3. There is an increased number of bands being sold on e-bay.
4. There has been increased concern about auxiliary markers.
5. NABC has display cases available for shipping costs only.

The next meeting will be held in Long Point, Ontario

Bander Certification:
Yunick announced that a bander certification session will be held at Braddock Bay 30 Sep through 2 Oct 2011. There is room for six bander candidates and three trainer candidates.

New Business:

By-Laws: A revision to Article III of the by-laws was passed by council to include District of Columbia in the list of states and provinces. Tate moved to accept the change to the by-laws. The motion was seconded and carried.

Adjourn:
It was moved and seconded to adjourn. Motion passed. The meeting was adjourned at 1447 hours.

Respectfully Submitted,
Gerald K. Lahr, Secretary

Abstracts from the Paper Session at EBBA's Annual Meeting

The Effect of Oil and Gas Development on Songbird Abundance in the Eastern United States.

Emily H. Thomas, Margaret C. Brittingham, and Walter M. Tzilkowski, School of Forest Resources, The Pennsylvania State University, University Park, PA 16802, and Scott H. Stoleson, U.S.F.S Northern Research Station, Irvine, PA 16329.

Studies on the effects of forest fragmentation on songbirds illustrate both positive and negative effects. Resident, early successional species tend to benefit or adapt, while forest dwelling Neotropical migrants are often displaced. The development of oil and gas resources can cause extensive forest fragmentation. My study examines the effects of oil and gas development on songbirds in the Allegheny National Forest. To determine effects, I measured the relative abundance of songbirds at both small- and large-scales. I completed point counts at individual wells and paired controls to determine songbird response at the well pad itself. I also examined the overall landscape effect by completing three point counts within 25 ha sites with various densities of active wells. My results showed that 12 species increased at individual wells, while nine species decreased at individual wells. Also, 11 species increased with overall well density, while two species decreased with overall well density. Species richness increased with well density; however, conservation value scores did not correspondingly increase. The increase in species richness but not conservation value with well density suggests that although total number of species increases with well density, the species found in areas with no or few wells are considered species of greater conservation concern than the species found in areas with many wells. I suggest that oil and gas developers place wells along existing roads or within previously cleared areas whenever possible to limit the elimination of core forest area and the forest interior songbird species that depend on it.

Current Research on Purple Martins *(Pronge subis)* Conducted by the Purple Martin Conservation Association (PMCA)

Robert A. Aeppli, Biological Technician: Purple Martin Conservation Association, 301 Peninsula Drive, Ste. 6, Erie, PA 16505

East of the Rocky Mountains, Purple Martins *(Progne subis)* depend almost entirely on housing provided by humans for their nesting. This dependency makes the Purple Martin a great research subject, because it eliminates time spent searching for birds and increases the ease of capturing them, allowing for large numbers to be banded. The PMCA and its partners at York

University in Toronto, Ontario, have been conducting joint research on Purple Martins for nearly 10 years, studying topics such as paternity, dispersal, and disease. Current research reported on includes studies of long-term survival and breeding success based on the PMCA's banding program, as well as an update on ground-breaking research using geo-locators to track the migration of Purple Martins to Brazil and back.

The Gulf of Maine Migration Mystery: Filling in the Gaps

Adrienne J. Leppold and
Rebecca L. Holberton, PhD.

Data collected from radar, ceilometry, and mist-netting studies in the 1960s and 1970s provided us with ample evidence that birds migrate through the Gulf of Maine region during both spring and fall. However, these studies were conducted at the northern and southern reaches of the Gulf with little information about migration timing and intensity, key flyway and stopover locations throughout the region, and the species of birds using them. In fall 2009, a collaborative banding study by the USFWS, University of Maine, and National Audubon revealed a major but previously undocumented flyway for an estimated 1/4 - 1/2 million songbirds over a small area in mid-coast Maine. With recent pressure on inland, coastal, and island sites in the Gulf of Maine region for energy-related development projects, the need for a better understanding of how migrants use the region's topography is especially timely. Here, we will discuss how this flyway discovery led to the formation of the Northeast Regional Migration Monitoring Network comprising multiple state and federal agencies, academic institutions, and NGOs, and the expansion of monitoring efforts in 2010 to include banding, ground censusing, surveillance radar, passive acoustic monitoring, and sampling of individual birds for isotope signatures. This unprecedented coordination of monitoring techniques resulted in documenting higher densities of birds through mid-coast Maine than reported at other long-term monitoring sites in the Northeast. We will summarize these unexpected findings and highlight their importance in the context of the increased development pressure in the region.

