

Land trusts and bird conservation: A needs assessment National report

**By Ashley Dayer, Nancy Cheng, Amanda Rodewald,
Emily Cosbar, & Ron Rohrbaugh**

Background

The importance of private land to birds is clear. Over sixty percent of the land area in the United States is privately owned, and more than 100 bird species have $\geq 50\%$ of their U.S. breeding distribution on private lands (*State of the Birds, Private Lands, 2013*). Unfortunately, both individual and institutional barriers complicate conserving private lands; birds reliant on private lands continue to decline. One increasingly popular mechanism to conserve birds and their habitats on private lands is the land trust. At the Cornell Lab of Ornithology, we believe not only can land trusts help birds, but birds can benefit land trusts as well.

As part of the Cornell Lab of Ornithology's Land Trust Initiative, our intent was to explore mutually beneficial collaborations that result in more land conserved for birds, other wildlife, and people. The purpose of this survey was to learn more about land trusts' interests and experiences with bird habitat conservation and related resources.

In 2014, we conducted an online survey of regional and local land trusts throughout the United States, who previously responded to the 2010 Land Trust Alliance Census. This survey is a cooperative effort of the Cornell Lab of Ornithology, the Land Trust Alliance, and Wings Over Western Waters (a consortium of land trusts and bird habitat Joint Ventures). Additionally, our Advisory Team for the effort included Cornell University's Human Dimensions Research Unit, The Conservation Fund, and Finger Lakes Land Trust.

Purpose

The survey purpose was defined as:

- Understand the current state of bird and habitat conservation by land trusts
- Understand what bird conservation information is currently informing land trusts
- Explore motivations and barriers for bird and habitat conservation
- Consider how to deliver information
- Identify other ways to support land trusts

Methods

Interviews were conducted to inform survey questions and response options. The land trust survey was implemented using Survey Monkey (an online survey program) and sent to U.S. land trusts working at the sub-national level. One initial request and four subsequent reminders were sent to those who did not complete the survey between March and April 2014. Six hundred and fourteen land trusts responded to the survey with a response rate of 42%.

A national Land Trust Alliance conference registration drawing was used as an incentive to complete the survey. Phone surveys were conducted for land trusts that did not respond to the online survey in order to check for non-response bias.

Results for All Land Trusts

Largely believe they are benefiting birds and habitat (especially forests). Respondents were asked: “Approximately what percentage of the total acreage protected by your land trust maintains or protects these benefits?” About 78% of all land trusts indicated that between 76-100% of their land benefits “wildlife habitat in general.” Following closely was “bird habitat” (71%) and “important natural areas” (51%). Respondents were also asked: “Approximately what percentage of the total acreage protected by your land trust is characterized by the following types of land?” About 45% of all land trusts indicated that between 76-100% of their land is characterized as “forest.”

Nearly ½ of land trusts put land under easement due to birds and nearly ⅔ considered birds in management plans. In the past five years, land trusts have completed a variety of conservation activities to advance land protection for birds. In order of most commonly completed by land trusts were “considered information about birds when creating a land management plan” (61%), “prioritized land for protection due, at least in part, to bird conservation benefits” (56%), “put land under conservation easement due, at least in part, to bird conservation benefits” (47%), “purchased land in fee due, at least in part, to bird conservation benefits” (38%), and “considered information about birds when creating a strategic habitat conservation plan” (38%). Only sixteen percent of land trusts indicated, “our land trust has not completed any of the above in the past 5 years.”

Inventory of birds, bird walks, and invasives management were the most common actions for birds. In the past five years, land trusts have also completed more specific conservation activities related to birds and habitat. The top response, with the largest percentage of land trusts indicating its completion, was “hosted a bird walk” by 62% of all land trusts. Following closely were “managed invasive species to create or maintain habitat” (57%), “inventoried birds (i.e., species list)” (52%), and “installed or maintained nest boxes” (49%).

Majority believes there is right amount of information, but not widely using conservation plans, science articles, or eBird. We were interested in land trusts’ views on the amount of information available to land trusts on birds in their region. Forty-five percent thought

there was just the right amount of information, 35% thought there was too little, 18% didn't know, and 1% thought there was too much.

