

Kirtland's Warbler Conservation Team
Spring Meeting
February 8, 2022
Virtual Meeting



MEETING MINUTES

Welcome, Introductions and Meeting Overview - Dr. Carol Bocetti, Steering Committee Chair

Recording minutes: 0:19:09-0:32:41

- Virtual attendees introduced themselves and provided details on their connections to the Kirtland's Warbler Conservation Team.

Human Dimension Subcommittee - Bill Rapai, Chair

Recording minutes: 0:32:42-1:10:58

- Bill Rapai, Chair, introduced the Human Dimensions Subcommittee presentation, which was focused on three areas they have been spending their time: Drawing closer connections to the timber industry, developing community coffee talk, and reviving the "Connections" exercise:
- Drawing closer connections to the timber industry:
 - HD Goal: Strengthen ties between the KWCT/agencies and the timber products industry for the benefit of both.
 - Problem: Value of KW jack pine is low – is it possible to raise the value of jack pine? Could we find new markets for jack pine that would help increase demand and drive up the price?
 - History of relationships between agencies and the timber industry (Keith Kintigh):
 - Keith reported that on Michigan's four million-acre State Forest system, there are about 500-600 timber sales per year. Less than a dozen of those would be KW timber sales. All timber sales generate 650 million cords per year, with 25,000 cords coming from KW stands. KW sales account for 800-1600 acres per year, which is 9,000-24,000 cords (2% of total cords – small peanuts!).
 - Several years ago, Partners in Flight coordinated a discussion about how we can get the timber industry more engaged in KW Management. Five main recommendations came out of that meeting (along with the overall recommendation that we should not expect the timber industry to come to us – we should go to them):
 1. Take actions to improve wood quality (land managers are currently doing that)
 2. Advocate for biomass/co-gen boiler sustainability
 3. Create procurement efficiencies (are there ways we could better coordinate State or State/Federal timber sales?)
 4. Collaborate on fundraising
 5. Collaborate on telling timber-KW recovery success story
 - Ideas for ways to better market jack pine (covered by other HD Subcommittee Members):
 - Joy Mittig discussed several education and outreach components, such as: Forestry for Michigan Birds presentations (through American Bird Conservancy), local newspaper articles, and planned "Coffee Talks" in local communities.

- Mike Petrucha discussed CHP (combined heat and power) and wood pellet benefits (renewable and sustainable heat source; carbon neutral; cost less than fossil fuels; similar BTUs per pound compared to other wood species).
 - Other potential markets for jack pine: biochar (used in enriching and moistening soils), biodiesel, low carbon biochemical
 - Kirstie Heidenreich discussed the concept of looking to possible local/grassroots solutions. It is a *local problem* that we have high levels of jack pine biomass – let’s look for *local opportunities* of how to use it (this will be more effective than advocating on a federal level for new policies or aid). Currently, there are universities and communities that are using renewable resources for fuel (University of WI – Stevens Point has 100% of electricity coming from renewables); could we approach Kirtland’s Community College or a large school district? There is a facility north of Lake Tahoe that uses biomass leftover from fires, along with wood crates from a Tesla factory to produce energy. Could a community like Traverse City be interested in burning jack pine biomass?
 - The problem with co-gen is that there is a gap between what plants will pay for wood and what truckers will sell it for – it will take a policy change by the Michigan Public Service Commission.
- Post-Presentation Discussion: Phil Huber suggested working with wood pellet brands or the timber industry to better market the fact that consumers aid a conservation-reliant species through their purchases. Similarly, could groups like the Arbor Day Foundation and American Forests work with us to “cut down a tree” for conservation (raise donations to pay \$1/tree to cut a jack pine and get it to a co-gen plant). David Rothstein commented that some groups need to be brought together, as there is an existing group of DNR/USFS staff devoted to forest products and silviculture (led by Jason Hartman) that is already meeting on some of these issues. He mentioned that another person to contact at his university is Lauren Cooper from their forest carbon program, as he believes that the relation to carbon credits could be key.
- Developing community coffee talk: The HD Subcommittee is planning a coffee talk for this spring that will be for a number of community leaders and influencers. The draft agenda was shared and the committee will be sharing more details soon.

