



tidal tales

The Newsletter of the Hayward Shoreline Interpretive Center

Volume 32, Number 4



A facility of
Hayward
Area
Recreation &
Park District

UPCOMING EVENTS AT THE SHORELINE

SEPTEMBER

● **Sleep with the Fishes:
Family Sleepover Night**
Sat. Sep. 23, 6:00pm-10:00am

OCTOBER

● **Birding: Murrumbidgee Has It**
Sat. Oct. 28, 11:00am-2:00pm

NOVEMBER

● **Tidepooling Time**
Sun. Nov. 5, 3:30pm-5:00pm

DECEMBER

● **Leopard Shark Feeding
Frenzy**
Sun. Dec. 17, 2:00pm-3:00pm

See inside for program details.

SCHOOL FIELD TRIPS

We conduct hands-on wetland education programs for local schoolchildren. Call 510-670-7270 to talk with the naturalist staff about reservations.

INFO & HOURS

We are open to the public every Friday, Saturday, and Sunday from 10am to 5pm.

4901 Breakwater Avenue
Hayward, CA 94545
telephone: 510-670-7270
email: shoreline@haywardrec.org

on the web:
HAYWARDREC.ORG

Biodiversity in the Bay

By DOMINIC INN

I recently traveled with my family to Vancouver, in Canada's British Columbia, which got me thinking about why we love visiting new places so much. Reasons vary, from expanding knowledge, visiting other cultures, finding new challenges, getting away from life's business, or snapping Instagram pictures. I love traveling. I often find myself planning make-believe trips to the Great Barrier Reef in Australia, rainforests in South America, or deserts in Africa. My desire is to explore natural areas I've never been to, encounter plants and animals I can't see at home in the San Francisco Bay Area, and fish for species not found in California's waters. My latest trip to British Columbia satisfied my itch to travel, but it also reminded me of my appreciation for the life in the area I call home.

British Columbia is known for its wildlife, so I had hopes of seeing of grizzly bears, orcas, bald eagles, and the numerous species of salmon. Although the bears and orcas eluded me, I was fortunate enough to see bald eagles soaring above and perched in trees. I also didn't catch any salmon, but just the opportunity to fish for a salmon completing its life cycle and returning to the river of its birth was rewarding on its own. As I stood among the line of fishermen on the shore of the Capilano River, I couldn't help but think about home. Not just because salmon can be caught in California, but because if my goal for traveling is to see and learn about plant and animal species new to me, I don't have to travel very far: not only is California beautiful, it's also one of the most biodiverse areas in the world!

One of my favorite classes in college was called "Plant Communities of

California." I remember asking my advisor if I could take a replacement class because studying plants sounded very hard and (to be honest) a little boring. My advisor convinced me to take the class by reminding me that if I wanted to study animals, I'd have to understand the plants that make habitats suitable for them. I ended up lov-

not only is California beautiful, it's also one of the most biodiverse areas in the world

ing the class because it opened my eyes to the enormous diversity of life that exists right here in California.

Physical factors unique to California, such as climate, geological formations, elevation, and soil, allow it to support habitats that exist nowhere else in the world. As a result, plant and animal species which specialize in surviving in these habitats can only be found here. They are endemic to the area, and if their habitats were taken away, the species would cease to exist.

Focusing on the saltmarshes around the Hayward Shoreline Interpretive Center and San Francisco Bay-Estuary, a species which is both endemic and endangered to the area is the salt marsh harvest mouse. These mice rely on pickleweed as a food source as well as habitat to shelter them from predators. If this unique saltmarsh habitat were to continue being developed for more homes and business parks, for example, there would be no pickleweed. The

B is for Bird

Artist: Steve Haimovitz

ON EXHIBIT SEPTEMBER 16, 2017 - JANUARY 17, 2018

Reception Sunday, Sept 17, 2:00pm-4:00pm

Steve Haimovitz's photography attempts to create an emotional impact on his audience by capturing birds in the midst of some of their everyday activities. The images allow one to take in a specific moment in the birds' lives, moments that in reality are quite fleeting and difficult to witness. Many of his photographs are printed on aluminum which is infused with the image. They have an archival value and durability. The colors are extraordinarily vibrant and the depth of the coating gives a luminous quality that no paper print can achieve.



