Photos by Michael Puff

Hanalei Hale

By Michele Carter

My husband Dan (Worsham) and I vacation frequently in the town of Hanalei on the north shore of the island of Kauai. To us it is paradise on earth--a timeless place of serenity and breathtaking beauty. Several years ago after a two-week vacation there, we decided to build an early Hawaiian grass hut in miniature.

Dan built the structure using bamboo and woven mats. Then the project ground to a halt as we realized our knowledge of early Hawaiian culture was pretty scant. We did not know how to thatch the roof correctly. Nor did we know what kind of tools and implements would have been found in a hale (pronounced ha'-lay, which is Hawaiian for house). So we put it aside, vowing to finish it later. "Later" ended up taking four years!

In September we again vacationed on Kauai, and made a point of doing the research needed to complete the project. The Kauai Museum in Lihue has many artifacts and reference books. We bought several excellent books, but one in particular became our bible as we built the furnishings for the hale. It had detailed descriptions of each and every artifact in the Bishop Museum. However, it did not provide any information about how the people used the items. For example, it mentions "pillows" woven out of Pandanus leaves, but gives no clue about beds. Did they have beds? If so, how were they made and furnished? I had to use logic to try to fill the gaps in our research. We have attempted to be as historically accurate as possible, with the caveat just mentioned.

The time frame for our hale is pre-1778--before the islands were discovered by Captain James Cook. The setting for our vignette is the island of Kauai, specifically the Hanalei area where the foliage is lush and abundant. Hanalei town sits underneath an extinct volcano (Mt. Waialeale, pronounced wa ale lee ale lee). It has the distinction of having the most rainfall on the planet – averaging over 450 inches a year.

Our hale is built as a cut-away, and is not meant to represent an entire dwelling. Huts ranged in size from tiny to grand depending on the rank of the family and the function of the building. Some were built with lava rock walls, others with no walls and thatch all the way to the ground. Our hale has woven Pandanus mats for the exterior walls. Bundles of raffia were used to simulate Pili (pronounced pee lee) grass for the roof thatching. If the doorway looks small, it is. The average height of a door was about 4 feet; some were even shorter.

I knew I wanted to make a lava wall around the hale. Many ancient sites near Hanalei still show elaborate lava rock terraces. These terraces had sophisticated irrigation channels that diverted water from nearby streams. Some of the terraces were flooded for growing Taro. Others were used as holding ponds and hatcheries for live fish.

I gathered a number of small pieces of lava rock, thinking I would use them in my hut vignette. I placed them in a shell on a table outside our apartment. Our host asked me: "You're not intending to take those off the island are you?" "Well, yes I was, why?" I asked. He then proceeded to tell me about The Curse. Apparently tourists who take any rock off the island of Kauai suffer from severe and permanent bad luck when they return to the mainland. At first I laughed it off, thinking it was a joke. He told me several stories about tourists who had such terrible things happen to them, they mailed the rocks back to Kauai..

OK, so I went to Plan B on the rocks. I was pretty confident that I could approximate the look and feel of the lava rock using paper clay, which is what I did. The red dirt is exactly the color of the earth on Kauai. The pigment in the soil is so strong they now use it to dye T-shirts, which are called "red dirt shirts." They are sold all over the island.

I included as many of the Hawaiian 'heritage" plants as possible in this vignette. Plants provided the early Hawaiians with food, building materials, tools, utensils, cloth, medicines, and drinks. The plants to the left of the front door are Taro plants, from which Poi is made. Poi is still the main staple of the Hawaiian diet. They harvest the bulbous roots, boil them, then pound them into the mash they call Poi.

Foods they ate included pig, fish, chicken and--don't shoot the messenger--dog. Coconut, although abundant, was not eaten frequently--possibly because of its diuretic properties. Women were not allowed to eat either coconut or banana. The pineapple--which has become a symbol of Hawaii--is not native to the Hawaiian Islands. It was introduced by Europeans in 1813.

Other heritage plants included in the landscaping are a banana tree on the left, and Ginger, Kukui, and Ti on the right. Ginger was used for shampoo, and as a medicinal herb. Ti leaves were used for everything. The leaves are very waxy and water resistant, making them perfect for wrapping around food (think early sandwich bag). They were also woven into mats, and used for elaborate leis and headdresses.

Another heritage plant--Pandanus--is represented by the mats. I made them by scanning a real Pandanus mat, and reducing it down on my computer. Then I scored the print with a small ball stylus.