Breeding Range Subcommittee Discussion (Facilitator: Keith Kintigh, Chair)

Recording minutes: 1:20:50-2:27:15; 2:29:00-2:59:06

- **Report on Breeding Range Work Plan Outcomes**
 - Outcome 1: Ensure Adequate Habitat to Support a Minimum of 1,300 Kirtland’s Warbler Pairs.
 - Keith reported that they have decided to separate the traditional versus experimental acres for habitat development. The breakdowns are as follows:

Kirtland's Warbler Breeding Habitat Development													
Year	Objective	MDNR	FWS	HMF	HIF	ONF	CNNF	WI	Other	Traditional	Non-Trad	Total	
2006	3,830	2,891	108	1,556	174	0	0	0	70			4,799	
2007	3,830	1,543	90	864	684	0	0	0	0			3,181	
2008	3,830	1,739	0	1,083	913	0	0	0	0			3,735	
2009	3,830	2,524	250	691	1,472	0	0	0	0			4,937	
2010	3,830	1,207	0	4,557	1,608	0	0	0	205	7,577	0	7,577	
2011	3,830	858	0	831	1,545	0	0	0	0	3,234	0	3,234	
2012	3,830	1,266	0	1,697	324	90	86	0	0	3,463	0	3,463	
2013	3,830	1,377	0	928	121	0	264	0	125	2,815	0	2,815	
2014	3,830	1,473	0	1,364	480	0	0	0	0	3,317	0	3,317	
2015	3,830	1,237	92	1,051	323	0	0	441	0	3,144	0	3,144	
2016	3,830	794	0	839	94	10	0	0	0	1,737	0	1,737	
2017	3,830	929	0	676	85	500	151	0	0	2,341	0	2,341	
2018	3,830	669	0	702	53	100	0	0	0	1,524	0	1,524	
2019	3,830	1,315	0	205	0	0	0	0	0	1,520	0	1,520	
2020	3,416	852	0	0	0	0	0	0	0	852	0	852	
2021	3,416	1,180	0	1,077	0	0	0	0	0	1,380	877	2,257	
10-yr Avg.		1,109	9	854	148	70	50	44	13	2,209	88	2,297	
Annual Goal		1,560		1,186	670							3,416	

- He also described MDNR’s on-going KW Habitat Management Activities:

KWMU	Timber Sale	County/FMU	Acres	Status	Proposed Planting Date	Comments
Ogemaw/St. Helen	Beaver Trail KW		587	Trenched	2020, 21, 23	Density Project (Control) - 1452 TPA. 154 ac in '20, 303 in '21, and 124 in '23.
Fletcher	Fletcher KW Block	Kalkaska/Traverse City	570	Scarification complete Fall 2021	TBD	Natural Regen with fill-in plant contingency after year 3 (2024).
Ogemaw/St. Helen	School Rd KW	Ogemaw/Roscommon	634	Sale Closed. Trenching planned in '21.	2022	Density Project (Control) - 1452 TPA
Ogemaw/St. Helen	School Rd KW	Ogemaw/Roscommon	190	Scarification 2021	TBD	Natural Regen with fill-in plant contingency after year 3.
Manistee River	Sop Sops KW	Kalkaska/Traverse City	400	Sale Closed. Trenching planned in '21.	2022-23	Density Project - 1200 TPA
Monument	Monument 46	Oscoda/Grayling	460	Recently closed. Trenching planned in '21.	2023	Will be trenched in 2021
Down River	McMasters Pine	Crawford/Grayling	650	Open Sale	2023	Density Project - 900 TPA
Damon	Damon 96	Ogemaw/Roscommon	588	Open Sale	2023	Density Project - 1200 TPA
Pere Cheney	Pere Cheney 75	Crawford/Grayling	700	Open Sale	2023	
Leota	Leota 121	Clare/Gladwin	640	Open Sale	2023 or 24	
Clear Lake	Clear Lake 9	Montmorency/Atlanta	238	Open Sale	2023 or 24	
			6535			

- 2021 Habitat Accomplishments – MDNR, USFS CNNF, ONF, HNF, HMNF, WI DNR, USFWS
 - Huron-Manistee National Forest: Eric O’Neil reported that they have projects going on in both sides of the Zone; four different areas got planted. There is also an East Zone KW Environmental Assessment and most of the treatment areas have been lined out and it will be moving forward with a 2023 timeline of having it done and signed. This will be a 15-year plan, which lasts longer than their typical plans.