The Interpretive Center has a large exhibit space with vaulted ceilings and moveable display panels. We are always interested in any form of art exhibit that highlights local wildlife, wetland or Bay ecology, or any theme in keeping with our goal of educating and inspiring

the public. If you are an artist interested in holding an art show at the Hayward Shoreline Interpretive Center, please contact the Supervising Naturalist, Adrienne De Ponte at 510-670-7270.



CREATURE FEATURE:

California Ground Squirrel

While leading children on walks along the trail, they'll inevitably point out large burrows in the dirt and ask us if they're gopher holes or snake holes. In fact, they're neither! Gophers don't live here in the saltmarsh, and snakes - lacking limbs - are unable to dig in the dense soil. These burrows, in fact, belong to our most visible mammal: the California Ground Squirrel!

If you spend any time at the shoreline, you've probably encountered a ground squirrel or two, furiously packing its cheek pockets full of seeds then dashing away as you approach. As its common name suggests, this species is not a tree climber but a digger, and it can be found in many habitats, from open fields and grasslands to oak woodlands, and of course right here in the saltmarsh. Look for its light-brown mottled coat and a tail that is less bushy than its tree-dwelling relatives.

Gardeners and farmers may consider these busy rodents to be pests, but their relentless tunneling creates shelter for many other animals. Neither burrowing owls (which don't actually burrow) nor gopher snakes can dig, so they reside in abandoned ground squirrel tunnels; and the endangered California tiger salamander spends most of the year underground, often in an old ground squirrel home.

Like all rodents, California ground squirrels are an important food source. Their diurnal foraging habits make them vulnerable to raptors and coyotes, and rattlesnakes (not found here on the shoreline) will venture into burrows. Amazingly, many adult California ground squirrels are resistant to rattlesnake venom and will pump blood into their tails and wave them around when near a rattlesnake. The blood and the waving triggers the rattler's heat-sensing pits, and has proven effective in driving them off from the squirrel's young, which are not resistant to venom.

The next time you see a ground squirrel, marvel at this little animal that is important and fascinating in so many ways, and make sure to keep it wild by maintaining your distance and not feeding it, as tempting as that may be. - text and photos by Tony Iwane



VITAL STATS:

Ground Squirrel

COMMON NAME:

California Ground Squirrel

SCIENTIFIC NAME:

Otospermophilus beecheyi

RANGE: native throughout western North America

DIET: plant material like seeds, leaves, and fruit, and sometimes small insects

PREDATORS: foxes, coyotes, raptors, cats, and snakes

LENGTH: 18 in. including the tail

HOW TO OBSERVE: gathering food alongside the trail

NEWS AND NOTES

COASTAL CLEAN UP 2017

Every year, on the third Saturday of September, thousands of people around the world gather together to remove trash and debris from coastlines and waterways. Over 60,000 Californians volunteered last year, including scores right here at the Hayward Shoreline Interpretive Center.

Join us on *Saturday, September 16th from 9am - 12pm* and become part of this international movement to help out our oceans, estuaries, and streams.

We'll provide gloves, bags, and refreshments, just bring some good friends, some work clothes, a (reusable) water bottle and your goodwill!



UPDATE: SHARKS AND RAYS IN SF BAY

In our last issue we wrote about a mysterious die-off of sharks, rays, and other fish in San Francisco Bay. According to Mark Okihiro, a California Department of Fish and Wildlife senior fish pathologist, over 1,000 leopard sharks have died, as have 200-500 bat rays. At that time, preliminary research indicated that a fungal infection, likely stewing in stagnant runoff from this winter's heavy rains, was the culprit.

