### Class project – Spight's 1960s-70s

"We are steadily replacing grass and tress with roads and parking lots, thereby redesigning the natural ecosystem."

T M Spight



# What hypothesis might we consider?

Given: Snail sizes & abundances

## Objective 1 Pop V & VI

→ Measure ALL *Nucella lamellosa* length in populations V & VI

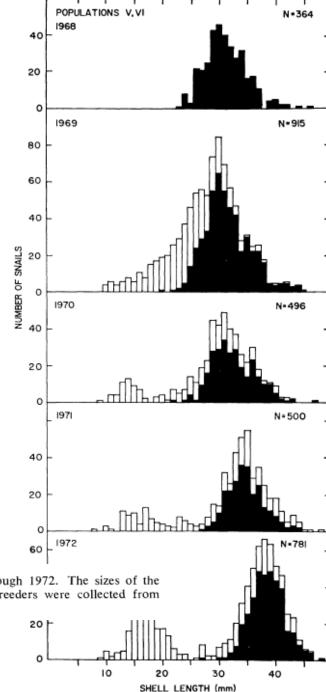
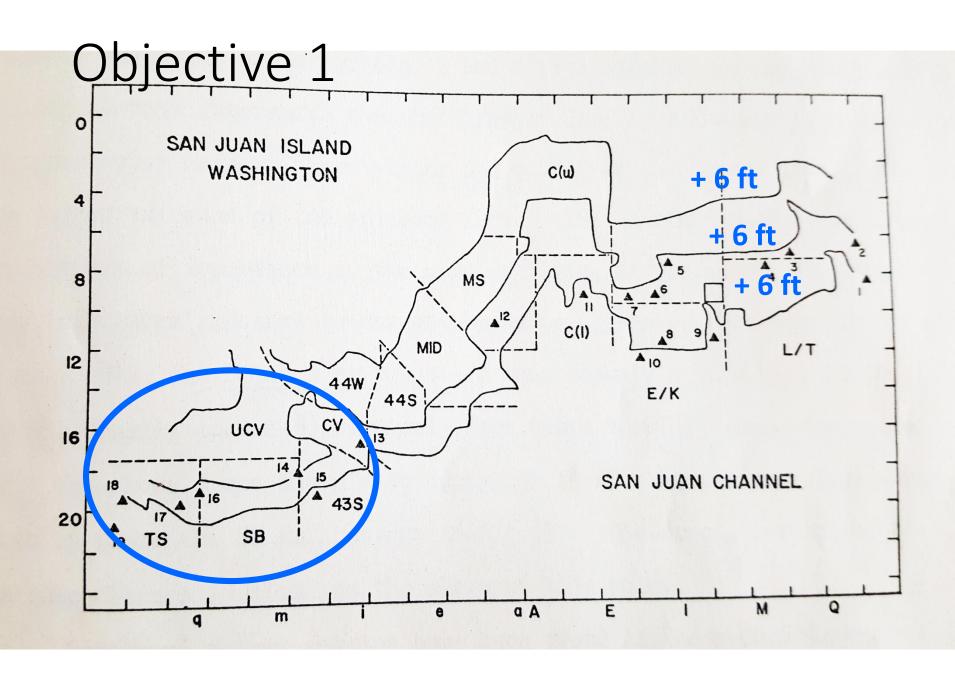
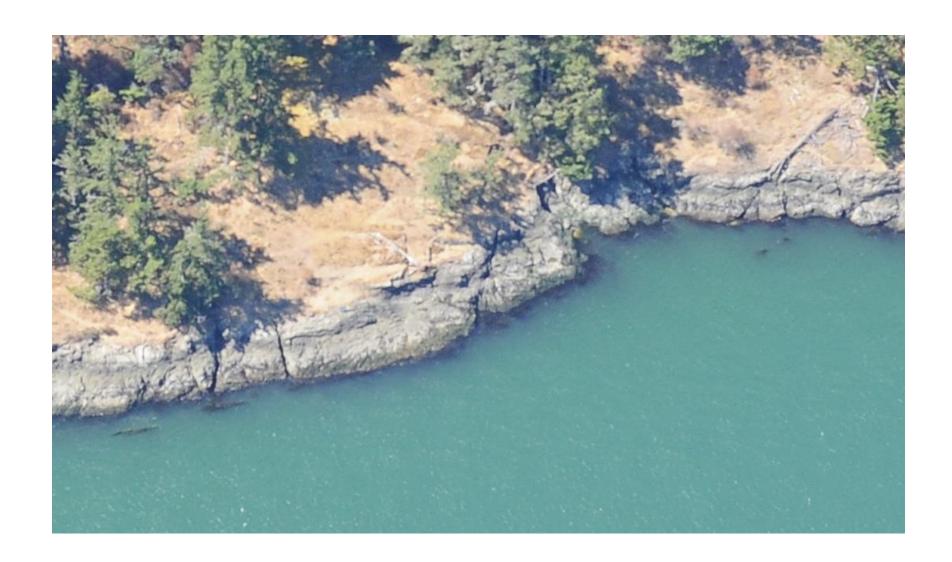
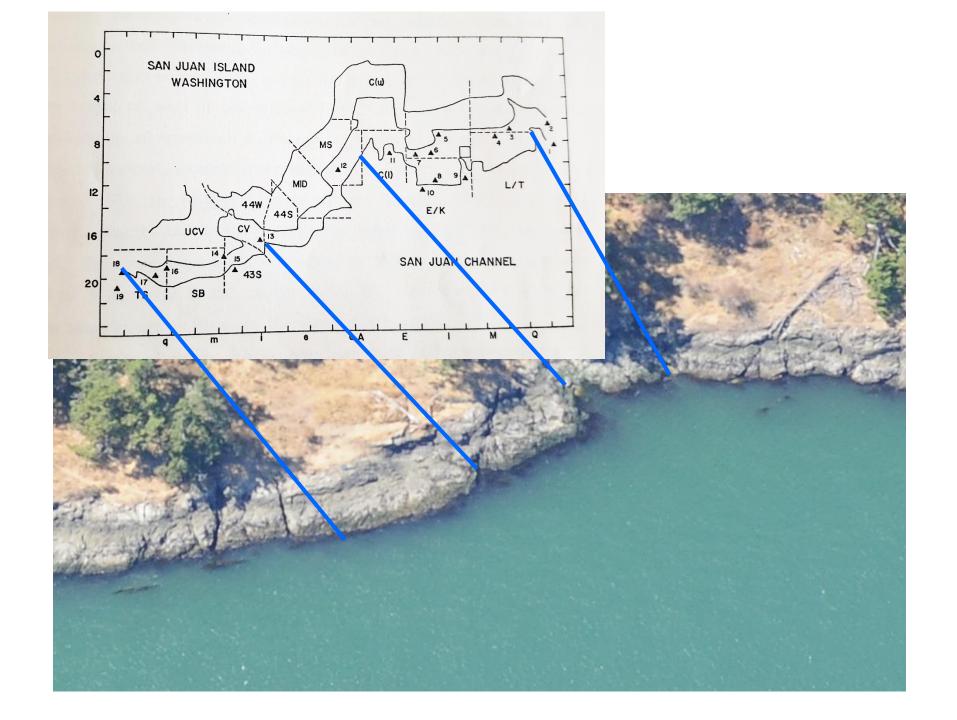


