

Forestry for Minnesota Birds

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Today I'll cover...



Forestry for Minnesota Birds – Project history



Funding



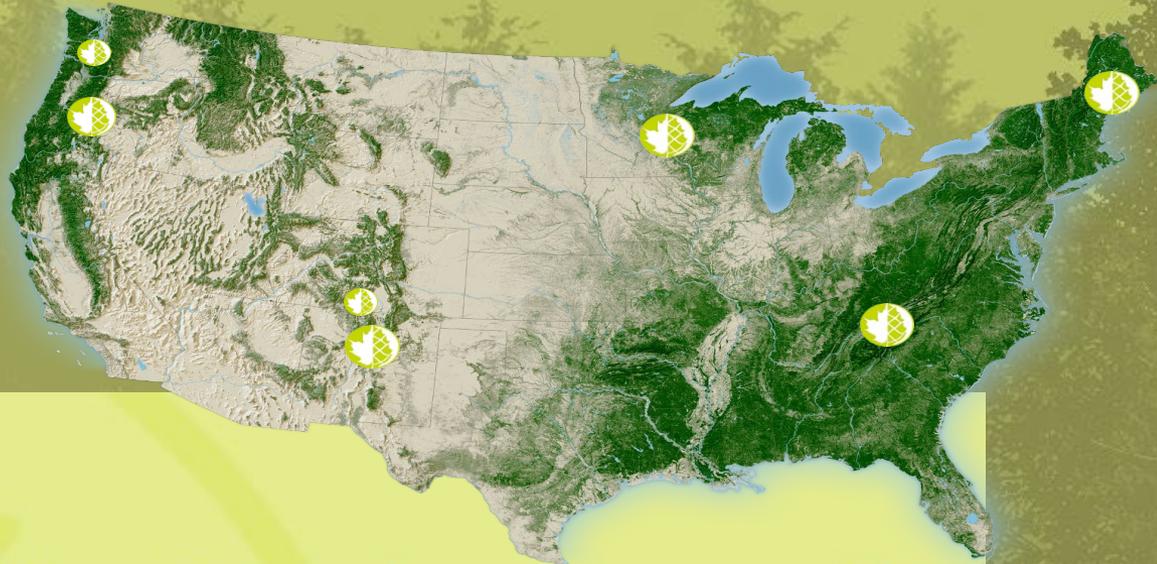
Working Group Members & Partnering Organizations



Key Decision Points

-audience, publications/outreach materials,
geographic scope, forest types, focal bird species





Our Mission

The Forest Stewards Guild practices and promotes responsible forestry as a means of sustaining the integrity of forest ecosystems and the human communities dependent upon them. The Guild engages in education, training, policy analysis, research, and advocacy to foster excellence in stewardship, support practicing foresters and allied professionals, and engage a broader community in the challenges of forest conservation and management.

Forestry for the Birds

Goals:

- Enhancement of bird habitat to keep common birds common
- Promote the connection between bird habitat and working woodlands
- Collaborate and support others to bring Foresters for the Birds across the landscape
- Provide habitat and silvicultural recommendations for at-risk bird species and bird species with populations in decline
- Host educational workshops...promoting the connection between bird habitat and working woodlands

Chestnut-sided Warbler (*Setophaga pensylvanica*)

| | | |
|----|--|--|
| H |  | <p>FOREST AGE CLASS: Young Forest</p> <p>IDENTIFICATION: Breeding adults are crisp gray-and-white birds with a yellow crown, black face markings, and rich chestnut flanks. Relatively long tail is often held cocked upward.</p> <p>SONG: Primary song is a short ditty ending with a decisive, accented ending. Often described as: <i>Pleased, pleased, pleased to meetcha! or I wish to meet Miss Beecher!</i></p> <p>NEST: Compact cup nest placed in a small shrub or within a dense group of small-diameter woody stems, within 6 feet of the ground.</p> <p>FOOD: Insectivorous; particularly caterpillars. Picks or gleans insects from the undersides of leaves.</p> <p>TERRITORY SIZE: 1-3 acres. Found throughout Michigan, especially in the U.P. and northern L.P.</p> <p>CLIMATE VULNERABILITY: High. Predicted to lose all of Michigan range.</p> |
| M | | |
| OP | | |
| S | | |
| | | |

