Pennsylvania Society for Ornithology Newsletter Vol. 4, No. 4

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FROM THE PRESIDENT'S DESK...

Is this the winter for an invasion of the northern birds? The preliminary signs are here. For more than a month, flocks of Evening Grosbeaks have been visiting feeders. Also sightings of Pine Siskins, Common Redpolls, a White-winged Crossbill at a feeder in Elk County, and a Snowy Owl at Presque Isle State Park indicate that the invasion may be underway. This could be an interesting winter for birders!

Randy Flament of Emporium spent time this fall "hawking" on Bald Eagle Ridge. He reported, "In a five-hour period on November 6 near Port Matilda, 37 Golden Eagles were seen. And nearby on November 7 over 600 Red-tailed Hawks passed in one day."

By a 2 to 1 margin, voters approved the Key 93 Bond Referendum. Up to 5.1 million dollars of the bond money can be utilized by DER to purchase recreational and natural areas which in the opinion of the Department face imminent loss or damage. Three million dollars is available for the Department of Community Affairs to pay land trusts up to 50% of eligible project costs for natural areas and open space planning and acquisition. Selection criteria will be developed to give priority to acquisition of critical habitat for rare, threatened, or endangered plant or animal species or communities which are at risk of destruction or substantial degradation. This one-time opportunity for acquistion of key properties is important to us all. Local Bureau of Forestry, State Park offices, and local conservation organizations need your input and support.

Recently in my CBC packet, I received an "ACTION ALERT" from the National Audubon Society. At a time when government funding for conservation is limited, volunteerism comes under attack in the U.S. House.

"Late in October the House passed H.R. 1845, a bill to establish the National Biological Survey (NBS), a new agency within the Department of the Interior. The purpose of the Survey is to better assess the Nation's biological resources, including birds.

Unfortunately, when the House passed the bill it also adopted harmful amendments, including one by Rep. Billy Tauzin (D-LA) to remove a provision authorizing the Secretary of the Interior to accept the services of volunteers in conducting the Survey. Although attorneys are still evaluating the practical effect of this amendment (if it becomes law), the sponsor's intent is clear: They do not trust Audubon members and others to gather data, like the Christmas Bird Count, for a national biological base. Consider these comments made on the House floor:

> *It is hard to believe that an interest group could actually be one of the volunteers, that we could have the...Audubon Society...qualify as volunteers to go out and collect data.... And in essence we are creating an environmental gestapo that will go on people's private property....(Rep. Jack Fields, R-TX)*

> *Our complaint is that the volunteers, nonscience volunteers with a special agenda...are going to be part and parcel of...the survey....You start with bad science, you end up with bad science....(Rep. Tauzin)*

The members who supported this amendment insult the quality and integrity of volunteers whose efforts date back almost a century. If the opponents of the National

Biological Survey have their way, the Secretary of the Interior would be prohibited from putting CBC results and other volunteer-generated bird data into a national database. This would be a disaster for bird monitoring programs--CBC and the Breeding Bird Surveys, to name two--most of which rely heavily on volunteers in the field.

Write or call your Senator and Representative to express your opposition to the 'volunteer provision' in H.R. 1845 as passed by the House, and ask them to support the use of volunteers to collect data to be used in the NBS."

Powdermill Nature Reserve will host the 1994 PSO Annual Meeting, May 20-22, 1994, and the Westmoreland County Bird Club will assist with field trips and local arrangements. Additional information will be sent to you concerning the meeting. However, if you want to rent a rustic cabin at nearby Linn Run State Park, reservations can be made by phone (412-238-6623) starting Saturday, February 5, 1994.

Happy Holidays and good birding!

--Bob Martin, President

FOURTH ANNUAL MEETING POWDERMILL NATURE RESERVE RECTOR, PA MAY 20-22, 1994

THE CHRISTMAS BIRD COUNT-- It's Not Just For Fun

It's that time of the year again when birders join together to participate in the Christmas bird count. I consider the Christmas bird count to be the social equivalent of opening day for deer hunters. Birders join together to test their skills, enjoy the outdoors, compete with one another, and socialize. There's no doubt, the Christmas bird count is a lot of fun, but it also has a lot of value.

