

**Kirtland's Warbler Conservation Team**  
**Winter Meeting Minutes**  
**February 14, 2023**  
**10:00 AM – 4:00 PM ET**



**A. Welcome, Introductions, and Meeting Overview (Carol Bocetti, KWCT Chair)**

**B. Breeding Range Subcommittee and Friends**

1. Habitat accomplishments for 2022 (20 minutes; Keith Kintigh, Eric O'Neil, Paul Thompson, Davin Lopez, Peter Burke)

MI DNR – 2 large planting areas, traditional and experimental acres tracked separately: The School Road site (689 traditional acres in total) includes planting and natural regeneration (190 acres). Fill in planting will be used if naturally regenerating areas do not achieve a minimum density of 800 jack pine/ac. The Sops Sops site (579 acres) is experimental (lower stocking density of 900 stems/ac and planned openings). Three areas trenched to prepare for 2023 planting. Many other parcels in intermediate stages of KW planning: several timber sales closing this year. 6,000 acres in the planning pipeline.

Huron-Manistee NF – 659 acres planted (Iosco and Oscoda Counties), of which 249 acres were a fill-in planting. Sales completed on four stands totaling 1,700 acres in 2022. Approximately 185 acres of KW habitat were lost with the creation of the Meridian Boundary Fire fuel break, but that should be the last loss due to the fuel break initiative.

Hiawatha NF – Sales on six stands totaling ~1,100 acres in 2022. A 2020 sale on 444 acres was not previously reported. No planting or natural regeneration acres in 2022.

Wisconsin DNR – No planting in 2022.

Total acres across all jurisdictions: 3,513 acres (but this number includes acres replanted that were counted in a prior year). 3,416 acres is the annual goal. Group discussion about how to meet agency commitments in the next several years to raise 10-year average back toward the annual goal. Keith and Eric believe there are enough projects in the pipeline to catch up as well as natural regeneration areas that will help towards the goal.

Ontario – Two pilot projects in Simcoe County. Packard Tract restoration actions between 2020-2022 include harvest of mature trees, planting to increase red pine density, seeding of native forbs and shrubs, and playback methods to attract birds. 5-6 males at site in June 2022. 3 males persisted into early July. No females were observed. Over 400 people came to see the birds and an ambassador program helped manage traffic. Plans for 2023 return of warblers and warbler watchers!

2. Status of Conservation Plan update (5 minutes; Phil Huber)

Team editing to the Breeding Range Conservation Plan started in September. Updates are 90% complete. Plans to incorporate Wisconsin plan into document. Once ready, it

will be shared with the Steering Committee. Anticipated completion of draft: end of February.

Question from Ken Tuininga about inclusion of Ontario perspective and viability of red pine as Kirtland's Warbler habitat. Phil confirmed that Ontario Kirtland's Warbler Working Group members will have an opportunity to comment on the plan.

3. Status of research prioritization exercise (10 minutes; Keith Kintigh)  
Year-long project to compile a list of research topics and prioritize them. The project is now complete and available in Breeding Range subcommittee folder for review. The content will be incorporated in future subcommittee work plans.

4. Habitat Improvement Working Group/Jack pine research group (10 minutes; David Rothstein, Jason Hartman)

Jack pine has marketability issues when on a 50-year rotation. Addressing stand age distribution issues will also require harvests of 20-40-year-old stands, which is an economic challenge with unpredictable biomass markets.

Research areas: Pre-commercial thinning of KW habitat stimulates growth response in remaining trees, even in older age classes. The costs of thinning will likely always exceed increase in timber sale returns from increased growth, but there may be other benefits like improved resilience to drought and future climate change. Future research directions: How does tree vigor/resilience change with thinning? Are there ways to economically thin stands on an operational scale? Would more intense thinning (2<sup>nd</sup> row instead of 3<sup>rd</sup>) enhance growth further? Will thinning help jack pine timber value if rotations are extended to 70-years?