Just a Bunch of Numbers: A Guide for Banders in the Practical Use and Application of EBBA Monograph 1

Adrienne J. Leppold

In the spring of 2004, EBBA published its first monograph, *Relationships Among Body Mass, Fat, Wing Length, Age, and Sex for 170 Species of Birds Banded at Powdermill Nature Reserve*. This publication summarizes over 276,000 banding records from birds captured over 25 years at Powdermill Nature Reserve (located in southwestern Pennsylvania). The only two previously know publications summarizing a large amount of biometric information are Dunning's *CRC Handbook of Avion Body Masses,* published in 1992 and Clench and Leberman's *Weights of 151 Species of Pennsylvania Birds Analyzed by Month, Age, and Sex*, published in 1978 (the latter the predecessor to EBBA Monograph 1). Both of these publications, however, have limited utility to researchers because of the way data were pooled and subdivided, respectively, across many groups. Thus, in 2004, the monograph became the first publication of its kind to statistically analyze large amounts of biometrical data for a large number of North American species in a way specifically designed to foster use by other researchers. Unfortunately, even seven years after its publication, it is infrequently cited and rarely used by few professionals in the field. Because over two-thirds of the monograph presents results from statistical and descriptive analyses, many find it incomprehensible or inconsequential. Here, I will present a workshop introducing the methods and significance of the monograph in the context of how bird banders across the country could benefit from using this reference in the field.

Maximizing Returns and Minimizing Time: Three- vs. Five-minute Point Counts in a Census of the Birds of Cherry Valley, Pennsylvania

John K. Leiser[1,2], Darryl Speicher[2], and Jackie Speicher[2]
[1]Northampton Community College, Tannersville, PA 18372
[2]Pocono Avian Research Center, Cresco, PA 18326

Point count surveys are among the most widely used bird census techniques. Such surveys are an efficient way to study species compositions and within species abundance patterns in different habitats. The goal of any census technique is to cover as many different points as possible while achieving an accurate representation of the birds present at any given point; as a result, it is unclear what the optimal survey time should be for a single point. For example, the United States Department of the Interior, Fish and Wildlife Service utilizes three-minute counts, while others suggest longer times of five-to-fifteen minutes. We conducted point counts at eight locations throughout the greater Cherry Valley of the Pocono Mountains of Pennsylvania. Four of the counts were conducted in upland habitats; the other four were done along riparian corridors. Each count spanned five minutes, with observers distinguishing between the first three and the final two minutes of the survey. In both upland and riparian locations, the vast majority of individuals and species recorded were observed during the first three minutes. At no location did the number of new species seen during the final two minutes of the survey exceed 10% of the species recorded at that site. These results suggest that three-minute surveys were a more efficient use of the observers' time than the full five minutes. Nonetheless, the final two minutes were valuable for sighting particular species, including several listed as "Species of Conservation Concern" by the Pennsylvania Game Commission.

