Predators

To record avian and mammal predators in the vicinity of fish surveys or other protocols, a boat or shore-based observer conducts surveys of animals that may feed on juvenile salmon and forage fish, also on non-predators that may interact with other protocol or habitat data.

Materials

- Binoculars
- Bird and marine mammal identification guide
- Datasheets

Sampling Summary

- Survey before other sampling (e.g., fish protocol), to minimize disturbance
- Observe for 10 minutes
- Collect data on species, abundance, and behavior
- Focus can be on both predators and non-predators
- Try not to double-count animals

Scale of Effort

- \$ Cost low, simple materials and data are all field-based
- \$ People low, 2 people can observe and record data
- \$ Fieldwork time low, survey before other protocols
- \$ Processing time low, entering field data into computer format
- \$\$ Technical expertise medium, avian and mammal identifications require some background knowledge

Additional Resources

<u>Prey fish identification guide</u> provided by the Salish Sea Guillemot Network

Puget Sound Seabird Survey

Seal Sitters

Suggested citation: Shoreline Monitoring Toolbox.

Washington Sea Grant.
Website: shoremonitoring.org



Methods

Conduct observations of avian and mammal predators for 10 minutes, before other surveys to minimize disturbance. Include birds (e.g., osprey, great blue heron) as well as mammals (e.g., harbor seal, river otter), and note human activity. Observations can record non-predators as well (e.g., crows, swallows). Record observations of species, abundance, distance (from transect or habitat of importance: <10m, 10-100, >100), habitat, behavior (moving through, resting/perching, foraging, other), and prey identification if foraging. Try not to double count animals, note if multiple behaviors observed. Binoculars can be used as needed for individual species identifications and behavior patterns, especially when foraging is observed.

Data to record in the field

Site, date, strata, time, time observed, weather, tide height, human activity, predator data on abundance, distance, habitat, behavior, and prey ID. Photos can help document predators and verify identifications.

Processing

Enter the field data into computer spreadsheets. Verify any predator and prey identifications. Calculate abundance and behavior patterns, and compare with other protocols conducted the same day such as fish surveys.