

Shellfish Inventory Protocols- Birch Bay

Whatcom County Marine Resources Committee

Preparation:

Surveyor- Paces out sample plots on transect, digs survey hole, and records data for sampler.

- Determine the length of each pace.
- Receive training on:
 - Using a compass to determine direction of transect.
 - Determining starting location, sample plot location, and ending location.
 - Digging consistent sample holes.
 - Completing field data sheet.

Sampler- Sorts and organizes clams and provides clam data (species and size category) to surveyor.

- Rate experience and knowledge level.
- Receive training on:
 - Shellfish identification.
 - Shellfish measurements using caliper.
 - Completing field data sheet.
- Complete shellfish identification quiz.

Team- Surveyor and Sampler will work as a team to conduct the shellfish survey.

- Assign to transect. Clearly describe transect location and public access issues.
- Sign-out equipment (shovel, compass, caliper, clipboard with shellfish id sheet and field data sheet).
- Provide the location of the first sample plot on the transect using random numbers table.

Data Collection:

Step 1) Determine appropriate starting location for the assigned transect.

Step 2) Use a compass to determine the direction of the transect.

Step 3) From the starting location, take the number of paces (from random numbers table) to the first survey plot.

Step 4) Place the quadrat or hoop using the toe of the left foot as the locator.

Step 5) Count the number of horse clam holes within quadrat and describe features of survey plot on data sheet (water, vegetation, substrate, etc.).

Step 6) Dig the survey hole using quadrat or hoop. The survey hole size is 1ft³.

Step 7) Sort the removed substrate for all clams.

Step 8) Categorize clams by species, measure clams, and record number of clams by species and size category.

Step 9) Replace the clams and refill the survey hole.

Step 10) Using compass and pace measurement, pace 100 feet to next survey plot.

Step 11) Repeat steps 4 – 10 for remaining sample plots along the transect.

Step 12) For last sample plot, record number of paces to water and time of completion.

Step 13) Turn in data sheet and equipment.