Ten Years at Two Mile Run: A Long Term Study of the Avian Community in the Thomas Darling Nature Preserve, Monroe County, Pennsylvania

Lisa Schreffler[1,2], Darryl Speicher[2], and Jackie Speicher[2]
[1]Northampton Community College, Tannersville, PA 18372
[2]Pocono Avian Research Center, Cresco, PA 18326

Thomas Darling Nature Preserve in Monroe County, Pennsylvania, was dedicated in 1993 and is under the management of the Nature Conservancy. The preserve is 9 km^2 and includes glacial wetlands, peatlands, marshes, and spruce forest. This unique boreal bog habitat, with surrounding glacial wetlands and peatlands, is home to nesting Hermit Thrushes, Canada Warblers, Prairie Warblers, and many other Neotropical migrants. One of the only recorded occurrences of a Red Crossbill in Monroe County was here in 2007. Threats to the area include the regional expansion of local cities, so much so that the Pocono Mountain region is the fastest growing region in Pennsylvania. The Pocono Avian Research Center has operated a MAPS station in the Thomas Darling Nature Preserve at Two Mile Run since 2000. This paper will report on the avian community in the preserve and discuss some of the changes seen over the past decade.

Any Green Space Matters: A Short-Term Study of Bird Populations along Streams Impacted by Human Development in the Pocono Mountains

Darryl Speicher[1], John K. Leiser[1,2], and Jackie Speicher[1]
[1]Pocono Avian Research Center, Cresco, PA 18326
[2]Northampton Community College, Tannersville, PA 18372

In the Pocono Mountains, as elsewhere, the growing human population threatens natural systems directly by habitat destruction through the

residential, commercial, and industrial development of an area and indirectly through the introduction of invasive plant species that alter local ecological communities. Here, we present data from a short-term study that compared the avian populations of three stream corridors within Monroe County, Pennsylvania. The streams, while similar in physical and chemical structure, have been impacted differently by human activities. One has been relatively undisturbed by human development, one has been impacted moderately by suburban sprawl and the introduction of invasive plant species, and one has been impacted by commercial sprawl and a high proportion of invasive plants. While the relatively unimpacted stream corridor had a more intact avian population compared to the other sites, we argue that the preservation of any open space, even small riparian buffers, provides a needed refuge for a number of important species.

A Look Back at 109 Years of Bird Banding in North America

John Tautin, Purple Martin Conservation Association, Erie, PA

The remarkable history of the North American bird Banding Program is reviewed through a thread that follows the Bird Banding Lab and its Chiefs through time. The people, programs, and sometimes unforeseen events that shaped the banding program are documented with photos, facts, interesting quotes, and anecdotes, all richly embellished with the recollections of this former Chief of the BBL.

A River Runs Through It: Bird Research in the Delaware Water Gap National Recreation Area

Terry L. Master, East Stroudsburg University Department of Biological Sciences

The Delaware Water Gap National Recreation Area (DEWA) was established on 1 Sep 1965. The park spans 41 miles of the Delaware River from Milford southward to the Delaware Water Gap and occupies 70,000 ac (28,340 ha) in portions of five counties across Pennsylvania and New Jersey. It was originally intended to be a buffer surrounding a 30-mile-long reservoir that would have been created by construction of the Tock's Island Dam. Land acquisition resulted in the demolition of 5,000 buildings and displacement of 15,000 residents located in the proposed reservoir basin. Ultimately, several events, including resident protest, lack of funding, and an unacceptable geological assessment conspired to defeat construction of the dam. Subsequent efforts to resurrect the project led to designation of the river corridor as a National Wild and Scenic River ending further attempts to obstruct the free-flowing river. When completed, the reservoir would have inundated nearly half of the park's current 30,000 ac (12,145 ha) area, much of it the most productive riparian habitat.

Most of the avian research conducted within the park since then has focused on this riparian habitat and its characteristic headwater stream and riverine species. Beginning in the early 1980s, the Delaware River was designated as one of the original reintroduction sites for Ospreys to Pennsylvania from Chesapeake Bay. Unfortunately, the shoreline hacking towers were never used by returning birds in subsequent years, but Ospreys eventually returned on their own to artificial platforms clustered around two power plants located south of the water gap. These and other individuals hacked back on Pocono lakes and reservoirs are the origins of many of the 105 pairs currently nesting throughout the state. During this period, studies were also done on habitat use and location of winter roost sites of the long-established wintering Bald Eagle population. Bald Eagles have since become summer residents with at least six pairs nesting in or adjacent to the park. More recently, behavior and courtship activities of Peregrine Falcons have been monitored in the gap and near Milford but nesting has not been confirmed.

