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COVER: Ash-throated Flycatcher *photo by Franklin C. Haas*

from the Editors...

RARE BIRDS, HOSTS, AND ETHICS

Oh, what a quarter! Three rarities showed up—one a new state record—and another showed up in January, just after the quarter ended. The situations surrounding these four birds contrasted sharply and raised some issues among birders in the state.

The Northern Wheatear in Juniata County presented a typical “rare bird” scenario. It was found on the farm of a neophyte birder who enlisted a cousin for verification. The cousin then spread the word. Unlike all past Wheatear sightings in this state, the bird actually stayed for two days after word got out, thereby allowing many to see it. The owners of the farm, no doubt somewhat influenced by having birders in the family, were most gracious and accommodating to strangers (read “birders”) wishing to see the bird. They gave birders carte blanche permission to roam their property with the proviso to please close any gates they passed through. As stated above, the bird was gone by the third day and, although several birders showed up on subsequent days looking for the bird, most everyone was satisfied about the way it was handled.

The Ash-throated Flycatcher, which showed up just before Thanksgiving, was at a die-hard birder’s property—Arlene Koch (see her article elsewhere in this issue)—and presented a slightly different scenario. Arlene is obviously birder-friendly, and spread the word immediately, opening her property to birders far and wide.

The bird stayed for 23 days, affording just about every interested birder an opportunity to see it. However, because of some family considerations—not everyone in Arlene’s family is a birder—she had to ask birders not to come on certain days and not to venture onto adjoining properties. This word was spread through the hotlines and internet, and was respected. As you can read in her article, although the period was hectic, birders behaved themselves and obeyed the restrictions imposed on them.

A Say’s Phoebe was found on the

Newville (Cumberland County) CBC in January. Unlike either of the two preceding scenarios, this bird was at a farm owned by a non-birding family. Approaches were made to the owners, the situation explained, and they permitted birders access to their property to look for the bird. This bird is still being seen as I write this piece in March.

Scores of birders have gone to see the bird—most successfully. Again, the property owners gave full access to birders, with similar provisos as above—close any gates and stay on their property. There have been no complaints about birders’ behavior.

Don Henise, who has been coordinating this sighting and has kept everyone up-to-date on its status, suggested that birders write thank-you notes (mostly through the internet) which he has delivered to the family that owns the farm. This, of course, has fostered good will. This situation was a pleasant one for all concerned.

Then there was the Townsend’s Warbler. This bird was found in mid-December and word eventually got to some local birders who went to the house to see and confirm the sighting. During that visit, the birders promised not to tell anyone else about the bird. Without going into details, suffice it to say that the reason was that the resident did not want any birders coming to see the bird.

If all five of the local birders had kept their word (or if the bird vanished), that is how it probably would have ended. No one except these five would have gotten to see this bird.

Fortunately for other birders, after several weeks, one of the five broke this code of silence, word got out, and arrangements were finally made by which birders could come and see the bird in a location several houses away from the original location without infringing on the sensibilities of the original resident.

Since then, hundreds of birders have had the opportunity to see the bird and have done so happily, following certain restrictions that were imposed because of the situation with the original

observer.

From a strictly ethical standpoint, one could say that after the promise of silence was broken (an unethical act), all subsequent viewers of this bird were acting unethically—poisoned evidence, as it were. On the other hand, was the promise of silence unethical to begin with? Is it ethical to keep something secret from friends and fellow birders for which there are no legal grounds or physical danger involved? Residents certainly have the right to keep people off of their property, but not their neighbors’ property, especially when it turns out that the neighbors have no problem with birders coming onto their property. Yet this is what was demanded! Is rejecting this unethical demand unethical?

In all of the above cases, when reasonable restrictions were imposed, Pennsylvania’s (and other states’) birding community acted responsibly. Except for this one person (the Townsend’s Warbler original observer), all other non-birders involved had positive experiences with birders. And it was not the birders that caused the problem, it was the attitude of the non-birder that was the problem.

The birders involved wanted nothing more than cooperation. They wanted to do whatever was necessary to get other birders to see the bird. But the person’s intransigence prevented any accommodation and eventually led to the promise-breaking cited above.

I feel that under these circumstances that this was not an unethical act, but a reasonable reaction to unreasonable circumstances.

I welcome your comments.

NEW COMPILER

Aden Troyer has taken over the compiler duties for Juniata County. Welcome aboard! 🦋

*Frank Haas
Chief Editor*

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An Annotated List of the Field Identifiable and Non-Field Identifiable Bird Subspecies and Morphs of Pennsylvania

by Steven B. Feldstein

Introduction

There are many species of birds in Pennsylvania which exhibit extensive intraspecific variation. The most common type of intraspecific variation involves *subspecies*. When geographic variation within a species results in populations with at least one sex or age that is morphologically distinct from other populations, and these populations occupy allopatric (non-overlapping) breeding ranges, such populations are referred to as subspecies. In the vast majority of cases, the differences between subspecies are very slight, and identification of individuals outside the breeding season must be left to museum ornithologists and highly skilled banders. Not surprisingly, given that there are subtle differences between many populations, there is often much disagreement amongst museum ornithologists as to the validity of many subspecies. Thus, although many species of birds are polytypic (comprised of more than one subspecies), most subspecies are sufficiently similar that field identification to the subspecies level is not possible.

Amongst the numerous subspecies of North American birds, there are a small number that are sufficiently distinct to allow for identification in the field. (By definition, the identification of individuals of a particular subspecies is usually straightforward in the breeding season, because the breeding range of most subspecies is fairly well defined. For such individuals, identification is based on geography, not plumage, song, or calls. In this article, our primary concern lies with the identification of migratory subspecies in Pennsylvania.) However, the number of field identifiable subspecies is actually much less than is commonly recognized amongst birders. This is because subspecies are usually defined based on the requirement that more than 75% of

their population is distinct from other similar subspecies. Thus, to some extent, subspecies are defined based on their average characteristics, and even though average individuals from separate subspecies can be quite distinct, there is often enough variation within members of a subspecies such that field identification of any subspecies is not possible. The sources of this variation include age, sex, molt, fading, and wear, in addition to individual variation, clinal variation (a gradual variation in characters over a geographic area) within the breeding range of a subspecies, and intergradation with other subspecies. Another major problem is simply that so much is still unknown about the variability of subspecies.

The Sixth Edition of the AOU Checklist (1983) defines a number of *subspecies groups*, which are a collection of subspecies that share several common characteristics relative to other subspecies within the same species. In most cases, a subspecies group can be regarded as an incipient species, and many subspecies groups were even once treated as separate species, and may be once again. In fact, since the publication of the Sixth Edition of the AOU Checklist, some subspecies groups have since been split and reverted to full species status, e.g., Rufous-sided and Brown Towhees, and Northern Oriole. Most subspecies groups can be identified in the field.

A second form of intraspecific variation involves two or more distinct plumage "types" within a given population. These plumage types, which are referred to as color morphs, or simply *morphs*, usually occur independently of age, sex, or season. Furthermore, in many species, when individuals of different morphs interbreed, their offspring resemble one parent, and do not appear intermediate in plumage, as is the case with most intergrades between subspecies. Thus, many morphs can be

identified in the field. However, for some species, identification of morphs is complicated by the existence of a continuum of plumages. For convenience, we describe such species as including intermediate morphs.

There are many reasons why birders may be interested in field identification of subspecies groups, subspecies, and morphs, when it is indeed possible. For example, the identification of a bird as being a member of a particular subspecies indicates that individual's geographic origin. Such knowledge can give information about migration routes and winter ranges of certain populations. Also, careful monitoring of field identifiable subspecies and morphs can enhance our knowledge about their relative abundance, and over time can yield further information about changes in various populations. In addition, subspecies are interesting as they can raise fascinating questions about evolutionary processes. Furthermore, for those birders that maintain various lists, keeping track of observed subspecies will keep them prepared for future splits of species. Lastly, and perhaps most importantly, it can simply be fun to study, observe, and enjoy the variability within many species of birds.

The primary aim of this article is to provide an annotated list of all the highly variable *forms* (subspecies groups, subspecies, and morphs) which have occurred or may eventually occur in Pennsylvania. Each of these forms is placed into one of two categories: 1) a field identifiable form, or 2) a non-field identifiable form. Furthermore, each of these forms is further classified as to whether they are "regular" or "accidental" in Pennsylvania. The term regular refers to occurrence in Pennsylvania at least once during most years. On the other hand, the term accidental corresponds to very few if any records in Pennsylvania, or even in the northeast US. In the most extreme cases, i. e., those for which there are no records in the northeast

US, inclusion on the annotated list is based on patterns of vagrancy which suggest at least a remote possibility of future occurrence in Pennsylvania.

There are two reasons why I include non-field identifiable forms in the annotated list, both relating to the manner in which subspecies and morphs are treated in most field guides. These are: 1) the field guides do not indicate the extent of variation within each form, and 2) the field guides often illustrate very distinctly different forms without mentioning the existence of other intermediate plumage forms. Although it is certainly very commendable that modern field guides such as that from the National Geographic Society (1987) illustrate multiple subspecies and morphs for so many species, the fact that the above two problems are not stated may give many birders the sense that the identification of subspecies and morphs is much easier than it is in reality. Motivated by this problem, my selection for the list of non-identifiable subspecies and morphs is limited to those species which are often shown in the field guides as exhibiting extensive intraspecific variation.

For some species, it is not possible to state with complete confidence whether a particular form is field identifiable. Thus, given this element of uncertainty, a conservative approach is adopted when designating a particular form as being field identifiable. As a result, only those subspecies groups or subspecies which exhibit *discontinuities* in plumage are considered as field identifiable. Furthermore, intergradation must be confined to a negligible fraction of the total population of all subspecies groups or subspecies considered. Such a restriction excludes those highly variable species which exhibit a continuum of plumages, even if individuals at either end of the continuum are markedly different from each another. Similarly for morphs, only those forms which exhibit *discontinuities* in their plumage are considered as field identifiable. Thus, polymorphic species which show intermediate plumages are not regarded as identifiable in the field. However, it is important to note that even for field identifiable forms, there will be some individuals which still cannot be identified in the field because of individual variation.

Furthermore, it is also necessary to mention that to a certain degree, any classification that distinguishes between field identifiable and non-field identifiable forms is arbitrary. This is because many species could be regarded as being borderline with respect to the above criteria. Thus, I would certainly expect there to be differences between my classification and that by other authors.

Although a rather rigid requirement is being used for specifying field identifiable forms, the intent of this article is not to discourage birders from paying close attention to those forms which are considered as non-field identifiable. This is because such forms can be just as interesting as the field identifiable forms, as long as one takes a probabilistic viewpoint, i.e., regard the identify of an observed bird as *most likely*, rather than *definitively*, being a particular subspecies or morph.

Annotated List

All subspecies groups, subspecies, and morphs listed below are designated as belonging to one of four categories. On behalf of the Pennsylvania Ornithological Records Committee (P.O.R.C.), it is requested that documentation be submitted for those birds which come under the designation of Category C or Category D.

Category A: A field identifiable subspecies group, subspecies, or morph that occurs regularly in Pennsylvania. Documentation is not requested.

Category B: A subspecies group, subspecies, or morph that occurs regularly in Pennsylvania, and cannot be identified in the field because of extensive variability. This category is restricted to species with marked geographic variation. Documentation is not requested.

Category C: A field identifiable subspecies group, subspecies, or morph that is either accidental or has never occurred in Pennsylvania. Documentation is requested.

Category D: A subspecies group, subspecies, or morph that is either accidental or has never occurred in Pennsylvania, and cannot be identified

in the field because of extensive variability. This category is restricted to species with marked geographic variation. Documentation is requested, although a formal decision by the committee to the level of subspecies group, subspecies, or morph will not be made. Such records will be archived by P.O.R.C., and may be re-examined in the future if new identification techniques are developed. Thus, P.O.R.C. strongly encourages birders to submit documentation for category D species (records of Category D species, including the names of the observers, will be published in the Annual Report of P.O.R.C. in Pennsylvania Birds). Also, in all cases, if the entire species is sufficiently rare in Pennsylvania, P.O.R.C. will make a decision at the species level (see Pulcinella (1995) for the list of species requiring documentation).

The designated category is listed immediately after each form. Also, those forms which regularly nest in Pennsylvania are denoted by "br." As stated earlier, geographic considerations allow for subspecific identification during the breeding season. Thus, with the exception of an extremely rare summer vagrant, the subspecific identity of any bird that breeds in Pennsylvania is already known.

For each species listed below, there is also a brief discussion about each subspecies or morph, followed by a list of references. The subspecific designation for most species is based on the fifth edition of the AOU Checklist (1957), which describes the breeding ranges of most subspecies. The reference list primarily includes popular books on field identification, and also magazines such as *Birding* and *Pennsylvania Birds*. Thus, the list of references is far from exhaustive. Besides the fifth edition of the AOU Checklist, two other particularly beneficial references for both subspecies and morphs are the National Geographic Society (1987) field guide and the relatively new *Birds of North America* series. As the above three references are highly useful for most species, I do not list these publications with the individual species discussions. Furthermore, for those who are particularly interested in subspecies and morphs of birds, there is an excellent and particularly

fascinating series of publications by Ron Pittaway in Ontario Birds. Each of his articles is referenced below with the relevant species.

Least Bittern (*Ixobrychus exilis*) (light (Abr) and dark (C) morphs): The dark morph (Cory's Least Bittern), which has not been recorded in Pennsylvania, is extremely rare everywhere within the northeastern range of this species. *References* Pittaway (1996).

Great Blue Heron (*Ardea herodias*) (light (C) and dark (Abr) morphs): The white morph of the Florida Keys and West Indies, known as the "Great White Heron", has been recorded in several states in the northeast including Pennsylvania. There is also an intermediate morph, known as Wurdemann's Heron, which hasn't been recorded in the northeast. *References* Palmer (1962).

Tundra Swan (*Cygnus columbianus*) (*columbianus* (A) and *bewickii* (C) subspecies groups): The Old World subspecies *bewickii* (Bewick's Swan) is usually quite distinctive from the North American subspecies *columbianus* (Whistling Swan). Although records of *bewickii* from the northeast US are of questionable origin, it seems plausible for a stray individual already in Alaska to migrate with *columbianus* to the northeast US (there is a photograph of a Tundra Swan from Westmoreland Co., Dec. 1982, that resembles the Siberian population, sometimes recognized as a separate subspecies, *jankowskii*, (Parkes, personal communication)). *References* Madge and Burn (1988).

Greater White-fronted Goose (*Anser albifrons*) (*frontalis* (B), *gambelli* (D), and *flavirostris* (D) subspecies): There are three subspecies that could occur in Pennsylvania. These include *frontalis* of Arctic North America and eastern Siberia, *gambelli* of Alaska and northwest Canada, and *flavirostris* of Greenland. There are definitive North American records for the latter subspecies. However, there seems to be too much variation within each subspecies for definitive field identification of any subspecies. *References* Godfrey (1986), Kaufman (1994), Madge and Burn (1988),

Palmer (1976).

Snow Goose (*Chen caerulescens*) (white (B), intermediate (B), and blue (B) morphs): The three morphs of this arctic nesting species represent a continuum of plumages of which all commonly occur in Pennsylvania. *References* Madge and Burn (1988), Pittaway (1992c).

Ross's Goose (*Chen rossii*) (white (C) and blue (C) morphs): The two morphs of this arctic nesting species are distinctive. However, as with Snow Goose, intermediate morphs might exist. *References* Madge and Burn (1988).

Brant (*Branta bernicla*) (*bernicla* (A) and *nigricans* (C) subspecies groups): The two North American subspecies groups are quite distinctive, however intergrades do occur and both subspecies groups show considerable individual variation. These two subspecies groups comprise the eastern pale-bellied subspecies *hrota*, of the *bernicla* subspecies group, and the dark-bellied *nigricans* of western North America and eastern Siberia. There are many records for *nigricans* in the northeast US. *References* Madge and Burn (1988), Palmer (1976).

Canada Goose (*Branta canadensis*) (large subspecies (Bbr), *parvipes* (D), and *hutchinsii* (D) subspecies): The abundant large subspecies in Pennsylvania includes both *interior* and intergrades with other large subspecies via introduction programs. The subspecific identify of these large individuals cannot be determined in the field. The only other subspecies that may occur in Pennsylvania are the medium-sized *parvipes* (Lesser Canada Goose) and the smaller *hutchinsii* (Richardson's or Hutchins' Canada Goose), both migrants through the Great Plains. There have been a number of records of smaller forms of Canada Goose in the state. However, there is considerable variation within each subspecies, and *parvipes* overlaps in characteristics with both the larger subspecies and the smaller *hutchinsii*. Furthermore, *parvipes* and *hutchinsii* frequently intergrade. *References* Bellrose (1976), Godfrey (1986), Madge and Burn (1988), Palmer (1976).

Green-winged Teal (*Anas crecca*)

(*crecca* (C) and *carolinensis* (A) subspecies groups): The Old World subspecies, *crecca*, is distinctive from the North American *carolinensis* (males only). There are several records of *crecca* for Pennsylvania. Also, there are reports of intergrades from Ontario and an intergrade specimen from Quebec (Pittaway, personal communication). *References* Godfrey (1986), Madge and Burn (1988), Palmer (1976).

Broad-winged Hawk (*Buteo platypterus*) (light (Abr) and dark (C) morphs): The light morph is common in Pennsylvania. The dark morph, which nests in Alberta, is a rare but regular migrant in the eastern Great Plains, and has been reported from Ontario and Quebec (Pittaway, personal communication). *References* Clark and Wheeler (1987), Wheeler and Clark (1995).

Swainson's Hawk (*Buteo swainsoni*) (light (D), rufous (D), and dark (D) morphs): This species occurs in light, rufous, and dark morphs. Most records in the east are light morphs. However, the identify of any particular morph is complicated by the occurrence of intermediate individuals. *References* Clark and Wheeler (1987), Palmer (1988), Wheeler and Clark (1995).

Red-tailed Hawk (*Buteo jamaicensis*) (*borealis* (Bbr), *harlani* (D), and *kriderii* (D), and *calurus* (light (D), dark (D), and rufous (D) morphs) subspecies): The eastern subspecies *borealis* nests and winters in Pennsylvania. Furthermore, there is evidence that the northern populations of *borealis*, which have more heavily marked underparts, may be better considered as a separate subspecies, *abieticola* (see Dickerman and Parkes, 1987) (there are 7 Pennsylvania specimens of *abieticola* that range from the months of October through April (Parkes, personal communication)). Most or perhaps all individuals of these subspecies are light morphs (see Parkes (1996) for a discussion on possible dark morph *borealis*). The widespread western subspecies *calurus* occurs in light, rufous, and dark morphs. Dark morphs, presumably of the western subspecies *calurus*, have been recorded in Pennsylvania, and rufous morphs have been reported from Ontario. However, some

individuals show characteristics intermediate between the various morphs. There are also records for the highly variable Alaskan subspecies *harlani* in the east, including a specimen from Pennsylvania. Most or perhaps all *harlani* are dark morph individuals. However, the field identification of *harlani* is complicated by the fact that both its variability and that of *calurus* at the western edge of its range are not well known. The highly variable Great Plains subspecies *kriderii*, which seems to intergrade extensively with *borealis*, has also been recorded in the east. It is also questionable as to whether *kriderii* should be classified as a subspecies, rather than a polymorphic population of *borealis*. Both *harlani* and *kriderii* were once regarded as separate species. *References* Clark and Wheeler (1987), DeBenedictis (1984), Dickerman and Parkes (1987), Dunne et al. (1988), Floyd (1992), Mengel (1965), Palmer (1988), Parkes (1996), Pittaway (1993a), Wheeler and Clark (1995), Wiltraut (1991).

Rough-legged Hawk (*Buteo lagopus*) (light (B) and dark (B) morphs): This species commonly includes individuals of both light and dark morphs in Pennsylvania. However, there are many individuals which show intermediate characteristics. *References* Clark and Wheeler (1987), Palmer (1988), Wheeler and Clark (1995).

Merlin (*Falco columbarius*) (*columbarius* (B) and *richardsonii* (D) subspecies): The subspecies of the Canadian Prairies and northern Great Plains, *richardsonii*, which has been reported as a migrant in southern Ontario, has much paler upperparts than the eastern *columbarius*. However, northwestern populations from Alaska east to Manitoba, sometimes regarded as a separate subspecies, *bendirei*, are slightly paler than *columbarius*, and often appear intermediate in plumage between *columbarius* and *richardsonii*. *References* Clark and Wheeler (1987), Godfrey (1986), Palmer (1988), Pittaway (1994a), Wheeler and Clark (1995).

Peregrine Falcon (*Falco peregrinus*) (*tundrius* (B) and *anatum* (B) subspecies): The arctic subspecies

tundrius is an uncommon migrant in Pennsylvania. The subspecies *anatum*, which used to be found throughout North America south of the tundra, has been extirpated in eastern North America. However, identification of all Peregrine Falcons in the field in Pennsylvania is very much complicated by re-introduction programs which include individuals of a number of subspecies, including intergrades. *References* Clark and Wheeler (1987), Dunne et al. (1988), Palmer (1988), Wheeler and Clark (1995).

Gyr Falcon (*Falco rusticolus*) (white (D), gray (D), and dark (D) morphs): All three morphs of this arctic species are very rare in Pennsylvania. This species exhibits a continuum of plumages from the palest to the darkest individuals. *References* Clark and Wheeler (1987), Dunne et al. (1988), Palmer (1988), Wheeler and Clark (1995).

Ruffed Grouse (*Bonasa umbellus*) (red (Abr) and gray (Abr) morphs): Both gray and red morphs commonly occur in Pennsylvania. Furthermore, there are two subspecies in Pennsylvania, *umbellus* in the east and *monticola* in the west. The latter subspecies is much richer in coloration (Parkes, personal communication). Also, it is requested that all records of gray morphs be reported to the appropriate county compiler.

Willet (*Catoptrophorus semipalmatus*) (*semipalmatus* (D) and *inornatus* (D) subspecies): There is enough variability within both the coastal Atlantic subspecies *semipalmatus* and the western subspecies *inornatus* to prevent field identification of either subspecies. *References* Hayman et al. (1986), Paulson (1993).

Whimbrel (*Numenius phaeopus*) (*hudsonicus* (C) and *phaeopus* (C) subspecies groups): In addition to the North American subspecies group *hudsonicus*, which occurs as a rare migrant in Pennsylvania, there are records of the extremely rare Old World white-rumped subspecies group *phaeopus* on the Great Lakes. *References* Hayman et al. (1986), Paulson (1993), Rosair and Cottridge (1995).

Short-billed Dowitcher

(*Limnodromus griseus* (*griseus* (A) and *hendersoni* (A) subspecies)): Both the eastern subspecies *griseus* and the interior subspecies *hendersoni* migrate regularly through Pennsylvania, *hendersoni* being far more numerous in western Pennsylvania. Only alternate plumaged adults can be identified in the field. *References* Hayman et al. (1986), Kaufman (1990), Pittaway (1992a), Wilds and Newton (1983), Zimmer (1985).

Pomarine Jaeger (*Stercorarius pomarinus*) (light (D), intermediate (D), and dark (D) morphs): This is a polymorphic arctic species exhibiting a continuum of plumages from light through dark. *References* Enticott and Tipling (1997), Harris et al. (1989), Harrison (1983, 1987), Kaufman (1990), Olsen and Larsson (1997), Pittaway and Burke (1995).

Parasitic Jaeger (*Stercorarius parasiticus*) (light (D), intermediate (D), and dark (D) morphs): This is a polymorphic arctic species exhibiting a continuum of plumages from light through dark. *References* Enticott and Tipling (1997), Harris et al. (1989), Harrison (1983, 1987), Kaufman (1990), Olsen and Larsson (1997).

Mew Gull (*Larus canus*) (*canus* (C) and *brachyrhynchus* (C) subspecies): Both the European subspecies *canus* and the western North American subspecies *brachyrhynchus* occur annually in eastern North America. Only *canus* has been recorded in Pennsylvania. *References* Grant (1986), Harrison (1983), Kwater (1992), Tove (1993).

Herring Gull (*Larus argentatus*) (*smithsonianus* (Abr), *vegae* (C), *argenteus* (D), and *argentatus* (D) subspecies): In addition to the widespread North American subspecies *smithsonianus*, the distinctive eastern Siberian subspecies *vegae* is common in western Alaska. As other east Siberian gull species are showing up more frequently in eastern North America, e. g., Slaty-backed Gull and Black-tailed Gull, with closer examination, *vegae* may also be found in the east. The two European subspecies *argenteus* and *argentatus* have recently been reported from Atlantic Canada, but these two subspecies are probably not safely

distinguished from *smithsonianus* in the field. *References* Enticott and Tipling (1997), Grant (1986).

Iceland Gull (*Larus glaucoides*) (*glaucoides* (D) and *kumlieni* (D) subspecies): Because of extreme variation in the adult wingtip pattern of the North American subspecies *kumlieni*, in addition to variation in other minor field marks such as bill size and mantle color, it is not possible to safely identify the Greenland subspecies *glaucoides*. The subspecies *kumlieni* is regular in the northeast US, and there are specimens of the extremely rare *glaucoides* from as close as Ontario. *References* Enticott and Tipling (1997), Godfrey (1986), Grant (1986), Harris et al. (1989), Harrison (1983, 1987), Pittaway (1992b), Zimmer (1991).

Lesser Black-backed Gull (*Larus fuscus*) (*graellsii* (D) and *intermedius* (D) subspecies): Most records of this species in North America are of the west European subspecies *graellsii*. There are also several North American records of the darker mantled southern Scandinavian subspecies *intermedius*. However, extensive intergradation between these two subspecies takes place. *References* Grant (1986), Harrison (1983), Post and Lewis (1995a,b).

Eastern Screech-Owl (*Otus asio*) (red (Bbr), brown (Bbr), and gray (Bbr) morphs): In Pennsylvania, it seems that the brown morph is just slightly browner in color than the grey morph (Parkes, personal communication). However, in other parts of this species' range, there is a continuum of red, through brown (intermediate), to gray morphs. The brown morph is much less common than the other two morphs. *References* Kaufman, (1990), Pittaway (1995b).

Great Horned Owl (*Bubo virginianus*) (*virginianus* (Bbr) and *heterocnemis* (D) subspecies): The subspecies *virginianus* is a common permanent resident in Pennsylvania. The subspecies *heterocnemis* of eastern Canada has been recorded in the northeast US, including Ohio, but not in Pennsylvania (Parkes, personal communication). In general, *heterocnemis* is noticeably darker than *virginianus*, but the *heterocnemis*

population from northern Cape Breton Island is intermediate in plumage between the two subspecies. *References* Godfrey (1986), Peterson (1947), Pittaway (1993b).

Common Nighthawk (*Chordeiles minor*) (*minor* (Bbr), *chapmani* (D), and *sennetti* (D) subspecies): The common nesting subspecies of Pennsylvania is *minor*. The western Great Plains subspecies *sennetti* is grayer and much paler than *minor*. However, field identification of *sennetti* is probably not possible because of the intermediate plumaged subspecies *chapmani* of the eastern Great Plains. Given that *sennetti* has been recorded in Kentucky, it seems plausible for *sennetti* to occur occasionally in Pennsylvania. *References* Godfrey (1986), Mengel (1965).

Northern Flicker (*Colaptes auratus*) (*auratus* (Bbr) and *cafer* (D) subspecies groups): Individuals of the *auratus* subspecies group (Yellow-shafted Flicker) commonly nest in Pennsylvania. Both individuals of the western *cafer* subspecies group (Red-shafted Flicker) and *auratus/cafer* intergrades occur rarely in the northeast US. However, as the intergrade zone is so extensive, with individuals showing a continuum of plumages between *auratus* and *cafer*, it is probably impossible to identify any *cafer* with complete confidence. *References* Short (1982), Winkler et al. (1995).

Horned Lark (*Eremophila alpestris*) (*alpestris* (B), *praticola* (Bbr), and *hoyti* (D) subspecies): The common nesting subspecies in Pennsylvania is *praticola*. This subspecies also winters in Pennsylvania, and is joined by the eastern Canadian subspecies *alpestris*. Both subspecies exhibit extreme variability to the extent that neither subspecies can be identified in the field (see Mengel 1965). Furthermore, the central Canadian subspecies *hoyti*, which is on average intermediate in plumage between *praticola* and *alpestris*, has been recorded in the northeast US. *References* Mengel (1965), Pittaway (1994b). *References* Peterson (1947), Pittaway (1994b).

House Wren (*Troglodytes aedon*) (*aedon* (Bbr) and *parkmanii* (D) subspecies): There is some evidence of

intergradation between the eastern *aedon* and *parkmanii*. The subspecies *parkmanii* nests as far east as Michigan and central Ontario and has been recorded wintering in several states in the southeast US, so it is certainly possible for *parkmanii* to migrate through Pennsylvania. *References* Godfrey (1986), Mengel (1965).

Winter Wren (*Troglodytes troglodytes*) (*hiemalis* (Bbr), *pullus* (D), and *pacificus* (D) subspecies): The subspecies *hiemalis* nests over most of southern Canada and parts of the northeast US, including Pennsylvania. It is not separable in the field from the subspecies *pullus* of the southern Appalachians. The subspecies *pacificus*, which nests from southern Alaska south to Oregon, is darker and less barred than the previous two subspecies. However, *pacificus* is highly variable and may itself be comprised of several subspecies. This subspecies has been recorded on the plains of eastern Colorado, and there is a recent report from the northeast US. *References* Godfrey (1986), Mengel (1965), Phillips (1986).

Northern Wheatear (*Oenanthe oenanthe*) (*leucorhoa* (D) and *oenanthe* (D) subspecies): Most records of this species in the northeast US correspond to the subspecies *leucorhoa* which nests in eastern Arctic Canada, Greenland, and Iceland. However, the subspecies *oenanthe*, which nests in Alaska and much of the Old World, is a very long-distance migrant and has been reported from California, Colorado, and New York. However, the populations of Northern Wheatear seem to be clinal with increasing brightness in adult males from *oenanthe* in the Faroes, to intermediate individuals of the subspecies *leucorhoa* in Iceland, and then to the brightest individuals in Greenland and Canada. Furthermore, these populations of Northern Wheatear show extensive individual variability in their plumage. *References* Phillips (1986).

Veery (*Catharus fuscescens*) (*fuliginosa* (B), *fuscescens* (Bbr), and *salicicola* (B) subspecies): The dark reddish brown subspecies *fuliginosa* which breeds in eastern Canada, the slightly paler and redder *fuscescens*

which nests in the northeast including Pennsylvania, and the darker and duller western subspecies *salicicola*, which breeds as close as northwest Ohio, are all too variable and not identifiable in the field. Also, there is clinal variation in plumage color. *References* Godfrey (1986), Mengel (1965), Phillips (1986), Zimmer (1985).

American Robin (*Turdus migratorius*) (*migratorius* (Bbr) and *nigrideus* (B) subspecies): The subspecies *nigrideus* of Newfoundland and eastern Quebec is on average darker than the subspecies *migratorius* of much of Canada and the eastern US. The winter range of *nigrideus* does include the eastern US (there is a Pennsylvania specimen —Parkes, personal communication), but because of extensive variability within both *nigrideus* and *migratorius*, these two subspecies are not safely separable in the field (see Mengel, 1965). *References* Mengel (1965), Phillips (1991).

Blue-headed Vireo (*Vireo solitarius*) (*solitarius* (Bbr) and *alticola* (D) subspecies): The main differences between the subspecies *solitarius* of the northeastern US and Canada, and *alticola* of the southern Appalachians, is that some adult males of the latter subspecies tend to have a slate gray rather than a green back. However, most *alticola* do show various amounts of green color to their backs, complicating subspecific identification in the field. *References* Heindel (1996), Phillips (1991).

Warbling Vireo (*Vireo gilvus*) (*eastern* (Bbr) and *western* (D) subspecies): The subspecies *gilvus* nests in the northeast US and eastern and central Canada. Western populations are comprised of several subspecies. Intergrades seem to occur, and the differences between *gilvus* and the western populations are subtle and sufficiently variable such that there is no single field mark that is completely reliable for identification. However, there are differences in the songs of the two populations. Although there are no records of western individuals in the northeast US, given that western individuals are long distance migrants, it seems plausible that some individuals migrate much farther eastward, but are not observed because of the similarities between eastern and

western populations. *References* Phillips (1991).

Orange-crowned Warbler (*Vermivora celata*) (*celata* (B), *orestera* (D), and *lutescens* (D) subspecies): The dull subspecies *celata* of central Alaska and much of Canada migrates through Pennsylvania. There are two western subspecies that are long distance migrants, *orestera* which breeds in the western mountains, and *lutescens* of the west coast. *Lutescens* is the brightest subspecies, and *orestera* is slightly brighter than *celata*. There have been reports of bright individuals from Pennsylvania. *References* Curson et al. (1994), Dunn and Garrett (1997), Godfrey (1986), Pyle et al. (1987).

Nashville Warbler (*Vermivora ruficapilla*) (*ruficapilla* (Bbr) and *ridgwayi* (D) subspecies): Adult males of the subspecies *ridgwayi* of the west coast are much whiter on their underparts and have a brighter rump than those of the eastern subspecies *ruficapilla*. Also, *ridgwayi* has been recorded in Oklahoma and on the eastern plains of Colorado. Given that there are records for various species of western warblers in the east, e.g., Townsend's, Hermit, Black-throated Gray and Virginia's Warblers, it certainly wouldn't be surprising if *ridgwayi* occasionally occurs in the east too. However, the above differences between the two subspecies are somewhat slight. *References* Curson et al. (1994), Dunn and Garrett (1997).

Yellow Warbler (*Dendroica petechia*) (*aestiva* (Bbr), *annicola* (B), and *rubiginosa* (D) subspecies): Two subspecies can commonly be found in Pennsylvania, *aestiva* which breeds in Pennsylvania, and *annicola* which nests throughout much of Canada and migrates throughout Pennsylvania. Also, there are specimen records of the northwest subspecies *rubiginosa* in Pennsylvania (see Parkes, 1968), but there are no specimen records from the western populations of *annicola*, sometimes referred to as two additional subspecies *banksi* and *parkesi* (Parkes, personal communication). Because of individual variation and clinal variation within *annicola*, it is probably not possible to identify individuals to subspecies in the field. *References* Parkes (1968),

Curson et al. (1994), Dunn and Garrett (1997), Feldstein (1994), Godfrey (1986).

Black-throated Blue Warbler (*Dendroica caerulescens*) (*caerulescens* (Bbr) and *cairnsi* (Bbr?) subspecies): Males of the two subspecies, *caerulescens* of eastern Canada and the northeast US, and *cairnsi* of the southern Appalachians, appear quite distinctive. The specimens from southwest Pennsylvania closely resemble *cairnsi*, but since individuals closely matching both subspecies occur at the same locations throughout the state, the subspecific identity of nesting Black-throated Blue Warbler in southwest Pennsylvania remains unresolved (Parkes, personal communication). *References* Curson et al. (1994), Dunn and Garrett (1997), Mengel (1965).

Yellow-rumped Warbler (*Dendroica coronata*) (*coronata* (Abr) and *auduboni* (C) subspecies groups): The northern and eastern populations make up the *coronata* subspecies group (Myrtle Warbler), and the western populations comprise the *auduboni* subspecies group (Audubon's Warbler). There are many records of *auduboni* from the northeast US, and some from Pennsylvania, but one should also be aware of intergrades, which are rare. An additional complication is that some *coronata* show a few of the field marks of *auduboni*. Nevertheless, brightly plumaged adults of either subspecies group are quite distinctive. *References* Curson et al. (1994), DeBenedictis (1982), Dunn and Garrett (1997), Godfrey (1986), Kaufman (1990), Pyle et al. (1987).

Yellow-throated Warbler (*Dendroica dominica*) (*dominica* (D) and *albilora* (Bbr) subspecies): The subspecies *albilora* nests in Pennsylvania and *dominica* has been reported from Pennsylvania. Most *dominica* (*albilora*) have yellow (white) lores, but some individuals occur with reversed color lores, i.e., some *dominica* have pale yellow lores that would appear white in the field, and some *albilora* have a yellowish tinge to the lores. *References* Curson et al. (1994), Dunn and Garrett (1997), Mengel (1965).

Palm Warbler (*Dendroica palmarum*) (*palmarum* (A) and *hupochrysea* (A)

subspecies): These two subspecies, *hypochrysea*, which nests in eastern Canada and New England, and *palmarum* which nests in central and western Canada, are very distinctive. Both subspecies migrate through Pennsylvania, although the majority of *hypochrysea* are seen in eastern Pennsylvania. There is a narrow intergrade zone in Quebec east of the Ontario/Quebec border. Also, it is requested that all records of *hypochrysea* be reported to the appropriate county compiler. *References* Curson et al. (1994), Dunn and Garrett (1997), Kwater (1995), Pittaway (1995a).

Savannah Sparrow (*Passerculus sandwichensis*) (*princeps* (C) and *sandwichensis* (Abr) subspecies groups): Individuals of the subspecies group *princeps* (Ipswich Sparrow), breed on Sable Island, Nova Scotia, and can be readily distinguished from individuals of the widespread *sandwichensis* group. Within the *sandwichensis* group, the breeding subspecies in Pennsylvania is *mediogriseus*, and there is a specimen of the dark, heavily streaked subspecies *labradorius* which nests in northeastern Canada (Parkes, personal communication). Also, there are specimen records (Parkes, personal communication) from eastern Ohio of another dark subspecies, *oblitus*, which breeds as close to Pennsylvania as Michigan. However, *labradorius* and *oblitus* are sufficiently similar to *mediogriseus* such that identification must be in-hand. There are no records of *princeps* in Pennsylvania, as this subspecies migrates and winters along the Atlantic coast. However, as there are a few records of individuals some distance inland, it is remotely possible that *princeps* could someday be found in extreme eastern Pennsylvania. *References* Byers et al. (1995), Godfrey (1986), Rising (1996).

Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni*) (*nelsoni* (D), *alterus* (D), and *subvirgatus* (D) subspecies): The subspecies *nelsoni* of west-central Canada and *alterus* of the James Bay area both migrate through Pennsylvania and usually cannot be separated in the field. However, the somewhat distinctive subspecies *subvirgatus* of Maine and Atlantic Canada might occasionally occur in

Pennsylvania. One should be very careful when trying to identify subspecies of Nelson's Sharp-tailed Sparrow, as *alterus* often shows plumage characteristics intermediate between *nelsoni* and *subvirgatus*, and *subvirgatus* sometimes hybridizes with the *caudacutus* subspecies of Saltmarsh Sharp-tailed Sparrow. The *caudacutus* Saltmarsh Sharp-tailed Sparrow has been recorded in Pennsylvania. *References* Byers et al. (1995), Parkes (1992), Rising (1996), Sibley (1996).

Fox Sparrow (*Passerella iliaca*) (*iliaca* (A), *zaboria* (D), and western (D) subspecies) (Category D): The northern and reddish subspecies *iliaca* is a regular migrant and winter visitor to Pennsylvania. There are also several specimen records of the darker and grayer subspecies, *zaboria*, which nests in northwestern Canada and Alaska (Parkes, personal communication). However, *zaboria* is not sufficiently distinctive for definitive field identification. There are no records of other subspecies in the state. However, as there is a record of one western subspecies, *altivagans*, in New York State, it is possible that this or other similar subspecies could someday be recorded in Pennsylvania. Also, as there are numerous similar subspecies in western North America, it is questionable as to whether an identification to the subspecies level is possible. *References* Byers et al. (1995), DeBenedictis (1996), Godfrey (1986), Rising (1996).

White-throated Sparrow (*Zonotrichia albicollis*) (white-striped (Bbr) and tan-striped (Bbr) morphs): Both morphs are common in Pennsylvania and also intermediate morphs occur. *References* Byers et al. (1995), Rising (1996).

White-crowned Sparrow (*Zonotrichia leucophrys*) (*leucophrys* (B) and *gambelii* (D) subspecies): The dark-lored subspecies *leucophrys*, which nests in the eastern half of Canada, is a common migrant through Pennsylvania. The pale-lored subspecies *gambelii* nests in western Canada and Alaska and is a rare migrant in Pennsylvania. However, extensive intergradation between these two subspecies occurs and there are also individuals within the

breeding range of *leucophrys* which closely resemble *gambelii*. Thus, it is probably not possible to identify any *gambelii* with complete confidence in the field. *References* Byers et al. (1995), Dunn et al. (1995), Godfrey (1986), Mengel (1965), Rising (1996).

Dark-eyed Junco (*Junco hyemalis*) (*hyemalis* (Abr), *oreganus* (C), *aikeni* (C), *caniceps* (C) subspecies groups, and *mearnsi* (D) subspecies): The subspecies groups *hyemalis*, *oreganus*, *aikeni*, and *caniceps* are each distinctive, although intergrades do exist. The *hyemalis* group, also known as Slate-colored Junco, breeds across Canada into Alaska and south through the Appalachian Mountains. The subspecies groups *oreganus* (Oregon Junco) and *caniceps* (Gray-headed Junco) breed in the west. There are many records, including specimens, of *oreganus* in the northeast. The subspecies group *caniceps* has also been recorded in Ontario. The subspecies group *aikeni*, which nests in the Black Hills of South Dakota has been reported in the east. However, most or perhaps all eastern reports of *aikeni* pertain to *hyemalis*, as the latter subspecies can sometimes have white wingbars, as do typical *aikeni*. Better field marks for *aikeni* include its larger size, paler gray plumage, and more extensively white outer rectrices. There are also records of the seemingly distinctive subspecies *mearnsi* (Pink-sided Junco) in the east (this subspecies is part of the *oreganus* subspecies group), but these could also be intergrades, pale *oreganus*, or *cismontanus* (see below). One particular subspecies within the *hyemalis* group, *cismontanus*, which is a common migrant in Pennsylvania (Parkes, personal communication) appears intermediate in plumage between the *hyemalis* and *oreganus* groups. Because of the resemblance between *cismontanus* and female/immature individuals of the *oreganus* group, only adult males of the *oreganus* group can be identified with confidence in the field. *References* Byers et al. (1995), Godfrey (1986), Mengel (1965), Pittaway (1993c), Rising (1996).

Common Grackle (*Quiscalus quiscula*) (*versicolor* (Bbr) and *stonei* (Bbr) subspecies): The subspecies *versicolor* (Bronzed Grackle) is common

in western Pennsylvania and the subspecies *stonei* (Purple Grackle) is common in eastern Pennsylvania. In migration, both subspecies and intergrades can be found throughout Pennsylvania. *References* Peterson (1947).

Common Redpoll (*Carduelis flammea*) (*flammea* (B) and *rostrata* (D) subspecies): The widespread subspecies *flammea* is a regular winter visitor to Pennsylvania. The larger and darker subspecies *rostrata*, which nests in northeast Canada and Greenland, has been recorded in the northeast US. There is sufficiently large variation in both subspecies such that identification to the subspecies level is probably not possible. *References* Clement et al. (1993), Czaplak (1995), Harris et al. (1989), Pittaway (1992d).

Hoary Redpoll (*Carduelis hornemanni*) (*hornemanni* (D) and *exilipes* (D) subspecies): The subspecies *hornemanni* which nests in northeast Canada and Greenland, and the more widespread subspecies *exilipes*, occur extremely rarely in Pennsylvania. There is tremendous variation in these subspecies to the extent that it is probably impossible to separate these subspecies with complete confidence in the field, although the palest individuals are probably adult male *hornemanni*. *References* Clement et al. (1993), Czaplak (1995), Pittaway (1992c), Shirihai et al. (1996).

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Northern Finches and the Red-breasted Nuthatch in the Pennsylvania Christmas Bird Count

by Nicholas C. Bolgiano

The incursion of northern finches and Red-breasted Nuthatches during the winter of 1997–1998 has excited observers, many of whom see these species infrequently. Although there is a large degree of randomness to when and where these species appear in Pennsylvania, some degree of regularity can be detected from studying observations made over many years. Because of its longevity, the Christmas Bird Count (CBC) is one of our best means for doing this.

This article summarizes the occurrence of northern finches and the Red-breasted Nuthatch (*Sitta canadensis*) during past years of the Pennsylvania CBC. The finch species included in this summary are Pine Grosbeak (*Pinicola enucleator*), Purple Finch (*Carpodacus purpureus*), Red Crossbill (*Loxia curvirostra*), White-winged Crossbill (*Loxia leucoptera*), Common Redpoll (*Carduelis flammea*), Pine Siskin (*Carduelis pinus*), and Evening Grosbeak (*Coccothraustes vespertinus*).

Purple Finches, Red-breasted Nuthatches, and, to a lesser extent, Pine Siskins breed in Pennsylvania (Brauning 1992), but it is likely that many of the individuals of these species observed during winter months in Pennsylvania are nonresidents, as most of their breeding range is north of the state (National Geographic 1987). Hoary Redpoll (*Carduelis hornemanni*) was recorded just one time during the Pennsylvania CBC between 1900 and 1996 and is not included in the summary.

Scientists have previously analyzed CBC reports of these eight species. Bock and Lepthien (1972, 1976) examined continent-wide occurrence patterns for Red-breasted Nuthatches counted in 1950–1970 and for all eight species counted in 1962–1971. They observed that the species tended to irrupt synchronously not only in North America, but circumboreally, and the irruptions in both Europe and North America coincided with years of poor seed production in European high-latitude trees. An “irruption” is a non-annual movement of many individuals,

usually within a relatively short period of time and over a large area. Bock and Lepthien observed that the irruptions tended to occur about every other year though sometimes there were consecutive years of irruptions or two years between irruptions. Widrlechner and Dragula (1984) observed that the California CBC occurrence of Red-breasted Nuthatch and Pine Siskin, but not Red Crossbill or Purple Finch, appeared to be associated with poor cone crops in northwestern North America. Larson and Bock (1986) observed a tendency for synchronous irruptions in the northeastern and northcentral United States of Red-breasted Nuthatch, Common Redpoll, and Pine Siskin during 1901–1920 and 1951–1980, but not during 1921–1950, suggesting that there may also be longer-term cycles to irruptions.

Purple Finch breeding populations have declined in the northeastern United States and southern Canada during recent years, according to Breeding Bird Survey data. Purple Finches may have reduced their breeding range as a result of competition with the House Finch (*Carpodacus mexicanus*) (Wootton 1996) as House Finches win most feeding station encounters between the two species (Shedd 1990). Though a decline of wintering Purple Finches was not noted in 1968–1983 CBC data from eastern North America (Wootton 1987), CBC and Audubon Field Notes compilers have commented upon the lack of Purple Finches during recent winters.

Species Occurrence

When northern finches arrive in Pennsylvania they often are patchy in distribution, with numbers counted at a site usually being small but occasionally being much higher. For example, there were CBC reports of 248 Pine Grosbeaks at Warren in 1961, 390 White-winged Crossbills at Southeastern Bradford County in 1963, 562 Common Redpolls at Lock Haven in 1971, 1014 Pine Siskins at Reading in 1977, and 1628 Evening Grosbeaks at Lewisburg in 1978. Local

numbers like these can dominate statewide count/hour statistics. The occurrence of a species, as measured by the percentage of sites reporting a species, is a measure of abundance that is not affected by individual numbers at a site, but it does reflect the area occupied by that species. This measure is reported here for all species.

Except for regular reports of Red-breasted Nuthatch, Purple Finch, and Pine Siskin, there were few individuals (a total of 381) of the other five northern finch species reported before 1950. Here, a year refers to the year in which Christmas occurred in the count period. The smaller number of observers and the absence of widespread bird feeding before mid-century were likely important factors behind these fewer records. Therefore, the data reported here are those from 1950 to 1996.

Red-breasted Nuthatch and the seven finch species differed appreciably in their presence: four species, Pine Grosbeak, Red Crossbill, White-winged Crossbill, and Common Redpoll, were infrequent, reported by a mean of 3–14 percent of sites each year, with relatively few individuals; two species, Purple Finch and Evening Grosbeak, were reported, on average, by over half the Pennsylvania sites each year, with the highest numbers of individuals; the Red-breasted Nuthatch was reported, on average, by over half the sites, but with a modest number of individuals; the Pine Siskin was intermediate in both presence and in numbers of individuals (Table 1).

Pine Grosbeaks, Red Crossbills, and White-winged Crossbills were irruptive in years before 1982, according to the CBC data. Until the winter of 1997–98, there had been no substantial irruption of crossbills in the Pennsylvania CBC period after 1981; there remains no irruption of Pine Grosbeaks since 1977. The peak Pine Grosbeak years were 1951, 1954, 1961, when 56% of sites reported it, 1968, 1972, and 1977. Pine Grosbeaks were not detected in 9 of the 47 years. This species often appears in small numbers with 1–30 Pine Grosbeaks

being reported in 28 of the years. The peak Red Crossbill years were in 1963, 1969, and 1972 and the peak White-winged Crossbill years were 1963, 1965, 1977, and 1981. Red Crossbills were not detected in the CBC period during 20 of the 47 years and White-winged Crossbills were not detected 25 years (Figure 1).

Common Redpoll, like Pine Grosbeak and the crossbills, tended to be irruptive relatively infrequently during the Pennsylvania CBC. However, unlike those three species, the Common Redpoll was irruptive between 1982 and the winter of 1997-98. Common Redpoll was reported from 40% or more of sites in 1969, 1975, 1977, and 1993. Common Redpolls showed a slight tendency for irruptions two years apart. The autocorrelation, or correlation between pairs of years, was 0.26 for years two apart, suggesting a biennial pattern, though there was insufficient statistical evidence for this (Figure 1). Common Redpoll is a species that Bock and Larson (1986) had observed to irrupt about every other year.

