broad patterns described
History of Pennsylvania Ornithology--PA's rich past described
Species Accounts--why the birds are where they are
Account of Past Breeders--breeding history of all past nesters
List of Atlas Volunteers--your name, if you participated
Breeding Chronology Table--listing when each species nests
Literature Cited--over 1,000 citations are included!

This book is a must for any outdoor person who is curious about the birdlife of Pennsylvania.

All Atlas Project participants will receive a special introductory offer of the book for \$25. So don't order your copy yet. The Atlas will be available at all major bookstore chains or from the Press at a list price of \$34.95, plus \$3 handling, overlays included. If you did not participate, you may order the Atlas from:

University of Pittsburgh
Press
c/o CUP Services
Box 6525
Ithaca, NY 14851
(1-800-688-2877 for orders)

**CANOE CREEK STATE PARK SPECIAL
AREAS PROJECT**

--by Stan Kotala

Juniata Valley Audubon Society vice-president Bill King organized the Special Areas Project covering Canoe Creek State Park in Blair County in January, 1992. The goal was to survey the entire park on a

monthly basis with as many observers as possible in order that an accurate accounting of avian life in the park during the year be achieved. The ultimate intention of this project is to produce a field list with graphical representation of the relative abundance of each species of bird in this state park throughout the year with annotations regarding preferred habitats.

Canoe Creek State Park consists of 958 acres of hills and lowlands with mature forests of hardwoods and conifers, old fields, small grasslands, mowed areas, marsh, three streams, and a 150-acre lake. Its variety of habitats makes it a very good birding location. Waterfowl find its 15-year-old lake very attractive.

Volunteers helping in these counts were recruited from the ranks of the Juniata Valley Audubon Society. They have shown extraordinary dedication to the project, braving single-digit temperatures, deep snow, rain, fog, and blazing sun and making significant sacrifices in regard to personal time in order to make this endeavor a success. The core group of participants has included Melissa Focht, Janet Huber, Bill King, Gary Koch, Stan Kotala, Dave Kyler, Dan Sinal, and Terry Wentz, the Canoe Creek State Park Superintendent. Each birder covers 100 to 150 acres of this park in a 5-6 hour period, allowing for very accurate counts with as close to 100% coverage as possible. This census has occurred on a monthly basis in 1992 and will continue with special trips planned to count rails, nightjars, and owls.

The Juniata Valley Audubon Society believes that a wealth of accurate data concerning Canoe Creek's birdlife collected on a monthly basis over a period of several years will be of immense value in the management of the park's resources as well as being an excellent measure of the health of our larger environment. Members of

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| One year subscription to <i>PB</i> & Individual Membership in PSO (\$27.50 value) | \$26.00 | <input type="checkbox"/> |
| One year subscription to <i>PB</i> & Family Membership in PSO (\$32.50 value) | \$30.00 | <input type="checkbox"/> |
| One year subscription to <i>PB</i> & Sustaining Membership in PSO (\$42.50 value)* | \$40.00 | <input type="checkbox"/> |

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*One year's subscription includes four issues covering January to December. The first issue is mailed in June and the last issue in March of the following year. Rate for Canada is \$30.00, Foreign is \$40.00, Library is \$28.00.

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the PSO who would like to participate in any of our counts or who would like additional information should call Bill King at 814-942-7673 or Stan Kotala at 814-946-8840.

SPECIAL THANKS

Special thanks to John Sidelinger for contributing the artwork for this newsletter!

THE LOGGERHEAD SHRIKE IN PA

--by Shonah Hunter

The Loggerhead Shrike (*Lanius ludovicianus*) population has been declining in eastern United States for many years, and since 1972 it has been included on the National Audubon Society's Blue List, which lists species of special concern (Tate 1985). The Loggerhead Shrike was considered extirpated from its historic breeding grounds in northwestern Pennsylvania (Gill 1985) since the last confirmed nesting in the state was in Crawford County in 1937 (Brauning 1992). During the state Atlas Project, regular reports of shrikes were made from Adams County, but no nests were found (Kennell and Kennell 1990). In January, 1992, in cooperation with the PA Game Commission, a project was established to thoroughly survey the habitat in Adams County where shrikes had previously been seen, in anticipation of locating a nest.

Beginning in February, 1992, Rob Chambers, a student in the Biology Department at Lock Haven University, conducted road surveys southwest of Gettysburg, near the town of Fairfield. On 15 March, a pair of birds was seen by Art Kennell, our contact in Adams County; on 3 April, after extensive searching of all isolated trees in the field where the birds had been seen, Rob located a Loggerhead Shrike sitting on a nest. Five eggs were laid 24 April, but only four young ultimately

fledged 24 May.

The nest was placed in a hawthorn tree located in a pasture used for cattle grazing. We measured vegetation in the nest area to contribute to the body of data that hopefully will provide information on critical nesting habitat requirements for the Loggerhead Shrike. The location had widely spaced trees (9.65 m was the average distance between trees) with short, grazed grass. The nest was within 25 m of a gravel road lined with hedgerows, composed of multiflora rose and honeysuckle. Across the road was a large grass and sedge pasture which the birds used for hunting.

