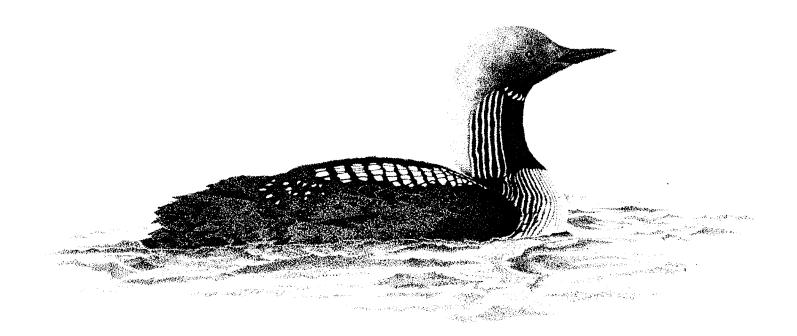
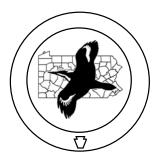
PENNSYLVANIA BIRDS



Volume 12, No. 2 Apr - Jun 1998 Issued September 1998



PENNSYLVANIA BIRDS

Journal of the Pennsylvania Society for Ornithology



VOLUME 12, NUMBER 2, APR – JUN 1998

Franklin C. Haas & Barbara M. Haas Editors-in-chief (717) 445-9609 FAX 445-8283 pabirds@redrose.net

Contents

41	Editorial
42	Status and field identification problems
	of the Willet subspecies in Pennsylvania Paul Hess
47	Short-eared Owls Breed In Pennsylvania In 1997
	John G. Fedak and Dan Brauning
49	Spring Raptor Migration Summary 1998 Frank Hohenleitner
52	New Longevity Record for a wild Red-tailed Hawk Roy F. Frock, Jr.
53	1997 Pennsylvania Birdlists Terry Schiefer
59	Nesting Red-headed Woodpeckers in Sullivan County - 1998
	Skip Conant
60	Rare Bird Reports Edited by Nick Pulcinella
64	Summary of the Season
65	Birds of Note
67	Local Notes
71	Photographic Highlights
84	Seasonal Occurrence Tables – April through June 1998
103	Compilers and Observers

ILLUSTRATIONS: COVER: **Pacific Loon by Adrian Binns**

Department Editors

Christmas Counts and

Spring Migration Count Ted Floyd PO Box 30804 Philadelphia, PA 19104 215-417-5089 ted@dept.english.upenn.edu

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

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 DAVILENE@AOL.COM

Rare Bird Reports

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

Hawk Watch Reports

Frank Hohenleitner 910 Larchmont Ave. Havertown, PA 19083 610-853-2905

Book Reviews

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

New AOU Checklist Changes

The Seventh Edition of The A.O.U. Checklist of North American Birds was finally published after our last issue went to print. We are using the new order and names in this issue.

A brief summary of the changes is as follows.

1. Vultures have been moved to follow the storks. They now appear just before the geese.

2. The order of the waterfowl has been scrambled. Whistling ducks come first, then geese, then swans, then ducks. The order of these individual species within these groups has also changed.

3. Shrikes and vireos have been inserted between the flycatchers and jays.

4. Cardinal, grosbeaks, and buntings have moved from before sparrows to after Snow Bunting.

5. There were some other minor rearrangements such as moving gnatcatchers in front of kinglets, etc.

6. The only major name change involving Pennsylvania is Solitary Vireo is now Blue-headed Vireo.

We now have new field checklists available reflecting these changes. The new checklists also incorporate species added to the state list since the last edition done in March 1996. See the ad elsewhere in this issue for details and prices.

New Compilers

Paul and Glenna Schwalbe have moved to Wisconsin and therefore have given their compiling duties for *Clinton* to Wayne Laubscher.

Paul was a great asset to the birding community i n Pennsylvania. Not only did he turn many young people onto birding through his teaching career, but he has been very active in many aspects of Pennsylvania's ornithology - State coordinator for the Breeding Bird Survey, Treasurer of the Ornithological Technical Committee of the Pennsylvania Biological Survey, charter member and Treasurer of the Pennsylvania Ornithological Records Committee, Breeding Bird Atlas coordinator, co-author of the Breeding Bird Atlas, Co-author of the Annotated Checklist of the Birds of Pennsylvania, and more. Both Paul and Glenna will be missed.

Barb Dean is stepping down as compiler for *Lawrence* and Randy Stringer has agreed to take her place. We thank Barb for her ten years of contributions and hard work.

Our workhorse in Schuylkill, Tom Clauser, has decided to be the compiler for Wayne, Pike, and Lackawanna! Its great to have reports coming in from the northeastern corner of the state again.

Hotlines, etc.

As a new continuing feature, we will publish relevant phone numbers inside the back cover of each issue. These numbers will include hotlines and other informational numbers relevant to birds. If you have any suggestions to add to the list, please let us know.

Speaking of hotlines, Tom Clauser (there he is again!) has started the **Greater Pocono Bird Hotline** at **717-622-2342**.

NAMC Report Delayed

Because of tardy submissions by compilers, the Spring NAMC report usually included in this issue, will not be ready until next issue. We hope that compilers will be more timely next year so that it can be included in the proper season's issue.

> 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© 1998 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.

Status and field identification problems of the Willet subspecies in Pennsylvania

by Paul Hess

The Willet (*Catoptrophorus* semipalmatus) is always a welcome find for Pennsylvania birders. Appearing rarely but regularly in spring and fall migrations, it is among the largest shorebirds we can expect to see — and with its black-and-white wing pattern flashing, one of the most spectacular.

Willets occur in the state every year, though in greatly varying numbers. Records in *Pennsylvania Birds* for the period 1992-1997 averaged five sightings per year, but the annual range was one to nine observations. About 70% of those reports involved single birds, and the rest ranged from two to six — except for a remarkable 10 at Shenango Reservoir, *Mercer*, in August 1997 (*Pa. Birds* 11:148). Even larger numbers occur very rarely, such as 16 at Presque Isle, *Erie*, in August 1979 (Stull et al. 1985).

During 1992-1997 slightly more observations were in spring than in fall, and nearly 80% of the reports came in May and August. Historically most Willets also have appeared in those two months, though records extend from early April to late October (Leberman 1988, Santner et al. 1992). Geographically, Presque Isle alone accounted for one-fourth of the 1992-1997 reports from 16 Pennsylvania counties.

Identifying a Willet to species should not be difficult, with only a Hudsonian Godwit or perhaps a standing Greater Yellowlegs possibly creating confusion for inexperienced observers, but determining an individual's subspecies can be a problem.

The two subspecies of Willet are Eastern (C. s. semipalmatus) and Western (C. s. inornatus). Easterns breed on the Atlantic and Gulf coasts primarily from Long Island, N.Y., southward but with scattered, mostly small, populations north to Nova Scotia. Westerns breed widely across the continent's northern prairies. Contrary to some references (e.g. Rosair and Cottridge 1995), Westerns winter not only on the Pacific coast but also along with Easterns in the southern Atlantic and Gulf coastal states. Both subspecies' winter range reaches South America.

our Pennsylvania From viewpoint, the two races' winter distribution on the southern Atlantic coast is noteworthy. Almost all Easterns apparently migrate southward and are replaced by Westerns in a zone extending from the regular winter limit in Virginia perhaps through the Carolinas. Both subspecies occur in good numbers in Florida, although their relative abundance and distribution are not well documented (Stevenson and Anderson 1994). Interestingly, Keith A. Arnold (pers. comm.) discovered the same phenomenon of Westerns largely replacing Easterns in winter on the Texas coast, when he analyzed specimen records in the Texas Cooperative Wildlife Collections for this article.

Thus, the Willets appearing in Pennsylvania in fall and spring would most likely be regular Western migrants to and from the Atlantic coast, not merely occasional strays from the Mississippi Valley migration route as Wood (1973) had supposed. Indeed all specimens from Pennsylvania are Westerns (Todd 1940, Santner et al. 1992), as were nearly all the New York specimens taken before Easterns began nesting on Long Island in 1966 (Bull 1964. 1985). Similarly. New Jersev's oceanfront birds outside the breeding season were believed long ago to be Westerns (Stone 1937), and migrant Westerns appear fairly regularly as far north as Nova Scotia after the Eastern breeders depart (Tufts 1986; Ian A. McLaren 1997, ID-Frontiers). In fact, all inland migrants and late-autumn coastal records in eastern North America are probably Westerns (Hayman et al. 1986).

I can find only one Eastern Willet reported in Pennsylvania, a bird seen in April 1939 at Tinicum, Delaware County (Poole 1964). Poole called it a "positive identification" but did not detail the reasons for that certainty. Easterns' apparent absence is surprising because they breed less than 50 miles away in New Jersey. Though the Eastern is "decidedly a coastwise bird...seldom seen far from the coastal marshes, beaches, and islands" (Bent 1929; also see Iliff 1998), it would be reasonable to expect storms or navigational errors to send them at least a short distance into Pennsylvania occasionally. If this is the case, documenting such occurrence would be worthwhile.

How confidently can the races be separated in the field? They are sometimes listed as recognizable (e.g. Pittaway 1997), most obviously during the nesting season on their distantly separated breeding grounds. Otherwise, caution is always warranted because none of the differences is a diagnostic field mark. All aspects of plumage and size are relative, subjective, open to great individual variation, and overlap between the races. In fact, eminent ornithologist Elliott Coues complained a century ago in his Key to North American Birds that characters ascribed to the Western form did not "appear to be well founded."

Nevertheless, recent studies indicate that some — though not all individuals can be identified to subspecies with a fair degree of confidence. Following is a summary of the problems and possibilities.

Alternate plumage — We would see adults in this "breeding" plumage during the spring migration, particularly late in the season when the pre-alternate molt should be complete (Bent 1929).

While both races are basically gray-brown above and white below, their standard distinctions have been known since Brewster (1887) described the Western race and named it *inornatus* as "unadorned" or "plain." Typical Easterns are darkly streaked on the head, upperparts and breast, conspicuously barred on the flanks, and with strongly barred central tailfeathers; Westerns are typically paler, slightly grayer, with relatively indistinct markings, and with weakly barred or unbarred central tailfeathers (Wilds 1983, Hayman et al. 1986, Paulson 1993).

However, those are average differences, and individual variation can leave them unclear (Prater et al. 1977, Hayman et al. 1986, Paulson 1993). For example, Paulson (1993) reported that alternate-plumaged Willets from the West may be as heavily marked as any Atlantic coast birds. He suggested that in such cases "it will be impossible to determine individual birds in the field to subspecies, although sexed specimens might be determined in the hand by measurements."

Even the often-emphasized tail pattern is not always reliable. The Los Angeles County Natural History Museum collection has Willets of both races with tail markings opposite of the conventional expectations: rather strongly barred on some Westerns and more weakly barred on some Easterns (Kimball L. Garrett 1997, ID-Frontiers). "At best, tail patterns seem to overlap greatly," Garrett commented.

Based on Paulson's and Garrett's findings, a darkish and well marked individual in spring is not definitely an Eastern. In view of such variability, plumage alone — while often supportive — should not be considered sufficient to identify the subspecies.

Basic and immature plumages — The two subspecies are so look-alike at these stages, which we would see during the autumn migration, that no standard identification guide suggests ways to separate them reliably in the field by plumage.

Basic adults are essentially pale gray with few or no distinctive markings. The juvenal upperparts are grayish-brown with buffy tips and dark subterminal bars on the mantle, coverts, and scapulars. To confuse matters, by their first spring a combination of feather wear and partial molt can leave sub-adult birds plain and pale much like fall-winter adults (Bent 1929, Prater et al. 1977). Thus, even in spring, a decidedly plainlooking Willet in the east is not necessarily a Western; it could be a "first-summer" bird of either race.

Despite the general similarity, however, one careful observer has

noticed slight differences between the two subspecies (Michael O'Brien 1997, ID-Frontiers). These are much more subtle and ambiguous than the average distinctions in alternate plumage, but I found them surprisingly noticeable in a few instances when Willets judged to be both races by other features were seen together during November on the Florida coast.

For basic plumage, O'Brien lists these characters:

* upperpart color — paler and more neutral gray (even tending toward blue-gray on the tertials) on Western; darker and more brownishgray on Eastern (but some birds ambiguous).

* head and underpart shade and pattern — crown, face, neck, and breast paler, less extensively smudged with gray, and less contrasting in Western; darker, more extensively smudged with gray, and more contrasting in Eastern (some overlap). He believes that very pale birds strikingly white on the breast, neck and face, contrasting with the mostly dark bill, are probably always Westerns.

For juvenal plumage, O'Brien describes the wing covert and tertial pattern as paler, more delicate, less extensive markings in Western; darker, coarser, more extensive markings in Eastern (some overlap but extremes are distinctive).

Such variable and subjective differences are probably of value only at their extremes and especially when both subspecies are present for comparison.

Wing pattern — Two features of the wing stripe have been proposed as distinctions between the races, but neither appears to be diagnostic.

1. A Western's outer greater coverts, next to the large black wrist spot, may show a more extensive white area projecting toward the wing's leading edge; an Eastern's coverts may be grayish in this area, making the white stripe look more confined (David Sibley 1997, ID-Frontiers). Sibley tested the difference fairly extensively in the field and on specimens at the Academy of Natural Sciences in Philadelphia, and he suggested that it might be helpful when viewing a flock with both subspecies in flight.

Specimens at the Los Angeles County Museum similarly average much more white on Western outer greater coverts than Eastern (Kimball Garrett, pers. comm.), which should indeed extend the white stripe along the black patch's inner side.

However. Siblev noted that an Eastern's white blends forward slightly into that area and can appear similar to Western. Further, O'Brien (1997, ID-Frontiers) cautioned that because of variation and overlap, either race can show extensively white or mostly gray outer greater coverts. Even more confusing, some of 14 photos by Marshall Iliff of Willets in flight along the mid-Atlantic coast (which I believe he correctly assigned to subspecies), show an opposite effect: Easterns with a prominent triangle of white or very pale gray extending forward across the coverts next to the black patch, and Westerns without this feature.

2. A Western's white stripe typically extends broadly onto the outermost primary at the wing's leading edge, while an Eastern's stripe tapers out abruptly on the outer two or three primaries (Sibley 1997, ID-Frontiers). Again O'Brien cautioned that the extremes may be distinctive but variation can create overlap between the subspecies.

No difference strikes my eye in most of Iliff's photos, nor have I been able to discern these these distinctions consistently in the field. A complication is that immature birds of both races tend to have wider white stripes than adults (Paulson 1993). The wing characters deserve further investigation to determine whether age, sex, molt, or wear might be factors in the apparent inconsistency.

Voice — This holds little meaning for someone who has not heard both subspecies, but Western calls tend to be lower pitched, hoarser, and slightly more slurred while Eastern calls tend to be higher, shriller, and more clearly enunciated (O'Brien 1997, ID-Frontiers). Sonagrams of the two races' "pill-willwillet" (Douglas 1998) confirm those differences, as well as showing the Eastern's syllables to be compressed into a significantly shorter duration and thus sound faster.

There is some subtle variation, and the differences may not be apparent in all cases. Sibley (pers. comm.) suggests, "I think a bird giving a rolled or trilled call when flushed, 'krrree-lii-lii,' is almost certainly a Western, and a non-trilled call more likely represents an Eastern, but I wouldn't rely on that in cases where the bird is out of range (e.g. an Eastern in Pennsylvania)."

Size — In overall length, wing length, and general bulk, Westerns average larger than Easterns. At extremes, the biggest Westerns are 25% longer, have 20% longer wings, and weigh nearly twice as much as the smallest Easterns (data from Prater et al. 1977, Hayman et al. 1986, and K.A. Arnold, pers. comm.). But all of those measurements overlap extensively between the races — mainly in small male Westerns and large female Easterns - and many intermediate individuals cannot be identified by size alone. As an example, in body weights for 11 Easterns and 16 Westerns collected on the Texas coast, all but one Eastern were within the lighter portion of the Westerns' weight range (Arnold, unpub. data).

Two particular distinctions frequently cited are the lengths of the bill and the tarsus. At the extremes listed in Prater et al. (1977), the largest Westerns' bill and tarsus are each 35-40% longer than the smallest Easterns.' Such differences are probably recognizable in the field, but we would not necessarily be seeing individuals at the extremes. As with overall size, many individuals in an intermediate range are unassignable based on these measurements. Even the *average* lengths reported for males by Ridgway (1919) differ only 5 mm for the bill and 8 mm for the tarsus:

	Eastern	Western
Bill	$54.5 \mathrm{~mm}$	59.4 mm
Tarsus	56.7 mm	64.9 mm

Those differences are only about one-quarter inch on bills 2 to 2.5 inches long and tarsi 2 to 2.75 inches long. Though that might be evident if individuals of both subspecies were standing together, seldom if ever would we enjoy the side-by-side luxury in Pennsylvania. Otherwise, as Dennis Paulson remarks (pers. comm.), "People have to decide if they can detect differences of this magnitude in birds not in comparison."

Bull (1964) summarizes the entire problem of size and plumage: "Although the two subspecies may be differentiated in the field when side by side, and 'typical' specimens may be picked out readily in a museum series, there is much overlap in size, markings, and color characteristics, both as to sex and age."

"Jizz" — The general impression of a bird's shape, proportions, and physical behavior can sometimes serve as a genuine "field mark," and my personal experience with Willet jizz illustrates the values and the pitfalls.

After growing up with winter Westerns on the Pacific coast, I was immediately struck by how short, ungraceful, even dumpy, my first Easterns along the Atlantic seemed. For some time I was convinced that the two races were easily separable in the field, but now I suspect that I had merely synthesized an impression of average or greater birds without regard to those in the intermediate range. Watching Willets more carefully on the east coast in late summer and early fall. I began to see some whose race appeared obvious but others I could not easily assign to subspecies.

O'Brien (1997, ID-Frontiers) summarized the important differences in jizz, while cautioning how subjective and variable they are:

* **bill shape** — proportionally thinner and longer on Western, shorter and thicker on Eastern (more variation in length than thickness).

* leg length — longer in Western, shorter in Eastern (but the difference surprisingly variable, at least in juveniles).

* **body shape** — longer neck, more bulging chest, more attenuated tail end, and more graceful S-curve of the neck and back in Western; chunkier, more evenly egg-shaped body, and shorter neck in Eastern (some overlap).

* head shape — higher, puffier crown in Western; flatter in eastern (much overlap).

* overall jizz — combination of bill shape, leg length, and body shape give Westerns generally more godwitlike proportions than Easterns.

Many of those aspects of size and shape are illustrated in the accompanying photographs. See Figures 1 and 2 for extremes such as O'Brien described, and Figure 3 for a direct comparison of typical individuals of both races.

Some Westerns also have a slightly drooping bill (Iliff, pers.

comm.), an effect shown in a Western's slightly downcurved bill pictured in Paulson (1993: 164). This may represent individual variation in growth of a Westerns' long bill, which short-billed Easterns ordinarily do not show — perhaps analogous to a Greater Yellowlegs' bill, usually slightly upcurved but straight in some individuals (Paulson, pers. comm.).

I would add one feature of behavioral jizz. Because of their longer legs, the tallest Westerns take longer, more stately, stork-like strides; Easterns take shorter, faster, more sandpiper-like steps.

Let's try O'Brien's approach with some photographs of Willets in Pennsylvania. The most recent was a bird at West Fairview, *Dauphin*, in August 1997 photographed by Don Henise (11:150; geographically incorrect in Hall 1998). Four features suggest strongly that it was a Western: conspicuously long and slim bill; seemingly long S-curved neck even when partially retracted; overall bulk much stockier than typical for Easterns; and very long-looking legs that make the bird appear to stand tall.

Three Willets pictured from Indiana, Erie, and Venango are more dubious (8:96, 9:141, 10:96). They offer Western impressions, but either not enough of the overall jizz is evident or their dimensions seem to be intermediate. This is definitely not easy.

Could I defend even my most confident Western identification, Henise's bird, to the Pennsylvania Ornithological Records Committee (P.O.R.C.)? Perhaps not formally, because the entire judgment rests not on diagnostic field marks but only on subjective features.

Balch (1983) commented that "these features are very difficult to quantify, and there are so many birds of both races which are indistinguishable by their use that they really aren't very good field marks." A photograph with Balch's article proves his point. Two Willets standing together are said to be a Western and an Eastern. Despite much larger bulk, the Western's relative bill, leg, and body proportions look the same as the Eastern's to me.

Dennis Paulson (pers. comm.) is similarly cautious: "As I wrote in my shorebird book, I'm all for the use of



Fig. 1. Eastern Willet, small extreme. Compared to Fig. 2, note relatively short thick bill, short neck, short legs, slim lower breast and belly, rather abrupt transition from hindneck to back, shorter and more slanted forehead to crown. (Assateague Island MD, May 25, 1993; photograph by Marshall Iliff).



Fig. 2. Western Willet, large extreme. Compared to Fig. 1, note relatively long slim bill, long neck, long legs, robust lower breast and belly, graceful transition from hindneck to back, higher and steeper forehead to crown. (Ocracoke Island NC, May 27, 1994; photograph by Marshall Iliff).

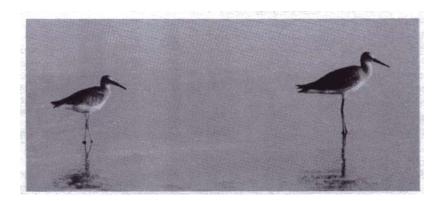


Fig. 3. Western Willet (taller bird) and Eastern Willet remarkably in the same pose and at the same distance. Neither bird represents all the extremes of size shown in Figs. 1 and 2, but in direct comparison the Western's longer neck, longer legs, and larger overall size are evident. In this case the relative bill lengths appear to differ only slightly if at all. (Nags Head NC, July 1995; photograph by Michael O'Brien).

jizz to distinguish common species, but I'm a bit more skeptical of its use to identify rare species (or subspecies, in this case)."

Where does all of this leave observers who want to identify a Willet's subspecies?

In my view, based on personal observations plus study of more than 50 photographs by Marshall Iliff, Ed Kwater, and Michael O'Brien, the best that field-birders can offer as formal documentation is a very probable identification based on a *combination* of relative sizes and proportions — and this only for birds at extremes of size and shape. Plumage may be supportive but not diagnostic.

This view of the extremes is perhaps more optimistic than the position of Feldstein (1998) and the P.O.R.C. that variability within each race is great enough "to prevent field identification of either subspecies." However, reports of the Willet subspecies are categorized as candidates for future re-examination by the P.O.R.C. if new identification techniques are developed. In that light, Feldstein emphasized that the committee strongly encourages observers to continue submitting detailed documentation of Willets in Pennsvlvania.

I hope observers will heed the committee's call with descriptions attempting to cover as many as possible of the characters listed in this article and including photographs. Even if the P.O.R.C. does not formally accept field and photographic determination of the races at this time, such reports have several important values: 1. From the birding viewpoint, not only have subspecies generally become a more popular identification challenge but also -- who knows? -perhaps the two races might unexpectedly be split into species someday (T. Floyd, pers. comm.); indeed an analysis of vocal divergence between the races suggests that they have attained an intermediate stage toward speciation (Douglas 1998). 2. The new bias against collecting means that study of specimens will be limited to skins already in museums, which makes careful and detailed field observation all the more scientifically important (Paulson, pers. comm.). 3. From the distributional viewpoint, an improving base of even "very probable" subspecies records may help to clarify the identification picture and indicate whether Easterns visit the state more often than we have supposed.

ACKNOWLEDGMENTS

I thank David Agro, George Armistead, Henry Armistead, Keith Arnold, Ned Brinkley, Steven Feldstein, Kimball Garrett, John Gerwin, Don Henise, Eric Hess, Marshall Iliff, Jean Iron, Ed Kwater, Mark McConaughy, Jerry McWilliams, Albert Mehring, D. James Mountjoy, Michael O'Brien, Robin Panza, Dennis Paulson, James Rising, David Siblev, and Rick Spaulding for information, and other assistance. Special thanks to Feldstein, Ted Floyd, Iliff, Kwater, O'Brien, and Paulson for valuable comments on an earlier draft, and to Iliff, Kwater and O'Brien for photographs.

LITERATURE CITED

- Balch, L.G. 1983. Answer to February photoquiz. *Birding* 15:95-96.
- Bent, A.C. 1929. Eastern Willet. In Life Histories of North American Shore Birds, Part 2. Smithsonian Inst. Press, Washington D.C. (reprinted 1962 by Dover Publications, New York).
- Brewster, W. 1887. Three new forms of North American birds. *Auk* 4:145-149.
- Bull, J. 1964. Birds of the New York Area. Harper & Row, New York (reprinted 1975 by Dover Publications, New York).
- —. 1985. Birds of New York State, including the 1976 Supplement. Comstock Publishing Div., Cornell Univ. Press, Ithaca, N.Y.
- Coues, E. 1903. Key to North American Birds, 5th edition (Vol. 2). Page Co., Boston, Mass.
- Douglas, H.D. III. 1998. Response of Eastern Willets (*Catoptrophorus s. semipalmatus*) to vocalizations of Eastern and Western (*C. s. inornatus*) willets. *Auk* 115:514-518.
- Feldstein, S.B. 1998. An annotated list of the field identifiable and non-field identifiable bird subspecies and morphs of Pennsylvania. *Pa. Birds* 11:178-186.
- Hall, G.A. 1998. Appalachian region. Field Notes 52:56-60.
- Hayman, P., J. Marchant, and T. Prater. 1986. Shorebirds: an Identification Guide. Houghton Mifflin Co., Boston.
- Iliff, M.J. 1998. Middle Atlantic Coast region. Field Notes 52:40-44.
- Leberman, R.C. 1988. A Field List of the Birds of Western Pennsylvania and Adjacent Regions. Carnegie Museum of Natural History Spec. Pub. 13,

Pittsburgh, Pa.

- Paulson, D. 1993. Shorebirds of the Pacific Northwest. Univ. of Washington Press, Seattle, Wash.
- Pittaway, R. 1997. Recognizable Bird Forms of Canada. *Birders Journal* 6(2):76-89.
- Poole, E. L. 1964. *Pennsylvania Birds: an Annotated List.* Delaware Valley Ornithological Club, by Livingston Publishing Co., Narberth, Pa.
- Prater, A.J., J.H. Marchant, and J. Vuorinen. 1977. *Guide to the Identification and Ageing of Holarctic Waders*. British Trust for Ornithology Guide 17. Herts, U.K.
- Ridgway, R. 1919. *The Birds of North and Middle America, Part 8*. Bull. 50, U.S. National Museum, Washington, D.C.
- Rosair, D., and D. Cottridge. 1995. *Photographic Guide to the Shorebirds of the World*. Facts on File, New York.
- Santner, S.J., D.W. Brauning, G. Schwalbe, and P.W. Schwalbe. 1992. Annotated List of the Birds of Pennsylvania. Pa. Biological Survey Contribution No. 4.
- Stevenson, H.M., and B.H. Anderson. 1994. *The Birdlife of Florida*. University Press of Florida, Gainesville, Fla.
- Stone, W. 1937. Bird Studies at Old Cape May, Vol. 1. Delaware Valley Ornithological Club (reprinted 1965 by Dover Publications, New York).
- Stull, J., J.A. Stull, and G.M. McWilliams. 1985. Birds of Erie County Pennsylvania Including Presque Isle. Allegheny Press, Elgin, Pa.
- Todd, W.E. C. 1940. Birds of Western Pennsylvania. Univ. of Pittsburgh Press, Pittsburgh.
- Tufts, R.W. 1986. Birds of Nova Scotia, 3rd edition. Nimbus Publishing Ltd. and the Nova Scotia Museum, Halifax, N.S.
- Wilds, C. 1983. Willet. In *The Audubon Society Master Guide to Birding, Vol.* 1. (J. Farrand Jr., ed.). Alfred A. Knopf, New York.
- Wood, M. 1973. Birds of Pennsylvania. Pennsylvania State Univ., University Park, Pa.

ID-Frontiers, referenced often in this article's citations, is an internet discussion group devoted to advanced field identification and sponsored by the National Birding Hotline Cooperative. The commentaries cited above are archived on the World Wide Web at:

http://nbhc.com/birdwg01/weeknnw1.htm

1412 Hawthorne St. Natrona Heights PA 15065 phess@salsgiver.com

Short-eared Owls Breed In Pennsylvania In 1997 by John G. Fedak and Dan Brauning

The summer of 1997 proved to be unprecedented for breeding Short-eared Owls Asio flammeus in Pennsylvania. More confirmed breeding events were documented that year than in all previous years combined. Observations came from a large arc across western Pennsylvania. Probable or confirmed breeding activity was reported in Elk, Jefferson, Clarion, Venango, Lawrence, and Allegheny counties. Most of these sites had not previously supported summering Short-eared Owls.

Along the Elk/Jefferson border near Lanes Mill, an owl was seen hunting and tearing prey into pieces during a Game Commission Grassland Count. Single owls were observed on subsequent occasions by Deuane Hoffman (pers.comm.) and Linda Christianson (pers.comm.). Two young owls were later noted on the site (Fedak 1997). At another site in Jefferson County near Coal Glen, a Game Commission WCO Roger Hartless recovered a recent fledgling (primary feathers still containing the sheath) killed on the roadway and observed four more young owls (Hartless 1997 pers.comm.). A third site in the county near Coal Glen had owls hunting into July with no confirmation of nesting and, at a fourth site near Munderf, an owl was observed at least one time during the summer months. Short-eared Owls were observed during the entire third quarter (July, August, September) in Jefferson County and along the Jefferson/Elk border (Fedak 1997).

In Clarion County, owls were seen at four sites. Owls were observed until July near Curllsville and throughout the summer at a historical nesting site on the "Piney Tract" near Mt. Zion. Local residents reported that the owls were seen feeding young throughout the summer at Mt. Zion. On another site on the "Piney Tract" near Stockdill Road, two downy young were observed and an adult was seen hunting in daylight. At one location near Mt. Airy, Walt Fye and Margaret Buckwalter (1997, pers.comm. 1998) observed owls courting and wing clapping, catching prey and dropping the prey into the grass at three different places. This was interpreted as feeding young. In Clarion County, Short-eared Owls were observed until 10 July (Buckwalter 1997).

Near Bullion, in Venango County, Gary Edwards (pers.comm.) watched Short-eared Owls throughout the summer (Edwards and States 1997). On 8 June, a single owl was observed performing display flight. On four other occasions prior to 17 June, single birds were also seen. On 17 July, three birds were observed at the same location. At least two birds subsequently were seen on five occasions during July. There was no attempt to locate a nest for fear of undue stress to the owls. Short-eared Owls were being reported in Venango County until 28 August (Edwards and States 1997).

At the Volant Strips in Lawrence County. Suzanne Butcher reported a first confirmed breeding record in the county. She and Nancy Rodgers saw the pair dropping food at the presumed nesting area on 4 June (Dean 1997). They noticed the adults carrying food to the same spot and presumed a nest site. On 8 June, both Suzanne and her husband, Gene Butcher, observed the adults taking food to different spots and observed a young owl near the road (Butcher pers.comm.). Four owls were observed in Lawrence County until 8 August (Dean 1997 and Butcher pers.comm.).

The first confirmed breeding of Short-eared Owls in Allegheny County took place at the Imperial Strips (Fialkovich pers.comm.). Chuck Tague and Andi Stephens photographed one nest containing four downy young in various stages of development (Tague 1998). Up to 27 Short-eared Owls had wintered in this area (Hess pers.comm.) and a pair was seen hunting in the area on 26 March. Ted Floyd reported that the owls exhibited extremely agitated behavior in early May, when the pair must have been incubating. Another location in the same grassland indicated possible breeding. On 13 June, an adult owl approached and barked at Tague and Stephens. As it flew and circled over their heads another owl rose from the grass nearby. The behavior of the adult owls suggested the presence of another nest, but the nest wasn't searched for because of the risk of disturbance (Tague 1997). Short-eared Owls were reported all third quarter in Allegheny County (Fialkovich 1997).

The majority of sites chosen by the birds were reclaimed surface mines. The sites all appeared to be on hilltop locations and seemed to show a far-off horizon. The types of grasses contained timothy, fescues, clover, bird's foot trefoil, and other herbaceous weeds. In some locations small trees or shrubs including locusts, conifers, autumn olives, aspen, and multi-flora rose are present. Even then, dense grasses covered the majority of the landscape. This grass provided cover and food for a large population of voles. The voles in turn provided the owls with food. Even in October, the vole runs and trails were easily visible in the clumped grasses. Each of these areas also supported sizable populations of grassland birds such as Henslow's Sparrow, Bobolink, Grasshopper Sparrow, Savannah Sparrow, Vesper Sparrow, and in most cases, Upland Sandpiper.

The Annotated List of the Birds of Pennsylvania lists Short-eared Owls as "Casual" (Santner et al. 1992). The only recent confirmed breeding prior to 1997 took place at the Philadelphia International Airport until 1989 and at reclaimed strip mines in Clarion County (Buckwalter 1988, Brauning 1992). Even summer records of the owl in the state are hard to find. Only four counties have recent summer records. During the Pennsylvania Breeding Bird Atlas years (1983-1989), Clarion, Jefferson, and Philadelphia counties had summer Short-eared Owls (Brauning 1992). On 21 June 1993, Paul and Glenna Schwalbe observed an owl in Clearfield County near Keewaydin. (Schwalbe 1993). Short-eared Owls are classified as endangered in Pennsylvania since suitable nesting habitat is extremely limited and intensive agricultural practices make many potential habitats unsuitable (Feldbaum et al. 1995). However, nesting could be expected on a cyclical basis of about every ten years (Tague 1997).

At least ten pairs were believed to be present during the summer of 1997 and nesting was confirmed at seven sites. The results indicate an "invasion" of Short-eared Owls. However, the causes of this invasion are still speculative. There are possible hypotheses: the areas the owls were seen in had grown into the acceptable breeding vegetation the owls need; more people have been afield and the owls have finally been found (which means that they have bred regularly before); the population of owls is on the increase and they are expanding their breeding range; and/or the population of food species was sufficient to warrant the owls staving on their winter range to breed.

Since the strip mine's vegetation has not changed significantly in the last few years, and since access to most of the areas has remained at the same level, a more likely explanation to the observed breeding during the summer of 1997 was a cyclical invasion by the species. Vole populations were high during the winter of 1996 into 1997, and surface mines reclaimed into grass provide habitat conditions suitable for Short-eared Owls. Wintering populations simply found conditions favorable and remained to breed. Observations during 1998 suggest that the owls may have returned to some areas (e.g., Imperial and Volant), but were not found in most sites documented in 1997 other than wintering and migration (Haas pers.comm. 1998). This further suggests that 1997 breeding was a cyclical event.

Many of the sites in which Short-eared Owls were found are well-known, frequently birded locations. Extensive areas of similar habitat, such as in Clearfield and Somerset counties, probably were not searched adequately for owl nesting activity. The complete number of nesting attempts or pairs present can only be guessed, but most likely included more than those reported here.

References

- Brauning, D. Ed. 1992. Atlas of Breeding Birds in Pennsylvania. University of Pittsburgh Press. 164-165.
- Buckwalter, M. 1988. Short-eared Owls in Clarion. *Pa. Birds* 2(2):55-56.
- 1997. Local Notes: Clarion County.
 Pa. Birds 11(2):93.
- 1997. Seasonal Occurrence Tables: Clarion County. Pa. Birds 11(3):166.
- 1998. Compiler Clarion County. Pa. Birds.
- Butcher, S. 1998. Contributor. Pa. Birds.
- Christenson, L. 1997. Compiler Elk County. Pa. Birds.
- Dean, B. 1997. Local Notes: Lawrence County. Pa. Birds 11(2):97.
- 1997. Seasonal Occurrence Tables: Lawrence County. *Pa. Birds* 11(3):168.
- Edwards, G. and R. States. 1997. Local Notes: Venango County. *Pa. Birds* 11(2):101.
- 1997. Seasonal Occurrence Tables: Venango County. Pa. Birds 11(3):172.
- 1998. Compiler Venango County. Pa. Birds.
- Fedak, J. 1997. Local Notes: Jefferson County. Pa. Birds 11(2):96-97.
- 1997. Seasonal Occurrence Tables: Jefferson County. Pa. Birds 11(3):168.
- Feldbaum, F., B. Mitchell, K. McKenna, J. Hassinger, A. Shiels, J. Hart, D. Brauning. 1995. Endangered and Threatened Species of Pennsylvania. p. 23.
- Fialkovich, M. 1997. Local Notes: Allegheny County. *Pa. Birds* 11(2):91.
- 1997. Seasonal Occurrence Tables: Allegheny County. *Pa. Birds* 11(3):166.
- 1998. Compiler Allegheny County. Pa. Birds.
- Hartless, R. 1997. Pennsylvania Game Commission WCO. Jefferson County.
- Haas, F. 1998. Ed. Pa. Birds..
- Hess, P. 1998. Compiler Butler County. Pa. Birds.
- Hoffman, D. 1997. Compiler Juniata County. Pa. Birds.

- Santner, S., D. Brauning, G. Schwalbe, P. Schwalbe. 1992. Annotated List of the Birds of Pennsylvania. p. 30.
- Schwalbe, G. and P. Schwalbe. 1993. Breeding Season Record of Short-eared Owl. *Pa. Birds* 7(2):53.
- Tague, C. 1997. Nesting Short-ears at Imperial. *Nature Observer News* 5(13):1-2.
- 1998. Nesting Short-eared Owls at Imperial. Pa. Birds 11(4):216, 220 (photo).

910 S. Broad Street New Bethlehem, PA 16242 jfedak@rbv.iu6.k12.pa.us

RR2 Box 484 Montgomery, PA 17752 brauning@mail.csrlink.net

Seven watch areas reported for spring 1998. Observers logged a total of 3769 birds during 448+ hours of coverage. This is the most comprehensive spring report for this journal, encompassing most of the breadth of Pa. Four sites are reporting to Pa. Birds for the first time in the spring: Allegheny Front, Lower Providence, Sideling Mt, and Tuscarora Mt. The Lower Providence count is not a fixed point; it provides some unique information on migration in extreme southeastern Pa. There are so many changes and inequalities in this report, that comparisons with previous spring summaries would be meaningless. Most of the data is so fragmented, that it is impossible to conclude any comprehensive picture of raptor migration for spring '98.

The warm El Niño winter in Pennsylvania was followed by an early and record-breaking spring for Golden Eagles. Otherwise, most of the compilers felt disappointed. The longawaited flight of Broad-winged Hawks never appeared in sufficient numbers to cheer observers at most of the current spring mountain-top outposts. It is probably safe to say that the vast majority of the Broad-wings passing over Pennsylvania this spring were never counted.

David Brandes published an interesting detailed analysis of spring Golden Eagle flights in the Northeastern states (Brandes, 1998). The majority of the early Golden Eagle flight in Pennsylvania consists of adult birds. They prefer to use the ridges for "updrafts, thermals, or as a visual orientation cue." The current information suggests a route through the westernmost ridges of central Pennsylvania and then northeastward across New York and east of Lake Ontario. Their destination is northern Quebec. Most of the immature and sub-adult birds are recorded later in the spring at other sites in New York. This latter flight coincides with the migration of Broad-wings, which make use of thermal lift. Check out David's o w n Internet Website: www.cee.psu.edu/tussey/ for site photos and much more.

Six Peregrine Falcons were reported. That is pretty good for the spring. Most sites along Lake Ontario in New York, northern New Jersev, and Maryland had low Peregrine counts. It was different at Ripley, New York, which is 20 miles east of Erie Pennsylvania, and just a tad east of the Pennsylvania border, where the count was 10 Peregrines as of 4/28/98. They reported 8 last year, compared to 2 for all of Pennsylvania (1 in Erie County). Merlins were noted all across Pennsylvania, while Kestrels were more numerous in the eastern half of the state

Ron Singer (compiler for Jacks Mt) spent considerable time away from his area to determine the directional movement of ridge-flying hawks as they come to the Juniata River — a critical juncture during the spring flight. He noted that the prevailing winds there determine to which of the ridges raptors move on their northward journey. These observations have helped him to understand the critical weather patterns that control the flow of hawks at Jacks Mt. He will continue this study next spring.

Looking for something different? Try looking for Short-eared Owls soaring high among migrating buteos. It happened at Fort Smallwood, Maryland (a riverside site just south of Baltimore), on 4/18/96 on a prime flight day for Broad-wings and other buteos. A second owl was seen there 2 days later. It is not clear if it also was soaring (Lindsay, 1996). Is this too farfetched for our mountain top hawk watches? Maybe not. Recall the Shorteared Owl seen 2 years ago in mid-March sitting in a tree on Second Mt.

Species	Count
Black Vulture Turkey Vulture	$\frac{4}{249}$
Osprey	314
Bald Eagle	29
N. Harrier	54
Sharp-shinned Hawk	295

Cooper's Hawk	74
N. Goshawk	11
Red-shouldered Hawk	91
Broad-winged Hawk	1,601
Red-tailed Hawk	629
Golden Eagle	200
A. Kestrel	129
Merlin	11
Peregrine Falcon	6

Chronology of the Season

The spring count began in **February** on the 16th on an overcast day in western Pennsylvania as 2 adult Golden Eagles, 15 buteos, and a Cooper's Hawk moved along Sideling Mt. Later, 5 more Golden Eagles and a Bald Eagle were recorded at Tussey Mt. Red-tailed Hawks appear in the counts from the very beginning to the end of the season.

There were seven intervals in March when the Internet was busy with reports of raptor migration in Pennsylvania. Mostly, they could be characterized as alternate periods of moderating weather followed by colder conditions. The warmer trend begun in late February moved 8 adult Golden Eagles at Tussey on 3/1. A more substantial flow of hawks occurred from 3/4-7 all across the state, and was associated with mostly cloudy and breezy weather. The combined eagle count during this time was 78 Golden Eagles and 3 Bald Eagles. The peak day for this interval was characterized by a center of high pressure over eastern Virginia, pumping up southerly winds over most of Pennsylvania. In contrast, gusty WNW winds on 3/10 produced 15 Golden Eagles at Sideling. More moderating weather on 3/13 with light westerly winds vielded a combined count of 15 Golden Eagles at central and western sites. Easterly cold weather on 3/16-17 produced a modest flow of a wider variety of raptors in western Pennsylvania. Mostly stormy weather with strong NW winds brought 21 eagles at Tussey on 3/22-23. Finally, the jet stream and colder weather moved north on the 25th, followed by 3 days of activity at Lehigh Furnace

featuring 2 Bald Eagles, and the first Pennsylvania sightings of an Osprey and Broadwings.

There was a long interval of relative inactivity until 8 April, when SE winds supported 20 Osprey, N. Harriers, and the smaller accipiters at Lehigh Furnace. Warmer air at the same site during 4/14-17 produced many Osprey, Broadwings, all accipiters, N. Harriers, Kestrels and 5 Merlin. Jacks Mt. reported a similar flow of hawks on 4/21-22. The period 4/25-29 was marked by strong NW winds, which strangely enough promoted the flow of many hawks, especially Broad-winged Hawks, which peaked to 357 on 4/28 at Lower Providence.

Rough-legged Hawks

Again this year the Rough-legged Hawk was absent from the spring count. Our Pennsylvania count coincided with mostly low counts of these hawks in adjacent states this past spring. The exception was Derby Hill, New York, located near the southeastern edge of Lake Ontario. A total of 140 Rough-legged Hawks was counted. This was "the lowest ever but that's probably due to few coming this far south during the mild winter." Derby Hill is part of what HMANA* calls the Eastern Great Lakes region. Five New York hawk watches are located along the southern rim of Lakes Erie and Ontario. In Pennsylvania, Erie, most of Crawford, and a bit of Warren Counties are also included in this region. The flow of spring raptor migration there is different from most of Pennsylvania, which is included in the Northern Appalachian Region.

Last year, I presented a discussion on the absence of the Rough-legged Hawk during the spring count in Pennsylvania, and noted that a better picture would emerge when we knew what was happening in surrounding states. The only "hot spot" for wintering Rough-legged Hawks in the northeast was the Dead Creek area in Addison County, Vermont. (Stein, 1997). In early January '97, she noted that the fields "were dripping with Rough-Legs." "I hesitate even to guess at the numbers, but the birds were absolutely everywhere." However, the entire Eastern Flyway (Massachusetts to Virginia) reported only 5 Rough-Legged Hawks during the spring of '97 (Kellog, 1998). That includes a Roughlegged Hawk at Tuscarora Mt, which did not report to *Pa. Birds* last year. These items suggest that we did not see them in early '97 because the largest component of the eastern Rough-leg population probably wintered north of here. So, now we have had at least two successive winter seasons of low level movement into Pennsylvania by this buteo of the low arctic tundra.