- Hiawatha National Forest: Paul Thompson reported that they are in the process of doing a forest-wide KW Environmental Assessment, looking at a 10 to 15-year window for this report. Currently the east zone of the Hiawatha has four KW timber sales, with three of them being sold.
 - Ottawa National Forest: Paul also reported (in lieu of Bri and Pam) that the Baraga II is a new KW project in the Ottawa and it will produce 1,000 acres of habitat and 2,000 acres for species affiliated with similar conditions. There are MDNR lands immediately adjacent to this project, and there is an opportunity to work together and perhaps provide more KW habitat there in the future.
 - Chequamegon-Nicolet National Forest: No one representing this forest was on the call.
 - Wisconsin DNR: Davin Lopez reported that there are so many different agencies working together, but much of the KW work being done is on County Forests. There is habitat being created in WI, but very little is being done on WI DNR land. Communication is a challenge, as the agencies doing KW work are currently not sharing reports or communicating regarding their efforts.
 - Canada – Ontario, Simcoe County: Shawn Graff reported that an Ontario KW Working Group has been pulled together. Peter Burke will be the co-chair of this working group, and their first meeting was in January. Their priorities are working on suitable lands for management, and the Land Trust that they are working with are focusing on the acquisition of lands.
- PDMP Objective:
 - Current Breeding Habitat Summary
 - Acres and Stand Details of Habitat Regenerated
- Outcome 2: Improve Marketability, Program Costs and Habitat Biodiversity.
 - Update on Experimental Habitat Projects
 - MDNR has a commitment to systemically evaluate and test outcomes on silvicultural variables on the 25% of lands not managed using “traditional” techniques.
 - Red Pine Interplanting
 - JP Stocking Density (Including MSU and Kashian-Inspired Projects)
 - Non-Commercial Mastication
 - Identify, maintain and restore rare natural features and communities within the KW Management areas.
 - Evaluate wildfire areas
 - Increase structural diversity
 - Promote Natural Features Inventories
 - MDNR – Complete a comprehensive assessment of essential habitat
 - USFWS – Promote retention of ecological characteristics
 - USFWS – Utilize prescribed fire where and when possible

Experimental Acres Highlights:

Year	FTP	Sale	Agency	KWMU	Acres	Original Notes
2015	W72-733	Standby Red and Jack	MDNR	Muskrat Lake	42.81	40 Acre opposing wave RP plantation. Planting record 25%
2016	W72-800	Cut Em All Jack	MDNR	Manistee River	235.16	Notes mention 20% RP. Planting Record 25% .
2017	W72-800	Cut Em All Jack	MDNR	Manistee River	367.6	Original notes mention 8 rows. Confirmed 10 rows on site.
2017	W71-943		MDNR	Damon	436.96	Only 300 of 437 acres planted to 25% RP. Unit north of Oyster Rd just JP.
2018	W52-440	Quick Jack	MDNR	Crapo Lake	58	Planting Record 25%
2018	W52-448	Warbling Mix	MDNR	Crapo Lake/Lovells	317	311 planted 20% RP. Planting Record 21% RP. Replant will only be JP.
2019	W72-819	HQ Road KW	MDNR	Staley Lake	537.1	Planting Record 25% RP
2020/21		Beaver Trail	MDNR	Ogemaw/St. Helen	580	Stocking Density Project - 5x6 Control
2021		Lovells KW	MDNR	Lovells	548	Stocking Density Project - 6x8 Replicate
2021		4 Mile KW	MDNR	Pere Cheney	330	Stocking Density Project - 6x6 Replicate
2022		School Road KW	MDNR	Ogemaw/St. Helen	635	Stocking Density Project - 5x6 Control
2022		Sops Sops	MDNR	Manistee River	583	Stocking Density Project - 6x6 Replicate
2022		Carter KW GNA	USFS	Pine River	482	Stocking Density Project - 6x8 Replicate
2023		GNA Conifer 2 (Six Mile)	USFS	McKinley	388	Stocking Density Project - 5x6 Control
2023		Hognose	USFS	Big Creek	407	Divided into 3 sections - 10% RP, 20% RP, All JP. Opposing wave, 5x6 spacing. 169 ac. traditional, 217 ac. non-traditional.
2023		Add On KW	MDNR	Damon	591	Stocking Density Project - 6x6 Replicate
2023/24		T-Rex KW	MDNR	Pere Cheney	704	Stocking Density Project - 6x8 Replicate
2026		El Nino (Hidden Vaughn IRTC)	USFS	Mack Lake	574	Kashian inspired. 53% high density regen; 15% med density regen; 10% low density regen; 27% open, natural regen only.
2027		GNA Deckerville KW	USFS	Mack Lake	529	Promote natural JP regen, plant to 1452 TPA of JP if necessary.
2028		Lincoln KW	USFS	Pere Cheney	511	Plant 200 red pine trees per acre on 135 ac. to supplement natural jack pine regeneration.
2029		GNA La Nina KW	USFS	Mack Lake	508	Kashian inspired w/ RP. 25% high density regen, 20% RP; 15% med density regen, 50% RP; 10% low density regen, all JP; 50% open, nat regen only.

