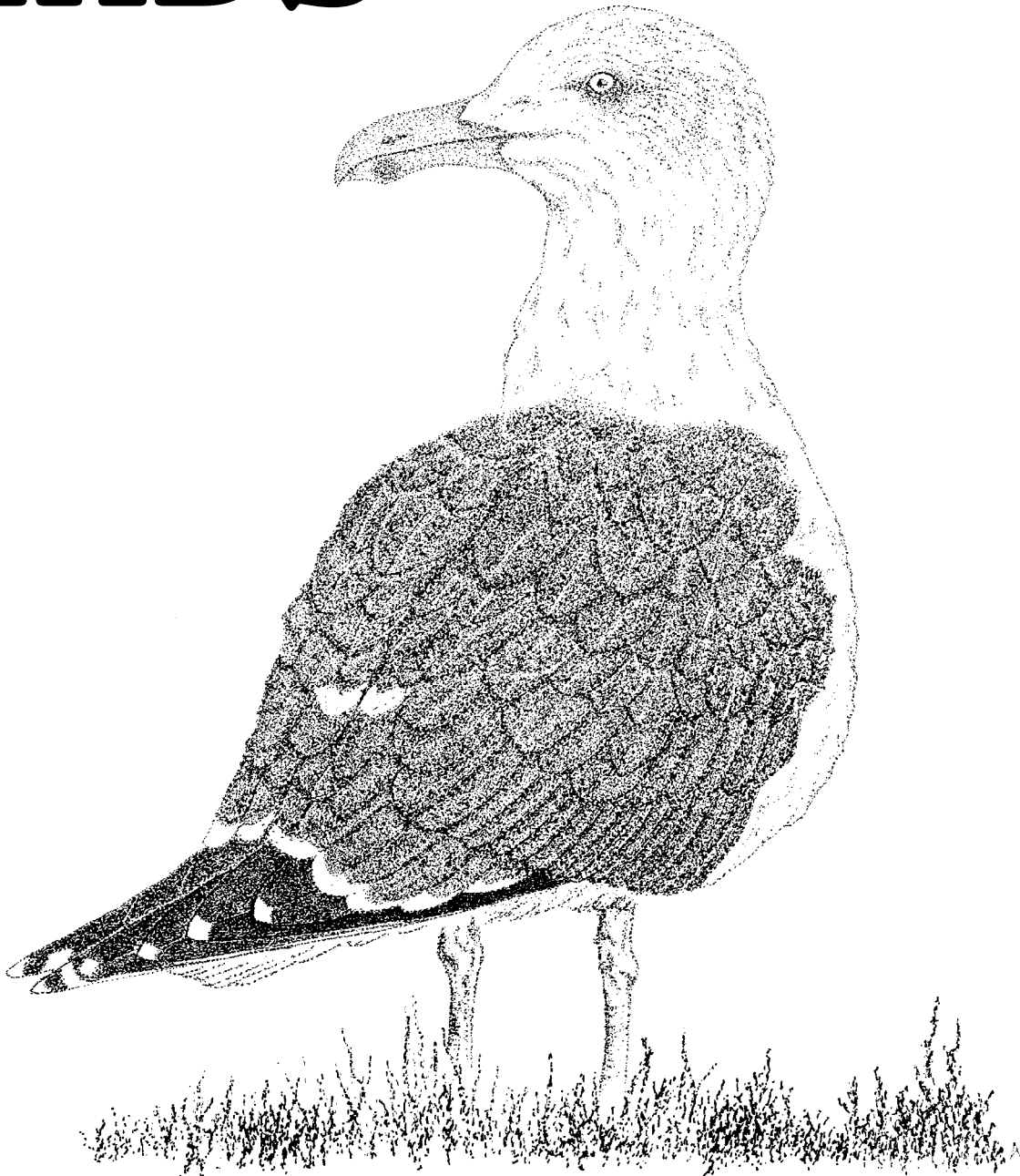
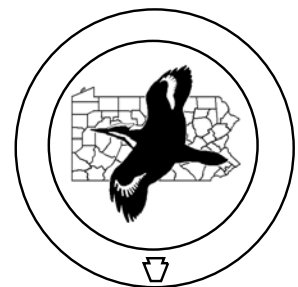


PENNSYLVANIA BIRDS



Volume 13, No. 1
Jan - Mar 1999
Issued June 1999





PENNSYLVANIA BIRDS

Journal of the Pennsylvania Society for Ornithology

VOLUME 13, NUMBER 1, JAN – MAR 1999

Franklin C. Haas & Barbara M. Haas —Editors-in-chief
(717) 445-9609 FAX 445-8283 pabirds@redrose.net
<http://users.desupernet.net/pabirds/pabirds.htm>

Department
Editors

Fall Migration Count

Deuane Hoffman
3406 Montour St
Harrisburg, PA 17111
717-564-7475
raven@paonline.com
and
John Fedak
221 Washington St
New Bethlehem 16242
814-275-4086
jfedak@rbv.iu6.k12.pa.us

Contents

1	Editorial	
2	The Story of the Ring-necked Pheasant in Pennsylvania	Nicholas C. Bolgiano
11	Spring Migration at Hawk Mountain Sanctuary, 1969-1998	Kyle M. McCarty, Michael Farhoud, Jennifer Ottinger, Laurie J. Goodrich, and Keith L. Bildstein
16	Casper and His Ghostly Friends <i>Glaucois and Iceland Gulls</i> <i>in Northampton County.</i>	Dave DeReamus
17	Participating in the Grassland Bird Survey.....	William Troy Reddinger
20	9th Report of the Pennsylvania Ornithological Records Committee - June 1999.	Nick Pulcinella, Secretary
24	Pennsylvania Birdlists 1998.	Terence Schiefer
30	Photographic Highlights	
33	PSO Meeting Announcement	
35	Summary of the Season	
36	Birds of Note	
38	Local Notes	
46	Seasonal Occurrence Tables – January through March 1999	
57	Compilers and Observers	

Site Guides

Rudy Keller
71 Lutz Rd
Boyertown, PA 19512
610-845-7310

Personality Profiles

Arlene Koch
1375 Raubsville Rd.
Easton, PA 18042
610-253-6377
davidlene@aol.com

Rare Bird Reports

Nick Pulcinella
210 Welcome Ave.
Norwood, PA 19074
610-583-3201
Npulcinella@aol.com

NAMC Report

Chris Turn
PO Box 231
Bushkill, PA 18324
570-588-6850
birder@ptd.net

CBC Report

Nick Bolgiano
711 W. Foster Ave.
State College, PA 16801
814-234-2746
NBolgiano@minitab.com

Hawk Watch Reports

Vacant

Book Reviews

Gene Wilhelm, Ph.D.
513 Kelly Rd.
Slippery Rock, PA 16057
724-794-2434

ILLUSTRATIONS:

COVER: Lesser Black-backed Gull by Adrian Binns

from the Editors...

Back on track!

We are finally back on our publishing schedule and we hope to keep it that way. We thank all of our contributors for their timely submission of reports and articles.

10th Anniversary PSO Meeting

Just a reminder that the 10th Anniversary Meeting of the Pennsylvania Society for Ornithology will take place September 24-26, 1999 at the Holiday Inn in Morgantown, Berks County. The fall date is in response to members who expressed their desire for the meeting to change occasionally from the spring date that we have used the past several years. The meeting will feature great field trips, interesting programs, and some surprises.

Berks County has a rich ornithological past (see *A Century of Birdlife in Berks County* reviewed in *Pa. Birds* Volume 12, No. 1) and has some great birding areas.

The field trips will concentrate on the migration that is in full swing at that time, sampling a variety of habitats surrounding three bodies of water. This will include Lake Ontelaunee, Blue Marsh Lake, and Morgan Lake (Carr's Park). For those who wish to experience the hawk migration, the Route 183 Hawk Watch is not far and the easiest hawk watch to get to — no walking!

And, on Sunday morning, there will be a special field trip to look for **Nelson's Sharp-tailed Sparrows** on the islands in the Susquehanna River. This trip will be limited to 20 participants (we have to get out to the islands via boat), so get your reservation in immediately.

The Saturday afternoon programs

can be found in the meeting notice elsewhere in this issue.

The banquet speaker will be the legendary Pete Dunne (What else can we say!).

Come and join us for what will be an exceptional event.

GET YOUR REGISTRATION IN TODAY!

New County Compilers

We welcome several new compilers this quarter.

Steve Hawk is taking over in *Pike*, as Charlie Muise is moving out-of-state.

Gene Zeilinski will be the new *Centre* county compiler and will continue as compiler for *Clearfield*.

Florence Mcguire has volunteered to compile in *Forest*.

Doris McGovern has stepped forward to take on compiling for *Philadelphia*.

You can find their addresses in the Compilers and Observers list in the back of this issue.

New CBC Compiler

Nick Belgiano, who has written several articles on trends in Pennsylvania's CBCs,— and the Pheasant article in this issue — has volunteered to be the statewide CBC compiler. We urge all of the local CBC compilers to send him your CBC report on a timely basis so we do not run into the same problem that we did last quarter.

His address is on the Table of Contents page.

New NAMC Compiler

Chris Turn has volunteered to be the new NAMC compiler. If you

haven't already sent in your report to her, please do so today. The 1999 NAMC report will appear in our next issue.

Her address is on the Table of Contents page.

Hawk Migration Compiler Needed

Frank Hohenleitner, who has done a terrific job as hawk migration editor the past 4 years is moving out-of-state and stepping down from this position. We thank him for his comprehensive, well-written, and timely reports.

We therefore need someone to take on this task. It consists of compiling the hawk migration statistics from hawk watches across the state for both spring and fall. Of course, a computer is mandatory. If interested, let us know.

WEB Page

Pennsylvania Birds now has a web page. The address is <http://users.desupernet.net/pabirds.htm>

The site includes information about the magazine, including subscription rates, publishing schedule, and the status of the latest issue —when it was mailed, etc.—and links to other Pennsylvania bird-related sites. ✪

Frank & Barb Haas
Chief Editors

PENNSYLVANIA BIRDS (ISSN 0898-8501) is published four times a year by Pennsylvania Birds. Editorial and business offices are located at 2469 Hammertown Road, Narvon, PA 17555-9726. Subscriptions, all in US\$: One year U.S.A. \$20.00, Canada \$35, Foreign \$45. Library rate \$30. Single copies: \$5.50. Checks and money orders in U.S.\$ only should be made payable to **PENNSYLVANIA BIRDS**. Copyright © 1999 by Franklin C. Haas and Barbara M. Haas.

SECOND CLASS POSTAGE PAID AT NARVON, PA 17555

POSTMASTER: Send address changes to **PENNSYLVANIA BIRDS**, 2469 Hammertown Road, Narvon, PA 17555-9726.

The Story of the Ring-necked Pheasant in Pennsylvania

by Nicholas C. Bolgiano

In recent decades, birds of Pennsylvania's farmlands and grasslands have declined precipitously in numbers, as what were once common species have become uncommon or even rare (Brauning 1992; Peterjohn et al. 1994). A well known such species is the Ring-necked Pheasant (*Phasianus colchicus*). Pheasants were abundant throughout much of the state during the middle of this century and during the 1960s ranked as the 20th most numerous species in the Pennsylvania Christmas Bird Count (CBC). Today, pheasants have disappeared from much of their former range and during 1990-97 ranked 69th in state CBC totals. But for a turn in the human economy, however, the pheasant would not have burst into prominence in the state and we might not be considering today if the pheasant can be restored. The story of the Ring-necked Pheasant in Pennsylvania is interesting both in itself and in its parallel to other farmland and grassland species.

The Ring-necked Pheasant, a native of Asia, was initially released in Pennsylvania by private individuals, beginning around 1892, and then by the Pennsylvania Game Commission (PGC), beginning in 1915. The birds were of two subspecies: *P. c. colchicus* that had been brought from Europe where it had lived for centuries and *P. c. torquatus* that had been initially brought from China and stocked in Oregon (Baumgardner 1962). As happened in other states, after pheasants became established in Pennsylvania, their population "exploded." An estimated 143,000 pheasants were killed during the 1928 Pennsylvania hunting season (Baumgardner 1962). This is similar to the estimated kill of 50,000 during Oregon's first pheasant hunting season ten years after the initial 1881 release (Edwards 1988), though it pales in comparison to South Dakota's estimated population of 16-30 million pheasants in the mid-1940s (Dahlgren 1988).

Pheasants spread throughout the best agricultural areas of Pennsylvania. A 1935 range map

prepared by PGC biologists shows pheasants living in about 7 million of the state's 28.7 million acres. The best or "first class" range of 3.2 million acres was primarily southeast of the Appalachians. There, natural reproduction sustained pheasant populations and stocking of game-farm reared birds was not needed for hunting. Lower pheasant densities occurred in 3.6 million acres of "second class" range, predominantly in the western part of the state and in the Susquehanna River Valley of the central part. Some natural reproduction occurred in second class range but stocking of birds was done to supplement the wild birds for hunting. A relatively small area of 0.25 million acres constituted "third class" range where natural reproduction was minimal and stocking was the source of most pheasants (Gardner 1962).

The historical pattern of pheasant abundance in Pennsylvania differs from that of most other states and Canadian provinces. The peak abundance in Oregon was as early as the 1910s but the peak abundance for most states and provinces with sizable pheasant populations occurred in the 1930s to 1940s. For a smaller group of states and provinces, including Pennsylvania, the peak occurred later, in the 1960s (Dahlgren 1988). These

historical difference can be largely traced to changes in agricultural land use, especially of land set aside for conservation or to limit agricultural production (Berner 1988). Understanding the pattern of pheasant abundance relative to the pattern of land use is important to understanding pheasant dynamics and to restoration success.

Population Trends of Pennsylvania's Pheasants

Among our long-term data bases on bird populations, I believe that the CBC is the best one for historically assessing pheasant populations because of its longevity and its timing relative to the life history of the species. By the time the CBC period begins in December, pheasants have moved into their winter cover, which may be separated by several miles from their breeding territory (Hartman and Sheffer 1971). After the hunting season ends in November, female pheasants, or hens, comprise about 90% of the population. During the winter, hens flock together and this is the time that many wildlife agencies conduct pheasant censuses. Males, or cocks, are polygamous and because not all of them breed, their numbers are usually thought to be relatively unimportant to population fluctuations

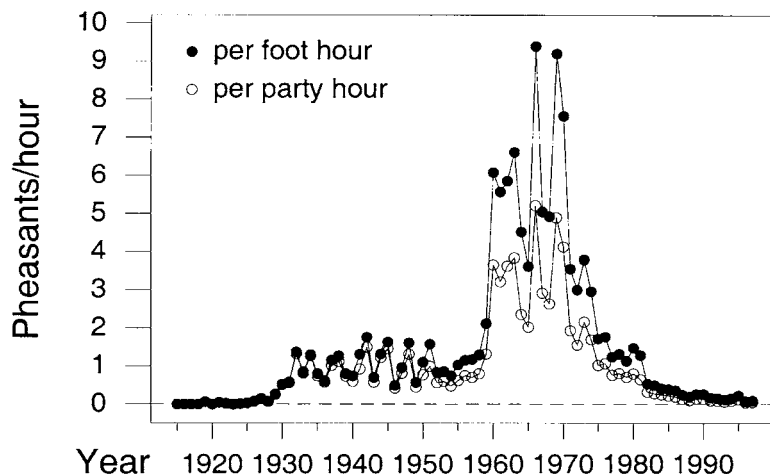


Figure 1 CBC Pheasant count/foot hour (solid circles) and count/party hour (open circles) from southeastern Pennsylvania sites, 1915-97.

(Petersen et al. 1988). The CBC is thus conducted during a period when the most important population component may most easily be observed.

The historical CBC time span, from 1900 to the present, encompasses the important part of the pheasant's Pennsylvania history. Pheasants were first tallied in the state CBC in 1919, soon after the first PGC release. (The CBC year referred to here is the year in which Christmas occurs.) Eighty-nine percent of all pheasants tallied during 1919 to 1997 Pennsylvania CBC counts were from sites southeast of the Appalachian Ridge and Valley province, so for simplicity in viewing the long-term trend, I show trend data only from those sites. To adjust for effort, I divided counts by either the party hours observers were on foot (foot hours) or total party hours.

nearly identical because the preponderance of effort at that time was on foot. The values diverge as observing from vehicles during the CBC became more common in the 1950s. Pheasant counts/hour topped 1 in 1932 and remained at a similar level through 1958 (1932-58 mean of 1.1/foot hour and 0.86/party hour), though the variability in the 1952-58 data appears to be lower than during 1932-51. During 1960-70, the observed counts/hour were much higher than in previous years, with a mean of 6.2/foot hour and 3.5/party hour. It appears that counts/hour may have declined during 1971-74 (mean of 3.3/foot hour and 1.8/party hour) from the 1960-70 peak. Then further declines occurred: to a lower level in 1975-81 (mean of 1.4/foot hour and 0.84/party hour), and then steadily lower beginning in 1982 to a very low recent level (mean of 0.14/foot hour and 0.07/party hour

combined southeastern Pennsylvania sites, 100 party hours of effort was reached in 1927, except for 85 hr in 1932, while the number of party hours was not lower than 300 after 1944. Of all regions within the state, foot effort remained highest at sites southeast of the Appalachians, with 51-70% of the yearly total party hours being foot hours after 1950. Of today's 23 sites in the southeast, 13 were established by 1953 (Bolgiano 1997).

During the 1960s to the mid-1970s, the density of Pennsylvania's pheasants must have been among the highest in North America. This is demonstrated by Pennsylvania sites leading North American CBC locations in pheasant counts for 7 of the 11 years between 1966 and 1976: Reading in 1966 (with 870 birds), Hamburg in 1969-70 (1468 and 1232 birds, respectively), in 1973 (812 birds), and in 1976 (380 birds), and Bethlehem-Easton in 1974-75 (584 and 342 birds, respectively).

CBC pheasant data from three other states, like Pennsylvania in having many dairy farms, show similarities to the Pennsylvania data. These are southwestern New York, once the primary New York pheasant range (Andrle and Carroll 1988), Massachusetts, and Wisconsin. Although peak counts from those regions are not as high as Pennsylvania's, what is most striking is that pheasant counts/hour from all three decline sharply after 1969-70 in a similar manner to the southeastern Pennsylvania data (Figure 2).

The CBC data are also informative about the pheasant's geographical distribution within Pennsylvania. Figure 3 shows the median number of pheasants/foot hour at each site sampled five or more times during 1960-70, the period when pheasants seemed so abundant. The geographical pattern shows the peak counts/hour were centered around the Berks and northern Lancaster county sites of Hamburg, Reading, and Lititz. A lower level was observed from a tier of sites extending from Bethlehem-Easton and Central Bucks County in the east to York in the west. A slightly lower level was observed at sites outside Philadelphia and in the Susquehanna River watershed of the

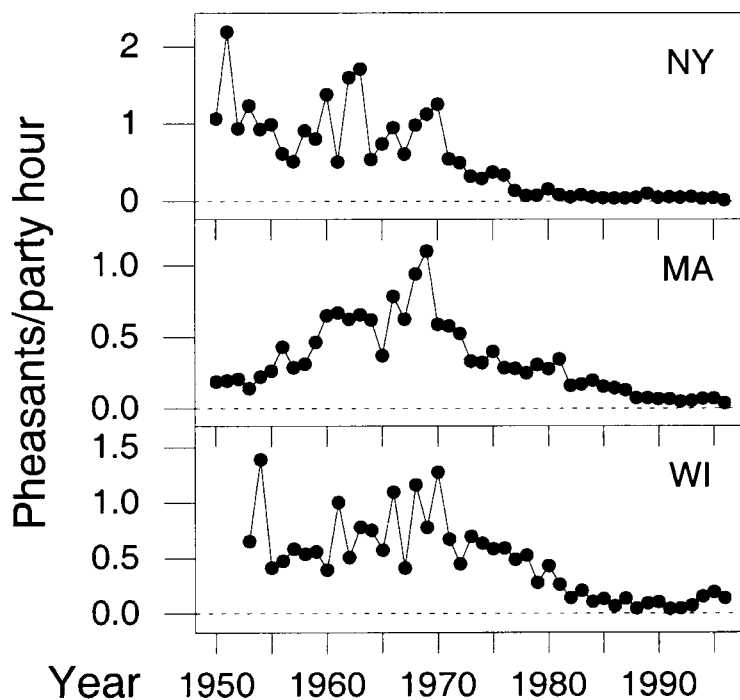


Figure 2 CBC Pheasant count/party hour from southwest New York, Massachusetts, and Wisconsin, 1950-96.

Southeastern Pennsylvania CBC pheasant counts/foot hour and counts/party hour show similar patterns (Figure 1). During the first half of the century, the numbers are

during 1995-97) (Figure 1).

The CBC effort data suggest that you can have more faith in the data collected after about 1944-50. For the

central region, followed by sites near Philadelphia, Pittsburgh, and along the periphery of the core range.

The 1960-70 CBC pheasant distribution is similar to a 1970 pheasant range map prepared by PGC biologists (Hartman 1970). Although 3.8 million acres of state farmland had been diverted to other uses since the drawing of the 1935 range map, the 1970 map shows a total of 15.7 million acres in the state judged to be pheasant range, more than double that of 1935. (The range in the 1970 PGC map is similar to the agricultural land area shown on p. 30 of Pennsylvania's Breeding Bird Atlas (Brauning 1992).) This included 5 million, 4.5 million, and 6 million acres, in first, second, and third class range, respectively, with the number of wintering hens/square mile estimated to be 30-80, 10-29, and 0-9, respectively. The biggest difference between the 1935 and 1970 PGC range maps was in the marginal third class range, as the PGC had increased pheasant stocking to expand hunting opportunities. The areas constituting first and second class range were similar in the two range maps. The CBC data adds detail to the PGC maps by further delineating the pheasant's distribution within its first class range.

The CBC data apparently corroborate that the peak of pheasant abundance in Pennsylvania was not in the 1930s and 1940s but within more recent memory. Why did Pennsylvania's Ring-necked Pheasant population apparently rise to unprecedented levels in the 1960s and crash after 1970? The population trend is linked to changes in the agricultural landscape.

Pennsylvania's Agricultural Landscape

The face of agriculture in Pennsylvania has changed considerably since pheasants were first introduced. In 1950, 14 million Pennsylvania acres were farmland, or a little less than half the total area; today this figure is about 7 million acres. Farmland was declining even as the pheasant exploded in the 1960s. In 1960, there were 11.7 million acres of farmland; by 1970 this had decreased to 9.1 million acres (USDA

Agricultural Statistics). The pheasant's decline in numbers is related to the loss of farmland but that is not the complete story.

An observer of Pennsylvania's farmland of 50 years ago would generally have seen the same crops as are grown today. However, their relative composition would have been different. I present here crop composition data from southeastern Pennsylvania (see Appendix for details), where most of the best pheasant range existed. During the mid-1940s, small grains (wheat, oats, and barley), corn, and non-alfalfa hay each grew in 13-19% of southeastern Pennsylvania farmland. Since then, corn has approximately doubled in proportion to about 34%, small grains have proportionately halved, while the proportion of non-alfalfa hay remained about the same. During this same time, two other crops, alfalfa hay and soybeans, became increasingly important on southeastern Pennsylvania farms. Today, corn is the major crop grown on these farms while small grains, non-alfalfa hay, alfalfa hay, and soybeans are each grown on about 9-12% of farm acreage (Figure 4).

Crop composition is important to the pheasant story but to gain a wider view we must examine the dynamics of agriculture across the country. The 1930s were a period of widespread soil erosion, dust bowls, and the subsequent loss of many farms. The federal government responded with the 1934-35 Cropland Adjustment Act (CAA) retiring 37.1 million farm acres

in these two years across the country, although no cover crop was required. This was followed in 1936 by the Agriculture Conservation Program (ACP), which retired 42 million acres at its peak in 1941, with this program requiring a grass and/or legume cover crop. In response to these "set-aside programs," pheasant populations increased, particularly in mid-western states. The ACP ended in 1944 as American farm production expanded during the post-war period. No retirement programs were implemented during 1943-55, although there were federal subsidies to plant up to 6.5 million acres in grasses and legumes (Berner 1988; Harmon 1986).

By the mid 1950s, American farms were overproducing grains and as a result the federal government sought to lower agricultural production. In 1956, the federal Soil Bank program began, initially with the Acreage Reserve program (1956-58) which required no cover crop, and then with the Conservation Reserve (CR) program, which required a cover crop. By 1960, 29 million acres were enrolled in the CR nationwide. During this program's peak years, 1960-63, pheasants again boomed in both mid-western and eastern states. By 1968, this program was essentially over (Berner 1988; Harmon 1986). The successors to the Soil Bank, the Feed Grain Program (FGP), which began in 1961, and the Wheat Program (WHP), which began in 1962, were annual set-aside programs in land formerly planted to grains (corn, sorghum, oats, barley, rye) or wheat, respectively. These two programs did not require a

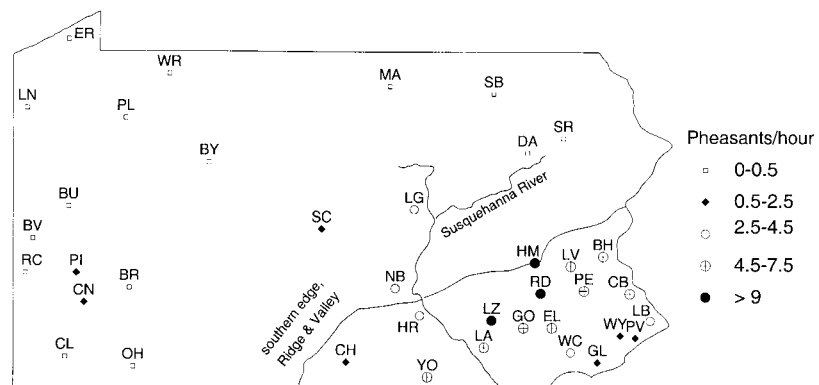


Figure 3 Median Pheasant count/foot hour from Pennsylvania CBC sites sampled five or more times during 1960-70. See Appendix for site list.

cover crop and their benefit to pheasants was decidedly mixed. In many states, these programs were generally destructive to pheasants as relatively few farmers planted a cover crop and pheasant populations plummeted after about 1963. The story was different in a few other states, particularly in Pennsylvania, where 57-60% of the land idled by the two programs during 1972-73 was judged as good to excellent pheasant cover, the highest among 14 surveyed states. These programs essentially ended after 1973, though there was some additional acreage retired under them during 1978-79 and 1982-85 (Berner 1988; Harmon 1986).

The historical dynamics of pheasant populations across many states is closely related to the pattern of set-aside lands and this association likewise holds true for Pennsylvania. The CBC pheasant counts/hour increase as the acreage under the CR, FGP, and WHP increases and decline upon the ending of these programs (Figure 5, see Appendix for more detail). Together during 1960-70, these programs idled a yearly average of 442,000 acres in Pennsylvania, with most of this being in the southeastern part of the state (S. Klinger, personal communication). Because Pennsylvania farmers maintained a good portion of their FGP and WHP set-aside land in good to excellent pheasant cover, these two programs extended the pheasant boom in Pennsylvania for nearly a decade past what many other states experienced when land enrollment in the CR dropped. The Pennsylvania CBC data reinforce our understanding of the benefit that federal land set-asides have had upon the state's pheasant population.

The Pennsylvania pheasant boom ended as another change in agriculture began. The U.S. dollar was devalued in 1972, reducing the price of U.S. grains to buyers from other countries, followed by the 1973 Middle East oil embargo, which raised the income of oil producing countries, and by crop failure in some countries. Grains were therefore in demand and the federal agricultural policy became "fence row-to-fence row" farming (Berner 1988; Harmon 1986). The value of farmland and monetary inflation simultaneously

increased. The high crop prices and high inflation ended after the U.S. Federal Reserve began to raise interest rates in late 1979. Subsequently, the profit margins of many farmers shrank (Strange 1988). Because many of today's farmers must squeeze production out of their land in order to make a living, we still see a high percentage of farmland planted to row crops, farm sizes increasing, and relatively few fence rows and other once unplanted areas left untilled.

Setting aside agricultural lands from production is the one factor that historically is related to high pheasant populations, not only in Pennsylvania, but across the nation. Although pheasants depend upon agricultural lands, as these lands are more intensively farmed, pheasant numbers decline. Small changes in the annual survival of hen pheasants can have a large effect upon pheasant populations and setting aside a portion of agricultural land from active production has often been enough to boost survival and lead to pheasant booms because of the food and cover that it provides.

Population Regulating Factors of Pheasants

What are the specific factors that regulate pheasant populations? Because the Ring-necked Pheasant has been well studied due to its popularity as a game bird, research has contributed much to answering this question. Factors examined here include hay mowing, clean farming

practices, predation, habitat fragmentation, vehicles, and severe weather.

As fewer cocks than hens are needed for a population to be self-sustaining, annual cock mortality may be up to 95% without affecting long-term population levels (Petersen et al. 1988), at least when pheasants are abundant. The percentage of cocks killed by hunting in Pennsylvania was among the highest recorded in North America (Edwards 1988), with estimates of 87-93% of the pre-hunt cocks being killed by hunting in Lebanon and York County study sites during the 1960s (Hartman and Sheffer 1971). Although cocks are the target of the gun, it is the annual survival of hens that appears to regulate long-term fluctuations in pheasant populations (Petersen et al. 1988).

Relatively small changes in hen mortality can have significant effects upon the population. The annual survival of hens is usually low; mean annual hen survival of 30-35% appears to be normal for self-sustaining populations. If mean annual survival falls below 20%, the population declines, if it rises above 40%, the population increases (Petersen et al. 1988). Mortality of hens by accidental shooting should not exceed 25% for population stability. The illegal hen kill is often about 15%, leaving little margin for error (Edwards 1988).

Hay mowing. One of the most

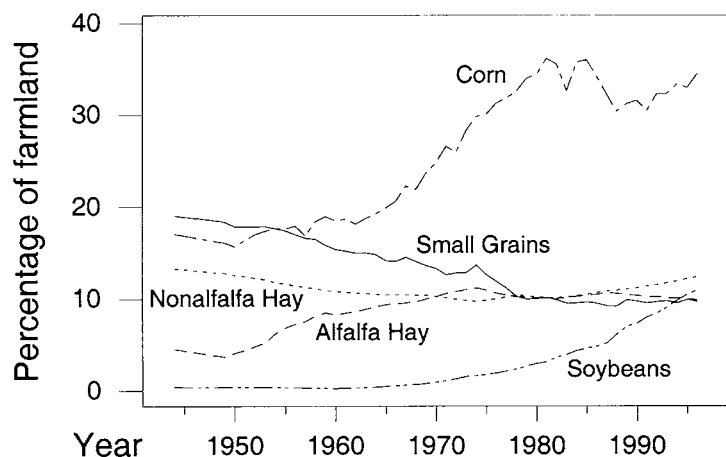


Figure 4 Percentage of southeastern Pennsylvania farmland in five crops, 1944-96.

important and well-documented hen mortality factors in Pennsylvania has been hay mowing (Hartman and Sheffer 1971). A hen pheasant will often abandon her nest if she is disturbed during either egg-laying or the early part of incubation. As the 24 day incubation progresses, a hen becomes more attached to her nest and subsequently many hens are killed by hay mowing. The PGC conducted a study in Berks and Cumberland Counties of the effect of hay mowing upon pheasants. Over four years, 51% of nests in hayfields with delayed mowing produced chicks while only 7% of nests in hayfields mowed on the normal early schedule produced chicks. Delay of mowing also reduced hen mortality; 19% of nesting hens in delayed-mowed fields were killed compared to 41% killed in normal early-mowed fields. In one year of the study, the effect was dramatic; no hens were killed in delay-mowed fields, while 75% of nesting hens were killed in early-mowed fields that year. It is suggested that mowing be delayed to after June 20 to ensure nesting success but that delay of mowing to after June 27 would be better. The destruction of nests by mowing was thought to increase by 10-15% every successive ten year period since the late 1930s. This was attributed to faster tractors, a change in hay species that required earlier mowing for best nutritive content of hay, and to a lower diversity of field types that prompted hens to frequently nest in hayfields (Graybill 1982; Fletcher and Hartman 1986).

Alfalfa hay, in particular, can be a "death trap" to nesting hens, as it is a preferred nesting cover even though many hen pheasants and their nests are destroyed in the cutting of it (Hartman and Sheffer 1971; Warner and Etter 1989). Harvesting forage legumes at first flower allows an optimal combination of yield, nutritive value, and stand persistence. In the Midwest, the average first cutting of hay was performed successively earlier during the 1960s to 1980s (Warner and Etter 1989). In the 1940s and early 1950s, alfalfa was grown on about 3-5% of southeastern Pennsylvania farm acreage, but as Figure 4 shows, alfalfa became more widely grown during the latter part of the 1950s. The loss of secure nesting cover with the ending of the Soil Bank and the grain set-asides

was undoubtedly an important reason for the rapid decline of Pennsylvania's pheasant population.

Clean farming practices. During the pheasant's peak years the proportion of farmland in row crops (primarily corn and soybeans in Pennsylvania) was relatively low and these tended to contain more weeds, and thus pheasant food, than does today's typical row crop field. With the increased acreage of row crops in the 1970s, Illinois biologists found that the numbers of chicks per nest did not change but that the survival of chicks declined. Up to four weeks of age, chicks eat mostly arthropods that are high in protein, but then switch their diet to weed seeds and cultivated grains. Before the rise in row crops, oats and forage legumes were the prime feeding areas of young broods, but as the 1970s decade progressed, it was found that Illinois broods traveled greater distances, presumably in search of food. The density of insects typically found in corn and soybeans is not high enough to sustain pheasant chicks, particularly after herbicides have eliminated weeds that serve as insect habitat (Warner 1984; Warner et al. 1984). In addition, the use of pesticides in alfalfa, small grains, uncultivated fields, and no-till corn eliminates both the invertebrates and weed seeds that are pheasant food (Messick et al. 1974; Basore et al. 1987). This loss of good brood habitat meant that chick mortality became an increasingly important limiting factor

to pheasant populations. The increased difficulty in raising a brood may also raise the physiological stress in hens, which is at a high level after brood raising, and which Hartman and Sheffer (1971) thought to be an important mortality factor upon hens.

Food and cover left in corn fields sustained pheasants during past winters (Warner et al. 1989). Corn was once harvested using corn pickers, which left tall stubble, complemented by weedy undergrowth. Combines began to be used to harvest corn around 1960 and by the late 1970s, nearly all the corn grown in Illinois was harvested using combines (Warner and Etter 1986). Waste grain left from the corn harvest was an important food source for wintering pheasants (Warner et al. 1989). However, fall tillage buries most of the waste grain and crop residue below the soil surface, leaving little food or cover for pheasants (Warner et al. 1985). This practice has become more widespread and in Illinois about 80% of corn fields were fall tilled by the late 1970s (Warner and Etter 1986). It is likely that corn harvest and tillage practices in Pennsylvania were similar to those in Illinois, resulting in a loss of wintering habitat for pheasants.

The CBC data indicate that, after 1981, the pheasant toppled over the edge, so to speak, toward eventual extirpation as a breeding species. A conjunction of events suggests that the increasing intensity of agricultural

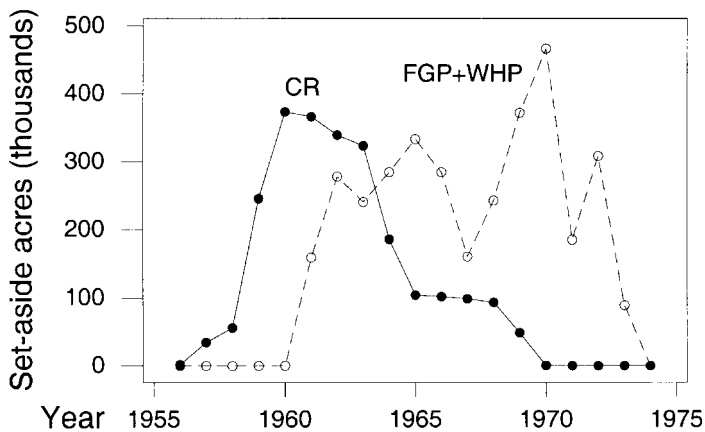


Figure 5 Pennsylvania farm acres (thousands) idled in the Conservation Reserve (CR-solid circles) and the Feed Grain Program (FGP) and the Wheat Program (WHP) combined (open circles), 1956-74.

practices played an important role. During the early 1980s many farmers were increasingly pressured by rising production costs and stagnant prices for their products. The proportion of farmland devoted to corn rose substantially (Figure 4) and corn fields became less hospitable to pheasants. There was also a marked decrease in the number of European Starlings and blackbirds counted during the CBC in Pennsylvania and elsewhere during this time (unpublished observation). Waste grain is thought to have attracted these species to northern regions (Dolbeer et al. 1978). This circumstantial evidence suggests that the intensity of row crop culture had become an important regulating factor of pheasant abundance, perhaps operating both in summer and winter.

Predation. Predation of pheasants generally takes two forms: predation upon nests or upon adults. Predation upon nests is usually by egg-eating mammals, such as Striped Skunk (*Mephitis mephitis*) and Raccoon (*Procyon lotor*), or by American Crows (*Corvus brachyrhynchos*). Even under the best of conditions, chicks may hatch in perhaps half of pheasant nests, with many of the failures due to nest predation. Removal of nest predators by trapping and shooting decreased nest predation in a Minnesota study by about 50% but the effect did not extend to the next season and was calculated to be uneconomical (Chesness et al. 1968). Effectively reducing nest predation requires the identification of habitat features that enhance nest success and subsequent habitat management to promote those characteristics (Martin 1992). Typically, nest predation of bird species increases as habitat area shrinks and predators have smaller areas to search (Martin 1992; Reynolds et al. 1994). Securing good nesting habitat involves promoting sufficient vegetation types in which hens prefer to nest (Haensly et al. 1987) and that will not be mowed during nesting season, and by modifying field shapes so that nests are not concentrated in locations that nest predators are likely to search (Warner 1994).

Predation upon adult pheasants may have increased as pheasant habitat declined (Petersen et al. 1988). Predation upon adult Wisconsin

pheasants was thought to be insignificant during the early decades after their establishment. However, during 1957-76, Wisconsin pheasant numbers seemed to be related to snow cover, suggesting that with habitat loss and reduced food availability, Pheasants become more concentrated and susceptible to predation. At Wisconsin and New York study sites, the highest predation upon adults also occurred during periods of snow cover with high annual predation rates of 62% and 65%, respectively. Hens that have experienced high physiological stress from nesting or from severe weather are more prone to predation than are unstressed hens. In Wisconsin, the primary predators of hens were thought to be Red Fox (*Vulpes vulpes*), Great Horned Owl (*Bubo virginianus*), and Red-tailed Hawk (*Buteo jamaicensis*) (Petersen et al. 1988) while these three plus Gray Fox (*Urocyon cinereoargenteus*) were thought to be the primary predators in New York (Andrle and Carroll 1988).

One predator species among these that appears to have increased in southeastern Pennsylvania during recent decades is the Red-tailed Hawk (Goodrich and Senner 1988; Brauning 1992), although this increase did not begin until after the decline in pheasant numbers was underway (Goodrich and Senner 1988). That Red-tailed Hawks can prey upon pheasants is demonstrated by Gates' (1972) estimate that over a seven-year period Red-tailed Hawks killed 7% of the hen population in his Wisconsin study area between the months of January and March. Removal of Red-tailed Hawks does not eliminate their predation upon pheasants, because other Red-tailed Hawks will soon move into the vacated territory (Gates 1972).

To see if a large pheasant population and high numbers of wintering Red-tailed Hawks coexist, I examined the North American CBC data (Shipman 1998). These data show a major concentration of wintering Red-tailed Hawks in the central United States, as noted by Root (1988). Three sites in central and north central Kansas, Quivira National Wildlife Refuge, Waconda Lake, and Webster Lake, tallied 2.4-3.2 Red-tailed Hawks/party hour and 1.4-1.6 pheasants/party hour. By comparison,

Pennsylvania's peak sites tally about 1.2 Red-tailed Hawks/party hour. Thus, the presence of a major concentration of Red-tailed Hawks does not necessarily eliminate pheasants.

Habitat fragmentation. Farm acreage in pheasant range has steadily declined during the time of Pennsylvania's pheasant. In 1944, there were 3.7 million acres of farmland in southeastern Pennsylvania. By 1992 this had declined to about 2.1 million acres (U.S. Census of Agriculture), with an average yearly loss of 1.2%. As farmland is converted to other uses and farm fields become less hospitable to pheasants, their habitat has become fragmented into smaller and smaller areas. The effect of mortality-causing factors is often magnified as habitat becomes more fragmented. This is especially true of predation and probably explains why predation upon pheasants is thought to have increased in recent decades. Habitat fragmentation increases the proportion of habitat that is edge, a favored location for predator activity. It also results in smaller areas for nest predators to search and adult pheasants being more exposed to foxes and avian predators (Hassinger 1991; Paton 1994; Warner 1994; Faaborg et al. 1995).

Pheasants are an "area-sensitive" species meaning that they require large areas in which to thrive. An important contributor to this area-sensitivity is the spring dispersal of pheasants, which may be several miles from their wintering grounds (Hartman and Sheffer 1971). Edwards (1988) thought that unless there were regionally abundant pheasants, habitat management will not work in an area smaller than about 22,000 acres or 35 square miles. The requirement for breeding and wintering habitats within a larger area complicates pheasant management compared to the management of many other species.

Vehicles. Mortality from road kills has probably increased as habitat has become more fragmented and vehicle traffic has increased. Kills by vehicles particularly occur during spring pheasant dispersal to breeding

territory. Hartman and Sheffer (1971) estimated that 12-20% of the wintering population in a Pennsylvania study area were killed by vehicles during the spring dispersal period.

Severe Weather. Although severe weather can kill pheasants (Hardisky and Casalena 1998), the severe winter of 1969-70 did not appear to kill more than the usual number of pheasants at several Pennsylvania sites (Hartman 1971; Hartman and Sheffer 1971). Hartman (1979) thought that the severe winters of 1976-77 and 1977-78 were one reason that the pheasant population declined after 1976. The Pennsylvania CBC data exhibited a small decline after 1976 but these winters probably were not a primary reason for the long-term population decline that appeared to start after 1970.

Summary of factors. Research has thus identified different habitat-related factors that likely regulate Pennsylvania's pheasant population: loss of hens and their nests due to mowing and nest predation, decreased survival of hens and their chicks due to lower food availability during brood raising, and low winter survival due to predation, exposure, and a lack of food. During the middle part of this century, the amount of secure nesting cover was likely the primary regulating factor. As the farm economy changed, the availability of good brood raising and wintering habitats probably became increasingly important regulating factors. Insufficient amounts of all three habitats sent the pheasant population into decline.