© MichiganDNR.com/retrofox

| | | |
|---|---|--|
| O |  | <p>HABITAT FEATURES & MANAGEMENT RECOMMENDATIONS:</p> <p>Young, dense forests (<30% canopy cover) or shrubby regeneration after clearcuts or other disturbances. Openings interspersed within a forested landscape provide additional diversity of food sources and habitat structure. Manage for dense sapling regeneration; retain scattered shrubs and both live and dead standing trees for singing perches. Clearcuts, thinning, and strip-cutting can be used to create young, shrubby forest patches.</p> |
| M | | |
| U | | |

Example: A Forest Manager's Guide to Forestry for Michigan Birds

Project History Timeline

2008

- Vermont develops Forestry for Birds program and publications. Maine follows.

2008 forward

- More states develop similar programs (IN, MA, MI, OR, PA) with different agencies & NGOs taking the lead.

2018

- The Guild organizes webinar featuring Vermont program. Participants reach out expressing interest in developing Minnesota program.
- The Guild initiates MN discussions, partners with ABC & NRRI seeking LCCMR funds for program. Funding request not successful.
- The Guild facilitates Forestry for the Birds 2-day workshop at Long Lake Conservation Center.

2019

- Effort to develop MN program stalls after second LCCMR funding request unsuccessful.

2021

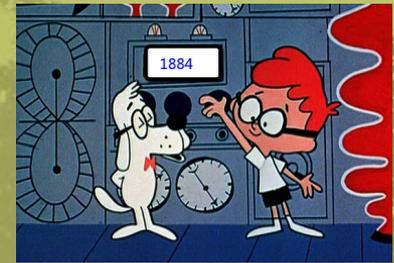
- Peter Dieser (ABC) & Peg Robertson (USFS) rekindle efforts and start to bring in natural resource professionals to form the FMNBs Working Group
- Several meetings, approximately every 2-3 months follow

2022

- Peter continues to facilitate meetings. More outreach. Review of other state's programs. Additional steering committee members brought on board to expand and diversify expertise
- The Working Group works towards funding for a dedicated position and other resources to further develop program
- Mike Lynch at Forest Stewards Guild takes lead to pursue GLRI/JV dollars to hire position, cooperative agreement between the Guild and ABC

2023

- FSG - Lake States Coordinator hired in April. Approximately 2/3rds time dedicated to FMNB Program
- ABC - Northern Forests Conservation Delivery Network Coordinator, hired in June



Position Funding:

The Guild Lake States Coordinator and ABC Northern Forests Conservation Delivery Network Coordinator



Funding from EPA



Grant from GLRI



Direct agreement with JV
- Northern Forests
Conservation Delivery
Network Coordinator



Sub-award/Cooperative agreement with ABC
-Lakes States Coordinator



FMNB's Working Group and Discussion Participants



Alexis Grinde – Natural Resource Research Institute (NRRI)

David C. Wilson – Minnesota Forest Resources Council (MFRC)

Josh Bednar – NRRI

Jaime Thibodeaux – MFRC

Michael Lynch – Forest Stewards Guild (FSG)



Ashlee Lehner – Minnesota Forest Industries



Christian Nelson – FSG

Bruce Anderson – The Wildlife Society (MN Chapter)

Mike North - MN DNR Wildlife



Dale Gentry – Audubon Minnesota



Molly Thompson – Sugarloaf

Callie Bertsch – Nat. Resource Conservation Service (NRCS)

Melissa Gabrielson – USFS (Chippewa NF)



Supportive participants or former participants:



Dave Grossheusch – USFS (Superior NF)

Ashley Peters – RGS

Mark Jacobs – Dovetail Partners

John Carlson – MN DNR Private Forest Management

Eli Sagor – U of MN Sustainable Forest Education Coop (SFEC)

Morgan Swingen – 1854 Treaty Authority

Lane Moser – U of MN SFEC

Joe Walewski – Wolf Ridge

Tanya Roerick – Leech Lake Band of Ojibwe (LLBO)



Stephen Handler – USFS/NIACS

Steve Mortensen – LLBO

(retired) Peg Robertson – USFS Superior NF

Dave Fehringer – Eastwood Forests LLC

Sarah Ruffing – Red Lake Band of Chippewa

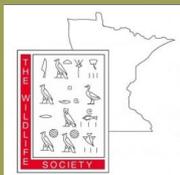
Mark Westphal – Carlton County

Jack Haben – ABC

Scott Johnson – Ruffed Grouse Society (RGS)

Duane Fogard – ABC

Peter Dieser – American Bird Conservancy (ABC)



Jayne Strange – ABC & Northern Forest Birds Network



Decisions decisions...