- PDMP Objectives:
 - Analysis of Jack Pine Market
 - Adjacent Harvest or Regeneration Coordination
- Outcome 3: Evaluate and Implement Management Goals Outside of the Core Breeding Range.
 - Update from Expanding Breeding Range Workgroup (Graff and Thompson)
 - Evaluate 100 pair goal: **New goal of 200 pairs**
 - Determine the number of habitat acres needed to sustain the population goal
 - Development of a spatial model to identify areas in the UP, MI, WI, and MN which have the potential to be managed for KWs using LandFire.
 - Development of spatial suitability model for Ontario.
 - ID and develop partnerships
 - Develop BMPs for habitat management outside of core
- Outcome 4: Cowbird Management Program.
 - Evaluate the scope and needs of the cowbird control program:
 - Determine the appropriate level of cowbird control needed to maintain the KW population above recovery objectives taking into account declining cowbird populations and changes in funding.
 - Evaluate KW response to reduced cowbird trapping
 - Determine correlation between cowbird presence and rates of parasitism

- ID and establish trigger points
- Continue WI work
- Coordinate transfer of responsibility from UFWFS to MDNR.
- PDMP Objectives:
 - Annual Plan for Managing Cowbirds
 - Areas Where Cowbird Management Is Adaptively Managed
 - Cowbird Management Results Report
 - Cowbird Breeding Bird Survey Results Review
- Develop and Keep Current a List of Breeding Range Research Needs and Implement a Feedback Loop to Integrate Research Results into Habitat Management Practices.
 - Brief Discussion on Status of Breeding Range Research Needs List (Kintigh)
 - Keith mentioned that the Breeding Range recently met to have their research needs list finalized and is hoping to receive further input and have everything finalized by the end of February. He will send it out for further comments and asks for input.

Keith also went through the Post-Delisting Monitoring Plan Implementation Progress Report. He mentioned that they will be taking the information listed in the below summary, and translate it in to the format following the below graphic:

	Monitoring Action	Frequency	Responsible Entities	Assigned To:	Information provided during:	Threshold	Response
Breeding Population	Census or representatively sample breeding population	Every other year	MDNR, USFS, USFWS, WDNR	Kintigh, O'Neil, Mensing, Lopez, Thompson, Tuininga	Fall KWCT meeting of odd years	Population is >1,300 pairs (using the lower 95% C.I.)	Adaptive management
	Duration of expected use	Annually review for anomalies or trends	Conservation Team	Kintigh, O'Neil, Lopez, Thompson, Tuininga	Fall KWCT meeting	Use of stands is consistent with expectations	Adaptive management
	Evaluate efficacy of new habitat techniques by census or survey for KW abundance	Within 6 years of establishment	MDNR, USFS, or USFWS	Kintigh, O'Neil, Lopez, Thompson, Tuininga	Fall KWCT meeting	Confirm use of stands by KW	Re-evaluate use of new habitat techniques
	Evaluate efficacy of new habitat techniques by selectively surveying for productivity	Within 6 years of establishment	MDNR, USFS, or USFWS	Kintigh, O'Neil, Lopez, Thompson, Tuininga, Cooper	Fall KWCT Meeting	Confirm stand regenerated using new techniques produce similar fledging rates	Re-evaluate use of new habitat techniques
Cowbird	Annual plan for managing cowbirds	Annually	MDNR, USDA-WFS, USFWS	Kintigh, Ryan, Cooper, Mensing	Spring KWCT Meeting	Submittal of report	N/A
	Areas where cowbird management is adaptively managed	Monitor for cowbird abundance and KW nests as warranted	MDNR, USDA-WFS	Kintigh, Ryan, Cooper	Spring KWCT Meeting	To be determined based on results from on- going research	Adaptive management, re-evaluate trapping efforts
	Cowbird management results report	Annually	MDNR, USDA-WFS	Kintigh, Ryan, Cooper	Spring KWCT Meeting	Submittal of report	N/A
	Cowbird Breeding Bird Survey Results Review	Annually	USFWS-MB	Forbes	Spring KWCT Meeting	Submittal of report	N/A
Breeding Habitat	Acres and Stand details of habitat regenerated	Annually	MDNR, USFS, USFWS, WDNR	Kintigh, O'Neil, Thompson, Siekierski, Lopez	Spring KWCT Meeting	Annual targets in Conservation Plan	Adaptive management
	Current Breeding Habitat Summary	Every two years	MDNR, USFS, USFWS, WDNR	Kintigh, O'Neil, Thompson, Siekierski, Lopez	Spring KWCT Meeting	Confirm relative proportion of occupied habitat by age class	Re-evaluate duration of use and density estimates
	Analysis of jack pine market	Every three years	MDNR, USFS, USFWS, WDNR	Kintigh, O'Neil, Siekierski, Lopez	Spring KWCT Meeting	Identify issues that would impact habitat regeneration	N/A
	Adjacent harvest or regeneration coordination	Within 5 years	MDNR, USFWS	Kintigh, Siekierski	Spring KWCT Meeting	Lands identified for collaborative management	N/A
	Wintering ground suitability (e.g., March rainfall, fruit availability, sea- level rise)	Annually	Conservation Team	Ewert	Fall KWCT Meeting	Bahamian March rainfall < 2.7cm and/or other metrics as issues are identified	To be determined
	New Wintering Information	Annually	Conservation Team	Ewert	Fall KWCT Meeting		

Kirtland's Warbler Post Delisting Monitoring Plan Implementation Progress Report – 2021

1. Breeding Population

- a. **Census or representatively sample breeding population. Population is >1,300 pairs (using the lower 95% C.I.).**

Kirtland's Warbler Census Results, 2010-2013, 2015, 2021

	2021	2015	2013	2012	2011	2010
NLP Subtotal	2,117	2,307	1,973	2,025	1,770	1,713
UP Subtotal	67	37	31	38	35	34
MI TOTAL	2,184	2,344	2,004	2,063	1,805	1,747
WI TOTAL	39	19	18	23	21	22
ONTARIO TOTAL	22	2	3	4	2	3
TOTAL	2,245	2,365	2,025	2,090	1,828	1,772

Key Statistics

1. MDNR - NLP

- a. Count for State Forest, USFWS, Camp Grayling, and Private Land, NLP = 1,003
- b. Occupied Habitat = 21,338 Acres.
- c. Occupied Stands = 108. Size Range 19 - 900 acres. Average size = 200 acres.
- d. Acres/singing male = 21.3

2. USFS – HMNF

- a. **Any statistics to add here?**

- c. **Evaluate efficacy of new habitat techniques by census or survey for KW abundance. Confirm use of stands by KW.**

Experimental habitat projects begin in 2015 and continued through 2021. Occupancy was confirmed in 2015 and 2016 interplanted red pine site during the 2021 census. Preliminary evaluation of the 2015 interplanted site was conducted by Smithsonian Migratory Bird Center Staff. Monitoring discussions are ongoing with Monitoring Ad Hoc Committee. Further evaluations are planned.

