BRI Environmental Consulting Services

Since its inception in 1998, Biodiversity Research Institute (BRI) has prioritized the advancement of natural resource sciences in response to pressing ecological threats such as contaminants, habitat loss, climate change, and renewable energy development. We have consciously cultivated the expertise and resources needed to develop innovative study designs, achieve more precise analysis, and maintain objective and informative interpretation. In doing so, we have become a leading global provider of sound environmental assessments. BRI scientists have extensive experience collecting field data and providing quantifiable interpretation for several major sectors related to regulatory needs.

BRI Environmental Services

BRI provides environmental consulting services including: wildlife surveys; renewable energy environmental assessments and impact studies; wetland, vernal pool, and vegetation surveys; freshwater and marine surveys; contaminant assessments; environmental planning, permitting, and management; habitat restoration; geospatial data management; and science communications.

Professional Staff

BRI’s multidisciplinary team includes wildlife research biologists, natural resource scientists, ecologists, environmental planners, GIS analysts, ecological statisticians, data managers, and science communications specialists. We combine in-depth knowledge of federal, state, and local regulations with a broad range of scientific expertise to develop effective solutions in response to our clients’ environmental needs.

Over the past 25 years, we have successfully completed 500 projects totaling more than $100 million for government agencies and private industry clients, both domestic and abroad. Safety, sustainability, and scientific integrity in both our organization and field operations are paramount to our success and as such, we are dedicated to providing the highest quality and cost-effective professional services.

CASE STUDY

U.S. Department of Defense

BRI has conducted ecological risk assessments, wildlife impact studies, natural resource inventories, and threatened and endangered species surveys. We have also assisted in the development of Integrated Natural Resource Management Plans. Examples include:

- Species of special concern
  - Atlantic salmon
  - Bald Eagle
  - Red Knot
  - Northern long-eared bat
  - Canada lynx
- Fish and wildlife assessments
  - Fisheries surveys, capture, tagging, and tracking
  - Bat inventories, capture, tagging, and tracking
  - Bat acoustic data collection and interpretation
  - Bird inventories and habitat assessments
  - Bird capture, sampling, tagging, and tracking
  - Conservation management plans
  - Science communications and public outreach
Our Capabilities

Wildlife Surveys
(BRI has existing bird capture/marking/sampling permits for 42 U.S. states)
• Baseline and post-construction biological assessments
• General community and habitat assessments for wildlife with specific emphasis on:
  • Bats (through acoustics and mist-netting)
  • Furbearers (through trapping of mustelids)
  • Terrestrial birds (through point counts, surveys, capture, tracking of songbirds, shorebirds, raptors)
  • Aquatic birds (through surveys, capture, and tagging of seabirds, waterfowl)
• Breeding and migratory bird surveys
• Camera and acoustic recording unit (ARU) surveys for cryptic species
• Rare, threatened, and endangered species surveys, inventories, and monitoring
• Tracking using satellite transmitters, cellular technology transmitters, VHF transmitters, geolocators, PIT tags

Renewable Energy Environmental Assessments, Permitting, and Impact Studies
• Ecological risk assessments, wildlife impact studies, permitting, stakeholder engagement
• Hydropower: wildlife, habitat, and contaminant studies related to Federal Energy Regulatory Commission (FERC) needs
• Solar energy: permitting, wildlife studies, habitat enhancement
• Terrestrial wind energy: wildlife inventories and studies
• Offshore wind energy: permitting, wildlife surveys and studies, risk assessments, ecological analyses
• Petroleum-based energy: avian and bat studies with Natural Resource Damage Assessment and Restoration (NRDAR)

Wetland, Vernal Pools, and Vegetation Surveys
• Wetland delineations
• Vernal pool surveys
• Wetland functions and values assessments
• Wetland monitoring and mitigation planning
• Native and invasive plant surveys and mapping

Freshwater and Marine Resource Studies
• Freshwater fisheries tracking surveys
• Water quality, sediment, and nutrient sampling and analysis
• Marine wildlife surveys
• Marine mammal tracking
• Marine spatial planning

Contaminant Assessments
• NRDAR projects for mercury and oil spills for the USFWS and NOAA
• Assessing exposure of heavy metals (e.g., mercury and lead) and organics (e.g., PFAS, PBDEs, PCBs) to fish and wildlife
• Developing risk assessments for the USEPA
• Interpreting mercury data for public policy and landscape management

Environmental Planning, Permitting, and Management
• Preliminary siting and constraints mapping and analyses
• Integrated natural resources management and planning
• Environmental and risk assessments
• Agency consultation
• National Environmental Policy Act (NEPA) and state-equivalent environmental assessments
• Federal, state, and local permitting support
• Community outreach and public engagement (e.g., planning board meetings)
• Conservation planning

Habitat Restoration
• Habitat restoration and improvement for pollinators
• Climate change studies to improve soil carbon sequestration:
  • Grazing management
  • Fire management

GIS and Geospatial Data Management
• Geospatial database design and management (e.g., creating digital dashboards)
• Geospatial modeling
• GIS web mapping
• Remote sensing interpretation
• Automated data management – Python, R scripts
• Audio and video data management and interpretation
• Ecological data analysis and modeling

Contracting Mechanisms
• GSA Contract Holder
• Cooperative Ecosystems Study Unit (CESU)
• North Atlantic Coast Cooperative Ecosystems Study Unit (NACCESU)
• Nonprofit organization indirect cost negotiation agreement available (NICRA)

Certifications and Insurance
BRI is committed to the safety of our staff, our clients, and the public. BRI operates under an ISNetWorld-approved safety plan, and we are fully insured to industry standards.

Credits: Wetlands © Ling Xia/istock; Solar panels © Chris Byers-BRI; Northern long-eared bat © Michael Durham; Shorebird in hand © BRI-Kevin Regan; Common Loon © Daniel Polescheck; Redwing Blackbird © BRI-Jonathan Fiety; Bald Eagle © John Rivers; BRI Lab; Wind turbines courtesy Nysted-Havemollepark; Dolphin © shutterstock

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