

Kashia Department of Environmental Planning Environmental Newsletter

Issue 9

Spring 2023

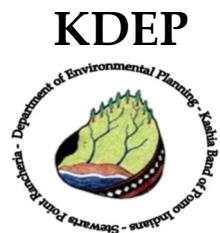


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This newsletter features many of the workshops, trainings, and field trips we went on in this Spring. It also has photos of everything we did on our past four Bear Project dates!

And don't forget to also look in the announcements section for information on all our upcoming camping trips!



Tribal Marine Stewards Network (TMSN): Update

ATTENTION

Due to the heavy storms back in January, our phytoplankton and mussel sampling and TIDES monitoring site received significant damage and we are in the process of restoring access. We will resume sampling and monitoring once our staff is able to safely descend down the cliff.



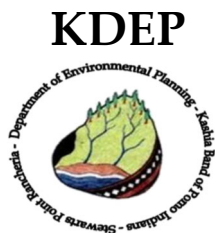
General height of cliff.



General Slope of Cliff



Picture of where the old rebar was placed, in the dirt.



Tribal Marine Stewards Network (TMSN): Update

Phytoplankton Monitoring

Kashia has been collaborating with the California Department of Public Health (CDPH) to conduct phytoplankton monitoring on the coastal reserve. The CDPH Marine Biotoxin Program coordinates a volunteer-based monitoring effort for toxic phytoplankton along the entire California coastline.

KDEP Staff uses a phytoplankton net made of a very fine and fragile nylon mesh and rope. The net is used to retrieve samples of phytoplankton in the water from depths of 10 to 50 feet, depending on the sampling location.

What are phytoplankton?

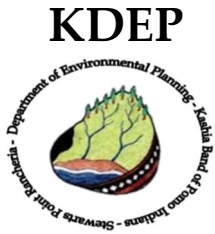


The vast majority of marine life in our coastal waters could not exist without these naturally occurring microscopic plants. There are hundreds of species of phytoplankton in the ocean, and the majority are nontoxic. However, a small number of species are known to produce toxins that can accumulate in filter-feeding organisms, especially bivalve shellfish like mussels, oysters, clams, and scallops. Humans, as well as marine mammals and seabirds, can be harmed by these nerve toxins when dangerous levels accumulate in these seafood items. There are many categories of phytoplankton, of which dinoflagellates and diatoms are the most important with respect to marine toxins along the California coast.



Results

Sampling has halted due to the site damage from the January storms. We anticipate resuming sampling in June.



Tribal Marine Stewards Network (TMSN): Update

Mussel Sampling Update

Mussel samples are usually sent to California Department of Public Health (CDHP) laboratory in Richmond, CA where they are tested for paralytic shellfish poisoning (PSP) toxins and domoic acid, but due to the storms at the beginning of the year, we are still working on repairing our access site to collect mussels.

<u>Months</u>	<i>PSP Toxins</i>	<i>Domoic Acid</i>
January, February, March, April	No Data	No Data



What is Paralytic Shellfish Poisoning

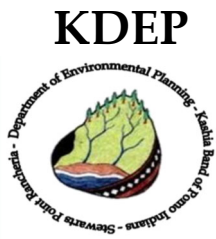
Paralytic Shellfish Poisoning (PSP) is a naturally occurring marine biotoxin that is produced by some species of microscopic algae. Shellfish eat these algae and can retain the toxin. People can become ill from eating shellfish contaminated with Paralytic Shellfish Poison. This biotoxin affects the nervous system and paralyzes muscles, thus the term "paralytic" shellfish poison. High levels of Paralytic Shellfish Poison can cause severe illness and death.



Volunteer to help collect mussels!

We are still conducting Mussel Samplings.

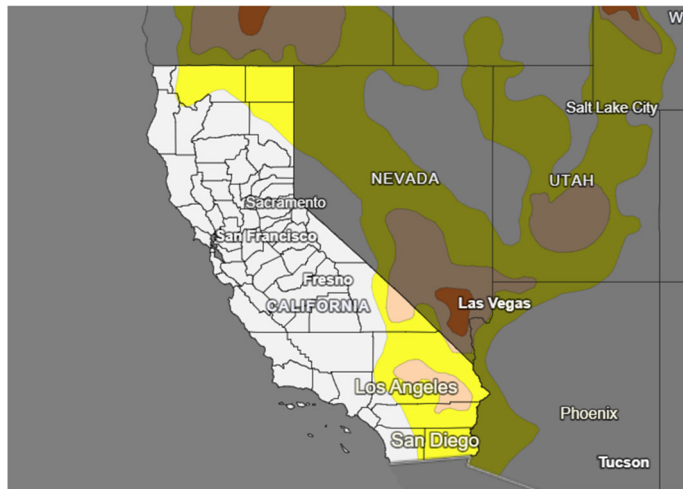
Contact Abreanna Gomes, abby@stewartspoint.org or Nina Hapner, nina@stewartspoint.org.