Three species, Pine Siskin, Red-breasted Nuthatch, and Evening Grosbeak, tended to be reported by many Pennsylvania sites about every other year. Autocorrelations of the percentages of sites reporting each species were highest for years two apart, with statistically significant evidence for all three species. Further, the percentages of sites reporting the three species were correlated, with correlation coefficients of 0.62-0.73 over 1950-1996, implying a tendency for synchronous irruptions. However, the yearly pattern of sites reporting them differed by species.

Pine Siskins were reported by 40% or more of sites in 22 of 47 years, with an autocorrelation for years two apart being 0.32. By this measure, the tendency of Pine Siskins for biennial irruptions was not quite as strong as for Red-breasted Nuthatch or Evening Grosbeak. However, the year to year pattern of Pine Siskin reports didn't change substantially over time as it did for the other two species (Figure 1).

Red-breasted Nuthatches appeared to irrupt about every two years, according to the CBC data, but the pattern changed over time. The autocorrelation for 1950-1996 Red-breasted Nuthatch reports two years

apart was 0.63. The biennial pattern seemed to especially hold for 1950-1968, when the percentage of sites reporting this species alternated low-high for almost all pairs of years. Beginning in 1968, the percentage of sites reporting Red-breasted Nuthatches was higher than 50% each year, though the percentages were somewhat lower for some years, such as 1984 and 1988, than for others (Figure 1). The increase in sites reporting Red-breasted Nuthatch after 1968 may be partially related to higher total effort since that time (Bolgiano 1997), making it more likely that observers came in contact with this species. However, this species is thought to be expanding its range southward in eastern North America (National Geographic Society 1987) and birds from nearby breeding areas may have become increasingly frequent.

Evening Grosbeaks also irrupted frequently, according to the CBC data, but like Red-breasted Nuthatches, the percentage of reporting sites exhibited a variable pattern over time. The percentage of sites reporting this species alternated low-high for most pairs of years during 1950-1967. However, during 1968-1987, this species was reported more frequently during the CBC than previously, with reports from over half the sites all but one year. During 1950-1987, the pattern of sites reporting Evening Grosbeak and Red-breasted Nuthatch was very similar, with a correlation of 0.89. Since 1987, it appears that the pattern of Evening Grosbeak occurrence has reverted to occurring at over half the sites about every other year, unlike Red-breasted Nuthatch (Figure 1). The autocorrelation of Evening Grosbeaks reports two years apart was 0.48.

Evening Grosbeak was the most counted of the eight species over the 97 years of the Pennsylvania CBC. But it was only reported in the CBC four years prior to 1945 when it began to be reported more regularly. Forbush (1929) noted that until the winter of 1889-1990 the range of Evening Grosbeaks did not extend east of the Great Lakes. This range expansion continued in subsequent years (Bent 1968) so perhaps the lack of early Pennsylvania reports was related to few Evening Grosbeaks breeding in eastern Canada.

Reports of Purple Finches did not vary much from one year to the next. It was reported from an average of 51% of sites during 1950-1970, which increased to an average of 79% of sites during 1971-1996, though this percentage dipped during some years in the 1990s (Figure 1). As with Red-breasted Nuthatch, the increase in sites reporting Purple Finch after 1970 could be related to higher participant effort in the Pennsylvania CBC or it may represent an increase in population and/or a wider species distribution.

Regional Patterns

There was statistically significant evidence, by Chi-Square tests, of regional differences in the occurrence of all species except Red Crossbill. The ornithological regions used were defined by Bolgiano (1997), except that the Northwest region was combined with the Western Allegheny region, giving six regions: Lower Piedmont, Upper Piedmont-Great Valley, Ridge and Valley, Northeast Allegheny, Southwest, and Western Allegheny-Northwest. Pine Grosbeaks, Red and White-winged crossbills, and Common Redpolls were reported at higher rates from the Northeast Allegheny region than from any other region. Evening Grosbeaks were reported at the highest rates by Ridge and Valley and Northeast Allegheny sites. Pine Siskins and Red-breasted Nuthatches reports were reported fairly evenly from the different regions with an exception of the Southwest region. Southwest region sites tended to report northern finches and Red-breasted Nuthatches at lower rates than sites from other regions. The highest rates of Purple Finch reports were from southeastern Pennsylvania and the Ridge and Valley (Table 2).

Regional patterns were apparent in counts/hour for the two most frequently recorded finches, Purple Finch and Evening Grosbeak. The effort categories used were foot and feeder, the modes thought to be most used in observing finches. The highest Purple Finch counts/hour were from the Piedmont, Ridge and Valley, and Northeast Allegheny regions as compared to western Pennsylvania. The highest Evening Grosbeak counts/hour were from the more mountainous regions of the Ridge and

Valley, Northeast Allegheny, and Western Allegheny-Northwest, as compared to the Piedmont or the Southwest regions. Reported counts/hour since about 1988 were generally lower in the Ridge and Valley region for both species and in the Piedmont regions for Purple Finches than in the previous two decades. Spikes in Purple Finch counts/hour, particularly in southeastern Pennsylvania where there are fewer breeding records of this species, may indicate, unlike the occurrence data, that this species has been irruptive in the past. These spikes are the accumulation of large counts over multiple sites rather than single locations.

Summary

The Pennsylvania CBC data suggest that northern finches have appeared in Pennsylvania according to temporal and spatial patterns. Four species, Pine Grosbeak, Red Crossbill, White-winged Crossbill, and Common Redpoll irrupted infrequently. Three species, Red-breasted Nuthatch, Pine Siskin, and Evening Grosbeak tended to irrupt in a biennial fashion, though Evening Grosbeaks were more frequently reported during 1968-1987 than before or since and Red-breasted Nuthatches have been observed at higher frequency since about 1968. Purple Finches were more frequently reported during 1970-1987 than previously, but they, like Evening Grosbeaks, may have recently declined in some regions during the CBC period.

It should be kept in mind that substantial irruptions may occur without the species being reported during the CBC. For example, Red-breasted Nuthatches and Evening Grosbeaks may pass through Pennsylvania before the CBC period and Common Redpolls may not arrive until after the CBC period is over.

The CBC patterns from Pennsylvania are consistent in part with previous observations made from North American CBC data. Though Bock and Lepthien (1976) observed a tendency for all eight species to irrupt synchronously during 1962-1971, regularly patterned irruptions of Pine Grosbeak or the two crossbills have not been the norm during the Pennsylvania CBC history. Griscom

(1923) noted that Pine Grosbeaks irrupted to the New York City area in 10 of 96 years prior to 1923, without a regular interval to the flights, which is similar to the Pennsylvania pattern. Pine Grosbeaks feed upon a variety of seeds, fruits, and buds (Bent 1968). Red and White-winged crossbills are known as nomadic searchers of good cone crops, and irruptions from boreal forests can be considered as extensions of this wandering behavior (Adkisson 1996; Benkman 1992).

The percentage of sites reporting a species may need to be viewed carefully as a measure of frequency. This value will be affected by observer numbers because the likelihood of detecting a species increases with more observers. Before 1970, at most 37% of the sites were sampled with 50 or more party hours. After 1973, 63% or more of the sites were sampled with 50 or more party hours, with this level rising to 83% in 1996. If the percentage of sites reporting a species decreases with increasing participation, such as occurs for Pine Grosbeak and the two crossbills, the relative decrease in species frequency may be more pronounced than is indicated.

Red-breasted Nuthatch, Evening Grosbeak, Pine Siskin, and possibly Common Redpoll tend to display biennial irruptions in Pennsylvania, similar to observations made over wider regions (Bock and Lepthien 1976; Bock and Larson 1986). The relative unpredictability of Common Redpolls may be related to the location of their breeding range and their hardiness. Perhaps Common Redpolls do not reach Pennsylvania as often as the other three species because their breeding range is the most northerly one, where boreal forest meets tundra (Bent 1968). All four of these species feed upon conifer seeds with Red-breasted Nuthatch especially favoring them. Common Redpolls and Pine Siskins also feed upon seeds of birches, alders, and willows and Evening Grosbeaks often prefer seeds and buds of maples (Bent 1948, 1968). Bock and Lepthien (1976) cite several sources for the phenomenon of some northern trees, including spruces and birches, producing good seed crops about every other year. These four species likely appear in large numbers in Pennsylvania when the seed crops of these trees are poor.

Purple Finches did not exhibit a biennial pattern of occurrence in the Pennsylvania CBC, unlike what often happens in southcentral and southeastern North America (Wootton 1996). Because this is a widespread species in Pennsylvania during early winter, irruptions may not be detected by examining the percentage of reporting sites. The CBC pattern for Purple Finches was similar to the pattern for Evening Grosbeaks in that more frequent occurrence and higher counts/hour were observed during the 1968-1987 period than before and less frequent occurrence and smaller counts/hour were observed since then. Both species are known to feed heavily upon spruce budworm caterpillars (Bent 1968; Speirs 1985; Crawford and Jennings 1989). Spruce budworms have oscillated in eastern Canada with peaks approximately 35 years apart. A peak occurred during the late 1960's to the mid-1970's in many regions of eastern Canada (Royama 1984) and it is possible that the numbers of Purple Finches and Evening Grosbeaks observed in Pennsylvania were somehow related to the budworm cycle. Subsequent sufficient northern supplies of the seeds, buds, and fruits of trees, grasses, and herbaceous plants that both species feed upon (Bent 1968) may have contributed to lower numbers flying southward during recent years. It is also possible that the recent low Purple Finch numbers may be related to competition with House Finches.

The CBC has provided insight into Red-breasted Nuthatch and northern finch patterns of occurrence during past Pennsylvania winters, but much remains unknown about these birds. The observed regional differences are probably indicative of habitat preferences and local food availability, but they may also reflect differences in breeding grounds and flight paths, about which we know relatively little. As we observe them, we will continue to enjoy and learn about these unique species.

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Table 1. Summary of northern finch and Red-breasted Nuthatch occurrence in the Pennsylvania CBC, 1950–1996.

Species	%Sites Reporting		Total Number	
	mean	range	mean	range
Pine Grosbeak	9	0-56	45	0-655
Red Crossbill	3	0-18	15	0-120
White-winged Crossbill	3	0-35	23	0-552
Common Redpoll	14	0-62	158	0-1900
Pine Siskin	37	4-88	574	50-6569
Red-breasted Nuthatch	63	0-97	242	0-1497
Evening Grosbeak	54	0-100	1980	0-11271
Purple Finch	66	21-96	916	14-5878

Table 2. Percentage of sites reporting northern finches and Red-breasted Nuthatches by region.

Species	LoP	UpP	Region			
			R&V	NE	SW	WAI
Pine Grosbeak	2	9	12	17	2	5
Red Crossbill	4	3	2	6	3	2
White-winged Crossbill	3	3	2	7	2	2
Common Redpoll	8	14	19	25	8	17
Pine Siskin	41	49	45	43	24	36
Red-breasted Nuthatch	77	72	68	70	51	66
Evening Grosbeak	43	59	67	67	37	57
Purple Finch	84	81	78	66	35	58

Regions: LoP=Lower Piedmont, UpP=Upper Piedmont-Great Valley, R&V=Ridge & Valley, NE=Northeast Allegheny, SW=Southwest, WAI=Western Allegheny-Northwest

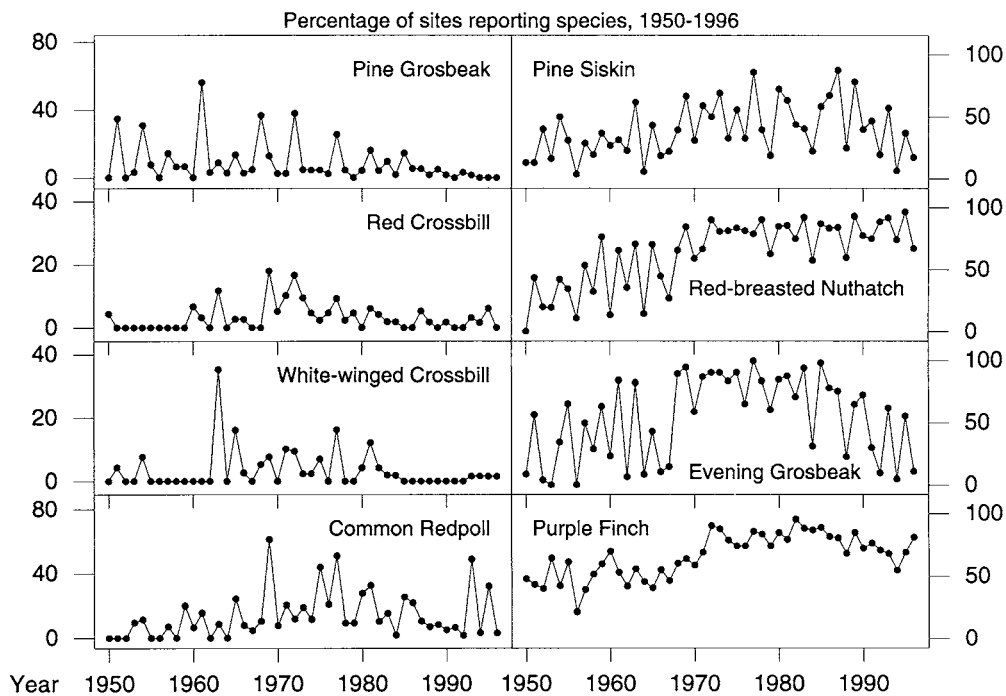


Figure 1. Percentage of sites reporting northern finches and Red-breasted Nuthatches in the Pennsylvania CBC, 1950-1996. Note the difference in percentage scales.

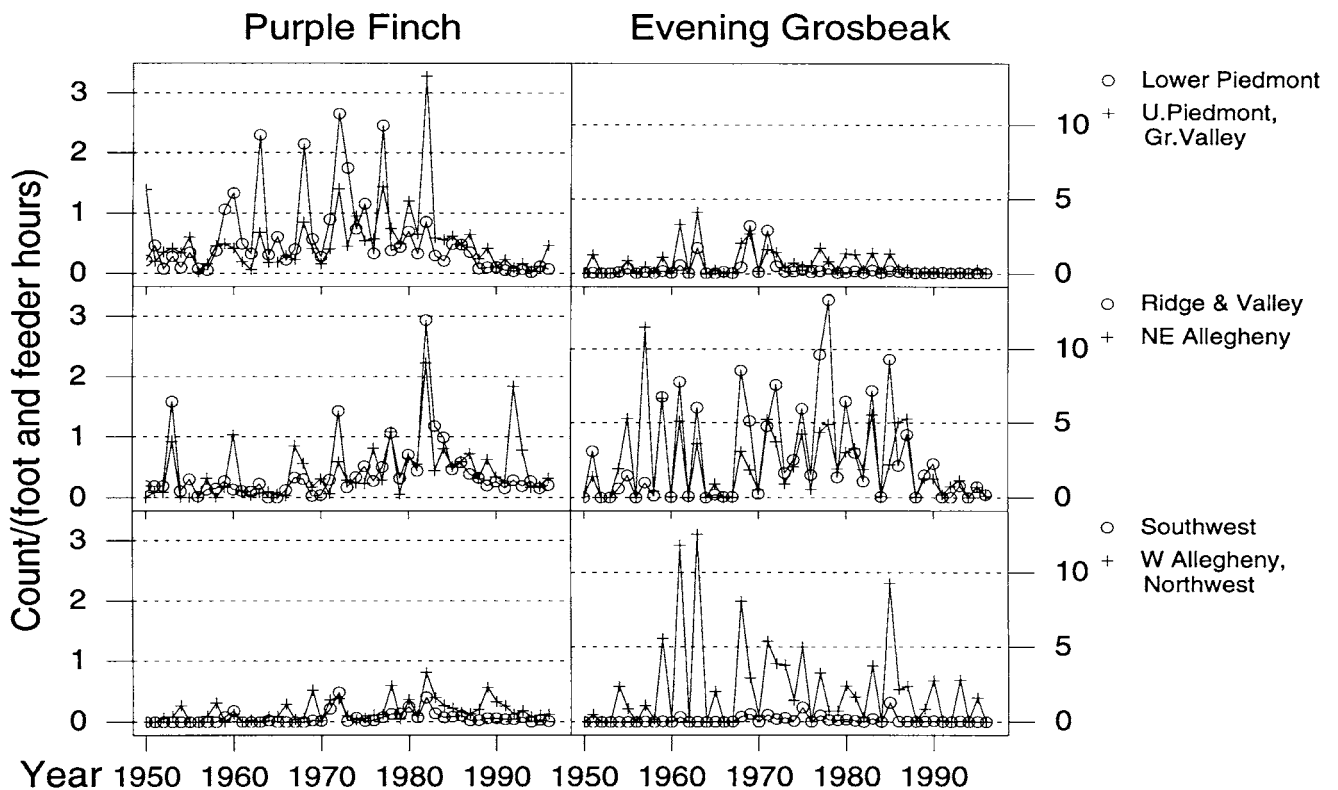


Figure 2. Pennsylvania CBC Purple Finch and Evening Grosbeak counts/ hours from the six ornithological regions.

The 1997-1998 Christmas Bird Count in Pennsylvania

by Ted Floyd

This is a summary and analysis of the 98th annual (1997-1998) Christmas Bird Count (CBC) in Pennsylvania. A total of 161 bird species (plus 3 count-week species) and 1,249,336 individual birds were tallied on the 67 Pennsylvania counts for which I received reports. Highlights included a widespread "superflight" of winter finches, good numbers of lingering passerines, a hodgepodge of western vagrants, and a better-than-average showing by seabirds and other aquatic species.

Fire and Ice:

Southern Stragglers and Winter Finches

For mid-latitude inland Christmas Bird Count participants, such as ourselves, there is something of an identity crisis. Is the CBC all about looking for lingering warblers and waterfowl in little patches of suitable habitat? Or is it more about scouting the vast Pennsylvania forests for northern finches and owls? Do we pray for a long stretch of mild weather before the count period? Or is it better to get a snow storm or cold snap, right before count day? Should a compiler schedule the CBC a week before Christmas, when the prospects are best for stragglers? Or after the New Year, when there is a better chance for boreal or arctic species? On most counts in Pennsylvania, and in most years, we get *either* fair-weather southern offerings *or* a more wintry northern sampling.

But not this year! Instead, we got record numbers of boreal species *and* a very respectable showing by stragglers.

Perhaps the top story was a long-awaited invasion by winter finches. The invasion was sufficiently large to be considered a "superflight." according to Steve Kelling of the Cornell Laboratory of Ornithology. (The last superflight occurred fifteen years ago, during the winter of 1982-1983.) This year **Red Crossbills** were recorded on 12 counts, and **White-winged Crossbills** on 16. Altogether, 1920 crossbills were recorded on 21 Pa. counts. To get a feel for the magnitude of this phenomenon, consider that a grand total of 32 crossbills had been recorded on all Pa. counts during the five-year period preceding the recent count. Also widespread and abundant this year was the **Common Redpoll**, of which 1580 individuals were found on 21 counts. **Purple Finches**, **Pine Siskins**, and **Evening Grosbeaks**, found annually but usually in small numbers, totaled 740, 937, and 1421 individuals, respectively (and respectably!). Meanwhile, the only Pine Grosbeak was a count week bird at Hamburg.

Other northern passerines made headlines, too. Of particular interest was a **Red-breasted Nuthatch** irruption, which Kelling considered to be part of this year's superflight. This year, a well-above-average 1090 individuals were recorded on 59 Pa. counts. Other notable northerners that were represented on Pa. counts included: **American Pipit** (143 birds on 4 counts), **Northern Shrike** (6 birds on 4 counts), **Lapland Longspur** (7 birds on 6 counts), and **Snow Bunting** (360 birds on 11 counts).

Meanwhile, stragglers managed to hang on in better than usual numbers, all across the state. For example, 34 **Eastern Phoebes** were found on 20 counts, and 82 **Gray**

Catbirds were found on 31 counts. Both species were considerably more widespread and abundant than in recent years. Another unusually common species was the **Myrtle Warbler**, of which 1984 individuals were found this year. Other lingering species included: **House Wren** (14 birds on 12 counts), **Marsh Wren** (1 bird at Glenolden), **Ruby-crowned Kinglet** (156 birds on 38 counts), **Hermit Thrush** (260 birds on 39 counts), **Brown Thrasher** (3 birds on 3 counts), **Loggerhead Shrike** (2 birds on 2 counts), **Blue-headed Vireo** (2 birds on 2 counts), Orange-crowned Warbler (1 bird during the Lancaster count week), **Pine Warbler** (6 birds on 5 counts), **Palm Warbler** (2 birds at Lancaster), **Common Yellowthroat** (6 birds on 6 counts), and **Vesper Sparrow** (2 birds on 2 counts).

Western Vagrants

Western strays were better represented this year than in most. A female *Selasphorus* hummingbird at Bushy Run was captured and positively identified as a **Rufous Hummingbird**. A **Say's Phoebe** was an excellent find at Newville. Unidentified *Empidonax* and *Myiarchus* flycatchers at Southern Lancaster presumably came from the western United States. It was remarkable to find two (!) **Western Tanagers** at Upper Bucks. And a pair of **Yellow-headed Blackbirds** consorted with the immense blackbird flocks in Southern Lancaster.

Seabirds and Other Aquatic Species

Red-throated Loon, Horned Grebe, Red-necked Grebe, Greater Scaup, Oldsquaw, White-winged Scoter... Sound like a day on the shore during the fall seabird flight? Actually, all of these species were recorded on the Indiana CBC, hundreds of miles from the shore, and nowhere near even the major river systems in Pennsylvania.

Seabirds and other aquatic species made a better-than-average showing this year, on the Indiana CBC and all across the Commonwealth. Here is a sampling of some species that are more typically found in coastal situations to our east and south: **Red-throated Loon** (2 birds on 2 counts), **Common Loon** (21 birds on 10 counts), **Horned Grebe** (13 birds on 9 counts), **Red-necked Grebe** (1 bird at Indiana), **Great Cormorant** (22 birds on 3 counts), **American Bittern** (1 bird at Newville), **Great Egret** (7 birds on 3 counts), **Green Heron** (2 birds on 2 counts), **Black-crowned Night-Heron** (8 birds on 2 counts), **Greater White-fronted Goose** (3 birds on 3 counts), **Snow Goose** (32555 birds on 13 counts), **Ross's Goose** (2 birds at Southern Lancaster), **Blue-winged Teal** (1 bird at Lewisburg), **Greater Scaup** (45 birds on 7 counts), **Oldsquaw** (14 birds on 5 counts), **Black Scoter** (19 birds at DuBois), **Surf Scoter** (6 birds on 2 counts), **White-winged Scoter** (1 bird at Indiana), **Least Sandpiper** (1 bird at Bernville), **Dunlin** (1 bird at Erie), **Little Gull** (1 bird at Erie), **Bonaparte's Gull** (967 birds on 7 counts), **Iceland Gull** (7 birds on 4 counts), **Lesser Black-backed Gull** (33 birds on 5 counts), and **Glaucous Gull** (5 birds on 3 counts).

Hawks and Owls

Diurnal raptors (*sensu vetere*) numbered 14 species, which is about average. However, numbers of several species were encouragingly high. **Black Vultures** were in their highest numbers (675) and were recorded on the largest number of counts (18) since *Pennsylvania Birds* began publishing Pennsylvania CBC records in 1992-1993. **Turkey Vultures** also were recorded on a record number of counts (25), and the **Red-shouldered Hawk** total (94 birds) was nearly twice the previous record of 51 birds during the 1992-1993 CBC. A good 13 **Merlins** on 9 counts (record high numbers of individuals and counts) were highlighted by an intriguing roost of 4 birds at Pittsburgh. Noteworthy lingering raptors included single **Ospreys** on 2 counts, and a single **Broad-winged Hawk** at Harrisburg. A Golden Eagle during the Hamburg count week was not included among the 14 species.

It was an unremarkable season for owls. **Barn Owls** continued extremely scarce, as only 9 birds were found on 4 counts. **Short-eared Owls** (6 birds on 4 counts) and **Northern Saw-whet Owls** (7 birds on 6 counts) also were scarce, but the 19 **Long-eared Owls** on 8 counts were about average. Rounding out the owls were 856 **Eastern Screech-Owls** on 52 counts, 747 **Great Horned Owls** on 61 counts, and 43 **Barred Owls** on 24 counts.

Intriguing Commoners

Arguably the most interesting, and certainly the most valuable, aspect of the CBC is the perspective it provides on widespread and abundant species.

One of Pennsylvania's most fascinating ornithological phenomena is the *Poecile* chickadee contact zone along the state's southern tier counties. The CBC offers a potentially powerful tool for understanding and documenting the apparent northward movement of the contact zone, but unfortunately birders along the contact zone continue to be very careless. On the 26 counts that recorded both chickadee species, only 605 of the 9424 chickadees (6.4%) went unidentified. And when the three southwesternmost counts (Pittsburgh, Clarksville, and Washington) are excluded from the analysis of contact zone counts, only 78 of the remaining 8082 chickadees (<1.0%) were unidentified. (For various reasons, birders in southwestern Pennsylvania have tended over the years to be more cautious about chickadee identification than have birders elsewhere in the Commonwealth.) It is unlikely that observers really can identify contact zone *Poecile* chickadees with >99% accuracy, and it is therefore difficult to use Pennsylvania CBC data for studying the intriguing dynamic nature of the contact zone.

Fortunately, **Carolina Wrens** are easier to identify than *Poecile* chickadees, and Pennsylvania CBC data continue to provide fascinating insight into the periodic population crashes and subsequent slow recoveries of this species. This year 1777 Carolina Wrens were recorded on Pennsylvania counts. This figure is up somewhat from last year's 1165 Carolina Wrens but still far below the recent peak of 4356 Carolina Wrens during the 1992-1993 CBC season.

Of course, many species show sporadic population swings, but the situation with the **American Goldfinch** is

worth remarking on. During the past five years, American Goldfinch numbers have averaged just below 8000 birds per year. But this year 15,780 American Goldfinches were found on Pennsylvania counts. In terms of median abundance, American Goldfinch was the 10th most numerous species in Pennsylvania this year. Were goldfinches, not normally thought of as irruptive species, part of this year's "superflight?" And were any of them undetected Lesser Goldfinches?

Hits and Misses

This year we were fortunate to have many more "hits" (species recorded on the 1997-1998 CBC, but only on two or fewer of the past five count years) than "misses" (species missed on the 1997-1998 CBC, but recorded on three or more of the past five counts years). Here is the break down:

<u>Hits</u>	<u>Misses</u>
American Bittern	Eurasian Wigeon
Great Egret	Common Moorhen
Green Heron	Laughing Gull
Greater White-fronted Goose	Dickcissel
Ross's Goose	Lincoln's Sparrow
Blue-winged Teal	
Black Scoter	
Surf Scoter	
Least Sandpiper	
Dunlin	
Little Gull	
Rufous Hummingbird	
Empidonax, sp.	
Say's Phoebe	
Myiarchus, sp.	
Blue-headed Vireo	
Western Tanager	

Saves and Bell-Ringers

Even less meaningful (but no less entertaining) than the analysis of "Hits and Misses" is the following enumeration of "Saves" (species seen on only one count) and "Bell-Ringers" (species seen on every count).

Southern Lancaster County led the way with 4 saves, followed by Erie and Indiana and Newville with 2 saves each. Counts with single saves included Bernville, Bushy Run, DuBois, Glenolden, Harrisburg, Lancaster, Lewisburg, and Upper Bucks. Here are the totals:

<u>Count</u>	<u>Saves</u>
So. Lancaster County	Ross's Goose Empidonax, sp. Myiarchus, sp. Yellow-headed Blackbird
Erie	Dunlin Little Gull
Indiana	Red-necked Grebe White-winged Scoter
Newville	American Bittern Say's Phoebe
Bernville	Least Sandpiper
Bushy Run	Rufous Hummingbird
DuBois	Black Scoter
Glenolden	Marsh Wren
Harrisburg	Broad-winged Hawk
Lancaster	Palm Warbler

Lewisburg Blue-winged Teal
Upper Bucks County Western Tanager

And here is a list of the 11 bell-ringers that were seen on all 67 counts in Pennsylvania

Mourning Dove Northern Cardinal
Downy Woodpecker Dark-eyed Junco
Blue Jay House Finch
American Crow American Goldfinch
White-breasted Nuthatch House Sparrow
European Starling

The Top Counts

How does one determine the best CBC? The one with the most species? The most individuals? The most party hours? I'm not sure, so I've listed the Top 10 in all three categories, plus several other rankings, as follows:

Most species

Southern Lancaster County	109
Elverson	99
Glenolden	99
Lititz	95
Southern Bucks County	94
Upper Bucks County	92
Newville	90
Harrisburg	88
Lancaster	88
Central Bucks County	85

Most individuals

West Chester	139,382
Southern Lancaster County	136,616
Southern Bucks County	88,688
Lancaster	73,873
Bethlehem	51,450
Glenolden	43,411
Lewisburg	40,067
Upper Bucks County	35,113
Lititz	32,735
Lehigh	32,034

Most party hours

Pittsburgh	238
Southern Lancaster County	203
Glenolden	173
Upper Bucks County	161
Lititz	145
West Chester	144
Chambersburg	142
Lehigh	138
Hamburg	130
Bethlehem	129

Most common species (ranked by median abundance)

European Starling	1620
Canada Goose	692
Dark-eyed Junco	685
American Crow	592
Rock Dove	500
Mallard	359
Mourning Dove	285
House Finch	269
House Sparrow	262
American Goldfinch	216

Most common species (ranked by total number of individuals recorded)

European Starling	212,273
Canada Goose	161,493
Common Grackle	150,224
American Crow	88,787
Ring-billed Gull	71,725
Slate-colored Junco	54,172
Mallard	38,851
Rock Dove	37,849
Mourning Dove	34,070
Snow Goose	32,555

Conclusions

It is probably fair to say that the 1997-1998 CBC was one of the great counts in Pennsylvania history. The species total of 161 was one of the highest ever. Moreover, many of the 161 species were in very high numbers. An impressive 71 species were recorded on more counts than in any of the previous five count years. (I am comparing against the previous five years, because this is the sixth year that *Pennsylvania Birds* has been archiving CBC data in Pennsylvania.) Also, 44 species were recorded in greater overall numbers than in any of the previous five count years.

Acknowledgments

I am grateful for technical and logistical support provided by Alan Gregory and Frank Haas. And I am especially grateful to all the CBC compilers, who got their data to me in a timely and thorough fashion.

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APPENDIX 1. MEDIAN ABUNDANCE

For each species I have reported the median abundance, which is not the same statistic as the mean (or arithmetic average) that many readers may be more familiar with. The median, very simply, is the middle or "typical" value of a sample. In any sample, the median is the 50th percentile; half the values are greater than or equal to the median, and half are less than or equal to the median.

The median is an especially good statistic in situations where a few outliers are expected to occur. A good example is the Snow Goose. This species was recorded on only 13 out of 67 counts in Pennsylvania. Clearly, the "typical" count produced zero Snow Geese; and the median abundance is, in fact, zero. In contrast, the mean value (486 Snow Geese per count) is meaningless; it typifies neither the aggregate of all 67 counts nor the 13 counts which reported Snow Geese.

For further reading on the use of medians in avian population studies, please see John Terborgh's very readable and interesting book, *Where Have All the Birds Gone?* (Princeton University Press, 1989)

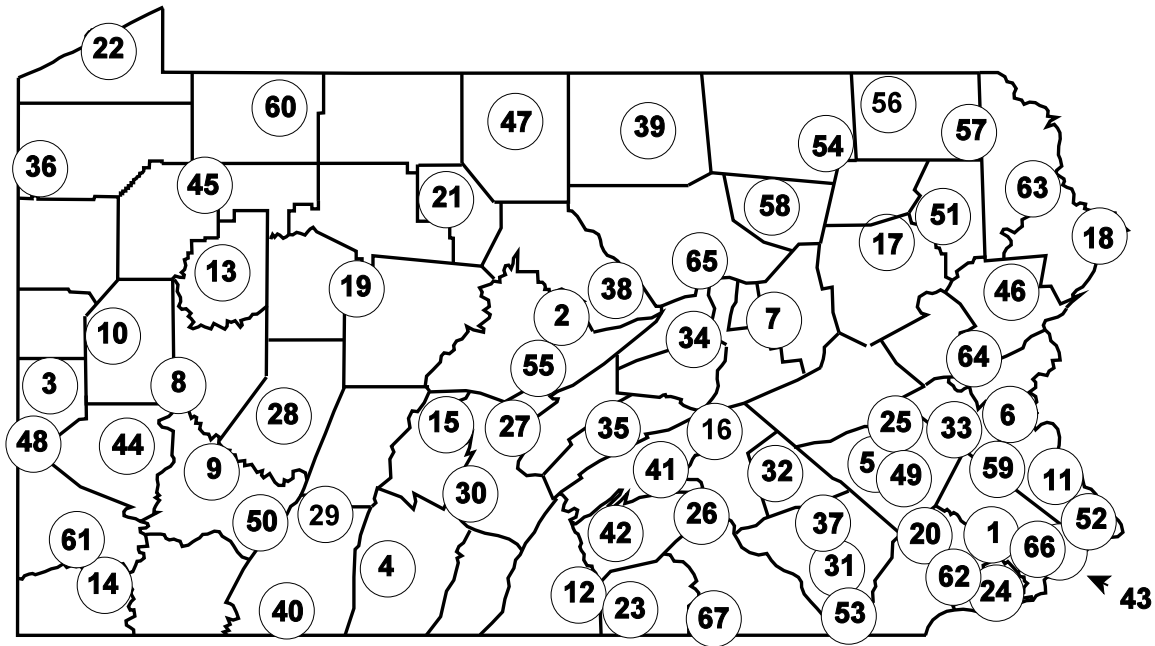
APPENDIX 2. List of count names, count codes, compiler information, and unidentified forms.

This appendix includes the full name of each Pennsylvania CBC, the four-letter CBC code used in the main table, the name and address of the count compiler, the number of the count used on the accompanying map, and any unidentified forms (e.g., chickadee sp., blackbird sp.) that are not listed in the main table.

1. Audubon (**AUDU**). Tony Fernandes (741 Monument Road, Malvern PA 19355). hawk sp. 2, gull sp. 145, kinglet sp. 2.
2. Bald Eagle (**BALD**). Eugene Zielinski (1322 Old 220 Road, Bellefonte PA 16823).
3. Beaver (**BEAV**). John Cruzan (Geneva College, Beaver Falls, PA 15010). goose sp. 4, duck sp. 21.
4. Bedford County (**BEDF**). Janet Shaffer (RD 6 Box 338, Bedford PA 15522).
5. Bernville (**BERN**). Edwin Barrell (123 Maple Lane, Reading, PA 19605).
6. Bethlehem-Easton-Hellertown (**BETH**). Elaine and Don Mease (2366 Springtown Hill Road, Hellertown PA 18055).
7. Bloomsburg (**BLOO**). Robert Sagar (RD 2 Box 70, Benton PA 17814). Mallard hybrid 6.
8. Buffalo Creek Valley (**BUFF**). George Reese (460 Monroe Road, Sarver PA 16055). gull sp. 1, sparrow sp. 1.
9. Bushy Run State Park (**BUSH**). Dick Byers (3570 Clawson Drive, Murrysville PA 15668). Accipiter sp. 1.
10. Butler County (**BUTL**). Suzanne Butcher (11 Norwick Drive, Youngstown OH 44505).
11. Central Bucks County (**CBCK**). Kenneth Kittson (704 Headquarters Road, Ottsville PA 18942).
12. Chambersburg (**CHAM**). Edith Lindsell (810 A Menno Village, Chambersburg PA 17201-4081).
13. Clarion (**CLRN**). Walter Fye (RD 3, Knox PA 16232) and Margaret Buckwalter (RD 2 Box 26, Shippensburg PA 16254). Crossbill sp. 1400.
14. Clarksville (**CLRK**). Ralph Bell (RD 1 Box 229, Clarksville PA 15322). chickadee sp. 25.
15. Culp (**CULP**). William King (3021 West Chester Avenue, Altoona PA 16601).
16. Curtin (**CURT**). Scott Bills (35 Roundtop Road, Halifax, PA 17032).
17. Dallas Area (**DALL**). Edwin Johnson (90 Midland Drive, Dallas PA 18612).
18. Dingmans Ferry (**DING**). Tom Shimalla (RR 2 Box 1010, Dingmans Ferry PA 18328).
19. DuBois (**DUBO**). Harold Webster (116 Swift Building - Penn State DuBois, DuBois PA 15801).
20. Elverson (**ELVE**). Robert E. Cook (PO Box 19 -103 East Main Street, Elverson PA 19520).
21. Emporium (**EMPO**). Bob Martin (125 Elmwood Court, Emporium PA 15834).
22. Erie (**ERIE**). Joan Howlett (3662 Kinter Hill Road, Edinboro PA 16412). scaup sp. 2.
23. Gettysburg (**GETT**). Arthur Kennell (2332 Bullfrog Road - Warbler Woods, Fairfield PA 17320). hawk sp. 4, chickadee sp. 4, sparrow sp. 6.
24. Glenolden (**GLEN**). (Delaware County) Skip Conant (126 Ashwood Road, Springfield PA 19064). Accipiter sp. 2, gull sp. 70, crow sp. 35, chickadee sp. 3, blackbird sp. 50.
25. Hamburg (**HAMB**). Laurie Goodrich (Hawk Mountain Sanctuary - 1700 Hawk Mountain Road, Kempton PA 19529). Accipiter sp. 1
26. Harrisburg (**HARR**). Bill Tripp (425 Reeser's Road, Camp Hill PA 17011-1306).
27. Huntingdon (**HUNT**). David Kyler (RD 4 Box 159A, Huntingdon PA 16652).
28. Indiana (**INDI**). Roger and Margaret Higbee (RR2 Box 166, Indiana PA 15701). Accipiter sp. 1, Buteo sp. 1.
29. Johnstown (**JOHN**). Tom Dick (123 Hummer Lane, Cairnbrook PA 15924).
30. Lake Raystown (**LAKE**). Greg Grove (RR 1 Box 483, Petersburg PA 16669).
31. Lancaster (**LANC**). Edward Pederson (306 Clearfield Road, New Providence PA 17560). chickadee sp. 22.
32. Lebanon County (**LEBA**). Fritz Heilman (115 East Chestnut Street, Lebanon PA 17042).
33. Lehigh Valley (**LEHI**). Dennis Miller (1415 Bushkill Center Road, Nazareth PA 18064).
34. Lewisburg (**LWBG**). Richard Nickelsen (432 Pheasant Ridge Road, Lewisburg PA 17837).
35. Lewistown (**LWST**). Linda Whitesel (RR3 Box 820, Mifflintown PA 17059). Accipiter sp. 1.
36. Linesville (**LINE**). Ron Harrell (428 Park Avenue, Meadville PA 16335).
37. Litz (LITI). Bruce Carl (628 Fulton Street, Akron PA 17501).
38. Lock Haven (**LOCK**). Wayne Laubscher (RD 2 Box 153, Lock Haven PA 17745).
39. Mansfield (**MANS**). Mark Cline (324 Russell Avenue Apartment 2, Williamsport PA 17701).
40. Mount Davis (MTDV). John Tilley (4023 Mount Davis Road, Fort Hill PA 15540). Mallard hybrid 1.
41. New Bloomfield (NEWB). Ramsay Koury (123 Old Ford Drive, Camp Hill PA 17011)
42. Newville (**NEWV**). Don and Robyn Henise (763 Green Spring Road, Newville PA 17241). Accipiter sp. 2, chickadee sp. 4.
43. Pennypack Valley (**PENN**). Peter Kurtz (Pennypack Environmental Center - 8600 Verree Road, Philadelphia PA 19115).
44. Pittsburgh (**PITT**). James Valimont (102 Deborah Lynn Court, Cheswick PA 15024). Accipiter sp. 2, gull sp. 5, chickadee sp. 372.
45. Pleasantville (**PLEA**). Russ States (24 East Fifth Street, Oil City PA 16301).

46. Pocono Mountain (**POCO**). Chris Turn (birder@postoffice.ptd.net). sparrow sp. 30.
47. Potter County (**POTT**). David Hauber (RD 2 Box 153, Coudersport PA 16915).
48. Raccoon Creek State Park (**RACC**). William Smith (348 Gringo-Independence Road, Aliquippa PA 15001). woodpecker sp. 1, chickadee sp. 39.
49. Reading (**READ**). Bill Uhrich (176 Clymer Street, Reading PA 19602).
50. Rector (**RECT**). Bob Mulvihill (Powdermill Nature Reserve - HC 64 Box 453, Rector PA 15677-9605).
51. Scranton (**SCRA**). William Speare (1117 Gravel Pond Road, Central Summit PA 18911). wren sp. 2.
52. Southern Bucks County (**SBCK**). Robert Mercer (1306 Bath Road, Bristol PA 19007). Accipiter sp. 3, chickadee sp. 25.
53. Southern Lancaster County (**SLAN**). Robert Schutsky (115 Peach Bottom Village, Peach Bottom PA 17563-9716). crow sp. 18, chickadee sp. 21, blackbird sp. 3500.
54. Southeastern Bradford County (**SEBR**). Bill Reid (73 West Ross Street, Wilkes-Barre PA 18702).
55. State College (**STAT**). John Peplinski (761 Beaver Branch Road, Pennsylvania Furnace PA 16865).
56. Susquehanna (**SUSQ**). Jerry Skinner (Woodbourne Forest and Wildlife Preserve - RD 2 Box 6294, Montrose PA 18801).
57. Thompson (**THOM**). Katherine Cameron (RR 1 Box 25, Thompson PA 18465). hawk sp. 1, owl sp. 1.
58. Tunkhannock (**TUNK**). Richard Koval (305 William Street, Plains PA 18705). Buteo sp. 1.
59. Upper Bucks County (**UBCK**). Hart Rufe (1890 North Fifth Street, Perkasio PA 18944). Accipiter sp. 2, gull sp. 1, chickadee sp. 20.
60. Warren (**WARR**). Michael Toole (212 Mohawk Avenue). Accipiter sp. 1, white-winged gull sp. 1, owl sp. 1.
61. Washington (**WASH**). Roy Ickes (Washington and Jefferson College, Washington PA 15301-4801). chickadee sp. 130.
62. West Chester (**WEST**). Barry Blust (21 Rabbit Run Lane, Glenmoore PA 19343-9543). gull sp. 25.
63. White Mills (**WHIT**). Voni and Joe Strasser (RR 2 Box 37, Hawley PA 18428-9646).
64. Wild Creek (**WILD**). Joel Silfies (PO Box 242, Danielsville PA 18038).
65. Williamsport (**WILL**). Mark Cline (324 Russell Avenue Apartment 2, Williamsport PA 17701).
66. Wyncote (**WYNC**). Martin Selzer (1907 Hemlock Road, Flourtown PA 19031).
67. York (**YORK**). William Del Grande (1687 Crestlyn Road, York PA 17403-4103).