Abbreviated seasonal highlights and comments follow.

Allegheny Front The number 1 site for Peregrines. The peak day for Broad-wings was 4/14, whereas Ospreys hit a high point of 9 on 5/4. This is the second spring count at this relocated and most western site.

Jack's Mountain There was no extended count at this central Pennsylvania site. There was staffing on only 7 days for a total of 30 hours (Apr-May). TV 14, OS 22, BE 2, NH 3, SS 16, CH 3, RS 5, BW 137, RT 29, GE 10, AK 7, ML 2, Total = 250.

Lehigh Furnace An eastern Pa. site just west of the turnpike tunnel of the northeast extension. The peak day for Red-shouldered Hawks was 3/7 with 11 hawks. It was a low count year. OS 153, BE 6, NH 25, SS 91, CH 31, NG 2, RS 21, BW 441, RT 110, GE 2, AK 84, ML 5, UR 21, Total = 1002 [Data obtained from Internet reports. May be incomplete for season.]

Lower Providence Our most eastern reporting area. This is an aggregation of sites mostly in lower Montgomery County. They include a cluster of sites in Valley Forge National Park, Trooper, and a "Superfund" hill near the southwestern edge of Evansburg State Park. There were also 2 count days at a satellite site at the Port Royal reservoir, which is a tad over the Montgomery/Philadelphia line. About 44% of the Broadwings came from this latter site, as well as the Peregrine. All are lowland compared to the other reporting sites, but they are high ground for the region. There are many local Red-tails. Most of the count was taken after the main flow of migrant

Red-tails. This grouping may be too diffuse for repeated reporting.

Sideling Mountain This was a limited count aimed mainly at recording the spring Golden Eagle flight. The next northeastern spring site in geographic sequence is Jacks Mt.

Tuscarora Mountain This count usually runs from the last week of March through April. The overall total was average for this site. There were more Turkey Vultures, but fewer Sharpies, Red-tails and Ospreys. Harriers and Broad-wings increased from last year. The 2 eagles and the lone Peregrine Falcon were average for this site.

Tussey Mountain Last year, Dave Brandes recorded 55 Golden Eagles on Tussey Mt in a tie with Derby Hill, New York for the all-time spring record for eastern hawk watches. This year, he recorded **95 Golden Eagles**. The slopes of Tussey were the northbound express lane for Golden Eagles early this season. All but 21 of these birds were noted before the first day of spring. Some of these greater numbers are the result of additional observers.

I gratefully acknowledge the support of the compilers and all who participated in the development of this spring report. It was a pleasure working with everyone.

*HMANA = Hawk Migration Association of North America

Literature/References cited

- Brandes, D. 1998 HMANA Hawk Migration Studies XXIII: 38-42.
- Kellog, S. 1998 HMANA Hawk Migration Studies XXIII: 43-28.
- Lindsay, B. 1997 HMANA Hawk Migration Studies XXII:30-32
- Stein, J. 1997 BIRDHAWK listserve message (12/1)

910 Larchmont Ave. Havertown 19083-4102 hohenfam@erols.com

ALLEGHENY FRONT (*BEDFORD*) Ruth Sager, Compiler

	Feb	Mar	Apr	May	Totals
Coverage - days Coverage - hours	-	17 90	16 76	1 6	34 172
Coverage - nours		30	70	0	172
Turkey Vulture	-	23	-	-	23
Osprey	-	1	28	9	38
Bald Eagle	-	-	4	-	4
N. Harrier	-	2	5	-	7
Sharp-shinned Hawk	-	4	12	4	20
Cooper's Hawk	-	6	12	-	18
N. Goshawk	-	2	-	-	2
Red-shouldered Haw	k -	5	1	-	6
Broad-winged Hawk	-	-	115	8	123
Red-tailed Hawk	-	41	31	-	72
Golden Eagle	-	45	4	-	49
Am. Kestrel	-	1	2	-	3
Merlin	-	1	1	-	2
Peregrine Falcon	-	2	-	1	3
Unidentified	-	8	12	-	20
Totals	-	141	227	22	390

LOWER PROVIDENCE (MONTGOMERY) Scott McConnell, Compiler

	Feb	Mar	Apr	May	Totals
Coverage - days	-	6	14	5	26
Coverage - hours	-	5	22	2	29
Osprey	-	2	61	1	64
Bald Eagle	-	-	1	1	2
N. Harrier	-	1	3	-	4
Sharp-shinned Hawk	-	12	60	1	73
Cooper's Hawk	-	1	2	-	3
Red-shouldered Haw	′k -	8	2	-	10
Red-tailed Hawk	-	-	1	-	1
Broad-winged Hawk	-	-	689	-	689
Am. Kestrel	-	1	9	-	10
Merlin	-	-	1	-	1
Peregrine Falcon	-	-	1	1	2
Unidentified	-	-	5	-	5
Totals	-	25	835	4	864

Tim Kline was also a major participant.

SIDELING MOUNTAIN (FULTON) Gregory Smith, Compiler

	Feb	Mar	Apr	May	Totals
Coverage - days	2	12	-	-	14
Coverage - hours	10	65	-	-	75
Bald Eagle	-	3	-	-	3
N. Harrier	-	1	-	-	1
Sharp-shinned Hawk	-	3	-	-	3
Cooper's Hawk	1	5	-	-	6
Northern Goshawk	-	3	-	-	3
Red-shouldered Hawk	2	24	-	-	26
Red-tailed Hawk	31	187	-	-	218
Golden Eagle	2	41	-	-	43
Am. Kestrel	-	3	-	-	3
Totals	36	270	-	-	306

TUSCARORA SUMMIT (FULTON) Herb Taylor, Compiler

	Feb	Mar	Apr	May	Totals
Coverage - days	-	6	13	-	19
Coverage - hours	-	22	50	-	72
Turkey Vulture	-	26	10	-	36
Osprey	-	-	25	-	25
Bald Eagle	-	1	1	-	2
N. Harrier	-	-	5	-	5
Sharp-shinned Hawk	-	2	15	-	17
Broad-winged Hawk	-	2	107	-	109
Red-tailed Hawk	-	5	15	-	20
Golden Eagle	-	-	1	-	1
Am. Kestrel	-	1	-	-	1
Peregrine Falcon	-	1	-	-	1
Unidentified	-	-	2	-	2
Totals	-	38	181	-	219

TUSSEY MT (*HUNTINGDON*) David Brandes, Compiler

	Feb	Mar	Apr	May	Totals
Coverage - days	4	20	4	1	29
Coverage - hours	10	77	11	2	100
Black Vulture	-	4	-	-	4
Turkey Vulture	7	169	-	-	176
Osprey	-	-	8	4	12
Bald Eagle	2	7	1	-	10
N. Harrier	-	8	1	-	9
Sharp-shinned Hawk	(1	48	21	5	75
Cooper's Hawk	-	8	4	1	13
N. Goshawk	1	3	-	-	4
Red-shouldered Hav	vk -	22	1	-	23
Broad-winged Hawk	-	-	100	2	102
Red-tailed Hawk	15	154	8	2	179
Golden Eagle	6	88	-	1	95
Am. Kestrel	-	17	4	-	21
Merlin	-	-	1	-	1
Unidentified	1	12	1	-	14
Totals	33	540	150	15	738

New Longevity Record for a wild Red-tailed Hawk By Roy F. Frock, Jr.

On October 20,1973 I banded an adult Red-tailed Hawk at Lehigh Furnace Gap, Carbon County, Pa. In May, 1998 it was found dead in a leg hold trap in Benson, VT. This is in the western part of Vermont, about 15 miles from Lake Champlain.

I spoke to the person who reported the bird band. He is a Game Warden in Vermont, and his brother had found the bird on the edge of a hay field. The bird was badly decomposed, but they had spread manure in the field in February and March, and it was not there then. The trap was not marked (as is required by law), and the Warden thought it had probably been set for coyotes.

The previous longevity record for Red-tails was 23 years, 1 month. On August 5, 1998, the Banding Office accepted the Red-tail found in Vermont as a new longevity record of 25 years, 9 months. Of course, we don't have any idea how old the bird was when I banded it - there is no way to age a Red-tail after it has acquired its adult plumage.

> 1305 Bridgeton Hill Road Upper Black Eddy, PA 18972 rffrock@epix.net

1997 Pennsylvania Birdlists by Terry Schiefer

Sixty-seven reports were	un	der 2	00, and seven of these are	52	295	Frank Windfelder B
submitted to Pennsylvania		der 10		53 53	294 294	David Freeland <i>B</i> George Malosh <i>B</i> *
Birdlists for 1997, eight less than	an	Tot		53	294 294	James Baxter *
				56	293	Terence Schiefer
last year. There are now 46 birders		erisk	., .	56	293	John Peplinski B *
whose Pennsylvania lifelists are	sub	omitte	ed totals for which an	58 58	290 290	Tom Clauser
above 300. Joining this group for	up	dated	total was not received this	60	290	Mike Fialkovich Roger Higbee <i>B</i> *
the first time are Skip Conant,	vea	ar. T	otals marked (B) were	61	288	Carl Garner
John Fedak, Robyn Henise, and	-		y published in the <i>Birding</i>	61	288	Allen Schweinsberg *
Richard Timm.				63 64	287 286	Kevin Crilley Kenneth Gabler
	nst	supp	olement.	64 64	286	William Reid *
The 300 county lifelist barrier				66	285	John Salvetti
was broken once again, this time				66	285	Neal Thorpe
by Robert Schutsky in Lancaster			1394 P D Fulgham Rd.	66 69	285 284	Armas Hill B *
County. Only four other birders			Starkville, MS 39759	70	282	James Gray <i>B*</i> Matt Wlasniewski
have reached this goal.		tschi	efer@entomology.msstate.edu	71	280	Thomas Reeves
Twelve top county lifelists are				71	280	Chuck Tague *
				73 74	279 278	John Billings <i>B</i> Merrill Wood *
now held by Deuane Hoffman,	Pe	nnsv	lvania Lifelists	74	278	James Baird B *
followed by John Fedak and	10	misy		76	277	Bonnie Baird B *
William Reid each with four, and	1	355	Barbara Haas <i>B</i>	77	274	Gloria Lamar *
by Gene Wilhelm with three top	2	354	Franklin Haas B	78 79	271 269	James Flynn David Kyler *
lists. There are still 17 counties	3	347	Deuane Hoffman	80	268	Walter Shaffer *
with top lists under 200.	4	342	Rick Wiltraut	81	267	Harry Henderson *
-	4 6	342 341	Eric Witmer Bernard Morris	82 83	266 263	Joe Meloney * Richard Koval *
Three 1997 Pa. annual lists	7	340	Tom Garner	84	262	Mark McConaughy
submitted by Deuane Hoffman,	8	338	Jerry Book	84	262	Scott Bills *
John Fedak, and Joyce Hoffmann	8 10	338 337	Jan Witmer Robert Schutsky	86	261	Peter Robinson
are in the all time top 50. Deuane's	10	337	John Miller B	87 87	259 259	Randi Gerrish Linda McWilliams *
list of 298 species is the third best	12	336	Randy Miller	89	258	Sarah Gerrish
annual list ever reported and is	12	336	William Stocku B	90	257	Dick Byers *
only seven species short of the	14 15	331 328	Dave DeReamus <i>B</i> Paul Schwalbe	90 90	257 257	Russell Ryan * Kerry Grim *
	15	328	Jason Horn *	93	256	Ted Grisez *
record. John's list of 290 species is	17	327	Richard Colyer	93	256	Eugene Zielinski *
not far behind, ranking sixth	17 19	327 326	Steve Santner <i>B</i> * Glenna Schwalbe	95	248	Greg Grove
overall.	20	324	William Murphy	95 97	248 245	Dennis Miller Scott Bastian
Both Deuane Hoffman and	20	324	Harry Franzen *	98	243	Aden Troyer *
John Fedak submitted county	22	323	Ken Lebo	99	242	Walter Fye
annual lists for 1997 from every	23 24	321 319	Gerald McWilliams John Ginaven	100 101	240 239	Jeff Payne Bob Machesney
county in the state. Deuane had	24	319	Joyce Hoffmann	102	238	Roy Ickes *
-	26	318	Phillips Street B	103	237	Retta Payne
7471 county year birds (111.5	27 28	315 314	Evelyn Kopf * Steve Farbotnik	104	235	Gary Edwards *
species per county) and John had	28	314	Al Guarente	105 105	232 232	Joe Strasser * Voni Strasser *
7418 county year birds (110.7	28	314	Fritz Brock *	107	227	Robert Frantz
species per county).	31 32	313 310	Harold Morrin * Harold Lebo	108	224	Wayne Laubscher
County annual lists in the all	32	310	Jonathan Heller *	109 109	223 223	Deborah Grove Pamela Woodman *
time top fifty were submitted by	34	309	Arlene Koch *	111	221	Larry Brown
Gerald McWilliams (Erie), Ken	34	309	Margaret Higbee B *	112	219	Neal Troyer
Lebo (Berks), and Deuane Hoffman	36 36	307 307	Devich Farbotnik Don Henise	112 114	219 218	Ann Pettigrew * Nick Kerlin
	36	307	Ronald Leberman *	115	216	Jim McKinney *
(Dauphin, Lancaster, and	39	305	Robyn Henise	116	214	Arlene Brown
Cumberland).	39 41	305 302	Gene Wilhelm * Sam Stull *	116	214	Glenn Czulada *
Top county annual lists are	41	302	Skip Conant	118 119	210 200	Richard Murphy * Fred Crowley *
now held by Deuane Hoffman in	43	300	John Fedak			·····,
fourteen counties plus one tie,	43	300	Richard Timm B			
followed by John Fedak with nine	43 46	300 299	Larry Lewis * Ernest Schiefer			
and one tie, and by Gene Wilhelm	46	299	Edward Pederson B			
-	46	299	Keith Richards <i>B</i> *			
with three. There are still 40	49 50	298 297	Bruce Carl Allan Keith <i>B</i>			
counties with top annual lists	51	296	Ed Kwater *			
	1			1		

County Lifelists (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	299	Lancaster	Jerry Book
7	292	Lancaster	Deuane Hoffman
7	292	Lancaster	Jan Witmer
9	291	Lancaster	Harold Morrin *
9	291	Erie	Sam Stull *
11	290	Philadelphia	John Miller *
12	289	Delaware	John Miller *
13	287	Lancaster	Barbara Haas *
13	287	Lancaster	Jonathan Heller *
15	281	Lancaster	Bruce Carl
16	280	Berks	Ken Lebo
17	278	Erie	Deuane Hoffman
18	276	Luzerne	William Reid *
19	275	Erie	Joyce Hoffmann
20	274	Erie	Ed Kwater *
20	274	Lancaster	Steve Santner *
22	272	Centre	Merrill Wood *
23	270	Berks	Kerry Grim *
24	268	Bucks	Steve Farbotnik
24	268	Erie	James Flynn
24	268	Chester	Larry Lewis *
27	267	Berks	Harold Lebo
27	267	Butler	Gene Wilhelm *
29	266	Franklin	Carl Garner
30	264	Cumberland	Deuane Hoffman
30	264	Franklin	Kenneth Gabler
30	264	Northampton	Rick Wiltraut
30	264	Lehigh	Fritz Brock *
34	263	Lehigh	Bernard Morris
34	263	Centre	Harry Henderson *
36	262	Berks	Matt Wlasniewski
36	262	Berks	Jason Horn *
38	261	Dauphin	Deuane Hoffman
38	261	Delaware	Al Guarente
40	259	Cumberland	Don Henise
40	259	Lehigh	Rick Wiltraut
40	259	Lehigh	Jason Horn *
43	257	Cumberland	Robyn Henise
43	257	Lebanon	Randy Miller
45	255	Montgomery	William Murphy
45	255	Delaware	Barbara Haas *
47	253	Erie	Linda McWilliams *
48	252	Bucks	Devich Farbotnik
48	252	Montgomery	Kevin Crilley
48	252	Chester	Barbara Haas *
48	252	Chester	Phillips Street *

County Lifelists (by county)

ADAMS	
213	Arthur Kennell *
208	Carl Garner
193	Nonie Kennell *
182	Deuane Hoffman
159	Kenneth Gabler
150	Steve Santner *
144	Russell Ryan *
102	John Fedak
ALLEGHEN	14
240	David Freeland *
220	Joyce Hoffmann
212	Mike Fialkovich
208	Ed Kwater *
193	Bob Machesney
176	Randi Gerrish
168	Deuane Hoffman
168	George Malosh *
158	Sarah Gerrish
144	Geoff Malosh *
	Geon Malosh
141	Greg Malosh *

140 Margaret Higbee *

138	Roger Higbee *
129	John Fedak
116	Dick Byers
102	Steve Santner *
ARMSTRO	
226	John Fedak
209	Margaret Higbee *
192	Roger Higbee *
188	Scott Bastian
157	Deuane Hoffman
147	Bill Reddinger
100	Steve Santner *
BEAVER	
168	Nick Kerlin *
152	George Malosh *
126	Deuane Hoffman
124	John Cruzan *
113	Geoff Malosh *
112	Greg Malosh *
108	John Snarey
102	Steve Santner *
BEDFORD	
201	Deuane Hoffman
139	John Fedak
122	Steve Santner *
110	Richard Murphy *
106	Kenneth Gabler
DEDKO	

BERKS

DEKKS	
280	Ken Lebo
270	Kerry Grim *
267	Harold Lebo
262	Matt Wlasniewski
262	Jason Horn *
236	Ernest Schiefer
234	Deuane Hoffman
204	Barbara Haas *
203	Terence Schiefer
194	Bernard Morris
192	Larry Lewis *
174	Steve Santner *
166	Al Guarente
160	Randy Miller
145	Kevin Crilley
139	Scott Bills *
136	Jonathan Heller *
117	John Fedak
BLAIR	
180	David Kyler *
129	Deuane Hoffman

129	Deuane Hoffma
103	Steve Santner *
79	John Fedak
76	Don Henise

BRADFORD

ADFOR	D
221	William Reid *
194	Ronald Young *
168	Frances Biles *
143	Randy Miller
129	Deuane Hoffman
105	Barbara Haas *
102	Steve Santner *

BUCKS

268	Steve Farbotnik
252	Devich Farbotnik
246	William Murphy
227	Jason Horn *
215	Harry Franzen *
202	Stan Glowacki *
172	Bernard Morris
157	Kevin Crilley
153	Deuane Hoffman
128	Barbara Haas *
121	Steve Santner *
110	AL Cularanta

110 Al Guarente	
-----------------	--

BUTLER	
267	Gene Wilhelm *
250	David Freeland *
198	Dick Byers
166	Deuane Hoffman
166	Ed Kwater *
165	George Malosh *
149	Bob Machesney

138

129

126

126	Sarah Gerrish
122	Geoff Malosh *
119	Roger Higbee *
119	Greg Malosh *
100	Steve Santner *
CAMBRIA 214 161 126 115 103	John Salvetti Gloria Lamer * Deuane Hoffman John Fedak Steve Santner *

Randi Gerrish

John Fedak

Margaret Higbee *

CAMERON

127	Deuane Hoffman
105	Steve Santner *
90	John Fedak

CAR

RBON	
245	Rick Wiltraut
217	Jason Horn *
206	Bernard Morris
193	Deuane Hoffman
188	Robert Frantz
115	Steve Santner *

CENTRE

272	Merrill Wood *
263	Harry Henderson *
244	Terence Schiefer
244	Rick Wiltraut
224	Eugene Zielinski *
218	Scott Bills *
205	Deuane Hoffman
184	Paul Schwalbe

180	Grea	Grove	

- 162 Russ Ruffing *
- 145 Kevin Crilley
- 145 Steve Santner * 138 John Fedak
- 126 Barbara Haas *
- 111 Randy Miller

CHESTER

268	Larry Lewis *
252	Barbara Haas *
252	Phillips Street *
245	John Ginaven
231	Joe Melonev *

- e Mel 220 Deuane Hoffman
- 214 Al Guarente
- 205 Jason Horn *

193 Neal Thorpe *

- Steve Santner * 167
- 120 Randy Miller Jonathan Heller * 116
- Terence Schiefer 111
- Theodore Drozdowski 102

CLARION

- 237 John Fedak 229 Walter Fye
- 200 Margaret Buckwalter *
- 188 Deuane Hoffman
- Gene Wilhelm * 181
- Fred Crowley 150
- 123 Bill Reddinger
- 104 Steve Santner *

CLEARFIELD

- 162 Deuane Hoffman
- John Fedak 155
- Eugene Zielinski * 117
- 114 Paul Schwalbe
- 100 Steve Santner *

CLINTON

- 246 Paul Schwalbe
- 166 Wayne Laubscher
- 128 Deuane Hoffman Steve Santner * 120
- John Fedak 106
- Barbara Haas * 101

COLUMBIA

- 163 Deuane Hoffman
- 112 John Fedak
- 100 Steve Santner *
- 61 Randy Miller

CR

CRAWFOF	
233	
	Deuane Hoffman
206	Margaret Higbee *
205	Ronald Leberman *
203	John Fedak
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 *
102	Terence Schiefer
102	referice Schlefer
CUMBERL	AND
264	Deuane Hoffman
259	Don Henise
257	Robyn Henise
244	Richard Colyer
206	Carl Garner
197	Steve Santner *
176	George Wertz, Jr. *
165	Mark McConaughy
159	Kenneth Gabler
	John Fedak
148	
111	Randy Miller
107	Jonathan Heller *
DAUPHIN	
261	Deuane Hoffman
236	Mark McConaughy
235	Scott Bills *
235	Grace Randolph *
234	George Wertz, Jr. *
219	Steve Santner *
203	Richard Colver
151	Don Henise
141	John Fedak
127	Merrill Wood *
123	Randy Miller
119	William Reid *
110	Kenneth Gabler
DELAWAR	E
289	John Miller *
261	Al Guarente
	Barbara Haas *
255 242	
	Thomas Reeves
240	Skip Conant
226	Paul Schwalbe
222	John Ginaven
159	Deuane Hoffman

DE

289	John Miller *
261	Al Guarente
255	Barbara Haas *
242	Thomas Reeves
240	Skip Conant
226	Paul Schwalbe
222	John Ginaven
159	Deuane Hoffman
151	Jason Horn *
130	Steve Santner *
104	John Fedak

ELK	
183	Linda Christenson
127	Deuane Hoffman
116 105	John Fedak Steve Santner *
79	Ted Grisez *
ERIE	
309	Gerald McWilliams
291	Sam Stull *
278	Deuane Hoffman
275	Joyce Hoffmann
274	Ed Kwater *
268	James Flynn
253 249	Linda McWilliams * Barbara Haas *
249 244	Mike Fialkovich
244 243	Margaret Higbee *
243	David Freeland *
242	George Malosh *
235	Roger Higbee *
233	Gene Wilhelm *
225	John Fedak
218	Geoff Malosh *
217	Greg Malosh *
210	Randy Miller
208	Steve Santner *
206	Richard Colyer
197	Terence Schiefer
178	Bernard Morris
177	Randi Gerrish
177	Sarah Gerrish
174 166	Don Henise
138	Ronald Leberman * Jonathan Heller *
138	Kenneth Gabler
	itemietii Gubiei
FAYETTE 129	Deuane Hoffman
129	Steve Santner *
111	Ed Kwater *
107	Randi Gerrish
100	Sarah Gerrish
FOREST	
148	John Fedak
141	Ted Grisez *
134	Deuane Hoffman
108	Steve Santner *
64	Randy Miller
FRANKLIN	
266	Carl Garner
264	Kenneth Gabler
213	Jeffrey Walck *
154	Deuane Hoffman
141	Don Henise
130	Steve Santner *
114	John Fedak

FULTON

198	Carl Garner
194	Daniel Snell
193	Kenneth Gabler
152	Jeffrey Walck *
130	Deuane Hoffman
119	Steve Santner *
118	Robert Walker *
GREENE	
194	Ralph Bell *
134	Roy Ickes *
125	Deuane Hoffman
	<u> </u>

109	Steve Santner *	

107 John Fedak

HUNTINGDON

229	Greg Grove
-----	------------

- 229 David Kyler *
- 204 Deborah Grove

181 160	Merrill Wood * John Salvetti
155	Eugene Zielinski *
145	Deuane Hoffman
106 105	John Fedak Kenneth Gabler
104	Steve Santner *
INDIANA	
243	Margaret Higbee *
233	Gloria Lamer *
224 195	Roger Higbee * Anne Hedgpeth *
161	Deuane Hoffman
158 158	Randi Gerrish
158	Sarah Gerrish John Fedak
118	Steve Santner *
JEFFERSO) N
198	John Fedak
167	Deuane Hoffman
104 97	Steve Santner * Margaret Higbee *
95	Scott Bills *
JUNIATA	
219	Aden Troyer *
201	Deuane Hoffman
108 102	Steve Santner * John Fedak
95	Jonathan Heller *
LACKAWA 182	NNA Glenn Czulada *
145	Deuane Hoffman
137	Richard Koval *
103 81	Steve Santner * John Fedak
	- 0
LANCASTI 308	ER Randy Miller
308	Eric Witmer
306	Tom Garner
302 299	Robert Schutsky Jerry Book
292	Deuane Hoffman
292	Jan Witmer
291 287	Harold Morrin * Barbara Haas *
287	Jonathan Heller *
281	Bruce Carl Steve Santner *
274 251	Jason Horn *
240	Larry Lewis *
223	Al Guarente
209 201	Richard Colyer Ernest Schiefer
201	George Wertz, Jr. *
198	Pamela Woodman *
184 184	Don Henise Terence Schiefer
172	Dennis Weaver *
160	Kevin Crilley
153 143	John Fedak Bernard Morris
124	Mark McConaughy
118	Margaret Higbee *
108 108	Kenneth Gabler Roger Higbee *
LAWRENC	E

LAWRENCE

- 210 Gene Wilhelm * 130 Deuane Hoffman
- 121 John Fedak

102 Steve Santner *

LEBANON

257 Randy Miller 236 Steve Santner *

221 208 181 181 174 152 130 122 LEHIGH 264	Deuane Hoffman Stephen Mallanson * Bruce Carl Jason Horn * Jonathan Heller * George Wertz, Jr. * Don Henise Barbara Haas *
263	Bernard Morris
259	Rick Wiltraut
259	Jason Horn *
159 103	Deuane Hoffman Steve Santner *
LUZERNE	
276 240	William Reid * Richard Koval *
240 216	Mark Blauer *
155	John Fedak
153	Deuane Hoffman
149 104	Kevin Crilley Steve Santner *
LYCOMINO 229	9 Paul Schwalbe
157	Deuane Hoffman
124	Steve Santner *
103 69	John Fedak Dick Byers *
	DICK Byers
MCKEAN 133	Deuane Hoffman
103	Ted Grisez *
103	Steve Santner *
84	John Fedak
MERCER	
211	Gene Wilhelm *
204 203	Neal Troyer Deuane Hoffman
158	John Fedak
124	Steve Santner *
103	Margaret Higbee *
MIFFLIN	D 11 11
178 152	Deuane Hoffman Greg Grove
110	John Fedak
108	Steve Santner *
59	Randy Miller
MONROE 222	Phillips Street *
176	Jason Horn *
135	Deuane Hoffman
123 110	Bernard Morris Steve Santner *
MONTGON 255	/ERY William Murphy
252	Kevin Crilley
251	Jason Horn *
241	Harry Franzen *
224 223	Bernard Morris Neal Thorpe
185	Deuane Hoffman
137	Steve Santner *
127 126	Al Guarente John Fedak
126	Robert Walker *
100	Barbara Haas *
MONTOUR	
212	Barbara Haas *
205 167	Allen Schweinsberg * Deuane Hoffman
126	John Fedak

104	(tevil) officey
NORTHAM	IRTON
264	Rick Wiltraut
241	Arlene Koch *
	Steve Boyce *
228	Dave DeReamus *
	Bernard Morris
	Brad Silfies *
214	Dennis Miller
201	Deuane Hoffman
201	Jason Horn *
177	Michael Schall
106	Steve Santner *
100	Randy Miller
	IBERLAND
	Allen Schweinsberg *
	Deuane Hoffman
166	Barbara Haas *
	John Fedak
112	Steve Santner *
DEDDV	
PERRY	Deuane Hoffman
232 231	Deuane Hoffman Richard Colyer
157	Steve Santner *
157	Don Henise
156	Walter Shelly, Jr. *
139	Dallas Dowhower *
	John Fedak
120	Randy Miller
116	Jonathan Heller *
112	Mark McConaughy
	mant mooonaagny
PHILADEL	PHIA
	John Miller *
245	Frank Windfelder *
243	Harry Franzen *
241	Barbara Haas *
240	Al Guarente
	Skip Conant
219	John Ginaven
184	Thomas Reeves
184	Jim McKinney *
167	Jason Horn *
163	Deuane Hoffman
163	Stephen Lawrence *
154	Steve Santner *
120	Terence Schiefer
107	Kevin Crilley
101	Randy Miller
PIKE	
201	Joe Strasser *
	Voni Strasser *
144	Phillips Street *
135	Deuane Hoffman Stove Santner *
101 100	Steve Santner * Barbara Haas *
100	
POTTER	
210	David Hauber *
126	Devane Hoffman
104	Steve Santner *
104	Paul Schwalbe
97	John Fedak
0.	
SCHUYLK	ILL
246	Tom Clauser
181	Deuane Hoffman
180	Mike Ward
177	Jason Horn *
133	Steve Santner *
117	Barbara Haas *
115	Bernard Morris
SNYDER	
193	Deuane Hoffman

119 Steve Santner * 104 Kevin Crilley

93	John Fedak
64	Merrill Wood *
SOMERSE	т
	Jeff Payne
229 228	Scott Bastian Retta Payne
175	Richard Murphy *
151	Deuane Hoffman John Fedak
135 126	John Fedak Steve Santner *
107	Randi Gerrish
106	Sarah Gerrish
SULLIVAN	
158 157	Nick Kerlin
137	Skip Conant Thomas Reeves
119 105	Deuane Hoffman
105 104	Randy Miller Steve Santner *
104	
SUSQUEF	
133	William Reid * Deuane Hoffman
	Steve Santner *
103 93	John Fedak Barbara Haas *
	Daibara Haas
TIOGA 206	Larry Brown
200	Arlene Brown
157	Deuane Hoffman
153 120	Bruce Carl * Steve Santner *
120	
UNION 217	Allon Sobwoinsborg *
132	Allen Schweinsberg * Barbara Haas *
128	Deuane Hoffman
117	Steve Santner * John Fedak
VENANGC	
175	Gary Edwards * Gene Wilhelm *
153	Deuane Hoffman
153 143	Nick Kerlin John Fedak
103	Steve Santner *
WARREN	
227	Ted Grisez * Harris Johnson * Deuane Hoffman
131 117	John Fedak
114	Steve Santner *
WASHING	TON
210	Margaret Higbee *
209 197	Roger Higbee * Roy Ickes *
161	Russ Ruffing *
141	George Malosh *
127 100	Deuane Hoffman Steve Santner *
WAYNE 221	Joe Strasser *
221	Voni Strasser *
139	Deuane Hoffman
125 121	William Reid * John Fedak
102	Steve Santner *
WESTMO	RELAND
211	Dick Byers
208	Linda Christenson *

181 Allen Schweinsberg *

132 Steve Santner *

181 178	Randi Gerrish Sarah Gerrish
142	Margaret Higbee *
137 133	Steve Santner * Roger Higbee *
126 125	Richard Murphy *
125	Deuane Hoffman James Flynn
115	John Fedak
WYOMING	3
242 169	William Reid * Richard Koval *
142	Skip Conant
130 111	Deuane Hoffman Steve Santner *
YORK 229	Russell Ryan *
216	Deuane Hoffman
194 185	Steve Santner * Ann Pettigrew *
172	George Wertz, Jr. *
168 166	Carl Garner Jeff Pheasant *
160	Jason Horn *
153	Jonathan Heller *
150 142	Randy Miller Kenneth Gabler
138	Don Henise
111	Barbara Haas *
PA Ann	ual Lists 1997
298	Deuane Hoffman
290	John Fedak
253 245	Joyce Hoffmann Gerald McWilliams
244	Ken Lebo
242 235	Randy Miller Mike Fialkovich
234	Don Henise
230 228	Peter Robinson Mark McConaughy
221	John Salvetti
219 217	Matt Wlasniewski
	I om Clauser
217	Tom Clauser Al Guarente
212	Al Guarente Skip Conant
	Al Guarente Skip Conant Bob Machesney Carl Garner
212 212 210 208	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer
212 212 210 208 190 190	Al Guarente Skip Conant Bob Machesney Carl Garner
212 212 208 190 190 184	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye
212 212 210 208 190 190	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger
212 212 210 208 190 190 184 183 170 168	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz
212 212 210 208 190 190 184 183 170	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer
212 212 210 208 190 184 183 170 168 161 160 148	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown
212 212 210 208 190 190 184 183 170 168 161 160	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown
212 210 208 190 184 183 170 168 161 160 148 143 124	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mikke Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski ual Lists (top 50)
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann 1 306	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann 1 306 2 305 3 298	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski ual Lists (top 50) Robert Schutsky Deuane Hoffman
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann 1 306 2 305 3 298 4 293	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Schiefer Robert Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski ual Lists (top 50) Robert Schutsky Deuane Hoffman
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann 1 306 2 305 3 298 4 293 5 291 6 290	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski Ual Lists (top 50) Robert Schutsky Deuane Hoffman Deuane Hoffman Deuane Hoffman Deuane Hoffman
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann 1 306 2 305 3 298 4 293 5 291 6 290 7 288	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Frantz Michael Schall Larry Brown Arlene Brown James Flynn Theodore Drozdowski Ual Lists (top 50) Robert Schutsky Deuane Hoffman Deuane Hoffman
212 212 210 208 190 184 183 170 168 161 160 148 143 124 PA Ann 1 306 2 305 3 298 4 293 5 291 6 290 7 288 9 278	Al Guarente Skip Conant Bob Machesney Carl Garner Neal Troyer Kenneth Gabler Bill Reddinger Walter Fye Mike Ward Ernest Schiefer Robert Schall Larry Brown James Flynn Theodore Drozdowski Ual Lists (top 50) Robert Schutsky Deuane Hoffman Deuane Hoffman Deuane Hoffman Deuane Hoffman John Fedak

14 269	Jonathan Heller	1992
15 268		1985
15 268	Deuane Hoffman	1986
15 268	Deuane Hoffman	1995
18 266	Randy Miller	1991
19 265	John Fedak	1996
20 263	Gerald McWilliams	1983
21 262		1993
21 262	Ken Lebo	1995
23 261	Gerald McWilliams	1991
23 261	Jonathan Heller	1993
25 260	Jason Horn	1992
25 260	Ken Lebo	1992
25 260	Gerald McWilliams	1992
28 259	Gene Wilhelm	1982
29 258	Steve Santner	1992
30 257	Jason Horn	1995
31 256	Jason Horn	1994
32 255		1977
32 255	Ed Kwater	1989
32 255	Jason Horn	1991
32 255		1996
36 254	Barbara Haas	1977
36 254		1992
38 253	Joyce Hoffmann	1997
39 252	John Ginaven	1978
39 252		1979 B
39 252		1979 B
39 252		1988
39 252	Ed Kwater	1991
44 251	Gerald McWilliams	1989
44 251	Steve Santner	1989
44 251	Steve Santner	1991
47 250		1979
47 250	Ed Kwater	1990
49 249	David Freeland	1984
49 249	Steve Santner	1990
	Jonathan Heller	1994
45 245	Johanan Heiler	1554
	y Annual Lists (by c	
		,
ADAMS		
	Arthur Kennell	1992
ADAMS		
ADAMS 201	Arthur Kennell	1992
ADAMS 201 140 126	Arthur Kennell Carl Garner Carl Garner	1992 1991 1995
ADAMS 201 140 126 126	Arthur Kennell Carl Garner Carl Garner Carl Garner Carl Garner	1992 1991 1995 1997
ADAMS 201 140 126 126 102	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak	1992 1991 1995 1997 1997
ADAMS 201 140 126 126 102 82	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997
ADAMS 201 140 126 126 102	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak	1992 1991 1995 1997 1997
ADAMS 201 140 126 126 102 82 60	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler	1992 1991 1995 1997 1997 1997
ADAMS 201 140 126 126 102 82	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler	1992 1991 1995 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler	1992 1991 1995 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler IENY Bob Machesney	1992 1991 1995 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney	1992 1991 1995 1997 1997 1997 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak	1992 1991 1995 1997 1997 1997 1997 1997 1995 1995
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1995
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMST	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMST	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 126 282 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 282 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVER	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124	Arthur Kennell Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1995 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1995 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman Corge Malosh George Malosh John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman George Malosh George Malosh John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI 223	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman Corge Malosh George Malosh George Malosh John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman George Malosh George Malosh John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI 223	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman Sonn Cruzan George Malosh George Malosh John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 282 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI 223 221 152	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman Corge Malosh George Malosh George Malosh John Fedak Deuane Hoffman RD Sally Dick Tom Dick Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 152 124 110 105 71 152 124 110	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman George Malosh George Malosh George Malosh John Fedak Deuane Hoffman RD Sally Dick Tom Dick Deuane Hoffman John Fedak	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI 223 221 152 132	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman George Malosh George Malosh George Malosh John Fedak Deuane Hoffman RD Sally Dick Tom Dick Deuane Hoffman John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1995 1997 1997
ADAMS 201 140 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 152 124 110 105 71 152 124 110	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman George Malosh George Malosh George Malosh John Fedak Deuane Hoffman RD Sally Dick Tom Dick Deuane Hoffman John Fedak	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1997
ADAMS 201 140 126 126 102 82 60 ALLEGH 163 159 154 122 113 ARMSTI 201 177 152 142 67 BEAVEF 124 110 105 71 52 BEDFOI 223 221 152 132	Arthur Kennell Carl Garner Carl Garner Carl Garner John Fedak Deuane Hoffman Kenneth Gabler HENY Bob Machesney Bob Machesney Bob Machesney Bob Machesney John Fedak Deuane Hoffman RONG John Fedak Scott Bastian Margaret Higbee Bill Reddinger Deuane Hoffman George Malosh George Malosh George Malosh John Fedak Deuane Hoffman RD Sally Dick Tom Dick Deuane Hoffman John Fedak Deuane Hoffman	1992 1991 1995 1997 1997 1997 1997 1997 1995 1997 1995 1997 1997

BERKS		
	Ken Lebo	1005
252 236	Ken Lebo	1995 1997
229	Ken Lebo	1996
216	Matt Wlasniewski	1997
153	Deuane Hoffman	1997
133	Ernest Schiefer	1997
117	John Fedak	1997
BLAIR		
143	Beryl Sternagle	1995
126	Beryl Sternagle	1990
121	Beryl Sternagle	1989
79	John Fedak	1997
57	Deuane Hoffman	1997
BRADFO	סאט	
147	Ronald Young	1993
146	Ronald Young	1992
102	Deuane Hoffman	1996
85	John Fedak	1997
73	Deuane Hoffman	1997
BUCKS		
224	Steve Farbotnik	1992
217	Steve Farbotnik	1994
210		1992
79	Deuane Hoffman	1997
72	John Fedak	1997
BUTLER	2	
245	Gene Wilhelm	1983
229	Gene Wilhelm	1985
225	Gene Wilhelm	1982
121	John Fedak	1997
102	Deuane Hoffman	1997
CAMBR	IA	
-	John Salvetti	1992
175	John Salvetti	1997
174	John Salvetti	1995
115	John Fedak	1997
77	Deuane Hoffman	1997
CAMER	ON	
92	Deuane Hoffman	1996
90	John Fedak	1997
-		
90 68	John Fedak Deuane Hoffman	1997
90	John Fedak Deuane Hoffman N	1997
90 68 CARBOI	John Fedak Deuane Hoffman N Robert Frantz	1997 1997
90 68 CARBOI 145	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman	1997 1997 1995
90 68 CARBOI 145 138 132 109	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman Deuane Hoffman	1997 1997 1995 1995 1997 1996 1997
90 68 CARBOI 145 138 132	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman	1997 1997 1995 1995 1997 1996
90 68 CARBOI 145 138 132 109	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak	1997 1997 1995 1995 1997 1996 1997
90 68 CARBOI 145 138 132 109 54 CENTRE	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak	1997 1997 1995 1997 1996 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer	1997 1997 1995 1997 1996 1997 1997 1985 1985
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer Terence Schiefer	1997 1997 1995 1997 1996 1997 1997 1985 1986 1984
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman	1997 1997 1995 1997 1996 1997 1997 1985 1986 1984 1984
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman	1997 1997 1997 1996 1997 1996 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak	1997 1997 1995 1997 1996 1997 1997 1985 1986 1984 1984
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak	1997 1997 1995 1997 1996 1997 1997 1985 1986 1984 1984
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak	1997 1997 1997 1996 1997 1997 1997 1985 1986 1984 1997 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis	1997 1997 1997 1996 1997 1997 1985 1986 1986 1987 1997 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 214 211 142 127 CHESTE 225 221 219 129	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Deuane Hoffman	1997 1997 1997 1996 1997 1997 1985 1986 1984 1987 1997 1997 1988 1988 1983 1986 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis	1997 1997 1997 1996 1997 1997 1985 1986 1986 1987 1997 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 214 211 142 127 CHESTE 225 221 219 129 98	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski	1997 1997 1997 1996 1997 1997 1985 1986 1984 1984 1987 1997 1988 1988 1983 1986 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219 129 98 69 CLARIO	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak E Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak	1997 1997 1997 1996 1997 1997 1985 1986 1986 1987 1997 1988 1988 1983 1986 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219 129 98 69 CLARIO 219	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak R Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak	1997 1997 1997 1996 1997 1997 1985 1986 1984 1987 1997 1997 1997 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 214 214 217 CHESTE 225 221 219 129 98 69 CLARIO 219 213	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak	1997 1997 1997 1996 1997 1996 1997 1985 1986 1984 1987 1997 1997 1997 1997 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219 129 98 69 CLARIO 219 213 181	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak Sohn Fedak John Fedak Gene Wilhelm	1997 1997 1997 1996 1997 1996 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 214 214 217 CHESTE 225 221 219 129 98 69 CLARIO 219 213	John Fedak Deuane Hoffman N Robert Frantz Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak	1997 1997 1997 1996 1997 1997 1985 1986 1984 1987 1997 1997 1988 1983 1983 1986 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219 129 98 69 CLARIO 219 213 181 131 CLEARF	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak N John Fedak Sohn Fedak Gene Wilhelm Deuane Hoffman	1997 1997 1997 1996 1997 1996 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219 129 98 69 CLARIO 219 213 181 131 CLEARF 155	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak Sohn Fedak Gene Wilhelm Deuane Hoffman	1997 1997 1997 1996 1997 1996 1997 1985 1986 1984 1987 1997 1997 1997 1997 1997 1997 1997
90 68 CARBOI 145 138 132 109 54 CENTRE 224 214 211 142 127 CHESTE 225 221 219 129 98 69 CLARIO 219 213 181 131 CLEARF 155	John Fedak Deuane Hoffman N Robert Frantz Deuane Hoffman Deuane Hoffman John Fedak Terence Schiefer Terence Schiefer Deuane Hoffman John Fedak ER Larry Lewis Larry Lewis Deuane Hoffman Theodore Drozdowski John Fedak N John Fedak Sohn Fedak Gene Wilhelm Deuane Hoffman	1997 1997 1997 1996 1997 1996 1997 1997

