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Send all manuscripts and related correspondence to the Editors. Information for "Seasonal Field Notes" should be sent to the Bird Reports Coordinator (see inside back cover). Art work and questions about the art should be sent to the Assistant Editor for art (see left column). Manuscripts that deal with Wisconsin birds, ornithological topics of interest to WSO members, and WSO activities are considered for publication. For detailed submission guidelines, see pages 131–132 of the Summer 2007 issue (Vol. 69, No. 2) or contact the Editors. As a general guide to style, use issues after Vol. 60, No. 1, 1998.

Front Cover: Pileated Woodpecker family observed by Dennis Malueg.

Bird Reporting via eBird

In the world of bird observation, one of the most exciting and dynamic uses of computer technology, facilitated by the interconnectivity of the Internet, is **eBird**. This data-collection website and program were launched by Cornell University and The National Audubon Society during 2002, and it enables bird observers everywhere to contribute to a huge database of sightings.

In brief, eBird provides birders with the opportunity to submit online checklists from their birding activities—initially from anywhere in the United States or Canada, then later from all of North or South America, and as of July 2010, from anywhere in the World!

Some of the benefits of eBird:

- Enables one to track and organize their personal bird lists—whether for a local area, county, state, country, or even a worldwide total.
- Provides individuals with the opportunity to contribute information to a massive database.
- Offers individuals or researchers the capability of generating occurrence charts for any species or locations.
- Allows one to generate range maps for any bird, by date range or within a geographical area.
- Enables one to easily create bar charts—perhaps for areas you intend to visit—so you might have a good idea what has been seen, whether it be statewide, by county, or even by local hotspot.
- Offers news articles regarding updates of eBird capabilities, or suggestions for more efficient utilization of eBird tools.

Although some Wisconsin birders were already utilizing eBird from the national website prior to 2007, it was in January of that year that we launched our own Wisconsin eBird portal, and the numbers of Wisconsin contributors really started to grow. Having our own portal enables us to provide articles or information that are more specifically aimed toward Wisconsin users, and also provides easy access to photos of recent Wisconsin rarities.

One of the real benefits of eBird for WSO has been their willingness to provide spreadsheets of data from reports received during each individual season. These can greatly simplify the analysis process for our seasonal editors, by providing the vast majority of the electronic data in a single computerized page that can be manipulated as desired for analysis.

By using eBird checklists to record their birding activities, Wisconsin observers no longer have to go through the extra work of compiling and submitting paper reports to WSO. For eBird users, this is all done automatically with the assistance of the eBird technology! This has resulted in a remarkable changeover, and also a great increase in seasonal reporting to WSO, with the

vast majority of reports now coming in electronically via eBird, compared to a steadily falling number of paper reports.

To help to illustrate this change in bird reporting, here are a few statistics: For the spring of 2006, there were 82 persons who sent paper reports to WSO. That number steadily declined to the spring 2010 summary, for which there were just 16 persons sending written reports. In comparison to that, in the spring of 2006 there were zero eBird reports used for the Wisconsin summary, whereas for the spring of 2009 WSO report there were "over 400 observers" who had submitted sightings via eBird.

You can readily agree that this change in bird reporting has occurred very quickly, due to the use of eBird data by our seasonal editors. As a result, the WSO board voted at our January 2011 meeting to provide funding to help sponsor the Wisconsin eBird website—for at least the next five years. I sincerely hope that all of you who observe birds will consider entering your checklists into eBird. It's very easy to do, and you can be assured that your sightings will contribute to the huge database of eBird records.

The Wisconsin eBird portal can be found at: http://ebird.org/content/ebird/wi/

I sincerely wish that eBird had been around when I started birding many years ago!

President

Some Thanks and Some Introductions

In the Spring 2011 issue of *The Passenger Pigeon*, you saw a new name under Assistant Editor (Art)—Dennis Malueg. In fact the art in that issue was put together by both the retiring Art Editor, David Kuecherer, and the new Art Editor, Dennis.

Neil and I inherited David as the Art Editor when we took over as Pigeon Editors from Tod Highsmith. Everyone should get such a wonderful inheritance. David has been a joy to work with and the fact that he lived nearby and attended the Oshkosh Bird Club, as I do, made it all even easier. In November 2010, David and his wife Joyce decided it was time to move closer to their daughter and grandchildren in Michigan. After due consideration, he also decided it was time to retire from his Pigeon work. While it is always difficult to give up an excellent assistant, we do understand why it was necessary. Please join your Editors in thanking David for his years of service to *The Passenger Pigeon* and WSO.

In the traditional WSO manner, Dennis Malueg stepped forward quickly to volunteer for the Art Editor position, and he and David worked together on the art for the Spring 2011 issue. Dennis' photography has appeared on Pigeon pages numerous times and if you have read the About the Artists page, you know he lives near Fremont and uses all of Wisconsin as his studio, but especially his farm in Waushara County. Please help make Dennis' work easier by contributing either your original art or wonderful photographs for use in the Pigeon.

Two more changes in WSO personnel have occurred since the Spring issue of the Pigeon. Margaret Jones, Bookstore Manager, is moving from Wisconsin to Oregon. Margaret has done an excellent job of managing the Bookstore during her fairly short tenture and was a pleasure to have serving on the WSO Board. She will be missed. And in the WSO tradition, Penny Fish has agreed to be the new manager of the Bookstore. You may know Penny through her work on the Convention Committee. You will find her contact information on the inside back cover of this issue of the Pigeon.

The second change in personnel occurred with the Bird Reports Coordinator. While he will continue as the Summer Field Note Compiler, Randy Hoffman has decided to retire as the Bird Reports Coordinator. Doing both those jobs at the same time has been above and beyond the usual committment one gives to WSO and we really appreciate all the time and energy Randy has devoted to both these tasks. Thank you for doing double duty, Randy.

We are pleased to welcome Joe Schaufenbuel as the new Bird Reports Coordinator. Joe grew up in Iowa and began keeping his records of birds in 1969 and while he was a teenager was fortunate to come under the wings of several great Iowa birders and banders, experiencing hawk-banding, mist-netting, and

winter raptor surveying. After acquiring a BS in Fisheries and Wildlife Biology at Iowa State University in 1984, Joe worked as a two-man team on a two-year statewide Breeding Bird Survey for Iowa. His wife's career brought them to Stevens Point in 1992, where Joe went into Real Estate sales and then to work for the Roundy's Coorporation in Stevens Point. He is a life member of the Iowa Ornithologists' Union and has served on the Iowa Records Committee. Your documentations of birds in Wisconsin should now be sent to Joe in Stevens Point. Please note his contact information on the inside front cover of this issue of the Pigeon.

So changes continue, but the work of WSO keeps moving along. We find members' cooperation and willingness to help our Society very encouraging and positive. This attitude has a long tradition and we believe it will last well into the future.

Bettie and Neil Harriman, Editors

Pied-billed Grebe by Judith Huf

The Wisconsin Greater Prairie-Chicken Program: Integrating Research, Management, and Community Outreach in the 21st Century

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The Greater Prairie-Chicken (GP-C; *Tympanuchus cupido pinnatus*;) is one of Wisconsin's most well-studied birds. Notable Wisconsin ornithologists and conservationists like Aldo Leopold, A. Schorger, Wallace Grange, and Fred and Fran Hamerstrom have contributed to our understanding of the life history of this bird since the turn of the 20th century (Leopold 1931, Schorger 1944, Grange 1948, Hamerstrom and Hamerstrom 1973). In Wisconsin, GP-Cs have lived a tumultuous existence in which they experienced significant range expansion and contraction (Warnke 2004), genetic bottlenecks (Bellinger et al. 2003), habitat loss and sustained population declines (Kardash 2010).

The objective of this paper is to de-

scribe the research, management, and outreach activities by the Wisconsin Department of Natural Resources, the Central Wisconsin Grassland Conservation Area Partnership and other partners in preserving and restoring the GP-C in Wisconsin. We will illustrate the integrated and cooperative approach taken in the last decade to achieve conservation success for this species, as well as describe the challenges and obstacles that need to be overcome to have continued conservation success for GP-C into the 21st century and beyond.

Recent History and Population Status

Prior to European settlement, GP-C occupied native prairie habitat in the southern and western third of Wisconsin. As their original range of prairie and oak openings was converted to agricultural production and prairie-chicken numbers began to drop, areas further north in the state were being logged, burned, and farmed, allowing prairie-chickens to expand their range northward (Anderson and Toepfer 1999, Sample and Mossman 2008). At the turn of the 20th century, prairie-chickens occupied every county in the state (Keir 1999). Thirty years later, prairie-chickens were restricted to the central part of Wisconsin as tree planting, agriculture, fire suppression, and plant succession significantly reduced their habitat in northern and southern Wisconsin (Keir 1999, Toepfer 2003).

Currently, the GP-C is listed as a Species of Greatest Conservation Need in Wisconsin and is a state-threatened species. It presently exists as a relatively small statewide population (<1500 individuals) separated into four nearly isolated populations due to habitat loss and habitat fragmentation (Warnke 2004).

GP-C populations have continued to show tremendous fluctuations over the last 30 years based on annual booming ground surveys (Fig. 1, Kardash 2010). In 2010 alone there was a 21% decrease in the number of male GP-C counted on booming grounds in central Wisconsin compared to 2009. This follows a 16% population decrease between the spring of 2008 and 2009, making 2010 and 2009 the lowest counts since the range-wide survey was implemented in 1989. Severe drought conditions in 2009 and 2010 resulted in very poor habitat conditions for nesting GP-C at Buena Vista (Greg Dahl, WDNR, personal communication). In addition, there are signs of continued range contraction, especially in the northern portion of the current range. The 2010 survey was the first year since 1989 that no males were detected in outlying areas during booming ground counts.

Management Plan Implementation

To address continued population declines and range contractions, the statewide GP-C Management Plan was revised in 2004 and approved by the Natural Resources Board of the Wisconsin Department of Natural Resources (WDNR). The goal of the revised management plan (Warnke 2004) and the Wisconsin GP-C Program is to "Maintain a viable population of GP-C in Wisconsin." More specifically, the 10-year plan goals are

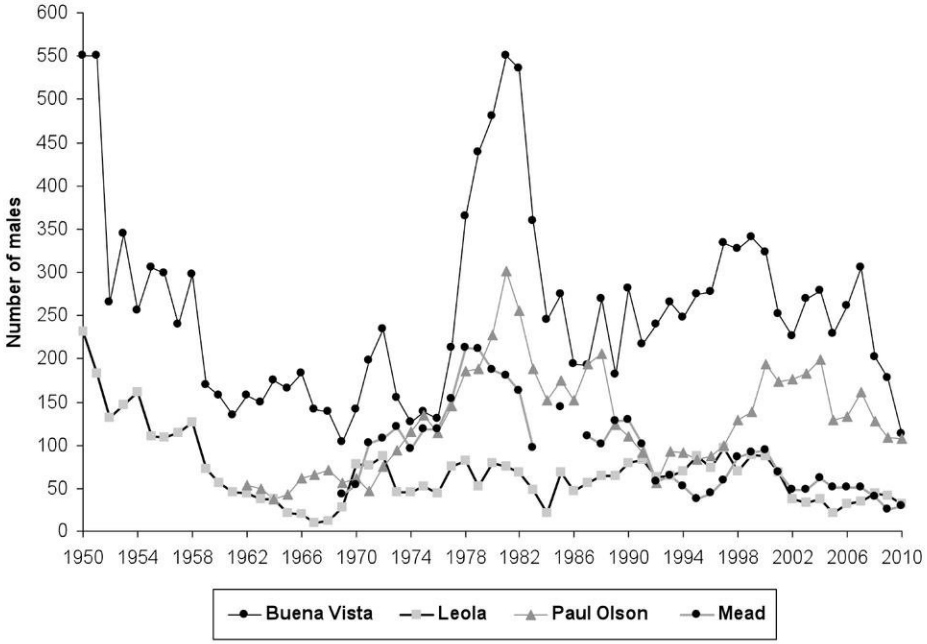

Figure 1. The number* of Greater Prairie-Chicken cocks counted on booming grounds on the four major wildlife areas in Central Wisconsin, 1950–2010**.

* Mean count reported since 2007, mean may not have been reported in prior years.
** We caution against the use of these data for any reason other than a population index. Great variation likely exists in data throughout this period as a result of variation in protocol techniques and observers.

to: 1) restore, monitor, and maintain genetic diversity within Wisconsin's GP-C population; 2) reconnect core areas by creating and maintaining smaller stepping stone grasslands strategically placed to facilitate GP-C dispersal; 3) increase and improve GP-C habitat on and between core areas to support approximately 90 booming grounds distributed throughout the GP-C range; 4) help maintain and promote GP-C habitat within a predominantly agricultural landscape; 5) continue management on current GP-C management areas; 6) establish and grow partnerships for grasslands and grassland wildlife; 7) raise public awareness for grasslands and GP-C conservation; 8) continue to evaluate potential sites for selection as GP-C translocation areas and; 9) develop, identify, and define GP-C population recovery parameters.

One of the key initiatives in meeting the plan goals was creation of the Central Wisconsin Grassland Conservation Area (CWGCA) in 2004. The CWGCA stretches from southeastern Taylor County, through portions of Clark and Marathon Counties, continuing into Wood and Portage Counties between Stevens Point and Wisconsin Rapids, and south to northeastern Adams County. The area includes

Leola Marsh Wildlife Area, Buena Vista Marsh Wildlife Area, Paul J. Olson Wildlife Area, and George W. Mead Wildlife Area. Within the CWGCA project boundary, the management plan calls for protecting, primarily through acquisition, easements, and private land conservation programs, up to 15,000 acres of additional grassland habitat. The primary goal of the CWGCA is to improve the existing protected lands' ability to harbor viable populations of grassland-dependent species, particularly the GP-C. To achieve this goal, the CWGCA's primary objectives are to establish permanent grassland habitat (primarily focused on lands within one mile of active, or recently active, GP-C booming grounds), and maintain a predominantly open, non-forested, undeveloped landscape where row crop agriculture and grazing are the dominant land uses, particularly in areas critical to the life history needs of grassland species. A secondary goal of the project is to provide a limited amount of low-impact recreational opportunities, primarily wildlife watching and hunting.

In early 2005, agriculture and conservation organizations around the state formed the CWCGA Partnership using the physical boundaries of the CWGCA established in 2004 as the basis for its framework and goals. This partnership is responsible for implementation and outreach components of the Wisconsin Greater Prairie-Chicken Program and is being coordinated by the Golden Sands Resource Conservation and Development Council. The over-arching goals of the CWGCA Partnership are to: 1) increase acres of permanent grassland for wildlife; 2) maintain an open, undeveloped landscape where farming is the major land use; 3) provide information to landowners about local, state, and federal programs that promote grassland conservation; 4) improve communication and cooperation between agriculture and conservation organizations within the project area and; 5) develop educational opportunities for landowners and students to appreciate the GP-C and other grassland species. As of 2011, over 50 different organizations and more than 600 individuals have voluntarily contributed to this partnership, bringing in over $400,000 in grants to support implementation of the Wisconsin Greater Prairie-Chicken Program.

Research Initiatives

Translocation—

Wisconsin's GP-C population experienced a bottleneck in the 1950s, ultimately resulting in decreased genetic variation in contemporary populations (Bellinger et al. 2003). The current isolation of sub-populations has resulted in further genetic degradation and significant genetic differentiation among those populations. A national genetics panel (Bouzat et al. 2005a, b) concluded that this reduction in genetic diversity poses a significant threat to the sustainability of Wisconsin GP-C. Bouzat et al. (2005a) also concluded that interstate translocations are necessary for long-term persistence of GP-C in Wisconsin and should occur for at least three consecutive years beginning no later than 2006. Toepfer (2003) also pointed to the lack of genetic diversity in the Wis-

consin GP-C population and stressed the need for interstate translocations to diversify the gene pool.

In 2006 a cooperative effort among WDNR, University of Wisconsin-Madison, University of Wisconsin-Milwaukee, University of North Dakota-Fargo, University of Minnesota-Crookston, and the Minnesota Department of Natural Resources was initiated to translocate 120 hens from western Minnesota for release at the Buena Vista Wildlife area in Wisconsin following the summer translocation protocol developed by John Toepfer. Over the course of four years (2006–2009), 110 hens were released in Wisconsin. The Society for Tympanuchus Cupido Pinnatus completed the first year of trapping and translocation in 2006, with WDNR completing translocations from 2007–2009.

Each of the released hens was fitted with a radio-transmitter to monitor survival, movements, and nest productivity. The released birds were compared to a control population of Wisconsin hens, also radioed, from the Buena Vista population. A subsample of chicks hatched from the Minnesota and Wisconsin hens was fitted with transmitters as well, to track their survival and possible subsequent entry into the breeding population at Buena Vista.

Minnesota hens made 74 nesting attempts from 2007–2009 and hatched over 315 eggs. A total of 60 chicks produced by Minnesota hens and their offspring was radio-collared during the course of the study. An additional 22 chicks escaped capture during that same time period.

Preliminary results showed that the nest success of translocated Minnesota hens was similar to that of Wisconsin hens with annual variations (33–60%). Nest success was similar to the range in nest success (35–65%) found in other studies from Wisconsin and the Great Plains (summarized in Bouzat et al. 2005b, but see Keenlance 1998, Newell 1987, Newell et al. 1988, Toepfer 2003). However, survival of the radio-marked chicks was low, suggesting that brood survival may be a limiting factor at the Buena Vista Wildlife Area. Final results of this study will be complete in early 2012 and will include a more detailed analysis of survival, nest success, and brood survival of translocated Minnesota and native Wisconsin hens as well as any changes in genetic diversity within the GP-C population.

The evaluation of the translocation is still underway. In the spring/summer of 2011 we will be conducting a population-wide genetic assessment of the population at the Buena Vista Wildlife Area. This will include trapping to collect blood samples for genetic material, as well as collecting genetic material from tissue from dead birds, feathers left on booming grounds, and eggshells from hatched or abandoned nests. All genetic samples will be sent to UW-Milwaukee for analysis. Results of the genetic assessment will be available in early 2012. Despite lower than expected survival of radio-marked chicks, not all chicks were captured during the course of the study. Therefore we are optimistic that a number of unmarked chicks produced by Minnesota hens entered into the breeding population and contributed genes to the Buena Vista population. Our 2011 population-wide genetic assessment will confirm or refute our suspicions.

Climate Change Impacts—

The Wisconsin Initiative on Climate Change Impacts report (2011) predicts that Wisconsin's warming trend will continue and likely increase in the decades ahead. Wisconsin could see average temperatures increase by 6–7°F by mid-21st century. In addition, the WICCI report predicts that we are likely to experience more summer days exceeding 90°F and a greater number of large storm events. These climate changes could have profound effects on wildlife populations and GP-Cs in particular. For example, some studies of Lesser Prairie-Chicken, (*Tympanuchus pallidicinctus*) have found that birds select microhabitats for nesting and brood-rearing in areas that are cooler, more humid, and with less wind exposure (higher shrub and grass cover and higher density of vegetation) than random sites within fields (Patten et al. 2005). Although temperature and humidity are recognized as key factors influencing the behavior, reproduction, and survival of birds, most studies rarely consider how vegetation influences these values. Vegetation is likely an important component of thermoregulation for prairie grouse, especially in the early brood-rearing period.

In 2010 WDNR initiated a study in collaboration with the University of Missouri to assess how cover type, vegetation density, and vegetation height affect temperature and humidity in the breeding season. The goal is to understand how vegetation mediates the stress of high temperature days during critical nesting and brood rearing periods. This will allow us to determine potential impacts of future climate change on GP-C populations and to develop adaptation strategies for potential climate stressors. For example, certain microhabitat features (e.g., grass density) may mediate climate stressors better than others. A future habitat management strategy may then be designed to favor certain vegetative characteristics (e.g., grass density and height) that mediate these climate stressors. To answer these questions, we placed 30 temperature and humidity loggers across a range of vegetation types and nest site locations at each of two study sites in Wisconsin and Missouri during 2010. This work is ongoing and results are expected in late 2011.