Who is our intended audience?

- Professional land managers? Private land owners? Loggers? Birding groups?

What are we planning to publish?

- One guide? Two? Field/pocket guides? Should we think in 'phases'?

What is the geographic scope of our project?

- Northern Minnesota? All of Minnesota? All forested regions of Minnesota?

How will the Guidelines be organized?

- Forest types and the birds within them? Birds and the forests they inhabit?

What forest habitat types will we include and how will we organize them?

- "Upland deciduous?" "Aspen-birch"? "MHn35"? SAF types? FIA types?

What birds will we include and why?

- Birds in greatest conservation need? Birds of particular importance in MN?
Birds with the most funding opportunities?

Who is our intended audience?

Professional land managers? Private non-industrial land owners? Loggers? Industry forest owners? Tribal agencies? Land conservancies? Birding groups or casual readers?

- Forestry for MN Birds aims to create content that serves the interests of each of these groups with one publication.
- Subsequent work may include “pocket guides” targeted to each group.

Mission Statement

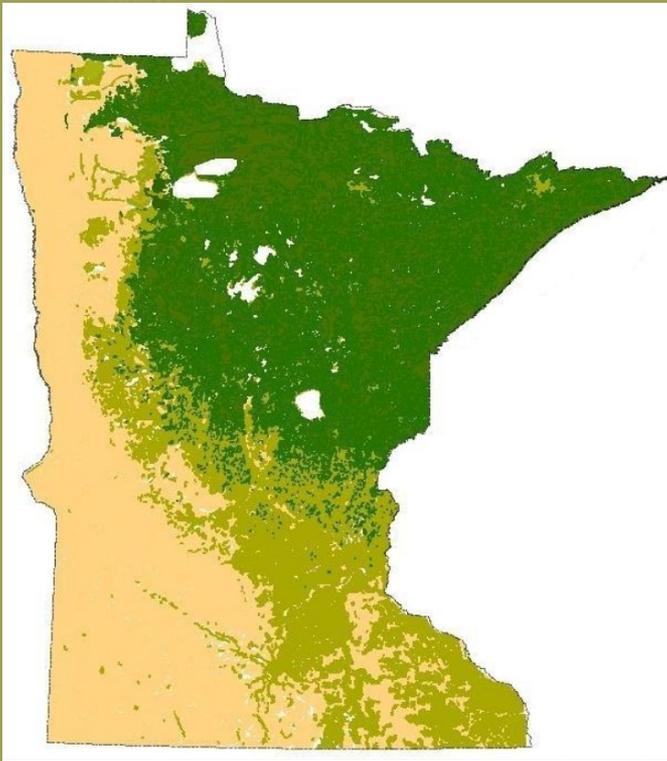
“Promoting forestry practices to benefit native bird species across Minnesota’s forest landscape by designing and sharing a conservation toolkit for landowners and natural resource professionals.”

Goal: To promote forest management techniques that benefit birds across Minnesota by raising awareness of problems and offering helpful options.

What is the geographic scope of FMNBs?

Northern Minnesota? All of Minnesota? All forested regions of Minnesota?

Forested areas in Minnesota primarily in Bird Conservation Regions (BCR) 12 and 23.



BCR12: Boreal Hardwood Forests:..."coniferous and northern hardwood forests, nutrient-poor soils, and numerous clear lakes, bogs, and river flowage."

BCR23: Prairie-Hardwood Transition: ..."[dominated by] beech-maple forest in the north and east, separated by an oak savanna."



Map © National GIS Laboratory, Bird Studies Canada, 2014

How will the Guidelines be Organized?

Forest types and the birds within them? Birds and the forests they inhabit?

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Example - Oregon: lead with detailed forest habitat type information and then a separate section for bird species details.

Example - Maine & Michigan: lead with birds organized by forest habitat and then separate sections for forest habitats.

FFMB BIRD GUIDE NORTHERN HARDWOODS

Yellow-bellied Sapsucker



Uses larger snags or live trees with inner decay to excavate nesting cavities. Often excavates a series of sap wells in live tree trunks that attract insects over time. Territories up to eight acres in size. Found statewide and year-round. Drums an irregular series of taps that sound like Morse code, slowing at the end.

