Andrew Gilbert, M.S.

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BRI Position: Senior Geospatial Scientist/Technology Director – Oversees staff responsible for the development and quality control of databases, GIS and geospatial analysis, and management of IT services for the organization. Works with advanced technology for science advancement. Designs research projects, writes proposals, conducts field research, and publishes results.
Education 2001 M.S., University of Maine, Wildlife Ecology

1995 B.A., Bowdoin College, Chemistry and Anthropology

Recent Experience:

- 2022-present Senior Geospatial Scientist/Technology Director *Biodiversity Research Institute* Conducts spatial exposure and risk analysis of offshore marine birds, develops offshore wind-related decision support tools (IDIOMS for Motus systems, SCRAM for CRM modeling) using advanced web-enabled platforms to deliver science products and applications.
- 2011-2022 **Data Management/IT Director** *Biodiversity Research Institute* Manages very large, complex geospatial data, creating scripts in Python, R, and javascript to efficiently process, analyze, and map data. Developed a mobile seabird survey application (SeaScribe). Processed boat and high-res. aerial survey data for modeling and mapping. Developed/tested a stereo-optic camera system for monitoring avian-turbine interactions.
- 2007-2011 **Seabird Biologist**, *U.S. Geological Survey, Patuxent Wildlife Research Center* Created the NW Atlantic Seabird Catalog, a database of seabird survey data of more than 250,000 observations. Developed and managed a Postgresql relational database with complex spatial queries to output data for modeling and mapping.
- 2001-2007 **Biologist**, U.S. Geological Survey, Patuxent Wildlife Research Center Conducted an inventory of terrestrial mammals at 10 national parks in the northeast. Led all aspects of fieldwork and analysis. Managed a field team to conduct wetland monitoring in Acadia National Park.

Select Publications:

- Stenhouse, I.J., A Berlin, A Gilbert, M Goodale, C Gray, W Montevecchi, L Savoy, & C Spiegel. 2020. Assessing the exposure of three diving bird species to offshore wind areas on the U.S. Atlantic Outer Continental Shelf using satellite telemetry. *Diversity & Distributions* 00: 1-12.
- Goyert H, B Gardner, R Veit, A Gilbert, E Connelly, M Duron, S Johnson, K Williams. 2018. Evaluating habitat, prey, and mesopredator associations in a community of marine birds. *ICES Journal of Marine Science*. 75:5:1602-1612.
- Goyert, H, B Gardner, R Veit, A Gilbert, E Connelly, & K Williams. 2016. Predicting the offshore distribution and abundance of marine birds with a hierarchichal community distance sampling model. *Ecological Applications*. DOI: 10.1890/15-1955.1.
- Sollmann, R, B Gardner, K Williams, A Gilbert, & R Veit. 2016. Investigating the abundance and distribution of seabirds using a community distance sampling model. *Methods in Ecology & Evolution* 7(5): 529-537.
- Friedland, K, J Manning, J Link, J Gilbert, A Gilbert, & A O'Connell. 2012. Variation in wind and piscivorous predator fields affecting the survival of Atlantic salmon in the Gulf of Maine. *Fisheries Management & Ecology* 19: 22–35.
- Zipkin, E, B Gardner, A Gilbert, A O'Connell, JA Royle, & E Silverman. 2010. Distribution patterns of wintering sea ducks in relation to the North Atlantic Oscillation and local environmental characteristics. *Oecologia* 163: 893–902.