The diminution of wildness in Pennsylvania pheasants by the mass release of game-farm reared birds and not habitat loss has been proposed as the reason for the decline in the state's pheasant population (Wunz 1998). The extensive research, the parallel of the Pennsylvania pheasant population trends to the trends in other states, and the data shown here provide strong evidence that habitat loss was the primary reason for the decline in Pennsylvania pheasant numbers. However, as habitat loss occurred and the wild pheasant population declined, the PGC sought to sustain pheasant kills by increasing the stocking of game-farm reared birds. Stocked birds

undoubtedly constitute the vast majority of pheasants observed today in the state. Few of these birds survive long as they are particularly susceptible to predation (Krauss et al. 1987), but neither can wild pheasants survive long in today's landscape. Citizens and the PGC must decide if put-and-take will continue to supply Pennsylvania's pheasants or if an attempt will be made to restore wild pheasants.

Pheasant Restoration in Pennsylvania

Restoration of the pheasant population is a common topic among Pennsylvania hunters and PGC biologists. One restoration attempt in Pennsylvania was the introduction during 1993-95 of the Sichuan Pheasant, subspecies *P. c. strauchii* and named after the Chinese province that is its homeland. The goal of the PGC was introduction of a bird that would be more apt to nest in brushy upland habitats than the Ring-necked strain (Prince et al. 1988; Kosack 1993). However, that attempt ended after Sichuan Pheasants proved to be no more prolific or hardier than Ring-necked Pheasants and the PGC realized that "a better bird is not the answer" but restoration of farmland habitat is (Hardisky and Casalena 1998).

Restoration of wild pheasants to Pennsylvania will not be easily achieved (Riley 1999). Pennsylvania's pheasants are in peril because after the set-aside programs ended in the early 1970s, pheasant habitat became more directly affected by how we grow and house our human population, raise our food, and conduct our economy. Particularly difficult to provide will be large areas containing sufficient habitat to support pheasants year-round.

Idling farm acreage into grass cover has been the key to recent increases in pheasant populations in some mid-western states. This has been achieved through the Conservation Reserve Program (CRP) that began in 1985, idling more than 36 million acres nationwide (Klinger et al. 1998), and concentrated in wheat and corn growing areas west of the Mississippi River (1992 U.S. Census of

Agriculture). This 10-year program allows farmers to convert highly erodible cropland to permanent cover crops while receiving 50% cost sharing of implementation and annual payments. Field studies in Iowa (Riley 1995) and Nebraska (King and Savidge 1995) found that pheasants increased in areas with a relatively high percentage of land in the CRP program. In Pennsylvania, only 89,000 acres have been idled under CRP, with negligible effect upon pheasants. However, state agencies, the USDA, and interested groups are working to develop another program called the Conservation Reserve Enhancement Program (CREP) for Pennsylvania. Its aim is to idle at least 100,000 acres, with much of the intended area in once first class pheasant habitat, in order to improve water quality, decrease soil erosion, and improve wildlife habitat (Klinger et al. 1998).

Whether pheasant restoration efforts can succeed in Pennsylvania is an open question. The proposed acreage to be set-aside under CREP represents about 4% of the farmland in targeted counties. Pheasant numbers increased the most in Nebraska and Iowa regions where relatively large areas had been idled under CRP (King and Savidge 1995; Riley 1995). But pheasants were a common breeding species in those states when CRP began, unlike in Pennsylvania. A restoration program with any likelihood of increasing wild Pennsylvania pheasant populations should probably concentrate set-aside lands in the regions where it might work (Riley 1999).

Idling grasslands has benefitted many grassland avian species in states with high CRP acreage (Best et al. 1997; King and Savidge 1995; Patterson and Best 1996; Ryan et al. 1998). If CREP comes to fruition, it may benefit some of Pennsylvania's farmland and grassland species. Whether it will also benefit pheasants is the untold part of this story.

References:

- Andrle, R.F. and J.R. Carroll. (eds). 1988. *The Atlas of Breeding Birds in New York State*. Cornell University Press, Ithaca, NY.
- Basore, N.S., L.B. Best, and J.B.

- Wooley, Jr. 1987. Arthropod availability to Pheasant broods in no-tillage fields. *Wildl. Soc. Bull.* 15:229-233.
- Baumgardner, I.C. 1962. That Oriental bombshell. *Pennsylvania Game News* 33(6):25-28.
- Berner, A.H. 1988. Federal Pheasants-Impact of federal agricultural programs on Pheasant habitat, 1934-1985. Pages 45-93 in *Pheasants: Symptoms of Wildlife Problems on Agricultural Lands*. D.L. Hallett, W.R. Edwards, and G.V. Burger (eds). North Central Section of the Wildl. Soc., Bloomington, IN.
- Best, L.B., H. Campa, III, K.E. Kemp, R.J. Robel, M.R. Ryan, J.A. Savidge, M.P. Weeks, Jr., and S.R. Winterstein. 1997. Bird abundance and nesting in CRP fields and cropland in the Midwest: a regional approach. *Wildl. Soc. Bull.* 25:864-877.
- Bolgiano, N.C. 1997. Examining the Christmas Bird Count in Pennsylvania, 1900-1995. *Pennsylvania Birds* 11:50-54.
- Brauning, D.W. (ed). 1992. *Atlas of Breeding Birds in Pennsylvania*. University of Pittsburgh Press, Pittsburgh, PA.
- Chesness, R.A., M.M. Nelson, and W.H. Longley. 1968. The effect of predator removal on Pheasant reproductive success. *J. Wildl. Manage.* 32:683-697.
- Dahlgren, R.B. 1988. Distribution and abundance of the Ring-necked Pheasant in North America. Pages 29-43 in *Pheasants: Symptoms of Wildlife Problems on Agricultural Lands*. D.L. Hallett, W.R. Edwards, and G.V. Burger (eds). North Central Section of the Wildl. Soc., Bloomington, IN.
- Dolbeer, R.A., P.P. Woronecki, A.R. Stickle, Jr., and S.B. White. 1978. Agricultural impact of a winter population of blackbirds and starlings. *Wilson Bull.* 90, 31-44.
- Edwards, W.R. 1988. Realities of "population regulation" and harvest management. Pages 307-335 in *Pheasants: Symptoms of Wildlife Problems on Agricultural Lands*. D.L. Hallett, W.R. Edwards, and G.V. Burger (eds). North Central Section of the Wildl. Soc., Bloomington, IN.
- Faaborg, J., M. Brittingham, T. Donovan, and J. Blake. 1995. Habitat fragmentation in the temperate zone. Pages 357-380 in *Ecology and Management of Neotropical Migrant Birds*. T.E. Martin, and D.M. Finch (eds). Oxford University Press, New York.
- Fletcher, S. and F.E. Hartman. 1986. Hay mowing & Pheasants. *Pennsylvania Game News* 57(3):21-24.
- Gardner, K. 1962. Our changing Pheasant range. *Pennsylvania Game News* 33(10):12-14.
- Gates, J.M. 1972. Red-tailed Hawk populations and ecology in east-central Wisconsin. *Wilson Bull.* 84:421-433.
- Goodrich, L.J. and S.E. Senner. 1988. Recent trends of wintering Great Horned Owls (*Bubo virginianus*), Red-tailed Hawks (*Buteo jamaicensis*) and two of their avian prey in Pennsylvania. *J. Pennsylvania Academy of Science.* 62:131-137.
- Graybill, J.C, Jr. 1982. Make hay and Ringneck Pheasants. *Pennsylvania Game News* 53(7):21-23.
- Haensly, T.F., J.A. Crawford, and S.M. Meyers. 1987. Relationship of habitat structure to nest success of Ring-necked Pheasants. *J. Wildl. Manage.* 51:421-425.
- Hardisky, T. and M.J. Casalena. 1998. Pheasant restoration program. *Pennsylvania Game News* 69(11):16-18.
- Harmon, K.W. 1986. The effects of agriculture on the history and future of the Ring-necked Pheasant (*Phasianus colchicus*). Pages 343-355 in *Endangered and Threatened Species Programs in Pennsylvania and Other States*. S.K. Majumdar, F.J. Brenner, and A.F. Rhoads. The Pennsylvania Academy of Science.
- Hartman, F.E. 1970. Save your Pheasant land. *Pennsylvania Game News* 41(3):48-50.
- , F.E. 1971. Transplanted wild Pheasants - an answer? *Pennsylvania Game News* 42(3):7-13.
- , F.E. 1979. Severe winter conditions affect Pheasant reproductive potential. *Pennsylvania Game News* 50(6):14-17.
- , F.E. and D.E. Sheffer. 1971. Population dynamics and hunter harvest of Ring-necked Pheasant populations in Pennsylvania's primary range. *Trans. NE Sect., Wildlife Soc.* 28:179-205.
- Hassinger, J. 1991a. Small game and the Great Horned Owl. *Pennsylvania Game News* 62(4):11-16.
- , J. 1991b. Small game and the Great Horned Owl. Part II. *Pennsylvania Game News* 62(5):7-11.
- King, J.W. and J.A. Savidge. 1995. Effects of the Conservation Reserve Program on wildlife in southeast Nebraska. *Wildl. Soc. Bull.* 23:377-385.
- Klinger, S., J. Dunn, and J. Hassinger. 1998. Game birds in trouble. *Keystone Conservationist* 1(4):40-45.
- Kosack, J. 1993. Pheasant recovery project. *Pennsylvania Game News* 64(2):3-5.
- Krauss, G.D., H.B. Graves, and S.M. Zervanos. 1987. Survival of wild and game-farm cock Pheasants released in Pennsylvania. *J. Wildl. Manage.* 51:555-559.
- Martin, T.E. 1992. Breeding productivity considerations: What are the appropriate habitat features for management? Pages 455-473 in *Ecology and Conservation of Neotropical Migrant Landbirds*. J.M. Hagan, III, and D.W. Johnston (eds). Smithsonian Institution Press, Washington, D.C.
- Messick, J.P., E.G. Bizeau, W.W. Benson, and W.H. Mullins. 1974. Aerial pesticide applications and Ring-necked Pheasants. *J. Wildl. Manage.* 38:679-685.
- Paton, P.W.C. 1994. The effect of edge on avian nest success: how strong is the evidence? *Conserv. Biol.* 8:17-26.
- Patterson, M.P. and L.B. Best. 1996. Bird abundance and nesting success in Iowa CRP fields: The importance of vegetation structure and composition. *Am. Midl. Nat.* 135:153-167.
- Peterjohn, B.G., J.R. Sauer, and W.A. Link. 1994. The 1992 and 1993 summary of the North American Breeding Bird Survey. *Bird Populations* 2:46-61.
- Petersen, L.R., R.T. Dumke, and J.M. Gates. 1988. Pheasant survival

- and the role of predation. Pages 165-196 in *Pheasants: Symptoms of Wildlife Problems on Agricultural Lands*. D.L. Hallett, W.R. Edwards, and G.V. Burger (eds). North Central Section of the Wildl. Soc., Bloomington, IN.
- Prince, H.H., P. Squibb, and B.Y. Belyea. 1988. Sichuans, Pheasants of the future?—Learning from past release programs. Pages 291-305 in *Pheasants: Symptoms of Wildlife Problems on Agricultural Lands*. D.L. Hallett, W.R. Edwards, and G.V. Burger (eds). North Central Section of the Wildl. Soc., Bloomington, IN.
- Reynolds, R.E., T.L. Shaffer, J.R. Sauer, and B.G. Peterjohn. 1994. Conservation Reserve Program: Benefit for grassland birds in the Northern Plains. *Trans. N. Am. Wild. Nat. Res. Conf.* 59:328-336.
- Riley, T.Z. 1995. Association of the Conservation Reserve Program with ring-necked pheasant survey counts in Iowa. *Wildl. Soc. Bull.* 23:386-390.
- , T.Z. 1999. Presentation to the Pennsylvania Game Commission.
- Root, T. 1988. *Atlas of Wintering North American Birds*. The University of Chicago Press, Chicago, IL.
- Ryan, M.R., L.W. Burger, and E.W. Kurzejeski. 1998. The impact of CRP on avian wildlife: a review. *J. Prod. Agric.* 11:61-66.
- Shipman, J.W. 1998. Christmas Bird Count database. <ftp://ftp.nmt.edu/pub/people/john/cbcl/>.
- Strange, M. 1988. *Family Farming, a New Economic Vision*. University of Nebraska Press, Lincoln, NE.
- USDA. 1964. Conservation Reserve Program and Land Use Adjustment Program. Statistical Summary 1963. U.S. Department of Agriculture, Washington, D.C.
- Warner, R.E. 1984. Effects of changing agriculture on Ring-necked Pheasant brood movements in Illinois. *J. Wildl. Manage.* 48:1014-1018.
- , R.E. 1994. Agricultural land use and grassland habitat in Illinois: future shock for Midwestern birds? *Conservation Biology* 8:147-156.
- , R.E., and S.L. Etter. 1986. The dynamics of agriculture and Ring-necked Pheasant populations in the Corn Belt, USA. *J. World Pheasant Assoc.* 11:76-89.
- , R.E., and S.L. Etter. 1989. Hay cutting and the survival of Pheasants: a long-term perspective. *J. Wildl. Manage.* 53:455-461.
- , R.E., S.L. Etter, G.B. Joselyn, and J.A. Ellis. 1984. Declining survival of Ring-necked Pheasant chicks in Illinois agricultural ecosystems. *J. Wildl. Manage.* 48:82-88.
- , R.E., S.E. Havera, and L.M. David. 1985. Effects of autumn tillage systems on corn and soybean harvest residues in Illinois. *J. Wildl. Manage.* 49:185-190.
- , R.E., S.E. Havera, L.M. David, and R.J. Siemers. 1989. Seasonal abundance of waste corn and soybeans in Illinois. *J. Wildl. Manage.* 53:142-148.
- Wunz, J. 1998. Pennsylvania's Ringneck dilemma. *Pennsylvania Sportsman* 39(7):58-60.
- methods. Linear interpolation of the Census of Agriculture data was used to obtain farmland estimates. An average of linear interpolation and regression upon 1949-96 U.S. Department of Agriculture's Agricultural Statistics data was used to estimate crop acreage. This imparted some of the year-to-year variability present in the Agricultural Statistics data. The southeastern Pennsylvania counties included were Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Delaware, Franklin, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, and York.
- III. The CR data were obtained from USDA (1964). The FGP and WHP data were USDA data provided by Scott Klinger. The correlation between the CBC Pheasant counts/hour and the combined set-aside acreage is 0.71-0.72 for 1956-74 data and is 0.84 for 1950-79 data.

Acknowledgment: I am indebted to Laurie Goodrich, Greg Grove, Scott Klinger, and Scott Weidensaul for valuable discussions and suggestions and to Scott Klinger for providing the Feed Grain Program and Wheat Program data.

711 W. Foster Ave.
State College, PA 16801

Appendix

I. List of CBC sites shown in Figure 3: BH-Bethlehem-Easton, BR-Bushy Run, BU-Butler County, BV-Beaver, BY-Brockway, CB-Central Bucks County, CH-Chambersburg, CL-Clarksville, CN-Clairton, DA-Dallas, EL-Elverson, ER-Erie, GL-Glenolden, GO-Goodville, HM-Hamburg, HR-Harrisburg, LA-Lancaster, LB-Southern Bucks County, LG-Lewisburg, LN-Linesville, LV-Lehigh Valley, LZ-Lititz, MA-Mansfield-Wellsboro, NB-New Bloomfield, OH-Ohiopyle, PE-Pennsburg, PI-Pittsburgh, PL-Pleasantville, PV-Pennypack Valley, RC-Raccoon Creek S.P., RD-Reading, SB-Southeastern Bradford County, SC-State College, SR-Scranton, WC-West Chester, WR-Warren, WY-Wyncote, YO-York.

II. The crop percentage data shown in Figure 4 were obtained from three sources. Data from 1944, 1949, 1954, 1959, 1964, 1969, 1974, 1978, 1982, 1987, and 1992 were obtained from the U.S. Department of Commerce's Census of Agriculture. 1974 and 1978 alfalfa hay acreage data were obtained from the Pennsylvania Crop Reporting Service. Estimates for the intervening years of the Census of Agriculture were imputed by interpolation

Spring Migration at Hawk Mountain Sanctuary, 1969-1998

by Kyle M. McCarty, Michael Farhoud, Jennifer Ottinger, Laurie J. Goodrich,
and Keith L. Bildstein

Introduction

Hawk Mountain Sanctuary, the world's first refuge for birds of prey, has been monitoring the autumn migrations of northeastern U. S. and eastern Canadian populations of raptors since its founding in 1934. The Sanctuary currently maintains the longest and most complete record of raptor migration in the world (Broun 1949; Brett 1991; Bildstein 1998). Hawk Mountain's autumn counts have helped document the harmful effects of DDT and other organochlorine pesticides on populations of birds of prey (Carson 1962), as well as to assess long-term population trends of raptors (Bednarz et al. 1990). The autumn database also has been used to examine relationships between (1) passing cold fronts and the magnitude of raptor migration at the site (Allen et al. 1996), (2) gender and American Kestrel (*Falco sparverius*) migration (Stotz and Goodrich 1989), and (3) recent shifts in the distribution of wintering Sharp-shinned Hawks (*Accipiter striatus*) and declines in their numbers at eastern migration watchsites (Viverette et al. 1996).

Between 1934 and 1995, an average 17,787 raptors has been observed at Hawk Mountain Sanctuary each autumn, with an average passage rate of 23.3 birds per hour (Bildstein 1998). In contrast to autumn, spring migration at the site is much less pronounced, with an average passage rate of 6.0 birds per hour in 1969-1998. Not surprisingly, count efforts and analyses of raptor migration at the site have focused on autumn movements. Here, we summarize data collected during spring migration at the site and compare these data to data collected in autumn.

Methods

Count efforts at Hawk Mountain Sanctuary in spring have been sporadic. Spring raptor migration was monitored in 1969-1970, 1976-1977, 1980, 1982-1988, 1992, and 1994-1998, with a range of 2 to 56 days and an average 69 hours of observation each year (Figure 1). Spring counts have

been made as early as 1 February and as late as 21 May. Twenty-seven % of the count effort has been in March; 60% has been in April (Figure 2). Spring coverage typically extends from 09:00 to 15:00, with 1 or 2 observers conducting each day's count. Counters use binoculars to spot, identify, and count north- and northeast-bound raptors at the site. Counts have been conducted at 9 lookouts on or within 8 km of the Sanctuary. Eighty-nine % (1116 of 1249 hours) of the spring watchsite effort has occurred at the Cobble and the North Lookout (Table 1, Figure 3). For the purposes of the analyses that follow, autumn data from the site include only those years in which spring observations also were made (1969-1997).

Results and discussion

7433 raptors were observed during 1249 hours of spring counts at Hawk Mountain Sanctuary in 1969-1998. Six species of raptors (Osprey [scientific binomials appear in Table 2], Sharp-shinned Hawk, Broad-winged Hawk, Red-tailed Hawk, Northern Harrier, and American Kestrel) account for 92% of the spring flight. Spring totals and averages for each species, and a comparison of the spring and autumn flights are shown in Table 2.

Broad-winged Hawks were the most common spring and autumn migrants (48% of the flight in spring, 41% of the flight in autumn). The next most common migrant, Sharp-shinned Hawk, comprised 28% of the autumn flight and 15% of the spring flight. Relative percentages of Red-tailed Hawks and American Kestrels varied slightly between seasons (Table 2). Two generally broad-frontal migrants, Ospreys (Poole 1989) and Northern Harriers (MacWhirter and Bildstein 1996), were decidedly more common in spring than in autumn (9.5 versus 2.4%, and 3.1 versus 1.4%, respectively), most likely because other more corridor-oriented autumn migrant species were relatively less common in spring than in autumn at the site.

Passage rates averaged <3 birds per hour in 1 March to 10 April; 6.4 birds per hour in 11-15 April, 10 birds

per hour in 16-20 April, 8.5 birds per hour in 21-25 April, and 15 birds per hour in 26-30 April (Figure 4A). In May, passage rates dropped to ≤ 3.0 raptors per hour.

Passage rates of Ospreys, Sharp-shinned Hawks, and Broad-winged Hawks all peaked between 11 and 30 April (Figure 4A), while Red-tailed Hawks, Northern Harriers, and American Kestrels showed gradual and protracted migration in spring (Figure 4B). The 11-15 April peak passage rate for American Kestrels is due to an extraordinary flight on 14 April 1983, when 70 kestrels were counted in 7 hr between 0900 and 1600.

High rates of spring passage in 1969, 1970, 1984, and 1992 correspond to low hours of observation (<90) (Figure 1).

The Sanctuary plans to maintain its recently reinitiated season-long (1 April-15 May) spring watchsite effort as part of its accruing long-term raptor migration database.

Acknowledgments

Our analysis would not have been possible without the watchsite efforts of Sanctuary curators Maurice Broun, Alex Nagy, and Jim Brett who, together with numerous Sanctuary staff, volunteers, and interns, collected the autumn and spring-count data. Most of the 1998 spring-count data were collected by the Sanctuary's 1998 spring interns. Mark Monroe prepared Figure 3. We thank them all for their contributions to the Sanctuary's mission. This is Hawk Mountain Sanctuary contribution number 71.

References

- Allen, P. E., L. J. Goodrich, and K. L. Bildstein. 1996. Within- and among-year effects of cold fronts on migrating raptors at Hawk Mountain, Pennsylvania, 1934-1991. *The Auk* 113:329-338.
- Bednarz, J. C., D. Klem, L. J. Goodrich, and S. E. Senner. 1990. Migration counts of raptors at Hawk Mountain, Pennsylvania, as indicators of population

trends, 1934-1986. *The Auk* 107:96-109.

Bildstein, K. L. 1998. Long-term counts of migrating raptors: A role for volunteers in wildlife research. *J. of Wildlife Management* 62:435-445.

Brett, J. J. 1991. *The mountain and the migration* (revised and expanded edition). Cornell University Press, Ithaca, N.Y.

MacWhirter, R. B., and K. L. Bildstein. 1996. Northern Harrier (*Circus cyaneus*). In *The birds of North America*, No. 210 (A. Poole and F. Gill. eds.). The Academy of Natural Sciences, Philadelphia, Pa.; and The American Ornithologists Union, Washington, D.C.

Broun, M. 1949. *Hawks aloft: The story of Hawk Mountain*. Dodd, Mead Company, Cornwall, N.Y.

Carson, R. 1962. *Silent spring*. Houghton Mifflin, Boston, Mass.

Poole, A. F. 1989. Ospreys: a natural and unnatural history. Cambridge University press, Cambridge, England.

Stotz, N., and L. J. Goodrich. 1989. Sexual differences in the timing of American Kestrel migration at Hawk Mountain Sanctuary, Pa. *J. of Raptor Research* 23:167-171.

Viverette, C., S. Struve, L. J. Goodrich, and K. L. Bildstein. 1996. Decreases in migrating Sharp-shinned Hawks (*Accipiter striatus*) at traditional raptor-migration watch sites in eastern North America. *The Auk* 113:32-40.

Table 1. Spring watchsites at or near Hawk Mountain Sanctuary, including hours of observation and years active.

Watchsite	Hours of observation	Years of observation
The Cobble	882	1969, 1976, 1977, 1980, 1982-1988
North Lookout	234	1969, 1970, 1977, 1980, 1983, 1988, 1994-1998
Port Clinton Fire Tower*	52	1969, 1976, 1977, 1983
Owl's Head	41	1977, 1980, 1983
Top of the World*	12	1992
The Pinnacle*	9	1969
East Rocks	6	1992
Hemlock Heights	6	1969
Combined**	6	1976
Eckville*	0.75	1992

*Near but not on the Sanctuary

**North Lookout and Cobble

Table 2. Comparison of spring and autumn raptor migration at Hawk Mountain Sanctuary.

	Spring Total	Spring Average	Autumn Average	%spring flight	%autumn flight	Spring: Autumn
Osprey	705	39	492	9.5	2.4	4.0
Bald Eagle	21	1.2	58	0.3	0.3	1.0
Golden Eagle	12	0.7	59	0.16	0.3	0.5
Sharp-shinned Hawk	1085	60	5688	15	28	0.5
Cooper's Hawk	96	5.3	400	1.3	2	0.7
Northern Goshawk	27	1.4	80	0.35	0.4	0.9
Red-shouldered Hawk	138	7.7	277	2	1.4	1.4
Broad-winged Hawk	3532	196	8253	48	41	1.2
Red-tailed Hawk	901	50	3748	12	19	0.6
Rough-legged Hawk	10	0.6	12	0.13	0.06	2.2
Northern Harrier	228	13	283	3.1	1.4	2.2
American Kestrel	315	18	514	4.2	2.6	1.6
Merlin	10	0.6	57	0.13	0.3	0.5
Peregrine Falcon	5	0.3	21	0.07	0.1	0.7
Unidentified	348	8.6	180	4.7	0.9	5.2

Note: Turkey Vultures (*Cathartes aura*) and Black Vultures (*Coragyps atratus*) are not included in this analysis due to inconsistencies in counting methods and the relatively recent appearance of the Black Vulture at Hawk Mountain in the 1950s. Autumn data include only those years (1969-1997) in which spring counts occurred.

Hawk Mountain Sanctuary
1700 Hawk Mountain Road
Kempton, Pennsylvania 19529-9449

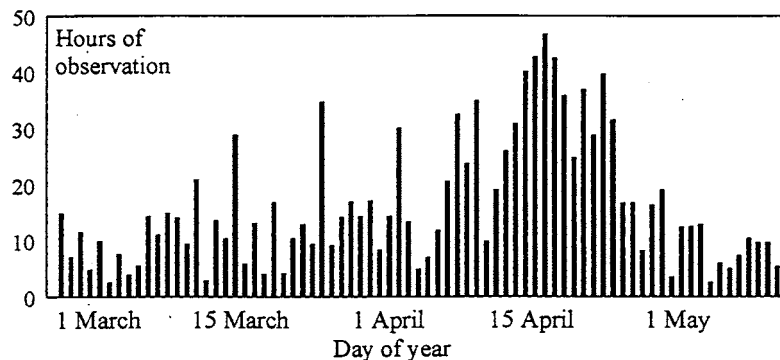


Figure 2. Total hours of observation by day of year for spring migration at Hawk Mountain Sanctuary, 1969-1998.

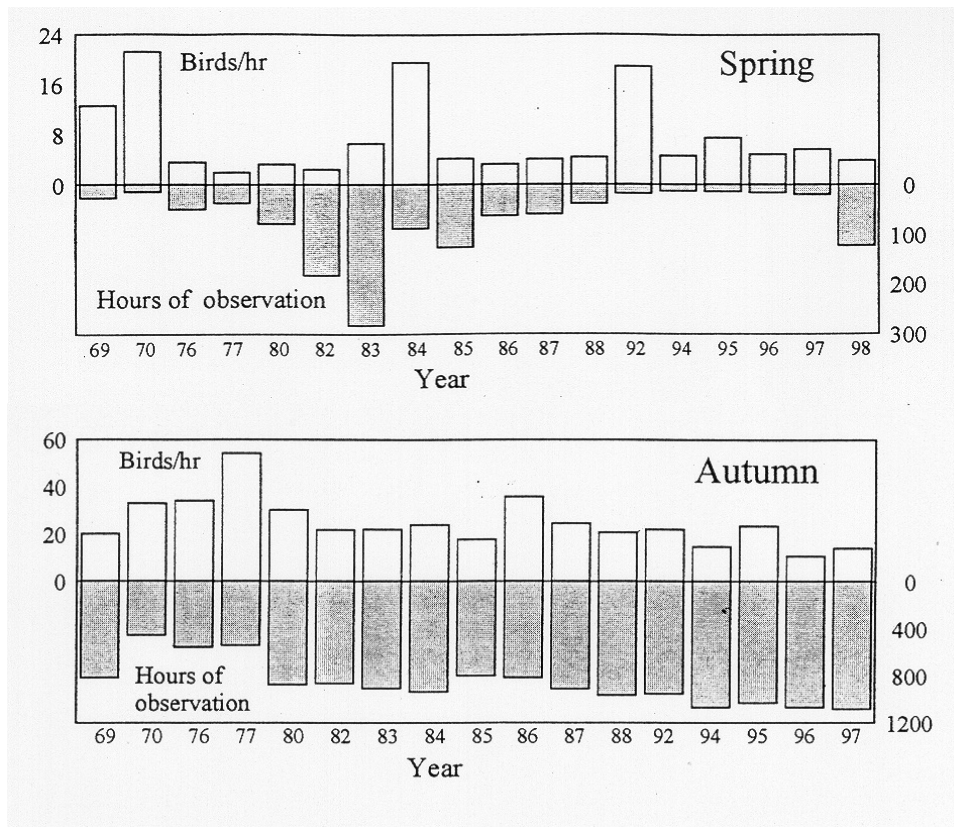


Figure 1. Hours of observation and rate of passage during spring and autumn raptor migration counts at Hawk Mountain Sanctuary, 1969-1998. Note that vertical scales differ between spring and autumn.

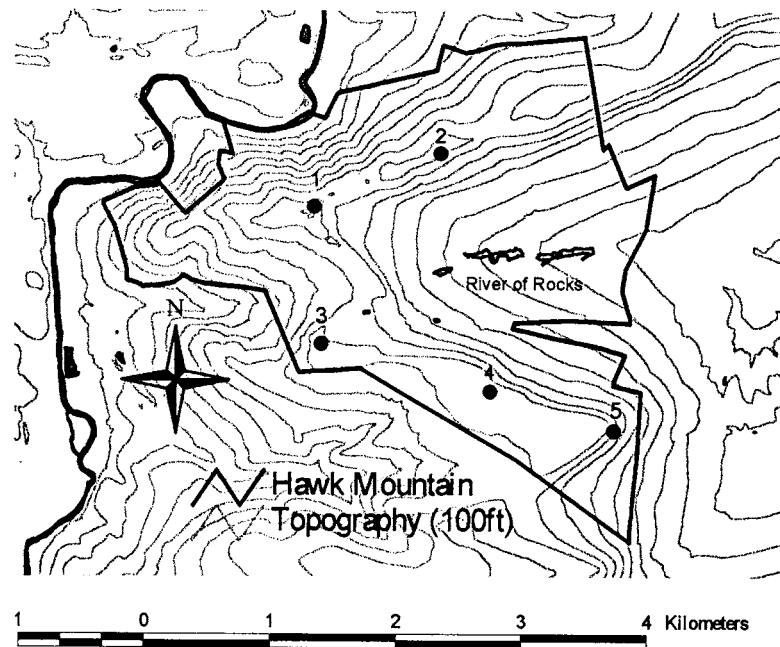


Figure 3. Map of Hawk Mountain Sanctuary, indicating on-site five lookouts: (1) North Lookout, (2) East Rocks, (3) The Cobble, (4) Hemlock Heights, and (5) Owl's Head. The Port Clinton Fire Tower, Top of the World, The Pinnacle, and Eckville are not depicted on the map.

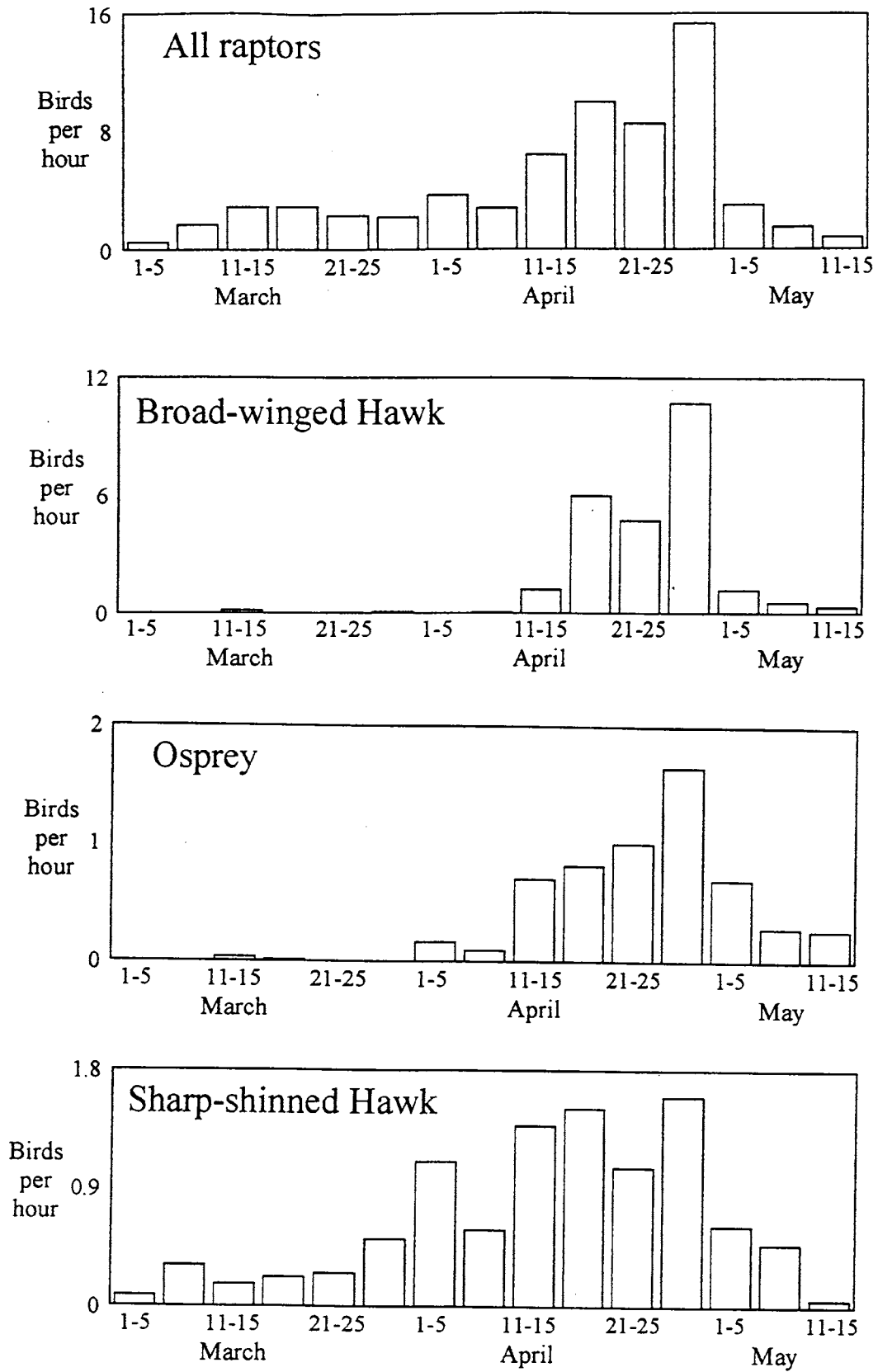


Figure 4A. Rates of passage of all raptors, Broad-winged Hawks, Ospreys, and Sharp-shinned Hawks in spring at Hawk Mountain Sanctuary, 1969-1998.

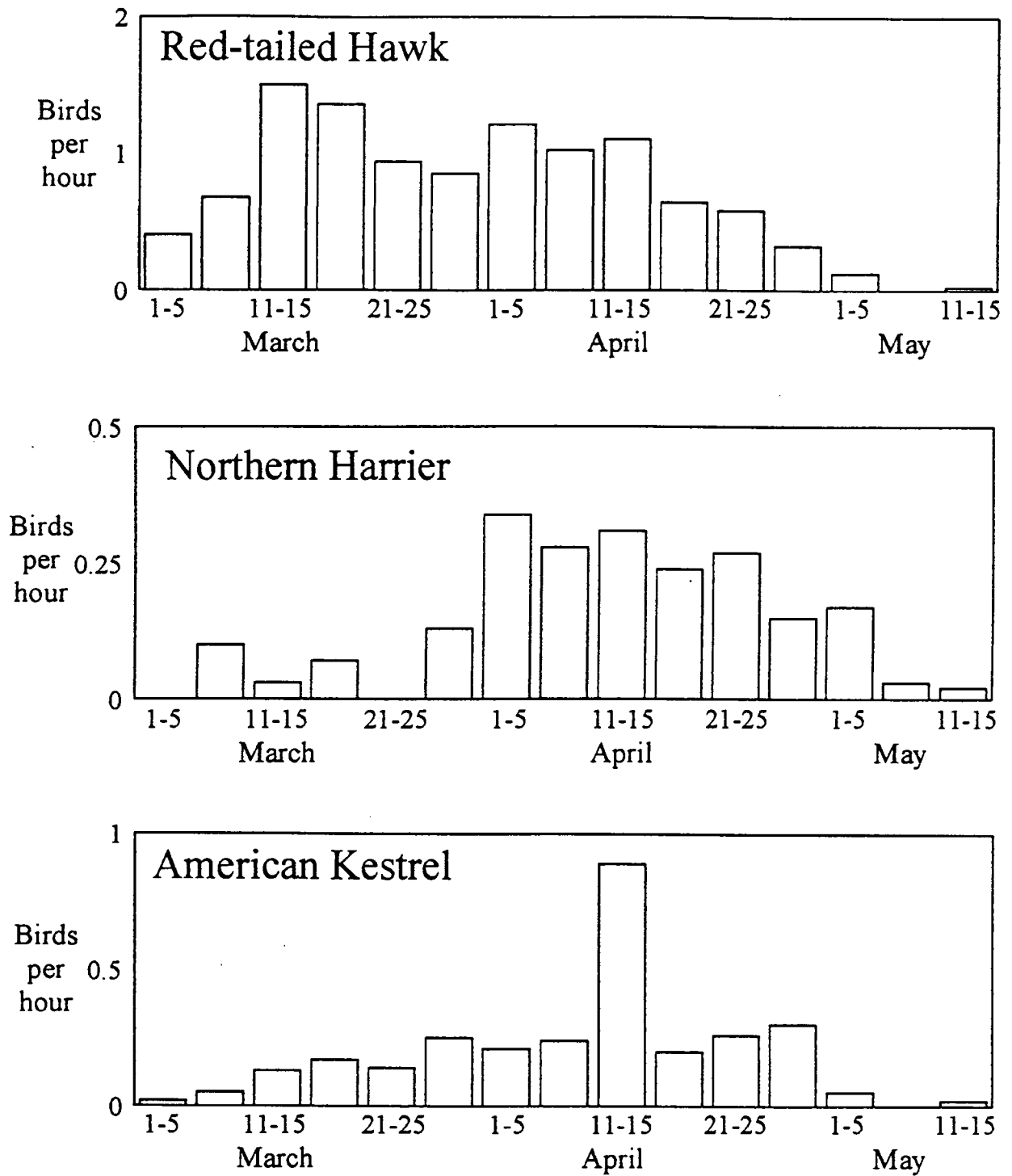


Figure 4B. Rates of passage of Red-tailed Hawks, Northern Harriers, and American Kestrels in spring at Hawk Mountain Sanctuary, 1969-1998.

CASPER AND HIS GHOSTLY FRIENDS

Glaucous and Iceland Gulls in Northampton County

by Dave DeReamus

When doing a Christmas Bird Count, like any other day of birding, the hope that you might turn up something out of the ordinary is always there; but you know that the chances of that happening are not much more possible than seeing a ghost. While participating in the Bethlehem-Easton Hellertown Christmas Bird Count on 2 January 1999, I actually saw a ghost. That ghost was a first-winter Glaucous Gull, *Larus hyperboreus*. It was on a frozen section of the Lehigh River just above what is locally known as "the Chain Dam." This dam is located about two miles west of the Delaware River near the city of Easton. I spotted the bird around 2:15 in the afternoon. It was in the company of 4 Great Black-backed Gulls, *L. marinus*, 27 Herring Gulls, *L. argentatus*, and about 80 Ring-billed Gulls, *L. delawarensis*. Unfortunately, I was alone and had no one to verify it. My camera was at home because I didn't trust leaving it in the car while I was out roaming the woods. So, I studied the bird for about 15 minutes and then ran back to the car and drove home to get my camera. I also called Arlene Koch's house — she only lives two miles away — to see if anyone was available to help me verify the sighting. Luckily, she answered the phone and said she could be at my house in five minutes. We drove back down and easily relocated the bird at about 2:45. We watched it through my Swift spotting scope; and I took pictures of it with my 1000mm Celestron lens on a Nikon body. Around 3:30 it took off with several other gulls and flew off to the east. As it flew, its large size and color reminded me of an adult male Snowy Owl with pointed wings.

I was very fortunate to have the advantage of being able to compare this bird with an adult Great Black-backed Gull that was sitting on the ice approximately three feet

away from it. The bird was originally observed standing on the ice in the middle of the Lehigh River, just above a dam breast, with about 100 other gulls. Later, it was seen preening itself, stretching its wings, and finally flying off down river towards Easton.

The only other gulls normally found in our area would be Herring, Ring-billed, and Great Black-backed. In fact, all three were present at the time of this sighting. Obviously, none of these species comes close in coloration to the pale, ghostly appearance of a Glaucous Gull. An Iceland Gull would be the closest possibility; but it was immediately ruled out because of the size of this bird. As mentioned before, its size most closely matched the Great Black-backed and was much larger than the Herring Gulls which are, themselves, larger than an Iceland Gull. In addition, an Iceland Gull sighting would be almost as rare as a Glaucous.

As far as I know, this was the first record for Glaucous Gull in Northampton County and, in fact, the entire Lehigh Valley area. Thankfully, the bird was present at

about the same time of the day on the 3rd and 4th. Since he was good enough to cooperate for us, I kiddingly called him "Casper, the friendly Glaucous." Then, on the 5th birders looking for Casper picked out a first-winter Iceland Gull at the same spot! This "dirty-white" bird had an all-dark bill and, like Casper, had pale primaries. Its size fell between that of the Ring-billed and the Herring gulls. Both birds were there between 3:00pm and 4:00pm that day among about 300 other gulls. There were as many as a thousand gulls there earlier in the day. The sighting of the Iceland was only the second county record for that species. On the 6th, birders identified a total of three Glaucous and two Iceland Gulls! Between the 6th and the 20th a Lesser Black-backed Gull, *L. fuscus*, and a Bonaparte's Gull, *L. philadelphia*, were spotted, raising the three-week gull species total to seven! The "Chain Dam" had become a mid-winter "Patagonia Rest Area."

20 Marywood Lane
Easton, PA 18042



Glaucous Gull, Chain Dam, Northampton, 1/4/1999. Photo by Dave Dereamus.

Participating in the Grassland Bird Survey

by William Troy Reddinger

“T-slik,” “Bob-white;” “Spring-of-the-year:” All examples of bird calls or songs that should be heard on a suitable grassland habitat in Pennsylvania. These three calls are examples of what I hoped to hear during my Pennsylvania Game Commission Grassland Bird Survey.

This survey consists of a combination of hard work, skill, and luck on survey day to be a success. The participant of this survey first sets up a survey route consisting of suitable habitat. Conducted within a time limit between three to three and one-half hours, this survey has thirty stops of exactly three minutes each along the survey route. I chose to do my survey in southern Clarion County. This is because there were no previous grassland bird surveys being conducted in this area. Also, this area surrounding Curllsville has an abundance of legitimate habitat that should contain grassland bird species.