Land Acquisition and Private Land Conservation

Since the creation of the CWGCA and the CWGCA Partnership in 2004 and 2005 the WDNR has acquired over 2,800 acres of land through the Knowles-Nelson Stewardship Program and other grants at a total cost of $5.3 million. The largest purchase, nearly 900 acres, was obtained in 2010 within the Buena Vista Wildlife Area. These lands are now protected in perpetuity for the benefit of GP-C and other grassland-dependent wildlife in the CWGCA boundary, and provide hunting and other recreational opportunities for Wisconsin citizens.

The intent of the CWGCA and associated Partnership is to use a combination of land acquisition, conservation easements, and private land conservation programs to protect and restore additional grassland habitat. Successful grassland habitat conservation within the CWGCA requires coopera-

tion and coordination among a number of entities, including private landowners. The CWGCA partnership has been working with a number of CWGCA partners such as the United States Department of Agriculture's Farm Service Agency and Natural Resources Conservation Service to deliver and implement a variety of voluntary private land conservation programs that are beneficial to GP-C and other grassland-dependent wildlife in central Wisconsin. These programs include the Grassland Reserve Program, Wildlife Habitat Incentive Program, Wetlands Reserve Program, State Acres for Wildlife Enhancement, and the Conservation Reserve Enhancement Program. Together they have helped protect and restore thousands of acres of critical grassland habitat in central Wisconsin. The Grassland Reserve Program, in particular, is very well suited to GP-C in central Wisconsin. The program preserves and restores working grazing operations while enhancing plant and wildlife resources through conservation easements. In 2009 alone, 350 acres adjacent to the Buena Vista Wildlife Area were permanently enrolled in the Grassland Reserve Program, adding potential important habitat for Greater Prairie-Chickens.

In addition, the United States Fish and Wildlife Service's Partners for Wildlife program has been active within the CWGCA boundary, implementing key private land programs such as tree line and woodlot removal. This work has connected fragmented parcels of core grassland habitat within the Buena Vista Wildlife Area boundary, making the current grassland tracts more suitable to GP-C.

Community Outreach

Prairie Chicken Festival—

The CWGCA partnership launched the Prairie Chicken Festival in 2006. The goals of the festival are to provide; 1) a historical perspective on GP-C, 2) opportunities to observe GP-C and other grassland species, 3) educational experiences for all ages, 4) a forum to explain federal, state and county programs that enhance grasslands, and 5) information on the benefits of rotational grazing and other conservation practices for farmers and other dedicated private landowners. To date the festival has attracted over 500 visitors each year from across the country and has provided booming ground observation opportunities for over 150 individuals each year. The festival and associated tourism have spawned considerable interest from individual landowners and local businesses. For example, some local landowners have now begun to providing booming ground observation opportunities on their properties as part of the festival.

Landowner Survey—

While the GP-C festival has raised the overall awareness of GP-C in central Wisconsin, more specific information about landowner interest in prairie-chickens and their level of willingness to participate in programs designed to benefit GP-C is needed. In 2009, the Department of Forestry and Wildlife Ecology at the University of Wisconsin-Madison initiated an extensive and voluntary private landowner survey within the CWGCA. This survey builds on previous landowner contacts made by the CWGCA partnership and is designed to learn more specifically,

what may motivate landowners to become more engaged in GP-C conservation. The survey research project is expected to be completed in late 2011. Preliminary results have identified several landowners who have voluntarily expressed interest in selling their land to conservation organizations and others who are willing to participate in government sponsored private land conservation programs. Overall, survey respondents support the idea of preserving and managing large areas of open grassland, and about one-third of respondents have created or maintained grassland on their property.

Future Outlook

The Wisconsin Greater Prairie-Chicken Program has made tremendous progress and completed numerous objectives over the last decade. The creation of the Central Wisconsin Grassland Conservation Area Partnership is a shining example of conservation organizations and individuals coming together for a common goal. However, despite these new partnerships, over $5 million in land purchases, and multiple research endeavors, many challenges remain to ensure that a viable population of GP-C exists in Wisconsin.

By far the biggest challenges to GP-C and their habitats in central Wisconsin is continued habitat loss and land-use change. A changing farm economy has meant the loss of dairy farms in parts of the GP-C range, resulting in the fragmentation of land into smaller parcels with dwellings for recreational and other landowners. Aided by drought, invasive plants such as spotted knapweed have rapidly taken hold in parts of Buena Vista, significantly reducing habitat quality for GP-C. Continued forest succession has resulted in a significant increase in the amount of wooded cover in the GP-C range in the state. Irrigated vegetable and row crop agriculture, which requires substantial investment, is increasing in central Wisconsin. In addition, the demand for lands for cranberry production is at an all time high. All of these factors contribute to population and genetic diversity declines.

While translocation may address an immediate problem with genetic diversity, it is not a long-term solution. More work is needed to protect and restore enough habitat of sufficient quality for GP-C in central Wisconsin. As of now, the answer to the question: How much grassland habitat is enough to sustain GP-C over the long-term for an isolated population such as exists in Wisconsin, is unknown. Whatever the answer, accomplishing sufficient grassland conservation for sustaining the GP-C population in Wisconsin will involve a number of factors, including grassland-promoting agricultural policies and programs, extensive public support, and the commitment of substantial financial resources

It is very clear that the CWGCA Partnership must continue to grow in order to address current and future challenges, such as grassland conservation and climate change. A strong partnership that integrates land protection, management, research, and outreach, is critical for the Wisconsin Greater Prairie-Chicken Program to be successful.

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LITERATURE CITED

Anderson, R. K., and J. E. Toepfer. 1999. History, status, and management of the Greater Prairie-Chicken in Wisconsin. Pages 39–58 *in* W. D. Svedarsky, R. H. Hier, and N. J. Silvy, editors. The Greater Prairie-Chicken: a national outlook. Minnesota Agricultural Experiment Station, St. Paul, Minnesota, USA

Bellinger, M. R., J. A. Johnson, J. Toepfer, and P. Dunn. 2003. Loss of genetic variation in Greater Prairie-Chickens following a population bottleneck in Wisconsin, U.S.A. Conservation Biology 17: 717–724.

Bouzat, J., L., P. Dunn, S. Haig, J. A. Johnson, S. Oyler-McCance, B. L. Sloss, and B. J. Swanson. 2005a. Conservation Genetics Plan For The Management And Recovery Of Greater Prairie-Chickens In Wisconsin. Unpublished report.

Bouzat, J., L., P. Dunn, S. Haig, J. A. Johnson, S. Oyler-McCance, B. L. Sloss, and B. J. Swanson. 2005b. Addendum to Conservation Genetics Plan For The Management And Recovery Of Greater Prairie-Chickens In Wisconsin. Unpublished report.

Grange, W. B. 1948. Wisconsin grouse problems. Wisconsin Conservation Department, Madison, Wisconsin.

Hamerstrom, F. and F. N. Hamerstrom. 1973. The prairie chicken in Wisconsin: highlights of a 22-year study of counts, behavior, movements, turnover, and habitat. Wisconsin Department of Natural Resources Technical Bulletin 64.

Kardash, L. 2010. Central Wisconsin Greater Prairie-Chicken survey. Wisconsin Department of Natural Resources, Madison, Wisconsin.

Keenlance, P. W. 1998. Reproductive ecology of Greater Prairie-Chickens in central Wisconsin. Thesis. University Wisconsin, Stevens Point, Wisconsin, USA.

Keir, J. R. 1999. Wisconsin prairie chicken management: an agency perspective. Pages 59–62 *in* W. D. Svedarsky, R. H. Hier, and N. J. Silvy, editors. The Greater Prairie-Chicken: a national outlook. Minnesota Agricultural Experiment Station, St. Paul, Minnesota, USA

Leopold, A. 1931. Report on a game survey of the north-central states. Sporting Arms and Ammunition Manufacturer's Institute, Madison, Wisconsin.

Newell, J. A. 1987. Nesting and brood rearing ecology of the Greater Prairie-Chicken in the Sheyenne National Grasslands, North Dakota. Thesis. Montana State University, Bozeman. USA.

Newell, J. A., J. E. Toepfer, and R. L. Eng. 1988. Nesting and brood-rearing ecology of the Greater Prairie-Chicken in the Sheyenne National Grasslands, North Dakota. Rocky Mountain Forest and Range Experiment Station, U.S. Forest Service and Fish and Wildlife Program, Montana State University Agreement No. 28-C2-04.

Patten, M. A., D. H. Wolfe, E. Shochat, and S. K. Sherrod. 2005. Effects of microhabitat and microclimate selection on adult survivorship of the Lesser Prairie-Chicken. Journal of Wildlife Management 69(3): 1270–1278.

Sample. D. W. and M. J. Mossman. 2008. Two centuries of change in grassland bird populations and their habitats in Wisconsin. Pp. 301–329 *in* D.M. Waller and T.P. Rooney editors. The vanishing present: Wisconsin's changing lands, waters, and wildlife. The University of Chicago Press, Chicago.

Schorger, A. W. 1944. The prairie chicken and Sharp-tailed Grouse in early Wisconsin. Transactions of Wisconsin Academy of Science, Arts and Letters. 35:1–59.

Toepfer, J. E. 2003. Prairie chickens and grass-

lands: 2000 and beyond. Society of Tympanuchus Cupido Pinnatus, Ltd., Elm Grove, Wisconsin, USA.
Warnke, K. 2004. Wisconsin Greater Prairie-Chicken Management Plan 2004–2014. Wisconsin Department of Natural Resources.
Wisconsin Initiative on Climate Change Impacts. 2011. Wisconsin's Changing Climate: Impacts and Adaptation. Nelson Institute for Environmental Studies, University of Wisconsin-Madison, and the Wisconsin Department of Natural Resources, Madison, Wisconsin.

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Sharon Fandel received a dual B.S. degree in Wildlife Management and Biology from UW-Stevens Point and a M.S. in Ecology from UC-Davis where she researched Western and Clark's Grebes and their response to human disturbance at nesting colonies. Her first summers afield were spent in Utah, where she surveyed for Northern Goshawks and worked on stream delineation surveys for threatened Bonneville cutthroat trout in USFS managed grazing areas and designated wilderness areas. She has also worked with both the USFS and USFWS on long-term studies on Northern Goshawks, Swainson's Hawks, and Spotted Owls in the Klamath Mountains of Northern California. Most recently, she returned to Wisconsin and has spent the last four years with WDNR's Upland Wildlife Program, working on both statewide and national issues related to various upland game and non-game species.

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Sharon Schwab received a B.S. in Wildlife Management and Biology, and a M.S. in Natural Resources from UW-Stevens Point. She has coordinated the Central Wisconsin Grassland Conservation Area Partnership and the Central Wisconsin Prairie-Chicken Festival for the past 5 years. Prior to her current position she worked for various federal, state, and local conservation departments, currently volunteers for both civic and conservation NGOs, and serves as chairperson on a local town board in Portage County.

Barred Owl photographed by Ryan Brady

He Nailed It!

Anita A. Carpenter

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A diminutive House Wren arrived in my yard the last week of April 2010. Early one morning, his bubbly song announced his welcome return. Over the next several days, he checked out the wren house and Tree Swallow box. He finally chose the swallow box. He was here to stay.

April slipped into May. He'd sit atop the Tree Swallow box or in the nearby lilac and sing and sing and sing. When not singing, he was an industrious little fellow, busily carrying nesting material to the swallow box and none to the wren house.

One day, another wren appeared. She investigated the wren house. He was by her side singing as proudly as could be. She ignored him and the Tree Swallow box. She lingered briefly and flew on.

May drifted into June. Still no sign of nesting behavior. He sang and sang. He continued to pack the swallow box with sticks. But, alas, he was destined to be a bachelor.

Summer sped by. This perky little bird had spent most of every day in my yard. Then one day he was gone, taking with him his uplifting music. No little House Wrens fledged.

Several weeks passed and I finally got around to checking and cleaning out the box. I opened the side to find the next box completely full (Fig. 1), but it was the presence of roofing nails that surprised me. Yes, roofing nails that were sticking out at all angles. That's when I decided to carefully take apart the nest and discover what he had collected.

Figure 1. When Anita Carpenter opened the House Wren box in the fall of 2010 to clean it, she discovered that the wren had taken advantage of the re-roofing of a human house in the neighborhood to include some roofing nails in its nest building.

The eight-inch high base of sticks and nails was firmly packed in the house. Atop the base was a soft cup nest lined with fine grasses. The base consisted of 828 sticks. Most were 3 mm in diameter, two to five inches long with the majority being in the two to three inch range. Many sticks had multiple branches, yet somehow he managed to get them through the entrance hole. Included in the total stick number were many slender, pliable pine branch ends with no needles attached.

In his quest for sticks, he had also picked up eight, two-inch roofing nails and ten 1½ inch roofing nails (a neighbor two doors away roofed his house this spring). He also picked up parts of 8 roofing nails with 5 being just nail heads. Eleven 1¼ inch siding nails also found their way into the nest.

But this was not all. He also scrounged one poptop from a soda can, a cigarette butt, 2 cellophane wrappers, one straw paper wrapper, and six small feathers (three were cardinal). All were neatly stuffed into the mass of sticks.

Just imagine how many trips this little bird made to construct the nest. At no time were two birds seen together or any evidence of feeding behavior. Perhaps this was just a dummy nest but this little fellow spent almost his entire time around the nest box. He sang incessantly but what beautiful music. I look forward to the summer of 2011.

Anita A. Carpenter is a naturalist, writer, photographer, quilter, and pharmacist who has spent most of her life in Oshkosh, Wisconsin. She has a BS in Pharmacy from UW-Madison and a MS in Biology from UW-Oshkosh. Her love and enjoyment of the natural world have led her to write about it in the Wisconsin Natural Resources magazine and for Winnebago Audubon Society, and to give many slide presentations, particularly of birds and butterflies. She also enjoys spending time in nature on her travels and this has led to the creation of quilts in her own designs to share her views of the natural world with others. You may find her anywhere in Wisconsin, even her own yard, examining any aspect of the natural world and then sharing what she learns through her writing, photos, and quilts.

Wisconsin Big Day Counts: 2010

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Only three Big Day reports were submitted in 2010, which is a significant decline from previous years. All reports were submitted by one individual during the month of May. A total of 211 species was tallied in 997 miles of driving and 6 miles of walking. Seventy-two species were seen on only one route; 77 species were recorded on all routes.

The Counts

Daryl Tessen, *151 species*, 12 May, Bay Beach Sanctuary, Schumacher Rd. ponds, B pond, Schumacher Rd pond, CTY DM/I ponds, Goose Pond, CTY DM/Harvey Rd. ponds, Horicon Marsh.

Highlights: Daryl tallied the highest number of warbler species (18) on this route, including seven species that were not observed on other counts: Golden-winged, Tennessee, Orange-crowned, Cape May, Bay-breasted, Black-and-white, and Northern Waterthrush. This route also produced the highest number of shorebirds (21), including six species not observed on other routes: Black-bellied Plover, Hudsonian Godwit, Marbled Godwit, White-rumped Sandpiper, Long-billed Dowitcher, and Red-necked Phalarope. Daryl recorded all four of the expected tern species (Caspian, Common, Black, Forster's) as well as six species of thrushes. Other noteworthy species included Northern Mockingbird, American Black Duck, Peregrine Falcon, Common Moorhen, and White-crowned Sparrow.

Daryl Tessen, *140 species*, 1 May, White River Marsh, Lakes Puckaway and Maria, Arlington ponds, Horicon Marsh.

Highlights: Although this route had fewer total species, it had a wealth of rarities. Daryl detected Yellow Rail, White-faced Ibis, Glossy Ibis, and Black-necked Stilt. He observed 17 species of waterfowl, including two species that were not seen on other routes—Common Merganser and Red-breasted Merganser. Other good finds included American Golden-Plover, Willet, Stilt Sandpiper, American Woodcock, Eurasian Collared-Dove, Cerulean Warbler, Grasshopper Sparrow, and Orchard Oriole.

Daryl Tessen, *137 species*, 26 May, Stones Bridge area, Wisconsin Point, Crex Meadows.

Highlights: Daryl detected 12 species of sparrows on this route, including 4 species that were not seen on other

routes: Lark, Le Conte's, Nelson's, and Dark-eyed Junco. He tallied the highest number of raptors (8) and flycatchers (7) on this route, of which 6 were not seen on other routes: Osprey, Merlin, Olive-sided Flycatcher, Yellow-bellied Flycatcher, Alder Flycatcher, and Eastern Kingbird. Other notable sightings included White-winged Scoter, Red-throated Loon, Ruddy Turnstone, Red Knot, Parasitic Jaeger, and Short-eared Owl.

Big Day Rules

For all who wish to participate in future Big Day counts, please remember these rules and guidelines:

- The count must be taken within a 24-hour calendar day (midnight to midnight).
- The count must be taken within the state boundaries, but it may cover as many parts of Wisconsin as birders can reach in the time limit.
- All participants must be within direct conversational contact at all times during the birding and traveling periods. This excludes meal and rest stops if birding is not conducted during those times. This limits the number of parties involved to one, and participants to the number safely and comfortably seated in one vehicle.
- Areas can be revisited during the day.
- The same areas may be covered on different Big Day counts.
- No fees are involved in conducting the counts.
- Be sure to drive safely. Sleep deprivation is characteristic of those engaging in Big Days, and drivers and passengers alike are urged to use great caution while driving.
- Counting individual birds is optional.
- Please note that there is no special Big Day form. Standard checklists, such as WSO's *Wisconsin Birds—Field Checklist*, may be used.
- It is critical that all unusual species—whether they are early or late sightings, or rare species—be completely documented. Reports of rarities are subject to review by the WSO Records Committee.
- Completed Big Day results should be sent directly to Joe Schaufenbuel, WSO Bird Reports Coordinator [see inside front cover of this issue for his address], and clearly marked as a Big Day report. All 2011 Big Day reports must reach Joe no later than 15 January 2012 to be included in *The Passenger Pigeon* Big Day summary for 2011.

Kim Kreitinger is currently working as a contract biologist for the Wisconsin Department of Natural Resources and PRBO Conservation Science. Kim has been involved with numerous bird conservation projects in Wisconsin and California, including the development of the Wisconsin All-Bird Conservation Plan and the Partners in Flight Bird Conservation Plan for BCR 12. Kim previously worked in California for seven years for PRBO Conservation Science and the Endangered Species Recovery Program and also served as the California Coordinator for Partners in Flight.

Lessons From the Seasons: Summer 2010

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Competitive birding is herein described as the comparison of one birder's list with another list. The comparative list could be another person's list, but more often the comparison is to a cumulative list seen within some geopolitical boundary. Sometimes the comparison is with an idealized list for the potential of a place and time. Many iterations of comparative list can be formulated by active minds. Lists for yards, even cones above yards to get flyovers are a kind of list predominantly found in a birder's notebook. Comparisons between years for the same place and lists developed as a potential for a place at a certain time are getting awfully close to science.

Competitive birding is not inherently unethical, but for a few the lure of being in the limelight may precipitate a bending of the ethics codes. Such breaches of ethics may lead to a rationalization that doing so in the pursuit of a big number is OKAY. This scenario rarely happens. More likely a good birder with good birding skills gets caught up in the moment of a chase. Many times for a birder the competition is with one's self. A long-term goal is at hand and the current opportunity may not present itself for a long time into the future. Perhaps the birder is chasing a nemesis bird that has eluded the birder on several occasions before. Potentially, long travel and expense weigh on the birder's thought process regarding his or her personal code of ethics. Regardless the reason, competitive birding is an important catalyst for the breakdown of birder ethics.

