



Wisconsin Kirtland's Warbler 2012 Season Summary

The following is a brief summary of Kirtland's warbler activities in Wisconsin in 2012. Planning and coordination for these activities were conducted by Joel Trick of the U. S. Fish and Wildlife Service and Kim Grveles of the Wisconsin Department of Natural Resources (DNR).

MONITORING

In 2012 we hired Shaun Hilgart and Emily Lind as our two Kirtland's warbler monitors. Neither Shaun nor Emily were able to begin work prior to the spring arrival of Kirtland's warblers, but we were fortunate to arrange for the services of Daryl Christiansen and Alyssa DeRubeis, who monitored the Adams County main breeding site early in the season. Shaun began work on May 21 when at least nine males were already present. New arrivals increased this total to 20 males by the end of May at our main breeding site. The first female was observed on May 21, and a total of 10 females were eventually found during the season.



2012 Kirtland's warbler monitors Shaun Hilgart and Emily Lind. Adams County, WI July 5, 2012. Photo by Joel Trick

Shaun concentrated his efforts on the southern portion of the site, where he eventually documented 14 territorial males and 7 females. These females made a total of nine nest attempts, including one re-nest and one second nest. Of the nine nesting attempts, 3 were predated, 3 lost to cowbird parasitism, and 3 fledged and estimated 7-10 young.

Emily Lind began work as our second monitor on June 4, providing coverage of the north portion of the main breeding site and at other sites around the state. This year Emily found up to eight males at the north site, 5 of which established territories and remained through the nesting season. Three of these five males attracted mates, and Emily recorded a total of 5 nest attempts, with one successful nest which fledged an estimated 1-3 young.



For the 2012 breeding season, we documented a total of 20 male and 10 female Kirtland's warblers in Adams County. Similar to last year, we observed a high return rate, with 14 of the 20 color-banded males present in Adams County in 2011 returning in 2012.

Because of our cautious approach in monitoring of nests, we have limited information on specific nest outcomes. However, based upon the best information available, we estimate that out of a total of 14 nesting attempts, four were successful, fledging an estimated 8-13 young.

Of particular note is that for the first time this year, we found birds nesting in young stands adjacent to our main breeding site which are just reaching an age suitable for occupation by the warbler. We had at least three nests in these newly available stands, which makes us optimistic regarding the future of Kirtland's warbler nesting at this site.

MONITORING WITH DIGITAL VIDEO RECORDING

In recent years of monitoring Kirtland's warbler nests, we have had growing concerns about approaches to nests leading to predation. Therefore, we have limited, and in some cases abandoned, nest approaches. This conservative method has made it difficult to accurately document cowbird parasitism and to record nesting outcomes. Thanks to technical advice from John Dadisman of the WDNR's Science Services and assistance with protocol developed by the U.S. Fish and Wildlife Service, we conducted a trial of using digital video recording to monitor nests.



Emily holding the camera array prior to deployment. Adams County, WI June 22, 2012. Photo by Shaun Hilgart.

On June 22, Emily placed an outdoor surveillance camera on a nest that had hatched 1-2 days previously. Recording continued through June 29, when Emily observed that the nest was empty. Preliminary transcription of recorded data reveals the following: 1) parents' visits to the nest were captured; 2) calculating feeding rates of young should be possible; 3) the nest was predated on June 28; and 4) the predator could be identified. Full results will appear in a future issue of the Wisconsin Society for Ornithology's journal, the Passenger Pigeon. Stay tuned.

STATEWIDE SURVEYS

A statewide survey of potentially suitable Kirtland's warbler habitat was conducted between 15 May and 15 June by 25 volunteers plus eight agency staff who searched 71 sites in seven Counties: Washburn, Douglas, Bayfield, Vilas, Marinette, Adams, and Jackson.



This Kirtland's warbler male banded in 2011 returned to the same site in 2012. Marinette County, WI May 16, 2012. Photo by Jack Swelstad.

Marinette County

On May 16, volunteer Jack Swelstad found a single male Kirtland's warbler at the same Marinette County site where he has found birds every year since 2008. This was the same bird we banded at this site in 2011, marking the first time we have had a Marinette county Kirtland's warbler return in a subsequent year. Follow-up monitoring by Jack revealed that the bird remained through at least June 20, though no female was ever observed and nesting is not thought to have occurred.