1997 CHRISTMAS BIRD COUNTS



PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	AUDU	BALD	BEAV	BEDF	BERN	BETH	BLOO	BUFF	BUSH	BUTL	CBCK	CHAM	CLRN	CLRK	CULP	CURT	DALL
Red-throated Loon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CW
Common Loon	2	-	-	7	-	-	-	-	1	-	-	-	-	-	-	-	1
Pied-billed Grebe	-	-	-	-	-	-	-	-	CW	-	-	-	-	-	-	2	2
Horned Grebe	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1
Red-necked Grebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Great Cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Double-crested Cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
American Bittern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Great Blue Heron	18	5	11	1	29	24	8	1	6	5	22	33	1	2	5	10	4
Great Egret	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green Heron	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Black-crowned Night-Heron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tundra Swan	-	-	-	-	3	-	-	-	-	1	-	1	-	-	-	-	-
Mute Swan	2	-	-	5	3	5	-	-	5	-	15	5	-	-	-	-	-
Greater White-fronted Goose	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Snow Goose	3	-	-	-	-	2	CW	-	-	-	5	-	-	-	-	-	-
Ross's Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Canada Goose	6,543	-	765	25	1,802	9,936	2,758	-	952	242	14,947	1,187	1,330	104	23	290	138
Wood Duck	4	-	-	-	-	12	2	-	1	-	1	-	-	-	-	-	3
Green-winged Teal	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
American Black Duck	17	65	2	2	7	108	1,591	-	27	6	78	7	-	30	-	42	17
Mallard	794	101	359	431	448	1,110	670	43	373	121	742	1,277	19	223	76	287	199
Northern Pintail	-	1	1	-	2	1	7	-	-	-	3	1	-	-	-	-	-
Blue-winged Teal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Shoveler	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Gadwall	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
American Wigeon	1	-	-	-	-	1	-	-	-	-	1	-	-	1	-	-	-
Canvasback	2	-	1	8	-	-	1	-	-	41	-	-	-	-	-	-	-
Redhead	-	-	-	-	-	-	2	-	-	6	-	-	-	-	-	-	-
Ring-necked Duck	13	-	-	3	-	-	1	-	CW	29	20	-	-	-	-	-	1
Greater Scaup	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	-
Lesser Scaup	1	-	-	3	-	-	-	-	-	12	-	-	-	-	-	-	-
Oldsquaw	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-
Black Scoter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CW
Surf Scoter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
White-winged Scoter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Goldeneye	-	1	-	-	-	-	-	-	-	6	-	-	-	-	-	35	1
Bufflehead	84	-	-	1	-	-	33	-	6	56	2	-	-	-	-	15	-
Hooded Merganser	1	18	-	2	-	-	-	-	9	6	1	-	-	3	-	2	4
Common Merganser	19	523	-	1	21	14	77	-	-	2	390	-	-	-	-	16	81
Red-breasted Merganser	-	2	-	1	-	-	6	-	-	1	-	-	-	-	-	CW	-
Ruddy Duck	-	6	-	11	-	1	3	-	-	110	16	-	-	-	-	-	17
Black Vulture	25	-	-	-	1	-	-	-	-	-	13	-	-	-	-	-	-
Turkey Vulture	26	-	-	-	-	6	3	-	-	-	181	1	-	2	-	-	-
Osprey	-	-	-	-	-	-	CW	-	-	-	-	-	-	-	-	-	-
Bald Eagle	-	3	-	-	1	-	-	-	-	1	CW	-	-	-	-	1	-
Northern Harrier	2	-	-	1	11	4	6	-	-	11	11	-	12	1	-	4	3
Sharp-shinned Hawk	5	1	-	-	9	8	5	-	4	3	7	14	3	-	1	6	-
Cooper's Hawk	1	1	-	-	7	13	4	1	2	3	6	4	3	5	3	8	4
Northern Goshawk	-	-	-	-	-	-	3	-	-	-	-	1	-	-	-	-	-
Red-shouldered Hawk	1	-	2	1	-	1	-	-	CW	-	-	-	-	-	-	46	-
Broad-winged Hawk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red-tailed Hawk	33	17	4	9	84	84	101	-	47	23	88	56	38	31	11	-	6
Rough-legged Hawk	-	1	-	1	2	-	2	-	-	-	-	-	3	-	-	-	CW
American Kestrel	10	6	2	8	40	16	31	-	23	12	19	36	8	14	5	52	2
Merlin	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peregrine Falcon	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	AUDU	BALD	BEAV	BEDF	BERN	BETH	BLOO	BUFF	BUSH	BUTL	CBCK	CHAM	CLRN	CLRK	CULP	CURT	DALL
Ring-necked Pheasant	-	4	1	-	9	4	8	-	3	3	33	27	1	5	11	22	-
Ruffed Grouse	-	1	4	1	2	-	8	1	7	2	1	-	6	-	13	5	4
Wild Turkey	-	1	2	26	1	99	13	5	144	46	32	1	61	177	12	128	CW
Northern Bobwhite	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
American Coot	8	-	2	17	-	11	36	-	8	195	1	-	-	1	-	-	44
Killdeer	-	-	-	-	12	1	-	-	-	-	6	-	-	-	-	-	2
Least Sandpiper	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Dunlin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Snipe	-	-	-	-	15	-	-	-	CW	-	-	18	-	3	-	-	-
American Woodcock	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Little Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bonaparte's Gull	-	-	-	3	-	-	-	-	-	1	CW	-	-	-	-	-	-
Ring-billed Gull	623	29	489	CW	1,475	1,952	9	3	-	132	725	-	-	-	5	34	-
Herring Gull	5	9	1	-	9	75	1	3	-	-	21	-	-	-	162	7	-
Iceland Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lesser Black-backed Gull	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-
Glaucous Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Great Black-backed Gull	-	-	-	-	-	-	-	-	-	-	22	-	-	-	-	12	-
Rock Dove	781	244	1,007	553	2,003	1,512	765	171	291	479	655	1,547	119	115	408	584	30
Mourning Dove	538	207	329	177	1,288	2,365	393	6	586	381	656	1,809	204	353	83	150	283
Barn Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Eastern Screech-Owl	35	2	-	1	25	13	41	1	7	2	25	1	1	1	1	41	9
Great Horned Owl	12	-	-	-	14	27	28	1	4	7	29	5	1	6	1	20	10
Barred Owl	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	2
Long-eared Owl	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	1
Short-eared Owl	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	-
Northern Saw-whet Owl	-	-	-	-	-	-	-	-	-	CW	-	-	-	-	-	1	1
Rufous Hummingbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belted Kingfisher	19	7	5	1	15	22	11	1	4	3	16	26	-	7	3	5	4
Red-headed Woodpecker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red-bellied Woodpecker	105	27	17	15	88	150	30	4	54	37	79	49	14	35	10	67	1
Yellow-bellied Sapsucker	12	1	-	-	7	23	3	-	9	-	14	-	-	3	1	16	-
Downy Woodpecker	96	39	59	27	144	243	121	6	116	98	99	99	67	51	32	155	52
Hairy Woodpecker	13	21	5	7	11	14	16	1	16	23	17	20	27	9	10	15	8
Yellow-shafted Flicker	97	15	-	4	56	154	21	2	31	6	84	23	1	23	5	39	4
Pileated Woodpecker	-	8	2	9	-	3	5	2	10	9	-	7	8	13	10	14	1
Empidonax, sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Phoebe	1	-	-	-	1	-	-	-	-	1	3	1	-	-	-	1	-
Say's Phoebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Myiarchus, sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horned Lark	-	20	-	-	316	245	22	-	60	65	-	361	-	-	CW	642	-
Blue Jay	217	100	72	8	122	207	191	5	131	170	151	166	151	113	16	107	41
American Crow	516	572	198	155	838	13,204	1,293	32	290	422	817	1,037	1,255	656	112	838	195
Fish Crow	-	-	-	-	54	8	3	-	-	-	2	22	-	-	-	2	-
Common Raven	-	2	-	7	-	-	5	-	-	-	-	-	-	1	-	1	3
Black-capped Chickadee	20	122	57	79	185	640	790	31	184	377	109	200	355	10	89	247	210
Carolina Chickadee	359	-	16	-	-	169	-	14	23	-	169	6	-	197	-	-	-
Tufted Titmouse	227	85	105	60	240	397	257	-	140	158	195	222	78	183	74	297	64
Red-breasted Nuthatch	2	5	5	2	13	51	6	-	4	6	19	2	19	-	CW	12	7
White-breasted Nuthatch	93	58	53	22	113	184	151	7	88	98	114	117	119	117	54	155	35
Brown Creeper	14	5	2	3	6	20	11	1	10	6	17	13	4	6	1	24	8
Carolina Wren	66	1	25	1	23	19	7	2	29	8	22	29	2	29	1	46	3
House Wren	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Winter Wren	1	1	-	1	2	2	1	1	2	4	1	2	-	1	2	9	2
Marsh Wren	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Golden-crowned Kinglet	21	22	3	11	4	10	29	4	82	15	13	3	32	6	17	13	6
Ruby-crowned Kinglet	2	1	2	1	2	4	2	-	2	-	1	5	1	-	2	8	-

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	AUDU	BALD	BEAV	BEDF	BERN	BETH	BLOO	BUFF	BUSH	BUTL	CBCK	CHAM	CLRN	CLRK	CULP	CURT	DALL
Eastern Bluebird	21	39	6	7	259	107	257	7	44	46	154	26	53	78	27	243	14
Hermit Thrush	6	3	-	-	6	4	2	-	9	1	3	1	CW	-	-	7	-
American Robin	1,469	4	6	17	230	4,302	16	-	11	239	459	5	9	6	4	25	8
Gray Catbird	3	-	-	-	1	1	-	-	-	-	1	-	-	-	1	1	-
Northern Mockingbird	54	3	-	2	81	46	22	-	11	-	85	66	-	11	2	12	3
Brown Thrasher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
American Pipit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cedar Waxwing	337	50	81	-	174	784	113	-	44	82	138	-	384	7	4	56	48
Northern Shrike	-	-	-	-	-	-	1	-	-	-	-	-	CW	-	-	-	-
Loggerhead Shrike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
European Starling	3,360	1,161	775	643	6,670	6,031	2,102	48	1,475	995	3,727	7,587	2,199	1,242	660	3,001	610
Blue-headed Vireo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Myrtle Warbler	37	12	3	12	18	66	19	11	124	2	58	1	2	12	3	40	-
Pine Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palm Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Yellowthroat	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Tanager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Cardinal	352	91	125	64	253	402	292	20	230	101	201	293	70	193	69	225	91
Eastern Towhee	-	-	2	-	3	2	1	-	4	-	2	1	-	-	-	-	-
American Tree Sparrow	18	303	4	17	393	118	623	81	116	85	83	45	192	30	90	233	116
Chipping Sparrow	-	-	-	6	-	-	-	-	-	10	-	5	-	1	-	-	-
Field Sparrow	10	2	-	-	8	19	8	-	10	1	19	4	1	1	-	9	-
Vesper Sparrow	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Savannah Sparrow	-	-	-	-	-	-	5	-	-	-	4	-	-	-	-	-	-
Fox Sparrow	8	2	-	-	1	2	-	-	-	-	1	-	-	-	-	-	-
Song Sparrow	177	23	67	16	278	121	131	11	89	24	225	110	6	83	1	124	19
Swamp Sparrow	1	5	-	-	9	5	5	1	6	3	5	4	-	2	-	4	8
White-throated Sparrow	926	425	17	14	994	1,287	352	17	128	38	683	287	17	15	19	529	88
White-crowned Sparrow	1	1	-	2	83	34	11	-	5	1	14	78	-	1	1	29	-
Slate-colored Junco	934	713	224	390	1,262	2,411	1,977	108	416	408	976	1,193	714	380	238	1,487	274
Lapland Longspur	-	-	-	-	-	1	-	-	-	1	-	-	-	-	CW	-	-
Snow Bunting	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	CW	1
Red-winged Blackbird	40	5	-	-	26	15	16	-	-	2	-	-	23	1	-	1	-
Eastern Meadowlark	1	-	-	1	-	-	-	-	-	-	14	-	-	5	-	21	-
Yellow-headed Blackbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rusty Blackbird	-	-	-	-	1	-	-	-	16	-	-	-	-	-	-	-	1
Common Grackle	129	1	-	-	92	52	-	-	5	7	2	16	2	-	-	-	-
Brown-headed Cowbird	2	2	-	15	120	51	4	-	CW	115	51	16	-	89	-	-	-
Purple Finch	7	12	-	14	17	4	7	-	2	23	16	15	40	-	-	13	-
House Finch	142	192	212	64	808	1,291	398	14	287	235	523	427	255	211	212	580	53
Red Crossbill	-	-	-	-	-	-	-	-	-	-	-	3	100	-	-	-	5
White-winged Crossbill	-	-	-	-	-	-	5	-	-	-	-	-	40	-	-	22	-
Common Redpoll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	1	6
Pine Siskin	-	-	-	-	-	9	5	-	45	2	2	8	-	-	53	2	-
American Goldfinch	195	219	68	62	288	526	403	19	83	102	201	318	551	26	90	418	175
Evening Grosbeak	-	34	-	12	-	-	8	-	-	25	-	-	96	-	CW	1	8
House Sparrow	76	502	277	117	837	753	565	33	410	255	173	1,145	220	404	47	452	24
TOTAL SPECIES	77	68	47	66	76	76	81	36	66	78	85	70	54	59	50	76	66
TOTAL INDIVIDUALS	19,948	6,165	5,500	3,190	22,507	51,450	16,947	717	7,364	6,251	28,545	20,109	10,372	5,361	2,818	12,215	3,089
TOTAL PARTY HOURS	117	49	39	44	117	129	96	10	70	79	128	142	82	51	44	69	40

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	DING	DUBO	ELVE	EMPO	ERIE	GETT	GLEN	HAMB	HARR	HUNT	INDI	JOHN	LAKE	LANC	LEBA	LEHI	LWBG
Ring-necked Pheasant	1	-	3	2	-	3	6	7	1	12	6	15	-	8	3	7	2
Ruffed Grouse	10	3	-	14	-	1	-	16	2	11	14	2	4	-	-	1	5
Wild Turkey	101	13	2	29	-	-	-	44	-	34	74	CW	35	-	-	67	74
Northern Bobwhite	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
American Coot	3	-	85	-	845	1	107	-	135	-	302	15	2	3	2	-	-
Killdeer	-	-	21	-	-	13	63	5	-	CW	-	-	12	21	11	3	3
Least Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dunlin	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Common Snipe	-	-	7	-	-	6	2	2	-	1	-	-	-	1	1	2	19
American Woodcock	-	-	-	-	-	-	1	-	1	-	1	-	-	-	-	-	-
Little Gull	-	-	-	-	951	-	-	-	-	-	-	-	-	-	-	-	6
Bonaparte's Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring-billed Gull	1,349	7	6,297	-	6,676	-	3,338	18	824	2	1	12	110	12,826	1,027	137	4
Herring Gull	218	-	312	-	536	-	548	9	22	-	-	2	-	815	466	13	5
Iceland Gull	-	-	1	-	1	-	-	-	-	-	-	-	-	-	3	-	-
Lesser Black-backed Gull	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Glaucous Gull	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Great Black-backed Gull	46	-	25	-	50	-	79	-	26	-	-	-	-	228	10	-	1
Rock Dove	52	199	298	62	500	639	671	1,110	848	363	167	919	89	251	338	1,425	1,162
Mourning Dove	80	121	410	224	128	1,235	665	1,183	841	262	551	253	76	502	377	2,986	838
Barn Owl	1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
Eastern Screech-Owl	12	-	64	-	1	-	28	36	8	6	4	1	7	6	6	9	6
Great Horned Owl	21	1	25	2	6	5	27	45	9	15	5	3	12	15	5	11	23
Barred Owl	7	1	-	-	-	4	-	-	1	2	1	1	-	CW	-	-	1
Long-eared Owl	2	-	1	-	-	-	-	-	-	-	CW	-	-	-	4	-	-
Short-eared Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Saw-whet Owl	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Rufous Hummingbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belted Kingfisher	5	1	15	6	1	8	27	9	30	8	6	-	10	12	6	20	16
Red-headed Woodpecker	6	-	-	-	3	21	-	1	-	1	-	-	-	-	-	-	2
Red-bellied Woodpecker	19	4	127	-	7	84	156	115	119	36	21	10	32	68	40	158	43
Yellow-bellied Sapsucker	13	2	16	-	-	2	16	15	31	5	1	-	4	2	-	30	1
Downy Woodpecker	103	28	125	27	59	77	141	197	152	77	98	33	51	66	41	274	157
Hairy Woodpecker	22	8	24	19	3	14	39	43	23	20	24	7	10	7	5	30	15
Yellow-shafted Flicker	13	-	72	-	32	23	70	86	60	11	5	7	7	47	18	100	30
Pileated Woodpecker	11	9	2	9	-	8	6	10	6	20	7	3	20	1	2	3	6
Empidonax, sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Phoebe	-	-	-	-	-	-	1	-	2	-	-	1	1	-	-	1	-
Say's Phoebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Myiarchus, sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horned Lark	10	345	-	-	-	325	-	764	-	-	-	-	-	-	-	-	-
Blue Jay	116	54	167	134	69	98	269	127	151	111	116	79	50	79	49	300	212
American Crow	301	87	306	89	157	168	1,895	945	1,423	698	1,015	1,122	464	1,543	478	1,723	25,000
Fish Crow	-	-	3	-	-	-	6	3	25	-	-	-	-	19	3	2	6
Common Raven	-	3	-	16	-	2	-	9	-	4	2	6	8	-	-	-	5
Black-capped Chickadee	415	141	150	425	143	15	8	591	208	322	635	363	129	24	82	688	365
Carolina Chickadee	1	232	-	-	-	217	609	1	304	-	-	-	-	174	-	2	-
Tufted Titmouse	163	56	308	21	19	108	473	385	361	240	226	88	116	111	114	475	243
Red-breasted Nuthatch	32	9	28	21	11	3	102	9	3	22	29	4	1	2	1	133	7
White-breasted Nuthatch	120	59	138	93	39	98	137	221	140	137	179	60	56	49	54	293	137
Brown Creeper	12	5	9	9	2	5	26	20	78	15	23	9	2	21	5	30	8
Carolina Wren	2	1	40	2	1	11	116	18	106	13	4	-	19	56	17	41	11
House Wren	-	-	-	-	-	1	1	2	-	2	-	-	-	-	-	1	-
Winter Wren	-	-	1	-	4	-	19	6	13	-	-	-	-	6	1	3	3
Marsh Wren	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Golden-crowned Kinglet	54	5	11	41	10	8	28	19	63	97	79	13	10	25	13	27	51
Ruby-crowned Kinglet	2	-	2	1	-	-	11	7	15	1	-	-	-	3	-	4	-

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	DING	DUBO	ELVE	EMPO	ERIE	GETT	GLEN	HAMB	HARR	HUNT	INDI	JOHN	LAKE	LANC	LEBA	LEHI	LWBG
Eastern Bluebird	69	-	172	-	8	76	68	287	126	113	26	6	71	80	93	126	126
Hermit Thrush	6	-	27	1	1	1	4	8	4	3	-	-	1	6	-	7	-
American Robin	123	1	434	-	8	5	8,041	56	197	3	3	9	-	51	1	353	18
Gray Catbird	1	-	2	-	1	1	18	2	2	-	CW	1	-	1	-	2	1
Northern Mockingbird	3	-	59	-	-	59	127	90	68	5	-	-	7	41	29	115	21
Brown Thrasher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
American Pipit	-	-	1	-	-	-	-	2	-	-	-	-	-	100	-	-	-
Cedar Waxwing	196	-	289	3	20	36	368	134	43	29	6	1	-	87	73	174	402
Northern Shrike	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Loggerhead Shrike	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
European Starling	182	272	4,914	91	590	4,274	5,278	5,811	3,000	1,057	2,155	1,382	873	47,648	3,366	7,459	5,209
Blue-headed Vireo	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Myrtle Warbler	25	-	32	-	167	4	16	152	49	-	4	2	-	29	2	54	2
Pine Warbler	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	1	-
Palm Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
Common Yellowthroat	-	-	1	-	-	-	1	-	1	-	-	-	-	-	-	-	-
Western Tanager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Cardinal	51	35	355	35	47	317	501	294	428	114	164	117	203	331	78	547	237
Eastern Towhee	1	-	2	-	-	1	19	1	3	-	-	1	1	5	-	3	-
American Tree Sparrow	157	16	150	110	90	47	62	472	56	176	110	127	105	76	36	515	326
Chipping Sparrow	-	6	1	-	-	-	1	-	2	-	-	-	-	-	-	1	-
Field Sparrow	-	4	18	-	-	-	26	43	10	6	3	24	3	12	-	11	10
Vesper Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Savannah Sparrow	-	-	2	-	-	6	-	-	-	-	-	-	-	6	-	-	-
Fox Sparrow	1	1	-	-	-	1	14	7	1	-	3	4	-	-	-	-	-
Song Sparrow	33	9	280	17	3	51	1,263	281	107	65	29	6	25	304	81	265	110
Swamp Sparrow	5	-	63	-	1	-	194	4	8	4	1	1	5	20	-	22	4
White-throated Sparrow	252	4	754	11	21	236	1,563	1,189	624	51	86	12	69	912	261	1,263	469
White-crowned Sparrow	-	2	44	-	-	28	-	134	-	10	-	3	-	49	16	59	33
Slate-colored Junco	552	144	1,527	653	40	1,110	980	2,863	850	674	930	272	1,317	685	532	2,603	1,159
Lapland Longspur	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Snow Bunting	-	-	11	-	-	-	40	-	-	-	-	100	1	-	-	-	-
Red-winged Blackbird	-	-	124	-	7	1	585	-	35	2	-	55	1	4	-	348	1
Eastern Meadowlark	-	-	-	-	-	18	-	-	-	-	-	1	-	-	-	-	-
Yellow-headed Blackbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rusty Blackbird	-	-	-	-	-	-	10	-	-	12	-	-	2	-	-	6	16
Common Grackle	-	1	2,219	-	-	3	52	1	3	-	3	2	-	9	-	2	1
Brown-headed Cowbird	-	-	11	-	1	2	88	5	28	-	CW	-	3	8	-	115	11
Purple Finch	30	8	66	1	-	14	26	17	5	22	20	28	4	-	2	4	27
House Finch	31	153	425	136	145	435	1,052	901	750	136	669	90	115	272	241	1,104	625
Red Crossbill	4	-	-	-	-	-	15	6	-	-	-	-	-	-	-	-	-
White-winged Crossbill	35	-	-	8	-	-	2	38	-	-	-	-	-	CW	26	1	-
Common Redpoll	82	9	CW	-	-	-	CW	145	-	-	3	-	1	-	-	9	-
Pine Siskin	137	20	1	-	-	10	1	30	7	126	8	-	29	2	-	4	3
American Goldfinch	302	73	312	101	29	227	420	483	485	337	252	153	195	117	111	355	237
Evening Grosbeak	51	13	-	255	-	69	-	16	-	117	-	2	-	-	-	-	3
House Sparrow	80	120	232	75	284	241	519	1,302	219	282	383	310	222	265	159	619	670
TOTAL SPECIES	70	53	99	37	75	74	99	83	88	64	74	61	66	88	63	84	79
TOTAL INDIVIDUALS	6,627	2,076	28,436	2,750	13,987	12,629	43,411	23,513	17,959	6,223	10,180	6,966	5,391	73,873	10,018	32,034	40,067
TOTAL PARTY HOURS	73	-	121	57	41	127	173	130	120	72	113	113	42	78	53	138	105

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

LWST	LINE	LITI	LOCK	MANS	MTDV	NEWB	NEUW	PENN	PITT	PLEA	POCO	POTT	RACC	READ	RECT	SCRA
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	2	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
16	10	15	4	5	1	5	57	4	29	4	4	-	-	17	6	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	3	458	-	-	-	-	-	-	-	1	-	-	-	-	-	-
-	1	4	-	-	-	2	-	-	-	-	-	-	-	4	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	625	-	-	-	-	-	-	-	-	-	-	-	4	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
242	18,185	4,668	244	19	314	280	324	788	752	125	38	2	215	3,683	418	680
-	2	7	-	1	2	-	4	1	2	-	-	-	-	2	-	1
-	6	4	-	3	3	-	4	-	-	-	-	-	-	16	CW	-
16	597	869	112	1	7	20	11	230	18	4	1	-	-	221	45	39
300	5,260	2,617	240	18	203	125	253	418	1,338	8	674	30	147	656	192	208
-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	11	55	-	-	-	-	-	1	-	-	-	-	-	-	-	-
-	7	2	-	-	-	-	2	-	-	-	-	-	-	10	-	-
-	3	6	18	-	-	2	CW	-	-	-	-	-	-	CW	CW	-
-	6	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	CW	7	-	-	-	-	-	-	-	-	-	-	-	-	6	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	2	-	-	-	-	-	-	-	CW	-	-	-	-	-	-	-
-	-	6	-	-	-	-	-	-	-	-	-	-	-	7	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	66	-	68	-	-	35	-	-	-	1	-	-	-	-	CW	-
-	13	-	2	-	5	1	1	-	3	-	-	-	-	-	-	-
-	24	8	2	-	-	-	-	-	13	-	-	-	-	1	-	10
21	9	225	4	-	25	6	10	10	-	49	-	-	-	33	-	30
-	CW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	9	-	-	-	10	-	12	-	-	-	-	-	-	CW	-
55	-	71	-	-	-	CW	3	-	-	-	-	-	-	28	-	-
46	-	446	-	-	-	-	3	3	-	-	-	-	-	16	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	9	1	-	-	-	1	-	-	-	2	-	-	-	1	-	-
7	3	3	-	2	-	-	3	-	-	-	-	1	1	1	-	-
4	-	10	1	3	4	4	10	4	4	1	1	-	1	8	3	1
4	4	5	3	1	3	4	10	3	9	-	1	-	1	3	3	1
-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
-	2	1	-	-	-	1	-	-	1	-	-	-	-	-	5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	38	73	15	21	19	25	70	16	51	7	18	1	6	64	37	12
2	3	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-
38	8	37	10	1	7	11	64	1	7	3	1	-	2	21	1	3
-	-	-	-	-	-	CW	-	-	4	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

LWST	LINE	LITI	LOCK	MANS	MTDV	NEWB	NEWV	PENN	PITT	PLEA	POCO	POTT	RACC	READ	RECT	SCRA
	2	-	6	-	1	4	7	1	5	6	-	3	-	1	5	-
Ring-necked Pheasant																
Ruffed Grouse	2	4	2	4	10	2	1	-	1	8	3	4	-	-	8	-
Wild Turkey	33	-	-	38	17	21	10	15	71	47	18	1	135	2	23	4
Northern Bobwhite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
American Coot	-	400	-	-	-	35	1	-	15	-	-	-	-	4	-	10
Killdeer	21	-	42	-	-	3	13	-	-	-	-	-	-	49	-	-
Least Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dunlin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Snipe	5	-	4	-	-	3	5	-	-	-	-	-	-	-	-	-
American Woodcock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Little Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bonaparte's Gull	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring-billed Gull	-	243	610	4	-	17	55	495	385	1	15	-	-	1,225	11	210
Herring Gull	-	10	17	2	1	17	20	18	17	-	1	-	-	550	-	1
Iceland Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lesser Black-backed Gull	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Glaucous Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Great Black-backed Gull	-	-	1	-	-	4	1	12	-	-	-	-	-	1	-	-
Rock Dove	1,253	51	767	548	168	323	1,326	675	2,022	150	-	147	-	824	23	732
Mourning Dove	434	77	789	213	168	86	930	283	1,120	285	130	44	30	1,409	225	260
Barn Owl	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Eastern Screech-Owl	-	13	6	2	4	48	40	-	23	-	1	1	9	22	1	-
Great Horned Owl	20	1	3	3	CW	25	24	5	14	1	1	1	1	32	5	3
Barred Owl	1	1	-	-	3	1	3	-	-	-	-	-	CW	-	1	-
Long-eared Owl	4	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Short-eared Owl	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-
Northern Saw-whet Owl	-	-	-	-	-	1	2	-	-	-	-	-	-	1	-	-
Rufous Hummingbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belted Kingfisher	19	1	19	1	8	5	25	8	19	6	-	-	4	11	7	1
Red-headed Woodpecker	-	2	-	-	1	-	-	-	142	-	-	-	-	4	-	-
Red-bellied Woodpecker	108	16	77	7	28	64	79	42	-	10	11	2	9	102	49	3
Yellow-bellied Sapsucker	7	-	2	-	-	5	14	6	10	-	-	-	-	18	6	-
Downy Woodpecker	185	68	101	34	80	124	193	69	268	33	15	4	32	107	111	51
Hairy Woodpecker	27	13	20	21	24	9	9	23	60	11	-	1	3	19	23	9
Yellow-shafted Flicker	70	34	53	11	1	39	65	16	52	-	5	-	4	59	6	3
Pileated Woodpecker	30	1	6	3	13	20	14	1	18	5	2	1	5	4	17	1
Empidonax, sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Phoebe	-	-	1	-	-	1	3	-	1	-	-	-	-	1	1	-
Say's Phoebe	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Myiarchus, sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horned Lark	34	9	1,675	13	521	2	678	-	-	-	-	-	-	1	CW	-
Blue Jay	261	126	135	137	51	179	200	61	344	75	59	12	10	114	109	105
American Crow	1,018	222	7,238	523	1,805	692	468	254	739	60	244	49	19	691	599	362
Fish Crow	-	-	57	-	-	-	5	-	-	-	-	-	-	6	-	-
Common Raven	7	-	-	9	24	1	2	-	-	-	-	7	-	-	7	-
Black-capped Chickadee	205	463	247	139	519	196	84	-	269	391	295	178	-	301	669	296
Carolina Chickadee	-	-	16	-	-	1	93	264	209	-	-	-	111	1	-	-
Tufted Titmouse	424	33	205	57	104	400	335	149	605	49	117	7	56	201	225	103
Red-breasted Nuthatch	1	12	5	10	10	1	12	5	12	24	4	2	11	44	8	-
White-breasted Nuthatch	236	64	126	58	120	150	186	64	244	108	65	16	46	128	184	63
Brown Creeper	39	6	9	4	43	14	25	10	11	7	2	5	-	12	37	2
Carolina Wren	56	1	42	9	3	40	58	27	210	6	1	-	9	22	15	1
House Wren	-	-	-	1	-	1	1	1	-	-	-	-	-	-	-	-
Winter Wren	4	2	6	1	3	3	18	9	2	3	-	-	-	4	4	-
Marsh Wren	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Golden-crowned Kinglet	63	33	19	5	121	38	47	1	27	49	7	-	17	18	117	2
Ruby-crowned Kinglet	4	-	10	-	-	1	9	-	-	-	-	-	-	2	1	-

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	LWST	LINE	LITI	LOCK	MANS	MTDV	NEWB	NEWV	PENN	PITT	PLEA	POCO	POTT	RACC	READ	RECT	SCRA
Eastern Bluebird	206	80	108	18	12	11	228	182	5	4	10	67	-	34	94	60	25
Hermit Thrush	-	2	14	-	-	-	22	11	-	2	1	-	-	-	21	-	-
American Robin	276	75	17	2	-	2	8	24	124	2,015	9	14	-	1	340	14	4
Gray Catbird	-	-	5	-	-	3	2	3	4	-	-	1	-	-	3	-	1
Northern Mockingbird	37	-	50	7	1	1	18	124	42	18	-	9	-	-	73	4	14
Brown Thrasher	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-
American Pipit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cedar Waxwing	244	290	12	199	185	-	55	47	36	23	87	335	50	6	226	34	82
Northern Shrike	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loggerhead Shrike	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
European Starling	5,296	2,331	3,692	1,266	626	1,630	1,887	6,743	750	1,620	218	435	911	78	5,842	537	5,087
Blue-headed Vireo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Myrtle Warbler	31	13	42	6	-	14	27	132	6	4	1	-	-	3	16	19	2
Pine Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palm Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Yellowthroat	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Western Tanager	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Cardinal	266	107	299	105	38	97	389	392	153	803	44	45	4	37	231	205	59
Eastern Towhee	2	-	2	-	1	-	-	2	1	-	-	-	-	6	-	2	-
American Tree Sparrow	148	1,326	297	210	340	36	194	222	-	10	75	21	50	22	38	251	129
Chipping Sparrow	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
Field Sparrow	16	-	54	-	-	25	25	23	6	2	-	8	-	-	9	3	-
Vesper Sparrow	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Savannah Sparrow	-	-	14	-	-	-	-	CW	-	-	-	-	-	-	-	-	-
Fox Sparrow	-	-	1	-	-	-	4	3	1	1	-	-	-	-	-	-	-
Song Sparrow	155	40	314	37	8	42	118	197	59	270	4	14	5	58	149	82	17
Swamp Sparrow	2	2	18	-	3	3	5	38	-	1	-	-	-	2	6	18	-
White-throated Sparrow	318	35	1,122	84	5	24	485	815	619	237	27	10	-	21	867	39	9
White-crowned Sparrow	13	-	23	1	-	-	7	179	-	-	-	-	-	-	1	-	-
Slate-colored Junco	1,176	328	1,161	534	202	568	1,294	1,231	515	830	142	225	54	306	1,287	544	312
Lapland Longspur	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Snow Bunting	-	105	-	-	-	-	-	CW	-	-	-	-	-	-	-	-	-
Red-winged Blackbird	1	1	33	CW	-	15	4	7	-	-	-	-	-	-	5	70	-
Eastern Meadowlark	3	-	9	-	-	CW	-	15	-	-	-	-	4	-	-	-	-
Yellow-headed Blackbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rusty Blackbird	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	15	10
Common Grackle	3	-	3	4	2	3	49	-	3	-	-	-	-	-	10	-	-
Brown-headed Cowbird	50	28	1,137	35	40	14	15	72	-	-	-	-	-	-	2	-	-
Purple Finch	12	2	3	2	9	3	9	54	-	4	17	1	-	-	17	11	5
House Finch	269	111	640	322	157	133	358	507	214	924	52	78	60	10	778	290	269
Red Crossbill	-	25	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
White-winged Crossbill	-	-	-	-	-	-	1	1	-	-	31	-	-	-	-	3	-
Common Redpoll	47	216	-	-	-	13	-	-	-	-	315	2	-	-	35	100	-
Pine Siskin	18	-	8	1	-	27	3	15	-	3	146	11	-	-	12	71	-
American Goldfinch	511	201	205	189	133	367	236	263	102	575	104	168	92	23	207	310	193
Evening Grosbeak	6	1	8	77	163	6	-	6	-	-	90	25	5	-	-	3	-
House Sparrow	747	149	858	273	165	331	109	871	161	1,572	96	39	96	6	345	136	605
TOTAL SPECIES	71	78	95	59	50	65	81	90	59	66	52	48	33	41	81	64	50
TOTAL INDIVIDUALS	15,267	31,641	32,735	5,977	4,075	7,816	8,644	18,083	6,828	18,449	3,009	3,273	1,849	1,538	21,367	5,971	10,133
TOTAL PARTY HOURS	79	49	145	54	46	70	77	103	49	238	67	34	34	44	113	72	63

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	SBCK	SLAN	SEBR	STAT	SUSQ	THOM	TUNK	UBCK	WARR	WASH	WEST	WHIT	WILD	WILL	WYNC	YORK
Ring-necked Pheasant	4	9	2	1	-	2	1	5	-	-	-	2	-	1	1	8
Ruffed Grouse	-	14	3	3	1	1	5	3	1	1	-	8	1	1	-	-
Wild Turkey	-	15	42	-	58	113	201	171	2	152	-	72	8	83	-	-
Northern Bobwhite	111	8	-	1	-	-	12	53	-	-	4	-	2	-	9	559
American Coot	32	51	-	-	-	-	-	2	-	-	49	-	-	1	10	26
Killdeer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Least Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dunlin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Snipe	-	11	-	3	-	-	-	-	-	-	-	-	-	-	-	1
American Woodcock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Little Gull	1	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
Bonaparte's Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring-billed Gull	16,045	12,580	1	-	-	35	113	708	579	209	215	186	48	11	51	542
Herring Gull	26,186	519	2	CW	CW	36	186	740	443	388	-	5	21	-	3	1
Iceland Gull	2	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
Lesser Black-backed Gull	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glaucous Gull	4,154	98	-	-	-	-	-	1	-	-	-	1	-	-	-	-
Great Black-backed Gull	1,356	874	407	583	315	35	113	708	579	209	454	41	60	639	730	841
Rock Dove	1,163	834	261	197	28	36	186	740	443	388	693	106	18	195	1,081	517
Mourning Dove	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barn Owl	6	57	9	9	-	-	5	76	7	13	96	1	2	5	2	3
Eastern Screech-Owl	24	48	16	6	-	CW	7	58	3	4	18	1	8	4	8	6
Great Horned Owl	-	4	1	1	-	-	1	-	2	-	-	1	-	-	-	1
Barred Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Long-eared Owl	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-eared Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Saw-whet Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rufous Hummingbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belted Kingfisher	33	38	9	23	3	-	3	16	10	3	24	1	2	7	17	13
Red-headed Woodpecker	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	-
Red-bellied Woodpecker	65	193	33	33	1	-	13	168	11	64	127	3	10	21	116	62
Yellow-bellied Sapsucker	3	22	5	5	-	-	2	35	-	13	33	1	3	4	18	3
Downy Woodpecker	126	197	55	59	12	13	43	258	74	90	111	30	28	59	154	68
Hairy Woodpecker	12	19	20	21	2	9	12	25	21	19	10	16	5	9	8	15
Yellow-shafted Flicker	108	169	15	7	-	-	33	96	9	25	66	2	9	17	88	32
Pileated Woodpecker	-	6	8	10	-	1	10	6	6	9	1	4	-	4	1	1
Empidonax, sp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Phoebe	-	9	-	-	-	-	1	2	-	-	-	-	-	-	-	-
Say's Phoebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Myiarchus, sp.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horned Lark	333	212	86	136	25	26	43	363	305	99	270	103	22	-	-	-
Blue Jay	2,773	683	635	971	453	119	404	1,182	158	271	1,246	261	440	1,048	1,387	1,448
American Crow	1,025	5	-	1	-	-	-	2	-	-	3	-	-	-	15	-
Fish Crow	-	-	5	11	-	-	4	-	1	-	-	-	-	4	-	2
Common Raven	21	-	569	344	234	129	307	297	373	26	9	404	128	272	7	1
Black-capped Chickadee	447	453	-	-	-	-	-	533	-	104	411	-	-	-	458	328
Carolina Chickadee	241	297	77	211	18	25	54	601	63	220	246	122	56	111	336	119
Tufted Titmouse	6	109	14	10	-	-	3	56	24	51	48	10	10	3	13	12
Red-breasted Nuthatch	102	199	90	171	33	19	46	326	118	96	128	81	38	70	128	89
White-breasted Nuthatch	12	57	13	14	3	1	3	25	9	12	12	3	6	5	21	4
Brown Creeper	70	89	1	13	-	-	3	52	3	33	113	-	2	2	61	66
Carolina Wren	1	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-
House Wren	6	31	-	1	-	-	-	3	-	2	3	-	-	-	5	-
Winter Wren	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marsh Wren	2	53	21	44	-	-	5	37	40	17	7	-	8	23	9	70
Golden-crowned Kinglet	-	9	-	-	-	-	-	11	1	3	4	2	1	-	5	12
Ruby-crowned Kinglet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

SBCK	SLAN	SEBR	STAT	SUSQ	THOM	TUNK	UBCK	WARR	WASH	WEST	WHIT	WILD	WILL	WYNC	YORK
10	248	57	46	2	-	48	277	3	63	182	23	41	44	5	190
3	13	-	4	-	-	-	21	-	7	18	-	1	2	6	1
1,419	80	5	17	-	-	55	1,767	8	158	1,249	4	-	12	946	7
10	1	-	-	-	-	-	1	-	-	6	-	-	1	1	-
102	212	2	34	-	-	2	142	-	16	174	1	7	15	58	78
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
166	76	49	173	48	-	1	181	1,197	63	219	119	32	247	157	167
-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6,764	3,043	1,434	1,248	316	112	446	6,094	1,211	1,158	3,727	459	298	5,168	2,687	3,312
-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65	45	-	9	-	-	-	332	9	20	15	-	2	26	53	134
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
407	725	85	186	18	10	49	496	110	224	383	40	44	138	232	253
2	20	-	-	-	-	-	2	-	-	11	-	-	-	4	1
41	17	308	286	32	41	440	90	100	28	19	49	119	186	9	14
2	1	-	-	-	-	-	-	-	CW	-	-	1	-	9	-
38	18	-	7	-	-	1	15	-	27	-	-	6	5	15	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	13	-	-	-	-	-	2	-	-	-	-	-	-	-	-
7	13	-	-	-	-	-	2	-	-	3	1	-	-	1	9
369	753	20	46	-	-	27	230	12	65	221	5	25	23	106	132
15	41	1	16	-	-	-	10	-	-	7	1	3	-	-	14
1,223	2,091	40	656	-	-	55	1,283	45	36	903	5	87	96	1,525	778
2	101	-	7	-	-	1	1	-	-	-	-	-	-	-	66
1,014	1,406	224	980	32	44	341	2,817	761	417	772	209	492	901	686	1,371
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	1	-	-	18	-	-	-	-	-	-	11	-	-	42
221	24,868	-	1	-	-	-	4	-	-	317	-	10	-	2	-
1	5	-	-	-	-	1	5	-	-	-	-	-	-	-	-
-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	14	-	-	-	-	-	-	-	-	-	-	2	-	-	-
2,008	33,869	-	-	-	-	-	19	-	-	111,540	-	52	-	38	19
89	3,502	-	36	-	-	-	218	15	-	131	-	-	-	-	2
13	9	-	9	-	20	1	52	3	7	6	18	-	6	3	-
604	291	150	398	73	18	153	991	348	278	513	182	46	621	447	193
-	8	4	64	-	-	-	-	-	-	-	-	-	-	-	11
-	-	12	17	-	-	-	-	-	-	-	-	CW	-	-	-
-	-	116	3	37	-	15	-	225	-	-	-	-	-	-	-
-	27	2	8	-	-	-	15	3	-	-	-	1	2	-	6
216	490	347	355	31	21	343	509	366	126	235	75	95	267	261	231
-	-	68	22	50	50	-	3	95	10	-	7	-	16	-	-
335	804	245	751	102	62	88	311	262	381	63	72	19	296	289	114
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94	109	60	71	33	29	63	92	59	51	75	56	64	66	70	82
88,688	136,616	7,701	9,427	2,052	933	7,110	35,113	8,167	5,522	139,382	2,891	3,185	12,049	18,889	16,368
112	203	71	114	24	28	52	161	80	144	144	28	40	86	120	70

PENNSYLVANIA'S 1997 CHRISTMAS BIRD COUNTS

	TOTALS			NO. OF COUNTS			HIGH			NO. OF COUNTS			HIGH		
	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH
Red-throated Loon	2	2	1	13	9	4	198	43	31	1	43	31	1	43	
Common Loon	21	10	7	5	5	1	1	1	1	1	1	1	1	1	
Pied-billed Grebe	87	21	20	284	49	33	1,747	63	121	17	63	121	17	63	
Horned Grebe	13	9	3	229	49	16	156	38	15	1	38	15	1	38	
Red-necked Grebe	1	1	0	2,573	50	201	5,218	63	287	48	63	287	48	63	
Great Cormorant	22	3	19	3	3	1	260	39	27	1	39	27	1	39	
Double-crested Cormorant	39	8	18	3,040	36	845	24,765	59	8,041	12	59	8,041	12	59	
American Bittern	1	1	0	477	25	63	82	31	18	0	31	18	0	31	
Great Blue Heron	918	62	86	1	1	1	2,263	51	212	11	51	212	11	51	
Great Egret	7	3	4	1	1	1	3	3	1	0	3	1	0	3	
Green Heron	2	2	1	109	19	19	143	4	100	0	143	100	0	143	
Black-crowned Night-Heron	8	2	7	4	4	1	8,969	60	1,197	73	60	1,197	73	60	
Tundra Swan	1,654	17	741	1	1	1	6	4	3	0	6	4	3	0	
Mute Swan	126	24	28	967	7	951	2	2	1	13	2	1	13	2	
Greater White-fronted Goose	3	3	1	71,725	50	16,045	212,273	67	47,648	1620	67	47,648	1620	67	
Snow Goose	32,555	13	30,003	30,660	42	26,186	1,984	2	1	0	1,984	2	1	0	
Ross's Goose	161,493	63	18,185	33	5	26	6	5	2	0	6	5	2	0	
Wood Duck	89	25	14	5	3	3	2	1	2	0	2	1	2	0	
Green-winged Teal	1,049	19	952	4,772	19	4,154	6	6	1	0	6	6	1	0	
American Black Duck	7,735	59	1,591	37,849	65	2,022	10,326	66	1,326	90	66	1,326	90	66	
Mallard	38,851	65	5,260	34,070	67	2,986	49	14	10	0	49	14	10	0	
Blue-winged Teal	1,307	22	1,248	9	4	4	574	44	54	4	44	54	4	44	
Northern Shoveler	261	10	188	856	52	96	6	6	6	0	6	6	0	6	
Gadwall	331	16	129	43	24	7	574	44	54	4	44	54	4	44	
American Wigeon	151	21	42	19	8	4	2	2	1	0	2	1	0	2	
Canvasback	506	17	400	6	4	3	52	8	14	0	52	8	14	0	
Ring-necked Duck	500	20	126	7	6	2	93	26	14	0	93	26	14	0	
Greater Scaup	45	7	35	671	62	38	8,037	65	1,263	77	65	1,263	77	65	
Lesser Scaup	142	13	109	193	14	142	27,153	64	2,091	96	64	2,091	96	64	
Oldsquaw	14	5	6	3,360	64	193	1,041	35	179	1	35	179	1	35	
Black Scoter	19	1	19	440	44	35	54,172	67	2,863	685	67	2,863	685	67	
Surf Scoter	6	2	5	1,043	66	60	7	6	2	0	7	6	2	0	
White-winged Scoter	1	1	1	34	20	9	360	11	105	0	11	105	0	11	
Common Goldeneye	675	25	235	671	62	38	26,850	34	24,868	1	34	24,868	1	34	
Bufflehead	619	32	122	193	14	142	106	17	21	0	106	17	21	0	
Hooded Merganser	533	35	87	444	60	30	2	1	2	0	2	1	2	0	
Common Merganser	6,318	42	3,200	1	1	1	127	13	22	0	127	13	22	0	
Red-breasted Merganser	66	11	22	34	20	9	150,224	35	111,540	1	35	111,540	1	35	
Ruddy Duck	618	26	175	1	1	1	6,123	36	3,502	2	36	3,502	2	36	
Black Vulture	675	18	168	7,236	30	1,675	740	53	66	7	53	66	7	53	
Turkey Vulture	1,682	25	446	8,659	67	363	23,662	67	1,291	269	67	1,291	269	67	
Osprey	2	2	1	88,787	67	25,000	246	12	100	0	246	12	100	0	
Bald Eagle	56	17	17	1,277	23	1,025	274	16	40	0	274	16	40	0	
Northern Harrier	121	34	12	159	29	24	1,580	21	315	0	1,580	21	315	0	
Sharp-shinned Hawk	327	51	27	16,047	64	790	6,123	36	3,502	2	36	3,502	2	36	
Cooper's Hawk	276	57	19	5,753	29	609	937	42	146	2	937	42	146	2	
Northern Goshawk	14	7	3	12,197	66	605	15,780	67	575	216	67	575	216	67	
Red-shouldered Hawk	94	24	46	1,090	59	133	1,421	35	255	1	35	255	1	35	
Broad-winged Hawk	1	1	1	7,229	67	326	23,025	67	1,572	262	67	1,572	262	67	
Red-tailed Hawk	2,716	65	155	857	66	78	4,545	67	109	66	67	109	66	67	
Rough-legged Hawk	31	18	3	1,777	60	210	1,249,336	67	139,382	9427	67	139,382	9427	67	
American Kestrel	998	59	71	14	12	2	5,488	64	238	75	64	238	75	64	

	TOTALS			NO. OF COUNTS			HIGH			NO. OF COUNTS			HIGH		
	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH	TOTALS	COUNTS	HIGH
Winter Wren	198	43	31	16	16	16	16	16	16	16	16	16	16	16	16
Marsh Wren	1	1	1	13	9	4	1	1	1	13	9	4	1	1	1
Golden-crowned Kinglet	1,747	63	121	5	5	1	1	1	1	5	5	1	1	1	1
Ruby-crowned Kinglet	156	38	15	284	49	33	3	3	3	284	49	33	3	3	3
Eastern Bluebird	5,218	63	287	229	49	16	2	2	2	229	49	16	2	2	2
Hermit Thrush	260	39	27	2,573	50	201	21	21	21	2,573	50	201	21	21	21
American Robin	24,765	59	8,041	3	3	1	0	0	0	3	3	1	0	0	0
Gray Catbird	82	31	18	3,040	36	845	1	1	1	3,040	36	845	1	1	1
Northern Mockingbird	2,263	51	212	477	25	63	0	0	0	477	25	63	0	0	0
Brown Thrasher	3	3	1	1	1	1	0	0	0	1	1	1	0	0	0
American Pipit	143	4	100	109	19	19	0	0	0	109	19	19	0	0	0
Cedar Waxwing	8,969	60	1,197	4	4	1	0	0	0	4	4	1	0	0	0
Northern Shrike	6	4	3	1	1	1	0	0	0	1	1	1	0	0	0
Loggerhead Shrike	2	2	1	967	7	951	0	0	0	967	7	951	0	0	0
European Starling	212,273	67	47,648	71,725	50	16,045	18	18	18	71,725	50	16,045	18	18	18
Blue-headed Vireo	1,984	2	1	30,660	42	26,186	2	2	2	30,660	42	26,186	2	2	2
Pine Warbler	6	5	2	33	5	26	0	0	0	33	5	26	0	0	0
Palm Warbler	2	1	2	5	3	3	0	0	0	5	3	3	0	0	0
Common Yellowthroat	6	6	1	4,772	19	4,154	0	0	0	4,772	19	4,154	0	0	0
Western Tanager	2	1	2	37,849	65	2,022	500	500	500	37,849	65	2,022	500	500	500
Northern Cardinal	13,600	67	803	34,070	67	2,986	285	285	285	34,070	67	2,986	285	285	285
Eastern Towhee	108	30	20	9	4	4	0	0	0	9	4	4	0	0	0
American Tree Sparrow	10,326	66	1,326	856	52	96	6	6	6	856	52	96	6	6	6
Chipping Sparrow	49	14	10	747	61	58	6	6	6	747	61	58	6	6	6
Field Sparrow	574	44	54	43	24	7	0	0	0	43	24	7	0	0	0
Vesper Sparrow	2	2	1	19	8	4	0	0	0	19	8	4	0	0	0
Savannah Sparrow	52	8	14	6	4	3	0	0	0	6	4	3	0	0	0
Fox Sparrow	93	26	14	7	6	2	0	0	0	7	6	2	0	0	0
Song Sparrow	8,037	65	1,263	1	1	1	0	0	0	1	1	1	0	0	0
Swamp Sparrow	593	45	194	671	62	38	7	7	7	671	62	38	7	7	7
White-throated Sparrow	27,153	64	2,091	193	14	142	0	0	0	193	14	142	0	0	0
White-crowned Sparrow	1,041	35	179	3,360	64	193	33	33	33	3,360	64	193	33	33	33
Slate-colored Junco	54,172	67	2,863	440	44	35	3	3	3	440	44	35	3	3	3
Snow Bunting	360	11	105	1,043	66	60	15	15	15	1,043	66	60	15	15	15
Red-winged Blackbird	26,850	34	24,868	671	62	38	7	7	7	671	62	38	7	7	7
Eastern Meadowlark	106	17	21	444	60	30	6	6	6	444	60	30	6	6	6
Yellow-headed Blackbird	2	1	2	1	1										

Fall Raptor Migration Summary 1997

By Frank Hohenleitner

Thirteen watches reported for fall 1997. Observers logged a total of 86,817 birds during 6565 hours of coverage - excluding the special count in southeastern Pa. (Broadwing SEPT). No new site was added this year. Migration generally seemed later than usual. There was no Swainson's Hawk or other unusual hawks.

Broad-winged Hawks did not concentrate as heavily in the off-ridge sites in southeastern Pa., but moved in increased numbers over a greater number of sites. Black Vultures increased sharply at several central Pa. sites, whereas the changes in the Turkey Vulture total count increased by only 14% with little site specific deviation. Total Bald Eagles were up by 35%. Ospreys were down by 4% - essentially no difference. Golden Eagles continue to migrate primarily past lookouts west of the Susquehanna River. The total number of N. Goshawks, Cooper's Hawks and Sharpshinned Hawks varied by +111%, +26% and -3% respectively (compared to most recent previous report). The place to be to see Goshawks was along the Blue Mountain lookouts. At the four major comprehensive counts on the ridge, Red-tailed Hawks and Red-shouldered Hawks were down by 5% and 12% respectively - again, probably within normal variation. All falcons were plentiful. The N. Harrier persistently showed up at many lookouts throughout the season - in all kinds of weather and in good numbers.

Chronology of the Season

As expected, there was little migration in **August**, occurring mostly during the latter half of the month. A strong storm over the Great Lakes on the 23rd and a cold front on the 29th resulted in moderate NW winds, which created an increase in migration for two days each time. The early Peregrine Falcons at several sites must have been exhilarating. The mix of birds was not unusual.

In **September** there were two early ripples of Broad-wing activity on the 3rd and the 7th, but the first cold front to generate any significant

activity was on the 12th. There was a good flow of Broad-wings in most of the eastern part of the state for the next 5 days. Another wave of Broad-wings began in eastern Pa. after a cold front on the 19th and also lasted up to 5 days at some sites. On the 26th another cold front set up a peak flow of Sharpies and Kestrels at both Hawk Mt and Waggoners Gap.

October was rather uneventful until a moderate cold front passed on 10/10 generating strong winds in the afternoon and filling the skies with Sharpies, Cooper's Hawks, and all falcons at many locations. Brisk northerly breezes on the 16th and 17th probably generated an unusual mid-month peaking of Red-shouldered Hawks. The 20th was partly to mostly sunny with a NW breeze, producing a good flight of all accipiters, Ospreys, and Golden Eagles for watches along the Blue Mountain Ridge. On the 28th there was plenty of sunshine and a strong WNW wind, supporting a modest increase in the flow of the larger hawks: Red-tails, Goshawks and Golden Eagles.

A nor'easter went moved through the area on the 7th of **November** and restricted movement until the 9th, when Red-tails, Red-shouldered Hawks and Goshawks started appearing in good numbers. A weak cold front went through on the 10th, intensifying this flow of raptors, which now also included more Golden Eagles. Sleet ended this run on the 14th. Strong winds kept hawks moving on the 16th. High pressure the next day slowed things down considerably, reducing flow and remaining so until cold air moved through on the 23rd. A new wave of Bald Eagles began to appear in Pa. as well as the usual large raptors of the season. Goshawk numbers appeared to be greater than usual at this time. This continued through Thanksgiving Day.

As usual, the best hawk watching in **December** reported here came on cold blustery days. They occurred on the first 2 days of the month and the last day of the year.

This past year I followed the fall migration on the Internet. This

allowed me to keep track of not only six Pa. hawkwatches, but many sites across the continent. Often there were moments when I could not help but be thankful for these wonderful times in hawkwatching. Just one example: In 1975, Hawk Mt, Pa. and Cape May, N.J. reported a seasonal total of 25 and 27 Peregrine Falcons, respectively, whereas this past fall the comparable counts were 60 and 1791. The multi-pronged effort to restore this falcon into the wild is a conservation success story. Thankfully, many other hawks have increased also. And we have lived to see again days of raptor abundance.