An idea of the Pennsylvania Game Commission’s ornithologist Dan Brauning, this survey was developed to create an estimation of breeding grassland birds across Pennsylvania. To do this, Mr. Brauning asks all of the surveyors not only to pay attention to birds, but also to take a vegetation survey of all of the stops on their survey. This vegetation survey is thorough, but not so much that the surveyor must have a background of ecology or botany. The purpose of the vegetation survey is to determine why certain birds are found at any given stop on the survey route. Surveying the vegetation includes examples such as recording the percentage of rural buildings, old fields, and agricultural habitat. Then, the percentage of specific plant or field types are surveyed. Examples include small agricultural grains, alfalfa, or recently plowed fields. Studying plant life gives more information to the game commission on how habitat depletion may be affecting given bird species. This is also necessary for situations where a Horned Lark may be in a field of thick grasses when Horned Larks actually prefer to be in almost no-grass habitats.

Because I enjoy birdwatching so

much, and because the game commission requests it, I plan to participate in this survey for many years to come. Before going onto next year’s survey, however, I have been eager to compare my results with two others in Clarion County and the many across the state. I was able to compare my results with the average amount of birds of other surveys over the last few years. This information was provided by the Pennsylvania Grassland Bird Survey Report of 1997 by Dan Brauning. These comparisons seemed to tell me that the data that I collected were of average productivity.

Because Pennsylvania is referred to ecologically as an eastern woodland state, there were only a limited amount of grassland bird species that are to be surveyed each year, 16 to be exact. Fortunately for grassland bird species, Pennsylvania, like much of the eastern United States, was highly susceptible to logging in the early years of our country. Also, farming has cleared much of the way for grassland birds to make there homes in Pennsylvania.

One species total that I was satisfied with was the Henslow’s Sparrows. I recorded 27 individuals. This is because my route passes through reclaimed strip mine habitat in southern Clarion County. Reclaimed strip mines often have plenty of tall and thick grass. Compared to surveyors that also had access to strip mines, the number of Henslow’s Sparrows that I saw or heard seemed to hold its own. The Henslow’s Sparrow, *Ammodramus henslowii*, is heavily sought after by professional ornithologists and amateur birdwatchers alike because of its status as a federal Species of Concern. Also, it is endangered in Pennsylvania. This situation doesn’t seem to be getting any better as it remains uncommon and continues to have declining populations. This can be blamed on the fact that there is a reducing amount of this species’ habitat across Pennsylvania and the United States. This small sparrow can be seen in old fields and grassy meadow habitats. The degradation of habitat can be blamed on suburban

development as well as succession of proper habitat and intensive farming. Even so, Henslow’s Sparrows can occasionally be found in agricultural hay fields that are lush. Unfortunately, many farmers have converted to planting foreign grasses for the benefit of their livestock. These grasses do not occur in clumps like the native grasses. Henslow’s Sparrow’s and other grassland sparrows of Pennsylvania prefer the clumping type of grasses. However, there is hope for grassland habitat throughout the mid-Appalachian area. One organization to commend for this is the Mid-Appalachian Grassland Initiative Corporation (MAGIC). One thing that MAGIC is interested in is purchasing healthy grassland habitat to protect its rarities--including Henslow’s Sparrows. Other such organizations include the Western Pennsylvania Conservancy and the Audubon Society of Pennsylvania.

Recognizing the Henslow’s Sparrow by its call is not hard at all once it is learned. The only problem might be that the “t-slik” call is often hard to detect. Visual identification of this species is more difficult. Taking note of its flat forehead, large gray bill, chestnut-colored wings, and short tail are essential in distinguishing it from other sparrows such as the Grasshopper Sparrow. Other things that are useful to know about the Henslow’s Sparrow include the fact that a Henslow’s Sparrow will often run across the ground like a mouse rather than to take flight. Also, this sparrow rarely perches in the open which makes it a difficult bird to see anyhow. Also, if a strange sound is coming from the ground of a field in the middle of the night, it is probably a Henslow’s Sparrow because of its unusual characteristic of nighttime singing.

The Grasshopper Sparrow, *Ammodramus savannarum*, is named for its insect-like call. This sparrow is very similar to the Henslow’s Sparrow in shape. Fortunately, taking note of such characteristics as a buffy breast and sides, and its low, fluttering flight can provide some relief in visual identification. Even so, finding a

Grasshopper Sparrow out in the open will most likely occur early in the morning or just before dark. My total number of individuals of this species, 19, seemed rather low. Reasons for this may include my own inability to detect the Grasshopper Sparrow's relatively "soft" call.

Along with the Vesper Sparrow, *Poocetes gramineus*, the Grasshopper Sparrow and Henslow's Sparrow are three birds that are not always easy to visually identify. Because of the survey, I have been able to gain a stern ability to identify these birds in spite of the apparent difficulty in doing so. I only encountered one Vesper Sparrow in my survey. This, as one might suspect, is a disappointingly low number. I hoped to see or hear at least five of these birds. It is possible that there were Vesper Sparrows that I missed because they simply weren't singing. Even if they were singing, I may have not heard them from a distance because they are so prone to singing from the ground. Another possibility as to why I didn't get more of these is because I attempt to survey from the absolute middle of the grassland area. In other words, I place myself as far away from any succession area or forest as I possibly can so that I can be in a locale that keeps all parts of any given field at an equal distance from me. This may not be optimal for finding Vesper Sparrows because they prefer to remain closer to trees for protection against predators than any other grassland sparrow in the area.

Another sparrow that I searched for on my survey was the Field Sparrow, *Spizella pusilla*. I found a total of 18 Field Sparrows on my survey. I found that this is very close to average in comparison to the 1997 report. I was happy to get to see or hear this bird 18 times because of its accelerating trill song and bubble gum colored bill and legs.

Another sparrow-like bird that I searched for is the Dickcissel, *Spiza americana*. Unsurprisingly, I found none. This bird is more commonly found west and south of Pennsylvania. Although I have seen one of these birds in Clarion County (which was found during another Pennsylvania Game Commission Grassland Bird Survey), there were very few found in Pennsylvania's surveys during 1997. The exact number was six.

The final sparrow that I listened

and looked for is called the Savannah Sparrow, *Passerculus sandwichensis*. This sparrow prefers to live in a more agriculturally-based habitat but also lives elsewhere. I managed to record 30 Savannah Sparrows on my survey. This seemed to be rather average even though one surveyor of 1997 found 121 of these birds. I think that it is safe to say that that particular surveyor has a route in which agriculture is abundant.

Another survey bird that has a liking for agriculture is the Horned Lark, *Eremophila alpestris*. This bird prefers rocky and short grass, unlike the Savannah Sparrow, which would rather be in a little bit of grass at least. I managed to find only three Horned Larks. Although this is about average, I found this to be highly disappointing. This is so because I have many stops on my survey that I saw Horned Larks on, but on survey day, no Horned Lark was found on those stops. I wouldn't have been surprised if I would've had 19 or 20 on my survey. This is a prime example of how luck can play a critical role in collecting good data.

A rather numerous bird that I surveyed is the Eastern Meadowlark, *Sturnella magna*. I found 32 Eastern Meadowlarks. Once again, these numbers could be labeled as average. Actually a member of the blackbird family, the Eastern Meadowlark can be found in almost all of the grassland habitats of Pennsylvania. I was very hopeful to find a Western Meadowlark, *Sturnella neglecta*. It is a close relative of the Eastern Meadowlark. This is very possible (although not likely) since there was one found in Clarion County during another grassland bird survey. At all times during my survey, I listened carefully for the song of the Western Meadowlark (a rather warped form of the "Spring-of-the-year" song of the Eastern Meadowlark). Unfortunately, meadowlarks have been known to learn their calls from other members of their family. In other words, just because you hear the call of a Western Meadowlark in the range of an Eastern Meadowlark doesn't mean that it is a Western Meadowlark. It could just be an Eastern Meadowlark that was at one time in the wrong range and learned the song of the Western Meadowlark. Another problem in identification is that both of these species look almost exactly alike. The only major difference is the

pattern of yellow on the throat.

The beautiful Bobolink, *Dolichonyx oryzivorus*, is also a bird that I surveyed. The Bobolink prefers lush grass to live in. I found 29 Bobolinks on my survey. These numbers seemed to be relatively under-average in comparison to the statistics in the 1997 report. This disappointing figure of 29 birds is easily made up for because of the male Bobolink's extravagant breeding display as it hovers just over the grass singing its melodious, glassy song. The display that is put on seems like it came from some sort of bird-Broadway. The object of the display is to show females its stamina. More stamina in being able to flutter its wings for so long means that the bird has a lot of strength and body fat.

Ironically, body fat is a good characteristic for birds. More body fat should mean more power to chase off opponents to get food. The female Bobolinks want only the best father to produce only the best offspring. As an observer watches this breeding display, he/she might think that in spite of these beautiful physical characteristics, the Bobolink is an odd-looking bird. This appears to be so because of its white back and black belly. This is called reverse counter-shading. This is not a common phenomenon. Regular counter-shading that is used for protection against predators involves a light underside and dark top. (Anything looking up will have a hard time seeing it against the sky, and anything looking down will have a hard time seeing it because of the ground.) In reverse counter-shading, the importance of an elaborate visual display takes precedence over protection from predators.

The common Killdeer, *Charadrius vociferus*, displays an elaborate version of counter-shading. In addition to a light bottom and dark top, the Killdeer has two dark breast bands so that anything looking at it towards its face will probably get it mixed up with the horizon. Although rather common, the Killdeer showed up only five times on my survey because the stops that I chose didn't always agree with the short grass preference of the Killdeer. Not surprisingly, my Killdeer numbers will probably be one of the lowest in 1998.

I found one Northern Bobwhite,

Colinus virginianus, on my survey. I was very pleased with this. Even so, this bird was probably released here and not actually of wild origin. Because of this, I will probably never be able to observe such an interesting happening as a Northern Bobwhite laying one of its eggs in the nest of a Ring-Necked Pheasant in Clarion County. In spite of this, it is always a joy to hear the famous "bob-white" call that gives the Northern Bobwhite its name. Such an activity as this is done by a few species of birds that are always looking for species survival opportunities. If a Northern Bobwhite won't be able to provide essential care for its young, it may lay its egg in the nest of another bird. Most commonly, that bird will be the Ring-Necked Pheasant. Such "brood parasitism" is frequently displayed by the Brown-Headed Cowbird, *Molothrus ater*. The female Brown-Headed Cowbird most commonly chooses the nest of a wood-warbler to lay her egg(s) in. From there, survival of the fittest takes over in the nest. The young cowbird will always be bigger than its new brothers and sisters. Therefore, the cowbird will almost always get the meal from its parents.

Ironically, the Ring-Necked Pheasant, *Phasianus colchicus*, occasionally lays its eggs in the nest of the Northern Bobwhite. Because of the size advantage of the pheasant, the pheasant will probably have authority over the young bobwhites just as young cowbirds have authority over smaller members of the nest. Two Ring-Necked Pheasants were found on my survey route during count day. This is about what I expected, and I am satisfied with that although I wish that I would have seen or heard more.

One species of bird that I didn't manage to find is the Upland Sandpiper, *Trygites subruficollis*. Although found elsewhere in Clarion County, my route contained only one possible location where this bird might be found. A large and wet grassland is the habitat that the Upland Sandpiper demands to breed in. Another reason that I didn't find one is that they are considered "endangered" in the state of Pennsylvania. Although my hopes weren't up to get one of these shorebirds on my survey, I was still disappointed I was unable to find one. Hoping to hear the Upland Sandpiper's beautiful whistling song goes right

along with visiting grassland habitat.

Another bird that I failed to find on my route was the Short-Eared Owl, *Asio flammeus*. Like the Upland Sandpiper, the Short-Eared Owl is rather scarce in Pennsylvania. Even so, my route included a large field that has contained many Short-Eared Owls in the past. Either they went north for the summer, or I got to that stop too late in the day. Short-Eared Owls have been known to hunt in daylight. Even so, luck would more likely come to someone who looks for Short-Eared Owls closer to dawn or dusk,

The Northern Harrier, *Circus cyaneus*, is another raptor that I hoped to see. I did see one and only one. I found the large harrier at a spot that I didn't expect to see it. Unfortunately, I failed to see any at three other stops that I had seen Northern Harriers at while preparing the survey. Even so, I shouldn't complain. Seeing one on the survey is definitely a plus. As usual, I saw the harrier as it was gliding just above the grass looking for its next meal.

There is one last bird, a member of the wren family, that Mr. Brauning asks the surveyors to look for. This bird is called the Sedge Wren, *Cistothorus platensis*. The Sedge Wren is extremely rare in the eastern United States, and I didn't even consider the possibility of finding one before I set out on survey day. These birds build nests in relatively dry marshes that contain sedge rather than cattails, and they also breed in damp fields that contain sedge. If a person ever comes across a Sedge Wren that is building a nest, he/she must be careful not to assume that Sedge Wrens are breeding at that spot. This is because Sedge Wrens, like many other wrens build dummy nests. These dummy nests are continuously built until the female wren is satisfied with the quality of the nest. Only then does the female begin the process of egg-laying and incubation.

By doing this survey, I have learned many things and only strengthened my knowledge of the subject of ornithology. From my research, I learned that there are many things that are still unknown about birds which is just another incentive for me to head outside with binoculars-in-hand. In preparing for the survey, my bird identification skills increased and knowledge of avian

natural history and behavior has doubled concerning grassland bird species of Pennsylvania. Anyone with legitimate bird identification skills who wants to learn a lot more about birds (and there is always more to be learned!) should consider participating in this highly enjoyable survey.

REFERENCES

- Bent, Arthur Cleveland. 1962. *Life Histories of North American Cardinals, Grosbeaks, Buntings, Towhees, Finches, Sparrows, and Allies*. Washington, D.C.: Smithsonian Institution Press.
- *Life Histories of North American Shorebirds*. 1982. New York: Dover Publications.
- Brauning, Dan. Personal interview: 12 June 1998.
- Byer, Clive, Jon Curson and Urban Olsson. 1995. *Sparrows and Buntings: A Guide to the Sparrows and Buntings of North America and the World*, Boston: Houghton Mifflin Co.
- Ehrlich, Paul, David Dobkin and Darryl Wheye. 1988. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*. New York: Simon and Schuster, Inc.
- Fedak, John. Personal interviews: 6 June 1998 and 19 December 1998.
- Gill, Frank B. *Ornithology*. 1995. New York: W.H. Freeman and Co.
- Gingras, Pierre. 1995. *The Secret Lives of Birds*. Toronto: Key Poster Books Limited
- Haas, Frank and Barb Haas. "Summary of the Season-April through June 1998." *Pa. Birds* April-June 1998, Volume 12(2):64.
- Hoffmann, Deuane. Personal interview: 19 December 1998.
- Kaufman, Kenn. 1990. *Advanced Birding*. New York: Houghton Mifflin Co.
- Minutes for the Meeting of Mid-Appalachian Grassland Initiative Corporation*. Mid-Appalachian Grassland Initiative Corporation, 11 December 1998
- National Geographic Society. 1987. *Field Guide to the Birds of North America*. Second Edition. Washington, D.C.

RD 1 Box 66A
New Bethlehem, PA 16242

NINTH REPORT of the PENNSYLVANIA ORNITHOLOGICAL RECORDS COMMITTEE

June 1999

Nick Pulcinella, Secretary

This report covers 55 records of 30 species submitted to the Pennsylvania Ornithological Records Committee (hereafter PORC or the Committee). The 38 records accepted, of 18 species, represents an acceptance rate of 67%. Highlights include the first record for Pink-footed Goose, and the third record for Gull-billed Tern. The addition of the one new record brings the state total to 395 species (Pulcinella 1995). PORC requests reports of any species on the Review List as well as any species not previously accepted for Pennsylvania. The committee encourages observers to document their sightings with photographs, videos or sound recordings when possible. The committee would also reiterate however, that the primary point of any documentation of a rare bird, should be the written description. At times, the committee receives photographs that don't adequately depict the field marks needed to clinch the identification, whereas, supporting written documentation may add the missing information. When the written description is the only means of documentation, the observer(s) should include as much detail as possible regarding field marks and plumage, as well as information regarding behavior and habitat. PORC again encourages observers of well-watched multi-observed rarities to submit documentation and not to depend on others to submit a report. It is not unusual to be at the scene of a rarity and notice that there are many photographs being snapped and one or two observers using video cameras to record the event only to find out later that the photos did not show the clinching field marks well or that the video images were too small or too dark to show the bird clearly. Each observer's report builds upon the other forming a large body of evidence for the committee to work with. Reports can be submitted to PORC directly by contacting the committee secretary, Nick Pulcinella, 210 Welcome Avenue, Norwood, PA 19074 or through the various county compilers for

Pennsylvania Birds. A list of county compilers can be found in any issue of the journal. For guidelines on preparing rare bird documentation, readers are encouraged to consult Dittman and Lasley 1992, Kwater 1994 and Hanisek and Lehman 1997.

Membership- Since the last PORC report was issued in June 1997 there have been several changes in the committee membership. During 1998, Ed Kwater, Steven Feldstein and Nick Pulcinella resigned and Paul Hess, Ted Floyd, and Ken Parkes were elected to fill the vacancies. During the annual meeting, held 27 June 1998, bylaws changes were approved formally incorporating the position of Treasurer and establishing the position of nonvoting secretary. During this meeting Roy Ickes was elected chairman, Paul Hess was elected Treasurer, and Nick Pulcinella was appointed nonvoting secretary. Committee members who participated in decisions listed in this report are: Steven Feldstein, Ted Floyd, Frank Haas, Paul Hess, Roy Ickes, Ed Kwater, Jerry McWilliams, Ken Parkes, Nick Pulcinella, and Paul Schwalbe.

Classification of Records

Class I: An accepted record based on an existing identifiable specimen, a diagnostic photograph or a diagnostic recording.

Class II: An accepted sight record documented independently by two or more observers.

Class III: An accepted sight record documented independently by one observer.

- (p) photograph submitted
- (r) sound recording
- (v) videotape
- (s) specimen

Format

The records in this report are arranged taxonomically following the AOU Checklist of North American

Birds (AOU 1983) as recently supplemented. The number in parenthesis after the species name represents the number of accepted records, including this report, since the establishment of PORC in 1989. Within each species, the records are listed chronologically. Each record includes the locality and county and a full date span when known. In most cases, the date span is incorporated from the quarterly reports published in *Pa. Birds*. Enclosed in parenthesis following the date are the initials of those who submitted documentation. There is no attempt to list all observers who saw the bird only those who submitted documentation. Following the list of observers, is the Classification of the record and the PORC record number. All photos, video and sound recordings are currently being held with the Secretary until a permanent location is established.

Abbreviations

Co.= County; FN= *Field Notes*; MCWMA= Middle Creek Wildlife Management Area; NWR= National Wildlife Refuge; PB Pennsylvania Birds; PISP= Presque Isle State Park; Res.= Reservoir; SP= State Park

ACCEPTED RECORDS

Eared Grebe (*Podiceps nigricollis*) (18) One in basic plumage at Moraine SP, Butler, 25-31 March 1997 first confirmed county record (PH, DHe; Class III; 009-02-1997). This species is a regular rare migrant throughout the state, probably seen more frequently than is reported to the committee.

White Ibis (*Eudocimus albus*) (6) An adult was observed in flight at Cook Forest SP, Forest, 26 May 1997 (GN, SN, BR; Class II; 093-01-1997). This is one of the few adult spring records for the state. Most sightings occur from July-October and are of immature birds that wander north from their southern breeding grounds.

Glossy Ibis (*Plegadis falcinellus*) (6)

An adult was observed feeding on the Big Spring Fish and Game Association property near Newville, Cumberland, 6 May 1997 (DHe; Class III; 095-01-1997). This is another regular rare migrant and post-breeding wanderer that occurs throughout the state, again, probably seen more frequently than is reported to the committee.

Pink-footed Goose (*Anser brachyrhynchus*) (1) A single individual present in Oley, Berks, 27 March-12 April 1997 (RK, KK, DHe, MM (v), GM, BCo, BU (p); Class I; 108-01-1997). Photograph published in PB11:25. The identity of this species was never in doubt but determining the origin of vagrant waterfowl is problem all records committees dread. Fortunately, this species had several factors weighing in favor of wild origin; the timing of this sighting was consistent with patterns of dispersal and long-distance vagrancy for this species in other parts of the world; the bird's arrival and departure appears to have corresponded with the arrival and departure of the Snow Geese *Chen caerulescens* with which it associated; the bird was wary and showed no signs of having been in captivity; the flight feathers were worn, which could indicate a recent history of long-distance flight. One report submitted mentioned that the wear on the flight feathers was comparable to the wear of the flight feathers of the Snow Geese it associated with; this species is rare in waterfowl collections. The committee appreciates the body of documentation that was submitted for this sighting including copies of personal communications between observers and ornithologists knowledgeable with this species. The acceptance of this species establishes a first state record.

Ross's Goose (*Chen rossii*) (12) One blue-morph was present at MCWMA, Lancaster, 24 February 1997 (KC (ph); Class I; 112-01-1997). Photograph published in PB 11:25. Two birds present at MCWMA, Lancaster/Lebanon 1-30 March 1997 (RM, JM (ph), PL; Class I; 112-02-1997, 112-03-1997, 112-05-1997). The committee feels that these three reports likely pertain to the same individuals. Photograph published in PB V11:24. One at

Shawnee State Park, Bedford, 9-10 March 1997 (JP; Class III; 112-07-1997). One on a small lake near Stoneboro, Mercer, 19 March 1997 (SB (ph), SM, BC; Class III; 112-06-1997). This species is a regular rare migrant in the state with reports increasing yearly. Most reports originate from MCWMA where this species can be found annually accompanying the thousands of Snow Geese (*Chen caerulescens*) that stop there on their northward journey.

Sandhill Crane (*Grus canadensis*) (11) One at Curtin Village, Centre, 3 May-1 June 1997. (BS (ph); Class I; 248-01-1997). This was the first confirmed county record. Photograph published in PB 11:85. One at Menges Mills, York, 8-27 April 1997 (AS (ph); Class I; 248-03-1997). In addition to the nesting pair(s) in the Butler/Mercer/Lawrence Co. area, this species is annual around the state, probably seen more frequently than is reported to PORC.

Piping Plover (*Charadrius melodus*) (6). Three birds seen and heard at PISP, Erie 8 May 1997 (JM; Class III; 261-01-1997). All of the accepted records of this rare shorebird have been from PISP.

Willet (*Catoptrophorus semipalmatus*) (14) One at the Mt Parnell Fish Hatchery, Franklin, 15 May 1997 (CG; Class III; 278-01-1997). One at the CFSR, Lancaster, 30 June 1997 (RM; Class III; 278-02-1997). A flock of 10 at Shenango Res., Mercer, 10 August 1997 (EK; Class III; 278-03-1997). One at Bald Eagle SP, Centre 14 August 1997 (PS, GS, MS; Class III; 278-04-1997). One juvenile at Pymatuning-Millers Pond, Crawford, 16 August 1997 (EK; Class III; 278-05-1997). One along the banks of the Susquehanna River near West Fairview, Dauphin, 16-18 August 1997 (DHe (ph), RKO; Class I; 278-06-1997). Photograph published in FN 52:58 and PB 11:150. Reports are proving that this species is a regular rare migrant especially in the western counties where a majority of the reports originate. The birds that show up in the western counties are also believed to be the "western willet" *C. s. inornatus*. Both the Centre and Dauphin Co. birds were reported to have characteristics favoring *inornatus* such as an overall paleness and lack of

brownness to the upper parts, the lack of contrast on the head as seen in *semipalmatus*, a longer thinner bill and the appearance of longer legs. Readers are referred to Hess (1998) and O'Brien (1997) for further discussion on this interesting identification issue.

Red-necked Phalarope (*Phalaropus lobatus*) (8) One at PISP, Erie, 31 July 1997 (JF, JJ; Class III; 330-02-1997).

Franklin's Gull (*Larus pipixcan*) (7) One on the Susquehanna River at West Fairview, Dauphin 16 May 1997 (GR, MM; Class II; 338-01-1997).

Gull-billed Tern (*Sterna nilotica*) (3) Two at Bald Eagle SP, Centre, 25 May 1997 (AF, BS (ph); Class I; 362-01-1997). This is the third Pennsylvania record and a first for Centre Co. Photo published in PB 11:85. With the documentation by photograph, this species is now elevated to a Class I status.

Sedge Wren (*Cistothorus platensis*) (7) One seen and heard at Imperial, Allegheny, 10 May 1997 (TF; Class III; 625-01-1997). One at MCWMA, Lancaster, 10 May 1997 (RM; Class III; 625-02-1997). One near Latrobe, Westmoreland, 14 May 1997 (TV (ph); Class I; 625-03-1997). Photograph published in PB 11:86. One at PISP, Erie, 17 May 1997 (JM; Class III; 625-05-1997).

Kirtland's Warbler (*Dendroica kirtlandii*) (4) One at PISP, Erie, 14 May 1997 (BM, MW; Class III; 746-01-1997). There is one other spring record accepted by PORC which also falls on 14 May. Santner (1992), lists an additional spring record on 23 May 1981 in Allegheny Co.

Swainson's Warbler (*Limnithlypis swainsonii*) (2) One at Volant, Lawrence, 21 May 1997 (BD; Class III; 756-01-1997).

Summer Tanager (*Piranga rubra*) (9) One at Plowville, Berks 23 May 1997 (KL; Class III; 780-01-1997). One near Ski Rountop, York, 17 June 1997 (JPh; Class III; 780-02-1997). Outside of breeding birds in Greene Co. in the extreme southwestern part of the state, Brauning (1992) this species continues to be a regular rare migrant

especially in southeastern and southcentral counties.

Clay-colored Sparrow (*Spizella pallida*) (19) One at Tyler Arboretum, Delaware, 9 October 1996 (AG; Class III; 814-04-1996). One at PISP, Erie, 8-19 May 1997 (JM (ph); Class I; 814-01-1997). Photograph published in PB 11:85. One at Bald Eagle SP, Centre, 11 May 1997 (RM; Class III; 814-03-1997). One at a feeder in Jacobsburg, Northampton 23 May 1997 (RW (ph); Class I; 814-02-1997) the first documented county record. Photograph published in PB 11:87. One at Keystone SP, Armstrong, 30 September 1997 (JF; Class III; 814-05-1997).

Western Meadowlark (*Sturnella neglecta*) (2) One seen and heard in Center, Juniata 21 June - 1 July 1997. (DHe; Class III; 858-01-1997). There was some hesitation on accepting this record with only written documentation to evaluate, but both description of the bird and the song were convincing. Since the decision on this record was completed, further documentation, including a sound recording, has been submitted for evaluation.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) (2). A female at Conneaut Lake Park, Crawford, 29 June 1997 (RL, RLe; Class III; 859-01-1997).

RECORDS NOT ACCEPTED, identification questionable

Eared Grebe (*Podiceps nigricollis*) One at Kahle Lake, Clarion, 27 March 1997, 009-01-1997. The description provided lacked sufficient details to allow for judgment. One at Little Buffalo SP, Perry, 3 April 1997, 009-03-1997. This bird was very likely an Eared Grebe but the description provided was too brief to allow for an adequate assessment.

Glossy Ibis (*Plegadis falcinellus*) One at John Heinz NWR at Tinicum, Philadelphia/Delaware, 26 August 1997, 095-02-1997. Probably a Glossy Ibis, but the details were too brief to adequately eliminate the possibility of similar species.

Ross's Goose (*Chen rossii*) One at

Lake Ontalaunee, Berks, 10 February 1997, 112-08-1997. Most likely a Ross's Goose but the description submitted was too brief to allow for adequate assessment.

Canada (Richardson's) Goose (*Brananta canadensis hutchinsii*) One at Springton Res., Delaware, 25-26 January 1997, 116a-02-1997. Photograph published in PB 1:241. PORC agrees that this report is of one of the small races of Canada Goose. The committee also agrees with Feldstein (1997), that within the smaller races of Canada Goose there is considerable variation and overlapping characteristics and measurements that prevent most "small canada geese" from being assigned to a specific race.

Mississippi Kite (*Ictinia mississippiensis*) One at Grove City, Mercer, 12 July 1997, 171-01-1997. This was very likely a Mississippi Kite, but the description provided lacked sufficient details to allow for judgment.

Gyr Falcon (*Falco rusticolus*) One at PISP, Erie, 8 February 1997, 200-01-1997. This record circulated the committee twice and the general agreement was that the identification of a Gyr Falcon may be correct, but the description does not entirely rule out a dark Peregrine Falcon (*Falco peregrinus*) of the subspecies *pealei*.

Red Phalarope (*Phalaropus fulicaria*) One at Martin's Creek, Northampton 7 September 1996, 331-01-1996. Photograph published in PB 11:157. One at Imperial, Allegheny, 7 September 1996, 331-02-1996. Photograph published in PB 11:157. Both of these birds were probably the result of the fallout from Hurricane Fran that passed through the state on this date. Both reports were circulated through the committee twice and caused quite a bit of debate and confusion. It is very likely that both of these birds were Red Phalaropes but the photographs submitted did not rule out the possibility of Red-necked Phalaropes (*Phalaropus lobatus*). Written descriptions in both cases might have aided in establishing the identification.

Mew Gull (*Larus canus*) One at Moraine SP, Butler, 8 September 1996, 344-02-1996. This report was

circulated through the committee twice and the description though highly suggestive of this species, does not completely rule the possibility of a Ring-billed Gull.

Sooty Tern (*Sterna Fuscata*) Two, one adult and an immature, near Reading, Berks, 7 September 1996, 375-01-1996. One immature near the Philadelphia Airport Area, Delaware, 7 September 1996, 375-03-1996. These three birds were part of the fallout from Hurricane Fran that passed through Pennsylvania on this date. Both of these reports circulated through the committee twice. All three birds were probably Sooty Terns but the descriptions submitted were too brief to allow for an adequate assessment or did not completely rule out the possibility of similar species such as Bridled Tern (*Sterna anaethetus*).

Violet-green Swallow (*Tachycineta thalassina*) One at Marysville, Cumberland, 10 May 1997, 571-01-1997. The description submitted was based on a brief look at a flying individual and only the "rump" pattern was described. The committee felt the description was too brief to allow satisfactory judgment on such a rarity.

Painted Redstart (*Myioborus pictus*) Four near Medix Run, Elk, 16 May 1997, 770-01-1997. The description submitted lacked several details needed to support the identification.

Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni*) One at Crossingville, Crawford, 9 October 1996, 830a-01-1996. One at Minsi Lake, Northampton, 12 November 1996, 830a-02-1996. Photograph published in PB V10:218. Both of these reports circulated through the committee twice. Though both reports were highly suggestive of this species, the similar Saltmarsh Sharp-tailed Sparrow (*A. caudacutus*), which has occurred inland (Parkes 1992), was not completely ruled out. Readers are referred to Sibley (1996) as a guide in separating the two species.

Chestnut-collared Longspur (*Calcarius ornatus*) One at Robesonia, Berks, 15 February 1997, 845-01-1997. The description was too brief and lacked sufficient detail to support the

identification.

Brewer's Blackbird (*Euphagus cyanocephalus*) Four near Erie Rd., Bucks, 22 December 1996, 861-02-1996. This report circulated through the committee twice. Probably Brewer's, but the description is too brief to allow for adequate judgment and elimination of similar species. Sixteen at St. Mary's, Elk, 21 September 1997, 861-01-1997. Though highly likely that these birds were Brewer's Blackbirds, the description was sketchy and too brief to allow for adequate assessment.

Boat-tailed Grackle (*Quiscalus major*) One at Crosslands-Near Longwood, Chester, 18 March 1995, 863-01-1995. The description provided was too sketchy and did not completely rule out the possibility of Great-tailed Grackle (*Q. mexicanus*).

RECORDS NOT ACCEPTED, represents an escapee or an introduced bird not yet established in Pennsylvania. Identification accepted.

Barnacle Goose (*Branta leucopsis*) One at MCWMA, Lancaster, 15 March 1997 (MM (ph); 115-01-1997). As with previous records submitted for this species, the date of the sighting falls into a nice migration pattern similar to that of our native goose species. This species is widely held in captivity and determining for certain the wildness of each individual is difficult. With this in mind, the committee continues to take a conservative approach toward acceptance.

Contributors

Dan Bogar, Suzanne Butcher, Linda Christensen, Dick Colyer, Betty Comfry, Barry Cooper (BCo), Kevin Crilley, Barb Dean, Steve Farbotnik, John Fedak, Mike Fialkovich, Ted Floyd, Alice Fuller, Carl Garner, Al Guarente, Don Henise (DHe), Paul Hess, Deborah Hess, Jean Jaworski, Rudy Keller, Katrina Knight, Ramsay Koury (RKO), Ed Kwater, Michael Leahy, Robert Leberman, Ronald Leberman, Ken Lebo, Harold Lebo, Paul Lehman, Bob Machesney, Gail Mackiernan, Mark McConaughy, Shirley McCarl, Jerry McWilliams, Randy Miller, Sandra Nolf, Greg Nolf, Jeff Payne, Jeff Pheasant (JPh), Nick Pulcinella, Grace Randolph, Bill Reddinger, Paul Rodewald, Paul Schwalbe, Glenna Schwalbe, Mark Schwalbe (MSc), Walt Shaffer, Bob Snyder, Al Speise, Matt

Spence, Phillips Street, Randy Stringer, Bill Uhrich, Tim Vechter, John Walker, Mark Williams, Rick Wiltraut.

Literature Cited

- American Ornithologists' Union. 1983. *Check-list of North American Birds*. 7th edition. American Ornithologists' Union. Washington, D.C.
- Brauning, D. Ed. 1992. *Atlas of Breeding Birds in Pennsylvania*. University of Pittsburgh Press, Pittsburgh, Pa.
- Dittman, D. and G.W. Lasley. 1992. How to document rare birds. *Birding* 24:145-159.
- Feldstein, S. 1997. An Annotated List of the Field-identifiable and Non-field-identifiable Bird Subspecies and Morphs of Pennsylvania. *Pa. Birds* 11:178-186
- Hanisek, G. and P. Lehman. 1997. Documenting Rarities. *Records of New Jersey Birds* 22:82-83
- Hess, P., 1998. Status and field identification problems of the Willet subspecies in Pennsylvania. *Pa. Birds* 12:42-46.
- Kwater, E. 1994. Documenting Rare Birds in Pennsylvania What the Records Committee Looks For Part 1. *Pa. Birds* 8:63-65.
- O'Brien, M. 1997. *Winter Willets*. from the e-mail discussion group Frontiers of Bird Identification <birdwg01@listserv.arizona.edu>
- Parkes, K. C. 1992. The Subspecies of the Sharp-tailed Sparrow and the Re-Identification of a Western Pennsylvania Specimen. *Pa. Birds* 6:13-14.
- Pulcinella, N. 1995. Official State List of the Birds of Pennsylvania. *Pa. Birds* 9:118-123.
- Santner, S., D. Brauning, G. and P. Schwalbe. 1992. *Annotated List of the Birds of Pennsylvania*. Pennsylvania Biological Survey Contribution Number Four.
- Sibley, D. 1996. Field Identification of the Sharp-tailed Sparrow Complex. *Birding* 18:197-208.

PORC Review List

The PORC requests details, including descriptions and photos or sound recordings if possible, of all records of the following species. Please note county exemptions.

Review List A - rarities

Pacific Loon, Eared Grebe, Northern Fulmar, Black-capped Petrel, Cory's Shearwater, Leach's Storm-Petrel, Northern Gannet, American White Pelican, Brown Pelican, Great Cormorant (exempt in Bucks, Delaware, Philadelphia), Anhinga, Magnificent Frigatebird, Tricolored Heron, White Ibis, Glossy Ibis,

Roseate Spoonbill, Wood Stork, Black-bellied Whistling-Duck, Pink-footed Goose, Ross' Goose, Cinnamon Teal, Eurasian Wigeon (male only exempt in Erie and Lancaster), Tufted Duck, King Eider, Harlequin Duck, Barrow's Goldeneye, Masked Duck, Swallow-tailed Kite, Mississippi Kite, Swainson's Hawk, Gyrfalcon, Yellow Rail, Black Rail, Clapper Rail, King Rail, Spotted Rail, Purple Gallinule, Sandhill Crane, Snowy Plover, Wilson's Plover, Piping Plover, American Oystercatcher, Black-necked Stilt, American Avocet (Erie exempt), Willet (Erie exempt), Whimbrel (Erie exempt), Black-tailed Godwit, Hudsonian Godwit, Marbled Godwit, Surf-bird, Red Knot, Purple Sandpiper (Erie exempt), Ruff, Long-billed Dowitcher, Red-necked Phalarope, Red Phalarope, Parasitic Jaeger, Pomarine Jaeger, Laughing Gull (exempt in Erie and the lower Delaware and Susquehanna rivers), Franklin's Gull (Erie exempt), Little Gull (Erie exempt), Black-headed Gull, Mew Gull, Thayer's Gull, Black-legged Kittiwake, Ross' Gull, Sabine's Gull, Gull-billed Tern, Royal Tern, Roseate Tern, Arctic Tern, Least Tern, Sooty Tern, Black Skimmer, Dovekie, Thick-billed Murre, Ancient Murrelet, Band-tailed Pigeon, Eurasian Collared-Dove, White-winged Dove, Common Ground-Dove, Northern Hawk Owl, Great Gray Owl, Boreal Owl, Chuck-will's-widow, Rufous Hummingbird, Black-backed Woodpecker, Pacific-slope Flycatcher, Say's Phoebe, Vermilion Flycatcher, Western Kingbird, Scissor-tailed Flycatcher, Violet-green Swallow, Boreal Chickadee, Bewick's Wren, Sedge Wren, Northern Wheatear, Mountain Bluebird, Townsend's Solitaire, Bicknell's Thrush, Varied Thrush, Bohemian Waxwing, Loggerhead Shrike, Black-throated Gray Warbler, Townsend's Warbler, Kirtland's Warbler, Swainson's Warbler, Summer Tanager (exempt in Greene), Western Tanager, Black-headed Grosbeak, Blue Grosbeak (exempt in Bucks, Chester, Delaware, Lancaster, Philadelphia and York), Lazuli Bunting, Painted Bunting, Dickcissel, Green-tailed Towhee, Spotted Towhee, Clay-colored Sparrow, Lark Sparrow, Lark Bunting, LeConte's Sparrow, Saltmarsh Sharp-tailed Sparrow, Nelson's Sharp-tailed Sparrow, Seaside Sparrow, Golden-crowned Sparrow, Harris' Sparrow, Western Meadowlark, Yellow-headed Blackbird, Brewer's Blackbird, Bullock's Oriole, Brambling, Pine Grosbeak, Hoary Redpoll.

Review List B - Extirpated Species

Greater Prairie-Chicken, Eskimo Curlew, Brown-headed Nuthatch, Bachman's Sparrow.

Pennsylvania Birdlists 1998

Compiled by Terence Schiefer

Sixty-six reports were submitted to Pennsylvania Birdlists for 1998, one less than last year. There are now 49 birders whose Pennsylvania lifelists are above 300. Joining this group for the first time are Tom Clauser, Edward Pederson, and Ernest Schiefer.

The big news this year is in the Pennsylvania annual list category. Deuane Hoffman established a remarkable new record with 313 species! This total surpasses by seven species the previous record of 306 set in 1992 by Bob Schutsky. Deuane was not the only birder to see lots of birds in 1998. John Fedak's total of 294 is the 5th highest annual list ever, and four other birders, Joyce Hoffmann, Peter Robinson, Mike Fialkovich, and Scott Kinzey, submitted totals that were among the all time top 50.

There are now six birders who have county lifelists of over 300 species. The newest addition to this small group is Jerry Book in Lancaster County. John Fedak joins Deuane Hoffman and Steve Santner as being the only birders who have recorded over 100 species in every Pennsylvania county. Thirteen top county lifelists are now held by Deuane Hoffman, followed by John Fedak and William Reid, each with four. There are still 15 counties with top lists under 200.

Once again Deuane Hoffman submitted county annual lists from every county in the state. He had 8489 county year birds (126.7 species per county), 1018 more than last year. County annual lists in the all time top fifty were submitted by John Fedak (*Clarion*) and Deuane Hoffman (*Cumberland, Dauphin, Lancaster*). Top county annual lists are now held by Deuane Hoffman in fifteen counties, followed by John Fedak with seven, and by Gene Wilhelm with three. There are still 40 counties with top annual lists under 200, and two of these (*Clinton* and *Pike*) are under 100.

After 14 years of compiling your list totals, I've decided that this installment of Pennsylvania Birdlists will be my last. When I published the first Pennsylvania Birdlists newsletter in 1986, I had no idea that I'd be transplanted to Mississippi. The future of Pennsylvania Birdlists looked grim, but Frank and Barb Haas rescued it by incorporating it into *Pennsylvania Birds* starting in 1989. Of course there would be no Pennsylvania Birdlists if it weren't for all of you submitting your lists each year. Although I've never met many of you, your names are as familiar to me as the names of birds. So if any of you ever wander down to Mississippi to do some southern birding, don't hesitate to look me up.

Frank and Barb will be looking for someone to take my place as compiler of Pennsylvania Birdlists. All you need to have is a computer, meticulous attention to detail, and a little time. This issue took me about thirteen hours to prepare. Best of luck to the new compiler of Pennsylvania Birdlists and good birding to you all.

Totals marked with an asterisk (*) are previously submitted totals for which an updated total was not received this year. Totals marked (B) were originally published in the *Birding* list supplement.