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Nonbreeding Range Subcommittee Discussion (Dr. Dave Ewert, Chair)

Recording minutes: 3:00:31 –3:59:24

- Dave acknowledged new committee members Giselle Dean and Falon Cartwright (Bahamas National Trust), Mike Akresh (Antioch University), and George Wallace (American Bird Conservancy).
 - Non-Breeding Work Plan to be Updated (Dave Ewert)
 - As a result of re-ordering and reconsidering the research priorities, the work plan will be updated to reflect that, in addition to any new information that has come up in the last year.
 - Potential Bahamas Trip (Dave Ewert)
 - This would include Dave Ewert and George Wallace traveling to meet Giselle and other colleagues at Bahamas National Trust (and possibly Mike Akresh's colleagues)– hopefully taking place in late March or early April.
 - Bahamas Activities Update (Giselle Deane)
 - October Scoping Trip: In October, Giselle and Demonica Brown (BNT) traveled to Eleuthera on Oct. 14-15. They presented awards to the KW Calendar winners and also distributed KW calendars to businesses in the area. They also met with Mr. Simonette, a goat farmer they have been working with on KW habitat. Additionally, they met with Bahamas Power and Light to discuss Rights-of-Way management (encouraging them to bulldoze and not use herbicides under the power line).
 - Education and Outreach: They distributed 100 calendars around Eleuthera, and three Eleuthera students were award winners.
 - Farmer's Workshops: BNT is hosting a series of three workshops as an outreach tool to farmers to expose them to the benefits of using their lands to host KWs.
 - Habitat Monitoring: The second round set of surveys is set to occur in late February, with another one in March. There will be vegetation and food abundance surveys (black torch and white sage). BNT is still waiting for a permit that is needed for these efforts.
 - Development of a Bahamian Nursery for Black Torch & White Sage (Mike Akresh)
 - Mike is working with Andrea Centola (a Masters Student at Antioch University who is taking this on as her thesis project). They are starting a nursery for black torch and white sage on San Salvador but have plans to include Eleuthera in the future.



- They have learned that the different ways to create habitat include land clearing/failed developments, goat farms, power line corridors, and natural disturbance (salt spray, hurricanes).
- New/complementary habitat management methods – seed broadcast and plantings: collect fruit/seeds, grow key plants in nursery, clear land and then plant seedling, clear land and then broadcast seed, and compare with other methods (cleared and uncleared land; goat farms).



- They have also collected various types of soil to see which type is most productive for the seeds. Additionally, they have been clipping cuttings and planting to see how they do over time (180 cuttings each of black torch and white sage) and they have planted the cuttings in the different types of soil.



Future Plans

- * March
 - * Re-measure cuttings / any germinated seeds
 - * Re-potting
 - * Continue watering, collecting and planting seeds
- * Summer
 - * Harden plants
 - * Conduct initial vegetation surveys in plots
 - * Clear land, plant seedlings, broadcast seed
 - * Educational outreach
- * Next Winter
 - * Measure plants in plots
 - * Examine germination of seed broadcasting
 - * KIWA surveys?
 - * Continue nursery work, if funding is available

- The Non-Breeding Subcommittee also has spent time determining their top research topics, which can be ranked as follows:

Topic	Impact relevance	Current knowledge	Complexity /funding
Determine relative KW abundance on different islands	4.4	2.5	2.4
Inventory available Bahamas habitat/assess habitat change over time	4.2	2.1	4.1
Determine KW habitat location and need for refuges during migration	4.2	2.2	3.5
ID relative use of stopover sites & survivorship and hazards at sites	4.1	1.8	4.2
ID predictability of food resources as function of water table and KWs	4.1	1.9	3.3
Project effects of climate change on KW winter habitat	3.9	2.3	3.4
ID anthropogenic mgmt. activities to sustain KW populations	3.9	2.3	3.7
Determine mortality factors during migration	3.7	1.7	4.3
Evaluate value of goat farms to sustain KW populations	3.7	2.6	3.5

Monitoring and Research Updates (Dr. Nathan Cooper, Chair)