When asked what types of information about birds their land trust used in the past five years, the most common response was "information from a scientist we know who specializes in birds" (47%), followed closely by "biodiversity data that includes birds as one part" (42%), "Audubon's Important Bird Areas" (41%), "information our organization collected about birds" (36%), and "regional or state bird conservation plans" (35%). Although regional/state conservation plans were used by a third of land trusts, national conservation plans and bird species conservation plans were only used by 17% and 19% of land trusts respectively. The two items most directly related to science and monitoring were also not as widely used by land trusts ("science article" [20%] and "eBird" [19%]).

Greatest barrier is funding, then staff/volunteer capacity. We were interested in determining what barriers keep land trusts from accomplishing bird conservation activities. Regardless of whether the activity was land protection, land management, land monitoring, or engaging people, about 60-75% of all land trusts "agreed" or "strongly agreed" that funding was the biggest barrier, followed by staff/volunteers with a range between 50-60%. The availability of knowledge/skills was thought to be less of a barrier, with a range between 35-45%.

Greatest motivation is land protection, then funding (but all benefits are motivating). We were interested in determining the greatest motivations for land trusts to contribute more to bird conservation. About 80-100% of all land trusts "agreed" or "strongly agreed" that the various different outcomes were all highly motivating to spark their land trust's interest in bird habitat conservation. The most agreed upon response was "more land protected" and "more donor funding sources" (92%); followed by "more grant funding sources" and "more awareness of our land trust" (90%); "more birds protected" (89%); "more members" (85%); "more connections to partner organizations" (84%); "more media coverage" and "more volunteers" (83%).

Place-based information would be beneficial, especially via the web. Land trusts had a high level of agreement (between 80-100% either "agreed" or "strongly agreed") that the following area-specific information would increase their land trust's ability to conduct bird habitat conservation: 1) Funding sources for protecting and managing land for birds; 2) Value of your area to bird populations; 3) Priority bird habitats for your area; 4) Priority locations/sites for birds in your area; 5) Priority bird species for your area; 6) Top threats to bird species in your area; 7) How to manage habitats in your area for birds; and 8) Bird conservation partners in your area.

Respondents also had a high level of agreement ("agreed" or "strongly agreed") that their land trust would like to receive information about birds and bird habitat conservation via the web in the following ways: 1) Web-based information (87%); 2) Interactive web tool with place-based information (82%). The remaining non-web approaches were less popular: 3) Training at a state land trust network meeting (70%); 4) Printed manual (62%); 5) Training at Land Trust Alliance's Rally (56%).

Funds would best ensure land trusts conserve more bird habitat, followed by monitoring support. Respondents were asked: “Do you agree or disagree that your land trust’s ability to conduct bird habitat conservation would increase with the following types of resources?” Respondents had a high level of agreement (“agreed” or “strongly agreed”) that they would be able to increase conservation with the following resources: 1) A new grant program for birds and habitat (87%); 2) Matching funds sources for grants from existing sources for birds and habitat (84%); 3) Availability of volunteers to inventory or monitor birds (79%); 4) A tool to allow staff or volunteers to inventory or monitor birds (75%).

Summary of Recommendations for Land Trusts Based on Survey Results, Interviews, and Follow-up Presentations

Recommendations are based upon results from regional network leader interviews, bird conservation land trust interviews, and our online survey of over 600 land trusts, as well as feedback from presentations to the North American Bird Conservation Initiative (NABCI) US Committee, NABCI Private Lands Working Group, Partners in Flight Western Working Group, our Land Trust Advisory Team, a session with 25 survey participants at the Land Trust Alliance’s national conference, and responses to a presentation to 50 land trusts at a citizen science workshop at the conference.