Despite the few negatives, competitive birding can be an outstanding way to promote birding and bird conservation. A premier example is WSO bird-a-thon/band-a-thon. Held each year in mid-May, this event attempts to identify and band as many birds as possible at WSO's Harold and Carla Kruse Honey Creek Nature Preserve. The pledges are a monetary amount for every species identified or banded. While not directly competitive against another team, it competes against what is expected for the time and place. This competition is extremely close and is mostly indistinguishable from science with the resources pledged and collected helping to

maintain bird habitat and the grounds.

Another example is New Jersey Audubon's World Series of Birding. This competition is between teams following prescribed rules and attempting to identify as many species as possible in the state on a particular day. The proceeds from the event go to New Jersey Audubon to conduct bird-related activities.

The World Series has come under some criticism. The critics are mostly concerned with promotion of this event as being good for birds. Schaffner (2009) discusses the hypocrisy of claiming to be environmentally pure in their activities, while birders visit superfund sites to expand their tally. Little regard is given to the fate of the birds at these sites other than the number on a list they generate.

A similar personal hypocrisy moment changed my birding habits a few years back. Many years ago, I conducted daily shorebird counts at the Madison sewage treatment lagoons. The numbers were exciting and the diversity was quite good with American Avocet, Hudsonian Godwit, Willet, and Whimbrel on the list of goodies I found. I really did not enjoy this birding as much as other birding adventures, which seemed strange to me, since I dearly love shorebirds. After pondering my queasiness, I realized my dilemma was linked to bird conservation. The mud has a high probability for contained remnants of some nasty cleaning compounds and the invertebrates were consuming the chemicals. When the shorebirds eat the invertebrates, the compounds would be more concentrated and thus not be good for the shorebirds. There may be evidence that bacteria or other chemicals added to the system have ameliorated the potential harm, but I personally feel this situation is not as good for the shorebirds as natural mudflats.

Friendly competition among birders is mostly benign. Comparative state list totals and county list totals are published regularly by WSO. Many birders like to see where they stack up against the top bird species listers in the state. A simple and gentle reminder is needed not to go overboard in your listing quest. You and the other published listers are but a small subset of the birders in the state. You may be more accomplished at bird identification, and generally more dedicated to bird finding on a regular basis, but you also have a burden. Your actions are much more in the eye of the birding public. For WSO members you are the most obvious face of the organization. Your actions can be regarded with disdain, such as an ardent lister arriving at a rare bird sighting, demanding to know where the bird is, and leave within minutes of ticking it off the list. Conversely, many ardent bird listers transfer their wisdom to others in the group by noting subtle plumage differences or song variations, thus enhancing the experience for all.

Most active listers likely find pleasure in discussing the thrill of finding the rare bird and the satisfaction of listing a magic number, say 300, with your inner circle of less than 200 birders who have the similar passion for listing. Always remember: while the inner circle may not need others to be part of the rare bird discussion, the greater birding community needs all birders to effectively conserve the

birds whose number on a list is cherished.

For some readers, the previous few paragraphs will conjure thoughts of author hypocrisy. How can the person who shares the single day record of 230 species give advice to others on how not to get hung up on their lists? For those who do not know me very well, I may be perceived as a twitcher. Those who do know me well, know that I do not keep political boundary lists, because birds are keyed to habitat. I do not have a state list, or any type of county list. I do keep lists of birds seen within bird conservation regions and I do keep a journal of all my bird sightings. I have never added my journal tallies to get a total of bird species I have seen. That number is absolutely meaningless to me.

Conversely, the number 230 does have meaning to me. My passion is to understand what bird communities are in what habitat and thusly how to protect those communities. I also have a strong desire to better understand the nuances of migration. The Big Day challenge was a long- standing competition internally to see how well I had learned the bird communities and migration patterns. To me, there are many better field birders out there with better identification skills. Upon my personal introspection, I concluded my best skills are in logistics. Being in the right habitat at the right time to maximize the probability of identifying a certain species is what I do best. The other component for success was identifying the best weather conditions to maximize migrant fall out and detection probabilities.

Many Big Days fail to meet their goals, because the weather on the day chosen tends to coincide with a migratory bird fallout. The problem with this scenario is the wet and often blustery conditions are not conducive to hearing bird song and shorebirds tend to fly in such conditions.

Introspection of my Big Day activities, after attaining my long-held goal, challenged me personally. The continued understanding of the potential effects of a warming climate and the role of hydrocarbon fuelled vehicles made me pause regarding continued participation in Big Days. After the 230 was reached I did a few more Big Days, but my enthusiasm had waned. I did not enjoy the challenge as much as before. Maybe it was because my goals had been achieved, or probably to a greater degree, I felt I should not be tossing that much carbon dioxide into the air.

The upshot of the lesson is to look at your own birding ways and occasionally put yourself into others' shoes. Your wants and desires do not always trump others. The mudflat that precipitated the ethics concerns is now being drained. Most likely economic factors were the reason for the decision. However, I can't help but think that for the farmer having dozens of birders looking towards his house every day for a few weeks may have helped in the decision. What if those who birded along the highway had stopped in and thanked the farmer for providing the habitat? Would that have saved the mudflat? Maybe or maybe not! What if all the birders who stopped at the mudflat had given the farmer ten dollars to help him financially? Well over 100 birders may have been at that site. One thousand dollars could have made a difference in a decision.

Bobolink by Dennis Malueg

The Summer Season: 2010

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Few observers included comments about the summer's weather in their reports. Karen Etter Hale's description from Jefferson County indicated a warm and wet summer. She described the weather as rain, rain, and more rain. Nearly 11 inches of rain in June combined with above-normal temperatures culminated in a most uncomfortable July. She continues by recounting "the record number of late season mosquitoes, or if not a record then certainly the most irritating ones I've ever encountered." Daryl Tessen reported similar conditions from Appleton. Warm and wet were the key words. Approximately 8 inches of rain in June followed by an additional 14 inches in July resulted in record rainfall amounts by a large margin. Farther north, observers reported drought conditions for the last five years were finally broken. Adequate rains began the slow process of filling many lakes that were abnormally low. Shallow depressions and those dependent upon surface runoff filled first. Seepage lakes were still low, but gradually rising.

Observers recorded 259 species during the season, which is down significantly from the 272 reported in 2009. The account that follows gives information on nearly all of them. The only species not included are Rock Pigeon, European Starling, and House Sparrow. In past reports going back decades, the summer season gave a summary of the rare and uncommon species, while skimming over the common species. A few vocal birders requested more detailed reporting of all the species seen in the state the better to understand the complete bird picture. The following account provides that information, even to the point of stating Mourning Dove, American Crow, Black-capped Chickadee, and American Robin were seen in all 72 counties. This fact is not only a statement regarding their abundance, but also their detectability.

Rarities

Observers located several rarities during the season. Among these, eight species are worthy of special note. The first was Wisconsin's fifth summer record for Lark Bunting, which spent three days in Milwaukee County to the enjoyment of numerous birders. Second, an appearance by a male Eurasian Wigeon in the company of American Wigeons in mid-summer leads to speculation regarding the po-

tential for nesting. Third, the now near annual Rufous Hummingbird appeared twice. The first was at the same feeder in Bayfield County that hosted a male one year ago and another at a feeder in Oneida County in late July. This corresponds very closely to the post-breeding movement time for male birds and needless to say both were brilliant males. Fourth, Kirtland's Warblers were documented fledging more than 12 to 18 young birds. Fifth, the Chuck-will's-widow returned to the same location for the sixth consecutive year. Sixth, a summer Scissor-tailed Flycatcher is always a treat. And finally, two boreal warblers, Bay-breasted and Blackpoll, were seen in the summer season.

Although less rare, a number of additional species, some out of season, helped to make this an interesting summer season: Spruce Grouse, Eared Grebe, Snowy Egret, Little Blue Heron, the Glossy and White-faced Ibises that remained for a few days of the summer at Horicon Marsh, nesting Black-necked Stilts, American Avocet, Willet, Whimbrel, Hudsonian Godwit, Marbled Godwit, Red-necked Phalarope, Laughing, Little, Franklin's, Glaucous, and Great Black-backed Gulls, Loggerhead Shrike, White-eyed Vireo, Boreal Chickadee in good numbers, Northern Mockingbird, Hooded Warblers in Florence County, Yellow-breasted Chat, and a few southerly Dark-eyed Juncos.

Other Features of the Season

The warm and wet summer would normally be associated with great shorebirding opportunities. Unfortunately, the double whammy of extensive flooding in 2008 followed by drying and thus exposed shorebird flats in 2009, would normally lead to finally drying of the remaining temporally watered pools. The areas that dried in 2009 were well vegetated and the wet June and July now filled the pools again with preciously few mudflats. A tremendous reduction in Greater Yellowlegs and Stilt Sandpiper reports from the past few years exemplifies this phenomenon. Another important finding was the analysis of the secretive marsh bird data, which are finally giving us a glimpse into the actual populations we may have in the state for a few species. A few years ago, if someone asked me how many American Bitterns are in the state, I probably would have guessed a few thousand at most. They are widely scattered, not hard to identify by call, but only a few are in each marsh. Also many wetlands, especially those dominated by reed canary grass, do not seem to have any. The estimate of nearly 13,000 American Bitterns in the state is eye opening. Equally impressive is the estimate for 40,000, plus or minus 8,000, Soras in the state. These kinds of data are valuable for bird conservation, and much of the information was gathered by volunteers, like you. Ryan Brady expresses deep gratitude to WSO members who participated in the secretive marsh bird survey

County Coverage

The "Contributors and Cited Observers" section keeps expanding every year due to expanded use of the data submitted to ebird. This summer's list contains 545 names com-

pared to the 254 names in last year's report. Observations were submitted for every county in the state. Examining this year's single- and multiple-county reporting forms and the data submitted to ebird, I concluded that every county had at least fifty species recorded.

This summer's data we collected do have value and every birder submitting to ebird or through hard copies to WSO should know their efforts can be used to help bird conservation. The data come in different forms. Those articulated above are of the most value, because they cover specific habitats and especially the ones that are repeated year after year. The summer report for the most part does not use national Breeding Bird Survey data in this report, mostly due to unavailability at the time of compilation. However, the more rapid birder self-entry of BBS data may alleviated that concern more so in the future. This slight amount of extra work is ex-

tremely valuable to the seasonal editor for making evaluations between years. The best information for understanding our breeding bird populations is to conduct intense surveys year after year.

Until we have data, such as from many European countries, where observers know the population of a species in the country within small statistical errors, we cannot do acceptable bird conservation. The secretive marsh bird survey analysis is a first step in this valuable process. The paradigm stills holds that for the most part people bird ten months of the year for fun and they bird in June and July for conservation. Everyone is encouraged to participate in single or group counts. Furthermore, if you are a landowner, it should be your moral obligation to know the breeding bird populations on your land.

Abbreviation used: m. obs. = multiple observers;

REPORTS
(1 June–31 July 2010)

Canada Goose—Reported from 67 counties.

Mute Swan—Seen in Ashland (Anich, Spaeth), Dane (Paulios), Door (m. obs.), Kenosha (Rosenthal and Costa), Racine (m. obs.), Rock (Yoerger), and Waukesha (m.obs.) Counties.

Trumpeter Swan—Reported 14 counties with highest numbers from Burnett 20 June (Paulios) with 25 birds.

Wood Duck—Reported from 60 counties.

Gadwall—Found almost exclusively at Horicon Marsh in Dodge and Fond du Lac Counties with a high count of 25 birds (Casper). Also noted from Sheboygan (Brassers and T. Schaefer) and Winnebago (Ziebell) Counties.

Eurasian Wigeon****—A male bird was seen 26 June in Manitowoc County by Sontag. See *"By the Wayside"* for an account of this bird.

American Wigeon—Observed only in three counties: Dodge throughout the period by m. obs., Fond du Lac (Kavanaghs), and Manitowoc (Sontag).

American Black Duck—Observers reported this species from 10 counties; Ashland and Bayfield (m. obs.), Brown (m. obs.), Dodge (Tessen), Forest (Kavanaghs), Manitowoc (m. obs.), Marinette (Cambell), Oneida (Younkin), Sheboygan (T. Schaefer), and Winnebago (Ziebell).

Mallard—Reported from 64 counties.

Blue-winged Teal—Reported from 37 counties.

Northern Shoveller—Twelve birds were reported 2 July in Dodge County (Prestby) where almost all of the summer's sightings were found. In addition, a few birds were seen in Manitowoc (Sontag & Tessen) and at Rush Lake in Winnebago County (Ziebell).

Northern Pintail—The only sighting this summer was from Dodge County 24 July (Matrisch).

Green-winged Teal—Reported from Brown (R. Rickaby), Chippewa (Cameron), Dane (Cameron), Dodge (m. obs.), Douglas (LaValley), Jackson (Paulios), Manitowoc (Sontag), Ozaukee (Cutright and Bontly), Polk (Smith), Sheboygan (Brassers), and Winnebago (Ziebell) Counties.

Canvasback—These 5 counties provided the season's only observations: Dodge (David), Fond du Lac (Cameron), Manitowoc (R. Rickaby), Waukesha (Herrmann), and Winnebago (Spencer).

Redhead—At least 232 birds were recorded 16 June Winnebago County (Ziebell). Additional observations were from Dodge and Fond du Lac (m. obs.), Manitowoc (Sontag), Outagamie (Tessen), and Waukesha (m. obs.) Counties.

Ring-necked Duck—At least 10 birds were recorded 18 June Vilas County (DeRubeis). Additional observations were from 13 counties.

Greater Scaup—Observers found birds through 18 July Manitowoc (Sontag) County.

Lesser Scaup—Three June records with the latest being 7 June Columbia (T. Schaefer) County. Additional sightings came from Manitowoc (Domagalski and Sontag) and Winnebago (Ziebell) Counties.

Bufflehead—June birds were absent, but a bird appeared 8–23 July in Manitowoc (Sontag) County.

Common Goldeneye—An amazing 52 birds were counted 30 July at Pelican Lake in Oneida County (Richmond). An additional bird was out of range 20 July in Sawyer County (Evanson).

Hooded Merganser—Reported from 28 counties.

Common Merganser—Reported from 13 counties.

Red-breasted Merganser—Sightings came from 3 June–26 July Door County (Costoff & Fenske), 6 June Ozaukee County (Frank), and throughout the season in Douglas County (LaValleys).

Ruddy Duck—A normal season with observations in 10 counties including more than 154 seen in Winnebago County 16 June (Ziebell).

Northern Bobwhite—The five reporting counties are down from recent years. Reported from Adams (Schilke), Grant (Yoerger), Marquette (Schultz), Monroe (Epstein), and Rock (Yoerger). Several birds reported from the Buena Vista Grassland in Portage County were dismissed after biologists discovered these birds were raised and released for hunting dog practice.

Gray Partridge—Only report was 26 June Iowa County (J. Holschbach).

Ring-necked Pheasant—Reported from 25 counties.

Ruffed Grouse—Birds were reported in 28 counties compared to 22 counties in 2009.

Spruce Grouse*—Mid-summer sightings were well above normal with reports coming from Ashland (Anich & Oksiuta), two locations in Florence (Kavanaghs), three locations in Forest (Anich & Prestby), and Vilas (Anich & Prestby) Counties.

Sharp-tailed Grouse—The only report was 15 July in Burnett County (Haseleu).

Greater Prairie-Chicken—Reported 2–12 June from the Buena Vista Grasslands in Portage County (Pendergast).

Wild Turkey—Reported from 60 counties.

Common Loon—Sommer's observation of a bird 3 June in Ozaukee County was out of the normal pattern for this species. None of the remaining 27 reporting counties were considered unusual.

Pied-billed Grebe—Reported from 29 counties.

Eared Grebe*—Tessen was fortunate to see 2 of these grebes 2 June on the north side Hwy 49 Horicon Marsh in Fond du Lac County. Several other birders searching for ibis and other goodies that day failed to locate them.

Red-necked Grebe—Ziebell counted 8 birds on 16 June in Winnebago County. Other reports came from these counties: Burnett (Jakoubek) and Columbia (A. Holschbach, T. Schaefer & Tessen). As in 2009, birds summered on Beaver Dam Lake in Waukesha County, well south of the normal southern limits in the state (Yoerger & Szymczak). [*See* The Passenger Pigeon, 73(1), pp. 5–7 for a nesting report at this location.]

Double-crested Cormorant—Ziebell estimated 306 to be present in Winnebago County on 16 June. This species was seen in an additional 32 counties.

American White Pelican—The number of reporting counties rose again, to 26 this season with many high numbers. The Kavanaghs reported 300 at the Fox River mouth in Brown County, Ziebell counted 300 on Rush Lake in Winnebago County, Fissel & T. Schaefer counted 100 on Schoeneberg Marsh in Columbia County, Rhode counted 178 at Horicon Marsh in Dodge County, and Collins had 125 birds in Vernon County. All these reports indi-

cate a continued expansion of the species in the state.

American Bittern—Reported from 28 counties. Brady, with data from the secretive marsh bird survey, estimates 12,800 bitterns, plus or minus 4,000, live in Wisconsin. These data are precisely the type needed for effectively developing bird conservation programs.

Least Bittern—Noted in 15 counties this season; a report from 20 June at Powell Marsh in Vilas County (Yoerger & Prestby) was by far the farthest north. Ziebell had 35 birds 16 June in Winnebago County.

Great Blue Heron—Reported from 65 counties.

Great Egret—Reported from same 24 counties as last year. The highest number was 50 birds seen at Horicon Marsh in Dodge and Fond du Lac Counties (Mooney).

Snowy Egret—Down compared to recent years with the only report of a bird 30–31 July at Vernon Marsh in Waukesha County (Wenzel & Wood).

Cattle Egret—Seen only at Horicon Marsh in Dodge and Fond du Lac Counties 18 June–1 July (Rohde & Batterman).

Green Heron—Reported from 50 counties.

Black-crowned Night-Heron—At least 41 birds were noted in Dodge County on 7 July (B. Schaefer). Observed in 13 counties in all.

Glossy Ibis*—The birds (Fig. 1) from spring remained until 5 June. They were most often observed along Hwy 49 or south of the Main Dike Road (David & Tessen), Dodge County.

White-faced Ibis*—This bird (Fig. 1) remained until 5 June. It was most often observed along and south of the Main Dike Road (David & Tessen), Dodge County.

(Plegadis) Ibis—A single bird was observed in flight over Rush Lake in Winnebago County on 16 June (Ziebell). See "*By the Wayside*" for an account of this sighting.

Turkey Vulture—Reported from 63 counties.

Osprey—Good news from the expanding range front with a bird seen soaring above Franklin, Milwaukee County 30 July (Goodman). In all Ospreys were reported from 31 counties.

Bald Eagle—Reported from 55 counties.

Northern Harrier—Reported from 38 counties.

Sharp-shinned Hawk—A bird 19 June at Chiwaukee Prairie, Kenosha County (Howe & Weber) was well south of its normal range in Wisconsin. Also, reported from a near normal 15 counties.

Cooper's Hawk—Reported from 39 counties.

Northern Goshawk— Noted from only 4 counties: Bayfield (Oksiuta), Eau Claire (Retherford), four locations in Florence (Kavanaghs), and Rusk (Prestby).

Red-shouldered Hawk—Reports were up over previous years with birder sightings from 25 counties.

Broad-winged Hawk—Reported from 32 counties.

Red-tailed Hawk—Reported from 62 counties.

American Kestrel—Reported from 59 counties.

Merlin—Observed in these 13 counties, up from 10 counties last year.

Peregrine Falcon—Reported from Buffalo, Columbia, Dane, Douglas, Jefferson, Manitowoc, Milwaukee, Racine, Sheboygan, and Winnebago Counties.

Yellow Rail*—No sightings reported for a third consecutive summer.

King Rail*—Tessen was the only person to report this species. He reports from the Dodge County side of Horicon Marsh birds on 28 June, 3 July, and 31 July. Brady reports a DNR sponsored marsh bird survey had no individuals found statewide.

Virginia Rail—Reported from 16 counties.

Sora—Reported from 22 counties. Brady with data from the secretive marsh bird survey data estimates 40,000 Soras, plus or minus 8,000, live in Wisconsin. Again, these data are precisely the type needed for effectively developing bird conservation programs.

