Kilgii Gwaay—A 10,700 year old Wet Site Revisited on the Southern Haida Gwaii, B.C., Canada

By Dr. Dale Croes

Anthropology, South Puget Sound Community College

Travel supported by Spring 2012 Exceptional Faculty Award

Dale Croes, Wet Archaeological Site Specialist, was invited by Parks Canada to volunteer on an expanded investigation of the oldest and most important Northwest Coast wet site discovery. It took place during the lowest tides of the year last June 2012.

Kilgii Gwaay, dating to 10,700 years ago, contains a rich assemblage of stone tools, preserved bone artifacts and fauna and, so important to wet site specialists, wood/fiber artifacts. The site is in the intertidal zone, so last spring during the lowest tide of the year, the crew visited this protected embayment on small Ellen island (Figure 1) on the southernmost Haida Gwaii (formerly call the Queen Charlette Islands), northern B.C. Canada.

Figure 1. Kilgii Gwaay wet site on the southern end of the Queen Charlotte Islands (Haida Gwaii), B.C., Canada

For Dr. Croes, this is a wet site that was of critical importance in understanding the very early period of post-glacial Northwest Coast settlement—when the coast was beginning to become forested and today's NW land and sea resources were beginning to expand. Being involved with wet site archaeological research since it began in earnest in the late 1960's, Croes viewed this site as one of a few remaining on his "bucket-list" of wet sites—ones he truly wanted to help to further investigate. (Sunken Village, a Portland, OR. area wet site SPSCC investigated in 2006-2007, was also on his short bucket-list).

Though he still has one remaining wet site on the list, with last Spring's work at Kilgii Gwaii, he feels he has now properly addressed most of his bucket-list!

Figure 2. Dale Croes (left) helps Director Daryl Fedje (center) and Gwaliga Hart (right, Haida Archaeologist, Parks Canada) remove lithic flakes made of argillite stone (in dust pan) on 1st day of excavation, June 2, 2012 (Al Mackie photograph).

Kilgii Gwaay was occupied for about 50 years around 10,700 years ago, when sea levels were 5-10 feet below modern levels and rising rapidly towards early and current marine maximums. The site is therefore inter-tidal and the crew had to work with tidal schedules, so sometimes were up by 4:30 am to take advantage of the low tide (Figure 2).

The site was next to a fresh water pond when occupied and several *in situ* wooden stakes, driven at an angle were found near this pond (Figure 3). Researchers believe these were potential frames for racks used to process foods and/or hides.

Figure 3. One of several* in situ *wooden stakes found around the 10,700 year old fresh-water pond (Al Mackie photograph).

Surprisingly the most common faunal remains from the site are black bear bones (Figure 4)—which must have been one of the focuses of hunting at that post-glacial time period.

Figure 4. Dr. Quentin Mackie, University of Victoria, B.C. and project co-Director, finds a bear canine tooth in screen on first day of excavation (Al Mackie photograph).

.

Also lots of off-shore, often deep-sea fish bones were found—halibut, lingcod, greenling and rockfish—so these rakes may be for drying and smoking fish. Concentrations of salmon berry seeds in the pond were found in the peat on the edge of the pond, which may have been dried on the possible rakes, though salmonberries are not the preferred historic berry for drying.

A new discovery in the peat layers of the pond was hair. Possibly this is bear hair since they may have been using the fresh water pond to soak bear hides to help in processing them and then scraping the hair off the hides while stretched on these suggested pole rakes. Researchers believe these early NW Coast peoples used hide covered boats since cedar was not available for dugouts and the spruce trees may not have been large enough for dugout canoes at these early times. The hair will be identified this fall, so it will be interesting to see what kind of hair it represents.

Common to the site were wooden wedges, no doubt examples of early uses of wood splitting technologies, being a typical wood working artifact into the contact period (Figures 5-6). These wooden wedges demonstrate the success of this wood working technology for at least 10,000+ years, as a major way to split wood such as in forming planks.

Figure 5. Splitting end of 10,700 year old formed wooden wedge found this spring at the site (Al Mackie photograph).

.

Figure 6. Another wooden wedge tip and wood chip from woodworking found this spring at the site (Al Mackie photograph).

Though basketry itself was not found, several basketry waste elements were found—no doubt indicating that basketry was being produced at this ancient time period. If a basket were found, Dr. Croes would have filled his bucket-list to the rim—however an example of a small, braided spruce root string was found in previous explorations, indicating the skills of these NW Native peoples over 450 generations back (Figure 7). No doubt this work has been developed through these hundreds of generations and continues to be into the future as demonstrated at the recent Northwest Native American Basketweavers Association (NNABA) meeting in Seattle—the largest gathering to date. Bud Lane, President, NNABA, invited Dale Croes to present this recent early exploration and other examples of ancient basketry found from sites along the entire Northwest Coast. This wet/waterlogged archaeology will be an important kind of exploration for documenting the ancient Northwest basketry, cordage and wooden artifacts from all times.

Figure 7. A 10,700 year old spruce root braid string held by Daryl Fedje, Kilgii Gwaay Project Director, and a close up of the delicate braiding.