The Christmas Bird Count (CBC) was started by the National Audubon Society in 1900. Each CBC is a day-long tally of birds seen within a circle 15 miles in diameter (the count circle) on one day during the official CBC period, two weeks centered on Christmas day. Participants, with varying levels of experience, attempt to cover the count circle within a 24-hour period recording all individuals and species observed. Numbers of birds are reported along with the number of participants, the number of party-hours, and the distance traveled both by foot and car. Over 42,000 people participate on over 1,500 counts annually making the CBC the oldest, most extensive, most geographically comprehensive, continuous survey of birds in the world. It is also one of the most unstructured.

As a result of this lack of structure, there are many types of questions which cannot be answered with these data. For example, for many species it is difficult to determine whether annual fluctuations in the number of individuals observed on the CBC are real or merely a result of other factors, such as observer skill and effort or weather conditions. Just because you saw 15 Sharp-shinned Hawks this year and only ten were reported last year, doesn't necessarily mean there are more Sharp-shinned Hawks. Visibility may have been better, participants may have worked harder to find these birds, or birders may just have been in the right place at the right time. CBCs also don't provide any information on habitat use by birds and how the abundance of birds varies with habitats. On CBCs, rare species are often over represented because participants will work hard to add an extra species and will put in extra effort to locate a "good bird."

Although there's a lot the CBC can't tell us, there's a lot of valuable information in these counts. Because of the long term nature of the data, the CBC can provide information on long-term changes in bird populations when those changes are fairly dramatic. For example, I used CBC

data to document the exponential increase in numbers of Brown-headed Cowbirds from 1900-1980. CBC data is excellent for documenting range expansions of species. For example, House Finches were illegally released on Long Island in the 1940's. Data from CBCs were used to document their explosive increase in numbers and steady spread westward. The northward range expansion of the cardinal, Tufted Titmouse, and mockingbird were also documented with CBC data. In addition, CBCs are excellent for documenting the movements of "irruptive" species. These include species like Evening Grosbeaks, Red-breasted Nuthatches, and Pine Siskins which are absent during some years and arrive in huge numbers during others. These are just a few examples of how the CBC data can be used. So this year when you're out on the count, enjoy yourself, have a good time, and know you're making a contribution to science and the conservation of birds.

--Margaret C. Brittingham

THE CONSERVATION PAGE

In September, I had the good fortune to be able to go to Washington D.C. to lobby for the reauthorization of the Clean Water Act. The lobby week was sponsored by the National Wildlife Federation with the express purpose of contacting our legislators to urge them to support a strong Clean Water Act.

During the week, I was privileged to meet and work with NWF staff and a dozen other concerned citizens from other parts of the country. We learned the basics of lobbying, reviewed proposed Senate bills on clean water and wetlands, received a brief training session on working with the media, met with a representative from the President's Office of Environmental Policy, and talked with our respective states' Senators and Representatives.

I was fortunate to meet with staff members from both PA Senators' offices and with aides from the offices of Congressmen Blackwell, Borski, Clinger, Shuster, and Weldon. The staff members were attentive and commented that the legislators were interested in hearing from PA residents in regard to clean water. We specifically discussed the need to keep clean waters clean, referred to as "antidegradation," and the need to ensure that any clean water bill contained a strong antidegradation requirement. It is important to remind our legislators that it is much easier and less expensive to keep clean water free of pollution than it is to clean it up after being polluted.