Experimental plantings were established (or will be) in 2021, 2022, and 2023 with reduced density (1452, 1200, and 900 trees per acre) than traditional for KW habitat. Tree growth and warbler response will be subject to long-term monitoring (decades).

Results from a retrospective study on relationship between KW density and jack pine stem density: "Connectivity" (habitat within 5 km radius) is the strongest predictor of KW density in a stand. 67% of variation in KW density is explained by best statistical model. There is no evidence from the analysis that jack pine plantations starting at lower densities support fewer birds.

Some mastication projects to mulch 20-year-old jack pine are just getting started with contractors.

### **C. \*\* Morning Break (5 minutes) \*\***

5. Expanding the Breeding Range Working Group (20 minutes; Paul Thompson, Brianne Boan, Sherry MacKinnon, Davin Lopez, Shawn Graff)  
Paul: Hiawatha NF is working on a 15-year EA to plan Kirtland's Warbler habitat expansion in Michigan U.P. with intent to maximize landscape scale projects.

Brianne: Baraga II project (Ottawa National Forest) signed in early February. First timber sale in 2024 or 2025. Plan to rotate three blocks so there will always be some suitable habitat. Adjacent MI DNR land expands scale of habitat landscape.

Sherry: Revisions of forest management plans for MI U.P. are happening now through October, with an upcoming public input process. The goal for 50 KW pairs on MI DNR land in MI U.P. will require larger-scale projects, on the order of ~300 acres per area. The Duck Lake fire area currently has about 25 pairs. More deliberate KW surveys in the U.P. will start in 2023.

Davin, Shawn, and Linnea Rowse: ABC is working with the Nature Conservancy in Adams County, WI to shepherd habitat management application through NRCS. The intent is for ecological restoration with jack pine (replacing a red pine plantation) more than a forest products project. ABC also working with Sand Valley Golf Course in Adams County, WI (adjacent to previously occupied area) to plan partial replant of jack pine stand (natural regeneration) to improve habitat suitability for KW. ABC also engaged with another Adams County landowner on a prospective project. ABC has an upcoming meeting with the WI Sharp-tailed Grouse Society to look for collaboration opportunities, especially in northwest WI.

Group discussion regarding alternative models/values (i.e., ecological) that should be given greater recognition in land management, including the biodiversity value of Kirtland's Warbler and associated species. Phil will try to include language of non-economic ecosystem services into the Conservation Plan update.

6. Ontario Kirtland's Warbler Working Group (10 minutes; Peter Burke, Ken Tuininga)

The working group was established in the last few years and currently has 8 partner organizations. The group has an application submitted for federal funding to support its work. Modern interest in KWs in Ontario began with the 2006 discovery of KWs at Garrison Petawawa (1-4 individuals, with some breeding). KWs have also recently re-established in Simcoe County (~20 pairs across multiple sites, including a military installation). There was a former population known from near Georgian Bay of Lake Huron, which is in a region with indigenous-held land that experienced a major fire a few years ago.

The working group is also focused on a new project starting in Northumberland County (~100 km from Simcoe County). The lead organization is Oak Ridges Moraine Land Trust, which is raising funds for a land purchase (another \$750,000 is needed to reach \$2 million in total). The 196-acre property is adjacent to Ganaraska Forest (public land), located on Oak Ridges Moraine, an area with glacial outwash plains and historically a pine-oak savannah. A native plant seed orchard, led by Prof. Ben Walters of Fleming College, is planned for the property. The overall perspective for the project is rewilding and ecosystem services.

TNC Canada and Fleming College are planning an enhanced mapping effort to identify suitable areas for restoring Kirtland's Warbler/pine barrens species habitat.

Monitoring is planned for both KWs and cowbirds at Ontario sites (especially Packard) in 2023.

7. Status of Cowbird Working Group (5 minutes; Carol Bocetti)  
Carol proposes to dissolve the working group as a unit of the Breeding Range subcommittee and reassign remaining BHCO-related responsibilities to the Monitoring subcommittee. There was general approval and no objection from meeting attendees.

