

BIRD CONSERVATION MEASURES

Compiled by the DoD Partners in Flight Working Group to assist with INRMPs and NEPA.

Bird Conservation Planning

The most important factor in minimizing and mitigating takes of migratory birds is an understanding of when and where such takes are likely to occur. This means developing knowledge of migratory bird habits and life histories, including their migratory paths and stopovers as well as their feeding, breeding, and nesting habits. This basic inventory data provides the basis for the bird conservation section of the Integrated Natural Resources Management Plan (INRMP).

Utilize the DOD Partners in Flight database of migratory bird species of concern that are likely to occur on each installation (<http://www.dodpif.org>) to help determine the birds you should focus on. This database includes FWS Birds of Conservation Concern (http://library.fws.gov/Bird_Publications/BCC2008.pdf); priority migratory bird species documented in the comprehensive bird conservation plans (North American Waterbird Conservation Plan, U.S. Shorebird Conservation Plan, Partners in Flight Bird Conservation Plans, North American Waterfowl Management Plan); list of threatened and endangered bird species in 50 CFR 17.11 (<http://www.fws.gov/angered/wildlife.html>); and Game Birds Below Desired Condition (<http://www.fws.gov/migratorybirds/reports/status04/GBBDC%20LIST.pdf>).

Identify and understand the bird conservation goals and habitat protection objectives for the installation's Bird Conservation Region, promoted through the North American Bird Conservation Initiative, contained in the comprehensive bird conservation plans and state Wildlife Action Plans. Incorporate these into installation INRMPs, implement identified actions and monitor the results of these management actions.

- North American Bird Conservation Initiative (<http://www.nabci-us.org>)
- Partners in Flight (<http://www.partnersinflight.org>)
- North American Waterfowl Management Plan (<http://www.fws.gov/birdhabitat/NAWMP/index.shtml>)
- North American Waterbird Conservation Plan (<http://www.waterbirdconservation.org>)
- U.S. Shorebird Conservation Plan (<http://shorebirdplan.fws.gov/>)
- State Wildlife Action Plans (<http://www.wildlifeactionplans.org/>)

Conservation Partnerships

Initiate and facilitate conservation partnerships to improve habitats and protect and restore avian resources that occur on Department of Defense lands. Potential partnerships can emanate from initiatives such as the Avian Power Line Interaction Committee, Communication Tower Working Group, the bird conservation initiatives, Central Shortgrass Prairie Partnership and similar ecoregional partnerships, Pacific Seabird Group, Western Hemisphere Shorebird Reserve Network, Important Bird Areas program

Continue to participate in international bird conservation initiatives, including Partners in Flight and the North American Bird Conservation Initiative.

Utilize opportunities offered through the Sikes Act to enter into cooperative agreements with FWS, States, and organizations such as The Nature Conservancy, Chesapeake Bay Program, Coastal America, Ducks Unlimited, and Partners in Flight partners to share information and advice that benefit birds and other species and implement INRMPS.

Use partnerships facilitate implementation of conservation or mitigation measures at a landscape scale, including locations outside the fence.

Utilize the provisions in appropriate legislation that allow the Department of Defense to provide property at closed bases to conservation organizations for use as habitat and that, in order to lessen problems of encroachment, allow the Department of Defense to purchase conservation easements on suitable property in partnership with other groups.

Support research efforts for applied avian biology and adaptive land management for avian conservation, species capture and relocation programs, and identifying the relative impact of various bird species to operations, training, and air safety.

Support data sharing partnerships and contribute data to nation-wide bird monitoring efforts such as eBird, Avian Knowledge Network, National Biological Information Infrastructure, and Natural Resource Monitoring Partnership.

Bird Inventories

Inventory all habitats on a site to establish a base line assessment of what bird species are present in which habitats during what times of the year. Standards and protocols defined in the DoD Coordinated Bird Monitoring Plan should be followed.

Avoidance and Mitigation

Follow published guidelines regarding communication towers (<http://www.fws.gov/migratorybirds/issues/towers/comtow.html>) and wind energy impacts (<http://www.fws.gov/habitatconservation/wind.pdf>) when dealing with tower or wind energy development.

Follow *Suggested Practices for Avian Protection on Power Lines* to minimize potential avian/power line issues with raptors and other migratory birds ([www.aplic.org/SuggestedPractices2006\(LR\).pdf](http://www.aplic.org/SuggestedPractices2006(LR).pdf)).

Use base line surveys and knowledge of annual cycle of bird species known to occur on a site to avoid potentially harmful activities to habitats used for nesting, migration stopover, and non-breeding. During sensitive habitat use periods, relocate or limit training and target areas, modify air operations, and avoid or limit construction and maintenance activities. Plan ahead and concentrate activities during times of minimum habitat use by birds.

Utilize inert ordnance or limit the type of quantity of ordnance to that with the least environmental impact. Conduct appropriate clearing pass over the range prior to releasing ordnance to verify minimal impact to birds.

If secondary operations or training activities are required, delay these secondary actions to allow dispersal of birds (on land or water) following the initial/primary action.

Implement fire suppression programs or measures when and where wildfire can potentially damage nesting, migration stopover, or non-breeding habitat. Use base line surveys and knowledge of annual cycle of bird species known to occur on a site to identify potentially harmful fire windows. Similarly, controlled burns should be conducted during the season appropriate for the habitat use.

