Net Committee:

Jerry Lahr reported that net sales are down and inventory is running low. We have lost our supplier and Ted Hicks is working on reaching an agreement with a new supplier. Gale Smith is stepping down as Net Committee Chair and Ted Hicks will be assuming that position.

NABC Delegate Report:

Anthony Hill reported that he attended the 2010 meeting in Tucson, Arizona.

ABSTRACTS FROM PAPERS DELIVERED AT EBBA'S ANNUAL MEETING 9-11 APRIL 2010

Results from Banding Royal and Sandwich Terns. - *John S. Weske*, Weske Associates, Sandy Spring, MD (e-mail: jsweske@juno.com)

As a result of the extensive banding of Royal Tern and Sandwich Tern chicks over many years, a substantial portion of the adult breeding population of North Carolina, Virgina, and Maryland is now banded. In some colonies, over 80% of nesting adults are marked. These known-age individuals provide a source of information on population age structure, survival, philopatry, age of first breeding, and age-related seasonal movements. For example, Royals delay breeding until at least the age of three and Sandwich Terns until at least age two. The terns are long-lived, however, and individuals in their late teens and early twenties are not unusual.

Why Leave Town? Banding Returns from Backyard Juncos to Nesting Canada Geese by the Mall - Dr. David Thorndill, Professor of Biology, The Community College of Baltimore County, Baltimore, MD. (e-mail: dthorndill@ccbcmd.edu) webpage:http:// faculty.ccbcmd.edu/~dthornd1/

Winter returns of Dark-eyed Juncos and Whitethroated Sparrows to a suburban Baltimore The next meeting will be in Oregon. He also reported that there will be a Raptor Conference in Colorado this year.

Adjourn:

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

> Respectfully Submitted, Gerald K. Lahr, Secretary

backyard are presented, along with estimated population sizes. Also, data from two years of observing thirty-five banded Canada Geese near ponds and parking lots of a suburban Baltimore shopping area will be presented. These geese were banded by the Maryland Wildlife Division, Department of Natural Resources, 100 miles away. One pair of geese had young in 2008 and 2009 and is still together for a third spring.

Trend Analysis for the Northern Saw-whet Owl in Maryland - *Melissa Boyle*, Park Manager at Hashawha Environmental Center, Westminster, MD.

Dunn and Hussell's methodology, "Instructions for Calculating Annual Population Indices and Trends from Daily Migration Counts" was used with thirteen to seventeen years of Maryland banding data to conduct a trend analysis for the Northern Saw-Whet Owl (Aegolius acadicus) population. No significant long-term population trends were evident using this method with the Maryland data. However, the three stations analyzed showed similar four year cyclical irruption patterns. While the effort values varied among stations, effort did not directly correspond to number of owls netted. The index value (mean number of birds per day in that season after adjustment for variable effort and missing days) was highest at the station with the lowest effort values. The migration window and middle date of migration showed variation based on location-the earliest migration time began at the western most station with the highest elevation.

Status and conservation of Northern Goshawks in the Central Appalachian Mountains: Has the population trend reversed since 2001? - David F. Brinker, Maryland Natural Heritage Program, Maryland Department of Natural Resources, Annapolis, MD (e-mail: dbrinkerdnr.state.md.us)

Prior to European settlement, Northern Goshawks (Accipiter gentilis) were regular components of the high elevation Appalachian breeding bird fauna, possibly as far south as the Great Smokey Mountains in North Carolina. As a result of extensive 19th century logging in the Appalachians, goshawks were extirpated from Maryland south by the beginning of the 20th century and greatly reduced in Pennsylvania and the northeastern US. During the late 20th century, the higher elevations of the central Appalachians were reoccupied gradually by breeding Northern Goshawks as the population increased throughout the northeast in response to improving habitat conditions. Satellite telemetry studies demonstrate that central Appalachian adult goshawks are permanent residents. Reproductive output from central Appalachian goshawks is correlated with autumn counts of dispersing juvenal and non-breeding sub-adult goshawks at Hawk Mountain and Waggoner's Gap. Counts of goshawks from 1991 through 2001 show a nonsignificant increase (P=0.32), but are consistent with observations of late 20th century breeding expansion southward. During 2001-2008, counts of dispersing goshawks show a nearly significant decline (P=-0.07). This coincides with loss of recent breeding pairs in Maryland and West Virginia and declines in Pennsylvania and New York (Breeding Bird Atlas data). This recent trend reversal may be the result of increased adult mortality from West Nile Virus and lower adult female survival rates (during the incubation and brooding periods) coupled with reduced nesting success rates from depredation by an expanding fisher (Martes pennanti) population. South of Pennsylvania, conifers appear to be important components of Northern Goshawk nesting habitat. Loss of eastern hemlock (Tsuga canadensis) to hemlock wooly adelgid (Adelges tsugae) would seriously impact goshawk nesting habitat in the

