

Birds

Characterizing the species, number, and behavior of birds along the shoreline provides valuable information on the use of beach areas. Birds may respond to habitat characteristics such as riparian vegetation, wrack on the upper beach, or shoreline armoring and development. Foraging behavior may be particularly indicative of the health of a beach.

Materials

- 50 m transect tape
- Binoculars
- Bird identification guide; also see BirdWeb.org for an online guide

Sampling Summary

- Survey in the early morning
- 50 m transect parallel to shore, centered at MHHW
- Observe for 15-30 minutes
- Collect data on species, count, minutes observed, and behavior

Scale of Effort

\$ Cost – low, simple materials and data are all field-based

\$ People – low, 2 people can establish transects and record data

\$\$ Fieldwork time – medium, recommend 2x/month in summer months June - August

\$ Processing time – low, entering field data into computer format

\$\$ Technical expertise – medium, bird identifications require some background knowledge

Additional Resources

Reports that have used this method:
Ch. 5 in [Heerhartz 2013](#)

For seabirds on the water within 300 m from shore, use the [Puget Sound Seabird Survey](#)

Summit observations and explore data from nearby locations at [eBird.org](#)



Methods

Survey the beach along a 50 m transect at MHHW near accumulations of beach wrack and logs if present. Bird observations should encompass exposed areas of the intertidal zone from the water line up to and including riparian vegetation. Try to survey when the water level is below MHHW to give ample room for observations. Divide the transect into smaller segments if the entire transect is not visible from a single vantage point. Spend 15-30 minutes observing the entire transect, with a minimum survey duration of seven minutes for smaller segments. Optimum time of day for surveying is within 30 minutes after sunrise. Collect data for each bird observation on species, count, minutes observed, behavior (e.g., foraging, moving, and perching), and habitat location (e.g., intertidal, wrack line, driftwood, riparian vegetation). June – August are good months to characterize summer bird activity when growth of shoreline vegetation is maximized.

Data to record in the field

Date, time, site name, transect elevation, tidal height, minutes surveyed, bird data. It is advisable to take a digital photo of the transect location for future sampling.

Processing

Enter the field data into computer spreadsheets. For each transect, standardize the data by the minutes observed: minutes observed per bird observation/minutes of survey, and count of individuals/minutes of survey. Also calculate the proportion of time birds were observed in different behavior categories. You can upload data and explore data from nearby locations at [eBird.org](#).