Conduct environmental monitoring to prevent contamination of avian food resources or habitat conditions.

Pesticide Reduction

Implement an integrated pest management (IPM) program, in conjunction with the INRMP (<http://www.afpmb.org/ipmis.htm>), that will reduce the use of pesticides to the minimum necessary and also benefit migratory birds. Department of Defense policy requires all operations, activities, and installations worldwide to establish and maintain safe, effective, and environmentally sound IPM programs.

Habitat Conservation and Enhancement

Develop and implement conservation measures that improve existing habitat, create new habitat, enhance degraded habitat, or improve conditions for birds. These measures include wetland protection, maintenance and enhancement of forest buffers, elimination of feral animals (including feral cats) that may be a threat to migratory birds or their habitat, reduction or elimination of harmful grazing practices, and appropriate control and elimination of invasive and non-native species that crowd out other species necessary to migratory bird survival. All conservation measure should be detailed in the installation INRMP. Examples may include:

Forest management

- Convert to uneven-age and/or other progressive forest management that enhances available habitat values.
- Maintain and enhance bottomland hardwood forests.
- Create snag trees or protect existing snags during forestry programs.

Habitat enhancement/restoration

- Maintain and restore priority habitats.
- Incorporate habitat enhancement into project review and project design.
- Create habitat as mitigation programs.
- Promote nest box and platform programs.
- Encourage nesting in tower structures, where appropriate.

Invasive, non-native species

- Implement feral cat removal programs.
- Implement invasive species control programs.
- Remove exotic species.

Wetlands

- Protect and restore wetlands.
- Promote positive water use modifications to improve hydrology and avian habitat in arid areas.

Agricultural Outleases

- Initiate establishment of native warm-season grasses or other field and grassland conditions beneficial to birds found in the area.
- Modify agricultural leases to promote nesting and fledgling protection by setting appropriate dates for mowing, haying, or harvesting.
- For leases near an airfield, do not grow crops that will attract species which create a bird strike risk.

Communication towers, power lines, wind energy, and buildings

- Identify and remove abandoned communication towers.
- Remove unused power lines and poles, especially in open habitat areas such as deserts and grasslands where such structures provide artificial raptor perches
- Minimize new tower and wind turbine construction impacts through critical assessment of structure requirement, location site evaluation and structure design assessment for minimal avian impacts.
- Maintain certain towers to promote nesting if they are not a collision issue or provide a raptor perch in inappropriate habitat (desert, grasslands, prairie)

Monitoring the Impacts of Military Readiness Activities on Migratory Birds

Utilize *Coordinated Bird Monitoring: Technical Recommendations for Military Lands* (CBM) in designing monitoring efforts in INRMPs. The DoD CBM strategy will include guidelines for the design of bird monitoring surveys, a plan for monitoring bird species of special concern, and recommendations for DoD's role in continental bird monitoring programs.

Monitor bird populations that may be affected by military readiness activities in numerous ways, as supported by the DoD Coordinated Bird Monitoring strategy. Monitoring programs may include Monitoring Avian Productivity and Survivorship (MAPS), point counts, Christmas Bird Counts, migration counts, standardized and/or customized breeding and wintering surveys, grassland-bird flush counts, weather (WSR-88D, or NEXRAD) and mobile marine radar studies, point count surveys, hawk watches, overflight surveys, and/or rookery surveys.

Enter survey and monitoring data into eBird or other appropriate databases defined in the DoD CBM Plan.

Use tools identified in the DoD CBM Plan, such as the Avian Knowledge Network, to identify and track population trends of birds.

When conservation measures require monitoring, the Armed Forces must retain records of any monitoring data for five years from the date the Armed Forces commence their action. Entering data via the DoD interfaces provided through the Coordinated Bird Monitoring Plan and eBird will provide a secure permanent archive of monitoring data.

Develop and implement specific protocols for actions such as detailed research and/or land use changes when monitoring trends show predefined threshold declines for priority species.

Understand impacts of operations and land management on avian populations, and closely monitor impacts of activities which cannot be adjusted to avoid critical times.

Promote use of radars to monitor bird movements and population trends.

Endangered Species Act Consideration

The rule does not authorize take under the Endangered Species Act. The Armed Forces retain responsibility for consulting with FWS if a military readiness activity may affect a listed species (under section 7(a)(2) of the ESA) or a species proposed for listing (section 7(a)(4) of the ESA).

Training and Outreach

Participate in the Migratory Bird Conservation training workshops hosted by DOD and the FWS.

Support International Migratory Bird Day and other outreach/educational activities.

Distribute education materials for Military and civilians, including conservation information, outreach/education opportunities, and fact sheets relating to birds. Educational material should strive to isolate myths and legends.

INRMP Annual Reviews

Maintain regular communications with FWS and State fish and wildlife agencies to address issues concerning natural resources management including migratory birds.

Discuss with FWS conservation measures implemented and the effectiveness of these measures in avoiding, minimizing, or mitigating take of migratory birds.

Conduct annual reviews of INRMPs. Solicit annual feedback from FWS and States concerning how effectively the INRMP is being implemented. Take advantage of these annual reviews to modify the INRMPs to keep the bird conservation section current.