

Comox Harbour Fish Trap Mapping Project

Conducted by archaeologists
Nancy Greene & David McGee
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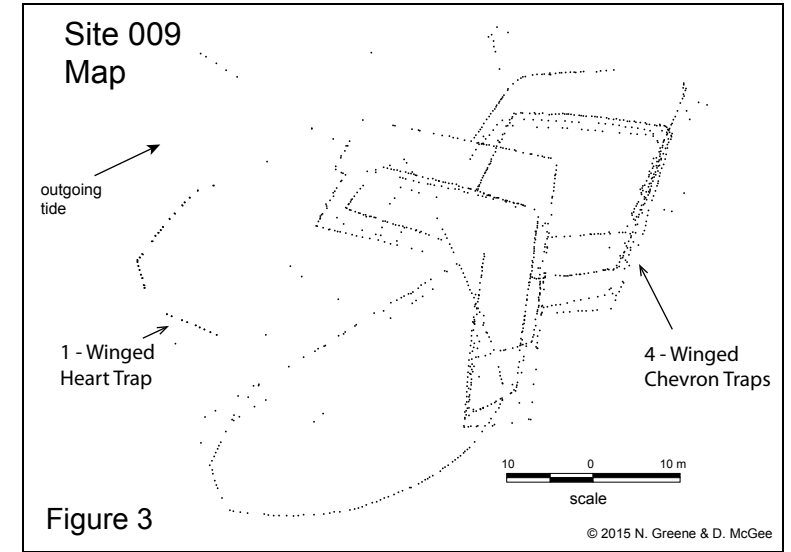
A multi-year archaeological mapping and research project at Comox Harbour, east coast Vancouver Island (Figure 1) has recorded the remains of a large Aboriginal wood-stake trap fishery. The traps' large sizes, numbers and technological sophistication are unique for coastal British Columbia and have not been previously described....anywhere.

The traps were built by pounding long, slender wooden poles into the intertidal sediment to form large, fence-like structures designed to catch fish. Today, remains of the original traps are buried in the sediment and only short stubs of wood appear at the surface of the mud flats (Figure 2)

To learn about the ages of the traps, small pieces of wood were cut from 57 poles for radiocarbon dating. Results indicate that the traps were used to catch fish for more than 1,000 years between about AD 650 and AD 1850. More than 300 traps were built during this period of time.



Figure 1



Remains of the traps are remarkably well preserved. Following mapping and radiocarbon dating of selected traps, two distinctly different trap types were identified (Figures 3 and 4). The Winged Heart trap type was built between approximately AD 650 and AD 1250, and Winged Chevron traps were built between about AD 1250 and AD 1850. Further analysis of the data also indicates that the Winged Heart traps were designed to most specifically catch herring, and the Winged Chevron traps were designed to target salmon. The two trap types were designed by people who understood the different natural behaviours of herring and salmon.

Left: Archaeological research and mapping has identified approximately 200 discrete sites (concentrations of wooden poles) exposed at the surface of the tide flats. Each yellow dot on the map may represent the remains of more than 1,000 poles. We estimate that there are about 150,000 to 200,000 poles buried in the estuary. Of the 200 sites, we selected 19 sites to map in detail recording the spatial positions of approximately 14,000 poles.

Above: Site 009 is one of the 19 sites mapped in detail.

Above Right: Remains of 1,143 poles (black dots) were mapped at site 009 and five traps were identified: one Winged Heart trap built about AD 970 and four Winged Chevron traps built between AD 1460 and AD 1770, in basically the same footprint. As the oldest Winged Chevron trap deteriorated with use it was replaced by a second trap, which was eventually replaced by a third and a fourth trap.

Below Right: Schematic diagrams showing the structural and functional components of the two types of fish traps.

The traps were very large. The enclosure of one Winged Heart trap encompassed an area of about 1,200 square meters. Such large traps would have been capable of catching immense numbers of fish and supporting a large population of people. Despite having this capacity to catch lots of fish, the traps were operated sustainably to ensure an abundance of fish for future generations.