DESIRABLE CONDITIONS
Older stands with snags; live aspen, poplar, alder, birch with heartwood decay.



Chestnut-sided Warbler



One of the birds in most dramatic decline in the Northeast. Nests <6' from the ground in dense small tree stems or shrubs. Typically found in young hardwood forest, often after intense cutting has removed most or all of the overstory. Song is a fast phrase-phrase-pleased-to-MEET-cha. Found statewide.

DESIRABLE CONDITIONS
Overstory gaps with dense young growth in understorey; low or no canopy vegetation.

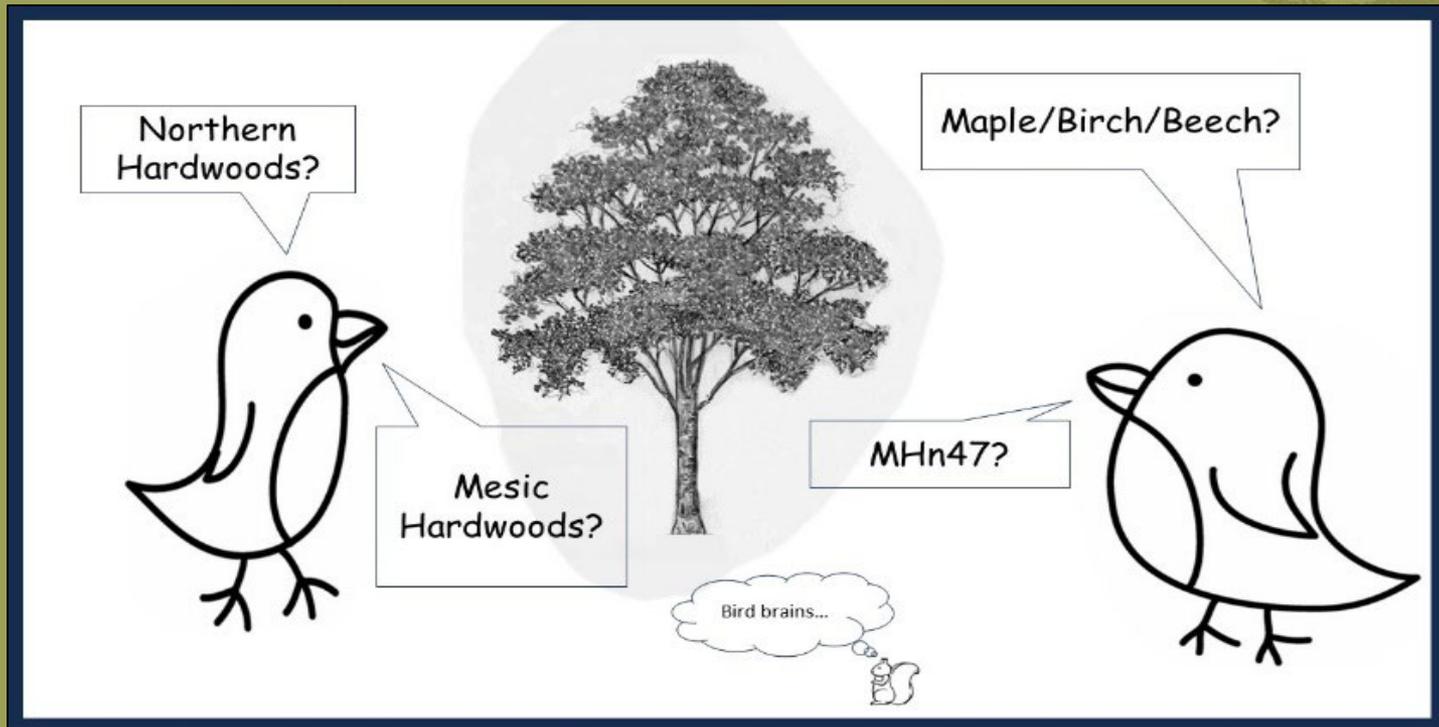


Minnesota will likely follow Oregon's approach.

- Start with the forest you're working in and manage for appropriate birds.

What forest habitat types and what to call them?

