

Rare, Threatened, and Endangered Bird Studies

GAI Consultants' environmental studies and ecological surveys cover a broad range of rare, threatened, and endangered (RTE) species, including birds. Our environmental professionals strive to conserve wildlife while keeping projects on schedule.

We have a long history of successfully navigating RTE species coordination and critical-issues analyses. Our company works with clients and regulatory agencies to implement the appropriate bird studies to obtain clearance for pipeline or electric transmission lines, transportation corridors, and site development projects.

Federally-listed species are protected by the Endangered Species Act (ESA) from intentional "take," which includes habitat modifications—therefore, project areas that may contain protected-

species habitats must consider the potential effects of project activities. Projects must also consider the regulatory requirements of the Migratory Bird Treaty Act (MBTA), and species and/ or habitats that receive protection from the state.

GAI environmental specialists regularly complete bird habitat assessments, presence and absence surveys, territory mapping, demographic and habitat data collection, aerial and ground surveys, monitoring, and more throughout our many services areas. These services help assess possible project effects on RTE birds including Ohio's **Northern Harrier** and **Upland Sandpiper**, Virginia's **Loggerhead Shrike**, the **Florida Scrub-Jay**, the **Lesser Prairie-Chicken** in the southern Great Plains, and—across the continent—the **Bald Eagle**.

The conservation and natural resource permitting process can be cumbersome without the right partner. GAI's ornithologists are dedicated to protecting birds and their habitats while simultaneously working with clients and regulatory agencies to balance the needs of a project.



gai consultants.

Service Profile

Rare, Threatened, and Endangered Bird Study Services

- Auditory playback surveys
- Avoidance or mitigation planning
- Cavity nest searches
- Foraging analysis
- Habitat assessments and management plans
- Nest searches and monitoring
- Point counts; presence/absence surveys
- Survey protocol development
- Territory mapping
- USFWS MBTA consultation and analysis
- USFWS ESA Section 7 and Section 10 coordination

Species Specific Services

- Bald Eagle Incidental Take and Nest Take Permits
- Bald Eagle terrestrial and aerial surveys and nest monitoring
- Florida Scrub-Jay presence/absence surveys
- Osprey nest removal/replacement permitting with conspecific playbacks, territory mapping, demographic data collection
- Wood Stork foraging analysis

Species Experience

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|-------------------------|--------------------------|---------------------------------|
| ■ American Bittern | ■ Harris's Hawk | ■ Red-cockaded Woodpecker |
| ■ Bald Eagle | ■ Henslow's Sparrow | ■ Sandhill Crane |
| ■ Burrowing Owl | ■ Lark Sparrow | ■ Sedge Wren |
| ■ Common Raven | ■ Lesser Prairie-Chicken | ■ Southeastern American Kestrel |
| ■ Florida Scrub-Jay | ■ Loggerhead Shrike | ■ Trumpeter Swan |
| ■ Golden-winged Warbler | ■ Northern Harrier | ■ Upland Sandpiper |
| ■ Great Blue Heron | ■ Osprey | ■ Wood Stork |

**GAI Services Summary**

- Airport Planning and Design
- Bridge and Structure Inspection and Design
- Coal Combustion Residuals Management
- Construction Inspection and Management
- Cultural Resources Management
- Economic Analyses and Strategies
- Electric Transmission Design and Siting
- Environmental Engineering
- Environmental Studies, Species Studies, Permitting
- Gas Pipeline Surveying and Mapping
- Geographic Information Systems (GIS)
- Geotechnical Engineering and Geology
- Impoundment and Landfill Permitting and Design
- Land Development Engineering
- Landscape Architecture and Design
- Master Planning and Urban Design
- Mechanical, Electrical, Structural Engineering
- Natural Gas FERC Certification and Permitting
- Nuclear Energy Engineering Support
- Right of Way and Appraisal Support
- Land Surveying and Mapping
- Transportation Planning and Design
- Utility Management Consulting
- Water, Stormwater, Wastewater Management

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