February, 2010

Trail Talk

Mission Trails Regional Park Trail Guide Program

Trail Talk Volume 14, Issue 2

Pass the Salt and the Shawii, Please

Story by Millie Basden, photos by Peter Thomas, Trail Guides

Salt and shawii go together. You may have read about shawii being sweetened with honey. But historically, acorn mush eaten by the Kumeyaay was a savory dish, similar to mashed potatoes. We know where the Kumeyaay harvested acorns for their shawii, but have you ever thought about where they found salt?

Mankind has a long association with salt. Although we are often encouraged to eat less salt, it is an essential component of our bodies, and has been used as a food preservative and a condiment for centuries, if not millennia.

In the time of the Romans, salt was distributed to soldiers as their pay—the origin of the word "salary." Salt was added to fresh greens to offset their bitterness—the origin of the word "salad." In England, a "wich" was a salt works. A town in England with a name ending in "wich" is a place where there was at one time a salt harvesting area.

In our area, the shallow south end of San Diego Bay has long been a prime location for finding salt. The Kumeyaay gathered salt there before Europeans arrived in the area. In addition to scraping up salt deposits left behind when shallow pools of bay water evaporated, the Kumeyaay also used plants native to the salt marsh as a source of salt. Plants that grow in the intertidal zone have adapted ways to deal with the salinity of the water that bathes their roots twice a day. Some salt marsh plants, such as pickleweed (*Salicornia virginica*), have become succulent and store salt in special chambers, periodically shedding the distal parts of the plant to get rid of the salt. Pickleweed could be added to foods or munched for the salty flavor. Other salt marsh plants, such as salt grass (*Distichlis spicata*), excrete salt onto the surface of their leaves. The Kumeyaay could pound salt grass to free salt from the blades.

Traveling to San Diego Bay for salt was not possible for all Kumeyaay. Those who lived far away would trade foods available to them, such as mesquite beans, for salt from Kumeyaay who were in the more coastal areas.

By 1870, European settlers had developed a salt harvesting operation in south San Diego Bay that is still in use today. Originally called "La Punta Salt Company," it was followed by "Western Salt Company" which became "South Bay Salt Works" a few years ago. If you have ever driven in the neighborhood, you probably noticed the huge piles of salt, stacked and ready for processing.

Salt is harvested from south San Diego Bay through wind and solar evaporation. Water from the bay is moved into shallow ponds separated by man-made dikes. Over the course of about a year, the brine is moved along a series of ponds where the salinity increases as the water evaporates, until salt crystals form which are then scooped up and processed for sale. The salt produced by South Bay Salt Works is used for water softening and cattle feed. It is sold in 50 lb bags or by the truckload.

The salt ponds are an ecosystem all their own. The salinity of the primary ponds is similar to that of San Diego Bay, but the ponds are more sheltered from wind and tidal influences. The primary ponds support fish and attract birds that eat fish. As the salinity increases, the ponds no longer support fish, but hold lots of brine shrimp and brine flies, attracting other species that dine on those. At the highest level of salinity, brine shrimp and brine flies cannot survive, but halophilic bacteria,

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Writers wanted...

- *Have an interesting story or photo you'd like to share with other Trail Guides? Send them to 'Trail Talk' editor Millie Basden at trailtalkeditor@yahoo.com. Please include "Trail Talk" in the subject line!*

Speakers Needed…

- *Have you heard an interesting speaker or know an interesting topic that would be appropriate for one of our monthly meetings? If so, please send your ideas to Brian or Ondina Moehl.*

Next Trail Guide Monthly Meeting:
Wednesday, February 10th
6:30 pm—
Visitor Center Library

Monthly Meeting Minutes—January 13, 2010

There were 25 Trail Guides, 3 guests, and Ranger Heidi in attendance.

Fred's number for January was 13,000. The answer in the form of a question is "How many years old is the oldest plant in California?" He mentioned this number was from an article on latimes.com (accessed 12/25/09): www.latimes.com/news/nation-and-world/la-sci-oak23-2009dec23,0,2005264.story. The plant, a Palmer's Oak (*Quercus palmeri*), is in Riverside County and is known as the Jurupa Hills oak. The researchers estimated the plant's age by measuring growth rings and its rate of spread. The article mentioned the world's oldest living plant may be a quaking aspen in Utah that is thought to be as old as 80,000 years.

Fred reminded Trail Guides to sign up for walks and record the number of visitors and some interesting observations from the walk, including how visitors learned about the walk.

Fred announced the prize winners for the best walk write-ups in November and December: Chris Axtmann and George Varga for their Special Walk on November 4 and Jeanne Raimond for her Bird Walk on December 19.

Fred announced that Mike Gibbs has started leading a monthly beginning tracking walk at 8:30 a.m. on the first Saturday of every month. They will start from various locations in the park, like the Birds Walks, so check the calendar on the MTRP public web site for the meeting place each month.