Since the discovery of the shrike in Adams County, we have learned from Ken Gabler, of another nest in Franklin County, near the town of Mercersburg. This nest was located in a 10 m tall Norway Spruce which was adjacent to a home. The surrounding vegetation was mowed lawn with a few scattered, planted shade trees. Although four young fledged successfully, the carcass of one young bird was recovered from the road. The resident of the homesite informed us that Loggerhead Shrikes have been at his residence for the past three years but that this is the first year that he knew that young had been produced. It is possible that young were produced in previous years, but it cannot be confirmed.

I will be continuing this work on the Loggerhead Shrike. I plan to trap and band the known birds and to monitor them as much as possible during the winter months. This will be done by enlisting the help of local birders and bird clubs for information on birds which are regularly seen during the winter. I plan to collect data on the habitats which the birds use during the winter. In addition, probably in conjunction with the Game Commission, road surveys will be conducted to locate any additional birds. With all of this information, I plan to estimate the

availability of similar habitat in the two counties to determine the possibilities of additional shrike nest sites being established.

Literature Cited:

Brauning, D. 1992. Pennsylvania Atlas Project, in press. University of Pittsburgh Press, Ithaca, NY.

Gill, F.B. 1985. Birds. Ch 5 in Species of special concern in Pennsylvania. Genoways, H.H. and F.J. Brenner, eds. Carnegie Mus. of Nat. Hist. spec. Publ. #11. Pittsburgh, PA.

Kennell, A. and E. Kennell. 1990. Adams County Report. Pennsylvania Birds 4(2):57.

Tate, J. 1986. The blue list for 1986. Am. Birds 40:227-235.

THIS IS YOUR RENEWAL NOTICE!!!

Because PSO has accepted *Pennsylvania Birds* as our journal, we need to revise our membership structure. Originally, membership in PSO was on an anniversary basis; if a member joined in September, his membership would expire the following September. Effective for 1992, however, all memberships will start in May. Therefore, I am asking you to help me out while we synchronize our memberships.

Please take a look at your address label:

1. If it indicates that your membership is good until Dec., 1992, relax. You are a member in good standing and don't have to do anything until next May.
2. If the label indicates that your membership expires between June and December, please use the form enclosed in this newsletter to renew now. However, do not send a full year's dues; remit for a half year: \$5 for membership in PSO only, or \$4.25 plus the cost of subscription

if subscribing to *PA Birds*. If you are sending a subscription to *PA Birds*, please enclose a note explaining that you owe half a year's dues to PSO. Your new membership will run to May, 1993.

If you have paid your PSO dues for this year and now want to subscribe to *PA Birds*, please let me know. In fact, if you have any questions or problems with membership, please write to me. Thanks for bearing with me; I hope I haven't made this more confusing!

--Eugene Zielinski
Membership, PSO
R.R. 3, Box 71
Bellefonte, PA 16823

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Org.	\$25.00	NONE

FACTORS AFFECTING DETECTION OF GREAT HORNED OWLS BY USING BROADCAST VOCALIZATION¹

Populations of Great Horned Owls have been increasing since the early 1970s, based on recent evidence from Christmas Bird Counts. However, to determine the long-term status of populations of Great Horned Owls and to enable state and federal agencies to address questions dealing with relationships between owls' abundance and changing land uses or prey abundance, a standardized survey technique needs to be developed that is both cost and labor efficient. Although broadcasts of conspecific recordings have been used to determine the presence of owls, including Great Horned Owls, none has been rigorously field tested. Further, factors that may influence responses

of owls to taped playbacks, such as weather conditions, must be considered when conducting surveys. Survey techniques that are used to monitor other bird species usually are not practical for Great Horned Owls because individuals are nocturnal, secretive, and mobile and because nests are widely dispersed. Thus, the objectives were to (1) determine the influence of temporal, weather, and lunar factors on vocalizations of Great Horned Owls, and (2) develop a standardized survey technique for indexing numbers of Great Horned Owls.

The study was conducted in 15 counties in southcentral Pennsylvania. The study area included 3 physiographic regions (Ridge and Valley, Blue Ridge, and Piedmont) that ranged from 21 to 956 m in elevation.

One thousand, forty-two contacts of Great Horned Owls were recorded from 3 January to 31 May in 1987 and 1988. Two hundred sixty-five (25.5%) of the owl contacts occurred during the 2-minute pre-broadcast period. Three hundred twenty-four (31.2%) and 438 (42.2%)

of the owl contacts were noted during the 5-minute postbroadcast periods, respectively.

Although the owl contacts were obtained under a variety of temporal, weather, and lunar conditions, Great Horned Owl contacts were more likely after midnight in January when temperatures were relatively low and wind velocities were minimal. January coincides with the time when most Great Horned Owls in PA have established pair bonds and are territorial.