Water Supply & Drought Update

2023 Drought Update: Thank You for Doing Your Part

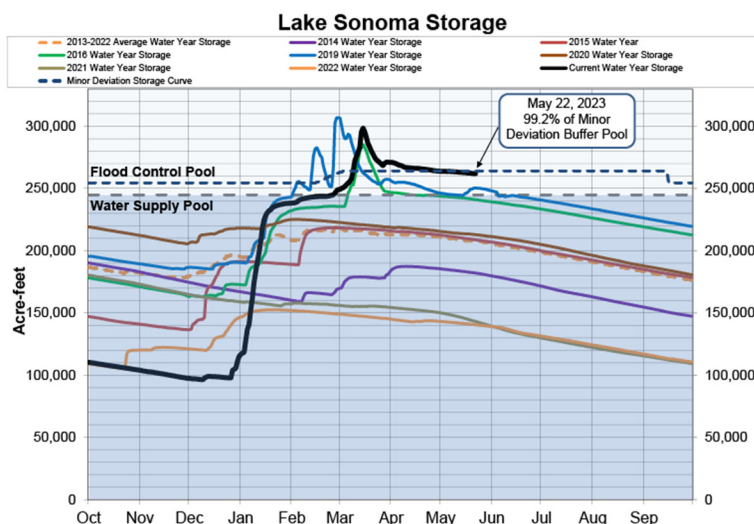
As of May 2023, zero percent of Sonoma County is in a drought. Lake Sonoma and Lake Mendocino are well above their water supply pool's holding capacity, with Lake Mendocino reaching around 100,000 acre-feet and Lake Sonoma having a little over 250,000 acre-feet of water.



Drought & Dryness Categories	% of CA
D0 - Abnormally Dry	24.5%
D1 - Moderate Drought	4.6%
D2 - Severe Drought	0.0%
D3 - Extreme Drought	0.0%
D4 - Exceptional Drought	0.0%
Total Area in Drought (D1-D4)	4.6%

"While it is important to celebrate this positive change and applaud our community's water saving efforts, it is also important to recognize that drought will continue to be a regular occurrence in California. Consequently, the water saving practices learned and implemented in the last few years should not be abandoned now that the rain has come, and instead must be a regular practice. Our communities must continue to apply lessons learned from drought years if we are going to achieve the needed balance between water for people, for fisheries, and for other essential environmental and economic services that our waterways provide. The path to get us there includes continued efficiency gains and the elimination of wasteful practices. In fact, if there is a single take away lesson from the last few years, it is the reminder that during drought, or during years with abundant rain, there is never enough to waste. "

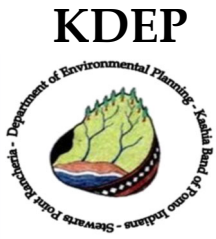
- Sonoma Water



Visit www.sonomawater.org or www.drought.gov for more information.

The Stewarts Point Rancheria Community did an exceptional job at conserving water this past summer! They averaged between 35-45 gallons per person, using less than the average household in town (55-75 gallons per person).





Endangered Species:

Northern Spotted Owl



Northern Spotted Owls are one of the three sub-species of Spotted Owl, including California Spotted Owls and its smaller cousin the Mexican Spotted Owls. These owls are known to dwell in old-growth forests and to perform their classic four note calls. California Spotted Owls are common throughout the big trees of Sierra Nevada and Southern California, but logging, sprawl, and invasion by their aggressive cousin the Barred Owl has driven Spotted Owls into hiding.



Size: 1.5 feet (0.4 meters) in length with a wingspan up to four feet (1.2 meters) Females weigh 10%-20% more than males.