Pennsylvania Lifelists

1	357	Barbara Haas	30	318	Phillips Street B *	62	289	Kenneth Gabler
2	355	Franklin Haas	32	315	Evelyn Kopf *	62	289	Allen Schweinsberg
3	350	Deuane Hoffman	33	314	John Fedak	62	289	Roger Higbee B *
4	343	Rick Wiltraut	34	313	Harold Morrin *	66	288	John Salvetti
5	342	Bernard Morris	35	311	Devich Farbotnik	66	288	Matt Wlasniewski
5	342	Eric Witmer *	36	309	Arlene Koch *	68	286	William Reid *
7	341	Tom Garner	36	309	Margaret Higbee B *	69	285	Neal Thorpe *
8	340	Jerry Book	38	307	Don Henise *	69	285	Armas Hill B *
9	338	Robert Schutsky	38	307	Ronald Leberman *	71	284	James Gray B *
9	338	Jan Witmer *	40	305	Robyn Henise *	72	283	Kerry Grim
11	337	Randy Miller	40	305	Gene Wilhelm *	72	283	Peter Robinson
11	337	John Miller B *	42	304	Ernest Schiefer	74	282	Thomas Reeves
13	336	William Stocko B *	43	303	Skip Conant	74	282	John Billings B
14	334	Dave DeReamus	44	302	Edward Pederson	76	280	Chuck Tague *
15	329	Richard Colyer	44	302	Sam Stull *	77	278	Merrill Wood *
15	329	Ken Lebo	46	301	Tom Clauser	77	278	James Baird B *
15	329	Paul Schwalbe	47	300	Richard Timm B *	79	277	Bonnie Baird B *
18	328	Jason Horn *	47	300	Larry Lewis *	80	275	Mark McConaughy
19	327	Joyce Hoffmann	49	299	Bruce Carl	81	274	Gloria Lamar *
19	327	William Murphy	49	299	Keith Richards B *	82	271	James Flynn *
19	327	Glenna Schwalbe	51	297	Allan Keith B	83	269	Scott Kinzey
19	327	Steve Santner B *	52	296	Ed Kwater *	83	269	David Kyler *
23	324	Harry Franzen *	53	295	Mike Fialkovich	85	268	Walter Shaffer *
24	323	Jonathan Heller	53	295	Frank Windfelder B	86	267	Harry Henderson *
25	322	Fritz Brock	55	294	Terence Schiefer	87	266	Joe Meloney *
26	321	Gerald McWilliams	55	294	David Freeland B *	88	264	Aden Troyer
27	319	Steve Farbotnik	55	294	George Malosh B *	89	263	Richard Koval *
27	319	John Ginaven	55	294	James Baxter *	90	262	Scott Bills *
27	319	Al Guarente	59	293	John Peplinski B *	91	259	Randi Gerrish *
30	318	Harold Lebo	60	292	Carl Garner	91	259	Linda McWilliams *
			61	290	David Abbott B	93	258	Dennis Miller
			62	289	Kevin Crilley	93	258	Sarah Gerrish *

95 257 Dick Byers *
 95 257 Russell Ryan *
 97 256 Ted Grisez *
 98 255 Eugene Zielinski
 99 252 Greg Grove
 100 248 Scott Bastian
 100 248 Bob Machesney
 102 242 Steve Graff
 102 242 Jeff Payne
 102 242 Walter Fye *
 105 238 Retta Payne
 105 238 Roy Ickes *
 107 237 Robert Frantz
 108 236 David Hawk
 109 235 Gary Edwards *
 110 234 Neal Troyer
 111 232 Dave Rieger
 111 232 Joe Strasser *
 111 232 Voni Strasser *
 114 231 Larry Brown
 115 230 Bill Reddinger
 116 228 Wayne Laubscher
 117 227 Deborah Grove
 118 224 Arlene Brown
 119 223 Pamela Woodman *
 120 219 Nick Kerlin
 120 219 Ann Pettigrew *
 122 214 Glenn Czulada *
 123 212 Richard Murphy
 124 203 Martin Page
 125 200 Fred Crowley *

County Lifestlists (top 50)

1 309 *Erie* Gerald McWilliams
 2 308 *Lancaster* Randy Miller
 2 308 *Lancaster* Eric Witmer *
 4 306 *Lancaster* Tom Garner
 5 302 *Lancaster* Robert Schutsky
 6 300 *Lancaster* Jerry Book
 7 296 *Lancaster* Jonathan Heller
 8 294 *Lancaster* Deuane Hoffman
 9 292 *Lancaster* Jan Witmer *
 10 291 *Lancaster* Harold Morrin *
 10 291 *Erie* Sam Stull *
 12 290 *Philadelphia* John Miller *
 13 289 *Delaware* John Miller *
 14 287 *Lancaster* Barbara Haas *
 15 285 *Berks* Ken Lebo
 16 281 *Erie* Deuane Hoffman
 16 281 *Lancaster* Bruce Carl
 18 278 *Erie* Joyce Hoffmann
 19 276 *Luzerne* William Reid *
 20 275 *Berks* Kerry Grim
 21 274 *Erie* Ed Kwater *
 21 274 *Lancaster* Steve Santner *
 23 273 *Berks* Harold Lebo
 24 272 *Centre* Merrill Wood *
 25 270 *Bucks* Steve Farbotnik
 26 269 *Northampton* Rick Wiltraut
 27 268 *Dauphin* Deuane Hoffman
 27 268 *Erie* James Flynn *
 27 268 *Chester* Larry Lewis *
 30 267 *Berks* Matt Wlasniewski
 30 267 *Cumberland* Deuane Hoffman
 30 267 *Butler* Gene Wilhelm *
 33 266 *Franklin* Carl Garner
 34 265 *Lehigh* Fritz Brock
 35 264 *Franklin* Kenneth Gabler
 36 263 *Lehigh* Bernard Morris
 36 263 *Centre* Harry Henderson *
 38 262 *Berks* Deuane Hoffman
 38 262 *Delaware* Al Guarente
 38 262 *Berks* Jason Horn *
 41 260 *Lehigh* Rick Wiltraut
 42 259 *Montgomery* William Murphy
 42 259 *Cumberland* Don Henise *
 42 259 *Lehigh* Jason Horn *
 45 258 *Bucks* Devich Farbotnik
 45 258 *Lebanon* Randy Miller
 47 257 *Cumberland* Robyn Henise *
 48 255 *Centre* Eugene Zielinski

48 255 *Montgomery* Kevin Crilley
 48 255 *Delaware* Barbara Haas *

County Lifestlists (by county)

Adams
 213 Arthur Kennell *
 211 Carl Garner
 193 Nonie Kennell *
 188 Deuane Hoffman
 159 Kenneth Gabler
 150 Steve Santner *
 144 Russell Ryan *
 108 John Fedak

Allegheny
 240 David Freeland *
 223 Joyce Hoffmann
 214 Mike Fialkovich
 208 Ed Kwater *
 194 Bob Machesney
 185 Deuane Hoffman
 183 Scott Kinzey
 176 Randi Gerrish *
 168 George Malosh *
 158 Sarah Gerrish *
 144 Geoff Malosh *
 141 Greg Malosh *
 140 Margaret Higbee *
 138 Roger Higbee *
 134 John Fedak
 116 Dick Byers *
 102 Steve Santner *

Armstrong
 234 John Fedak
 209 Margaret Higbee *
 192 Roger Higbee *
 188 Scott Bastian *
 172 Deuane Hoffman
 165 Bill Reddinger
 152 Steve Graff
 113 Mark McConaughy
 100 Steve Santner *

Beaver
 168 Nick Kerlin *
 158 Deuane Hoffman
 152 George Malosh *
 138 Scott Kinzey
 124 John Cruzan *
 113 John Fedak
 113 Geoff Malosh *
 112 Greg Malosh *
 108 John Snarey *
 102 Steve Santner *

Bedford
 205 Deuane Hoffman
 146 John Fedak
 122 Steve Santner *
 111 Richard Murphy
 108 Kenneth Gabler

Berks
 285 Ken Lebo
 275 Kerry Grim
 273 Harold Lebo
 267 Matt Wlasniewski
 262 Deuane Hoffman
 262 Jason Horn *
 244 Ernest Schiefer
 205 Terence Schiefer
 204 Barbara Haas *
 198 Bernard Morris
 192 Larry Lewis *
 174 Steve Santner *
 170 Al Guarente
 166 Randy Miller
 159 Jonathan Heller
 149 Kevin Crilley
 139 Scott Bills *
 134 John Fedak

130 Bruce Carl

Blair

180 David Kyler *
 158 Deuane Hoffman
 104 John Fedak
 103 Steve Santner *
 76 Don Henise *

Bradford

221 William Reid *
 194 Ronald Young *
 168 Frances Biles *
 145 Randy Miller
 136 Deuane Hoffman
 109 John Fedak
 105 Barbara Haas *
 102 Steve Santner *

Bucks

270 Steve Farbotnik
 258 Devich Farbotnik
 248 William Murphy
 227 Jason Horn *
 215 Harry Franzen *
 202 Stan Glowacki *
 191 Deuane Hoffman
 172 Bernard Morris
 157 Kevin Crilley
 131 John Fedak
 128 Barbara Haas *
 121 Steve Santner *
 110 Al Guarente

Butler

267 Gene Wilhelm *
 250 David Freeland *
 198 Dick Byers
 181 Deuane Hoffman
 169 Bob Machesney
 166 Ed Kwater *
 165 George Malosh *
 138 Randi Gerrish *
 133 John Fedak
 129 Margaret Higbee *
 126 Sarah Gerrish *
 122 Geoff Malosh *
 119 Roger Higbee *
 119 Greg Malosh *
 100 Steve Santner *

Cambria

217 John Salvetti
 161 Gloria Lamer *
 131 John Fedak
 126 Deuane Hoffman
 103 Steve Santner *

Cameron

140 Deuane Hoffman
 113 John Fedak
 105 Steve Santner *
 69 Paul Schwalbe

Carbon

245 Rick Wiltraut
 226 David Hawk
 217 Jason Horn *
 206 Bernard Morris
 202 Deuane Hoffman
 197 Robert Frantz
 115 Steve Santner *
 103 John Fedak

Centre

272 Merrill Wood *
 263 Harry Henderson *
 255 Eugene Zielinski
 245 Rick Wiltraut
 244 Terence Schiefer
 218 Scott Bills *
 216 Deuane Hoffman
 184 Paul Schwalbe
 183 Greg Grove

162 Russ Ruffing *
 158 John Fedak
 145 Kevin Crilley
 145 Steve Santner *
 126 Barbara Haas *
 111 Randy Miller
 101 Jonathan Heller

Chester
 268 Larry Lewis *
 252 Barbara Haas *
 252 Phillips Street *
 246 John Ginaven
 231 Joe Meloney *
 226 Deuane Hoffman
 214 Al Guarente
 205 Jason Horn *
 193 Neal Thorpe *
 168 Martin Page
 167 Steve Santner *
 148 Thomas Reeves
 140 Theodore Drozdowski
 125 Jonathan Heller
 120 Randy Miller
 111 Terence Schiefer
 109 Bruce Carl
 108 John Fedak

Clarion
 252 John Fedak
 229 Walter Fye *
 209 Deuane Hoffman
 200 Margaret Buckwalter *
 181 Gene Wilhelm *
 151 Bill Reddinger
 150 Fred Crowley *
 104 Steve Santner *

Clearfield
 165 Deuane Hoffman
 157 John Fedak
 138 Eugene Zielinski
 114 Paul Schwalbe
 100 Steve Santner *

Clinton
 246 Paul Schwalbe
 169 Wayne Laubscher
 154 Deuane Hoffman
 126 John Fedak
 120 Steve Santner *
 101 Barbara Haas *

Columbia
 163 Deuane Hoffman
 114 John Fedak
 100 Steve Santner *
 65 Randy Miller

Crawford
 242 Deuane Hoffman
 208 John Fedak
 206 Margaret Higbee *
 205 Ronald Leberman *
 201 Gene Wilhelm *
 200 Roger Higbee *
 164 Ed Kwater *
 152 Geoff Malosh *
 150 Greg Malosh *
 138 Randi Gerrish *
 138 Sarah Gerrish *
 124 George Malosh *
 123 James Flynn *
 117 Randy Miller
 112 Steve Santner *
 107 Jonathan Heller
 102 Terence Schiefer

Cumberland
 267 Deuane Hoffman
 259 Don Henise *
 257 Robyn Henise *
 244 Richard Colyer
 208 Carl Garner

197 Steve Santner *
 176 George Wertz, Jr. *
 169 Mark McConaughy
 159 Kenneth Gabler
 154 John Fedak
 120 Jonathan Heller
 111 Randy Miller

Dauphin
 268 Deuane Hoffman
 238 Mark McConaughy
 235 Scott Bills *
 235 Grace Randolph *
 234 George Wertz, Jr. *
 219 Steve Santner *
 207 Richard Colyer
 154 John Fedak
 151 Don Henise *
 127 Merrill Wood *
 125 Randy Miller
 119 William Reid *
 113 Jonathan Heller
 110 Kenneth Gabler

Delaware
 289 John Miller *
 262 Al Guarente
 255 Barbara Haas *
 244 Thomas Reeves
 243 Skip Conant
 226 Paul Schwalbe
 222 John Ginaven
 186 Deuane Hoffman
 151 Jason Horn *
 130 Steve Santner *
 113 Martin Page
 108 John Fedak

Elk
 183 Linda Christenson *
 127 Deuane Hoffman
 122 John Fedak
 105 Steve Santner *
 79 Ted Grisez *

Erie
 309 Gerald McWilliams
 291 Sam Stull *
 281 Deuane Hoffman
 278 Joyce Hoffmann
 274 Ed Kwater *
 268 James Flynn *
 253 Linda McWilliams *
 249 Barbara Haas *
 244 Mike Fialkovich
 243 Margaret Higbee *
 242 David Freeland *
 241 John Fedak
 236 George Malosh *
 235 Roger Higbee *
 233 Gene Wilhelm *
 218 Geoff Malosh *
 217 Greg Malosh *
 210 Randy Miller
 208 Steve Santner *
 206 Richard Colyer
 197 Terence Schiefer
 182 Jonathan Heller
 178 Bernard Morris
 177 Randi Gerrish *
 177 Sarah Gerrish *
 174 Don Henise *
 166 Ronald Leberman *
 137 Kenneth Gabler
 109 Bill Reddinger
 105 Steve Graff

Fayette
 152 Deuane Hoffman
 119 Steve Santner *
 113 Mark McConaughy
 111 Ed Kwater *
 107 Randi Gerrish *
 104 John Fedak

100 Sarah Gerrish *

Forest
 157 John Fedak
 141 Ted Grisez *
 139 Deuane Hoffman
 108 Steve Santner *
 64 Randy Miller

Franklin
 266 Carl Garner
 264 Kenneth Gabler
 213 Jeffrey Walck *
 185 Deuane Hoffman
 141 Don Henise *
 130 Steve Santner *
 114 John Fedak

Fulton
 198 Carl Garner
 196 Kenneth Gabler
 194 Daniel Snell *
 160 Deuane Hoffman
 152 Jeffrey Walck *
 119 Steve Santner *
 118 Robert Walker *
 107 John Fedak

Greene
 194 Ralph Bell *
 139 Deuane Hoffman
 134 Roy Ickes *
 109 Steve Santner *
 107 John Fedak

Huntingdon
 233 Greg Grove
 229 David Kyler *
 205 Deborah Grove
 181 Merrill Wood *
 170 Deuane Hoffman
 161 John Salvetti
 155 Eugene Zielinski
 128 Lewis Grove
 106 John Fedak
 105 Kenneth Gabler
 104 Steve Santner *

Indiana
 243 Margaret Higbee *
 233 Gloria Lamer *
 224 Roger Higbee *
 220 Steve Graff
 195 Anne Hedgpath *
 182 Deuane Hoffman
 161 John Fedak
 158 Randi Gerrish *
 158 Sarah Gerrish *
 118 Steve Santner *
 117 Mark McConaughy

Jefferson
 213 John Fedak
 172 Deuane Hoffman
 104 Steve Santner *
 97 Margaret Higbee *
 95 Scott Bills *

Juniata
 227 Aden Troyer
 205 Deuane Hoffman
 109 Jonathan Heller
 108 Steve Santner *
 106 John Fedak

Lackawanna
 182 Glenn Czulada *
 158 Deuane Hoffman
 137 Richard Koval *
 112 John Fedak
 103 Steve Santner *

Lancaster
 308 Randy Miller

308 Eric Witmer *
 306 Tom Garner
 302 Robert Schutsky
 300 Jerry Book
 296 Jonathan Heller
 294 Deuane Hoffman
 292 Jan Witmer *
 291 Harold Morrin *
 287 Barbara Haas *
 281 Bruce Carl
 274 Steve Santner *
 251 Jason Horn *
 240 Larry Lewis *
 223 Al Guarente
 209 Richard Colyer
 206 Ernest Schiefer
 201 George Wertz, Jr. *
 198 Pamela Woodman *
 185 Terence Schiefer
 184 Don Henise *
 172 Dennis Weaver *
 166 John Fedak
 160 Kevin Crilley
 151 Matt Wlasniewski
 143 Bernard Morris *
 124 Mark McConaughy
 118 Margaret Higbee *
 108 Kenneth Gabler
 108 Roger Higbee *

Lawrence
 210 Gene Wilhelm *
 137 Deuane Hoffman
 122 John Fedak
 102 Steve Santner *

Lebanon
 258 Randy Miller
 236 Steve Santner *
 226 Deuane Hoffman
 208 Stephen Mallanson *
 198 Jonathan Heller
 184 Bruce Carl
 181 Jason Horn *
 152 George Wertz, Jr. *
 130 Don Henise *
 122 Barbara Haas *
 104 John Fedak

Lehigh
 265 Fritz Brock
 263 Bernard Morris
 260 Rick Wiltraut
 259 Jason Horn *
 187 Deuane Hoffman
 108 John Fedak
 103 Steve Santner *

Luzerne
 276 William Reid *
 240 Richard Koval *
 216 Mark Blauer *
 170 Deuane Hoffman
 168 John Fedak
 149 Kevin Crilley
 115 Bernard Morris
 104 Steve Santner *

Lycoming
 230 Paul Schwalbe
 162 Deuane Hoffman
 124 Steve Santner *
 118 John Fedak
 69 Dick Byers

McKean
 138 Deuane Hoffman
 127 John Fedak
 107 Steve Graff
 103 Ted Grisez *
 103 Steve Santner *

Mercer
 213 Deuane Hoffman

211 Gene Wilhelm *
 190 Neal Troyer
 177 John Fedak
 124 Steve Santner *
 103 Margaret Higbee *

Mifflin
 184 Deuane Hoffman
 155 Greg Grove
 113 John Fedak
 108 Steve Santner *
 59 Randy Miller

Monroe
 222 Phillips Street *
 176 Jason Horn *
 153 Deuane Hoffman
 123 Bernard Morris
 110 Steve Santner *
 105 John Fedak

Montgomery
 259 William Murphy
 255 Kevin Crilley
 251 Jason Horn *
 241 Harry Franzen *
 224 Bernard Morris
 223 Neal Thorpe *
 195 Deuane Hoffman
 148 John Fedak
 137 Steve Santner *
 127 Al Guarente
 107 Robert Walker *
 100 Barbara Haas *

Montour
 212 Barbara Haas *
 206 Allen Schweinsberg
 172 Deuane Hoffman
 136 John Fedak
 119 Steve Santner *
 104 Kevin Crilley

Northampton
 269 Rick Wiltraut
 246 Dave DeReamus
 241 Arlene Koch *
 229 Steve Boyce *
 221 Bernard Morris
 220 Dennis Miller
 220 Brad Silfies *
 206 Deuane Hoffman
 201 Jason Horn *
 177 Michael Schall *
 106 Steve Santner *
 102 John Fedak
 100 Randy Miller

Northumberland
 209 Allen Schweinsberg
 192 Deuane Hoffman
 166 Barbara Haas *
 128 John Fedak
 112 Steve Santner *

Perry
 234 Deuane Hoffman
 233 Richard Colyer
 157 Steve Santner *
 156 Don Henise *
 141 Walter Shelly, Jr. *
 139 Dallas Dowhower *
 126 John Fedak
 120 Randy Miller
 112 Mark McConaughy
 110 Jonathan Heller

Philadelphia
 290 John Miller *
 245 Frank Windfelder *
 243 Harry Franzen *
 242 Al Guarente
 241 Barbara Haas *
 225 Skip Conant

219 John Ginaven
 192 Deuane Hoffman
 191 Thomas Reeves
 184 Jim McKinney *
 167 Jason Horn *
 163 Stephen Lawrence *
 154 Steve Santner *
 120 Terence Schiefer
 113 John Fedak
 107 Kevin Crilley
 101 Randy Miller

Pike
 201 Joe Strasser *
 201 Voni Strasser *
 146 Deuane Hoffman
 144 Phillips Street *
 127 John Fedak
 101 Steve Santner *
 100 Barbara Haas *

Potter
 210 David Hauber *
 139 Deuane Hoffman
 107 John Fedak
 104 Paul Schwalbe
 104 Steve Santner *

Schuylkill
 249 Tom Clauser
 191 Deuane Hoffman
 180 Mike Ward *
 177 Jason Horn *
 143 Bernard Morris
 133 Steve Santner *
 117 Barbara Haas *
 113 John Fedak
 103 Bruce Carl
 101 Randy Miller

Snyder
 202 Deuane Hoffman
 187 Allen Schweinsberg
 132 Steve Santner *
 108 John Fedak
 64 Merrill Wood *

Somerset
 232 Jeff Payne
 230 Scott Bastian
 230 Retta Payne
 177 Richard Murphy
 159 Deuane Hoffman
 137 John Fedak
 126 Steve Santner *
 107 Randi Gerrish *
 106 Sarah Gerrish *

Sullivan
 161 Nick Kerlin
 157 Skip Conant
 131 Deuane Hoffman
 129 Thomas Reeves
 108 John Fedak
 105 Randy Miller
 104 Steve Santner *

Susquehanna
 168 William Reid *
 144 Deuane Hoffman
 105 Steve Santner *
 103 John Fedak
 93 Barbara Haas *

Tioga
 223 Larry Brown
 215 Arlene Brown
 174 Deuane Hoffman
 153 Bruce Carl *
 130 John Fedak
 120 Steve Santner *

Union
 219 Allen Schweinsberg

143 Deuane Hoffman
 132 Barbara Haas *
 117 Steve Santner *
 109 John Fedak

Venango

228 Gary Edwards *
 175 Gene Wilhelm *
 164 Deuane Hoffman
 162 John Fedak
 153 Nick Kerlin *
 103 Steve Santner *

Warren

227 Ted Grisez *
 227 Harris Johnson *
 138 Deuane Hoffman
 134 John Fedak
 114 Steve Santner *

Washington

210 Margaret Higbee *
 209 Roger Higbee *
 197 Roy Ickes *
 161 Russ Ruffing *
 141 George Malosh *
 138 Deuane Hoffman
 106 John Fedak
 100 Steve Santner *

Wayne

221 Joe Strasser *
 221 Voni Strasser *
 162 Deuane Hoffman
 129 John Fedak
 125 William Reid *
 102 Steve Santner *

Westmoreland

212 Dick Byers
 208 Linda Christenson *
 181 Randi Gerrish *
 178 Sarah Gerrish *
 164 Mark McConaughy
 154 Deuane Hoffman
 142 Margaret Higbee *
 137 Steve Santner *
 133 Roger Higbee *
 128 Richard Murphy
 121 John Fedak
 120 James Flynn *

Wyoming

242 William Reid *
 169 Richard Koval *
 147 Deuane Hoffman
 142 Skip Conant
 111 Steve Santner *
 101 John Fedak

York

229 Russell Ryan *
 227 Deuane Hoffman
 194 Steve Santner *
 185 Ann Pettigrew *
 174 Carl Garner
 172 George Wertz, Jr. *
 166 Jeff Pheasant *
 160 Jason Horn *
 156 Jonathan Heller
 150 Randy Miller
 142 Kenneth Gabler
 138 Don Henise *
 111 Barbara Haas *
 109 John Fedak

Pa. Annual Lists 1998

313 Deuane Hoffman
 294 John Fedak
 278 Joyce Hoffmann
 268 Peter Robinson
 259 Mike Fialkovich

253 Scott Kinzey
 226 Randy Miller
 223 Ken Lebo
 220 Gerald McWilliams
 219 Steve Graff
 219 Al Guarente
 219 Bob Machesney
 218 Dave Rieger
 215 Matt Wlasniewski
 214 Mark McConaughy
 211 Skip Conant
 208 Bill Reddinger
 207 Neil Troyer
 204 John Salvetti
 203 Aden Troyer
 202 Carl Garner
 196 Bruce Carl
 193 Ernest Schiefer
 178 Kenneth Gabler
 177 Larry Brown
 165 Robert Frantz
 152 Theodore Drozdowski
 146 Arlene Brown
 132 Martin Page

Pa. Annual Lists (top 50)

1 313 Deuane Hoffman 1998
 2 306 Robert Schutsky 1992
 3 305 Deuane Hoffman 1992
 4 298 Deuane Hoffman 1997
 5 294 John Fedak 1998
 6 293 Deuane Hoffman 1991
 7 291 Deuane Hoffman 1996
 8 290 John Fedak 1997
 9 288 Barbara Haas 1986
 9 288 Franklin Haas 1986
 11 278 Sam Stull 1979
 11 278 Gene Wilhelm 1983
 11 278 Joyce Hoffmann 1998
 14 273 Joyce Hoffmann 1991
 15 272 Randy Miller 1992
 16 271 Jason Horn 1993
 17 269 Jonathan Heller 1992
 18 268 Terence Schiefer 1985
 18 268 Deuane Hoffman 1986
 18 268 Deuane Hoffman 1995
 18 268 Peter Robinson 1998
 22 266 Randy Miller 1991
 23 265 John Fedak 1996
 24 263 Gerald McWilliams 1983
 25 262 Randy Miller 1993
 25 262 Ken Lebo 1995
 27 261 Gerald McWilliams 1991
 27 261 Jonathan Heller 1993
 29 260 Jason Horn 1992
 29 260 Ken Lebo 1992
 29 260 Gerald McWilliams 1992
 32 259 Gene Wilhelm 1982
 32 259 Mike Fialkovich 1998
 34 258 Steve Santner 1992
 35 257 Jason Horn 1995
 36 256 Jason Horn 1994
 37 255 Franklin Haas 1977
 37 255 Ed Kwater 1989
 37 255 Jason Horn 1991
 37 255 Joyce Hoffmann 1996
 41 254 Barbara Haas 1977
 41 254 Ed Kwater 1992
 43 253 Joyce Hoffmann 1997
 43 253 Scott Kinzey 1998
 45 252 John Ginaven 1978
 45 252 Bonnie Baird 1979 B
 45 252 James Baird 1979 B
 45 252 Gerald McWilliams 1988
 45 252 Ed Kwater 1991
 50 251 Gerald McWilliams 1989
 50 251 Steve Santner 1989
 50 251 Steve Santner 1991

County Annual Lists (by county)

Adams

201 Arthur Kennell 1992
 140 Carl Garner 1991
 137 Carl Garner 1998
 105 Deuane Hoffman 1998
 87 Kenneth Gabler 1998

Allegheny

167 Scott Kinzey 1998
 163 Bob Machesney 1996
 159 Bob Machesney 1997
 127 Deuane Hoffman 1998

Armstrong

201 John Fedak 1997
 177 Scott Bastian 1996
 152 Margaret Higbee 1993
 133 Bill Reddinger 1998
 113 Mark McConaughy 1998
 112 Deuane Hoffman 1998
 110 Steve Graff 1998

Beaver

124 John Cruzan 1994
 110 George Malosh 1974
 105 George Malosh 1975
 97 Deuane Hoffman 1998

Bedford

223 Sally Dick 1997
 221 Tom Dick 1997
 155 Deuane Hoffman 1998

Berks

252 Ken Lebo 1995
 236 Ken Lebo 1997
 229 Ken Lebo 1996
 219 Ken Lebo 1998
 210 Matt Wlasniewski 1998
 187 Deuane Hoffman 1998
 149 Ernest Schiefer 1998

Blair

143 Beryl Sternagle 1995
 126 Beryl Sternagle 1990
 121 Beryl Sternagle 1989
 79 Deuane Hoffman 1998

Bradford

147 Ronald Young 1993
 146 Ronald Young 1992
 102 Deuane Hoffman 1996
 72 Deuane Hoffman 1998

Bucks

224 Steve Farbotnik 1992
 217 Steve Farbotnik 1994
 210 Devich Farbotnik 1992
 166 Deuane Hoffman 1998

Butler

245 Gene Wilhelm 1983
 229 Gene Wilhelm 1985
 225 Gene Wilhelm 1982
 122 Deuane Hoffman 1998

Cambria

177 John Salvetti 1992
 175 John Salvetti 1997
 174 John Salvetti 1995
 165 John Salvetti 1998
 71 Deuane Hoffman 1998

Cameron

119 Deuane Hoffman 1998
 92 Deuane Hoffman 1996
 90 John Fedak 1997

Carbon

162 David Hawk 1996
 155 David Hawk 1998
 145 Robert Frantz 1995
 145 Robert Frantz 1998
 131 Deuane Hoffman 1998

<i>Centre</i>		
224	Terence Schiefer	1985
214	Terence Schiefer	1986
211	Terence Schiefer	1984
170	Deuane Hoffman	1998
<i>Chester</i>		
225	Larry Lewis	1988
221	Larry Lewis	1983
219	Larry Lewis	1986
127	Deuane Hoffman	1998
126	Theodore Drozdowski	1998
92	Martin Page	1998
<i>Clarion</i>		
231	John Fedak	1998
219	John Fedak	1996
213	John Fedak	1997
152	Deuane Hoffman	1998
85	Bill Reddinger	1998
<i>Clearfield</i>		
155	John Fedak	1997
102	Deuane Hoffman	1997
92	Deuane Hoffman	1996
88	Deuane Hoffman	1998
<i>Clinton</i>		
95	John Fedak	1997
92	Deuane Hoffman	1997
81	Deuane Hoffman	1996
81	Deuane Hoffman	1998
<i>Columbia</i>		
117	Deuane Hoffman	1997
112	John Fedak	1997
111	Deuane Hoffman	1998
<i>Crawford</i>		
208	Ronald Leberman	1994
202	Ronald Leberman	1989
201	Gene Wilhelm	1992
174	Deuane Hoffman	1998
<i>Cumberland</i>		
227	Deuane Hoffman	1989
226	Deuane Hoffman	1998
225	Deuane Hoffman	1992
138	Carl Garner	1998
77	Kenneth Gabler	1998
<i>Dauphin</i>		
234	Deuane Hoffman	1997
231	Deuane Hoffman	1998
229	Deuane Hoffman	1996
210	Grace Randolph	1998
<i>Delaware</i>		
241	John Miller	1969
211	Al Guarente	1996
209	Al Guarente	1998
175	Skip Conant	1998
92	Deuane Hoffman	1998
<i>Elk</i>		
116	John Fedak	1997
113	Deuane Hoffman	1996
78	Deuane Hoffman	1998
<i>Erie</i>		
264	Sam Stull	1979
256	Gerald McWilliams	1992
252	Gerald McWilliams	1991
218	Deuane Hoffman	1998
215	Gerald McWilliams	1998
105	Steve Graff	1998
<i>Fayette</i>		
112	Mark McConaughy	1998
103	Deuane Hoffman	1998
77	John Fedak	1997
<i>Forest</i>		
144	April Walters	1993
143	Richard Walters	1993
132	John Fedak	1997
81	Deuane Hoffman	1998
<i>Franklin</i>		
185	Carl Garner	1997
180	Carl Garner	1993
180	Carl Garner	1994
174	Carl Garner	1998
149	Kenneth Gabler	1998
123	Deuane Hoffman	1998
<i>Fulton</i>		
173	Daniel Snell	1997
128	Deuane Hoffman	1996
115	Kenneth Gabler	1988
112	Deuane Hoffman	1998
75	Kenneth Gabler	1998
<i>Greene</i>		
137	Ralph Bell	1985
134	Ralph Bell	1986
130	Ralph Bell	1990
107	Deuane Hoffman	1998
<i>Huntingdon</i>		
205	David Kyler	1996
194	Greg Grove	1994
191	Greg Grove	1992
180	Greg Grove	1998
137	Deuane Hoffman	1998
<i>Indiana</i>		
206	Margaret Higbee	1993
203	Margaret Higbee	1991
195	Steve Graff	1998
131	Deuane Hoffman	1998
114	Mark McConaughy	1998
<i>Jefferson</i>		
198	John Fedak	1997
143	Deuane Hoffman	1996
121	Deuane Hoffman	1998
<i>Juniata</i>		
188	Aden Troyer	1996
176	Aden Troyer	1997
170	Deuane Hoffman	1996
167	Deuane Hoffman	1998
158	Aden Troyer	1998
<i>Lackawanna</i>		
182	Glenn Czulada	1996
161	Glenn Czulada	1995
117	Richard Koval	1995
103	Deuane Hoffman	1998
<i>Lancaster</i>		
255	Robert Schutsky	1992
249	Jonathan Heller	1992
239	Jonathan Heller	1993
235	Deuane Hoffman	1998
185	Bruce Carl	1998
177	Randy Miller	1998
<i>Lawrence</i>		
210	Gene Wilhelm	1992
118	John Fedak	1997
110	Deuane Hoffman	1996
97	Deuane Hoffman	1998
<i>Lebanon</i>		
215	Randy Miller	1993
205	Randy Miller	1996
204	Randy Miller	1998
179	Deuane Hoffman	1998
<i>Lehigh</i>		
200	Bernard Morris	1984
132	Deuane Hoffman	1998
119	Deuane Hoffman	1997
<i>Luzerne</i>		
220	Richard Koval	1996
219	Richard Koval	1995
206	Richard Koval	1994
121	Deuane Hoffman	1998
<i>Lycoming</i>		
112	Deuane Hoffman	1997
103	Deuane Hoffman	1998
90	John Fedak	1997
<i>Mckean</i>		
119	Deuane Hoffman	1996
92	Deuane Hoffman	1997
87	Deuane Hoffman	1998
86	Steve Graff	1998
<i>Mercer</i>		
211	Gene Wilhelm	1992
192	Neil Troyer	1997
186	Neil Troyer	1998
155	Deuane Hoffman	1998
<i>Mifflin</i>		
160	Deuane Hoffman	1998
126	Deuane Hoffman	1997
113	Deuane Hoffman	1996
<i>Monroe</i>		
101	Deuane Hoffman	1998
88	Deuane Hoffman	1996
82	Deuane Hoffman	1997
<i>Montgomery</i>		
140	Deuane Hoffman	1998
132	Deuane Hoffman	1997
126	John Fedak	1997
<i>Montour</i>		
126	John Fedak	1997
115	Deuane Hoffman	1997
112	Deuane Hoffman	1998
<i>Northampton</i>		
189	Dave DeReamus	1990
168	Dave DeReamus	1991
159	Dennis Miller	1996
159	Michael Schall	1997
133	Deuane Hoffman	1998
<i>Northumberland</i>		
147	Deuane Hoffman	1998
144	Deuane Hoffman	1997
128	John Fedak	1997
<i>Perry</i>		
202	Richard Colyer	1997
199	Deuane Hoffman	1995
193	Deuane Hoffman	1996
188	Deuane Hoffman	1998
<i>Philadelphia</i>		
225	John Miller	1965
208	Edward Fingerhood	1996
162	Al Guarente	1992
133	Skip Conant	1998
127	Deuane Hoffman	1998
<i>Pike</i>		
92	Deuane Hoffman	1998
75	John Fedak	1997
75	Deuane Hoffman	1997
<i>Potter</i>		
160	David Hauber	1992
160	David Hauber	1995
157	David Hauber	1993
98	Deuane Hoffman	1998
<i>Schuylkill</i>		
209	Tom Clauser	1996
208	Tom Clauser	1997
191	Tom Clauser	1987
158	Deuane Hoffman	1998

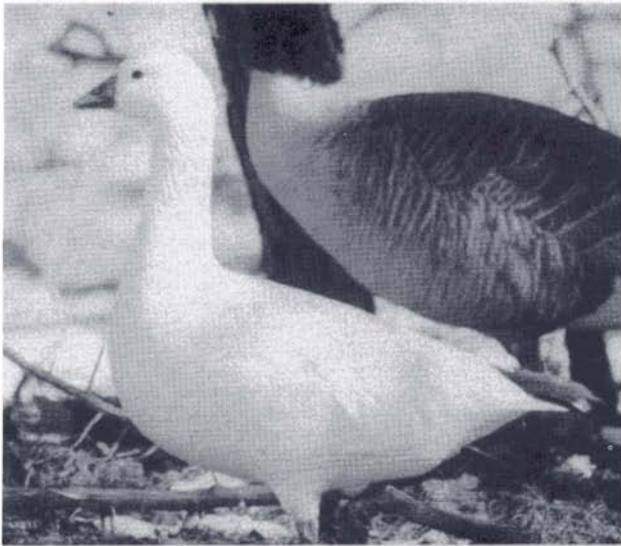
PHOTOGRAPHIC HIGHLIGHTS



Black Scoter, Leaser Lake, *Lehigh*, 1/26/1999.
Photo by Rick Wiltraut.



Eared Grebe, State College, *Centre*, 1/28/1999.
Photo by Rick Wiltraut.



Ross' Goose, Cranberry Twp., *Butler*, 3/7/1999.
Photo by Walt Shaffer.



Sandhill Crane, Sharteleesville, *Berks*, 2/8/1999.
Photo by Rick Wiltraut.



Incomplete leucistic Dark-eyed Junco, Brush Mountain, *Blair*, 1/1/1999.
Photo by Charlie Hoyer.



Cape May Warbler, Nazareth, *Northampton*, 1/21/1999.
Photo by Rick Wiltraut.



Clay-colored Sparrow, Martin's Creek, *Northampton*, 2/22/1999.
Photo by Rick Wiltraut.



"Gambel's" White-crowned Sparrow, Martin's Creek, *Northampton*, 2/22/1999. Photo by Rick Wiltraut.



Leucistic Northern Flicker, Etters, York, Early March 99
Photo by Jim Spontak.



Eurasian Goldfinch, Upper Fairfield Twp., Lycoming, 3/3/1999.
Photo by Ed Reish..

PENNSYLVANIA SOCIETY FOR ORNITHOLOGY

10th Anniversary Meeting

24-26 September, 1999

Holiday Inn

Morgantown, PA

FRIDAY, September 24, 1999

5:00	p.m.	--	9:00	p.m.	Registration
7:00	p.m.	--	8:00	p.m.	Social
8:00	p.m.	--	8:45	p.m.	PSO Business Meeting
8:45	p.m.	--	10:00	p.m.	Field Trip Overview

SATURDAY, September 25, 1999

5:30	a.m.	-	6:30	a.m.	Breakfast
6:30	a.m.	--	11:45	a.m.	Field Trips (*see below)
Noon	--		1:00		Lunch
Afternoon Programs					
1:00	p.m.	--	2:00	p.m.	Louis Bevier - Hummingbird Identification
2:00	p.m.	--	2:45	p.m.	Scott Weidensaul - Saw-Whet-Owl Banding in Pennsylvania
2:45	p.m.	--	3:00	p.m.	Break
3:00	p.m.	--	3:45	p.m.	Dave Brandes - Solving the Puzzle of the Spring Golden Eagle Migration through Pennsylvania
3:45	p.m.	--	4:30	p.m.	Scott Klinger - The Impact of Agriculture and USDA Programs on the Abundance of Grassland Birds: Can we Restore Declining Grassland Bird Populations on Pennsylvania Farmland?
4:30	p.m.	--	5:15	p.m.	Paul Rodewald - Habitat Use and Foraging Behavior of Neotropical Migrant Songbirds during Migration in Central Pennsylvania
6:00	p.m.	--	7:00	p.m.	Social including book signing with Pete Dunne
7:00	p.m.	--	9:30	p.m.	Banquet- Our banquet speaker will be Pete Dunne presenting "Spishing 101"

SUNDAY, September 26, 1999

5:30	a.m.	-	6:30	a.m.	Breakfast
6:30	a.m.	--	11:30	p.m.	Field Trips (*see below)

Saturday Field Trips

Carr's Park - This will be an **all-walking** trip around Morgan Lake in Carr's Park. This has the largest colony of breeding Pied-billed Grebes in the state and has had Ruddy Ducks nesting the past two years. We will look for waterfowl and migrant passerines. There is an entrance fee, therefore we ask that you register for this trip on your registration form.

Lake Ontelaunee - A drive and walk trip around Lake Ontelaunee, one of the premier birding spots in Berks County where many of the records in *A Century of Birdlife in Berks County* came from. We will look for waterfowl, shorebirds, and migrant passerines. If conditions warrant, there will be an approximate 2-mile roundtrip walk to look for shorebirds.

Blue Marsh Lake - This will be a drive and walk trip to Blue Marsh Lake - a Corps of Engineers impoundment - with a great variety of habitat. We will look for waterfowl, shorebirds, and migrant passerines. No strenuous walking.

Rte 183 Hawk Watch - One of the easiest hawk watches to get to. Located about 15 miles downridge from Hawk Mountain, it gets great hawk flights. For those who cannot or do not wish to walk far, this trip will be easy on the legs. The hawkwatch is just off the side of the road. Bring a folding chair and sit back and enjoy the flight. The hawk flight will be weather-dependent, of course.

Sunday Field Trips

SPECIAL SUNDAY FIELD TRIP - Sharp-tailed Sparrow quest - This trip will consist of being taken by boat out to several islands on the Susquehanna River renowned for Sharp-tailed Sparrows in fall migration. Because of the logistics (boats, etc.) this trip is limited to 20 participants. Participants will be chosen on a first-come-first-served basis. You must register for this trip on your registration form so that we can be sure of the number of participants. Be prepared to get wet. Wear either sneakers or waders. There will be walking through knee-high water.

Carr's Park - see description above.

Other Sunday trips to be determined.