Focus on Central PA

Two central Pa. hawkwatches will be featured here: Stone Mt and Jacks Mt. Recent counts there suggest a favoring of the more northwestern Stone Mt for the migration of Golden Eagles. Yet these sites are on parallel mountains only 4 miles apart. Published data for the 1996 season and the reports from these sites on the Internet in late 1997 illustrate the magnitude of this selective passage. Each year there has been a single day when the Stone/Jacks ratio was 25:1 for Golden Eagles on blustery NW winds. In 1996 there was also a Golden Eagle single day ratio of 12:1 after a strong cold front.

Greg Grove noted that Jacks usually does much better than Stone for raptors in general on E or SE winds, but Stone usually does better on NW and W winds. He contends that because Golden Eagles may have a tendency to fly on cold NW winds, Stone Mt probably has better conditions for detecting Golden Eagles than does Jacks Mt. He identified several immediate site-topographic features (e.g., steep drop vs. broad bench), which may affect the counts. Nick Bolgiano expanded on this theme by noting that there are significant geographical features in the feeder mountains northeast of these sites which could alter ridge choice depending on the wind. In addition he noted that both Jacks and Stone are very close together at their

northeastern points of origin - like the bow of a ship. "When birds come down the pipeline at that point, they take Stone Mt if the wind is from the NW or W and take Jack's Mt if the wind is from the E or SW". However he has frequently seen the crossing over of hawks to Stone on E or SE winds.

It may also be useful to establish whether this migration pattern is exclusive to Golden Eagles. I have rerun the counts of these sites for the past two years by excluding totals for August and September, as very few Golden Eagles migrate then. I have also excluded species that migrate primarily in these early months as well as those with only very low numbers late in the season. This allows for some refinement of the data. I compared the ratio of birds counted at these Mts against the ratio of the hours counted during the same time interval. The Stone/Jacks value for hours counted is 1.72. The results show that among many species of hawks (NH, SS, CH, RT, and AK) the differences are in agreement with the hours counted ratio for the site (range: 1.51 to 1.97). Simply stated, for these species there is a greater number of birds counted at Stone Mt proportionate to the greater number of hours of counting. However, large differences favoring Stone over Jacks were noted for both the Red-shouldered Hawk (6.33) and the Golden Eagle (8.02). For the Peregrine and Merlin there are also large differences (4.2 and 7.75), but the small numbers of birds for some of these counts may distort the results for these two hawks.

Again, a closer look is revealing. Last year, Jacks Mt was counting more Red-shoulders on mild, southerly flows, while Stone Mt had more Red-shoulders immediately after cold fronts. This year, Stone was running a 10:0 ratio for Red-shoulders with Jacks on each of two days when both sites were counting and hawks were moving.

There are other concerns. At Bald Eagle Mt, about 18 miles NW of Stone Mt, David Brandes also reported an impressive total of Golden Eagles, usually in far fewer hours than at Stone or Jacks Mts. He noted that the peak of the Golden Eagle season at Bald Eagle Mt is "from mid-November to early December, times when many sites are either shut down, or scaled way back in coverage." (A cautionary

note: at Bald Eagle Mt there are two lookout sites to take advantage of the prevailing winds. Once again, we must be wary of comparing apples and oranges.) The reminder of Brandes is helpful: "...these ridges are not just scaled down Hawk Mountains. Each one has its own peculiarities."

Sometimes a small vertical difference in location is very significant. In 1995 the Stone Mt site was moved about 0.3 mile up ridge. Because of an early seasonal snow shutdown, that year was excluded in my analysis. Greg Grove wrote then that his new ability to see both sides of the ridge greatly improved his counts for Red-shouldered Hawks and Merlins.

Any conjecture on this subject should explain why a few species of hawks are favored at one site over the other. Equally interesting is the question: Why are the other hawks noted above so independent of these factors? If these patterns persist in future years, especially with a more equivalent counting experience between the sites, it may be reasonable to conclude that geography and wind direction play an important selection role in the movement of certain hawks at these hawkwatches in central Pa. The more difficult thing to do is identify exactly how that selection takes place.

Abbreviated seasonal highlights follow. Quotes are site compiler's statements.

Allegheny Front - This is the first report from our relocated western site on land owned by the Allegheny Plateau Audubon Society. Hours reflect an 88% increase from 1995 (the last report). Bald Eagles are up from 2 to 38, while Golden Eagles almost doubled. Merlin are up from 1 to 21. The Sharp-shin is down by 40% while the Red-tail is up by 34%. There is no change in Broad-wing, Kestrel, Peregrine or Harrier. Most of the other hawks are up only slightly.

Bald Eagle Mt - During this third report year, hours increased by 15. The Golden Eagle site record is now 122 - a close match to the 120 at nearby Stone Mt this year. There were 4 Merlins in the afternoon of 10/10. An amazing 93% of the Red-tails were recorded on 10/28. Most birds totaled greater than

or equal to last year, except for the Osprey and Sharp-shin.

Council Cup - An expansion of days and hours reaped a reward. There was also a shifting of time from the early part of the season to the latter days. Seasonal site records were recorded for Bald Eagle, N. Harrier, Cooper's Hawk, Red-shouldered Hawk, Am. Kestrel, and Merlin. Rough-legged Hawks and Golden Eagles were a strong second. The big day of the season was 9/14 when 716 birds of 12 species were counted.

Hawk Mountain - Using a ten-year average comparison, there were increases in Turkey Vultures, N. Goshawks, Cooper's Hawks, both eagles, Peregrine Falcon, and Merlin. Decreases were noted for N. Harriers, Sharp-shins, Red-tailed Hawks, and Broad-winged Hawks. The new one-day record for Merlins was 36 on 10/10.

Jacks Mountain - Both vultures and almost all hawks were up from last year, probably due in large part to the 40% increase in hours. Bald Eagles up from 3 to 30 in September. Red-tails more than doubled from 1996. Both Merlins and Peregrine Falcons up from one to six. Rough-legged Hawks made an appearance on the 5th and 16th.

Little Gap - Nearly all counts and totals are up because of a 58% increase in hours covered. [Part of this increase may be due to supplemental data from the L.G banding station]. There was a good Broad-winged Hawk flight, including 1658 birds on 9/17, which surpassed last year's Broadwing seasonal total of 1601. Other outstanding increases were noted for the N. Harrier, both eagles, all accipiters, and all falcons. Compiler Michael Schall acknowledges with special thanks to Gerald Lahr and the members of Little Gap banding station for their contribution to the count.

Militia Hill - Monthly highs for Black Vultures in September and October. All time high for Sharpies in September, monthly highs for Bald Eagles and Broad-wings in October. Most hawks were down from average. The large fish-eating raptors increased, possibly reflecting the success of conservation efforts. There will no official count at this site in

November beginning in 1998.

Rocky Ridge - An 11% increase in hours counted but a 14% decrease in the total count compared to 1996. The decrease in Broad-wings and Sharp-shins alone could count for the difference. However, there are many other ups and downs mostly within the range of normal variation. This was a good year for eagles: up by 15 for Bald Eagles and 1 for the Golden Eagle. Two Goshawks are always good.

Second Mountain - Birds above the 10-year seasonal average were: both vultures, N. Goshawk, Red-shouldered Hawk, both eagles, and Merlin. A new seasonal high for Merlin. All eagles were age determined. Bald Eagles were 18 adults and 15 immature, whereas Golden Eagles were 30 adult and 16 immature. A one day fall record of 9 N. Goshawks on 10/10, and 44 Am. Kestrels on 9/17.

Stone Mountain - "At least an average or better season for most species." Broad-wing count was the 2nd highest in the past 7 years. Tied one day record for Golden Eagles on 11/16. The Golden Eagle is now the 4th most numerous raptor after RT, BW, and SS at this site. Red-tails peaked on 11/11 at 173. "Harriers and Merlins went well beyond seasonal highs. Many of those Merlins were seen very late in the afternoon, usually zipping right overhead after making a run at the [decoy] owl."

Tuscarora Summit - A major increase in days and hours over past years - an impressively complete seasonal report. This is reflected in substantial increases in all raptors over 1996 except for the Merlin. However, going back over the past 4 years, it is notably less for N. Harriers, Sharp-shins, and Kestrels. Each of these 3 species peaked primarily in Oct of 1995, at which time most of the Pa. migratory scene was affected similarly. That month was remarkable for hurricane Opal passing through Ohio and a succession of cold fronts.

Waggoners Gap - The Broad-wing flight increased sharply on 9/12 and ran through until 9/21 with a major dip on the 20th. On 11/3 there were 262 Turkey Vultures for a single day record. Most eagles in one season: 246.

On 10/10 a new single day record of 21 Merlins. New seasonal highs for Turkey Vulture, Golden Eagle, and Merlin. There were 2 dark morph Red-tails and a partial albino early in November. Of age-determined Peregrine Falcons, 22 were adult and 5 were immature (similar to 1996). Of 104 age-determined Goshawks, 76 were immature - a major increase over last year. Among age-determined Red-shoulders, 175 were adult and 75 were immature (fewer adult and more young over 1996). Adults dominated the early Bald Eagle flight, but younger birds heavily outnumbered adults late in the season. Adult and sub-adult Golden Eagles dominated the entire season by 133 to 39 immatures, as compared to 108 to 55 in 1996.

WHP Tower - This count was terminated in mid-October due to the relocation of the compiler, and may not be in operation in 1998. A Peregrine Falcon on 8/16. Unusually early Rough-legged Hawk and a Golden Eagle on 9/28. There were 2 peaks for Broad-wings: 9/15 (175) and 9/17 (153). The latter matched the peak day for Broadwing SEPT. Species totals were mostly better than last year for the months of August and September.

Broadwing SEPT - SouthEastern Pennsylvania Transect. "A series of eight hawk watches spaced approximately five miles apart, running in a northwest to southeast line at an angle perpendicular to the theoretical preferred angle of migration of 242 degrees for Broad-winged Hawks in this region." This is an extensive volunteer effort directed by Kirk and Lois Moulton. The count ran from 9/13 to 9/22 with the peak day on 9/17. The total number of Broad-wings was 10,095, substantially less than any other year (maximum = 23,339 in 1995).

The project has repeatedly established that this southeastern corner of the state is a major migration corridor for Broad-wings. All other raptors counted during the 10 days added an extra 1137 to the total. The only raptors above 100 (max = 404) during this interval are Sharp-shins, Osprey, American Kestrel, and the Cooper's Hawk - listed in descending order. However, these hawks move in massive numbers over a broader time frame at other locations in Pa. and/or

along the New Jersey coast. This is also true for most of the remaining raptors. Because Broad-winged Hawks move primarily in a rather narrow time window, the Transect project probably works best for describing a significant migratory component of this species only.

For a more complete description of the season, send a SASE to 731A North Wales Road, North Wales PA 19454. The Moultons offer copies of back years - "one stamp for each year requested". You will receive 5 two-sided pages with text, tables, and figures.

Special thanks to: Nick Bolgiano, David Brandes, Greg Grove, and Ron Singer for their experience and knowledge of the central Pa. sites; Kirk Moulton for the SEPT report; and Michael Guenther for reviewing the text. Again I thank all the compilers, and the many dedicated and talented hawk watch participants, who helped capture the gifts of this extraordinary season.

References

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Northern Appalachians Region Daily Totals Fall 1996 in *H.M.A.N.A. Hawk Migration Studies*. 23: Z-EE.

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get the next issue on
time, we need your
renewal by June 15.**

ALLEGHENY FRONT (BEDFORD)
Ruth Sager, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
Coverage - days	-	29	29	21	1	80
Coverage - hours	-	182	223	128	5	538
Black Vulture	-	-	2	-	-	2
Turkey Vulture	-	-	314	6	-	320
Osprey	-	32	6	-	-	38
Bald Eagle	-	12	6	-	-	18
N. Harrier	-	12	22	8	1	43
Sharp-shinned Hawk	-	174	422	11	-	607
Cooper's Hawk	-	49	80	7	-	136
Northern Goshawk	-	-	3	5	-	8
Red-shouldered Hawk	-	6	21	21	-	48
Broad-winged Hawk	-	699	3	-	-	702
Red-tailed Hawk	-	132	1,014	630	3	1,779
Golden Eagle	-	-	29	31	-	60
Am. Kestrel	-	19	17	-	-	36
Merlin	-	3	16	2	-	21
Peregrine Falcon	-	6	4	-	-	10
Unidentified	-	43	73	8	-	124
Totals	-	1,187	2,032	729	4	3,952

Hawk watch is on private land. All visitors must be accompanied by a designated hawk watcher. Please contact David Escherich: 814-893-5260.

BALD EAGLE MT (CENTRE)
David Brandes, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
Coverage - days	-	13	13	11	3	40
Coverage - hours	-	35	49	48	14	146
Black Vulture	-	1	-	-	-	1
Turkey Vulture	-	-	145	13	-	158
Osprey	-	30	6	-	-	36
Bald Eagle	-	3	-	6	-	9
N. Harrier	-	8	22	12	2	44
Sharp-shinned Hawk	-	129	241	3	1	374
Cooper's Hawk	-	16	37	11	-	64
N. Goshawk	-	-	2	-	4	6
Red-shouldered Hawk	-	-	6	10	-	16
Broad-winged Hawk	-	790	-	-	-	790
Red-tailed Hawk	-	100	747	434	66	1,347
Rough-legged Hawk	-	-	2	3	-	5
Golden Eagle	-	-	14	87	21	122
Am. Kestrel	-	23	14	3	-	40
Merlin	-	2	10	1	-	13
Peregrine Falcon	-	1	1	1	-	3
Unidentified	-	8	16	15	1	40
Totals	-	1,111	1,263	599	95	3,068

COUNCIL CUP (LUZERNE)
Rick Koval, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
Coverage - days	4	25	24	19	5	77
Coverage - hours	6	127	83	59	8	283
Black Vulture	-	-	1	-	-	1
Turkey Vulture	-	46	263	16	-	325
Osprey	1	81	8	-	-	90
Bald Eagle	5	45	6	-	-	56
N. Harrier	1	13	7	36	-	57
Sharp-shinned Hawk	4	195	198	32	3	432
Cooper's Hawk	-	25	18	8	-	51
N. Goshawk	-	1	-	6	-	7
Red-shouldered Hawk	-	2	7	16	-	25
Broad-winged Hawk	44	2,056	5	-	-	2,105
Red-tailed Hawk	2	52	539	927	14	1,534
Rough-legged Hawk	-	-	-	1	1	2
Golden Eagle	-	-	3	3	1	7
Am. Kestrel	5	98	20	-	-	123
Merlin	-	7	2	-	-	9
Peregrine Falcon	-	2	3	-	1	6
Unidentified	1	35	24	2	1	63
Totals	63	2,658	1,104	1,047	21	4,893

HAWK MT. SANCTUARY (BERKS)
Laurie Goodrich and HMS Staff

	Aug	Sep	Oct	Nov	Dec/ Jan	Totals
Coverage - days	22	29	31	27	23	132
Coverage - hours	167	288	289	209	139	1,092
Black Vulture	-	-	24	24	2	50
Turkey Vulture	-	-	208	30	-	238
Osprey	45	470	146	3	-	664
Bald Eagle	12	62	14	16	31	132
N. Harrier	9	48	103	48	4	212
Sharp-shinned Hawk	99	1,131	2,908	75	5	4,218
Cooper's Hawk	26	168	483	34	13	724
N. Goshawk	-	-	28	49	16	93
Red-shouldered Hawk	3	8	120	168	8	307
Broad-winged Hawk	213	5,237	68	1	-	5,519
Red-tailed Hawk	43	172	984	1,014	169	2,382
Rough-legged Hawk	-	-	-	-	5	5
Golden Eagle	-	1	34	55	11	101
Am. Kestrel	65	330	254	1	-	650
Merlin	3	31	113	3	-	150
Peregrine Falcon	-	16	42	2	-	60
Unidentified	5	59	70	32	1	167
Totals	523	7,733	5,599	1,555	265	15,675

JACKS MOUNTAIN (MIFFLIN)
Ronald Singer, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	4	20	24	9	1	58
<i>Coverage - hours</i>	10	101	116	43	6	276
Black Vulture	3	53	92	37	-	185
Turkey Vulture	-	5	264	48	-	317
Osprey	1	44	18	-	-	63
Bald Eagle	2	30	-	-	-	32
N. Harrier	1	8	28	11	-	48
Sharp-shinned Hawk	4	117	371	8	-	500
Cooper's Hawk	-	14	40	1	-	55
N. Goshawk	-	-	6	1	-	7
Red-shouldered Hawk	-	-	7	3	-	10
Broad-winged Hawk	1	1,191	5	-	-	1,197
Red-tailed Hawk	7	100	641	232	5	985
Rough-legged Hawk	-	-	-	2	-	2
Golden Eagle	-	-	15	8	-	23
Am. Kestrel	1	33	31	1	-	66
Merlin	-	2	4	-	-	6
Peregrine Falcon	-	-	5	1	-	6
Unidentified	-	13	10	2	-	25
<i>Totals</i>	<i>20</i>	<i>1,610</i>	<i>1,537</i>	<i>355</i>	<i>5</i>	<i>3,527</i>

MILITIA HILL (MONTGOMERY)
Marylea Klauder, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	-	30	31	30	-	91
<i>Coverage - hours</i>	-	232	241	137	-	610
Black Vulture	-	22	34	12	-	68
Turkey Vulture	-	6	126	85	-	217
Osprey	-	213	61	2	-	276
Bald Eagle	-	25	9	-	-	34
N. Harrier	-	31	21	6	-	58
Sharp-shinned Hawk	-	465	348	51	-	864
Cooper's Hawk	-	45	37	8	-	90
N. Goshawk	-	-	-	1	-	1
Red-shouldered Hawk	-	4	18	31	-	53
Broad-winged Hawk	-	8,647	211	-	-	8,858
Red-tailed Hawk	-	26	87	134	-	247
Am. Kestrel	-	159	117	2	-	278
Merlin	-	9	10	2	-	21
Peregrine Falcon	-	3	5	2	-	10
Unidentified	-	19	24	18	-	61
<i>Totals</i>	<i>-</i>	<i>9,674</i>	<i>1,108</i>	<i>354</i>	<i>-</i>	<i>11,136</i>

LITTLE GAP BIRD OBSERVATORY
(NORTHAMPTON)
Michael Schall, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage days</i>	8	24	27	25	3	87
<i>Coverage hours</i>	42	179	198	134	17	570
Black Vulture	-	-	10	9	-	19
Turkey Vulture	-	-	77	16	-	93
Osprey	10	213	80	-	-	303
Bald Eagle	4	32	6	11	-	53
N. Harrier	-	32	56	40	-	128
Sharp-shinned Hawk	16	769	1,509	64	-	2,358
Cooper's Hawk	6	117	246	14	-	383
N. Goshawk	-	3	20	11	4	38
Red-shouldered Hawk	-	8	34	38	1	81
Broad-winged Hawk	47	5,552	13	-	-	5,612
Red-tailed Hawk	11	147	461	539	2	1,160
Rough-legged Hawk	-	-	-	2	-	2
Golden Eagle	-	1	17	13	-	31
Am. Kestrel	21	160	61	-	-	242
Merlin	-	9	26	4	-	39
Peregrine Falcon	-	5	19	-	-	24
Unidentified	-	33	56	14	-	103
<i>Totals</i>	<i>115</i>	<i>7,081</i>	<i>2,691</i>	<i>775</i>	<i>7</i>	<i>10,669</i>

ROCKY RIDGE (YORK)
Randy Phillips and David Wildasin,
Compilers

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	11	23	21	11	4	70
<i>Coverage - hours</i>	16	71	34	20	3	144
Black Vulture	-	-	24	11	-	35
Turkey Vulture	-	-	42	33	-	75
Osprey	3	28	5	-	-	36
Bald Eagle	-	19	6	1	-	26
N. Harrier	2	9	3	8	1	23
Sharp-shinned Hawk	5	183	107	16	1	312
Cooper's Hawk	-	19	10	2	-	31
Northern Goshawk	-	-	1	1	-	2
Red-shouldered Hawk	1	2	8	4	1	16
Broad-winged Hawk	6	274	2	-	-	282
Red-tailed Hawk	11	48	70	101	10	240
Rough-legged Hawk	-	-	-	2	-	2
Golden Eagle	-	-	-	-	1	1
Am. Kestrel	3	36	6	-	-	45
Merlin	-	2	2	-	-	4
Peregrine Falcon	-	2	5	-	-	7
Unidentified	-	6	1	2	-	9
<i>Totals</i>	<i>31</i>	<i>628</i>	<i>292</i>	<i>181</i>	<i>14</i>	<i>1,146</i>

SECOND MOUNTAIN (LEBANON)

Dave Schwenk, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	18	29	31	24	15	117
<i>Coverage - hours</i>	150	259	259	163	60	891
Black Vulture	-	12	85	34	3	134
Turkey Vulture	-	-	115	35	2	152
Osprey	21	195	52	1	-	269
Bald Eagle	5	18	6	3	1	33
N. Harrier	3	32	68	30	1	134
Sharp-shinned Hawk	54	582	1,785	22	-	2,443
Cooper's Hawk	14	100	164	14	-	292
N. Goshawk	2	6	31	17	3	59
Red-shouldered Hawk	8	14	97	76	-	195
Broad-winged Hawk	172	2,493	19	-	-	2,684
Red-tailed Hawk	50	153	540	388	15	1,146
Golden Eagle	-	2	16	27	1	46
Am. Kestrel	13	119	62	-	-	194
Merlin	1	12	29	-	-	42
Peregrine Falcon	1	9	11	1	-	22
Unidentified	6	13	30	6	-	55
Totals	350	3,760	3,110	654	26	7,900

STONE MOUNTAIN (HUNTINGDON)

Greg Grove, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	-	24	28	15	5	72
<i>Coverage - hours</i>	-	140	146	75	21	382
Black Vulture	-	-	6	6	-	12
Turkey Vulture	-	-	171	9	-	180
Osprey	-	73	17	1	-	91
Bald Eagle	-	13	3	8	1	25
N. Harrier	-	22	30	29	-	81
Sharp-shinned Hawk	-	230	460	7	-	697
Cooper's Hawk	-	40	62	10	-	112
N. Goshawk	-	-	2	3	1	6
Red-shouldered Hawk	-	2	20	34	1	57
Broad-winged Hawk	-	974	8	-	-	982
Red-tailed Hawk	-	86	626	622	17	1,351
Rough-legged Hawk	-	-	-	1	-	1
Golden Eagle	-	-	36	70	14	120
Am. Kestrel	-	59	58	1	-	118
Merlin	-	13	15	1	-	29
Peregrine Falcon	-	7	8	-	-	15
Unidentified	-	32	27	5	-	64
Totals	-	1,551	1,549	807	34	3,941

TUSCARORA SUMMIT (FULTON)

Carl Garner, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	-	26	26	20	-	72
<i>Coverage - hours</i>	-	160	158	94	-	412
Black Vulture	-	-	1	41	-	42
Turkey Vulture	-	-	158	39	-	197
Osprey	-	111	27	1	-	139
Bald Eagle	-	17	4	3	-	24
N. Harrier	-	19	28	22	-	69
Sharp-shinned Hawk	-	394	532	19	-	945
Cooper's Hawk	-	27	27	5	-	59
N. Goshawk	-	-	3	8	-	11
Red-shouldered Hawk	-	18	33	-	-	51
Broad-winged Hawk	-	2,345	10	-	-	2,355
Red-tailed Hawk	-	46	360	547	-	953
Rough-legged Hawk	-	-	1	-	-	1
Golden Eagle	-	-	17	30	-	47
Am. Kestrel	-	13	15	-	-	28
Merlin	-	2	2	-	-	4
Peregrine Falcon	-	3	6	-	-	9
Unidentified	-	36	32	9	-	77
Totals	-	3,013	1,241	757	-	5,011

WAGGONERS GAP (CUMBERLAND)

Dave Grove, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	22	29	31	28	23	133
<i>Coverage - hours</i>	131	256	283	201	150	1,021
Black Vulture	-	6	20	15	31	72
Turkey Vulture	-	-	446	398	4	848
Osprey	25	284	85	1	1	396
Bald Eagle	15	34	10	6	12	77
N. Harrier	5	56	108	69	7	245
Sharp-shinned Hawk	76	1,354	2,957	75	2	4,464
Cooper's Hawk	16	137	274	30	3	460
N. Goshawk	-	4	34	59	30	127
Red-shouldered Hawk	-	2	143	168	10	323
Broad-winged Hawk	119	2,671	26	-	-	2,816
Red-tailed Hawk	62	207	1,440	1,853	281	3,843
Rough-legged Hawk	-	-	-	6	1	7
Golden Eagle	-	2	41	105	28	176
Am. Kestrel	63	192	85	-	-	340
Merlin	-	12	41	2	-	55
Peregrine Falcon	1	10	34	-	-	45
Unidentified	8	53	96	18	7	182
Totals	390	5,024	5,840	2,805	344	14,476

Addendum: 12/31

Bald Eagle 3, Sharp-shinned Hawk 1, N. Goshawk 2, Red-Tailed Hawk 18, Golden Eagle 4.

...continued on page 223

Nesting Short-eared Owls at Imperial

by Chuck Tague

On 30 May 1997 Andi Stephens and I explored a section of the Imperial Strip Mines where, a few days before, she and her husband Chriss had found some unidentified egg shells. They also observed two Short-eared Owls. As expected the shells were gone but two owls quickly greeted us. One rose up from the grass and approached us, the other just appeared high overhead. About 100 feet from the first owl's roost, in a clump of grass taller than the surrounding vegetation, I noticed a white spot that I thought might be a shell fragment. It was actually a small spot of fecal matter in a slight depression surrounded by high grass. Near the whitewash I noticed an owl pellet, then another. I pushed aside some grass and from the clump two nestling Short-eared Owls stared out at us.

The largest nestling, about 8" long, had wide yellow eyes, beige down, and a black beak and face. The second, slightly smaller, was also downy, but not quite as alert. These two faced the opening. The older bird clicked its beak at us once but otherwise seemed undisturbed. As Andi and I examined the birds, we noticed a third nestling. This chick, about 3" long, had its rear towards the opening so we could not see its face. It did not, however, have much down.

We located the nest in a sloped grassy savanna surrounded by great expanses of recently reclaimed surface mine. The ground cover, mostly grasses and clovers, stood about 8" high. Scattered Autumn Olives, about 6' tall, were the only woody vegetation. The grass around the nest, what my parents called Orchard Grass, had wide blades and was about 24" high. The bottom of the nest was sparsely lined with dried grass. As I photographed the nest, one parent circled very high over our heads and barked at us constantly, soaring and hanging like a kite — as if it were a Red-tailed Hawk. This agitated surveillance continued until Andi and I left the vicinity of its young and had moved far from the nest. My photographs would later reveal the back end of a fourth owlet snuggled against the second oldest sibling.

Short-eared Owls, *Asio flammeus*, are endangered in Pennsylvania. Although they have historically migrated through the Commonwealth, and they occasionally wintered in appropriate open habitat, the heavily wooded landscape seldom provided sufficient grasslands or marshes for Short-eared Owls to breed. There are reports of Short-ears nesting in Pymatuning Swamp before it was flooded and they have regularly nested in marshes around Philadelphia International Airport. Recent changes in surface mine reclamation, however, have created large expanses of grasslands in western Pennsylvania, ideal habitat for Short-eared Owls as well as other prairie birds. In 1988, volunteers of the Pennsylvania Breeding Bird Atlas Project documented several Short-eared Owls' nests in Clarion and Jefferson Counties. According to Dan Brauning, the ornithologist for the Pennsylvania Game Commission, nesting Short-eared Owl are reported in Pennsylvania about every ten years. On Dan's recommendation we did not report the nest in the *Nature Observer* until the breeding season had safely passed. Finding the owls' nest was not totally unexpected. Good numbers of Short-ears have been wintering in the Imperial mines for the last several years. On the morning of 26 March, I observed a pair of owls hunting in the mines. This is the latest I had ever seen them there. Several other birders reported spotting Short-ears during the spring and in early May Ted Floyd encountered a pair of extremely aggressive Short-ears in the mine.

Northern Harriers share the Short-eared Owls' habitat and feeding requirements, and several observers have noted these grassland hawks in the mines as well. Beginning in mid-April, one male harrier in particular would aggressively greet birders at the mine entrance and escort them past a high, sloping ridge; swooping, circling and screaming "keek-keek-keek." When the human intruders reached a turn in the trail, the harrier would return to the ridge and perch on a look out post on the edge of a shale cut.

The following Friday, 6 June, I

had little trouble locating the harriers' nest. It was on the slope just below the look out. The male was not around but the female flushed and I found two nestlings, bigger than a grapefruit but smaller than a cantaloupe. They were in the grass about a yard from the nest, each having moved off in a different direction. The nest was little more than a mat of dried, compressed grass and herbs. The female moved off but hung around the ridge watching. I photographed the nestlings and left quickly. The female returned before I left the mine. Andi Stephens and I spent the morning of 13 June at Imperial, although rain kept us in the car most of the morning. We observed a male and female harrier hunting in the pasture along Steubenville Pike, leading me to believe there may be more than one harrier nest. We walked the trail through the valley and as usual, the male harrier greeted us. We then climbed the ridge directly across from the harriers' nest and a Short-ear approached, barking as it hung over our heads. This is quite a distance from the first owls' nest. We crossed a high, flat plane and a second owl rose from the grass. We did not search for a second nest, but instead assumed that one was there and move off so we would not to disturb the owls.

References:

- Brauning, Daniel W. ed. 1992 *Atlas of Breeding Birds in Pennsylvania*. Univ. of Pittsburgh Press, Pittsburgh.
- Johnsgard, Paul A. 1990. *Hawks, Eagles, & Falcons of North America*. Smithsonian Institution Press, Washington, D.C.
- Todd, W.E. Clyde. 1940. *Birds of Western Pennsylvania*. Univ. of Pittsburgh Press, Pittsburgh.

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PHOTOGRAPHIC HIGHLIGHTS



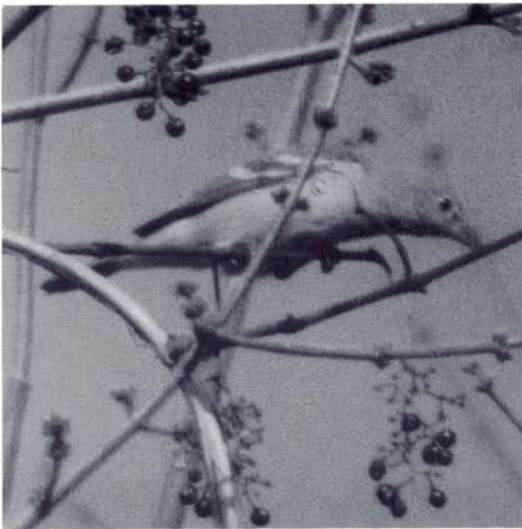
Hudsonian Godwit, Green Lane Res., *Montgomery*
10/15/1997. Photo by Rick Wiltraut.



Snowy Owl, near Butler, *Butler*,
12/17/1997. Photo by Scott Bastion.



Long-billed Dowitcher, Somerset Lake, *Somerset*,
9/11/1997. Photo by Walt Shaffer.



Western Tanager, Nockamixon State Park, Bucks, 12/26/1997. Photo by Rick Wiltraut.



Northern Wheatear, Walker Twp., Juniata, 10/6/1997. Photo by Franklin C. Haas.



Merlin, Fancy Furrow Farm, Northampton, 12/24/1997. Photo by Rick Wiltraut.



Black-headed Gull, Pittsburgh, Allegheny, 11/4/1997. Photo by Chuck Tague.



Townsend's Warbler, Drums, *Luzerne*,
12/19/1997. Photo by Jim Hoyson.



Ash-throated Flycatcher, Williams Twp., *Northampton*,
11/28/1997. Photo by Franklin C. Haas.



Short-eared Owl nestling, Imperial, *Allegheny*,
5/30/1997. Photo by Chuck Tague.



Northern Harrier nestling, Imperial, *Allegheny*,
6/6/1997. Photo by Chuck Tague.

PENNSYLVANIA SOCIETY FOR ORNITHOLOGY

9th Annual Meeting 15-17 May, 1998 Mansfield University - Mansfield

FRIDAY, May 15, 1998

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

SATURDAY, May 16, 1997

6:30 a.m.	--	11:00 a.m.	Field Trips (*see below)
11:30 a.m.	--	12:30 p.m.	Lunch
1:00 p.m.	--	5:00 p.m.	Programs (exact schedule will be sent with registration confirmation)

Tim O'Connell, Pennsylvania State University--**Landscape Effects on Forest Interior Birds on the Allegheny Plateau** (Using Geographic Information Systems)

Brad Ross, National Audubon Society and Penn State--**Response of Birds to Timber Practices on the Pennsylvania Northern Tier**

Ted Floyd, University of Pennsylvania--**A New Method for Analyzing Christmas Count Data** (Using Pennsylvania Christmas Count Data)

Douglas Gross, Ecology III and PSO--**Discoveries Made by the Special Areas Project in Pennsylvania's High, Low, and Out-of-the-way Places**

Ron Rohrbaugh, Education Dept. of Cornell Laboratory of Ornithology--**Citizen Science at Cornell University: A Sampler of Bird Project Results**

Jeff Groth, American Museum of Natural History--**Crossbill Identification, Taxonomy, and Natural History**

6:00 p.m.	--	7:00 p.m.	Social
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7:00 p.m. -- 9:30 p.m. Banquet- Our banquet speaker, **Ken Rosenberg**, is the Assistant Director of the Cornell Laboratory of Ornithology's Conservation Program and Team Captain of the Sapsuckers. His presentation is entitled "**New Developments in Bird Monitoring and Conservation at the Cornell Lab of Ornithology.**"

SUNDAY, May 17, 1998

6:30 a.m.	--	11:30 p.m.	Field Trips (*see below)
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*Field Trips will include the following locations:

The Muck, Crooked Creek wetlands, Tauscher's Pond
Marsh Creek wetland trail, Gee Hollow
Pine Creek Gorge
Isolated relic boreal wetlands

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

The Flycatcher in the Honeysuckle Bush

by Arlene Koch

Monday morning, 24 November, dawned cold and windy and I was glad there was nothing pressing on my schedule for the day. I had slept later than usual trying to recover from a short, but intense birding weekend at Cape May, N.J.

Around quarter to 9 I picked up my third and last cup of coffee and walked to the living room window. My hair was soaking wet and I had no shoes on. I had not, as yet, decided how to start the day. I stood watching the activity at the feeders out front and laughed at the chickadees and titmice getting blown all over the place by the 20+ mph winds.

Suddenly my attention was riveted on a bird that swept down from the sky onto a low pine branch. Too much coffee, I thought, because it looked to be a *Myiarchus* flycatcher and in mid-November that's a very unusual bird. In fact, one of our target birds in Cape May had been an Ash-throated Flycatcher reported to have been around the Beanery but we hadn't found it.

My binoculars weren't anywhere close but the bird was only about 20 feet away so I got a good look at it even though it flew off 30 seconds later. "Oh, no," I said out loud. I just saw what could be one of the best birds of the year and I have no way of proving it.

Well, actually, I knew that most of my birder friends would believe me because I've had more than my share of unusual species here on the property that have been seen and verified by other knowledgeable birders. But recently I've had a string of really unusual avian visitors seen by my eyes only and after 23 years in this game I know how it works. Even some of your closest friends will secretly doubt your unverified sightings, even if they wouldn't say

it to your face.

I looked, but didn't see the flycatcher any more that day. So on Tuesday morning I positioned myself at the front window around 8 o'clock, hoping that by some miracle it would return to the same place at the same time. But it didn't and by 9:30 I gave up and drove to Allentown to take care of some business, allocating this bird to my "never to be seen again" list.

At 3 that afternoon I laid back to take a short rest in the recliner in the living room. I looked out at the pine tree and thought how funny it would be if the flycatcher would show up right at that moment while I was prone and almost asleep. I closed my eyes and started drifting off, but opened them when one of the logs in the wood stove crackled and, incredulously, there was the flycatcher, back right where I had seen it yesterday morning.

I half-leapt and half-fell out of the chair and from that moment on for the next three weeks my life was not my own.

On Wednesday morning seven other highly qualified birders saw and photographed what turned out to be Pennsylvania's first-ever confirmed sighting of an Ash-throated Flycatcher. More than likely this bird has visited our state before, but was just never found. It was, according to Frank and Barbara Haas, long overdue.

We didn't see it until around 9, when Jason Horn spotted it sitting low in a Mountain Ash tree at the edge of the front yard. Deuane Hoffman had just arrived and rushed into the house and Jason jokingly told him he had just missed it. "There it is!" Jason yelled, and I thought my picture window was going to be smashed by bodies and binoculars jockeying for position. One guy with a heart condition ran in from the kitchen

so fast that he got red in the face and began tapping on his pacemaker. I almost fainted because no bird, however rare, is worth dying for. But fortunately he was OK after that.

I had no choice but to announce this bird's presence on all the hotlines, knowing what would happen next. I couldn't, nor did I want to, contain news of this bird so I went for the next best option of trying to control the situation.

People began arriving the next morning (Thanksgiving Day) at dawn. At 7:15 the first out-of-state visitor arrived from Connecticut and subsequently people came from New Jersey, Delaware, New York City, Illinois, and Seattle, Wash. (although he was on the East Coast on business).

The flycatcher usually roosted at the base of the trees in the front yard, favoring the root tangles of a 17-year-old tartarian honeysuckle bush. I often watched it come up and get active in the morning, sometimes as early as 6:45 but other times not until close to 8. It would sit out in the open at the end of a branch for a while before starting its daily feeding rounds.

It frequented the still heavily-berried Autumn Olive bushes and occasionally ate what was left of the Mountain Ash berries. When the sun warmed things up, it would go up to the nearby fields and catch insects from whatever convenient low perch it could find. It worked its way from one end of the fence row to the other. Two or three times during the day it would return to the yard and repeat the whole cycle. Occasionally I would see it go down for the night.

During the course of the bird's three-week visit, 129 people visited and all but four of them successfully saw the bird. All were welcomed and I enjoyed their

company but a few were, admittedly, pains in the butt.

Some people stayed around for hours, "bonding" with the bird. At the other end of the spectrum, though, one guy was literally only on the property less than 5 minutes. He drove up and got out of his car, I pointed out the bird sitting in the tree, he looked at it, signed my book, thanked me, and left.

Hosting a bird this rare is an eye-opening and often very draining experience. My phone rang constantly and many times people were in the front yard before I was awake enough to talk. Even David leaves me alone then. I found that some birders with big reputations were short on knowledge and others whose names I had never heard could pick out the bird camouflaged in the underbrush.

The last day I saw the flycatcher was Tuesday, 16 December, and frankly by that time I was almost ready to chase it away. Ironically, the next morning one of our local papers did a front page story on it, complete with color picture, and then I had to deal with local people showing up uninvited, even though directions were not given.

However, the reporter who wrote that story called later in the week to tell me that because the paper had put in the wrong page number for the ending of the article their phone lines were jammed with people wanting to know where it was. They were amazed, he said, and so was I when I found out later in the week that the Associated Press picked up the story and I began receiving clippings from papers all over Pa.

The reporter said that his editor had no idea that there were so many people interested in birds. I'm just thankful that finally birders have reached a level of legitimacy!

1375 Raubsville Rd.

RENEW, RENEW!

DON'T FORGET

Never put off til tomorrow what you can do today!

WHP TOWER (DAUPHIN)
Mark McConaughy, Compiler

	Aug	Sep	Oct	Nov	Dec	Totals
<i>Coverage - days</i>	6	16	4	-	-	26
<i>Coverage - hours</i>	43	113	42	-	-	198
Black Vulture	6	2	22	-	-	30
Turkey Vulture	-	4	83	-	-	87
Osprey	10	50	5	-	-	65
Bald Eagle	3	6	1	-	-	10
N. Harrier	2	10	9	-	-	21
Sharp-shinned Hawk	15	188	178	-	-	381
Cooper's Hawk	3	43	26	-	-	72
Northern Goshawk	-	-	1	-	-	1
Red-shouldered Hawk	-	1	10	-	-	11
Broad-winged Hawk	32	499	1	-	-	532
Red-tailed Hawk	7	61	37	-	-	105
Rough-legged Hawk	-	1	-	-	-	1
Golden Eagle	-	1	-	-	-	1
Am. Kestrel	4	35	3	-	-	42
Merlin	-	1	2	-	-	3
Peregrine Falcon	1	2	3	-	-	6
Unidentified	3	21	31	-	-	55
<i>Totals</i>	86	925	412	-	-	1,423

Weekends and 8/30-9/1, 9/6-8, 9/13-22, 10/10-13

Rare Bird Reports

by Nick Pulcinella

Ash-throated Flycatcher

Myiarchus cinerascens

Northampton County

24 November to 16 December 1997

The description that follows is taken from journal notes submitted to PORC by Louis Bevier. He observed the bird on 27 November 1997.

After searching for about 1 hr., I relocated the bird across the street from Arlene's house. It was preening on a low, exposed perch in a multiflora rose at the margin of a large field. After studying the bird with my scope for ~1 min., the bird flew directly to Arlene's house. We both had excellent study of the bird at close raring (7-10m) as it fed in a small line of autumn olive. It perched quietly some of this time after having eaten several berries off the autumn olive. With my 30x Optolyth scope, backlit conditions, and low perch of the bird, we had perfect opportunity to study the bird up to 20 minutes before it flew off.

Size and Shape: medium to large flycatcher just smaller than nearby mockingbird; long tail, medium length hooked bill; broad, gentle bushy crest held oppressed most of the time; wing tips of folded wing came about to base of tail just beyond upper-tail coverts.

Head and Upperparts: crown dull, medium brown, the feathers with dusky central streak (creating diffuse streaked or spotted pattern); auriculars brownish-gray and blending to pale grayish (whitish-gray) of throat, this color extending to hindneck and contrasting with brownish back (slight olivaceous cast); rump somewhat darker than back; uppertail coverts dark brown with cinnamon-rufous margins.

Wings: primaries and outermost secondaries with rufous edging on outer web, creating rufous panel in wing; most of secondaries, including innermost secondaries edged with whitish, the large, oval innermost secondaries (called tertials by some) were clearly only margined with white,

the innermost being dark brown with this margin of white. Greater coverts dark with yellowish white tips. Median coverts similar with pale tips somewhat more restricted (these forming the 2 wingbars seen on the bird); primary coverts dark brown; lesser coverts appeared also to have narrow whitish tips forming a vague 3rd upper wing bar (this often covered by the scapulars).

Tail: I carefully studied the tail from above and below. This bird clearly had completed pre Basic molt, having fairly fresh rectrices and, if a bird of the year, having replaced juvenal rectrices. Outer web of all rectrices dark brown; inner web rufous—except central pair, which were all brown. As the bird preened and we were at close range, the dark brown color of the outer webs could be seen hooking across tip of each rectrix (except of course, inners). The folded tail from above appeared all brown, but from below (outer most pair being seen) a central area of rufous was bounded by dark outer frame that wrapped around and crossed at the tip of tail. The right outermost rectrix had only a vague impression of dark crossing tip, atypical. I thought it might be a retained juvenal rectrix except it clearly was dark brown on the outer web and truncate not rounded at tip unlike juvenal Myiarchus rectrices.

Underparts: chin, throat, and breast a clear pale whitish gray blending imperceptibly with pale lemon wash from lower breast to undertail coverts.

Bare Parts: Bill black, with somewhat paler (brownish) base to lower mandible, mouth lining pinkish though stained reddish by autumn olive berries. Bye: irides rich brown against black pupil. Legs: dark gray. Bill was long and tubular with slight hook at tip, it was relatively slender.

Identification: Clearly an Ash-throated Flycatcher in my opinion, though I would have liked to hear a call (Arlene described it as a rolled "prip" or "pip.") Great Crested Fly[catcher] less likely at this time of year than Ash-thr[outed]—should have shown an obvious white slash on the outer web to innermost secondary (tertial); this bird clearly lacked this diagnostic

mark of Great Crest[ed]. The feathers were not worn, so it is unlikely the white was worn off. Nevertheless, it is the presence of this bold white mark that is diagnostic, not its absence. Therefore, the tail pattern and throat-breast color are important for eliminating Great Crested. The dark tips to the rectrices and pale throat and belly clearly eliminate G-C (also lack of olive cast to back and narrow bill). Brown-crested also should be considered on any vagrant Myiarchus in the east. The bill was too slender for Great Crest[ed] and either the big-billed *magister* Brown-cr[ested] or smaller-billed *cooperi* Brown-cr[ested]. Tail pattern and grayer cheeks also eliminate Brown-cr[ested]. Arlene's description of call, also diagnostic for Ash-throated.

RANGE IN NORTH AMERICA:

Ash-throated Flycatchers breed in western Norm America from Washington and Idaho south through California and east through Colorado and Texas. Winter range is from southern California and Arizona south through Central America, it is casual in winter along the Gulf states. It is accidental in the east especially in late fall and winter.

STATUS IN PENNSYLVANIA:

This is the first record for Pennsylvania. This species has long been sought by birders in Pennsylvania thought to be long overdue to occur as it nearly annual in nearby states (New Jersey, New York, and Virginia) in late fall and early winter. The presence of the bird in late November falls nicely into the pattern established by Murphy (1982).

SEPARATION FROM SIMILAR SPECIES:

It is imperative that any reports of Myiarchus species found in Pennsylvania in late fall and early winter should be checked carefully as it is more likely to be an Ash-throated than any of the other Myiarchus. Others should be alerted even if the

identification is unsure. Ash-throated can be separated from similar Myiarchus, usually Great-crested, by using a combination of few useful field marks. I have included Brown-crested Flycatcher here, as the smaller race *cooperi* has occurred in Florida and Louisiana and may be considered a potential vagrant to the northeast in late fall and winter.

Northern Wheatear *Oenanthe oenanthe*

There were two reports of single Northern Wheatear this fall in Pennsylvania. A female/immature found near Center, Juniata County from 4-7 October, and a male seen briefly in Lebanon County on 19 October.

	Size	Bill Size	Underparts	Upperparts
Ash-throated	Medium	Medium-small	Throat white; breast pale gray; belly and vent pale yellow.	Pale grayish-brown
Great-crested	Medium-large	Medium-large	Throat and breast dark gray; belly and vent bright yellow.	Olive
Brown-crested	Large	Large	Throat and breast pale gray; belly and vent pale yellow.	Grayish-brown to olive-brown

	Tertial Edging *	Outer Tail Feathers*
Ash-throated	Wide and buff	Broad rufous edges to the inner web but tipped brown. Outer web brown extending and hooking across the tip of the feather.
Great-crested	Large and buffy lemon	Inner web rufous. Outer web brown extending all the way to the tip.
Brown-crested	Narrow and buffy-lemon	Inner web with moderate amount of rufous extending to the tip. Outer web brown.

* Note, both of these features are well illustrated in Pyle (1997).

There are also other field marks (wing-bar color, lower mandible color, and mouth lining color) that can be used in conjunction with the above general field marks to help with the identification. In general, if you are familiar with the field marks of Great-crested Flycatcher, the Ash-throated may look slightly smaller, has a noticeable pale belly, is brown above and show less rufous in the tail.

References:

- Murphy, W. 1982. The Ash-throated Flycatcher in the East: an overview. *Am. Birds* 36:241-247.
 Pyle, P. 1997. *Identification Guide to North American Birds Part 1*. Slate Creek Press, Bolinas, Calif.

Upperparts: Mantle grayish-brown. Back brown. Lesser coverts gray-white with black centers and gray-white edges. Median coverts mostly brown with some black feathers edged in buffy-white. Alula appeared grayish. Primaries black, secondaries black with some buffy-white tips, tertials mostly brown with some darker tips. Rump white.

Underparts: Chin, throat and upper breast a brownish-tan. Lower breast and belly a paler whiter-tan. Under tail coverts light brownish-tan.

Tail: Seen mostly closed, but appeared mostly white with black feathers and when flying the black feathers showed an inverted "T" design. The black "T" was apparent in the lower third of the tail.

Bare Parts: Bill dark, eye large and black, legs black.

Race: With the darker brownish-tan appearance to the overall color of the bird, we feel it is of the Greenland race *leucorhoa*. The bird is probably an immature male because of the dark ear coverts, but because there is so much variability within females and immature of the species, we can't be certain of age.

Steven Feldetein also observed the bird and posted the following note regarding this observation to the Pabirds internet birding forum.

I went with Randy Harrison and Gene Zielinski to see the Northern Wheatear in Juniata County. We had excellent prolonged views of the bird, so we were fortunate to be able to study it in detail. I'd like to make some additional comments on the held identification of this bird. Firstly, its breast, sides, and flanks were a fairly bright buffy orange, contrasting noticeably with its whitish belly and undertail coverts. This suggests that the bird is of the expected subspecies "leuchora" which nests in Labrador, eastern Arctic Canada, Greenland, and Iceland. Secondly, the bird lacked the obvious black mask of an adult male, so it is most likely an adult female or an immature. It did have grayish ear coverts, black lores, and a bright white supercilium (brighter behind the eye).