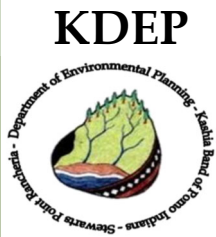
Reproduction: Northern Spotted Owls do not build their own nest, but instead seek out naturally occurring nest sites such as broken-top trees, tree cavities, mistletoe brooms, debris accumulations, or nests built by other wildlife. Reproduction often occurs once every other year, females usually lay one to two eggs in late March through April, but timing can vary by latitude and elevation. Chicks generally leave the nest in late May or in June (at 34-36 days old) and continue to be dependent on their parents into September.

Diet: Owls that nest further North (much of Washington and Oregon) mainly consume flying squirrels. In the southern portion of range (California and parts of Oregon) dusky-footed woodrats are the main component of the diet. Other prey include deer mice, tree voles, red-backed voles, shrews, gophers, snowshoe hare, rabbits, bushy-tailed woodrats, chipmunks, small to medium sized birds, bats, and insects.

Population Status: Northern Spotted Owl populations are declining at an annual rate and decline is accelerating in many areas, including in California. Population sizes within three large study areas in California have declined 31-55% since the 1990s and these declines are accelerating. The ongoing and increasing effects of Barred Owls, coupled with other threats including habitat loss due to wildfire and timber harvest, and reduced recruitment due to climate change, will likely lead to additional declines into the future.

Species Monitoring: The Tribe conducts monitoring in the late spring/early summer to keep a record of Spotted Owl and Barred Owl nests on the Stewarts Point Rancheria and Kashia Coastal Reserve. This data is required if the Tribes wishes to conduct economic development activities.





Announcements and Reminders

Job Announcement

Now Hiring!

Environmental Education Coordinator

This is a 3/4 time position within the Environmental Department of the Kashia Band of Pomo Indians. Under supervision of the Director of Environmental Planning, the Environmental Education Coordinator will coordinate environmental education events and youth programs, develop educational materials and curriculum, conduct community outreach, and develop/manage KDEP's media platforms. Topics of interest may include environmental stewardship, marine science, forestry management, watershed science, non-point source pollution, etc.

Wage: \$18-\$24 per hour (based on experience)

Hours: 32 Hours a week (1 year minimum, may be extended, pending funding)

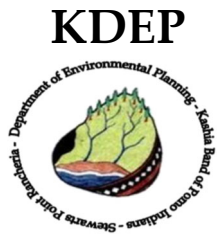


Applications can be found on the www.stewartspoint.org website under "Employment Opportunities" or picked up at our offices located at:

1420 Guerneville Road, Suite 1
Santa Rosa CA 95403
(707)591-0580

VETERANS AND INDIAN PREFERENCE WILL BE AWARDED TO THOSE WHO QUALIFY. ALL POSITIONS ARE SUBJECT TO TRIBAL DRUG FREE WORKPLACE TESTING POLICIES.

For more information, contact Nina Hapner, Director of Environmental Planning at (707)591-0580 x107 or nina@stewartspoint.org



Announcements and Reminders

Marine Ecology Program



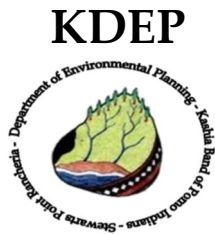
Look forward to KDEP hosting this seasons **Kashia Marine Ecology Program (MEP)** campout on the **Kashia Coastal Reserve (KCR)** in collaboration with **Fort Ross Conservancy**.

- Camp will be held on the open field on the east side of the property.
- Our program will be on **June 27th, 28th, and 29th!**
- We will be learning about **Climate Change, Black Bears, Kashia Plants**, and more important environmental lessons that meets the standard curriculum for the ages below.
- We will be accepting applications until **June 24th** from youth ages 9 to 18 yrs.

To RSVP for the Marine Ecology Program please contact at the Tribal Office
(707) 591-0580:

- Athena (athena@stewartpoint.org)
- Esther (esther@stewartpoint.org) or

Applications will be available at the Tribal Office and online at <https://www.stewartpoint.org>



Announcements and Reminders



for information: Potter Valley Tribe 707.462.1213

Open Invitation to All Interested Lake, Mendocino and Sonoma Tribes

The 11th Inter-Tribal Environmental Youth Campout will be held **Tuesday through Friday**, June 20-23, 2023 at Noyo-bida Ranch in beautiful Fort Bragg, California. The event provides a safe atmosphere for native youth and is intended to be inclusive of the larger tribal community. All tribes are invited to sponsor native youth and/or families to participate and make the event a success!