Fred thanked Millie Basden and Peter Thomas for the sharp kiosk display on Prickly-pear cactus. Jeanne Raimond volunteered to do the display for April–June.

Fred announced the possibility of having "discovery stations" at the Visitor Center on a regular basis. These would be similar to the ones being planned for Explore Mission Trails Day at the Equestrian Staging Area. He said the idea is for Trail Guides to become knowledgeable on particular topics and have hands-on items to talk to VC visitors about. We brainstormed possible topics and came up with a long list of possibilities.

Rick Halsey gave a great presentation on the chaparral as part of Trail Guide training.

Upcoming Events:

MTRP Volunteer Dinner and Awards Ceremony, Saturday, February 6, 5:30 p.m. at the Visitor Center. RSVP at front desk.

The next meeting is February 10, 2010, 6:30 p.m. in the Visitor Center LIBRARY. Program will be a presentation on arthropods by Dr. Michael Wall from the San Diego Natural History Museum as part of Trail Guide training.

Respectfully submitted,

Fred Kramer, Acting Secretary

Salt and Shawii

(Continued from page 1)

also called blue-green algae, thrive. Blue-green algae are red in color giving the higher-salinity ponds a rosy hue. When the salt is first harvested and piled into huge stacks, the stacks have a pink tinge which fades after a short while.

The salt ponds of south San Diego Bay are now part of the San Diego Bay National Wildlife Refuge. South Bay Salt Works operates under a lease. For now, the salt ponds will continue as a commercial salt harvesting operation, but the United States Fish and Wildlife Service has adopted a plan to restore some, if not all, of the salt ponds to their original salt marsh habitat. The salt ponds are known for attracting thousands of nesting birds each year, including the Western Snowy Plover (listed as threatened) and California Least Tern (listed as endangered).

To protect nesting birds and the commercial salt operation, the salt ponds are not open to the public. During the non-breeding season, docents from San Diego Audubon Society lead monthly nature tours of the salt ponds. Come see for yourself where the Kumeyaay found salt.

(For information about tours of the salt ponds, please contact Millie at trailtalkeditor@yahoo.com.)

References:

Alvarez, Judy. "Shawii for Lunch, Anyone?" elsewhere in this issue of *Trail Talk*, and previously published in Vol. 7, Issue 12, 2003, pp. 1-2, 4.

Kurlansky, Mark. *Salt: A World History*. New York: Penguin Books. 2002.

Shipek, Florence C. *Delfino Cuero: Her Autobiography*. Menlo Park: Ballena Press. 1991. p. 33.

Trail Guide Training Schedule

Here's the schedule of lectures for the Trail Guide training class. Lectures start around 7:45 p.m. unless there is a Trail Guide meeting (marked with an asterisk); then they start at 7:15 p.m. (Of course, you'll be coming to the meeting at 6:30 p.m.) Please feel free to attend any of the lectures as a refresher. Since we have a large class, please don't sit at the tables or take any handouts until all the regular students have received theirs.

2/3 History by Bill White

2/10* Arthropods by Dr. Michael Wall

2/17 Mammals by Bill Howell

2/24 Geology by Dr. Pat Abbott

3/3 Indians by Judy Alvarez

3/10* Reptiles by Dr. Brad Hollingsworth

3/17 Botany II by Bill Howell

Shawii for Lunch, Anyone? story by Judy Alvarez, photos by Connie Wood, Trail Guides

Traditional culture reached beyond borders as Kumeyaay elders Teodora Cuero and Celia Silva of Baja California taught an acorn-processing workshop in 2003 at

Kumeyaay elders Celia Silva and Teodora Cuero demonstrate acorn grinding. Translator Mike Wilken (left) looks on.

MTRP. Those of us lucky enough to attend were also treated to hearing first in Kumeyaay, then in Spanish, and finally in English how many of the plants found around the Visitor Center are still being used by native peoples. Ranger Sue Pelley made the arrangements with our translator Mike Wilken of CUNA-Native Culture's Institute of Baja California to bring these ladies, who so graciously shared their traditional skills and stories with us, from La Huerta and San Jose de la Zorra.

In late October to November, we should notice acorns (Esnyaaw) falling to the ground. When the acorns are first gathered, you discard any with holes, as that is a sign that there is a grub inside. They are then placed in the sun for 3 or 4 days to dry. Extra acorns are placed in willow granaries. (You might recognize Celia's name along with her daughter Gloria as the artisans of the granary on exhibit in the Visitor Center).

When the hulls are dry, the acorn's pointed end is held against an anvil rock and the cap end is then struck with a small hammerstone to crack it. The reddish papery "skin" around the kernels must be removed before the actual grinding process begins. We learned there are different words used for grinding depending upon whether the shallower metates and manos or the deeper mortars with pestles were used. The motion Teodora and Celia surprisingly used to grind could be best described as that of a rolling

pin and not of pounding. A winnowing basket was then used to separate and bounce the thicker particles back onto the metate to be reground until only a fine meal existed.