11 273 Joyce Hoffman

12 272 Randy Miller

13 271 Jason Horn

92	Deuane Hoffman
CLINTON	
95	John Fedak
92 81	Deuane Hoffman Deuane Hoffman
01	
COLUME	
117 112	Deuane Hoffman John Fedak
112	John Fedak Deuane Hoffman
	2 outro norman
CRAWFO	
	Ronald Leberman
202	Ronald Leberman Gene Wilhelm
190	John Fedak
149	Deuane Hoffman
CUMBEF	Deuane Hoffman
	Deuane Hoffman
225 224	Deuane Hoffman
	Deuane Hoffman
217	Don Henise
148	Carl Garner
145	Carl Garner John Fedak Mark McConaughy
61	Kenneth Gabler
DAUPHI	
234	
229	Grace Randolph
201	Deuane Hoffman Grace Randolph Mark McConaughy
141	John Fedak
DELAWA 241	.RE John Miller
241	Al Guarente
207	Al Guarente
200	Sheryl Johnson
193	Skip Conant John Fedak
104 93	John Fedak Deuane Hoffman
93	Decane Holiman
ELK	
116	John Fedak
113	Deuane Hoffman
71	Deuane Hoffman
ERIE	
264	Sam Stull
256	Gerald McWilliams
252	Gerald McWilliams
240 211	Gerald McWilliams Deuane Hoffman
206	John Fedak
122	Neal Troyer
89	Kenneth Gabler
FAYETTI	_
77	₌ John Fedak
67	Deuane Hoffman
62	Deuane Hoffman
505505	
FOREST 144	April Walters
144	Richard Walters
132	John Fedak
81	Deuane Hoffman
	N
FRANKL 185	N Carl Garner
185	Carl Garner
180	Carl Garner
147	Kenneth Gabler
114	John Fedak
80	Deuane Hoffman

FULTON	
	Daniel Snell Deuane Hoffman
	Kenneth Gabler
94	Kenneth Gabler
93	Carl Garner
	John Fedak Deuane Hoffman
	Dedalle Holiman
GREENE	
137 134	Ralph Bell Ralph Bell
	Ralph Bell
107	John Fedak
103	Deuane Hoffman
HUNTING	BDON
	David Kyler
	Greg Grove Greg Grove
	Greg Grove
106	John Fedak
72	Deuane Hoffman
58	Kenneth Gabler
INDIANA	
	Margaret Higbee
	Margaret Higbee Gloria Lamer
148	John Fedak
108	Deuane Hoffman
JEFFERS	ON
	John Fedak
	Deuane Hoffman
110	Deuane Hoffman
JUNIATA	
188	Aden Troyer
170	Deuane Hoffman
	Aden Troyer Deuane Hoffman
	John Fedak
LACKAW 182	Glenn Czulada
161	Glenn Czulada Richard Koval
	Deuane Hoffman John Fedak
01	John Fedak
LANCAST	
	Robert Schutsky Jonathan Heller
	Jonathan Heller
	Deuane Hoffman
	Randy Miller John Fedak
140	John Foduk
LAWREN	
	Gene Wilhelm John Fedak
	Deuane Hoffman
59	Deuane Hoffman
LEBANOI	N
	Randy Miller
205	Randy Miller
200 124	Randy Miller Deuane Hoffman
	John Fedak
LEHIGH	Bernard Morris
	Deuane Hoffman
77	Deuane Hoffman
74	John Fedak
LUZERNE	E
	- Richard Koval

219	Richard Koval	1995
206	Richard Koval	1994
140	John Fedak	1997
120	Deuane Hoffman	1997
LYCOMI		1007
	Deuane Hoffman John Fedak	1997
90 81	Deuane Hoffman	1997 1996
01	Deuane Honnan	1990
MCKEAN	N	
119	Deuane Hoffman	1996
92	Deuane Hoffman	1997
84	John Fedak	1997
MERCE		
211	Gene Wilhelm	1992
192	Neal Troyer	1997
	John Fedak	1997
103	Deuane Hoffman	1997
MIFFLIN		
	Deuane Hoffman	1997
113	Deuane Hoffman	1996
	John Fedak	1997
MONRO		
88	Deuane Hoffman	1996
82	Deuane Hoffman	1997
74	Eric Sullivan	1993
62	John Fedak	1997
MONTO	OMEDY	
MONTG		1997
132	Deuane Hoffman John Fedak	1997
93	Deuane Hoffman	1996
00		1000
MONTO	UR	
126	John Fedak	1997
115	Deuane Hoffman	1997
107	Deuane Hoffman	1996
	AMPTON	1000
189 168	Dave DeReamus Dave DeReamus	1990 1991
159	Dennis Miller	1991
159	Michael Schall	1990
155	Deuane Hoffman	1997
148	Dennis Miller	1997
84	John Fedak	1997
NORTH	JMBERLAND	
144	Deuane Hoffman	1997
	John Fedak	1997
121	Deuane Hoffman	1995
PERRY	Richard Coluct	100-
202 199	Richard Colyer Deuane Hoffman	1997
199 193	Deuane Hoffman Deuane Hoffman	1995 1996
178	Deuane Hoffman	1990
125	John Fedak	1997
120	oonn'i oddax	1007
PHILAD	ELPHIA	
225	John Miller	1965
208	Edward Fingerhood	1996
162	Al Guarente	1992
136	Skip Conant	1997
80	John Fedak	1997
72	Deuane Hoffman	1997
PIKE	John Ecdel	100-
75 75	John Fedak Deuane Hoffman	1997 1997
75 55	Deuane Hoffman Deuane Hoffman	1997
55		1990
POTTER	ł	
160	David Hauber	1992
160	David Hauber	1995
157	David Hauber	1993

97	John Fedak	
77	Deuane Hoffman	
SCHUYL		
209 208	Tom Clauser Tom Clauser	
191	Tom Clauser	
174	Mike Ward	
137	Deuane Hoffman	
55	John Fedak	
SNYDE	5	
175		
172	Deuane Hoffman	
93	John Fedak	
SOMER	0CT	
	Jeff Payne	
216	Retta Payne	
208	Scott Bastian	
135	John Fedak	
102	Deuane Hoffman	
SULLIVA	A N	
130	Nick Kerlin	
125	Skip Conant	
124 122	Nick Kerlin Skip Conant	
87		
82	John Fedak	
0110011		
	EHANNA Deuane Hoffman	
	Deuane Hoffman	
103	John Fedak	
TIOGA		
107	Larry Brown	
167	Arlene Brown	
157	Larry Brown	
143	Arlene Brown	
111 88	Deuane Hoffman John Fedak	
UNION		
88 87	John Fedak Deuane Hoffman	
	Deuane Hoffman	
VENANO		
207		
194 192	Russ States	
131		
55	Deuane Hoffman	
WARRE	N	
165	Ted Grisez	
152	Ted Grisez	
117	John Fedak	
98	Deuane Hoffman	
WASHIN	IGTON	
134	Russ Ruffing	
132	Roy Ickes	
100 96	George Malosh John Fedak	
96 85	Deuane Hoffman	
WAYNE 127	Deuane Hoffman	
127	John Fedak	
	Deuane Hoffman	
WEST		
WESTM 92	ORELAND Deuane Hoffman	
88	Deuane Hoffman	
84	John Fedak	
WYOMI		

1996

1997 1997

1997	193	William Reid		1993
1997	181	William Reid		1994
1557	-	Richard Kov		
	134			1994
	105	Skip Conant		1997
1996	81	Deuane Hoffman		1997
1997	77	John Fedak		1997
1987				
1997	YORK			
1997	196	Russell Ryar		1992
		•		
1997	178	Russell Ryar		1991
	153	Jeff Pheasar	nt	1995
	87	Carl Garner		1997
1996	76	John Fedak		1997
1997	44	Kenneth Gal	oler	1997
1997				
1997				
	County	y Annual L	ists (top 50)	
1996				
1996	1 264	Erie	Sam Stull	1979
1994	2 256	Erie	Gerald McWilliams	1992
1997				
1997	3 255	Lancaster	Robert Schutsky	1992
1997	4 252	Berks	Ken Lebo	1995
	4 252	Erie	Gerald McWilliams	1991
	6 251	Erie	Gerald McWilliams	1983
1995	6 251	Erie	Gerald McWilliams	1988
1995	8 249	Lancaster	Jonathan Heller	1992
1997				
1997	9 248	Erie	Gerald McWilliams	1989
	10 246	Erie	Gerald McWilliams	1993
1997	11 245	Butler	Gene Wilhelm	1983
1997	12 244	Erie	Gerald McWilliams	1985
	13 243	Erie	Gerald McWilliams	1979
	13 243	Erie	Gerald McWilliams	1981
1997	15 242	Erie	Gerald McWilliams	1984
1996				
1997	16 241	Delaware	John Miller	1969
1557	17 240	Erie	Gerald McWilliams	1997
	18 239	Erie	Gerald McWilliams	1994
	18 239	Lancaster	Jonathan Heller	1993
1992	20 238	Erie	Gerald McWilliams	1990
1992	21 237	Erie	Gerald McWilliams	1995
1997	22 236	Berks	Ken Lebo	1997
1997				
1997	22 236	Lancaster	Randy Miller	1991
	24 234	Dauphin	Deuane Hoffman	1997
1997	24 234	Erie	Gerald McWilliams	1980
	24 234	Erie	Gerald McWilliams	1982
	24 234	Erie	Gerald McWilliams	1987
1997	24 234	Erie	Ed Kwater	1989
1997	24 234	Lancaster	Jonathan Heller	1991
1996				
	24 234	Lancaster	Randy Miller	1992
	31 233	Erie	James Flynn	1979
	32 232	Erie	Ed Kwater	1992
1995	33 231	Erie	Deuane Hoffman	1996
1991	34 230	Erie	Gerald McWilliams	1986
1991	34 230	Erie	Deuane Hoffman	1991
1997			Ken Lebo	1996
1997	36 229	Berks	Gene Wilhelm	
	36 229	Butler		1985
	36 229	Dauphin	Deuane Hoffman	1996
	39 228	Erie	James Flynn	1978
1992	40 227	Cumberland	Deuane Hoffman	1989
1985	40 227	Erie	Ed Kwater	1991
1997	40 227	Lancaster	Deuane Hoffman	1997
1997	43 226	Berks	Ken Lebo	1994
	43 226	Lancaster	Jonathan Heller	1994
108F	45 225	Butler	Gene Wilhelm	1982
1985	45 225	Chester	Larry Lewis	1988
1984	45 225	Cumberland	Deuane Hoffman	1992
1975	45 225	Philadelphia	John Miller	1965
1997	49 224	Bucks	Steve Farbotnik	1992
1997	49 224	Butler	Gene Wilhelm	1981
	-			
	49 224	Centre	Terence Schiefer	1985
1007	49 224		Deuane Hoffman	1995
1997	49 224	Cumberland	Deuane Hoffman	1997
1997	49 224	Lancaster	Randy Miller	1993
1996				

Nesting **Red-headed** Woodpeckers in Sullivan County -1998

by Skip Conant

On May 23, 1998 I observed a Red-headed Woodpecker in Wyoming State Forest on the High Knob Road. In the years I've been coming to Sullivan County this was only the sixth of this species I've seen there. As far as I know the previous five were single individuals.

The area where this bird was found was one of many in Wyoming State Forest where trees are dead as a result of an infestation of Elm span-worms, Gypsy moth caterpillars, and Forest tent caterpillars about four years ago. To the casual observer, these areas look pretty stark, but they have filled in with raspberry, blackberry and red-berry elder and have become meccas for birds. Within two years of the damage, Mourning Warblers had moved in, and this year there were at least eight males singing on territory in the immediate area. Veerys, Chestnut-sided Warblers, Common Yellowthroats, Towhees, Indigo Buntings, Least Flycatchers and Sapsuckers are all extremely abundant.

I continued to see the Red-headed Woodpecker on and off during June, and then near the end of the month I observed a pair. I also found a fresh nesting excavation. On July 14, 1998, Nick Kerlin informed me that he observed an immature bird on a dead snag in the area. Then on July 26th my nephew Rob Megraw and I watched three immatures flying around with adults.

As far as I know, this is the first official nesting record for this species for Sullivan County.

> 126 Ashwood Rd. Springfield, PA 19064

THE SEVENTEENTH ANNUAL

BUCKS COUNTY WILDLIFE ART EXHIBITION

DECEMBER 5 & 6 1998 NEW HOPE, PENNSYLVANIA

The Bucks County Audubon Society presents the Seventeenth Annual "Bucks County Wildlife Art Exhibition" on Saturday, December 5th from 10:00am - 6:00pm and Sunday, December 6th from 10:00am - 5:00pm at Eagle Hall, Route 202 and Sugar Road in New Hope, Pennsylvania. A preview reception takes place Friday evening December 5th.

The juried show features over fifty regional, national and internationally-known wildlife artists who appear in person to exhibit their award-winning paintings, drawings, etchings, engravings, sculpture, wood carvings, jewelry and nature photography. The weekend event also features environmental displays,- live birds of prey, a natural history gift shop, binoculars and spotting scopes, a silent art auction, raffle, mellow music and a light luncheon menu.

Admission fee is \$5.00/person (free for children under 12). Proceeds benefit conservation projects and education programs of the Bucks County Audubon Society. For more information, call (215)297-5880.

On the Honey Hollow Watershed, a National Historic Landmark

Confused? Disoriented? Befuddled?

Lost?

CanOt seem to find anything? ArenOt 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.

Rare Bird Reports

Edited by Nick Pulcinella

Anhinga

Anhinga anhinga

Date: 25 May, 1996 Location: Media, *Delaware* Observer: Al Guarente.

On May 25, 1998, I was sitting on my deck in Media, Delaware County, PA relaxing on the couch. It was about 2:45PM and I had been viewing migrating birds for about an hour. When I looked up this time I saw three birds circling overhead with long, straight necks. My immediate thought was Sandhill Cranes, but then I noticed there were no legs extending beyond the tail. So I grabbed the binoculars and got on the birds and could tell instantly that they were Anhingas.

The birds were circling around in buteo fashion, but with long, straight, extended necks. The necks appeared much thinner and longer than a cormorant's neck, The birds were all dark gray or blackish in coloration. I didn't notice any of the birds having a tan or brownish throat so I assume all were males. The bills were long and thin like a heron's thus adding to the length of the neck and also to the straightness. The birds were making constant but fairly small circles with the birds alternately flapping and than The wings an extended glide. appeared long, thin and pointed. The tailed was long and fanned out, thinner at the base. All these characteristics gave the bird an appearance of a flying cross, even more so then the cross appearance of any loon because of the length of the wings.

The day was windy with clouds most of the morning and at 2:45PM the clouds were just starting to break up so I could view the birds against a clear blue sky and also against a backdrop of clouds.

RB Editor - There are two previous accepted records of Anhinga for Pennsylvania, three birds observed soaring over Swarthmore, *Delaware*, April 18, 1993 and a single bird flushed in Salford Twp., *Montgomery*, May 15, 1996. There are also two undocumented records, a single bird flying over Prospect Park, Delaware April 6, 1994 and two birds observed flying over Hibernia Park, Chester, May 6, 1995. There are multiple records of this species from nearby states and most are from the spring period. Anhingas should be looked for to occur again within the state especially in the southeastern and southcentral counties near large bodies of water or in wetland areas. Any suspected Anhinga should be studied carefully to rule out cormorant. Both species can look deceivingly similar especially when soaring at great distances. Observers should concentrate on the shape of the head and neck, bill, tail and wings.

Arctic Tern Sterna paradisea

Date: 3 May 1998 Location : Glen Morgan Lake, Carr's Recreation Park, New Morgan, *Berks* Observer: Ken Lebo Weather : Rain with NE winds of 10-25 mph Time : noon to 6 pm

Observation : I observed a tern feeding in the middle of the lake, kiting into the wind, flapping occasionally and swooping down to the surface and back up again to about 15 feet above the water. From this distance 100 yards) the bill looked dark, but when he flew close (50 vards), I could see the whole bill was dark-dark red. The cap was black, the cheek was white, the mantle was gray, the tail was long, white and deeply forked, and the belly and neck were about the same gray as the mantle, The underwing was white except the first primary feather which was black and the tips of the next five primaries were black so the tip of the wing had a black "V".

Similar species ;

Common Tern - has a

reddish-orange bill with a black tip end all primaries on underwing are dark (does not have the "V').

Forster's Tern - has a orange bill with a black tip, does not have gray neck and belly, and primaries are white.

Roseate Tern - all black bill, has white neck and belly.

Optics : binocs - Bosh & Lomb Elite $10{\sim}42$

scope - swift discover (with zoom at 25x)

Observers : Matt Spence, Rich Bonnett, Harold Lebo, Eric and Jan Witmer, John Fedak, Randy Miller, Jon Heller, Joan and Rob Silagy, Matt Wlasniewski, Frank and Barb Haas

Comments : The bird was seen by others until dark and was gone the next day,

RB Editor - There is one previous documented record for Pennsylvania. two birds found May 16, 1989 at Beltzville Lake Carbon during a driving rainstorm (Wiltraut 1989), There is also a report from Presque Isle S.P. Erie May 17-18, 1983 (Stull 1985). There are several specimens that were to have been taken near Philadelphia and along the Lehigh River prior to 1890, but these specimens have disappeared (Poole 1964). Arctic Terns migrate well offshore and occasionally may get blown inland during storms containing strong NE winds. Identification of medium-sized white terns can be a bit tricky. With birds on the wing, observers should concentrate their attention on both the upperwing and underwing patterns for shades of gray and white and especially for primary color and pattern. The shape of the bird in flight i.e. the combination of head and bill size and tail length, may also aid in identification. On perched birds leg length, bill size, shape, and color can all be used to help with identification.

Cited References

Poole. E. 1964. Pennsylvania Birds. Livingston Press, Narberth, Pennsylvania.

- Stull J., J.A. Stull and G. M. McWilliams. 1985. *Birds of Erie County, PA including Presque Isle.*, Allegheny Press. Pittsburgh PA.
- Wiltraut R. 1989. Arctic Tern in Carbon County. *Pennsylvania Birds* 3:56.

General References

- Harrison, P. 1983. Seabirds an Identification Guide. Houghton Mifflin. Boston MA.
- Hume, R. A. 1993. Common, Arctic and Roseate Terns: an identification review. *British Birds*.
- Kaufman, K. 1990. Advanced Birding. Houghton Mifflin. Boston, MA.
- —1987. The Practiced Eye: Terns Overhead. American Birds. 41:184-187.
- Olsen. K. M. and H. Larsson. 1995. Terns of Europe and North America. Princeton University Press. Princeton, NJ.
- Wilds, C. 1993. The Identification and Ageing of Forster's and Common Terns. *Birding* 25:94-108.

White-winged dove

Zenaida asiatic

Date: 29, June 1998 Location: Schuylkill Haven, *Schuylkill* Observer: Scott Weidensaul

Weather: 80 F, winds light northwest, overcast. No rain. Lighting flat, and the bird was observed against the bright overcast, making it more difficult to discern subtle colors.

Viewing conditions: Excellent. Range 55-80 feet, viewed with 10x40 Zeiss and 400mm Pentax telephoto lens mounted on Canon EOS 10-S body.

First sighted for 2-3 seconds at 9:30 a.m., flying past my home office window with a mourning dove; I immediately saw the large, symmetrical white wing patches on upper coverts, but I didn't notice tail length or shape, nor was I using binoculars. Attempts to find the bird again failed.

At 12:45 p.m. I heard a four/five note vocalization, obviously a dove but with a different melody and tempo from mourning dove: whoo-00H-00H-oo oo, which I recognized as a white-winged dove. The dove was sitting on a utility line above my garage, and I viewed it for about a minute with 10x40 binoculars at a range of about 80 feet, then went inside to get a camera. I photographed the bird at both 80 feet, and again at 55 feet, for almost five minutes before it flew a short distance and landed briefly among three mourning doves, all of which then flushed and disappeared.

Description: The bird was clearly a "Zenaida" dove, although a bit bulkier than a mourning dove. Overall length appeared slightly smaller, due to the shorter, rounder tail. The beak was noticeably longer and slightly more downcurved than on the mourning doves, a trait especially noticeable while they briefly perched together. The dark facial marking was longer and thinner than on a mourning dove, extending farther toward the throat. The large area of blue skin around the eye was not observed, perhaps due to the poor light conditions. The distance was too great to note eye color.

The white wing markings were distinct, and ran along the lower edge of the folded wing on the secondaries and tertials, partially obscured by the overhanging scapulars. The tail was rounded, with the lowest one-quarter appearing white on the underside. The upperparts were smooth gray-brown, with no spots on the wing. The underparts were a slightly lighter shade of gray-brown, although there appeared to be some lightening of the tone toward the belly and flanks. The leg color was pinkish, identical to mourning dove.

Previous experience with the species: I've seen many, many white-winged doves on trips to the Southwest, Gulf coast and Mexico.

RB Editor - There is one previous accepted record for Pennsylvania, a single bird observed May 8, 1996 in Fairview Twp., *Erie* The *Schuylkill* bird was particularly frustrating for most visiting birders to find. It would spend most of the day roaming the numerous agricultural fields in the area in the company of Mourning Doves and it really couldn't be counted on to be at one specific location. The White-winged Dove is a common breeding bird in the desert habitats of the southwest U.S. Numbers are less common there during the winter when they move south into Mexico. There is also an introduced breeding population in south Florida and the Keys. This species wanders widely and there are many extralimital records throughout North America.

White-winged Doves were reported from Oregon, Nova Scotia, North Carolina, and Delaware this spring. This bird was probably part of that "incursion."

There are records, some multiple, from nearly all surrounding states and provinces. Because of its tendency to wander, it is likely that this species may occur again in Pennsylvania at any season. If you enjoy chasing rareties in Pennsylvania, this is turning out to be a great year.

Last quarter provided geese, gulls, Say's Phoebe, Varied Thrush, Townsend's Warbler, and northern finches. This quarter sported Pacific Loon, Arctic Tern, Whitewinged Dove, **2** Swainson's Warblers, Western Meadowlark, and several other non-chasable species.

The **Pacific Loon** in *York* was extraordinary because of the time of year. Most vagrant loon reports come during migration or winter. This was a great opportunity to see this species in breeding plumage.

An Eared Grebe in *Chester* and **3 American White Pelicans** in *Erie* did not stay around for others to see.

Anhingas continue to be reported from southeastern Pennsylvania (*Delaware*, *Philadelphia*). As usual, these were flyovers. It would be nice if one of these birds would stop and spend a while so that others could see it.

Egrets and herons made a nice showing and there were at least three **Glossy Ibis** reports (*Lancaster*, *Northampton*, *Philadelphia*) and one *Plegadis* in *Delaware*. Observers are reminded to study any *Plegadis* ibis carefully. One of these days a White-faced is going to show up.

A **Mississippi Kite** in *Lackawanna* was a first county record. These birds continue to be seen annually in the state.

What may be the rarest sighting of the year was the Yellow Rail discovered by an Amish farmer in *Juniata*. (See local notes for details.) These birds probably migrate through the state in small numbers every year, but are so secretive as to elude detection. Maybe we should organize a Yellow Rail harvest expedition one of the years. October is supposed to be the peak migration time. If we could find a cooperative farmer, we could follow his tractor and see what flushes out. Any takers?

A **Sandhill Crane** in *Columbia* was noteworthy, while the *Mercer/Lawrence/Butler* birds returned to breed again.

Shorebird reports included American Avocet, Willet, and 16 Whimbrel in *Lancaster*.

The Arctic Tern in *Berks* stayed long enough for a number of observers to see it. This is only the second documented record for the state.

Another second state record, White-winged Dove, proved very uncooperative, although it did hang around for several days. This bird was part of a White-winged Dove incursion, as there were reports from Nova Scotia, North Carolina, and Delaware.

The **Say's Phoebe** and **Varied Thrush** reported last quarter remained into this one.

Last quarter's warbler highlight was Townsend's. This quarter's prize was **two Swainson's Warblers** — one in *Dauphin* and one in *Westmoreland*. Both birds were fairly cooperative and many observers added it to their state (or life) lists. It was nice to have one in each end of the state. Why can't other birds be so cooperative? The **Clay-colored Sparrows** in *Clarion* may be nesting. We will have more details in the next issue.

Two **Western Meadowlarks** were reported. One in *Clarion*, and one returned to the same site in *Juniata* as last year.

A Yellow-headed Blackbird was a good find in *Potter*, and a Brewer's Blackbird was reported from *Philadelphia*.

Last, but not least, the crossbill invasion lingered into this quarter with reports of **Red Crossbills** as late as 6/21 and **White-winged Crossbills** as late as 5/27. Red Crossbills are known to stay and breed after invasions such as this, but none have been found to date.

There were **278** species reported this quarter, slightly down from the **281** reported in the same quarter last year. We received partial or complete reports from **57** counties.

Thanks again to our hardworking county compilers! *****

Frank & Barb Haas

Birds of Note - April through June 1998 (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 <u>description of the bird</u> was submitted.

- <u>Pacific Loon</u> York: 1 on 6/13-15 at Long Arm Dam (Barb & Frank Fisher) and then rediscovered at Codorus S.P. on 6/19-25 was a first county record.
- **Eared Grebe** Chester: 1 on 4/2 at Chambers Lake (Grier Saunders)(no details).
- <u>American White Pelican</u> 3 on 5/18 at Presque Isle S.P. (Deuane Hoffman)(no details).
- **Great Cormorant** *Bucks:* Present up to 5/16 at the Delaware River.
- <u>Anhinga</u> Delaware: 3 on 5/25 at Media (Al Guarente) was the third county record since 1993; *Philadelphia:* 1 on 6/14 at Tinicum (John Damico)(no details).
- Snowy Egret Beaver: 1 in late April on the Beaver River was misreported as March 25 in the last issue; Dauphin: 1 on 4/22 at Wildwood Lake (Ramsay Koury) and 1 on 5/9 in Dauphin (David Solomon); Philadelphia: 1 on 4/16 at Tinicum (Ted Floyd) and 4 on 5/9 (v.obs.); Schuylkill: 1 on 5/9 at Raven Run Res. (Marilyn Gamble).
- Little Blue Heron Bradford: 1 on 6/21 at North Towanda (Ron Young) was a second county record; Delaware: 1 on 5/24 at Darby Creek (Sheryl Johnson, Jim Lockyer); Lancaster: Present from 6/28 at Washington Boro (Peter Robinson).
- Tricolored Heron Berks: 1 on 6/29 at Blue Marsh Lake (Harold & Joan Silagy); Lancaster: 1 on 5/9 at Washington Boro (Tom Garner, Eric Witmer, Jerry Book).
- Cattle Egret Cumberland: 1 on 5/9 at West Fairview (Ramsay Koury); Dauphin: Present from 5/2 to 5/19 at Haldeman Island (Scott Bills).
- Yellow-crowned Night-Heron Cumberland: Present from 5/9 at West Fairview (Don & Robyn Henise); Lancaster: Present from May on (Jeff Hoppes); Philadelphia: 1 on 6/21 at Tinicum (Belynda Stewart); Sullivan: 1 on 4/26 at Worlds End S.P. (Nick Kerlin).
- Glossy Ibis Lancaster: 1 on 5/9 (No details); Northampton: 1 on 4/1-3 at Green Pond (Rick Wiltraut); Philadelphia: 1 on 4/30 at Fort Mifflin (John Miller).
- **Plegadis sp.** Delaware: 1 on 4/18 at Marcus Hook (Nick Pulcinella).

<u>**Trumpeter Swan</u></u> - Bedford: 2 on 5/17 at Dunning Creek (Tom Dick)(no details).**</u>

- Black Scoter 1 on 5/9 at Margus Lake (Gloria Lamer, Georgette Syster).
- <u>Mississippi Kite</u> Lackawanna: 1 on 6/19 near Mt. Cobb was a first county record (Bill Reid).
- Rough-legged Hawk Mercer: 1 on 5/9 near I-79 (Randy Stringer); Potter: Present up to 4/2.
- Golden Eagle Berks: 1 on 4/28 at Hawk Mountain (Mark Monroe); Carbon: 1 on 5/27 at Beltsville S.P. (Bob Frantz); Clarion: 1 on 6/8 at Leeper (Lois Callahan); Huntingdon: 1 on 5/1 at Tussey Mt. (Dave Brandes)
- <u>Yellow Rail</u> Juniata: 1 on 5/18 on an Amish farm was the first Pennsylvania record in many years. See the Juniata report in Notes from the Field for details.
- Sandhill Crane Columbia: 1 on 6/19 (Bob & Tonya Sager); Lawrence: Present all quarter.
- Black-bellied Plover Cumberland: Present from 5/1 to 5/26 with a high of 7 on 5/20 at Mud Level Road (Don Henise); Dauphin: 1 on 5/19 at Haldeman Island (Scott Bills); Erie: Recorded from 5/3-25 at Presque Isle S.P. (Jerry McWilliams); Lancaster: Recorded from 5/9-23 with 4 on the 23rd at Washington Boro (Peter Robinson).
- American Avocet Centre: 1 on 5/7 near Pine Grove Mills (Paul Rodewald).
- *Willet* 1 on 5/15 at Presque Isle S.P. (Jerry McWilliams).
- Whimbrel 1 on 5/25 at Presque Isle S.P. (Jerry McWilliams); Lancaster: 16 on 5/25 at Washington Boro (Jerry Book, Tom Garner).
- Sanderling 2 on 6/7 at Presque Isle S.P. (Jerry McWilliams).
- Western Sandpiper Huntingdon: 12 on 5/15 at Old Crow Wetland (Greg Grove).
- **Baird's Sandpiper** *Indiana:* 13 on 5/31 at Yellow Creek S.P. (Greg Cook).
- Short-billed Dowitcher Butler: 1 on 5/9 at Moraine S.P. (Gene Wilhelm); Erie: Present part of the quarter at Presque Isle S.P. (Jerry McWilliams); Lancaster: 23 on 5/23 at Washington Boro (Peter Robinson).
- Wilson's Phalarope Dauphin: 2 on 5/19 at Haldeman Island (Scott Bills); Northampton: 1 on 6/5 at Green Pond (Joe Zajecek, Rick Wiltraut).
- Little Gull Dauphin: 1 on 4/23, 4/27, and 5/20 at Harrisburg (Ramsay Koury, Grace Randolph)

PENNSYLVANIA BIRDS

- Iceland Gull *Bucks:* Present up to 5/16 (which was late) at Van Sciver Lake (Gerry Dewaghe).
- Lesser Black-backed Gull Bucks: Present up to 5/16 at Van Sciver Lake (Gerry Dewaghe); Montgomery: Present up to 4/7 at Green Lane Reservoir (Kevin Crilley).
- <u>Arctic Tern</u> Berks: 1 on 5/9 at Glen Morgan Lake was a first county record and only the third state record (Ken Lebo, et al.).
- <u>White-winged Dove</u> Schuylkill: 1 on 6/29-7/3 at Wayne Twp. Was only the second state record (Scott Weidensaul).
- Long-eared Owl Erie: 2 on 4/11 at Presque Isle S.P.(Dave Darney); Juniata: At least 4 present up to 4/3 at Oakland Mills (John Straub); Schuylkill: Present all quarter.
- Short-eared Owl Allegheny: Present all quarter at Imperial; Clarion: Present up to 5/26 at Mt. Zion (Chris Grainer); Erie: Recorded from 4/5 - 5/14 at Presque Isle S.P.(Jerry McWilliams); Lawrence: Present all quarter — bred.
- <u>Say's Phoebe</u> Cumberland: The bird reported last quarter was last seen on 4/10 (Greg Grove).
- Loggerhead Shrike Adams: Present all quarter with 5 on 6/15 (Deb Siefken).
- Sedge Wren Dauphin: 1 on 5/3-6/19 at Hershey North (Nancy Cladel).
- <u>Varied Thrush</u> Allegheny: The bird in Churchill from the previous quarter was last seen on 4/9 (Dino Ciabattoni).
- <u>Swainson's Warbler</u> Dauphin: 1 on 5/7 to 5/24 at Clark's Valley (m. obs.); Westmoreland: 1 on 5/9 and several weeks thereafter near Loyalhanna Res (Tom Pearson).
- **Connecticut Warbler** Allegheny: 1 on 5/9 at Fox Chapel (Mary Ann Thomas); *Erie*: 1 on 5/24 at Presque Isle S.P.(Ramsay Koury); *Mercer*: 1 on 5/25 at North Liberty (Troyer family).
- Summer Tanager Bucks: 1 on 5/16 at Penn Manor (Gerry Dewaghe); Dauphin: 1 on 5/16 at Blue Mountain (Tom Smith); Delaware: 1 on 5/18 at Media (Doris McGovern): Greene: Present from 5/13 (Ralph Bell); Westmoreland: 1 on 5/7 at Powdermill Nature Preserve was their first in several years (Jim Grumber).
- Dickcissel Adams: 1 on 6/13 on Cunninham Rd and 2 on 6/14 on the grassland bird survey (Peter Robinson); Berks: 1 on 6/28 near Bowers (Catherine Elwell); Clarion: 1 on 6/6 to 6/21 at Mt. Zion (m. obs); Cumberland: 2 on 5/21at Newburg (Deuane Hoffman, et al.); Dauphin: 1 on 6/5-7 at Hershey North (Nancy Cladel, Grace Randolph); Mercer: 1 on 5/4 at North Liberty (Neal Troyer)(no details).
- <u>Clay-colored Sparrow</u> Clarion: 1 from 4/16 at Mt. Zion (John Fedak, Bill Reddinger).

Snow Bunting - Mercer: Up to 4 present from 4/29

to 5/5 at Skunk Run Road (Troyer family).

- <u>Western Meadowlark</u> Clarion: 1 on 6/6 on the Grassland Bird Survey (John Fedak); Juniata: 1 appeared again at Center on 6/26 exactly one year after being first reported last year (Toby Petersheim).
- Yellow-headed Blackbird Potter: 1 on 5/9 at Ole Bull S.P. (Mary Herrold).
- <u>Brewer's Blackbird</u> Philadelphia: 1 on 4/17 at Tinicum (Ted Floyd). ♣

Adams County

A **"Brewster's" Warbler** was found at SGL-249 (P Robinson). **Dickcissel** were found on Cunningham Rd (PR), on a 6/14 Grassland Bird Survey (PR), and two along Rte 95 near Littlestown/Bonneauville (PR).

Allegheny County

There were many unusual birds despite the rather poor spring migration.

A C. Loon was at Verona (VER) on 4/17 (S Kinzey). Double-crested Cormorant numbers were carefully checked during April with a high of 125 seen at a roost on the Allegheny R. (AR) at Highland Park and VER (SK). Uncommon were 3 Ruddy Duck at Imperial (IMP) 4/28-30 (J Hoffmann, SK). A pair of N. Shoveler was present at North Park at the late date of 5/23 (M Fialkovich, JH, MK, SK). An ad. & Surf Scoter was at Duck Hollow on the Monongahela R. 5/15 (C Tague) which was rather late. I received a late report of an injured & White-winged Scoter found in Pittsburgh 3/1. It was treated and eventually released at Presque Isle (M Pradines *fide* CT). A Hooded Merganser with 2 young was observed at IMP 6/20 (MF).

Any tern is rare in the county so 2 **Caspian Tern** at IMP 4/30 were certainly notable (JH, SK). Eight **Bonaparte's Gull** on the AR at VER 4/10 were the highest count for a long time (MF, SK).

Shorebird highlights at IMP included 7 Semipalmated Sandpiper 5/25 (CT); 6 Least 5/18 (T Floyd, JS); 6 C. Snipe 4/12 (WS, DS); a Dunlin on 5/9 (MF, J Valimont) and 2 on 5/16 (SK); and a White-rumped Sandpiper 5/25 (CT). Am. Woodcock were heard calling at IMP 4/12 (MF).

A new **Herring Gull** breeding site was discovered at Dashield Lock and Dam near Edgeworth on the Ohio R. on 6/22 (D Rieger). There were two nests, one with 2 and one with 3 young. Five nests were seen at the "traditional" site at the Highland Park Bridge on the AR (SK, MF).

A **Black-crowned Night-Heron** was a surprise find at VER 4/16 (SK), the first for many years and extremely rare here. A **Great Egret** was found in the same area, the same day, also very uncommon here (SK).

Short-eared Owl continue to be seen at IMP. No confirmed nesting this spring, however the land is now off limits to birders, making observations of breeding behavior difficult, however, an individual was observed performing a courtship flight 4/12 (MF). A Whip-poor-will was heard at Kilbuck Twp 5/9 (PB) and one was heard in June at Bradford Woods in the northern part of the county (*fide* JH). Once again, raptors were in good variety with a **N. Goshawk** in a yard in Natrona Heights (NH) 4/2 (PH). Two **Merlin** were seen at the roost (reported last quarter) in Schenley Park (SHP) up to 4/16. Searches on 4/20-22 did not produce any birds (BH). A **Bald Eagle** (SK) and an **Osprey** (MF) were found an 4/19 at VER A late (or nearby breeding) Osprey was seen at Harmar Twp. 6/13 (JV).

Rare bird reports continued with a **Red-headed Woodpecker** at SHP 5/9 (B Hintze, C Holzner). An **Alder Flycatcher was** seen and heard at Beechwood Farms 5/30 (MF et al.), the 1st for many years. An **Olive-sided Flycatcher** was seen at Frick Park (FP) 6/5, the 1st for many years (BH).

The Varied Thrush reported last quarter was last seen 4/9 (DC). An early N. Waterthrush was seen and heard at FP 4/23 (JS, N Hall). A Connecticut Warbler was an excellent find at Fox Chapel 5/9 (MA Thomas). Yellow-throated Warbler were first reported from SEW 4/9 (JH), and Louisiana Waterthrush was first reported on that date at FP (NH) which was early. Cape May Warbler was the only miss for the spring migration.

Two **Rusty Blackbird** were reported from SHP the first week of April (BH), and a late individual was in Pleasant Hills 5/9 (S Sinderson).

A few northern finches passed through, including 30 **Evening Grosbeak** at NH 4/26 (PH, DH); a **Pine Siskin** in Kilbuck Twp 5/2 (P Brown); single **Whitewinged Crossbill** at Harrison Hills Park 4/2 and 4/9 (PH), an individual hit a window in Brentwood 4/10 (SD), and 2 were in a yard in Squirrel Hill 4/14 (JKR). A flock of 16 **Red Crossbill** were in Sewickley 4/23, and a single bird was seen at FP 5/21 (MF). Sadly, the **Blue Grosbeak** breeding at IMP could not be located this year.

Armstrong County

A **Red-necked Grebe** found by Steve Graff 4/10 was relocated later that day (D Jacobs). An **Am**. **Bittern** in a small roadside marsh near Maysville on 5/3 was unexpected (M&R Higbee).

A & N. Harrier observed 6/18 (G Cook, MH) near Elders Ridge suggested possible breeding. Whippoor-will at two locations: 1 near Dayton on 5/2 (J McIntire) and 2 near Timblin 5/8 (B Copenhaver, B Reddinger) were encouraging for this seldom-reported species. The **Purple Martin** colony (m.ob.) Near Elderton continues to be the only known colony in the county. Thirty-five White-winged Crossbill visiting a yard near Templeton were videotaped (C Pierce).

Bedford County

Mike Jackson reports on 4/22, he was able to videotape a **Whip-poor-will** at night. On 6/15 he observed 2 **Wild Turkey** hens with 10 poults. Rosie McGinnett reported 123 Goldfinches on her feeder on 4/4. And, Tom Dick of Johnstown reported 2 **Trumpeter Swan** present at Dunnings Creek Wetlands on 5/17.

Bradford County

81 spp. were recorded on a BBS in the Wyalusing area on 6/1 (W Reid). Previous high on this survey which began in 1982 was 77 species. **Bald Eagle** and **Mourning Warbler** were new for the route.

The Little Blue Heron which was observed by Ron Young at N. Towanda on 6/11 was an adult bird. To my knowledge this is only the 2^{nd} record for the county.

The 2 Green-winged Teal seen at Standing Stone on 6/1 (these were not on the BBS) were at the same pond where **Hooded Merganser** with young were found in 1997. Unfortunately, no follow-up of the teals was possible.

A flock of about 30 **Least Sandpiper** at Browning's Pond on Spring Hill on 6/1 (also not on BBS) was late in date and high in number.

It is gratifying to see increasing reports of bald eagles, both adults and immatures.

Ron Young reports: "I had 45 bluebird nests with eggs in the 100 bluebird boxes I maintain with about 38 successful, but will improve these figures with 2nd nestings. Something new happened this year. Bluebird egg incubation was aborted in nine boxes so far by invasions of small brown ants, and I wonder if nests of other birds were similarly affected. I wondered if it was a result of super-abundance, overpopulation, or a change in soil chemistry."

On 6/2 a powerful tornado came through the county. Over 1000 acres of timberland destroyed. I will write something about the effects on bird life, but want to carry observations into the fall.

Bucks County

Highlights include: A **Summer Tanager** was reported at Penn Manor on 5/16 (G Dewaghe). A **Black-headed Grosbeak** was reported at a feeder at Pine Run on 4/19 (M& H McNaught). The bird was at the feeder several times for only the one day. This is the 1st report for this species in the county.

Nesting highlights: The **Great Blue Heron** rookery at Quakertown Swamp has grown to 48 nests (A Mirabella). **Black Vulture** bred successfully for the 3^{rd} year in Solebury (D Fitting). The **Osprey** that returned to the nest site on the Delaware R. at the lower end of the county had a successful breeding season (H D'Allesandro). **Acadian Flycatcher** are nesting again for a 2^{nd} year at Peace Valley (PV) (R

French). **Bank Swallow** were reported nesting at Money Is. (B McNaught). **Cerulean Warbler** were reported nesting at Buckingharn Mt (BMc). A pair of **Prothonotary Warbler** was reported as probably nesting at Churchville (C Stieber). Two pairs of **Grasshopper Sparrow** were reported nesting at PV (C Crunkelton). **Blue Grosbeak** were reported nesting in June at Bedminster (D Nagle, D McClintock).

Other highlights: An Am. Bittern was reported at PV from 4/28-5/7 (RF). Evidence of a Ruffed Grouse was reported at PV on 4/22 (S Taylor). Up to 4 Virginia Rail were reported at QS from 5/2-16 (G & K Campbell, K Reiker, NAMC). A Sora was reported by two teams on the NAMC. The Red-headed Woodpecker that was at Revere last quarter stayed until 4/28 (S Farbotnik), and another was reported on 5/3 at PV (I Baldoch). A Winter Wren stayed late and was reported singing on 6/20 at Carversville (M Rutbell).

In addition to the nesting family, **Blue Grosbeak** were reported on 5/16 at Morrisville (GD), on 6/18 at Money Is. (BMc), and on 6/21 at PV (HD). Five **Rusty Blackbird** were reported on 4/6 at Revere (SF). A **Red Crossbill** was brought to Silver Lake center on 5/8 (G Carmichael). It had been picked up in a yard in Bensalem on 5/7; it was ok and released. Three **Evening Grosbeak** were reported on 4/29 at Nockamixon Twp (T Kern).

It was a strange season for the migrating species, 8 species were early in arriving and 17 species stayed late. The warbler migration was generally later than usua1. In addition there were a number of reports of species that are rare in *Bucks*, which is the northern edge of their range: four reports of Prothonotary Warbler (including 1 nesting); one report of a Summer Tanager; and four reports of Blue Grosbeak (including 1 nesting). Maybe El Nino mixed things up.

Butler County

Lingering waterfowl at L. Arthur (LA) included 2 C. Loon through the quarter (B Machesney) and **Ring-necked Duck, Ls. Scaup**, and **Ruddy Duck** into early June (D Darney, D Yovanovich). 4 **Surf Scoter** at LA 4/26 (DD, DY) and one still present 5/9 (G Wilhelm) were rare visitors, and a $\stackrel{\circ}{=}$ **Hooded Merganser** with young was found there in late June (DD). A **Great Egret** at Glades 5/24 (P&D Hess) was the only report.

Sad news at Glades: A storm 5/31 blew down the **Bald Eagle** nest in its 9th productive year. The season's single eaglet, 9 weeks old and near fledging, was badly injured when the tree fell. It was taken to a rehabilitator but died 6/8. A happier picture came from L. Arthur's introduced **Osprey**, with two nesting pairs and 6 other birds on hand (DD). A **N**.

Goshawk was a good find at Moraine SP 4/10 (R Stringer).

Virginia Rail and Sora were present at Glades and LA (v.o.), and 2 C. Moorhen were found at LA 5/9 (GW). Three Upland Sandpiper pairs at Barkeyville grasslands represented the species' last stronghold in the county (GW). 5 Caspian Tern were a good count at LA 4/26 (DD, DY), and 2 C. Tern were there 4/26 (DD, DY) and 5/9 (GW).