Tribal youth will participate in a combination of workshops and presentations including topics on the environment, culture, health and wellness, and education. Fun team-building games and activities will be mixed in throughout the week and provide a great opportunity for native youth to make connections and build relationships.

Tribes interested in signing up for the event or for more information, please contact Potter Valley Tribe at 707-462-1213 or by email at waterresources@pottervalleytribe.com or pvtepadirector@pottervalleytribe.com. Tribal representatives who would like to participate, provide a workshop or coordinate an activity are invited to attend the planning meetings via Zoom, or at the Potter Valley Tribal Office located at 2251 South State Street, Ukiah CA (or other locations to be announced).

We appreciate your support and look forward to hearing from you.

Regards,

The MLSTEP Inter-Tribal Environmental Youth Campout Planning Team

**RSVP to Esther Stra, 591-0580 x 128; esther@stewartspoint.org or
Athena Stra, 591-0580 x 127; athena@stewartspoint.org**



Announcements and Reminders

Machi ?ama● mimáw - Earth Day Photo Winners!

Congratulations to Alex Guajardo, Brandon Wilder, Marilyn Mendez and Peyton Gomes!

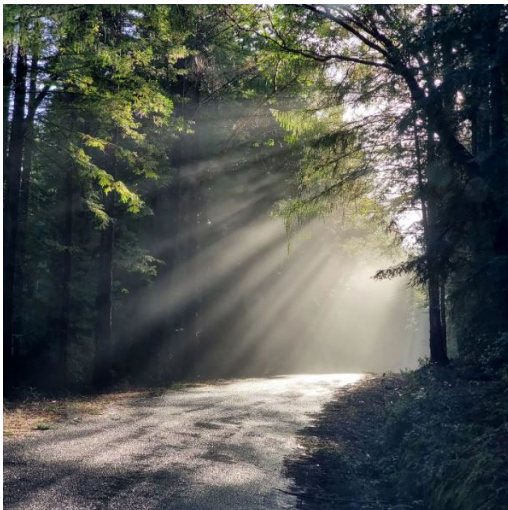
If you have not, come to the tribal office or contact Abby Gomes at abby@stewartspoint.org to have your gift card mailed.



Marilyn Mendes



Peyten Gomes



Brandon Wilder



Alex Guajardo



Announcements and Reminders



**“ʻAma·tʻi· bak^he ʻaca?
ahq^ha”**



Congratulations To The Winners!

Kendall Pinola, Addison Gomes, Adam Gomes,



“I love the ocean because every time I go and see it, I learn something new about the beautiful animals in it.”

- Kendall Pinola
Grade 2



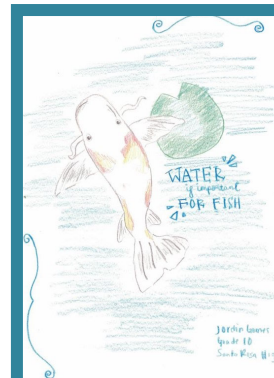
“Keep the ocean clean for all sea life”

- Addison Gomes
Grade 4



“It’s a tree with the moon behind and reflecting the water”

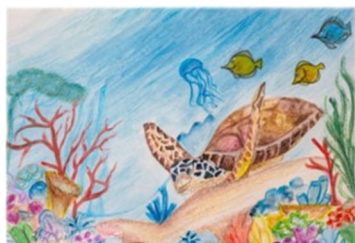
- Adam Gomes
Grade 8



“Water is important for fish”

- Jordin Gomes
Grade 10

Kashia 2023 International Ocean Calendar Project



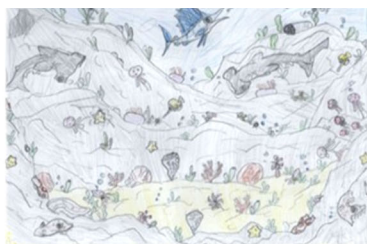
Take a look at this year's Ocean Calendar!