#### **D. Non-breeding Range Subcommittee**

1. Update to Non-breeding section of Business Plan (5 minutes; Dave Ewert)  
The Business Plan is updated and is regularly used as part of grant proposals and fundraising activities.
2. Habitat mapping project (10 minutes; Cole Scrivner, Demonica Brown)  
Goals: Create a land use classification map for central/southern Bahamas. Use the land cover map and known KW locations to build a habitat suitability map for the focal area. The draft map combined 8 input layers. KW input data is sourced from eBird and transect playback surveys on multiple islands (San Salvador, Eleuthera, Cat).  
  
Next steps: Collect habitat classification training data and ground truthing to improve land cover classification for use in KW distribution model.
3. Anticipated field work (5 minutes; Mike Akresh)  
Plant nursery partially set up to grow Wild Sage and Black Torch (fruiting shrubs preferred by KW), but the ongoing permit issue has delayed further work. There are potential collaborations with Gerace Research Centre (San Salvador) and One Eleuthera Foundation (Eleuthera), once permits are obtained, to plant shrubs in already-cleared areas (no desire to clean existing coppice vegetation). There are plans for ground truthing of vegetation classification done from aerial imagery. Hopes for KW surveys on Exumas, Rum Cay, Long Island, New Providence, and South Andros (areas less heavily surveyed historically). Timeline of field work remains uncertain due to permitting delays.
4. New ownership of Madeira Rd property, Eleuthera (10 minutes; Ancilleno Davis)  
One Eleuthera Foundation (sustainable development nonprofit) has acquired the Madeira Rd property, a major KW wintering area that was a principal research site of the Kirtland's Warbler Research and Training Program. ABC/BNT tour on Eleuthera in March will include meetings with One Eleuthera Foundation staff, including an expert on plant propagation.
5. Potential KWCT meeting in The Bahamas (10 minutes; Ancilleno Davis)  
Improvements to hospitality infrastructure on Eleuthera make it a viable location for a Conservation Team meeting in the future. Bahamian government has a current interest in ecotourism and a KWCT meeting could open doors and build support for KW conservation. This idea will be discussed further at the next Steering Committee meeting.

#### **E. \*\* Lunch Break (45 minutes) \*\***

## **F. Human Dimensions Subcommittee**

1. Outreach report (10 minutes, Mike Petrucha)

USFS tours May 15-May 31. MI Audubon tours May 27-June 30. Gahagan tour on July 8.

Over 3200 people reached during 2022 via tours, presentations, art contest, festival, and geocache trail. A detailed report is available on Google Drive.

2. Kirtland's Warbler Festival (10 minutes, Mike Petrucha)

June 2<sup>nd</sup> (home opener) and 3<sup>rd</sup> (festival). New events this year: banding demonstration, story time, migration game. Agencies and organizations are invited to have a booth. Planning a warbler film to dispel myths surrounding KW management. Mike obtained a COVID grant of \$5,000 for festival promotional materials. Mike created a poster with photos, festival schedule, and KW natural history (2,000 copies).

3. Tower lighting (10 minutes, Bill Rapai)

Scott Hicks (USFWS) requested KW Alliance look into hazardous communication towers. This is a joint project with the HD subcommittee to identify towers with out-of-date tower lighting that can be retrofit with safer lighting for birds and lower operating costs—a win-win. The group is consulting Dr. Joelle Gehring, an expert on tower collisions. Data collected will be used to direct letters to tower owners, encouraging lighting changes. The ABC Songbird Saver app is helping locate towers.

Phil Huber suggested some kind of public recognition for tower owners that change lighting.

4. State bird legislation (10 minutes, Bill Rapai)

No major update. Legislation did not move in lame duck session after mid-terms. Rep. Markkanen has promised to reintroduce the legislation in 2023.

5. Other

KW Alliance coffee talk on April 14 to do outreach to community/economic leaders in jack pine country. The talk will be hosted by the Grayling Nature Center.

HD subcommittee is brainstorming ideas with USFS for new jack pine driving tour. Ideas include jack pine scavenger hunts, QR code interactive signs, electric bike touring, observation towers, and off-road parking.