Landbird highlights included an Olive-sided Flycatcher at MSP 5/29 (DD) and up to 7 Alder Flycatcher singing at Glades in late May (PH, DH). Two Brown Creeper nests discovered at Slippery Rock and Wolf Creek Narrows (GW) were the county's 1^{st} confirmed breeding records (contrary to my comment last quarter, there were no Atlas confirmations). 2 Marsh Wren each were present at MSP (GW) and Glades (PH, DH).

Migrant passerine counts were unusually low as most flocks apparently overflew us, but notable warbler reports were a "Brewster's" at Cranberry Woods 5/27 (M Williams), <u>26</u> Nashville at MSP 5/9 (GW), an early N. Parula 4/12 at Slippery Rock (GW), and a Mourning at MSP 5/9 (GW). An interesting mini-wave at Slippery Rock 5/28 included Blue-headed and Philadelphia vireos, Swainson's and Gray-cheeked thrushes, and Tennessee, Magnolia, Cape May, Blackburnian, Bay-breasted, Blackpoll and Worm-eating warblers (GW).

A Barkeyville grassland count tallied 109 Savannah, 37 Grasshopper, and 44 Henslow's sparrows, plus 100 Bobolink and 23 E. Meadowlark (GW). 11 Orchard Oriole at MSP 5/9 (GW) were also a fine total. The last "northern finches" were 3 Pine Siskin and 15 Evening Grosbeak 5/9 at Wolf Creek Narrows (GW).

Cambria County

John Salvetti and Dave Gobert observed a "**pink-sided**" Junco at Dave's feeder in Patton from 4/28-5/4. They both noted the unusually late dates of the **Evening Grosbeak** on 5/7,8 at St. Lawrence. Salvetti writes, "The pair of **Orchard Oriole** were my first for *Cambria* and were located between Prince Gallitzin SP and Dysert at— you guessed it!—an abandoned orchard.

Chester County

This report does not include totals from the West Chester Bird Club's Spring Count (4/15-5/15) or its Breeding Count (6/7).

An **Eared Grebe** was reported by Grier Saunders at Chambers L. on 4/2. No details were provided.

Two **Olive-sided Flycatcher** were observed. One was heard near Big Elk Creek by Phyllis Hurlock prior to mid-May. The second was seen by Bill Barber while taking part in the West Chester Bird Club Breeding Bird Count on 6/7 (†BB).

Both **Prothonotary Warbler** were seen in the same location in Valley Forge Park approximately one week apart. The first time a male was seen and the second time a female was seen.

Clarion County

New **Great Blue Heronry** established in Cook Forest SP (CF) near Ridge Camp; in two parts, one about ¼-mile from first and 8 known fledged young. **Canada Goose**: first goslings seen 4/20 at Beaver Cr. (J Fedak). Very early.

N. Goshawk: first seen 4/27 (D Boden) at CF. Pair seemed to be holding territory during May and June, but nest not located. **N. Saw-whet Owl**: If the sighting of two juv. is accepted this would be the 1^{st} breeding record for the county.

Cedar Waxwing: If anybody keeps a gruesome list of birds killed by monofilament fishing line, add this species. At CF in the main parking lot a pair of Cedar Waxwings were busy building a nest on 6/13 while a dead waxwing, caught by monofilament line, dangled underneath.

Dickcissel were discovered by JF on a Grassland Breeding Bird Survey near Mt. Zion (MZ) on 6/6. At least 1σ and $2 \circ \circ$ were seen in the area until 6/21 when the area was mowed. **Clay-colored Sparrow** was heard on 4/15,16 at MZ (JF, B Reddinger). Interesting in light of their presence on 7/17 and later.

W. Meadowlark: On the same GBBS on 6/6 JF and others heard and saw what was believed to be a W. Meadowlark. The bird had a non-typical Western song (the same notes but softer) but neither did it have an Eastern song or call. It had a paler head than an Eastern and had yellow in the cheek. (I believe JF is to submit documentation).

Clearfield County

Fifteen warbler spp. were recorded, all of which appear to be summer residents, not migrants. The most interesting report was that of a **Cerulean Warbler** s. of Ramey (M McCounaghy). Also notable was an **Olive-sided Flycatcher** observed in the Westover area (D Gobert). Waterfowl records were few, only because I had no chance to visit the DuBois Res.

Clinton County

One particularly interesting observation during the months of May and June in the Swissdale area at least 2 N. Bobwhite were heard and seen in the same general area by several local persons, including myself. Although no one in the area raises bobwhites and no one knew where they came from, the possibility of these birds being escapes cannot be ignored. To my recollection, it has been at least 30 years since I remember hearing them locally.

Columbia County

Clearly the highlight of the quarter was the discovery of a very unexpected bird in the wetlands of Bob and Tonya Boston-Sager. On 6/19 Tonya had just returned from a "hard day at the office" and had sought the refuge of their recently-created wetlands in order to wind down. Cresting a dike she observed a large bird wading at the water's edge a short distance away. The evening was in the early stages of dusk but the bird did not appear to be one of the usual Great Blue Herons. Normally they take flight when people appear and in addition this bird was vocalizing like no other great blue that Tonya had ever heard. Bob was back at the house and heard the noise but thought it was the neighbor's kids sounding off. Tonya backed off the dike, alerted Bob and both returned to the house. Tonya collected a field guide and Bob binoculars. Returning carefully to the wetland they located the bird briefly before it took flight. Overhead the silhouette and size led to the unanimous conclusion by two competent birders that an imm. Sandhill Crane had just departed their wetlands for parts that have so far remained unknown! (TBS, RS)

Bank Swallow at the Berwick colony seem to be enjoying a banner year although the cool wet early June may have delayed them. If the several hundred new holes are all populated then the swallow number approximates 2x several hundred. A bulldozer, however, parked in front of a hole-free area of the four or five hundred foot face of the sand bank may be an ominous sign for the future prospects for this rather unique area (S Killam).

N. Parula Warbler were numerous in the area of the confluence of Huntingdon and Fishing Creeks at Forks. Five singers were noted during a bicycle trip thru that location in early June (SK). A Dark-eyed Junco at my deck feeder until late June was unusual but then so was the **Hermit Thrush** vocalizing along with Veerys, a Wood Thrush and a robin in a group of hemlocks near my cabin. Up to now I have seen and heard Hermits here only during migration. Blame it on E1 Nino! A Mourning Warbler, only on Memorial Day, and a Nashville Warbler for several weeks in late June also were firsts for my property. The latter avoided exposing himself while offering taunting vocalizations during my intermittent attempts to confirm nesting. SGL-55 had 2, possibly 3, Cerulean Warbler along with ten other species of warblers that find the Mountain Laurel/selectively timbered site very attractive for nesting. Three Whippoor-will were present also (SK).

Cumberland County

The **Say's Phoebe** from last quarter was last noted on 4/10 (G Grove). An ad. **Laughing Gull** along Mud Level Rd was well-studied (D&R Henise). The only report of **Dickcissel** was of 2 birds seen near Newburg (D Hoffman, J Horn, S Kinzey). Where did they go?

Dauphin County

An unusual. yet cooperative Swainson's Warbler paid a visit in Mav. It was first observed 5/7 (G Randolph) along Rte. 325 in Clarks Valley and remained at the same location through 5/24. Its predictability made it easy for many to add this species to their county or state lists, often without even leaving the roadway. Other interesting visitors to the northern half included a Summer Tanager discovered near the top of Robert's Valley on Blue Mt 5/16 (T Smith, F Blum). A Blue Grosbeak was observed at a feeder near Carsonville 5/3 (J&J Funck); while a Prothonotary Warbler and a Virginia Rail were counted near Millersburg 5/9 (NAMC). Both of the Blue-winged X Goldenwinged warbler hybrids were found in Stony Creek Valley with the "Brewster's" warbler first discovered 4/30 and the "Lawrence's" 5/7 (TS). This is the 3rd time in the past four years that both hybrids have been reported from this valley.

A **Dickcissel** was discovered in E. Hanover Twp on 6/5 and (ph. N Cladel) and a **Sedge Wren** returned for its second spring to the Cladel property 5/3 and was heard again on 6/20 (NC).

A Little Gull was reported from the Susquehanna on three occasions: 4/23, 4/27, and 5/20 (R Koury, GR); and 2 Wilson's Phalarope stopped off at Haldeman Is. (HI) on 5/19 (S Bills). Also noteworthy news from HI was the successful Bald Eagle nesting which fledged 2 eaglets, maintaining their yearly average for the decade; and the discovery of two broods of Hooded Merganser on the northern compound 6/3 (SB). HI was also the only location which produced a significant shorebird count: Greater and Lesser yellowlegs, Black-bellied and Semipalmated Plover, Dunlin, Solitary and Least sandpipers, and even 2 White-rumped Sandpiper reported at various times through mid-May (SB). Cattle Egret reports also came from HI during the first half of May (SB) and from W. Fairview 5/9 (RK). A Snowy Egret was observed at Wildwood L. 4/22 (RK) and another was found near Dauphin 5/9 (D Solomon).

The winter crossbill "invasion" even carried into the spring quarter. **Red Crossbill** were still being seen on HI through 4/18 (SB) and were visiting feeders near Carsonville to 4/24 (J&JF); also 4 **Whitewinged Crossbill** were discovered foraging beneath hemlock trees behind Hotel Hershey as late as 4/14 (J Renninger). A C. Redpoll was reported from HI 4/10 (SB) and Evening Grosbeak passed through Carsonville in mid-April (J&JF) and on HI as late as 5/6 (SB).

Delaware County

The second quarter was characterized by warm and wet weather. The early warm temperatures in April resulted m a few early migrants. This early migration was stifled by a ten-day period of rain. Once the weather cleared most migrants took advantage of the good flying conditions and overflew the area. There were few if any fallouts. The extended migration produced several late migrants. Highlights include reports of **Anhinga**, **Summer Tanager**, **Red Crossbill**, and a dark **ibis** species.

A group of 3 Anhinga were observed soaring over Media 5/25 (A Guarente). This is the 3rd report of Anhinga for the county since 1993. Details of this sighting were sent to P.O.R.C. Least Bittern returned to Tinicum (TN) 4/2 (J Miller) and were seen in areas along Darby Cr (DC) thereafter. An ad. Little Blue Heron 5/24 was an unusual fmd at (DC) (S Johnson, J Lockyer). A distant plegadis species was seen flying along the Delaware R. at Marcus Hook (MH) 4/18 (N Pulcinella). Details have been submitted to P.O.R.C. Late **Snow Geese** were still being seen in late May at both Willows L (WL) and Tinicum Is. It is likely that these birds were unable to make the flight north. A single N. Pintail at DC 6/25 (AG) was unusual. It seems that the pair of Peregrine Falcon that have nested on the Commodore Barry Bridge spanning the Delaware R. in Chester have abandoned the site, as no bird was found by officials monitoring this species nesting sites.

A Sora was found at DC 5/3 (AG). Shorebirds along DC were in average numbers this year, with the best find being a Dunlin 5/24 (SJ). Taking a cue from birders in nearby Montgomery who have observed large flocks of migrating shorebirds in May, a shorebird watch was done at Rose Tree Park on several evenings in late May. The group was rewarded with a flyby flock of 300+ Ruddy Turnstone 5/30. Other large distant shorebird flocks were seen but the birds could not be specifically identified. By plotting out directions on a map, these areas in Delaware and other nearby counties are in a generally northwesterly direction from the huge shorebird concentrations along the Delaware bay in N.J., so one might expect migrant shorebirds to pass through.

A good find at Ridley Creek SP (RCSP) was a **Red-headed Woodpecker** 5/23 (J Damico, AG). **Olive-sided Flycatcher** were seen at both RCSP (AG, NP) and Tyler Arboretum (TY) (D McGovern, T Reeves). The rarest of the migrant *empidonax* to pass through the county, Alder Flycatcher, was found at RCSP 5/29 (AG). Warbling Vireo continue to multiply in the county, at least 8 singing birds were found along a small section of DC 5/15 (NP). They are also showing up in other new locations. Cliff Swallow returned to nest at Springton Res. (SR) for the 2nd consecutive year (M Guenther). Remnants of the invasion of **Red-breasted Nuthatch** that began in July '97 were still being seen this spring. Two birds continued to frequent a feeder in Media until 5/30 (S Edwards). The migration of *catharus* thrushes was later than normal, but numbers were higher than in previous years. Both Swainson's and Graycheeked were still being seen into the last week of May.

Thirty species of warblers were recorded. Prior to the span of rainy weather in early May, a few species were being seen earlier than usual, i.e. Blackpoll, Yellow-throated, Tennessee, but generally most numbers were below average and late. New late dates were established for Tennessee, Black-throated Green Bay-breasted, N. Waterthrush, and Wilson's. No Cerulean Warbler was found at traditional nesting sites despite an intense search. A calling Summer Tanager was heard in Media 5/18 (DM). Though not seen, the bird did respond by singing to a tape of its song. A good find was a Lincoln's Sparrow 5/23 at Haverford College (SJ). To give us a reminder that in years of northern finch invasions some of these birds can linger for a while, Red Crossbill were found in Swarthmore 5/10 (T Floyd) and an Evening Grosbeakvisited a feeder in Media 5/11 (SE). 178 spp. were recorded for the quarter.

Erie County

Despite the early spring there were few birds arriving ahead of schedule. As every spring there were a few lingering ducks well into June at the north end of Misery Bay on Presque Isle SP. Except for a good warbler movement on 5/14 it was a rather uneventful spring.

The most interesting birds reported for this period were: 3 <u>Am. White Pelican</u> 5/18 (D Hoffman, no details); a freshly killed **Barn Owl** at PISP 5/17 (J McWilliams);"**Brewster's**" **Warbler** on 5/14 (JM); **Connecticut Warbler** 5/24 (JM); and the first summer record of **Pine Siskin**.

Fayette County

A **Mute Swan** was at Deer L. (DL) 5/2 (M McConaughy). A **Bonaparte's Gull** was observed at DL 5/22 (MM). This species is rarely reported here.

Shorebird reports were good, including Gr. Yellowlegs, first reported 4/18; and 1 Ls. Yellowlegs first reported 4/30; Solitary Sandpiper

PHOTOGRAPHIC HIGHLIGHTS



Ruddy Turnstone, Beaver Creek, *Clarion* 5/20/1998 Photo by John Fedak.



Wilson's Phalarope, Green Pond, Northampton, 6/5/1998. Photo by Rick Wiltraut.



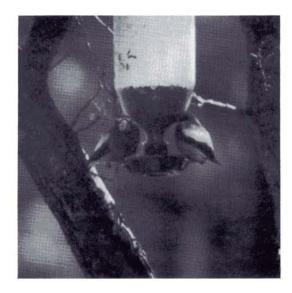
Dunlin, Beaver Creek, *Clarion*, 5/20/1998. Photo by John Fedak.



Virginia Rail, SGL 213, *Crawford*, 4/18/1998. Photo by John Fedak.



Dickcissel, Callensburg, *Clarion*, 6/6/1998. Photo by John Fedak.



Evening Grosbeaks, Swissdale, *Clinton*, 5/9/1998. Photo by Wayne Laubscher.

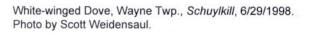


Swainson's Warbler, Loyalhanna, *Westmoreland*. 5/18/1998. Photo by John Fedak.



Swainson's Warbler, Clark's Valley, Dauphin, 5/15/1998. Photo by Mark McConaughy.







Pacific Loon, Long Arm Dam, York, 6/17/1998. Photo by Al Spiese.



Albino American Robin, Kittaning, Armstrong 6/2/1998. Photo by Scott Bastian.

4/27-5/11; **Spotted Sandpiper** first seen 4/30; a **Semipalmated Plover** 5/6; and a high count of 8 **Least Sandpiper** on 5/14, all at Mill Run Res (E Hynes). An **Am. Woodcock** was flushed at Ohiopyle SP (OSP) 4/5 and 6/14 (v.o.).

The **Cliff** and **Barn swallow** colony at the Rte. 381 bridge at Ohiopyle continues to do well. Four **C**. **Raven** were observed soaring, calling, and tumbling through the air at OSP 6/14 (v.o.). A **Blue-headed Vireo** reported <u>4/1</u> at (OSP) was early (EH). **Yellow-throated Warbler** was first reported at OSP 4/12 (EH). A good count of 13 **Prairie Warbler** was tallied at OSP 6/14 (v.o.). The only northern finches reported were **Evening Grosbeaks** visiting a feeder in Farmington (W Shaffer).

Forest County

A C. Raven nest site was occupied for the 27th consecutive year.

Late report: A **Barnacle Goose** was a Buzzard Swamp 3/29 (T Grisez, M. Neel). It was with a few **Canada Geese**, which are always there except in winter.

Fulton County

A singing **"Brewster's" Warbler** was noted 5/3 at SGL-49 (D Snell).

Greene County

Summer Tanager first noted on farm 5/13. Three C. Nighthawk flew over the yard 5/17.

C. Raven are now *confirmed breeding*. An adult was seen feeding 2 young on the same branch on 5/29. Four ravens are often noted and they roost in the same big trees within ¼-mile of my house. Four were noted flying over the farm on 6/11/96. Two were first noted here on 7/2/84 and have been seen most years since.

Huntingdon County

This was an eventful quarter with a number of seldom-seen species found and evidence of nesting for some species of uncertain breeding status.

One to 2 **Am. Bittern** were present at a beaver marsh near Perez L. 4/21-5/9, calling frequently and seen by many local birders. When the water level fell 18" because of damage to the dam, the bitterns apparently moved on, dashing hopes for possible breeding.

A pair of **Red-headed Woodpecker** were observed all quarter with activity centered on a cavity in a tree on private land, strongly suggesting breeding activity.

Due mostly to the efforts of field work by Penn State ornithologists Paul Rodewald, Tim O'Connell, and their associates, breeding by **Magnolia Warbler** (near Alan Seeger Nat Area) and **N. Waterthrush** (near Whipple Dam SP) was confirmed by finding nests. Two other species of uncertain status were observed through June in appropriate breeding habitat: a pair of **Golden-crowned Kinglet** in Norway Spruce near Alan Seeger (G Grove, PR) and **Yellow-rumped Warbler** at a number of ridge-top locations on Tussey Mt. and elsewhere (GG, PR).

Dave Kyler found an extremely early Goldenwinged Warbler near Huntingdon on 4/2, about the same time other observers reported very early arrivals of other warbler species. Late dates for the various winter finches were: Purple Finch 6/3 (GG); Red Crossbill 4/8 (DK); White-winged Crossbill 5/27 (flock of 12 near Alan Seeger); C. Redpoll 5/6; Pine Siskin and Evening Grosbeak, both 5/9.

Unusual species reported were **Black-crowned Night-Heron** at Perez L on 5/2 (N Bolgiano, D Wentzel) **Mute Swan** at L. Raystown 5/2 (G&L Grove); **Virginia Rail** at McAlevy's Fort on 5/4 (T O'Connell); **Sora** in Stone Valley 5/2 (GG) and the newly constructed Old Crow Wetland 5/15 (DK); 12 **W. Sandpiper** at Old Crow on 5/15 (GG, DK); **Whiteeyed Vireo** at McAlevy's Fort 5/21 (PR) and Perez L 6/7 (DW); and **Orange-crowned Warbler** at McAlevy's Fort 5/9 (GG).

Indiana County

The spring migration, though not extraordinary, held a few nice surprises. A **Red-necked Grebe** arrived at Yellow Creek SP (YC) 4/7 (L Carnahan, C Guba, M Higbee, G Lamer, L Wagner) and stayed through the following day (B&J Fetterman, GL). There were two reports of single **Black-crowned Night-Heron**, a bird seldom seen here: 1 at YC 4/23 (MH, GL) and 1 at Conemaugh Dam 5/6 (Steve Graff, MH, MJ Seipler). Shorebirds made an excellent appearance at YC, partially due to better coverage because of Greg Cook's employment at the park. Flocks of 40 **Semipalmated Sandpiper** on 6/7 and 13 **Baird's Sandpiper** on 5/21 (GC) were nothing short of spectacular for YC.

In addition, the NAMC on 5/9 yielded a few interesting species: **Red-throated Loon** at YC (GL, G Syster), **Oldsquaw** at Musser's L. (W Betts), a & **Black Scoter** at Margus L (GL, GS), **Orangecrowned Warbler**, a singing &, at Gipsy (MH, R Higbee), and a flock of 7 **Red Crossbill** at Indiana (S Gatti). Two **White-winged Crossbill** flew over Blue Spruce CP 4/29 (MH) calling repeatedly.

Jefferson County

The warbler migration seemed "scant" this year. Many spring migrants went unnoticed. Waterfowl also seem a bit off. **C. Loon** did not even show up until the end of April.

However, Whip-poor-will were finally reported. A Forster's Tern made an appeance at Kahle L.

Bonaparte's Gull were more numerous. An early **Louisiana Waterthrush** arrived early, 4/3, and made itself obvious.

Special thanks to Ian Hartzler and Pat McElhenny for submitting their research data to me. Without their report, many species would have been missed altogether.

Crossbills of both species were still being observed until 5/5; however, no evidence of breeding.

Juniata County

We had a good quarter.

From Andrew Swarey comes this report of a Yellow Rail on 5/18. "After mowing hay for several hours and only having one more round to go in this field, I spotted a small brown bird running through the uncut strip of hay. Thinking it's just a young Pheasant, I didn't pay much attention. As I was making the last cut this bird flushed and only flew approx. 20' before diving into the mowed area and disappearing under the freshly mowed hay. I noticed the white wing patches and thought Pheasants don't have wing patches, so stopped my team of horses, walked to the spot where the bird dove into, I reached down and caught it. I noticed it was a rail, but I'd never seen this species. I called my wife and son out to check this bird out. After checking the bird for any injuries (it didn't have any visible wounds) we released the bird, which flew only about 30-40' and dove under the hay again. Never to be seen again by any of us on the farm."

Several **Red-headed Woodpecker** were in the area all quarter. The **W. Meadowlark** appeared in the Center area exactly 1 year after it was first reported in 1997, on 6/26 (T Petersheim). A σ **Purple Finch** was coming to a feeder in Oakland Mills area all quarter. Two pair of nesting **Barn Owl** in the Van Wert area. On 5/18 at SGL-171 near Thompsontown a **Blue-winged X Golden-winged Warbler** hybrid was noted. It sang the Blue-winged song. It was studied by at least 8 people for 20 minutes, who only assigned the name as "that strange hybrid."

Lackawanna County

Birding here is very active and progressive. The Lackawanna Audubon Society is conducting SAPs at Lackawanna SP and Promised Land SP. The waterfowl group of the PGC Wildlife Management office is conducting duck banding and other field activities in this Pocono region. The Nature Conservancy at Long Pond is conducting the Pocono Mountain Program, and is involved in encouraging field trips at that location. The "Wings of the Americas" kickoff program for the Poconos was recently held at Long Pond, as Robert Ridgley of the Phila. Academy of Natural Sciences and Panama field guide fame was the featured speaker. SAP studies are being undertaken at the Long Pond area, which has a variety of habitat, including scrub wetland, forest, field, barren, and bog. A PGC Grassland Survey was conducted in the Newton/ Ransom area of s.w. *Lackawanna* on 6/1, which produced 2 Vesper Sparrow (uncommon), 2 Grasshopper Sparrow (uncommon), a high number of 69 Bobolink, 30 E. Meadowlark, and an Orchard Oriole (very uncommon) (R Koval).

N. Saw-whet Owl is becoming a fairly common breeder in this part of the Poconos. A **Winter Wren** was found at Lackawann SF 4/28 (RK), which had not been found in the county for the last 2 years of 2nd quarter reports. A <u>Mississippi Kite</u> was seen 6/19 (B Reid) near Mt. Cobb, along Rt. 84, at 10AM. Only about 20 reports have been submitted for this species. The bird is well documented in the Birds of Note section. Please contact the Greater Pocono Hotline 7/7-622-2342 with sightings.

Lancaster County

Despite a record 13 consecutive rainy days in May, good numbers of warblers passed through in spring. <u>Three</u> records of **Cerulean Warbler**, the 1st in the county in at least 2 years. Oddly, no Cape May or Golden-winged recorded, although both were found last spring.

A **Glossy Ibis** was found 5/9 and 16 **Whimbrel** were found on the Conejohela Flats 5/5-25.

Lawrence County

Bob Walczak reports that Gene Wilhelm found Least Bittern at Copper Rd wetland on 5/11. This is only the 3rd sighting. G and B Dean found a pair of Great Blue Heron nest building at a new location on 4/18 at River Rd. in New Castle. They completed the nest on 4/25 and the area was hidden from view by nearby trees soon after. We hope to see more nests in fall or early spring '99. This is an excellent area with great potential as a 4th heronry here. On 5/9(B&GD, BW) found 68 Wood Duck at a puddle in a farm field in the Enon valley area. All 68 were adult males. The had our best season in a decade for Am. Coot. At just one of the locations we found 44 on 4/16 at Edinburg L. At least two pair of Upland Sandpiper returned to Amish Area and 3 pair to the Vosler Rd. area to breed on 4/11. This is our earliest arrival date since we found them in 1982. L. Wagner and S. Butcher found 1 Upland at the Strips on 5/9.

Barn Owl <u>now</u> can be listed as a breeding bird here thanks to information from Walczak, who has been working with a group called the Moraine Preservation Fund. They have been placing Barn Owl boxes in *Lawrence, Butler*, and *Armstrong*. They had placed over 120 boxes by April 1998. Their goal is to have 1000 boxes in place within 10 years. They have also been raising, placing, and releasing Barn Owls. The Moraine Preservation Fund placed a Barn Owl box at an undisclosed location near Pulaski in April of 1998. Later that month they went back to check the box and found <u>3 wild</u> Barn Owls there and counted 6 to 8 eggs. Four of these eggs hatched. Bob also reports that a man in the New Castle area put up his own Barn Owl box in another undisclosed location. In April of 1998 two Barn Owls from the wild were found in this box with 11 eggs. These eggs were infertile but Bob reports the birds had a second clutch.

Cerulean Warbler has been declining for about the past four years. Two of our most reliable habitats for them seem fine, but this year I could find not one at the River Rd area in New Castle. We have checked every location we could think of and could only come up with a dozen Cerulean at 3 locations not far from the Mahoning R. in the W. Pittsburgh area of New Castle.

Sandhill Crane were seen the last week of July with 1 young, so successful breeding did occur. Several people who live in the area report that the 2 ad. and 1 juv. Were joined at the end of July with another adult-sized crane.

In order to officially upgrade the *Lawrence* list, we should list the **Louisiana Waterthrush** as a breeder. On 5/30, 1 was seen carrying food to a nest (B&GD). Finally, Bill Hintz reported a new late date for **Am. Pipit**, with 1 found in Mt. Jackson area on <u>6/22</u>.

EXOTIC: Two **Bar-headed Geese** were found at Copper Rd wetland on the NAMC 5/9 and later Walczak said he first saw them there on 4/28. They remained for about a month, In June the Deans were able to report that these birds are definite escapes from a Mr. Patterson of the Hells Hollow area.

Lebanon County

We had five new late dates and six new early date. <u>Late</u> were: a **Horned Grebe** in breeding plumage on a pond at Middlecreek WMA (MC) on 5/16 by 20 days. Two **Gadwall** at Memorial L (ML) on 5/2 by 10 days. Four **Bufflehead** at ML on 5/30 by 25 days. A σ

Hooded Merganser at MC on 5/16 was 44 days late! Two **Red-breasted Merganser** at ML on 5/8 were 17 days late.

Early: A Barn Swallow at Mt Wilson on 4/6 by 10 days. A Wood Thrush 4/3 at SGL-145 by 15 days. A Warbling Vireo on 5/2 was 1 day early. By 2 days was a Louisiana Waterthrush. Two Scarlet Tanager in Palmyra on 4/22 by 5 days. And a Baltimore Oriole by 6 days on 4/25.

C. Loon made a good showing with 47 at ML on 4/17 and 28 on 5/8, also on ML. **Snow Geese** were present all quarter at MC, with 128 on 5/9. Shorebirds made a poor showing because all the rain filled the ponds. The warbler migration seemed a little late.

The best seemed to 5/15-16. Four **Red Crossbill** were at a feeder in Palmyra on 4/22.

Luzerne County

This quarter was referred by local birders as the migration that wasn't. We observed brief and dismal waterfowl species as compared to prior years. **Redthroated Loon** 5/4 at Harveys L. (B Reid) was the only report. 125 **C. Loon** 4/26 also at HL was respectable (R Koval). A late **Horned Grebe** was reported during the NAMC 5/9 by Alan Gregory at Black Cr. Twp. A lone **Am. Bittern** 5/9 surprised Jim Shoemaker and Jim Hoyson at the "muck hole." Anything is possible! An early **Great Egret** 4/6 at Conyngham (A Gregory) was a welcome visit. **Bufflehead** 5/9 stayed just long enough at Penn Lake (RK) for the NAMC. Two sightings of **Red-breasted Merganser** were 4/14 (D Gross) at L. Jean and 5/2 (E Stull) at Plains.

A pair of **Black Vulture** was seen 6/5 at Hunnington Twp (DG). This species has been reported at this location each spring for the past several years. A new **N. Goshawk** nest was located in s. *Luzerne* (AG). The former nest site was not occupied this year although a pair has been reported by John Heughes and Gregory. The **Peregrine Falcons** at Plains were closely observed daily by Bob Wasilewski. Bob noted that the σ would defend its territory against hawks, vultures, and a **Bald Eagle** and ignore **Double-crested Cormorants** and herons.

Shorebirds made brief appearances at Plymouth Flats. Semipalmated Plover, Gr. And Ls. Yellowlegs, Solitary, Least and Pectoral sandpipers were reported 5/3 and 5/18, respectively BR, RK. Caspian Tern 4/26 at HL (RK) has not been reported in a few years. C. Tern 5/19 at Wyoming (BR) and 6/21 at Plains (ES) did not pass by unrecorded this spring.

Early migrants reported at Hobbie by Autumn Pfeiffer were **Black-billed Cuckoo** 4/15, **Brown Thrasher** 4/7, **Baltimore Oriole** 4/16 and a possible nesting **N. Saw-whet Owl**. I managed to do a **Whippoor-will** night survey on 5/18 and heard 51 whips. The following evening produced 10 more whips. These birds preferred scrub oak thickets and power-line cuts. **Yellow-bellied Sapsucker** was seen carrying food in June by AG near Conyngham. This woodpecker hasn't been reported nesting often in *Luzerne*. **White-eyed Vireo** 5/19 at Bear Cr. (BR) has been a rare bird as of late.

Warblers numbers were dismal. Early Louisiana Waterthrush 4/4 (DG) followed by a Nashville 4/26 at KP (JS). Others include one Baybreasted 5/23at ?BHR (E Johnson, BR); Mourning 5/28 at Dallas (EJ); a few Wilson's and two new

Cerulean locations.

Lingering **Red Crossbill** on 4/24 at Dallas (EJ) and at BCT by (JHe). **White-winged Crossbill** were last reported on 4/21 at Nescopeck SP (AG, JHe). **Pine Siskin** at a Shavertown feeder (J Hoyson) and at my feeder 6/3 at Plains. **Evening Grosbeak** was last seen at KP on 5/2 (JH, JS, RK).

Lycoming County

Noteworthy sightings included **Surf Scoter**, which first appeared at Rose Valley L. 4/12 (R Beach). On 5/3 a high count of <u>7</u> was made (RB). They were last seen 5/13 (F Stiner).

Also noteworthy were the scattered reports of **Whip-poor-will**. They were first reported 5/13 in Shrewsbury Twp (A&D Sheets). Then a report of 1 heard through the first week of June. On 6/1 at least 10 indiv. Were heard near the site of the former Long Ridge fire tower in Plunkett's Cr. Twp (FS). However, nesting was not confirmed anywhere. These reports constitute the most observations of this species since my becoming compiler. It is hoped these observations will continue to be made in coming years and this nocturnal species will be confirmed as a nesting bird in *Lycoming*.

McKean County

Waterfowl sightings provided nothing out of the ordinary, but a few reports: Pied-billed Grebe were seen on 4/20 Eldred (S Graff) and at various places in and around Bradford through April and last sighting was 5/20 at Willow Bay. Nine Tundra Swan at Bullis Mills 4/8-18 (SG). Green-winged Teal 16 at BM 4/8, 7 at BM 4/18 (SG); Blue~winged Teal 4 at BM 4/8 and remained through 4/18 (SG). Ringed-necked Duck 4/4 at Derrick City (SG); Bufflehead 6 at BM 4/8-12, and small groups of ♂♂ and 99 at WB, Gilbert Ln, and Red Bridge through April. Hooded Merganser 4/7 at CC (SG). C. Merganser all quarter with many broods throughout the county. On 4/12 at BM Red-breasted Merganser (SG). Osprey 4/29 along the Tuna in FB and nested in snag at WB swamp in old Great Blue Heron nest, with the GBH's constructing three nests in another snag, less than 20 yds. away; all seemed happy and the Osprey fledged 2 young. I don't know the count or full success rate of the GBH's. Rough-legged Hawk 2, on 4/12 along Rte 446 Eldred (SG). Virginia Rail 4/8 BM, and Am. Coot 4/15 at Zippo warehouse (SG). Gr. Yellowlegs, Spotted Sandpiper (7+ at GL all quarter) and C. Snipe through April in Eldred and WB. Bank Swallow 4/29 at Tuna Cr. along Campus Dr. (SG).

Rusty Blackbird 1, 4/7 at CC and 2, 4/20 on SR l011 Eldred (SG). **Pine Siskin** throughout April and last seen 5/15 at RB. **Evening Grosbeaks** last seen 4/27 at GL and a flock of 20 on 4/25 at DC (SG). White-throated Sparrow 4/27 also in DC, and all quarter in White-throat Swamp. Yellow-rumped Warbler 4/7 at CC (SG), 3 5/16 Eldred BBS. 2 singing ♂♂ all quarter at GL, but no success in locating any nesting. 4/11 Louisiana Waterthrush along Little Gilbert run. On 4/17 at GL Blackburnian Warbler 9, Blue-gray Gnatcatcher 3, Black-and-white Warbler 11, Cerulean Warbler 10, and Redbellied Woodpecker 2, were all seen together. Black-throated Green Warbler, E. Towhee 4/29 at Marshburg.

First singing in May included Am. Redstart, Rose~breasted Grosbeak, Chestnut-sided and Yellow warblers 5/4 at GL. Black-billed Cuckoo were recorded in higher numbers this year on study sites in the Allegheny NF than in years since 1994. Olive-sided Flycatcher seen and heard in 1985 tornado blow near Lamont. Other sightings would not be first dates nor were there any special species worth a note.

Mercer County

Although a few platforms were erected last year for **Osprey** nesting, a pair has chosen a power company steel tower near the Chestnut Run swim beach at Shenango R Res. Three pair of **Bald Eagle** are nesting: 1 at M.K. Goddard SP; 1 at Big Bend at SRR; and 1 in Worth Twp., where the female, found bleeding in the middle of Rt. 173 from a possible gun shot wound, was taken to a rehab unit.

Mobbing crows weren't scarred a bit by the **Barred Owls'** terrifying scream, (4/20 at Hermitage) but it certainly stood the hair up on 2 humans and 2 dogs. **Yellow-bellied Sapsucker** was very early (4/1) at Hermitage. 1 **Eared Grebe** 4/3; a sitting, 2ndwinter **Thayer's Gull** 4/4 both at L. Wilhelm; and a singing **Sedge Wren** 5/3 at Grove City were all reported, but unfortunately without details.

The first Yellow-rumped Warbler went through Hermitage incredibly early, <u>4/1</u>, but the first real wave wasn't until 4/29. A grand total of 31 warbler spp. was recorded, with the highlights being 1 Golden-winged 5/4 at Skunk Run Rd. (Troyer family) and 1 5/12 at Pennsy Swamp (R Stringer), 1 Orange-crowned 5/13 at Skunk Run Rd. and another there 5/24 (TF), 1 Connecticut 5/25 at Nicklin Ln (TF), and 2 Mourning 5/15 at Skunk Run and 2 found there also on 6/21 (TF). The height of the warbler migration was about 5/9-12.

A few **Pine Siskin** were hanging around Grove City until 5/13. And last, but certainly not least, a **Dickcissel** was glimpsed and heard singing at Nicklin Ln 5/4 (N Troyer).

Mifflin County

Spring birds were plentiful. We had a number of

the "closer to the woods" variety: Red-eyed Vireo, Great Crested Flycatcher, E. Wood-Pewee, N. Waterthrush, and several Wood Thrush. They kept the chorus lively with all the other spp. The absence of Am. Woodcock, C. Snipe, and C. Nighthawk is a mystery. Whip-poor-will were very good. We had reports from the Jack's Mt top, Ferguson Valley, Little Kansas, and the Carlisle Gap area. In the vicinity of Kansas Rd in Ferguson Valley, Cecil Johnson heard 2 Whip-poor-will calling for quite a while one evening. Then he heard a skirmish with a Great Horned Owl nearby and after that he only heard 1 Whip calling. Another note: The Rodewalds of State College found a nesting pair of Whip-poor-will at Coopers Gap area. This is perhaps the 1st confirmed since before the PBBA.

A **Bald Eagle** flew towards the Juniata R. early one morning in mid-June and on the Newton Hamilton Rd near Mt. Union a Bald Eagle circled over the river for my BBS route.

Gloria Bickel reported an **E. Towhee** with young and also a **Dickcissel** on a utility line near Belleville. Amazingly, a flock of **Red Crossbill** crossed the road near Reeds Gap SP on 6/14 during the Naginey BBS count.

We celebrated Earth Day, 4/22, on Jack's Mt. Blessed with a SE wind, best for spring here, we had our most raptors: 15 **Osprey**, 3 **N. Harrier**, 10 **Sharp-shinned**, 98 **Broad-winged**, 2 **Red-tailed**, 7 **Am. Kestrel**, and 1 **Merlin** for a 136 total. In addition we watched a pair of **Black-capped Chickadee** going in and out of a snag preparing a nest. They were active all morning. Other high-lights were 75 **Cedar Waxwing** and 7 **loons**. We were also surprised by Becky Lock, a reporter from the *County Observer*, who stopped by to do an article about our hawk watch.

Montgomery County

The passerine migration was largely disappointing as twelve consecutive rainy days kept many birders indoors. There were, however some bright spots.

An all-time high of <u>82</u> C. Loon were at Walt Rd. Green Lane Res (GLR) on 4/26. Single **Red-throated** Loon were there on 4/26 and 5/8. (R Grubb, K Crilley, GA Franchois). Three **Red-necked Grebe** were at Walt Rd on 4/15 (E Abraham, M Kulp). An **Am.** Bittern was at Church Rd. GLR 5/3 (K Reiker). 15 waterfowl spp. were observed, highlighted by 4 Gr. Scaup on 4/4 (GAF) and 2 **Red-breasted** Merganser 4/26 (KC, GAF)

Bill Murphy witnessed a nice raptor flight on 4/27 at Fort Washington SP including 252 Broadwinged Hawk, 11 Osprey, and a N. Goshawk. 2 Virginia Rail were at Church Rd. on 4/29 and 5/3 (KR). Am. Coot are expected in spring, but a single bird up until 6/28 at GLR was a surprise.(GAF).

Due to extremely high water, GLR produced few spring shorebirds. Highlights included 6 Gr. Yellowlegs 4/26, 1 Ls. Yellowlegs 5/3, and 15 Least Sandpiper 5/15 (GAF, KR). Bonaparte's Gull numbers peaked at 40 4/3 (GAF) and a Ls. Blackbacked was at GLR 4/7 (KC). Yellow-bellied Sapsucker lingered at a Perkiomenville feeder to 4/19 (P&A Guris).

Ron Grubb's backyard near Upper Perkiomen Park produced the only **Olive-sided Flycatcher** 5/19 for the period (RG). **Least Flycatcher** were just as scarce with a single bird 5/23 and 5/24 at Valley Forge Park (S McConnnell). **Gray-cheeked Thrush** were found only at Fort Washington and Valley Forge parks (BNM, SM).

29 warbler spp. were found, but most in very low numbers. Highlights included **Nashville** at VFP and North Wales, **Yellow-throated** at VFP and Unami Creek Valley, **Worm-eating** and **Kentucky** at several locations, **Hooded** at Haverford College and VFP, and **Wilson's** from Norristown Farm Park and Haverford College. (KC, GAF, S Johnson, SM, A&J Mirabella).

Grasshopper Sparrow were at VFP beginning 5/3, but were unreported elsewhere (SM). After departing in mid-April as expected, a **Dark-eyed Junco** visited Gary Freed's yard 6/26 to 6/28 (most unexpected!) (GLF). **Blue** Grosbeak were at VFP and FWP beginning in early May (SM, BNM). Orchard Oriole also seem to be doing well with reports from throughout the county (v.o.).

Finally, some "winter finches" lingered well into spring. **Pine Siskin** abandoned our UCV feeders 5/6 and **Purple Finch** left 5/12 (KC). Up to 10 **Red Crossbill** were in the UCV 4/5 to 4/19 (GAF, KC, KR). An **Evening Grosbeak** lingered at VFP until 4/28 (SM).

Northampton County

A Glossy Ibis was at Green Pond 4/1-3 and a Green-winged Teal and a real and

Silfies found a **Whip-poor-will** nest at Lime Gap in May, the 1st confirmed nesting record for the county. Two calling **Olive-sided Flycatcher** were videotaped at LG in late May (BS). A <u>singing</u> of **Prothonotary Warbler** was seen at the Lehigh River Natural Area for one day only on 6/2 (S Thorpe) and up to 3 singing **Yellow-throated Warbler** were present there in June along with **N. Parula** and **Cerulean Warbler** (RW et al.). A color-banded **Louisiana Waterthrush** was seen along the Bushkill Cr. in Jacobsburg (D Miller).

Observers: Brian Hardiman, Dennis Miller, Brad Silfies, Steve Thorpe, Rick Wiltraut, Joe Zajecek

Philadelphia County

We recorded an excellent 192 spp. Highlights included several rarities and record late dates for many species of migrant land birds.

An Anhinga was seen over Tinicum (TN) 6/14 (J Damico). Notable waders included: **Am. Bittern** at TN 4/18 (S Conant); 2 **Least Bittern** at TN 4/2 (J Miller); **Snowy Egret** at 2 locations (v.o.); **Yellowcrowned Night-Heron** at TN 6/21 (B Stewart); and **Glossy Ibis** at Ft. Mifflin (FM) 4/30 (JM).

A N. Goshawk was seen along the Upper Wissahickon (UW) 5/23 (G Seagraves), and a Merlin was at TN 4/16 (J Fedak). Virginia Rail and Sora were found at TN 4/16 (JF). Shorebirds included: Semipalmated Plover at Fort Mifflin (FM) 5/25 (JM); Semipalmated Sandpiper at FM until 5/25 (T Floyd); Least Sandpiper at FM until 5/23 (TF); and Pectoral Sandpiper at TN 4/5 (JM). C. Tern was at TN 4/30 (JM).

Top C. Nighthawk count was 200 over UW 5/18 (D Cutler). A Yellow-bellied Sapsucker lingered at UW until 5/24 (TF). Good flycatchers included: Olivesided at Carpenters Woods (CW) 5/24 (TF, C Walters); Yellow-bellied at TN 5/26 (JM, R Miller); and Alder at TN 6/6 (D Serriani, G Serriani). Purple Martin was noted near TN 4/30 (JM), and Cliff Swallow was seen over University City (UN) 4/29 (TF). Red-breasted Nuthatch lingered until 5/23 at TN (E Fingerhood et al.), and a late Winter Wren was at W. Fairmount Park (WF) 6/15 (A Ingersoll, K Russell).

Late warblers included: Chestnut-sided near Torresdale (TO) 6/26 (AI, KR); Magnolia in Germantown (GE) 6/14 (KR); Black-throated Green in Center City (CC) 6/17 (M Sharpe); Blackpoll near the Art Museum (AR) 6/15 (AI, KR); N. Waterthrush near AR 6/15 (AI, KR); and Canada at WF 6/13 (AI). Other interesting warblers included: single Cape May at TN 5/22 (JM); Yellow-throated at several locations (v.o.); Pine found breeding at UW 6/27 (S McConnell); Cerulean at several locations (v.o.); Prothonotary at WF 6/13 (AI) and at TN 6/20 (D McGovern); Worm-eating through the end of the quarter at two locations (v.o.); Kentucky at the Schuylkill Center (SC) 5/19-22 (TF, C Hetzel); Mourning at TN 5/20-28 (JM, RM); and Hooded at several locations (v.o.).