Created by KDEP in collaboration with **Manifesto Atlantico!** This year's theme was to highlight ocean connections from around the world. Each month demonstrates how communities within different regions of the world use the ocean for recreational, subsistence, and/or ceremonial purposes. Included inside are pictures and quotes from not only our very own Kashia youth, but also children of **Spain, Chile, Peru, and the United States West Coast!**

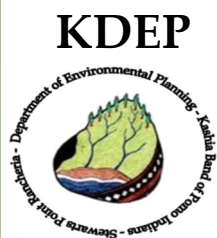


Calendars are on sale for **\$20**. All proceeds go to the **Kashia Youth Cultural Fund**. You can pay through our venmo @**Kashia-Band** (put a note for Ocean Calendars in the purchase so we know where the money goes to) or you can buy them in person at the tribal office. **Don't miss out!**

(\$1.96 extra for any mailed calendars)



For more information on how to purchase, contact abby@stewartspoint.org 707-591-0580 x 126, or Athena Stra athena@stewartspoint.org 707-591-0580 x 127



Announcements and Reminders



Kashia Department of Environmental Planning



Summer Internship Opportunity

Interested in gaining experience working in the environmental field?

Kashia Department of Environmental Planning is currently accepting internship applications for a **Tribal student enrolled in college or junior college.**

- ⇒ Conduct fieldwork and collect data (*beach watch surveys, mussel/phytoplankton sampling, TIDES surveys, NSO surveys etc.*)
- ⇒ Data entry and upload
- ⇒ Prepare/assist in youth outreach events/campouts (*Kashia Ecology Program, Bear Project*)
- ⇒ Develop educational outreach materials
- ⇒ Attend meetings/notetaking/document events

\$2,000
stipend upon
completion

Internship Period: 6/19/23 - 8/4/23

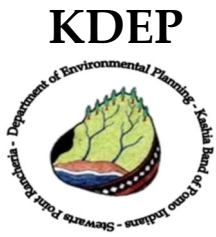
Deadline to Apply: June 16, 2023

Part-time: Average 10 hrs. per week



Applications are available on the tribal website under job openings
(Employment Application) or at the tribal office.

For more info contact Abreanna Gomes, abby@stewartspoint.org, 707-591-0580 x 126 or
Nina Hapner, nina@stewartspoint.org, 707-591-0580 x 107



Buᑎaqá: A Kashia Youth, Bear, and Habitat Project



Our First Field Day!

We had our first field day on February 25, 2023 and here is what the kids learned from that day.



Black Trumpet Mushroom,
Stewarts Point Rancheria



Black Trumpet Mushroom,
Stewarts Point



Hedgehog Mushroom,
Stewarts Point

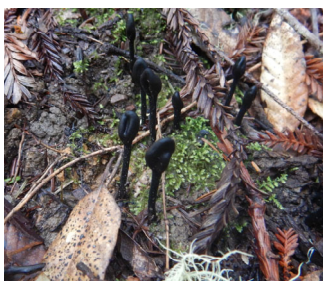


Hedgehog Mushroom,
Stewarts Point

We found some edible mushrooms on the KCR property, such as *black trumpets* (Picture 1&2) and *hedgehog mushrooms* (Pictures 3&4). Some other edible mushrooms we found were *cat's tongue* and *winter chanterelles*!

Then we checked a trail camera and moved it to a new spot where we found a lot of Chinkapin Oaks, a source of food for bears. The new kids were able to learn how to perform a transect, and the old kids were able to re-hone their transecting skill!

Below are some pictures of some cool looking but inedible mushrooms we found! Such as Black Earth Tongue, Scarlet Waxcaps, Golden Waxcap, and a mature Puffball.



Black Earth's Tongue
Mushroom, Stewarts Point



Scarlet Waxcap Mushroom,
Stewarts Point Rancheria



Golden Waxcap
Mushroom, Stewarts Point



Stump Puffball Mushroom,
Stewarts Point Rancherias



Butaqá: A Kashia Youth, Bear, and Habitat Project



Our Second Field Day!

Here is what we learned on March 26, 2023



Vegetation Transect 1,
Stewarts Point Rancheria



Trillium, Stewarts Point
Rancheria



Juncus Ssp.
Stewarts Point Rancheria

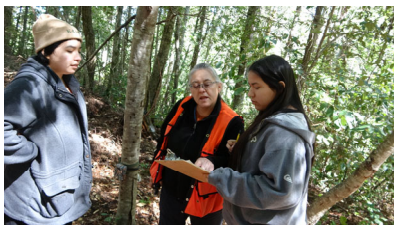


Wild Orchid, Stewarts
Point Rancheria

On their second field day, new youth interns learned how to do their first vegetation transect, during their search, they found many interesting plants such as: Trillium (Picture 2), Juncus (Picture 3), Wild Orchid (Picture 4), and Coastal Blackberries.

Interns also learned how to set up trail cameras and take GPS points; of course, KDEP staff appreciated the help of formal interns from the 2022 Butaqá Bear internship, who some are now youth staff in the Environmental Department.

