

WHERE **SCIENCE****HISTORY****AND****ART** CONNECT

To: Raven Hill friends

From: Cheri

Date: December 2, 2023

Re: *Cousins and Connections*

The cucurbit (**Cucurbitaceae**) or gourd plant family encompasses nearly 975 species including squashes, pumpkins, zucchinis, cucumbers, watermelons, muskmelons, gourds and even loofah “sponges”. That’s a lot of **cousins**! This week, I did a little scavenger hunt here at the Center and found several gourd artifacts in Raven Hill’s eclectic collection of science, history and the arts.



A pumpkin is a gourd, a squash, a fruit AND edible at that!

There are two kinds of gourds--soft-skinned gourds and hard-skinned gourds. A main difference between the two is that soft-skinned gourds like squash and pumpkins are grown and harvested to eat, while hard-skinned gourds are mainly grown and dried for their hard shells, which have historically been very useful.

Edible gourds, like squash, are one of the earliest plants domesticated by man, along with corn and beans. In our Ancient World exhibit, we have raised crop beds with signage that names the “three sisters--corn, beans and squash”. Archeologists think gourds came to

the Americas from either Asia or Africa about 10,000 years ago. Gourds have been found in archeological sites as early as 13,000 BCE (Before Common Era, which was formerly called BC).

Hard-skinned gourds can be dried and used in numerous ways. Throughout history, gourds have become water bottles, dippers, spoons, containers, art objects,

weapons and musical instruments. Gourd rattles and maracas are relatively common and easily identifiable. Large bottle gourds used for birdhouses are also often noticed.



Raven Hill’s modern marimba has metal tubes, which replaced the gourd resonators on early marimbas as pictured here.

More complex instruments, like marimbas—a type of xylophone—have been found worldwide and originally gourds were used as resonators. The Zulu ethnic group of South Africa is said to have legends of a goddess named Marimba who created a xylophone with gourds attached underneath. The gourds helped to resonate and amplify the sound. In 1680, Mayan musicians were using marimbas with gourd resonators.



This gourd container depicting a hungry raven feasting on a moth is part of the Raven Collection at the Center.



Call it what you will: maraca, gourd rattle, shaker and natural percussion instrument!

Recently, Raven Hill was gifted with several artifacts from world traveler, Eleanor Sadowski. Among them were three items using gourds. One was a gourd shaker and another was a necklace with a gourd as the focal point. The third was a gourd tied to a bamboo sheath full of darts. The hollow gourd was stuffed with a cotton-like plant fiber laced with poison. Indigenous groups would dip their darts into the poison, before using them in traditional hunting ways.



'Tis the season! Gourds make great surfaces to paint, as shown by this gourd Santa!



Paige shows how to dip the dart into the poison in the gourd.



(from lower left to top right) Gourd necklace, Quiver of poison darts with poison for dipping darts in gourd and Gourd rattle. Artifacts donated by Eleanor Sadowski

Next time you visit Raven Hill, try your hand at finding science, history and art connections in whatever it is that catches your eye. It might be making connections with a plant like a gourd; an animal like a frog; a metal like copper or a game like Skittles. Most everything has a science, history and art connection, if you just take the time to think about it.

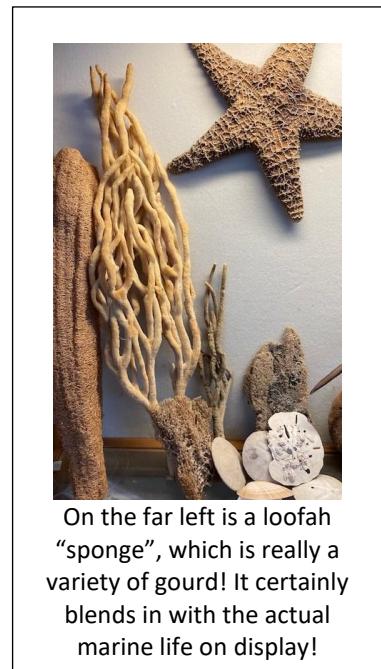
Connections help children and adults make better observations, encouraging problem-solving and critical thinking skills. This is according to **Let's Talk Science**, a Canadian charitable organization "committed to preparing youth for evolving career and citizenship demands in a rapidly changing world." **Mind in the**

Making is a "training program that helps children learn in part by figuring out what's the same and what's different about things and sorting them into categories. Making unusual connections is at the core of creativity and moves children beyond knowing information to using information." **Michigan State University (MSU) Extension** puts it like this: "Children can expand their thinking by making connections. Children sort and categorize objects as one way of learning how things are connected. Making connections is just another way to describe learning how things are related to each other and how the physical world works." These are pretty lofty thoughts and all because of the modest little gourd that caught my eye this week with all its **cousins and connections**.

Raven Hill is currently on its fall/winter schedule. The Center is open to the public from noon to 4pm on Saturdays, 2pm to 4pm on Sundays and other times, including holidays, by appointment. Schools, service organizations and other groups can reserve a special time to visit the Center, hold a retreat or take a specific science, history or art class. Email info@miravenhill.org or call Cheri at 231.536.3369 with questions or to make reservations for a family or group visit. Have a great week and we hope to see you here soon.

Cheri

Thanks to our wonderful supporters!



On the far left is a loofah "sponge", which is really a variety of gourd! It certainly blends in with the actual marine life on display!