Common Moorhen—Noted in five counties: Columbia, Dodge, Fond du Lac, Jefferson, and Waukesha.

American Coot—Noted in 12 counties, quite low compared to long-term averages.

Sandhill Crane—Reported from 62 counties.

Whooping Crane**—Summer observations away from the release area in Juneau County were confirmed in Adams, Fond du Lac, and Dodge Counties.

Black-bellied Plover—Two late departure dates noted: 5 June Bayfield (Anich) and the same date in Dodge County (Otto). The first fall migrant was found 27 July in Douglas County (Pendergast).

American Golden-Plover—No reports from the summer season 2010, which is the second consecutive year with no reports.

Semipalmated Plover—Lingering spring birds were noted in four counties with the latest being 17 June Milwaukee (Mooney). Some returning birds began to appear in several areas as early as 28 June, Dodge County (Tessen).

Piping Plover*—Julie Van Stappen reports that within the Apostle Islands National Lakeshore five nests fledged 7 chicks.

Killdeer—Reported from 68 counties.

Black-necked Stilt**—Nesting occurred at nearly the same spot as 2008–09 at Horicon Marsh along the Main Dike Road, Dodge County. The nesting birds continued from the spring season and remained through the summer season. In all, 15 birds were tallied (A. & N. Kearns and Prestby).

American Avocet—A single report this summer is atypical for the past few years. The lone sighting was 23 July Columbia (Romano) County.

Spotted Sandpiper—Reported from 35 counties.

Solitary Sandpiper—Reported from 16 counties.

Greater Yellowlegs—Only 8 county reports were received indicating an extremely poor showing this summer. Probable early migrants were a 28 June bird in Dodge County (Tessen) and 1 July also in Dodge County (Batterman).

Willet—Three reports this summer: 5–23 July Columbia (Fissel & Romano), 15 July Manitowoc (Sontag), and 30 July Winnebago (Uslabar) Counties.

Lesser Yellowlegs—The last spring migrant was recorded 15 June in Dodge County (David) and the first fall migrant was seen 27 June in Dodge County (Bontly).

Upland Sandpiper—Reported from 13 counties nearly statewide in distribution; however, in lower numbers than 2009.

Whimbrel—The only reports came 1–10 June with 3 birds on 3 June in Manitowoc County (Sontag).

Hudsonian Godwit—The only report was 2 June Manitowoc County (Sontag).

Marbled Godwit—A good summer with reports: 1 June Ashland/Bayfield (Anich & Oksiuta), 2 June Manitowoc (Sontag), and 5 July Columbia (Fissel) Counties.

Ruddy Turnstone—Horicon Marsh held birds 1–7 June (Casper), Dodge County. The last spring migrant was seen 10 June in Manitowoc County (Sontag).

Red Knot—No sightings this summer, which is not a positive sign for this declining species.

Sanderling—Five birds seen 1 June Manitowoc (Sontag) and an early migrant 13 July Adams (Helland) Counties.

Semipalmated Sandpiper—The latest spring departure was 2 June Barron County

(Reichoff). The earliest fall migrant was 5 July Dane County (Schwarz).

Least Sandpiper—The last spring migrant was 9 June Dodge (Renner) and the first fall migrant 28 June Dodge (Tessen) County.

White-rumped Sandpiper—The latest departing bird was 10 June Waukesha County (Gustafson).

Baird's Sandpiper—The latest departing bird was 10 June Waukesha County (Gustafson). The first fall migrant was seen 10 July Columbia County (Tessen).

Pectoral Sandpiper—A light summer movement with only eight counties reporting birds. The first fall migrant was recorded 28 June in Dodge County (Tessen).

Dunlin—The last spring reports: 10 June Manitowoc (Sontag), and 17 June Dodge (Sinkula) Counties.

Stilt Sandpiper—An incredibly poor July exemplified by a single sighting 18–22 July Sauk County (A. Holschbach).

Buff-breasted Sandpiper*—An early migrant seen 30–31 July Racine County (Wenzel, Dixon, and Fare).

Short-billed Dowitcher—The first bird of the fall season appeared 27 June in Dodge County (Bontly). In addition, birds were observed in Columbia (Yoerger & Prestby) and Sauk (A. Holschbach) Counties.

Long-billed Dowitcher—Only seen 21–31 July Dodge County (Barrientos & Tessen).

Wilson's Snipe—Reported from 26 counties.

American Woodcock—Reported from 25 counties, which is well above normal for the summer season.

Wilson's Phalarope—Reported from: 2 June Dodge (Tessen), 4 June Columbia (A. Holschbach), 10 July Dodge (Tessen) and 21 July (Romano) Counties.

Red-necked Phalarope—One bird lingered in spring until 2 June Dodge County (Tessen).

Bonaparte's Gull—Present throughout the season in Ashland, Bayfield, Dodge, Kenosha, Manitowoc, Ozaukee, and Sheboygan Counties.

Little Gull*—Only Sheboygan County harbored this species. Seen from 5–14 June (Schroeder, Tessen, Wood, and Brassers).

Laughing Gull*—Two sightings: 11 June–18 July Manitowoc (Sontag & Schilke) and 7–27 July Ozaukee (Bontly, T. Schaefer, Wood, and Brassers) Counties.

Franklin's Gull—A tardy spring migrant remained though 2 June Dane County (Thiessen). Summering birds were seen 13 June–16 July Sheboygan (Brassers, Wood, Tessen, & R. Rickaby) and 29 July (Fig. 2) Bayfield (Brady) Counties.

Ring-billed Gull—Reported from 54 counties.

Herring Gull—Reported from 30 counties.

Glaucous Gull—A northern gull not wanting to go north lingered until 15 June Douglas County (LaValleys).

Great Black-backed Gull—Two reports: 4 June to 16 July Sheboygan (Tessen, Frank & Bontly), and 27 June Racine (Coulter) Counties.

Caspian Tern—Present through most or all of the entire season in 16 counties with 45 to 50 individuals reported 16 July in Manitowoc County (R. Rickaby & Schilke).

Black Tern—Reported from 22 counties with an estimated 100 individuals 5 June in Fond du Lac County (Mertins).

Common Tern—Reported from Ashland/Bayfield (m. obs.), Brown (R. Rickaby), Dodge (m. obs.), Door (Fenske & Noeldner), Douglas (Anich & Lind), Kewaunee (Schilke), Manitowoc (Sontag & Tessen), and Sheboygan (m. obs.) Counties.

Forster's Tern—Present through the season in 14 counties. High counts were 40 individ-

uals 21 June at Lake Puckaway Green Lake County (Prestby).

Eurasian Collared-Dove**—Observed only in Columbia 4 June (Trick), 6 June Grant (Bontly) and 1–26 June Iowa (A and J. Holschbach & Romano) Counties.

Mourning Dove—Reported from all 72 counties.

Yellow-billed Cuckoo—Reported from 32 counties.

Black-billed Cuckoo—Reported from 46 counties.

Eastern Screech-Owl—Reports increased to six counties. The farthest north was Taylor (Risch). Also, heard in Crawford (Ellis), Manitowoc (J. Holschbach), Waukesha (Coulter), Waupaca (Roth), and Winnebago (Ziebell) Counties.

Great Horned Owl—Reported from 29 counties.

Barred Owl—Reported from 35 counties.

Long-eared Owl—The only report was 24 June La Crosse County (Herrmann).

Short-eared Owl—Two reports this season: 1 June at Leola Marsh in Adams County (Schilke), and 2–16 June at Buena Vista Grasslands, Portage County (Schilke, Trick, and Pendergast).

Northern Saw-whet Owl—June observations came from Forest (Anich & Kavanaghs) and Milwaukee (via Schlitz Audubon) Counties.

Common Nighthawk—This year's 25 reporting counties are above average and probably due to increased effort to document nocturnal birds. Thirteen individuals reported 13 June in Oconto County (Szymczak) could be all nesters.

Chuck-will's-widow**—For the sixth consecutive year the Chuck (Fig. 3) has made its appearance near the correctional facility in Jackson County. Reports spanned the period from 1 June (Wood) until 13 July (Stutz).

Eastern Whip-poor-will—Reported from 23 counties (Fig. 4) with high numbers being 14 birds along Ball Road in Wood County 7 June (Prestby) and 15 birds near Pigeon Creek in Jackson County (Otto).

Chimney Swift—Reported from 63 counties.

Ruby-throated Hummingbird—Reported from 63 counties.

Rufous Hummingbird**—A stunning male was photographed 20–21 July (Figures 5 and 6) in Oneida County (Wagner & Rasmussen). Another male Rufous Hummingbird was present from ~11–20 July in Bayfield County at the same residence that hosted one about this time last year—likely the same bird a year later (fide Brady).

Belted Kingfisher—Reported from 53 counties.

Red-headed Woodpecker—Reported from 38 counties.

Red-bellied Woodpecker—Reported from 55 counties.

Yellow-bellied Sapsucker—Reported from 40 counties.

Downy Woodpecker—Reported from 66 counties.

Hairy Woodpecker—Reported from 62 counties.

Black-backed Woodpecker—Birds were found only in Vilas County 24 June (Prestby).

Northern Flicker—Reported from 67 counties.

Pileated Woodpecker—Reported from 55 counties.

Olive-sided Flycatcher—Reported from 5 southern counties in early June indicating a good migration in the first few days of the month. The last southern report was 16 June Racine County (Kennedy). Mid to late June breeding season records came from only a few northern counties: Florence (Curnutt & Strelka), Forest (m. obs.), Oconto (R. Rickaby),

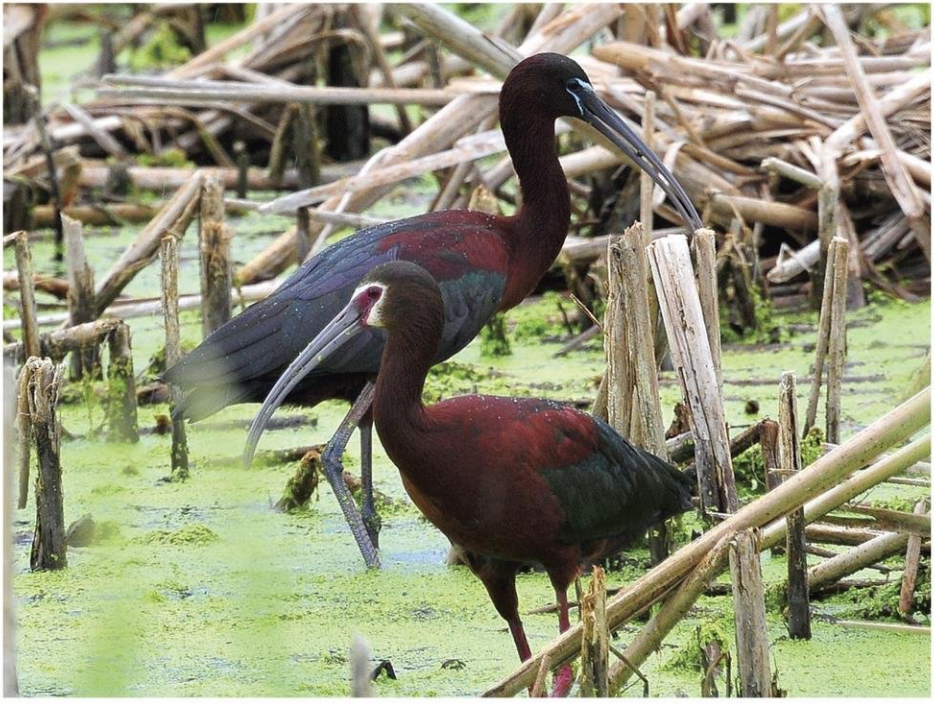

Figure 1. Glossy Ibis and White-faced Ibis taken by Joel Trick on Dike Road in Horicon Marsh, Dodge County, 2 June 2010.

Figure 2. Franklin's Gull by Ryan Brady on 29 July 2010 in Bayfield County.

Figure 3. Chuck-will's-widow on 6 June 2010 in Jackson County photographed by Chris West.

Figure 4. Eastern Whip-poor-will on 4 June 2010 in Waukesha County by Jim Edlhuber.

and Vilas (Anich). An individual seen 9 July in Ozaukee County (Burns) is hard to explain, but may have been an unsuccessful nester that began wandering.

Eastern Wood-Pewee—Reported from 66 counties.

Yellow-bellied Flycatcher—Four southern counties reported birds early June with the latest being a 10 June bird in Racine (Kennedy) County. Fifteen northern counties had probable breeding activity. Early southbound birds were reported 31 July in Crawford (Fissel) and Milwaukee (Bontly & Zehner) Counties.

Acadian Flycatcher—Reported in 21 counties north to Fond du Lac. Thirteen individuals were tallied in June along the Scuppernong Ski Trail in Waukesha (Szymczak).

Alder Flycatcher—As is usual, most of the 43 reporting counties were northern. The highest tallies of individuals were 14 individuals 17 July at Thunder Lake in Oneida County (Younkin), and the same number on the same date in Taylor County (Stutz).

Willow Flycatcher—Reported from 31 counties with no reports from north of the tension zone.

Least Flycatcher—Reported from 55 counties.

Eastern Phoebe—Reported from 68 counties.

Great Crested Flycatcher—Reported from 60 counties.

Eastern Kingbird—Reported from 69 counties.

Scissor-tailed Flycatcher**—A cooperative bird stayed long enough to be photographed (Fig. 7) then made a hasty exit on 22 June at Crex Meadows in Burnett County (Russell).

Loggerhead Shrike*—The only report was 3 individuals in St. Croix County 24 July (Persico).

White-eyed Vireo*—Three reports: the first from Green County 1 June–10 July (Yoerger & Prestby), the second bird was found in Milwaukee County 5 June (Spencer), and the third (Fig. 8) was at Riveredge Nature Center, Ozaukee County 12–27 June (Bontly & Condon).

Bell's Vireo*— Fewer numbers than in past summers with reports from: 27 June–31 July in Crawford County (m. obs.), 4–7 June at Governor Dodge State Park in Iowa County (m. obs.) and 11 June at the Arena boat landing also in Iowa County (A. Holschbach), 13 June Lafayette (Yoerger), 17 June Rock (Yoerger), and 30 June–29 July Jefferson (Prestby & Stutz).

Yellow-throated Vireo—Among the 52 reporting counties, the most northern ones were Douglas and Bayfield.

Blue-headed Vireo—Birds in Walworth County 6 June (Stutz) were at the south end of the Kettle Moraine State Forest where they have been recorded annually for several years. The 25 other reporting counties were all northern.

Warbling Vireo—Reported from 62 counties.

Red-eyed Vireo—Reported from 69 counties.

Gray Jay—Reported from these four counties: Douglas (m. obs.), Florence (Kavanaghs), Iron (Francken), and Vilas (Uher-Koch & Anich).

Blue Jay—Reported from 71 counties.

American Crow—Reported from all 72 counties.

Common Raven—Reported from 34 counties and as far south as Adams (Schilke), Green Lake (Prestby), and Ozaukee (Mattrisch).

Horned Lark—Reported from 32 counties.

Purple Martin—Reported from 42 counties.

Tree Swallow—Reported from 70 counties.

Northern Rough-winged Swallow—Reported from 50 counties.

Bank Swallow—Reported from 42 counties.

Cliff Swallow—Reported from 58 counties.

Barn Swallow—Reported from 67 counties.

Black-capped Chickadee—Reported from all 72 counties.

Boreal Chickadee—Four counties reporting this season: Ashland (Anich), Forest (Anich), Oneida (Kavanaghs), and Vilas (Jungkuntz, Huset & DeRubeis).

Tufted Titmouse—Reported from 21 counties with the farthest north being Pierce (Heikkinen) and Chippewa/EauClaire (m. obs.).

Red-breasted Nuthatch—Reported from 48 counties.

White-breasted Nuthatch—Reported from 62 counties.

Brown Creeper—Reported from 21 counties.

Carolina Wren*—Reported from five counties: Crawford (Collins), La Crosse (Weigels), Marathon (Belter), Milwaukee (Boyle), and Rock (Klubertanz).

House Wren—Reported from 67 counties.

Winter Wren—Among the 19 reporting counties were two southern locations; 3 June Washington (Mueller), and 18 July Milwaukee (Kopitizke).

Sedge Wren—Ziebell found 130 in Winnebago County 16 June. Reported from 47 counties in all.

Marsh Wren—Ziebell found 800 in Winnebago County 16 June. Reported from 37 counties in all.

Blue-gray Gnatcatcher—Jakoubek found birds in early June in Burnett County, which represents the farthest north sightings. In addition, reports came from 46 counties.

Golden-crowned Kinglet—Noted in 12 counties within normal range. A significant find was an individual throughout the summer in the Southern Unit of the Kettle Moraine State Forest, Waukesha County (Szymczak).

Ruby-crowned Kinglet—Reported from four counties: Douglas (Stutz), Forest (Anich), Iron (Francken), and Oneida (Prestby & R. Rickaby).

Eastern Bluebird—We tend to miss the various bluebird nest box groups information that lets us track with any confidence how well this species is doing. The number of reporting counties varies for multiple reasons. This year's number (68) is significantly above anything reported in recent memory.

Veery—Reported from 48 counties.

Swainson's Thrush—Two early fall migrants were reported from southern Wisconsin 29–31 July Milwaukee County (Bontly & Zehner) and the same dates in Waukesha County (Szymczak). Reports from normal breeding range came from Douglas (Pendergast & LaValleys), Florence (Kavanaghs), Forest (Anich), Oneida (R. Rickaby), and Sawyer (Gordon) Counties.

Hermit Thrush—Reported from 28 counties south to Jackson (m. obs.), Juneau (Paulios), and Adams (Pendergast).

Wood Thrush—Reported from 52 counties.

American Robin—Reported from 72 counties.

Gray Catbird—Reported from 63 counties.

Northern Mockingbird—Found at four locations: 1–25 June Sauk (A. & J. Holschbach), 6 June Waukesha (Wood), 6–19 June Walworth (m. obs.), and 16–20 June Burnett (Schmoker & Paulios) Counties.

Brown Thrasher—Reported from 53 counties.

Cedar Waxwing—Reported from 67 counties.

Blue-winged Warbler—Of the 29 reporting counties, Polk (Maercklein) and Florence (Kavanaghs) were the most northern.

Golden-winged Warbler—Of the 26 reporting counties, Adams (Schilke) and Juneau

Figure 5. Rufous Hummingbird visiting a feeder in Oneida County on 21 July 2010 by Carmen Wagner.

Figure 6. The same Rufous Hummingbird at the same location on the same day as in Figure 5, by John Rasmussen.

Figure 7. Scissor-tailed Flycatcher sitting on a sign, at Crex Meadows State Wildlife Area in Burnett County, photographed by Steve Russell.

Figure 8. This White-eyed Vireo was photographed by Al Sherkow when it was captured in a MAPS net at Riveredge Nature Center on 5 June 2010.

(Paulios) were the most southern. No reports from anywhere in the Kettle Moraine, where they formerly bred in abundance.

Tennessee Warbler—Lingered until 20 June in Ozaukee County (Cutright). The first fall migrants were in Dane 17–31 July (A. Holschbach and C. Martin). In addition, birds were recorded from Bayfield (Oksiuta) and Sawyer (Gordon) Counties in late July.

Nashville Warbler—Reported from 29 counties with several in Adams County (Schilke).

Northern Parula—Reported from 13 counties with most being the more obviously northern. Compared to 2009, was found in much lower numbers.

Yellow Warbler—Reported from 65 counties.

Chestnut-sided Warbler—Reported from 42 counties. While the majority of the reports came from northern counties, there were a few from more southern locations, such as Sauk (Engel, Condon, & Schwarz).

Magnolia Warbler—This season's records came from only 10 counties with apparent late migrants in the southeast in early June as exemplified by 3 June reports from Washington (Mueller) and 6–13 June from Ozaukee (Uttech) Counties. Also, reported from Ashland, Florence, Forest, Manitowoc, Oconto, Oneida, Polk, and Vilas Counties.