To engage land trusts in bird conservation, we recommend efforts to foster collaborations focus on the following:

1. Many land trusts are already engaged in bird conservation; learn from them and share their stories, including learning from Audubon.
2. Address needs for funding mechanisms for upland bird habitat protection—potential sources are Farm Bill programs, state wildlife grants, Partners for Fish and Wildlife programs, and starting a new small grants program.
3. Ask the question: “Is it problematic that information sources typically don’t include bird conservation plans?” If so, consider how to increase awareness and use of plans.
4. Address need for volunteers and monitoring through connecting land trusts with eBirders and other bird enthusiasts.
5. Provide land trusts with service area-based resources, connected to larger landscapes.
6. Follow-up with these 500+ land trusts who are interested—connect them to Joint Ventures, other potential bird conservation partners, and resources.

Next Steps

We propose three next steps for the Cornell Lab Land Trust Initiative to address the research-based recommendations above.

- **Web Resources Portal for Land Trusts**

- Recommendation
 - A basic website for broad awareness-building that links to bird conservation resources and presents the benefits of these resources to land trusts
 - Resources may include: bird conservation plans, eBird, All About Birds, North American Birds Online, Important Bird Areas, Joint Ventures, International Migratory Bird Day
 - Provide case studies and examples from land trusts
 - Draw land trusts to the website with regular e-newsletters highlighting a resource or new material on the website
- Outcomes
 - More land trusts accessing bird conservation resources
 - More land trusts considering information about birds when creating a land management plan or a habitat conservation plan

- **eBird for Land Trusts**

- Recommendation
 - Connecting land trusts with eBird is essential (given results about land trust barriers for conservation and our resources at the Lab)
 - Ensure land trust lands are hotspots
 - Focus birders on birding land trust hotspots
 - Better understand and communicate how land trusts are using eBird
 - Consider how to address any challenges land trusts have experienced with eBird (e.g., private easement information)
 - Develop outreach campaign to reach out to land trusts and engage them in eBird—the following tools should be considered:
 - Webinars
 - State, regional, and national trainings at land trust meetings
 - Special section on the Web Resources Portal for Land Trusts including training content, success stories, and videos
 - “Market” through current list of land trusts, Saving Lands, and regional and state networks
- Outcomes
 - More land trusts inventorying and monitoring birds (and using birds as indicators)
 - More information about birds on private lands in eBird
 - More land trusts using bird information to justify conservation

- **Clustered Collaborations**

- Recommendation
 - Coordinating clusters of land trusts focused on key bird conservation needs/priority species
 - Provide place-based information about key species
 - Bring land trusts together for skills & relationship-building workshop
 - Connect with state agency, local/regional bird conservation experts, & partner biologists
 - Connect with local/regional eBirding community
 - Write a collaborative grant proposal for a project to address priority species
- Location
 - Will occur in areas where there are...
 - Priority species needs on priority lands
 - Funds available that we can help access
 - Strong partnerships with the bird conservation community, state agencies, and/or land trusts
 - Joint Ventures interested in partnering
 - Land trusts willing to collaborate
- Outcomes & Evaluation Tools
 - Build relationships between land trusts in a region
 - Build capacity for conservation planning, fundraising, monitoring
 - Site-specific support and technical assistance
 - More priority bird conservation on private lands
 - More acres conserved for priority birds by land trusts
 - More acres managed for priority birds by land trusts

Acknowledgments

We would like to express our appreciation for funding support from the Wings Over Western Waters initiative, Intermountain West Joint Venture, Pacific Coast Joint Venture, and the Sarah K. deCoizart Foundation. Our Advisory Team includes Marie McCarty (Kachemak Heritage Land Trust) and Andrew Mackie (Land Trust of the Upper Arkansas) from the Wings Over Western Waters Initiative, Erin Heskett (Land Trust Alliance), Ole Amundsen (The Conservation Fund), Andy Zepp (Finger Lakes Land Trust), and Rich Stedman (Cornell University Human Dimensions Research Unit).

Suggested Citation

Dayner, A.A., Cheng, N., Rodewald, A., Cosbar, E., Rohrbaugh, R. (2015). *Land trusts and bird conservation: A needs assessment. National report*. Ithaca, NY: Cornell Lab of Ornithology.