The Juniata County bird showed well during its stay and allowed close study, many photographs, and video recording. A description of the bird was submitted by Nick Pulcinella and Al Guarente.

We were able to study the bird under good lighting conditions for approximately one hour at distances as close as 15 feet. The bird was active and was observed feeding on the ground among the small rocks in a dirt pathway.

General Appearance: Smaller than a robin, dark tan to white below with dark primaries and an inverted black "T" on a white tail.

Head: Forehead and crown a brownish-tan. Lore black. Ear coverts smudgy dark brown, white eye ring, supercilium white.

This leads me to guess that it might be an immature male. However there seems to be substantially intraspecific variability within this species so that determination of age and sex is probably not possible.

Both groups took time to eliminate the very similar Isabelline Wheatear, a species of southeast Europe, the Middle East, and southcentral Asia which has exhibited long range vagrancy to Great Britain and could potentially reach our shores. Isabelline Wheatear closely resembles adult female/immature Northern Wheatear. Using several useful field marks (Corso 1997 and Harris 1996) such as length of the primary extension, alula color, difference in supercilium shape and color, shade of the back color and length of the black "T" on the tail, the Isabelline Wheatear was eliminated.

The Lebanon County bird was observed at Memorial Lake SP during a field trip by the Lancaster County Bird Club. Notes on the sighting were submitted by Randy Miller.

On 19 October 1997 I went birding with the Lancaster Bird Club to Memorial Lake. Rosemary Spreha led the group of 10 people. We birded around the dam first. Below the dam there were approx. 300+ American Robins. Twice I saw a bird with white on the rump. It would fly, than land where I could not see it. Most people were watching the 5 Rusty Blackbirds in the creek. Then I saw the bird fly up and land on a post. It was approx. 60 yds. away. I put my scope on it and saw it was a Northern Wheatear. After 30 sec[onds] it flew to the top of the dam breast. The white rump and top of the tail were highly visible. The group quickly went to the top of the dam breast. We sighted the bird 5-6 more times around the rocks, always being chased by American Robins. It would fly 20-100 yds, then hide in the rocks. We didn't go down into the rocks because we did not want to scare the bird away. We were hoping for a better view. But at 0915 the N. Wheatear was seen being chased by an Am. Robin south until it was out of sight.
Description: Size approx. 6 inches; cinnamon breast, medium brown back and top of head; buff supercilium; dark mask, dark eye; small thin black bill;

dark brown wings with no wing bars; rump and top of tail white, lower half of tail dark brown; belly light buff; white undertail coverts. I have seen Northern Wheatear only in Alaska. This was my first sighting of the "Eastern" race.

RANGE IN NORTH AMERICA:

The Northern Wheatear breeds in open country throughout most mainland Alaska and eastward through the northern Yukon Territory, Baffin Island, and Labrador.

The birds that nest in eastern Canada and nearby Greenland and Iceland are of the larger more brown and cinnamon *leucorhoa* race, the expected race in Pennsylvania.

STATUS IN PENNSYLVANIA:

Accidental migrant. These are the fourth and fifth records for Pennsylvania. Previous records are of a specimen collected near Landsdale, Montgomery County on 6 October 1919 (Poole 1964). This specimen is now lost. A sight record from Centre County on 17 September 1985 (*Cassinia* 61:84). And, a bird photographed in Bucks County on 25 September 1995. The two new records fit nicely into the mid-September to mid-October pattern of occurrence for most fall Northern Wheatears in the Middle Atlantic states.

REFERENCES:

- Grow, T. 1986. *Cassinia* V61:84, Published by the Delaware Valley Ornithological Club.
- Corso, A. 1997. Variability of identification characters of Isabelline Wheatear. *Dutch Birding* 19:153-165.
- Harris, A., H. Shirihai, A. Christie. 1996. *The Macmillan Birder's Guide to European and Middle Eastern Birds*. Macmillan General Books, London.
- Poole, E.L. 1964. *Pennsylvania Birds*. Livingston Publishing, Narberth, Pa.

Townsend's Warbler

Dendroica townsendi

Luzerne County

A Townsend's Warbler was first observed in Butler Township in early December and remained present through the reporting period. Through an agreement between the resident and local birders, knowledge of the bird's presence was to remain private, and the resident agreed to keep a record of her observations of the bird. (See editorial in this issue concerning this situation.) The follow account is excerpted from notes submitted by Alan Gregory.

The bird was first seen by a resident of Butler Township in her yard in early December 1997. She called me about an odd warbler visiting her plastic silo-type feeder with a catch-tray attached to the bottom. The feeder was hung from an interior branch of a large Norway spruce. The yard is bordered on the north by mature blue spruces. We saw the bird first on 18 December. Additional visits were made periodically beginning the week of Christmas to check on the bird. Based on the initial observations and the follow-up visit of 19 December I recorded the following field notes.

The male warbler was in fresh fall plumage with no indications of worn feathers. Its bill was black. A bold, somewhat triangular-shaped black patch centered on the eyes adorned both sides of the head and really stood out on the first look at the bird. This black area (which almost enclosed the eyes) began in front of the eyes and was bordered by strong yellow plumage above (median lines) and below. The crown was dark. There was a slight hint of yellow at the bottom of the eyes but no complete eye ring. A thin black line started at the rear corner of each facial mask and appeared to go up and over the nape/upper back. The back was olive green with faint black makings throughout. These markings were clearly evident upon looking down at the bird as it foraged below the window, and were aligned in a head-to-tail fashion. The crown also was a dark olive-green. The back plumage melded into a slightly grayer and darker rump and tail area There

was no rump patch as in the Yellow-rumped Warbler. The bird's sides were yellow with some hint of dark spots and this plumage then transitioned into the streaking along the bird's sides. The two white bars were prominent on each wing. The bird did not wag its tail at any time. The bird was a bit larger than a chickadee but not as plump as a junco. On the initial visit of 18 December the bird stayed close to the feeder but on the follow-up visit it also foraged extensively among the lower branches of the Norway spruce. It also went down to the ground, seemingly in search of fragments of sunflower seeds. The bird's visits to the feeder seemed to coincide, most of the time, with those of chickadees and juncos.

The black facial mask and yellow median stripes clearly distinguished the bird apart from the Yellow-rumped Warbler or Blackburnian Warbler. The thin black bill, streaking on the sides, and bright yellow plumage on the chest clearly distinguished it as a warbler, but it was the bold black, somewhat triangular shaped facial mask that marked it as a Townsend's Warbler and this was the most striking feature of the bird. Further observation that corroborated our identification was accomplished on 19 December by Doug Gross, Jim Hoyson, and Rich Koval. Jim Hoyson took a series of color slides of the bird while Rich Koval was able to get a few minutes of videotape documentation. I also took several color slide photos and was able to get a few more photographs on subsequent visits. All photography was accomplished through a window of her home.

An additional comment I would like to add to Alan's description is that, having seen the bird and a photograph taken at close range show there is a lack of any gray or dark markings across the throat or upper breast identifying it as a female, probably a first fall bird.

RANGE IN NORTH AMERICA:

Breeds from east-central Alaska south through British Columbia, and southwest Alberta and south through western Washington and central Oregon and central Idaho. Winters from western Washington south to southern California, with the largest

numbers wintering in central California. A small number also winters in southeast Arizona and west Texas (Dunn 1997).

There are numerous late fall and winter records on the East Coast from Newfoundland to Florida.

STATUS IN PENNSYLVANIA:

Accidental. There is a specimen obtained in Coatesville, Chester County on 12 May 1868. It is deposited at the Academy of Natural Sciences of Philadelphia (Poole unpublished ms.) and a single-observer record from Tyler Arboretum in Delaware County, 17 November 1973 (Scott 1974).

ELIMINATION OF SIMILAR SPECIES

The presence of the dark auricular area eliminates Black-throated Green Warbler and Hermit Warbler, another potential vagrant during the winter season in the Northeast.

REFERENCES:

- Dunn, J.L. and K. Garrett. 1997. *A Field Guide to Warblers of North America*. Houghton Mifflin Co., Boston - New York.
- Poole, E.L. Birds of Pennsylvania unpublished manuscript.
- Scott, F.R. and D. Cutler. 1974 Middle Atlantic Coast Region. *Am. Birds* 28:36.

An Unusual *TRINGA* Delaware County

On 9 November 1997, I was birding with Jim and Linda Waldie at Springton Reservoir in Delaware County. As we were observing a small flock of Lesser Yellowlegs and Killdeer, a Northern Harrier flushed up the birds and as they flew in front of us, I noticed a smaller, slightly darker brown-backed individual. Luckily, the birds put down nearby and we were able to study the "different" looking bird. In most respects, the bird resembled a Lesser Yellowlegs, but there were a few field marks that were "not quite right" for any Lesser Yellowlegs I had ever seen. When compared to the nearby Lesser Yellowlegs the bird in question had a

back that was a shade darker brown, the bill was not as long and the leg color was not the same shade of yellow. The most dramatic difference when compared side-by-side with the Lesser Yellowlegs was the bird's size. It was clearly smaller-legged and smaller proportioned, nearly 30-40 percent smaller.

With only about two hours of daylight left we thought it would be prudent to get other birders out to see the bird, so we notified others that we had an unusual shorebird and several other birders were able to see it before sunset. Field notes were taken, but the lighting conditions were too dark and the bird too distant for any recognizable photograph. That night while going through some shorebird references I thought that the *Tringa* could possibly be a Wood Sandpiper. I consulted with some friends who I knew had some practical experience with Wood Sandpiper and the conclusions were mixed. Some felt that the bird was not right for a Wood Sandpiper and others thought the bird had to be a Wood Sandpiper. I made some phone calls to some of the others who had seen the bird during the day and strangely we all had come to the same conclusion, that the bird we observed for over two hours could have been a Wood Sandpiper.

The next morning there were about twice as many birders studying the *Tringa* and some of the birders there who had field experience with Wood Sandpipers, felt that the bird could be that species. I was still not totally convinced, but agreed that word of the bird should go out to others who can then decide if they wanted to chase it or not. By the end of day two, about 30 to 40 birders had seen the bird and identifications ranged from a "weird" Lesser Yellowlegs to a definite Wood Sandpiper and everything in between, including some strange hybrid hypotheses.

This is my description of the bird taken during the first day of observation.

Size: *Slightly* larger than a Pectoral Sandpiper.

Upperparts: Head, neck and mantle; gray, white supercilium more prominent in front of the eye; back brown with some white speckling; rump white; In flight, the upperwing

was solid brown, no wingstripe. The wings were as long as or slightly longer than the tail when viewed from the side. The underwings were a pale gray. Underparts: Belly white, flanks white. Tail: In flight the tail appeared finely barred with a dark tip.

Bare Parts: Bill was medium-size not quite as long as a Lesser Yellowlegs, with the appearance of being slightly upturned, this seemed to be caused by a slight upward angle of the lower mandible. The upper mandible was straight. The bill was finely tipped. Legs appeared either a dull yellow-orange or orange-brown and it was not noticed if they extended beyond the tail in flight.

Voice: None heard.

I also thought that other medium-sized *Tringa* could be easily eliminated. Green Sandpiper was eliminated by the absence of dark underwings and of the presence of a finely barred tail. Solitary Sandpiper was eliminated by the lack of a dark rump.

So what was. I left with? A miniature or as some people were saying a "runt" Lesser Yellowlegs or a bird that had some possible features of a Wood Sandpiper but other field marks such as a distinct wing projection and finely tipped bill that didn't fit that species either.

The bird was present for a third day when other birders from further afield got to see it and then it disappeared along with the Lesser Yellowlegs. I have seen photographs of the bird, but to me, none is identifiable to a specific species. I observed the bird for nearer ten hours and still don't feel comfortable putting a name to it, but it was interesting nonetheless.

Letter to the Editor

Dear editor,

As someone who has listened in the dark to the flight calls of thrushes, I enjoyed "A Thrush Migration Pattern over Southwestern PA" by Paul Hess and Dennis Lauffer (PB 11(3):144). I listen outside my house on Berks County's Reading Prong, an ancient range of low hills that parallels the ne/sw orientation of the Kittatinny Ridge across the Great Valley to the nw. The birds seem to fly ssw, apparently following the hills and perhaps also heading for the Appalachians. Like Hess & Lauffer, I have never found numbers of thrushes in the woods remotely comparable to the number that fly over, even on those rare occasions when I've been able to go birding on the same morning as a heavy flight.

The same type of weather patterns described in the article bring the biggest flights here. My best Swainson's week in 1997 was 9/21-28, but my highest count was no more than 50, though I rarely listen for more than 15 minutes before dawn. (Stimulated by Hess & Lauffer's results, I plan to be more systematic about this next fall.)

The largest and most memorable flight I've ever witnessed passed over on the night of 9/27/70. A logjam of hot, humid, stagnant air that had been stalled over the region for more than a week was broken by a cold front that dropped the temperature

about 20 degrees F. in a matter of hours and brought rain. After the rain came the birds. I could hear call notes of migrants of all kinds all evening, and finally decided to get some idea of thrush numbers passing over in a 15-minute period. From 10:45-11:00 pm, I counted 410 call notes. The migration (not just of thrushes) seemed to continue at that level through the evening and night. I went outside several time during the night, too excited to sleep well, and the skies were never silent. Joan Silagy, a friend who lived 20 miles away in Reading, said the flight was so heavy she could hear it indoors. Another friend, Mrs. Anna Kendall, reported "huge" numbers of birds, including Swainson's Thrushes, in the woods at Eckville below Hawk Mt. (about 30 Miles from here) at dawn the next morning.

How many birds flew over? I don't know how you begin to count a tide like that, but remembering the sound of it moving through the darkness is stirring to this day.

Rudy Keller
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I'm not sure if we mentioned it yet, but it is time to renew your subscription to *Pennsylvania Birds* and your membership in the Pennsylvania Society for Ornithology. Do it today!

Summary of the Season - October through December 1997

Western and northern vagrants highlighted this quarter. The **Ash-throated Flycatcher** (first state record) that showed up at Arlene Koch's property in *Northampton*, was long overdue for this state, having occurred in the adjacent states of New York, New Jersey, and Maryland. Not only did it stay for three weeks, it was fairly cooperative in allowing close approaches by birders. This seems to be the normal behavior of this species when out of its normal range.

The **Townsend's Warbler** in *Luzerne* was only the second record for Pennsylvania and also cooperated with birders, allowing decent views. (Unlike the resident who first spotted the bird.) This is another species which one would expect to show up more frequently, as there are quite a few records for the northeastern part of the country. The only other record for the state was a specimen collected on 12 May 1868 at Coatesville, Chester County. Will we have to wait 130 more years for the next one?

Northern Wheatears made an unprecedented showing. Not only were there two occurrences, both were seen by multiple observers. The one in *Juniata* stayed for two days after being reported, allowing many birders to see it, and the *Lebanon* bird was seen by many members of a field trip. All other previous records were single-observer records, except for last year's *Bucks* bird which was seen by two observers.

With all of the splitting going on these days. It is important to report races or sub-species. A case in point was a possible "**Black**" **Brant** in *Bucks*. Unfortunately, the bird was only there for a day. The usual number of **Greater White-fronted Geese** were seen, but more interesting was the report from a bander in Ireland who reported on "Greenland" White-fronted Geese that were banded in Ireland, one of which was reported with a flock of Canada Geese at Green Lane Res., *Montgomery*! This verifies that birds nesting in Greenland who normally migrate to Europe, can stray into the northeastern United States.

This gives a large dose of credibility to Barnacle Goose sightings, as they also breed in Greenland and migrate to Europe.

Great Egrets remained until the end of December in *Berks*, *Bucks*, and *Delaware*, and into November in several other counties. The **Yellow-crowned Night-Heron** in *Dauphin* on 11/15 was the second latest record, only surpassed by last year's record of 12/21. Other waterfowl reports were unexceptional, except for **Black Scoter** which made an impressive appearance on 7-8 November. Here are the high counts from across the state.

Date	Number	County
8	10	Armstrong
7	41	Berks
7	27	Bucks
7	38	Chester
8	36	Clinton
7	23	Delaware
7	134	Erie
7	35	Fayette
8	80	Indiana
7	60	Montgomery
7	44	Montour
8	11	Philadelphia
7	4	Schuylkill
8	45	Somerset
8	25	Westmoreland
7	54	Wyoming

There were reports on those dates from other counties as well, but numbers were not reported.

Shorebird reports were relatively normal, but two **Wilson's Phalarope** were reported (*Armstrong* and *Philadelphia*).

It was an average season for jaegers at Presque Isle this fall—only one **Pomarine** and one *sp.* In recent years, there have been 0 to 3 jaegers each fall, quite a comedown from 1991 when there were seven.

The **Black-headed Gull** in *Allegheny* was a first county record. And two **Black-legged Kittiwakes** were reported in *Erie* and *Lancaster*. **Forster's Terns** remained into

November in the southeastern and northwestern corners of the state.

Snowy Owls made only brief appearances in *Butler* and *Schuylkill*.

A **Rufous Hummingbird** was captured and positively identified in *Westmoreland*, and another was photographed in *York*.

Northern Shrikes made a respectable showing, with 9 in 5 counties. The only **Loggerhead Shrike** outside of *Adams* was in *Berks*.

Two **Western Tanagers** (different plumages) were found in Nockamixon S.P. in *Bucks*. One stayed around for many observers to see.

At the current "Rare Bird Capitol" of Pennsylvania (Arlene Koch's) 14 species of sparrow were reported including **LeConte's** and **Seaside**. The Seaside Sparrow, if accepted, would be only the fourth state record.

The **Western Meadowlark** reported last quarter in *Juniata*, disappeared for a while (or shut up) and reappeared 30 September for about a week.

There were inklings of the winter finch invasion to come with **Red Crossbill** being reported from 19 counties, **White-winged Crossbill** from 20, **Com. Redpoll** from 27, **Pine Siskin** and **Evening Grosbeak** from 45. **Pine Grosbeak** continued to be elusive, reported in only *Berks* and *Clarion*.

There were 261 species reported this quarter, down somewhat from the 268 reported in the same quarter last year. We received partial or complete reports from 53 counties.

Thanks again to our hardworking county compilers! ♣

Frank & Barb Haas

Birds of Note - October through December 1997

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

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

Pacific Loon - *Lancaster*: 1 on 11/8 at Peach Bottom (Bob Schutsky, Randy Miller).

Eared Grebe - *Chester*: 1 on 11/7-8 at Marsh Creek S.P. (John Ginaven); *Erie*: 1 on 11/11 at Presque Isle S.P. (Jerry McWilliams); *Montgomery*: 1 on 10/16 at Green Lane Res. (Jason Horn).

Great Cormorant - *Bucks*: Present from 10/14 (Peace Valley Park), mostly on the Delaware R.; *Delaware*: Present from 11/2 at Marcus Hook (Al Guarente); *Montgomery*: 1 on 10/22 at Green Lane Res. (George Franchois); *Philadelphia*: Present from an early date of 10/23 when 6 were seen (Ed Fingerhood).

American Bittern - *Crawford*: 1 on 11/3 at Pymatuning (Anthony Marich Jr); *Lebanon*: 1 on 10/19 at Memorial L. S.P. was late (Randy Miller); *Schuylkill*: 1 on 10/12 at Landingville Dam (Tom Clauser).

Least Bittern - *Bucks*: 1 on 10/7 at Silver L. (George Carmichael).

Snowy Egret - *Montgomery*: 1 on 12/28 at Ambler Res. (Amy Henry); *Philadelphia*: Recorded up to 10/21 at Tinicum (Ted Floyd).

Yellow-crowned Night-Heron - *Dauphin*: 1 on 11/15 at Harrisburg was late (Terry Neumeyer).

Greater White-fronted Goose - *Berks*: 1 on 11/29 at Oley (Peter Saenger); *Bucks*: 1 on 11/19-12/31 at Peace Valley Park (Ron French) and 1 at Ingham Springs on 12/28 (Ted Evans); *Lancaster*: 1 on 12/21 in southern Lancaster County; *Montour*: 1 on 12/21 at Montour Preserve (Dave Unger).

"Black" Brant - *Bucks*: A possible "Black" Brant was reported at Peace Valley Park on 11/11. Unfortunately, the word did not get out until after the bird was gone and no photo was taken.

Canada "Cackling" Goose - *Bucks*: 3 on 11/22 at Peace Valley were described as possible "Cackling" race.

Virginia Rail - *Bucks*: 1 on 10/13 at Peace Valley Park (Steve & Devich Farbotnik); *Cambria*: 2 on 10/13 at Prince Gallitzin S.P. (John Salvetti); *Philadelphia*: 1 picked up on 10/9 in center city (Frank Windfelder).

Sora - *Cambria*: 2 on 10/1 at Prince Gallitzin S.P. (John Salvetti); *Lancaster*: 1 on 11/12 at Washington Boro (Bob Schutsky et al.).

Common Moorhen - *Philadelphia*: Recorded up to 11/1 with a high of 3 on 10/5 at Tinicum (Ted Floyd).

Sandhill Crane - *Erie*: 3 on 12/3 at Fairview (Jerry McWilliams); *Lawrence*: 4 present up to 11/9 in Plain Grove (m. obs.).

Black-bellied Plover - *Crawford*: Present from 10/25-11/2 at Woodcock L. (Ron Leberman, Isaac Field); *Lancaster*: recorded up to 10/12 at Washington Boro (Bob Schutsky et al.); *Montgomery*: 1 on 10/24-28 at Green Lane Res. (Kevin Crilley, George Franchois); *Somerset*: 1 on 10/13-11/2 at Somerset L. (Bob Leberman, Jeff & Lauretta Payne).

American Golden Plover - *Cumberland*: 8 on 10/3 at Ridge Rd. (Deuane Hoffman); *Erie*: 1 on 10/5 at Fairview (Jerry McWilliams); *Lancaster*: recorded up to 10/12 at Washington Boro (Bob Schutsky et al.); *Lawrence*: 7 on 10/6 at Plain Grove (John Fedak); *Northampton*: 4 on 10/14 at Martins Creek Fly Ash Basin (Rick Wiltraut); *Philadelphia*: 10 on 11/16 near Carpenter's Woods (Steve Lawrence).

Semipalmated Plover - *Delaware*: 1 on 10/2 at Darby Creek (Sheryl Johnson); *Erie*: Recorded up to 11/9 at Presque Isle S.P. (Jerry McWilliams); *Philadelphia*: Recorded up to 10/5 at Sun Oil (Ted Floyd).

Hudsonian Godwit - *Montgomery*: 1 or 2 from 10/13-11/12 at Green Lane Res. (Kevin Crilley, et al.); *York*: 1 on 10/4-5 at Sheppard Myers Dam (Peter Robinson, Al Spiese).

Sanderling - *Bucks*: 1 on 10/14-15 at Pine Run (Steve Farbotnik, Ken Reiker); *Erie*: Recorded up to 11/9(3) at Presque Isle S.P. (Jerry McWilliams); *Montgomery*: 1 on 11/8 at Green Lane Res. was late (George Franchois, Gary Freed, Larry Rhoads).

Semipalmated Sandpiper - *Berks*: 1 on 10/25-26 at L. Ontelaunee (Ken Lebo, Matt Wlasniewski); *Crawford*: 1 on 10/25-26 at Woodcock L. (Ron Leberman); *York*: Present til 10/2.

White-rumped Sandpiper - *Berks*: 3 on 11/8-9 at L. Ontelaunee (Ken Lebo, Matt Wlasniewski) *Montgomery*: Records from 10/4-11/3 with 2 on 10/6 at Green Lane Res. (George Franchois, Kevin Crilley).

Western Sandpiper - *Philadelphia*: Recorded up to 10/26 at Tinicum (Ted Floyd); *Westmoreland*: 1 on 10/23 at Twin Lakes Park (Dennis Smeltzer).

Stilt Sandpiper - *Bucks*: 2 on 10/15 at Pine Run (Steve Farbotnik, Ken Reiker).

Short-billed Dowitcher - *Chester*: 1 on 10/9 at Chambers L. (Ellie Wolf); *Crawford*: 3 on 10/26 at Woodcock L. (Isaac Field); *Somerset*: 2 on 10/28 at Somerset L. (Anthony Marich Jr).

Long-billed Dowitcher - *Indiana*: 3 on 10/25-31 at Yellow Creek S.P. (Greg Cook, Margaret Higbee, Beth Marshall); *Lancaster*: recorded up to 10/12 at Washington Boro (Bob Schutsky et al.); *Somerset*: 1 on 10/27 at Somerset L. (Jeff & Lauretta Payne).

Dowitcher, sp. - *Philadelphia*: 1 on 10/26 at Tinicum (Ted Floyd).

Wilson's Phalarope - *Armstrong*: 1 on 10/24 at Keystone S.P. (Steve Graff); *Philadelphia*: 1 on 10/1 at Tinicum (fide Andy Ednie).

Pomarine Jaeger - *Erie*: 1 on 12/7 at Presque Isle S.P. (Jerry McWilliams).

Jaeger, sp. - *Erie*: 1 on 11/22 at Presque Isle S.P. (Jerry McWilliams).

Laughing Gull - *Cambria*: 1 on 11/3 at Prince Gallitzin S.P. (John Salvetti) and 1 on 11/9 at Beaverdale Res. (Judy Johns); *Delaware*: Recorded up to 11/23 with 92 on 10/27 at Marcus Hook (Al Guarente); *Philadelphia*: Recorded up to 11/9 with 11 on 10/26 (Ted Floyd).

Little Gull - *Erie*: 1 from 10/18-12/18 at Presque Isle S.P.

(Jerry McWilliams).
Black-headed Gull - *Allegheny*: 1 on 11/4 at the Riverfront Park in Pittsburgh was a first county record (Chuck Tague).
Thayer's Gull - *Erie*: 1 on 10/31 at Presque Isle S.P. (Jerry McWilliams); *Lebanon*: 1 on 12/24-26 at Memorial L. S.P. (Randy Miller).
Iceland Gull - *Berks*: 1 on 12/19 at Glen Morgan L. (Ken Lebo) and 12/27 at BFI Landfill (Frank & Barb Haas); *Bucks*: 2 on 12/20 on the CBC; *Erie*: 1 on 12/14 at Roderick WMA (Deuane Hoffman); *Lebanon*: Up to 3 present from 11/2 through the period at Memorial L. S.P. (Randy Miller).
Glaucous Gull - *Berks*: 2 on 12/27 at BFI Landfill (Frank & Barb Haas); *Bucks*: 1 on 12/20 on the CBC; *Erie*: Recorded from 11/19-12/29 at Presque Isle S.P. (Jean & Toby Cunningham, Don Snyder); *Lancaster*: 1 in December at Long Level (Jerry Book).
Black-legged Kittiwake - *Erie*: 1 on 11/20 at Presque Isle S.P. (Jerry McWilliams); *Lancaster*: 1 on 11/8 at Peach Bottom (Bob Schutsky, Randy Miller).
Caspian Tern - *Cumberland*: 1 on 10/9 at West Fairview (Deuane Hoffman); *Delaware*: 11 on 10/18 at Tinicum Is. (Nick Pulcinella).
Forster's Tern - *Bucks*: 1 on 10/22 at Plumstead Twp. (Alan Brady); *Delaware*: Recorded up to 11/8 with 13 on 10/12 at Darby Creek (Nick Pulcinella); *Erie*: Recorded up to 11/22 (late) at Presque Isle S.P. (Jerry McWilliams); *Philadelphia*: Recorded up to 11/5 with 20 on 10/19 (Ted Floyd, Ed Fingerhood).
Black-billed Cuckoo - *Huntingdon*: 1 on 10/8 at Blairs Mills (Robert Taylor); *Luzerne*: Present til 10/24 at Hobbie (Autumn Pfeiffer); *Westmoreland*: Present til 10/2 at Delmont (Ken Byerly);
Yellow-billed Cuckoo - *Montgomery*: Present til 11/12 at Green Lane Res. (Gary Freed, Larry Rhoads); *York*: Present til 10/10.
Snowy Owl - *Butler*: 1 on 12-17-19 at Lucasville (Scott Bastian, John Fedak); *Schuylkill*: 1 on 12/3-6 at Schuylkill County Airport (Mark Sterling).
Ruby-throated Hummingbird - *Delaware*: 1 on 10/5 at Hverford College (Sheryl Johnson); *Sullivan*: Present til 10/1 at Laporte (Dave Motko).
Rufous Hummingbird - *Westmoreland*: Present from 10/11 through the period at Delmont (m. obs.); *York*: 1 on 11/10-22 at Red Lion (Bill DeGrande).
Olive-sided Flycatcher - *Somerset*: 1 on 10/4 at the Allegheny Front Hawk Watch (John Fedak).
Ash-throated Flycatcher - *Northampton*: 1 on 11/24-12/16 in Williams Twp. was a first state record (Arlene Koch, et al.).
Great Crested Flycatcher - *Berks*: 1 on 10/8 at Bern Twp. (Ed Barrell); *Indiana*: 1 on 10/3 at Gipsy (Harvey & Shirley Spindle).
Eastern Kingbird - *Huntingdon*: 1 on 10/1.
Northern Rough-winged Swallow - *Philadelphia*: Recorded up to 10/2 with 100 on 10/2 (Sheryl Johnson).
Bank Swallow - *Montgomery*: Present til 10/7 at Green Lane Res. (Kevin Crilley); *York*: Present til 11/1 (late).
Barn Swallow - *Berks*: recorded up to 10/27 at L. Ontelaunee (Matt Spence); *Franklin*: 5 on 12/20 a on the Chambersburg CBC were late; *Montgomery*:

Present til 10/21 at Green Lane Res. (Kevin Crilley); *Schuylkill*: 1 on 10/1 at Landingville Dam (Mike Ward).
Sedge Wren - *Indiana*: 1 on 10/4 at Yellow Creek S.P. (Greg Cook, Margaret Higbee, Carol Guba); *Mercer*: 1 on 10/18 at Williamson Rd. (Troyers).
Blue-gray Gnatcatcher - *Luzerne*: Present til the first week of October.
Northern Wheatear - *Juniata*: 1 on 10/4-7 in Walker Twp. was only the second record to be photographed in the state and the first one to stay more than one day. (Eli Wengard et al.); *Lebanon*: 1 on 10/19 at Memorial L. S.P. was a first county record (Randy Miller).
Veery - *Indiana*: 1 on 10/3 at Gipsy (Harvey & Shirley Spindle); *Huntingdon*: 1 on 10/15 (Doug & Susan Wentzel).
Gray-cheeked Thrush - *Greene*: 1 banded on 10/3 at Bell's Farm (Ralph Bell); *Lawrence*: 4 on 10/19 at New Castle (Barb & George Dean); *Westmoreland*: Present til 10/11 at Powdermill Nature Reserve (Bob Leberman, Bob Mulvihill).
Northern Shrike - *Bradford*: 1 on 12/27; *Clarion*: 1 present from 11/11 at Mt. Zion (Margaret Buckwalter, Walter Fye); *Columbia*: 1 on 12/21 (Karen Hiller); *Crawford*: 1 on 12/13 at Miller Pond (Ron Leberman) and 3 on 12/28 at various locations (no observer listed); *Erie*: 1 on 11/12 at Fairview (Jerry McWilliams) and 1 on 11/28 at Siegel Marsh (Jean & Toby Cunningham).
Loggerhead Shrike - *Adams*: Present all quarter: *Berks*: 1 on 12/21 at Gibraltar (Ed Barrell, Bob Cook).
White-eyed Vireo - *Berks*: 1 on 10/8 at Leesport (Dean Kendall); *Cambria*: 1 on 10/1 at Prince Gallitzin S.P. (John Salvetti); *Cumberland*: 1 on 10/8 at Kuhn L. (Deuane Hoffman); *Greene*: 1 banded on 10/7 at Bell's Farm (Ralph Bell).
Yellow-throated Vireo - *Allegheny*: 1 on 10/8 at Frick Park (Sue Solomon); *Indiana*: 1 on 10/8 at Yellow Creek S.P. (Gloria Lamer); *York*: 1 on 10/14 at Wrightsville (Jack & Lil Downs).
Philadelphia Vireo - *Butler*: 1 on 10/4 at Todd Sanctuary (Jack & Sue Solomon).
Orange-crowned Warbler - *Allegheny*: 1 on 10/5 at Harrison Hills Park (Paul Hess) and 1 on 10/14 at Schenley Park (Bill Hi); *Berks*: 1 on 10/25 at Hamburg (Kerry Grim); *Mercer*: 1 on 10/8 at Skunk Run Rd. (Troyers); *Venango*: 1 on 10/4-5 (no location, no observer); *Westmoreland*: Records from 10/1-30 with 2 on 10/15 at Powdermill Nature Reserve (Bob Leberman, Bob Mulvihill).
Northern Parula - *Berks*: 1 on 10/12 at Leesport (Dean Kendall); *York*: Present til 10/9; *Dauphin*: 1 on 10/8 at Hershey North (Nancy Cladel).
Townsend's Warbler - *Luzerne*: 1 from mid-December through the period at Drums is only the second state record. (Rich Koval).
Yellow-throated Warbler - *Columbia*: 1 on 11/2 at Rohrsburg was late (Doug Gross).
Cerulean Warbler - *Lawrence*: 1 on 10/19 at New Castle (Barb & George Dean).
Northern Waterthrush - *Westmoreland*: Present til 10/10 at Powdermill Nature Reserve (Bob Leberman,

Bob Mulvihill).

Connecticut Warbler - *Westmoreland*: Present til 10/11 at Powdermill Nature Reserve (Bob Leberman, Bob Mulvihill); *York*: 1 on 10/14.

Mourning Warbler - *Mercer*: 1 on 10/9 at Skunk Run Rd. (Troyers); *Westmoreland*: Present til 10/8 at Powdermill Nature Reserve (Bob Leberman, Bob Mulvihill); *York*: 1 on 10/2-3.

Canada Warbler - *Berks*: 2 on 10/8 at District Twp. (Catherine Elwell).

Western Tanager - *Bucks*: 1 on 12/20-29 on the north side of Nockamixon S.P. (Devich Farbotnik) and 1 on 12/21 on the south side of the park (Diane Allison, Hart Rufe).

Dickeissel - *Bucks*: 1 on 10/26 at Peace Valley Park (Steve Farbotnik).

Clay-colored Sparrow - *Berks*: 1 on 11/23 at L. Ontelaunee (Matt Spence, Bart. Smith).

Grasshopper Sparrow - *Allegheny*: 1 on 10/14 at Imperial (Chuck Tague); *Dauphin*: Present into October at Haldeman Is. (Scott Bills); *Luzerne*: Present til 10/2 at the Eastside Landfill (Rich Koval); *Mercer*: 1 on 10/14 at Williamson Rd. (Troyers).

Henslow's Sparrow - *Erie*: 1 banded on 10/1 at Presque Isle S.P. (Ron Leberman); *Indiana*: 5 on 10/3 at Gipsy (Harvey & Shirley Spindle); *Somerset*: 2 on 10/4 at Reel's Corner (John Fedak).

LeConte's Sparrow - *Northampton*: 1 on 10/25 in Williams Twp. (Arlene Koch).

Nelson's Sharp-tailed Sparrow - *Lancaster*: Recorded from 10/4-26 at Washington Boro and Bainbridge (Tom Garner, Bob Schutsky et al.).

Seaside Sparrow - *Northampton*: 1 on 10/18-19 in Williams Twp. was only the fourth state record. (Arlene Koch).

"Oregon (Pink-sided)" Junco - *Schuylkill*: 1 on 10/24 at Shenandoah (Danny Knarr).

Bobolink - *Bucks*: 12 on 10/12 at Pine Run (Ken Reiker); *Delaware*: 3 on 10/5 at Essington (Nick Pulcinella); *Schuylkill*: 3 on 10/12 at Hawk Mountain Sanctuary (Laurie Goodrich).

Western Meadowlark - *Juniata*: The bird found the previous quarter in Center, reappeared for about a week on 9/30.

Yellow-headed Blackbird - *Lancaster*: 2 on 12/21 in Southern Lancaster Co.

Brewer's Blackbird - *Crawford*: 1 on 11/9 near Shermansville (Isaac Field)(no details); *Dauphin*: 1 on 11/30 at Wildwood L. (Joe Church)(no details); *Juniata*: 1 on 11/17 at Mifflintown (Aden Troyer).

Baltimore Oriole - *Butler*: 1 on 10/24 at Glades SGL (Margaret Higbee, et al.); *Delaware*: 1 on 10/27 at the Darlington Tract (Nick Pulcinella); *Erie*: Recorded up to 11/17 at Union City (Dorothy Hecker);

Pine Grosbeak - *Berks*: 1 on 12/26 at Hamburg (Kenneth & Dorothy Grim); *Clarion*: 3 on 12/19 at Cook Forest S.P. (Steve Graff)

Hoary Redpoll - *Luzerne/Schuylkill*: 1 on 12/14 at Oneida (Alan Gregory, Rich Koval). ♀

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

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NOTICE TO COMPILERS!

With the major changes coming up in the new AOU Checklist, please hold off from sending in your 1st Quarter Reports for 1998 until you receive new forms from us.

This will not be until the end of April.

The new forms will incorporate the new taxonomic order and any name changes.

Thank you for your cooperation.

Frank & barb Haas
Editors

Local Notes

Allegheny County

An ad. **C. Black-headed Gull** was found at Riverfront Park on the south side of Pittsburgh (PGH) on 11/4 C Tague) for a 1st Co. record! The bird was seen for a brief period that day, never relocated, but photographs were obtained.

During the scoter fallout weekend of 11/8-9, we recorded a **White-winged** at North Park 11/8 (M Fialkovich, B Machesney, S Kinzey) which remained until around 12/4. Eight **Surf Scoter** were on the Allegheny R. at Verona 11/9 (SK). An ad. ♂ **Black Scoter** was found 12/10 on the Ohio R. (CT). This was quite an achievement as scoters are rarely recorded here.

A single **Dunlin** was at Imperial (IMP) 10/5 (MF) and 2 were there 10/27 (CT).

Raptor reports this quarter were the best in years. Up to 5 **Merlin** were in Schenley Park (SHP) first located on 11/23 and seen through the end of the quarter (B Hi). There are few records of this species in the Co., and 5 is certainly unprecedented! They appeared at dusk at the golf course, apparently roosting in the pine and spruce trees in the area. Reports of single Merlins came from IMP 10/14 (CT), and Natrona Heights 11/25 (P Hess). Also present in SHP was a **Red-shouldered Hawk** (BH). An ad. ♀ **N. Goshawk** was found at NP 10/18 (E Kwater), and an ad. ♂ at NH 11/19 (PH). A **Golden Eagle** was observed flying over Mt. Washington in PGH 10/25 (CT). A light morph **Rough-legged Hawk** was found at Moon Twp 11/12 (D Hess). Combined with our resident species, we recorded 11 species of raptors!

Uncommon in the county a **Red-headed Woodpecker** was recorded in Sewickley (C Knoll). Also uncommon, a great count of 40 **Rusty Blackbird** at IMP 10/24 was noteworthy (CT).

Northern finches went unreported here with the exception of **Pine Siskin**. A single bird visited a feeder in Hangar Twp 11/9 (J Valimont), and 2 were at a feeder in Shaler Twp 11/12-30 (J Hoffman). A **Snow Bunting** was at IMP 10/27 (CK), the first for many years.

Armstrong County

The county experienced a fallout of waterfowl during the three-day period, 11/7-9. The highlight was a **Brant** at Keystone Res 11/7 (J Fedak, J Horn). November 9 yielded 1 **Red-throated Loon** (Margaret & Roger Higbee), 10 **Black Scoter** (S Kinzey, M Fialkovich), 13 **Surf Scoter** (MH, RH), and high numbers of other species as well. A **Wilson's Phalarope** at KR 10/24 (S Graff) may have been a 1st Co. record.

Beaver County

The Beaver CBC produced a couple of spp. That are usually further south, namely **Ruby-crowned Kinglet** and **N. Flicker**. The reported invasion of northern finches has not reached us; not even any **Pine Siskin** and few **Red-breasted Nuthatch**.

Bedford County

Mike and Laura Jackson report 35 **Am. Goldfinch** on

niger seed on 11/14; 12 **Cedar Waxwing** eating Mt. Ash berries on 11/18; and 35 **Mourning Dove** eating millet on 12/29. On 12/5 they saw an **E. Screech-Owl** (gray) in a redbud near their home about 2100 h. They tossed a lab mouse out and the owl swooped down and grabbed it.

Berks County

The rainy northeaster on the weekend of 11/8,9 grounded 9 Red-throated Loons at LO (RK) and 2 at GML (KL)--that's a lot of these loons--as well as 42 Common Loons at LO (MW). The 200 Pied-billed Grebes at GML 11/8 (KL) were probably breeding birds augmented by grounded migrants. A week later, only 10 remained (FH,RK). Also at LO 11/9 were 5 Red-necked Grebes (KL). The county's first wintering Great Egret, discovered at GML 12/27 on the Elverson CBC (KK,KL), was still there in Feb., 1998. Previous late records are 11/22/96 (KG) and 11/21/37 (Earl Poole). A Green Heron found on the RCBC and the next day (MS) was only the 3rd Dec. record. An apparent first-winter Greater White-fronted Goose was described at Gotwals pond, Oley 11/29 (PS). A Brant was at LO 11/8-16 (KL,MS) and another at Kaercher Cr. Park, Hamburg, 11/8-15 (KG). A small-race Canada Goose about the size of a Ross' Goose and with a similar head and bill shape was at Oley 10/11 (RK). Only one (dark-morph) Rough-legged Hawk was regularly seen in Marion Twp. this quarter (HJS).

A Least Sandpiper seen and thoroughly described at Blue Marsh L. on the BCBC (DK) provided the first winter record in Berks. The previous late date was 10/25/94 (KL). An Iceland Gull was at GML 12/19 (KL), likely the same bird seen at the New Morgan landfill 12/27, where 2 Glaucous Gulls were also seen (FBH). An ad. Lesser Black-backed Gull was at LO 11/30 (RK,MW) and an ad. was at Angelica L. a few times in Dec. (KK).

In recent years, owl banders have been documenting the surprisingly extensive fall migration of N. Saw-whet Owl. This fall, Todd Bauman showed that many of these birds move through Berks County. From 10/13 to 11/27, Todd netted and banded 73 N. Saw-whets, mostly hatch-year birds.. His was one of several banding stations in PA this fall, which banded a total of about 120 owls. Another N. Saw-whet was calling in Bern Twp. 10/8 (EB). Single birds were found on the RCBC and HCBC.

Red-breasted Nuthatches, on the move since last summer, peaked in Sept.-early Oct. There were feeder reports, but most wintering birds tended to be found in large groups in conifers foraging with chickadees and titmice. A Loggerhead Shrike watched for about 10 minutes near Gibraltar on the RCBC (EB,BC) was the first reported in Berks since one was seen on the RCBC near Oley 12/16/79 by Joanne Kintner!

A 'Western' Palm Warbler (whitish below with yellow only under the tail) was seen at Leesport 10/7 (DK).

Late 1997 finally brought the northern finch invasion birders have been waiting for, but in Berks you had to be on the Kittatinny Ridge to see it. Except for moderate numbers of Purple Finches, Pine Siskins and a sprinkling of Evening Grosbeaks, very few or none of the northern finches were

reported south of the ridge. Pine Grosbeaks were not part of this invasion; a male watched for 10 minutes at a Hamburg feeder 12/26 (KDG) was the only report. Crossbills provided most of the excitement, with the biggest flight of White-winged since the 1960's and the most Red Crossbills seen since the early 1970's. However, no White-winged and very few Red were reported in Berks more than a few miles from the Kittatinny Ridge.

Exotics: An Egyptian Goose was at Angelica L. 10/26 and later (KK).

Blair County

Nearly impossible to report on a quarter that had "winter finches" at feeders on 50+ days, and "summer residents" present on days below freezing.

Bradford County

Red-headed Woodpecker - 1st record for 48-year SE Bradford CBC. An ad. bird seen by Sandy Goodwin and Bob Wasilewski. First winter record for the Co. of which I am aware.

Bucks County

Highlights include: 2 **Western Tanager** were reported at Nockamixon (NSP). The first was seen on 12/20 (D Farbotnik) and on the Upper Bucks CBC on 12/21 (S Conyne). An imm. or ♀ it was last reported on 12/29. The second was also reported on that CBC (D Allison, R Rufe). It was a ♂ and was only seen once. A **Dickcissel** was at a feeding station at Peace Valley (PV) from 10/26-11/2 (DF, S Farbotnik). Several sub-species were also reported. A **Black Brant** was at PV on 11/10 (DF, SF, J Horn). Three "cackling" Geese (a race of **Canada Goose**) were with a **White-fronted Goose** at PV on 11/22 @ French, K Kitson).

Other highlights include: 2 **Red-throated Loon** at PV 10/15 (K Reiker, T Wurtenberger), 11/9 (K Crilley), and 12/2 (A Brady), and they were on the Upper and So. CBCs, 12/20 & 21. **Great Cormorant** were at PV 10/ 14,15 (SF, JH), 2 at NSP 11/5 (AB, B Hoehne), and on the Southern CBC 12/20. A **Least Bittern** was at Silver Lake on 10/7 (*fide* G Carmichael). A White-fronted Goose was seen at Ingham Springs on 12/28 (T Evans) and at PV on 12/31. Including the one mentioned above, is that 1, 2, or 3 birds? Up to 9 **Brant** were reported at PV from 11/8 (RF) to 11/22. Twenty-seven **Black Scoter** were at NSP 11/7 (BH), and 18 at PV 11/8. Also 5 **Surf Scoter** were at NSP on 11/7 (BH). A **White-winged Scoter** was at PV on 10/15 and on 11/7 (KR, TW). **Red-breasted Merganser** were at PV on 12/4 (G Hoffman) and on the So. and Upper Bucks CBC 12/20 and 12/21.

A **Merlin** was at PV on 10/22 and 11/21 (I Baldoch, R Pfeffer). **Peregrine Falcon** were reported on 10/1 at PV (TW), on 10/12 at Pine Run (KR), and on the So. Bucks CBC 12/20. At Pine Run there was a **Sanderling** on 10/14,15, and 2 **Stilt Sandpiper** on 10/ 15 (SF, KR). **Pectoral Sandpiper** were at Pine Run on 10/21 (SF, KR) and 3 at PV on 11/6 (IB). An **Am. Woodcock** was reported on the Central Bucks CBC. A **Glaucous Gull** was reported on the So. Bucks CBC. **Forster's Tern** were reported on 10/2 at PV (KR) and on 10/22 at Plumstead Twp (AB). A **Vesper Sparrow** was at PV 10/19 to 26 (A Mirabella). Several species stayed around a bit later this year: A **House Wren** and 2 **Chipping Sparrow** were on the So. Bucks CBC. At

New Hope there was a **Tree Swallow** from 12/6-11; 2 **Pine Warbler** on 12/6; and 2 **Palm Warbler** from 12/12-30 (BH).

Up to 27 **Snow Bunting** were at NSP from 11/9-11 (SF, KC). There were at least four reports of 1-3 **Pine Siskin** from 11/1-12/28 at PV (RF), Revere (SF), New Hope (BH), and on the Central Bucks CBC. There were also four reports of 1-9 **Evening Grosbeak** from 11/7-12/21 at Revere (SF), Peace Valley (RF, IB), Pipersville (T Spiegel), and on the Upper Bucks CBC.

Butler County

The best waterfowl flight in many years included two major **Tundra Swan** passages a month apart, 1000+ on 11/12 (D Yovanovich, D Darney) and 1200+ on 12/12-13 (G Wilhelm, DY); 4 "blue" **Snow Goose**, uncommon in the region, at L. Arthur 11/5 (C & F McCullough); and all-time record L. Arthur counts of 142 **Wood Duck** (E Kwater), 540 **Ring-necked Duck** (EK), 400 **Bufflehead** (EK), an astonishing 2500 **Ruddy Duck** (GW), and 2500 **American Coot** (EK). In contrast, one **Black Scoter** there 11/11 (EK) was the only sign of November's big scoter fallout.

At least 4 **Bald Eagle** were present at L. Arthur during the quarter, and a **Merlin** was found at Glades 11/11 (S Butcher). Up to 5 **Sandhill Crane**, local birds, were noted in the county's n.w. corner (J Fedak, GW) and 1 lingerer was still present 12/20 (GW). A max. 171 **Killdeer** at Slippery Rock Univ. was high (GW), and a **C. Tern** at L. Arthur 11/8 (EK) was rather late.

The most welcome highlight was a **Snowy Owl** near Lucasville 12/17-19 (S Bastian, JF et al.). Owls also included a **Long-eared** at Moraine SP 12/7 (D Darney), and 3 **N. Saw-whet** in Dec: 2 at Moraine (DD) and 1 at Slippery Rock (GW). Wilhelm heard four owl species calling from his Slippery Rock yard 12/12: E. Screech, Great Horned, Barred, and Saw-whet.

Notable landbirds were a **N. Mockingbird** at Moraine 10/16 (M Higbee, L Wagner), a fine total of 9 **Lincoln's Sparrow** 10/4-28 (v.o.), a **Lapland Longspur** near Slippery Rock 12/20 @ States, J Stanley), and a late **Baltimore Oriole** 10/24 at Glades (MH et al). The crossbills did not reach *Butler*, and "northern finch" maxima among very few reports were 50 **Purple Finch** at Slippery Rock 10/21 (GW), just 3 **Pine Siskin** at Moraine 11/8 (CM, FM et al.), and 50 **Evening Grosbeak** over Buffalo Twp 11/9 (C Bier).