There has also been a focus on riparian passerine species as bioindicators of headwater stream and adjacent hemlock forest health. Louisiana Waterthrush metrics, including habitat use, foraging

behavior, and productivity, were investigated from 1998 - 2000 on pristine and impacted streams as part of a statewide study on their effectiveness as a barometer of headwater stream health. Positive results encouraged the National Park Service to use the waterthrush and the overall riparian avian community as "vital signs" of ecosystem integrity from DEWA to the New River National Park in West Virginia. The Acadian Flycatcher is a hemlock-dependent species in the park, and recent studies using heavily impacted sites in DEWA in comparison with pristine sites at Powdermill Avian Research Center have shown declines in pair density with increasing infestation levels.

These and other studies and surveys of birds of early successional habitats and wetlands, many conducted by faculty and students of East Stroudsburg University in conjunction with various collaborators, have contributed to the rich history of avian studies in the Delaware Water Gap National Recreation Area.

Poster Abstracts

Lunar Influence on the Fall Migration of Northern Saw-whet Owls

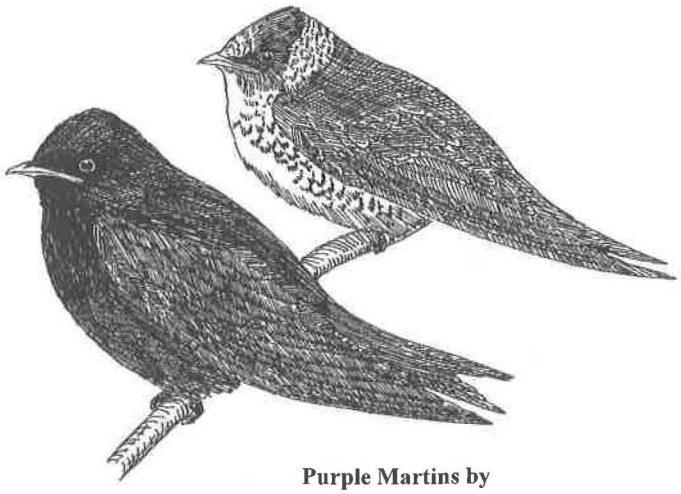
Jackie Speicher[1], Lisa Schreffler[1,2], and Darryl Speicher[1]
[1]Pocono Avian Research Center, Cresco, PA 18326
[2]Northampton Community College, Tannersville, PA 18372

Seasonal migration is an important component in the life cycle of Northern Saw-whet Owls *(Aegolius acadicus)*. We evaluated the influence of the four lunar events (new moon, first quarter moon, full moon, and last quarter moon) on nocturnal activity of Northern Saw-whet Owls based on captures during fall migration, 2000-2008. We found differences between the lunar events with decreased capture rates during the full moon and the new moon. These results suggest lunar phase influences migratory movements and behaviors in this species. This may be attributed to predator avoidance during periods of relative brightness or darkness at night.

Ten Years at Kettle Creek: A Long Term Study of the Avian Community of Central Monroe County, Pennsylvania

Rebecca L Snyder[1], Darryl Speicher[2], Jackie Speicher[2], and John K. Leiser[1,2]
[1]Northampton Community College, Tannersville, PA 18372
[2]Pocono Avian Research Center, Cresco, PA 18326

The Kettle Creek Wildlife Sanctuary is a 166-ac (67.2 ha) preserve located in central Monroe County, Pennsylvania, that is managed by the Monroe County Conservation District. The property features a number of different habitat types, including old fields, mature deciduous, and evergreen stands, as well as two ponds connected by a small stream. For the last decade, the Pocono Avian Research Center has operated a MAPS banding station at Kettle Creek. Here, we report on the current structure of the avian community of the sanctuary and some of the changes that the community has undergone over the course of the past ten years, a time when surrounding areas have faced the increasing pressures of human development.



Purple Martins by George West