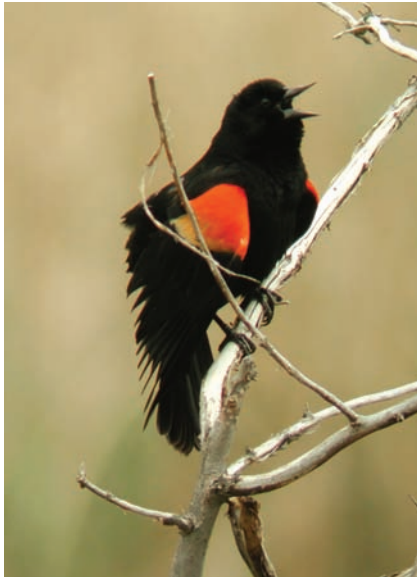




# Audubon Science

## CITIZEN SCIENCE PROGRAMS

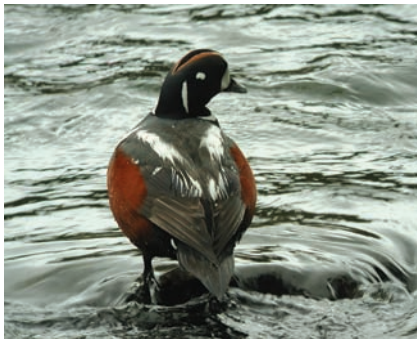


### Needs

Understanding changes in bird numbers is the basic material for bird conservation. Given the scale and variable nature of the Americas this is a colossal task. The need for information increases as threats and pressures on bird habitats increase. Essential requirements for Citizen Science include ways to capture, manage, and analyze information, , and attractive result presentation, which are costly to develop.

### Vision and Goals

Citizen Science is about learning, empowerment, building a constituency, as people count birds for conservation. Audubon's vision is to engage citizens in asking questions about their environment, and to help them gather information to answer questions that they and professional biologists are asking. By being part of the process, it is our vision that a growing number of people will become empowered to take action on behalf of places important to them and important to wildlife, giving birth to a new culture of conservation. Local citizens will conserve their own natural resources though Citizen Science engaged by Audubon's people-focused conservation activities.



### What we are doing

Audubon's national Citizen Science program comprises the Christmas Bird Count (CBC), the Great Backyard Bird Count (GBBC), and eBird, augmented by many state-based initiatives. North America's conservation movement started when citizens began to count birds instead of killing them over the holidays. Audubon's Christmas Bird Count is the world's oldest bird-based Citizen Science project and it encourages people to participate in local conservation of the birds they count.

The GBBC is a four-day Citizen Science program held each President's Day weekend. It involves people counting birds in their yards and elsewhere, submitting their results online, and seeing their results displayed with those of others in real time. Audubon developed and now runs this program with our partner the Cornell Lab of Ornithology.

eBird is a web-based place-based checklist program that provides individuals with the means to contribute to a collective memory of the birds they see, again as a collaborative program of Audubon and Cornell. Individuals can keep check of their own checklists over time.



ALL PHOTOS © PAUL & FINGH GREEN

PROMOTING A CULTURE OF CONSERVATION BY CONNECTING PEOPLE WITH NATURE

AUDUBON SCIENCE PROGRAMS >> IBAS >> WATCHLIST >> BIRDS & AGRICULTURE >> AUDUBON AT HOME >> CHRISTMAS BIRD COUNT >> STATE OF THE BIRDS >> SEABIRD RESTORATION

## GOALS

- Engage people to ask questions about the world around them.
- Engage large numbers of citizens in gathering information# for conservation.
- Empower citizens to take action on behalf of places important to them and important to wildlife.
- Help people learn about their natural environment.

## ACHIEVEMENTS

- CBC is producing unique new bird population information not previously available.
- GBBC engages more than 60,000 people in watching birds, keeping checklists, and submitting their sightings online.
- eBird now allows for personalized list keeping as birders also contribute to bird conservation.

## FUTURE

- Provide exciting and informative online results pages for all our Citizen Science programs.
- Provide comprehensive monitoring of birds and habitats on our IBAs through engaged local communities.
- Provide a Citizen Science activity to those engaged in the Audubon At Home program.

## HOW YOU CAN HELP

- Offer your time and skills.
- Make a donation.
- Help with program development.

## Achievements

CBC engages 60,000 citizen scientists each year and their annual contribution is valued conservatively at around six million dollars. The CBC fostered the founding and growth of over a thousand bird clubs and Audubon chapters throughout the U.S. and Canada. During 2005, new analyses of these CBC data continue to reveal new bird population trends, changing our focus on which species are of greatest conservation concern.

GBBC engages more than 60,000 people in watching birds, keeping a checklist, and submitting their sightings online to a central website. During 2005, participants submitted 52,000 checklists, reporting 6.54 million birds, of 613 species. In the process, our Citizen Scientists learn a great deal about the birds they see, and they contribute to an invaluable database that produces real-time information on the distribution of species across the continent.

eBird launched version two in the fall of 2005, with new listing games to encourage use, and enhanced output tools for those who want to use the data. Birders access the historical database to find out what other eBirders are reporting from across North America. Birdwatchers, scientists, and conservationists who want to know more about the distributions and movement patterns of birds across the continent use the eBird database.

## Future

The Internet allows us to give and to receive information about natural systems over a wide spread of geographic locations, and continues to shape the future of our Citizen Science programs. The Internet allows instant integration and display of environmental data, permitting real time comparisons against long-term patterns to detect subtle changes and, as necessary, to sound warning signals.

Audubon is responsible for the Important Bird Area program in the United States. It also plays a role in coordinating IBAs throughout the hemisphere in landscape-scale conservation activities. Our Citizen Scientists will provide comprehensive monitoring of birds on our IBAs, trends in habitat, threats, and responses to conservation action.

Audubon aims to provide a Citizen Science activity to those engaged in the Audubon At Home program to enable those who make changes in the personal landscapes to track the changes in wildlife use of these wildlife-friendly habitats. Our AAH Citizen Science program will provide a launch pad for some to become engaged in IBA monitoring.

GBBC participation will grow many times over to become an even more valuable education tool. CBC will increase its participation, especially in underrepresented areas, and will respond to recommendations of a recent scientific review to increase the value of CBC data in bird conservation.