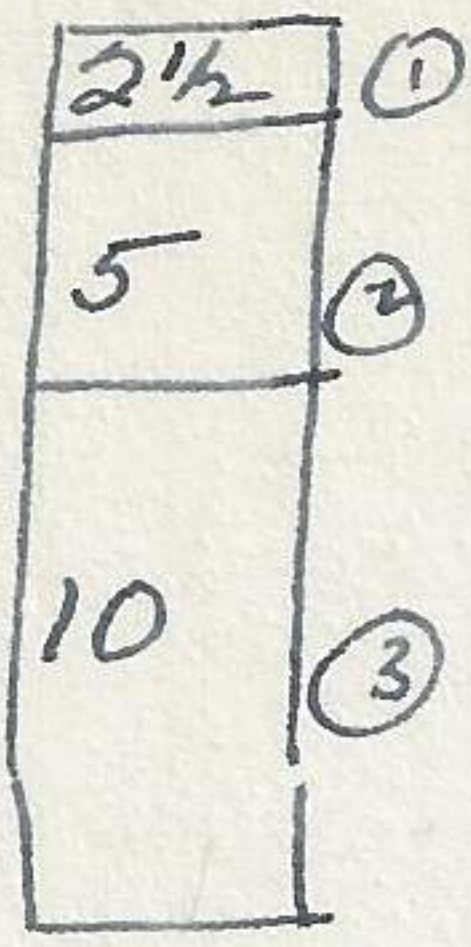


Jarvis  
1949

False Bay, San Juan Island, San Juan County, Washington.  
26 July 470726-37

made collection of third layer of transect stations. This zone consists of 10 cm of  $\frac{1}{10}$  of meter area in the following position. zone no. 3. The tide was out and followed as I worked progressively from the outer limits of the bay to the head of bay.



The results are tabulated on the following page. measured various depth of clay at the following positions on transect.

- 50 m = 8 cm to clay
- 100 m = 15 cm to clay
- 127 m = 30 cm " "
- 132 m = 40 cm to clay
- 138 m = 50 cm to clay
- 142 m = ? but at least beyond 100 cm.
- 150 m = no clay at 1 meter and 10 cm depth.
- 175 m = 30 cm to clay. usual rock lying upon clay. no wood but considerable shells.
- 550 = clay at 1 meter and 25 cm depth. no barnacles <sup>on</sup> the rock at these depths but confined to prevent water influence or top of sand level. Numerous shells and wood + rock below.

It would appear that at point 138 m the clay disappears but reappears at 175 meters indicating the variation in depth. The surface of this clay is irregular with hump and depressions of minor extent. The discovery of numerous racks on the clay surface beyond the exposed boulder zone of the upper bay would indicate that these boulders are not confined to this zone but are found covered by the sands above. The zones of shells at various layers are found to be associated with running or circulating water and this probably accounts for the shells of *Macoma secta* found at these zone. Whether these layers of shells have been formed by living shells or have been covered by sands is a question. It may be that the wood and gravel layer has supplied the proper condition for water circulation and then the clams subsequently entered this zone to form the shell layer. The latter seem more likely as it is difficult to explain ~~how~~ how such a massive and extensive layer of shells cover be formed on the surface and then covered without shuffling of shells. Measured the siphon of one *Macoma secta* which measured 33 cm in length. Tube transparent and fragile and about 2 1/2 mm in thickness at point where it entered shell.

The clay base to the upper limits of the bay may be responsible for the <sup>water</sup> holding capacity of the bay and accounts