We further discussed the need to remove persistent, bio-accumulative toxins from wastewater discharges and eliminate "mixing zones." Persistent, bio-accumulative toxins, such as PCBs, dioxin, and mercury, even though discharged at very low levels, are accumulating in the food chain and are affecting our health and that of our children. It is important that these chemicals be completely removed from wastewater treatment plant discharges. Allied with the problem of toxic discharges, is the concept of "mixing zones." A mixing zone, also called "Zone of Initial Dilution," is that section of the receiving waters that mix with the toxin containing wastewater such that the permit limits for the toxins will be met at the downstream/downriver edge of the zone. In other words, "The solution to pollution is dilution." The problem is that these toxins, while in the process of being diluted, are being taken up by living organisms and accumulating in the food chain. Therefore, in addition to removing the toxins, it is important to no longer permit "mixing zones."

A third item we discussed was the need for a clear, concise statement requiring water conservation. Water conservation includes such things as leak detection and repair, installation of water meters, low-flow plumbing fixtures, and eliminating price discounts for the use of large quantities of water. The legislative aides indicated that in general the legislators support water conservation, but they need to hear it from their constituents.

The last item of discussion was wetlands. This topic is very controversial, so I met with varying reactions. It is important for PSO members to know that the opponents are working very hard to

destroy any legislation and/or proposals that strengthen wetlands protection. As with the previous topics discussed, it is critical that we write our legislators to let them know that we want a strong wetlands protection program. This includes supporting expansion of the 404 permit program to include activities such as draining, dredging, and excavating; establishing a national policy to preserve and restore the nation's wetlands; creation of tax incentives to encourage the protection of privately owned wetlands; and protection of Alaska's wetlands. Further, our legislators should know that we strongly oppose the removal of EPA from the permit review process, a wetlands value ranking system, turning over the permit system to local agencies, taxpayers' subsidies to private developers in the form of "compensation" or for "mitigation banks," and defining wetlands through legislation rather than through science.

ACTION NEEDED:

PLEASE WRITE SENATOR WOFFORD!

The Senate subcommittee dealing with the environment and public works is presently considering Senate bill S. 1114, that reauthorizes the Clean Water Act and S. 1304, that provides for wetlands protection. Senator Wofford is on this subcommittee. Feel free to use any of the above information in your letter and address your letter as follows:

The Honorable Harris Wofford
U.S. Senate
Washington, DC 20510

Dear Senator Wofford:

Please remember to address your letter properly, state your purpose or concern, be polite, be specific, and limit the length of your letter to one page.

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If you would like to comment or offer suggestions, contact our Conservation Editor, Mark Henry, P.O. Box 873, State College, PA 16804.

Raven Reporter

Winter Finches, ... Finally

Well, I was off by only a year.

They're back! At last. I've seen and heard them myself. Those sunflower-eating yellow monsters have invaded my backyard and emptied my feeders. Evening Grosbeaks, Pine Siskins, Common Redpolls, Red Crossbills, and White-winged Crossbills have all been sighted in Pennsylvania.

All of the winter finches are flying over hawk lookouts and along the ridges. Siskins and redpolls are feasting on birch catkins. Some finches are visiting feeding stations while others are visiting woodlots. So far, most grosbeaks and crossbills seem quite restless and are not staying anywhere for very long. (Anyone surprised by this?)

Bohemian Waxwings are an added bonus this year. More Bohemians have been reported this season than in any recent past year. Check your field guide for identifying traits. Bohemians are larger than Cedars and have distinctive rusty undertail coverts, easily seen from below. I find that their low-pitched buzzy call is also diagnostic and easy to separate from the more sweet-sounding Cedar Waxwings.

This might be the best year to add the winter finch species to our Special Areas lists. Any conifer or birch grove would be worth visiting to find some of these wanderers. (Please remember that these finches like natural food as well as the feeder offerings.) Why not plan a few Special Areas field trips in January and February to catch them when they are around? When the snow flies, even more finches could arrive in the state.

Let's Count Our Blessings

How many species have been observed

in your Special Area?

If your group has staged field trips in every month of the year, there is a very good chance that your total list exceeds 100 species. This is especially true if you made the effort to have a field trip or two in peak migration times. Stan Kotala reported to me that Canoe Creek State Park's list already exceeds 170. I would bet that several Special Areas have lists exceeding 150.