Only now did we see any consideration to modern times. The acorn meal was placed in the center of a piece of cheesecloth stretched over a bush. Enough warm water was supposed to be poured over it glass by glass until it was rid of its tannin and no longer bitter. Unfortunately it was still very bitter after a very long time and Teodora finally told us, traditionally no one should be watching and because the acorns were embarrassed, no amount of leaching was going to work!

Celia then spooned our not so perfect meal into an olla half filled with water balanced on 3 rocks set in amongst hot coals from a wood fire. Cooking time should be about 15 minutes, with water added as needed as the mush thickened. As we all took turns stirring, we could see the oil that resembled butter on the top. As it cooked, it coagulated into almost the consistency of Jell-O. Finally, the finished product! HMMMM, I think shawii might be an acquired taste. Teodora stated that in the past it was made more on the salty side and was similar to mashed potatoes and that people today like it sweeter, so they add sugar and honey.

No matter what the final taste, the whole workshop was an experience not to be forgotten. Celia and Teodora are living links to the past, giving us insights into the past and

present Kumeyaay way of life. The grinding rocks have always been my favorite place in MTRP, but their significance is so much more meaningful to me now.

(Reprinted from the December 2003 *Trail Talk*)

Ordnance Found in Oak Canyon by Fred Kramer, Trail Guide

On January 2nd, two hikers reported to Ranger Tom Miller that they had spotted a piece of ordnance partially buried in the streambed in Oak Canyon, about a mile and a half north of Highway 52. They had marked the exact location using a GPS. Using the GPS coordinates, Ranger Mel Naidas directed Ranger Tom, the San Diego Police Department Able-1 helicopter, and MCAS Miramar's Explosive Ordnance Disposal team to the location. The Marines identified the 12" projectile as a mortar shell and removed it.

Photo by Ranger Tom Miller

Ranger Tom mentioned that even though over the years there have been extensive sweeps for ordnance (and mandatory re-sweeps of the park every five years), it is not unusual for additional pieces to become exposed after rains. As Trail Guides, we need to be aware of this potential hazard in the park and remind our visitors not to touch any suspicious-looking metal objects, but to mark the location and report it to park staff. After hours they should call the San Diego Police Department.

Name That Life Form!

by Millie Basden; photos by Peter Thomas, Trail Guides

Can you name this life form photographed recently in MTRP?

(Answer on Page 4)

What's Happening at the Park

Saturday, February 6...

Tracking Walk—Learn the art of discovering signs left behind by resident creatures with Trail Guide and Tracking Team member Mike Gibbs. Meet at the Visitor Center, 8:30 a.m.—10:30 a.m.

Friday, February 12...

Stars at Mission Trails—Join members of the San Diego Astronomy Association from sunset to 10 p.m. at the Kumeyaay Lake Campground's Day Use Parking Lot. Telescopes available (weather permitting.)

Saturday, February 13...

Star Party—Join resident stargazer and Trail Guide George Varga to view the night time sky. Tonight is a New Moon. Mars may be visible in the Southeast. Deep sky objects like the 1054 AD supernova Crab Nebula will keep viewers occupied. Meet at the far end of the Kumeyaay Lake Campground Day Use Parking Lot. 5-8 p.m. (weather permitting.)

Saturday, February 20...

Guided Bird Walk—Join resident birder and Trail Guide Jeanne Raimond for an adventure in bird watching! This month: Oak Grove Loop—meet in front of the Visitor Center. 8 a.m. to 10:30 a.m.

Saturday, February 27...

Birding Basics—Resident birder Winona Sollock will teach 5 simple techniques for identifying birds at a glance. 1 p.m. to 2:30 p.m., Visitor Center.

Sunday, February 28...

Canyoneer Walk—The Rim Trail in the western edge of MTRP highlights views of Suycott Wash and Fortuna and Cowles mountains. Park at the trailhead at the far eastern end of Clairemont Mesa Blvd. 9 a.m. to noon.

Name That Life Form

(answer from page 3)

The pappus (from Latin for hairy seed) of Coyote Brush (*Baccharis pilularis*). The Latin name "Baccharis" is in honor of Bacchus, the Greek god of wine (apparently chosen by Linnaeus without any special connotation for this particular plant). "Pilularis" means having globules, a reference to galls that may appear on stems or flower buds, according to www.calflora.net.

The flowers of late winter and early spring occupy places in our hearts well out of proportion to their size.

~ Gertrude S. Wister

If you can't do a walk you signed-up for, arrange for someone to take your place or let Fred or Ranger Heidi know you won't be there.

Mission Trails Regional Park Trail Guide Program

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The Trail Guide Program is dedicated to provide the visiting public with education and understanding of the unique environmental and historical attributes of Mission Trails Regional Park. The Trail Guides supplement the Park Rangers in outreach programs to the public.

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