Recording minutes: 4:08:44-4:19:54

- Ad-Hoc Monitoring Committee Updates

- Nathan has agreed to take over as Chair following Katie O'Brien's departure from her previous position. The committee met a few weeks ago for the first time with Nathan as Chair.
- Update on Evaluation of Point Counts to Estimate Kirtland's Population Size
 - The committee recently discussed point counts as an alternative method to the census. The data that was collected this past summer, and the analysis of the data has begun – it is too early to say whether it will be helpful or not. Stay tuned for future report-outs.
- Using BBS to Estimate Changes in BHCO Abundance
 - Nathan stated that in 2019 he published a paper that was an analysis of BBS data, looking at how cowbird populations have changed within the KW breeding area, the Great Lakes, and nationally (it showed they are declining in all three mentions). Chris Mensing inquired as to whether that data could be gathered every year with new BBS data, to use as an early warning system in case cowbird numbers increase. A plan was put in place and it seems to be working, except the data processor is incredibly intense for the models to converge and he plans on reporting out on this data in the future.
- 2022 Agency Plans
 - There are currently no plans in place for 2022 for agencies to monitor cowbirds. They talked a bit with Bill Rapai of the KW Alliance a bit about how to keep volunteers from the census involved with running BBS routes or BHCO monitoring. They would like to find a way to keep census volunteers involved and engaged in between the census years. Carol Bocetti also commented that Matt Kleitsch from Camp Grayling also recently noted that he could use help monitoring Eastern Massasauga Rattlesnakes (in KW habitat). Bill Rapai volunteered to reach out to Matt regarding this effort.

Updates

- Kirtland's Warbler Alliance (Bill Rapai)

Recording minutes: 4:19:54-4:28:40

 - One of the KWA goals that they are currently working on is to widen their donor base.
 - They also added a new Board Member: Shelly Martinez (former board member of MI Audubon and Huron Pines).
 - Bill reported that he thought their video was completed, but he found out some footage was used that was not properly credited, so DJ Case is making corrections.
 - For the coming year, they plan on giving a number of presentations.
 - Jack Pine Planting Day is set for May 7th, and Huron Pines is going to be more involved this year than they were last year (working with Kirtland Community College).
 - KWA is also working on updating their Strategic Plan in April 2022.
 - Mio KW Monument: They have received an estimate of about \$20,000 to fix it up and do maintenance every five years.
 - The KWA Board is also considering making another run at pursuing MI Legislature to make the KW the Michigan state bird (good year due to the KW license plate).
- Fundraising/Spring Donor Trip Updates (Lynne Mecum)

Recording minutes: 4:19:54-4:34:47

 - Lynne reported on the state of the Kirtland's Warbler Long-Term Fund. It is currently at \$285,304. Of that amount, it breaks down to 174 unique donors, and 447 gifts. American Bird Conservancy did a Fall Fundraiser focused on Dave Ewert's retirement,

and that brought in about \$10,000. ABC also did a year-end push that brought in another \$27,000. Lynne also did a recent outreach to folks that had been monthly donors to the long-term fund, but it had lapsed. In terms of planned giving, ABC has identified four planned gifts that are in place that if they come in to fruition, they could result in up to a seven-figure gift for the fund.

- Donor Trips: There were plans for a Bahamas Donor Trip this winter, which had to be cancelled due to Covid restrictions. In 2023, there are plans for an in-person trip, along with a virtual trip. In Michigan, there are plans in place for a May 16-18 trip, along with various individual trips. There is also a Wisconsin trip planned for Sand Valley.
- Fall Meeting Format Change (Dr. Carol Bocetti)
Recording minutes: 4:19:54-4:44:33
 - Carol announced that the Steering Committee voted to move forward with the format of having the “Spring” meetings be virtual and held in February, and the “Fall” meeting be in-person and in July. The in-person meetings will always include a virtual option.
 - The dates and place have not been set for July, but the Steering Committee will making final decisions soon. It is hopeful that the in-person meetings can rotate around to various locations, such as the U.P. and Wisconsin as well. It would be ideal to take field trips to KW project sites.
 - Meeting attendees were also reminded that the KW Festival is in Roscommon, MI on Saturday, June 4th. Check their Facebook page for further details. Chair Mike Petrucha provided a few details on the many happenings, including family-friendly activities.

Adjournment