Blue Grosbeak returned to traditional breeding

grounds at the Northeast Airport (NA) at TN (TF). At least 20 **Savannah Sparrow** staged at Spring Lane (SP) 4/17 (TF, M Pratt). The only **Lincoln's Sparrow** was a single

bird at TN 5/26 (JM, RM). Bobolink were present through

the end of the quarter at SP, and a female was seen carrying food (TF). White-throated Sparrow lingered

until 6/19 at WF (AI), and **Slate-colored Junco** remained

at Roosevelt Park (RO) until 6/9 (AI). Outstanding finds included a **Brewer's Blackbird** at TN 4/17 (TF) and a

Bullock's Oriole along Verree Rd 5/22 (M Drake). A scattering of winter finches included: **Purple Finch** at SC 4/21-4/28 (SM); **Pine Siskin** at UW 4/17 (TF, MD); and **Evening Grosbeak** at SC 4/28-5/3 (SM).

Pike County

Bordered by the Delaware R. on the east and north and L. Wallenpaupack on the west, Pike has a great diversity of bird species. The Checklist to the Birds of the Delaware Water Gap National Recreation Area (DWGNRA) lists 264 spp. The Delaware Valley acts as a corridor for many migrants. C. Merganser are fairly common breeders along the upper river and nesting **Bald Eagle** have been breeding at L. Shohola (LS) for several years. Three imm. Were at LS 4/5 (F Hohenleitner), and an ad. was there 6/29 (FH). Five colonies of Great Blue Heron have been recorded (fide D Brauning). Four were reported sitting on nests 4/5 at a pond w. of LS (FH). Osprey nest in several areas, including a newly-installed platform near the dam of L. Wallenpaupack. Pied-billed Grebe were discovered at Decker's Pond along Rte 6 on 6/29 (FH). This is the same area where they were found during the BBS.

The Pocono Environ. Educ. Ctr (PEEC) at Dingmans Ferry offers field trips to the DWGNRA, the Shohola Wildlife Management Area, the Delaware R., and the Mongap and Rio reservoirs. Lectures are also scheduled at the PEEC and birding with them is a year-round adventure. A few very uncommon **Redbreasted Merganser** were seen this quarter along the upper Delaware (PEEC staff). 30 **White-winged Crossbill** were at PEEC 5/8 (C Muise). Promised Land SP also adds a vast diversity of birdlife, which has been nominated along with Shohola Falls, as Important Bird Areas. Please contribute sightings to Greater Pocono Bird Hotline **717-622-2342**.

Potter County

On 5/9 Mary Herrold walked out onto her porch in Ole Bull SP, looked up and watched a <u>Yellow-</u> <u>headed Blackbird</u> singing in a tree in front of the house († to NAMC and PORC).

Waterfowl migration was almost non-existent here.

Schuylkill County

We recorded 186 spp. (including a 2nd state record bird, a hybrid(s), and an escapee(s). A huge **C**. **Loon** fallout occurred 4/26 with a high of 39 at the Still Creek Res. (SCR) (D Kruel). For the second straight year only 1 **Red-necked Grebe** was reported from the Lebanon Res (LR) 4/15 (T Clauser). 3 **Great Egret** were at Sweet Arrow L (SAL) 4/21 (B Allerton), and 2 were at that location 5/13 (D Dolinsky). A surprising **Snowy Egret** was at the Raven Run Res (RRR) 5/9 (NAMC) (M Gamble et al.). An imm. **Tundra Swan** arrived at the Landingville Dam (LVD) 4/14, and remained all quarter (TC). A pair of **Ruddy Duck** were at RRR 5/9 (MG). 9 **Bonaparte's Gull** turned up at SCR 4/15 (DK).

A 2nd state record <u>White-winged Dove</u> was discovered at Schwartz Valley Rd in Wayne Twp 6/29-7/3 (S Weidensaul). Although the dove was more often heard than seen, birders from throughout the state came to see the dove, with a small percentage being successful. This dove was well documented and photographed, and can be reviewed under Summary of the Season of this issue. Two **Ringed Turtle-Dove** were reported, both obvious escapees: 1 was near the Hidden Valley Golf Course 4/18 (A Liebner), and the other at Forest Hills in Pottsville 5/22 (M Ward). **Black-billed Cuckoo** seemed relatively uncommon with only 2 at LVD 5/9 (TC), 1 at SGL-227 6/20 (DK).

Red-headed Woodpecker were reported from two locations: 1 at Forest Hills in Pottsville 5/5-9 (MW, TC), and other at Ringtown 5/17 (MG). An Olive-sided Flycatcher was at SGL-110 near Port Clinton 5/26 (DK). The most uncommon empid flycatcher to be found was a Yellow-bellied at SAL 5/27 (BA). A pair of Least Flycatcher was reported from Locust L (LL) 5/9 (DK), and there was another there on 6/14, both a first for that location. The Rabbit Run Res. produced 12 Bank Swallow 5/9 (N Sfara), but only 20 were at the LVD colony this year, and were apparently evicted from that traditional site due to excessive trucking activity. Both Red-breasted Nuthatch and Golden-crowned Kinglet were upgraded to resident status, as breeding for both species has now been observed at various locations for successive years, especially at the Tumbling Run and Owl Creek watersheds. A prime overlap zone of Bluewinged and Golden-winged warblers was discovered at SGL-229, between Tremont and Newtown 6/4 (DK et al.). Resulting Brewster's hybrid were seen there 6/11 (DK, L Ealy), 6/18 (DK, J Plyler), 6/20 (TC). Three different birds were observed, an F1 phenotype, an F2 phenotype, and a juvenile. A J Yellow-rumped Warbler was singing

at Bear's Head (perhaps the highest elevation in the county) 6/14 (DK) which if breeding, would be a first for the county. Perhaps as many as 6 **Yellowbreasted Chat** were first found at SGL-229 5/19 (DK) and were entertaining birders at that location all quarter. A very late **Am. Tree Sparrow** was discovered at Swatara SP on 4/27 (DK). **Red Crossbill** continued to be reported into this quarter with 4 at TRD 4/1 (TC), 4 at SGL-106 5/5 (DK), and 1 at Ringtown 5/9 (MG). **White-winged Crossbill** also continued into this quarter with 12 at SAL 4/11 (BA), and 1 at SAL 4/21 (BA). **Evening Grosbeak** were reported with 12 at LR 4/26 (J Kosack), and 5 at LVD 4/26 (V Connor).

Somerset County

Several strong tornadoes (F2, F3) ripped through southern Somerset in late May/early June leaving the nesting birds of the flattened woodlands acting strangely. Birds were singing loudly even in the mid-afternoon and crows flocked (58+) at an unusual time (J Tilley, A Marich). Osprey have successfully bred again at two spots: Somerset L. and Cranberry Glade L. (AM). A N. Goshawk was seen on 4/18 at Brush Creek (J Payne) and another present at Mt Davis in May (JT, D Jeffrey). A flock of 30 Dunlin was at Somerset L. on 4/2 (L Payne). Caspian and **Common terns** visited the lake in mid-Apr (AM). Received too late for the last quarter, but of special interest was the Blackburnian Warbler found at Mt Davis on 3/31 (JT). Henslow's Sparrow is doing well along the Rte 160 strip mines (JP). Whitewinged Crossbill were still being observed through late June (JT) in the Salisbury area. Perhaps they are breeding there. Evening Grosbeak was last noted on 4/24 at the Payne's home.

Sullivan County

Despite a mild winter blending into this quarter, no significant earlier than normal arrivals, in fact some species were even slightly late by a few days.

A **Yellow-crowned Night-Heron**, a rarity for the county, was apparently forced down during a rain shower onto a grass playfield at Worlds End SP on 4/26 (N Kerlin). At the opposite end of the quarter, on 6/30 a **N. Bobwhite** was heard calling near Eldredsville. Probably a release/escape; checking with local residents could not verify this (P&S Stott).

A high count of 8 **Whip~poor-will** was made on 5/25 at Splashdam Pond (S Conant et al.). Rare in the county, this may indicate the start of an increase for this species from this eastern county sector.

A **Red-headed Woodpecker**, another species rarely seen, arrived 5/25 near High Knob in the Wyoming SF. It was joined by a second bird in early July (SC). The devastation to timbered mountain tops by the tent caterpillar/elm spanworm outbreak of three years ago may now be bearing fruit for this and other woodpecker species. **Mourning Warbler** are also taking advantage of the habitat change with several being regularly seen in this same area (SC). A final county rarity, a **Blue-winged Warbler**, was noted on the NAMC at Dutch Mountain on 5/9 (R Megraw).

Tioga County

Please refer to the NAMC and PSO annual meeting (5/15-17) reports for additional single-day bird records.

Success at the county's 2nd **Bald Eagle** nest at Hammond L. is uncertain. An ad. was observed in the nest until foliage made observation difficult. Neither state nor federal biologists attempted to scale nearby trees or overfly the nest to determine status. However Project Chief Richard Koeppel saw a probable 1st-year bird recently as well as adult eagles at the Hammond L. site. A total of 5 successful **Osprey** nests was recorded from US Army Corps lands at the three area lakes (Cowanesque, Hammond, and Tioga).

Venango County

Overall this would have to be a Silent Spring. While there was a good variety of birds the numbers were very low. Mornings in this quarter seemed very quiet. There was little song.

Hooded Merganser once again bred. A \hat{v} with 5 young was seen at Polk on 5/15 (RS) and a \hat{v} with 3 young was seen on Swamp R. on 5/31 (RS). A pair of **Bald Eagle** built a nest along Allegheny R, though probably no eggs were laid, as the eagles never spent time sitting on the nest. The pair consisted of an adult and a 4th year bird. This would be our first confirmed nesting of Bald Eagle.

The Polk Wetlands continues to attract small, but consistent, numbers of shorebirds. Four pairs of **Upland Sandpiper** were present at the Barkeyville fields (BF), three pairs in *Venango* and one in *Butler*. And they were discovered in a new location this year, Clintonville fields (CF), though none was seen after 5/17.

Wondering if we were going to see any more tern species for the spring, G Edwards & R States pulled into the parking lot at Kahle L (5/17) and within 5 minutes 5 **Common**, 2 **Caspian**, and 1 **Black** dropped out of the sky from the east, skimmed the lake and flew upward and continued onward from the west end. Cuckoos were nearly all **Black-billed**. Very few Yellow-billed. Vireos were mostly later in arriving and in fewer numbers than usual.

The first confirmed (by the compilers) **C. Raven** nest was discovered by hunters near Pithole. Two young fledged between 5/9 and 5/13. A nest used in 1996 & 1997 was shown to the compilers by B Rictner, but appeared to have been abandoned this year; unable to relocate the pair.

A **Bank Swallow** colony that had been abandoned for several years is in use again. A count on 6/24 revealed 125 nest holes, though probably less than half were in use. The colony that has been near Cooperstown for the last few years was abandoned this year. **Swainson's Thrush** numbers were way down compared to the last two years.

Thirty-one species of warblers were observed this quarter, most often only 1 or 2 indiv. at a time. Numbers were down. And many species did not arrive until well into May. **Yellow Warbler** were **rare** this quarter. To see more than one in a day was an event. A singing **Pine Warbler** was seen near Van on 5/17 (RS, GE), a week after latest record, but could not be located again later. **Prairie** was one of the few that seemed to be present in better numbers (though 1 or 2 singing males is usual). All **Palm Warbler** records are of the 'western' race.

Grasshopper and **Henslow's sparrows** continued in good numbers at BF and CF.

And the White-winged Crossbill stayed for part of the quarter peaking in numbers (for Apr.-June) at 30 near Van and finally dwindling in numbers at the Franklin Cemetery until none could be located after 5/18 (J Stanley). Breeding could not be confirmed.

Warren County

There were 6 **Great Blue Heron** nests in two large willow trees in Akeley Swamp (T Grisez).

Possibly the same **Red-tailed Hawk** that was seen a few years ago e. of Columbus was reported by locals to Don Watts to have been between Columbus and Bear L this year and last (TG).

Great Horned Owl nested at the Buckaloons Rec. Area again this year, and at Akeley Swamp in one of the Great Blue Heron nests among the other nests occupied by herons (TG).

Two **Com Raven** nests sites were occupied. Near one of them, a raven pursued a **Red-shouldered Hawk** within four or five feet until the hawk left the area (TG).

A **Kentucky Warbler** was seen and heard singing from at least 6/16-28 in the same area where 1 was on territory last year (DW, J King).

ERRATUM: The Kentucky Warbler reported in PB 11(2):101 at the Newbold Estate was on Davey Hill near Tidioute. See PB 11(3):159.

<u>Correction</u>: Warren Co: The Kentucky Warbler reported in 11-~: Char at the Newbold Estate was on Davey Nill near TiJioute.^ Vol 11 (3): 159.

Wayne County

With a maximum height above sea level at 2000',

Wayne has a very nice diversity of birds. There are quite a few sizable lakes in the county, which hold a variety of waterfowl. The largest lake is L. Wallenpaupack in the east, which is also partly in *Pike*. Other lakes in the county are Ariel, Harvey, Watawga, Pocono Peak, Whitney, Paupacken, Cadjaw, Keen, and Ladore. The Lackawaxen R. runs through the northern part of the county, and the southern part has the very nice Tobyhanna SP. *Wayne* was host to many excited birders in 1991, when a N. Hawk Owl was discovered 4 miles west of Lookout in Manchester Twp. The owl remained in the area from 2/18 to 3/17. The county's birds have never been compiled for the Seasonal Occurrence Tables in *Pa. Birds*.

Once reports begin coming in on a regular basis, a representation of early/late dates will be recorded. Please give reports to the Greater Pocono Bird Hotline at **717-622-2342**.

Westmoreland County

Single **Fish Crow** were reported by Mark McConaughy at Twin Lakes Park on 5/3 and in a cultivated field near Crabtree on 5/9 for new county records-well w. of the normal Pa. range. Tim Vechter first located a singing (territorial) **Yellow-bellied Flycatcher** at the Laurel Summit Bog, south of Rector, on 6/18; the first evidence that the species might be nesting here.

A typically plumaged ? Lawrence's Warbler was banded at PNR 5/7 (R Leberman, R Mulvihill, J Gruber) The parulid of the season, however, was a territorial <u>Swainson's</u> <u>Warbler</u> located near Loyalhanna Res. on 5/9 by Tom Pearson, and subsequently listed by at least 50 observers over the next few weeks. A singing **Mourning Warbler**, apparently on territory, was found at Laurel Summit Bog 6/22 (TV); the first evidence of breeding in *Westmoreland* in nearly two decades. A record early **Hooded Warbler** was singing near Ligonier on <u>4/1</u> (RSM)! A late **Wilson's Warbler** was banded at PNR on 6/11. Our first **Sumner Tanager** in several years was at PNR on 5/7 (JG).

Wyoming County

At least 158 species were recorded this quarter. 117 spp. were found on the migratory bird count on 5/9.

One blue morph **Snow Goose** was included in the 49 Snow Geese reported from Goeringer's Pond in Tunkhannock Twp on 4/1-2. Few ducks were noted during spring migration on L. Carey and elsewhere in the county.

An unidentified **tern** (probably Common or Forster's) was seen along the Susquehanna R. about 2 miles up-river from Tunkhannock on 6/11.

Non-breeding warblers (Tennessee, Bay-

breasted, **Cape May**, **Wilson's**, etc.) were in very low numbers.

A devastating tornado which hit L. Carey and other areas of the county on 6/2 destroyed over 1000 acres of timber.

York County

Three **Red-throated Loon** at Long Arm Dam on 4/17 (P Robinson). Barb & Frank Fisher discovered an ad. <u>Pacific Loon</u> at LAD 6/13-15 (m.ob.). Fourteen **Black-crowned Night-Heron** nests were counted at Kiwanus L. on 4/14. A bumper crop fledged, along with 4 dead (A Spiese). A stray **Snow Goose** was at Lock 15 on 5/27 (PR). Two **Gadwall** remained at Menges Mills at least until 5/9 (AS). PR counted 38 L. **Scaup** at Codorus SP on 4/8.

Three **Com. Raven** fledged at a tower in Pigeon Hills by 5/3 (K Lippy). A well-observed **Yellowbellied Flycatcher** appeared at Brunner's I. 4/8 (AS). Early **Least Flycatcher** at Glatco Lodge on 4/26 (PR). The **White-eyed Vireo** on Gut Rd on 4/17set a new early date (J&JP). A **Hermit Thrush** lingered near Ski Roundtop until 4/29 (JP). Barb Fisher has a nest box containing 2 **Tree Swallow** and 4 **E. Bluebird** eggs. Both 99 were trying to incubate and both 3° were defending the territory! Jean Cook has been providing meal worms and sunflower hearts for bluebirds, an important aid during wet, cold weather such as we had this spring.

The first **Prothonotary Warbler** returned 5/15 and were found again at two areas along Gut Rd. One nest hole was found (J&JP). A **Worm-eating Warbler** was found at Otter Cr on 4/18 (J&LD).

A singing White-throated Sparrow was taperecorded on 6/28 in Ski Roundtop (JP); it continued into early July. An **Evening Grosbeak** was heard calling as it flew over Rocky Ridge CP on 4/25 (PR).

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

SCOTT F. BASTIAN CHRISTINE SCIOCCHETTI JAMES L. STASZ* WALTER A. THURBER

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

Seasonal Occurrence Tables - April through June 1998

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 <u>almost</u> 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:

 $A = Present \underline{A}ll$ 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.

 \mathbf{P} = Present $\underline{\mathbf{P}}$ art of the quarter. This species was present, but specific dates are not available.

 \mathbf{R} = Permanent <u>R</u>esident. This species <u>breeds</u> and is present <u>year round</u> in this county.

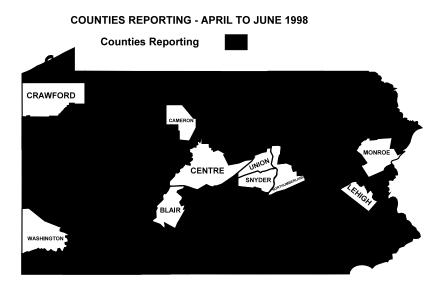
L = Late or Low. An L after a date indicates an unusually late date. An L after a number indicates an unusually low number.

H = **H**igh. An H after a number indicates an unusually high number.

E = **E**arly. An E after a date indicates an unusually early date.

 \rightarrow = An arrow <u>before</u> a date indicates the species was present from the beginning of the quarter to at least that date.

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



() = Numbers in parentheses indicate high counts <u>for the season</u>. 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.

 \rightarrow **1/5,3/15** \rightarrow 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.

 $1/15-2/26(300H) \rightarrow$ 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.

1998
JUNE
UGH.
THRO
APRIL
ABLES -
ENCE T
CCURRE
ONAL O
SEAS

	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BRADFORD	BUCKS	BUTLER	CAMBRIA	CARBON
LOON, RED-THROATED				5/8	→4/12	4/26		5/11			
COMMON	5/9(13)-6/1	4/17	4/10-30(15)-5/14	4/11		4/4-26(231H)→	4/6-8	5/9-30	A-4/26(41)	→6/12	→6/27(3)L
GREBE, PIED-BILLED			→4/22		→ 4/12(6)	A-6/25(28)		→4/25	↓ 5/9	→5/10(3)	↓4/9
HORNED		4/8	→ 4/22(5)-30		4/12(6)	→4/15(9)-5/16		↓4/11	→4/7(20)-5/9	→4/7(11)-24	↓ 4/18
RED-NECKED			4/10			4/10(10)		4/10(4)			
CORMORANT, DOUBLE-CRESTED		→4/17(125)-5/11	4/22(4)-5/22	4/4(25)-5/9	5/9	A-5/13(35)	4/6	A	↓ 5/24	4/25-5/8(70)-6/12	5/9-6/27
BITTERN, AMERICAN			5/3		-	4/12-5/23		4/28-5/7		5/21	
LEASI HEPON CDEAT BLIE	, 0	, 0	. <		4/18 D	5/13-23(5)→ D	. <	, ۵	- A.Elodiad)	, <	, <
FORET OREAT BLUE	A/16(A)	A/16	٤.	- 4/4/4/-5/6	۷.	A/10-5/22(3)	٤.	A/10-5/0	A-3/24(14) 5/34	τ.	τ.
HERON GREEN	5/3(3)	5/20+	5/14→		4/19→	4/17	<u>а</u>	4/18+	4/24-5/24(7)→	4/7-6/20/5)→	5/7→
NIGHT-HERON, BLACK-CROWNED		4/16	- -	4/11	2	F GL		6/7→			5 -
VULTURE, BLACK	Ľ				A	Я		Ľ			
TURKEY	R	A	A	٨	٨	R	A	2	A	A	Я
GOOSE, SNOW						→4/5(300)-6/30					
CANADA	2	₽	ъ	2	ĸ	Я	ш	ш	R	R	Я
SWAN, MUTE			5/22		4/12	Я		A	5/9		
TUNDRA	4/3										
DUCK, WOOD	5/3→	2	A	4	A-5/10(6)	R-6/28(200)	A	2	A	A-4/7(16)	A-5/29(8)
GADWALL		4/12(4)	→4/30(4)	4/4		↓6/6L	4/3	14/10	↓4//(3)	↓ 5/8(3)	
				, L		10/31 10/41		, ,	→4/10		
		צנ		Q/G	, c	/1/0† c	L C	צנ	5/9 L	, ,	, c
	۷.	4/5-12(4)-16	۷.	-	4/19	A/18/10)-27	4/16 4/16	5/3	2 4	A/7-18/11)-27	A/8/6)
SHOVELER, NORTHERN		+5/23		2 -	2 .	4/10-5/13	2 -				-
PINTAIL, NORTHERN						5/3					
TEAL, GREEN-WINGED		4/5(3)			5/30	→4/18(5)-5/3	+6/1*		→4/10		4/12
CANVASBACK		1		ı		→4/4(30)-5/23L					
REDHEAD					5/9						
DUCK, RING-NECKED						→4/4(100)-5/30	→ 4/19(5)-5/3	→5/16	NUL	→4/22	→ 5/23(18)
SCAUP, GREATER		- 100				4/11	-	-	→4/10(5)	-	
LESSER		4/2(4) E/1E	77./9	4/20		→4/11(12)-6/25L	¢1/5	14/18	→4/10(155)-JUN	G2/₽	
		CI /C				-	140	-	s/c-(+)07/t		
						4/10(0)	- 14	4/15 1/15			
BUFFLEHEAD		4/4-16	→4/7(9)		→4/12(26)	→4/17(20)-5/3			→4/10(121)-18	→4/12(135)	→4/11
GOLDENEYE, COMMON			-		-	-				→4/25	
MERGANSER, HOODED	4/3	A	→4/22		4/30	→6/21L	→5/8	→6/14	A		4/7
RED-BREASTED		4/9-16	→ 4/22(39)-30		4/12(40)	5/3-8		→5/16	→4/10(300)-5/9	→4/18(74)-6/2	4/9
COMMON					5/9	→4/16	£	£	↓APR		A
DUCK, RUDDY	, u	4/28-30	→4/30(10)	-	4/12(8)	A-4/17(290)	4/19(6)	→6/13L	→4/10(800H)-JUN	→4/25(65)-5/18	. <
	C/C	4/9-0/13	41/C-77/H		4/ 12		₽/0t <	4/4	4//(c))1 D	21/C-1/4	×
HARRIFR NORTHFRN	- 1	4 d	- 6/18			4/4-20	4	t 1/11	5/9	4/5	- 4
HAWK. SHARP-SHINNED	Ľ	: ლ	2				: ۲	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	A	2 22	. ⊲
COOPER'S		Ľ	Ľ		4/19	Ľ	Ľ	ĸ	A	œ	A
GOSHAWK, NORTHERN		4/2		ı	6/20				4/10		
HAWK, RED-SHOULDERED		ш				→4/11		ш	А	A	
BROAD-WINGED	5/31→	5/9→	<u>م</u> ۱	. 1	٩ -	4/7-17(32)→	6/1→	4/4→	4/7→	4/15→	4/19→
	צ נ	צנ	צנ	ינ	Υc	rc	Υc	צנ	רנ	צנ	צנ
MEDIIN	۲.	94/4 1	۲.	۲,	۲.	۲.	A/2	A/8E-5/16I	۲.	۲.	צי
FALCON PERFGRINE							Ç	5/16			
BOBWHITE, NORTHERN		έ,	Ч		5/9			2 5 22	6/6		
RAIL, VIRGINIA				1		5/13-23	5/3-6	5/2-16	4/24→		
SORA						4/17-25(3)-5/23		5/16	5/9(5)	4/18→	
MOORHEN, COMMON						5/13-23			5/9		

1998 VOLUME 12 NO.2

86

			SEASONAL OCCU		RRENCE TABLES	I	APRIL THROUGH JUNE 1998	NE 1998			
	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BRADFORD	BUCKS	BUTLER	CAMBRIA	CARBON
COOT, AMERICAN		→4/2(6)-5/7	→ 4/2(72)-30	→ 4/4	5/9(6)	A-4/17(60)		→5/16	→ 4/3(165)-5/9	→4/7(150)-5/10	→4/11(9)
PLOVER, SEMIPALMAIEU KILLDEER	, Ľ	- ×	- A-5/22(8)	, ∢	, 4	5/23(1)-30 R	- ¥	ə/1ə(1ə)-зиL А	- ×	0/2 A	- ×
YELLOWLEGS, GREATER	4/15	4/28(21)-5/9		4/29		4/18-5/3(5)-9	4/16	5/9-16	4/24-5/24	4/27(5)	
LESSER SANDPIPER. SOLITARY	5/3 4/16-5/3(3)	5/3 4/23-5/23		- 5/5-16(3)		5/2-3 4/30(4)-5/30		→5/16 5/3-24L	5/9 5/9	- 4/7-5/10	- 5/2
SPOTTED	4/22→	4/23-28(4)→	4/22→	5/6→	5/9→	4/27→	٩.	4/21→	e.	4/22-5/14(8)→	5/2
UPLAND SANDPIPER. SEMIPALMATED	5/25 -	- 5/18-25(7)-6/6			- 6/3(12)	- 5/23-30(5)		- 5/16	5/9(6) -		
LEAST		5/9-18(6)-6/13				5/7-6/28	6/1(30)*	5/16-30L			
WHITE-RUMPED		5/25 4/12/5_22		- 5/0		-					
DUNLIN		5/9-16		- 10		5/9(4)-30		5/16(15)			
SNIPE, COMMON		4/12(6) 4/12-28/5)→	- 4	, d	- 4		4/11 A	4/8-5/16 ^	P A	4/5 4/5→	, A
GULL, LAUGHING		- (c)07-71 /+	ς,	¢ ,	ς,	6/11-13	ς,	A/25(150+)→	ζ.	- 07 -	ς,
BONAPARTE'S RING-BILLED		→4/10(8)-16 P	4/22-30(4) →4/30(16)-30	4/10(16) →5/6	4/12(257) 4/12(18)	4/10-11(37)-5/9 A		4/8(74)-5/16 A	4/10-26(60)-5/9 A-4/5(121)	4/10-29(15)-5/18 A-4/29(120)	4/4(8) A
HERRING		Ľ	→4/22	→ 4/28(6)	5/9	→4/12		A	4/26(12)	4/27-5/5	A
GREAT BLACK-BACKED TERN. CASPIAN		- 4/30				- 4/10-26		A 4/20(4)	- 4/26(5)		
COMMON						5/26-6/11(4)-21			4/26-5/9	-	
FORSTER'S BLACK						- 6/2-12		- 5/4-5		4/27-5/9(4) -	
CUCKOO, BLACK-BILLED		5/9→	5/5→		5/4→	5/20→		5/16→	5/9→	5/20-21(4)→	6/21→
YELLOW-BILLED	5/31(3)→	5/5→	6/21→	6/13	5/9→	5/9→	4	5/3→	5/9→	5/18→	
UWL, BARN BAPPED	×Ω	, ۵			. 0	×Ω	, 0	×Ω	. 0		. 0
NORTHERN SAW-WHET	۷.	۷.	۷.		۷.	۷.	۷.	< ۲2	۷.	۷.	۷.
NIGHTHAWK, COMMON		5/12→	5/26→	5/11→	5/9→	5/13(6)→		5/16→	с.		
WHIP-POOR-WILL	- 4/46	5/9+	5/2→		4/22→	5/23→	- 00/1	4/12-28	5/9→	- 1014	5/2→
	±/ 13 - 1 5/5→	4/20(4)→	5/7→	4/20 1 5/9 ↓	4/25→	4/23→	4,20→ 5/13→	4/29→	4,20→ 5/9→	5/8→	5/9+
WOODPECKER, RED-HEADED	ж	5/9			5/9	с i	5/10→	Ж		1	
SAPSUCKER, YELLOW-BELLIEU FLICKER, NORTHERN	- R-4/16(5)	→4/12(6)-5/18 R	→4/2 R-4/30(6)	, Ľ	4/11 R	5/9L R	4/2↓ R	, ¥	- A	4// R	, ¥
FLYCATCHER, OLIVE-SIDED		6/5				5/13-23		5/24	5/29		
WOOD-PEWEE, EASTERN FLYCATCHER, ACADIAN	5/14-31(4)→ 5/14(3).	5/14-23(4)→ 5/10→	5/22(9)→ 5/22-6/14(7)→	5/15→ 5/14→		5/9→ 5/6→	5/6E-6/1(9)→ -	5/16→ 5/9→	5/9→ P	5/18→ 5/20-28(4)→	5/23→ 6/21→
ALDER		5/30	E C	-	, i	- LO, L	5/18→		5/9-24(7)→	5/28→	4/10
WILLOW	t +1 /0 -	5/4+	6/12→ 5/22→	6/4 6/4	- R/G	5/17-23	5/14 ↓ 6/1(9) ↓	5/15-27	5/9-27	5/24	5/23→
PHOEBE, EASTERN	A	A	A-4/22(7)	A	A	A	A	A	A	A	A
FLYCAICHER, GREAL CRESLED KINGBIRD, EASTERN	5/14-31(6)→ 4/22(3)→	5/9→	5/4↓ 4/30→	5/6↓	5/9→	5/4→ 4/27→	5/8→	4/29+ 4/25+	5/9→ 5/9→	5/14→ 4/29→	5/13→ 5/2→
VIREO, WHITE-EYED	4/16-5/14(6)→	4/9→	6/12→	5/6→		5/9→		5/3→	4/12→	5/7→	
BLUE-HEADED YELLOW-THROATED	- 5/14→	4/9-28(6)-5/22 5/4-7(4)→	4/22↓ 5/22↓	5/9↓ 5/9↓	- 5/22→	4/18↓ 5/1↓	4/29→ 5/12→	4/27↓ 5/9↓	P 5/9↓	4/18(7)→ 5/28	5/14 -
WARBLING	5/14→	4/29→	5/22→	5/6→		4/30→	5/2→	4/22E→	5/9→		
PHILADELPHIA RED-EYED	- 5/1-14(10)→	5/22 5/7(6)→	- 5/22-6/19(39)→	- 5/6→	- 5/1→	- 4/24→	- 4/27-6/1(22)→	5/9-24 5/5→	5/28 5/9→	- 5/7→	- 5/9(3)→
CROW, FISH			-			R	. (ĸ		. (Č A
KAVEN, CUMMUN LARK, HORNED	- ¥	. ~			¥ ,	4/5-5/2 →4/5(120)	צצ		- V	к R-6/20(10)	
MARTIN, PURPLE SWALLOW, TREE	- 4/16-5/3(38)→	4/5→	4/24-5/7(6)→ A	- 4/20→	5/9→ A	4/3→ A	5/1→ 4/11-19(200)→	5/5→ A	4/25→ A	- 4	- 4
NOK I HEKN KOUGH-WINGED		4/2-5/12(c)→	4/.22→	4/18↓	±2/9	A	4/20→	4/b →	4/13→	4//+	A

1998	
JUNE	
THROUGH	
APRIL	
TABLES	
OCCURRENCE	
SEASONAL	

	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BRADFORD	BUCKS	BUTLER	CAMBRIA	CARBON
BANK						4/25→	6/1→	4/29→	5/9→	5/8→	6/1(5)→
BARN	5/31(4)-+	4/3→	4/22→	4/20→	5/9+	4/4→	4/20-	4/10+		4/11+	4/8→
CLIFF		2	I .		£/9	4/10→	Ē	5/74	٩	4/18-5/8/20)→	5/9(3)→
	2	œ		۵	0	2		5 CC			(0)00
BLACK-CAPPED		Ľ	Ж	Ľ	Ľ	Ľ	Ж	Ľ	Ľ	Ľ	ч
NUTHATCH, RED-BREASTED		→5/14			4/20-30	Ľ	A	→5/30	15/9	↓ 5/1	A
CREEPER, BROWN	Ж	→ 4/8(10)-27	Ж			Ж	Ж	ĸ	A	A	
WREN, HOUSE	4/16-5/1(7)→	4/23→	5/3→	5/2→	5/9→	4/17→	5/2-6/1(14)→	4/18→	4/12→	5/1→	5/2→
WINTER		→5/6(7)				A	A	→6/20L	- -		
MAKSH	-		-		- (0/04/4		-	-	5/9-24 D		- (0)0414
GINATICATCHER, BLUE-GRAT KINGLET, GOLDEN-CROWNED	+(01)1/C-11/4 -	4/10→ →4/2(20)-23	4/ ∠∠(/)→	₩ 	4/1∠(3)→ →5/9	4/ I I (8) → R	4/21 4	- 4/4	L L		4/ 18(3)→ →4/4(3)
RUBY-CROWNED	4/16(4)	→4/15(25)-5/12	4/22-30	4/14	15/9	15/9	↓ 5/14	→5/16	4/5-13	4/22-5/9	→ 4/4(4)
VEERY	5/31(11)→	4/29→	6/19(8)→		,	5/3→	д.	4/5E→	5/7→	5/18-26(6)→	4/10→
THRUSH, GRAY-CHEEKED		5/22-24						5/16-27L	5/28		4/12
SWAINSON'S HERMIT	- 5/31	4/26-5/23(6)-26 →4/24(11)-5/8				5/14-18(4)-28 A	- 4/13-+	5/9-24L ↓5/16	5/28(3) 4/10-11	- ⊿/7-5/14(4)→	4/17 7/4
WOOD	5/1-14(18)→	4/24-5/4(7)→	4/30→	4/29→	4/28→	4/17→	5/14-6/1(16)→	4/21E→	4/12E→	4/29→	4/10→
ROBIN, AMERICAN	£	Ľ	R	к	£	Ľ	A	ъ	A	ш	Ľ
CATBIRD, GRAY	4/30-5/14(20)→	5/5→	5/4→	5/6→	5/1→	4/30→	5/7→	A	5/3→	A	5/2(7)→
THRASHER, BROWN	4/16(5)→	4/2→	4/2→	5/6→	4/7→	A	4/15→	A	4/12→	4/7→	4/9→
PIPIT, AMERICAN	5/3					5/3(4)			5/9(4)		4/9
WARBLER, BLUE-WINGED GOI DEN-WINGED	5/1↓	5/7-22(12)→ 5/0	5/3→ 5/22	5/6→	- 5/A	4/30↓	5/9→	5/2→	5/9↓ 5/16		5/9↓
TENNESSEE	- 	013 E 16	J124	E10 E14	11				0/ 10 E /26/ 4)		E 146
	- 14	3/0-10 4/28-5/8(16)-26		5/6	5/5 4/18-5/13I	5/6(3)-14	- 5/6→	5/5	3/20(4) 5/9(26H)		01/C
PARULA, NORTHERN	5/14	5/4-14	5/22→)) ,		4/18→	, ,	5/2→	4/12E→		5/16→
WARBLER, YELLOW	5/1-3(5)→	4/18→	4/30→	5/6-9(19)→	4/27→	4/27→	5/3-6/1(46)→	4/25→	5/3→	4/29→	5/9(5)→
CHESTNUT-SIDED	5/14(4)→	5/4-22	6/14→	5/6		5/7→	5/14→	4/30→	5/9→	5/7→	5/16→
MAGNOLIA		5/4-27(3)-28	5/22			5/6-24(4)	5/6	5/9-24L	5/9-28		5/16(3)
	-	-		5/5	, ī	-	5/16	5/3-17	5/28(3)		
	5/9-31(4)	5/4-14(4)-18	-	5/8-6/4	5/9 1/2/1/	4/30+	100-10 1/30-1	4/29-5/16	5/9-14	5/18-+ 4/40/76/	- 14-
	5/1-11(10)	4/16_25/5/-5/24	-4/2(3)-3/22	4/20-0/2	4/20(4)	-0/ IL	1/20/1	F/2-24	12/12	4/ IO(20)7	4/4-7 5/16_
BLACK-I TROATED GREEN BLACKBURNIAN	5/14 5/14	4/29-5/25		(c)e/c	e/c-07/4	4/20-7 5/6	4/2a-1	3/2-24L 5/9-24	5/9-28	5/28	5/16+
YELLOW-THROATED	<u> </u>	4/9+	4/22→		5/9	р 5 г	- -	1	5/9	21.0	2
PINE	5/31(10)→	4/22-5/4			4/26	4/1→		→4/11		4/22	A
PRAIRIE	5/14→	4/18→	4/22-5/7(13)→		4/26→	5/1→	5/9→	5/2→	5/9→	д.	5/2(3)→
PALM		4/24-5/8		5/9	4/26	4/4(4)-10		→5/23			4/4
BAY-BREASTED		5/8-13(4)-22		5/6		5/15-23		5/16-23L	5/9-28(6)		-
CERULEAN	0/ 14(0) -	3/9-10(1∠)-30 4/30→	- 4/30-5/22(9)→	o/ Io 5/8→		5/5(3)→		5/16→	5/9 1	- 5/26→	5/23→
BLACK-AND-WHITE	5/14-31(7)→	4/16→	4/22→	5/6	4/26→	4/18→	5/4→	4/29→	5/9→	5/1→	5/9→
REDSTART, AMERICAN	5/1-14(10)→	4/30-5/26(7)→	5/22(4)→	5/6→	4/26→	4/30→	5/14→	5/4→	5/9→	5/9-21(9)→	5/2→
WARBLER, PROTHONOTARY				,				5/16→			
WORM-EATING	5/31	5/9→	5/22(3)→	5/9	5/9→	4/30→		5/9(16)→	5/9→		5/9→
OVENBIRD	5/1-31(15)→	4/22→	4/30→	5/6	4/25→	4/25→	5/3-6/1(33)→	5/2→	5/7→	5/1↓	5/9(4)→
WATERTHRUSH, NORTHERN	5/31	4/23-5/18		5/6	5/9	4/25(3)-5/23	6/1	5/5-23	•		
	4/16→	4/9+	4/21	4/4	5/9↓	A FIO	5/2→	4/13→	4/2→	5/29+	
	- 5/11	5/44	t 77 /0			5/34	- 6/1	5/10-+ 5/17	1/2 2/3	Σ,	
VELLOWTHROAT COMMON	5/1-14(30)+	4/20+	4/30→	5/6	5/4	4/20→	5/3-6/1(29)→	0/1/ 4/18F↓	5/8+	5/14	5/3+
WARBLER, HOODED	5/31(11)→	4/30-5/7(6)→	5/22→	5/6	5 -	5/7→	6/1	5/1	5/7→	5/18→	5/23(3)→
WILSON'S		5/17-27		5/15	5/23	5/9		5/15-30L	5/19		
CANADA	5/31(6)	5/18-27		5/15		5/11→	ъ	5/16-24	5/14	5/20-29(8)→	5/16(3)
CHAT, YELLOW-BREASTED	5/3→	5/7→	5/7→	, L	5/9→	5/17→	, L	6/5→	5/16→	5/26→	- L L
I ANAGER, OCARLE I	5/14-31(5)→	+(8)1-0/c	t-77./G		D/81	4/23-4		↓ 7/G	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	2/0-14(0)-1	1

1998 VOLUME 12 NO.2

1998 VOLUME 12 NO.2

			SEASONAL OCCURRENCE TABLES	OCCURRI	ENCE TABI	I	APRIL THROUGH JUNE 1998	JNE 1998			
	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BRADFORD	BUCKS	BUTLER	CAMBRIA	CARBON
TOWHEE, EASTERN	4/16-5/3(8)→	A	A	A	A	A	4/28→	ĸ	A	4/8→	4/4→
SPARROW, AMERICAN TREE			, .	-	, .	, .			→4/5	→4/2	<u>с</u> ,
CHIPPING	5/31(8)→ 4/46-6/3/13)→	4/4→	A A_A/22/12/	4/4↓	4 <	A <	4/3E ↓	4/.5†	Α <	4// 1	A/4
VESPER	6/14(7)→	4/5→	P	5/9(3)	ζ,	4/4→	4/11	£ ,	5/9-24(9)→	5/16→	t i
SAVANNAH	5/25-6/14(9)→	4/12→	4/30-5/8(15)→	4/18		4/18→	А	Я	5/9→	5/7→	
GRASSHOPPER	5/25-6/14(4)→	4/28→	4/30→	5/9(3)		5/3(3)→	5/15	5/16→	5/9→	5/7(4)→	4/9
HENSLOW'S FOX		4/12→ →4/12	4/13→		- →4/11(12)		6/24 -		5/9→	5/7(3)→ 4/2	
LINCOLN'S		1						5/9-24L		4.	
SWAMP	5/3(3)→	4/12→	4/22→	4/18	٩	Я	4/6→	R	4/5→	4/7→	4/9→
WHITE-THROATED	→ 5/1(25)-16	→ 5/18	→ 4/30(6)-5/11	↓ 5/6		→ 5/9(23)	Я	→5/24L	→ 5/9(12)	→ 5/12(3)	А
WHITE-CROWNED	5/3(12)	4/28-5/5	5/6-7	5/5	↓ 5/9	→ 6/8L	, (→ 5/13	5/9		5/2
JUNCO, DARK-EYED GROSBFAK ROSF-BRFASTFD	+5/5 5/5+	+5/4 5/4+	→4/4(6)-10 4/30→	+4/4	- 1 5/9	↓5/6 4/27↓	R 5/3-6/1(10)→	→4/18 4/29→	↓4/23 5/7↓	A 5/6↓	R 5/7(4)→
BLUE							- (01)10000	5/16→			- (+)
BUNTING, INDIGO	5/3-14(6)→	4/29→	5/22→		۵.	5/2→	5/9→	4/27→	5/9→	5/9→	5/14→
BOBOLINK	5/25(15)→	5/9→	5/6-22(6)→	5/6		5/3(5)→	5/9-6/1(22)→	5/9→	5/9→	5/7→	
BLACKBIRD, RED-WINGED	A-5/3(31)	A -	A	A	A -	A I	Α.	<u>د</u> ا	A -	A -	A -
MEADOWLARK, EASTERN BLACKBIRD. RUSTY	4/16(4)	A 4/5-5/9	A-4/30(12) -	4/25 4/4(50)	۲.	К 4/5(10)-30	Α,	K 4/6(5)	Υ,	A 4/22	۲.
GRACKLE, COMMON	4/16-5/14(18)→	A	A-4/12(70)	A	A	A	A	R	A	A	A
COWBIRD, BROWN-HEADED	4/1-5/3(18)→	A	A-4/22(15)	A	٨	Ы	A	Ľ	Α	A	A
ORIOLE, ORCHARD		5/9→	5/22→	5/9→	5/9→	4/30→		5/2→	5/9→	5/29→	
BALI IINUKE FINCH PI IPPI F		A_A/28(5)	↓ +1/G	12/G	11/2 1/2	4/29→ A/10-5/15	5/2-5/1(1/)→	t7/G	t /G	t / /G	P/ ((3)→
CROSSBILL, RED	→5/11(12)	4/23(16)-5/21	÷ ,	÷.		→4/19(11)-5/28	- ,	5/8		5 1	6/21
WHITE-WINGED	1	4/2-14	4/16(35)			→4/21					
REDPOLL, COMMON	L	Ç L					→4/8(20)		5	- 100 001	
GROSBEAK, EVENING	4/30	4/26(30)-5/7	4/22(4)-5/11 5/1(4)-6	- 5/12	→3/9(6) →4/30(4)-5/9	4/25(8)-5/3	→4/12 →5/6(15)	- 4/29(3)	↓5/9	4/0-∠0(<i>t</i>)-29 →4/29(25)-5/8L	- 14/13
	CHESTER	CLARION	CLEARFIELD	CLINTON	COLUMBIA	CUMBERLAND	DAUPHIN	DELAWARE	ERIE	FAYETTE	FRANKLIN
LOON, RED-THROATED	4/7-15	4/15				5/9	5/9-6/13				
COMMON GREBE, PIED-BILLED	→4/24(26)-5/9 P	4/1-15(11)-5/13 A		4/8-5/5 →4/8(4)	- ∢	↓5/9 ↓5/2	→4/27(16)-6/7 -	→4/26(7)-5/27 →4/7	→5/23 →MAY	4/10-5/26 -	4/12-5/13 4/13-5/4
HORNED	4/15	→4/8(17)-30		1	↓ 4/3	→4/4	→4/16	→ 4/5(3)-10	→5/15	4/3-16(17)-5/15	5/9-10(4)
CORMORANT DOLIRI F-CRESTED	- APR(33)	4/15-20 4/20-30(9)			, @	- 4/4(5)→	- 4	- A-4/26(100)	- 4	- 4/17(19)	
BITTERN, AMERICAN	-	-		5/22-6/4		-		-	4/10-16(8)-5/22	-	
	, <	, <	, <	, c	, (, <	, c	4/2↑	5/16→ D	, (, <
HERON, GREAT BLUE FGRET GREAT	Υ.	A 4/30	Υ.	¥ ,	¥ ,	Ā	¥ 4	צ ⊲	4/12-6/20	A/3	A 4/14→
HERON, GREEN	4/16→	4/30→	6/8→	APR→	5/3→	4/30→	4/30→	5/3→	4/18→	5/3→	4/21→
NIGHT-HERON, BLACK-CROWNED						A	5/3→	A	4/16		
VULTURE, BLACK	<u>د</u> ر	, •	, ,		, •	4 •	۷ ۹	<u>د</u> ر		5/2→	, •
LUKKEY GOOSE, SNOW	¥,	۲ ،	κ,	۲ ،	۲.	Α,	A 4/11	т ↓5/26	Α,		۲.
CANADA	ĸ	ж	ĸ	ĸ	ж	ж	ж	ъ	æ	ĸ	ĸ
SWAN, MUTE	5/1	4/15(4)				15/9	4/4	ĸ		5/2	
	. <	. <	. <	. <	, c	6/9↑	. <	. <	→4/5(3) ^	, c	+5/4
GADWALL	٤,	A →4/30(4)	τ,	۲.	۲.	τ,	±	A 5/27	A ↓5/17	R 4/3-5/6(8)	τ,
WIGEON, AMERICAN		→4/30				→4/16	+5/9		→5/2	4/3-16(16)-5/5	→4/5

