

# Shellfish Inventory Protocols - Chuckanut 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 described 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)** Using a compass to determine direction of transect, identify a distant landmark to walk toward.
- 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 1ft<sup>3</sup>.
- 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 the chosen distant landmark and pace measurement, pace 40 feet to next survey plot.
- Step 11)** Repeat steps 4 – 10 for remaining sample plots along transect.
- Step 12)** For last sample plot, record number of paces to transect end (water or other transect) and time of completion.
- Step 13)** Turn in data sheet and equipment.