There is an old saying that if you birdwatch in one place long enough, you will see most of the birds in the world. Well, I don't know about the world list, but I would agree that many local birding spots would reveal most birds of the state's list if they were visited more frequently. Most migrants just seem to move through our state and will land almost anywhere, so you really just need to be out there persistently.

I invite all coordinators to count up the species observed in their Special Areas. Please submit them by the end of January, and I will publish them as part of the Raven Reporter column. Of course, we all understand that Special Areas with more habitats, particularly wetlands, have the potential for more species. The Special Areas Project is not a contest; we would just like to emphasize how many birds can be observed at these locations.

It is also a good idea to review the list for absent species. By making a review list of the Special Area, we can see not only what species have been found, but also which ones have not been. The field trips for 1994 can be planned with a hit list in mind. It is also a good idea to check the breeding species list against the list of species found in that block during the Breeding Bird Atlas.

Auduboners Join SAP

The Special Areas Project has always enjoyed the support of Audubon Society chapters. This was intensified this fall when several Audubon Society members expressed interest in conducting Special Areas Projects.

At the invitation of Leigh Altadonna, I attended the Audubon Council of Pennsylvania Fall Council Meeting at Black Moshannon State Park on the weekend of October 22. It was a spirited meeting and I thoroughly enjoyed the warm camaraderie of the Audubon Council members. (Unfortunately, my team lost the World Series on the same weekend; I needed all the consolation I could get.)

After a brief overview of the project and its goals, we headed out into the park for a field trip in exquisite autumn weather. It did not take much to convince the group that the project was a good excuse to have field trips. It seems that even those serious environmentalists like to watch birds, too. In only a short time the group amassed a list of 38 species, including a few seen earlier that morning. Some of the highlights were some Evening Grosbeaks, Pine Siskins, a Bufflehead, and a Merlin.

Some members who took packets of SAP forms home included John Fedak and Fred Crowley (Seneca Rocks Audubon), Jeff Goodenow (Seven Mountains), John Jakoby (Greater Wyoming Valley), Lisa Bainey (Bucktail), Paula Ford, Bill Johnston, Chris Turn, and Bob Cupper. We welcome all of you to the Project. Thanks to all of the Audubon Society Chapters for drumming up support. Good SAPing!

--Douglas Gross, PSO Special Areas Project, R.R. 1, Box 147, Orangeville, PA 17859. Phone: 717-542-2191 (day) or 717-458-4564 (evenings).

YELLOW-BELLIED FLYCATCHER
The Anonymous Species of Special Concern

The Yellow-bellied Flycatcher isn't glamorous; it will never grace the cover of a glossy wildlife magazine or calendar. When most people think of threatened or endangered species, eagles and elephants come to mind, not little birds. Yet, many rare species are inconspicuous and poorly known like this one.

Background

The Yellow-bellied Flycatcher is one of those "little green birds" that are hard to tell apart. It is an *Empidonax* flycatcher, the group for which field guides devote many paragraphs and comparison charts.

The "Yellow-bellied" is one of the few "empids" that you can identify by sight--that is, if you ever get to see one. It is separated from other small flycatchers by its yellow throat and breast, an olive-green back, and its relatively small size and short tail.

Generally, song is the most reliable way to identify small flycatchers, but identifying Yellow-bellied Flycatcher's calls take a practiced ear. It's most common calls are a sharp, staccato *killink!* and a softly whistled *tu-wee*. Although these calls are somewhat distinctive to an experienced birdwatcher, the *killink!* call resembles the territorial song (*che-bec!*) of the Least Flycatcher and the *tu-wee* call resembles the quiet *per-wee* call of the Eastern Wood-Pewee. So, the Yellow-bellied could be easily mistaken for other species. The Yellow-bellied Flycatcher's unobtrusive behavior has kept it from notice. Few realize that it nests in Pennsylvania; most birdwatchers only know it as a hard-to-find migrant. Historical accounts of nesting Yellow-bellieds are quite sparse, with most records coming from the Poconos. From the 1930's to the 1980's there were no reports of nesting in the state, and several ornithologists observed that many of its nesting grounds had been destroyed.

