

10,000 years ago in Haida Gwaii

by Hannah Hickey

To most people, they just look like pointy rocks and old bones. To UVic anthropologist Dr. Quentin Mackie, however, they are archaeological clues that tell how early inhabitants of what is now British Columbia lived, fished, and adapted to rising sea levels and rebounding continents near the end of the last ice age.

Mackie and his team are excavating sites in Haida Gwaii (Queen Charlotte Islands) that contain 9,500-year-old artifacts. The remains were first discovered by Parks Canada archaeologist Daryl Fedje in the newly established Gwaii Hanaas National Park Reserve and Haida Heritage Site. Fedje contacted Mackie, and the two now co-direct the project, a partnership between UVic and Parks Canada.

This past summer Mackie, Fedje, four graduate students, two Haida archaeologists, and several undergraduate volunteers worked at Richardson Island. The excavation site is a hole in the ground five metres deep. There are more than 50 layers of sediment remains, each corresponding to about one human generation. However, because of the acidic environment, only stone artifacts and severely burnt bones have survived.

The bits of shaped stone date from a strange and tumultuous period 9,500 years ago. Sea levels were rising by five metres over a person's lifetime. "If you were making camp by the ocean, by the time you were an adult the village that you were born into would be in the intertidal zone, your parents' camp would be the reef, and your grandparents' camp would be where you go fishing," explains Mackie.

The moving intertidal zone was continuously exposing new sources of raw materials for making stone tools. At the same time, it was nibbling away at mature forest, dropping it into the water. "These people would never have had to cut a tree down in their lifetime," says Mackie.

And then, suddenly — on geological time scales — it stopped. Sea levels stabilized 9,000 years ago and remained stable for about 4,000 years before lowering to the current level. Mackie has noticed a switch from large, single stone spear points to many smaller "microblades," roughly coinciding with the time when sea levels stabilized. He hypothesizes that when sea levels stopped rising, the raw materials for the large tools became scarce. The early Haida people adapted by switching to smaller, multi-blade tools, which

Rob Kruyt photo



Mackie and graduate student Nicole Smith with fish bones used in identifying ancient bones excavated at Haida Gwaii.

made more efficient use of the resources found on mature beaches. The findings provide insight into how ancient peoples adapted to their radically changing environment.

Nearby, the Kilgii Gwaay site tells a different piece of the story. Here, shell fragments have lowered the acidity of the soil, preserving bone, wooden tools, basket fragments and even string.

The remains show that 9,500 years ago, people in Haida Gwaii were already experts in the sea. Mackie and his team have found evidence for a diet of marine animals, including albatross, seals, sea lions, ling cod, rockfish, and halibut — many of which can be caught only by adept fishermen.

Until now, it had been "conventional wisdom" that people in the Americas didn't have fully developed maritime exploitation until 5,000 years ago.

"The Haida are well-known as being one of the most marine-focused, marine adapted, maritime-fluent cultures in the world — anywhere, at any time," says Mackie. The discover-

ies in Gwaii Haanas are new evidence that the legendary Haida fishing culture has much older roots than previously believed. The findings may also help solve the mystery of the initial peopling of the Americas, supporting current theories that the earliest settlers travelled down the west coast.

This research is jointly funded by the Social Sciences and Humanities Research Council and the Natural Sciences and Engineering Research Council, the Coasts Under Stress project, and by Parks Canada. It is conducted with permission of Parks Canada and the Haida Nation, and the artifacts found on the islands will be returned to the Haida Museum at Qay'llnagaay (Second Beach) after being dated and catalogued in a UVic lab.

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