***** REGISTRATION FORM INSIDE BACK MAILING COVER *****

Snyder
 177 Deuane Hoffman 1998
 175 Deuane Hoffman 1996
 172 Deuane Hoffman 1997

Somerset
 216 Jeff Payne 1996
 216 Retta Payne 1996
 208 Scott Bastian 1994
 82 Deuane Hoffman 1998

Sullivan
 130 Nick Kerlin 1995
 125 Skip Conant 1995
 124 Nick Kerlin 1997
 118 Skip Conant 1998
 113 Nick Kerlin 1998
 89 Deuane Hoffman 1998

Susquehanna
 109 Deuane Hoffman 1997
 105 Deuane Hoffman 1996
 103 John Fedak 1997
 103 Deuane Hoffman 1998

Tioga
 174 Larry Brown 1998
 167 Larry Brown 1992
 160 Arlene Brown 1992
 142 Arlene Brown 1998
 122 Deuane Hoffman 1998

Union
 102 Deuane Hoffman 1998
 88 John Fedak 1997
 87 Deuane Hoffman 1997

Venango
 207 Gary Edwards 1995
 194 Gary Edwards 1991
 192 Russ States 1991
 113 Deuane Hoffman 1998

Warren
 165 Ted Grisez 1992
 152 Ted Grisez 1985
 117 John Fedak 1997
 82 Deuane Hoffman 1998
 64 Steve Graff 1998

Washington
 134 Russ Ruffing 1985
 132 Roy Ickes 1984
 100 George Malosh 1975
 95 Deuane Hoffman 1998

Wayne
 127 Deuane Hoffman 1997
 121 John Fedak 1997
 112 Deuane Hoffman 1998

Westmoreland
 163 Mark McConaughy 1998
 97 Deuane Hoffman 1998
 92 Deuane Hoffman 1996

Wyoming
 193 William Reid 1993
 181 William Reid 1994
 134 Richard Koval 1994
 102 Skip Conant 1998
 92 Deuane Hoffman 1998

York
 196 Russell Ryan 1992
 182 Deuane Hoffman 1998
 178 Russell Ryan 1991
 86 Carl Garner 1998
 84 Kenneth Gabler 1998

County Annual Lists (top 50)

1 264 *Erie* Sam Stull 1979
 2 256 *Erie* Gerald McWilliams 1992
 3 255 *Lancaster* Robert Schutsky 1992
 4 252 *Berks* Ken Lebo 1995
 4 252 *Erie* Gerald McWilliams 1991
 6 251 *Erie* Gerald McWilliams 1983
 6 251 *Erie* Gerald McWilliams 1988
 8 249 *Lancaster* Jonathan Heller 1992
 9 248 *Erie* Gerald McWilliams 1989
 10 246 *Erie* Gerald McWilliams 1993
 11 245 *Butler* Gene Wilhelm 1983
 12 244 *Erie* Gerald McWilliams 1985
 13 243 *Erie* Gerald McWilliams 1979
 13 243 *Erie* Gerald McWilliams 1981
 15 242 *Erie* Gerald McWilliams 1984
 16 241 *Delaware* John Miller 1969
 17 240 *Erie* Gerald McWilliams 1997
 18 239 *Erie* Gerald McWilliams 1994
 18 239 *Lancaster* Jonathan Heller 1993
 20 238 *Erie* Gerald McWilliams 1990
 21 237 *Erie* Gerald McWilliams 1995
 22 236 *Berks* Ken Lebo 1997
 22 236 *Lancaster* Randy Miller 1991
 24 235 *Lancaster* Deuane Hoffman 1998
 25 234 *Dauphin* Deuane Hoffman 1997
 25 234 *Erie* Gerald McWilliams 1980
 25 234 *Erie* Gerald McWilliams 1982
 25 234 *Erie* Gerald McWilliams 1987
 25 234 *Erie* Ed Kwater 1989
 25 234 *Lancaster* Jonathan Heller 1991
 25 234 *Lancaster* Randy Miller 1992
 32 233 *Erie* James Flynn 1979
 33 232 *Erie* Ed Kwater 1992
 34 231 *Clarion* John Fedak 1998
 34 231 *Dauphin* Deuane Hoffman 1998
 34 231 *Erie* Deuane Hoffman 1996
 37 230 *Erie* Gerald McWilliams 1986
 37 230 *Erie* Deuane Hoffman 1991
 39 229 *Berks* Ken Lebo 1996
 39 229 *Butler* Gene Wilhelm 1985
 39 229 *Dauphin* Deuane Hoffman 1996
 42 228 *Erie* James Flynn 1978
 43 227 *Cumberland* Deuane Hoffman 1989
 43 227 *Erie* Ed Kwater 1991
 43 227 *Lancaster* Deuane Hoffman 1997
 46 226 *Berks* Ken Lebo 1994
 46 226 *Cumberland* Deuane Hoffman 1998
 46 226 *Lancaster* Jonathan Heller 1994
 49 225 *Butler* Gene Wilhelm 1982
 49 225 *Chester* Larry Lewis 1988
 49 225 *Cumberland* Deuane Hoffman 1992
 49 225 *Philadelphia* John Miller 1965

Summary of the Season - January through March 1999

Although the number of species was considerably lower this quarter than the same quarter last year, there were some interesting occurrences and trends.

Geese made news last year, and again this year. Most notable were 2 reports of **Pink-footed Goose** (*Berks* and *Montgomery*). In light of the acceptance by PORC of the first Pink-footed Goose record in 1997, it is likely that these will also pass muster. This makes three consecutive winters that this species has made an appearance in this state. They have also been appearing in other northeastern states the past three years. It looks like a trend to us!

Snow Geese, on the other hand were down considerably from the last few years. We assume that part of the reason is the extended hunting seasons that have been initiated in an effort to reduce the Snow Goose population. This was done to take some pressure off of the tundra habitat being devastated by their recent population explosion.

Greater White-Fronted Geese were recorded in 12 counties! There seems to be a small upward trend for this species during the last ten years. Here are the number of counties reporting this species in the first quarter during the past 10 years.

Year	Counties
1990	2
1991	1
1992	3
1993	3
1994	5
1995	3
1996	5
1997	7
1998	3
1999	12

Ross' Geese showed up in 5 counties, although *Allegheny* and

Butler shared the same bird. **Brant** were recorded in 4 counties and **Barnacle Geese** were seen in 3 counties.

Eurasian Wigeon continue to show up every year. The *Luzerne* bird was only the 2nd county record.

An **Osprey** lingered until 1/3 in *Westmoreland*.

Merlins returned to the communal roost in *Allegheny*. And there were wintering reports from a total of 5 counties—a continuing trend from the last few years.

An **American Coot** visited a feeder away from water during a winter storm in *Clarion*.

Sandhill Cranes showed up in 5 counties, returning to the *Lawrence/Butler/Mercer* area to breed again.

The **Red Phalarope** reported on 12/31 last quarter in *Butler*, remained until 1/1.

There was the usual smattering of **Franklin's, Little, and Thayer's gulls**, but the 21 white-winged gulls in *Erie* on 3/19 was amazing.

Following the pattern of the last few years, **Snowy Owl** reports were few and far between. Only 3 were reported, and none for extended periods.

Barred Owls in central *Berks* and central *Bucks* may be an indication that this species is expanding its range back into the southeastern part of the state where it had become rather rare during the last 20 years.

The **Rufous Hummingbird** that returned this year to *Westmoreland* only lasted until 1/6.

The January record of a **Blue-headed Vireo** in *Blair* was only the

third winter record for the state. A **Blue-gray Gnatcatcher** in *Lancaster* joins the increasing number of early winter records of this species.

Brown Thrashers were reported from *Fayette* and 2 northern counties (*Clinton* and *Luzerne*).

The best warbler of the season had to be the **Cape May Warbler** in *Northampton*, a 1st county winter record.

Clay-colored Sparrows continued their annual appearance in the state. If you combine their breeding season in *Venango*, the numerous sightings during migration, and the wintering records each year, this species has become a year-round species in the state—although not at only one location.

Westmoreland noted a larger than normal number of wintering **Fox Sparrows** this year.

The **Western Tanager** in *York* stayed around long enough for many birders to see it.

Winter finches were all but non-existent. There was only 1 report of **Red Crossbill**, 1 report of **Common Redpoll**, and only 5 reports of **Evening Grosbeak**.

The only unusual finch was an **Eurasian Goldfinch** that appeared in *Lycoming*.

There were **179** species reported this quarter—way down from the **199** reported in the same quarter last year, but about the same as the previous three years (95-97). We received partial or complete reports from **57** counties.

Thanks again to our hard-working county compilers! ♣

Frank & Barb Haas

Birds of Note - January through March 1999

(Species not expected or reported in fewer than five counties this period)

Rare and unusual sightings for which details have been submitted will be reviewed by the Pennsylvania Ornithological Records Committee. "No details" means no **description of the bird** was submitted.

Red-throated Loon - *Berks*: 2 on 3/23 at Lake Ontelaunee (Katrina Knight); *Butler*: 1 on 3/22 at Moraine S.P. (Mark Williams); *Delaware*: 1 on 3/13 at Marcus Hook (Nick Pulcinella).

Red-necked Grebe - *Armstrong*: 1 on 3/4 at Keystone Res. (John Fedak, Bill Reddinger); *Carbon*: 1 on 1/30 at Beltsville S.P. (David Hawk et al.); *Dauphin*: 1 on 1/31 at Harrisburg (Grace Randolph).

Great Cormorant - *Delaware*: Present all quarter.

Black-crowned Night-Heron - *Bucks*: 1 on 1/13 at Lake Warren (Devich Farbotnik); *Cumberland*: 1st seen on 2/25 at Huntsdale Fish Hatchery (Deuane Hoffman); *Philadelphia*: Present up to 1/9 at the Delaware River.

Pink-footed Goose - *Berks*: 1 made its 3rd annual appearance with Snow Geese at LO 3/20-21 (Rudy Keller); *Montgomery*: The bird reported last period was seen sporadically until 1/10 at Walt Rd, Green Lane Res (A Curtis, GA Franchois, m.obs).

Ross' Goose - *Allegheny/Butler*: 1 on 3/4-13 at the Venango Trail Golf Course (*Allegheny*) and Cranberry Twp. (*Butler*), (Mike Fialkovich et al.); *Bucks*: The bird reported last quarter remained until 2/24 at Peace Valley Park (Tom Wurtenberger); *Lancaster*: 1 on 2/20-3/20 at Middle Creek WMA (Randy Miller, et al.); *Lebanon*: 3 on 2/13 at Middle Creek WMA included 1 blue morph (Randy Miller).

Brant - *Bucks*: 1 on 2/6-3/13 at Peace Valley Park (Ken Reiker); *Montgomery*: 1 on 1/2 at Green Lane Res. (Andrew Curtis, Kevin Crilley); *Philadelphia*: 1 on 1/9 at the Schuylkill River (Doug Weschler et al.); *Schuylkill*: a flock of 35 was observed flying over Hawk Mountain on 1/1.

Barnacle Goose - *Bucks*: 1 on 1/31-3/6 at Peace Valley (m. obs.); *Montgomery*: 1 on 1/21 at Green Lane Res and 1 on 3/2 at Oreland (Bill & Naomi Murphy); *York*: 1 shot by a hunter on 1/20 at Codorus S.P.

Eurasian Wigeon - *Indiana*: 1 on 3/7 at Yellow Creek S. P. (Bill Reddinger, John Fedak); *Luzerne*: 1 on 3/16 at Plymouth was a 2nd county record (Rick Koval); *York*: 1 on 3/28 at Menges Mills (Randy Phillips, Bruce Fertman).

Surf Scoter - *Armstrong*: 3 on 3/4 at Keystone Res.

(John Fedak, Bill Reddinger); *Berks*: 1 on 3/15 at Lake Ontelaunee (Katrina Knight); *Erie*: 3 on 1/1 at Presque Isle S. P. (Jerry McWilliams).

Black Scoter - *Crawford*: 3 on 2/20 at Ford Island (Ron Leberman); *Erie*: 1 on 1/2 at Presque Isle S. P. (Jerry McWilliams); *Lehigh*: 1 on 1/22-27 at Leaser Lake (Mark Monroe).

Broad-winged Hawk - *Bradford*: 1st seen on 3/22 at New Era (Trudy Gerlach); *Crawford*: 1 on 3/24 at Meadville (Ron Leberman); *Indiana*: 1st seen on 3/31 at Yellow Creek S. P. (Gloria Lamer).

Common Moorhen - *Crawford*: 2 on 3/26 at Conneaut Lake outlet (Isaac Fields); *Cumberland*: 1st seen on 3/25 at Kings Gap EE Center (Deuane Hoffman).

Sandhill Crane - *Berks*: 1 on 2/7-26 at Shartlesville (Ken Lebo, et al.); *Bradford*: 1 on 3/19 between Wyalusing and Wysox (Bill Reid); *Butler*: 2 ad. and 1 imm. On 2/18 at Slippery Rock (Gene Wilhelm); *Erie*: 2 on 3/17 (Nathan Hall) and 3 on 3/28 (Greg Cook) at Presque Isle S. P.; *Lawrence*: 2 on 2/27 at Bonnoni Rd.

Solitary Sandpiper - *Crawford*: 1 on 3/26 at Hartstown Marsh (Marvin Byler).

Western Sandpiper - *Crawford*: 2 on 3/29 at Woodcock Lake (Isaac Fields).

Red Phalarope - *Butler*: The bird reported last quarter remained until 1/1.

Laughing Gull - *Berks*: 1 on 1/23-25 at Lake Ontelaunee (Ken Lebo, Matt Wlasniewski); *Bucks*: 1 on 3/28 at Chalfont (Steve Farbotnik).

Franklin's Gull - *Erie*: 1 on 3/23 at Presque Isle S. P. (Greg Cook).

Little Gull - *Erie*: Present from 3/24 with a high of 3 on 3/27 at Presque Isle S. P. (Adam Erb); *Lancaster*: 1 on 3/28 (Tom Garner).

Thayer's Gull - *Erie* 1 in alternate definitive plumage on 2/4 and 2/28 and 1 in basic 1 plumage on 2/13 at Presque Isle S.P. (Jerry McWilliams).

Iceland Gull - *Bucks*: 1 on 1/13 at Tullytown (Steve Farbotnik); *Erie*: Present from 2/4 with a high of 12 on 3/19 at Presque Isle S. P. (Jerry McWilliams); *Northampton*: 2 at Chain Dam in early Jan (m. obs).

Glaucous Gull - *Berks*: 1 on 1/1 at Lake Ontelaunee (Ken Lebo, Bill Uhrich); *Bucks*: 1 on 1/26 at Tullytown (Steve Farbotnik); *Erie*: Present all quarter with a high of 8 on 2/28 at Presque Isle S. P. (Jerry McWilliams); *Montgomery*: 1 on 1/20-21 at Walt Rd was a 2nd county record (George Franchois, Bill & Naomi Murphy);

Northampton: Up to 3 at Chain Dam in early Jan. (m. obs).

Snowy Owl - *Mercer*: 1 on 3/9 at Lake Latonka (Glenna Kemm); *Tioga*: 1 on 3/9 near Millertown (John Deming); *Venango*: 1 on 1/26 (John Fedak).

Whip-poor-will - *Potter*: 1 on 3/10 (David Hauber).

Rufous Hummingbird - *Westmoreland*: The bird reported last quarter survived only to 1/6 at Delmont (J. Madden, Bob Mulvihill).

Loggerhead Shrike - *Adams*: Permanent Resident; *Lancaster*: 1 on 1/6 at Middle Creek WMA (Randy Miller); *Franklin*: 1 continued to be seen in the Clay Hill area until 1/7.

Blue-headed Vireo - *Blair*: 1 on 1/4-5 at Brush Mt. (Marcia Bonta); *Westmoreland*: Present part of the quarter.

Northern Rough-winged Swallow - *Adams*: 1 on 3/28 at Fairfield (Rusty Ryan); *Cumberland*: 1st seen on 3/28 at West Fairview (Deuane Hoffman). *Delaware*: 1st on 3/14 at Springton Res. (Michael Guenther); *York*: 1st on 3/27.

House Wren - *Berks*: 1 on 3/31 at Lake Ontelaunee (Matt Spence); *Dauphin*: 1 on 1/25 to March at Hershey South (Bunny Hottenstein).

Blue-gray Gnatcatcher - *Lancaster*: 1 on 1/22 at Rapho Twp. (Randy Miller).

Cape May Warbler - *Northampton*: 1 present in mid to late Jan in Nazareth was a 1st winter county record.

Louisiana Waterthrush - *Fulton*: 1st seen on 3/31 at Redbud Nature Area (Dan Snell); *Schuylkill*: 1st seen on 3/31 at Tumbling Run Watershed (Tom Clauser); *Westmoreland*: 1st seen on 3/24 at Powdermill Nature Reserve (Mike Irwin, Craig Fosedick).

Western Tanager - *York*: 1 on 1/15-3/31 at Glen Rock (Debbie Boyle, Peter Robinson).

Clay-colored Sparrow - *Berks*: The bird reported last quarter was last seen on 1/1; *Northampton*: The bird reported last quarter remained through the quarter.

Painted Bunting - *Berks*: 1 from mid-January through the quarter in Amity Twp. (Sue Goldberg)

Dickcissel - *Delaware*: A female from the previous quarter was joined on 3/11-12 by a male in Essington (Raymond Miller); *Westmoreland*: 1 on 1/16 at Delmont (Ken Byerly).

Yellow-headed Blackbird - *Montgomery*: 1 on 3/8 in Pennsburg (Andrew Curtis)(no details).

Brewer's Blackbird - *Carbon*: 1 (no date, location, or details); *Jefferson*: 1 on 3/2-3 in Rose Twp. (John Fedak).

Baltimore Oriole - *Berks*: 1 on 1/1-3/3 at Leesport (Dean Kendall);

Red Crossbill - *Crawford*: 50 on 2/19 at Meadville (Isaac Fields).

Common Redpoll - *Sullivan*: 1 on 3/8 at Eagles Mere (Fred Crafts).

Local Notes

Adams County

A **Great Egret** was found 3/31, a bit early, at a restored wetland area near Fairfield (R Ryan). 19 spp. of waterfowl were reported, even though there are only four fairly small lakes in the county, two of which are private gated communities. Three **Gr. White-fronted Geese** on Wencoff Rd on 3/15-16 were a very good find (A Kennell).

An early **Am. Woodcock** was found 2/18 at the same Fairfield restored wetland where the Great Egret was found (RR). One and 2 **Short-eared Owl** were seen several times during Jan. and Feb. long Shriver Rd (K Gabler, C Garner, J&N Locher, P Robinson). Homes are, unfortunately, being built in the fields where Short-eared Owls have been regular winter visitors for many years.

There was only one report of a **Yellow-bellied Sapsucker**, on 3/26 (D Siefken). **Loggerhead Shrike** continue to reside here. An early **Tree Swallow** was found 3/2 at the Fairfield restored wetland (RR). There were only two reports of **Red-breasted Nuthatch**, 1 arrived about 2/8 at a feeder on Valley Rd and continued to show up regularly the rest of the quarter (B&P Myers), 2 others were found 2/11 in Michaux SF (CG). There were only four reports of **Purple Finch**, two in Jan and two in March.

Allegheny County

An early **Double-crested Cormorant** was on the Monongehela R. at Duck Hollow 2/10 (C Tague, S Kinzey). **Tundra Swan** moved into the county 3/5 during a snowstorm; 14 were at North Park (M Fialkovich, C McCullough) and a flock was heard flying over Harmar Twp after dark 3/6 (J Valimont). Seven **Mute Swan** were on the Monongehela R. 1/18 (F McCullough, CM).

The **Ross' Goose** found in *Butler* drifted over the border to *Allegheny* during the middle of March. It spent time at the Venango Trail Golf Course where it was seen by many observers. This was a 1st county record. A **White-winged Scoter** was found on the Ohio R (OR) 1/22 (W&D Shaffer). A good count of 21 **Redhead** was on the OR 1/16 (P Brown). A ♂ **N. Pintail** was seen at North Park (NP).

An early **Killdeer** was present at Harmar Twp 1/31 (MF). **Bonaparte's Gull** were reported throughout Jan., an uncommon bird here. The highest count was 10 at the Highland Park Bridge on the Allegheny R 1/22 (WDS).

A **Rough-legged Hawk** was present at Imperial during January (W&DS). An imm. **N. Goshawk** visited a yard in Natrona Heights 3/17 (P Hess). Three **Merlin** continued to roost at Schenley Park through the quarter.

A **Red-headed Woodpecker** was at NP 2/27 to 3/13 (BM), a rare bird here. An extremely early, or overwintering **E. Phoebe** was at Imperial 1/16 (W&DS).

A **Dark-eyed "Oregon" Junco** visited a feeder in Harmar Twp 3/20 (JV). A small group of 4 **Snow Bunting** was found near the Imperial strip mines 1/10 (W&DS); another rarity for the county.

Armstrong County

Highlights of the season include a **Red-necked Grebe** and 3 **Surf Scoter** at Keystone Res. 3/4 (J Fedak, B Reddinger). At least 3 **Rough-legged Hawk** were found at Elders Ridge during the early half of the quarter (v.o.), and another was present near Worthington (S Bastian). **Short-eared Owls** once again wintered at the W. Lebanon/Elders Ridge strips. Large flocks of **Horned Lark** and **Snow Bunting** were found both at Beautiful Lookout (JF) and near Worthington (SB).

Beaver County

Bill Hintze is organizing a *Beaver Bird Club*. He can be reached at hintze_bill@hotmail.com.

Bedford County

On 3/6 Marilyn Growden of Rt. 220 S, reported 18 **Tundra**

Swan on her pond.

On 3/3 Rosie McGinnett of Beldon reported a pair of **Am. Kestrel** checking a nesting box and as of 3/31 were still occupying it. On 2/15 she had a **N. Screech-Owl** roosting in a wood duck box.

Rosie reports on another date that she went to tend pheasants she raises in her barn. A **Cooper's Hawk** was in another part of the barn, flying against the window, trying to get out. She got behind it to chase it toward the door. The bird flew out. She discovered that the hawk must have attacked a full-sized pheasant outside the barn, chased it into the barn and was in the process of consuming it when she arrived. The pheasant was 3 times the size of the hawk and she figured it was a very hungry hawk.

A birder from Evertt reported a **Red-headed Woodpecker** coming to her feeder every day. She watched it molt from immature to adult plumage.

Rosie noted that when the **Yellow-bellied Sapsuckers** were on the feeder, the **Red-bellied Woodpeckers** were not.

Berks County

Abbreviations: Blue Marsh L. (BML), Glen Morgan L. (GML), L. Ontelaunee (LO), Hawk Mt. Sanctuary (HMS), SGL 110, Shartlesville (SV).

Two **Red-throated Loon** were at LO 3/23 (K Knight). Wintering **Pied-billed Grebe** were at the Rt. 662 quarry near Oley 1/16 (R Keller) and on the Tulpehocken Cr. near Womelsdorf 1/17 (H&J Silagy). By 3/27, 5 were at the GML nesting area (K Lebo). Poultry carrion spread on a field near Oley attracted vultures till March, with highs of 30 **Black** and 73 **Turkey** 1/16 (RK).

There were several reports of **Gr. White-fronted Geese**, none of which stayed put for more than a day or two. At BML, 5 were seen 2/12 (HJS), 4 on 2/21, and 1 on 2/22 (M Spence). At LO, 5 were seen 3/13 (RK) and 1 3/14 (MS). **Snow Geese** peaked at 11,000 (166 'blues') at LO 2/21 (RK), fewer than in the last two years. Again there were several dozen yellow-collared birds from Bylot Is., arctic Canada, as well as a red collared 'Blue' 3/16, probably from Wrangel Is., Russia (KK)! The birds were much more wary than before, tending to stay far out on LO and quickly flushing from fields if a car stopped. This behavior and the number of walking wounded attest to the fact that their long season legalized "population reduction" in the name of tundra preservation has commenced.

A large influx of 8000-10,000 **Canada Geese** in the Oley Valley 2/21 (RK) included a red-collared bird of the 'interior race' (smaller than the resident giants) that had been banded at James Bay, Canada, and was east of its normal migratory route in the Mississippi Flyway (*vide* S Repasky). Small-race Canadas close to duck size were at Nehf's ponds near Eckville 3/15 (M Monroe) and LO 3/17 (KK). The **Pink-footed Goose** made its 3rd annual appearance with Snow Geese at LO 3/20 (RK), but was seen till only 3/21. A **Mallard X Am. Black** hybrid. was at LO 2/6 (MS).

Adult **Bald Eagle** were reported periodically all winter. Single **N. Goshawk** were at HMS 1/4 (MM) and LO (imm.) 1/3 (MS). Among the chicken pickin' vultures near Oley were 27 **Red-tailed Hawk** 1/17 (RK). Another opportunistic Red-tail picked a road-killed Gray Squirrel off Rt. 143 1/30 (RK). Other migrants at HMS were a **Golden Eagle** 1/19 and a **Peregrine Falcon** 3/31 (MM).

A **Sandhill Crane** in clean gray ad. plumage stayed at the farm pond e. of Shartlesville on Old Rt. 22 with Canada Geese 2/7-2/26 (KL, m.obs.). A **Gr. Yellowlegs** at BML 3/18 (J Eckert) and an **Am. Woodcock** at Bailey Cr., LO, 2/4 (JE) are the earliest on record. Unusual gulls were a **Laughing** at LO 1/23-25 (m.obs.), 2 **Ls. Black-backed** at BML 1/27 (HJS), and 1 or 2 at LO off and on all winter. A pair of **Barred Owl** noisily calling for weeks at Nolde Forest outside Reading (L Lloyd) are another indication that this bird may be slowly increasing in larger woodlots in populous areas of the county. A **Short-eared Owl** was at Yellow House 3/25 (H

Lebo). A **N. Saw-whet Owl** was watching for prey under a feeder in District Twp 3/13 (RK).

One or 2 **Red-headed Woodpecker** remain resident on Kauffman Rd., Oley Twp (RK). An **E. Phoebe** was at Peters Cr. 2/19,21 (MS). Did it survive the winter? An imm. **N. Shrike** found on Penn-Bern Rd., BML, on the Bernville CBC 1/2 (KK) was seen again chasing birds 1/5 (HJS) and 2/9 (JE). An ad. was near Hamburg 2/14 (R Bonnett). Two very pale, sandy **Horned Lark** at the roadside near Oley 3/6 (RK) may have been of the prairie race, which Earl Poole considered the breeding race in *Berks*. There were several other extremely early arrivals: 2 **Purple Martin** seen along Rt. 222 near Kutztown and the Reading Airport 3/13 (D Wood) were 10 days earlier than the previous record; a **Tree Swallow** at LO 3/6 (RK, KK) beat the record by 13 days; and a **House Wren** at LO 3/31 (MS) was two weeks earlier than seen before. Two **Golden-crowned Kinglet** at Baldy Hill, District Twp. (C Elwell) and a **Ruby-crowned** near Leesport (D Kendall) came to feeders for fat this winter.

The **Clay-colored Sparrow** found near Topton last quarter was last reported 1/1 (HL, KL, B Uhrich). A short spell of wintry weather in Jan. brought a spectacular flight of **Snow bunting** to the Fleetwood-Lyons area. On 1/17, flocks totaling 830 birds rolled calling across the brown fields, looking indeed like windblown snow. At least 9 **Lapland Longspur** were among hundreds of Horned Larks on manure nearby (RK, KK). On 1/21, about 500 Snow Buntings were in Marion Twp (HJS). A distinctively marked "near-adult male" **Baltimore Oriole** visited a yard near Leesport 1/11 and again 3/3 (DK).

A **Painted Bunting** visited a feeder on Amity Park Rd, Amity Twp, owned by Sue Goldberg, from sometime in Jan. to 4/20. It also visited the feeder of Bob & Carol Mazzerle across the road for a time in April. Not reported until about a week before it left. Sue is a backyard birder and correctly identified the bird, but told her aunt, a more experienced birder, about it. The aunt, who never came to see it, dismissed it as a goldfinch and advised Sue it would turn yellow in spring. Sue kept watching it and when it clearly wasn't going to change, finally reported to the local hotline for what it really was! Seen by RK, KL, HL, H&JS, and BU before it left.

EXOTIC: Another escaped or released **Emu** was seen, this time near Mertztown 3/28 (P Saenger). The day before it had been a mile away.

Bradford County

Two species were added to the county list during the first three months of 1999. The first was two **Gr. White-fronted Geese** which were found on the river at Sugar Run by Dave and Melody Buck on 1/1 and which remained until 1/11. They were both adult birds, and they stayed in the company of two adult **Snow Geese** (one a blue morph) and of **Canada Geese**. On one occasion, the birds flew in from fields where they had been feeding. The White-fronted Geese led the whole flock of about 50 geese as they came in. The birds were seen by several other observers including Bill Reid, Rick Koval, and Jim Hoyson.

On 3/19, as I was driving on Rt. 6 from Wyalusing to Wysox at 9:45 a.m., I (Bill Reid) saw a very large bird flying directly in front of me at the west end of the Wysox Narrows. The bird had a long outstretched neck and black legs which looked like black sticks trailing behind. The uniform gray-brown color (somewhat lighter toward the head and neck), the flight of three or four flaps and a glide (repeated), and the large size of the bird told me that the bird was a **Sandhill Crane**. The tail was squarish and wide, but not long. In its flight the bird seemed to be attempting to gain altitude, but somehow it was not getting any higher. I wonder if this might be what Peterson meant when he stated that "the wings beat with an upward flick." The bird turned in its flight to avoid the cliff ahead of it, and I got to see it from a couple of angles. At the closest point I was only 30-40' from the bird. Unfortunately, because of traffic approaching from the rear, I was unable to stop for nearly a quarter of a mile, and by then the bird was not to be seen.

Ron Young said that "there was a small, reverse, migration of geese after the cold spell the 2nd week of January." He also wrote,

"First time I've seen **Song Sparrows** disappear from this area in winter."

Bucks County

The **Ross' Goose** (*county 1st*) that was reported in the last quarter was seen up to 2/24 at Peace Valley (PV) (T Wurtenberger). A **Barnacle Goose** was reported at PV at various times from 1/31 (M Lyman) to 3/6 (TW). This was our 4th record. A **C. Raven** was reported at Yardley on 3/4 (D Long). The **Bar-headed Goose** (first reported in the 1st quarter of 1998) was reported at Doylestown (R Hendrick).

Other highlights: **Homed Grebe** were at Nockamixon SP on 1 / 10 (D Farbotnik) and 2 at PV on 3/24 (D Wilber). A **Great Cormorant** was at L. Warren on 1/6 (DF). A late **Black-crowned Night-Heron** was also seen at L. Warren on 1/6 (DF). **Tundra Swan** were seen all quarter at PV [2/7 (3) S Farbotnik, A Mirabella], Bradford Dam [2/9 (5) R French], Dublin [3/13 (2) AM], and Middletown [3/23-26 (10) RF, M Line]. The **Gr. White-fronted Goose** reported at PV last quarter remained until 3/6 (RF). A **Brant** was at PV from 2/6 (K Reiker) until 3/3. Two **N. Shoveler** were at PV 2/11 (RF). **Gadwall** were at PV 1/2 (RF), L. Warren [1/13 (2) SF], Bradford Dam [2/11 (2) RF], and Silver L. [3/13 G Carmichael]. An **Am. Wigeon** was at PV on 2/6 (RF). A **Carnasback** was at PV on 1/31 (TW). Two **Redhead** were at PV 1/17-20 (SF, KR). **Gr. Scaup** (1/20) and **Ls. Scaup** (1/10) were at PV (SF, KR). A **Merlin** was at Plumstead on 2/6 (SF).

The **Barred Owl** was reported again at Chalfont 1/10 and 2/7 (KR, AM). The **Long-eared Owl** (>4) reported at PV last quarter remained until 3/27, a second group of 4 was also reported below the dam during this quarter (RF). A **Short-eared Owl** was at PV from 1/31+ (KR, TW). **Red-headed Woodpecker** were reported again at Revere all quarter (SF), and at Bedminster 3/13 (AM). **Yellow-bellied Sapsucker** were at Silver L. 1/5-23 and Levittown 1/6 (GC), and at PV 3/31 (C Crunkleton).

Horned Lark (100+) were at Dublin 1/10-17 (SF, KR). An early **Purple Martin** was reported at Solebury 3/31 (J Majden). One **Red-breasted Nuthatch** was at Revere on 1/1 (SF). An early **Pine Warbler** was at PV on 3/1 (A&JM). A **Lapland Longspur** was at Dublin 1/16 (D Farbotnik), along with up to 30 **Snow Bunting** 1/16-17 (DF, KR). An **Evening Grosbeak** was at PV on 3/30 (C Constable).

Butler County

For the second consecutive quarter we had a *county 1st*: a **Ross' Goose** at Cranberry Twp 3/4-13, discovered by Mark Williams and seen by a dozen observers thanks to Mark's help in entering the private site. As noted last quarter, our 1st **Red Phalarope** remained for its second day to 1/1.

Among noteworthy reports were a **Red-throated Loon** at L. Arthur 3/22 (MW); 14 active **Great Blue Heron** nests at Todd Sanctuary in March (M Fialkovich); a **Great Egret** at Glades 3/26 (S Butcher, M Higbee) and 2 at L. Arthur 3/28 (MF, J Valimont); and an early **Turkey Vulture** 2/3 at Moraine SP (D Yovanovich). **Snow Goose** is an uncommon migrant in sw. Pa., so three reports in the season were notable: 2 at L. Arthur 2/16 (D Darney, DY), 6 at Glades 3/13 (SB, R Crawford), and 15 at L. Arthur 3/20 (G Wilhelm et al.). Unusually good max. at L. Arthur were 84 **N. Pintail**, 75 **Redhead**, 516 **Ring-necked Duck**, 2000 **Ls. Scaup**, 22 **Oldsquaw**, 350 **Bufflehead**, and 350 **Hooded Merganser**.

Gratifying news was the renesting of Glades' **Bald Eagle** pair, whose tree was blown down and the eaglet killed in a storm last May. PGC workers put a platform and starter of sticks in a nearby tree, the pair completed the nest quickly, and incubation was under way by late March (fide DD). At least 1 ad. and imm. eagle were also seen frequently at L. Arthur, where Mary Dean watched the adult catch and eat an **Am. Coot** on the ice 3/11.

A **N. Goshawk** was observed eating a Blue Jay at Slippery Rock Twp 3/12 (SB, RC). **Red-shouldered Hawk** pairs returned to three locations and singles were seen at four more, as the declining species keeps a foothold in the county. 2 ad. and 1 imm. **Sandhill Crane**, undoubtedly the returning *Lawrence/Mercer*

family, visited Slippery Rock Twp 2/18 (GW). 2 Gr. **Yellowlegs** and 3 **Pectoral Sandpiper** arrived a bit early 3/26-28 at L. Arthur (m.obs.). A N. **Saw-whet Owl** was found at Moraine SP 2/18 (DD), and the wintering N. **Shrike** was last seen there 3/11 (DD, DY). Up to 15 **Snow Bunting** stopped at a Butler Twp feeding station 1/14 (DY), among very few reports.

Regrettably unconfirmed was a male **Rose-breasted Grosbeak** reported 3/1 at the Jennings Environ. Educ. Center feeder (Candy Vild, *fide* DY). Though lacking detailed documentation, I mention it because the observer was the center's naturalist, and an adult male should be unmistakable. If so, it must have wintered somewhere in the region.

Cambria County

Dave Gobert reports that the **Red-headed Woodpecker** reported last quarter wintered throughout this first quarter near a grain silo. He enjoyed watching **Rusty Blackbirds** at his feeder in Jan. during bad weather and a **Bald Eagle** in another location other than Prince Gallitzin SP.

Final **E. Bluebird** data for PGSP: out of 129 eggs laid, 59 E. Bluebirds fledged. Changes for next year include new boxes and relocation of existing structures, which it is hoped will increase breeding success for 1999.

Carbon County

A **Brewer's Blackbird** was in a tree with **C. Grackles** and **Red-winged and Rusty blackbirds** and viewed for 15 minutes. Comparing it with the other blackbirds it was very clear we had a unique bird (D Hawk, B Frantz, B Reed). A **Rough-legged Hawk** was at Wild Creek Res. On 3/23 (BF). It appeared to be unusually high numbers of birds, probably due to a mild winter and very little ice. **Am. Robins** were in the hundreds and blackbirds in the thousands.

EXOTIC: A **Graylag Goose** was at Beltzville SP on 2/6.

Clarion County

Red-tailed Hawk on 2/3 at Leeper was a partial albino. **Rough-legged Hawk** observations were made at Mt. Zion, Curllsville, and West Freedom in Jan. An **Am. Coot** appeared at a feeder quite a distance from any water during the bad storm on 1/17. It preferred sunflower seeds. Since it seemed to have difficulty getting off the ground, it was captured and released in the Clarion R. **Short-eared Owl** appeared at both CV, MZ and a new strip mine near New Bethlehem all during the months of Jan. and Feb. The **Pileated Woodpecker** was feeding on Nannyberries at Summerville on 1/12. **Horned Lark** were common and abundant during Jan. and Feb., especially on newly maturated fields.

Clinton County

A good variety of waterfowl was observed all quarter. A dark-phase **Rough-legged Hawk** seen on 1/31 at South Avis and on 2/14 at McElhatten (W Laubscher, M Craig), possibly the same bird, was the only northern vagrant found. An adult **Bald Eagle** was at S. Avis on 3/13 (B Zbегner). A N. **Saw-whet Owl** was seen at Swissdale on 3/9 (WL).

A **Brown Thrasher** was in Mill Hall on 1/8 (M Philippe). One ♀ **Purple Finch** seen on 1/9 and 3/4 at Avis (BZ) was the most interesting finch report.

Columbia County

The first quarter weather can be adequately described by the observation that it contained only one respectable cross country skiing day. Snow, changing to freezing rain and followed by freezing conditions made for messy off-road birding conditions, particularly in shaded areas.

Short-eared Owl (2 or more), 3 **Rough-legged Hawk**, and up to 9 N. **Harrier** were in the Rhorsburg/ Benton area for most of the quarter (D Gross). The usually productive Asbury grasslands were better than usual this winter: 2 pair of **Am. Kestrel**, 4 **Rough-legged Hawk** (1 dark phase), 3 N. **Harrier**, 2 **Red-tailed Hawk**, and 10 **Short-eared Owl** (M Richards, S Killam). It appeared

that the owls vigorously encouraged the red-tails to hunt the area during hours other than late afternoon! Their response to harrier intrusion was a more restrained show of hostility. The same area also hosted a late March flock of about 60 **Am. Pipit** (SK).

A Jan. survey of the Camp Louise property (Huntington Mt) was highlighted by presence (calling) of **Barred** (a previous year nester), **Great Horned**, and **E. Screech-owls** (J Hoyson, R Koval, MR, SK). In mid-Feb an evening of N. **Saw-whet Owl** tape "music" resulted in the netting of 2 of the saw-whets that had been among the banded the previous Oct. Were they winter residents, early migrants, or year round residents?

In March a pair of courting **Red-shouldered Hawk** were observed above the Camp Louise lake. They appeared to be more attached to the area than the N. **Goshawk** observer earlier in the quarter. A ♀ **Ls. Scaup** and paired **C. Merganser**, **Hooded Merganser**, and **Wood Duck** took little notice of the red-shouldered's overhead performance (MR, SK).

The only report (2/2) of N. **Shrike** was of 1 in the Numedia area (M Gamble, J Morgan).

Some bluebird boxes were "filled" with eggs by the end of March so arriving **Tree Swallow** (3/25) were not as strong box competitors as last year. Typically this early a start, however, results in very spotty first brood success.

Am. Robin were present all quarter in large flocks of up to 200 birds. Sumac appeared to be one of their prime food sources.

Crawford County

Jan. was cold and snowy, Feb. and March relatively dry and windy, but milder than usual. Woodcock L. and Tamarack L. were lowered for this period, affording better than usual shorebirding.

There were a number of reports of up to 10 **Sandhill Crane** around the central *Crawford* area, but no confirmation. Few winter finches this period. Very good numbers of ducks, geese, and swans. The **White-fronted Goose** at Conneaut Marsh was on the edge of the ice about 50' from the Custards Bridge 2/7. It was an adult with the white face patch, pink bill, and orange feet.

Dauphin County

With the third mild winter in a row, rivers, streams and ponds remained ice free during most of the quarter. As a result the Susquehanna R. and Wildwood L provided a variety of waterfowl throughout the period. **Horned Grebe**, **Green-winged Teal**, **N. Pintail**, **Gadwall**, **Am. Black Duck**, **Am. Wigeon**, **Canvasback**, **both scaup**, **C. Goldeneye**, **Bufflehead**, and all three **mergansers** could have been observed on any given day by birding both locations. Unusually high numbers of some of these species were reported: 20 **Canvasback** on the river at Royalton 1/16 (S&G Lockerman); 60-70 **Gadwall** at Wildwood L in Feb. (R Koury, R Williams); 50+ **Redhead** on the river between Wormleysburg and Harrisburg in mid-Feb (G Randolph, RW), and on Haldeman Is. 3/20; 250 N. **Pintail**; 400 **Am. Black Duck**; and 1400 **Tundra Swan** were reported (S Bills). By March **Pied-billed Grebe**, **Oldsquaw**, **Blue-winged Teal**, and **Ring-necked Duck** had arrived with the latter being reported in good numbers...60+ on Tobias L. 3/2 (SB) and 60+ on a pond north of Hershey 3/19 (N Cladel); while 250 **Snow Geese** were found south of Hershey 3/13 (GR).

Other interesting sightings on the Susquehanna included a **White-winged Scoter** 1/28 (RK), and a **Red-necked Grebe** 1/30, both observed from W. Fairview. A **Ls. Black-backed Gull** was also seen from W. Fairview 1/5 (GR), a **Little Gull** was identified from Marysville 3/27 (D Bogar), while **Bonaparte's Gull** was first reported 3/24 and continued into April.

There are two active **Bald Eagle** nests on the islands north of Clarks Ferry (SB). A **Merlin** was an occasional neighborhood visitor in Lawnton between 1/16 and 2/1 (N&C Juris), while the only **Rough-legged Hawk** reported was near Carsonville 3/10 (J&J Funck). At least 4 **Long-eared Owl** remained at their Hershey roost into early April in spite of the location of a mountain bike trail through their "preserve" (RW); and only 2 N. **Saw-whet Owl** were banded between 3/19 and 3/29 at the Berry Mt. station (S&GL, S Weidensaul).

This winter saw nearly the complete absence of "winter finches," which was quite a contrast to last year's "invasion." Actually the quarter was marked by late departures or overwintering of some of our nesting species. A **Gray Catbird** was discovered in Clarks Valley 1/25 (GR), a **House Wren** stayed in a Hershey yard from 1/25 to mid-March (B Hottenstein), **E. Towhee** frequented a Halifax feeder through the period (SB), and **Red-winged Blackbird** was reported by many from a variety of locations all winter. Some of the winter visitors were **winter Wren**, which was common along the boardwalks at Wildwood L (GR, RW). **Fox, Am. Tree, White-throated** and **White-crowned sparrows** were reported by many all quarter, while the only **Swamp Sparrow** was found near Union Deposit 3/18 (J Renninger).

Some other interesting reports included: a very early ♂ **Scarlet Tanager** in Hershey 3/31 (BH); 110 **Wild Turkey** were tallied on 1/18 for the feeder watch program near Carsonville (J&JF); and 2 **Gr. Yellowlegs** were discovered in Powells Valley 3/30 (GR). Returning breeders were the real harbingers to spring and included **Killdeer** 2/16, **E. Meadowlark** 3/6, **Tree Swallow** 3/8, **Am. Woodcock** 3/11, **E. Phoebe** 3/18, **Great Egret** 3/21, **Double-crested Cormorant** 3/24, and **Pine Warbler** 3/29.

Delaware County

The first quarter was characterized by unseasonably warm temperatures. There was only one major snowfall. A few species took advantage of the mild winter and a several hardy individuals were able to winter over. 102 spp. were observed this quarter.

A **Red-throated Loon** was found on the Delaware R. at Marcus Hook on 3/13 (N Pulcinella) while the first **C. Loon** of the spring was noted at Tyler Arboretum (TY) on 3/31 (A Guarente). Both **Great** and **Double-crested cormorants** could be found along the Delaware R. all quarter. Two **Great Egret** took advantage of the mild winter and were observed in and around Tincum Twp and Tincum Is. Springton Res. (SR) hosted most of the waterfowl seen, including **Canvasback** on 1/30 (AG), **Redhead** on 1/3 (NP) and **C. Goldeneye** (S Conant, NP). An adult **Bald Eagle** also took up a winter residence at SR. Three separate **Merlin** were found on winter territories this year. This species is now annual during winter.