There were two other reports of Kirtland's warblers from Marinette County in 2012. On June 5, volunteer Tim Collins observed a single, unbanded male about 4 miles west of the banded male, but this bird was not found during subsequent visits to the site. Noel Cutright recorded two singing male Kirtland's warblers at a single stop on a Breeding Bird Survey (BBS) route in northern Marinette County on June 14. Noel has been a BBS surveyor since 1971, and this was his 206th BBS. This is the first time ever that the Kirtland's warbler was detected on a BBS in Wisconsin. Unfortunately, no Kirtland's warblers were found on subsequent visits to the site.

Bayfield County

On May 26, a single Kirtland's warbler male was found on Bayfield County Forest land by volunteer surveyor Dan Jackson. We were able to capture and band this bird on May 29, and the bird was last observed at this site on May 30. On June 27, Emily observed this same bird at the north Adams County site, a distance of approximately 175 miles from where it had been banded about one month before.



*Bayfield County Kirtland's warbler male prior to banding.
Bayfield County, WI May 26, 2012. Photo by Dan Jackson.*

Douglas County

In early June, we received multiple reports of at least two and possibly three Kirtland's warbler males at several locations in Douglas County, including the site where we banded a bird in 2011. These birds were seen at three sites within three miles of each other between June 2 and 9 by multiple observers including Erik and Mark Collins, Steve LaValley, Mike and Chris Sabyan, and John (Patrick) Hager. On June 12, an effort was made to locate and band these birds but despite extensive searching, no Kirtland's warblers could be found at these locations.

Vilas County

On May 24, a single Kirtland's warbler was found near Conover in Vilas County. The bird was seen again at the same location on May 25 by volunteers Donna DePape and Ingrid Stephan. Subsequent visits in the following days failed to relocate this bird.

SUMMARY

In 2012, Kirtland's warblers were recorded in five counties in Wisconsin (Adams, Douglas, Bayfield, Vilas, and Marinette), and we documented a minimum of 24 singing male warblers present in the state.

Wisconsin's count of Kirtland's warblers observed during the official Michigan Kirtland's Warbler Census period of June 6-20 was 23 singing males distributed as follows: Adams County 19, Marinette County 3, Douglas County 1. Additional birds recorded outside of the census period include the following: Adams County 1, Marinette County 1, Bayfield County 1, Douglas County 2, Vilas County 1. Because most of these birds were unbanded, and observed on various dates in multiple locations, we cannot confirm how many birds were actually present in Wisconsin in addition to the 23 reported for the census period. However, including the known banded bird, a minimum of 24 Kirtland's warbler males were present in Wisconsin in 2012.

COWBIRD TRAPPING

A total of three brown-headed cowbird traps were installed by U.S. Department of Agriculture (USDA) -Wildlife Services at the Adams County nesting sites and operated for 10 weeks, from April 23 through June 29. USDA Wildlife Specialist Barry Benson again operated the traps, capturing 143 males and 73 females for a grand total of 216 cowbirds removed from the site in 2012. This compares to a season total of 166 captured through 9 weeks of trapping in 2011, and 216 for the same period in 2010.

BANDING

Banding operations in Wisconsin were again led by retired FWS biologist Ron Refsnider. On May 29 we successfully captured and color-banded each of the six unbanded males present at the Adams County nesting site. After completing this banding operation by mid-day, that afternoon we traveled to the Bayfield County site where a bird had been reported several days earlier, and were able to successfully capture and band this bird as well.

Also this year, we organized a new effort to band hatch-year Kirtland's warblers after they had fledged. By deploying mist nets in the nesting habitat after the young of the year had been on the wing for several weeks, we hoped to band some birds before they left the site to gain insight into how many will return next year. We timed this banding effort to minimize the risk to the birds that they would otherwise be exposed to if we were to band them in the nest.

This effort met with limited success, resulting in the capture and banding of one first year bird. Based upon the measurements and plumage characteristics, we believe it is a female, but are not absolutely sure of that. We are hopeful it will be back to the site in 2013, when it will be much easier for us to determine its sex. We did learn much during this banding effort, and are already formulating plans for how we can be more effective in targeting fledged young next year.

This was the first time we had seen a Kirtland's warbler in prebasic plumage, which is attained shortly after fledging.



Hatch year Kirtland's warbler ready for release after banding. Adams County, WI August 1, 2012. Photo by Joel Trick.