Cape May Warbler—The only observations were from northeastern counties where the species seems to have its stronghold (Florence, Forest, Oneida, and Vilas). A bird seen 25 July at Trempealeau NWR, Trempealeau County (Maercklein) may have been an early fall migrant.

Black-throated Blue Warbler—Reported from these 5 counties: Florence (Kavanaghs), Forest (Anich, Cameron, and Richmond), Langlade (Richmond), Oneida (R. Rickaby), and Vilas (Richmond & Schroeder).

Yellow-rumped Warbler—Reported from 25 central and northern counties with the farthest south 3 June in Adams County (Schilke).

Black-throated Green Warbler—Most reports came from 29 central and northern counties, however, significant numbers (40) were found throughout the breeding season in Walworth and Waukesha Counties (Szymczak).

Blackburnian Warbler—Reported in 17 counties with June sightings in Waukesha (Szymczak) and Grant (A. & J. Holschbach) obviously the farthest south.

Yellow-throated Warbler*—Reported 1–26 June at Wyalusing State Park in Grant County (A. & J. Holschbach, Bontly, Cutright, Wilson, Romano, and Wood).

Pine Warbler—Present through the season in 36 counties with the highest total individuals being 14 on 25 June Florence (Kavanaghs).

Kirtland's Warbler**—For the 2010 breeding season, 20 males and 11 females were at the Adams County location. Marinette County had up to six males and a female, but nesting could not be confirmed. In addition, single males were found in Bayfield, Douglas, and Washburn Counties. An estimated 12 to 18 young were produced from the nests in Adams County (fide Grevles).

Prairie Warbler*—A cooperative male (Figures 9 and 10) found 1 June Waukesha County remained through 16 July and was reported by at least 24 birders. Another bird was found 10 June Dane County (Hutnik), but could not be relocated.

Palm Warbler—Reported from a higher than normal 11 counties, although a bird seen 31 July at Wisconsin Point, Douglas (Bardon) may have been an early fall migrant.

Bay-breasted Warbler—An extremely out of place bird was seen 13 July Rusk County (Steger). See "*By the Wayside*" for a description of this sighting.

Blackpoll Warbler—An extremely late migrant was seen 13 June Ozaukee County (Frank). See "*By the Wayside*" for a description of this sighting.

Cerulean Warbler—Reports came from 12 additional counties, including 12 individuals seen on 25 June Grant County (Romano).

Black-and-white Warbler—Reported from 39 counties overall.

American Redstart—Reported from 64 counties.

Prothonotary Warbler—Observed in 11 counties. Significant was a survey of the Avon Bottoms in Rock County 3 June that produced 115 individuals (Paulios).

Worm-eating Warbler*—No reports this season.

Ovenbird—Reported from 60 counties.

Northern Waterthrush—Fifteen counties with reports this season are above average. A report 3 June in Washington County (Mueller) may indicate the southern breeding extent in the state.

Louisiana Waterthrush—Reports came from diverse places: 5–12 June Baxter's Hollow, Sauk County (m. obs.), 12 June Oconto County (R. Rickaby), and 16–20 June Norway Point, Burnett County (Schmoker & Paulios).

Kentucky Warbler—Only reported 1–26 June from Wyalusing Park, Grant (m. obs.).

Connecticut Warbler—Expected reports from the northwest sand counties: Bayfield (m. obs.), Burnett (Schmoker), Douglas (Stutz), and Washburn (m. obs.). Unusual for summer was a 19 June sighting in Marathon County (Pendergast).

Mourning Warbler—Reported from 36 counties overall.

Common Yellowthroat—Reported from 67 counties.

Hooded Warbler—Reported from 13 counties. Most significant was a bird found 14 June in Florence County (Kavanaghs).

Wilson's Warbler—Continuing the pattern of late migrating warblers, this species was seen in 3 June at Schlitz Audubon, Milwaukee County (Bontly).

Canada Warbler—Noted in Douglas, Florence, Forest, Marathon, Milwaukee, Oconto, Oneida, Rusk, and Sheboygan Counties.

Yellow-breasted Chat*—Present from 6 June (Bontly & Cutright) through 4 July (Ellis) at the Brooklyn Wildlife Area in Dane County. Another bird was seen 10 June–3 July in Jefferson County (Szymczak).

Eastern Towhee—Reported from 57 counties.

Chipping Sparrow—Reported from 71 counties.

Clay-colored Sparrow—Reported from 55 counties.

Field Sparrow—Among the 53 counties from which these were reported, the highest number of individuals was 31 on 6 June Walworth (Howe).

Vesper Sparrow—Reported from 46 counties.

Lark Sparrow—Wilson found 8 individuals on 8 June at the Spring Green Preserve in Sauk County. An additional 22 reported locations were submitted from 13 counties.

Lark Bunting—Lubahn and Hansen photographed a male 1 June (Figures 11 and 12) and it stayed through 3 June giving many of the ardent listers a chance to add this bird to their list. See "*By the Wayside*" for details on this sighting.

Savannah Sparrow—Reported from 62 counties.

Grasshopper Sparrow—Among the 35 reporting counties, the highest number of individuals was 10 from the Spring Green Reserve in Sauk County 11 June (Heikkinen).

Henslow's Sparrow—Noted in 26 mostly southern counties. The highest number of individuals reported was 24 in Green Lake County on 10 June (Prestby).

Le Conte's Sparrow—Reported from: Burnett (Schmoker), Douglas (Trick), Marathon (Hoeft), Monroe (Prestby), Oneida (Kavanaghs and R. Rickaby), and Vilas (Prestby and Yoerger) Counties.

Nelson's Sparrow*—One report for the summer season, 7 June at Crex Meadows, Burnett County (Schmoker).

Figures 9 and 10. Prairie Warbler near the Mackie Picnic Area in the Kettle-Moraine State Forest-Southern Unit, Waukesha County on 7 June 2010 as pictured by Jim Edlhuber.

Figure 11. Lark Bunting on 1 June 2010 by Brian Hansen in Milwaukee County.

Figure 12. Male Bobolink chasing the male Lark Bunting on 1 June 2010 (ahhh, hormones) by Brian Hansen in Milwaukee County.

Song Sparrow—Reported from 70 counties.

Lincoln's Sparrow—Reported from these northern counties: Ashland, Douglas, Forest, Langlade, Marathon, Marinette, Oconto, Oneida, and Vilas.

Swamp Sparrow—Reported from 55 counties.

White-throated Sparrow—Reported from 28 counties, including 11 June–17 July at Cedarburg Bog in Ozaukee County (Bontly and Boyle).

Dark-eyed Junco—Noted in these northern counties: Bayfield, Florence, Forest, Langlade, Marinette, and Vilas. Out of place birds were seen 1 June Racine (G. Martin), 17 June Adams (Schilke), and 30 July Sheboygan (Yogerst) Counties.

Scarlet Tanager—Reported from 55 counties.

Northern Cardinal—Reported from 61 counties.

Rose-breasted Grosbeak—Reported from 67 counties.

Indigo Bunting—Reported from 70 counties.

Dickcissel—Birders found this species with relative ease by observing it in 38 counties as far north as Ashland and Bayfield. Most places reported a few individuals with the exception being 26 birds tallied 6 June in Monroe County (Prestby).

Bobolink—Reported from 58 counties.

Red-winged Blackbird—Reported from 70 counties.

Eastern Meadowlark—This year the number of counties in which birders found this species (60) was over four times as many as those reporting Western Meadowlarks.

Western Meadowlark—Observers found this species in 13 counties this year, which is down from 2009. Most interesting are the reports from Oconto (R. Rickaby) and Oneida (Richmond, Gustafson, and Prestby) Counties.

Yellow-headed Blackbird—Noted in 17 counties. The highest number of individuals reported was 300 at Rush Lake, Winnebago County 16 June (Ziebell).

Brewer's Blackbird—Noted in 26 counties. The highest number of individuals reported was 40 at Wind Lake Sod Farm, Racine County 13 July (Prestby).

Common Grackle—Reported from 68 counties.

Brown-headed Cowbird—Reported from 66 counties.

Orchard Oriole—Noted in 31 counties this season. This number is down from 2009.

Baltimore Oriole—Reported from 70 counties.

Purple Finch—Observed in 25 mostly northern counties. Out of range was an individual seen 20 June–9 July Ozaukee County (Burns).

House Finch—Reported from 54 counties.

White-winged Crossbill—LaValleys found a single bird 27–30 July in Douglas County for the season's only sighting.

Pine Siskin—Reports from 12 counties, down significantly over 2009.

American Goldfinch—Reported from 71 counties.

Evening Grosbeak—Distinctly out of range for the summer season was a male photographed on 3 June in the Town of Omro, Winnebago County by Pat Fowler (Figure 13). In addition, reports were submitted for 6 counties in the more normal summer range: Bayfield (Schilke), Florence and Forest (Kavanaghs), Marinette (Schilke and Swelstad), Oneida (Nowicki), Sawyer (Heikkinen), and Vilas (Peczynski).

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Figure 13, Male Evening Grosbeak visiting the feeder of Pat Fowler in the Town of Omro, Winnebago County, on 3 June 2010 when she took this photo.

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Checklist of the Birds of Wisconsin—2011 The Wisconsin Society for Ornithology, Inc.

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INTRODUCTION

This checklist incorporates 432 species that are considered valid species as part of the Wisconsin Society for Ornithology (WSO) state list, as of early 2011. Nomenclature and sequence follow the Seventh Edition of the Check-List of North American Birds (AOU 1998 and 2011), provided by the Committee on Classification and Nomenclature of the American

Ornithologists Union, and the 51st Supplement to that Check-List (Chesser et al. 2010). Decisions regarding inclusion of species on the WSO checklist are made by the Records Committee of the Wisconsin Society for Ornithology.

A list of abundance codes describing generalized abundance is provided with the following codes:

1 = abundant or common
2 = uncommon
3 = rare
4 = very rare to "accidental"
5 = extinct

A status column marks all those species categorized as "SGCN" (Species of Greatest Conservation Need) according to the Wisconsin State Wildlife Action Plan. Some species are also considered to be part of a separate category of "Special Concern," and they are marked "SC."

For more information on the SGCN species, see the following online resource: http://www.wisconsinbirds.org/plan/species/priority.htm (Wisconsin Bird Conservation Initiative, 2010).

A list of hypothetical species is found at the end of the valid list. Hypothetical species are those for which there is a sight record, but without additional corroborating documentation from several observers, made and documented independently, or the existence of a specimen, or accepted photographic evidence.

Ornithologists and birders should expect additional changes to be made later this year by the AOU's Committee on Classification and Nomenclature. WSO follows the guidance of AOU in regard to our state checklist. Checklists such as these are really only able to be considered as "working documents," since taxonomic research and the findings produced by that research are part of a dynamic and ever-changing body of knowledge. We can expect later in 2011, for example, to see changes in the genera and sequence of species within the family Parulidae (wood warblers).

Acknowledgments

We wish to thank the WSO Records Committee for its many years of ongoing service to WSO, its members, and all those interested in Wisconsin's birdlife. Additional helpful comments on this latest version of the checklist came from Jeff Baughman, Bettie Harriman, Tom Schultz, and Bill Smith.

Literature Cited

American Ornithologists' Union. 1998. Check-List of North American Birds. Seventh Edition. The American Ornithologists' Union. Washington, D.C. Online version 2011: http://www.aou.org/checklist/north/full.php Accessed February 2011.

Chesser, R. T., R. C. Banks, F. K. Barker, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr., J. D. Rising, D. F. Stotz, and K. Winkler. 2010. Fifty-first supplement to the American Ornithologists' Union Check-List of North American Birds. American Ornithologists' Union Committee on Classification and Nomenclature. *The Auk* 127(3): 726–744.

Wisconsin Bird Conservation Initiative. 2010. Wisconsin All-Bird Plan. Online: http://www.wisconsinbirds.org/plan/species/priority.htm Accessed February 2011.

Checklist of the Birds of Wisconsin— Wisconsin Society for Ornithology

Seq	Order	Family	Common name	Scientific name	Abundance	Status
	Anserifomes					
		Anatidae: Ducks/Geese/Swans				
1			Black-bellied Whistling-Duck	*Dendrocygna autumnalis*	4	
2			Fulvous Whistling-Duck	*Dendrocygna bicolor*	4	
3			Greater White-fronted Goose	*Anser albifrons*	2	
4			Snow Goose	*Chen caerulescens*	2	
5			Ross's Goose	*Chen rossii*	3	
6			Brant	*Branta bernicla*	4	
7			Cackling Goose	*Branta hutchinsii*	2	
8			Canada Goose	*Branta canadensis*	1	
9			Mute Swan	*Cygnus olor*	2	
10			Trumpeter Swan	*Cygnus buccinator*	2	SGCN
11			Tundra Swan	*Cygnus columbianus*	1	
12			Wood Duck	*Aix sponsa*	1	
13			Gadwall	*Anas strepera*	1	
14			Eurasian Wigeon	*Anas penelope*	3	
15			American Wigeon	*Anas americana*	1	
16			American Black Duck	*Anas rubripes*	2	SGCN
17			Mallard	*Anas platyrhynchos*	1	
18			Blue-winged Teal	*Anas discors*	1	SGCN
19			Cinnamon Teal	*Anas cyanoptera*	3	
20			Northern Shoveler	*Anas clypeata*	1	
21			Northern Pintail	*Anas acuta*	2	SC
22			Green-winged Teal	*Anas crecca*	1	
23			Canvasback	*Aythya valisineria*	2	SGCN
24			Redhead	*Aythya americana*	1	SGCN
25			Ring-necked Duck	*Aythya collaris*	1	
26			Greater Scaup	*Aythya marila*	1	
27			Lesser Scaup	*Aythya affinis*	1	SGCN
28			King Eider	*Somateria spectabilis*	4	
29			Common Eider	*Somateria mollissima*	4	
30			Harlequin Duck	*Histrionicus histrionicus*	3	
31			Surf Scoter	*Melanitta perspicillata*	2	
32			White-winged Scoter	*Melanitta fusca*	2	
33			Black Scoter	*Melanitta americana*	2	
34			Long-tailed Duck	*Clangula hyemalis*	2	
35			Bufflehead	*Bucephala albeola*	1	
36			Common Goldeneye	*Bucephala clangula*	1	SC
37			Barrow's Goldeneye	*Bucephala islandica*	3	
38			Smew	*Mergellus albellus*	4	
39			Hooded Merganser	*Lophodytes cucullatus*	1	
40			Common Merganser	*Mergus merganser*	1	
41			Red-breasted Merganser	*Mergus serrator*	1	
42			Masked Duck	*Nomonyx dominicus*	4	
43			Ruddy Duck	*Oxyura jamaicensis*	1	
	Galliformes					
		Odontophoridae - New World Quail				
44			Northern Bobwhite	*Colinus virginianus*	2	SGCN
		Phasianidae: Partridges/Grouse/Turkeys/Quail				
45			Gray Partridge	*Perdix perdix*	2	
46			Ring-necked Pheasant	*Phasianus colchicus*	1	

Abundance: 1 = common, 2 = uncommon, 3 = rare, 4 = very rare to "accidental," 5 = extinct.
Status: SGCN = Species of Greatest Conservation Need; SC = Special Concern; END = endangered; THR = threatened.

Seq	Order	Family	Common name	Scientific name	Abundance	Status
47			Ruffed Grouse	*Bonasa umbellus*	1	
48			Spruce Grouse	*Falcipennis canadensis*	3	SGCN, THR
49			Willow Ptarmigan	*Lagopus lagopus*	4	
50			Sharp-tailed Grouse	*Tympanuchus phasianellus*	2	SGCN
51			Greater Prairie-Chicken	*Tympanuchus cupido*	2	SGCN, THR
52			Wild Turkey	*Meleagris gallopavo*	1	
	Gaviiformes					
		Gaviidae - Loons				
53			Red-throated Loon	*Gavia stellata*	2	
54			Pacific Loon	*Gavia pacifica*	3	
55			Common Loon	*Gavia immer*	1	SC
	Podicipediformes					
		Podicipedidae - Grebes				
56			Pied-billed Grebe	*Podilymbus podiceps*	1	
57			Horned Grebe	*Podiceps auritus*	1	SGCN
58			Red-necked Grebe	*Podiceps grisegena*	2	SGCN, END
59			Eared Grebe	*Podiceps nigricollis*	3	SGCN
60			Western Grebe	*Aechmophorus occidentalis*	3	SC
	Ciconiiformes					
		Ciconiidae - Storks				
61			Wood Stork	*Mycteria americana*	4	
	Suliformes					
		Fregatidae - Frigatebirds				
62			Magnificent Frigatebird	*Fregata magnificens*	4	
		Phalacrocoracidae - Cormorants				
63			Double-crested Cormorant	*Phalacrocorax auritus*	1	
		Anhingidae - Darters				
64			Anhinga	*Anhinga anhinga*	4	
	Pelecaniformes					
		Pelecanidae - Pelicans				
65			American White Pelican	*Pelecanus erythrorhynchos*	1	SC
66			Brown Pelican	*Pelecanus occidentalis*	4	
		Ardeidae - Herons/Bitterns/Allies				
67			American Bittern	*Botaurus lentiginosus*	2	SGCN
68			Least Bittern	*Ixobrychus exilis*	2	SC
69			Great Blue Heron	*Ardea herodias*	1	SC
70			Great Egret	*Ardea alba*	1	SGCN, THR
71			Snowy Egret	*Egretta thula*	3	SGCN, END
72			Little Blue Heron	*Egretta caerulea*	3	
73			Tricolored Heron	*Egretta tricolor*	4	
74			Cattle Egret	*Bubulcus ibis*	2	SC
75			Green Heron	*Butorides virescens*	1	
76			Black-crowned Night-Heron	*Nycticorax nycticorax*	1	SC
77			Yellow-crowned Night-Heron	*Nyctanassa violacea*	3	SGCN, THR
		Threskiornithidae - Ibises/Spoonbills				
78			White Ibis	*Eudocimus albus*	4	
79			Glossy Ibis	*Plegadis falcinellus*	3	
80			White-faced Ibis	*Plegadis chihi*	3	
81			Roseate Spoonbill	*Platalea ajaja*	4	

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Status: SGCN = Species of Greatest Conservation Need; SC = Special Concern; END = endangered; THR = threatened.