CHESTER			NUTION				DFI AWARE	ERIE		
	CLARION	CLEARFIELD			CUMBERLAND		ררה עיניר		FAYEIIE	
			A	Ľ		۲	Ľ	→MAY	Ľ	
	Я		¥	₩	₩	Ч	₩	A	Ж	22
APR(10)	→ 4/1(23)-20				→5/21(3)	→4/28	→5/7(4)	4/17(4)-6/7	4/10-27	4/9-5/9(4)
	→4/1(4)				4/4	↓5/11		14/5	→ 4/8(3)	
	-				9.	↓5/2 ↓ 4/07	→4/18,6/25→ →4/48/6/ E/3	↓4/5 ↓M^/	-	-
	14/1				10/8	14/21			4/0	
	↓4/1					200		T MAY		
	→ 4/4(35)-16	ı	,	,	→4/12	→5/9	→4/12	AL	4/22-5/6	→5/17
	→4/1(19)-30					↓ 4/2		↓MAY		
	→4/1(34)-30		→4/8(12)		→ 5/9(9)	↓ 5/19		AL		→ 4/24(3)
						4/12				4/29-5/4
						4/2(3)				
	→4/1(3)					15/9		+4/4		4/19
	→ 4/1(21)-30		4/7-9(20)		→5/2	→5/9(5)	→4/12(10)	→6/7L	4/3(32)	↓ 5/3
					. (↓APR	4/5	AL		-
(3)	↓4/1(6)-30			A-6/8(8)	L L	A-6/3(13)		т <	2/G†	14/13
	→4/30(39) ^		4/0	, ,	c7-4/4		- r (o/o)	AL	07/G †	
	A		Y	r	A 	1/9/1	5/9(8)	↓ MAY		
2/0/-6/0	→4/20(95)-30 4/8-20	- 1/75	, ם		4/2/ 15/0	→5/9(15)-11	→4/1/((15)-5/b →5/3/3)-15	AL 1MAV	4/16(7)-6/2 7/10-5/5	- -
101-010 8	07-07	C7		4/10+		R-5/11(4)		A		5/10
	¥		4/25	4/8		15/9	→ 4/5	; L		2
	: Ľ		2	د	Ľ	2	→4/28	. ല	Ľ	A
	ĸ	Ľ	£	Ľ	œ.	Ľ	Ľ	Ľ.	£	A
	4/27→		R	5/12						
	A		٩		A	۲	5/23	۵.	Ł	
5(20)→	A	4/8→	5/19→	5/29→	4/15→	4/17→	A-4/28(12)	۵		4/17→
	<u>ک</u> ا	œ ۱	<u>د</u> ا	с I	œ ۱	œ ۱	œ ۱	œ ۱	<u>ک</u> ا	۲ I
	4/20	r	r	r	¥	r	¥	K 4/40 F/40	r	r
	4/20					, 0	. 0	71/G-01/4		
				- 4/15		A/17	2 4			, œ
				2	4/27-5/9	5/9	ς,	4/5F→		£ ,
	4/1		д.		2/6	þ.	5/3	4/10E→		
	4/30				5/21)) ,			
	→4/4(85)-5/2				4/27(4)-5/21	A	+4/7	→5/15	+5/2	→5/24
			,		5/6-20(14)-21	5/9-19(4)	5/15-24(4)	5/15-23	5/6	5/17(4)-26
	A	A	A	A	A	A	£	A	4/17→	A
					→4/15(7)-21	4/8-5/19	→5/2(6)-24	4/30(5)-5/15	4/18-5/2(3)	4/5-5/2
	- 4/30-				→0-11(12)-0/3 4/27-5/26	4/2/(10)-2/19 4/24-5/10	4/18-5/2 5/2-24	۲ ם	4/30-5/2	€/c-(51)02/₽← -
t	4/20→	5/18→	۵.	4/20→	4/27-6/2	4/21→	4/26-5/24(6)→	5/3→	4/30→	4/21-5/12(14)-26
	4/24-6/8(4)→				4/28-5/2		-			
	5/20N				5/19		5/30(300)	5/19-23		
					5/20-6/4(36)-9		5/15(5)	5/17-6/7(25)		
	5/10				4/30-5/20(10)-26	5/8-19(6)	5/2-15(56)-24	5/14-6/26(6)	5/6-14(8)	5/2-24(8)
						5/19		5/19		
	-				→ 4/18(106)-5/20	5/3	- F/04 07	5/15 F/0 6/7/1F/		
171	4/1(4)-5/20				- →4/18/30)-5/0	4/2/-2/19(4) -	12-4-21 4/F	(c1)//0-7/C		- 4/11/3)-12
()	A	A	A	A	A	A-5/9(7)	A	. a	4/5→	A
			: .		5/9-10	-	A			
4/3-5/4(4)	4/9(43)-30		4/13(3)		→4/3(87)-5/21	→4/27(66)-5/11	4/20(21)	А	5/22	4/9(9)
	A-4/30(200+-)		5/2(48)	A	A-4/3(200)	A	A	A	→4/30(7)	
	4/15				↓5/9	Α <	Α <	A ¢		
					A	A	A	A		
		s t	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	+ 4/1(35)-16 + 4/1(35)-16 + 4/1(3)-30 + 4/1(19)-30 + 4/1(19)-30 + 4/1(10)-30 + 4/1(10)-30 + 4/20(39)-30 + 4/20(39)-30 + 4/20(39)-30 + 4/20(39)-30 + 4/20 + 4/1(3)-5/20 + 4/1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	

SEASONAL OCCURRENCE TABLES - APRIL THROUGH JUNE 1998

PENNSYLVANIA BIRDS

1998 VOLUME 12 NO.2

NNSYLVANIA	BIRDS	
SY	NIA	۰.
	22	2

 $\mathbf{00}$

1998 VOLUME 12 NO.2

	CHESTER	CLARION	CLEARFIELD	CLINTON	COLUMBIA	CUMBERLAND	DAUPHIN	DELAWARE	ERIE	FAYETTE	FRANKLIN
TERN, CASPIAN	4/17(3)-5/4	4/20				5/10	5/11(8)-18	4/16-20(4)	4/9→ 4/4→1 4/ 6/7		
FORSTER'S		4/ 10-30(4) -				- 5/2(4)	5/20(3)	- 4/18-5/24	4/11/(4)-0// 4/4-5/21		
BLACK CLICKOO BLACK-BILLED		- 5/27→		- MAY→		, <u>а</u>	- MAY→	- 6/6	5/2-23 P		5/17(6)-19 -
YELLOW-BILLED	٩	5/23→		6/2→		5/30(4)→	5/9→	5/2→	. с.	6/14→	5/14→
OWL, BARN BARRED	. ~	, ≃	, 22	, 🗠	۲ ۲	<u>د</u> د	к к		5/17 R	, Ľ	œ ۳
NORTHERN SAW-WHET	,	4/28-5/27							4/2-3		
		5/2→			P 2/1	5/21→	5/1→ E/0 E/2/1)→	5/7-30(3)	P 1/20-1		
WHIF-POOR-WILL SWIFT, CHIMNEY	- 4/14→	A 4/22(4)→	- 5/25→	4/307 MAY→	Р 041	4/ → 4/22→	o/9-0/3(4)→ 4/14→	- 4/15(5)→	4/301 APR↓	- 4/18→	- 4/11→
HUMMINGBIRD, RUBY-THROATED	٩.	5/7→		5/1→	5/4→	5/4→	4/30→	5/10→	MAY→	6/14→	4/29→
WOODPECKER, RED-HEADED SAPSUCKER. YELLOW-BELLIED		- 4/4	- 6/8	, 22	- 4/13→	œ ,	- →4/28	5/23 -	4 4	- 4/12	œ ,
FLICKER, NORTHERN	۲	£	A	. w	ж	ĸ	Я	£	A		A
FLYCATCHER, OLIVE-SIDED WOOD-PEWFF FASTFRN	6/7* P	5/27 5/20→	5/25 5/18→	- 5/19→	- 6/7+	- 5/16→	- 	5/21-6/3 5/16-17(6)→	5/24 5/14→	-	- 5/14→
FLYCATCHER, YELLOW-BELLIED	. ,	- 1	2 2 5	2 .	5 -	2		-	5/24	1 1	
ACADIAN	€/7→	5/21→		_ 0	€/6→	5/18→	5/9→	5/13-25(8)→	5/15→	5/11→	5/14→
	- 6/7→	- 5/23-4	-		- 6/6/6)→	- 5/12→	- 5/18→	5/24(4)→	5/17→		
LEAST		5/20(5)→	5/18→	5/14→	6/6→	5/12	6/19→	5/14	5/3+	5/6→	
PHOEBE, EASTERN	A	A	A	٨	A	A	A	A	APR→	4/5→	A
FLYCATCHER, GREAT CRESTED	5/9→	5/20	5/18→	MAY→	5/6→	5/2	5/9→	5/3→ 4/or	5/14(6)→	5/6→	5/7→
KINGBIRD, EASTERN VIREO, WHITE-EYED	t €/c	±07/6	- م/ع	o/4→ MAY→	6/7→	5/1→	4/29→	4/25→ 4/25→	MAY→ 5/5	- 5/2→	+7/C
BLUE-HEADED	5/12	4/9-5/20(9)→	5/18→	APR→	A	4/11(3)→	4/3→	4/26-5/14	5/3(6)→	4/1→	4/22
YELLOW-THROATED	۵. ۵			MAY→		5/18→ 5/2→	4/30→	4/27-5/3(3)→	P	-	5/14→
PHILADEL PHIA							- 67/4		5/15-6/7L	5/5→	-
RED-EYED	4/25→	5/20(40+)→	5/18→	5/7→	5/12→	5/9→	5/3→	4/28-5/17(10)→	5/14(15)→		5/7→
CROW, FISH	d.			4/7→	Я	Ľ	Я	Ж			A
RAVEN, COMMON		₩ 4	¥ ،	2 ⊲	œ ۵	₩ 4	₽ 4		, 0	œ ,	¥ .
MARTIN, PURPLE	4	4/20→		APR→	2 Å	< 4	ζ.	4/19→	APR→		4/11-5/31(27)→
SWALLOW, TREE	<u>م</u> ۱	4/1-26(26+)→	4/30→	5/2→	A	A .	A	A -	4/16(300)→	4/22→	A
NOKTHEKN KOUGH-WINGED BANK	Р 5/9	4/15-20(4)→ 4/25-6/22(50)→	- 6/8+	4/18→ APR→	5/21→ APR-6/2(200+)→	A 5/7-11(20)→	A 4/27-5/9(200+-)→	A 5/15-22	APR→ 4/17E→	5/2(8)→ 5/14	4/10→ 5/8(4)
BARN	۵.	4/15→	4/30→	4/29→	с.	4/4→	4/10→	4/12-5/6(20)→	4/18→	4/17→	A
CLIFF CHICKADFE, CAROLINA	, œ	5/20(3)→ -		4/28↓		4/2/↓ R	4/17-5/9(18)→ R	5/2-21(6)→ R	MAY→ -	4/1/↓ R	4/10-5/7 R
BLACK-CAPPED		۲	۲	۲ ۲	Ľ	۲	Ľ		۲	۲	۲
NUTHATCH, RED-BREASTED CREEPER, BROWN	→4/25 -	œ œ	, œ	~~~~	A 5/29	↓5/9 ↓4/12	↓ 5/9 R	→4/14(3)-5/30 -	ር ቢ	4/12 -	- 4
WREN, HOUSE	5/9→	4/1↓	5/18→	5/1→	а С	4/14→	4/20→	4/20→	4/17E→	5/2→	4/30→
WINTER	4/5	A	5/18→	۲ ۲	۲	→4/11(5)-12	+6/4	-	→5/14 4/20/6)_		
GNATCATCHER, BLUE-GRAY	. a	- 4/15→		- 4/28→	- 4/18→	- 4/12→	4/1→	3/13(3)→ 4/5-5/13(13)→	4/30(0)-7 4/17-5/17	- 4/5→	
KINGLET, GOLDEN-CROWNED		→4/1(5)	4/8	2	2 .	→4/5	 ↓5/18		→MAY	2	
RUBY-CROWNED	, !	4/17-30(7)	-	-	↓ 5/29	→5/5	15/9	→4/28(3)-5/7	→MAY	5/2(3)	
VEERY THRUSH. GRAY-CHEEKED	4/7↓	5/21-6/16(9)→ -	5/18→ -	5/20 ↓	5/7↓ -	5/9 ↓	5/7↓ -	4/23-5/30(7)→ 5/25-26	5/14→ 5/24		
SWAINSONS	5/23(3)	5/21-6/5				5/9-18	5/8-18	5/16-26(3)	5/14-25	5/16	
HERMIT	Р 101	A/30-	5/16→ 5/18→	л Т	4/29→ 5/3→	A 5/1	R 1/30-	→4/26 4/36_5/30/11)→	APR-MAY	↓4/25 //78↓	-
ROBIN, AMERICAN	о б сс	° ₽ ₽2	A N	A	о 20 сг.	δœ	с Э́г Ш	R	2 2 2	A	Эст.

	CHESTER	CLARION	CLEARFIELD	CLINTON	CLEARFIELD CLINTON COLUMBIA	ບັ	MBERLAND DAUPHIN DELAWARE	DELAWARE	ERIE	FAYETTE	FRANKLIN
		C L		1000	C L		1110	100,001		100	100
CALBIRU, GRAY THPASHED BDOWN		+7/G	0/8	4/29+	5/3 4/F		4/18+	(c∠))06/C-A		4/30+	4/30+
	1111		•	4/23	£01		4/2-1	¢		1 77 17	4/11/1
		→4/∠U		(1)7/0		→4/29(200)=2	4/8/150+(-+001)8/4				71/C-(74)C/H
	±₽/0	↑0L/G				↑7/G	t	t=(0)01/C-87/b	MIA Y →	0/4	t/10
GOLDEN-WINGED				MAY→		5/30	5/1+		5/14-20	5/4-6/14(4)→	
TENNESSEE						5/9		4/28-5/25	5/14-25	5/14	
ORANGE-CROWNED									4/25E-5/19		
NASHVILLE				5/4→	6/19→	5/2→	5/9-14	4/29-5/16	5/2-15	5/14	
PARULA, NORTHERN	5/9→	5/2→		MAY→	5/6→	5/1→	4/30→	4/22-5/3(6)→	5/14-15	4/23→	5/7→
WARBLER, YELLOW	5/3→	4/30-5/23(5)→	5/25→	5/4→	5/6→	4/27→	4/29→	4/25→	5/2→	4/27→	4/29→
CHESTNUT-SIDED	٩	5/10-29(6)→	5/18→	MAY→	5/12→	5/9→	5/6→	4/30-5/14(5)→	5/3→	6/1→	5/7→
MAGNOLIA		5/20-27(7)→	5/18→	5/7→	5/15→	5/9-18	5/6-16	5/15-16(4)-6/1	5/14(20)-25	5/10→	5/9
CAPE MAY		-				۵.		5/16	5/17-23		5/7
RI ACK-THROATED BI LIF	5/9	5/204	,	10+0/5	4/29→	5/2-	4/30-5/17	4/27-5/3(4)-24	5/3+	5/2+	5/9
YELLOW-RUMPED	±5/12	A	5/18	5/4+	5/6	→5/12	±5/0	→5/3(33)-22	±5/23	15/5	4/11
RI ACK-THROATED GREEN	5/0-23	4/30-4	5/18	5/5	4/15-	5/24	4/27	4/27-5/28	4/18+	6/1	5/0
	010 EU	1(10/20-0/4	101/2	1200	5/15-1	6/121	101	5/16-05	1014	- 6 0	5
	01 40	012-21(21)-			2 10		120	0/10-20		1011	
		17/0			. •	4/24-23	-	4/37		4/ 12-1	
PINE	, (4/24(3)	t_81/c		A	A -	4/10+	G2/G-(G)+L/++-	4/1/(3)-6/16	-	5/9
PRAIRIE	٩.	4/24(4)→		MAY→	4/18→	5/9→	4/29\7→	5/1-3(8)→	5/14	4/30-6/14(13)→	5/9→
PALM		4/1-5/2				4/11-5/9	4/11-5/3	4/18-5/2	5/2(25)-23	5/2	
BAY-BREASTED	5/24			5/14	4/15→	5/16	5/15	5/15-27	5/14(12)-25		
BLACKPOLL	5/20-6/7					5/16-30	5/15-27	5/1-23(17)-30	5/14-25(12)		ı
CERULEAN	5/6	5/2-6/1(4)→	5/29→	5/27→	€/7→	5/9→	5/1→		с.	5/4-6/14(6)→	5/9→
BLACK-AND-WHITE	4/27→	4/30→	5/18→	4/29→	4/29→	5/2→	4/30→	4/23-5/30	5/3-24	4/23→	5/7→
REDSTART. AMERICAN	۵.	5/27(6)→	5/18→	5/6→	5/5→	2/9→	4/30→	4/28-5/1(11)→	5/14(15)→	5/4→	5/3→
WARBLER, PROTHONOTARY	5/17-24*					4/24-+	5/9				
WORM-EATING	5/4+			5/54	5/15→	5/12→	5/3→	5/16-27			5/9→
OVENBIRD	101	4/29→	5/18→	5/5-4	5/54	4/25-+	4/15→	4/27-5/30/6)→	5/15→	4/23+	5/14
WATERTHRUSH, NORTHERN	5/20-23		2	MAY)))	5/9	4/18→	5/2-17(3)-29	4/5F	2	5/9
I OLIISIANA	а а	4/2→	5/25→	APR	APR	4/11	4/3-+	A-5/30(6)	APR	Φ	4/17→
WARRIER KENTLICKY	14/2	5/28/6/		1 VAV		5/0 1	5/14-	5/16		5/11	5/14-
MOLIRNING	t i	-	,	MAY-	5/25-4		t i	2 .	5/12+	Ē.	
VELLOWTHROAT COMMON	10/5	+ <i>PC</i> / <i>P</i>	5/18-	T ∧ T ∧ T ∧ T ∧ T ∧ T ∧ T ∧ T ∧ T ∧ T ∧	5/54	4/30-4	4/25-4	4/18-	5/2(E)+	4/30-6/14/17)-	5/2-4
	500	101/2	5/20		100/1	10/4	157	191/4 191/4	0/5/0)-1 6/14/0)-1	192/1	
		3/ 10 1	67/0		4/ 23	1710	0/2	0/10-1/2	3/14(3)-	102/7	
	- 100	27.07	E 140 -		E14E ->	. c		0/10-23 E14 E17	0/10-20(0)		
	£7/G	17/6				л ц	5/21-0/3	5/14-0//	+ + L/G	-	- L
		+ CI /4				- 0/u		0/10	11/0	14/0	
	0/8 1	4/20-1	0/ IO	011	0.01	- 7/0	4/307	1,710	0/ 1 4 1	0/ 11	10/1
	c	Ť	¢		Ē	Ť		2		10	f 0 +
	. <	14/4		. <		. <	14/4	. <		-	. <
	< D	4/1	100/5	< ⊲	< ⊲	< ⊲	< ⊲	< P		4/14-4	< ⊲
VESPER	: ۱	4/8-6/9/4)→		₩AY→	6/6-4	4/3-	4/15-+	£ ,			4/21+
SAVANNAH		4/8-6/9(8)→		MAY→	6/6→	A	6/7→	5/3-7(5)	APR↓		A
GRASSHOPPER	5/16→	4/30-6/9(4)→	6/8→	MAY→	6/6(4)→	4/16→	5/9→	(-)		5/2→	4/29→
HFNSI OW'S		4/30(6+)→									
FOX	,	→4/1(4)			↓4/18	٩			→4/17	,	
LINCOLN'S		-				. с.	5/9	5/23	5/14(5)-25		
SWAMP	4/16→	A	A	2	A	A	4/4	2	× ×	4/22→	A
WHITE-THROATED	→ 5/2(3)	→4/1(11)-30		→4/10	16/6	→5/2(15)	+5/9	→5/30	→5/25	4/27	→5/14
WHITE-CROWNED		4/1-5/2		5/6-7		15/9	→ 5/31		5/3-16		4/1-5/13
JUNCO, DARK-EYED	↓ 5/8	£		Ъ	£	→4/12	↓ 5/9	→ 4/28	A		↓ 4/30
GROSBEAK, ROSE-BREASTED	5/3→	4/30→	5/18→	5/4→	5/3→	5/1→	4/30→	5/3-24(3)	5/2→	6/14→	5/6-8
BLUE	۵.						5/3	5/25→			5/7→
BUNTING, INDIGO	۵.	5/12	6/8→	5/3-	6/6↓	5/7↓	4/30→	4/26-5/25(14)→	5/14(6)→	5/5-6/14(14)→	4/29+
BUBULINK		+(c1)8/0-8/c	€/8	MAY→	r	r	+-R/G	(c)c7/c	MAY→	t-c/c	(0L)ZL-Z/G

SEASONAL OCCURRENCE TABLES - APRIL THROUGH JUNE 1998

PENNSYLVANIA BIRDS

1998 VOLUME 12 NO.2

BIRUN
ENNSTLVANIA

1998 VOLUME 12 NO.2

			DEADUNAL		OCCURRENCE TABLES	LA – AFKIL	TUNCOR TONNE	JUNE ISAB			
	CHESTER	CLARION	CLEARFIELD	D CLINTON	COLUMBIA	CUMBERLAND	DAUPHIN	DELAWARE	ERIE	FAYETTE	FRANKLIN
BLACKBIRD, RED-WINGED MEADOWLARK, EASTERN BLACKBIRD, RUSTY	ΥΥ,	A A 1/1	Κ Κ ,	A	۲ ۲ ,	Α Α '	A A 4/5	R 4/26 -	A A →5/25	4 4 -	A A 5/10
GRACKLE, COMMON COWBIRD, BROWN-HEADED	Я 201 1	A A E(177	4 ح	1 > V A A	A R F	A A A	A R	R R 6/117/01	ح ح ۵	A A	A A
BALTIMORE FINCH, PURPLE	0,91 P →4/18(4)	5/1↓ R	5/18→ 5/18→	4/30→ A	5/5→ A	5/2→ →4/27	4/30→ →4/10(16)-5/15	4/30-5/17(7)→ →5/11	MAY↓ P	5/5(5)→ R	5/3→ →4/10
CROSSBILL, RED WHITE-WINGED		- →5/20(30)-21		5/12(8) -		→4/23(12) →4/5(6)	→4/14(9)-24 →4/14(4)	5/10(5) -			
REDPOLL, COMMON SISKIN, PINE	- 4/11-5/1	- ↓5/31		- A-5/13(10)	- →4/11	- ↓4/11	4/10 ↓5/9		- →6/24*		- 4/17
GROSBEAK, EVENING		+5/2		→5/10(6)	→4/11	→ 4/11(4)	→ 5/6(5)	5/11	↓MAY	4/13	
	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA	LACKAWANNA	LANCASTER	LAWRENCE	LEBANON	LUZERNE
LOON, RED-THROATED				5/9				-			5/4
COMMON GREBE, PIED-BILLED	→4/10(9)-5/5 4/8-16		4/1-5/21 →5/31	4/7-5/5(8)-15 →4/7(16)-5/12	4/7-14(9)-27 →4/27	4/29-5/15 P	A ↓6/1	→5/9(143)-17 5/9	4/12-25(5)-5/9 A	4/13-17(47)-5/17 5/8	4/4-26(125)-5/24 →5/6
HORNED BED.NECKED	→4/9(17)-30		4/2-26	→4/3(30)-5/11	→4/27(4)	1			→4/3	5/16L	4/9-5/11
CORMORANT, DOUBLE-CRESTED	- 4/9		4/29-5/9(44)	4/13-28(7)-5/19	- 4/9-27	5/9→	5/9-6/20	5/9(47)-21	- 4/5-28(5H)-5/22	- ×	A-5/9(6)
BITTERN, AMERICAN I FAST			4/21-5/9 -				5/9-6/24 -	- 5/9	- 5/11*		5/9 -
HERON, GREAT BLUE	A		A	A-4/7(15)	A		A	2 X	Ж	Ľ	Ľ
EGRET, GREAT HERON, GREEN			- 5/2→	- 4/25→	- 6/7→	P 4/26↓	- 5/9→	5/9 APR→	- 4/12E→	- 5/2→	4/6E-5/9 4/30→
NIGHT-HERON, BLACK-CROWNED	. (5/2 5	4/23-5/6		. •	с.	< 4		. (- L) C
VULTURE, BLACK TURKEY	¥ ₹		х <i>с</i> с	- X	ਰ ਵ	4 4	1 ⊲	ΥĽ	- ¥	צצ	6/5↓ A
GOOSE, SNOW	, (, (. (. (. (±5/9	. (→5/9(128)	. (
CANADA SWAN, MUTE	œ.	œ ,	R 5/2-9	Ч	⊻,	∝,	Я 4	R 5/9	R 4/12-5/9	R 5/9	∝,
	Α,		Α.	A-4/7(9) →4/7	Α.	× ·	A 0	Α.	R-5/9(68) 4/11/3)-12	A ↓5/2	R
WIGEON, AMERICAN	→4/9 →1/0/2/ 10		→4/6	→4/7(6)-11			. 0. <	, <	→4/16(24)	, O	ř.Ω
MALLARD	R	. œ	æ	A-4/7(18)	. œ	£ 62	. 22	(²	. X	£ 62	< ~
TEAL, BLUE-WINGED SHOVELER. NORTHERN	4/9-16 -		4/11-5/2 -	4/7-14(10)-5/5 →5/31	4/3(4) -		→5/11(3) -	→5/16 →4/19(10)	A-4/12(42H) 4/11	- →4/19(10)	4/24-30 -
PINTAIL, NORTHERN				ć			<u>م</u> ۱	-	4/25(19H)		
I EAL, GREEN-WINGED CANVASBACK				→4//(13)-14 -			Ľ,	→4/19(10)-5/9 -	4/11-1∠(38H) 5/9	4/5-119(1U) -	4/4(12)-5/3 -
REDHEAD					→ 4/7					-	
DUCK, RING-NECKED SCAUP, GREATER	- 1 5/5		→4/21 -	→4/7(25)-6/2 →4/2(6)	→4/7(45)-16 →4/9(8)		- ↓4/5 -		→4/25(18) -	→4/5(6) -	→4/19(6) →4/12(5)
LESSER			→4/12	→4/7(39)-5/5	→4/7(11)				4/12(26)		4/24
BUFFLEHEAD			→5/15	→4/7(115)-5/2			→4/15		→4/12(43H)	→5/30L(4)	15/9
GOLDENEYE, COMMON MERGANSER, HOODED			→5/2 →5/22	- A-4/7(17)	→4/2 →4/3(8)		P →4/20		- 5/6	- →5/16L	- +4/9
RED-BREASTED COMMON	→4/3(12)-9 →4/9(14)-5/5		- total	6→4/4(65)-5/10 -	→4/17 R-4/3(13)		. д	5/9-21 -	- 5/17	5/2-8L -	4/14-5/2 R
DUCK, RUDDY OSPREY	4/8(9)-16 4/9-23(3)		4/12-5/11(6) 4/4-5/9	→4/7(51)-5/12 4/7-5/24	→4/27(39) 4/3-17	- 4/1	P 4/20-5/10	↓ 5/9 Р	→4/12(28H)-6/7 4/11-6/19	- 5/9	→4/26 A

	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA	LACKAWANNA	LANCASTER	LAWRENCE	LEBANON	LUZERNE
EAGLE BALD			15/9	4/17-5/12		4/9-5/22		8			5/29+
HARRIER, NORTHERN				→4/24	~	A	d	: ,	R-4/10(4)		→4/12
HAWK. SHARP-SHINNED	Ľ	Ľ	Ľ	Ľ	: ლ	: œ	. ല	A	2	2	2
COOPER'S	Ľ	ĸ	ж	Ľ	ĸ	R	Я	ж	Я	ж	Я
GOSHAWK, NORTHERN			Ж			Р.	Ь			₽	Ж
HAWK, RED-SHOULDERED	4/10		Ж	A	A	A	5/9→	A	↓ 4/5	Я	R
BROAD-WINGED	4/16→		4/9→	4/15-27(20)→	4/17→	٨	4/28→	APR→	Ь	д	Ъ
RED-TAILED	2	R	Ъ	Ľ	Ъ	R	2	£	۲	Ъ	Ľ
KESTREL, AMERICAN	₩	ĸ	ъ	∝	ъ	æ	22	∝	R	æ	2
MERLIN				4/11		5/9		4/11			
				4/13		, (. (. [A
BOBWHITE, NORTHERN			-	A-5/6(3)	6/5	Я.	۹.	ж.	5/7	×	5/23+
RAIL, VIRGINIA			5/4			4/19	د ۱	4/19(3)-5/9	A		4/24+
NOORHEN COMMON			(S)C1-7/C	7/9			۲ د		5/8 2/2		4/214
	-		1/11 00		10/11/11	, ,	L 6	, ,	5/6(3)→		
	4/A		62-C1/4	→4//(///)//#←	→ 4/1/(3)	r	L		→4/10(44H)		→4//(U)//4
PLOVER, SEMIPALMAI EU	. <		. •	1/9-47/G	. <	. •	(07)7)0 v	5/9-23(25)→	1.7/9		5/18(0)-6/3
	A		A 	A 	A	A	A-6/1(18)	A 	A	×	A
YELLOWLEGS, GREALER			4/11-5/2	4/7-5/5			5/9	5/9-16(6)-21	4/12(15H)		5/18-6/3
	, L		4/30 1/20 F/4F	1/20 1/20		-	л i	5/9-16(10)-23	4/12	, ī	5/3-18
	0-0/0		c1/c-nc/t	4/23-2/20		(0)0/2	5/G	01-1/C	4/ 10-0/ 19 D	2/2	5/2 - Z
	4/01		4/20-1	←(a)11/c-+1/+	t / 1		4/204		7/44E 40/6)	t -7/0	17/0
								-	4/11E-10(0)		
							. (57/G	-		
SANDPIPER, SEMIPALMATED			, ī	5/23-6//(40+-)			ב מ	- 10 00 00 1	6//(6)		- 10(1) 010
			7/G	1/9-02/3			r	5/9-23(60)	(H01)21/G		5/9-(G)5/G
				1/0-67/0				→(8)82/0-52/C			-
				4/20 F /00 0C			L		81.70-(4)-A/G		81./C
				0/23-20			, (5/9-10 G	. <		<u>(</u>
	. <		4/19(8)	4/1-14(10)	. <	. <	L -	ר ⊲	4 ~	. <	
	×		A 414 E/J	A 4/4 12/04) E/22	A 117 77170	×	< 0	A E/O	A A/E 42/2EUN	A	(cl)4/c-A
	10/0/17		7/C-1/th	4/4-13(04)-5/23	(21) 12-11 (4	, <		2/3	4/0-12(20H)	. <	4/3(4U)-3/0
	+ 4/9(3)		+1./C †		→4/∠/(/)	< 0	14/20	Α <		A	A 6/04
CDEAT DI ACK DACKED				(01.)∠1./c+		L	1 4/30	τ <	C7/C		0/24
GREAT BLACK-BACKEU TEDNI CASPIANI				-				A 4/11			-
			-	02-20				4/ 11 E /0			4/20 E/10 E/01
	,	ı	20	1/4 E/04	2014			000	1		1 20-01 10
BLACK				5/31	- 12/1-			5/9(4)			
			٩	5/30+	5/18→	٩	5/15→	5/9+			4/15F→
YELLOW-BILLED	5/5→	5/6→	5/6→	5/10→	6/7→	5/14→	5/15→	5/9→		5/29→	5/17→
OWL, BARN	Ľ					Ч	Ч		Я		
BARRED	Ľ	ĸ	R	£	£	R	Ľ	œ	£	R-6/20(4)	ĸ
NORTHERN SAW-WHET							2				۲
NIGHTHAWK, COMMON		5/17(3)→	5/4→	д.	д.		5/17→	д.	5/14L→	6/14	5/18→
WHIP-POOR-WILL	5/2→		5/2→	5/5-27(8)→	5/21→	4/26→	с.				5/3-18(51H)→
SWIFT, CHIMNEY	4/23→	4/23→	5/2→	4/24-5/12(15)→	€/9	4/15→	5/10→	4/17→	4/18L→	5/2→	4/18→
HUMMINGBIRD, RUBY-THROATED	4/29→		4/25→	5/5-30(4)→	5/20→	5/3 →	5/9→	5/2→	5/5L↓		5/9→
WOUDPECKEK, KEU-HEAUED SARSHOKER VEH OW BELLIED			r		, c	< □	, c	£6/G	↑ A/G		
ELICKED NODTHEDN	. 0	. Ω		(2/04/V-V	2 <	L 0	L <	. 0	. 0		
	∠ .	< ،	< ،	(ı) nı /+	ς,	< .	¢ ,	5/16	< .	< .	< .
WOOD-PEWEE FASTERN	5/15-		5/15-4	5/11-6/0/16)→	5/18/5)→	5/14+	E/1		5/104	5/17/10)+	5/17+
FLYCATCHER, YELLOW-BELLIED	2		2			с С			2		5 -
ACADIAN	5/13→		5/9→	5/14-6/9(8)→	6/1→	Р.	5/31→	5/9(4)→	5/17L→	5/30-6/20(4)→	5/9→
ALDER	,	,	5/20-23	5/27→	6/7→	,	6/1↓		TUNL		6/1→
WILLOW	5/18→		5/16→	5/15-31(6)→	6/7→	д.	5/20→	5/16→	д.	5/16→	5/21→

SEASONAL OCCURRENCE TABLES - APRIL THROUGH JUNE 1998

PENNSYLVANIA BIRDS

1998 VOLUME 12 NO.2

PENNSYLVANIA BIRDS	DS				6	94				1998 VOL	1998 VOLUME 12 NO.2
			SEASONA	SEASONAL OCCURRENCE TABLES - APRIL THROUGH JUNE 1998	CE TABLE:	s – April	THROUGH	JUNE 1998			
	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA	LACKAWANNA	LANCASTER	LAWRENCE	LEBANON	LUZERNE
LEAST			5/5-9	5/11→	5/19→	с.	5/9→	5/9-16	5/29L→		5/4(12)→
PHOEBE, EASTERN	A	A	A	A-4/7(13)	4/3↓	A	A	4/17→	A	A	A
FLICAICHER, GREAL CRESLED	0/0 1	5/3 1	10 ×	5/0-4 1/20 E 14 2/2/	1/0	5/3(5)]↓	+ R/C		5/8 1	t/1/0	5/3 7
KINGBIRU, EASTERN VIDEO WHITE EVED	1/1	10/G	18/G	4/29-5/12(1)→	t/9	t_/0	1/9	1/19	5/64	£/2+	5/3+
BLUE-HEADED	3/17 4/12(3)-26	1710	5/21 1 4/6↓	3/17 4/7-5/3(4)→	- 5/5→		- 4/30→	4/ - / - / 5/9	- 07/0	5/17-6/20(6)→	3/19→ 4/4(11)→
YELLOW-THROATED	4/26→	4/29→	5/2→	5/1(7)→		. с.	6/1↓	5/9+	5/6→	-	4/22→
WARBLING		4/29→	5/9→	5/1→		. с	5/9→	5/7→	5/6→	5/2E→	5/9→
PHILADELPHIA									5/28		5/9(21)-17
RED-EYED	4/29→		5/2→	5/11-6/2(36)→	5/21(7)→	٩.	5/6→	5/7→	5/6→	5/17→	5/9→
CROW, FISH			д.			A	6/1↓	Ж		۲	Я
RAVEN, COMMON	ц.	A-5/29(5)	Ж	Я	Ж	22	٩	6/14		۳	Ж
LARK, HORNED	£		→5/10	A-5/14(6)	£	A	۵.	£	£	Ľ	£
MARTIN, PURPLE	4/15-25(17)→	A		4/11	4/27→	4/20(5)→	٩	APR→	5/2(29)→	٩	6/10→
SWALLOW, TREE	4/1-10(50)→	ı	A	A-4/14(160)	4/17(35)→	A	A	A	A	A	A
NORTHERN ROUGH-WINGED	4/9+	1	4/7→	4/11-5/2(8)→	4/17→	4/22→	4/9→	4/10→	4/3→	5/2-8(50)→	4/7→
BANK			д.	4/28-5/12(35)	4/27(6)→	5/8(4)→	5/9→	5/9→	4/18→	5/8(10)→	5/18→
BARN	4/9→	4/7→	4/14→	4/11-5/12(27)→	4/17(5)→	4/12→	5/9→	4/12→	4/12→	4/6E(4)→	4/19→
CLIFF			4/19→	4/28-5/12(15)	5/21(5)→	5/9→	5/9→	5/9→		5/8(4)→	4/21→
CHICKADEE, CAROLINA		۲			,			۲		۲	
BLACK-CAPPED	ĸ		R	Ж	Я	К	Я	Ж	Ж	ъ	Ъ
NUTHATCH, RED-BREASTED	5/4		Ъ	R-4/29(5)	↓ 5/5	4	2		4/3(4)		£
CREEPER, BROWN	ĸ		R	A	Ж	д	Ъ	R	15/6	₩	R
WREN, HOUSE	5/2→		4/18→	4/12-6/13(15)→	5/5→	5/1→	4/28→	4/17→	4/23→	4/25→	4/18→
WINTER			£	4/14-15	5/5→	A	4/28→				22
MARSH			5/2				٩.				
GNATCATCHER, BLUE-GRAY	A	4/12→	4/12→	4/14→	4/27→	4/21→	4/26→	4/17→	4/25→	A	4/14→
KINGLET, GOLDEN-CROWNED	4/12-16(4)	-	Α	A	↓ 5/5	A I	۲ 1	±5/9	4/3(6)	2	R
KUBY-CKOWNED	6/G-(G)91-71/4	4/13-5/1	4/ /-d-1	4/ /-29(6)-5/11	5/5(3)	L C	6/G†	+0/A	4/29(1)-5/3	+4/25	4/13-22(22)-5/3
			×		101	L L	t R/C	►(c1)01-7/c			
			, L	070		۵/c					
SWAINSONS	- 4/12/6)-25		6/C	1 5/3	5/21	ר ⊲	г 4/15 →	/1/C	71-8/C	, œ	(c)/1/c
WOOD	4/29-5/6(10)→	5/14	5/2+	4/29-5/11(15)→	5/20	4/21→	4/30+	4/17→	4/30+	4/3F→	5/2+
ROBIN. AMERICAN	R	5 .	i i œ	() 2		A	A	:	2	1	
CATBIRD, GRAY	5/1-7(14)→		5/2→	5/2→	€/7→	4/30→	4/30→	APR	5/6→	5/2→	4/30→
THRASHER, BROWN	4/23→	4/3→	4/12→	4/1-22(8)→	€/7→	4/12→	5/5→	4/17→	4/12→	4/13→	4/7E→
PIPIT, AMERICAN						+5/9		→4/3(13)	→6/22		
WARBLER, BLUE-WINGED	5/3→	5/2→	5/9→	5/1-14(6)→	€/7→	5/8→	5/10→	5/7→	5/9→	5/2-17(15)→	4/30→
GOLDEN-WINGED		ı	4/2E→	5/14(6)→		5/8→	۵.				4/29→
TENNESSEE				5/14		Ъ	Ч	5/16			
ORANGE-CROWNED			5/9	5/9							
NASHVILLE	5/10		4/27-5/13	5/4(4)-14		д.	5/9→	5/7-9	5/9→		4/26→
PARULA, NORTHERN	4/24→	4/29→	4/18→	5/1→	6/7→	с.	5/9→	5/7→		5/17→	5/9→
WARBLER, YELLOW	5/2→	4/1-29(5)→	5/2→	4/29-5/14(27)→	5/21→	5/4→	5/2→	5/7→	5/6→	5/2(12)→	4/24→
CHESTNUT-SIDED	5/3→		5/9→	5/6→	5/18→	٩	5/9→	5/7↓	4/29→	5/17(9)→	5/7→
MAGNOLIA			5/9→	5/11+	5/5→	L I	5/11↓ 5	5/9-16		5/17(4)→	5/9→
				E/17_73		5/22	۵				5/8

A 5/3→ 4/18(11) 5/23

5/8→ 5/2

5/17→ 5/6 5/12 4/29

5/9→ 5/9(7) 5/9-16

-4/23→ 5/9→ 5/9-14 5/9

Р 5/8

٩

4/22-6/4(4)→ 4/29-5/5 5/23

.

5/9 5/9 5/9 5/3 5/9 5/3

5/17→ →5/17(20)

5/17→

-→5/17 4/29-5/9

5/7-9 →5/16(20) 5/7-16 5/9-16 4/17→

 $\begin{array}{c} 5/9 \rightarrow \\ 5/11 \rightarrow \\ 7/9 \rightarrow \\ 5/9 \rightarrow \\ 5/3 \rightarrow \\ 5/9 \rightarrow \end{array}$

5/18(7)→ 5/5→ 5/5(12)→

5/11→ 5/12-23 5/11→ →5/11(11)-19 4/28-5/5(6)→ 5/5-19(4)→

5/5↓

 $\begin{array}{c} 4/29 \rightarrow \\ A \\ 4/18 \rightarrow \\ 4/11 \rightarrow \\ 4/11 \rightarrow \\ 5/2 \rightarrow \\ 4/5 \\ 5/6 - 18 \end{array}$

4/3

4/8-13(4)→ 4/20→ 4/9(4)

5/3↓ . .

.