The Butaqá crew also got a tour of Lindsey Camp, where they set up another transect and trail camera. There we found plants such as: Cinquefoil, Hedge Nettle, Wild Rye, Dog tail Ssp., and Blue eyed grass.



Noting Vegetation, Stew-
arts Point Rancheria



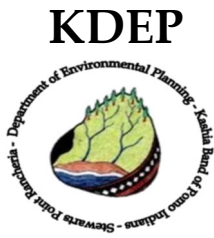
Young Fern, Stewarts Point
Rancheria



Himalayan Blackberries,
Stewarts Point Rancheria



Sword Fern, Stewarts Point
Rancheria



Buṇaqá: A Kashia Youth, Bear, and Habitat Project



Our Third Field Day!

Here is what we learned in April 16, 2023



"Babysitter Tree", Stewarts Point Rancheria



Soap Root, Stewarts Point Rancheria



Blue Eyed Grass, Stewarts Point Rancheria



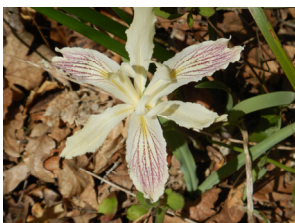
Blue-Eyed Grass, Stewarts Point Rancheria

On their third field day, youth interns explored the back roads of Stewarts Point Rancheria, where they discovered plants such as: Soap Root (Picture 2), Blue-Eyed Grass (Picture 3 and 4), White Iris (Picture 1 below), Indian Paint Brush (Picture 2 below), and many more.

Meghan Wallah-Murphy, our bear expert, discovered an old babysitter tree that was once use as a den area by a Black Bear (Picture 1).

After setting up a transect in the meadow, we were visited by a small Pacific Tree Frog (Picture 2 below).

Our day ended after setting up another trail camera, where we hope to capture footage of the natural life around, and a group photo of some of the youths (Picture 4 below).



White Iris, Stewarts Point Rancheria



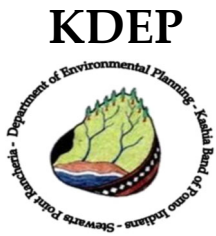
Indian Paint Brush, Stewarts Point Rancheria



Pacific Tree Frog, Stewarts Point Rancheria



Youth Interns, Stewarts Point Rancheria



Buᑭaqá: A Kashia Youth, Bear, and Habitat Project



Our Fourth Field Day!

We had our fourth field day in May 27, 2023 and here is what the kids learned from that day.



**Transect #2,
Stewards Point Rancheria**



**Bristly Dogtail Grass,
Stewards Point Rancheria**



**Transect #2,
Stewards Point Rancheria**



**Sword Fern,
Stewards Point Rancheria**

The youth interns were able to visit two of our camera spots on the rancheria and perform two transects.

At the first transect the kids were able to find Douglas fir, tan oak, redwood, French broom, sword fern, huckleberry, thimble berry, and many other species behind the Elementary School. Then they checked the field camera and were able to see multiple instances of a fox visiting the area. They also noted the many neighborhood cats and dogs.

At the second transect the kids were able to find California oat grass, blue eyed grass, jun-cus, velvet grass, geranium, wild rose, blackberry, and many other species. Unfortunately the camera's SD card was missing, so no photographic data was gathered.



**Blooming French Broom,
Stewards Point**



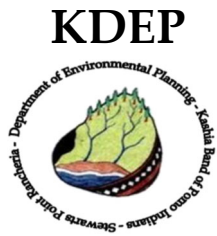
**Pacific Sideband Snail,
Stewards Point**



**Pacific Coast Iris,
Stewards Point**



**Yerba Buena,
Stewards Point**



Buṭaqá: A Kashia Youth, Bear, and Habitat Project

Bear Project Interviews

KDEP is seeking interviewees for the **Kashia Youth Buṭaqá Project**.

Kashia Department of Environmental Planning is partnering with the North Bay Bear Collaborative (NBBC) to implement a Tribal youth conservation project on the Kashia Coastal Reserve focused on black bears. As part of this project youth will interview tribal membership to learn about tribal perspectives on bears.



In person or zoom interviews



Share your perspectives on bears, observations, experiences and stories.

"You will receive a \$ small stipend \$ upon participation."