In future surveys of Great Horned Owls, it is recommended that wildlife managers give consideration to temporal, weather, and lunar conditions when conducting surveys. When possible, it is recommended that surveys be conducted relatively early in the breeding season, preferably after midnight, on nights without precipitation, and when winds are consistently less than 4.8 km/hr. Additionally, an effort should be made to conduct surveys on nights with clear skies during a waxing second quarter to and including a full moon.

Morrell, T.E., R.H. Yahner, W.L. Harkness. 1991. The Pennsylvania State University, University Park, PA. Wildlife Society Bulletin, 19(4).

PSO BIRD LIST

A total of 158 species plus one hybrid were sighted on the various field trips around Presque Isle during the weekend of May 15-17, 1992. These species are listed below. Many thanks to the field trip leaders!

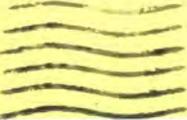
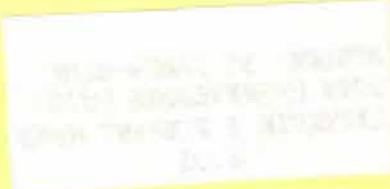
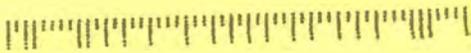
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|---------------------------|------------------------|------------------------|
| Common Loon | American Wigeon | Am. Coot |
| Pied-billed Grebe | Greater Scaup | Black-bellied Plover |
| Horned Grebe | Lesser Scaup | Semipalmated Plover |
| Double-crested Cormorant | Common Merganser | Piping Plover |
| American Bittern | Red-breasted Merganser | Killdeer |
| Great Blue Heron | Turkey Vulture | Greater Yellowlegs |
| Great Egret | Bald Eagle | Lesser Yellowlegs |
| Green-backed Heron | N. Harrier | Spotted Sandpiper |
| Black-crowned Night-Heron | Sharp-shinned Hawk | Least Sandpiper |
| Canada Goose | Am. Kestrel | Dunlin |
| Wood Duck | Merlin | Short-billed Dowitcher |
| Mallard | Virginia Rail | Common Snipe |
| Gadwall | Common Moorhen | Am. Woodcock |

Wilson's Phalarope
Little Gull
Bonaparte's Gull
Ring-billed Gull
Herring Gull
Gt. Black-backed Gull
Caspian Tern
Common Tern
Rock Dove
Mourning Dove
Black-billed Cuckoo
Yellow-billed Cuckoo
Great Horned Owl
Common Nighthawk
Chimney Swift
Ruby-thr. Hummingbird
Belted Kingfisher
Red-headed Woodpecker
Red-bellied Woodpecker
Yellow-bel. Sapsucker
Downy Woodpecker
Hairy Woodpecker
N. Flicker
Pileated Woodpecker
E. Wood-Pewee
Yellow-bel. Flycatcher
Willow Flycatcher
Least Flycatcher
E. Phoebe
Gt. Crested Flycatcher

E. Kingbird
Purple Martin
Tree Swallow
N. Rough-wgd. Swallow
Bank Swallow
Cliff Swallow
Barn Swallow
Blue Jay
Am. Crow
Black-capped Chickadee
Tufted Titmouse
Red-breasted Nuthatch
White-br. Nuthatch
Carolina Wren
House Wren
Marsh Wren
Ruby-crowned Kinglet
Blue-gray Gnatcatcher
E. Bluebird
Veery
Gray-cheeked Thrush
Swainson's Thrush
Hermit Thrush
Wood Thrush
Am. Robin
Gray Catbird
N. Mockingbird
Brown Thrasher
Am. Pipit
Cedar Waxwing

Eur. Starling
White-eyed Vireo
Solitary Vireo
Yellow-throated Vireo
Warbling Vireo
Philadelphia Vireo
Red-eyed Vireo
Blue-winged Warbler
Golden-winged Warbler
"Brewster's" Warbler
Tennessee Warbler
Orange-crowned Warbler
Nashville Warbler
N. Parula
Yellow Warbler
Chestnut-sided Warbler
Magnolia Warbler
Cape May Warbler
Bl.-thr. Blue Warbler
Yellow-rumped Warbler
Black-thr. Gr. Warbler
Blackburnian Warbler
Prairie Warbler
Palm Warbler
Bay-breasted Warbler
Blackpoll Warbler
Black-&-white Warbler
Am. Redstart
Prothonotary Warbler
Ovenbird

N. Waterthrush
Mourning Warbler
Common Yellowthroat
Hooded Warbler
Wilson's Warbler
Canada Warbler
Yellow-breasted Chat
Scarlet Tanager
N. Cardinal
Rose-breasted Grosbeak
Indigo Bunting
Rufous-sided Towhee
Chipping Sparrow
Field Sparrow
Savannah Sparrow
Song Sparrow
Lincoln's Sparrow
Swamp Sparrow
White-throated Sparrow
White-crowned Sparrow
Dark-eyed Junco
Bobolink
Red-winged Blackbird
E. Meadowlark
Common Grackle
Brown-hd. Cowbird
N. Oriole
House Finch
Am. Goldfinch
House Sparrow



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