Bahamian teachers and students want a more developed Kirtland's Warbler curriculum that features sustained engagement throughout the year. Ancilleno Davis has identified some potentially strong partners on Eleuthera to support curriculum development and connections to teachers and students. Dana Meder and Nathan Cooper offered to help Ancilleno with information on educational and funding resources.

## **G. Monitoring Ad Hoc Subcommittee**

1. Kirtland's Warbler monitoring (10 minutes; Nathan Cooper)

Collaboration with Dr. Nathan Hostetter (USGS) to test viability of point count/distance sampling methods to survey KWs. Successful field season with skilled technicians.

Modelled population estimates looked reasonable prior to accounting for detection. If

detection probability is included in model, population estimates balloon to implausibly high numbers. Distance estimation is likely the weak link because KWs are very loud and distance estimates are confounded by the density of the breeding habitat. No actionable information to change current census methodology. Additional funds are needed to research other methods that would allow for standardized and sufficiently accurate surveys.

MI DNR planning a stand subsampling approach for off-year surveys, but still refining its overall approach after prior survey adjustments were not satisfactory.

Subcommittee will be creating document to highlight the importance of KW monitoring and key questions for researchers to consider. As researchers develop plans, they will be invited to engage in more detail with the subcommittee.

2. Cowbird monitoring (10 minutes; Nathan Cooper)

Analyses of BHCO BBS data and landcover trends are upcoming once Smithsonian supercomputer is running again. Past studies suggest that point counts for BHCO may be of limited use because of very low numbers in the northern Lower Peninsula. Nevertheless, BBS data could be used to define a BHCO abundance trigger for additional monitoring/management activities.

Ad hoc nest monitoring shows an encouraging lack of nest parasitism. Monitoring at experimental projects aging into nesting habitat are an upcoming opportunity for nest monitoring. Nest monitoring in conjunction with the every-four-years census is also ideal.

3. 2023 Kirtland's Warbler census on Huron-Manistee NF (5 minutes; Eric O'Neil)

Plan is for full census in 2023 from June 6-20 covering ~17,180 acres. Recruiting from the KW Alliance volunteer pool.

4. Michigan UP/Hiawatha and Ottawa NF census

Paul Thompson is coordinating census across the U.P., including for MI DNR and county-owned lands.

5. Status of subcommittee: ad hoc vs. standing (10 minutes; Carol Bocetti)

Carol proposes to modify KWCT Charter to make the Monitoring subcommittee a permanent subcommittee. There is a long-term need to improve population estimate methodologies, review BHCO data, and monitor other KW life history parameters. There was general agreement and no objection. Carol and Steve will work with Steering Committee to revise KWCT structure diagram and charter.

**H. \*\* Afternoon Break (10 minutes) \*\***

**I. Northern Pine Plains Partnership (Steve Woods)**

Canceled. Steve Woods was unable to attend.

**J. Long-term Fund Ad Hoc Subcommittee**

1. Long-term Funds balance updates (10 minutes; Jennifer Kleitch, Shawn Graff)

ABC KW Long-term Fund - \$350,000 balance earlier in the year (but probably less now with market performance). Approximately \$65,000 was added to the fund in 2022. Several donor trips coming up this spring: Bahamas, Michigan (two trips), Wisconsin. Four planned gifts/bequests are secured (although amounts are unknown).

ABC is also fundraising for immediate KW needs, including time for Steve Roels' and Dave Ewert's positions.

MI DNR Trust Fund as of September 2022: \$2.2 million.

2. Long-term Fund policy drafting (5 minutes; Dave Ewert)

The ad hoc subcommittee met in November to discuss policy surrounding use of funds. The policy needs to transparently spell out when and how funds will be distributed and any programmatic or geographic restrictions on fund use. The subcommittee intends to provide a draft policy to Steering Committee at a regular meeting this spring with a plan to present a final policy at the Summer meeting.

Ken Tuininga asked a question about the future availability of funds for international projects. Shawn Graff confirmed that the ABC-held fund will be open to projects regardless of geography.