For more information or to schedule an interview please contact Abreanna Gomes, abby@stewartspoint.org, 707-591-0580 x 126
or Nina Hapner, nina@stewartspoint.org, 707-591-0580 x 107

Department Events

Grasslands Tour for KDEP Staff: March 2023



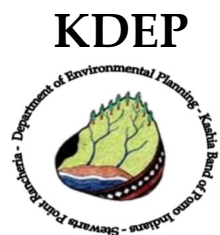
We met with Kathleen Kraft where she showed us the type of non-native and native grasses on the LandsPath property she caretakes.

The non-natives we found were *Romulea Rosea* (native to South Africa), *Hypochaeris Radicata* (native to Europe), White-Man's Foot (native to Europe/Asia), Common Velvet Grass (native to Europe/Africa), and Hedgehog Dogtail (native to Europe).

The native grasses we found were Blue Wild Rye, Purple Needle Grass and California Oat Grass.

We talked about the different ways to bring back native plants and grasses, such as using cattle grazing and controlled burns. Also discussed the lack of dryland farmers and how kids can use 1x1 meter squares to learn how to survey grasslands.





Department Events

May 14, 2023: Art & Algae Workshop



Picking out algae species.
Fort Ross



Cleaning algae print in water.
Fort Ross



Prints in hydrogen peroxide/water solution.
Fort Ross



Prints drying after being washed.
Fort Ross

On May 14th we had a workshop led by algae expert Josie Iselin. Josie brought many different dry pressed algae species and the kids were able to pick out their favorites to put on the sun sensitive paper. The participants then placed their sun sensitive paper outside under glass sheets and waited for the sun's rays to dye the paper a dark shade of blue. As a result the outline of the algae on the paper was left behind! See above pictures for results.

After the Art & Algae workshop, kids were able to explore the tidepools while they waited for their art to dry. They saw limpets, turban snails, abalone, ochre sea stars, dreadlock algae, and more!



Ochre Star,
Fort Ross



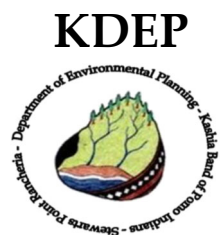
Bat Star,
Fort Ross



Dreadlock Algae,
Fort Ross



Exploring Tidepools,
Fort Ross



Department Events

Bear Tracking Training

March 15, 2023



Possible Bear Markings,
Pepperwood Preserve



Possible Bear Hair,
Pepperwood Preserve



Possible Bear Back Rubbing Tree,
Pepperwood Preserve

In March, KDEP staff members attended a Bear Tracking Training . This event was held by Meghan Walla-Murphy and Matt Nelson on the Pepperwood Preserve property.

Discussion centered on the many black bears coming into Sonoma, Mendocino, and Lake Counties and how Pepperwood Preserve collects hair and scat samples. Most samples can be found in the dryer months, during mating season and when crops come into season. There was also discussion on how bears don't truly hibernate and many other interesting facts about black bears.

Crew was told not to just look on the ground for paw prints, but also in the bushes for broken or flattened areas. Also told the crew to look in the trees for broken branches or claw marks going up the tree. We were shown many examples of old bear climbing trees, old bear beds, and possible trees stripped by bears. We learned that bears like to make beds by large trees that are good for climbing and that bear beds look circular and concave like an upside down contact lens. We found some possible old bear scat and some bear hair on a barbed fence.



Possible Deer Bed,
Pepperwood
Preserve



Possible Bear Scat,
Pepperwood
Preserve



If you have any questions regarding the articles in this newsletter, are interested in providing suggestions for the next Environmental Newsletter, or interested in signing up for an email subscription please contact Athena Stra or Esther Stra, Environmental Technicians.

Athena: (707) 591-0580 x127

Email: athena@stewartspoint.org

Esther: (707)591-0580 x128

Email: esther@stewartspoint.org



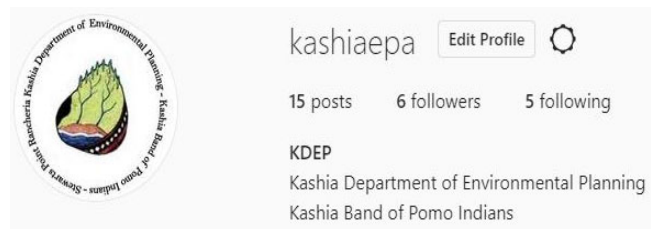
Kashia Band of Pomo Indians

Kashia Department of Environmental Planning

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