Seq	Order	Family	Common name	Scientific name	Abundance	Status
	Accipitriformes					
		Cathartidae - New World Vultures				
82			Black Vulture	*Coragyps atratus*	4	
83			Turkey Vulture	*Cathartes aura*	1	
		Pandionidae - Osprey				
84			Osprey	*Pandion haliaetus*	1	SGCN
		Accipitridae - Hawks/Kites/Eagles/Allies				
85			Swallow-tailed Kite	*Elanoides forficatus*	4	
86			White-tailed Kite	*Elanus leucurus*	4	
87			Mississippi Kite	*Ictinia mississippiensis*	3	
88			Bald Eagle	*Haliaeetus leucocephalus*	1	SGCN
89			Northern Harrier	*Circus cyaneus*	1	SGCN
90			Sharp-shinned Hawk	*Accipiter striatus*	1	
91			Cooper's Hawk	*Accipiter cooperii*	1	
92			Northern Goshawk	*Accipiter gentilis*	2	SGCN
93			Harris's Hawk	*Parabuteo unicinctus*	4	
94			Red-shouldered Hawk	*Buteo lineatus*	2	SGCN; THR
95			Broad-winged Hawk	*Buteo platypterus*	1	
96			Swainson's Hawk	*Buteo swainsoni*	3	
97			Red-tailed Hawk	*Buteo jamaicensis*	1	
98			Ferruginous Hawk	*Buteo regalis*	4	
99			Rough-legged Hawk	*Buteo lagopus*	1	
100			Golden Eagle	*Aquila chrysaetos*	2	
	Falconiformes					
		Falconidae - Caracaras/Falcons				
101			American Kestrel	*Falco sparverius*	1	
102			Merlin	*Falco columbarius*	1	SC
103			Gyrfalcon	*Falco rusticolus*	3	
104			Peregrine Falcon	*Falco peregrinus*	2	SGCN, END
105			Prairie Falcon	*Falco mexicanus*	4	
	Gruiformes					
		Rallidae - Rails/Gallinules/Coots				
106			Yellow Rail	*Coturnicops noveboracensis*	3	SGCN, THR
107			Black Rail	*Laterallus jamaicensis*	4	SC
108			King Rail	*Rallus elegans*	3	SGCN
109			Virginia Rail	*Rallus limicola*	1	
110			Sora	*Porzana carolina*	1	
111			Purple Gallinule	*Porphyrio martinica*	4	
112			Common Moorhen	*Gallinula chloropus*	2	SC
113			American Coot	*Fulica americana*	1	
		Gruidae - Cranes				
114			Sandhill Crane	*Grus canadensis*	1	
115			Whooping Crane	*Grus americana*	4	SGCN
	Charadriiformes					
		Charadriidae - Lapwings/Plovers				
116			Black-bellied Plover	*Pluvialis squatarola*	1	
117			American Golden-Plover	*Pluvialis dominica*	1	SGCN
118			Snowy Plover	*Charadrius alexandrinus*	4	
119			Wilson's Plover	*Charadrius wilsonia*	4	
120			Semipalmated Plover	*Charadrius semipalmatus*	1	
121			Piping Plover	*Charadrius melodus*	2	SGCN, END

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Status: SGCN = Species of Greatest Conservation Need; SC = Special Concern; END = endangered; THR = threatened.

Seq	Order	Family	Common name	Scientific name	Abundance	Status
122			Killdeer	*Charadrius vociferus*	1	
		Recurvirostridae - Stilts/Avocets				
123			Black-necked Stilt	*Himantopus mexicanus*	3	
124			American Avocet	*Recurvirostra americana*	2	
		Scolopacidae - Sandpipers/Phalaropes/Allies				
125			Spotted Sandpiper	*Actitis macularia*	1	
126			Solitary Sandpiper	*Tringa solitaria*	1	SGCN
127			Greater Yellowlegs	*Tringa melanoleuca*	1	
128			Willet	*Tringa semipalmata*	2	
129			Lesser Yellowlegs	*Tringa flavipes*	1	
130			Upland Sandpiper	*Bartramia longicauda*	2	SGCN
131			Eskimo Curlew	*Numenius borealis*	4	
132			Whimbrel	*Numenius phaeopus*	2	SGCN
133			Long-billed Curlew	*Numenius americanus*	4	
134			Hudsonian Godwit	*Limosa haemastica*	2	SGCN
135			Marbled Godwit	*Limosa fedoa*	2	SGCN
136			Ruddy Turnstone	*Arenaria interpres*	1	
137			Black Turnstone	*Arenaria melanocephala*	4	
138			Red Knot	*Calidris canutus*	2	
139			Sanderling	*Calidris alba*	1	
140			Semipalmated Sandpiper	*Calidris pusilla*	1	
141			Western Sandpiper	*Calidris mauri*	3	
142			Least Sandpiper	*Calidris minutilla*	1	
143			White-rumped Sandpiper	*Calidris fuscicollis*	2	
144			Baird's Sandpiper	*Calidris bairdii*	1	
145			Pectoral Sandpiper	*Calidris melanotos*	1	
146			Purple Sandpiper	*Calidris maritima*	3	
147			Dunlin	*Calidris alpina*	1	SGCN
148			Curlew Sandpiper	*Calidris ferruginea*	4	
149			Stilt Sandpiper	*Calidris himantopus*	1	
150			Buff-breasted Sandpiper	*Tryngites subruficollis*	2	SGCN
151			Ruff	*Philomachus pugnax*	3	
152			Short-billed Dowitcher	*Limnodromus griseus*	1	SGCN
153			Long-billed Dowitcher	*Limnodromus scolopaceus*	1	
154			Wilson's Snipe	*Gallinago delicata*	1	
155			American Woodcock	*Scolopax minor*	1	SGCN
156			Wilson's Phalarope	*Phalaropus tricolor*	2	SC
157			Red-necked Phalarope	*Phalaropus lobatus*	3	SGCN
158			Red Phalarope	*Phalaropus fulicarius*	3	
		Laridae - Gulls/Terns				
159			Black-legged Kittiwake	*Rissa tridactyla*	3	
160			Ivory Gull	*Pagophila eburnea*	4	
161			Sabine's Gull	*Xema sabini*	3	
162			Bonaparte's Gull	*Chroicocephalus philadelphia*	1	SC
163			Black-headed Gull	*Chroicocephalus ridibundus*	3	
164			Little Gull	*Hydrocoloeus minutus*	3	SC
165			Ross's Gull	*Rhodostethia rosea*	4	
166			Laughing Gull	*Leucophaeus atricilla*	2	
167			Franklin's Gull	*Leucophaeus pipixcan*	2	
168			Black-tailed Gull	*Larus crassirostris*	4	
169			Mew Gull	*Larus canus*	3	
170			Ring-billed Gull	*Larus delawarensis*	1	
171			California Gull	*Larus californicus*	3	
172			Herring Gull	*Larus argentatus*	1	
173			Thayer's Gull	*Larus thayeri*	2	
174			Iceland Gull	*Larus glaucoides*	2	

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Status: SGCN = Species of Greatest Conservation Need; SC = Special Concern; END = endangered; THR = threatened.

Seq	Order	Family	Common name	Scientific name	Abundance	Status
175			Lesser Black-backed Gull	*Larus fuscus*	2	
176			Slaty-backed Gull	*Larus schistisagus*	4	
177			Glaucous-winged Gull	*Larus glaucescens*	4	
178			Glaucous Gull	*Larus hyperboreus*	2	
179			Great Black-backed Gull	*Larus marinus*	2	SC
180			Sooty Tern	*Onychoprion fuscatus*	4	
181			Least Tern	*Sternula antillarum*	4	
182			Caspian Tern	*Hydroprogne caspia*	2	SGCN, END
183			Black Tern	*Chlidonias niger*	1	SGCN
184			White-winged Tern	*Chlidonias leucopterus*	4	
185			Common Tern	*Sterna hirundo*	2	SGCN, END
186			Arctic Tern	*Sterna paradisaea*	3	
187			Forster's Tern	*Sterna forsteri*	2	SGCN, END
188			Royal Tern	*Thalasseus maximus*	4	
		Stercorariidae - Jaegers				
189			Pomarine Jaeger	*Stercorarius pomarinus*	3	
190			Parasitic Jaeger	*Stercorarius parasiticus*	2	
191			Long-tailed Jaeger	*Stercorarius longicaudus*	3	
		Alcidae - Auks/Murres/Puffins				
192			Dovekie	*Alle alle*	4	
193			Thick-billed Murre	*Uria lomvia*	4	
194			Ancient Murrelet	*Synthliboramphus antiquus*	4	
	Columbiformes					
		Columbidae - Pigeons/Doves				
195			Rock Pigeon	*Columba livia*	1	
196			Band-tailed Pigeon	*Patagioenas fasciata*	4	
197			Eurasian Collared-Dove	*Streptopelia decaocto*	2	
198			White-winged Dove	*Zenaida asiatica*	3	
199			Mourning Dove	*Zenaida macroura*	1	
200			Passenger Pigeon	*Ectopistes migratorius*	5	
201			Common Ground-Dove	*Columbina passerina*	4	
	Psittaciformes					
		Psittacidae - Parakeets/Macaws/Parrots				
202			Carolina Parakeet	*Conuropsis carolinensis*	5	
	Cuculiformes					
		Cuculidae - Cuckoos/Roadrunners/Anis				
203			Yellow-billed Cuckoo	*Coccyzus americanus*	1	SGCN
204			Black-billed Cuckoo	*Coccyzus erythropthalmus*	1	SGCN
205			Groove-billed Ani	*Crotophaga sulcirostris*	4	
	Strigiformes					
		Tytonidae - Barn Owls				
206			Barn Owl	*Tyto alba*	3	SGCN, END
		Strigidae - Typical Owls				
207			Eastern Screech-Owl	*Megascops asio*	1	
208			Great Horned Owl	*Bubo virginianus*	1	
209			Snowy Owl	*Bubo scandiacus*	2	
210			Northern Hawk Owl	*Surnia ulula*	3	SC
211			Burrowing Owl	*Athene cunicularia*	4	
212			Barred Owl	*Strix varia*	1	
213			Great Gray Owl	*Strix nebulosa*	3	SC
214			Long-eared Owl	*Asio otus*	2	SC
215			Short-eared Owl	*Asio flammeus*	2	SGCN

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Seq	Order	Family	Common name	Scientific name	Abundance	Status
216			Boreal Owl	*Aegolius funereus*	3	
217			Northern Saw-whet Owl	*Aegolius acadicus*	1	
	Caprimulgiformes					
		Caprimulgidae - Goatsuckers				
218			Common Nighthawk	*Chordeiles minor*	1	
219			Chuck-will's-widow	*Caprimulgus carolinensis*	3	
220			Eastern Whip-poor-will	*Caprimulgus vociferus*	1	SGCN
	Apodiformes					
		Apodidae - Swifts				
221			Chimney Swift	*Chaetura pelagica*	1	
	Trochilidae - Hummingbirds					
222			Green Violetear	*Colibri thalassinus*	4	
223			Green-breasted Mango	*Anthracothorax prevostii*	4	
224			Broad-billed Hummingbird	*Cynanthus latirostris*	4	
225			Ruby-throated Hummingbird	*Archilochus colubris*	1	
226			Anna's Hummingbird	*Calypte anna*	4	
227			Rufous Hummingbird	*Selasphorus rufus*	2	
	Coraciiformes					
		Alcedinidae - Kingfishers				
228			Belted Kingfisher	*Megaceryle alcyon*	1	
	Piciformes					
		Picidae - Woodpeckers/Allies				
229			Lewis's Woodpecker	*Melanerpes lewis*	4	
230			Red-headed Woodpecker	*Melanerpes erythrocephalus*	1	SGCN
231			Red-bellied Woodpecker	*Melanerpes carolinus*	1	
232			Yellow-bellied Sapsucker	*Sphyrapicus varius*	1	
233			Downy Woodpecker	*Picoides pubescens*	1	
234			Hairy Woodpecker	*Picoides villosus*	1	
235			American Three-toed Woodpecker	*Picoides dorsalis*	3	
236			Black-backed Woodpecker	*Picoides arcticus*	2	SGCN
237			Northern Flicker	*Colaptes auratus*	1	
238			Pileated Woodpecker	*Dryocopus pileatus*	1	
	Passeriformes					
		Tyrannidae - Tyrant Flycatchers				
239			Olive-sided Flycatcher	*Contopus cooperi*	1	SGCN
240			Western Wood-Pewee	*Contopus sordidulus*	4	
241			Eastern Wood-Pewee	*Contopus virens*	1	
242			Yellow-bellied Flycatcher	*Empidonax flaviventris*	1	SC
243			Acadian Flycatcher	*Empidonax virescens*	2	SGCN; THR
244			Alder Flycatcher	*Empidonax alnorum*	1	
245			Willow Flycatcher	*Empidonax traillii*	1	SGCN
246			Least Flycatcher	*Empidonax minimus*	1	SGCN
247			Dusky Flycatcher	*Empidonax oberholseri*	4	
248			Eastern Phoebe	*Sayornis phoebe*	1	
249			Say's Phoebe	*Sayornis saya*	4	
250			Vermilion Flycatcher	*Pyrocephalus rubinus*	4	
251			Ash-throated Flycatcher	*Myiarchus cinerascens*	4	
252			Great Crested Flycatcher	*Myiarchus crinitus*	1	
253			Western Kingbird	*Tyrannus verticalis*	3	SC
254			Eastern Kingbird	*Tyrannus tyrannus*	1	
255			Scissor-tailed Flycatcher	*Tyrannus forficatus*	3	
256			Fork-tailed Flycatcher	*Tyrannus savana*	4	

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		Laniidae - Shrikes				
257			Loggerhead Shrike	*Lanius ludovicianus*	3	SGCN, END
258			Northern Shrike	*Lanius excubitor*	1	
		Vireonidae - Vireos				
259			White-eyed Vireo	*Vireo griseus*	2	SC
260			Bell's Vireo	*Vireo bellii*	2	SGCN, THR
261			Gray Vireo	*Vireo vicinior*	4	
262			Yellow-throated Vireo	*Vireo flavifrons*	1	
263			Blue-headed Vireo	*Vireo solitarius*	1	
264			Warbling Vireo	*Vireo gilvus*	1	
265			Philadelphia Vireo	*Vireo philadelphicus*	1	SC
266			Red-eyed Vireo	*Vireo olivaceus*	1	
		Corvidae - Jays/Crows				
267			Gray Jay	*Perisoreus canadensis*	2	SC
268			Blue Jay	*Cyanocitta cristata*	1	
269			Clark's Nutcracker	*Nucifraga columbiana*	4	
270			Black-billed Magpie	*Pica hudsonia*	3	
271			American Crow	*Corvus brachyrhynchos*	1	
272			Common Raven	*Corvus corax*	1	
		Alaudidae - Larks				
273			Horned Lark	*Eremophila alpestris*	1	
		Hirundinidae - Swallows				
274			Purple Martin	*Progne subis*	1	SC
275			Tree Swallow	*Tachycineta bicolor*	1	
276			Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	1	
277			Bank Swallow	*Riparia riparia*	1	
278			Cliff Swallow	*Petrochelidon pyrrhonota*	1	
279			Cave Swallow	*Petrochelidon fulva*	4	
280			Barn Swallow	*Hirundo rustica*	1	
		Paridae - Chickadees/Titmice				
281			Black-capped Chickadee	*Poecile atricapillus*	1	
282			Boreal Chickadee	*Poecile hudsonicus*	2	SGCN
283			Tufted Titmouse	*Baeolophus bicolor*	1	
		Sittidae - Nuthatches				
284			Red-breasted Nuthatch	*Sitta canadensis*	1	
285			White-breasted Nuthatch	*Sitta carolinensis*	1	
286			Brown-headed Nuthatch	*Sitta pusilla*	4	
		Certhiidae - Creepers				
287			Brown Creeper	*Certhia americana*	1	
		Troglodytidae - Wrens				
288			Rock Wren	*Salpinctes obsoletus*	4	
289			Carolina Wren	*Thryothorus ludovicianus*	2	SC
290			Bewick's Wren	*Thryomanes bewickii*	3	END
291			House Wren	*Troglodytes aedon*	1	
292			Winter Wren	*Troglodytes hiemalis*	1	
293			Sedge Wren	*Cistothorus platensis*	1	SC
294			Marsh Wren	*Cistothorus palustris*	1	
		Polioptilidae - Gnatcatchers				
295			Blue-gray Gnatcatcher	*Polioptila caerulea*	1	
		Regulidae - Kinglets				
296			Golden-crowned Kinglet	*Regulus satrapa*	1	
297			Ruby-crowned Kinglet	*Regulus calendula*	1	SC

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		Turdidae - Thrushes				
298			Eastern Bluebird	*Sialia sialis*	1	
299			Mountain Bluebird	*Sialia currucoides*	3	
300			Townsend's Solitaire	*Myadestes townsendi*	2	
301			Veery	*Catharus fuscescens*	1	SGCN
302			Gray-cheeked Thrush	*Catharus minimus*	1	
303			Swainson's Thrush	*Catharus ustulatus*	1	SC
304			Hermit Thrush	*Catharus guttatus*	1	
305			Wood Thrush	*Hylocichla mustelina*	1	SGCN
306			American Robin	*Turdus migratorius*	1	
307			Varied Thrush	*Ixoreus naevius*	2	
		Mimidae - Mockingbirds/Thrashers				
308			Gray Catbird	*Dumetella carolinensis*	1	
309			Northern Mockingbird	*Mimus polyglottos*	2	
310			Sage Thrasher	*Oreoscoptes montanus*	4	
311			Brown Thrasher	*Toxostoma rufum*	1	SGCN
312			Curve-billed Thrasher	*Toxostoma curvirostre*	4	
		Sturnidae - Starlings				
313			European Starling	*Sturnus vulgaris*	1	
		Motacillidae - Wagtails/Pipits				
314			American Pipit	*Anthus rubescens*	1	
		Bombycillidae - Waxwings				
315			Bohemian Waxwing	*Bombycilla garrulus*	2	
316			Cedar Waxwing	*Bombycilla cedrorum*	1	
		Ptilogonatidae - Silky-Flycatchers				
317			Phainopepla	*Phainopepla nitens*	4	
		Calcariidae - Longspurs and Snow Buntings				
318			Lapland Longspur	*Calcarius lapponicus*	1	
319			Chestnut-collared Longspur	*Calcarius ornatus*	4	
320			Smith's Longspur	*Calcarius pictus*	4	
321			Snow Bunting	*Plectrophenax nivalis*	1	
		Parulidae - Wood-Warblers				
322			Blue-winged Warbler	*Vermivora cyanoptera*	1	SGCN
323			Golden-winged Warbler	*Vermivora chrysoptera*	2	SGCN
324			Tennessee Warbler	*Oreothlypis peregrina*	1	
325			Orange-crowned Warbler	*Oreothlypis celata*	1	
326			Nashville Warbler	*Oreothlypis ruficapilla*	1	SC
327			Northern Parula	*Parula americana*	1	
328			Yellow Warbler	*Dendroica petechia*	1	
329			Chestnut-sided Warbler	*Dendroica pensylvanica*	1	
330			Magnolia Warbler	*Dendroica magnolia*	1	
331			Cape May Warbler	*Dendroica tigrina*	1	SC
332			Black-throated Blue Warbler	*Dendroica caerulescens*	2	SGCN
333			Yellow-rumped Warbler	*Dendroica coronata*	1	
334			Black-throated Gray Warbler	*Dendroica nigrescens*	4	
335			Black-throated Green Warbler	*Dendroica virens*	1	
336			Townsend's Warbler	*Dendroica townsendi*	4	
337			Hermit Warbler	*Dendroica occidentalis*	4	
338			Blackburnian Warbler	*Dendroica fusca*	1	
339			Yellow-throated Warbler	*Dendroica dominica*	3	SGCN; END
340			Pine Warbler	*Dendroica pinus*	1	
341			Kirtland's Warbler	*Dendroica kirtlandii*	3	SGCN
342			Prairie Warbler	*Dendroica discolor*	3	
343			Palm Warbler	*Dendroica palmarum*	1	