central and southern Appalachians, especially in the absence of any significant recovery of red spruce (*Picea rubens*) and white pine (*Pinus strobus*) dominated forest communities which were decimated by past logging. Restoration of native conifers in high elevation Appalachian forests is critical to the long-term recovery of Northern Goshawks in the central and southern Appalachians.

Habitat Associations and Nest Site Selection of Swamp Sparrows in Western Maryland - Kevin J. Oxenrider (e-mail: KoxenriderO@frostburg.edu) and Frank K. Ammer, Frostburg State University.

Wetland alteration in the northeastern US has had negative impacts on obligate wetland species in this region. The Swamp Sparrow (Melospiza georgiana) is distributed across the eastern United States and Canada and is considered a wetland specialist. Swamp Sparrows were studied on five study sites located in Garrett County, MD, to determine habitat associations, nest site selection, and reproductive success. Capture of adult Swamp Sparrows was conducted using mist nets and conspecific song playback. Processing of captured individuals included gathering basic physical information as gender, mass, age, wing chord, bill width, length and depth, tarsus length, and crown length and width. Gender and age of captured individuals were determined using plumage differences, physical measurements, and breeding characteristics. If gender was unable to be determined using morphological characteristics in the field, DNA gender analysis will be used to ascertain gender and age of captured individuals. All captured individuals were banded using a USGS band and auxiliary band for future identification. Swamp Sparrow nestlings were processed and banded six days prior to fledging. Nest searching was conducted using modified BBIRD (Breeding Biology Research and Monitoring Database) protocols. Nests were located by systematically searching each study plot. A Robel pole was used to calculate amount of biomass at nest sites. Vegetative characteristics were measured to fully assess the habitat being used by Swamp Sparrows. Nest measurements included

nest height (cm), nest substrate height (cm), nest width (cm) and depth of nest rim and cup (cm). A nest was considered successful if it fledged at least one offspring. Nest survival was assessed using the Mayfield method. Preliminary data collected during the 2009 field season found 21 failed Swamp Sparrow nests and 21 successful nests. Nest search effort for the 2009 field season across all study sites was 0.3 nests per hour. Preliminary analyses suggest that the overall average clutch size was 3.5 eggs per nest, with clutch size decreasing as the breeding season progressed. Data collection will continue in the 2010 season.

Creating PowerPoint Presentations of Your Banding Activities - *Ken Heselton*, EBBA's President (email: KHeselton@cs.com)

You have been asked to give a presentation by the local bird club, an elementary school teacher, or someone else interested in what you do. However, you may lack the confidence to present yourself before a group of people. Perhaps you have never done it before and do not know where to begin. It is not difficult to put on a program that looks professional, rehearsed, and it does not make you the center of attention so you can present comfortably. Using PowerPoint you can produce a presentation to do exactly that. Ken Heselton will demonstrate, with a couple of samples, how the use of PowerPoint can do all that. One sample on sawwhet owl banding actually runs itself. Ken will show you how to master PowerPoint to put together a presentation you will be proud to show and how to use other standard programs to enhance it.