However, further evidence has shown that this die-off was caused by a common protozoan, *Miamiensis avidus*. As to why this pathogen has had such a deleterious effect in 2017, it's likely we'll never know for sure, but it's possible the heavy rains both lowered the salinity of San Francisco Bay's waters and brought in higher-than-normal amounts of human pollutants.

Bay Nature magazine has a great article on their website, baynature.org.

**Sleep with the Fishes:
Family Sleepover Night**



Spend a night together as a family at the shoreline! We'll make hot chocolate and treats on Saturday night, as well as go for a moonlit walk on the trail. Then you and your family can stretch out inside the Interpretive Center for a good night's sleep. In the morning we'll have some breakfast and feed the fish that kept us company overnight. Each family must have at least one parent and one child. Pre-registration is required. Space is limited!

Sat, Sept 23 6:30pm - Sun, Sept 24 10:00am. Ages 5 and up. \$40 per person.

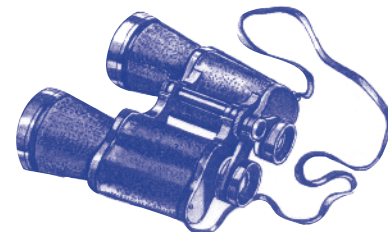
Register at www.haywardrec.org

Summer sightings

THIS SUMMER, wildlife of all kinds were seen in the marsh. Notable sightings include:

- **LONG-LEGGED FLIES** perched on the invasive sweet fennel along Breakwater Avenue.
- **LAUGHING GULL** continued to hang around the freshwater marsh
- **LEAST TERNS** catching fish to bring to their nests
- **BLACK SKIMMERS** skimming the bay waters for fish
- **CLAM WORMS** found burrowing in the mud
- **COOPER'S HAWK** swooping over visiting campers
- **NON-BITING MIDGES** swarming to find a mate
- **PEREGRINE FALCONS** hunting shorebirds
- **A HARBOR SEAL** poking its head out of the water at campers

At the end of summer, look carefully and you might see male **MELIS-SODES BEES** sleeping in the yellow gumplant flowers along the trail in the morning. In many solitary bee species like this one, females sleep in their burrows, but males, who don't need burrows for eggs, settle down in a nice comfy flower for the night. Sometimes with a bunk-mate! *Photo by Tony Iwane*





Hayward Area Recreation and Park District
 hayward shoreline interpretive center

4901 Breakwater Avenue Hayward, CA 94545

H.S.I.C. STAFF

Adrienne De Ponte	Superv. Naturalist	Dominic Inn	Naturalist Aide
Ann Graham	Senior Naturalist	Zoey Moran	Student Aide
Patti Workover	Senior Naturalist	Josh Levenson	Student Aide
Tony Iwane	Naturalist	Karen Nguyen	Student Aide
Caitlin Hosken	Naturalist	Randy Gates	Contributing Naturalist

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Home FROM PAGE 1

absence of this special plant would leave the salt marsh harvest mouse with no food or habitat.

Although there are many endemic and endangered organisms, it's rare that we get to see them. Thankfully, there is a seemingly unending supply of species that are more common, but not as well known. Just by taking a walk at the shoreline you could possibly see two species of swallows, as well as willets, Forster's terns, great egrets, snowy egrets, least sandpipers, American avocets, and black-necked stilts. Even a handful of shoreline mud can contain 40,000 organisms!

Whenever I get the chance to talk with visitors at the Hayward shoreline, I tell them that even though my job is to educate people about the marsh, I feel like I've barely scratched the surface of all there is to know about it. I see things I've never seen almost every time I go to work, and my fellow naturalists are constantly teaching me things. A species doesn't have to be endangered or in a forest halfway around the world to be new to me. Once we realize this, it's easy to get excited about life that exists around all of us.

I plan to continue travelling and learning about as many new plants and

animals as I can, but I also never want to forget that there is such a rich diversity of life in California, and specifically the Hayward shoreline. I've spent many hours exploring the saltmarsh, as well as teaching about it, and no matter where I end up or what I am doing, I am certain that I will view this place with as much excitement and wonder as I do if I were exploring places around the world.