Am. Woodcock were displaying at Ridley Creek SP (RCSP) on 3/27 (AG). The first **E. Phoebe** was located at Indian Orchards (10) on 3/24 (J Waldie). A single **Red-breasted Nuthatch** continued to visit a feeder in Glen Mills (D Kendal). This species has been present at this feeding station since the fall of 1997 and may have nested in this area last summer. Two **Gray Catbird** were present at RCSP all quarter (AG). **Pine Warbler** returned to TY on 3/17 (T Reeves). Sparrows were in good numbers all winter especially **American Tree, White-throated**, and **Dark-eyed Junco**. The highlight of the quarter was the continuing appearance from last quarter of a ♀ **Dickcissel** at a feeder in Lester (R Miller). This bird was joined for two days, 3/11-12, by a ♂ **Dickcissel**. There was no report of "northern finches" outside of a few **Purple Finch**.

By the end of the period, a few spring migrants were visible in the area including record early dates for **Tree Swallow** 3/3 near the Philadelphia airport (R Miller), **N. Rough-winged Swallow** on 3/27 at SR (M Guenther) and **Chipping Sparrow** on 3/26 in Media (J Lockyer). Other migrants noted were **Gr. Yellowlegs** at Darby Cr. on 3/29 (NP) and **Savannah Sparrow** 3/31 at TY (AG).

There was an unconfirmed report of 2 **American Oystercatchers** seen briefly flying along Darby Cr. 2/27 (Helen McWilliams).

Elk County

Don Weis had a **Sharp-shinned Hawk** fly into his porch window. After a closer look he found a **Dark-eyed Junco** under it. Either a high speed chase or he was carrying the junco and hit the window. He also reported a **Golden Eagle** at Dents Run, an **E. Screech-Owl** at his home, a **Rusty blackbird** on 2/20, and a **Fox Sparrow** on 3/10 at his feeders in St. Marys.

Richard Horsey had an **Am. Woodcock** in his yard on 3/27 and also reported a **Brown Creeper** 2/24 and a **Tufted Titmouse**

2/22 at his feeders in Ridgway.

Paul Linden had **E. Bluebirds** checking his nest boxes on 3/27.

On 3/8, the coldest day of the winter (-10°F), 40 **Red-winged Blackbird** were at my feeders (J Heughes). On 3/9 a **Rough-legged Hawk** at Lake City. I have seen numerous **Golden-crowned Kinglet** all period.

Erie County

Presque Isle Bay remained frozen until an early Feb. warming period when up to 75,000 gulls gathered to feed on the dying gizzard shad and alewives. Gull numbers decreased following the return of winter weather but returned for a second show beginning in early March when **white-winged gulls** collected in record numbers. By 3/19 there were at least 21 white-winged gulls present at the park.

An unusual concentration of **Short-eared Owls** was flushed from a grassy section of Gull Point when the observer counted at least 11 in the air at one time. The early Feb. warm spell also brought an influx of early **Red-winged Blackbird** and **C. Grackle** flocks.

Fayette County

A **Red-shouldered Hawk** was recorded from mid-Jan+ at Jacob's Creek L. Another bird was near Ohiopyle SP 3/31 (W&D Shaffer).

A **Brown Thrasher** visited a feeder near Ohiopyle 1/3-5 (O Scarlette). **E. Towhee** returned 3/31 at Ohiopyle SP, and a **Fox Sparrow** was there 3/31 (WS,DS).

Forest County

Bald Eagle appeared to be on nest from 2/27+. **E. Bluebird** arrived on 3/27 at a yard in Tionesta (F McGuire) 11 **Cedar Waxwing** were seen there 3/29 (J McGuire). A high of 150 **Am. Goldfinch** were there 3/6 (FM, JM).

Three **Tundra Swan**, 5 **Redhead**, and 2 **Bald Eagles** were seen near Tionesta 1/10 (D Watts, T Grisez).

2 **Pied-billed Grebe** were on the Clarion R. in Cook Forest SP on 3/19 (J Fedak). From 10-50 **C. Merganser** were found along the river between 1/27 and 3/19 (M Buckwalter, JF). A **Ls. Scaup** was there 3/19 and on 2/5 a 3rd-yr **Bald Eagle** was seen (JF).

Franklin County

Various waterfowl at the Greencastle Res.: **Snow Geese**, **Canvasback**, **N. Pintail**, **Ls. Scaup** and **Bufflehead**.

A **Loggerhead Shrike** continued to be seen in the Clay Hill area until 1/7. **Turkey Vulture** were reported early this year, 1/7, while looking for the shrike.

More **Tundra Swan** than usual were noted observed in farm fields as well as ponds, etc.

Fulton County

Oldsquaw were found at Meadow Grounds L. 3/24 (K Gabler) and a **Canvasback** there 3/31 (D Snell). Other duck highlights included **Gr. Scaup** at Cowans Gap SP 3/28 (DS) and a 10-acre Ft. Littleton pond had 81 **Ring-necked duck** on 3/31 (DS).

The newly-created (and open to the public) Haines-Seville Wetland Restoration Area hosted a **Ls. Yellowlegs** and 8 **C. Snipe** on 3/31 (DS). This 30-acre wetland area is on Rt. 655 two miles south of Harrisonville. **Louisiana Waterthrush** were noted 3/31 at Redbud Nature Area and MGL. Singing **Pine Warbler** were also at MGL 3/31 (DS).

Huntingdon County

A relatively quiet quarter here began with half-hardy species lingering after the warm autumn. An unusual waterfowl sighting occurred on 1/30 when David Kyler found 35 **Redhead** on the Juniata R.

David Brandes reported the first **Golden Eagles**, moving N past the Tussey Mt hawkwatch by mid Feb. Doug Wentzel spotted a **Merlin** near Perez L. on 3/26. The first **Am Woodcock** reported

this spring was, on the relatively late first date of 3/6 (DK). Other first arrival dates included **E. Phoebe** on 3/21 (DK), **Tree Swallow** 3/20 (G Grove), **Pine Warbler** 3/23 (DW), and **Chipping Sparrow** 3/20 (GG). Blackbirds, as usual during a mild winter, began filtering in before the end of Feb.

A **Gray Catbird** survived the winter at Shaver's Creek Environ. Center. (DW). Except for 2 **Pine Siskin** sightings (1/1 & 2/6), invasive winter finches were not present; even **Purple Finch** were very rare this winter.

Indiana County

Good numbers of waterfowl stopped over at Yellow Creek SP. An unprecedented **169 Gr. Scaup** were identified on 3/30 (B Fetterman, M Higbee, G Lamer, C Labarthe, J Henry). A **Fish Crow** on the IUP campus 2/15 (S Graff) was the 3rd county record. A **Pine Warbler** wintering at a Center Twp feeder was last seen 3/4 (B Marshall); on 3/22 (MH, R Higbee) the first arriving Pine Warbler was noted near Shelocta. A flock of **Snow Bunting** near Conemaugh Dam contained at least 1 **Lapland Longspur** 1/31 (SG).

Jefferson County

Lapland Longspur finally crossed the county line in Jan. **Snow Bunting** were present from 1/14–2/8, with average numbers about 50. A ♂ **Brewer's Blackbird** was seen well on 3/2-3. **Red-breasted Nuthatch** and winter finch numbers were low on non-existent. A **Rough-legged Hawk** was seen once at Lanes Mills.

Waterfowl were scarce. With the exception of the Clarion R., our lakes and ponds remained iced over for the entire quarter. An exception was a strip mine pond near Prescotville that held 10 **Am. Wigeon** on 3/25 (M&R Higbee).

Juniata County

The quarter was somewhat "ho-hum" except for a few notables. An **E. Towhee** coming to a feeder all quarter, the **Long-eared Owls** were back in the same areas reported last year, and the **N. Shrike** on 1/31 was an especially nice front yard bird. Three weeks later Scott Weidensaul caught a shrike in a kestrel trap near East Salem. Waterfowl migration was drawn out a bit, but better than we'd seen in several years.

Also the **Mute Swans** returned 2/18 to the Cocolamus Dam for the 4th year and stayed all quarter. Large flocks of **Am. Robin** were seen in heavily wooded, swampy areas all quarter.

Lancaster County

A mild winter encouraged several half-hardy species to linger through Feb. Highlights included **Gray Catbird** on 2/6 at Muddy Run (flyash ponds), **E. Phoebe** all quarter in several locations, and an amazing 1/22 record of **Blue-gray Gnatcatcher** (Rapho Twp).

Two **Little Gull** found 3/28 (T Garner). **Ross's Goose** was found several times between 2/20 and 3/20 (R Miller, B Weaver, TG, B Carl).

Lawrence County

On 1/16-17, 9 **Ring-necked Pheasant** in Wilmington Twp, 2 **Wild Turkey**, and a **Belted Kingfisher** on Neshannock Cr. were found.

On 2/27 2 **Sandhill Crane** were on Bonanni Rd. A red phase **E. Screech-Owl** was in Neshannock Twp 2/28. Three **Cedar Waxwing** were seen 3/6.

Lebanon County

A **C. Loon** was found on a small pond near Mt. Wilson on 3/23-24. A **Gr. White-fronted Goose** was with **Canada Geese** at Middle Creek WMA (MC) on 2/20 for a 3rd county record. **Snow Geese** peaked at ±40,000 on 3/14 at MC, down from the 100,000+ from previous years. Three **Ross's Geese** were found on 2/13 along Rt. 897 at MC. One was a nice blue phase that I overlooked at 30 yards for 15 minutes! I was lucky to find it two hours later for some York Audubon birders. A record high of 4 **Mute Swan** was found at Memorial Lake (ML) on 3/27. Two **Wood Duck** at ML on 2/2 set

a new early date. A flock of **Mallard** on 2/23 near Mt. Wilson totaled 2340, for a new high count. The 75 **N. Shoveler** at MC on 1/10 set a new high. Six **N. Pintail** at MC on 1/10 set a new early date. Three **Redhead** and 1 **Gr. Scaup** set an early date on 1/25 at ML. **C. Goldeneye** was reported twice at ML on 1/24 and 2/19. **C. Merganser** set a new high with 135 on 3/14 at ML. 45 "lesser" Canada Geese were seen at MC on 2/20 (R Miller, B Weaver).

A **Golden Eagle** was seen on 3/14 at Fredericksburg. **Am. Woodcock** were found calling on 2/10 at SGL-145 for a new early date and 26 were found in 45 on SGL-145 on 3/20 for a new high count. **Great Black-backed Gull** set a late date on 3/20 at ML.

A **Pine Warbler** at ML on 3/20 was a good find. 40 **Am. Pipit** were at ML on 3/22. The 50 **Am. Tree Sparrow** found at ML on 3/21 was a new high. An albino **Eur. Starling** was coming into a feeder in Fredericksburg in mid-March.

Lehigh County

Unlike the first quarter of 1998, there was little out of the ordinary reported. The most notable birds were a **Black Scoter** at Leaser L. 1/ 22-27 (M Monroe), and the continuation from the previous quarter of a **Pine Warbler** at a feeder in Allentown until 3/13 (N Boyer). Instead of high's of 10,000 **Snow Geese**, there were only a few scattered reports, with a lone Snow Goose at Leaser L. on 1/10 (MM) and a small build-up in early March, with a high of 3000 on 3/7 at Fogelsville. A interesting note were mixed flocks of Canada and Snow Geese seen flying over fields west of Trexlertown in March.

Luzerne County

Luzerne birders had no time to sit idle this quarter. The New Year started full throttle with the very successful and inaugural Nescopack Mountain CBC. A job well done goes to Alan Gregory and John Heughes for their organization of this count. A total of 67 spp. was reported. Noteworthy finds were **E. Phoebe** and **Dark-eyed "Oregon" Junco** (D Gross), **Hermit Thrush** by several participants, **Snow Buntings** (S Barron, M Blauer), **Yellow-rumped Warblers**, **Red-headed Woodpecker** (B Houck), and **Ruby-crowned Kinglet** (J Hoyson, R Koval, S Killam).

Early arrivals: **Great Egret** 3/16 (A Gregory) at Conyngham, **Double-crested Cormorant** 3/26 (RK) at Plains Flats, **Turkey Vulture** 2/3 (S Hiller) at Shickshinny, **Pectoral Sandpiper** 3/18 (RK) at Plymouth Flats, and **E. Meadowlark** 2/3 (AG) at Conyngham.

Uncommon birds were: good showings of **Tundra Swan** and **Snow Geese**, **Rough-legged Hawk** 3/17 (B Reid, J Hoyson) at Plymouth Flats, 4 **Short-eared Owl** 1/20 (RK) at Eastside Landfill, **Lapland Longspur** 3/20 (BR) at Plymouth Flats, **Brown Thrasher** 1/22 (RK) at Nescopack SP, an **E. Phoebe** that wintered at the Berwick Riverlands which was kept under close observation by Doug Gross and a **N. Shrike** that stayed until 2/21 at Hayfield Farms in Lehman. The shrike was first reported as an immature **N. Shrike** back in late Dec. 1998 exhibiting a light and dull plumage without any contrast nor defined face mask. By late Feb. the bird exhibited a splendid adult plumage, very handsome and striking.

Finally, Plymouth Flats once again produced a rare bird for *Luzerne*. On 3/16 while I was searching through a flock of **Am. Wigeon**, out pops a ♂ **Eurasian Wigeon**. The bird stayed for a few days and was seen by a lucky few. This is a 2nd county record. Bill Reid reported the first record nearly 40 years ago.

Lycoming County

A single **Osprey** near Waterville on Pine Cr. on 3/3 was early. Only two reports of **Pine Siskin** for the quarter were the only winter finches reported. On 1/15, with deep snow cover, 120+ **Am. Goldfinch** visited the Egli feeders in Picture Rocks. On 3/4 a single **Eur. Goldfinch** visited the feeding station of Ed and Tink Reish in Upper Fairfield Twp (photos).

Mercer County

The best bird of the quarter was certainly the 2 **White-winged Scoter** at L. Latonka 3/26, a county 1st found by Neal

Troyer. He is working to assemble a county list, currently lacking, but an essential project.

Bald Eagle sightings are getting positively common: 1 on 1/15, 22 at Rattlesnake Swamp (R Noll), 2 ad. at L. Wilhelm 2/8 (B Dean, C Gonzales), 1 at Saguallas Ponds 3/19 (S McCarl, RN) and present all quarter at L. Latonka. A resident **Red-shouldered Hawk** displayed early (2/3) at Hermitage on a sunny, calm, 49° day. A brief sighting 3/9 at LL of a **Snowy Owl** was reported by Glenda Kemm, and 1 **Sandhill Crane** 3/20 was at the same site (NT).

A **Ruffed Grouse** 3/20 at Shenango R. Res. excited the compiler — the first one seen in many years. Two **N. Mockingbird** were present all winter at “John’s Ponds” near LL, and were seen carrying nesting material on 4/3.

No winter finches. Instead we had a **Snow Bunting** flood in Jan.: Barb Dean reported an amazing 525 off the old Mercer Rd in the very southern part of the county on 1/17, 50+ were near LL on 1/18, and 60+ at SRR on 1/24. 500+ **Horned Lark** were seen on the old Mercer Rd. 1/17 (BD, CG), and 1 was flushed (actually, almost stepped on) from a snow-drifted weed field, where it had burrowed under the snow for the night.

Mifflin County

On 1/1 we observed **Tundra Swans** flying over the Juniata R. at Meveytown.

Fox Sparrow were absent from our area this quarter. **C. Redpoll**, **Pine Siskin**, and **Evening Grosbeak** were a pleasant surprise in Jan. and Feb. Their only visit to the backyard this winter.

On a mild March day as we searched the Wharton Rd along the river above Ryde, we saw dozens of **Song Sparrow** feasting on weed seeds of the tall, dried grasses. Matt Bickel of Strodes Mills observed a **Sharp-shinned Hawk** catch and eat a bird in his backyard. Gloria Bickel had two pair of **Purple Finch** feeding at her backyard feeders.

Participation in the Great Backyard Bird Count in Feb. was an incentive to find some nice species. Waterfowl were very plentiful on the Juniata R. all quarter.

Monroe County

A mid-Jan. Ice storm produced an interesting find, a **Dark-eyed “Oregon” Junco**.

The first **Turkey Vulture** report came from Skytop 2/16 (J Serrao) and a **Red-breasted Merganser** was a good find near Jonas 2/15 (J Wilson). A pair of **Red-shouldered Hawk** were on territory 3/10 near Meesing (B Hardiman) and the first displaying **Am. Woodcock** was near Cresco 2/17 (J Rituper). **N. Saw-whet Owls** were heard calling near Jonas in mid-Feb. (JW) and near Cresco 2/27 (JR).

At least 2 **Red-headed Woodpecker** have continued through the quarter in the swamp at the Delaware Water Gap Nat'l Recreation Area headquarters near Bushkill (BH). A single Red-headed Woodpecker was in Tobyhanna 1/20 (JS).

The first **E. Phoebe** was reported from Swiftwater 3/30 (E Davis). A **N. Shrike** made a one-day appearance in Brodheads ville 1/26 (D Murphy) and a single **Tree Swallow** at Brady’s L. 3/29 was the first reported (ED). The first **Fox Sparrow** appeared at the Monroe Environmental Educ. Center feeders 3/25 (BH).

The aforementioned junco was at a Jonas feeder 1/15 (JW). Unfortunately it only was seen that day. **Snow Bunting** were seen in the Appenzell area in mid-Jan. (C Turn).

Montgomery County

The first quarter brought some nice birds, including more “good” geese.

An impressive total of 25 waterfowl species was reported. The **Pink-footed Goose** reported last period was seen sporadically until 1/10 at Walt Rd, Green Lane Res (GLR) (A Curtis, GA Franchois, m.obs). Walt Rd also hosted a **Brant** on ½ (AC, K Crilley), and a **White-fronted Goose** until 3/16 (GAF, m.obs) A **Barnacle Goose** was at Hill Rd, GLR on 1/21 (BNM), and another (?) was in Oreland 3/2 (B&N Murphy). The Canada x White-fronted

Goose hybrid reported last quarter was last seen at GLR 2/25 (KC), and a high of 2 “Richardson’s” Goose was there 2/19 (KC). Other waterfowl at GLR included 114 **N. Pintail** 3/9 (GAF), 1-2 **Canvasback** on several dates (GAF, KC, P&A Guris), a **Redhead** 2/9 (KC), and 6 **Red-breasted Merganser** 3/31 (KC). Bill Murphy also found some nice birds at Ambler Res., including 2 Redhead, a Canvasback, and 27 **Hooded Merganser** through Jan. (B&NM).

Raptor sightings included 2 adult **Bald Eagle** at Walt Rd, GLR until the lake froze over in mid-Jan. (Unfortunately, the pair observed copulating in mid-Dec. has not returned to this date.) The first migrant **Red-shouldered Hawk** was at Ft. Washington SP 3/3 (B&NM). An **Osprey** nesting platform was erected at Church Rd, GLR, 3/31. Kudos to Jeff Luzenski of PP& L and Laurie Goodrich of HMS for their dedication to this program!

A high of 10 displaying **Am. Woodcock** was at Church 3/20 (J McBready). Gull variety was about average, with a high of 2 **Ls. Black-backed** and 8 **Great Black-backed** 1/24 (GAF, KC). A first winter **Glaucaous Gull** was at Walt Rd 1/20-21, representing our 2nd county record! (GAF, B&NM).

The season’s only **Short-eared Owl** at Church Rd was rather late on 3/21 (KC). Field birds were generally hard to find due to lack of adequate snow-cover. A high count of 125 **Horned Lark** was seen on a manure strip near Niantic 2/8, and 9 **Am. Pipit** were picking grit on a road nearby (KC).

A single **Winter Wren** was in its favorite woodpile at the GLR Nature Center on 1/7 (KC). The season’s first **Pine Warbler** was at FWP 3/19, and the 3 **E. Towhee** reported there last quarter spent the entire winter (B&NM). A ♂ **Yellow-headed Blackbird** was found in a huge mixed flock of blackbirds in Pennsburg 3/8 (AC). Finally, a lone ♀ **Purple Finch** was at the GLR feeders 1/6-8 (KC).

Montour County

Observations of most migrating waterfowl and shorebirds in the county corresponded closely with the observation dates from last year. One notable exception was the arrival of **Killdeer** three weeks earlier than last year. The numbers of **Tundra Swan** and **C. Merganser** at L. Chillisquaque were much higher than noted in previous years. In contrast, the number of **Am. Black Duck** observed was much lower than during the past several years.

The 5 **Long-eared Owl** at Montour Preserver remained until 3/20 (WL). Unusual was having two separate roosts of these owls, 7-9 indiv. in one and 12-15 indiv. in the other. These are on private property (*vide* W Laubscher).

Northampton County

A nice flock of 135+ **N. Pintail** was at Green Pond 3/9 (R Wiltraut).

Up to 3 **Glaucaous** (1st county record) and 2 **Iceland gulls** (3rd county record) were present at the Chain Dam near the Chrin Landfill in early Jan. (ph. D DeReamus, RW, m.obs.). A record 7 **Ls. Black-backed Gull** were at the Chrin Landfill 3/1-2 (RW) and 1-2 were present at Green Pond in late Feb.(m.obs). Another **Ls. Black-backed Gull** was at Minsi L on 3/21 (RW). The dark morph Red-tailed Hawk at the MC flyash ponds was present again in Jan. (S Boyce, RW) and single **Merlin** were at Graver’s Hill on 1/20, at Tatamy on 2/14, and at Mack Rd on 3/14 (RW). A **Short-eared Owl** was present at the MC flyash ponds 1/11-12 (RW).

A **Cape May Warbler** was present at a suet feeder in Nazareth in mid-late Jan. for the 1st winter record in the county (N Wisser, ph. RW). 40+ **White-crowned Sparrow** wintered at the MC flyash ponds including an imm. of the Gambel’s race (ph. RW). The **Clay-colored Sparrow** reported in the fall report at the MC flyash ponds remained through the winter (ph. RW).

Philadelphia County

With the ‘98 eruption of winter finches only a memory, a moderate to mild winter with less than average precipitation allowed many less hardy species to linger. However, the warm temperature on 1/9, the day of the 13th Winter Bird Census (WBC), followed a week’s freeze and covering of snow which left

impoundments and reservoirs frozen, produced heavy fog, and an ice-slick which impeded mobility and visibility. The WBC count total of 90 spp. included two new species: **Brant** and **Bonaparte's Gull**, but did not come close to recording the numbers of species or individuals expected.

Great Cormorant along the Delaware R. (DR) held at 25. Two **Horned** and 3 **Pied-billed grebes** were found. Only 1 **Great Egret** (T Floyd) was found along the DR and 1 **Black-crowned Night-Heron** (R Ridgely) at Roosevelt Park. **Snow Goose** migration was noted on 3/31 with 100 flying over (RR). The first WBC **Brant** was seen at W. River Dr. on the Schuylkill R. (D Wechsler, E Brendel, D Cutler, M S). Other waterfowl were low in number: 5 **Gadwall**, 18 **Am. Coot**, 1 **N. Shoveler**, and missed entirely **N. Pintail**. Diving ducks, mergansers, and grebes at the East Park Reservoir (EPR) were present in numbers greater than the WBC would indicate, but access was greatly curtailed and reliable counts could not be confirmed. This unique basin is in imminent danger of being sold or filled-in.

Only 8 species of raptors were found including 1 **Merlin** at EPR (DC) and 1 **Peregrine Falcon**. 3 **Am. Woodcock** flushed at Tinicum (D McGovern). **C. Snipe** were found along the upper Schuylkill R. (C Lyman) and at EPR (K Russell). In a season that will be remembered by the many exotic gulls present in the mid-Atlantic area, a **Bonaparte's Gull** made its first appearance on the WBC at Pleasant Hill, DR (TF, MS). **Ls. Black-backed Gull** was found on the river at the Art Museum (EB, m.obs). There was no report of wintering owls received in this quarter.

Northern finches were nonexistent, both on count day and throughout the quarter. On 1/10 no Red-breasted Nuthatch or Black-capped Chickadee could be found. **Carolina Wren** numbered 94.

An **E. Phoebe** was seen in Mt. Airy on 3/18 (S Lawrence). **Tree Swallow** were sighted at Tinicum on 3/15 (J Miller). Only 2 warbler species lingered for the WBC: 1 **Yellow-rumped** and 5 **Palm**, 2 at the mouth of the DR (C Wonderly, M Logan), 2 along the upper DR (CL et al.), and 1 at Tinicum on 1/5 (DM).

Mowing practices at the Philadelphia International Airport eliminated the yearly sightings of **Horned Lark** and **Snow Bunting**. **Am. Tree Sparrow** were more numerous in many localities with a flock of 36 associating with **Swamp** and **White-crowned** at Tinicum on 1/6 (DM). There was wide spread comment about the relatively low numbers of **White-throated Sparrow**.

Pike County

All in all the Pocono Environmental Education Center has been pretty average, with the exception of a **Bald Eagle** nesting nearby.

Potter County

As in the fall report, **House** and **Purple finch** numbers were still down. **Am. Goldfinch** came back in big numbers. Kirk Newton had a **Red-headed Woodpecker** for several weeks starting 1/15 and a mile away David Hauber had a **Red-bellied Woodpecker** all quarter. Both birds are unusual for *Potter*.

Schuylkill County

We recorded 112 spp. plus one sub-species. 35 **Brant** were seen flying N at Hawk Mt Sanctuary (HMS) 1/1 (staff). The only **Canvasback** was at the Landingville Dam (LVD) 1/24 (D Krue). The only **C. Goldeneye** (5) were at LVD 1/25 (DK). A few **Red-breasted Merganser** turned up, with 1 at the Lebanon Res. 3/26 (DK), 3 at Sweet Arrow L (SAL) 3/29 (D Donnemoyer), and 1 at SAL 3/30 (B Allerton). A **Peregrine Falcon** was seen from HMS 3/31 (staff).

An adult **Red-headed Woodpecker** was at Forest Hills (FH) in Pottsville 3/24 and remained to the end of the quarter (M Ward). An **E. Phoebe** may have over-wintered, having been first noted on 1/17 at LVD (T Clauser) and continuing there all quarter. The year's first **Purple Martin** passed by HMS fairly early 3/31 (staff). Two **Winter Wren** were first noted at LVD 2/3 (DK), with at least

1 remaining all quarter.

A silent **Louisiana Waterthrush** showed up early this year at the Tumbling Run watershed 3/31 (TC). There were only 2 **E. Towhee** for the quarter, 1 late at Pottsville 1/4 (MW), and the other early, also at Pottsville 3/28 (MW). A number of **White-crowned Sparrow**, most of which were immature, remained in the Hidden Valley area all quarter (AM Liebner). Six **Snow Bunting** were at Schwartz Valley Rd in Wayne Twp 1/19 (S Weidensaul), and there were 70 on the slopes of Eagle Rock Ski Lodge 2/5 (J&J DeBalko).

There were relatively few finches reported for the quarter with only 1 **Purple Finch** at SGL-227 on 2/27 (DK), 2 **Pine Siskin** at Ringtown 2/3 (M Gamble, J Morgan), and 1 **Pine Siskin** at Hidden Valley 2/3 (AL). The "Oregon" sub-species of the **Dark-eyed Junco** was reported from the FH section of Pottsville on two occasions, 1/4 and 3/12 (MW).

Somerset County

The Youghiogheny R. at Confluence is a good spot for wintering ducks due to the constant open water. **Gadwall**, **Am. Black Duck**, **Green-winged Teal**, **Ringed-neck Duck**, **Bufflehead**, **C. Goldeneye**, **Hooded Merganser**, and **Ruddy Duck** were all present there on 1/18 (A Marich). A **Gr. White-fronted Goose** was found at Stoughton Lake on 2/5 & 2/6 for 1st county record (R Murphy, ph. S Bastian). The goose was probably of the race *frontalis*. One **Snow Goose** was seen on 3/5 (AM).

Early shorebirds included **Killdeer** on 2/14 (W Thomas), **Ls. Yellowlegs** on 3/23 (AM), and **Pectoral Sandpiper** on 3/24 (J Payne). A 2nd county record of **Great Black-backed Gull** was found at Quemahoning Res. in March (T Fox). **C. Raven** were nesting near St. Paul by 2/8 [this nest fledged three young (AM)]. One **Lapland Longspur** was found on 1/17 (JP, LP) and **Snow Bunting** were seen periodically through most of the quarter. Few finches were found in the quarter. More than usual numbers of **Great Blue Heron**, **C. Grackle**, **Red-winged Blackbird**, and **Brown-headed Cowbird** over-wintered.

Sullivan County

Another mild winter with expected temperatures and precipitation not arriving until March. No influx of winter finches, with only 1 indiv. **C. Redpoll** from Eagles Mere on 3/8 (F Crafts) and scattered reports of **Pine Siskin** in low numbers during the late Jan. through mid-Feb. period (v.o.). **Am. Goldfinch** in numbers up to 75 at area feeders during the period, but only when snowfalls seem to trigger the move. Other expected winter species at feeders were sporadic and low in expected numbers.

Waterfowl did not appear until the last week of the quarter, as nearly all lakes and ponds remained frozen until that time. A major movement of **Canada Geese** on 3/3 with "thousands" reported in numerous large flocks throughout the day (v.o.).

Carolina Wren being seen through 1/21 in Mildred, a species seldom seen even during the milder times of the year (J&B Exley). These may have been holdovers from the numerous reports during the previous quarter. Another holdover (or early arrival?) were **Fox Sparrow** noted in Hillsgrove on 1/12 (D Long).

Susquehanna County

Bill Reid reports the following from Springville Twp: 1 **Great Blue Heron** 3/26; 1 **Turkey Vulture** 3/30; 13 **Ring-necked Duck** 3/26 and 24 on 3/30; 12 **Hooded Merganser** 3/26 and 16 on 3/27; 2 **C. Merganser** 3/26 and 6 on 3/27.

1 ♂ **N. Harrier** on 2/16 and a ♀ on 2/22. He had 64 **Mourning Dove** on 2/4; 2 **Belted Kingfisher** 3/30; 2 **Horned Lark** on 1/1. A **Carolina Wren** on 2/23; 1 **Am Robin** 3/9; 50 **Am. Tree Sparrow** on 1/7 and 8 on 2/1; 200 **Snow Bunting** on 1/11; and **Red-winged Blackbirds** and **C. Grackles** on 3/26.

Tioga County

We again have two known active **Bald Eagle** nests this year. The Grand Canyon nest (over a decade of productivity) now has

three eaglets (hatched early April), while the Hammond L. nest has at least one egg with both adults actively attending the nest in early April.

Venango County

The quarter started out fine with 20 spp. of waterfowl and waterbirds on the nearly frozen Allegheny R. Most species were observed near the Franklin and Oil City sewage treatment plants and at the confluence of French Cr. and the Allegheny R. These included **Horned Grebe** until 1/19, **Gadwall** from 1/5-16, **N. Pintail** until 1/5 and **White-winged Scoter** 1/17-19.

Owl highlights include **Long-eared** at Oil Creek SP 1/10 (R States, G Edwards), 9 **Short-eared** at Bullion, Barkeyville, and Clintonville fields 1/1 after which they were not present, probably because of the snow depth. And a singing **N. Saw-whet Owl** at OCSP 3/21+. This is a possible nester and I will report on this next quarter. **Horned Lark** were found in unusually large numbers through Jan. at Kahle L. with a max. of 350+ on 1/14. The only warbler of the season was a **Pine** at BHNS on 3/27 (J Stanley). At least two **Lapland Longspur** were found at KL from 1/17 - 2/13 (RS, GE). And large numbers of **Snow Bunting** were at KL, peaking at 200+ on 1/17. Both of these species often associated with the Horned Lark flock. There were no winter finches present this quarter.

Warren County

A **Horned Grebe** was on the river in Warren (WA) 1/10 (D Watts, T Grisez). A **Great Blue Heron** stayed at Starbrick (ST) most, if not all, of Jan. (B Hill, Q. Strandburg, TG). Nine **Tundra Swan** were in WA 1/3 (Bhl), 11 in WA, and 1 south of Irvine 1/10 (DW, TG). Two **Mute Swan** have been seen in ST since 3/16.

Six **Am. Black Duck** and 4 **Canvasback** were near ST 1/23 (TG). About 50 **Redhead** in two flocks were in WA 1/1 and 72 at ST 1/23 (TG, DW).

The mid-winter **Bald Eagle** survey listed 3 on the west side of WA and 1 north of Tidioute 1/10 (DW, TG). This did not include WA to Kinzua Dam. An imm. Bald Eagle was at Glade Bridge, WA, 3/14 (D Palmer). **Rough-legged Hawk** were 1 near Lander (LA) 1/27 (B Highhouse, TG), 7 between LA and Sugar Grove 2/27 (B Watts, DW), 2 along State Line Rd (SLR) 3/9 (F McGuire), and 1 there 3/27 (DW). Four **Short-eared Owl** were seen along Brown Hill Rd. 1/8 (M Bleach, DW), 3 near LA 2/20 and 1 on 2/23 (DW), and 2 on SLR 3/27 (DW). A **N. Saw-whet Owl** was seen in downtown WA 3/12 (T Ashbaugh).

A **Red-bellied Woodpecker** was at Chuck and Marge Neel's feeder in Saybrook (SA) 2/15, 21, and 22. A **Yellow-bellied Sapsucker** was there most of Jan. and 2/21-25. **C. Raven** were found in WA in late Jan. (Bhh) and along SLR 1/9 (K Confer).

Four-6 **E. Bluebird** were seen just west of WA 1/9 (J Schultz). A **N. Shrike** was northwest of Youngsville 2/20 (DW). Fifty-five **Snow Bunting** were near Chandlers Valley 1/8 (DW). A flock of 17 **Red-winged Blackbird** was on Yankee Bush Rd. 1/8 (DW). A **Pine Siskin** was at the Neel's feeder in SA 1/27.

Washington County

Paul Brown reports the following. Forty-four **Great Blue Heron** at Chartiers Cr. rookery in N. Strabane Twp on 3/27. Eleven nests with incubating birds on this date.

Two **N. Harrier** at Robinson Twp reclaimed surface mine on 1/16 and 1 on 4/5 at that location. Three **Short-eared Owl** were also there on 1/16 with 1 found on 4/5. Nine **E. Meadowlark** were also found there on 4/5.

Wayne County

Trudy Gerlach reports 150 **Horned Lark** between Orson and Callender's Maple Shop on 2/7.

Westmoreland County

Interesting mid-winter sightings included a **C. Loon** and **Double-crested Cormorant** flying downriver together at New Kensington 1/17 (Paul & Deborah Hess). Because of milder than

usual weather this quarter, many waterfowl were able to winter or begin drifting northward earlier than normal. **Tundra Swan** were widespread over much of the period, but no particularly large flocks were observed—the best was 105 birds at Trout Run Res., Ligonier 3/22 (m.obs.). A **White-fronted Goose** spotted with a flock of Canadas at TRR 3/8 (RC Leberman) was a good find. Perhaps puddle ducks were commoner than usual, but there were no reports of *any* scoter species or of **Oldsquaw**.

An **Osprey**, flying above a completely frozen-over Donegal L., was a pleasant surprise during the Rector CBC 1/3 (Don Stitt). Bob Shaw found a **Bald Eagle** at TRR 2/17, and it was seen the next day by Bob, Bonnie, Mead, and Robert Mulvihill. The **Rufous Hummingbird** that successfully wintered in 1997-98 at a Delmont feeder returned this season but failed to survive severe weather the night of 1/5-6 (J. Madden, RSM). A **Pine Warbler** was a good find at PNR on 3/25 (RSM, RCL). A **Dickcissel** was at a Delmont feeder, 1/16 (K Byerly). It was the best season for wintering **Fox Sparrow** (throughout the county) in many years.

Wyoming County

Tundra Swan: A flock of up to 13 birds was found at S. Eaton from 1/7-19. There were 9 adults and 4 immatures. They left when the river rose. A few days later 13 swans (9 ad., 4 imm.) Turned up at Plains in w. Luzerne. The same birds?

Bufflehead: Remained at L. Carey until 2/11. On 3/9 birds returned as the lake began to open.

Am. Coot: Two coots were at L. Carey daily until 1/26. Then there was only 1 until 3/15. This is the lowest number in several years.

N. Saw-whet Owl: I heard on 1/14, 1/26, and 2/24. It called on its own. Twice at 11:30 p.m., the other time at 6:00 a.m. On other occasions I tried to call the bird in with a tape, but without success. Is my home on the edge of a fairly big territory for the owl?

Winter Wren: In full song at S. Eaton on 2/17. Seems early.

Dark-eyed Junco: During the winter I had 40 juncos at my feeder. Two of the birds which were there in Jan. had absolutely no tails. Were they siblings or parent/off-spring? Why did they disappear when the other birds did not? If, as has been conjectured, juncos identify each other by the tail pattern what did this mean the breeding, etc. outlook of these birds was?

York County

A **Barnacle Goose**, flying by itself, was shot by Scot Failer, a hunter, at Codorus SP on 1/10 (confirmed and reported by A Spiese). Randy Phillips and Bruce Fertman reported a **Eurasian Wigeon** at Menges Mills 3/28 and it was seen later. No Ruddy Duck found. **Bald Eagle** were found at six locations away from the Susquehanna R. from Jan. thru 3/31.

The 3 **Bonaparte's Gull** on 1/10 and 1 on 1/19 were our 2nd and 3rd sightings (P Robinson). Robin Smith saw 1-2 **Short-eared Owl** on and inside a ground hog hole 3/2-31. For the 2nd year in a row **C. Raven** were on a nest on a tower in the Pigeon Hills (K Lippy).

From 2/15-3/15 there were from 150-350 **Horned Lark** in a manure-spread field along Poff Rd. There were also 3 **Lapland Longspur** and 60 **Snow Bunting** (KL, PR). A **Western Tanager** showed up at Debby Boyle's feeding station in Glen Rock 1/16 and later. This is the 1st *confirmed county record*. (KL, PR, Candy Krenzer et al., plus photos.)

EXOTIC: **Coscoroba Swan** (black) at Spring Grove 1/24 (PR).

Seasonal Occurrence Tables - January through March 1999

A summary of frequently reported species with arrival/departure dates and high counts

HOW TO READ THE TABLES

The species listed in the following tables represent the "expected" species in most areas. The following 26 species, permanent residents that occur in almost every county, are not included.

Ruffed Grouse, Ring-necked Pheasant, Wild Turkey, Rock Dove, Mourning Dove, Eastern Screech and Great Horned owls, Belted Kingfisher, Red-bellied, Downy, Hairy, and Pileated woodpecker, Blue Jay, American Crow, Tufted Titmouse, White-breasted Nuthatch, Carolina Wren, Eastern Bluebird, Northern Mockingbird, Cedar Waxwing, European Starling, Northern Cardinal, Song Sparrow, House Finch, American Goldfinch, and House Sparrow

Not all of the above are "permanent residents" in the strictest sense. Kingfishers, for example, will leave an area if all of the open water freezes up. Blue Jays migrate, but since Pennsylvania is in the center of their summer and winter ranges, they are present year round. Comments on the above species can be found in either the *Summary of the Season* or *Local Notes*.

All other reported species can be found in the *Birds of Note* section.

CODES

The codes used in the tables are as follows:

A = Present All quarter. This species was present from the first day of the quarter through the last day of the quarter. This could refer to individual birds or the species as a group.

P = Present Part of the quarter. This species was present, but specific dates are not available.

R = Permanent Resident. This species breeds and is present year round in this county.

L = Late or Low. An L after a date indicates an unusually late date. An L after a number indicates an unusually low number.

H = High. An H after a number indicates an unusually high number.

E = Early. An E after a date indicates an unusually early date.

- = An arrow before a date indicates the species was present from the beginning of the quarter to at least that date.

An arrow after a date indicates the species was present starting with that date and through the rest of the quarter.

() = Numbers in parentheses indicate high counts for the season. No number means only 1-3 individuals or no number was reported.

***** = Something noteworthy. Comments about the record may usually be found in the Local Notes section.

sp. = Species unknown, such as Scaup.

A comma between dates indicates that the species was not present during that interval.

A blank does not necessarily mean that the species does not occur in that county, just that no reports were received by the compiler for that species.

EXAMPLES:

2/27-3/6(24)-3/30 means the species was first reported on 2/27 with a high of 24 on 3/6 and last reported on 3/30.

1/6-3/22(250)- means the species was first reported on 1/6 with a high of 250 on 3/22 and present through the rest of the quarter.

-1/5,3/15- means the species was present up to 1/5 then returned on 3/15 and was present through the rest of the quarter.

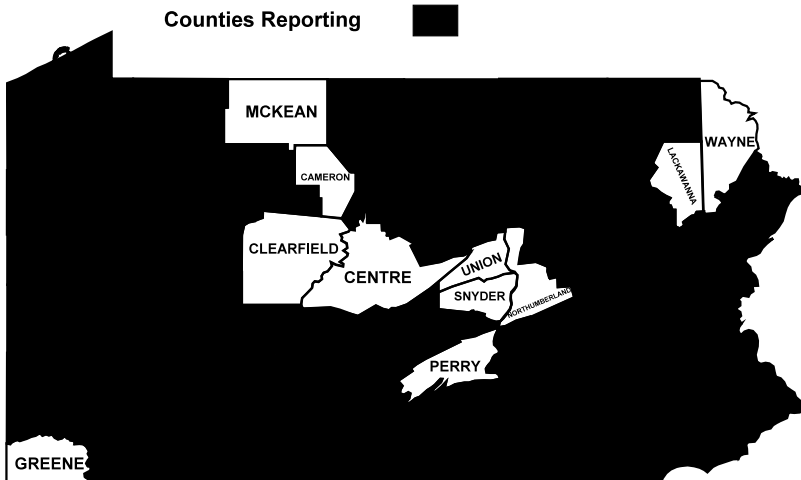
5/6- means the species was first seen on 5/6 and remained the rest of the quarter.

A-5/6(25) means the species was present all quarter with a high of 25 on 5/6.

9/4E means the species was reported on 9/4, which was early for this county.