Cambria County

Highlights were the 2 separate **Laughing Gull** found in two different location of two different dates. Noteworthy to Dave Gobert were the first sightings of **Carolina Wren** in n. *Cambria* since the winter of '93-94; also the unexpected early arrival of **Lapland Longspur** (3) on 10/19 near Patton. Of interest was an **E. Towhee** that lingered until 12/13.

Centre County

A **Red-throated Loon** was at Bald Eagle SP (BE) on 11/15 (G&S Young). A fairly late **Double-crested Cormorant** was at BE on 11/16 (B Snyder). An imm. **Black-crowned Night-Heron** was along Rt. 322 between Colyer Lake (CL) and Boalsburg on 11/9 (D Bordner, A Norris, A&P Rodewald). On 11/9, a large gathering of

waterfowl (at least 26 spp.) at CL included 9 **Brant**; 13 **Black Scoter**; 3 **Surf Scoter**; and 4 **White-winged Scoter** (A&T Fuller, PR, D Bordner, AN). Other waterfowl spp. there that day included 40 **Canvasback**; 3 **Redhead**; 158 **Ring-necked Duck**; 10 **C. Goldeneye**; 125 **Bufflehead**; and 50 **Ruddy Duck**. Two Black Scoter were at CL on 11/23 (A&PR).

The 122 Golden Eagle observed during the fall at the Bald Eagle Mt. Hawkwatch established a new season record, and 20+ Golden Eagles were observed on 11/16, 11/24, 11/27, and 12/1 (D Brandes). 16 **Am. Pipit** were at BE on 11/15 (G&SY).

A **Pine Warbler** seen on Penn State University campus on 12/21 was a new species for the State College CBC (D Prosser, J Bishop), and only the 2nd Dec record for *Centre*. The **Ovenbird** present only for one day at a feeder in Spring Mills on 12/30 was an exceptional record (J Gyekis, E Gyekis, L Snavely). Five **Snow Bunting** were along Bald Eagle Mt. on 11/27 (D Br). The crossbill irruption reached here in late Nov when 10-15 **Red Crossbill** were observed at Bear Meadows on 11/23 (A&PR), followed by 20 **White-winged Crossbill** there on 12/14 (K Massey, D Ombalski, JB, DP). Both crossbill species were recorded on the State College CBC on 12/21 for the first time (58th count), with 17 White-winged, 8 Red in Pine Grove Mills (A&TF, AN), 28 Red at Bear Meadows (E Zielinski), and another 28 Red in the Pleasant Gap area (M Henry, M McCarthy). 35 Red and 35 White-winged crossbills were seen in Spring Mills on 12/30 (JG, LS). **C. Redpoll** were first reported along Little Shingletown Rd in Rothrock SF on 12/14 (KM, DO, JB, DP) with 2 flocks totaling about 30 birds. About 75 redpolls were seen there on 12/17 (D Br). Redpoll flocks also began appearing at Bear Meadows in mid Dec.

Chester County

A nor'easter seems to have been the reason for a variety of waterfowl, including **Black** and **Surf scoters** to have put in an appearance on Marsh Creek Lake on 11/7,8.

In s. *Chester* near Camp Saginaw, a ♂ **Dark-eyed "Oregon" Junco** was reported coming to a feeder in early Dec. Details were not available.

An **Eared Grebe** was at Marsh Creek SP on 11/7, 8 (†J Ginaven, S Conant, G Saunders, L Lewis).

Clarion County

The invasion of winter finches was the most exciting event of the quarter, and it isn't over yet. On 11/14 Greg Burkett reported 12 **Pine Siskin** near the Sawmill. I did an ordinary SAP in Cook Forest on 11/21 and didn't notice anything unusual. On 11/22 John Fedak didn't notice anything strange on his SAP list. On 11/28 Paul Brown of Pittsburgh called about seeing a flock of **Red Crossbill** on Longfellow Trail in the park. On 11/30 I persuaded my son, Ted, to go up the Longfellow Trail to see what he could find. He returned to the parking lot with the confirmation of many crossbills high up in the trees in the old-growth forest. We then went to Ridge Camp and found a small flock (10) of birds we could get the scope on and they proved to be Red Crossbills. Down along the Clarion R. we heard a few more flying over. On 12/12 Paul Brown found **White-winged Crossbills** and ±50 Pine Siskins. On 12/18 John Fedak found 16 **C. Redpoll**. Since then Cook Forest

has been the destination of many birders and the "Patagonia Picnic Table Effect" has been amply substantiated: more birds equals more birders equals more birds being found, etc. I want to thank the birders from all over Pennsylvania who have taken time to report their findings. It has been quite an experience and it is still going on. In January two Northern Goshawks were observed flying over the parking lot by Margaret Higbee and party. Steve Graff found 3 **Pine Grosbeak**.

Outside of Cook Forest near Wentlings Corners on 12/27 nine birders led by Walter Eye and Michael Leahy on the Clarion CBC saw mixed flocks of Red and White-winged crossbills that they estimated to have 1000 to 1500 individuals. Smaller flocks of both crossbills have been seen since but they are very erratic--seldom seen in the same place twice

Clearfield County

The DuBois Res. was particularly productive this quarter, with reports of about 16 spp. of waterfowl. Most notable were 4 **Black Scoter** on 11/15 (J Fedak). The reservoir also produced a **Red-throated Loon** on 11/13 (E Zielinski), as well as a **Bald Eagle** and a **Marsh Wren**, both on 10/17 (JF). One **N. Goshawk**, (dining on a **Ruffed Grouse**) was near I-80 in the n.w. corner of the Co. on 10/17 (JF) and a **N. Harrier** near Mahaffey on 12/15 was fairly late (D Gobert). Winter finch reports were limited to three species: 3 **White-winged Crossbill** near I-80 on 10/17 (JF), and 10 **Evening Grosbeak** and 10 **Pine Siskin** both at Parker Dam SP on 11/13 (EZ). Perhaps the low point of the quarter was the compiler's trip to an icy Parker Dam in late Dec. The only bird recorded was an **Am. Crow** and it wasn't even seen!

Clinton County

There was a major movement of seven species of sparrows in the South Avis area from 10/9-10/15. Included were **E. Towhee**, **Chipping**, **Lincoln's**, **Swamp**, **White-throated**, and **White-crowned sparrows** and **Dark-eyed Junco**. **Ruffed Grouse** were reported to be up in numbers in the Lock Haven area by Wayne Laubscher.

Columbia County

The anticipated irruption of northern forest species, evident in some surrounding counties was not so obvious here. Only the occasional **Pine Siskin** and **Evening Grosbeak** visited feeders. The Bloomsburg CBC found no redpoll or Snow Bunting and the 5 **White-winged Crossbill** heard overhead (D Gross) were probably leaving the county !

I wonder what will be the effect of the January ice storm on bird populations in those affected areas?

A **Red-shouldered Hawk** near the Bloomsburg Fair Grounds in late Dec. may be wintering in the area (S Killam). A **Cooper's** and a **Red-tailed Hawk** in the adjacent Bloomsburg Town Park periodically were observed (S Barron) dining on some of the slower local winged and four-legged residents.

As many a 17 **Gadwall** spent over a month, early Nov. to early Dec., at the shallow end of Briar Creek L. Ice finally covered their dabbling area. A pair of **Hooded Merganser** and 2 **N. Pintail** took advantage of the successful efforts of 1000 + **Canada Geese** and an equally

large number of **Mallard** to keep open an extensive area of open water during a brief pre-Christmas cold (cool?) spell. **Am. Coot** dwindled from a max. of 54 to only four or five during the ice development period. They seemed to accept bread crumb handouts as readily as the Mallards.

At Youngs Pond the resident assortment of Canada Geese, Mallards and **Am. Black Duck** were joined by: **Green-winged** and **Blue-winged teal**, **Ruddy Duck**, **Ring-necked Duck**, **Am. Wigeon**, **Pied-bill Grebe**, **Hooded** and **Common mergansers**, **Wood Duck** and **Am. Coot**. Two **Tundra Swan** found there by Bob Houck did not linger nor did an imm. "blue phase" **Snow Goose**. The mud exposed by the low water level held the attention of as many as 7 **C. Snipe** and 20+ **Killdeer** for almost two weeks.

Crawford County

11 **C. Loon** was a rather low high count this fall at Pymatuning SP, but the high count of 350 **Double-crested Cormorant** was most unexpected as was a late **Am. Bittern** there 11/3 (A Marich). A **Brant** at Wildwood L. 11/23 during a snowstorm was my 1st for *Crawford* (Ron Leberman).

An extremely late **Spotted Sandpiper** was at Pymatuning 12/14 (RL, I Fields). A **Ls. Black-backed Gull** was found at Pymatuning 10/1 (E Kwater). This is a 1st Co. record.

On 11/9 Isaac Fields and I found a **Brewer's Blackbird** s.w. of Shermansville. Fields is familiar with the species from his California bird trips.

Cumberland County

We had quite a quarter. The **Western Meadowlark** found last quarter near Center disappeared until 9/30. It stayed for approximately one week, but hasn't been seen since.

A **Northern Wheatear** was also near Center from 10/4-7 (A Troyer et al.; see separate article; ph. F Haas). Some northern spp. Seemed earlier than usual: **Evening Grosbeak**

10/9; **Pine Siskin** 11/2; **Rough-legged Hawk** 11/6; and both **crossbills** 12/1. For approx. one hour on 11/17 we had 1 **Brewer's Blackbird** at our feeder (AT). It was viewed from <50' with a Kowa 20X cope.

The CBC tallied 71 spp., with late (?) **E. Towhee** and **Swamp Sparrows**. Raptor flights were great on several windy days early in the quarter. **Long-eared Owls** were found 12/14 (E Wengerd).

Dauphin County

The winter finch invasion began with the arrival of **Pine Siskin** and **Purple Finch** in early Oct. By the end of the month **Evening Grosbeak** were being reported and flocks of 30 or more were being enjoyed at feeders by mid-Nov. in Fishing Creek Valley (J Barnette) and through Dec. in Powell's Valley (J & J Funck). The first report of **Red Crossbill** came in late Nov., and by mid-Dec. Small flocks were seen in Clark's Valley @ Koury). The Curtin CBC on 12/29 added a flock of **White-winged Crossbill** and a lone **C. Redpoll** as well as a **N. Saw-when Owl** to the Co. tally.

The Susquehanna R. produced its usual assortment of interesting species with 2 **Marsh Wren** being discovered

on the islands off the West Fairview boat launch 10/11 (RK), and a **Red-throated Loon**, a **Brant**, 2 **Horned Grebe**, and rafts of **Black** and **Surf scoters** the weekend of 11/8-9 (G Randolph). Haldeman Is. yielded **Ruddy Duck** and **Snow Geese** 10/25, and **Canvasback** and **Am. Pipit** 10/28 (SB).

At Wildwood L. 1 **Lincoln's** and 15 **Swamp sparrows** were tallied 10/10, and two weeks later more than two dozen **Rusty Blackbirds** were counted (RK). Also a **Brewer's Blackbird** was discovered 11/30 (J Church). Some late departures included **Gray Catbird** and **Wood Duck** until 12/30 @ Williams). The Hershey farms also produced **Am. Pipit** in early Nov. (S Rannels), and on 11/18 a **Lapland Longspur**, 5 **Snow Bunting**, and hundreds of **Horned Lark** (GR).

Other interesting reports: the observation of **Peregrine Falcon** all quarter with 2 over the river 11/9 (J Renninger); a late **Yellow-crowned Night-Heron** at W. Fairview 11/15 (T Neumeyer); 92 **Wild Turkey** in the Funck's yard near Carsonville 12.22; and the discovery of 4 **Barn Owl** for the Curtin CBC 12/29 (SB).

Delaware County

The quarter was characterized by continued above average temperatures and below normal rainfall. The water level at Springton Res. (SR) was reported to be 12' below normal. A large low pressure system moved through the area on 11/7-8 bringing an influx of unusual waterfowl. Eight **Red-throated Loon** were noted flying along the Delaware R. at Essington (ES) during the storm of 11/8 (N Pulcinella). The mild temperatures were probably responsible for the presence of **Great Egrets** throughout the period at Darby Creek (DC). The storm of 11/7-8 also brought a number of scoters into the area. A high count of 23 **Black Scoter** were at SR 11/7 (A Guarente) along with 2 **Surf Scoter** (AG). On the same day 6 **White-winged Scoter** were seen flying at ES (NP). Other ducks noted at ES were 14 **Gr. Scaup** and 7 **Oldsquaw** on 11/8 (J Lockyer). **C. Mergansers** maxed out at 105 at SR 12/20 (S Johnson).

A few unusual hawks were found during the period: a **N. Goshawk** 12/20 in Rose Valley (C Walters), a **Rough-legged Hawk** 12/17 at DC, and a **Golden Eagle** at Tyler Arboretum (TY) (SJ). The low water levels at SR caused a large mudflat to be exposed which attracted shorebirds all fall. These flats contained 18 **Pectoral Sandpiper** 10/2 (SJ), 15 **Ls. Yellowlegs** 11/2 (T Floyd) as well as smaller numbers of **Gr. Yellowlegs** and **Dunlin**. The appearance of a small *tringa* on these flats 11/8 (NP et .al.) caused a stir. The bird was seen by many observers and thought to be either an aberrant or "runt" Lesser Yellowlegs or possibly a Wood Sandpiper. The bird had several features of a Lesser Yellowlegs including a slight wing projection beyond the tail, a thin medium length bill and somewhat yellow-colored legs, but the bird was about 2/3 the size of a Lesser Yellowlegs. Those observers in favor of Wood Sandpiper identification thought the bird had a more prominent supercillium than a Lesser Yellowlegs, a darker browner back and straw colored legs. Several photos were taken of the bird, but they do not appear to be clearly diagnostic of either species.

An ad. **Ls. Black-backed Gull** was found at SR 11/21 (JL) for a 5th Co. record. A **Barred Owl** was heard calling

11/23 in Media (S Edwards). The status of this species in the county continues to be relatively unknown. There are records for every month, but not every year, despite specific efforts to try and find it. An imm. **Red-headed Woodpecker** was found at SR 10/5 (NP). Three **Horned Lark**, a species increasingly more difficult to find, were noted at Marcus Hook 10/26 (AG). **Red-breasted Nuthatch** numbers continued to increase throughout the period much to the delight of observers. A **Blue-headed Vireo** at TY 11/17 (NP) established a new late date. **Pine Warbler** were present at TY until the end of the quarter (AG, B Bodine). **Am. Tree Sparrow** were early at the Darlington Tract 10/21 (AG) and a **Lincoln's Sparrow** was at the Phila. Airport (PHL) 11/30 (AG). Forty **Snow Bunting** were also at PHL 12/20 (NP). Winter finches began to trickle into the county in mid-Oct with **Evening Grosbeak** 10/11 at Haverford College (SJ) and Swarthmore 10/30 (H McWilliams). They were closely followed by small numbers of **Pine Siskin** (NP, JL), but the star finches were the crossbills. **Red Crossbill** were first noted at TY 11/12 (AG) and then small numbers were found almost daily thereafter throughout the end of the period. There were only two reports of the much sought after **White-winged Crossbill**. One ♂ at TY 12/19 (NP) and a pair at SR 12/20 (J Freiberg). One **C. Redpoll** was seen at TY 12/19 (NP).

A total of 158 spp. were recorded for the quarter and 238 species for the year.

Elk County

Frank Hughes reported the following. **Double-crested Cormorant** on 11/3 and 17 **Tundra Swan** on 11/10 at Ridgeway Res. (RR); 5 **Am. Wigeon** on 10/23 on the Clarion R.(CR); **Bufflehead** on 11/3 at RR.; 3 **Osprey** on 10/17 at RR and CR; 3 **Rough-legged Hawk** 12/29-30 near Lake City and Montmorenci(MM); **Red-breasted Nuthatch** 10/22 at MM; **Brown Creeper** 12/2 at MM; **Winter Wren** 10/23 at CR; **White-throated** and **White-crowned Sparrows** 10/7 at MM; 15-20 **Snow Bunting** 12/7 at MM; 40+ **Evening Grosbeak** 11/20 at CR.

Erie County

Loons and Horned Grebes and the beginning of a northern finch invasion were the main bird topics of this period. The waterbird count turned up a large number of loons and grebes from late Oct through Dec. A total of 222 **Red-throated Loon** passed Sunset Point this fall. Usually less than ten birds are reported most years. At total of 1160 **C. Loon** were counted passing Sunset Point. An additional several hundred birds were counted in Presque Isle Bay during the period. **Horned Grebe** were abundant along the outer beaches of Presque Isle. 300 or more birds could easily be counted on the water in this six or seven mile stretch of water. A total of 1434 Horned Grebes were counted passing Sunset Point during this reporting period.

Nov 7 was the big **scoter** day when over 150 birds of all three species were tallied passing Sunset Point. The waterbird Count also produced some rare gulls including **Little** and **Thayer's gulls** and **Black-legged Kittiwake**.

A few northern finches passed through from late Oct through Nov and early Dec., which included **Red Crossbill**, **C. Redpoll**, **Pine Siskin**, and **Evening**

Grosbeak. Few finches have been reported since.

Fayette County

Jacob's Creek Lake (JCL) continues to concentrate waterfowl during migration. **Tundra Swan** max count was 394 11/13 (M & E Watko). Other high waterfowl numbers included 70 **Am. Wigeon** and 56 **Redhead** 11/9 (MEW); 35 **Black Scoter** (M Fialkovich, MEW), 3 **Surf Scoter** and 250 **Ring-necked Duck** 11/7 (MEW); 3200 **Bufflehead** 11/11 (MEW); 234 **Hooded Merganser** 11/9 (MEW), and 15-20 **Oldsquaw** 11/18 (W & D Shaffer).

Uncommon for the county was a **Herring Gull** at JCL 12/21 (MEW).

Twenty **Horned Lark** were found in a field near Ohiopyle SP, and 2 **C. Raven** were at OSP 12/27 (WS, DS). The only northern finches reported were **Evening Grosbeak** coming to a feeders near OSP 11/6-8 (O Scarlett).

Franklin County

A **Red-throated Loon** was at Mountain Brook Rd from 11/13-16 (C Garner, D Gerhart). Five very late **Barn Swallow** were listed on the Chambersburg CBC report from 12/20. The only report of the winter finch invasion was of 3 **Red Crossbill** also from the CBC.

Fulton County

97 spp. were reported. Mild weather and favorable weather fronts brought an excellent raptor migration and waterfowl flight, which seemed to peak during the Veterans' Day weekend.

Meadow Grounds L. (MGL) continues to be the duck hotspot, with 14 spp. recorded. At MGL 11/11 the seldom-seen **Black** and **Surf scoters**, 1 **Double-crested Cormorant**, **Horned Grebe**, **C. Goldeneye**, with the rafts of **Oldsquaw**, **Ring-necked Duck**, **scaups**, **Bufflehead**, **Hooded Merganser**, and **Ruddy Duck** were found (D Snell).

Tuscarora Summit experienced one of the best overall hawk migrations in recent memory. Depending on the day, observers noted large movements of certain raptors,. Late Oct through 11/10 brought daily high counts of **Turkey** and **Black vultures**, **N. Harrier**, **Sharp-shinned**, **Red-tailed**, and **Red-shouldered hawks**, and **Golden Eagle** (CG). Although not seen every year, a **Rough-legged Hawk** was seen at the Pulpit for the second fall in a row (CG).

Other Pulpit highlights: an incredible 719 **Tundra Swan** 11; 40 **C. Loon** 10/28; 5 **Double-crested Cormorant** 10/1; **Winter Wren** 10/7; 3 **Snow Bunting** 11/18; and 65 **Evening Grosbeak** 11/10 (CG).

While deer hunting, Mike Newell flushed an **Am. Woodcock** at the Harrisonville Cr. bottomlands 12/2.

Greene County

Many people saw the **Tundra Swans** on 11/11. At least birders estimated 100+ in one flock. Tundra Swans are seldom noted here, but I was alerted by Dan Gaden on the morning of 11/11 of 3 strange, big white birds on his dairy farm pond. His description fit Tundra Swan (2 ad. and 1 imm.). Other reports soon came in and around 1645 h. I noted 8 flying east (over our yard) toward the Monongahela R.

Huntingdon County

The 14th Huntingdon CBC (12/21) produced 64 spp., including well above average numbers of many common winter residents. The 5th Lake Raystown CBC (1/1) produced 66 spp., right on the average for this young count. Species found for the first time included **Lapland Longspur**, **Snow Bunting**, and **C. Redpoll**.

All three **scoters** were found at Perez (formerly Stone Valley) Lake: **Black** and **Surf** on 11/9 (G Grove, N Bolgiano); and **White-winged** on 11/30 (GG). At the Stone Mt. hawk watch, 173 **Red-tails** were high on 11/11 as were 25 **Golden Eagle** on 11/16; we had 120 Golden Eagles for the season.

A late **Black-billed Cuckoo** was well seen at Blairs Mills on 10/8 @ Taylor). 12 **Rusty Blackbird** were found at Jackson's Corner on 12/21.

Red Crossbill were noted by GG on 12/14 and **White-winged** by D Brandes on 12/17; both in the mountainous n.e. corner of the Co. A flock of 80 **Evening Grosbeak** settled for the winter at our feeder where they continue to wolf down copious quantities of sunflower seeds. The first grosbeak of the season was noted on 10/15 at the Stone Mt. hawk watch.

A total of 199 species were reported in the county in 1997.

Indiana County

The fourth quarter yielded a nice variety of species including two county records. **Red-throated Loon** was sighted on 8 different dates at Yellow Creek SP (YC). Seven **Snow Geese** on 11/4 (S Graff, M Higbee, G Lamer, D Lauffer, J Salvetti, MJ Seipler, L Wagner) were unusual. A single **Brant**, last reported in the county 10/89, was at YC 11/11 (B Bekker, L Carnahan, D Jacobs, GL, DL, JS, J Walko). Waterfowl made a nice appearance with a nice fallout 11/8-9. Scoters were in good supply with an unprecedented high of 80 **Black Scoter** on 11/8 (SG, MH) and 20 **Surf Scoter** (C Lamer, GL) the following day. Three **Long-billed Dowitcher** at YC 10/25-31, studied by many observers (G Cook, D Darney, B Fetterman, SG, C Guba, MH, DJ, GL, B Marshall, MJS, D Yovanovich), were a *1st Co. record*. Alice and Dave Beatty received a nice Christmas present--a **Barn Owl** perched near the side of a Nolo road; this is a species not recorded in the county during the past 15 years. **Sedge Wren**, another *Co. first*, was seen in the grasses beyond the cattails at the lake's edge at YC by GC but only heard singing by CG and MH. A **Gray Catbird** lingered through the quarter's end in the brushy vegetation at YC. A **Yellow-throated Vireo** at YC 10/8 (GL) was rather late. A number of warblers bled over into the quarter with no extremely late dates noted. Unfortunately *Indiana*, with lots of hemlocks but no cones, was not included in the crossbill invasion. However, 3 **C. Redpoll** on the CBC 12/26 (B Hintze, M Sarver) were the precursor of more to come. **Evening Grosbeak** arrived in Nov. but most had moved out within days of their arrival.

Jefferson County

This completes my first year as compiler in this under-birded Co., which has one lake, the Clarion R., three SAPs, and an IBA. Since I started, pending PORC approval, there have been 202 spp. Seen. And we have hosted breeding **Henslow's Sparrow** and **Short-eared Owl**. Please feel

free to bird here (and, of course, send your sightings to me!).

The prediction for winter finches has been fulfilled. Spillovers from Cook Forest SP's megaflock, and some smaller local flocks, have supplied us with almost all of the expected winter finches. **Red Crossbill** started out being more abundant, but the numbers are now swinging in favor of the **White-winged Crossbill**. **C. Redpoll**, **Pine Siskin**, and **Evening Grosbeak** have been sporadic. Let's hope for a Pine Grosbeak or more.

Our *1st Merlin* has been crossing the line with *Clarion* while hunting **Horned Larks**. An **Snow Bunting** have been recorded at two locations.

Lancaster County

A sporadic invasion of winter finches plus mild winter weather yielded some bizarre combination of species for the CBCs. Present during the lat week of Dec. Were **C. Yellowthroat**, **Blue-headed Vireo**, **Red Crossbill**, and **Evening Grosbeak**.

Highlights from the Susquehanna R. include: **Pacific Loon** on 11/8 at Peach Bottom (R Miller, Bob Schutsky); **Black-legged Kittiwake** 11/8 (RM, BS); 2 **Yellow-headed Blackbird** 12/21; and 3-7 **Nelson's Sharp-tailed Sparrow** on the islands 10/4-26 (T Garner, J Book, E Witmer, R Koury).

Lawrence County

C. Loon have been coming to Edinburg Lake for over a year and can no longer be considered rare here. 1 on 11/20 and 2 on 11/22 there. An ad. **Bald Eagle** was circling over Black Swamp on 12/27 then perched for ½-hour along Black Rd. This eagle is only our second record in 15 years. Our breeding pair of **Sandhill Crane** and their 1 young of 1997 joined up with another adult-sized bird, presumably a young bird from a previous year. These 4 birds were well reported by L Wagner, N Rodgers, S Butcher, S McCarl and others. The 4 birds were together in the Plain Grove area from about 8/22 until at least 11/9.

Seven **Am. Golden-Plover** were at Plain Grove on 10/6 (J Fedak). In the past dozen years we were very lucky to find a single one every other year near a pond on Vosler Rd. and we did search the farm fields. Numbers and locations for this species have picked up in the last few years and in 1997 we recorded a grand total of 15 individuals found at 4 locations. A **Killdeer** standing in watercross from a spring fed run in Amish Area on 11/23 is a very late find. Our highest record number for **Herring Gull** came to us this quarter with 80 counted at Edinburg Lake on 11/20 (B Dean). Sadly, we could not find our only wintering **Long-eared Owl** after searching in Nov & Dec. near Pennsy. Many observers reported from 1-4 **Short-eared Owl** seen at the Volant Strips all quarter. (SB, SM, LW, NR, B Walczak). We have a new late date for **E. Phoebe**; 1 was found on the Stoughton Farm on the CBC held 12/20 (SB, R Crawford, P Stoughton). 10/19 was a peak day for **Gray-cheeked Thrush** in the New Castle area when 4 were found very quickly. One **Gary Catbird** on 12/27 at Plain Grove gave us our second Dec. record.

At 1130 h. on 11/18, Mt. Jackson residents were startled by the sight and sound of an awesome mixed flock of blackbirds flying overhead. The sky was black as far as the eye could see and it took 8 minutes for the birds, which

were flying in a SW direction, to pass over. Folks came out onto their porches and children had great fun laughing while holding their hands over their ears during this awe-inspiring flight.

We had only 1 **Pine Siskin** and that bird was found at McConnell's Mills during the CBC on 12/20 (SB, D Byers). Only one report of 15 **Evening Grosbeak** at a New Castle feeder for a few hours the afternoon of 10/5 (BD).

Lebanon County

We had 3 Co. firsts. An imm. **N. Wheatear** at Memorial Lake (ML) on 10/19. Two different **Thayer's Gull**, both 1st winter, at ML on 12/24, 26. And an ad. **Iceland Gull** on at ML 11/2.

An **Am Bittern** at ML 10/19 set a new late date. Also at ML on 12/20 were 3 imm. Iceland Gull. **Ls. Black-backed Gull** also started showing up at ML on 11/16. A new high count of 4 was made on 12/26. **Great Black-backed Gull** set a new high of 45 on 12/26. Most of the gulls were flying in from the south from approx. 1500 h. into dusk to roost on the lake.

An **Indigo Bunting** at ML on 10/19 set a late date by 20 days. And the finches. **Red Crossbill** were heard in the fog at SGL 145 on 11/23. **White-winged Crossbill** also showed up there 11/23 and stayed all quarter. The high count was 90 on 12/26 near Ft. Indiantown Gap. Second Mt. had 25 **C. Redpoll** on 12/14. **Pine Siskin** were at ML 11/16, with a high count of 200 on 11/23 at SGL 145. **Evening Grosbeak** were noted 11/21 at SGL 145, with a high count of 25 on 11/29 at SGL 211.

Luzerne County

152 spp. were reported, well up from the 134 reported in the same quarter last year. One of the most amazing birds ever observed in *Luzerne* was a **Townsend's Warbler!** This cooperative bird happened to appear at a feeder in a uncooperative situation, to say the least. On 12/17, Alan Gregory and John Heuges went to check a questionable warbler appearing at a feeder. That late morning, I received a call from Alan and John. They informed me it was a Townsend's. After picking up the dropped phone, I responded, "no way." They then convinced the feeder owner to allow Jim Hoyson, Doug Gross and myself to visit the feeder on 12/19, with camera and video equipment for documentation purposes. The feeder, which was nestled in the branches of a Norway Spruce, could only be observed through this person's bedroom window, from a distance of 3 feet. To the dismay of having 5 people show up, eventually we were allowed inside. Jim set up his camera and tripod and within several minutes the Townsend's appeared. Many photos were taken and I captured the feeding warbler on video for several minutes. Alan will submit a detailed report of this event along with documentation. I will submit the photos and video to PORC. for review. The events that followed turn out to be catastrophic. We were not allowed to tell anyone, no one else was allowed to see the warbler, the police were notified of "peeping toms" with binoculars in hand, the feeder was taken down, the tree was threatened to be cut down, and burlap was wrapped around the tree where the feeder allegedly was. Kind of a privacy issue. 'Nuff said! Be that as it may, I do appreciate the opportunity given to me and the four other "chasers" to see the Townsend's.

Now for other birds: a **Red-throated Loon** stayed until count week on Harvey's Lake 12/17 @ Koval). A late **Great Egret** was found in Conyngham 10/29 (AG). A flock of 35 **Brant** were at Council Cup Hawk Watch (CC) 10/22 (RK, S Killam). It appears that Brant are being reported every fall at this site. A nice migration of **scoter** species were reported throughout Nov., with a uncommon CBC **Surf Scoter** 12/20 (S Goodwin, B Wasilewski). One reported at CC 10/10 (AG). Early **Rough-legged Hawk** at Conyngham 10/25 (AG) and a late **Peregrine Falcon** at CC 12/14 (SB). An extremely high count of 28 **Am. Woodcock** 11/6 were reported in Hobbie (A Pfeiffer). Jim, see what good bird-dogs can do? **Long-eared Owl** stayed for the CBC at Plains (J Shoemaker, JH) and a rare **N. Saw-whet** was found near Huntsville 12/20 (SG, BW). An imm. **Red-headed Woodpecker** made a brief passing at Black Creek 10/26 (JHe). Maybe one day this rare woodpecker will breed in our county, as an adult was found in June 1997, in neighboring *Lackawanna*. A **Marsh Wren** was present at Francis Slocum SP from 10/5-12 (JH). 15 spp. of warbler were reported this quarter. A **Scarlet Tanager** was heard singing at FSSP on 10/5 (RK, JH). A late **Chipping Sparrow** was at Plains 11/9 (RK), as was a late **Grasshopper Sparrow** 10/2 (RK) at the former East Side Landfill. Our first crossbill report was at Ceastown 11/23 when a flock of **White-winged** was heard (JH, JS, RK). 2 **Red Crossbill** were heard at Ceastown 12/20 (RK). The most reliable crossbill spot was Ricketts Glen SP. **C. Redpoll** arrived 12/5 at CC (RK). Large redpoll flocks were being observed in the Hazleton area (AG). On 12/14 a large flock of redpolls 1200-1500 birds were found feeding on Gray Birch catkins at the *Luzerne/Schuylkill* border near Oneida. Among the massive flock was a **Hoary Redpoll** (AG, JHe, JH, RK) which was observed for several minutes. A written description will be submitted to PORC. A Hoary was again discovered by (D Hoffman) two days later in the same area. **Pine Siskin** were reliable all quarter only at the feeding station on the property of John Heuges. I'm sure John would not object to any "peeping toms" trying to catch a look at these winter finches. **Evening Grosbeak** were reported all quarter.

Lycoming County

Fall migration at Rose Valley Lake (RVL) yielded several nice sightings, including 13 **Double-crested Cormorant** 11/8; a lone **Brant** 11/8; 2 **Canvasback** 11/29; 1 **Oldsquaw** 11/8; 5-6 **C. Goldeneye** 11/23-12/5; 37 **Ruddy Duck** 11/8; and 68 **Am. Coot** 11/8 (all R Beach, W Egli, F.Stiner). Only two reports of **Red-breasted Nuthatch** were received; 1 in Picture Rocks (PR) 12/4 (WE) and 1 in Jersey Shore (JS) 12/19-20 (G&P Schwalbe). One **Winter Wren** and 1 **Hermit Thrush** in JS (G&PS) were the only reports for these species. A very late **Chipping Sparrow** frequented the Schwalbe's feeding station in JS 12/5-12. This species is very rarely reported during the fall/winter quarters here. Single **Fox Sparrow** visited the Reish's feeding station in Upper Fairfield Twp 11/14 and 12/4. They also reported having several (1 ♂, 4-5 ♀♀) "Oregon" **Dark-eyed Junco** there 10/18+, although no photograph or written documentation was received. The only **Pine Siskin** observations were by the compiler in PR 12/6-27. **Evening Grosbeak** were first observed in PR 10/26 (WE), with several scattered sightings throughout the

county until 12/3; 30+ was the most reported on 11/8 at RVL (RB, WE, FS).

Mercer County

Regular checking of L. Latonka resulted in a great variety of waterfowl including 3 **Red-necked Grebe** 11/1 and 7 **Oldsquaw** 12/8. Other highlights: a perched **Peregrine Falcon** 11/11 near the intersection of I-79 and Rt. 58 (H Bauer) and a **Sedge Wren** 10/18 in a wetland on Williamson Rd (Troyer family, G&S Butcher, R Crawford, S McCarl, L Wagner). Documentation of the wren was sent to PORC. 10/18 was a late date for **E. Phoebe** also seen on WR. Skunk Run Road was the place for 13 spp. of warbler 10/4-18, including **Orange-crowned** 10/8 and **Mourning** 10/9 (Troyers).

The winter finches are visiting us also: 50+ **C. Redpoll** 12/27, (with more to come in Jan.), a few **Pine Siskin** beginning in mid-Oct, and 18 **Evening Grosbeak** 11/1 all on WR.

Although many "good" birds were reported, perhaps the most significant comment is on the total failure of the acorn crop and poor hickory nut crop (at least locally). The effect this is having on birds and wildlife is already apparent: numbers of **Blue Jay** and **Wild Turkey** are very low. **Great Horned Owl** has left-the area (no mice nibbling the acorns?). Only 2 Grey Squirrels raiding my feeders instead of 11, plus other effects yet to be determined. Cause of nut crop failure could be acid rain plus several successive drought years.

Mifflin County

On 11/16 had 5 **C. Redpoll** and 7 **Pine Siskin** in the yard, followed by 5 **Evening Grosbeak** 12/8 (M Kenep). Had our first report of a **N. Bobwhite** in several years; 1 at Strodes Mills (G Bickel).

Montgomery County

This quarter was probably above average for birding in the county, due to late mudflats at Green Lane Res (GLR) and scattered reports of winter finches from several locations.

A **Red-throated Loon** was at GLR 11/8 (GF Freed, GA Franchois, L Rhoads), but more surprising was 1st Upper Perkiomen Park (UPV) on 11/29+ (W Beltz, v.o.) This may be the first loon ever on this tiny lake. **C. Loon** were scarce at GLR but a high of 49 went past the Hawk Watch at Fort Washington SP (FW) on 11/16 (B Murphy). GLR hosted an **Eared Grebe** on 10/16 (J Horn, v.o.) a 1st Co. record! The **Great Cormorant** at GLR was again found Oct (GAF).

Waterfowl had a decent showing with 22 spp. reported. A high of 500 **Snow Geese** flew over FW on 10/16 (BM). Other noteworthy waterfowl (all from GLR) included: **Green-winged Teal** 11/2; 60 **Black Scoter** 11/7 (K Crilley); single **White-winged Scoter** on several dates (GAF, KC); a **Canvasback** 11/ 22 (KC); and 100 **Ruddy Duck** 10/18 (GAF) Most of our raptor highlights were from the Militia Hill Hawk Watch at FW. Good finds there included a **N. Goshawk** 11/ 13; and single **Peregrine Falcon** on several dates (BM, M Klauda). GLR also hosted some nice raptors, including a Peregrine Falcon 10/ 2 (GAF) and **Merlin** at both GLR and UPV (GAF). **Bald Eagle** were present the entire quarter at GLR, with a high of 4 birds in

early Dec (v.o.).

Continued low water levels helped extend the GLR shorebird season into mid-Nov. Highlights included **Black-bellied Plover** 10/24-28 (KC et al.). **Sanderling** 11/8 (GAF, GLF, LR), and 1-2 **Hudsonia Godwit** 10/13-11/ 20 (KC et a.;). An ad. **Ls. Black-backed Gull** was at GLR 10/20 (R Wiltraut, JH, KC).

A **Yellow-billed Cuckoo** at GLR on 10/12 was unusually late (GAF, GLF). **Barred Owl** have become increasingly rare in w. *Montgomery* with reports of single birds 10/20 and 12/2 at GLR (GLF). 60 **Am. Pipit** were at GLR 10/14 (KC).

Not surprisingly, warblers were scarce during the period, but reports included **Black-throated Blue** 10/7; **Magnolia** 10/11; and **Palm** 10/12 (R Grubb, GLF). Reports of **Lincoln's Sparrow** came from both FW and GLR (BM, GAF), and a late **Chipping Sparrow** was at FW on 11/16 (BM). **Rusty Blackbird** reached a high of 82 at GLR on 10/26 (GAF).

Winter finch reports were sporadic and local, at best. FW had a **White-winged Crossbill** 11/24; 9 **Evening Grosbeak** 11/11; and 36 **Pine Siskin** 11/16 (BM). RG's Perkiomenville feeders hosted 17 **Purple Finch** 12/28. Unami Creek Valley had 3 **Evening Grosbeak** 11/5; 24 **Pine Siskin** 11/16; and a **C. Redpoll** 12/ 31 (KC) - better late than never ! 12 **Snow Bunting** were at GLR 11/22-23 (JH et al.).

Northampton County

The highlight was by far the **Ash-throated Flycatcher** found by Arlene Koch on her property 11/24. It remained until 12/3. It was studied at point-blank range, photographed, videotaped (including calls) and seen by over 120 observers. *This is the 1st Pa. record.*

The dark morph **Red-tailed Hawk** returned to Martins Creek PP&L plant on 11/13 and 4 **Am. Golden-Plover** were at the flyash pond there 10/14 ® Wiltraut). A probable **Carolina Chickadee** was seen and heard my m.ob. At the Koch property in Nov-Dec.

The sparrow fields on the Koch property attracted many species this fall. Besides the commoner spp., **Grasshopper**, **LeConte's**, and **Seaside** were reported there (AK). A high count of 12 Fox Sparrow were at the Jacobsburg SP feeders 11/16 (RW). Both **Red Crossbill** and **C. Redpoll** were seen in Nov at Little Gap (B Silfies) and 25+ **Snow Bunting** were on the "jetty" at Minsi Lake 11/17 (RW). A **Lapland Longspur** was at Gravers Hill 12/12 (RW).

Philadelphia County

We recorded 158 spp. this quarter and 237 spp. for the year.

Unusual were 6 storm-driven **Red-throated Loon** on the Delaware R (DR) 11/8 (N Pulcinella). **Great Cormorant** returned to DR on 10/23 (E Fingerhood), a record early date. **Great Egret** were present at Tincum (TI) all quarter (v.o.), and **Snowy Egret** lingered there until 10/21 (T Floyd). **Black-crowned Night-Heron** were present all quarter at TI (v.o.). Notable storm-related species along DR 11/8 included 7 **Gr. Scaup**, 11 **Black Scoter**, and 6 **White-winged Scoter**.

An **Osprey** at Carpenter Woods (CW) 11/7 was late (S Lawrence), and 3 **Bald Eagle** flew over Roxborough (RO)

10/18 (E Brendel et al.). Other interesting raptors included **N. Goshawk** at CW 11/12 (SL), **Rough-legged Hawk** at TI 12/18 (TF), and **Merlin** near CW 12/5 (SL). A **Virginia Rail** was picked up in Center City 10/9 (F Windfelder), and **C. Moorhen** lingered at TI until 11/1 (TF).

Best among 13 spp. of lingering shorebirds were: 10 fly-over **Am. Golden-Plover** near CW 11/16 (SL), **W. Sandpiper** until 10/26 at TI (TF), a **dowitcher sp.** at TI 10/26 (TF), and a **Wilson's Phalarope** at TI 10/1 (*fide* AE). **Laughing Gull** lingered at the Sun Oil Pond until 11/9 (TF), and **Forster's Tern** lingered at DR until 11/5 (EF).

Unusual owls at TI included **Barred Owl** (v.o.) And **N. Saw-whet** (J Miller). Single **House** and **Marsh wrens** remained at TI until 12/20 (JM et al.). Noteworthy tardy warblers, all at TI, were **Black-throated Green** and **Prairie** 11/8 (D McGovern) and a **Blackpoll** on 11/1 (TF). A **Vesper Sparrow** and 14 **Savannah Sparrow** were at the Army Corps (AC) area 10/26 (L Bevier et al.), and a **Lincoln's Sparrow** lingered until 11/1 at TI. A flock of 11 **E. Meadowlark** were at AC 10/26 (LB et al.). Best among a scattering of winter finches were a **White-winged Crossbill** along the Upper Wissahickon 12/4 (MS), and a **C. Redpoll** at CW 11/4 (G Seagraves).

Potter County

25 **N. Saw-whet Owl** were banded between 9/28 and 11/11 at Hebron.

Schuylkill County

This quarter produced 155 spp., as well as 1 ssp. As stated last quarter, the **White-winged Crossbill** which was seen at the North Lookout of Hawk Mountain Sanctuary (HMS) 9/22 was indeed a tantalizing harbinger of the forthcoming finch irruption, also known as a "superflight." HMS set a yearly record for White-winged Crossbills with a total count of 508 birds! The **Red Crossbill** count of 149 birds was also quite a significant yearly total. Other finch species recorded at HMS were 1535 **C. Redpoll**, 1240 **Pine Siskin**, and 172 **Evening Grosbeak**, making 1997 one of the best 3 years for finch species since the sanctuary's founding. Other areas of the county also produced nice numbers of finches, including the county's 3rd record for **Hoary Redpoll**, seen near the village of Oneida, in both *Schuylkill* and *Luzerne* counties, 12/14 (A Gregory, et al.).

An "Oregon" race of the **Dark-eyed Junco** was seen and clearly identified near the #1 Shenandoah Res. 10/24 (D Krue). 2 **Lincoln's Sparrow** were present at SGL 286 between Schuylkill Haven and Adamsdale 10/2-3 (T Clauser, DK), and another was at SGL 160 near Rock 10/8 (DK). A very late ♂ **Hooded Warbler** was at SGL 229 near Tremont 10/9 (TC), and another late warbler, a **Prairie**, was at the Landingville Dam (LVD) 10/9 (M Ward). This winter's relatively mild weather was apparently the catalyst for producing 2 **Gray Catbird**, 1 at SGL 160 near Rock 12/23 (DK), and the other near Molino 12/28 (B Jucker et al.) A relatively late **Wood Thrush** was near the Tumbling Run Dam (TRD) 10/9 (TC). Another late bird, a **Barn Swallow**, was at LVD 10/1 (MW). At least 34 **Horned Lark** were at the County airport 12/3-12, which was during the visit of the adult ♂ **Snowy Owl** 12/3-6 (M Sterling, TC et al.). The owl gave great views to numerous birders for three days, while sitting atop fence posts and

runway markers. 15 unidentified **scoters** flew past the N. Lookout of HMS 11/12 (E Hynes, S Thorpe) but at too great a distance to discern between Surf and Black Scoter. 4 **Black Scoter** were at Sweet Arrow Lake (SAL) 11/7 (TC). A ♀ **Greater Scaup** was closely identified at LVD 11/1 (TC). A lone imm. **Brant** was at Deer Lake (DL) 11/11 (MW, TC). An **Am. Bittern** was at the Wood Duck Trail of the LVD 10/12 (TC). 2 **Red-throated Loon** flew past the N. Lookout, one 11/10 (M Monroe), and the other 11/20 (MM et al.).

Note: The new Schuylkill County checklist is now available at no cost, and can be obtained by calling Tom Clauser at 717-622-1818, or either at Hawk Mountain Sanctuary or the Schuylkill Conservation District Office.

Somerset County

Our typically great waterfowl numbers were impressive, as were the late shorebirds and the nice assortment of winter finches. Two **Red-throated Loon** were at Somerset Lake (SL) from 11/9-11 (S Bastian) and 1 at Indian L. on 11/9 (J&L Payne). Seventy-five **Horned Grebe** were present on 11/4 (R Leberman). **Snow Geese** were seen on three different dates at SL (v.o.), Stoughton L. (R Murphy), and the Que (SB). 100 **Canvasback** (K Shorbine); 21 **Oldsquaw** (RL); 45 **Black Scoter** (SB); 1500 **Bufflehead** (SB); and 320 **Ruddy Duck** (J&LP) highlighted the waterfowl. A **Peregrine Falcon** was noted on 10/5 at Mount Davis (J&LP). Both **Short-billed** (2 on 10/28 by A Marich) and **Long-billed dowitcher** (1 on 10/27 by J&LP) turned up at SL. The Long-billed was a 1st Co. record. **Black-bellied Plover**, **Killdeer**, **Greater/Lesser Yellowlegs**, **Pectoral Sandpiper**, **Dunlin**, and **C. Snipe** were all found in Nov at SL on the mudflats created by a draw down.

Over 1000 **Am. Robin** were at SL mudflats in the afternoon of 10/26 (AM). A flock of 14 **Yellow-rumped Warbler** was at Confluence for the Mount Davis CBC on 12/21. Twenty-five **Field Sparrow** were notable for the count as well. Lastly, small numbers of **Purple Finch**, **Red and White-winged crossbills**, **C. Redpoll**, **Pine Siskin**, and **Evening Grosbeak** were recorded late in the quarter in the Mount Davis area.

As no documentation or observers can be found to support the reports of Laughing Gulls in *Somerset* after Hurricane Fran (PB 10(3):141), this compiler concludes the reports to be erroneous.

Venango County

We started off the quarter with 4 early duck records. **Gadwall**, 1st Oct. record (10/19 KL, RS), **Canvasback**, **Redhead & Red-breasted Merganser** all w/ early dates. Our first ever fall record of **White-winged Scoter** (10/18 KL, GE). Hawk numbers continue to be low through the quarter. Only one **Red-shouldered Hawk** sighting all quarter (10/23), and only two **Rough-legged Hawk** (one on 10/15, one on 10/23) as compared to up to 15 at a time last fall & winter.

Migrating owls were scarce this quarter. A maximum of 3 **Short-eared Owl** at BF & Bullion Fields on 11/16. No **Long-eared Owl**, and just two **Saw-whet Owl** sightings at BHNS 12/16-17.

Red-breasted Nuthatch were probably at the highest numbers I've seen in Venango Co. **Golden-**

crowned Kinglet also very abundant. A **Swainson's Thrush** on 10/11 at BHNS was a late record. First Oct. **Orange-crowned Warbler & Am. Redstart** at BHNS. **Lapland Longspur** and **Snow Bunting** both were present with one individual of each at a time.

The winter finches made a good showing. **Purple Finch** numbers were up from previous years. **White-winged Crossbill** gave us a 1st County Record, 12/9 BHNS w/ 4 individuals. 24 were then found 12/28 at President, with numbers continuing to build well into the 1st quarter of 1998. 40 **Com. Redpoll** were first seen on 12/16 at BHNS, building in number to 150 on 12/28. And these also continued to build in numbers well into the 1st quarter of 1998. **Pine Siskin** showed up a little earlier w/ the 1st individuals on 11/15, and building up in numbers like the crossbills and redpolls. **Evening Grosbeak** first seen on 11/1, w/ numbers improving slightly through the end of the quarter, but not in the large numbers of the other winter finches.

Warren County

After a record-smashing count of 14 **Bald Eagle** on last year's Warren CBC, none was seen this year. It may be due to the mostly out-of-count Allegheny Res. remaining unfrozen on 12/20. An ad., probably male, **Sharp-shinned Hawk** tried to get at two juncos in a trap for banding 11/11 in Warren. It retreated when approached, then came back within arm's length. It would not be chased from its perch on a low branch (T Grisez). **Cooper's Hawk** were seen around several feeders. Two **Great Horned Owl** were at N. Warren 11/11 (C Putnam).

A **Red-bellied Woodpecker** used a feeder on the e. side of Warren the last half of Dec (TG). **Pileated Woodpecker** visited feeders 10/19 at Saybrook (M Neel), and 10/25 at N. Warren (CP).

A **C. Raven** was found outside its usual range w. of Warren 10/18 (B Highhouse, D Watts). A **Carolina Wren** was in Warren through Oct (DW), 2 at a feeder in Barnes 11/5 (B Dorn). A **N. Mockingbird** was seen 12/28 near Lander (DW, BH).