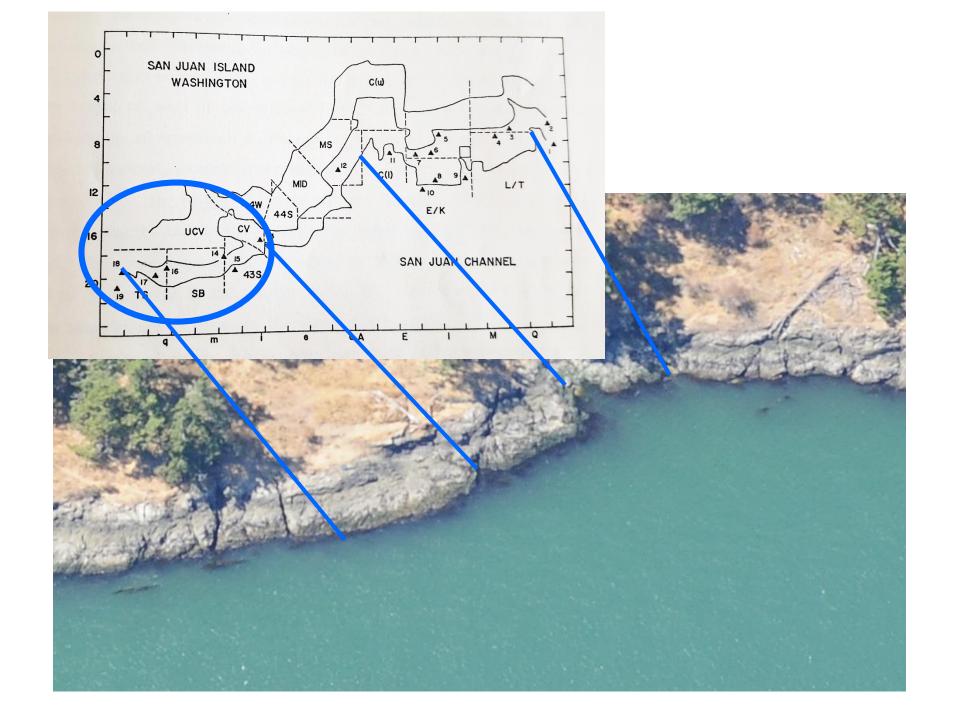
Fig. 2. Sizes of snails in the populations at Shady Cove each April 1968 through 1972. The sizes of the snails in the breeding groups at the times of the censuses are darkened. Only breeders were collected from populations V + VI in 1968.