The Pennsylvania Breeding Bird Atlas Project verified that the Yellow-bellied Flycatcher is one of the state's rarest birds. A few dedicated birders found this elusive species in 13 Atlas blocks, far fewer than one percent of the state's total. As a result, the Ornithological Technical Committee and the Pennsylvania Game Commission classified it as "Threatened" in 1990.

More typical of Canada's moist conifer forests and bogs, the Yellow-bellied Flycatcher reaches the southernmost point of its continuous breeding range in Pennsylvania. It nests erratically in a few isolated spots in the high mountains of West Virginia and Virginia. In Pennsylvania, it nests in the dense sphagnum moss of remote high elevation forested wetlands. Considering the obscurity of the bird and the remoteness of its habitat, conservation biologists suspected that the Yellow-bellied Flycatcher may have been overlooked for years, including during the Atlas Project. For these reasons and the lack of general information about the species, it seemed appropriate to study its status in the state.

Findings of this Study

I have studied the Yellow-bellied Flycatcher's range and habitat needs in Pennsylvania since 1990. Over 45 forested wetlands have been searched in this time period. Many of these locations were quite remote and have not been visited by an ornithologist in recent times, if ever. Breeding Yellow-bellied Flycatchers were found in only six of the locations surveyed. Two of these were reconfirmations of Atlas records, and four locations were additional to the Atlas records. Two new records, however, were observations of males defending territories in June; no mates were found for these birds. Including a 1980 record, Yellow-bellied Flycatchers have been discovered breeding in only 18 locations (Atlas blocks) in the last 25 years.

In 1991, I found Yellow-bellied Flycatcher nests in Pennsylvania for the first time in more than 50 years. Two nests were located in a mossy hemlock swamp in Sullivan County's "Endless Mountains." I located four more nests in 1992 and two more in 1993. Of the eight nests, five successfully fledged young and three failed due to predation. All nests were well-concealed in sphagnum moss on the ground. Yellow-bellied Flycatcher nests are notoriously difficult to find.

I witnessed two incidents of pairs that nested twice in the same year; double-broodedness had not previously been reported for this species. This neotropical migrant arrives on its breeding ground in late May or early June and often leaves by late July, rarely allowing time for two nestings.

No Pennsylvania Yellow-bellied Flycatcher breeding ground had more than three pairs. Some breeding records from this study and the Atlas Project are of territorial males that did not seem to have mates. This indicates there are fewer active pairs than the figure 18 breeding locations may represent, but that male flycatchers are attempting to colonize new locations. It also seems that pairs are fairly loyal to nesting grounds as some sites were occupied in consecutive years.

During this study, I have witnessed a local extirpation of this threatened species. In 1985, Dan Brauning found a population of Yellow-bellied Flycatchers in a small shrubby bog in Lycoming County. I confirmed nesting at this location in 1985, 1988, and 1989 by finding dependent young. There was only one territorial male in 1991 and none in 1992. The reasons for the disappearance are unknown, but two consecutive dry summers may have been instrumental to nesting failures. This demonstrates how small pockets of populations are vulnerable.

Yellow-bellied Flycatcher nesting grounds have been restricted to conifer-dominated forested wetlands in high elevations (mean = 1968 feet) of the state's northern plateaus. These habitats are sometimes called "hemlock swamps" or "boggy woods." Such wetlands have an open canopy of trees, some quite mature, and a substantial mid-story of shrubs and saplings. These bogs are filled with windthrown logs, stumps, and mossy hummocks. All of these bogs were part of extensive northern hardwood forests.