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344			Bay-breasted Warbler	*Dendroica castanea*	1	
345			Blackpoll Warbler	*Dendroica striata*	1	
346			Cerulean Warbler	*Dendroica cerulea*	2	SGCN, THR
347			Black-and-white Warbler	*Mniotilta varia*	1	
348			American Redstart	*Setophaga ruticilla*	1	
349			Prothonotary Warbler	*Protonotaria citrea*	1	SGCN
350			Worm-eating Warbler	*Helmitheros vermivorum*	2	SGCN, END
351			Swainson's Warbler	*Limnothlypis swainsonii*	4	
352			Ovenbird	*Seiurus aurocapilla*	1	
353			Northern Waterthrush	*Parkesia noveboracensis*	1	
354			Louisiana Waterthrush	*Parkesia motacilla*	2	SGCN
355			Kentucky Warbler	*Oporornis formosus*	2	SGCN, THR
356			Connecticut Warbler	*Oporornis agilis*	2	SGCN
357			Mourning Warbler	*Oporornis philadelphia*	1	
358			MacGillivray's Warbler	*Oporornis tolmiei*	4	
359			Common Yellowthroat	*Geothlypis trichas*	1	
360			Hooded Warbler	*Wilsonia citrina*	2	SGCN, THR
361			Wilson's Warbler	*Wilsonia pusilla*	1	SC
362			Canada Warbler	*Wilsonia canadensis*	1	SGCN
363			Yellow-breasted Chat	*Icteria virens*	2	SC
		Emberizidae - Emberizids				
364			Green-tailed Towhee	*Pipilo chlorurus*	4	
365			Spotted Towhee	*Pipilo maculatus*	3	
366			Eastern Towhee	*Pipilo erythrophthalmus*	1	
367			Rufous-crowned Sparrow	*Aimophila ruficeps*	4	
368			American Tree Sparrow	*Spizella arborea*	1	
369			Chipping Sparrow	*Spizella passerina*	1	
370			Clay-colored Sparrow	*Spizella pallida*	1	
371			Field Sparrow	*Spizella pusilla*	1	SGCN
372			Vesper Sparrow	*Pooecetes gramineus*	1	SGCN
373			Lark Sparrow	*Chondestes grammacus*	1	SGCN
374			Black-throated Sparrow	*Amphispiza bilineata*	4	
375			Lark Bunting	*Calamospiza melanocorys*	3	
376			Savannah Sparrow	*Passerculus sandwichensis*	1	
377			Grasshopper Sparrow	*Ammodramus savannarum*	2	SGCN
378			Baird's Sparrow	*Ammodramus bairdii*	4	
379			Henslow's Sparrow	*Ammodramus henslowii*	2	SGCN
380			Le Conte's Sparrow	*Ammodramus leconteii*	2	SGCN
381			Nelson's Sparrow	*Ammodramus nelsoni*	3	SGCN
382			Fox Sparrow	*Passerella iliaca*	1	
383			Song Sparrow	*Melospiza melodia*	1	
384			Lincoln's Sparrow	*Melospiza lincolnii*	1	
385			Swamp Sparrow	*Melospiza georgiana*	1	
386			White-throated Sparrow	*Zonotrichia albicollis*	1	
387			Harris's Sparrow	*Zonotrichia querula*	2	
388			White-crowned Sparrow	*Zonotrichia leucophrys*	1	
389			Golden-crowned Sparrow	*Zonotrichia atricapilla*	4	
390			Dark-eyed Junco	*Junco hyemalis*	1	
		Cardinalidae - Cardinals/Saltators/Allies				
391			Summer Tanager	*Piranga rubra*	2	
392			Scarlet Tanager	*Piranga olivacea*	1	

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393			Western Tanager	*Piranga ludoviciana*	3	
394			Northern Cardinal	*Cardinalis cardinalis*	1	
395			Pyrrhuloxia	*Cardinalis sinuatus*	4	
396			Rose-breasted Grosbeak	*Pheucticus ludovicianus*	1	
397			Black-headed Grosbeak	*Pheucticus melanocephalus*	3	
398			Blue Grosbeak	*Passerina caerulea*	3	
399			Lazuli Bunting	*Passerina amoena*	4	
400			Indigo Bunting	*Passerina cyanea*	1	
401			Painted Bunting	*Passerina ciris*	4	
402			Dickcissel	*Spiza americana*	1	SGCN
		Icteridae - Blackbirds				
403			Bobolink	*Dolichonyx oryzivorus*	1	SGCN
404			Red-winged Blackbird	*Agelaius phoeniceus*	1	
405			Eastern Meadowlark	*Sturnella magna*	1	SGCN
406			Western Meadowlark	*Sturnella neglecta*	2	SGCN
407			Yellow-headed Blackbird	*Xanthocephalus xanthocephalus*	1	
408			Rusty Blackbird	*Euphagus carolinus*	2	SGCN
409			Brewer's Blackbird	*Euphagus cyanocephalus*	1	
410			Common Grackle	*Quiscalus quiscula*	1	
411			Great-tailed Grackle	*Quiscalus mexicanus*	4	
412			Brown-headed Cowbird	*Molothrus ater*	1	
413			Orchard Oriole	*Icterus spurius*	1	
414			Hooded Oriole	*Icterus cucullatus*	4	
415			Streak-backed Oriole	*Icterus pustulatus*	4	
416			Bullock's Oriole	*Icterus bullockii*	3	
417			Baltimore Oriole	*Icterus galbula*	1	
418			Scott's Oriole	*Icterus parisorum*	4	
		Fringillidae - Fringilline/Cardueline Finches				
419			Brambling	*Fringilla montifringilla*	4	
420			Gray-crowned Rosy-Finch	*Leucosticte tephrocotis*	4	
421			Pine Grosbeak	*Pinicola enucleator*	2	
422			Purple Finch	*Carpodacus purpureus*	1	
423			House Finch	*Carpodacus mexicanus*	1	
424			Red Crossbill	*Loxia curvirostra*	2	SGCN
425			White-winged Crossbill	*Loxia leucoptera*	2	
426			Common Redpoll	*Acanthis flammea*	1	
427			Hoary Redpoll	*Acanthis hornemanni*	3	
428			Pine Siskin	*Spinus pinus*	1	
429			American Goldfinch	*Spinus tristis*	1	
430			Evening Grosbeak	*Coccothraustes vespertinus*	2	
		Passeridae - Old World Sparrows				
431			House Sparrow	*Passer domesticus*	1	
432			Eurasian Tree Sparrow	*Passer montanus*	4	
		Hypothetical Species				
			Clark's Grebe			
			Spotted Redshank			
			Roseate Tern			
			Long-billed Murrelet			
			Cassin's Kingbird			
			Yellow-browed Warbler			
			Virginia's Warbler			
			Northern Wheatear			
			Sprague's Pipit			
			Painted Redstart			
			Lesser Goldfinch			

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50 Years Ago in *The Passenger Pigeon*

It sometimes takes detective work and unusual circumstances to document a new bird record. Such was the case for documenting the first Ross's Goose in Wisconsin.

Alan Rusch, who wrote the Pigeon article entitled "Ross' Goose Discovered in Wisconsin," received a report of a goose weighing 2 pounds 15 ounces that was shot on the "Davidson Marsh" just north of the Storr's Lake Wildlife Area in Rock County on about 1 November 1960. Fortunately, photos were taken of the goose. When the photos plus negatives were examined, they showed a small white goose with no "grinning patch" on the side of the bill. The shading on the upper cheek from the eye to the base of the bill also seemed to fit a juvenile Ross's Goose.

To look at goose measurements more closely, arrangements were made with the young lad photographed holding the goose to measure his hand for comparison with the goose. Comparative measurements indicated that the culmen length was <40mm, which ruled out Snow Goose. No feather evidence was obtained because the only feathers found in the area where the goose was prepared for the table were some from a pigeon.

Rusch stated that this record might not have come to light except for a set of odd and perhaps humorous circumstances. The hunter had entered the bird as a Snow Goose in a contest at Brown's Shoe Store in Milton Junction. The prizes were to have been hip boots for the largest Richardson's Goose and for the largest Snow Goose. Because the goose was entered in the contest, it was weighed on scales in the meat department of Martin's Grocery. As it turned out, the entry was the only one entered in the Snow Goose contest.

Mr. George Bachay, outdoor writer for the Janesville Daily Gazette, then informed the hunter that the registered weight indicated that the goose was too small to be a Snow Goose and was probably a Ross's Goose. It is unfortunate that the entry did not qualify for the contest, but as Rusch stated, he was certain the hunter had the greater satisfaction of contributing an outstanding record to Wisconsin's bird lore.

Excerpt from Vol. 23(2), 1961 by WSO Historian Noel J. Cutright, 3352 Knollwood Road, West Bend, WI 53095. h. 262 .675. 2443, w. 262. 268. 3617, noel.cutright@we-energies.com.

Least Flycatcher by Ryan Brady

Monitoring of Extracolonial Kirtland's Warblers in Wisconsin

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In June and July of 2010 I monitored extracolonial Kirtland's Warblers (*Dendroica kirtlandii*) in Bayfield, Douglas, Marinette, and Adams Counties, Wisconsin. This work was done under the direction of United States Fish and Wildlife Serivce (USFWS) biologist Joel Trick and Wisconsin Department of Natural resources (WDNR) avian ecologist Kim Grveles, with financial support from the Natural Resources Foundation of Wisconsin.

Background

After Dean DiTammaso discovered a colony of the federally endangered Kirtland's Warbler in Adams County in 2007, the USFWS and the WDNR have devoted considerable effort to gaining an understanding of these birds in accordance with state and federal statutes on endangered species (Trick et al. 2008). Beginning in 2008, a monitor has been engaged in tracking birds and nests at the Adams County colony throughout the breeding season. In addition, Kirtland's Warbler surveillance efforts that were initiated by the WDNR in 1978 were renewed and their coverage-area increased throughout Wisconsin (Tilghman 1979). Enthusiastic volunteers composed mostly of citizen-scientists have covered many acres of suitable pine (*Pinus spp.*) stands in search of additional birds. The surveys have resulted in the discovery of additional Kirtland's Warblers in the state each year since 2008. Although typically considered colonial nesters, many of the birds found outside of the Adams County site have been single individuals or pairs. These extracolonial birds, located in widely scattered appropriate pine habitat across the state, were the focus of my monitoring efforts.

Since 2008 a working protocol has been implemented for monitoring Wisconsin's Kirtland's Warblers that includes tracking and mapping of birds' territories and monitoring nest progress in a way that minimizes disturbance and risk to the birds (Anich 2009). Using these methods I tracked singing males, mapped their territories, and monitored nests. Surveys were conducted by walking transects through suitable habitat and broadcasting Kirtland's Warbler song at regular intervals, similar to the methods used by volunteers (Grveles 2009).

2010 Season

The extracolonial monitoring season began on 1 June, allowing adequate time for both males and females to arrive from their wintering grounds, occupy territories, and begin breeding activity. USFWS biologist Paul Charland and Rachel Samerdyke had previously located a banded male Kirtland's Warbler six miles away from the main colony in a red pine (*Pinus resinosa*) plantation owned by Plum Creek Timber Co.; it was the same stand where a pair had nested the previous season. The male's USFWS bands revealed that he was color-coded as Aluminum-Jet/Green-Purple, the same bird that occupied the stand last year (Fig. 1). This male proved amenable to tracking—singing into the late morning and again in the early evening. After spending time observing him and mapping his singing perches I realized that he was occupying a territory remarkably similar to the previous season. By the second day of tracking the male I located a female Kirtland's Warbler within his territory. Shortly after finding the female I located a nest containing five Kirtland's Warbler eggs under a low-hanging red pine bough in a patch of blueberry (*Vaccinium angustifolium*) near the edge of his singing territory (Fig. 2). I was able to follow the progress of this pair as the male brought food to the female during incubation and both parents brought in food during brooding of chicks. This pair eventually fledged an unknown number of young in early July.

During the annual census period from 6–20 June reports were received of Kirtland's Warblers in areas they've occupied in previous years in both northern and southern Marinette County. I surveyed the area for several days to follow up on these reports and assist with banding efforts by USFWS biologist Ron Refsnider. I was only able to relocate one bird in northern Marinette County, which was subsequently banded and aged as a second-year male. This bird was also using a pine stand where Kirtland's Warblers had been found in previous years. After several days at this site I briefly observed a female Kirtland's Warbler within the male's singing territory. However, this was the last evidence I had of Kirtland's Warblers in the area; the male ceased vocalizing and no nest was located. The two other sites in Marinette County where birds were reported in 2010 but not relocated also had a history of Kirtland's Warbler presence within the past several years.

In contrast to the birds at the main colony, the extracolonial birds have proven less predictable in their location and behavior, and often disappear and sometimes reappear throughout the season. Color-banding by the USFWS has confirmed the peripatetic nature of some male Kirtland's Warblers, as evidenced by a bird that was sighted in Upper Michigan, Lower Michigan, and Upper Michigan again over the course of a breeding season (Probst et al. 2003; C. Bocetti pers. comm.). Such wandering behavior may be applicable to the four Kirtland's Warblers that were briefly observed early in the breeding season in Marinette County but not relocated. In the case of the one male that was relocated but then ceased singing, wandering seems less likely to explain his disappearance because there was a female in his territory. This pair may

have suffered a nest failure or a mortality event that caused them to leave the site, or the male may have simply stopped vocalizing due to the absence of conspecific territorial interactions.

After tracking the Kirtland's Warblers in Marinette County there was encouraging news from the northwest part of the state. Kirtland's Warblers had been found by Robert Royse, a birder from Ohio, and WDNR biologist Steve LaValley in Bayfield and Douglas Counties, respectively. I eagerly entered a new Kirtland's Warbler habitat. Although structurally similar to the red and jack pine (*Pinus banksiana*) plantations in Adams and Marinette Counties, the landscape in Douglas and Bayfield Counties was dominated by naturally regenerated jack pine stands. Arriving at the Bayfield County site, I soon heard the loud warble of a Kirtland's Warbler. This unbanded male sang continually from a well-defined territory during the several days that I observed him. I estimated he went through a maximum of 300 song repetitions in one hour. Higher singing frequency is thought to be indicative of a bird seeking a mate as opposed to a paired bird defending a territory (Hayes et al. 1986). Several days of observations and surveys did not produce any evidence of a female Kirtland's Warbler or any additional males in the large area of suitable habitat in Bayfield and Douglas Counties.

I returned to the sites in Bayfield and Douglas Counties several weeks later in late June, but there was no evidence of the unbanded male. This precluded the possibility of banding him and brought an end to the season's monitoring in northwest Wisconsin. With such a large area of pine habitat it seems plausible that an unpaired bird could spend the season moving through the area unnoticed. The two other male Kirtland's Warblers that were sighted in Bayfield and Douglas Counties are probably comparable to the Marinette County birds that were never relocated or became undetectable due to lack of singing or site abandonment.

The Bayfield and Douglas County pine barrens area was home to a unique avifauna. Palm (*Dendroica palmarum*) and Connecticut Warblers (*Oporornis agilis*) and Dark-eyed Juncos (*Junco hyemalis*) occupied the same stand as the Kirtland's Warbler. With a Lincoln's Sparrow (*Melospiza lincolnii*) nest at the Kirtland's site in Marinette County it seemed that the habitat overlap that Sam Robbins described in Connecticut Warblers was carrying over to these other bog/muskeg breeding birds as well (Robbins 1974). The structural similarity between the pine stands that host Kirtland's Warblers—small coniferous trees and a groundlayer of ericaceous shrubs, grasses, and sedges—and bog/muskeg vegetation seems apparent. Several species identified as Species of Greatest Conservation Need by the Wisconsin Wildlife Action Plan were also observed in the pine barrens including Upland Sandpiper (*Bartramia longicauda*), Vesper Sparrow (*Pooecetes gramineus*), and Black-billed Cuckoo (*Coccyzus erythropthalmus*).

I returned to Adams County and spent time surveying pine stands throughout the area that appeared suitable for Kirtland's Warblers, while also helping with nest checks at the main colony and the additional single nest outside the colony. Kirtland's Warbler site preference and selection

can be unpredictable. There are many acres of habitat within a ten kilometer radius of the main colony that contain a similar suite of bird and plant species and are structurally similar to Kirtland's Warbler breeding sites, but they have yet to be occupied. As the number of birds produced in Adams County grows, perhaps these offspring will return and take up residence in new stands near their natal area.

While monitoring birds at the main colony I observed new and unexpected Kirtland's Warbler behavior. Singing "face-offs" during which two males approach one another while vocalizing were common, but three male Kirtland's Warblers physically fighting on the ground in the area where their territories met was an unusual occurrence. I also observed a female Kirtland's Warbler leave her nest while incubating and bathe in the dew of some oak leaves. Perhaps the most unexpected observation was a male Kirtland's Warbler engaging in aerial dive attacks on a Five-lined Skink (*Plestiodon fasciatus*). After scuffling a bit with the skink on the ground the warbler eventually chased it up a tree, all presumably in defense of his nest several meters away.

As the breeding season wound down in early to mid July, several unpaired birds in the main colony ceased singing and likely moved out of their territories. A color-banded male Kirtland's Warbler first appeared in the same stand as the single extracolonial pair I had been monitoring all season on 6 July. It is likely that this was a male that had been on territory for the first part of the season at the main colony six miles away although this was not confirmed as only three of its four band colors could be discerned.

Summary

A total of 13 Kirtland's Warblers (males and females) was reported in the state outside of the main colony in Adams County during the 2010 breeding season; of these, five were relocated during followup monitoring (Table 1). Six birds were reported in Marinette County including one female. A male and female were tracked on territory in early June but could not be relocated by late June. Three birds were reported in Bayfield County including one female. One male was tracked in mid-June but could not be relocated by the end of June. One male was reported in Douglas County but was never relocated on followup visits. A credible report was also received late in the season of a male that had been present in Washburn County in May. A male and female were on territory in Adams County throughout the breeding season. They produced a nest that likely fledged 1–5 Kirtland's Warblers. One additional male Kirtland's Warbler was seen in Adams County in early July but had likely dispersed from the main colony.

From a statewide perspective, there were 37 Kirtland's Warblers reported in Wisconsin in 2010, 13 of which were in areas outside of the main colony. There were an estimated 12–18 young produced in the state including an estimated 1–5 from extracolonial birds.

Additional Questions and Future Research

Monitoring of Wisconsin's extracolonial Kirtland's Warblers provided data on locations, territories, and nesting activity that can be used for popu-

Figure 1. Extracolonial male Kirtland's Warbler in Adams County with band combination Aluminum-Jet/Green-Purple. Photo by Rachel Samerdyke.

Figure 2. Extracolonial Kirtland's Warbler nest site in Adams County, Wisconsin.

Table 1: Extracolonial Kirtland's Warblers (*Dendroica kirtlandii*) reported in Wisconsin in 2010.

Extracolonial Site	Total Kirtland's Warblers Reported	Males	Females	Total number of birds relocated on followups	Nests
Adams	2	1	1	2	1*
Marinette (North)	3	2	1	2	0
Marinette (South)	3	3	0	0	0
Bayfield	3	2	1	1	0
Douglas	1	1	0	0	0
Washburn**	1	1	0	NA	0

* The Adams nest had 1-5 young
** The Washburn bird was reported in July as having been present in May

lation estimates and viability analyses, and can also be used to better understand patterns of occurrence and productivity on a statewide scale. Despite the increased effort to understand Kirtland's Warblers in Wisconsin there are many questions that remain.

What are the origins of the Wisconsin's Kirtland's Warblers? Banding of adults by the USFWS sheds light on the nativity of some birds and is an accurate measure of an individual bird's site tenacity, but the many unbanded birds that were found in the state are either dispersers from Michigan or were hatched from Wisconsin pairs. In the future, banding of nestlings that was initiated in 2009 may provide a more definitive answer as to how many birds are returning to natal areas in Wisconsin.

Why have nesting colonies like the one in Adams County failed to develop in other parts of the state? Despite multiple birds sighted in Marinette County over the past three years, and at least one nest, a colony has not developed and productivity has not increased there. Future monitoring will help determine limiting factors for colony development in suitable areas of northeast and northwest Wisconsin.

Why do some territorial birds disappear? The majority of the Kirtland's Warblers seen outside of Adams County were only observed once. Pairs were seen in both Marinette County and Bayfield County but were undetectable by late June. If these birds are not singing due to lack of conspecific interactions there may be additional birds and nests that go undetected. In this case productivity from extracolonial birds may be higher than current estimates. It seems equally likely that many of these birds give up after failing to find a mate early in the breeding season and begin moving to other sites, making detection difficult.

Continued monitoring of extracolonial Kirtland's Warblers will provide better answers to these questions and assist with management efforts for this species that will ensure its continued survival as a breeding bird in Wisconsin for years to come.

Acknowledgments

The Natural Resources Foundation of Wisconsin (www.wisconservation.org) continues to provide generous support for this project and others

benefitting endangered species. Plum Creek Timber Company's cooperation has made monitoring efforts possible. Joel Trick (USFWS) and Kim Grveles (WDNR) provided direction and guidance throughout the season as well as helpful reviews of this article. The Green Bay USFWS office provided travel costs to attend the Kirtland's Warbler Recovery Team meeting. Nick Walton collaborated on field methods. Jack Swelstad, Steve LaValley, Paul Charland, Rachel Samerdyke, John Probst, and Jon Motquin contributed helpful field reports along with many other dedicated volunteers.