Westmoreland County

Ken Byerly's count of 222 **Canvasback** on Derry Lake 12/8 was exceptionally high for a *Westmoreland* locality. There was a good fallout of ducks 11/11 when Leberman's finds included 450 **Bufflehead** on Donegal Lake (DL) and 200 on Trout Run Res. (TRR) near Ligonier; 50 **Ruddy Duck** were on DL and 100 at TRR; and 8 **Surf Scoter** were also on TRR that same date. **Black Scoter** were in unusually good numbers: on 11/7 Mike and Evaleen Watko saw 22 at Mammoth Park and 1 at DL; on 11/ 8 Dennis Smeltzer observed 25 at TRR.

The season's only **Bald Eagle** was at Stahlstown 12/19 (D Byers), and the only report of **Peregrine Falcon** was from West Newton 10/11 (D Koch). Best shorebird find was a **Western Sandpiper** 10/23 at Twin Lakes Park (DS). A **N. Saw-whet Owl** was banded at Powdermill Nature Reserve 11/22 (Leberman and R Mulvihill). An imm. ♀ **Rufous Hummingbird** showed up at the home of Joanne Madden near Delmont about 10/11 and remained there through the end of the year. The bird was trapped (RSM) and banded by visiting hummingbird researchers Mr. and Mrs. Duane Berger on 12/1.

At PNR 4 **Orange-crowned Warbler** were banded between 10/4-22. The **Dark-eyed Junco** flight was heavy, with 872 banded during the quarter. An Oregon Junco was netted 10/19. A total of 419 **Purple Finch** was also banded between 10/1 and year's end. Bob Mulvihill heard the first (several) **Evening Grosbeak** over Powdermill 10/18, and DS found 2 at MP by 10/21.

Wyoming County

The 54 **Black Scoter** on L. Carey 11/7 was very high. Of the 54, only 3 were in adult male plumage (W Reid). While regular in spring, the **Bonaparte's Gull** at L. Carey 10/10 was unusual (WR).

An imm. **Red-headed Woodpecker** was at Vosburg on 11/8, both unusual and late. Records this year from *Wyoming, Bradford, Luzerne, and Lackawanna* may be showing an increase in this unusual species. Sure hope so!

York County

36 **Double-crested Cormorant** at Codorus SP (CSP) on 11/8 (J Wentz). 1 **Black Scoter** at CSP 11/12 (P Robinson). Good waterfowl counts: 70 **Bufflehead** at Long Arm Dam (LAD) 11/11; 35 **Hooded Merganser** at LAD 11/11; 130 **Ruddy Duck** at Sheppard Myers Dam (SMD) 11/11-12 indicating a large increase (PR). A new high count of **Black Vulture** on the CBC 12/20. **Bald Eagle** (2 ad., 1 imm.) Were in the LAD area all year. Adults remain but no nest.

A **Hudsonia Godwit** at SMD 10/4-5 (PR video, A Spiese). A hummingbird 11/10-22 at a Red Lion feeder identified as a **Rufous** (†B DelGrande). **Yellow-bellied Sapsuckers** were very common. Late swallow reports included **Bank** on Gut Rd 11/1 and **Tree** at LAD 11/30 (J&J Prescott). The Prescotts found a **Marsh Wren** along Gut Rd 10/4. A **Yellow-throated Vireo** was near the feeder and drip-pool area at the Downs' home on 10/14. Late warbler sighting include **Chestnut-sided** and **Cape May** 10/14 (AS); **Black-throated Green** on Gut Rd 11/22 (J&JP); **Am. Redstart** 10/13-14; **Connecticut** 10/14; and **Wilson's** 10/10 at Wrightsville (J&LD). 11 **Red Crossbill** were found for the CBC. ♣

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Seasonal Occurrence Tables - October through December 1997

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

HOW TO READ THE TABLES

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

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

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

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

CODES

The codes used in the tables are as follows:

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

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

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

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

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

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

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

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

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

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

sp. = Species unknown, such as Scaup.

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

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

EXAMPLES:

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

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

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

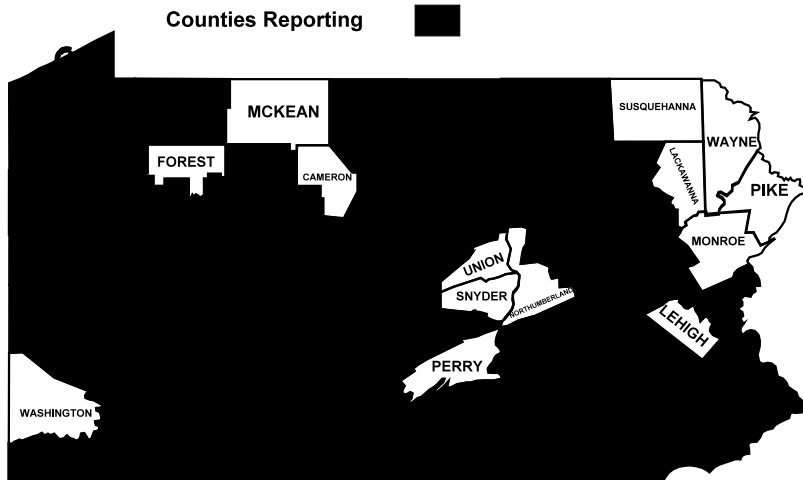
5/6- means the species was first seen on 5/6 and remained the rest of the quarter.

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

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

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

COUNTIES REPORTING - OCTOBER TO DECEMBER 1997



SEASONAL OCCURRENCE TABLES - OCTOBER THROUGH DECEMBER 1997

	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BLAIR	BRADFORD	BUCKS	BUTLER
LOON, RED-THROATED	-	-	11/9	-	-	11/8-9(9H)-22	-	-	10/15-12/21	-
COMMON	-	-	10/24-11/9(19)-12/17	11/21	10/4-28(6)-11/29	→11/10(286)-12/28	-	11/12	→12/20	10/28-11/8(37)-27
GREBE, PIED-BILLED	-	→12/27	10/24-11/8(18)-12/16	11/21	10/7-28(8)-11/29	→11/8(200H)-12/27	-	10/25-12/27	→12/21	→11/8(30)-27
HORNED	-	-	11/8-9(16)-23	-	10/26	10/11(5)-11/15	-	-	→12/20	10/20-11/11(115)-12/20
RED-NECKED	-	-	10/30	-	-	11/9(7)	-	-	10/16	-
CORMORANT, DOUBLE-CRESTED	-	-	-	-	10/4-26	→10/1(167)-12/17	-	-	A-11/9(41)	10/4-11/2
HERON, GREAT BLUE	R	R-12/10(20)	A-10/17(4)	-	R	→12/27L	-	A-12/27(10)	R	A
EGRET, GREAT	-	-	-	-	-	→12/22L	-	-	→12/20(7)	-
HERON, GREEN	-	-	→10/3	-	-	-	-	-	11/29	-
NIGHT-HERON, BLACK-CROWNED	-	-	-	-	-	-	-	-	12/19→	-
SWAN, TUNDRA	-	11/11(300)-23	11/9-14(127)	-	10/30(93)	11/7-12/12(160)-28	11/12	10/26-11/16	11/29	10/30-11/12(900)-12/29
MUTE	-	-	11/22	-	→11/29	R	-	11/21	-	-
GOOSE, SNOW	-	-	10/19	-	10/28(78)	A-11/10(183)	-	-	10/4→	11/5(4)
BRANT	-	-	11/7-9	-	-	11/8-16	-	-	11/8(9)-22	-
GOOSE, CANADA	R	R	R	-	R-11/11(120)	R-10/1(11490)	-	R	R	R-11/12(460)
DUCK, WOOD	-	R-10/19(12)	→11/9	11/21(8)	10/26(15)	→12/21	-	-	R	→10/8(142H)-11/8
TEAL, GREEN-WINGED	10/11(9)	10/11-29(8)	11/8(6)	-	10/4	→12/21(16)-28	-	10/26(6)-11/16	→12/21	→11/2(22)-8
DUCK, AMERICAN BLACK	10/19(19)	R	→12/16(12)	11/21(5)	10/4-28(5)	A-12/21(221)	-	A-10/26(40)	R	10/4-12/20(6)
MALLARD	R	R	R-12/11(90)	12/20	R-11/29(31)	R	-	R-11/21(500)	R	R
PINTAIL, NORTHERN	10/19(3)	-	11/8(3)	-	-	→11/8(4)	-	12/27	12/20-28(13)	10/8(3)-25
TEAL, BLUE-WINGED	-	-	→10/1	-	10/4(3)	→10/3(63)-8	-	10/1	10/1	→10/8(9)-25
SHOVELER, NORTHERN	-	11/17	-	-	-	-	-	-	-	-
GADWALL	11/20(5)	-	10/24-30(7)	-	10/26	→10/18(12)-11/16	-	10/25	→12/20	10/16-11/27(25)
WIGEON, AMERICAN	-	-	-	-	10/26(5)	A-12/28(66)	-	10/26(4)	10/5-12/20(28)	→11/15(10)
CANVASBACK	10/11(9)	10/29-30	11/29-12/10(8)→	-	10/26(5)	→10/11(8)-12/28	-	10/25-12/27(4)	A	-
REDHEAD	-	-	11/8	12/20	10/30-11/29(6)	11/8-12/12(27)-27	-	11/9	11/11-12/21	10/25-11/15(56)-12/20
DUCK, RING-NECKED	10/11(11)	-	-	-	10/30	-	-	10/26	10/17(6)-12/21	11/15-12/20(6)
SCAUP, GREATER	11/12(4)	11/16→	10/24-11/9(85)	-	10/28(30)-11/29	→11/15(70)-12/27	-	10/26	10/2-12/21(20)	→11/8(540H)-12/20
LESSER	-	-	-	-	-	-	-	-	11/8(3)	10/28(11)-12/20
OLDsquAW	-	-	11/8-9(16)	-	→10/30(5)	10/11-12/21(7)	-	-	10/18-12/20	10/25-11/8(44)-12/20
SCOTER, BLACK	-	-	11/9(45)	-	11/29(5)	11/8(6)-30	-	-	11/16(13)-28	11/8-9(12)-12/20
SURF	-	12/10	11/8-9(10)	-	-	10/12-11/7(41)-9	-	-	11/7(27)-22	11/11
WHITE-WINGED	-	11/9(8)	11/8-9(13)	-	-	10/18-11/14	-	-	11/7-9(6)	-
GOLDENEYE, COMMON	-	11/8-12/4	-	-	10/26	11/8(6)-9	-	-	10/15-11/7	-
BUFFLEHEAD	-	-	11/8	12/28	10/26-30	11/8-14(8)	-	-	11/11-12/21	11/15-12/20(6)
MERGANSER, HOODED	11/12(13)	10/30-12/27(3)	10/30-11/9(268)-14	-	10/26(6)	11/1-8(42)-12/27	-	10/19→	10/22→	10/25-11/11(400H)-12/20
COMMON	-	-	611/6-16(25)→	-	-	11/1-12/12(14)-27	-	-	11/7→	11/2(30)-12/20
RED-BREASTED	-	-	-	-	10/30(3)	11/14-23(100)-12/27	-	A-12/27(164)	R	12/20
DUCK, RUDDY	10/11(5)	10/11-11/15(6)-12/4	10/30-11/9(6)	-	10/26(4)-30	11/8(4)-30	-	10/25	12/4-21(9)	10/12-12/20
VULTURE, BLACK	R	-	10/24-11/9(79)-12/16	-	10/26-11/29(78)	A-11/15(600H)	-	10/25-11/16(13)	A	10/5-20(2500H)-12/20
TURKEY	R	→10/11(4)	→12/2	10/23	10/12	A-11/30(129H)	-	-	R	-
OSPREY	-	-	-	-	R	A-11/3(66)	-	→10/19	R	→10/16(68H)-28
EAGLE, BALD	-	-	11/2	-	→10/3	→10/10(19)-11/15	-	-	→11/8	→10/16(3)-20
HARRIER, NORTHERN	-	A	11/8	-	→10/17	A-11/27(8)	12/17	-	A	R
HAWK, SHARP-SHINNED	A	R	R	-	→10/17	A-10/9(12)	-	11/16	A	10/5-12/20
COOPER'S	-	R	R	-	→10/17(9)-11/13	A-10/10(376)	-	R	R	A
GOSHAWK, NORTHERN	-	R	R	-	10/17-29	A-10/16(72)	-	R	R	A
HAWK, RED-SHOULDERED	-	R	-	-	10/20	A-10/10(11)	-	-	-	-
BROAD-WINGED	-	-	12/20	12/20	10/17	A-11/5(40)	-	-	→10/19	11/27
RED-TAILED	R	R	R	-	-	→11/6L	-	-	-	-
ROUGH-LEGGED	-	11/12	-	-	R-10/17(58)	R-10/28(217)	-	R	R	R
EAGLE, GOLDEN	-	10/25	-	-	-	12/1→	-	-	-	-
KESTREL, AMERICAN	R	R	R	-	10/17	→11/27(14)-12/31	-	-	-	-
MERLIN	-	10/14-12/5(5)→	-	-	-	R-12/28(71)	-	R	R	R
FALCON, PEREGRINE	-	-	-	-	-	→10/10(36)-11/11	-	-	10/22-11/21	11/11
BOBWHITE, NORTHERN	-	R	-	-	-	→10/4(8)-11/21	-	-	A	-
COOT, AMERICAN	11/20(5)	10/3-11/9(20)→	10/17-11/9(132)→	10/30	→10/26(141)-11/29	A-11/8(150)	-	-	R	→NOV(2500H)-12/29

SEASONAL OCCURRENCE TABLES - OCTOBER THROUGH DECEMBER 1997

	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BLAIR	BRADFORD	BUCKS	BUTLER
KILLDEER	R	→10/12(32)-11/9	→10/17(29)-11/11	10/18	R-10/26(12)	R-10/18(88)	-	→10/5	R	→10/28(171H)-11/2
YELLOWLEGS, GREATER	-	→10/11	→11/9	-	→10/4	→10/12(5)-11/9	-	-	10/1-26	→10/24(3)-11/2
LESSER SANDPIPER, SOLITARY	-	→10/5	→10/24	-	→10/4	→10/18(17)-11/9	-	-	→10/26	-
SPOTTED LEAST	-	-	→10/30	-	-	→10/3(3L)	-	-	10/11	-
PECTORAL	-	-	10/1	10/30	-	-	-	-	→10/18	-
DUNLIN	-	10/5-27	→11/8	-	-	→10/25(33)-11/7	-	-	10/21-11/6(3)	-
SNIPE, COMMON	11/17(7)	10/24-29	11/6-8(7)-9	-	-	10/15-11/1(37H)-9	-	-	10/19-11/7	10/18-25(11)-11/8
WOODCOCK, AMERICAN	-	10/23	10/23	10/30(3)	-	→10/15(8)-12/28	12/14(7)	-	-	10/18-11/1
GULL, BONAPARTES	-	11/4(3)-16	10/19	-	→10/12	-	-	P	12/28	-
RING-BILLED	-	A	11/25	-	-	11/30	-	-	A	10/28-11/15(70)-12/20
HERRING	-	A	→11/9(9)-16	A	10/26-12/21(26)	A-12/27(6000)	-	12/27	A	→12/20(132)-29
LESSER BLACK-BACKED	-	R	11/6-9	A	-	A-12/21(550)	-	12/27	A	10/28-11/1(5)-12/29
GREAT BLACK-BACKED	-	-	-	-	-	11/30→	-	-	12/7(3)→	-
TERN, COMMON	-	-	-	-	-	11/30→	-	-	10/19→	-
OWL, BARN	R-11/19(4)	-	-	-	10/26(3)	-	-	-	-	11/8
BARRED	R	R	R	-	R	R	-	R	R	R
LONG-EARED	-	-	-	-	-	-	-	R	11/6(4)→	12/7
SHORT-EARED	-	A-11/16(6)	11/29	-	-	-	-	-	-	-
NORTHERN SAW-WHET	-	-	-	-	10/19-11/5(5H)-9	-	-	-	R	12/10-23
NIGHTHAWK, COMMON	-	→10/5	-	-	-	→10/3L	-	-	-	-
SWIFT, CHIMNEY	-	→10/4(250)-9	-	→10/9	-	→10/5(28)-10	-	-	→10/4	→10/4(20)
WOODPECKER, RED-HEADED	R	P	-	-	-	R	-	12/27	-	-
SAPSUCKER, YELLOW-BELLIED	-	10/2→	10/17-12/19	-	10/13	10/1→	-	-	A	10/18
Flicker, Northern	R	R	R-11/22(7)	→12/20(4)	R	R	A	A	R	A
WOOD-PEWEE, EASTERN	-	-	-	-	-	-	-	-	-	→10/4L
PHOEBE, EASTERN	P	→11/21	→10/3	-	→10/12	→10/3(8)-12/21	→11/4	→10/26	A	→10/24
LARK, HORNED	-	R	-	-	-	11/13-12/28(764)→	-	R	-	10/20-12/20(65)
SWALLOW, TREE	-	-	-	-	-	→10/27	-	-	-	-
CROW, FISH	-	-	-	-	-	R-10/23(32)	-	-	R	-
RAVEN, COMMON	-	-	-	-	10/21→	A-11/10(12)	-	R	-	-
CHICKADEE, BLACK-CAPPED	R	R	R-10/19(14)	-	R	R	R	R	R	R
CAROLINA	R	R	-	R	-	R	-	R	R	R
NUTHATCH, RED-BREASTED	11/1(4)→	A	10/19→	12/14	→11/29	A-12/21(44)	-	A	A	A
CREEPER, BROWN	-	A	R	12/19	11/11→	A	-	R	R	12/20
WREN, HOUSE	-	→10/5	-	-	-	→10/12	-	-	→12/20	→10/4
WINTER MARSH	A	A-10/14(7)	10/19-31	-	12/2→	A	-	→10/22	A	10/4→
KINGLET, GOLDEN-CROWNED	-	-	-	-	-	-	-	-	-	-
RUBY-CROWNED	-	A-10/29(14)	11/9→	12/20(3)	11/27-29(6)→	A	A	A	A	10/3→
THRUSH, SWAINSONS	-	→10/19(10)-11/20	10/1-19(5)	10/12-12/20	10/6-10(7)-12/15	A-10/13(73)	-	10/25	10/3→	→10/18(6)-28
HERMIT	-	→10/12	-	-	-	→10/12	-	-	→10/4	→10/4
WOOD	-	10/12→	10/19-11/23	-	-	A	→10/28	-	10/19→	10/12-22
ROBIN, AMERICAN	-	-	→10/1	-	-	→10/10	-	-	-	-
CATBIRD, GRAY	R	A	R-11/8(100+)→	-	R	R-10/20(1319)	→12/27(4)	A	R	A-10/21(500)
PIPIT, AMERICAN	10/21(7)	-	→10/19	-	-	A-10/10(7)	→12/27	-	A	→10/8
VIROO, BLUE-HEADED	-	→10/19	10/1(6)-24	-	-	10/10-11/9(200H)	-	10/25-26(30)	10/12-11/15	-
RED-EYED	-	→10/12	→10/24	-	-	→10/22	-	-	→10/12	→10/18
WARBLER, TENNESSEE	-	→10/5	-	-	-	→10/11	-	-	→10/12	→10/4
NASHVILLE	-	→10/12	-	-	-	→10/12	-	-	→10/18	→10/4
CHESTNUT-SIDED	-	-	-	-	-	→10/8	-	-	→10/4	→10/4
MAGNOLIA	→10/5	→10/20	-	→10/10	-	→10/9	-	-	→10/18	-
CAPE MAY	→10/11	→10/8	-	-	-	→10/16	-	-	-	-
BLACK-THROATED BLUE	→10/11	→10/7	-	-	-	→10/16	-	-	-	-
YELLOW-RUMPED	→11/12	10/5→	→11/21	10/10(5)-12/20	A-11/29(3)	A	→12/27	→10/8	→10/18	→10/12
BLACK-THROATED GREEN	→10/11(5)	→10/14	-	-	-	→10/20	-	-	→10/18	→10/4(7)

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	ADAMS	ALLEGHENY	ARMSTRONG	BEAVER	BEDFORD	BERKS	BLAIR	BRADFORD	BUCKS	BUTLER
BLACKBURNIAN	-	→10/5	-	-	-	→10/12L	-	-	→10/18	-
PINE	→10/17	-	-	-	-	→10/12	-	-	11/2-12/6	-
PRAIRIE	-	-	-	-	-	→10/9L	-	-	-	-
PALM	-	-	-	-	-	→10/9	-	-	A	-
BAY-BREASTED	-	→10/9	-	-	-	→10/2	-	-	-	-
BLACKPOLL	-	→10/3	-	-	-	→10/12	-	-	-	-
BLACK-AND-WHITE	-	-	-	-	-	→10/9	-	-	→10/4	-
REDSTART, AMERICAN	-	→10/5	-	-	-	→10/14	-	-	→10/11	-
OVENBIRD	→10/9	→10/7	-	-	-	-	-	-	-	-
YELLOWTHROAT, COMMON	-	→10/15	→10/1(3)	-	-	→10/15	-	-	→10/25	→10/4
WARBLER, HOODED	-	→10/7	-	-	-	-	-	-	-	→10/4
WILSON'S	-	→10/2	-	-	-	-	-	-	-	-
TANAGER, SCARLET	-	→10/6	-	-	-	→10/9	-	-	→10/4	→10/2
GROSBEAK, ROSE-BREASTED	-	→10/5	→10/1	-	→10/21	→10/3	-	-	→10/4	-
BUNTING, INDIGO	-	→10/10	-	-	-	→10/5	-	-	→10/12	-
TOWHEE, EASTERN	-	→10/21	→10/19	→10/12	→11/7	A	11/11→	12/27(308)→	A	→10/24
SPARROW, AMERICAN TREE	12/13(8)→	12/27→	10/19-12/11(14)→	11/28(5)→	12/9→	6/10/7→	11/11→	11/15→	11/15→	12/20(85)→
CHIPPING	→10/27	→12/12	→10/11(26)	→11/30	10/11(5)→	→10/30	-	-	→12/20	P
FIELD	-	→11/2	→10/31	-	→10/27	A	-	-	R	→10/16(52)-12/20L
VESPER	-	→10/14	-	-	-	-	-	-	10/19-26	-
SAVANNAH	-	→10/14(20)	-	-	-	→10/12	-	-	R	-
FOX	12/27	11/21-12/27	10/19(3)	-	11/4-16	10/19-11/9(7)-12/28	11/13-18	10/25	10/19→	11/12
LINCOLN'S	-	10/5	-	-	-	→10/12	-	-	→10/18	10/4-28
SWAMP	-	10/2-19	R	-	→10/4	A	-	A	R	A
WHITE-THROATED	P	A-10/17(24)	10/19(42)→	12/20(17)	10/10→	A	-	A-12/27(40)	A	A-10/18(50)
WHITE-CROWNED	P	10/7-12	10/10	10/30	10/10	10/10→	12/27	10/25	10/4→	10/16-24(14)-12/20
JUNCO, DARK-EYED	10/7-12/31(35)→	A	10/17-11/22(35)→	10/9(7)	10/11(5)→	A	10/9→	R	10/12→	10/8→
LONGSPUR, LAPLAND	-	-	-	-	-	-	12/29	-	-	12/20
BUNTING, SNOW	-	10/27	-	-	-	11/7-12/14(30)→	-	12/27	11/9(27)-11	-
BLACKBIRD, RED-WINGED	P	→10/20	→10/5(5)	-	→10/22(20000)	A-11/7(945)	-	→10/19(30)-25	R	→10/21(1000)-12/20
MEADOWLARK, EASTERN	R	A-10/14(25)	→12/11	-	→10/21(6)	R	-	→11/12	R	→10/16(7)-11/2
BLACKBIRD, RUSTY	-	10/24(40)-11/21	10/24(14)	-	-	10/8-12(8)-11/13	-	10/25	10/23	10/1-24(98)-11/15
GRACKLE, COMMON	P	→11/9	→10/19(4)	-	-	A-11/9(5000)	-	-	R	→10/28(1000)-12/20
COWBIRD, BROWN-HEADED	-	→11/24	-	→12/20	-	R	-	-	R	P
FINCH, PURPLE	10/12-12/31(17)	11/9	A	-	10/21-26(8)→	A-11/4(153)	12/21	-	R	A-10/21(50)
CROSSBILL, RED	-	-	-	-	-	11/16-12/12(25)→	-	12/27(4)	-	-
WHITE-WINGED	-	-	-	-	-	11/10-17(100)→	-	12/27(12)→	-	-
REDPOLL, COMMON	12/14(20)	-	-	-	-	11/20-12/12(375)→	12/27(200)	12/27(116)→	-	-
SISKIN, PINE	12/20-27(10)	11/9→	10/30-11/9(7)	-	10/16-11/13(4)→	10/11-11/20(132)→	11/14(4)-12/21	12/27→	11/1-12/28	10/16-11/8
GROSBEAK, EVENING	12/20(32)	-	10/30(10)-11/9	-	10/22-11/13(12)-12/6	10/18-11/12(47)→	11/12(14)-12/29	12/27(68)→	11/7(9)-12/21	10/3-11/9(50)-12/20

	CAMBRIA	CARBON	CHESTER	CLARION	CLEARFIELD	CLINTON	COLUMBIA	CRAWFORD	CUMBERLAND	DAUPHIN
LOON, RED-THROATED	-	-	11/8	-	11/13	-	-	-	→11/8-15	-
COMMON	→11/10(20)-12/19	-	11/8(4)-12/27	→11/8(5)-12/3	11/15	-	→10/15(13)-12/13	11/2(11)→	11/7(3)-12/12	-
GREBE, PIED-BILLED	A-11/10(10)	11/16	A	→11/9(13)	11/13-15	10/20-27	→10/15(13)-12/13	10/19-11/22(18)→	→11/12	10/4→
HORNED	11/10-12	-	11/7-8(6)	10/28(9)-11/13	11/15	-	11/2-15	10/25-11/29(16)-12/14	10/20	11/8-10
CORMORANT, DOUBLE-CRESTED	→11/16(12)	-	→10/13(7)-19	10/29	-	-	10/5-11/2(350)-9	10/5-11/2(350)-9	11/8(3)	→11/10
HERON, GREAT BLUE	A-10/1(13)	A	A	A	-	R	R	R-10/25(19)	A	R
EGRET, GREAT	-	-	→10/10	-	-	-	-	→10/5(6)-11/3	→10/8	→11/9
HERON, GREEN	-	-	-	-	-	-	-	→10/5	→10/12	-
NIGHT-HERON, BLACK-CROWNED	10/4	-	→10/24	-	-	-	-	-	-	-
SWAN, TUNDRA	11/16(40)-12/16	-	-	10/27-11/15(300)-12/6	11/13-15	-	11/20	10/5-11/8(30)→	10/11(41)-15	12/20
MUTE	A-12/19(5)	-	-	-	-	-	-	A	12/20	10/25-12/20
GOOSE, SNOW	11/8(10)	-	-	12/1-13	-	-	10/19	→11/11	11/8(27)	10/25-12/20
BRANT	-	-	-	-	-	-	-	11/23	-	11/8
GOOSE, CANADA	R	R	R	R-12/25(1558)	11/13-15	R-12/27(244)	R	R-12/28(18185)	R	R
DUCK, WOOD	→10/1(64)-11/10	-	→10/18(7)-30	→10/7	10/12-11/15	10/7	R-10/21(13)	A	→11/15(4)	A

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	CAMBRIA	CARBON	CHESTER	CLARION	CLEARFIELD	CLINTON	COLUMBIA	CRAWFORD	CUMBERLAND	DAUPHIN
TEAL, GREEN-WINGED	10/3	-	11/7(11)	-	-	-	10/19(4)-11/18	A-10/25(67)	11/5(3)-13	A
DUCK, AMERICAN BLACK	10/3-12/16(30)-26	-	10/13-12/20(7)→	11/6-12/25(7)	-	A-12/27(112)	R	R-12/28(697)	A	R
MALLARD	R	R	NOV	R	A	R-12/27(240)	R-DEC(1800)	R-12/28(5260)	R	R
PINTAIL, NORTHERN	11/24-12/19	-	NOV	-	11/15	10/20(7)	11/23-12/9	A-10/25(5)	11/15	10/29-11/19
TEAL, BLUE-WINGED	10/1(17)-13	-	→10/1	-	-	-	10/15(4)-17	→10/25(40)-11/3	10/4	P
SHOVELLER, NORTHERN	-	-	-	-	-	-	-	A-12/20(14)	-	→11/4
GADWALL	11/3-12/12(9)	-	NOV	11/6(4)-12/15	-	10/20	11/2-12/9(17)-17	A-10/25(140)	11/8	11/17(19)→
WIGEON, AMERICAN	11/3(4)	-	-	10/29	11/15	12/27(18)	→10/15(12)-11/18	10/19-25(82)→	A	10/2(61)-11/4
CANVASBACK	10/29(5)-12/19	-	12/20	11/2(20)-22	11/13	-	-	11/1-2(7)→	-	10/28
REDHEAD	-	-	-	11/2(20)	-	-	-	11/9(16)→	-	-
DUCK, RING-NECKED	11/10-12/12(4)	-	11/8-12/20(14)	10/29(20)-11/2	11/13-15	10/22(14)	10/12(13)-11/12	10/19-11/2(400)→	11/12-16	10/28
SCAUP, GREATER	11/19	-	11/7	-	11/15	-	-	10/25-12/14	-	-
LESSER	11/11-12(13)-12/12	-	-	11/9-12/15	11/13-15	-	-	10/25-11/2(400)→	-	11/15(4)
OLDSQUAW	11/24(80)	-	-	11/9(15)-15	11/15	-	-	11/9(12)-12/14	-	-
SCOTER, BLACK	-	-	11/7(38)-8	-	11/15	11/8(36)	-	-	-	11/9(5)
SURF	-	-	11/7(4)	10/28	-	-	-	10/26	-	11/8(19)
WHITE-WINGED	-	-	-	10/19-11/15	-	-	-	-	-	-
GOLDENEYE, COMMON	11/3	-	11/8(3)-12/20	11/9	11/15	10/16-12/27(68)	-	10/26-12/14(79)→	11/22→	11/8-12/20(10)→
BUFFLEHEAD	11/3-11(192)-12/26	-	12/27	10/28-11/9(40)-12/15	11/15	12/5-19(21)-27	11/10-12/13(6)	10/26-11/8(127)→	11/11(44)-16	10/28→
MERGANSER, HOODED	10/29-11/12(23)-12/19	11/16(3)	NOV	10/28(4)-12/28	11/13-15	-	A	A-11/22(2031)	11/14	10/28→
COMMON	12/16-19(4)	-	-	10/28(10)	-	R-12/19(32)	R	11/2-29(250)→	11/7→	10/24→
RED-BREASTED	→12/12(8)	-	-	11/9-12/15	-	-	→12/21(6)	11/1-2(300)→	-	11/9(3)
DUCK, RUDDY	10/29-11/3(24)-12/19	-	10/11-15(150)-11/8	10/28-12/15(70)	11/13-15	-	11/10(6)-12/3	10/5-12/14(222)-21	11/8-18(3)	10/25(4)-11/10
VULTURE, BLACK	-	-	R	-	-	-	-	10/1-5(10)	→12/14	A-10/12(8)
TURKEY	P	P	R	→11/2	-	-	A-11/24(11)	-	→12/4	R
OSPREY	-	→10/20	→10/10	-	-	-	→10/6	-	→10/4(3)	→OCT
EAGLE, BALD	-	-	→11/22	10/29	10/17	-	-	R(11)	P	R
HARRIER, NORTHERN	10/10→	11/16→	A	R	12/15	12/2	R	R-12/3(3)	10/4-12/15	A-10/12(5)
HAWK, SHARP-SHINNED	R	A	A	R	-	R	R	R	R	R-10/10(72)
COOPER'S	R	A	A	R	-	R	R	R-12/28(4)	R	R
GOSHAWK, NORTHERN	-	-	-	A	10/17	-	12/5-21(3)	-	P	11/10
HAWK, RED-SHOULDERED	10/5-13	-	12/28	→11/25	-	-	12/27	R	→11/15	R
BROAD-WINGED	-	-	→10/5(8)	-	-	-	-	R-12/28(38)	-	→10/30L
RED-TAILED	R	R	R	R	R	-	R	12/13-28(3)→	R	R
ROUGH-LEGGED	11/10→	-	-	11/26→	-	-	12/21	-	P	-
EAGLE, GOLDEN	-	-	-	-	-	-	-	-	-	-
KESTREL, AMERICAN	R	R	R	R	R	R	R	R-12/28(6)	R	R
MERLIN	-	-	-	12/17	-	-	-	10/25	P	10/10
FALCON, PEREGRINE	-	-	-	-	-	-	-	10/1-26	→10/4	R
BOBWHITE, NORTHERN	-	-	R	-	-	-	R	-	-	12/29
COOT, AMERICAN	12/16(600)→	11/23→	A-11/8(100)	10/9-11/1(52)-12/15	10/17	-	A-12/23(54)	A-12/28(400)	11/12-12/2	10/29-11/9(100L)→
KILLDEER	→10/3(36)	→10/20	R	→11/1(150)	10/2-11/15	-	→10/19(21)-12/13	→10/19(192)	A	→NOV
YELLOWLEGS, GREATER	→11/3	-	→10/18(6)	-	-	-	-	→10/19(15)-11/22	→11/12	→11/9
LESSER	-	-	→10/2(8)-19	-	-	-	-	→10/19(10)-26	→11/12	→10/24
SANDPIPER, SOLITARY	-	-	-	-	-	-	-	→12/14	-	-
SPOTTED	→10/1	-	-	-	-	-	-	-	-	-
LEAST	-	-	-	-	-	-	-	→10/19(30)	-	-
PECTORAL	-	-	OCT	-	-	-	-	→10/19(18)-11/2	→10/17	→10/28
DUNLIN	10/29(3)	-	-	-	-	-	-	10/25-11/2(66)-8	10/17	10/28(10)
SNIPE, COMMON	-	-	-	-	-	-	-	→10/19(9)	-	-
WOODCOCK, AMERICAN	→11/6	-	-	-	11/5	-	-	-	-	-
GULL, BONAPARTE'S	10/29(4)	-	-	10/27(25)-11/9	-	-	-	10/25-11/9(115)→	-	-
RING-BILLED	A-11/24(85)	A	P	10/27(25)-11/9	-	10/6(3)-12/27	A-11/14(18)	A-10/19(1760)	A	A
HERRING	11/12	-	12/27	-	-	-	12/21	A-10/25(88)	A	A
LESSER BLACK-BACKED	-	-	-	-	-	-	-	10/1	-	-
GREAT BLACK-BACKED	-	-	-	-	-	-	-	-	A	A
TERN, COMMON	-	-	-	10/27	-	-	-	11/2	-	-

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	CAMBRIA	CARBON	CHESTER	CLARION	CLEARFIELD	CLINTON	COLUMBIA	CRAWFORD	CUMBERLAND	DAUPHIN
OWL, BARN	-	-	-	-	-	-	R	-	R	R-12/29(4)
BARRED LONG-EARED	R	-	R	R	R	R	R	R	R	R
SHORT-EARED	-	-	-	11/5-21(4)	-	-	-	-	-	DEC(4)→
NORTHERN SAW-WHET	10/4	-	-	A-11/5(6)	-	-	-	-	-	-
NIGHTHAWK, COMMON	-	-	-	11/8	-	-	-	11/1	-	12/29
SWIFT, CHIMNEY	-	-	→10/3	-	-	-	-	-	→10/4	-
WOODPECKER, RED-HEADED	-	-	-	-	-	-	-	-	→10/5	-
SAPSUCKER, YELLOW-BELLIED	A	-	10/10→	12/6-14	-	-	-	R-11/9(2)	R	10/4→
FLICKER, NORTHERN	R	R	R	R	11/15	R	-	A-12/28(34)	R	R
WOOD-PEWEE, EASTERN	-	-	-	-	-	-	-	-	-	1
PHOEBE, EASTERN	→10/13(4)	→10/20	→10/18	→10/5	-	-	-	→10/5	A	→10/12
LARK, HORNED	12/20(200)→26	11/7(18)	-	R-11/15(500±)	-	A-12/15(120+)	R-12/21(22)	A-12/28(9)	A	A-11/18(500±)
SWALLOW, TREE	-	-	→10/13(4)	-	-	-	-	→10/5	A	→OCT
CROW, FISH	-	R	→10/18(6)	-	-	R	R	-	A	R
RAVEN, COMMON	R	R	-	10/12-12/23(3)→	R	R	R	R	R	R
CHICKADEE, BLACK-CAPPED	R	R	-	R-12/21(20)	R	R	R	R	R	R
CAROLINA	-	-	R	-	-	-	-	-	R	R
NUTHATCH, RED-BREADED	A	-	A	A-12/12(41)	11/13-15	12/13	A-12/21(6)	10/25→	R	A-12/19(14)
CREEPER, BROWN	R	-	10/13→	R	A	12/27(4)	R-12/21(11)	12/28(6)	R	R
WREN, HOUSE	-	-	→10/18	-	-	-	-	-	R	-
WINTER	-	-	10/12	-	-	12/27	10/19-12/5	12/28	A	10/2→
MARSH	10/3	-	-	10/6	10/17	-	-	-	-	10/11
KINGLET, GOLDEN-CROWNED	11/3→	-	A	10/12-12/21(11)→	A	12/27	A-12/21(29)	11/30→	A	10/21→
RUBY-CROWNED	→11/21	A	10/12-18(12)	-	10/17	-	10/5(3)-12/21	A	A	A
THRUSH, HERMIT	-	-	11/15→	-	-	-	A-10/17(4)	A	A	A
WOOD	→10/3	R	-	→10/23	-	-	-	-	-	-
ROBIN, AMERICAN	R	R	R	R-10/19(84)	A	A	R	A-12/26(100)	R	R
CATBIRD, GRAY	-	-	A	-	-	-	-	-	→10/8(3)	A
THRASHER, BROWN	-	-	-	-	-	-	-	-	-	-
PIPET, AMERICAN	10/30(60)	-	-	11/1-15(500±)-16	-	-	10/19(5)	→10/26	-	10/28-NOV
VIREO, BLUE-HEADED	→10/13	-	→10/23	→10/5(6)-12	10/17	-	→10/26	-	→10/4	→10/21
RED-EYED	→10/5	-	-	-	-	-	-	-	→10/8	-
WARBLER, NASHVILLE	-	-	→10/2	-	-	-	-	-	→10/11	→10/12
MAGNOLIA	→10/5	-	-	-	-	-	-	-	-	→OCT
CAPE MAY	→10/5	-	-	-	-	-	-	-	-	-
BLACK-THROATED BLUE	-	-	-	-	-	-	-	-	-	→10/10
YELLOW-RUMPED	→10/16(12)-11/3	→10/20	A-10/18(60)	→10/12(5)-18	A	A-12/12(14)	A-12/21(19)	-	A	A
BLACK-THROATED GREEN	→10/5	-	-	→10/11	-	-	→10/5(4)	-	-	→10/10
BLACKBURNIAN	→10/5	-	-	-	-	-	→10/5	-	-	-
PINE	→10/5	-	-	-	-	-	-	-	-	→10/20
PALM	→10/13	→10/20	10/3-19(4)	→10/12	10/17	-	11/5	-	-	→10/10
REDSTART, AMERICAN	-	-	-	-	-	-	-	-	-	→10/4
OVENBIRD	-	-	-	-	-	-	-	-	-	→OCT
YELLOW-THROAT, COMMON	→10/5	-	→10/13	-	11/15	-	→10/5	-	→10/8	→OCT
WARBLER, WILSON'S	-	-	-	-	-	-	-	-	10/8	-
TANAGER, SCARLET	-	-	-	-	-	-	-	-	-	-
BUNTING, INDIGO	-	-	→10/3	-	-	-	-	-	-	-
TOWHEE, EASTERN	→12/13L	-	A	→11/16	-	→10/15	-	-	→10/8(3)	-
SPARROW, AMERICAN TREE	11/6→	A	-	11/5→	11/15→	12/6-15(8)→	A	12/13-28(1326)→	→10/8	→12/20
CHIPPING	→11/21	→10/17	→11/17	→11/16(4)	-	→10/18	-	-	11/13→	10/25→
FIELD	-	→10/20(5)	R	-	-	-	A	R	A-10/12(40)	→OCT
VESPER	→10/18	-	10/18-24	-	-	-	→12/21	R	→11/19	-
SAVANNAH	→10/30(4)	-	→10/19(40)-24	-	-	-	→12/21(5)	R	A	-
FOX	10/29(10)-11/6	11/16(5)	10/18-12/7	11/12-14(5)-17	11/13	10/22	10/18-11/19(7)-12/21	11/8	-	11/10-12/12
LINCOLN'S	-	-	10/3-18	10/6	10/17	10/13	-	-	→10/8	10/10-11
SWAMP	R-10/13(13)	11/16(3)	R	→10/6	A	R	A	A	A-10/12(15)	A

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	CAMBRIA	CARBON	CHESTER	CLARION	CLEARFIELD	CLINTON	COLUMBIA	CRAWFORD	CUMBERLAND	DAUPHIN
WHITE-THROATED	10/1→	-	A	A	10/17→	10/9→	A	R-12/28(35)	A	A
WHITE-CROWNED	-	-	10/2-19(9)→	10/6-23(6)	10/17	10/9-12/27	A	12/21	10/12→	11/7→
JUNCO, DARK-EYED	A	A	A	R-12/23(19)	A	R	A	A	10/12→	A
LONGSPUR, LAPLAND	10/19E(3)→	-	-	11/14-12/15	-	12/31(3)	-	-	12/6	11/18
BUNTING, SNOW	12/11-26(6)→	11/7	-	12/15(15)-17	-	12/31	-	12/20(800)→	11/21(4)→	11/18(5)
BLACKBIRD, RED-WINGED	P	→10/17(11)	A	A-10/9(70)	-	-	A	R-10/19(520)	A	A
MEADOWLARK, EASTERN	→10/30(7)	-	→10/31	→11/1	-	-	-	R-10/5(5)	A	A
BLACKBIRD, RUSTY	10/13(120)-11/10	-	-	11/2(6)-23	-	-	-	10/19-25(43)	10/12-11/15	10/24(15)
CRACKLE, COMMON	-	-	R	→11/15(17)	-	A	-	R	A	R
COWBIRD, BROWN-HEADED	-	-	R	→11/5(14)-12/3	-	A	R	R-12/28(28)	-	R
FINCH, PURPLE	10/16(6)	10/31	10/24-11/8(5)→	R	-	R	R	11/8→	A	10/5→
CROSSBILL, RED	-	-	-	11/28-12/27(1500±)→	-	-	-	12/28(25)	12/13(4)→	10/5→
WHITE-WINGED	-	-	12/26(16)-28	12/12(20)→	10/17	-	12/21(5)	-	12/21-29(25)→	12/29(22)→
REDPOLL, COMMON	-	12/7(25)	-	12/18(16)→	-	-	-	12/28(215)	-	12/29→
SISKIN, PINE	11/6(10)	11/23(15)	11/6-8(10)-23	11/28-12/13(100±)→	11/13	12/24(3)→	10/30-12/21(5)	10/19(6)	12/6(30)→	A-12/19(75±)
GROSBEAK, EVENING	11/5-12(6)-15	-	11/14-16	11/7-12/24(60)→	11/13	11/23-12/27(77)→	11/15(5)	10/20(18)→	12/13(50)→	10/28-12/26(37)→

	DELAWARE	ERIE	FAYETTE	FRANKLIN	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA
LOON, RED-THROATED	11/8(6)	10/24-11/7(43)-12/21	-	11/13-16	-	-	-	11/8-12/26	-	-
COMMON	11/12-12/20	A-11/27(240)	10/20-11/19(30)-14	10/11	10/1-28(40)-11/20	-	→NOV	10/4-12/8(51)	11/1	-
GREBE, PIED-BILLED	A-10/16(17)	A	11/7	→10/25(6)	→10/30(6)-11/19	-	A	A-10/4(47)	11/1-11(4)-12/9	-
HORNED	10/15-29	A-11/2(385)	10/30-11/9(30)	-	11/11	-	-	10/17-11/4(7)-12/26	11/1	-
RED-NECKED	-	10/19-12/7	-	-	-	-	-	12/26	-	-
CORMORANT, DOUBLE-CRESTED	A-10/1(29)	A-11/1(100±)	-	10/11(48)	10/1(5)-11/11	-	10/22(60)-26	→11/8	11/1-11(3)	P
HERON, GREAT BLUE	R	R	R	A	A	A	A	A	A	A
EGRET, GREAT	→10/5(4)-12/28	-	-	-	-	-	-	→10/28	-	P
HERON, GREEN	-	-	→10/30	-	-	-	→10/1	-	-	P
NIGHT-HERON, BLACK-CROWNED	-	-	-	-	-	-	-	-	-	P
SWAN, TUNDRA	11/11-12/20(49)→	10/29(12)→	11/8-13(394)	12/20	10/28-11/11(719H)	11/11(90+)-12/5	→11/29	10/29-11/9(77)-12/1	11/1(42)	P
MUTE	A	-	-	-	-	-	-	A	-	P
GOOSE, SNOW	10/18-11/2(4)→	10/24	-	11/11	-	-	-	11/4(7)	-	11/9(14)
BRANT	-	-	-	-	-	-	-	11/11	-	-
GOOSE, CANADA	R	R	R	R	R	R-12/9(30)	R	R-12/21(350)	R	R
DUCK, WOOD	→10/27(5)-12/20	A	R	→11/13(7)	-	A	-	→11/8(14)	-	10/11(100+)
TEAL, GREEN-WINGED	A-11/7(12)	→11/13	-	→10/22(7)	-	-	-	→11/9(25)-12/26	-	-
DUCK, AMERICAN BLACK	R	A	R	11/6-12/20	10/26(3)-11/11	-	10/26→	→11/8(11)	-	A
MALLARD	R	A	R	R	R	R	R	A-11/18(128)	R	A
PINTAIL, NORTHERN	A	10/12-11/8(8)	11/7(4)	→12/20	-	-	-	10/28-11/8(5)-12/23	-	A
TEAL, BLUE-WINGED	→10/10(5)-11/8	→OCT	→10/6	→10/6	-	-	-	-	-	-
SHOVELER, NORTHERN	10/15-12/6(8)→	P	-	→12/20	-	-	-	10/22-11/9	-	-
GADWALL	10/15-30(8)-11/12	10/22→	11/13(12)	12/20(3)	11/13	-	-	10/17-11/1(28)	11/11	-
WIGEON, AMERICAN	10/6-15(8)-12/20	→DEC	11/9(70)-12/18	10/12	10/30	12/27	OCT-11/29	→11/17(36)-12/27	11/11	-
CANVASBACK	11/12-12/20	10/27(120)→	11/9(45)	10/12	11/24	-	-	10/28-11/1(30)-12/28	-	-
REDHEAD	-	10/28(9)→	11/9(56)	-	-	-	-	10/28-11/18	-	-
DUCK, RING-NECKED	10/15-26(10)→	OCT→	11/7-9(250)	-	-	-	-	10/17-11/8(355)-12/26	11/1(4)	-
SCAUP, GREATER	11/8(14)→	10/27(72)→	11/9(250sp)	-	10/26-11/11(23)	11/9	-	11/4-12/26	-	-
LESSER	10/15-16(3)-26	A	11/2(6)-8	-	10/26-11/11(16)	-	-	10/21-11/8(27)-12/26	-	-
OLDSQUAW	11/8(7)	10/24(3)	11/8(15+)	-	11/11(7)-24	-	-	10/28-11/15(15)-12/26	11/11	-
SCOTER, BLACK	11/7(23)-8	10/27(117(134)-12/18	11/7(35)-9	-	11/11	11/9	10/25-11/10	11/8(80)-23	11/11	-
SURF	1/7	10/10-11/7(17)-12/21	11/7(3)	-	11/11	11/9(8)	11/9(8)	11/9(20)-11	11/1(7)	-
WHITE-WINGED	10/15(8)-11/8	10/31-11/27(14)-12/1	-	-	-	-	11/30	12/21-28	-	-
GOLDENEYE, COMMON	-	A	11/8	-	11/11-24	-	-	11/9-11(12)-12/26	-	12/20(6)
BUFFLEHEAD	10/25-11/12(10)→	10/24(31)→	11/7-11(3200)-12/28	10/27-11/12(7)→	10/30-11/11(119)-26	-	10/26→	10/17-11/8(95)-12/26	-	-
MERGANSER, HOODED	10/26-11/12(33)→	A	11/4-9(234)-14	11/16(8)	10/26-11/11(24)-26	-	11/19→	10/23-11/9(49)-12/26	11/1(12)	-