**K. Archives Ad Hoc Subcommittee (Mike Petrucha)**

218.75 hours of archiving work completed, supported by ABC subgrant award. 1,746 PDFs recategorized to follow new organization scheme. An additional 12 boxes and 6 tubes from Kepler and Sykes have been organized. Archive project seeks additional funding, but successful applications from appropriate programs identified would not be available until early/mid 2024. Mike is networking with Clarke Historical and Kirtland Community College libraries. New archival materials are still trickling in from various sources, including Dave Ewert and the Mio USFS office.

Phil Huber and Chris Mensing possess significant materials. The Smithsonian holds all of Walkinshaw's papers.

Much work still needs to be done, including rescanning unreadable PDFs, acquisition and processing of new materials, creation of a metadata structure for the entire archive.

Nathan Cooper suggested Zotero as a tool to store published KW papers.

**L. KWCT Coordinator (Steve Roels)**

1. Newsletter: Annual content plan and distribution (5 minutes)

The KW Observer is planned to be a quarterly publication. Steve has a general content plan in place for each issue, which corresponds to the annual cycle of the bird. The Q1 issue will focus on KW in The Bahamas.

Distribution is primarily via email, but the Human Dimensions subcommittee is also experimenting with distribution of printed copies in key public locations.

2. Website revisions (5 minutes)

The website is now updated to fix broken links, correctly route inquiries to the KWCT Coordinator, correctly list partner organizations, and have an up-to-date events calendar. The top menu bar was also slightly restructured. The text on the fundraising page has been clarified, with changes approved by both ABC and the KW Alliance. Steve requests recent photos of people for the website.

3. Google Drive walkthrough (5 minutes)

The KWCT Google Drive account was reorganized last fall to more intuitively store past meeting materials, media, contact information, and media.

4. Oversight subcommittee (5 minutes)

The Coordinator Oversight subcommittee met in late January to discuss Steve's performance so far as well as the evolution of Steve's role with ABC upon Dave Ewert's retirement. The subcommittee plans to have semi-annual standing meetings.

**M. \*\* Stretch Break (5 minutes) \*\* SKIPPED**

**N. Business Plan Updates and Streamlining Discussion (Dave Ewert, Carol Bocetti)**

Business Plan update completed in December. But there are too many plans! Updates to one plan trigger updates to other plans. Consolidation would help everyone.

Primary issue is whether work plans are needed beyond the Conservation Plan (partner audience) and Business Plan (donor audience).

Ancilleno Davis suggests using Google Drive to crosslink documents/place references with links in documents.

Steve will lead team to consider document consolidation approaches and use of cloud technology to store and link documents. Platform stability and ability to back up documents is essential for these long-term documents.

**O. Steering Committee membership (Steve Roels)**

1. New members (5 minutes)

Steve introduced the new members of the Steering Committee: Jennifer Kleitch, Mike Akresh, Ancilleno Davis, and Ken Tuininga. Steve and Carol are also hoping to recruit a representative from the forest industry in Wisconsin.

2. Steering Committee onboarding package (5 minutes)

Steve is working on an orientation package for new Steering Committee members that would include the KWCT charter, contact lists, and Google Drive tutorial. He hopes the package will be ready by late winter.

**INSERTED AGENDA ITEM: KW Alliance update**

Bill Rapai will be stepping down as Executive Director in June. New board members are rotating on to provide fresh perspective.

May 6 – Jack pine planting day



Introductory letters sent to members of the Michigan House Natural Resources Committee. Also arranging meetings with all representatives who have KW breeding in their district.

**P. Preliminary discussion of summer meeting (Carol Bocetti, Steve Roels)**

Dates for the summer meeting were discussed with the conclusion being to hold the meeting July 18-19, with a field trip on July 20. The meeting will be hosted by Hiawatha NF, likely in St. Ignace. The Raco Plains and Duck Lake fire area were suggested as a potential field trip destination. Steve will work with Paul and Sherry on meeting planning.

*Meeting Adjourned at 4:19 PM*