SUMMARY

A total of seven male Kirtland's warblers were captured and banded in Wisconsin in 2012, six in Adams County and one in Bayfield County. One recently fledged bird was also banded at our main site in Adams County on August 1 during our post-fledging banding operations. Of the 20 banded males present in Adams County in 2011, at least 14 were observed in 2012, a survival rate of 70%.

Until this year, none of the male Kirtland's warblers we banded in Marinette County had returned in subsequent years. However, that changed in 2012 when the bird we banded in 2011 returned to the same site this year. Also of note, the male we banded in Marinette County in 2008 that was found on the Raco Plains in the eastern Upper Peninsula of Michigan in 2010 and 2011, was again sighted on the Raco Plains this year. This location is about 170 miles northeast of the site where the bird was originally banded in 2008.

FIELD TRIPS

This year we again organized field trips for members of the Natural Resources Foundation of Wisconsin (NRF). We held field trips on Friday May 18 and Saturday May 19, and between the two days we accommodated 56 participants, including attendees from 4 states other than Wisconsin: Illinois, Minnesota, New Hampshire, and Missouri. All field trip participants were able to see and hear a singing male Kirtland's warbler.

ACKNOWLEDGEMENTS

Our work with Kirtland's warblers in Wisconsin continues to generate a great deal of interest, and our success is a tribute to the many individuals and organizations involved in the project. As has been the case throughout the life of the project, we continue to be dependent upon the critical contributions of our numerous partners.

Plum Creek Timber Company again allowed us to use their lands to conduct monitoring, banding and cowbird trapping, and provided great support and information at our NRF Kirtland's Warbler Field Trip. The U.S. Department of Agriculture-Wildlife Services contributed resources to fund operation of cowbird traps, with the efforts of Wildlife Specialist Barry Benson again proving essential to the nesting success of Wisconsin Kirtland's warblers.

The Natural Resources Foundation of Wisconsin provided the bulk of project funding to support Adams County monitoring, cowbird trapping, and banding. NRF also funded Kim Grveles involvement, which included her share of project coordination, public outreach and education, coordination with other Department of Natural Resources (DNR) programs to promote management of jack pine barrens for Kirtland's warbler, and especially volunteer coordination and organization of statewide surveys. A Citizen-Based Monitoring Grant from the DNR's Endangered Resources Program funded the statewide surveys and the digital video recording.

The U.S. Fish and Wildlife Service contributed funding through the Partners for Fish and Wildlife Program to help offset the costs of cowbird trap operation, and Endangered Species Act Section 6 funds partially funded nest monitoring and Kim's involvement in the project.

This year we again had the services of two capable field biologists as Kirtland's warbler monitors, Shaun Hilgart and Emily Lind. We wish them both the best of luck in future endeavors. Adams County tree farmer Nancy Livingston once again opened her home to us and provided lodging as she has for the past three years. Herb and Dorothy Peterson, owners of a centennial farm in Adams County, also provided housing for nest monitors this year. Housing is a critical need for the project each year, and we are deeply grateful to Nancy and the Petersons for their incredible hospitality.

Ron Refsnider contributed his time and expertise to make our color banding efforts a great success. John Dadisman shared his expertise in digital video recording of songbird nests, loaned us his clever custom recorders, and assisted with setting up equipment in the field. Special thanks to Daryl Christiansen and Alyssa DeRubeis for their help with monitoring the Adams County main breeding site early in the season. A number of County Forest Administrators provided assistance in identifying potential suitable habitat to survey for Kirtland's warblers. The generous efforts of numerous enthusiastic volunteer birders allowed us to survey for Kirtland's warblers at many Wisconsin sites.

In addition to those named above, individuals contributing to the project in 2012 included volunteers Alana Beadell, Jon Beadell, Charles Berry, Kurt Brownell, Joan Campbell, Erik Collins, Mark Collins, Tim Collins, Donna DePape, John Hager, Kirk Hager, Bob Heagle, Dan

Jackson, Jim McCrady, Marlene Nelson, Joe Palzkill, Joyce Palzkill, Michael and Christine Sabyan, Paul Schwalbe, Glenna Schwalbe, Bruce Steger, Ingrid Stephan, Jack Swelstad, Troy Walters, Dave Weimiller, and Darwin Wile, U.S. Fish and Wildlife Service staff Paul Charland, Rachel Samerdyke and Lisa Maas, and Wisconsin DNR staff Nick Anich, Ryan Brady, John Dadisman, Steve LaValley, Tom Prestby, Jon Robaidek, Ben Tracey, and Mike Worland.