1/15-2/26(300H)- means the species was first reported on 1/15, with a high count of 300 on 2/26, which was unusually high for this county. *

COUNTIES REPORTING - JANUARY TO MARCH 1999



SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BLAIR	BRADFORD	BUCKS	BUTLER	CAMBRIA
LOON, COMMON			3/4→		3/26→				1/26,3/21→	3/19,25(13)→	
GREBE, PIED-BILLED	3/22-29	A-1/16(7)	2/17→	1/31(4)-3/24		A-3/27(5)	3/24		1/2-3/25	1/1,3/31(6)→	3/19(4)
HORNED		A-1/17(6)	2/3-3/25(22)→	1/31(3)	3/26(3)	1/16(3)→	3/19		1/10-3/24	1/1,3/8(20)→	3/22(5)
CORMORANT, DOUBLE-CRESTED		2/10→	3/29(5)			3/20→			1/6-3/23		
HERON, GREAT BLUE	R	R-2/10(15)	A		R	R	R	A		1/18,2/17→	A
EGRET, GREAT	3/31									3/28E→	
VULTURE, BLACK	R					R-1/16(30)			R		
TURKEY	R	3/6→	2/11-3/20(10)→	2/14→	2/5-3/22(25)→	R-3/9(100)	3/17-3/1(6)→	3/5→	R	2/3E→	3/27→
GOOSE, GR. WHITE-FRONTED	3/15(3)-16					2/12-3/13(5)-14		1/1-1/11	1/4-3/6		
SNOW	R	R	3/20(62)		R-3/31(10)	A-2/21(11000)		1/1-1/11	3/20	2/16-3/20(15)	R-3/17(250+)
CANADA		1/18(7)-2/10	2/17→			R		R-1/6(300)			1/5
TUNDRA	2/27-3/20(125)-26	1/20-3/6(14)	3/20(225)		3/31(8)	1/1(20)-3/21	3/20(190)		2/7→	3/10(206)-26	3/7-20(25)
DUCK, WOOD	R-3/18(15)	R	3/19→	A	3/20-31(33)→	1/1,3/14→	R	3/15→	R	2/28E-3/26(15)→	
GADWALL		2/27	3/25→			A-1/24(50)		3/5	3/12	2/17(6)→	
WIGEON, AMERICAN	2/16-3/26(10)	1/18-2/15	3/4-25(36)→	3/24(15)		1/10-3/13(6)-28		3/23-30	2/6→	2/19-3/17(18)→	
DUCK, AMERICAN BLACK	2/27-2/28(8)-3/26	R-3/8(12)	1/13-3/4(32)→	3/3(6)		A-2/7(250)		A-1/6(100)	R	1/25-3/20(37)→	1/1(5)
MALLARD	R	R	R-3/4(45)		R-3/31(15)	R-1/10(900)	R	R	R		R
TEAL, BLUE-WINGED	3/30	3/25	3/25(8)→			3/13-22				3/14-21(8)→	
SHOVELER, NORTHERN	3/1-26			3/24		1/3(11)			2/11	1/1(4),3/20(12)→	3/19(3)
PINTAIL, NORTHERN	3/5(13)-26	1/17-3/8		3/24(3)		A-3/13(200)			1/10	2/20-3/8(84H)→	3/15(13)
TEAL, GREEN-WINGED	3/17-26(22)-29	2/6-3/26(6)	3/25(22)→		3/31(7)	A-3/9(14)			2/28→	3/5-20(22)→	3/19
CANVASBACK			1/14(14)			3/18(45)-24	3/19		1/31	1/1,2/4-3/8(30)→	3/19(4)
REDHEAD	2/16	1/7-22(6)	1/12→		3/26(3)	1/31(7)-2/15			1/17-20	1/1,2/19-3/8(75H)→	
DUCK, RING-NECKED	3/1-18(45)-29	2/13(7)→	2/3-3/15(49)→		3/26(15)→	A-3/27(70)	3/19	3/5-19(29)→	1/20	1/30-3/8(516H)→	3/19-20(75)→
SCAUP, GREATER		1/16-19(5)→				1/23(16)-3/28			1/20	1/1,2/17(17)-3/20	
LESSER	1/26-3/29	1/19→	1/12-3/2(30)→	1/31(4)	3/26(40)	2/1-3/13(10)-27			1/10	2/5-3/20(2000H)→	3/18(32)→
SCOTER, WHITE-WINGED		1/22-24				3/15					
OLDSQUAW			3/25(4)		3/26	3/28				1/1,3/8-2/6(22)→	3/18(10)
BUFFLEHEAD	3/22	A-1/19(10)	1/21-3/7(5)→	1/31-3/24	3/31(12)	1/2-3/27(10)	3/24		1/16	2/13-3/8(350H)→	3/13→
GOLDENEYE, COMMON		1/19(5)-3/25	3/3	1/31		1/17-2/12(12)-3/14			3/6	1/1,2/14-3/8(18)→	
MERGANSER, HOODED	2/28(4)-3/18	A-1/27(12)	3/4-7(12)→		3/26(30)→	1/3-3/14(22)-27	3/24	3/17→	3/20	1/1(6),2/5-MAR(350H)→	2/26-3/18(11)
COMMON	2/27(4)-3/18	1/10-22	1/13(30)→			A-2/17(2000)		R		1/1,2/14-3/20(33)→	3/18(5)
RED-BREASTED	3/24(32)	1/9-3/6(4)→	3/3-25(48)→		3/31(5)	2/15-3/28(5)	3/24		3/20	1/1,2/19-3/20(850H)→	3/18(31)→
DUCK, RUDDY		1/17→	3/3→	3/19(6)	3/21(7)	A-3/27(70)			A	2/14-3/20(500)→	2/17
OSPREY					3/19→		3/26		3/20→	3/26→	3/30→
EAGLE, BALD	1/18-3/30	A-1/22(4)	3/11	1/5	3/17	1/7(5)-3/25		A	1/2	A	3/31
HARRIER, NORTHERN	R	R	A	1/5		1/10-3/27	1/16	3/18→	A	2/12-3/7	A
HAWK, SHARP-SHINNED	R	R	R		A	R	R	R	A	A	R
COOPER'S	R	R	R		A	R	R	R	R	R	R
GOSHAWK, NORTHERN		3/17				1/3-4		3/5		3/12	
HAWK, RED-SHOULDERED	R	R	1/7	3/24	3/13	1/4→			R	1/27→	
ROUGH-LEGGED	R	R	R	R	R	R-1/17(27)	R	R	R	R	R
EAGLE, GOLDEN		1/21-24	1/13-26(3)			3/19		1/31-3/12			3/18-19
KESTREL, AMERICAN	R	R	R	R	R	R	R	R		R	R
MERLIN	R	A-2/26(3)							2/6		
FALCON, PEREGRINE		R				3/31			R		
BOBWHITE, NORTHERN											
COOT, AMERICAN	2/16-3/26	A-3/20(20)	1/21-3/2(34)→	1/31(50)-3/23	3/31(72)	A-3/27(36)	1/23		R	2/13-3/24(280)→	3/17-18(11)→
KILLDEER	R	A-3/8(6)	3/4→	2/26→	3/4→	R	2/11→	3/17→	1/10-3/27	2/11-3/28(30)→	3/28→
YELLOWLEGS, GREATER		3/25→				3/18E→				3/26→	
SANDPIPER, PECTORAL	A	3/30→		3/24		A-1/21(21)				3/28-31(11)→	
SNIPE, COMMON		3/30→	3/29	3/23					3/6→	3/21-26(15)→	
WOODCOCK, AMERICAN	2/18E→		3/27→			2/4E→	3/25→	3/3(4)→	2/14→	2/23→	
GULL, BONAPARTE'S	A	1/7-22(10)	3/25(8)→	1/27(8)-31		1/1	3/24→		1/23	3/20-28(70)→	
RING-BILLED		A-1/18(200)	1/15(19)→	A	3/31(14)	A-3/8(8000)	1/23→	A	A	1/22-3/20(200)→	3/5-17(125)→

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BLAIR	BRADFORD	BUCKS	BUTLER	CAMBRIA
HERRING	-	R-2/6(15)	1/15	1/31(4)	-	A	-	-	A	3/13-20	3/17
LESSER BLACK-BACKED	-	-	-	-	-	1/24-3/21	-	-	A	-	-
GREAT BLACK-BACKED	-	-	-	-	-	1/25(6)-3/1	-	-	A	-	-
OWL BARN	R	-	-	-	R	R	-	-	R	-	-
BARRED	R	R	R	R	R	R	R	R	R	R	R
LONG-EARED	-	-	-	-	-	-	-	-	-	-	-
SHORT-EARED	A-1/20(2)	A-1/10(3)	1/12-17	-	-	3/25	-	-	1/31→	-	-
NORTHERN SAW-WHET	-	-	-	-	-	3/13	-	-	R	2/18	-
WOODPECKER, RED-HEADED	R	2/27-3/13	-	-	-	R	R	-	R	-	A
SAPSUCKER, YELLOW-BELLIED	A	A	-	2/14	-	A	-	1/17→	A	-	-
FLICKER, NORTHERN	R	R-1/30(7)	-	A	-	R	R	R	R	A	R
PHOEBE, EASTERN	3/18→	1/16→	3/28→	3/24→	3/22→	2/19E→	3/24→	3/28→	3/21→	3/20→	3/21→
SHRIKE, NORTHERN	-	-	-	-	-	1/2-2/14	-	-	-	-	-
CROW, FISH	-	-	-	-	-	R	-	-	R	-	-
RAVEN, COMMON	-	-	A	-	R	-	R	-	-	-	-
LARK, HORNED	A-3/18(12)	R	1/9-12(250)→	A-2/19(110)	1/16(35)	-	R	R	-	-	R-3/9(125)
MARTIN, PURPLE	-	-	-	-	-	3/13E→	-	-	3/31	-	-
SWALLOW, TREE	3/2E→	3/27→	3/29(250)→	-	3/28→	3/6E-20(12)→	3/24→	3/29→	3/17→	3/21(17)→	-
CHICKADEE, CAROLINA	R	R	R	R	R	R	-	-	R	R	-
BLACK-CAPPED	A	R	R	R	R	R	R	R	R	R	R-3/9(31)
NUTHATCH, RED-BREADED	2/8→	3/27→	-	-	-	R	-	-	1/1	-	-
CREEPER, BROWN	A	A	-	-	A	A	R	R	A	A	-
WREN, WINTER	A	2/15	-	-	-	A	A	-	A	-	-
KINGLET, GOLDEN-CROWNED	A	A	A	3/2	-	-	A	R	A	A	A
RUBY-CROWNED	-	-	-	-	-	A	3/28	-	A	-	3/29
THRUSH, HERMIT	A	-	-	-	-	A	1/8-13	-	A	A-1/1(3)	-
ROBIN, AMERICAN	R	R-3/8(50)	R-3/19(60)	-	R	2.25→	-	A-1/19(15)	R	A	R
CATBIRD, GRAY	-	-	-	-	-	-	-	-	-	-	-
PIPT, AMERICAN	A	-	-	-	-	-	-	-	-	-	-
WARBLER, YELLOW-RUMPED	A	A-1/30(20)	-	-	-	-	-	-	-	3/28	-
PINE	3/30→	-	-	A-2/16(4)	-	A	-	-	A	2/17	-
TOWHEE, EASTERN	2/25→	3/21→	-	3/14→	3/16→	3/31→	-	-	3/1→	3/13E→	3/30→
SPARROW, AMERICAN TREE	A	A-1/21(43)	A-1/12(15)	-	-	3/31→	-	-	R	-	-
CHIPPING	3/26→	-	3/19→	-	-	-	A	-	A	-	-
FIELD	-	2/15→	-	A	-	-	3/31→	-	R	3/21E→	-
VESPER	-	-	-	-	-	-	3/31→	-	R	3/21→	-
SAVANNAH	-	-	-	-	-	3/27→	-	-	-	3/26→	-
FOX	A	2/13→	-	3/24(4)	1/22-3/31	A-3/21(23)	2/16-3/15(3)→	-	R	3/26	3/9-31
SWAMP	A	A	-	3/2→	-	R	R	-	R	2/17→	-
WHITE-THROATED	A	A	A	A	A	A	A	R	A	A	A-3/6(13)
WHITE-CROWNED	A	1/10	-	A	-	A	-	-	A	-	-
JUNCO, DARK-EYED	-	-	-	-	-	-	-	-	-	-	-
LONGSPUR, LAPLAND	-	-	A-1/12(21)	A	A-2/28(26+)	A	A	R(40)	A	A	-
BUNTING, SNOW	-	1/10(4)	1/9-11(50)-12	1/19(200)	-	1/17(9)-3/23	-	-	1/16	-	3/9
BLACKBIRD, RED-WINGED	A	A-3/6(40)	A-2/18(40)	2/16(40)	-	1/17(830)-2/8	A-1/13(5)	-	1/16-17(30+)	1/10-14(15)	1/15-3/9(3)
MEADOWLARK, EASTERN	A	2/25(4)→	1/19(12)	3/28	3/1-4(51)→	A	2/16→	2/28-3/19(450)→	R	1/7→	3/7→
BLACKBIRD, RUSTY	3/4-26(25)→	-	-	-	3/4	1/17(4)→	-	3/28→	R	3/17(4)→	-
GRACKLE, COMMON	A	1/16→	2/18(10)→	2/16	3/9	3/26	-	-	1/15-3/26	3/26(18)-27	1/14→
COWBIRD, BROWN-HEADED	3/16→	2/13→	2/1(6)	2/16	3/9→	A-1/24(100)	3/6→	2/27-3/19(150)→	R	2/15→	A
FINCH, PURPLE	A	3/24→	A-1/11(4)	1/12→	1/18(4)→	R-3/6(6)	1/3→	3/28→	R	3/12→	3/30(5)→
GROSBEAK, EVENING	-	-	-	-	-	-	A(4)	-	R	3/7→	3/19→
									3/30		

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	CARBON	CHESTER	CLARION	CLINTON	COLUMBIA	CRAWFORD	CUMBERLAND	DAUPHIN	DELAWARE	ERIE
LOON, COMMON	-	1/2	-	-	-	-	P	-	3/31	P
GREBE, PIED-BILLED	→3/6(4)	1/2-30(3)	-	2/7-3/5	-	R-3/21(3)	3/25	3/24→	A-1/1(4)	A
HORNED	1/17	1/30	-	2/1-3	-	1/16-3/28(4)	3/17→	1/28-2/8(6)→	A	P
CORMORANT, DOUBLE-CRESTED	-	-	-	-	-	-	3/29→	3/24→	A	P
HERON, GREAT BLUE	A	-	-	R-1/2(3)	R	R-3/25(4)	A	R	R	R
EGRET, GREAT	-	-	-	-	-	-	3/20→	3/21→	A	3/24
VULTURE, BLACK	-	R	-	-	-	-	R	R	R-1/12(56)	3/28
TURKEY	R	R	3/13→	-	2/5(4)→	3/28(7)→	R	R	R	2/14→
GOOSE, GR. WHITE-FRONTED	1/23	1/11-17	-	-	-	2/7	-	-	-	-
CANADA	3/20(20)	1/9(100)-3/3	R	R-3/10(400)	3/2	2/21	-	3/13(250±)	1/11-3/24(2000)	-
SWAN, MUTE	-	R	R	-	-	3/28(3)	R	R	R	R
TUNDRA	→1/17(7)	2/6(17)-3/3	1/30	3/15(60)	-	1/23-3/20(600)	3/19(100±)→	1/20-3/20(1400±)→	→1/13(12)-3/6	-
DUCK, WOOD	3/6→	-	2/28→	→1/2-3/9→	R-3/4(17)	A-3/27(95)	A	A	3/2→	MAR→
GADWALL	3/6	2/6(6)	2/6	-	-	2/7-3/20(60)	A	A-2/18(60±)	1/20-30	A
WIGEON, AMERICAN	-	2/6(20)-20	-	A-1/2(19)	-	2/14-3/20(475)	A	1/30→	1/30-3/2	P
DUCK, AMERICAN BLACK	P	P	-	A-1/2(80)	R-1/29(10)	1/16-3/26(200)	A	R-3/20(400±)	R	A
MALLARD	R	R	R	R-1/2(513)	R	1/16-17(800)	P	R	R	A
TEAL, BLUE-WINGED	-	-	-	-	-	3/20-28(3)	3/25→	3/17(4)→	-	-
SHOVELER, NORTHERN	-	2/6	-	-	-	2/14-3/25(22)	P	1/23	A-1/3(8)	-
PINTAIL, NORTHERN	3/6(5)	-	3/13→	1/2-3/3(12)-15	2/18(4)-3/1	2/20-3/30(60)	P	1/16-3/20(250±)→	A-3/29(20)	P
TEAL, GREEN-WINGED	1/30-3/6(8)	-	2/16	2/1-3/9	3/5(3)	1/23-3/26(30)	3/25(8)→	1/28(6)→	A-3/29(65)	3/30→
CANVASBACK	1/28	1/17-3/8	-	3/9-15	1/20(3)	1/16-3/27(25)	-	1/16(20)-2/26	1/30	A
REDHEAD	1/8-3(4)	1/17-3/8(3)	-	2/3	1/20(10)	1/16-2/14(180)	3/25	1/5-2/8(65)-3/24	1/3	A
DUCK, RING-NECKED	→3/27(500±)	→3/6	3/13→	3/5-30(35)	1/20-3/14(30)→	2/7-3/20(2100)	3/27→	3/2-1/9(65±)→	→3/2(25)	A
SCAUP, GREATER	?1/17	-	1/30→	-	-	2/21-3/20(6)	-	1/27→	-	A
LESSER	→1/30(12)	-	-	3/17(4)	1/20(5)	1/30-3/20(446)	P	1/28→	-	A
SCOTER, WHITE-WINGED	1/28	-	-	-	-	3/20	-	1/28	-	1/23-2/11
OLDSQUAW	-	-	-	-	-	-	-	2/9-3/24(20)→	-	1/1(12)
BUFFLEHEAD	-	→2/20	3/18→	1/2(10)-3/30	-	1/23-3/20(115)-27	A	A	A-1/3(6)	A
GOLDENEYE, COMMON	-	1/9-3/8	1/30-2/28	A-2/19(30)	-	1/16-3/20(155)-27	A	A	1/3-28	A
MERGANSER, HOODED	→1/8(45)	1/2-3/3(6)	2/28	3/15-2/1(6)-22	3/5→	1/16-3/28(83)	A	A	→1/3(12)-3/29	P
COMMON	-	→3/6	-	R-2/11(10)	R-3/25(23)	1/16-2/20(200)	A	1/28→	A-1/3(264)	A
RED-BREASTED	2/21	1/17-3/8	-	-	-	2/20-3/20(350)	-	-	-	A
DUCK, RUDDY	-	1/2-3/6	-	-	-	1/16-3/27(14)	3/25	-	A-1/3(78)	P
OSPREY	-	-	-	-	-	3/30	3/25→	-	-	-
EAGLE, BALD	3/6(4)	3/6	1/26-30(9)	3/13	-	R-1/23(4)	P	R	1/7-3/13	P
HARRIER, NORTHERN	A	1/15-3/6	R	A	R	1/5-3/27	A	2/3→	A	P
HAWK, SHARP-SHINNED	A	R	R	R	R	3/13-27	R	R	A	R
COOPER'S	A	R	R	R	R	3/19-28	R	R	R	R
GOSHAWK, NORTHERN	2/27	-	-	R	FEB	-	-	-	-	-
HAWK, RED-SHOULDERED	3/13	-	1/30→	3/13→	3/27	1/16-3/27	-	R	A	3/17(6)→
RED-TAILED	R	R	1/12-30	R	R	R-2/21(9)	R	R	R	R
ROUGH-LEGGED	3/23	-	-	→2/14	1/4-3/7(4)	1/16-3/14	1/17	3/10	-	P
EAGLE, GOLDEN	-	-	-	-	3/19	3/19	P	-	-	-
KESTREL, AMERICAN	R	R	R	R	R	3/14(9)	R	R	R	R
MERLIN	-	-	1/26	-	-	-	A	1/16-2/1	A	-
FALCON, PEREGRINE	-	-	-	-	-	3/20-29	-	R	R	1/2-2/7
BOBWHITE, NORTHERN	-	R	-	-	-	-	-	-	-	-
COOT, AMERICAN	→2/13(30)	→3/8(275)	1/17	1/9-3/9	1/20(12)	1/16-3/21(403)	A	A-1/19(100±)	A-1/3(52)	A
KILLDEER	2/16→	R	2/28-3/17(11)→	A	P	2/10-3/28(14)	A	A	R	3/17→
YELLOWLEGS, GREATER	-	-	-	-	-	3/28	-	3/30→	3/29→	3/31→
LESSER	-	-	-	3/30	-	-	3/25→	-	-	-
SANDPIPER, PECTORAL	-	-	-	-	-	3/28(5)	-	-	-	-
SNIFE, COMMON	3/27(6)	→2/27	-	3/29	-	3/28(10)	A-3/25(27)	3/31→	3/29(6)→	-
WOODCOCK, AMERICAN	3/8(3)→	3/24→	-	3/3(3)→	-	3/18	P	3/11→	3/27→	MAR→
GULL, BONAPARTES	-	1/11(17)	2/24	3/23	-	3/28(40)	-	3/24→	-	A

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	CARBON	CHESTER	CLARION	CLINTON	COLUMBIA	CRAWFORD	CUMBERLAND	DAUPHIN	DELAWARE	ERIE
RING-BILLED	A	A	-	1/2-3/17(80)-23	1/29(18)→	1/2-2/14(250)	A	A	A	A
HERRING	A	-	-	-	-	2/6-3/20(25)-27	A	A	A	A
LESSER BLACK-BACKED	-	-	-	-	-	-	-	1/5	-	A-3/19(4)
GREAT BLACK-BACKED	-	-	-	-	-	-	A	A	A	A
OWL, BARN	-	-	-	-	R	-	R	R	-	-
BARRED	R	R	R	R	R	R	R	R	R	R
LONG-EARED	-	2/20(12)-3/6	-	-	-	-	A	A	-	-
SHORT-EARED	-	2/20-3/6	→1/7(4)-2/16	-	1/28-3/8(10)→	-	-	-	-	3/31(11+)
NORTHERN SAW-WHET	-	-	-	3/9	2/20	-	-	3/19-29	-	-
WOODPECKER, RED-HEADED	-	1/1	-	-	-	-	R	-	-	-
SAPSUCKER, YELLOW-BELLIED	-	-	1/6	R	-	3/30	A	A	A	-
Flicker, Northern	R	R	R	R-1/31(4)	R	-	A	R	R	P
PHOEBE, EASTERN	3/21→	-	-	-	3/24→	3/28	3/15→	3/18→	3/24-31(3)→	3/23→
SHRIKE, NORTHERN	1/23	-	→2/16(2)-28	-	2/2	1/17-3/30	-	-	-	→3/16
CROW, FISH	3/3→	-	-	-	R	-	R	R	R	-
RAVEN, COMMON	-	R	R	R	R	-	R	R	R	-
LARK, HORNED	-	-	1/10-16(300)-2/28	→3/5(10)	R	1/22-2/14(35)	A	A-2/7(1000±)	-	P
MARTIN, PURPLE	-	-	-	-	-	3/31	-	-	-	-
SWALLOW, TREE	3/21→	3/3→	-	3/26→	3/25(6)→	3/19(125)	3/15→	3/8→	3/4→	-
CHICKADEE, CAROLINA	-	R	-	-	-	-	R	R	R	-
BLACK-CAPPED	R	-	-	R	R	R	R	R	R	-
NUTHATCH, RED-BREASTED	-	-	R	A	P	A	A	2/15	→3/29	-
CREEPER, BROWN	3/27	P	R	A	A	-	A	R	A	P
WREN, WINTER	-	-	-	1/2	A	-	A	R	A	MAR→
KINGLET, GOLDEN-CROWNED	-	A	-	R-1/2(16)	A	3/14	A	A	A-3/31(5)	P
RUBY-CROWNED	-	-	-	2/14	A	-	A	A	A	-
THRUSH, HERMIT	-	-	-	-	-	-	A	A	A	MAR→
ROBIN, AMERICAN	R	R	R	A-1/2(105)	R-2/6(150)	A-3/20(63)	R	R	R	R
CATBIRD, GRAY	-	-	-	-	-	1/1	A	→1/25	A	2/20→
THRASHER, BROWN	-	-	-	→1/18	-	3/28	A	-	-	-
PIBIT, AMERICAN	1/24	-	-	-	3/25(60)	-	3/15(75)→	-	-	P
WARBLER, YELLOW-RUMPED	-	-	-	A-1/31(3)	A-2/2(3)	-	A	A	1/14-2/16	A
PINE	-	-	-	-	-	-	3/15→	3/29→	3/17→	-
TOWHEE, EASTERN	-	R	-	-	-	3/27	A	A	R	P
SPARROW, AMERICAN TREE	-	1/1	A	→1/2(49)-3/30	A	-	A	A	A-3/13(11)	A
CHIPPING	-	-	-	-	-	-	2/27E(3)→	3/20→	3/26→	-
FIELD	-	R	-	-	-	-	A	-	R	-
VESPER	-	-	-	-	-	3/21	-	-	-	-
SAVANNAH	-	-	-	-	-	-	-	-	3/31	-
FOX	2/13	-	3/24	→3/7	3/7-27	3/13-28	3/5-25(3)	A	A-3/23(4)	-
SWAMP	-	-	-	R	A	3/21	A	A	R	MAR→
WHITE-THROATED	-	A	-	A-1/2(17)	A	-	A	A	A	P
WHITE-CROWNED	-	1/1(5)	-	1/2	-	-	A	A	-	P
JUNCO, DARK-EYED	-	A	R	R-1/2(219)	A	-	A-3/25(200+)	A	A	A
LONGSPUR, LAPLAND	-	1/17	1/10-15(15)-26	-	-	-	-	-	-	-
BUNTING, SNOW	-	1/17(5)	→1/19(200)-26	-	1/2	1/8(35)-3/8	-	-	-	P
BLACKBIRD, RED-WINGED	1/18	A	2/24(225)→	A-3/4(10)	A	1/24-3/19(300)	2/15(4)→	A-3/15(150±)	R	P
MEADOWLARK, EASTERN	3/21→	-	-	-	A	3/28(4)	3/15→	3/6→	-	P
BLACKBIRD, RUSTY	-	-	3/4	-	-	2/28	-	-	-	-
GRACKLE, COMMON	2/13(90)→	R	2/24(25)→	-	-	1/24	2/15→	2/18→	R	P
COWBIRD, BROWN-HEADED	3/21→	R	2/24(20)→	1/2(20)	R	1/19	-	R-2/7(200±)	R	P
FINCH, PURPLE	3/26	-	1/10(4)→	→3/4	A	-	2/15(3)	-	2/6-17	-
SISKIN, PINE	-	-	1/16-2/5(27)-7	-	-	-	-	-	-	-
GROSBEAK, EVENING	-	-	-	-	-	1/17	-	-	-	-

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	FAYETTE	FOREST	FRANKLIN	FULTON	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA	LANCASTER	LAWRENCE	LEBANON
LOON, COMMON	3/20	-	-	3/24→	-	3/20-25(10)→	-	-	-	1/25(3)	3/23→
GREBE, PIED-BILLED	3/20-26(6)→	3/19→	3/24→	3/21(4)→	3/28→	A-3/30(23)	3/13	-	A	3/7-31	A
HORNED	1/17-3/20(3)→	3/26→	3/24→	3/28(5)→	3/31→	3/7-30(12)→	-	1/18	→2/6	1/16-17	3/14→
HERON, GREAT BLUE	R	-	R	A	R	A-3/28(10)	3/27→	A	R-2/6(21)	R-3/5(5)	R
VULTURE, BLACK	-	-	3/17(7)→	R	R	-	-	A	R	-	R
TURKEY	3/20→	3/20-28(31)→	R	3/28(15)→	R	2/11-22(3)→	-	A	R	P	R
GOOSE, GR. WHITE-FRONTED	-	-	-	-	-	3/21(31)	-	-	A-3/6(40000)	-	2/20
SNOW	-	-	1/11	-	-	R-3/13(789)	R	1/22	R-2/20(25000)	-	A-3/14(40,000)
CANADA	R	2/19-20(40)→	R	R-2/6(48)	R	2/6→	-	2/14→	-	R	R-3/14(25,000)
SWAN, MUTE	3/26→	-	-	-	-	1/4-3/20(411)-25	P	1/3(50+)	→2/20(2000)-3/20	3/6-7(39)-17	A-3/27(400)
TUNDRA	3/26-31(6)→	3/24→	1/6(14)-3/24	3/21(87)→	P	3/8-23(75)→	3/26→	2/6(6)→	2/20→	3/5-17(40+)	A-3/21(5000)
DUCK, WOOD	-	-	R	-	3/7→	3/8-18(6)→	-	P	1/31(25)	3/7-31	2/2E-3/6(7)→
GADWALL	-	-	2/13→	-	-	2/6-3/23(52)→	3/25(10)-26	P	1/31(4)-3/20	2/23-3/7(9)-25	A
WIGEON, AMERICAN	3/20(6)	-	3/17(5)-25	-	3/7→	2/6-3/18(95)-30	R	A	1/31(200)	1/10-3/7(5)	R-1/10(125H)
DUCK, AMERICAN BLACK	3/31	-	1/19→	R	A	3/20→	R	A	R	R	R-2/23(2340H)
MALLARD	R	3/21-28(5)→	R	R-2/6(65)	R	3/20→	-	P	-	3/7(4)	-
TEAL, BLUE-WINGED	3/31→	-	-	-	3/31→	3/7-30(6)	-	-	→1/10(175)-3/6	→3/25(12)	1/10(75H)→
SHOVELER, NORTHERN	-	-	1/16→	-	3/31	2/6-3/8(35)→	-	3/28(15)	→3/6(70)	3/5-13(209)-21	1/10E-2/20(18)→
PINTAIL, NORTHERN	-	-	A	-	3/7-18	1/23,3/28(32)→	-	P	A-1/31(4)	3/8-25(68)	2/20(3)→
TEAL, GREEN-WINGED	3/25→	-	1/29-2/6	3/31	3/18→	3/8-20	-	-	-	-	3/21-27
CANVASBACK	3/20(3)	-	-	3/31	3/18	1/30(35)-31	-	-	-	-	1/25E
REDHEAD	3/20(20)	-	-	-	1/30(35)-31	1/20-3/7(36)→	-	-	-	3/7(12)-8	1/25E
DUCK, RING-NECKED	3/20(22)	3/21(5)→	3/16-28(12)	3/13-31(81)→	A	1/7-3/23(319)→	3/28→	P	A-1/10(10)	3/5-6(635)-31	2/20-3/14(15)→
SCAUP, GREATER	-	-	-	3/28	-	2/10-3/30(169)→	-	P	1/10	3/7	1/25E-2/19
LESSER	3/20(14)→	3/19	1/24(6)→	3/28(7)→	P	2/16-3/30(194)→	3/18→	P	A	P	3/14
OLDSQUAW	-	-	1/24(6)→	3/24	-	3/31	-	-	-	3/8	-
BUFFLEHEAD	3/20(21)→	3/26→	3/15(3)→	3/28→	A	2/10-3/30(71)→	3/18→	1/16(4)→	→3/6(4)	1/16-3/17	3/14-21(4)→
GOLDENEYE, COMMON	3/20	-	3/15(3)→	-	-	1/16(5)-3/27	3/27(3)	2/6(6)→	→3/20	-	1/24-2/19(4)
MERGANSER, HOODED	3/26(6)→	3/21(5)→	3/24(4)→	3/21-28(10)→	3/19→	2/6-3/20(139)→	3/15→	P	1/31(4)→	3/5-6(17)	3/19-2/13(6)→
COMMON	-	2/10-3/19(50)→	-	→3/22	→3/22	2/13-3/23	3/18(19)→	-	A-2/6(5000H)	-	3/14(13500)-21
RED-BREADED	3/20→	3/26(3)→	3/21(9)→	3/21-28(6)→	3/13→	2/13-3/30(162)→	-	P	3/20	3/6	-
DUCK, RUDDY	1/17(3)→	-	-	-	-	2/16-3/7(17)→	-	-	→1/31(31)-3/6	-	2/13→
EAGLE, BALD	-	2/5-20(2)→	-	-	P	1/14-3/11	-	3/7-12	R	3/7	A
HARRIER, NORTHERN	-	-	3/10	-	-	A	R	P	→3/6	1/16-17(3)	A
HAWK, SHARP-SHINNED	R	3/22→	R	R	R	A	R	R	R	R	R
COOPER'S	R	-	R	R	R	A	R	R	R	R	R
GOSHAWK, NORTHERN	-	-	-	-	R	1/11	-	-	-	-	R
HAWK, RED-SHOULDERED	R	-	-	-	R	-	3/27→	1/31→	-	2/28(3)	R
RED-TAILED	R	3/26→	R	R	R	R	R	R	-	-	R
ROUGH-LEGGED	-	-	3/10	-	→2/27	1/23-26(3)	1/30	1/10→	1/6-MAR	3/8	-
EAGLE, GOLDEN	-	-	-	-	2/18→	-	-	-	-	-	3/14
KESTREL, AMERICAN	R	-	R	R	R	R	R	-	-	-	-
MERLIN	-	-	-	-	3/26	-	-	-	-	-	-
COOT, AMERICAN	-	-	3/27→	-	P	1/20-3/30(545)→	-	-	2/3	-	A
KILLDEER	3/26(4)→	3/21(4)→	1/13→	3/21→	P	2/12→	3/18→	A	R	3/5-6(5)→	R
YELLOWLEGS, GREATER	3/26→	-	-	-	-	-	-	3/21→	-	-	-
LESSER	-	-	-	3/31→	-	-	-	-	-	-	-
SNIPES, COMMON	-	-	1/11→	3/31(3)	3/31(3)	-	-	1/10(4)→	A-3/20(29H)	1/10(4)	-
WOODCOCK, AMERICAN	-	3/31(6)→	-	3/6→	3/6→	3/10→	3/26(3)→	2/12→	2/20→	-	2/10E-3/20(26H)→
GULL, BONAPARTIS	-	3/26(3)→	-	1/1(23)	1/1(23)	1/16	P	-	-	1/16-17	-
RING-BILLED	3/20→	-	3/17(15)→	2/12(85)	a	1/16-3/17(200)→	-	A	A	1/10-3/7(85)-17	A
HERRING	-	3/26	-	-	-	-	P	A	A	1/10(4)-3/25	A-2/13(800)
LESSER BLACK-BACKED	-	-	-	-	-	-	-	-	-	-	1/1
GREAT BLACK-BACKED	-	-	-	-	-	-	-	-	-	-	→3/20L
OWL, BARN	-	-	-	-	-	-	-	-	-	-	-
BARRED	R	R	-	R	R	R	R	R	R	R	R
LONG-EARED	-	-	-	-	-	-	-	A-3/13(6)	-	-	-

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	FAYETTE	FOREST	FRANKLIN	FULTON	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA	LANCASTER	LAWRENCE	LEBANON
SHORT-EARED WOODPECKER, RED-HEADED	-	-	-	-	-	-	P	-	1/6-MAR	-	-
SAPSUCKER, YELLOW-BELLIED	3/31	-	R	2/6→	3/28	-	R	2/21	R	-	R
Flicker, Northern	A	2/28→	R	R	-	A	P	R	R	R	R
PHOEBE, EASTERN	3/31(4)→	3/30→	-	3/21→	3/21→	3/21-30(5)→	3/27→	P	A	3/21→	3/21→
SHRIKE, NORTHERN	-	-	→1/7	-	P	-	-	1/31-3/2	FEB-MAR	-	-
CROW, FISH	-	-	-	-	P	2/15	-	-	R	-	R
RAVEN, COMMON	-	R	R	R	R	R	R	R	-	-	R
LARK, HORNED	1/17(7)	-	R-1/16(300+)	R	→2/27	A-1/9(250)	R	R	A	R-1/10(900)	R
MARTIN, PURPLE	-	-	3/28→	-	-	-	-	3/26→	-	-	-
SWALLOW, TREE	3/20→	-	R	3/28→	3/20→	3/20→	-	3/16→	3/20→	P	3/21→
CHICKADEE, CAROLINA	R	-	R	-	-	2/4-10	-	-	R	-	R
BLACK-CAPPED	R	R	R	R	R	R-3/18(27)	R	R	R	R	R
NUTHATCH, RED-BREADED	-	3/28→	-	-	R	A	A-1/30(3)	-	A	A	-
CREEPER, BROWN	-	2/9→	-	R	R	A	R	-	A	A	-
WREN, WINTER	-	-	-	3/31→	P	→1/13	A	A	A	A	R
KINGLET, GOLDEN-CROWNED	1/17(4)→	3/20(3)→	-	-	A	A-2/28(12)	A	A-1/15(4)	-	A	R
RUBY-CROWNED	-	-	-	-	-	-	-	-	-	P	-
THRUSH, HERMIT	-	-	-	-	R	-	A	A	-	1/16-17	-
ROBIN, AMERICAN	3/20→	2/20(20)→	R	R-3/21(55)	R	R-3/19(100+)	R	A	R	R-3/15(200+)	R
CATBIRD, GRAY	-	-	-	-	A	-	-	-	A	-	3/13→
THRASHER, BROWN	1/3-5	-	-	-	-	-	-	-	-	-	-
PIPIT, AMERICAN	-	-	3/10(5)→	-	-	-	-	A-1/17(20+)	-	-	3/22(40)
WARBLER, YELLOW-RUMPED	-	3/28→	-	-	-	A-3/26(4)	-	A	A	-	-
PINE	-	-	-	3/31(4)→	3/23→	→3/4, 3/22→	-	-	-	-	3/20→
TOWHEE, EASTERN	3/31→	-	P	1/6	-	A	-	A	A	-	R
SPARROW, AMERICAN TREE	A-3/26(5)	A-3/26(6)	A-1/7(31)	→3/31(3)	-	A-3/5(21)	→1/30(21)	A	A-1/10(75)	→3/6(50)	→3/21(50H)-27
CHIPPING	-	-	-	3/31→	3/20→	-	-	-	-	-	-
FIELD	3/31→	-	-	R	R	2/5-3/26(6)→	-	A	R	-	R
VESPER	-	-	-	-	-	-	-	-	R	-	3/21→
SAVANNAH	-	-	-	-	-	-	-	-	R	-	R
FOX	3/31	-	3/4-14	-	A	2/13→	-	3/28(15)→	-	P	A-3/6(4)
SWAMP	-	-	-	-	-	-	-	-	R	-	R
WHITE-THROATED	-	A	A	A	-	A-2/7(5)	A	A	A	A	A
WHITE-CROWNED	-	A	A	A	A	-	R	A	A	A	A
JUNCO, DARK-EYED	-	A-3/25(52)	A-3/14(51)	A	R	A-2/13(111)	R	A	A	A	R
LONGSPUR, LAPLAND	-	-	1/16-3/11(4)-16	-	-	1/31	1/14-2/8	-	→1/13	-	-
BUNTING, SNOW	3/20→	1/16(15)-3/11	3/4(3)→	3/13→	2/20(50)→	1/7-10(175)-31	1/17(6)	1/17(6)	→1/1(60)	1/10-16(500+)-17	-
BLACKBIRD, RED-WINGED	3/20→	2/25-3/12(60)→	3/13→	3/13→	3/6→	A-3/2(450)	3/2-18(100)→	2/6(6)→	A	A	R-3/19(20,000)
MEADOWLARK, EASTERN	3/20→	-	1/11-3/10(3)→	R	3/22→	3/6→	3/26(4)→	A	A	1/16-17	R
BLACKBIRD, RUSTY	3/4	3/4	2/5→	3/13(6)→	1/17(10)→	1/8→	3/2(7)-18	P	R	-	3/29(4)
GRACKLE, COMMON	3/26(4)→	3/5-2/22(24)→	2/5→	2/21→	2/21→	A-1/12(40)	3/18(35)→	P	R	3/5	R-3/14(250,000)
COWBIRD, BROWN-HEADED	-	3/1-24(8)→	1/9-13(13)→	-	-	1/19-2/12(4)→	3/18(15)→	P	R	P	R
FINCH, PURPLE	-	R	-	2/6→	→3/19	A-3/21(7)	R	A	-	-	-
SISKIN, PINE	-	-	-	-	1/1-2/6	-	-	-	-	-	-