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	DELAWARE	ERIE	FAYETTE	FRANKLIN	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA
COMMON	11/15-12/20(105)→	10/30→	-	-	-	-	-	-	A-10/14(7)	12/20(22)
RED-BREASTED	-	10/18(22)→	-	-	-	-	-	1028-31(6)-11/24	11/11	-
DUCK, RUDDY	10/5-11/12(58)→	OCT→	10/30	10/11-11/21(5)-12/4	10/26-30(26)-12/9	-	10/26-11/23	10/3-11/9(423)→	11/1-11(8)	-
VULTURE, BLACK	R-11(6(6))	-	-	→10/11	→11/3(39)-11	-	A	-	-	A
TURKEY	R	→12/18L	-	A	→10/28(65)-11/17	A-10/13(6)	A-10/18(63)	→12/27	-	A
OSPREY	→10/1(6)-30	-	-	-	→10/4(3)-11/24	-	→10/1(6)-11/9	→10/28	-	P
EAGLE, BALD	→11/17	11/14	-	-	→OCT	-	A	10/1-25	-	P
HARRIER, NORTHERN	A	P	-	-	A	-	A-11/11(6)	A	R	A
HAWK, SHARP-SHINNED	A-10/1(59)	R	R	A	R-10/9(88)	R	R-10/10(75)	R	R	A
COOPER'S	R-10/1(10)	R	R	A	R	R	R-10/1(11)	R	R	A
GOSHAWK, NORTHERN	12/20	11/6-12/14	-	-	OCT-NOV	-	R	-	R	P
HAWK, RED-SHOULDERED	A	-	R	-	OCT-11/10(10)	-	R-11/5(10)	R	P	11/15
BROAD-WINGED	→10/1(80)-11	-	-	-	→10/1	-	→10/1(7)-5	→10/2	-	-
RED-TAILED	R	R	R	R	R-11/10(183)	R	R-11/11(173)	R	R	R
ROUGH-LEGGED	12/17	11/22-12/19	-	-	10/18	-	11/17→	12/26	12/9→	11/6E
EAGLE, GOLDEN	11/15	-	-	10/11	10/10-31(7)-11/19	-	10/5-11/16(25)→	-	-	P
KESTREL, AMERICAN	R	R	R	R	R	R	R-10/1(25)	R	R	R
MERLIN	A	10/2-11/6	-	10/11	→OCT	-	→10/5(6)-11/2	-	12/15→	-
FALCON, PEREGRINE	R	-	-	-	→10/3(3)-4	-	→10/1(4)-10	-	-	11/1
BOBWHITE, NORTHERN	-	-	-	R	-	-	-	-	-	-
COOT, AMERICAN	10/5-27(119)→	A-11/18(2000)	10/30-11/2(10)	10/3-11/15(7)-22	10/26	-	11/9-23(6)→	A-11/15(1403)	-	P
KILLDEER	R	→NOV	→10/30	A	→12/2(3)	-	A	→10/7(77)-11/23	→10/14	A
YELLOWLEGS, GREATER	→10/10(4)-11/1	→10/31	-	→10/31	-	-	-	10/23-11/11	-	-
LESSER	→11/2(15)-9	-	-	-	-	-	-	→10/25	-	-
SANDPIPER, SOLITARY	-	-	-	→10/6	10/1	-	-	→10/13	-	-
SPOTTED	10/5	-	-	-	→10/1	-	-	-	-	-
PECTORAL	→10/2(18)-11/12	-	-	-	-	-	-	-	-	-
DUNLIN	→10/27(8)	A	-	10/20	-	-	-	-	-	-
SNIPE, COMMON	-	P	-	A	-	-	12/21	10/17-26(20)-11/23	-	12/20(3)
WOODCOCK, AMERICAN	A	P	-	-	→12/2	-	-	→10/16(15)-11/1	-	P
GULL, BONAPARTE'S	10/28	A	-	12/31	10/30-11/13	-	-	→10/28(12)-11/23	-	-
RING-BILLED	A	A	11/2-12/21(250)	11/11→	11/24(30)	-	-	→11/24(143)-12/26	P	A
HERRING	A	A	12/21	-	-	-	-	-	-	-
LESSER BLACK-BACKED	11/21	11/9	-	-	-	-	-	-	-	-
GREAT BLACK-BACKED	A	A	-	-	-	-	-	-	-	-
TERN, COMMON	R	10/31(35+)	-	-	-	-	-	-	-	-
OWL, BARN	11/23	11/3	R	R	R	R	R	12/25	R	R
BARRED	-	R	R	R	R	R	R	12/27	R	R
LONG-EARED	-	-	-	-	-	-	-	-	→10/6	-
SHORT-EARED	-	-	-	-	-	-	-	-	-	-
NORTHERN SAW-WHET	-	10/29-12/1	-	-	-	-	-	-	-	-
NIGHTHAWK, COMMON	→10/9(4)	→10/11L	-	-	-	-	-	-	-	→10/11
SWIFT, CHIMNEY	→10/12	-	-	-	-	-	→10/7(4)	→10/5(54)	→10/6	-
WOODPECKER, RED-HEADED	10/5	R	-	R	-	-	A	-	-	-
SAPSUCKER, YELLOW-BELLIED	10/11→	P	-	A	-	-	A	10/14→	R	P
Flicker, Northern	R	R	-	A	R	R	R	A-11/8(6)	→10/31	R
WOOD-PEWEE, EASTERN	-	-	-	-	-	-	-	→10/2	-	-
PHOEBE, EASTERN	→12/20	-	-	A	→10/29	-	→10/19	-	-	A
LARK, HORNED	10/26(3)	-	12/27(20)	A	-	-	-	11/16(50+)	R	A
SWALLOW, TREE	→10/19(12)-22	-	-	-	→10/9	-	-	→10/28	-	-
CROW, FISH	R	-	-	A	-	-	-	-	-	A
RAVEN, COMMON	-	-	R	R	R	10/24	R	R	R	R
CHICKADEE, BLACK-CAPPED	11/3→	R	R	R	R	10/25	R	R	R	R
CAROLINA	R	-	R	R	R	R	R	-	-	-
NUTHATCH, RED-BREASTED	A	A	A	A	→10/30	-	R	R	10/31-12/6(6)→	11/2→
CREEPER, BROWN	10/5→	A	-	A	R	-	R	R	R-11/22(6)	10/4→
WREN, HOUSE	→12/20	→10/25L	-	-	-	-	-	-	-	-

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	DELAWARE	ERIE	FAYETTE	FRANKLIN	FULTON	GREENE	HUNTINGDON	INDIANA	JEFFERSON	JUNIATA
WINTER	10/4→	A	-	A	10/9	-	R	10/2-18	P	P
MARSH	-	→10/28L	-	-	-	-	-	10/3-7	-	-
KINGLET, GOLDEN-CROWNED	10/2-11(8)→	A	-	A	10/9→	10/14(3)→	-	A-11/23(11)	A-11/22(16)	R
RUBY-CROWNED	A-10/23(29)	→12/25L	-	A	→10/20	10/1	A	→10/13(8)-12/9	11/6	P
THRUSH, SWAINSON'S	10/5	-	-	-	-	-	-	→10/17	11/6	-
HERMIT	10/16-12/7(4)→	A	-	→10/11	-	-	A	10/12(8)-11/29	A-10/31(4)	A
WOOD	→10/4	-	-	-	-	→10/3	-	-	-	-
ROBIN, AMERICAN	R	R	-	R	R	R-12/28(70+)	R	R-10/29(263)	R-11/6(37)	A
CATBIRD, GRAY	A	P	-	-	-	→10/8	→10/4	A	-	P
THRASHER, BROWN	→12/6	-	-	-	-	-	-	-	-	-
PIPT, AMERICAN	11/2-9	P	-	→10/9	-	-	-	→11/15(17)	10/14	-
VIROO, BLUE-HEADED	10/11-11/17	-	-	-	→10/21	-	→10/18	→10/29	→10/31	P
RED-EYED	→10/5	-	-	-	-	-	→10/5	→10/2	-	-
WARBLER, TENNESSEE	→10/12	-	-	-	→10/11	-	-	→10/14	-	-
NASHVILLE	→10/11	→11/2L	-	-	-	-	-	→10/2	-	-
MAGNOLIA	→10/5	→OCT	-	-	-	-	-	→10/2	-	-
CAPE MAY	-	-	-	→10/11	→10/1	-	-	→10/13	-	-
BLACK-THROATED BLUE	→10/12	-	-	→10/11	→10/1	-	→10/12	→10/6	-	-
YELLOW-RUMPED	A-10/12(50)	A	-	A-10/11(16)	→10/3	10/5	A	A-10/13(30)	→10/9(15)-31	A
BLACK-THROATED GREEN	→10/11	-	-	→10/11	-	-	→10/15	→10/14	→10/14	-
PINE	10/10→	→11/2L	-	-	-	-	→10/14	-	-	-
PRAIRIE	-	-	-	-	-	-	-	→10/5	-	-
PALM	→10/16(4)-27	P	-	-	-	-	-	→10/17	-	-
BLACKPOLL	→10/10	-	-	-	-	-	→10/12	→10/2	-	-
BLACK-AND-WHITE	→10/5	→OCT	-	-	-	-	-	-	-	-
REDSTART, AMERICAN	-	→OCT	-	-	-	-	-	-	-	-
YELLOWTHROAT, COMMON	→10/11	P	-	-	-	-	-	→10/13	-	-
GROSBACK, ROSE-BREADED	→10/4	-	-	-	-	-	-	-	-	-
BUNTING, INDIGO	→10/5	-	-	-	-	-	-	-	-	-
TOWHEE, EASTERN	R	R	-	-	→10/26	-	A	→10/4(10)-11/29	-	→12/20
SPARROW, AMERICAN TREE	10/21-11/30(12)→	10/29→	-	-	-	12/9→	11/8→	11/8-12/9(11)→	11/6→	11/15→
CHIPPING	A-10/13(7)	→11/30L	-	-	→10/15	→10/23(8)-28	→11/9	→10/8(97)-11/16	-	P
FIELD	R	P	-	A	-	→10/9	A	A-12/28(12)	→10/6	A
VESPER	-	P	-	-	-	-	-	-	-	-
SAVANNAH	10/26-12/28	P	-	-	-	-	-	→10/3	→10/6	-
FOX	10/28-11/16(8)→	→11/21	-	-	-	-	10/19-12/27	10/8-11/24(7)-12/26	11/6-15	P
LINCOLN'S	→11/30	-	-	-	-	-	-	11/25	-	-
SWAMP	R	A	-	-	-	-	A	A	-	→12/20
WHITE-THROATED	A	A	-	-	10/9→	10/13→	A	A-11/1(55)	11/6→	10/12(8)→
WHITE-CROWNED	10/4→	-	-	11/12→	-	10/10→	10/19-23	10/14(7)-11/9	-	10/12→
JUNCO, DARK-EYED	A	R	-	10/1→	A	10/16→	R	10/8-11/8(113)→	R	10/12(25+)→
LONGSPUR, LAPLAND	-	12/15	-	-	-	-	-	-	-	-
BUNTING, SNOW	12/20(40)	A	-	-	11/18(3)	-	-	11/11-23	12/14(18)-15	-
BLACKBIRD, RED-WINGED	R	A	10/30(40)	A	→10/17(30)	-	A	→10/10(35)-12/5	→10/6(5)	P
MEADOWLARK, EASTERN	-	P	10/30	A	R	→11/23	→10/1	→10/11(6)-11/25	→10/14(14)	A
BLACKBIRD, RUSTY	10/26-11/5(200)→	→OCT	-	-	-	-	-	10/11-11/8(36)-12/7	10/6(22)	11/2-23
GRACKLE, COMMON	R-10/25(500)	P	-	A	→10/30(6500)-11/11	→11/22	→10/19	→11/1(17000)-12/26	→10/6(19)	P
COWBIRD, BROWN-HEADED	R	P	-	A	-	-	-	→12/5(300)-11	→10/6	A
FINCH, PURPLE	A	P	-	A	-	-	11/25→	R-12/9(15)	R	A
CROSSBILL, RED	11/12-12/18(14)→	12/16(11)	-	12/20(3)	-	-	12/14(6)→	-	12/6-7(300)→	12/1(10+)→
WHITE-WINGED	12/19-20	-	-	-	-	-	12/17(6)→	-	12/6-28(30)→	12/16(42)-20
REDPOLL, COMMON	12/19	11/1(13)-29	-	-	-	-	-	12/26	12/7-21(15)→	12/1(12)→
SISKIN, PINE	10/20-11/15(12)→	10/18(10)→	-	12/27→	-	11/28	11/16→	10/21-11/8(8)	12/6(6)→	11/5(4)→
GROSBACK, EVENING	10/11-30(5)-12/3	P	11/6-8	-	11/10(65)	11/13	10/15-11/9(60)→	11/3-13(30)-12/6	A-11/22(14)	10/29-11/23(10)

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	LANCASTER	LAWRENCE	LEBANON	LUZERNE	LYCOMING	MERCER	MIFFLIN	MONTGOMERY	MONTOUR	PHILADELPHIA
LOON, RED-THROATED COMMON	11/8(3)	-	-	11/9-12/17	-	-	-	11/9-29	-	11/8(6)
GREBE, PIED-BILLED	A	11/20-22 →10/31(4)-11/9	-	A	10/24-11/8	11/8-15	-	11/16(49)-23 →12/3	10/15-20 →11/16	-
HORNED	A	11/9-23	11/2	11/2→ →11/3	10/24(5)-11/23	10/4-11/1	-	10/15(8)-11/28	11/16(3)-18	A-10/5(4)
CORMORANT, DOUBLE-CRESTED	P	-	P	11/11-16 →11/3	-	11/1(3)	-	-	-	-
HERON, GREAT BLUE	A	R	R	R	A	R	R	A	A	A-10/26(56)
EGRET, GREAT	-	-	-	→10/29	-	-	-	-	-	A-10/16(16)
HERON, GREEN	-	-	-	-	-	-	-	-	-	A-11/9(15)
NIGHT-HERON, BLACK-CROWNED	-	-	-	-	-	-	-	-	-	→11/4
SWAN, TUNDRA	P	11/2-9(46)-21	12/14(200)→ 12/28	-	-	10/28-11/13(70)-12/25 12/9	12/19	11/12(32)-28	11/3	A
MUTE	A	-	-	R	-	-	-	-	-	R
GOOSE, SNOW	P	-	A	11/8(90)	-	-	-	10/14-16(500+)-12/6	10/1(4)-12/8	OCT(200)
BRANT	-	-	-	10/22(35)	11/8	-	-	-	-	-
GOOSE, CANADA	R	R	R	R	R	-	R-11/25(125)	R-10/2(10000)	A-12/21(2600)	R-12/20(860)
DUCK, WOOD	A	R	-	R	-	→10/26	R	-	→10/11(4)	→10/26(275)-12/10
TEAL, GREEN-WINGED	A	11/9	-	→DEC	-	11/9	-	10/15(20)-11/16	10/15(20)-11/16	A-11/9(285)
DUCK, AMERICAN BLACK	P	12/27	R	A	10/24(12)-12/5	11/25-12/12(19)-22	→11/15(8)	A	A-12/21(1590)	A-10/27(71)
MALLARD	R	R	R	R	R	R	R	R	R-12/21(587)	R
PINTAIL, NORTHERN	P	-	-	→NOV	-	-	-	10/20→ →10/16(8)	10/16-12/21(7)	A-10/26(147)
TEAL, BLUE-WINGED	P	-	P	-	-	10/12-30	-	-	-	→10/5(30)
SHOVELER, NORTHERN	P	-	P	11/16	-	11/1(3)-19	-	→10/26(30)-12/7	-	A-10/27(128)
GADWALL	P	-	11/14	-	-	-	-	10/13-12/21(45)→ →11/29(7)-12/6	11/24	A-11/9(10)
WIGEON, AMERICAN	A	11/9(16)→	-	→DEC	-	-	-	11/22	11/16(8)→	A-12/10(6)
CANVASBACK	P	-	-	11/16→	11/29-12/20	12/2(4)	-	-	11/16(8)→	12/31(450)
REDHEAD	P	-	12/28	11/16(12)	-	-	-	-	11/16(3)→	12/10→
DUCK, RING-NECKED	P	11/23	10/22-12/20	NOV→	11/23(7)	11/1-8(36)	-	11/14(86)-24	11/26→	11/26→
SCAUP, GREATER	12/14	-	-	NOV→	-	12/12	-	-	-	11/8→
LESSER	12/21→	-	-	NOV→	10/24-11/23(6)-29	12/8(35)	-	11/2-14(7)-15	-	11/9→
OLDSQUAW	11/28-12/28(6)→	-	-	11/16(5)-12/13	11/8	11/8-12/8(7)	-	-	-	-
SCOTER, BLACK	11/8	-	-	11/9→	-	-	-	11/7(60)-9	11/7(44H)	11/8(11)
SURF	-	-	-	12/20→	-	-	-	-	-	-
WHITE-WINGED	11/8	-	-	NOV(3)	-	-	-	10/18-11/16	-	11/8(6)
GOLDENEYE, COMMON	P	-	-	11/9(4)→	11/23-29(6)-12/5	11/8-12/12	11/15(8)	12/21→	-	-
BUFFLEHEAD	P	10/31-11/9	10/14-22	A	10/24-11/23(6)-29	11/1-8(20)-12/17	11/15(4)	10/17-12/27(52)→	10/31-11/22(10)→	11/9→
MERGANSER, HOODED	P	→10/31(6)	11/14	A	11/23-12/5	11/1(75)-14	-	11/2-12/21(16)→	11/12-12/1	A-12/9(9)
COMMON	P	-	11/14-12/20	R	R-11/23(35)	12/8(11)	-	A-12/10(170)	A-11/20(40)	A-12/17(9)
RED-BREASTED	P	-	11/2	11/30→	-	11/8(17)	-	-	-	-
DUCK, RUDDY	P	10/21-11/9(3)	10/19-11/14(11)	OCT→	10/24-11/8(37)-12/5	10/1-21(75)-11/1	-	10/4-18(100H)-11/29	10/18(13)-12/21	11/3-12/17(22)→
VULTURE, BLACK	A	-	R	10/10	-	-	-	-	-	P
TURKEY	A	→11/2	R	→NOV	→10/7(10)	→10/31	R-11/18(18)	A-10/14(48)	-	A
OSPREY	R	12/27	P	→NOV	-	-	OCT(18)	A-11/5(39)	→10/20	→11/7L
EAGLE, BALD	R	-	A	-	10/12-27	→12/26	-	10/11(29)(4)	-	10/18(3)
HARRIER, NORTHERN	P	R	A	A	12/15	10/5-11/8	→NOV	10/20(3)	10/26→	10/18→
HAWK, SHARP-SHINNED	A	R	R	R	R	R	R	A-10/18(56)	P	R
COOPER'S	R	R	R	R	R	R	R	R-10/18(8)	A	R
GOSHAWK, NORTHERN	-	-	R	R	-	-	→NOV	11/13	55.5454545454546	11/12→
HAWK, RED-SHOULDERED	A	-	R	R	-	-	→NOV	R-10/18(5)	-	→11/28
BROAD-WINGED	-	-	-	P	-	-	-	→10/7	-	-
RED-TAILED	R	R	R	R	R	R	R	R-11/11(31)	R	R
ROUGH-LEGGED	11/23→	11/21-23	11/23	10/25E→	-	12/15	→NOV	-	-	12/18
EAGLE, GOLDEN	-	-	P	OCT-12/5	-	-	-	-	-	-
KESTREL, AMERICAN	R	R	R	R	R	R	R	R-10/1(29)	R	R-10/26(4)
MERLIN	11/30	-	10/19	→10/16	-	10/1-11/9	-	→12/9	-	12/5→
FALCON, PEREGRINE	12/21	-	-	→12/14	-	11/11	→NOV	→10/18	-	R
BOBWHITE, NORTHERN	-	-	-	-	-	-	11/26	-	-	-
COOT, AMERICAN	A	10/26-11/2(48)-9	A-11/14(25)	A	10/24-11/8(68)-29	10/26-11/8(75)-12/13	-	→11/4(32)-25	10/29-12/15(62)→	A-10/26(70)

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	LANCASTER	LAWRENCE	LEBANON	LUZERNE	LYCOMING	MERCER	MIFFLIN	MONTGOMERY	MONTOUR	PHILADELPHIA
KILLDEER	R	→11/23L	R	-	P	→11/24(40)	R-11/10(8)	→10/6(35)-12/21	→11/16(3)	A-10/26(16)
YELLOWLEGS, GREATER	-	→10/14	-	→10/23	-	-	-	→10/26(6)-11/3	-	→10/26(18)-11/9
LESSER	-	→10/14	-	-	-	-	-	→10/16(14)-11/8	-	→10/26(47)-11/1
SANDPIPER, SOLITARY	-	→10/26	-	-	-	→10/12	-	-	-	-
LEAST	-	→10/14	-	-	-	-	-	→11/16	-	→10/5
PECTORAL	-	→10/14	-	-	-	-	-	→10/25(25)-11/4	-	→10/26(6)
DUNLIN	→10/12	10/27(5)	-	-	-	-	-	10/20-28(31)-11/16L	11/16	→10/5(25)-11/7
SNIFE, COMMON	P	→12/7(19H)	-	→11/6(28H)	-	10/12(13)-12/14L	-	10/15-11/23(3)	-	→11/9
WOODCOCK, AMERICAN	-	-	-	-	-	→11/8	-	-	-	→11/8
GULL, BONAPARTES	-	-	11/14	-	-	11/1(7)-15	-	11/8-16	-	-
RING-BILLED	A	A-12/6(1335)	A	A	11/23(12)	A-11/15(50)	10/6	A	P	A-12/17(754)
HERRING	A	11/20-12/14(60H)→	A-12/26(963H)	A	-	-	-	A	-	A-10/26(39)
LESSER BLACK-BACKED	12/28	-	11/16-12/26(4)→	-	-	-	-	10/20	-	A-11/9(18)
GREAT BLACK-BACKED	A	-	12/20-26(45)→	-	-	-	-	11/2-12/5	-	-
TERN, COMMON	→10/4	-	-	-	-	-	-	-	-	-
OWL, BARN	-	-	-	-	R	-	-	-	-	R
BARRED	R	R	R	R	R	R	R	R	-	12/14→
LONG-EARED	12/21(3)	-	-	12/12→	-	-	-	-	-	-
SHORT-EARED	-	A(4)	-	-	-	-	-	-	-	-
NORTHERN SAW-WHET	-	-	-	12/20	R	-	-	-	-	NOV→
NIGHTHAWK, COMMON	-	-	-	-	-	-	-	-	-	→10/3(11)-19
SWIFT, CHIMNEY	-	→OCT	-	→10/2	-	-	-	-	-	→10/5(60)-14
WOODPECKER, RED-HEADED	R	→11/18	-	10/26	-	-	-	-	-	-
SAPSUCKER, YELLOW-BELLIED	10/11→	10/19(3)-11/23	A	→12/1	11/6-12/20	12/17	-	10/9(3)-12/22	-	10/7-12/20(5)→
FLICKER, NORTHERN	R	A	R	R	R	R	R	R	R	R
WOOD-PEWEE, EASTERN	-	-	-	-	-	→10/4	-	-	-	-
PHOEBE, EASTERN	A	→12/20L	→10/5	-	-	→10/18	-	→10/17	→10/25	A
LARK, HORNED	R	R-12/7(600+)	→10/19	A	-	A	R-12/20(300+)	11/15(6)	A-12/21(22)	10/26
SWALLOW, TREE	-	-	-	→10/16(25)	-	-	-	→10/18(400+)-11/8	→10/18(12)	→10/26(22)
CROW, FISH	R	-	R	R	11/2	-	-	A	R	A
RAVEN, COMMON	-	-	R	R	R	-	R	-	-	-
CHICKADEE, BLACK-CAPPED	R	R	R	R	R	R	R	R	R	12/20
CAROLINA	R	-	R	-	-	-	-	-	-	-
NUTHATCH, RED-BREASTED	A	→10/19	-	R	A	A	11/14(8)	10/8-12/21(6)	-	R
CREEPER, BROWN	A	10/19→	R	R	R	A-10/9(6)	11/14	11/1-12/6(3)→	-	11/7→
WREN, HOUSE	→12/21	-	-	-	-	→10/6	-	-	-	→12/20
WINTER	10/24→	10/19-12/20	R	R	10/31	→10/9(4)-11/3	-	10/20	-	A
MARSH	-	-	-	→10/12	-	-	-	-	-	→12/20
KINGLET, GOLDEN-CROWNED	A	11/8→	R	R	-	A	A	10/12(5)-12/21	10/29→	10/7-26(12)→
RUBY-CROWNED	A	10/19(5)→	A	10/5-NOV	-	→11/1	-	10/12(10)	10/22	A-10/26(22)
THRUSH, SWAINSON'S	-	-	-	-	-	→10/12	-	-	-	→10/10
HERMIT	A	10/19(4)→	R	→10/31	→10/13	→11/7(5)	-	10/23-12/21	-	10/11→
WOOD	-	-	-	-	-	→10/14	-	-	-	-
ROBIN, AMERICAN	R	R	R	R	R	R	R	R-10/18(3000+)	R	R-11/9(1155)
CATBIRD, GRAY	A	→OCT	-	→10/31	-	→10/9	-	-	-	→11/9
THRASHER, BROWN	-	-	-	-	-	→10/3	-	-	-	→10/13
PIPIT, AMERICAN	P	→10/31(150L)	-	10/12-19(30)	-	→11/89(18)	-	→10/14(60+)-31	-	A-10/26(10)
VIREO, BLUE-HEADED	→12/21L	-	→10/19	→10/12	-	→10/27	-	→10/20	-	→10/26
RED-EYED	-	-	-	-	-	→10/12	-	-	-	→10/5
WARBLER, TENNESSEE	-	-	-	→10/5	-	→10/8	-	-	-	→10/18
NASHVILLE	-	-	-	→10/5	-	→10/8	-	-	-	→10/26
MAGNOLIA	-	-	-	→10/5	-	→10/8	-	→10/11	-	→10/9
CAPE MAY	-	→10/19(3)	-	→10/23	-	→10/7	-	-	-	→10/5
BLACK-THROATED BLUE	-	-	-	-	-	-	-	→10/7	-	→10/13
YELLOW-RUMPED	A	A	A	A	10/5	A-10/18(25)	→NOV	10/12(10)-12/21	→10/24	A-10/26(93)
BLACK-THROATED GREEN	-	-	-	→10/5	-	→10/12	-	-	-	→11/8L
BLACKBURNIAN	-	→10/19	-	→10/5	-	-	-	-	-	-

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	LANCASTER	LAWRENCE	LEBANON	LUZERNE	LYCOMING	MERCER	MIFFLIN	MONTGOMERY	MONTOUR	PHILADELPHIA
PINE	→12/28	→10/19	-	-	-	→10/7	-	-	-	-
PRAIRIE PALM	→12/28	-	-	10/11(5)-12	-	→10/18	-	→10/12(3)	-	→11/8L A
BLACKPOLL	-	-	-	→10/5	-	-	-	-	-	→11/1L 1
BLACK-AND-WHITE REDSTART, AMERICAN	-	-	-	→10/11	-	-	-	-	-	→10/5 →10/10 A-10/5(5)
OVBENBIRD	-	-	-	→10/11	-	→10/4	-	-	-	-
YELLOWTHROAT, COMMON	→12/21	-	-	→10/11	-	→10/12	-	-	-	-
WARBLER, HOODED	-	-	-	-	-	→10/4	-	-	-	-
WILSON'S	-	-	-	-	-	→10/2	-	-	-	-
TANAGER, SCARLET	-	-	-	→10/5	-	→10/4	-	-	-	-
GROBEAK, ROSE-BREADED	-	-	-	→10/8	-	→10/8	-	-	-	→10/1 →10/5
BUNTING, INDIGO	-	-	→10/19L	-	-	-	-	-	-	-
TOWHEE, EASTERN	R	→OCT	R	→11/8	P	→11/26	→10/2	→10/14	-	A-10/9(5)
SPARROW, AMERICAN TREE	P	11/21-12/28(200+)→	11/21→	11/9→	12/31→	11/18-12/25(20)→	11/27→	11/15(15)→	11/8→	11/9→
CHIPPING	→12/21	→11/9L	→10/19(25)	→11/9L	→12/12L	→11/5	R	→11/16	-	→10/24(25)-11/9
FIELD VESPER	A	A	R	R	-	→11/1	R	A	→12/21	→10/26
SAVANNAH	R	-	→11/2	A	-	10/10-14(5)-17	-	→10/12	-	10/26
FOX	P	-	10/31-11/23(12)	10/26(6)-11/22	11/14-12/4	→NOV	-	→10/12	-	10/26(14)
LINCOLN'S	-	→10/6	-	-	-	10/26(6)-11/19	12/11	11/8-23	-	11/7→
SWAMP	A	R	R	R	R	→10/10(3)-18	-	→10/16	-	→11/16
WHITE-THROATED	A	10/19(40+)→	R	R	R	A	A	A-10/12(15)	12/21	A-11/9(38)
WHITE-CROWNED	P	10/19-12/27(20)→	→10/18	11/23→	10/12→	A-12/23(25)	A	10/1-12/23(20)→	10/18→	A-12/20(251)
JUNCO, DARK-EYED	A	A	R	R	R	→11/27	A	→10/18(7)-23	10/15→	10/21-26(5)→
LONGSPUR, LAPLAND	12/28→	-	R	R	R	A	A	10/11→	10/16→	A-12/20(173)
BUNTING, SNOW	R	-	-	6/11/27→	-	-	-	-	-	-
BLACKBIRD, RED-WINGED	R	→10/31(1365)	R	R	→11/27	12/19(20)→	-	11/22(12)-23	10/1	-
MEADOWLARK, EASTERN	R	→11/23(4)	R	A	-	→11/30	R	P	-	A-10/26(377)
BLACKBIRD, RUSTY	12/28(22)	-	10/19(7)→	→OCT	-	→10/4(25)	-	→10/16(19)-20	-	10/26(11)→
GRACKLE, COMMON	R	→10/21	R	A	→11/11	10/12(100+)-11/8	→11/18(184)-24	10/2-26(82)-30	10/22(3)-29	10/26(71)→
COMBIRD, BROWN-HEADED	R	10/26	R	A	→10/21	→11/17	→11/18(184)-24	P	-	R-11/9(201)
FINCH, PURPLE	11/1-9(25)→	-	A	R	R	A-11/13(6)	→11/24	P	-	R-10/26(3000H)
CROSSBILL, RED	12/21(8)	-	11/23(3)	12/20	-	-	12/4	10/4-12/28(17)→	-	A-10/26(5)
WHITE-WINGED	11/25(25)	-	11/23-12/26(90)	11/23(6)→	-	-	-	11/24	-	12/4
REDPOLL, COMMON	-	-	12/14(25)	12/5(12)→	-	12/27(50+)	11/16(5)	12/31	-	11/4
SISKIN, PINE	10/24-11/23(200)→	12/20	11/16-23(200)→	10/16→	12/6-27(5)→	10/17(3)-11/26	11/16(7)	10/28-11/16(36)→	-	10/26(4)→
GROBEAK, EVENING	12/28(8)	10/5(15)	11/21-29(25)→	A	10/26-11/8(30±)→	11/1(18)	12/8(5)	11/5-11/9(9)-23	-	11/9

	POTTER	SCHUYLKILL	SOMERSET	SULLIVAN	TIOGA	VENANGO	WARREN	WESTMORELAND	WYOMING	YORK
LOON, RED-THROATED	-	11/10-20	11/9-11	-	-	-	-	-	10/24	-
COMMON GREBE, PIED-BILLED	11/4	10/11-11/10(286)-12/28	10/4-11/9(15)-12/14	-	-	10/16-12/5	10/22(3)	→10/28(5)-12/27	10/25-11/8(3)-14	11/1→
HORNED	11/9	→10/12(5)-11/18	→11/4(17)-12/21	→10/25	11/21(5)	→10/23(15)-11/18	-	A-11/11(12)	10/2-11/8	A
RED-NECKED CORMORANT, DOUBLE-CRESTED	11/9	10/28-11/9	10/26-11/4(75)-12/28	11/16(15)	12/7(3)-10	10/18-12/23	-	10/28-11/9(6)	76.375	-
HERON, GREAT BLUE	A	→10/10(13)-12/17	-	-	→10/27(100)	10/9-30	-	-	11/14	-
EGRET, GREAT HERON, GREEN	-	A-11/18(4)	→10/27(14)-11/2	A	A	R	R	R	A	R
SWAN, TUNDRA	-	-	-	-	-	-	-	-	→10/20L	-
MUTE	-	11/9(46)-24	10/30-12/31(78)	-	11/14	10/26-29(14)→	11/17(40)	11/6-11(300)-12/12	-	11/7-12/20
GOOSE, SNOW	-	R	10/4-7	-	-	-	R	R	A	A
BRANT	-	10/1-11/10(183)-12/18	23.0822281167109	-	10/6(6)-11/21	12/1-14	-	10/9-11/19	11/15(4)	-
GOOSE, CANADA	A	11/11	-	-	-	-	-	-	-	-
DUCK, WOOD	A	R-10/1(11490)	R	-	R-12/28(400)	R	R	→11/2(9)-12/27	→10/27(35)	R

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	POTTER	SCHUYLKILL	SOMERSET	SULLIVAN	TIOGA	VENANGO	WARREN	WESTMORELAND	WYOMING	YORK
TEAL, GREEN-WINGED	-	→10/13(18)-11/8	→11/9(63)-12/21	-	-	→10/28	-	A	→10/2(13)	A
DUCK, AMERICAN BLACK	A	A	10/26(10)-11/11	-	→12/28(11)	10/26-12/23	-	A	10/21→	R
MALLARD	R	R	R-10/26(138)	→11/9(5)	A	R	R	R	R	R
PINTAIL, NORTHERN	-	12/15-20	-	-	-	11/18-12/14	-	11/3→	11/15-12/19	→10/10
TEAL, BLUE-WINGED	-	11/18	→10/4	-	-	-	-	-	→10/2	-
SHOVELER, NORTHERN	-	11/14	-	-	-	-	-	P	10/29-11/14	-
GADWALL	-	→11/1	10/27(4)-11/9	-	-	10/19-11/13	-	10/20-28(7)	11/14→	10/22→
WIGEON, AMERICAN	-	P	10/20-11/9(60)	-	11/12(25)-22	→11/18	-	A-11/7(10)	→12/21	A
CANVASBACK	-	-	11/4-11(100)→	-	-	10/28(9)-12/13	-	11/2-12/8(222)	-	11/5-11
REDHEAD	-	-	11/4-12/14(12)	-	-	10/29-12/8	-	P	-	11/5→
DUCK, RING-NECKED	-	11/4-8(7)-12/28	10/26-11/9(88)-12/21	-	11/15(6)	10/23-12/9	10/22(4)	10/28-12/8(86)	11/8-11(36)-12/21	11/1→
SCAUP, GREATER	-	11/1	-	-	-	-	-	-	11/19	-
LESSER	-	11/7-12/20	10/26-11/9(30)	-	-	12/8-9	10/22(8)	A-11/1(25)	10/28-12/21	11/8
OLDSQUAW	-	-	11/9(21)-11	-	-	11/8-9(15)-12/8	-	11/7-12/8	10/28-11/11	11/2-8
SCOTER, BLACK	-	11/7(4)	11/8(45)-9	-	-	-	-	11/7-8(25)	11/7(54)-20	11/12
SURF	-	11/12(15sp)	-	-	-	-	-	11/9-11(8)	-	-
WHITE-WINGED	-	-	-	-	-	10/18-11/15	-	-	-	-
GOLDENEYE, COMMON	-	11/8(6)-22	11/9-15	-	-	11/8-12/12	P	11/11-12/8(6)→	-	11/11→
BUFFLEHEAD	10/27→	10/28-11/11(57)-16	10/26-11/11(1500)→	10/27	11/15-12/7(4)	10/23-11/8(15)-12/17	-	11/9-11(450)→	10/20-11/10(10)→	11/8-12/11(70)→
MERGANSER, HOODED	A	11/9-14	10/25-12/20(20)	-	11/22-12/28(12)	10/28-12/17	R	A-11/11(73)	10/25→	11/11→
COMMON	A	10/17-12/18(5)-23	11/4	→11/4(7)	→11/23(43)→	R	R	P	-	11/11→
RED-BREASTED	-	10/30	11/2-12/18(7)	10/25	10/5(8)-11/16	10/28-11/9	10/22	→12/8(8)	10/24-25	11/11→
DUCK, RUDDY	-	10/22-11/9(10)-18	10/13-11/9(320)→	-	11/1(6)-22	10/7-11/8(25)-12/14	10/22(12)	A-11/11(100)	10/24-11/12(7)-12/21	A-11/11(130)
VULTURE, BLACK	-	→12/15	-	-	-	-	-	-	-	R
TURKEY	→11/4	→10/18(47)-11/24	→10/5(20)	→10/15	→12/13	→10/17	P	P	→10/14	R
OSPREY	P	→10/10(19)-11/15	-	-	-	-	-	→10/1	→10/31	→11/1
EAGLE, BALD	A	A	10/12	-	→12/21	A	R	→12/19	A	R
HARRIER, NORTHERN	A	A	R	R	A	A	10/16	R	A	→11/29
HAWK, SHARP-SHINNED	A	R	R	R	R	R	R	R	R	A
COOPER'S	-	R	R	R	R	R	R	R	R	A
GOSHAWK, NORTHERN	11/14	R	R	R	10/26	10/23	R	-	-	-
HAWK, RED-SHOULDERED	→11/5	R	-	R	10/12	-	-	A	-	R
BROAD-WINGED	-	→11/6	-	-	-	-	-	-	-	-
RED-TAILED	R	R-10/28(217)	R	R	R	R	R	R	R	-
ROUGH-LEGGED	11/10→	12/1→	11/10	-	10/12→	11/15-23	-	-	11/5→	-
EAGLE, GOLDEN	12/10-27	10/4-11/27(14)→	-	-	-	-	-	-	-	-
KESTREL, AMERICAN	R	R-10/10(65)	R	R	R	R	R	R	R	-
MERLIN	-	→10/10(36)-11/11	10/1	-	10/16	-	-	-	-	→12/14L
FALCON, PEREGRINE	-	→10/4(8)-11/21	10/5	-	10/3	-	-	10/11	-	-
BOBWHITE, NORTHERN	-	R	-	-	-	-	-	-	-	R
COOT, AMERICAN	11/9	→11/18	A-11/9(65)	-	10/5-11/22(41)→	10/14-12/17	-	P	10/3-11/14(32)→	A
KILLDEER	A	A	→11/2(90)-9	-	→10/10	→11/14	-	R	→10/15(14)-30	R
YELLOWLEGS, GREATER	-	→11/13	→10/27(16)-11/15	-	-	→11/23	10/10	10/10-11/8	→10/25	→11/12
LESSER	-	→10/27(3)	→11/2	-	-	-	-	P	-	→11/8
SANDPIPER, SOLITARY	-	→10/30	→10/3	-	-	→10/4	-	→10/21	-	-
SPOTTED	-	→11/9	-	-	-	-	-	-	→10/15	-
PECTORAL	-	10/28-31	→10/13(13)-11/9	-	-	-	-	10/10	-	→11/8(6)
DUNLIN	-	-	10/27-11/2(21)-9	-	-	10/24-11/8	-	P	-	10/10-11/8(14)
SNIPE, COMMON	-	→11/7(9)-12/4	10/13-11/4(5)	-	-	→11/9	-	10/3	-	12/20
WOODCOCK, AMERICAN	-	→10/12	P	→11/13L	-	-	-	P	-	10/23-11/8
GULL, BONAPARTE'S	-	-	11/2-9(6)	-	-	10/29-11/23	-	11/12(4)	10/10	-
RING-BILLED	P	10/8-11/16(495)-12/18	10/27-11/17(11)-30	-	11/1-12/28(20)	11/3(50)→	A-11/18(202)	A	11/14(36)→	A
HERRING	P	10/14-12/7(17)-28	11/9-12/21	12/10	12/28(10)	11/19-20	10/4-11/5(8)	-	NOV→	A
GREAT BLACK-BACKED	-	-	-	-	-	-	-	-	-	A
OWL, BARN	R	R	R	R	R	R	R	R	R	R
BARRED	R	R	R	R	R	R	R	R	R	R
LONG-EARED	-	-	-	-	12/13	-	-	-	-	-

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	POTTER	SCHUYLKILL	SOMERSET	SULLIVAN	TIOGA	VENANGO	WARREN	WESTMORELAND	WYOMING	YORK
SHORT-TEARED	-	-	-	-	-	-	-	-	-	-
NORTHERN SAW-WHET	R	R	-	-	R	11/16(3)-19 12/16-17	10/1	P	-	-
SWIFT, CHIMNEY	-	→10/4	-	-	-	-	-	11/22	-	→10/10
WOODPECKER, RED-HEADED	-	→10/10	12/21	-	-	-	-	-	11/8	R
SAPSUCKER, YELLOW-BELLIED	-	→12/23	11/16→	-	-	10/4-12/13	→12/6	→10/2	→12/21	A
FLICKER, NORTHERN	P	R-10/8(22)	P	→10/21	A	R	R	R	R	R
WOOD-PEWEE, EASTERN	-	-	→10/9(3)	-	-	-	-	→10/7	-	→10/8
PHOEBE, EASTERN	→10/15	→11/4	→10/26	-	→10/26	→10/14	-	→10/24	→12/21L	→10/29
LARK, HORNED	A	→12/4(34)-12	A	-	12/15(4)→	-	-	A	R	-
SWALLOW, TREE	-	→10/1(439)-23	-	-	-	-	-	-	-	→11/30L
CROW, FISH	-	A	-	-	-	-	-	-	-	R
RAVEN, COMMON	R	R	R	R	R	R	R	R	R	R
CHICKADEE, BLACK-CAPPED	R	R	R	R	R	R	R	R	R	A
CAROLINA	-	-	-	-	-	-	-	-	-	R
NUTHATCH, RED-BREADED	R	A-10/17(7)	A	R	R-10/5(13)	10/2→	R	A	A	A
CREEPER, BROWN	R	R-10/3(6)	R	R	R	R	R	R	R	A
WREN, HOUSE	-	→10/9	→12/21L	-	-	-	-	1	→11/4L	→10/10
WINTER	-	→12/20	-	-	R	10/1	-	A-10/12(6)	R	10/11-18
MARSH	-	-	-	-	-	-	-	-	-	10/4
KINGLET, GOLDEN-CROWNED	-	A-12/12(24)	11/2-12/21(100+)	R	12/13(15)→	-	10/3	A	A	10/4→
RUBY-CROWNED	-	A-10/12(30)	10/4(7)	11/5	10/8	→11/2	10/22	→10/12(37)-11/17	10/25	A
THRUSH, SWAINSON'S	-	→10/16	-	-	-	→10/11	-	→10/1(6)-14	-	→10/8
HERMIT	-	→10/20(6)-11/8	→10/27	-	→10/26	→10/28	→10/2	A-10/11(11)	-	10/7→
WOOD	-	→10/9L	→10/4	-	-	→10/2	→10/2	-	-	→10/11
ROBIN, AMERICAN	A	R-10/20(1319)	→10/26(1000)	→10/21(50)-11/9	R-10/19(20)	R-10/26(250)	R	R	R	R
CATBIRD, GRAY	-	A	→12/21	-	→11/23	→12/17	-	→11/4	→10/15	→10/10
THRASHER, BROWN	-	P	-	-	-	-	-	→10/1	-	-
PIPET, AMERICAN	-	-	10/13(6)-11/17	-	-	10/22-11/18	-	10/15-24	10/16(40)-25	11/5
VIREO, BLUE-HEADED	-	→10/13(16H)-22	→11/2	→10/4	→10/16	→10/7	-	→10/13(5)-28	→10/14	→10/27
RED-EYED	-	→10/13L	→10/9	-	-	→10/4	-	→10/7	-	-
WARBLER, TENNESSEE	-	→10/13	→10/4	-	-	→10/6	-	→10/15	-	→10/4
NASHVILLE	-	→10/10	→10/4	-	-	→10/12	-	→10/8(4)	-	-
CHESTNUT-SIDED	-	-	→10/4	-	-	→10/4	-	→10/1	-	→10/14
MAGNOLIA	→10/5	→10/9	→10/4	-	-	→10/4	→10/2	→10/1(10)-10	-	→10/14
CAPE MAY	-	→10/16	→10/4	-	-	→10/4	-	→10/10	-	→10/14
BLACK-THROATED BLUE	-	→10/16	→10/4	-	-	→10/4	-	→10/13	-	→10/7
YELLOW-RUMPED	-	→11/18(8)	→12/21(14)	→10/20(3)	→10/15(14+)	→11/2	10/14-12/20(9)	A-10/18(31)	→11/4	A
BLACK-THROATED GREEN	→10/3	→10/2(15)-20	→10/9	-	-	→10/14	→10/2	→10/1(13)-13	-	→11/22
BLACKBURNIAN	-	→10/11(32)	→10/11	-	-	→10/4	-	→10/2	-	→10/1
PINE	-	→10/9	→10/4	-	-	-	→10/5	-	-	A
PRAIRIE	-	→10/9L	-	-	-	-	-	→10/4	-	→10/15
PALM	→10/3	10/1-10	→10/9	-	-	→10/7	-	→11/12	-	→10/15
BAY-BREADED	-	→10/9	-	-	10/7	→10/10	-	-	-	-
BLACKPOLL	-	→10/2(5)-10	-	-	-	→10/7	-	→10/11	-	→10/10
BLACK-AND-WHITE	-	→10/4	-	-	-	-	-	-	-	→10/15
REDSTART, AMERICAN	-	-	-	-	-	-	→10/5	→10/5	-	→10/14L
OVENBIRD	-	-	-	→10/11L	-	→10/10	-	→10/2	-	-
YELLOW-THROAT, COMMON	-	→10/18	→10/5	-	-	→10/4	-	→10/12	→10/15	→10/10
WARBLER, HOODED	-	→10/9L	-	-	-	→10/1	-	→10/4	-	-
WILSON'S	-	-	→10/4	-	-	-	-	→10/3	-	→10/10L
TANAGER, SCARLET	-	→10/2(8)-8	-	-	→10/1	-	-	→10/1(10)-9	-	→10/6
GROSBEAK, ROSE-BREADED	→10/15	→10/3	-	-	-	→10/2	-	→10/6	-	→10/4
BUNTING, INDIGO	-	-	→10/17	-	-	→10/2	-	-	-	-
TOWHEE, EASTERN	A	→10/27	→10/9	-	-	→10/2	-	→10/1(11)-9	-	-
SPARROW, AMERICAN TREE	11/9(5)→	10/7-12/11(20)→	11/2→	→11/4	11/14-12/20(143)→	11/2→	11/18→	11/10(5)→	12/2→	R
CHIPPING	→11/15	→11/13	→10/4	→11/2	→10/13	→10/26	-	→11/19	-	→12/8
FIELD	-	A	→12/21(20+)	-	→12/13	→12/11	-	A	→12/21	R

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	POTTER	SCHUYLKILL	SOMERSET	SULLIVAN	TIOGA	VENANGO	WARREN	WESTMORELAND	WYOMING	YORK
VESPER	-	-	-	-	-	→10/26	-	P	-	→10/11
SAVANNAH	-	P	→10/5	-	-	→10/29	-	P	-	→10/23
FOX	10/20-11/2	10/11-12/2	10/28-11/9(5)-12	10/21-11/20	10/30-11/8	10/26-30(6)-11/16	10/14(4)-11/23	10/17-11/10(11)-29	-	10/26→
LINCOLN'S	-	→10/8	10/4-9(5)	-	-	→10/14	-	→10/31	10/23-29	→10/13
SWAMP	-	→10/13(6)-11/18	A	-	-	→12/21	-	A-10/11(40)	→10/25	R
WHITE-THROATED	A	A	10/4(10)→	R	10/26→	A-10/30(20)	10/1→	R-10/11(53)	10/14→	A
WHITE-CROWNED	10/15-20	10/13-18(12)→	10/5	10/21-25	10/1-16(5)-11/2	10/6-29	10/2-22	10/1→	10/25-12/21	10/26→
JUNCO, DARK-EYED	A	A	A	R	R	R	R	R-11/2(65)	R	A
LONGSPUR, LAPLAND	-	-	-	-	-	11/15-18	-	11/17	-	-
BUNTING, SNOW	12/20(75)	11/7-12/14(30)	11/18(4)	-	12/15(3)→	11/15-12/6	-	-	-	12/1(20)→
BLACKBIRD, RED-WINGED	→11/15	→11/6(570)-20	→11/9(30)	-	→10/15	→11/30	P	A	→11/4	R
MEADOWLARK, EASTERN	A	P	→10/4	-	-	→11/29	-	P	→12/21	R
BLACKBIRD, RUSTY	-	10/8-30(250)-12/18	10/26(15)-11/9	-	-	11/9-16(30)-24	-	10/16→	10/21-22(5)-11/4	-
GRACKLE, COMMON	→11/20	→10/30(1000)-11/17	-	-	→12/20	→11/29	P	→12/27(5)	-	R
COWBIRD, BROWN-HEADED	-	→10/21(8)-30	12/21	11/22(20)	A	→12/13	P	A	P	R
FINCH, PURPLE	R	A-11/4(153)	12/21	R	R	R	R	R-11/6(38)	→12/21	A
CROSSBILL, RED	-	11/16-12/12(25)→	12/21	11/18-12/8(45)-15	-	-	-	-	-	12/20(11)
WHITE-WINGED	-	A-12/17(100)	12/21	-	-	12/9-21(24)→	-	-	-	-
REDPOLL, COMMON	12/27→	11/20-12/12(375)→	12/21(13)	12/14(135)	12/15(3)	12/16-28(150)→	12/12-20(225)	-	12/21(15)→	-
SISKIN, PINE	10/18(5)	10/11-12/21(132)→	12/21(27)	12/14-24(50)→	11/13-12/15(5)	11/15→	A	10/22→	-	11/14→
GROSBEAK, EVENING	10/25(10)→	10/29-11/12(47)→	10/21→	10/8-11/7(51)→	11/16→	11/1→	10/27-12/6(50)→	10/18-30(100)→	10/22→	NOV

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