- What are meaningful differences to birds? Composition, structure, age.
- How do most professional foresters in the state classify forests?
- How do private, non-professional landowners think of forests?
- Lumping types versus splitting types: want to lump types that share similar attributes, bird species, or management recommendations.
- If linking research or other resources to forest types what makes most sense?
- For comparison: Michigan & Maine had 4 types. Indiana took a descriptive approach. Vermont had 2 types.



What forest habitat types and what to call them?

| | Bird Cover Types | Bird and Forest Habitats | NPC Forest System | FIA | Dominant tree species (from FIA table) | Common Name | Scientific Name | FOC Bird |
|----|----------------------------|-----------------------------|------------------------------|---------------------------------|---|--------------------------|--------------------------------|----------|
| 1 | | | | | | | | |
| 2 | Upland Conifer | Pine | Fire-dependent Forest System | Red pine, jack pine, white pine | Red pine, jack pine, white pine | Pine Warbler | <i>Dendroica pinus</i> | PIWA |
| 3 | | | | | | Magnolia Warbler | <i>Dendroica magnolia</i> | MAWA |
| 4 | Upland Deciduous and Mixed | Northern Mesic Mixed | Mesic Hardwood Forest System | Aspen-birch | Q. aspen, paper birch, balsam poplar | Veery | <i>Catharus fuscescens</i> | VEER |
| 5 | | | | | | Ovenbird | <i>Seiurus aurocapilla</i> | OVEN |
| 6 | | | | | | Red-eyed Vireo | <i>Vireo olivaceus</i> | REVI |
| 7 | | | | | | Canada Warbler | <i>Wilsonia canadensis</i> | CAWA |
| 8 | | | | | | Chestnut-sided Warbler | <i>Dendroica pensylvanica</i> | CSWA |
| 9 | | | | | | Rose-breasted Grosbeak | <i>Pheucticus ludovicianus</i> | RBGR |
| 10 | | | | | | American Woodcock | <i>Scolopax minor</i> | AMWO |
| 11 | | | | | | Ruffed Grouse | <i>Bonasa umbellus</i> | RUGR |
| 12 | | | | | | Pileated Woodpecker | <i>Dryocopus pileatus</i> | PIWO |
| 13 | | | | | | Yellow-bellied Sapsucker | <i>Sphyrapicus varius</i> | YBSA |
| 14 | | | | | | Oak | Oak | Oak |
| 15 | Scarlet Tanager | <i>Piranga olivacea</i> | SCTA | | | | | |
| 16 | Red-bellied Woodpecker | <i>Melanerpes carolinus</i> | RBWC | | | | | |
| 17 | Northern Hardwood | | | Maple-Beech-Birch | Sugar maple, basswood, red oak, red maple | Wood Thrush | <i>Hylocichla mustelina</i> | WOTH |
| 18 | | | | | | Yellow-throated Vireo | <i>Vireo flavifrons</i> | YTVI |

- Meaningful cover types from a bird's perspective, broadly.
- Drill down and separate differences
- MN DNR's Ecological Classification System (ECS) / Native Plant Communities (NPCs)
- USFS Forest Inventory and Analysis types (FIA)
- Representative/dominant tree species examples for each type
- List the priority bird species that utilize each type of forest habitat

Bird Cover Types

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| 13 | | | | | | Yellow-bellied Sapsucker | <i>Sphyrapicus varius</i> | YBSA |
| 14 | Oak | Oak | Oak | Bur oak, red oak, basswood, q. aspen | Eastern Towhee | <i>Pipilo erythrophthalmus</i> | EATO | |
| 15 | | | | | Scarlet Tanager | <i>Piranga olivacea</i> | SCTA | |
| 16 | | | | | Red-bellied Woodpecker | <i>Melanerpes carolinus</i> | RBWC | |
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| 18 | | | | | Yellow-throated Vireo | <i>Vireo flavifrons</i> | YTVI | |

Bird forest habitat types:

- Upland Deciduous (ex. aspen, paper birch, oak stands, northern hardwoods)
- Upland Conifer (ex. jack/red/white pine stands, spruce plantations)
- Upland Mixed (ex. like upland deciduous with significant conifers in stand)
- Lowland Conifer (ex. spruce bogs, cedar and tamarack swamps)
- Lowland Deciduous (ex. black ash swamps, bottomland/river forests)

The Working Group felt strongly that cover types should be simple and relatable but should include FIA and ECS components.