Literature Cited

Anich, N. M. 2009. Kirtland's Warbler survey and nest monitoring, Adams County, Wisconsin: 2008 Field Report. Unpublished, Wisconsin Department of Natural Resources, Madison, Wisconsin.

Grveles, K. 2009. The first annual census of the Kirtland's Warbler (*Dendroica kirtlandii*) in Wisconsin. Passenger Pigeon 71: 123–130.

Hayes, J. P., J. R. Probst, and D. Rakstad. 1986. Effect of mating status and time of day on Kirtland's Warbler song rates. Condor 88: 386–388.

Probst, J. R., D. M. Donner, C. I. Bocetti, and S. Sjogren. 2003. Population increase in Kirtland's Warbler and summer range expansion to Wisconsin and Michigan's Upper Peninsula, USA. Oryx 37: 365–373.

Robbins, S. 1974. New light on the Connecticut Warbler. Passenger Pigeon 36: 110–115.

Tilghman, N. G. 1979. The search for the Kirtland's Warbler in Wisconsin. Passenger Pigeon 41: 16–24.

Trick, J. A., K. Grveles, D. DiTommaso, and J. Robaidek. 2008. The first Wisconsin nesting record of Kirtland's Warbler (*Dendroica kirtlandii*). Passenger Pigeon 70: 93–102.

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Common Loon by Ryan Brady

"By the Wayside"—Summer 2010

These reports of rare species, or odd timing by a species, include Eurasian Wigeon, Plegadis ibis, Bay-breasted Warbler, Blackpoll Warbler, and Lark Bunting.

EURASIAN WIGEON
(*Anas penelope*)

26 June 2010, City of Manitowoc Harbor Area, Manitowoc County—As I was walking on the containment vessel to the Manitowoc Harbor about 1 hour before sunset, a small flock of ducks flew into the containment vessel. The mixed flock contained 4 wigeon, 2 Gadwalls, and several Mallards. The wigeons were noticed because of their white wing patches in the shoulder area. Because the lighting was far from optimal, I continued walking to the west side of the vessel to where the sun was behind me. When I looked again one male and two female American Wigeon were together with a duck I initially dismissed as a Redhead. However, when I could not locate the fourth wigeon, I took a second look. The shape of the duck was consistent with the other wigeons; head, bill, and body form were those of a wigeon. The duck was the same size as the adjacent wigeons. This bird sported a rosy colored breast, certainly not the color expected if it were a Redhead, gray sides, and a slightly darker back. The tail-rump area was black, and a white spot separated the gray side from the black rump. Also, I looked for and found the lighter colored forehead.—*Charles Sontag, Manitowoc, Wisconsin.*

PLEGADIS IBIS
(*Plegadis sp.*)

16 June 2010, flying over Rush Lake in Winnebago County—A bird flying about ¼ mile away caught my attention. It wasn't a heron, cormorant, or duck. Looking at the bird with binoculars, I could see it was obviously an ibis. It had an all dark body, tail, wings, neck, and head. It also had a long decurved bill. The bird continued to fly towards me and passed about 60 feet away. As it flew past me the long decurved bill, outstretched neck, dark body, and legs extending beyond the tail were obvious. As the bird flew by it made a rhythmic graooow, graooow, graooow sound.—*Tom Ziebell, Oshkosh, Wisconsin.*

BAY-BREASTED WARBLER
(*Dendroica castanea*)

13 July 2010, along Firelane Road in Rusk County—While scanning a

mixed flock of warblers, nuthatches, and Black-capped Chickadees, apparently foraging in the forest foliage at multiple levels, my son and I saw this bird almost simultaneously. Both of us called "Bay-breasted," and my son Brad, who lives and birds primarily in Colorado asked, "Should they be here?" Although we realized it was very unexpected at that time of year, especially in that plumage, we did not consider any other species because of that same unmistakable plumage.

The bird was a large warbler (size and shape) with a bay colored crown, light nape, very dark mask, bay colored throat, breast, and sides, and two obvious wing bars. The plumage was either noticeably worn or this was a second year bird, as it was not as crisp and clean as spring birds normally appear, the chestnut on the sides was limited, and the dark facial mask was somewhat muted. The bird was first seen about 50 feet up in the canopy. From there it moved to eye level in the brush beside the road about 25 feet directly in front of us. It appeared to be feeding as it moved about in the brush for about 30 seconds before flying across the road and up into the trees where it continued to feed until it eventually moved away and out of sight.—*Bruce Steger, Chippewa Falls, Wisconsin.*

Blackpoll Warbler (*Dendroica striata*)

13 June 2010, at the Cedarburg Environmental Study Area—Initially what I heard was a very high-pitched series of 5 notes, all staying on the same pitch. The bird repeatedly sang across a small pond in some willow trees perhaps 30–40 yards away. Immediately behind me was an ash swamp habitat. Not quite wanting to believe my ears, although the song is rather distinctive, I waited 5–10 minutes for the bird to show. After I realized there was a small dike that would allow me access to the location, it stopped singing, but as I passed its location, it began to sing again in a willow tree 20 feet above my head. When it finally shifted branches, I was able to confirm the identification visually. The relative larger warbler had a black cap, black throat, striped black flanks, a white breast, and white wing bars on dark wings with a dark back.—*Jim Frank, Milwaukee, Wisconsin.*

Lark Bunting (*Calamospiza melanocorys*)

1–3 June 2010, at an old field in southern Milwaukee County—I first saw this bird feeding on the grassy edge of a dirt trail in the middle of a large overgrown field. I initially passed it off as a Bobolink as I didn't have any optics other than my camera. A second look convinced me this was a Lark Bunting. I noted a sparrow shaped bird with a bunting-like conical shaped bill, moderately long tail (almost a third of its overall body length), fairly large rounded head showing raised crown feathers at times and black iris. The bird was all black from head to tail with the exception of a large white patch on each of the primary coverts, white edges to the secondaries and tertials, muted light brown legs, and a grayish bill. The primaries also appeared brownish in areas from wear or molt. I noticed some white edging on the undertail

but no white tips as shown in Sibley. At certain times this bird interacted with other birds, at one point it fed alongside a House Sparrow, allowing for size comparisons. The Lark Bunting was slightly larger and stood in a more upright position as it moved by mostly walking fast. The Lark Bunting also showed some aggression toward a male Bobolink while competing for the same perch. I observed the Lark Bunting intermittently choose between the trail and perching on a wire.—*Steve Lubahn, Cudahy, Wisconsin.*

1 June 2010—John Dixon pointed it out to me as soon as I arrived. We watched it feed and fly around for awhile. I found a spot near where it was spending the most time on the ground and sat and waited for about an hour for it to come near enough for some decent photos. The photos are okay but it was a tough exposure with the black bird and white feathers in full sun [*See Fig. 11 in The Summer Season*].

It kept trying to hang out with a male Bobolink but the Bobolink wanted nothing to do with it and kept chasing it off when it came near. The second photo [*See Fig. 12 in The Summer Season*] captures that from a distance.—*Brian Hansen, Milwaukee, Wisconsin.*

Ruby-throated Hummingbird by Ryan Brady

Cerulean Warbler found by Dennis Malueg

WSO Records Committee Report: Summer 2010

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The WSO Records Committee reviewed 16 records of 13 species for the summer 2010 season, accepting 12 of them.

Also discussed is the status of Prairie Falcon reports in Wisconsin.

Accepted Records

Eurasian Wigeon—

#2010-040 Manitowoc Co., 26 June 2010, Sontag.

Four wigeon were noted, including a male American Wigeon and two female wigeon. Initially dismissed as a Redhead, the Eurasian Wigeon was noted to have a orange-red face, gray sides, rosy breast, black tail, white wing patch, and light colored forehead as well as being identical in size and shape to the American Wigeon.

Plegadis ibis (sp.)—

#2010-041 Winnebago Co., 16 June 2010, Ziebell.

In flight, this all dark, small heron-sized bird had a long, decurved bill. The neck was extended and the legs extended beyond the tail in flight.

Black-necked Stilt—

#2010-012 Dodge Co., 19 June 2010, T. Wood.

This tall, thin shorebird was as large as a Greater Yellowlegs with even longer legs. The top of the head, back of neck, back, and wings were black; the throat, front of neck, breast, belly, and rump were white. The thin, straight bill was black; the long thin legs were pink.

Seven adults and two chicks were noted on 19 June. A month later three families were evident, one with four young, and two with three young each.

Chuck-will's-widow—

#2010-017 Jackson Co., 1 June 2010, Wood.

The call of the Chuck-will's-widow was heard in comparison to an Eastern Whip-poor-will. The cadence was slower than the Whip-poor-will's, with 4 syllables instead of 3. The first of the 4 syllables was barely audible, the third syllable received the most emphasis, the fourth fell off in pitch compared to the second and third.

Rufous Hummingbird—

#2010-032 Lincoln Co., 18–20 July 2010, Rasmussen (photo).

This Ruby-throated Hummingbird-sized bird was orange/bronze colored on the head, back, rump, and sides instead of green. The throat gorget was bright red and had a white patch below it. The wings appeared dark greenish.

Scissor-tailed Flycatcher—

#2010-042 Burnett Co., 22 June 2010, Russell (photo).

The photo shows a pale gray head and upper back, black bill, dark gray/black wings and a long black tail (longer than the rest of the bird) perched on a road sign.

Kirtland's Warbler—

#2010-043 Bayfield Co., 6 June 2010, Royse (photo).

The gray back and crown, yellow breast and throat, black flanks streaks and back streaks, faint white wingbars, and broken white eyering were evident.

Bay-breasted Warbler—

#2010-044 Rusk Co., 13 July 2010, Steger.

A large warbler with a bay-colored crown, throat, breast and sides, along with a light nape, dark mask, and two wingbars was reported.

Blackpoll Warbler—

#2010-036 Ozaukee Co., 13 June 2010, Frank.

Attention was first drawn to this bird by the song, a series of 5 high-pitched notes, all on the same pitch. When finally located visually, a large warbler with a black cap, black throat stripes, dark back, black flank streaks, white breast, and white wingbars on dark wings were noted.

There are only three June records (after June 5th) for Wisconsin and two July records, none in the previous 29 years.

Hooded Warbler—

#2010-037 Florence Co., 14 June 2010, Kavanaugh.

This bird was also first noted because of it song —a series of 7 notes, the 6th louder and higher than the others. When seen, the yellow breast and belly, yellow cheek, olive-brown back and tail, black cap, and black throat patch were noted.

Lark Bunting—

#2010-038 Milwaukee Co., 1 June 2010, Lubahn (photo).

#2010-038 Milwaukee Co., 1 June 2010, Hansen (photo).

This bird was initially passed off as a Bobolink because of the all black face, breast, and belly and the lack of any optics to assist assessment. The tail was too long, the head was larger and rounder and entirely black, and the bill was larger, conical, and gray. The only break in an otherwise entirely black coloration was a large, white wing patch.

Records Not Accepted

Tricolored Heron—

#2010-031 Dodge Co., 31 July 2010.

This bird was seen at more than ¼ mile distance, and only showed the upper side of its wings in flight before disappearing. Rufous was seen extending from the upper coverts across the back to the other upper coverts. The primaries were dark gray/black in

color. No view was had of the head, legs, or underparts.

Making a case for the family of this bird given the brief and incomplete look is difficult. The observer even considered hawks and rails in the similar species assessment, only having an upperwing color pattern to draw on. The size of the bird isn't discussed. A juvenile Tricolored Heron could fit this description, but a worn Great Blue Heron could have this appearance as well. A Least Bittern seems too small for the "long-winged" suggestion in the report and an American Bittern shouldn't appear so rusty.

Lark Bunting—

#2010-038 Milwaukee Co., 1 June 2010, 2 June 2010.

The oversimplified description of a "black-bodied bird with a white wing patch" doesn't eliminate Bobolink, Red-winged Blackbird, Yellow-headed Blackbird, nor Black Guillemot. The use of "sparrow-sized" in one description leaves a wide size range of birds to consider from a Chipping Sparrow to a Harris's Sparrow. Some sort of beak size and shape description would also be useful.

The bird was correctly identified, but the supporting evidence was very meager.

Black-headed Grosbeak—

(#2010-039 Dodge Co., 31 July–1 August 2010.

Reported as 1st year birds, these two birds were felt to be different than Rose-breasted Grosbeak because the upper bills were darker than the lower bills. The breast of the male was beginning to show some rusty coloration. However, no mention of the extent/pattern of streaking on the breast was made.

Assuming the incomplete description was of a rustyish-breasted bird and a whitish-breasted bird, this is the expected coloration of a young male and female Rose-breasted Grosbeak. Both a male and female Black-headed Grosbeak will be orangish-breasted. The male will lack any breast streaking, the female will have faint streaking on the sides of the upper breast. A young male Rose-breasted will look strikingly similar to a female Black-headed Grosbeak except it will have heavier streaking across the upper breast instead of having it restricted to the sides of the upper breast and being finely patterned

Without more description, these two birds are more likely to have been young Rose-breasted Grosbeaks.

Status of Prairie Falcon Records in Wisconsin

Prairie Falcon—

Wisconsin has had a number of reports of Prairie Falcons over the past 50 years; however, due to the lack of photographic evidence or documentation of one of these sightings by a second independent party, all of these accepted reports have remained on the hypothetical list for the state.

The WSO Records Committee has undertaken a review of a 1976 report of a captured and subsequently photographed Prairie Falcon and a reconsideration of the previously accepted written "hypothetical" reports of this species to subject them to some sort of consistent evaluation.

The photographed bird was captured in Vernon Co. by William Smith.

Figure 1. Head shot of a Prairie Falcon by Ryan Brady.

Figure 2. Head shot of a *tundrius* Peregrine Falcon by Andrew Longtin.

Figure 3. Underwing of Prairie Falcon by Ryan Brady.

Figure 4. Underwing of *tundrius* Peregrine Falcon by Andrew Longtin.

At the time there was discussion about the origin of the bird. Apparently two falconers observed the bird first hand and a number of others offered opinions on what to expect of a Prairie Falcon in captivity. The bird in question was in good weight, good/undamaged feathers, with no evidence of falconry paraphernalia, and did not feed during its captive time. It was perhaps a little less skittish than expected of the species. At that time, Wisconsin had not established a Records Committee so the report was evaluated by one individual and whatever opinions he could obtain. In that process, the possibility that this bird was a recaptured falconry bird predominated the discussion, thus relegating this case to the "questionable origin" category.

The photographs of the bird "on fist" demonstrate the thin moustachial stripe, pale crown, pale superciliary line, pale spot behind the eye in front of the darker auricular patch, the lightly streaked breast, the dark patch on the side of the body and adjacent dark underwing lining. The paler flight feathers and paler underwing coverts in front of the dark underwing lining are also noted. With this photographic information, there is no doubt that the bird is a Prairie Falcon. Given the lack of any evidence of prior captivity and given the timing of the bird's capture during classic passage time for the species in adjacent upper midwestern states, the Wisconsin Records Committee has voted to move this report to a state of full acceptance and thus add the species to the state list.

In the future, observers should use as many of the following characteristics to aid the identification of a Prairie Falcon as possible. There is an overall paleness of the brown color on the crown, back, and wings, giving consideration to the lighting potentially inaccurately softening the brown color; a thinness of the moustachial stripe, (which is present to a somewhat similar extent on juvenile tundra Peregrines); the white spot immediately behind the eye separating the eye from the dark auricular patch; the thinly streaked and thus relatively pale breast; the dark axillary feathers, but noting the significant contrast of these feather to the flight feathers behind them on the underwing and the pale underwing feathers immediately in front of them as well—creating an isolated patch of dark axillary feathering. Young "tundra" peregrines will exhibit dark underwing linings which can contrast somewhat with the less darkened flight feathers on the underwing, particularly with sufficient backlighting. The previously mentioned light leading edge to the underwing coverts will not appear on these young peregrines. These feathers will be as dark as the rest of the underwing coverts. In addition, the area immediately behind the eye of a Peregrine will be dark and connected to the moustachial stripe, and show a pale auricular area behind that dark area. The Prairie Falcon will have the pale area begin immediately behind the eye, bit in front of a dark auricular patch. Immature 'tundrius' Peregrine Falcons must be given strong consideration in any Prairie Falcon sighting in Wisconsin.

These two species are not as easily distinguished as observers might think them to be.

In reviewing previously hypothetically accepted reports of Prairie Falcons for Wisconsin, the following

reports are added to the state records after acceptance of the 1976 Smith record. There are a few previously accepted hypothetical reports that have been excluded from this list based on controversy among the observers present as to the identification or limited written documentation evidence.

31 October 1976, Vernon Co., Smith (photo).
30 November 1989, Portage Co., Hoppa, Semo.
16 October 1990, Racine Co., DeBoer.
15 March 1991, Portage Co., Spuhler.
12 October 1998, Grant Co., Dankert.
22 April 1998, Douglas Co., R. Johnson, Putz.

The acceptance of Prairie Falcon to Wisconsin's state list moves the total species to 432.

Three Eastern Wood-Pewee youngsters by Ryan Brady

Adult Eastern Wood-Pewee by Ryan Brady

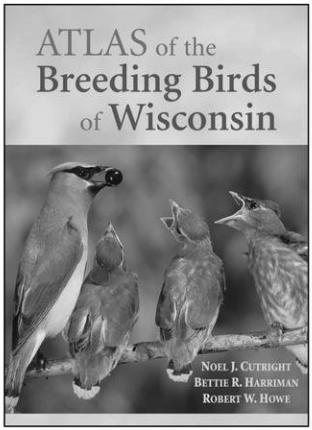
About the Artists

Ryan Brady actively birds in the Ashland area, taking many photographs of his observations (some in his own yard). He obtained his B.S. degree from Northland College and his M.S. in Raptor Biology from Boise State University in Idaho. He currently works for WDNR and has just become the Chair for the WSO Records Committee.

Judith Huf is a WSO member living in Milwaukee who has worked as an artist in many fields, from painting to sculpture to technical and scientific illustration, and creating exhibits for nature centers and museums. She has now added bird photography to her artistic talents.

Dennis Malueg, new Art Editor for this publication, is a dedicated amateur bird and wildlife photographer who travels Wisconsin in search of his subjects. He also works from his own "studio"—his backyard, prairie, and forest in Waushara County.

Black-throated Blue Warbler pictured by Dennis Malueg



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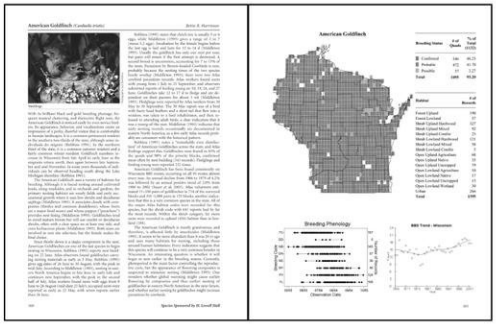

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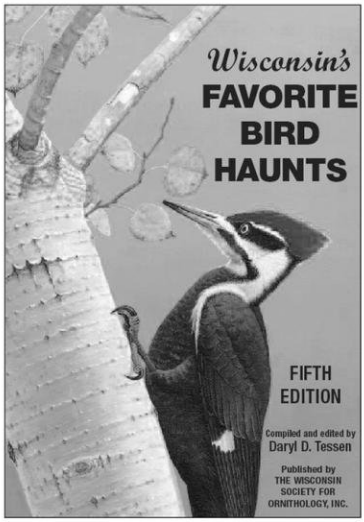

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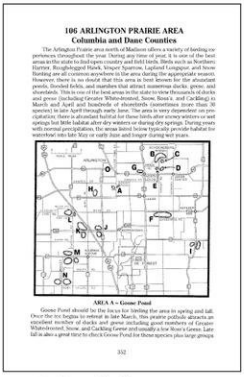
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