5/6-14 4/16(6)-5/14

4/16→

CAPE MAY BLACK-THROATED BLUE YELLOW-RUMPED BLACK-THROATED GREEN BLACK-THROATED GREEN YELLOW-THROATED GREEN PINE PINE PALM BAY-BREASTED

			SEASONAL	SEASONAL OCCURRENCE TABLES	TABLES	- APRIL	- APRIL THROUGH JUNE 1998	NE 1998			
	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA	LACKAWANNA	LANCASTER	LAWRENCE	LEBANON	LUZERNE
BLACKPOLL	5/16		5/16(3)	5/19-27(4)		5/18	д.	5/16(20)		5/17(15)-21	5/18
CERULEAN	5/6→	5/3→	4/26→	5/4-30(50+)→	€/9→	5/18→	д.	5/7→	5/9→	5/30→	5/9→
BLACK-AND-WHITE	4/13-5/3(5)→		4/25→	4/29-6/18(4)→	5/5→	5/8→	5/1→	5/7→	4/27→	4/25(8)→	5/2→
REDSTART, AMERICAN	4/24-5/7(8)→	4/29→	5/2→	5/5-6/4(12)→	5/5→	5/6→	5/6→	5/7 +	5/9↓	5/17→	5/9→
WARBLER, PROTHONOLARY WORM-FATING	- 1/20-5/6/10)-	- 10/2	- 1/18_	- 5/6-6/18/1)-		18/2	-	1 <u>6/</u> 9		-	-
	4/28-5/3(6)→	. 410	4/20	3/0-0/10(+) - 4/28-5/11/16)→	5/5-4	5/5	5/5+	5/9	5/6-1	5/2+	4/24-
VENDINU MATEDIHUISH NODIHEDN	-(n)cic-07/4		4/29 - A	4/20-0/11/10/-4	5	5/0	10/3	0.5-7		0/2-7 5/16	4/2+
LOUISIANA	. <	- 4/3→	5/2→	0/4-13 A	- 4/3E→	5/9→	5/3-7 4/25→	8/17→ 4/17→	- 5/30→	3/10 4/4E→	3/3-7 4/4E→
WARRI FR KENTLICKY	: .	£/3↓	<u>ا</u>	5/11-6/18(4)→		5/18→	i d	5/9→	5/9+	5/17→	
MOURNING		D .	5/15			2 2 3		5/24			5/28
YELLOWTHROAT, COMMON	4/30→	5/2→	5/2→	5/1-14(38)→	5/18→	5/9→	5/1↓	4/17→	5/2→	4/18(6)→	4/30→
WARBLER, HOODED	5/3(3)	5/3→	5/2→	4/17-6/4(11)→	5/18(4)→	5/18→	5/11→	5/7→	5/9→	5/30-6/20(6)→	5/9→
WILSON'S		,	,		1	,		,	,		5/17
CANADA			5/8→	5/14→	6/5→	5/18→	5/11→			6/20(5)→	5/13→
CHAT, YELLOW-BREASTED	5/3→	5/2→	5/6→	5/6-6/13(3)→		5/18→	٩	5/9→			5/27→
TANAGER, SCARLET	5/3(4)→	5/3→	5/2→	5/11-6/13(12)→	5/18(5)→	5/8(6)→	5/6→	5/7→	5/9→	4/22E→	5/6→
TOWHEE, EASTERN	4/8→	A	A	A-5/11(31)	5/5→	A	A	A	A	Ж	4/14→
SPARROW, AMERICAN TREE		,	→4/7			15/6	→4/10				
CHIPPING	A		A	A-6/13(43)	A	A	A	A	A	A	4/3→
FIELD	A		ъ	A-4/30(25)	6/7→	A	A	R	A	R	Я
VESPER	A		4/22	5/3(4)→	6/5→	4/30→	6/1→	R	4/5→		4/22→
SAVANNAH	4/20→		4/19	4/16-6/14(7)→	5/5→	4/10→	5/9-6/1(28H)→	R	4/2→	£	4/11↓
GRASSHOPPER	4/24-5/6(15)→		д.	5/4→	5/5→	5/5→	5/9→	5/9(8)→	4/29→	5/8→	5/9-15(15)→
HENSLOW'S				5/4→	5/5→			,	4/29-5/9(10)→		5/9
FOX			→ 4/4(4)	→4/10		15/3	д.		4/3-12		
LINCOLN'S				5/6		5/S					
SWAMP			15/9	A-4/13(8)	A	5/9→	5/9→	A	2	с К	₽ 1
WHITE-THROATED	↓5/7(3)		↓5/13	→5/2(9)-12	ፈ	↓5/3(4)	ני	→5/16(6)	↓5/9(6)	↓5/2(30)	R L
	71-0/G		01/ct u	LL-(/)9-7/G		27/6	1 c	6/C†	(4)8/c+	(8)2/C←	5/9-14 C
				7/0-(0+)+/+-	F10(7)	01/0				C 147/6/ .	
BLUE						- 0/0	- ñ	5/9↓	41.63		
BUNTING, INDIGO	4/25→		5/2→	5/3-6/13(24)→	5/19→	5/7→	5/9→	5/7→	5/9→	5/17(15)→	5/9→
BOBOLINK	4/29-5/8		5/9-11(16)	5/14(13)→	6/7(21)→	5/9→	5/9-6/1(69H)→	5/9→	4/25→	5/16(15)→	5/23→
BLACKBIRD, RED-WINGED	A		A	A-6/13(39)	A	A	A	A	A	Ъ	A
MEADOWLARK, EASTERN	Ľ		4/4→	A-5/14(9)	6/7(6)→	A	5/9-6/1(30H)→	A	A	£	A
BLACKBIRD, RUSTY				4/10-28		→ 5/10	д.	4/5(20)	4/2(3)		5/3
GRACKLE, COMMON	A		A	A-4/10(49)	A	A	A-4/28(35)	£	A	∝	A
COWBIRD, BROWN-HEADED	A		A	A-4/21(21)	€/7↓	A	A	22	A	₽	A
	5/4	5/2	5/1	5/1-12(4)→		5/9→	6/1↓	5/7→	5/21	5/8→	6/24→
BALTIMORE	5/14	5/2+	4/29→ 2.5	5/4-14(7)→	¢//1	5/7→ ·	5/3 →	5/7→ 	5/7↓	4/25E→	4/16E↓
		4/10	16/3	A-4/22(5)	R . r/r/r	A	¥	↓ 5/9(19)	A	↓ 4/25	R
			14/8 15/27/12)	(1)8/9	+5/5(4)	-				→4/22(4)	→4/24(8) → 4/24
		2	15/15	1.63	121)000-	110,000					17/5
SISKIN, PINF	→4/2(15)-30	4/26-5/18		±5/6		14/26	. <u>а</u>				5/9†
GROSBEAK, EVENING		4/26-5/7	15/9	→ 4/13(8)-5/13					4/25(5)		→ 4/16(16)-5/2

1998 VOLUME 12 NO.2

95

PENNSYLVANIA BIRDS

		SEASO	SEASONAL OCCUR	RRENCE TABLES	I	IL THRO	APRIL THROUGH JUNE 1998	98		
	LYCOMING	MERCER	MIFFLIN	MONTGOMERY	MONTOUR	PERRY	PHILADELPHIA	PIKE	POTTER	SCHUYLKILL
LOON, RED-THROATED COMMON	- 4/4-25(8)-5/22	- 4/2-20(7)-5/9		4/26-5/8 →4/76(82)-5/8	4/25 A	- 5/22	- +5/3(4)-9	- ↓5/10	- 4/12→	- →4/26(39)-5/17
GREBE, PIED-BILLED	4/4(6)-5/3	→4/9		→4/15(3)-19	→6/20	4/27	4/16-6/27L	→6/29	!	+5/9
HORNED BED-NECKED	4/4(3)-5/13	→4/3(28)-30 -		→4/19 4/15/3\	→5/3(3)	4/27	→4/16 -	۵.	→4/5 -	4/3(4)-10 4/45
CORMORANT, DOUBLE-CRESTED		4/3-24(17)→		4/4-17(43)→	5/27	A	A-4/27 (300)	4/24-5/1	4/28(4)-6/14	4/8-28(14)-6/16
BITTERN, AMERICAN				5/3	1		4/18	1	5/9	
LEASI HERON, GREAT BLUE	- ×	, Ľ	, œ	, A	, Ľ	, ∢	4/∠→ A	, Ľ	- ¥	- K
EGRET, GREAT		4/17	6/18	5/15	4/27		4/16→			4/21(3)-5/13
HERON, GREEN NIGHT-HERON BI ACK-CROWNED	5/13→ -	5/6→ 4/2	Υ,	5/2→ -	4/18→ -	د ,	5/9→	5/10→ P	5/9→ -	4/23→
		14	- A-4/18(12)	. œ		- ×	ς,	5/2		
TURKEY	A	A-4/2(12)	A-4/22(24)	Ľ	A	A	A	A	A	A
GOOSE, SNOW	. (. (-	→5/4(5)	→5/9L(45)*	, (→5/9L	م ۱	. (15/7
CANADA SWAN MITE	Υ,	К 1/3	R-6/21(132) -	A '	r,	۲.	צם	צם	¥ ,	צם
TUNDRA		4/3-4(4)					∟ ,	۷.		∠ ∢
DUCK, WOOD	A	A	R-4/11(8)	A-6/6(10)	A-4/5(10)	A	A	A	A	œ.
GADWALL WIGEON. AMERICAN	- →4/4	→4/12(4) →4/15(4)		- →4/10(6)-11	- →4/21		±5/9 -	, @	5/2 →5/6	5/7 4/2(9)-5/7
DUCK, AMERICAN BLACK	A		A	+4/25	A		A	A	Ж	→ 4/994)
MALLARD TEAL BLHE-WINGED	R 4/24	R 1/3/8/	R-5/16(31)	A 1175-517	R 1/15/3)	R 1/77	R 1//6/3/	R 15/0(3)	R 5/3	R 4/20(3)
SHOVELER. NORTHERN	-	→4/12(10)	→4/10(4)	→4/26	4/4	-	10/01	(0)000-	р 5 г	5/9
PINTAIL, NORTHERN	,	-	→4/10				→5/24	A	,	
TEAL, GREEN-WINGED	-			→5/2	4/3		→4/16	A	-	→4/20(8)
DUCK, RING-NECKED SCALIP GREATER	- ↓ 4/4	→4/2(10)-15 →4/6(7)-8		- 4/4/4)	→4/21 4/A			→5/2(20) -	4/16	α.,
LESSER	↓ 4/4	→4/4(65)-12		→4/15(5)	→4/15(3)			. L	4/12	- -+4/6
SCOTER, SURF	4/12-5/3(7H)-13									
OLDSQUAW BUFFLEHEAD	- →4/4(10)-5/13	4/3-5(5) →4/12(200+)	- →4/12(18)-21	- →5/10	- 4/3(5)-19	- →4/27(5)	- →4/16	- →5/3(4)	4/9 5/1	- 15/9
GOLDENEYE, COMMON			→4/12(11)-15			→4/27) L		
MERGANSER, HOODED RED-RREASTED	- →4/4/4)-5/3	→5/2 →4/6/15)-20		- 5/5	- 5/21			6/15 5/3-8/3)	P 5/10	±5/7 ↓5/17
COMMON	R	→4/20(4)-5/5	→4/12(23)-5/6	16/6	1 1 2		→4/21	R	2 6 W	15/9
DUCK, RUDDY	4/4(4)-5/13	→4/15(100+)-5/9	6/11 4/22/15/ 6/13	4/19-26(9)-5/4	→6/11(5)	, c	→5/9	4/24-5/2	-	5/9
EAGLE, BALD		A* 0	4/22(13)-0/12 6/11	4/15-6/6	4/4→		A/7-6/21	4/5(3)-6/29	2 7	4/20-6/9
HARRIER, NORTHERN		4/5-5/5	4/22(3)	+5/23	4/24		→4/30	+5/2	۹.	5/9→
	r o	ra	R-4/22(10) P	→4/2/((/) P	A A	4 ⊲	צם	יים	צם	צם
GOSHAWK, NORTHERN	<u>د</u> حد	4/4-5/9	<u> </u>	4/27	ζ,	< ∢	5/23L	<u>د</u> بر	<u>د</u> بر	× ۲
HAWK, RED-SHOULDERED		۲		ш				Ľ	4/10→	ш
BROAD-WINGED	. 0	. 0	4/22(98)→ B	4/5-27(252)→ B	۹. ۵	٩a	4/17-28(350H)→ P	4/24(3)→ B	4/15→ B	₹ 0
KESTREL, AMERICAN	< ۲	< K	R-4/22(7)	< ۲	< K	< ~	< K	× ۲	< K	2 22
MERLIN		4/19-30	4/22				4/16			
FALCON, PEREGRINE BORWHITE NORTHERN			-				∝,			, α
RAIL, VIRGINIA			01 10	4/29-5/3			4/16(4)→	4		£ ,
SORA MOORHEN COMMON		4/25 4/30					4/16 ^_5/73/3	- 5/1	5/9	
COOT, AMERICAN		4/15		→6/28L	→5/2(6)-6/9		±5/9	- 5 C		→5/17
PLOVER, SEMIPALMATED	, <	-	-	, <	. <	, ,	5/9	, <	, <	, <
AILLUERA	A	A-5/9(19)	K-5/9(27)	A	A	r	A	¥	A	A

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		LYCOMING	MERCER	MIFFLIN	MONTGOMERY	MONTOUR	PERRY	PHILADELPHIA	PIKE	POTTER	SCHUYLKILL
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SREATER		4/16-26(3)-5/4	-	4/17-26(6)-30	Ч		→5/25	٩.	5/3	٩.
	ITARY		5/1-9 4/17-5/25		5/3 5/2(4)-6		۰ ۵	4/19 5/9-21(3)-23	P 1/2	-	5/5-19 4/27-5/9
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		5/29(3)→	4/21-5/9(5)→	6/18	5/2(4)-23	5/12→	. a	5/9-23(12)→	5/2→	MAY→	5/15(6)→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	PALMATED							5/9-25	д.		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			5/1-18(5)-21		5/3-15(15)-24			5/9-23(4)	۹ ۵	5/9	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			4/20					c/t-	Ŀ,		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$,	→4/22(9)-5/7	1	→4/23			4/8(20)-5/9	4/24(4)		
	RICAN		A	•			A	A	A	A	A
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-		-			4/27→	, ŭ	- 410.45	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		4/4(0)1 15/13	4/4/20/-0/13L		4/3(40)-23	. 0	. <	- <	c/c <		4/ ID(9) ^
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2	1 10/21-11	6/18-22(8)→	12/2	_ 0_	(D.		< ⊲		↓4/29
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ACKED			(0)			. ৫	. A	: L		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						4/9(6)*	5/22				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								4/30			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								5/9→			
Bit 54-4 59(5)-4 51(6-4 P 51(6-23 50-4 R R R R R R R R R R S1(5-1) 51(5-	BILLED		5/10→	6/11(3)→			٩	5/21	5/9→	5/20→	5/9→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		5/6→	5/4→	5/9(5)→	5/16→	6/16→	۵	5/16-23	5/9→	5/20→	5/9→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2						2	٩		Ъ
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		R	*Х	ъ	£		R		R	ĸ	Ъ
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	V-WHET	ш	-						2		Ж
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	MON	5/27→	5/15		5/15→			5/18-28(62)→	٩		5/17→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		5/13→		6/21-28(3)→			4/27→	4/28	6/5→		5/26→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		4/17E→	4/15(10)→	6/1-11(55)→	4/10→	4/25→	4/27→	4/8→	5/14	4/30→	4/15→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	JBY-THROATED	5/18→	5/7→	5/2-6/28(8)→	4/30→	5/7→	5/1→	5/3→	5/9→		5/3→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ED-HEADED		5/9→	А						₽	5/5-17
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	OW-BELLIED	5/29→	14/1		→4/19			→5/24L	۵	₽	→ 4/22
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	RN	ъ	ъ	R-5/9(50)	ъ	æ	ш	ш	ш	۵	ĸ
NIME 5/24 5/13 4/10-6/11(16)- 5/15 5 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/16 5/16 5/16 5/23 5/23 5/23 5/16 5/23 5/23 5/16 5/23 5/23 5/16 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23 5/23-	VE-SIDED		5/13		5/19			5/24			5/26
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	STERN	5/24→	5/13→	4/10-6/11(16)→	5/15→		5/22(3)→	5/9→	6/5→	6/2→	5/15→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	LOW-BELLIED		6/5					5/26			5/27
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		6/12→	5/14	4/11→	5/16→		4/27→	5/23→	5/16→		5/24→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			5/19-25				, (6/6	ط 1	5/25→	5/30→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		5/27→	5/14→	5/9→	5/17→	5/21→	۹.	5/23→	٩.	6/4→	5/28→
RESTED A		5/13→	5/4→		5/23		5/1→	5/21-26	5/3→	5/20→	5/9→
RESIED 5/30+ 5/6+ 4/36/1(28)+ 5/3+		A	A	A-5/9(24)	A	A	A	A	A	< 1	A
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	EAL CRESTED	5/30+	100	4/3-6/11(29)→	5/3 100	P/.7→	4/2/1	2/9→	11/9	Ъ	÷/20
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Z	5/13→	5/3→	5/20→	4/23→	5/16→	ъ.	5/3→	4/26→	5/4↓	4/30→
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ņ	- 00/1	5/14	5/9(4) +	4/25↓	, (4/28	4/26 +	5/3↓ 1/20 .	-	5/94
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		4/301	4/ 10-0/0	0,0-0,9(0)	61/C-01/4		4/07-1	4/20-3/3	4/201	4/ 10-1	4/1-13(10)7
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Ľ		0,0-9(0) F(A 0(0)	E (0/ 1)-1			1701	1/10 6/0/16/-	100		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			01-3(0)	(+)00	10				200		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		100/3	0/6 E/E 0/E)T	1/1/1/2	1-06/1	E/33-L		10/5		100/9	102
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		0.20 V				V 20					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(0		۵			(0		(0	۵	(0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2	. <				< <	1	2	۷ د	۷ د
P $448-69(5) \rightarrow 4/3-25(12) \rightarrow 4/3-25(12) \rightarrow 4/32(3) \rightarrow 4/3-25(12) \rightarrow 4/3-25(12) \rightarrow 4/3-25(12) \rightarrow 4/2-10(50) \rightarrow 4/2-10(50) \rightarrow 4/10 \rightarrow A \rightarrow $			A	K-b/11(8)		-	₹ -	-		r	л : ;
A $42 - 10(50) \rightarrow 4571(200+)$ A A A A A A A A A A A A A A A A A A A		<u>ъ</u> .	4/8-6/9(5)→	4/20-5/9(203)→	4/3-25(12)→	4/22(3)→	A -	4/30	а.		4/9-5/30(37+)→
INGED $5(2 \rightarrow 4,10 \rightarrow 4,10 \rightarrow 4,10 \rightarrow A$ A $4,14 \rightarrow 5,2 \rightarrow 4,14 \rightarrow 5,2 \rightarrow 4,10 \rightarrow 4,23$ $4,17 \rightarrow 4,3-10(20) \rightarrow 4,2-59(4.14) \rightarrow 4,11(4) \rightarrow 5,3 \rightarrow A$ $4,8 \rightarrow 4,24(6) \rightarrow 4,2$		A	4/2-10(50)→	A-5/11(200+)	A	A	A	A	A	A	A
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	GH-WINGED	5/2→	4/10→	4/10→	A	4/14→	A	A	A	4/18→	A
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		4/10→	5/9→		4/23	٩		4/19→	4/24(3)→	5/20→	5/9-19(20)
P 5/2→ 6/2(7)→ - 5/27→ P 4/29 5/3(4)→ R R		4/17→	4/3-10(20)→	4/2-5/9(414)→	4/11(4)→	5/3→	A	4/8→	4/24(6)→	4/28→	4/6→
د ۲۰۱۰ ۲۰۱۰ ۲۰۱۰ ۲۰۱۰		₽	5/2→	6/2(7)→		5/27→	٩	4/29	5/3(4)→	4/19→	4/17→
	DLINA				2			ĸ			
х		₽	ĸ	R	Ľ	R	R		2	£	Ж

SEASONAL OCCURRENCE TABLES - APRIL THROUGH JUNE 1998

PENNSYLVANIA BIRDS

1998 VOLUME 12 NO.2

		SEASC	SEASONAL OCCUR	RRENCE TABLES		RIL THRO	APRIL THROUGH JUNE 1998	98		
	LYCOMING	MERCER	MIFFLIN	MONTGOMERY	MONTOUR	PERRY	PHILADELPHIA	PIKE	POTTER	SCHUYLKILL
NUTHATCH, RED-BREASTED	, c	→5/12	-	4/25-5/16		۸ م	→5/23L	<u>د</u> م	<u>د</u> د	R-5/16(6)
WREN, HOUSE	A/24→	4/22-5/9(10)→	3/0 4/28-6/11(29)→	4/20→	, c	¢ ۵	4/ 10	4/20→	5/15→	4/22→
WINTER MARSH	4/30	→4/19 -				Υ,	→6/15L 5/2→	↓5/30 5/2↓	5/5→ -	→4/29 -
GNATCATCHER, BLUE-GRAY	4/25→	4/16-5/15	4/26-6/11(15)→	4/4→		٩	4/8→	4/25(4)→	4/15→	A
KINGLET, GOLDEN-CROWNED		→4/2 4/8-27/6/-5/12		4/5(4) 4/5_5/7	۵. ۵	< □	→4/10 →1/26/10) E/0	R J 6/3/6)	< □	R-5/30(10)
VEERY	- 6/1→	5/14		4.0-07 5/3→	с,	∟ @_	4/25E→	10/2(0) 5/9→	5/15→	→3/3 5/4-17(24)→
THRUSH, GRAY-CHEEKED		5/22		4/20-5/26			5/21-28	, (
SWAINSONS HERMIT	- 5/29→	4/29-6/1 4/8-21(3)-27		5/14-2/ →4/12(10)-5/4	, d	- A	5/21-23(6)-26 →4/26(3)-5/23L	1 A	- 4/15→	- ×
WOOD	5/2→	4/29-5/9(19)→	4/26-6/11(24)→	4/25→	5/7→	4/27→	4/26→	5/1→	5/1→	4/30→
ROBIN, AMERICAN CATRIRD GRAY	R 5/2↓	R-5/9(54) 4/30-5/9(15)→	<u>م</u> م	R 4/25→	R 5/2	R 4/27→	R 4/16→	R 5/1↓	R 5/5↓	₩ 4
THRASHER, BROWN	5/1→	4/1-5/9(10)→	× 4	A	4/23→	4/27→	4/16→	4/26→	5/3→	4/11→
PIPIT, AMERICAN		4/3-4(24)-5/9		4/12						
		4/30-5/9(17)→ E/4 E/43*	5/2+ E/0/3/ 10	4/2/→		5/1↓ 5/1↓	4/28→	P/2+	5/9	5/34
TENNESSEE		5/5-9/7)-18	0/9(0)-10 -	- 5/15-16		1	- 5/26			D
ORANGE-CROWNED	,	5/13-24*	,	2 .	,	,	- 1	- 1	,	- ,
NASHVILLE		5/1-9(8)-14		5/7-14		5/1	5/2-23	₽.		4/30-5/9
	5/4 →	6/19		4/25→	-	4/27→	4/24→	4/24→	-	4/23→
WARBLER, YELLOW CHESTNIIT-SIDED	5/24 5/22	5/2-9(22)→ 5/0-6/10	5/2+ 5/2-0(12)+	+7/G	±81/c	4/2/(3)↓ 5/1↓	+0/2 +0/4	1-1-0 1-1-0	1/2 1/2	4/22→
MAGNOLIA	5/22→	5/7-22	5/9	5/14-6/13L		5/22(3)→	5/9-23(25)-6/14L	5/9	5/24-	5/4→
CAPE MAY			5/2(3)		,		5/22	٩		5/5-16
BLACK-THROATED BLUE	5/13→	5/7-9(3)	5/9(3)	5/4-23		5/1→	5/3-24	5/2→	5/15→	4/27-5/17(17)→
YELLOW-RUMPEU RI ACK-THROATED GREEN	4/10→ 4/20→	4/1E-5/9(50)-16 5/1-3(5)-19	↓5/9(8) 5/2↓	→5/23 5/1-24	4/3(3)-5/16 5/7-23	A 4/10→	→5/20 4/23-6/12I	4/20(3)↓ 5/1↓	5/4→	A 4/21→
BLACKBURNIAN	5/6→	4/29-5/23	5/9(4)→	5/15-24		4/28→	5/3-22(6)-25	5/9→	5/9→	4/27→
YELLOW-THROATED	- -		-	4/18→	,	4/27→	4/17-5/4	4/24→		į.,
PINE	4/24→	4/29	4/10→	A		٨	A	4/20→		A
PRAIRIE DAI M	4/30↓ 4/7E	5/8 1/2 E/2(8) 12	5/10→	A 1/12 E/2		5/1(3)↓	5/2-23 4/2/E> 2E	5/3→ → = /3/6/		4/29→
PALM BAY-BREASTED		4/3-3/3(0)-13 5/15		4/ 12-3/3 5/15-27	C/C-07/4	г 5/22	4/3(5)-23 5/10-24	13/3(0) P		4/3-3/4 5/15
BLACKPOLL		5/14-23	5/10	5/10-23(7)-6/2		5/22(4)	5/2-22(30)-6/5	٩	5/30	5/13-31
		5/8-6/19 4/20 6/2	5/10(3)→		-	4/28→ 4/27→	5/15-6/5	5/3-+	-	5/4→ 4/47→
REDSTART, AMERICAN	5/14	5/7-9(10)→	5/10-6/11(17)→	5/3→	5/7→	5/1+	4/25→	5/2→	5/9→	5/3→
WARBLER, PROTHONOTARY		•					6/3-20			
WORM-EATING			5/9(20)→	4/29→		5/1+	5/3→	5/3(3)→	1001	5/4→
OVENBIRD WATEPTHRISH NOPTHERN		4/29-5/9(8)→ E/12-13	4/21-5/9(51)→ 5/0	4/25	5/23	4/2/1	4/21→ 4/7_6/451	5/1(3)+	4/30	4/2/→ 5/0/3/-17
	4/30→	4/8-20	. Ja	4/4→		4/27→	4/15-5/27(6)→	4/24	4/28→	P
WARBLER, KENTUCKY		5/9-13		5/5-28		5/22→	5/7-23	۵.		5/9→
	-	5/15-6/21*	- 140 6441077		-	- 2014	5/20-28		5/22→	
	1-cc/3	5/3-9(35)→	←(1Z)11/9-01/9	4/234	0/41	4/2/ 1	A E / 3 2 2		1-60/3	4/2/→
WARBLER, HOUDED WILSON'S	- 123 t	5/12	- IUT	5/16-23		4/20	5/21-26 5/21-26	<u>†</u> _/o	- 10	o/1↓ -
CANADA	6/6→	5/10		5/15-25		5/22	5/9-23(10)-6/3L	5/11→	5/23→	5/9→
CHAT, YELLOW-BREASTED			5/9(5)→	5/27→	5/20	5/1→	6/21→	٩		5/4→
TANAGER, SCARLET	5/6→ 4/20→	5/4-9(5)→ Δ-5/0/16)	5/10-6/11(10)→ Δ-6/11/23)→	4/29-5/16(12)→ 4/17→	5/24→ 4/18→	5/1↓	5/3→	5/3→ ∆	4/22→ 4/14→	4/29→ ^
SPARROW, AMERICAN TREE	4/ 40	A-3/9(10) →4/10	- (07)11/0-H		- 10	נ ם	±4/3	±4/10	. 1	→4/27L
CHIPPING	A	4/15-5/9(12)→	A-6/11(63)	4/2→	4/3→	. <	A	A	4/2→	A
FIELD	Α	A-5/9(24)	A-6/11(24)	A	A	A	A	A	5/1→	A

1998 VOLUME 12 NO.2

98

PENNSYLVANIA BIRDS

Mercus Marting Montonentry Mo				SEASUNAL UCCURRENCE TABLES	UKKENCE IAE		KIL INKU	AFRIL IHKUUGH JUNE 1998			
		LYCOMING	MERCER	MIFFLIN	MONIGOMERY	MONIOUR	РЕККҮ	РНІСАЛЕСРНІА	PIKE	POLIEK	SCHUYLKILL
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	VESPER		4/10→	5/10		۵.	4/27→		Ч	4/8→	6/6→
1 5	SAVANNAH		A-5/9(13)	5/2		٩	A	4/17(20)-5/26	۵.	4/7→	5/3
It Construction Construction	GRASSHOPPER		-	5/10+	5/3→	L	5/22→		д.		6/6→
1. 960 1. 1. 061 1. 1. 061 1. 1. 061 1. 061 1. </td <td></td> <td></td> <td>to/o €/4†</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>, <u>а</u></td> <td>- 4/11</td> <td></td>			to/o €/4†						, <u>а</u>	- 4/11	
	LINCOLN'S		5/9					5/26		6/13	-
TD Sector	SWAMP	ĸ	A-5/9(10)		A	٩	٩	A	A	Ж	۲
	WHITE-THROATED	→ 5/2	→5/9(24)-13	→6/10L	↓5/22	15/7	٩	→6/17L	<u>د</u> ر	с ,	→5/16
		, c	5/5-19	, <	+5/3	1/91	, <	5/4-13 .c.m	2 c	5/3	5/9
	JUNCO, DARN-ETEU GROSBFAK ROSF-BRFASTFD	דא 5/4	→4/3(∠0)-29 4/29-5/9(17)→	A 5/10↓		5/34	A 4/28→		ר ד/כ	5/4↓	↓4/30↓ 4/30↓
Spin Spin <th< td=""><td>BLUE</td><td></td><td>-</td><td>2</td><td>5/3→</td><td>5.</td><td>21</td><td>5/25→</td><td>5 .</td><td>ð i</td><td></td></th<>	BLUE		-	2	5/3→	5.	21	5/25→	5 .	ð i	
5/2+ 5/200- 4411(3) 5/2- N 5/200 P 5/200 C <thc< th=""> C <thc< th=""> <thc< th=""></thc<></thc<></thc<>	BUNTING, INDIGO	5/9→	5/6-9(3)→	5/10-6/11(27)→	5/8→	5/15→	4/27→	5/9→	5/1→	5/7→	4/30→
A A	BOBOLINK	5/29→	5/2-9(9)→	A-6/11(6)	5/2→	٩.	٩	5/3(20)	Ъ	5/7→	5/9→
Discrete Activity	BLACKBIRD, RED-WINGED	A	A	A-6/11(48)	A	A	A	A	A	A	A
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	MEADOWLARK, EASTERN	5/2→	A-5/9(8)	A-6/11(14)	A	A	A	→5/25	۵. ۱	A	A
	CEACKBIRD, RUSTY	. <	100/00/	- 2/11/10)	, <	, <	, <	4/8(5U)-5/9	ר <	. <	→4/10(6)
Circ Consistent Circ		4 <	A-5/9(3U)	A-0/11(10)	Υ <	4 <	4 <	₹ <	¥ <	¥ <	4 <
		ť	A-3/9(10)	£			< C		τ .	ť	
R	URIVLE, UNCHARD BAI TIMORF	- 5/1→	4/29-5/9(0)→ 4/30-5/9(15)→	- 5/9(76)→	4/30±	<u>ر</u> م	4/27→	5/2	5/3→	- 5/4→	+0°/c 4/30+
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FINCH, PURPLE	. 22	A-5/9(7)	(2.12.2	→4/5(20)-5/12	. ,	- -	4/21-28		. 22	→4/1(18)-5/9
····································	CROSSBILL, RED			→ 6/14(20+-)	4/5-6(10)-19		→ 5/6(4)			→ 4/26(8)	→5/5(4)-9
6/16 6/2(3)-5/13 2/2(3)-5/13 </td <td>WHITE-WINGED</td> <td>,</td> <td></td> <td>-</td> <td></td> <td></td> <td>↓4/11</td> <td></td> <td>5/8(30)-16</td> <td></td> <td>→4/11(12)-21</td>	WHITE-WINGED	,		-			↓4/11		5/8(30)-16		→4/11(12)-21
-4/3 -5/0 · 4/23 · 4/23 · 4/25	SISKIN, PINE	→5/15	→ 4/23(3)-5/13	→5/20(6)	15/6			+4/1	→4/26(3)	۵.	→5/16(6)
SOMERSET SULLVAN TIOGA VENANGO WATNE WESTMORELAND VYONING 420	GROSBEAK, EVENING	↓ 4/9	→5/10		4/28			4/23-5/3	→ 4/26(6)	д.	→4/26(12)
Soverset Source Luxan TIOGA VENANGO WAREN WAVNE VESTMORELAND WYONING 4/20											
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		SOMERSET	SULLIVAN		VENANGO	WARREN	WAYNE	WESTMORELAND	WYOMING	YORK	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										10/24/4	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	COMMON	- ↓4/20	- 4/6		- -	- 4/31-5/4(5)-5	- 	- 4/6-26/14)-5/28	4/23-28 4/7-18(3)-5/11	4/1/(3) 5/12/100+-	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	GREBE, PIED-BILLED	-	2		→5/2	-	L D	A A	→4/18	→4/14	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	HORNED		5/9		→5/17	1	۵.	→ 4/3(4)	4/2-13	→4/16	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	RED-NECKED				4/17		, (-	4/3-25	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	CORMORANT, DOUBLE-CRESTED	4/2-5/3	-	(20)→	4/15-5/17	5/4-6(75)	-	4/1-5/9(6)-22	4/10-22	A	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	BITTERN, AMERICAN UEBONI OPEAT BITTE	AFK	c7/c	(160)		4/30-5/3	- E(0(4.0)	4/20-30	, <	, 0	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FICHT, GREAT BLUE	A 5/2	τ,	(-	۲.	۲.	(21)8/C-A	Б/8-6/6	۲.	A/27→	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	HERON, GREEN	- -			4/19→	5/1→	5/10(8)→	4/11→	5/4→	4/16→	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	NIGHT-HERON, BLACK-CROWNED									4/14(28+-)-	t
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$. <		- <	- 16(7)-	, <	(, 19/6/ A	, <	r	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	GOOSE SNOW		ς,	_	τ.		ς,		→4/1/40\-5/231 *	5/271	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	CANADA	£	£	ĸ	Ľ	Ľ	Ľ	£	R	1 1 1	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SWAN, MUTE				4/11	Ľ	٩	œ	۵.	ĸ	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	TUNDRA				↓ 4/8		1			4/1(3)	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	DUCK, WOOD	A	A		A	æ	A	A	A	ĸ	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	GADWALL	-			15/9		, (₽. (1€/9L	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	WIGEON, AMERICAN DI ICK AMERICAN DI ACK	→4/7(9) ^			£/qt		1 <	2 0		, 0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MOUN, AMENICAN BLACK	τ Ω	- 4		, α	, α	τ α	L 0	, œ	במ	
-4/20(4)	TEAL. BLUE-WINGED	4/19(9)-5/9	ς,		4/18(11)-28	4/30(12)	٤.,	+5/3	£ ,	1 15/9	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SHOVELER, NORTHERN	→4/20(4)									
- 5/9(13) 4/10(12) 4/27 P A P →4/5(3)	PINTAIL, NORTHERN		-		4/18	. 1	д.				
	IEAL, GREEN-WINGED	- 4/6/07	5/9(13)		4/27	r.	A	r	5/9		
	CHINAGDACN	14/3(3)			14:0						

66

ř
 VANIA
Z

100

		2						1	
	SOMERSET	SULLIVAN	TIOGA	VENANGO	WARREN	WAYNE	WESTMORELAND	WYOMING	YORK
REDHEAD				→ 4/1					
DUCK, RING-NECKED		→ 4/4(10)		→4/18		15/9		→4/27	→4/10(4)
SCAUP, GREATER								4/10	•
LESSER			4/4	↓5/3 F/2 47	4/1(15)		→ 4/3(22)		→4/1(38)
WHITE-WINGED				4/8-11	- 4/3				
OLDSQUAW				↓4/8	4/3			4/23(8)	
BUFFLEHEAD				↓5/3		15/9	→ 4/3(25)	→4/10(27)-5/2	→4/6
GOLDENEYE, COMMON						ĸ		14/7	
MERGANSER, HOODED	↓ 5/9	15/9	4/4	+5/31	R	A-6/20(6)	4/11	↓ 5/9	15/13
	→4/11(1 <i>1</i>)-20	, <	4/4-13(3) D	.5/9 D	4/1(11)-6	, <	4/28 L 4/76/5/	, 0	→6/22L 5/0
	- 1/11/26/-6/2	£	14	16/21		£,	14/20(3)	۷.	0/9 1/1 E/0
	4/2+	- 4/18_5/0	- 4/ -	4/8-5/17		- 4	1)0/01	- 4/10-5/9/4)-6/11	Δ Δ
EAGLE, BALD		5/9-19	< ~	A	τ c	< L	4/19	A	с с
HARRIER, NORTHERN	ĸ	5/9	A	5/9-6/20			œ	↓ 5/9	→5/24
HAWK, SHARP-SHINNED	۲	Ж	Ж	Ъ	Я	Ж	£	К	А
COOPER'S	Я	Я	Я	Я	ч	Я	Я	Я	А
GOSHAWK, NORTHERN	4/18*	Ж			A	ĸ			•
HAWK, RED-SHOULDERED	-	, 1	6/20(3)		< 1	R	∝ .	-	R
BROAD-WINGED	4/77 t	t_6/G		4/15+	1	4//Z//+	t/3↓	4/18↓	4/13↓
KEU-IAILEU Kestdei amedicani	צם	צם	צם	צם	צם	צם	צם	צם	צם
MERLIN	۲.	٤ ،	٤ ،	4/10	£ ,	£ ,	<u> </u>	5/15	↓ ↓4/28
BOBWHITE, NORTHERN		6/30				٩.		2 .	R
RAIL, VIRGINIA			A	5/17	4/13→	۵	4/21		4/28
SORA	5/16		5/16→		ţ	۵.	۵.	4/30	5/9
MOORHEN, COMMON				<u>,</u>	5/2-3(3)	۵. ۱			
COUL, AMERICAN DI OVED SEMIDAI MATED	(c)81/4+		4/13		L I	L.	+4/11(26)-5/9	4/2(4)-2/	€/c-(ncc)+++
KIII DEFR	A	A	Ā	A 4	A	A	01.22 R-5/6(15)	4	. ~
YELLOWLEGS. GREATER	4/2-5/14	: ,	: ,	4/13-5/30		с с .	5/11	4/13-5/18	£ ,
LESSER	5/3(14)-5/9			4/25-5/17		۵.	4/20		5/1-9
SANDPIPER, SOLITARY	4/27-5/16	5/9	4/10-5/7(4)	4/18-5/17		۵.	4/8	5/9	5/9-24
SPOTTED	4/21→	5/9→	5/30	4/18-5/22(12)→	д.	5/9→	4/16→	5/8(6)→	4/21-5/27
	4/23-5/24			4/13-5/17		, c	4/10-6/2(3)→	-	, u
SANDFIFER, SEINIFALIVIALED				- AIDT EIDDIAEV BIB		L 0	- E/7/0\ 22	0/0	0/9 F/0
WHITE-RUMPED	t			0.10-(01)77/0-17/t		L ,			0/3 6/11(11)
PECTORAL	4/5(11)-5/3	•		4/27		•	۵.		•
DUNLIN	4/2(30)-5/14		. •			, (5/22		<u> </u>
	(+)01/c+	- <	A	2/G-(G)L/P	. <	ר <	L <	5/G	R/C↑
	A 4/10-20	τ.		A 4/4/103\-5/3	A 5/4/3)	ŧ,	< □	ξ.	- 1/12-5/0
	→4/19(11)-5/3			→6/27	0.4(3) A-5/5(76)	A	→5/21(3)	→5/22	A
HERRING				4/5	C.	٩.			
TERN, CASPIAN	4/20			5/17					5/2-9
COMMON	4/19-5/3			5/17(5)				*	
				2/G-11/4	-		4/9		
CUCKOO, BLACK-BILLED	5/14→		5/25→	5/14→	t ₹ ⊂	5/20→	5/4→	5/30→	5/9→
VELLOW-BILLED	5/28→		5/24→	5/14→	٩.	5/9→	5/5→	5/9→	5/9→
OWL, BARN						д.	Я		Я
BARRED	ĸ	ъ	œ ۱	ж	ĸ	œ (2	ъ	ж
NORTHERN SAW-WHEI NIGHTHAWK COMMON		- 5/25	¥ ,	- 5/13→	, @	¥,	- 5/8-6/19	- 5/23→	- 5/16→
WHIP-POOR-WILL	5/29→	5/1-25(8)→		5/6	- 1	6/1→	с 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-	2