## Shady Cove







## Objective 2-breeding aggregations

→ Measure ALL *Nucella lamellosa* length in 2-4 breeding aggregations



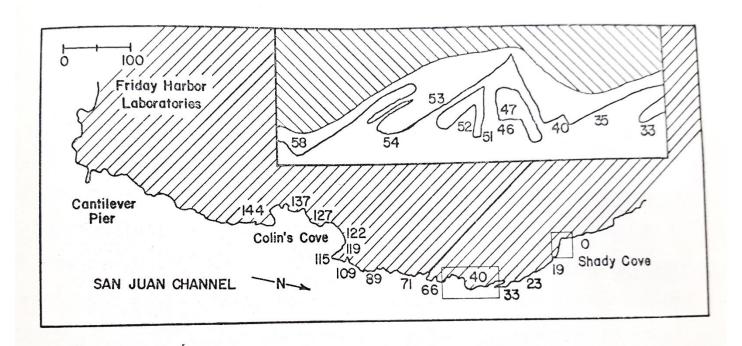
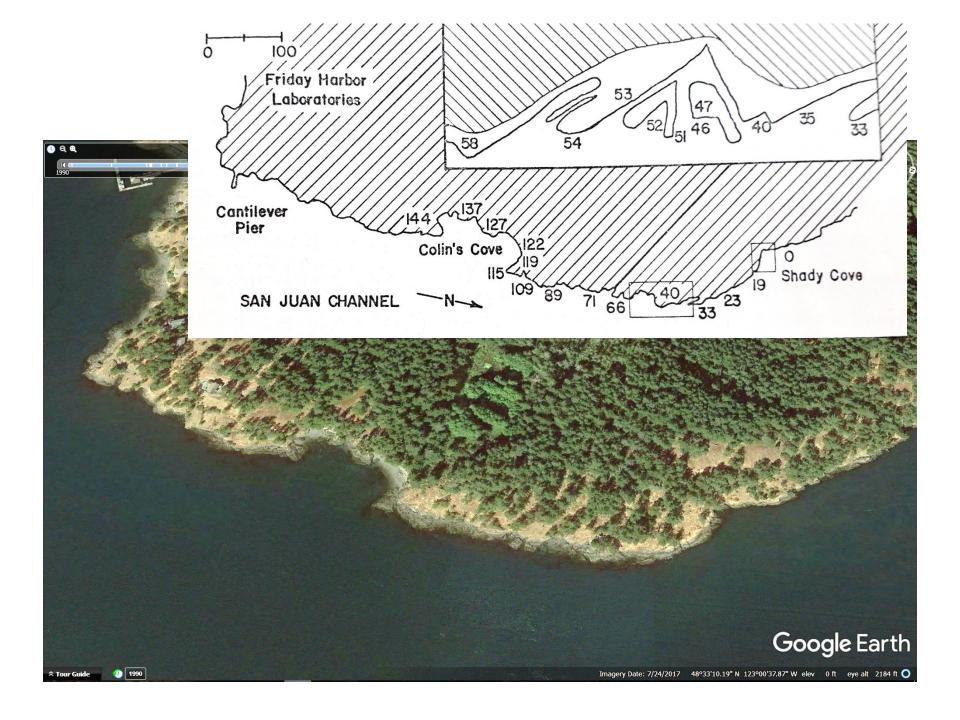


Fig. 3. The shoreline from Cantilever Pier to Shady Cove, San Juan Island, scale in m. Some of the breeding sites used in 1971 are indicated. The inset is a rough map of the shoreline around Site 40; the lower line indicates MLLW.



### N. lamellosa







## N. ostrina (emarginata)





#### N. lamellosa v. other whelks

- →large!
- →no/tiny spiral ridges
- → pinched in at siphonal canal (long skinny part)



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"The attitude of the investigator also varied; on a cold, wet morning, a collection would be much more thorough than a survey because it would take less time." T M Spight