Flycatcher-occupied forested wetlands are often the headwaters of small streams in poorly drained mountain forests. These wetlands are typically unnamed, unmapped swampy areas which require either a long drive from any town or a long walk in the woods to find them. However, the trip is worthwhile because high elevation forested wetlands contain a rich diversity of birds and plants. They are often the home to more than 30 bird species, including such rare breeding birds as Red-shouldered Hawk, Northern Saw-whet Owl, Yellow-bellied Sapsucker, Northern Waterthrush, Nashville Warbler, Canada Warbler, and White-throated Sparrow. In earlier days, other northern species such as Olive-sided Flycatcher and Red Crossbill also nested in Pennsylvania's boreal forested wetlands.

The nesting and foraging behaviors of the Yellow-bellied Flycatcher are the keys to its habitat choice. It is our only flycatcher that nests on the ground. The dense vegetation of this habitat provides some screening from nest predators and the thick mat of mosses shelters their delicate nests. Yellow-bellied Flycatchers feed by gleaning insects from the surfaces of bark, twigs, and leaves of the dense vegetation near the ground. Or, they sally from a perch within the umbrella of the vegetation to snatch prey midair. Even when higher in trees, these flycatchers often forage deep within vegetation, out of sight of predators and birdwatchers.

Conclusions and Recommendations

The Yellow-bellied Flycatcher is quite vulnerable in Pennsylvania. Even after the concerted field work of the last three years, this species remains one of the rarest breeding species in the state. It may have been overlooked in a few locations, but the assessment of its threatened status in Pennsylvania has been verified by this study.

In the last few years, we have achieved a better understanding of its natural history and distribution, but have only begun to unravel some aspects of its habitat and management needs. This very small flycatcher's life span is short and tenuous, especially because it must travel hundreds of miles south to Central America for the winter. The forests of Central America are undergoing increasing pressure from logging and development. The middle elevation forests are often burned and replaced by coffee plantations.

Since all of the isolated populations are quite small, they are quite vulnerable to local extinction due to habitat alteration or catastrophic natural events such as storms or drought.

The Yellow-bellied Flycatcher's habitat is almost as obscure and threatened as the bird itself. Unlike marshes or rivers, shrubby hemlock bogs do not fit the classic picture of wetlands. As such, bogs do not get as much attention as do other kinds of wetlands. Yet, upland forested wetlands and conifer forests are important elements of our natural ecosystem and vital to our state's natural diversity.

Forested wetlands of all sizes and types

have been greatly reduced in Pennsylvania. Many of these bogs were once logged, burned-over, drained, or flooded. Only a few were allowed to mature into the complex habitat needed for Yellow-bellied Flycatchers and other rare species. It takes many years, probably decades, for them to recover from a major disturbance. Stands of native conifers are also less extensive than a century ago and many kinds of wildlife are less common as a result.

The Yellow-bellied Flycatcher, the anonymous Species of Special Concern, alerts us to the importance and charm of all native habitats and species, no matter how obscure.

If any birdwatchers encounter Yellow-bellied Flycatchers on their breeding ground in Pennsylvania, please contact Douglas Gross as soon as possible. Information about the flycatchers and their nesting locations would be very helpful to better document and understand its ecology and conservation problems in the state. Any information shared with the author would be kept confidential. The Yellow-bellied Flycatcher is a threatened species in Pennsylvania, and the welfare of the bird is kept paramount in the process of studying it. As this species depends on vocal behavior for territory defense and communication, tape playing should be minimized in efforts to find or study Yellow-bellied Flycatchers.

I would like to thank the Wild Resource Conservation Fund for their support of this study. In addition, I would like to thank all who contribute to the Fund.

--Douglas A. Gross, Susquehanna SES Environmental Laboratory, R.R. 1, Berwick, PA 18603 (717-542-2191 or 458-4564).
(Also published by the Wild Resource Conservation Fund in the Summer, 1993, "Keystone Wild Notes."

PSO dues are payable May 1 annually. Please send your membership renewal to Eugene Zielinski, R.R. 3, Box 71, Bellefonte, PA 16823.

One year individual PSO membership	$10
One year individual + *PA Birds*	$26
One year family PSO membership	$15
One year family + *PA Birds*	$30

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