SWFT. CHMMEY 4/21	5/5 5/13↓ 5/13↓ 5/25↓ 5/6↓ 5/6↓ 5/8↓ 5/8↓	4/28(6) + 28(6	$5/9 \rightarrow$ $4/10 \rightarrow$ $5/9 \rightarrow$ $4/10 \rightarrow$ $5/9 \rightarrow$ $4/24 \rightarrow$ $5/7$ $5/7$ $5/9 \rightarrow$ $5/7$ $5/9 \rightarrow$ $5/7$ $5/16 \rightarrow$ $5/12 \rightarrow$ $5/16 \rightarrow$ $4/27 \rightarrow$ $5/9 \rightarrow$ $5/9 \rightarrow$ $5/9 \rightarrow$ $5/9 \rightarrow$ $5/9 \rightarrow$ $5/5 \rightarrow$ $5/9 \rightarrow$ $5/5 \rightarrow$	$\begin{array}{c} 4/29 \rightarrow \\ 5/9 \rightarrow \\ 5/9 \rightarrow \\ 1/21 \rightarrow \\ 8/24 \rightarrow \\ 5/9 \rightarrow \\ 5/9 \rightarrow \\ 5/9 \rightarrow \\ 5/8 \rightarrow \\ 5/9 - 6/19(5) \rightarrow \\ 5/9 - 6/19(30) \rightarrow \\ 5/9 - 6/19(30)$	4/11+ 4/30→ R - 4/16 S/7+ 5/7+ 4/26-5/7 A 5/3+ 4/24+ 4/24+ 4/24+
D-HEADED A 5/25 · OW-BELLED A A A A OW-BELLED A A A A STRENN 5/14 5/18 - STREN 5/14 5/19 5/16 STREN A A A MN A A A STREN 5/19 5/19 5/16 MN A A A MN A A A STREN S/14 5/9 5/10 MN A A A STREN A A A STREN S/14 5/9 5/9 STREN A A A	3)† 5. 5.6 5.6 5.6 5.7 5.6 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7			A_{121} + B_{19} + B_{19	R →4/6 R 5/7→ 5/7→ 5/9→ 5/9→ 5/9→ 4/26-5/7 A 5/3→ 4/17E→
W. BELLED A A A W. BELLED $3'14 + 5''$ $5'18 + 5''$ $5'18 + 5''$ $5'18 + 5''$ F. SIDED $5'14 + 5'' 5'' 5'' 5'' 5'' 5'' 5'' 5'' 5''$	3)↓ 5 (9 ↓ 1 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +			4/21↓ - 5/9↓ 5/9↓ 5/2↓ 5/9↓ 5/9↓ 5/9↓ 5/9+15(5)↓ 5/9+19(30)↓	→4/6
F::SIDED ::::::::::::::::::::::::::::::::::::	3)↓ 5.(6 5.(8 5.(10 5.(8 5.(8 5.(8 5.(8 5.(8 5.(8 5.(8 5.(8			5/9+ 5/2+ 6/26+ 5/2+ 5/3+ 5/8+ 5/8+ 5/3+ 5/3+ 5/3+ 5/3+ 5/3+ 5/3+ 5/3+ 5/3	
STERN 5/14+- 5/18+- 5/18+- 5/14+- 5/18+- 5/14 </td <td>3)↓ 5./25 5./54 5./64 5./64 5./64 5./64 5./64</td> <td></td> <td></td> <td>5/9→ 6/26→ 6/26→ 5/9→ 5/9→ 5/9→ 5/8→ 4/18→ 5/3→ 5/9+6/19(5)→ 5/9+6/19(30)→</td> <td>5/7→ 4/8E 5/9→ 5/9→ 4/26-5/7 A 5/3→ 4/17E→ 4/17E→</td>	3)↓ 5./25 5./54 5./64 5./64 5./64 5./64 5./64			5/9→ 6/26→ 6/26→ 5/9→ 5/9→ 5/9→ 5/8→ 4/18→ 5/3→ 5/9+6/19(5)→ 5/9+6/19(30)→	5/7→ 4/8E 5/9→ 5/9→ 4/26-5/7 A 5/3→ 4/17E→ 4/17E→
Conventue of $(0, -)$ Signation of $(0, -)$	3,25 5,64 5,64 5,64 5,64 5,64 5,64 5,64 5,6			6/26→ 5/22→ 5/9→ 5/4→ 5/8→ 4/18→ 5/3→ 5/3→ 5/3→ 5/3→ 5/3→ 5/3→ 5/3→ 5/3	448E 5/9→ - 4/26-5/7 A 5/3→ 4/17E→
AT CRESTED 5/24+ 5/34+ 5/34+ 5/34+ 6/32+ 6/32+ 5/34+ 6/32+ 6/32+ 5/34+ 6/32+ 5/34+ 6/32+ 5/34+ 5/34+ 5/34+ 5/34+ 5/34+ 6/	5/25↓ 6/84 5/64 5/64 5/84 5/84 5/84				- - 4/26-5/7 5/3→ 4/24→ 4/17E→
5/24+ $5/9+$ $5/9+$ $5/6+$ $5/6+$ N $6/12+$ $5/9+$ $5/6+$ $5/6+$ N $6/12+$ $5/9+$ $5/6+$ $5/6+$ N $6/12+$ $5/9+$ $5/6+$ $5/6+$ N $4/8+$ $4/16+$ $5/19+$ $5/6+$ N $4/8+$ $4/15 5/9+$ $5/6+$ S/14+ $5/9+$ $5/9+$ $5/6+$ $5/6+$ S/14+ $5/9+$ $5/9+$ $5/9+$ $5/9+$ S/14+ $5/9+$ $5/9+$ $5/9+$ $5/9+$ N $4/7(5+)+$ $5/9+$ $5/9+$ $4/13+$ LINA R R R R LINA R R R R MAY+ $5/9+$ $5/9+$ $4/13+$ $4/13+$ MAY+ $5/9+$ $5/9+$ $4/13+$ $4/12+$ N $8/14+$ $8/9+$ $8/14+$ $8/14+$ N <td>6(8 5 A 5(6 5(8 5(8 7</td> <td></td> <td></td> <td>5/22 + 5/22 + 5/92 + 5/92 + 5/94 + 5/94 + 5/84 + 5/84 + 5/82 + 2/18(5) + 5/3 - 5/92 + 19(30) + 5/92 +</td> <td>- 4/26-5/7 A 5/3→ 4/24→ 4/17E→</td>	6(8 5 A 5(6 5(8 5(8 7			5/22 + 5/22 + 5/92 + 5/92 + 5/94 + 5/94 + 5/84 + 5/84 + 5/82 + 2/18(5) + 5/3 - 5/92 + 19(30) + 5/92 +	- 4/26-5/7 A 5/3→ 4/24→ 4/17E→
5/14+ 5/9+ 5/6+ 5/6+ N $6/12 5/9+$ $5/6+$ $5/10-$ N $6/12 5/9+$ $5/6+$ $5/10-$ D $4/8+$ $4/15 5/9+$ $5/6-$ ED $4/8+$ $4/15 5/9+$ $5/6-$ S/14+ $5/9+$ $5/6 5/6-$ S/120+)- $5/9+$ $5/6 5/6-$ S/120+)- $5/9+$ $5/9 5/6-$ N $A/15 5/9 5/9 5/6-$ MAY+ $5/9 5/9 5/9 5/9-$ LINA R R R R MAY+ $5/9 5/9 5/9 5/9-$ LINA R R R R MAY+ $5/9 5/9 5/9 5/9-$ LINA R R R R MAY+ $5/9 5/9 7/10-$ MAY+	Σ (6 ↓ 5 /10 ↓ 5 /8 + ↓ 5 /8 + ↓			5/9→ A 5/4→ 5/8→ 4/18→ 5/3→ 5/3→ 5/3→ 5/9+0(10)→ 5/9+6(19(30)→	4/26-5/7 A 5/3→ 4/17E→
ATCRESTED A A A A N $6/12$ $5/19$ $5/19$ $5/10$ D $4/8$ $4/15$ $5/19$ $5/10$ ED $4/8$ $4/15$ $5/14$ $5/14$ $5/14$ FD $4/15$ $ -$ FN R R R $ -$ S/14 $5/9$ $5/9$ $5/6$ $-$ S/14 $5/9$ $5/9$ $5/6$ $-$ R R R R R HWINGED $4/16$ $5/9$ $5/9$ $5/16$ S/120+1- $ -$ MAY-+ $5/9$ $5/9$ $5/9$ $-$ MAY-+ $5/9$ - $5/9$ - $ -$ MAY-+ $5/9$ - $5/9$ - $ -$ MAY-+ $5/9$ - $ -$ <	× × 2010 2. 8.6 + 5.710 8.6 + 5.710			A 5/4↓ 5/8↓ 4/18↓ 5/5+15(5)↓ 5/9€/19(30)↓ 5/9€6/19(30)↓	A 5/3→ 4/17E→
AT CRESTED $5/14$ + $5/19$ + $5/10$ + $5/10$ + N $6/12$ + $5/9$ + $5/10$ + $5/10$ + ED $4/8$ + $4/15$ + $5/10$ + $5/10$ + ED $4/8$ + $4/15$ + $5/14$ + $5/14$ + $5/14$ + S/14+ $5/9$ + $5/9$ + $5/6$ + $-$ S/14+ $5/9$ + $5/9$ + $5/6$ + S/14+ $5/9$ + $5/9$ + $5/6$ + R R R R A $7/20$ + $5/9$ + $5/9$ + MAY+ $5/9$ + $5/9$ + $5/9$ + MAY+ $5/9$ + $5/9$ + $4/12$ + MAY+ $5/9$ + $5/9$ +	2, 2, 10 2, 10 2, 2, 1, 1, 2, 2, 1 2, 2, 1 2, 1 2, 1 2			5/4→ 5/8→ 4/18→ 5/5-15(5)→ 5/3→15(5)→ 5/9-6/19(30)→	5/3→ 4/24→ 4/17E→
N 0.12^{-1} 0.97^{-1} 0.12^{-1} 0.02^{-1} ED MAY+ $ 0.02^{-1}$ 0.02^{-1} 0.02^{-1} ED MAY+ $ 0.12^{-1}$ 0.12^{-1} 0.02^{-1} 0.02^{-1} S/14+ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ S/14+ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ LINA R R R R R R R MAY+ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $4/10^{-1}$ $4/10^{-1}$ LINA R R R R R R MAY+ $5/9^{-1}$ $5/9^{-1}$ $5/9^{-1}$ $4/10^{-1}$ $4/12^{-1}$ MAY+ $5/9^{-1}$ $5/9^{-1}$ $4/12^{-1}$ $4/12^{-1}$ $4/12^{-1}$ MAY+ $5/9^{-1}$ $5/9^{-1}$ $4/12^{-1}$ $4/12^{-1}$ $4/12^{-1}$	0 9 1 - 2 ⁰ ,			 4/18→ 5/6-15(5)→ 5/3→ 5/96/19(30)→	4/24→ 4/17E→
ED $4/8^+$ $4/15^+$ $4/15^+$ $5/6^+$ FE NAY^+ $ 5/9^+$ $5/6^+$ $5/14^+$ $5/9^+$ $5/6^+$ $5/6^+$ $5/14^+$ $5/9^+$ $5/6^+$ $5/6^+$ $5/12^+$ $5/9^+$ $5/6^+$ $5/6^+$ $4/18^ 5/9^+$ $5/2^ 5/6^+$ $4/16^ 5/9^+$ $5/2^ 4/13^+$ $4/16^ 5/9^+$ $5/2^ 4/13^+$ $4/16^ 5/9^+$ $5/9^ 5/2^ 4/14^+$ $5/9^+$ $5/16^ 5/16^ 4/14^+$ $5/9^+$ $5/16^ 5/16^ 4/14^+$ $5/9^+$ $5/16^ 5/16^ 6/14^+$ $5/9^+$ $5/16^ 5/16^+$ N $4/14^+$ $5/9^+$ $5/16^+$ N $5/14^+$ $5/9^+$ $5/16^+$ N $5/9^+$ $5/9^+$ $5/16^+$ N $5/9^+$ $5/9^+$ $5/16^+$ N $5/9^+$ $5/9^+$ $5/16^+$, ., ., ., ., ., ., ., ., ., ., ., ., .,			4/18→ 5/6-15(5)→ 5/3→ 5/9-6/19(30)→	£ 201
ED MAY- 519-1 $4.113-4.$	ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ ຊ			5/6-15(5)→ 5/3→ 5/9-6/19(30)→	A/10-5/26
· ·	2,0↑			5/3→ - 5/9-6/19(30)→	5/2+
5/14+- 5/9+- 5/8+- 5/14+- 5/9+- 5/8+- R R - - R R - - - A 5/9+- 5/9+- 5/8+- 5/8+- S1/(20+)- - - - - A/15+- 5/9(5) 5/9(5) - - S1/(20+)- - - - - A/15+- 5/9(5) 5/9(5) - - A/15+- 5/9(1)- - - - A/15+- 5/9(1)- - - - A/15+- 5/9(1)- - - - MAY 5/9+- 5/9 - - A/14+ 5/9+- - - - M A/14+ 5/9+- - - A/14+ 5/9+- - - - M A/14+ 5/14+ 4/15+ - M	2,8→	4/2 - 5/9	t.	- 5/9-6/19(30)→	5/5→
5/14+ 5/9+ 5/8+ S/14+ 5/9+ 5/8+ R R - - R R - - - S/120+)- 5/9(12)- 5/9(12)- 6/113- - S/120+)- 5/9(12)- 5/9(12)- 6/113- - MAY 5/9(12)- 5/9(12)- 6/113- - MAY 5/9(12)- 5/9(12)- 6/113- - ULGRAY -4/11 R R - - MAY 5/9 5/9 - - - ULGRAY 4/14+ 8/14+ 4/12+ - - MAY 5/9+ 5/9+ - -	2/8↑	A 4/2	1.	5/9-6/19(30)→	
R R R R R R R A 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) A 4/161 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) A 4/16-1 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) A 4/16-1 5(9(12)-1) 5(9(12)-1) 5(9(12)-1) 5(113-1) A - - - 4/16-1 5(16-1) A - - - - A - - 4/10-1 4/10-1 A - - - - - A - - - - - MAY+ 5(9-1) 5(9-1) - - - CROWNED - - - - - - MAY+ 5(9-1) 5(14-1) 5(16-1) - - - N - - - - - - - - MAY+ 5(14-1) 5(14-1)<		- 5/5			5/3→
R R R R R R 3HWINGED $4/18$				А	Я
R -		R 5/9	Ī	מנ	Ľ
HWINGED A 5/9(12)- A $3HWINGED$ $4/18$ $5/9(5)$ $5/2$ $87/(20+) 5/9(5)$ $5/2$ $5/2$ $4/15$ $5/9(80)$ $4/13$ $4/13$ $4/15$ $5/9(80)$ $4/13$ $4/13$ $RRSTED$ R R R R $RRSTED$ $-4/11$ R R R $RRSTED$ $-4/14$ $5/9$ $5/16$ $ RRSTED$ $-1/14$ $5/14$ $ RRSTED$ $-1/14$ $5/14$ $ RRSTED$ $-1/14$ $5/14$ $ RRST -1/14 $	/1/C			×10	- 4/4→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	A			A-5/5(300)	A
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5/2→	P↓ 5/9	4/4→	4/21→	4/6→
4/15 - 5/9(80) - 4/10 - 4/10 - 4/20 $4/15 - 5/9(80) - 4/10 - 4/20 - 4/20$ LINA R R R REASTED $-4/11$ R R R Arran R R R R MaY 5/9 5/9 - - UE-GRAY $4/14 + 5/14$ $5/9 + 6/16 + 1/2$ $4/12 + 6/16 + 1/2$ UE-GRAY $4/14 + 5/14$ $5/9 + 6/16 + 1/2$ $4/12 + 6/16 + 1/2$ V $5/14 + 5/14$ $5/16 + 1/2$ $4/12 + 6/16 + 1/2$ N $5/14 + 5/14 + 5/14 + 4/15 + 6/14$ $4/12 + 6/16 + 1/2$ N $5/14 + 5/14 + 5/14 + 4/15 + 6/14$ $6/16 + 1/2 + 6/14$ N $5/14 + 5/14 + 5/14 + 4/15 + 6/14$ $6/16 + 1/2 + 6/14$ N $5/14 + 5/14 + 5/14 + 6/14 + 6/16 + 6/14$ $6/16 + 1/2 + 6/14$ N $5/14 + 5/14 + 5/14 + 6/14 + 6/14 + 6/14 + 6/14 + 6/14 + 6/14 + 6/14 + 6/14 + 6/14 + 6/16 + 6/14 + 6/$	4/13→	P↓ 5/5	→ 4/10	5/9-6/19(60)→	4/8-5/15(120)→
4/27(19)→ 5/9 - REASTED →4/11 R R REASTED →4/11 R R MAY→ 5/3→ 4/29→ 4/29→ MAY→ 5/3→ 4/29→ 4/29→ MAY→ 5/9→ 5/9→ 5/16→ UE-GRAY 4/14+ 5/9→ 5/16→ 4/14 10) 4/26 - 4/14+ 5/9→ - - 5/14→ 5/18→ - - 6EKED - - 4/12→ 7/14→ 5/18→ - - 6 - - - 11 A A - 11 5/18→ - - 11 A A - 11 5/18→ - - 11 5/14→ 5/14→ 4/15→ 11 5/14→ 5/14→ 4/15→ 11 5/14→ 5/14→ 5/14→ 11 5/14→ 5/14→ 4/15→ 11 5/14→ 5/14→ 5/14→ 11 - - - 11 - - - 11 - -	80)→ 4/10→		5/9→ 4/2→		4/10→
REASTED		5/4(100+)→ 5/9	→ 4/17-5/22(10)→ 	0)→ 4/30→	4/24-5/20(20)→
REASTED $-4/1$ R R N MAY+ 5/3+ 4/18 5/3+ 4/29+ MAY+ 5/3+ 4/29+ 4/29+ MAY+ 5/9+ 5/9+ 5/16+ UE-GRAY 4/14+ 5/9+ 5/16+ - - - 4/14 - - - 4/14 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	, c	, c	Υc	, c	Т. С.
NMAY→ 5/3→ K K MAY→ 5/3→ 4/29→ A/14(10) 4/26 - 4/14(10) 4/26 - A/14(10) 4/26 - A/14(10) 4/26 - FEKED - - A A/14(10) 4/26 A A/14(10) 4/26 A A/14(10) 4/26 A A/14(10) 4/26 A A A/15→ S/14→ 5/18→ - A A A/15→ S/14→ 5/18→ - A A A/15→ S/14→ 5/9→ 5/2(9→)→ S/14→ 5/9→ 5/2(9→)→ S/14→ 5/9→ - S/14→ 5/9→ <td></td> <td>κ α</td> <td>¥ م</td> <td>л 44/23</td> <td>0/13 ↓5/5</td>		κ α	¥ م	л 44/23	0/13 ↓5/5
MAY→ 5/3→ 4/29→ 4/29→ 4/29→ 4/18 5/9→ 5/16→ 4/16 5/9→ 5/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/16→ 7/18\to		< 8	. ~	571F.	Å
4/18 5/9+ 5/16+ BLUE-GRAY 4/14+ 5/9+ 5/16+ BLUE-GRAY 4/14+ 5/9+ 5/16+ EN-CROWNED -5/14 R - EN-CROWNED -4/14(10) 4/26 - EN-CROWNED -4/14(10) 4/26 - EN-CROWNED -4/14(10) 4/26 - ED -4/14(10) 4/26 - CHEEKED - - - FD - - - N A A/12+ - NN A/4+ 5/9+ 5/2(8+)+ ANNGED 5/28+ 5/9 - FED - - - NNED - - - 5/14 5/9+ 5/9+ -	4/29→	P↓ 4/2	4/25→ 4/17→	4/30→	4/25→
BLUE-GRAY -1	5/16→	¥ ₽	→5/25 A		
BLUE-GRAY 4/14- 5/9 5/14 R R	A		5/1-16	•	•
ED $4/14(10)$ $4/26$ $-$ CHEEKED - $4/26$ $-$ CHEEKED - $5/18+$ $-$ CHEEKED - $ -$ CHEEKED - $ -$ CHEEKED - $ -$ N $7/14+$ $5/14+$ $ -$ NN $ 0.01$ $ 0.01$ $ 0.01$ $ 0.01$ $ 0.01$ $ 0.01$ $ 0.01$ $ 0.01$ $ 0.01$ $ -$ <th< td=""><td></td><td>1 d</td><td>4/25(3)→ A P</td><td>4/18→</td><td>4/5E→ //8-11</td></th<>		1 d	4/25(3)→ A P	4/18→	4/5E→ //8-11
CHEEKED - 5/18→ - 5/18→ - 1/12→ - 5/18→ 5/18→		- Ť	→5/9 4/3-5/13	4/3-29	4/5-5/10
CHEEKED		P↓ 5/9	-	5/5→	5/4→
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		L	→5/26		5/27
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		а ·	5/7-6/8	-	5/10-24
N A A A A A A A A A A A A A A A A A A A	4/12↓	A 21/5 A 70/2	A A A 5///5/+ A/73+	4/29↓ 1/1	4/11-29
5/14→ 5/9→ 5/2(8+)→ VNN 4/4→ 5/6→ 5/2→ 4 5/3 - - - 5/3 - - -:WINGED 5/28→ 5/9 - -:WINGED 5/28→ 5/9 - -:Display - - - -:Display - - - -:Display - - - MNED - - - -:Display - - - -:Display 5/9(6)→ - -	e e			5 W	2 2 2
WN 4/4→ 5/6→ 5/5→ 4 5/3 - 5/3 - 5/5→ E-WINGED 5/28→ 5/9 ED MNED	5/2(8+)→	P→	5/1→ 4/30→	4/27→	4/26→
5/3	5/5→	4/30→ 5/1	1		4/10→
5/28→ 5/9 	•	•			
	•	1 200 200	5/9→ 4/15→	5/7→	5/5→
	- 5/14-6/13 5/12-16	t c	5/4†	-	
5/14 5/9(6)→ -	al-61/c -	т,	0/8-24 1/16-20	51./G	
	9(6)→ - 5/6-14	5/4→ P	4/27→	5/1	4/30-5/7
		5/4(3)→ 5/9→		5/13→	4/19→
5/14→ 5/9(9)→	5/5(8+)→	P↓ 5/9	€ 4/27	4/29→	4/24→
CHESTNUT-SIDED $5/14 \rightarrow 5/9(7) \rightarrow 5/6 \rightarrow 5/5 \rightarrow 5/5 \rightarrow 5/6 \rightarrow 5/5 \rightarrow 5/6 \rightarrow 5/6 \rightarrow 5/5 \rightarrow 5/6 \rightarrow 5/6$	5/6→	P→ 5/9	€/9	5/5→	5/3→

101

		Ω	SEASONAL OCCI	CURRENCE TABLES	I	PRIL THROU	APRIL THROUGH JUNE 1998		
	SOMERSET	SULLIVAN	TIOGA	VENANGO	WARREN	WAYNE	WESTMORELAND	WYOMING	YORK
MAGNOLIA	5/14→	5/9→		5/6→	ţ	5/9→	5/4→	5/9→	5/15-26
CAPE MAY BLACK-THROATED BLUF	5/14 5/14→	- 5/6→	- 5/13→	5/9 5/5→	, †	↓5/9 5/9↓	5/9 5/1↓	5/16 5/9→	- 5/6-27
YELLOW-RUMPED		A	5/24→	4/6-5/25	→5/5(3)	4/20(13)→	→5/17	4/9→	→5/25
BLACK-THROATED GREEN	4/30→	4/30↓	4/28↓	4/20→	↑ d d	5/1(24)→	4/13→	4/23	5/6-25
VELLOW-THROATED	t oi /c	4/224	- R7/C	4/10+ 4/10+	4/28	t 8/0	±+/C	t	0/-0/0
PINE				4/13→	224	4/25→	4/9-5/9	4/11→	A C
PRAIRIE		5/9		4/24→	5/4	5/9→	4/17→	5/9→	4/26→
PALM				4/30-5/11		↓5/11	4/29-5/4	4/13	4/8-5/1
BAY-BREASTED BLACKPOLL	- 5/77-28	5/14	-	5/14 5/17_10		15/9	Р 5/15_6/8	5/9 5/16_25	5/15 5/0-28
CERULEAN	07-1710 (6/9→		5/13+	5/5+		5/9+	4/29→	6/22+	5/3+
BLACK-AND-WHITE	4/30→	5/9(9)→	5/10	4/28→	5/4→	4/28(10)→	4/21	5/1+	5/2→
REDSTART, AMERICAN	5/14→	5/9(3)→	5/5→	5/4→	5/4→	5/9→	4/29→	4/29→	5/2→
WARBLER, PROTHONOTARY						5/9			5/15→
WORM-EATING Ovenried	-	-	- -	5/17↓ 4/30↓	, 1	5/9+ 5/1/5)	4/22↓ 4/22↓	5/9-29 5/1 1	4/18E→ 4/26→
WATERTHRUSH NORTHERN	4/30+		- 20	5/10	5/3→	5/9+	4/29-6/1	4/14→	5/6-21
LOUISIANA	4/11→	5/9		4/1↓	5/5→	5/1	A	4/14→	4/4E→
WARBLER, KENTUCKY				5/10→	6/16-28*		5/4	5/9	5/15→
MOURNING	-	5/25→		6/14-20	↑ L	д і	5/15-26(4)-6/22	5/30	5/7-23
YELLOW IHROAT, COMMON WARRIER HOODED	4/30+ 5/14+	5/9(6)→	5/5→	4/30+	† 1	5/1(8)↓ 5/6↓	4/17↓	5/4→	4/26→ 5/2+
WILSON'S	5/14+		5/18		Ľ.	5/9	5/10-6/11		
CANADA	€/9	5/9		5/6-15	ţ	5/9→	4/19→	5/7→	5/21-27
CHAT, YELLOW-BREASTED							5/4→		5/3→
TANAGER, SCARLET	5/14→	5/9+	5/3→	5/6→	t L ı	5/3→	5/4→	65/7→	5/3→
IOWHEE, EASTERN SPARROW, AMERICAN TREE	4/20↓	5/9(3) → -	4/8→	A ↓4/5	ţ,	< □	₹,	4/21↓	¥,
CHIPPING	4/2→	A	4/2→	A	ţ	Α.	A	4/2→	Α
FIELD	4/2→	5/9→	4/2→	A	4/4→	A	A	4/8→	Я
VESPER	5/14+	-		5/23+	, (2/9→	4//22+	5/9	-
GRASSHOPPER	5/14 +	5/9(3) -	-	4/5↓ 5/9↓	ţ,	t_6/c	4/11→ 4/17→	4/30↓ 5/4→	5/4-30 5/3→
HENSLOW'S	5/14-6/11(8)→	5/9→		4/13→		с.	4/17-6/13	5/4→	
FOX				4/9	4/13	٩	→4/11		,
LINCOLN'S SWAMP		- 5/9(4)→	, œ	5/13 A	, Î	- 4	5/5-15(3)-26 A	- 4/13→	, œ
WHITE-THROATED		R	A	↓5/13	. ↑	e e e	→5/14	- -	→6/28L*
WHITE-CROWNED		, (4/25-5/13	4/30-5/13	<u>с</u> (1 15/9	+5/13	4/30-5/9	→4/25
JUNCO, DAKK-EYEU GROSBFAK, ROSF-BRFASTFD	- 5/1↓	R 5/9(6)→	5/2↓	4/25↓	4/29↓	ד ז/ז	5/1↓	К 5/1→	↓4/29 5/3→
BLUE									5/3→
BUNTING, INDIGO	5/14→	5/9→	5/3→	5/7→	↑ d	5/5→	4/22→	5/9↓	5/2→
	4/23→	4/2-5/7(11)→	5/5(10)→	5/2→	↑ ₽ <	5/9↓	4/29→	5/4→	5/15→
DLACKDIRU, REU-WINGED MEADOWLARK, EASTERN	۲ ۲	A 5/6→	A-5/6(4)	4 ∢	t d	¢ ۵	A 4/11↓	A 4/13→	۲ CL
BLACKBIRD, RUSTY	4/2		-	4/3	<u>∩</u>		→5/20	4/2	4/1(6)
	< <	< <	A-4/4(40+) A	< <	4 <	< <	4 <	Α <	د م
ORIOLE, ORCHARD	ς,	ς ι	ς ι	ς,	ς,	< L	4/28→	ς,	5/2→
BALTIMORE	5/17→	5/9→	5/5→	5/7→	↑ ₫	5/3(4)→	5/2→	5/1→	5/2→
FINCH, PURPLE	A	ш	R-6/7(5)	2	ж	ж	R 	4/18→	→5/18
WHITE-WINGED							→4/14(25)		
REDPOLL, COMMON				4/15	<u>∩</u>				
SISKIN, PINE GROSBEAK, EVENING	A 4/24(20)	↓5/9(6)	→5/12(12)-6/1 -	→6/3 4/15-5/14	→4/30 →5/6(30)	£,	→5/15 →4/28(14)-5/1	→4/3(15)-9 →4/18(15)-5/27L	- →4/25

1998 VOLUME 12 NO.2

102

PENNSYLVANIA BIRDS

ADAMS: Debra Siefken, 1494 Mountain Rd, Orrtanna 17353 siefked@mail.cvn.net, Carl Garner, Nancy Locher, Peter Robinson.

ALLEGHENY: Mike Fialkovich, 805 Beulah Rd, Pittsburgh 15235 (412-731-3581), mpfial@sgi.net, Sylva Arnell, Paul Brown, Dino Ciabattoni, Jean & Toby Cunningham, Sue Diehl, Pam Ferklett, Mike & Evelyn Fowles, Nathan Hall, Walter Hammond, Deborah & Paul Hess, Bill Hintze, Joyce Hoffmann, Claire Holzner, Bill & Vicky Judd, Scott Kinzey, Chris Knoll, Lydia Konecky, Jerry Kruth, Dave Reiger, Kate Saint John, Dana & Walt Shaffer, Sam Sinderson, Becky Smith, Bengt Stridh, Randy Stringer, Chuck Tague, Mary Ann Thomas, Jim Valimont.

ARMSTRONG: Margaret & Roger Higbee, RR 2 Box 166, Indiana 15701 (724-354-3493) bcoriole@ third-wave.com, Greg Cook, Brandon Copenhaver, Steve Graff, Carol Guba, Dori Jacobs, Gloria Lamer, Dennis Lauffer, Flo & Jim McGuire, Jeff McIntire, Curtis Pierce, Bill Reddinger, Mary Jane Seipler, Joe Valasek.

BEAVER: John Cruzan, 150 Sunview Dr, Beaver Falls 15010, jcruzan@geneva.edu, Jim Barker, Bruce & Barbara Kiester, Joel & Pat Mason, Phil VanBruggen.

BEDFORD: Janet Shaffer, RR 6 Box 338, Bedford 15522 (814-356-3553), Joshua & Cassandra Frear, Mike & Laura Jackson, Rosie McGinnett, Janet Shaffer, Dan Snell, Bob Way.

BERKS: Rudy Keller, 71 Lutz Rd, Boyertown 19512 (610-845-7310), Rosann Bongey, Mary Kay Coleman, Chuck Cravotta, Jim Eckert, Catherine Elwell, Kerry Grim, Dean Kendall, Katrina Knight, Harold Lebo, Ken Lebo, Mark Monroe & HMS staff, Harold & Joan Silagy, Matt Spence, Bill Uhrich, Matt Wlasniewski.

BLAIR: Bill King, 3021 W. Chestnut Ave, Altoona 16602 (814-942-7673).

BRADFORD: Bill Reid, 73 W. Ross St, Wilkes-Barre 18702 (717-836-2734), Dick & Nan Allyn, Trudy Gerlach, Jane Newton, Ron Young.

BUCKS: Ken Kitson, 704 Headquarters Rd, Ottsville 18942 (610-847-2968), Don Aiman, Ian Baldoch, Alan Brady, Gary & Karen Campbell, George Carmichael, Chuck Crunkleton, Henry D'Alessandro, Fran & Gerry Dewaghe, Steve Farbotnik, Don Fitting, Ron French, Bob Friedermann, Ray Hendrick, George Hoffman, Dave Long, Wendy Margolis, Don McClintock, Bruce McNaught, August & Judy Mirabella, D. Nagle, Craig Olsen, Don Parlee, Ken Reiker, Margie Rutbell, Tina Spiegel, Chris Stieber, Shelly Taylor, Tom Wurtenberger.

BUTLER: Paul Hess, 1412 Hawthorne St, Natrona Heights 15065 (724-226-2323) phess@salsgiver.com, Suzanne Butcher, Ruth Crawford, Marcy Cunkelman, Dave Darney, Mike Fialkovich, Carol Guba, Deborah Hess, Margaret Higbee, Joyce Hoffmann, Bob Machesney, Mark McConaughy, Mark McKellar, Randy Stringer, Gene Wilhelm, Mark Williams, Deb Yovanovich.

CAMBRIA: Gloria Lamer, RR 1 Box 183D, Penn Run 15765 (724-349-1159), Georgette Syster, RR 1 Box 183C, Penn Run 15765 (724-349-6293), Dave Gobert, Carol Guba, Ed Hunter, Jr., Ed Hunter, Sr., Margaret Higbee, Judy Johns, Clay Lamer, John Salvetti.

CARBON: David Hawk, 521 Walnut St, Lehighton 18235 (610-377-2407), Wes Beltz, Jeff Frantz, Robert Frantz, Rudy Keller, Barry Reed, Rehrig family.

CAMERON: John Fedak.

CENTRE: John & Becky Peplinski, Box 364, Pennsylvania Furnace 16865 (814-238-6541) jdp3@psu.edu.

CHESTER: Barry Blust, 21 Rabbit Run Ln, Glenmoore 19343 (610-458-5616), Bill Barber, Bob Cook, Paul Earley, Tony Fernandes, Michael Harvell, Dan Hegarty, Beryl & Phyllis Hurlock, Larry Lewis, Grier Saunders, Lisa Tull, Dan White, Richard & Ellie Wolf.

CLARION: Margaret Buckwalter, RR 2 Box 26,

Shippenville 16254 (814-782-3925) mbuckwalter@usachoice. net, David Beinhauer, Dave Boden, Lois Callahan, Paulette Colantonio, Pat Conway, Mary Emerick, John Fedak, Walter Fye, Chris Grainer, Mary Grishaver, Tom Kemp, Mike Leahy, Dale Luthringer, Charles Marlin, Bill Reddinger, Joe Shay, John Street, Jim Tarr, Gil Twiest, Judy Vogus.

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

CLINTON: Wayne Laubscher, RR2 Box 153, Lock Haven 17745-9802, Steve Bason, Lynn Earon, Brenda Laubscher, Sam Rockey, Glenna & Paul Schwalbe.

COLUMBIA: H. Scott Killam, RR 3 Box 65A, Shickshinny 18655, Doug Gross, Autumn Pfeiffer, Tonya Boston-Sager, Bob Sager, Kristen Vitkauskas.

CRAWFORD: Ronald F. Leberman, 11508 Pettis Rd, Meadville 16335 (814-724-5071).

CUMBERLAND: Deuane Hoffman, 3406 Montour St, Harrisburg 17111 (717-564-7475) raven@ paonline.com, Don & Robyn Henise, Jason Horn, Mark Kauffman, Scott Kinzey, Ramsay Koury, Peter Robinson, Joe Sheldon, Rick Stevick.

DAUPHIN: Richard Williams, 3 Parkside Ave, Hummelstown 17036 (717-566-6562), Bill Baker, Scott Bills, Frank Blum, Dan Bogar, Joe Church, Nancy Cladel, Bernie Crist, Dick Franz, Joan & Jim Funck, Nancy & Carl Juris, Dan Kline, Ramsay Koury, Eloise Laskowski, Terry Neumyer, Rom Ramsey, Grace Randolph, Joan Renninger, Tom Smith, David Solomon, Fred Wilcox, Pat Williams.

DELAWARE: Nick Pulcinella, 201 Elm Ave, Swarthmore 19081 (610-543-8360), npulcinela@aol.com, Bob Blair, Skip Conant, John Damico, Scott Edwards, Ted Floyd, Al Guarente, Michael Guenther, Sheryl Johnson, Mike Kaczcnski, Jim Lockyer, Doris McGovern, Tom McParland, John Miller, Carl Perretta, Tom Reeves, Jim Waldie.

ELK: David Wolfe.

ERIE: Jerry McWilliams, 3508 Allegheny Rd, Erie 16508 (814-868-3059) jerrymcw@aol.com, Richard Bollinger, Jean Cunningham, Dave Darney, Mike Fialkovich, Chuck Gehringer, Bob Grubbs, James Hill, Deuane Hoffman, Joyce Hoffman, Scott Kinzey, Ramsay Koury, Mark Lethaby, Susan Smith, Chuck Tague.

FAYETTE: Mike Fialkovich, 805 Beulah Rd, Pittsburgh 15235 (412-731-3581), mpfial@sgi.net, Dennis Smeltzer, Jack & Sue Solomon, Bengt Stridh, Jim Valimont, Mike & Evaleen Watko.

FRANKLIN: Dale Gearhart 1872 Burkholder Rd Box 155 Shady Grove 17256 gear@innernet.net, Carl Garner.

FULTON: Dan Snell, PO Box 207, Needmore 17238 (717-294-6344), John Fedak, Mike Newell, Marilyn Snell.

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

HUNTINGDON: Greg Grove, RR 1 Box 483, Petersburg 16669 (814-667-2305) gwg2@psu.edu, Nick Bolgiano, Deborah Grove, Lewis Grove, Dave Kyler, Alison Norris, Tim O'Connell, Paul Rodewald, Doug Wentzel.

INDIANA: Margaret & Roger Higbee, RR 2 Box 166, Indiana 15701 (412-354-3493) bcoriole@third-wave.com, Alice & Dave Beatty, William Betts, Bronnie Bekker, Vernon & Jean Blystone, Ken Byerly, Lee Carnahan, Greg Cook, Marcy Cunkelman, Dave Darney, Betsy & Jed Fetterrman, Evelyn & Mike Fowles, Judy Gallo, Sue Gatti, Steve & Shirley Graff, Carol Guba, Dori Jacobs, Pat Johner, Clay & Gloria Lamer, Dennis Lauffer, Phyllis Maher, Flo McGuire, Marilyn Moore, Pat Rawls, John Salvetti, Mary Jane Seipler, Jerry Shipe, Georgette Syster, Joe Taylor, John Taylor, Marge Vatter, Linda Wagner, Debbie Yovanovich.

JEFFERSON: John Fedak, 221 Washington St, New Bethlehem 16242 (814-275-4086), Tom Crawford, Ian Hartzler,

Deuane Hoffman, Jean Jaworski, Pat McElhenny, Bill Reddinger, Lisa Swackhamer.

JUNIATA: Aden Troyer RR1 Box 575 Mifflintown 17059, Deuane Hoffman, Tobie Petersheim, Abie Renno, Gideon Renno, John Straub, Amos Swarey, Andrew Swarey, Cora Wengerd.

LACKAWANNA: Tom Clauser, 213 Deerfield Dr, Pottsville 17901 (717-622-1363) mclauser@pottsville.infi.net, Randi Anderson, Mark Blauer, Glenn Czulada, Doug Gross, Alan Gregory, Rick Koval, Edie Parnum, Bill Reid.

LANCASTER: Jeff Hoppes, 426 Chowning Pl, Lancaster 17601, Jerry Book, Bruce Carl, Tom Garner, Jonathan Heller, Randy Miller, Peter Robinson, Bruce Weaver, Eric Witmer.

LAWRENCE: Barb Dean, 321 E. Meyer Ave, New Castle 16105 (412-658-3393), Suzanne Butcher, George Dean, Rae Bethe Dean, Bill Hintz, Shirley McCarl, Nancy Rodgers, Priscilla Stoughton, Randy Stringer, Linda Wagner, Bob Walczak, Gene Wilhelm.

LEBANON: Randy Miller, 607 Woodland Dr, Mannheim 17545 (717-664-3778), Bruce Carl, Jonathan Heller, Jane Light, Steve Mallanson, Quitty, Grace Randolph, Bruce Weaver.

LEHIGH: Bernie Morris, 4324 Glenwood Dr, Emmaus 18049 (610-967-0257), blm@aluxpo.att.com.

LUZERNE: Richard Koval, 305 William St, Plains 18705 (717-829-4381) unibirder@aol.com, Mark Blauer, Marybelle Gilroy, Sandy Goodwin, Alan Gregory, Doug Gross, John Heuges, Jim Hoyson, Edwin Johnson, John Murray, Autumn Pfeiffer, Linda Reggie, Bill Reid, Jim Shoemaker, Erick Stull, Bob Wasilewski.

LYCOMING: Wes Egli, PO Box 381, Picture Rocks 17762 (717-584-3083), Ron Beach, Wayne Laubscher, Alma & Denny Sheets, Kate Somerville, Fred Stiner.

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

MERCER: Marty McKay, 2320 Valley View Rd, Sharpsville 16150 (412-962-7476), Harriett Bauer, Richard Steuick, Randy Stringer, Aden Troyer, Harvey Troyer, Jerry Troyer, Melvin Troyer, Neal Troyer, Lorraine Weiland.

MIFFLIN: Margaret Kenepp, RR 2 Box 343, M c V e y t o w n 17051 (717-899-6252) mkenepp@lcworkshop.com, Gloria Bickel, Matthew Bickel, Terry Fitzgerald, Herb & Nancy Graves, Amos Miller, Thomas Thompson.

MONROE: Rick Wiltraut.

MONTGOMERY: Kevin Crilley, PO Box 100, Sumneytown 18984 (215-679-9318), Eva Abraham, Tony Fernandes, George A. Franchois, Gary L. Freed, Ron Grubb, Paul & Anita Guris, Sheryl Johnson, Marianne Kulp, Scott McConnell, August & Judy Mirabella, Bill & Naomi Murphy, Edith Parnum, Ken Reiker.

MONTOUR: Dan Brauning, RR 2 Box 484, Montgomery 17752 (717-547-6938), brauning@ mail.csrlink.net, Jon Beam, David Graff, Melissa Jo Harrison, Marcy Krum, Chris Smull.

NORTHAMPTON: Rick Wiltraut, Brian Hardiman, Dennis Miller, Brad Silfies, Steve Thorpe, Joe Zajecek.

NORTHUMBERLAND: no compiler.

PERRY: Deuane Hoffman, 3406 Montour St, Harrisburg 17111 (717-564-7475), raven@paonline.com, Greg Grove, Lewis Grove, Ramsay Koury, Ron Sober.

PHILADELPHIA: Ted Floyd, PO Box 30804, Philadelphia 19104, 215-417-5089, ted@dept.english. upenn.edu, Donna Calio, Skip Conant, David Cutler, John Damico, Michael Drake, John Fedak, Ed Fingerhood, Chuck Hetzel, Andrew Ingersoll, Steve Lawrence, Sid Lipschutz, Chris McCabe, Scott McConnell, Doris McGovern, John Miller, Ray Miller, Michael Pratt, Keith Russell, Gary Seagraves, Diane & Gerry Serianni, Matt Sharpe, Sandy Sherman, Kei Sochi, David Spawn, Judy Stepanaskie, Belynda Stewart, Chris Walters, Doug Weschler, Leigh Zahm.

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

Mary Kay Coleman, John Fedak, Frank Hohenleitner, Charlie Muise & PEEC staff, John Padalino, Edie Parnum, David & Lori Prytherch, Bob Ross, John Serrao, Chris Turn, Peter Wulfhorst.

POTTER: David Hauber RR 2 Box 153, Coudersport 16915 (814-274-8946) haubers3@penn.com, Betty Devling, Mary Devling, Mary Herrold, Stan Hess, Larry Mehal, Jack Mitterer, Gary Witmer.

SCHUYLKILL: Tom Clauser, 213 Deerfield Dr, Pottsville 17901 (717-622-1363) mclauser@pottsville.infi.net, Barbara Allerton, Brian Clauser, Vivian Connor, John DeBalko, Dave & Laurie Dolinsky, Denise Donmoyer, Lorne Ealy, Marilyn Gamble, Laurie Goodrich, Kerry Grim, Carol Keesey, Rudy Keller, Margaret Kerschner, Dan Knarr, Joe Kosack, Dave Kruel, Barb Jucker, Carole Laughlin, Anne Marie Liebner, Bill Malarkey, Kirk Marks, Joan Morgan, Mark Monroe, Tom Noonan, Regina Raudenbush, Nefen Sfarra, Joe Sholtes, Harold & Joan Silagy, Ann Tihansky, Janie Ulsh, Mike Ward, Scott Weidensaul, Sally Weisakowski, Doug Wood. Schuylkill Co. Hotline: 717-622-6013.

SNYDER: Cindy Davis, 40 S. Second St. Apt 2, Lewisburg 17837 (717-522-0785),

SOMERSET: Scott Bastian, 102 Harding St, Kittanning 16201 (724-543-5427), Jill Bastian, Dick Byers, Robert Croner, Dale Jeffrey, Anthony Marich, Jeff & Lauretta Payne, John Tilley.

SULLIVAN: Nick Kerlin, PO Box 62, Forksville 18616 (717-924-3542) bluebird@epix.net, Skip Conant, Fred Crafts, Ginny Davis, Joan & Bob Exley, Doug Gross, Helene Jordan, Ann Leach, Rob Megraw, Dave Motko, Janet Mueller, Dave & Flo Reitz, Mary Lou Shaffer, Phyllis & Stuart Stott.

SUSQUEHANNA: Randi Anderson, RR 3 Box 3384, Uniondale 18470 (717-679-9610) andergl@epix.net.

TIOGA: Robert M. Ross, RR 2 Box 113A, Wellsboro 16901 (717-376-5394), rossr@epix.net, Arlene & Larry Brown, Austin Brown, Tammy Brown, John Fedak, Richard Koeppel, Joanna Stickler, Lisa Swackhamer.

UNION: Cindy Davis, 40 S. Second St. Apt 2, Lewisburg 17837 (717-522-0785),

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, Suzanne Butcher, Dave Edwards, Kathie Goodblood, Bill Rictner, Jerry Stanley, Carolyn Worley, Gene Wilhelm.

WARREN: Ted Grisez, 10 Belmont Dr, Warren 16365 (814-723-9464), Steve Graff, Bill Hill, Jim King, Marge Neel, Chase Putnam, Brenda Watts, Don Watts.

WASHINGTON: Roy Ickes.

WAYNE: Tom Clauser, 213 Deerfield Dr, Pottsville 17901 (717-622-1363) mclauser@pottsville. infi.net, Randi Anderson, John Fedak, Frank Hohenleitner, Deuane Hoffman, Edie Parnum, Voni & Joe Strasser, Chris Turn.

WESTMORELAND: Robert C. Leberman, Powdermill Nature Reserve, HC 64 Box 453, Rector 15677 (724-593-7521), Ken Byerly, Dick Byers, Mike Fialkovich, Phyllis Flasher, Mike & Evelyn Fowles, Jim Gruber, Randy Harrison, Eric Hynes, Dennis Lauffer, Mark McConaughy, Bob Mulvihill, Bob Shaw, Mary Shirland, Dennis Smeltzer, Tim Vechter, Mike & Evaleeen Watko, M.H. Wisner.

WYOMING: Bill Reid, 73 W. Ross St, Wilkes-Barre 18702 (717-836-2734), Robert Daniels, Marybelle Gilroy, Sandy Goodwin, Jim Hoyson, Edwin Johnson, Jeanne Kilmer, Shane Kleiner, Rick Koval.

YORK: Al Spiese, 4086 Old Orchard Rd, York 17402 (717-755-8309), Jack & Lil Downs, Barb & Claude Fisher, Ken Gabler, Carl Garner, Karen Lippy, Jeff Pheasant, John & Jean Prescott, Peter Robinson.