First-year Survival is an Important Driver of Spatial Variation in Population Declines in Migratory Landbirds - Peter Pyle (D. F. DeSante, and J. F. Saracco), The Institute for Bird Populations, Point Reyes Station, CA

We used capture-mark-recapture models on 1992-2003 MAPS data to assess the importance of adult survival and recruitment in driving BCR-scale spatial variation in population trends (lambda), and constant-effort capture data to assess the importance of productivity and first-year survival in driving

spatial variation in recruitment for 27 species of Nearctic-Neotropical migratory landbirds. Recruitment tended to be more important than adult survival in driving spatial variation in trend for all but significantly increasing species, for which adult survival tended to be equally important. First-year survival, however, tended to be more important than productivity in driving recruitment for both significantly declining and significantly increasing species, while productivity tended to be more important than first-year survival for species with non-significant trends. These results suggest that enhancing first-year survival is important for slowing declines and stabilizing populations, enhancing productivity is important for maintaining stable populations, and enhancing both adult and first-year survival is important for recovering populations whose declines have been arrested. Because survival is likely ultimately driven by conditions on the wintering grounds, we conclude that identifying relationships between vital rates and both winter habitat and weather will be critical for assessing winter habitat quality which, in turn, will be crucial for reversing the declines of migratory landbirds and for formulating climatechange adaptation strategies for them. We provide several examples of such relationships from the MoSI Program.

Habitat Preferences of Over-wintering Birds in Restored Grasslands in The ManassasNational Battlefield Park, Virginia - James E. Garabedian and Frank K. Ammer, Department of Biology, Frostburg State University, Frostburg, MD, and J. Edward Gates, Appalachian Laboratory, University of Maryland Center for Environmental Science, Frostburg, MD.

Native grasslands represent the largest vegetation type in North America, historically covering approximately 162 million ha of the continent before European agriculture began. Since 1830, the original 162 million ha of native grasslands in North America have experienced declines ranging from 75% - 99.9%, affecting many faunal species that rely on these habitats. In the United States, grassland bird species have shown steeper, more consistent and more geographically widespread population declines than any other avian guild. Grassland bird species may be limited primarily by events affecting survival during the non-breeding season. Much of the attention on grassland bird research has focused on breeding habitat, leaving the wintering habitat requirements and ecology poorly documented.

Warm-season grass (WSG) fields have been reported as beneficial for over-wintering birds when compared to cool-season grass (CSG) fields. The structure of a WSG field has been reported to provide the critical benefits of structure, cover and mobility. Due to the importance of adequate wintering habitat for grassland birds in North America, habitat restoration is often the key to the conservation of grassland ecosystems. The purpose of this study is to determine habitat associations of wintering grassland birds using restored grasslands in the mid-Atlantic region, specifically The Manassas National Battlefield Park.

Avian abundance survey data revealed higher species richness, diversity, and evenness indices in WSG compared to CSG fields. Avian communities in WSG and CSG fields were considered statistically similar. Warm-season grass fields had significantly higher avian abundances during the 2008-2009 winter season while CSG fields had significantly higher avian abundances during the 2009-2010 winter season. However, CSG fields had significantly higher avian abundances using pooled data from both winter seasons. Preliminary vegetation survey data revealed various variables from the 2008-2009 winter season to be significantly different between WSG and CSG fields. Warm-season and CSG fields were considered statistically different, however, with moderate overlap in vegetation characteristics.

Habitat Selection and Reproductive Success of Grassland Birds in Western Maryland - Marie V. Brady and Frank K. Ammer, Frostburg State University, Department of Biology (e-mail: Mvbrady0@frostburg.edu)

Grassland birds in North America have experienced significant population declines, particularly east of the Great Plains. In western Maryland, surface coal mines are often reclaimed as grasslands, which may

provide suitable breeding habitat and be of ecological significance to declining grassland bird populations. Four reclaimed mine grasslands and two non-mined areas were surveyed during the summers of 2008 and 2009. A total of 411 birds of seven species were color-banded and 73 nests were found. The majority of nests found belonged to Grasshopper Sparrows (n=45). Grasshopper Sparrows had Mayfield nest survival estimates of 45.1%. Mined grasslands had more obligate grassland species, higher capture rates of adult breeding birds, and more nests found than nonmined grasslands. Grasshopper Sparrows, compared to other species, had a higher number of eggs laid and number of fledged offspring. Vegetation surrounding nest sites had, on average, less green cover and more bare ground than did available habitat in both mined and non-mined areas. Multivariate analysis shows spatial separation of non-mined habitat from the reclaimed mine habitat. Results indicate that grasslands in western Maryland, particularly reclaimed mine grasslands, are important breeding habitats for a variety of grassland obligate species.



Savannah Sparrow by George West