Michigan Example.

| Forest Habitat Association | Common Forest Types (modified from Michigan SAF) |
|---|--|
| Hardwoods Association <i>(May include up to 25% softwoods)</i> | Maple-Mixed Hardwood Aspen-paper birch (early successional) Southern Deciduous Swamps & Floodplain |
| Mixedwood Association <i>(Transitional btw hard and softwoods - neither hdwd or sfwd exceed 75% stocking)</i> | Hardwood / Conifer Uplands Hardwood / Conifer Swamps |
| Softwoods Association <i>(May include up to 25% hardwoods)</i> | Northern Cedar Swamps / Tamarack Spruce-Fir Hemlock Dominated |
| Oak-Pine <i>(May range from pure oak-dominated hardwoods to mixed hardwoods and softwood stands)</i> | Southern Oak-Mixed Hardwood Softwood Plantations Northern Oak Natural Red & White Pine Jack Pine |

Birds...249 species to choose from...

Selection Criteria:

- MN Forest birds - 150 species (~66% of breeding birds)
- Wide geographic distribution
- Habitat specialists
- Mix of relatively common and conservation need (SGCN)
- Responsive to silvicultural/management actions

Process:

- Identify forest habitat types
- Representative species for forest types that meet criteria

Birds – the chosen ones

Upland Conifer

Pine Warbler
Magnolia Warbler

Lowland Conifer

Boreal Chickadee
Connecticut Warbler
Golden-crowned Kinglet

Upland Deciduous and Mixed

Veery

Ovenbird
Red-eyed Vireo
Canada Warbler
Chestnut-sided Warbler
Rose-breasted Grosbeak

American Woodcock

Ruffed Grouse
Pileated Woodpecker
Yellow-bellied Sapsucker

Eastern Towhee

Scarlet Tanager
Red-bellied Woodpecker

Wood Thrush

Yellow-throated Vireo
American Redstart

Lowland Hardwood

Least Flycatcher
Winter Wren
Northern Parula
Brown Creeper
Blue-gray Gnatcatcher
Cerulean Warbler
Prothonotary Warbler

SGCN

BOLD text

Next steps

| Forestry for Minnesota Birds Project Timeline | | | | | | | | | | | |
|---|---|------|----|------|----|----|----|------|----|----|----|
| Performance Milestones | | 2022 | | 2023 | | | | 2024 | | | |
| | | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Literature Review | Review FFB Guides from other States | x | | | | | | | | | |
| | Review additional bird conservation resources | x | | | | | | | | | |
| | Finalize Priority Spp./Covertypes | | | | | x | x | | | | |
| | Determine Priority Habitat Guidance | | | | | | x | | | | |
| Concept Development | Determine Target Resources | | | x | x | | | | | | |
| | Create FMNB Subcommittees | | | x | | | | | | | |
| | Additional Content Deliberation | | x | x | x | | | | | | |
| | Gather Stakeholder Input | | | x | x | | | | | | |
| Toolkit/Guide Development | Create Toolkit/Guide Outline | | | x | x | x | x | | | | |
| | Draft Guidebook Development (Writing) | | | | x | x | x | x | x | x | |
| | Review and Quality Control (Internal) | | | | | | | | x | x | |
| Internal and Peer Review | Technical Committee(s) | | | | | | x | x | x | | |
| | Citing and Sourcing | | | | | | | x | x | x | |
| | Stakeholder Review | | | | | | | | x | x | |
| Graphic Design | Select Graphic Designer/Content Developers | | | | | | x | | | | |
| | Design Development | | | | | x | x | x | x | x | |
| | Final Guidebook Review | | | | | | | | | x | |
| Printing/Distribution | Printing | | | | | | | | | | x |
| | Distribution | | | | | | | | | | x |
| | Online Presence/Availability | | | | | | | | | | x |
| Education/Outreach | Educational Workshops | | | | | | | | | | x |
| | Engage/Expand Partner Organizations | x | x | x | x | x | x | x | x | x | x |

*Note: This is a approximate timeline of accomplishments for the Forestry for MN Birds Initiative, and milestones or timetables may be revised if necessary.

proposed, completed

Q1: jan, feb, mar; Q2: apr, may, jun; Q3: jul, aug, sep; Q4: oct, nov, dec

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*Shirley
Gay*