

# Crane Finder App

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North America is the home to both the world's most abundant crane species, Sandhill Cranes, and the world's rarest species of cranes, Whooping Cranes. Every year the International Crane Foundation in Baraboo, WI receives queries from the public trying to find out where they can see these iconic birds in the wild. The purpose of the Crane Finder App is to help people interested in seeing Sandhill or Whooping Cranes in the wild find areas near them where the birds are commonly seen. We use eBird sighting data paired with the USGS Protected Area database to identify publicly accessible areas where and when the birds are found. The app will allow a user to indicate a location and a time of year to identify the "hot spots" where they may find cranes near their location.

Spatial data for this project will be displayed through a web application. The presentation of this information will primarily cater to users interacting with our data in a desktop setting, but we plan to design the app so that mobile browsers have a similar user experience.

This project will use data collected by two of the project members for a class project they completed during Geog574, last semester. The PostgreSQL database includes a subset of sightings data from the Cornell Lab of Ornithology's eBird database, shapefiles from the United States Geologic Survey's US Protected Areas Database, and state and county boundary information from the US Census Bureau.

The purpose of the application is to help people identify places where they may see North America's crane species for themselves. A user will be able to use their current location or choose another and find the nearest, open-access protected areas where they can see these cranes. Cranes are migratory species so it is important that users are able to indicate when they hope to see the birds. The outputs in the application will show the protected area locations on the map as well as provide users with an option to get directions to the protected area.