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	LEHIGH	LUZERNE	LYCOMING	MERCER	MIFFLIN	MONROE	MONTGOMERY	MONTOUR	PERRY	PHILADELPHIA
LOON, COMMON	-	A	-	3/19-26(5)→	-	-	-	-	-	-
GREBE, PIED-BILLED	3/7	A	-	3/20-29	-	-	-	3/8→	-	-
HORNED	1/13	A	-	3/19-20(7)→	-	-	-	-	-	→1/9(3) 1/9→
CORMORANT, DOUBLE-CRESTED	-	3/26E→	-	3/27→	-	-	-	-	3/29→	A-1/9(27)
HERON, GREAT BLUE	1/28	R	-	A	R	A	A-1/9(8)	R	A	R-1/9(23)
EGRET, GREAT	-	3/16E	-	-	-	-	-	-	-	→1/9
VULTURE, BLACK	-	-	-	-	P	-	R-1/19(5)	-	3/15→	-
TURKEY	MAR→	2/3E→	-	3/14→	3/20(10)→	2/16→	R-1/27(5)	3/19→	2/19(20)→	R
GOOSE, GR. WHITE-FRONTED	-	P	-	-	-	-	→3/16	-	-	-
SNOW	2/10-3/7(3000)	-	-	-	-	-	→3/31(400+)	1/10-3/13(1600)	-	3/31(100)
CANADA	A-2/19(4000)	R-1/2(2408)	R	R	R-3/21(128+)	R	R	R-3/13(1500)	R	R
SWAN, MUTE	-	P	-	-	-	-	-	3/26	-	R
TUNDRA	-	1/17→	3/20(150+)-24	→3/10(75+)-28	1/1(8)	-	1/16-3/18(37)→	2/12-3/18(350)	-	3/31
DUCK, WOOD	-	R	-	3/12(5)→	R-3/24(6)	3/27→	2/26(16)→	3/19→	A	A-1/9(11)
GADWALL	-	A	-	3/14(35)→	-	-	A-3/8(19)	-	-	A-1/9(5)
WIGEON, AMERICAN	-	A	-	3/2-28(20)→	A-3/24(5)	-	1/20-3/20(7)	3/3-26(12)→	-	1/9(9)
DUCK, AMERICAN BLACK	-	R-1/2(170)	-	A	R	P	A-1/20(150+)	A-3/26(22)	A	A-1/9(31)
MALLARD	R	R	R	-	R	R	R	R	A	R-1/9(117)
TEAL, BLUE-WINGED	-	-	-	3/26→	-	-	-	-	-	-
SHOVELER, NORTHERN	1/2	-	-	3/28→	-	-	1/3→	-	-	A-1/9(16)
PINTAIL, NORTHERN	2/28	A	-	→3/14(14)	-	-	→3/16(114)-21	2/9-3/13(160)	-	-
TEAL, GREEN-WINGED	-	A	-	3/28→	-	-	A-3/31(100+)	3/19	3/15	-
CANVASBACK	-	A	-	-	-	-	1/17-3/6	-	-	1/9(90)
REDHEAD	-	A	-	3/19-20(75+)-22	3/8-24(74)	-	-	-	-	-
DUCK, RING-NECKED	3/7(50)	A	-	→1/6,3/28(50)→	3/8-24(18)	-	1/16-3/5(66)→	3/9-13(53)→	3/15(17)→	-
SCAUP, GREATER	-	A	-	3/19-20(60)	-	-	-	3/19	-	-
LESSER	3/7	A	-	3/19-20(50+)-	-	-	1/11-24(9)→	3/19	-	-
SCOTER, WHITE-WINGED	-	-	-	3/26	-	-	-	-	-	-
OLDSQUAW	-	→1/1	-	3/26(4)	-	-	-	-	-	-
BUFFLEHEAD	2/4	A	-	→1/6,3/20(12)→	-	-	-	2/6-3/13(5)→	A	1/9(12)
GOLDENEYE, COMMON	-	A-1/2(25)	1/12(3)	3/20(5)	2/8-3/18(31)	P	1/6	-	A	1/9(13)
MERGANSER, HOODED	3/10	A	1/8(6)	A	1/26-2/18(21)	-	→1/30(27)-3/15	3/2-13(19)	A	1/9(6)
COMMON	2/10-3/10(5)	R	2/19(6)	3/20-27	-	R	1/24-2/6(330)→	2/16-3/17(77)→	A	1/9(57)
RED-BREASTED	-	P	1/8(4)-12	3/17-20(75+)-28	-	2/15	1/4-3/31(6)→	-	-	-
DUCK, RUDDY	-	A	-	→1/3,3/19→	-	-	1/2	-	3/15(5)	1/9(104)
OSPREY	-	-	3/3E→	-	-	-	3/25→	-	-	-
EAGLE, BALD	-	A	3/3	A	2/12	2/26	1/17	2/5	P	-
HARRIER, NORTHERN	-	R	1/11-3/16	A	A-MAR(7)	3/26	→3/18	1/10→	-	A-1/9(4)
HAWK, SHARP-SHINNED	-	R	R	R	R-MAR(8)	R	R	A	R	A-1/9(10)
COOPER'S	-	-	R	R	R	R	R	A	R	A-1/9(4)
GOSHAWK, NORTHERN	JAN	-	R	3/21(2)	MAR	R	-	-	-	-
HAWK, RED-SHOULDERED	-	-	R	R	MAR(4)	R	3/3→	-	-	-
RED-TAILED	R	R-1/2(36)	R	R	R-MAR(26)	R	-	R	R	R-1/9(32)
ROUGH-LEGGED	-	→3/17	-	1/14-3/17	-	-	-	-	-	→3/23
EAGLE, GOLDEN	-	-	1/7-11	-	MAR	-	-	-	-	-
KESTREL, AMERICAN	R	R	R	R	R	R	-	R	R	R-1/9(10)
MERLIN	-	-	-	3/20	-	-	-	-	-	A
FALCON, PEREGRINE	-	R	3/4	-	-	-	-	-	-	R
BOBWHITE, NORTHERN	-	P	-	-	-	-	-	-	-	-
COOT, AMERICAN	1/22(3)	A	-	3/12-26(40+)-29	-	-	→1/21(4)-3/20	3/9-13	3/15	A-1/9(20)
KILLDEER	3/25→	P	-	2/6→	R-3/24(3)	-	2/3→	2/12→	A	R-1/9(19)
SANDPIPER, PECTORAL	-	3/18(4)→	-	-	-	-	-	-	-	-
SNIPE, COMMON	-	3/7→	-	A	-	-	3/14→	-	A	1/9
WOODCOCK, AMERICAN	-	3/5→	-	3/3→	3/18-20(10)→	-	-	3/17(6)→	P	1/9(3)
GULL, BONAPARTE'S	-	-	-	3/24-26	-	-	-	-	-	1/9
RING-BILLED	2/28(1000)	A	-	A	-	P	A-1/24(2000)	A	A	A-1/9(3995)
HERRING	FEB	A	-	→16,3/17(100+)-20	-	P	A-1/24(500)	-	A	A-1/9(287)

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	LEHIGH	LUZERNE	LYCOMING	MERCER	MIFFLIN	MONROE	MONTGOMERY	MONTOUR	PERRY	PHILADELPHIA
LESSER BLACK-BACKED	-	-	-	-	-	-	1/16-3/28	-	-	1/9
GREAT BLACK-BACKED	-	1/16(3)→	-	-	-	-	1/17-24(8)-3/21	-	A	A-1/9(188)
OWL, BARN	-	-	R	-	-	-	-	3/26	-	R
BARRED	-	R	R	R	R	R	R	-	R	-
LONG-EARED	-	1/3-6	-	-	-	-	-	2/20(15)	A	-
SHORT-EARED	-	1/20(4)-24	-	1/5-30	-	-	3/21	-	A	-
NORTHERN SAW-WHET	-	R	-	-	2/15	-	-	-	A	-
WOODPECKER, RED-HEADED	-	A	-	2/10(3)	2/21	A	-	-	-	-
SAPSUCKER, YELLOW-BELLIED	-	-	-	3/31E→	-	R	→3/23	-	A	A
FLICKER, NORTHERN	R	R	-	R	2/25→	R	R	-	A	R-1/9(24)
PHOEBE, EASTERN	3/24→	A	3/18→	3/20→	2/22→	3/30→	3/18→	3/26→	3/15→	3/18→
SHRIKE, NORTHERN	-	→2/21	-	-	1/26	1/26	-	1/30	-	-
CROW, FISH	FEB→	R	-	-	-	-	-	2/1→	A	R
RAVEN, COMMON	2/4(100)	R	R	-	R	-	-	-	R	-
LARK, HORNED	-	-	A-1/8(100±)	A-1/17(500)	R-2/1(8)	-	2/8(125+)-3/15	A-1/10(50)	-	-
MARTIN, PURPLE	-	-	-	3/31→	-	-	-	-	-	-
SWALLOW, TREE	3/24→	3/18→	3/25→	3/21→	3/29→	3/24→	3/20→	3/20→	3/15→	3/15→
CHICKADEE, CAROLINA	-	-	-	-	-	-	R	-	R	R-1/9(292)
BLACK-CAPPED	R	R	R	R	R-2/21(15)	R	-	R	R	-
NUTHATCH, RED-BREADED	-	R	-	-	3/11	-	-	-	A	-
CREEPER, BROWN	-	R	R	A	2/25-3/31	R	→3/13	-	A	A-1/9(7)
WREN, WINTER	-	R	-	3/31	P	R	1/7	-	A	A-1/9(9)
KINGLET, GOLDEN-CROWNED	-	R	-	A	2/21(4)	A	→2/14(16)-3/5	→3/19	A	A-1/9(28)
RUBY-CROWNED	-	A	-	-	3/18(5)→	-	3/25→	-	A	1/9(6)
THRUSH, HERMIT	-	A	-	-	-	-	-	-	A	A
ROBIN, AMERICAN	R	R	R	A	R-3/29(100+)	R	R	R-2/1(10)	A	R-1/9(540)
CATBIRD, GRAY	-	-	-	-	-	-	-	-	-	1/9
THRASHER, BROWN	-	1/22L	-	-	-	-	-	-	-	1/9(3)
PIPIT, AMERICAN	-	3/7(7)→	-	3/20	1/19(18)	-	2/8(9)	-	-	-
WARBLER, YELLOW-RUMPED	1/4	A	-	-	-	-	A-2/24(11)	-	A	-
PINE	A	-	-	-	-	-	3/19(3)→	-	-	-
TOWHEE, EASTERN	-	-	-	3/31→	-	-	A	-	A	R
SPARROW, AMERICAN TREE	-	A	→3/5(73)	A-1/10(12)	A-2/20(19)	P	→1/2(20±)-2/8	A-3/14(20)	A	A-1/10(82)
CHIPPING	-	-	-	-	-	-	-	-	3/25→	-
FIELD	-	R	-	-	-	-	A	-	A	A-1/9(9)
SAVANNAH	-	-	-	3/29→	-	-	-	-	-	1/9
FOX	-	3/7(7)→	3/4-14	3/31(5)	-	3/25(3)	2/14-3/13	3/3→	3/25	A-1/9(3)
SWAMP	-	R	-	-	-	-	A-3/6(6)	-	A	R-1/9(27)
WHITE-THROATED	A	R	A-2/22(6)	1/18	A-2/21(12)	R	A-2/7(80±)	A-2/12(5)	A	A-1/9(937)
WHITE-CROWNED	-	→1/2(9)	-	→1/4	A-2/21(6)	-	A	A	A	-
JUNCO, DARK-EYED	A	R-1/2(1666H)	R-3/9(25+)	A	A-2/21(25)	R	A-1/8(50±)	A-1/15(25)	A	A-1/9(480)
LONGSPUR, LAPLAND	-	03/20	-	-	-	-	-	-	-	-
BUNTING, SNOW	-	P	1/8(100±)-13	1/9-17(625)-2/27	1/19(20+)	JAN	-	-	-	-
BLACKBIRD, RED-WINGED	3/3(4)→	A	1/9(6)	1/3→	2/22(125+)	FEB→	2/7→	2/19→	2/19→	R-1/9(245)
MEADOWLARK, EASTERN	-	2/3→	-	3/13→	3/26(4)→	-	1/16-2/21(17)→	-	3/15→	-
BLACKBIRD, RUSTY	-	-	-	1/8	-	-	-	-	-	A-1/9(7)
GRACKLE, COMMON	-	P	2/16(100±)→	2/17→	-	FEB→	2/1→	3/11→	2/22→	R-2/17(217)
COWBIRD, BROWN-HEADED	-	P	-	1/25	2/28(3)→	FEB→	3/2→	3/18→	-	A-1/9(35)
FINCH, PURPLE	-	R	3/4	3/22→	2/8→	R	1/6-8	-	A	-
SISKIN, PINE	-	-	JAN-3/26	-	1/29-2/10	-	-	-	3/25	-
GROSBEAK, EVENING	-	-	-	-	1/29(7)	-	-	-	-	-

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	PIKE	POTTER	SCHUYLKILL	SOMERSET	SULLIVAN	TIOGA	VENANGO	WESTMORELAND	WYOMING	YORK
LOON, COMMON	4/18	-	A	3/28	-	-	→1/6,3/25→	1/17→	3/29→	1/23→
GREBE, PIED-BILLED	A	-	2/10→	3/16	-	3/19→	→1/9,3/13→	P	-	A
HORNED	-	-	3/17→	3/28	-	1/17	→1/19	2/20-3/21(4)→	1/17	A
CORMORANT, DOUBLE-CRESTED	-	-	-	-	-	-	-	1/17	-	3/30→
HERON, GREAT BLUE	R	3/10→	A	→1/12	A	→1/17,3/20→	A	R	A	R
VULTURE, BLACK	-	-	A-1/29(8)	-	-	-	-	-	-	R
TURKEY	A	3/10→	A	3/8→	3/5-27(6)→	3/15→	2/4→	2/19(6)	3/18→	R
GOOSE, GR. WHITE-FRONTED	-	-	-	2/5-6	-	-	-	2/22	3/18→	3/8-20
SNOW	-	-	2/17→	3/5	3/28(3)	3/22(75)→	1/1-12	-	2/3	3/13
CANADA	R	R	R-1/1(1050)	R	R-3/3(2000+)	R	R	R	R-1/5(500)	R
SWAN, MUTE	-	-	A	-	-	-	-	R	2/21-25	R
TUNDRA	-	-	2/12-3/26	3/20(172)	-	3/17-19(35)→	1/8-3/28	2/8-3/22(105)→	1/7-17(13)-19	→3/22
DUCK, WOOD	3/31→	3/4→	R	3/3→	3/29→	3/19(25)→	→1/8,3/5→	3/18→	3/24→	3/6→
GADWALL	-	-	2/17	1/18-3/28	-	3/28(8)	1/5-16	1/18→	1/11-18(22H)-3/18	1/18→
WIGEON, AMERICAN	-	3/3	1/25(4)-3/16	2/19	3/31(4)→	3/17(4)→	-	2/28-3/20(7)→	3/18(7)-27	A
DUCK, AMERICAN BLACK	A	3/23	A	1/18-3/19(8)	3/27(6)→	A-2/27(12)	→3/19	A-2/28(62)	→3/25	R
MALLARD	R	A	R	A	3/18-27(8)→	R	R	R	R	R
TEAL, BLUE-WINGED	-	P	-	3/23	-	3/30(5)→	-	4/23→	-	3/31→
SHOVELER, NORTHERN	-	-	3/15-23	-	-	-	3/18	P	-	3/24(7)
PINTAIL, NORTHERN	-	-	2/11-3/16(17)	2/19-3/28	-	3/17-19(4)→	→1/5,3/19→	A-3/20(4)	→1/1,3/18(11)→	3/18→
TEAL, GREEN-WINGED	-	P	3/23(3)→	1/18-3/28(14)	-	3/19→	→1/7,3/28→	1/5→	→1/21,3/29(7)→	A-3/1(40)
CANVASBACK	-	-	1/24*	-	-	-	1/15-19	1/14(6)	-	3/22
REDHEAD	-	-	2/2-3/13(116)→	1/16(12)	-	-	→3/7	1/27-3/20(5)	1/18(3)	→3/22
DUCK, RING-NECKED	-	3/3	2/18-3/23(25)	2/17(12)	3/18-27(65)→	3/24→	3/25→	A-2/14(15)	3/8-9(76)→	2/27→
SCAUP, GREATER	-	-	2/17-3/11	2/14-3/28(4)	-	-	→1/9,3/13→	3/18(45)→	3/15(5)-24	1/31
LESSER	-	-	1/24(11)→	-	-	3/31→	→2/14,3/27→	1/1-3/24(60)→	-	3/14-24(18)
SCOTER, WHITE-WINGED	-	-	-	-	-	-	1/17-19	-	-	-
OLDSQUAW	-	-	-	-	-	3/31	3/27	-	-	3/31(3)
BUFFLEHEAD	A	3/19	1/25-3/23	1/18-3/2(28)	3/10→	3/28→	A	1/3-3/20(9)→	→2/11,3/9→	3/15→
GOLDENEYE, COMMON	3/23	-	1/25(5)	1/18-2/19	-	-	→3/13	A	3/8	1/24
MERGANSER, HOODED	P	3/15→	3/3(7)→	1/18-2/11(31)-3/20	3/18-3/1(12)→	3/17-30(6)→	→1/7,3/28→	2/9-3/24(12)	3/3-14(20)→	→3/24
COMMON	R	3/10→	1/23→	-	2/18(3)→	R-3/20(300)	A	2/2-29(10)	R-3/14(78)	A
RED-BREASTED	-	-	3/26-29(3)-30	2/19	-	3/20(150)→	-	A	-	1/10→
DUCK, RUDDY	P	-	3/30→	1/18(4)	-	-	1/9-19	3/23→	-	-
OSPREY	3/23→	-	-	-	-	3/28→	-	1/3	-	3/15→
EAGLE, BALD	A	-	1/4-3/24	-	3/3	R	3/3→	2/17	A	A
HARRIER, NORTHERN	A	3/18→	A	2/19(3)	-	1/10	3/27→	P	A	1/29→
HAWK, SHARP-SHINNED	R	R	R	R	R	R	R	R	R	A
COOPER'S	R	R	R	R	R	1/13-3/19	-	R	R	A
GOSHAWK, NORTHERN	R	R	R	-	R	2/19	-	R	-	-
HAWK, RED-SHOULDERED	R	1/2	R	3/16→	-	-	3/10→	A	3/18-27(3)→	R
RED-TAILED	R	R	R	R	R	R	R	R	R	R
ROUGH-LEGGED	P	A	1/7-19(3)-3/19	1/16	-	-	→1/27	-	→3/20	-
EAGLE, GOLDEN	-	P	1/4-19	-	-	-	-	-	-	-
KESTREL, AMERICAN	R	R	R	R	R	3/20→	R	R	R	1/1-31
MERLIN	-	-	3/31	-	-	3/1-2	-	-	3/9	-
FALCON, PEREGRINE	2/15	-	R	-	-	-	-	-	-	R
BOBWHITE, NORTHERN	-	-	R	-	-	-	-	-	-	-
COOT, AMERICAN	-	-	1/23→	1/10-18(4)→	-	3/20→	→2/21	2/16→	→3/15	A
KILLDEER	-	3/11→	2/12(12)→	2/14-3/24(10)→	3/20→	3/31→	3/30→	A	3/4→	A
YELLOWLEGS, GREATER	-	-	-	-	-	-	3/21→	-	-	3/31
LESSER	-	-	-	3/23	-	-	-	-	-	3/31
SANDPIPER, PECTORAL	-	-	-	3/24(7)	-	-	-	-	-	3/31
SNIFE, COMMON	-	-	3/3	2/16-3/28(14)→	-	3/21	3/18→	3/17	-	3/31
WOODCOCK, AMERICAN	2/5-3/30(4)→	3/20→	2/26(3)→	3/30→	-	-	2/28→	P	3/25→	3/2(3)→
GULL, BONAPARTE'S	-	-	-	-	-	-	-	P	-	1/10-14,3/24→
RING-BILLED	A	3/3	A	2/7-28(31)→	-	2/7-3/20(500)	1/7→	1/25-3/20(31)	A-3/14(33)	A

SEASONAL OCCURRENCE TABLES - JANUARY THROUGH MARCH 1999

	PIKE	POTTER	SCHUYLKILL	SOMERSET	SULLIVAN	TIOGA	VENANGO	WESTMORELAND	WYOMING	YORK
HERRING	-	3/3	A	3/20	-	-	1/9	P	A-3/14(6)	A
GREAT BLACK-BACKED OWL, BARN	-	-	R	MAR	-	-	-	R	-	-
BARRED	R	R	R	R	R	R	R	R	R	R
LONG-EARED	-	-	R	-	-	-	1/10	-	-	-
SHORT-EARED	-	-	R	-	-	-	1/1(7)	-	-	-
NORTHERN SAW-WHET	P	-	R	2/5-3/24	-	-	3/21→	-	→1/15(5)-16	3/2→
WOODPECKER, RED-HEADED	A	1/15-29	3/24→	-	-	-	-	-	-	-
SAPSUCKER, YELLOW-BELLIED	R	3/20→	1/24→	A	-	-	-	A	3/31→	→3/6
FLICKER, NORTHERN	R	2/20→	R	3/17→	-	1/13→	A	R	R	R
PHOEBE, EASTERN	3/23→	3/30→	1/17→	3/25→	3/23→	3/22→	3/21→	3/16→	-	3/3→
SHRIKE, NORTHERN	-	-	-	-	-	2/7-3/7	1/30-3/11	-	-	-
CROW, FISH	-	-	3/13→	-	-	-	-	-	-	R
RAVEN, COMMON	R	R	R	-	R	R	R	R	R	R
LARK, HORNED	-	A	→1/12(100)-3/1	R-3/6(200+)	2/21(20)	-	1/7(35)→	A	R-1/9(200)	→3/15(350)
MARTIN, PURPLE	-	-	3/31→	-	-	-	-	-	-	-
SWALLOW, TREE	3/23(10)→	3/21→	3/18(3)→	3/28→	-	3/27→	3/20→	-	-	3/27→
CHICKADEE, CAROLINA	-	-	-	-	-	-	-	R	-	R
BLACK-CAPPED	R	R	R	R	R	R	R	R	R	R
NUTHATCH, RED-BREADED	R	R	R	-	R	-	1/17	P	R	-
CREEPER, BROWN	R-3/10(25+)	R	R	1/17	R	R	→2/19	R	R	A
WREN, WINTER	R	-	2/3→	-	-	-	→1/1,3/24→	R	A	A
KINGLET, GOLDEN-CROWNED	R	A	R	3/17	R	1/24-2/3	A	R	A	A
RUBY-CROWNED	A	-	1/13→	-	-	1/24	-	P	-	A
THRUSH, HERMIT	A	-	A	-	-	-	-	A	-	1/19
ROBIN, AMERICAN	R	R	R	A-2/16(25)	A	1/23(12)→	R	-	R-3/9(200)	R
THRASHER, BROWN	3/13→	-	-	-	-	-	-	-	-	-
PIPT, AMERICAN	-	-	3/26(200)-28	-	-	-	3/22→	P	-	1/9-3/16
WARBLER, YELLOW-RUMPED	P	-	A	-	-	-	3/27→	A	-	A
PINE	3/23→	-	3/27→	-	-	-	-	3/25→	-	-
TOWHEE, EASTERN	3/23→	-	A	3/19→	-	-	-	A	-	R
SPARROW, AMERICAN TREE	A	A	A	→2/7(35)	-	A-3/15(28)	A	A	A-3/9(32)	→3/28
CHIPPING	-	-	-	-	-	-	-	P	-	3/31→
FIELD	-	-	A	A	-	-	→1/3	A	-	R
VESPER	-	-	-	-	-	-	-	-	-	-
SAVANNAH	-	3/31→	-	-	-	-	-	P	-	3/31→
FOX	A-2/22(3)	3/1	1/7-3/23(11)→	3/6-23	1/12→	2/23-3/26	3/21	A	3/3-31	→3/24
SWAMP	R	-	1/17→	-	-	R	-	A	-	R
WHITE-THROATED	R-2/24(25)	-	A	A	R	-	A	A	A	A
WHITE-CROWNED	-	-	A	-	-	-	-	P	-	→3/15
JUNCO, DARK-EYED	R	R	A	A	R	R	1/17-2/13	R	R	A
LONGSPUR, LAPLAND	-	-	-	1/17	-	-	1/17-2/13	P	1/26	2/15(3)-3/7
BUNTING, SNOW	-	A	1/19-2/5(70)	1/17-3/17(10)	-	-	1/7(85)-3/10	P	1/19(400)-26	2/15(60)
BLACKBIRD, RED-WINGED	P	2/25→	1/17→	A-3/1(500+)	-	1/6(5)→	→1/21,2/19→	A	A	R
MEADOWLARK, EASTERN	-	-	3/11→	3/11→	2/2-3/3(500)→	3/22(7)→	→1/21,3/27→	P	3/24→	R
BLACKBIRD, RUSTY	-	1/17→	2/16-3/13	1/10-3/6	3/21(15)	1/14-3/4	-	A-1/23(20)	-	1/10-3/26
GRACKLE, COMMON	2/10-25(4000+)→	3/20→	A	A	A-2/7(100)	1/12,3/27→	→1/23,3/17→	A	3/3→	R
COWBIRD, BROWN-HEADED	-	P	2/23(12)→	A-1/17(40)	-	3/5→	→1/7,3/30→	A	-	R
FINCH, PURPLE	R-2/22(15)	1/30→	2/27	3/22	R	R	A	R	A	-
SISKIN, PINE	-	3/4	2/3-6	-	1/27-2/15(10)	1/9	-	P	1/18	-
GROSBEAK, EVENING	-	-	-	-	-	-	-	P	2/28(8)	-

COMPILERS AND OBSERVERS

ADAMS: Peter Robinson, PO Box 482, Hanover 17331 (717-632-8462) peterrobins@hotmail.com, Ed Bernot, Ken Gabler, Carl Garner, Dale Gearhart, Art Kennell, Jack & Nancy Locher, Bob Moul, Barry & Patti Myers, Rusty Ryan, Deb Siefken.

ALLEGHENY: Mike Fialkovich, 805 Beulah Rd, Pittsburgh 15235 (412-731-3581), mpfial@sgi.net, Tingle Barnes, Ken Behrens, Paul Brown, Ken Byerly, Bernie Conley, Walter Hammond, Deborah & Paul Hess, Joyce Hoffmann, Linda Huber, Sara Ibershof, Karen & Merle Jackson, Bill Judd, Margie Kern, Scott Kinzey, Mark McKellar, Carol & Fred McCullough, Shirley Mutz, Robert Protz, Dave Rieger, Dana & Walt Shaffer, Sam Sinderson, Jack & Sue Solomon, Jim Valimont.

ARMSTRONG: Margaret & Roger Higbee, RR 2 Box 166, Indiana 15701 (724-354-3493) bcoriole@twd.net, Scott Bastian, Ken Byerly, John Fedak, Chris Grainer, Shirley & Steve Graff, Penny & Richard Hughes, Mark McConaughy, Bill Reddinger, John Salvetti, Ed Slovensky, Nancy Smeltzer, Joe Valasek.

BEAVER: John Cruzan, 150 Sunview Dr, Beaver Falls 15010, jcruzan@geneva.edu, Phil Fatula, Bill Hintze, Scott Kinzey, Joel Mason, Pat Mason, Rick Mason, Shirley Mutz, Sara Stahl.

BEDFORD: Janet Shaffer, RR 6 Box 338, Bedford 15522 (814-356-3553), Dick Byers, Ron Kidd, Rosie McGinnett.

BERKS: Rudy Keller, 71 Lutz Rd, Boyertown 19512 (610-845-7310), Rich Bonnett, Rick Carpenter, Chuck Cravotta, Jim Eckert, Catherine Elwell, Jane & Huey Evangelista, Kerry Grim, Anna Kendall, Dean Kendall, Katrina Knight, Harold Lebo, Ken Lebo, Larry Lloyd, Mark Monroe & HMS staff, Pam Munroe, Rick Purcell, Peter Saenger, Harold & Joan Silagy, Matt Spence, Bill Uhrich, Matt Wlasniewski, Sue Wolfe, Doug Wood.

BLAIR: Charlie Hoyer, PO Box 32, Tyrone 16686, Marcia Bonta, Tom & Ruth Dubbs, Alice & Stan Kotala, Helena Kotala, Dave Kyler, Al & Beryl Sternagle.

BRADFORD: Bill Reid, 73 W. Ross St, Wilkes-Barre 18702 (717-570-2734), Dave & Melody Buck, Trudy Gerlach, Ronald Young.

BUCKS: Ken Kitson, 704 Headquarters Rd, Ottsville 18942 (610-847-2968), Ian Baldoch, Adrian Binns, George Carmichael, Carolyn Constable, Chuck Crunkleton, Devich Farbotnik, Steve Farbotnik, Ron French, Bob Friedermann, Roy Frock, Ray Hendrick, Mike Line, Dave Long, Mike Lyman, Barbara McGlaughin, Mercer, August & Judy Mirabella, Ken Reiker, D. Wilber, Tom Wurtenberger.

BUTLER: Paul Hess, 1412 Hawthorne St, Natrona Heights 15065 (724-226-2323) phess@salsgiver.com, Ken Behrens, Suzanne Butcher, Ruth Crawford, Dave Darney, Barb & George Dean, Mary Dean, John Fedak, Mike Fialkovich, Randi & Sarah Gerrish, Candy Gonzalez, Deborah Hess, Margaret Higbee, Joyce Hoffmann, Margie Kern, Scott Kinzey, Carroll Labarthe, Fred Lochner, Bob Machesney, Shirley McCarl, Dave Rieger, Mary Jane Seipler, Dana & Walt Shaffer, Sam Sinderson, Jack Solomon, Randy Stringer, Jim Valimont, Candy Vild, Linda Wagner, Gene Wilhelm, Mark Williams, Deb Yovanovich.

CAMBRIA: Gloria Lamer, 515 Laurel Run Rd, Penn Run 15765 (724-349-1159), Georgette Syster, 428 Laurel Run Rd, Penn Run 15765 (724-349-6293), Alice & David Beatty, Dave Brazil, Andrew Choby, Dave Gobert, Clayton Lamer, Margaret & Tony Mirilovich, Bill Rushin, John Salvetti.

CARBON: David Hawk, 521 Walnut St, Lehighton 18235 (610-377-2407), Ian Baldoch, Wes Beltz, Bob Frantz, Jeff Frantz, Steve Hawk, Jason Horn, Barry Reed, Ken Reiker, Rehrig family.

CAMERON:

CENTRE: Gene Zielinski, 1322 Old 220 Rd, Bellefonte 16823, birdeez@aol.com.

CHESTER: Barry Blust, 21 Rabbit Run Ln, Glenmoore

19343 (610-458-5616), Bill Barber, Paul Earley, Tony Fernandes, Beryl Hurlock, Phyllis Hurlock, John McNamara, Jim Russell, Grier Saunders, Ellie Wolf.

CLARION: Margaret Buckwalter, RR 2 Box 26, Shipperville 16254 (814-782-3925) mbuckwalter@usachoice.net, Ernie Aharra, Julie Amsler, Dave Darney, John Fedak, Walter Fye, Mike Leahy, Mark McConaughy, Elaine Neal, Lorna Vowinkel, Deb Yovanovich.

CLEARFIELD: Gene Zielinski, 1322 Old 220 Rd, Bellefonte 16823, birdeez@aol.com

CLINTON: Wayne Laubscher, RR 2 Box 153, Lock Haven 17745 (570-748-7511), Elizabeth Brobst, Mary Craig, Genevieve & Lynn Earon, Harry Henderson, Shonah Hunter, David Krempasky, Brenda Laubscher, Mike Philippe, Sam and David Rockey, David Rothrock, Vesta Schach, James Vanemon, Bill Walker, Beth Zbegner.

COLUMBIA: H. Scott Killam, RR 3 Box 65A, 5, Shickshinny 1865, Marilyn Gamble, Doug Gross, Karen Hiller, Jim Hoyson, Rick Koval, Joan Morgan, Autumn Pfeiffer, Mary Pratt, Michele Richards, Bob Sager.

CRAWFORD: Ronald F. Leberman, 11508 Pettis Rd, Meadville 16335 (814-724-5071), James Barker, Edward Byler, Marvin Byler, Owen Byler, Isaac Fields, Neal Troyer.

CUMBERLAND: Deuane Hoffman, 3406 Montour St, Harrisburg 17111 (717-564-7475) raven@paonline.com, Carl & Nancy juris, Ramsay Kourry, Dan Snell.

DAUPHIN: Richard Williams, 3 Parkside Ave, Hummelstown 17036 (717-566-6562), Jane Barnette, Scott Bills, Dan Bogar, Nancy Cladel, Tom Clauser, Joan & Jim Funck, Bunny Hottenstein, Nancy & Carl Juris, Ramsay Koury, Sandy & Gary Lockerman, Don Oyler, Grace Randolph, Joan Renninger, Scott Weidensaul, Pat Williams.

DELAWARE: Nick Pulcinella, 201 Elm Ave, Swarthmore 19081 (610-543-8360), npulcinella@aol.com, Skip Conant, Al Guarente, Michael Guenther, Dean Kendall, Jim Lockyer, Helen McWilliams, Ray Miller, Robert Miller, Tom Reeves, Jim Waldie, Dave Washbaugh.

ELK: Frank Hughes, RR 1 Box 14A, Ridgway 15853 (814-776-1403), Richard Horsey, Paul Linden, Don Weis.

ERIE: Jerry McWilliams, 3508 Allegheny Rd, Erie 16508 (814-868-3059) jerrymcw@aol.com, Dick Bollinger, Greg Cook, Adam Erb, Nathan Hall, Larry Massey, Walt Shaffer.

FAYETTE: Mike Fialkovich, 805 Beulah Rd, Pittsburgh 15235 (412-731-3581), mpfial@sgi.net, Randi & Sarah Gerrish, Olive Scarlette, Dana & Walt Shaffer.

FOREST: Flo McGuire, HC 1 Box 6A, Tionesta 16226, Margaret Buckwalter, John Fedak, Ted Grisez, Jim McGuire, Don Watts.

FRANKLIN: Dale Gearhart, PO Box 155, Shady Grove 17256, (717-597-3979) gear@innernet.net, Ken Gabler, Eric Martin, Dan Snell.

FULTON: Dan Snell, PO Box 653, Shippensburg 17257 (717-532-7708), Ken Gabler.

GREENE: Ralph Bell, RR 1 Box 483, Clarksville 15322 (412-883-4505).

HUNTINGDON: Greg Grove, RR 1 Box 483, Petersburg 16669 (814-667-2305) gw2@psu.edu, Dave Brandes, Debra Grim, Deb Grove, Lewis Grove, Dave Kyler, Ron Singer, Doug Wentzel.

INDIANA: Margaret & Roger Higbee, RR 2 Box 166, Indiana 15701 (412-354-3493) bcoriole@twd.net, Alice & Dave Beatty, Lee Carnahan, Dan & Marcy Cunkelman, John Fedak, Gary Ferrence, Betsy Fetterman, Jed Fetterman, Tom Fetterman, Mike Fialkovich, Patience Fisher, Mike Fowles, Judy Gallo, Randi & Sarah Gerrish, Shirley & Steve Graff, Carol Guba, Jenny Henry, Len & Linda Hess, Pat Johner, Scott Kinzey, Carroll Labarthe,

Clay & Gloria Lamer, Dennis Lauffer, Beth Marshall, Mark McConaughy, Flo & Jim McGuire, Bill Reddinger, Dave Rieger, Nancy Smeltzer, Colleen Summerson, Georgette Syster, Bryan Treese, Linda Wagner, Jo Walko.

JEFFERSON: John Fedak, 221 Washington St, New Bethlehem 16242 (814-275-4086) fedak@rbv.iu6.k12.pa.us, Margaret & Roger Higbee, Lisa Swackhamer.

JUNIATA: Aden Troyer, RR 1 Box 575, Mifflintown 17059 (717-463-3117), Gloria Bickel, Bud Fogleman, Christie Kanagy, Toby Petersheim, Harvey Petersheim, Gideon Renno, Paul Renno, Andrew Swarey, David Troyer, Ervin Troyer.

LACKAWANNA: Tom Clauser, 213 Deerfield Dr, Pottsville 17901 (717-622-1363) mclauser@pottsville.infi.net

LANCASTER: Jeff Hoppes, 426 Chowning Pl, Lancaster 17601, Jerry Book, Ray Bubb, Bruce Carl, Tom Garner, Randy Miller, Milt Steffy, Bruce Weaver.

LAWRENCE: Randy Stringer, 409 Shady Dr, Grove City 16127, Candy Gonzalez, Barb & George Dean, Mike Fialkovich, Bob Machesney, Nancy Rodgers, Linda Wagner.

LEBANON: Randy Miller, 607 Woodland Dr, Mannheim 17545 (717-664-3778), Karen Lippy, Tom McKinne, Joan Renninger, Bruce Weaver.

LEHIGH: Peter Saenger, 1830 Woodside Ave, Alburtis 18011 (610-682-2401) crex@early.com, Veena & Andrew Barnett, Nancy & John Boyer, Catherine Elwell, Ursula Hoffman, Ann Lessel, Clint Miller, Mark Monroe, Bernie & Pauline Morris.

LUZERNE: Richard Koval, 305 William St, Plains 18705 (717-570-4381) unibirder@aol.com, Sue Barron, Mark Blauer, Jacqueline Bonnano, Nancy Dennis, John Fedak, Stan Galanty, Sandy Goodwin, Alan & Monica Gregory, Doug Gross, John Heuges, Steve Hiller, Bob Houck, Jim Hoyson, Edwin Johnson, Nick Kerlin, Scott Killam, Autumn Pfeiffer, Michelle Richards, Linda Reggie, Bill Reid, Bob Sagar, Jim Shoemaker, Erick Stull, Bob Wasilewski.

LYCOMING: Wes Egli, PO Box 381, Picture Rocks 17762 (570-584-3083) prbirdman@hotmail.com, Ron Beach, Dan Brauning, Pat & Phil Courtright, Dennis Duza, Ron Guisewhite, Mike Kuriga, Rendal Ranck, Ed & Tink Reish, Charles Schwarz, Fred Stiner, Jerry Zeidler.

MCKEAN: Linda Ordiway, 72 Gilbert Lane, Bradford 16701, (814-368-7464) FSL@penn.com.

MERCER: Marty McKay, 2320 Valley View Rd, Sharpsville 16150 (412-962-7476), Harriett Bauer, Marvin Byler, Candy Gonzalez, Shirley McCarl, Rose Noll, Harvey Troyer, Jerry Troyer, Melvin Troyer, Neal Troyer.

MIFFLIN: Margaret Kenepf, RR 2 Box 343, McVeytown 17051 (717-899-6252) mkenepf@lcworkshop.com, Gloria Bickel, Matt Bickel, Don Kauffman, Ken McMullen, Paul Morrison, Ron Singer, Ken Tucker.

MONROE: Brian Hardiman, 8050 Running Valley Rd, Stroudsburg 18360 (717-629-3061) fax 629-3063, Ellen Davis, Tiffany Hardiman, Dennis Murphy, Jenifer Rituper, John Serrao, Chris Turn, Jim Wilson.

MONTGOMERY: Kevin Crilley, PO Box 100, Sumneytown 18984 (215-679-9318), Michelle Crilley, Andrew Curtis, George A. Franchois, Paul & Anita Guris, Jack McBready, August & Judy Mirabella, Bill & Naomi Murphy, Tom Wurtenberger.

MONTOUR: Jon Beam, Montour Preserve, RR 1 Box 292, Turbotville 17772 (570)-437-3131, Ron Beach, Frank Bonanno, Wes Egli, Mark King, Wayne Laubscher, Christine Smull.

NORTHAMPTON: Rick Wiltraut, Steve Boyce, Dave DeReamus, Nancy Wissler.

NORTHUMBERLAND: Wes Egli, PO Box 381, Picture Rocks 17762 (570-584-3083), prbirdman@hotmail.com

PERRY: Deuane Hoffman, 3406 Montour St, Harrisburg 17111 (717-564-7475), raven@paonline.com, Dallas Dowhower.

PHILADELPHIA: Doris McGovern, 209 Dogwood Ln,

Media 19063 610-565-8484 mcgovern@sas.upenn.edu, Dave Cutler, Ted Floyd, Richard Horowitz, Steve Lawrence, Mike Logan, Chuck Lyman, Robert Ridgely.

PIKE: Steve Hawk, PEEC, RR 2 Box 1010, Dingmans Ferry 18328 (570-828-2601) peec@ptd.net, Marie Kuhnen, Kevin Manks, Charles Muise, Jack Padalino.

POTTER: David Hauber RR 2 Box 153, Coudersport 16915 (814-274-8946) haubers3@penn.com, Mary Devling, Jack Mitterer, Kirk Newton, Gary Witmer.

SCHUYLKILL: Tom Clauser, 213 Deerfield Dr, Pottsville 17901 (570-622-1363) mclauser@pottsville.infi.net, Barbara Allerton, Vivian Connor, Glen Czulada, John & Jonathan DeBalko, Denise Donmoyer, Lorne Ealy, Marilyn Gamble, Laurie Goodrich, Kerry Grim, Dave Krueel, Carole Laughlin, Anne Marie Liebner, Mark Monroe, Joan Morgan, Harold & Joan Silagy, Mike Ward, Scott Weidensaul, Doug Wood. Schuylkill Co. Hotline: 570-622-6013.

SNYDER: No compiler

SOMERSET: Scott Bastian, 102 Harding St, Kittanning 16201 (724-543-5427), Jill Bastian, Tim Fox, Anthony Marich, Richard Murphy, Jeff & Lauretta Payne, William Thomas.

SULLIVAN: Nick Kerlin, PO Box 62, Forksville 18616 (570-924-3542) bluebird@epix.net, Lou Blasi, Fred Crafts, Ginny Davis, Joan & Bob Exley, Donna Long, Dave Motok, Flo & Dave Reitz, Mary Lou Shaffer, Phyllis & Stuart Stott..

SUSQUEHANNA: Randi Anderson, RR 3 Box 3384, Uniondale 18470 (570-679-9610) andergl@epix.net., Bill Reid.

TIOGA: Robert M. Ross, RR 2 Box 113A, Wellsboro 16901 (570-376-5394), rossr@epix.net, Benjamin, Arlene & Larry Brown, Martha Copp, John Deming, Dave Ferry, Tom Howe, Bill Ridge, Dave Sechrist, Joanna Stickler, Ann Vayansky.

UNION: Dan Brauning, RR2 Box 484, Montgomery 17752 (570)547-6938.

VENANGO: Gary Edwards, RR1 Box 494, Seneca 16346, (814-676-3011) gedwards@csonline.net; Russ States, 24 E 5th St, Oil City, 16301 (814-676-6320) russs@csonline.net, Jerry Stanley.

WARREN: Ted Grisez, 10 Belmont Dr, Warren 16365 (814-723-9464), Terry Ashbaugh, Mike Bleech, Keith Confer, Bill Highhouse, Bill Hill, Flo McGuire, Chuck & Marge Neel, Doug Palmer, John Schultz, Quay Strandburg, Brenda Watts, Don Watts.

WASHINGTON: Roy Ickes., Paul Brown.

WAYNE: No compiler.

WESTMORELAND: Robert C. Leberman, Powdermill Nature Reserve, HC 64 Box 453, Rector 15677 (724-593-7521), Ken Byerly, Dick Byers, Craig Fosedick, Paul & Deb Hess, Mike Irwin, Karen Jackson, Joanne Madden, M. Mifo, Bob Mulvihill, Bob Shaw, Dennis Smeltzer, Don Stitt, Tim Vechter.

WYOMING: Bill Reid, 73 W. Ross St, Wilkes-Barre 18702 (570-836-2734), Sandy Goodwin, Peggy Gorman, Jim Hoyson, Rick Koval.

YORK: Al Spiese, 4086 Old Orchard Rd, York 17402 (717-755-8309), Jack & Lil Downs, Scot Failer, Bruce Fertman, Jack & Lois Fultz, James Kobia, Candy Krenzer, Karen Lippy, Bob Moul, Jeff Pheasant, Randy Phillips, John & Jean Prescott, Peter Robinson, Robin Smith.

We wish to acknowledge the following individuals and organizations for supporting *PENNSYLVANIA BIRDS* through additional gifts.

**SCOTT F. BASTIAN
NICK BOLGIANO
ROSANN BONGEY *
BRUCE A. CARL
ART & NEEN DAVIS
GARY E. EDWARDS
JOHN G. FEDAK
HELEN R. FERGUSON
MICHAEL P. FIALKOVICH
EVELYN AND MIKE FOWLES
TRUDY GERLACH
LAURIE J. GOODRICH
KATHY KERN
H. SCOTT KILLAM
DAVE KUBITSKY
DAVID KYLER
WAYNE LAUBSCHER
ROBERT F. LEWIS JR.
DORIS MCGOVERN
HELEN C. MCWILLIAMS
JERRY MCWILLIAMS
RICHARD MYERS
MARTIN PAGE
MARY LOU & CURT PARKER
DAVE RIEGER
PETER ROBINSON
STEVEN J. SANTNER
ALBERT T. SPIESE
JAMES L. STASZ *
PHILLIPS B. STREET
NEAL G. THORPE
WILLIAM UHRICH
FRANKLIN H. WEST M.D.
WEST CHESTER BIRD CLUB *
RICHARD & PATRICIA WILLIAMS**

*Designates Patron (contribution of \$50.00 or more)

**Confused?
Disoriented?
Befuddled?
Lost?
Can't seem to find anything?
Aren't vultures hawks?
Where did those vireos go?
The grosbeaks were here the last time I looked!**

No, its not you, it's the new AOU Checklist!

And you can find your way around again by purchasing the new Pennsylvania Birds Field Checklist.

The new checklist incorporates all of the new AOU changes in taxonomic order and names.

It also includes all species accepted by the Pennsylvania Ornithological Records Committee (Plus a few exotics that PORC is split over - such as Barnacle Goose)

The list is in the same format and size as the old ones and will fit the binders that you purchased for keeping checklists (We still have plenty of those binders for sale, too!)

See the subscription form inside the front mailing cover for ordering information and prices.