Gourds were grown for use as water vessels. I made mine from paper clay. The black lei (traditionally worn by men) hanging on the bamboo pole is made from the nuts of another heritage plant, Kukui. They extracted oil from the Kukui nuts (also called candle nuts) to use in stone lamps for illumination. The nuts were also strung together to form crude "candles".

As for the interior, I had little information to help me with the "décor" and furnishings. Here is where my assumptions kick in. I read that surfboards were considered very valuable and were stored inside the hut. So logically, one would conclude that other items like bowls, tools, musical instruments, weapons and foodstuffs would also be stored in the hale. The walls are lined with Tapa cloth, which they made from the bark of another heritage plant, the Wauke (pronounced wa o key), or paper mulberry tree. I reasoned that anything stored in the hale would have to be raised on a pallet to avoid the inevitable water seepage from rain. So I made a storage platform to the left, and a sleeping platform to the right. A "pillow" rests on the sleeping platform.

The Hawaiians probably spent most of their time outdoors, using the hut only for sleeping, storage, and shelter from the rain. All cooking, crafting, and chores were done outside.

Dan and I made all of the artifacts from paper, real branches, paper clay, balsa wood, and raffia. As I was crafting the furnishings, it occurred to me that the ancient Hawaiians were stone-age people. They didn't have any metal until the late 1700's with the arrival of the first Europeans. I am amazed that their culture was so sophisticated, and that they were able to accomplish so much using only plant materials and rock.

Michele Carter and Dan Worsham are both IGMA Artisans, and live in San Jose, California. You can see their work at <a href="https://www.pepperwoodminiatures.com">www.pepperwoodminiatures.com</a>.

### **CAPTIONS:**

## 01-IMG 9170.jpg -

Front view of the Hale shows the lava rock terrace wall. A hen rests in the shade of Taro plants. A bowl of Kukui nuts sits by a bamboo rack that holds a water gourd and a Kukui nut lei.

## 03-IMG 9176.jpg -

This view shows a Ti plant on the right, which was always planted next to a hale. A red ginger plant and a sago palm are also visible. The fern was made with a laser cut kit from Jeanetta Kendall.

### 04-IMG 9171.jpg -

A prepared meal includes (clockwise) a bowl of poi, baked fish, two coconut-shell poi bowls, salt, and baked bananas (they didn't eat bananas raw). The salt looks red because they added red dirt to their salt; a practice unique to Kauai. Salt was made by evaporating seawater in shallow stone pans.

### 05-IMG 9173.jpg -

Detail showing an informal Heiau (pronounced hay ee ow), which is a place of worship. An offering--a lei made from Ti leaves and the fruit of an Umbrella Tree-hangs around the "neck" of a rude stone idol.

### 06-IMG 9186.jpg -

Rear view of the hale with all of the furnishings in place. Note the rooster hiding under the sago palm on the left. Chickens are now so numerous on the island, they are joking referred to as the new state bird.

### 07-IMG-9188.jpg -

Interior detail view shows Tapa cloth on the walls, various tools hanging from posts, the storage platform, and the sleeping platform. Hanging from the rafters is a bunch of unripe bananas made by Angie Scarr.

# 10-IMG\_9199.jpg -

On the right side of the hut, a banana tree pokes above a tangle of verdant foliage. I made the banana tree--which I had to paint three times until Dan blessed it as being accurate! I used preserved natural foliage for the other trees, and I painted the preserved leather ferns under the eaves.

## 12-IMG 9203.jpg -

Detail of the storage platform with poi-making implements, and a basket of unprocessed Taro roots. Note the large wooden bowl--called a Calabash. It was used for general storage, and for holding really large batches of poi. A wooden cover would have been placed over the calabash to protect the poi.

# 13-IMG\_9206.jpg

The much-revered surfboard is stashed in the rafters, along with a hula drum and a nose flute made from a bamboo tube. The surfboard is an alaia, or short board, which were between 6 to 9 feet in length. This one is from real Koa wood, and measures 6.5 inches.

## 14-IMG 9209.jpg -

Close up of (clockwise) a bowl of prepared poi, a basket of Taro roots, and a coconut shell poi bowl. Also, a large wooden platter and stone poi-pounder, a Taro plant, and a planting stick.

# 15-IMG 9214.jpg

Hawaiian "guy stuff" includes (clockwise) a Koa wood "short" surfboard, a hula drum, and a nose flute. Also a Kukui nut lei, a battle club, and an adze.

## 16-IMG 9218.jpg -

Household implements include (clockwise) a water gourd in a Calabash, a Kukui oil lamp, and a stone mortar with wooden pestle. Also, a wood bowl, a Kukui nut "candle," and Pandanus mats.