

RAPTOR POPULATION INDEX PROJECT
Strategic Plan
June 2008-May 2011

MISSION

Contribute to the conservation, knowledge, and public understanding of raptors and raptor migration through a collaborative population monitoring program that produces conservation assessments and scientifically defensible population trends derived from counts of migrating raptors.

VISION

RPI will become an essential component of raptor monitoring, migration research, and conservation planning in the North America.

BACKGROUND AND RATIONALE

Diurnal raptors are at the top of many food chains and are sensitive indicators of ecosystem health. Hawkwatchers have combined their enjoyment of raptor migration with the collection of valuable long-term data on the status of raptors from migration watchsites along major migration corridors.

The Raptor Population Index Project (RPI) was conceived to contribute to conservation, by using raptor migration counts to produce assessments of population status to be shared widely through public outreach and education. Specifically, RPI's objectives are to:

- (1) Produce statistically robust indices of annual abundance and long-term demographic trends for each species of migratory raptor from as many North American count sites as possible
- (2) Provide frequently updated, scientifically sound assessments of the status of each species; and
- (3) Make this information widely available to participating raptor migration monitoring sites, the scientific community, conservation and wildlife management agencies, and the public

This plan was created to prioritize and guide the actions and operations of RPI from June 2008 through May 2011.

PRINCIPAL FOCUS AND METHODS

Similar to many other citizen science monitoring programs, RPI consists of a network of independent watch sites, manned by volunteers and/or paid staff and an organizing group with professional staff. RPI was launched in 2004 by a partnership of three organizations: The Hawk Migration Association of North America (HMANA), Hawk Mountain Sanctuary (HMS), and HawkWatch International (HWI). Each of these partners has designated professional staff to perform specific project functions. RPI is guided by the three organizations and by Management and Science Advisory Committees. These committees are comprised of members from federal and state agencies, academic institutions, and non-profit conservation organizations (including the three partners).

From 2004 through 2007, RPI focused on a pilot project to establish the feasibility of a continent-wide program to monitor raptor population status and trends based on migration counts. The first three years of operations were partially funded by a grant from the National Fish and Wildlife Foundation (NFWF). Matching funds came from HMS, HMANA, and HWI. RPI partners agreed to perform the following functions:

HMANA.—Founded in 1974 to advance scientific knowledge and promote conservation of raptor populations through study, enjoyment, and appreciation of raptor migration, this RPI partner has been responsible for (1) count data standardization and collection protocols, (2) liaison to watchsites, (3) data entry and submission facilities (<http://www.hawkcount.org>), (4) data management and storage, (5) dissemination of results via various media, and (6) raising funds for cash match (organizational background at <http://www.hmana.org>).

HMS.—Founded in 1934 to conserve birds of prey worldwide by providing leadership in raptor conservation science and education, and by maintaining Hawk Mountain Sanctuary as a model observation, research and education facility, HMS has been RPI's analysis unit and has been responsible for (1) trend analysis (2) acquisition and preparation of key data sets, (4) scientific interpretation and publication of results, (5) dissemination of results via various media, (6) addressing other research questions, and (7) providing substantial in-kind matching funds (organizational background at: <http://www.hawkmountain.org>).

HWI.—Founded in 1986 to conserve our environment through education, long-term monitoring, and scientific research on raptors as indicators of ecosystem health, this RPI partner has contributed (1) coordination and operation of western and Gulf Coast sites, including data entry and submission, (2) as a liaison and feedback to its watchsites, (3) dissemination of results via various media, (4) scientific interpretation and publication, and (5) contribution of matching funds (organizational background at <http://www.hawkwatch.org>).

NFWF deliverables include a scientific peer-reviewed report on the status and trends of migratory raptor populations breeding in North America, based on a network of migration count sites. This will be in the form of a book "The State of North America's Birds of Prey" to be published early in 2008, which demonstrates the technical feasibility and value of using migration counts to track population changes in migratory raptors. RPI also provided federal, state, and local resource management and environmental conservation agencies and organizations with current information on site-specific, region-specific and continent-wide population trends. Other products included papers on analysis methods, raptor trends, and annual reports that have been dispersed to cooperators, funding agencies, resource agencies, the media, and posted on the RPI website (<http://www.rpi-project.org/>).

GOALS 2008-2011

RPI has identified two types of strategic goals needed to carry out our mission and achieve our vision:

Scientific and Conservation Goals.—RPI will focus on improving scientific and monitoring output and contribute results to conservation. RPI's research agenda is centered on improving our understanding of raptor migration to better interpret migration count data.

Institutional Goals.—*RPI's overarching goal in the next three years is to establish itself as a permanent monitoring program producing timely and regularly updated information on the status of North America's raptors.* To do so, RPI aims to strengthen the network of independent watchsites; work

towards sustainability of RPI's monitoring program, and increase organizational capacity for science and research.

RPI will address these strategic goals through the following specific objectives:

- ▶ Continue to develop and use the best-possible statistical analysis procedures and improve their efficiency in order to facilitate frequent and timely updating of assessments of the status of raptors.
- ▶ Develop and implement a frequency and mode of reporting status and trends of raptors that will effectively serve the conservation community, including meeting needs for raptor monitoring identified in the Partners in Flight North American Landbird Conservation Plan (http://www.partnersinflight.org/cont_plan/).
- ▶ Conduct and promote relevant research on raptor migration: (e.g. via satellite tracking, radar ornithology, definition of catchment areas, issues of detectability, etc.), to better understand and interpret count data.
- ▶ Increase support for new and existing watch sites through more direct contact with site personnel, including annual or biennial conferences, and enhanced feedback of RPI results via the web and other media
- ▶ Outreach to existing sites to assist them, if necessary, to develop and adhere to standardized data-collection protocols and to ensure long-term consistency of count data.
- ▶ Continue to develop, enlarge, and update an inventory and description of watch sites and make it available on HawkCount.org and RPI-project .org.
- ▶ Develop additional web analysis tools useful to hawk watches.
- ▶ Identify gaps in geographic coverage for spring and fall migration monitoring, and begin to fill those gaps.
- ▶ Work aggressively towards developing the support, infrastructure, and organizational capacity to put RPI onto a secure footing as a permanent long-term raptor monitoring program.

(Final Version, 15 February 2008)