

HAFERNIK'S ZOMBIE BEES FOR A WEIRD OCTOBER

Dr. John Hafernik, entomology professor at San Francisco State University, will speak on the **bees** who have been attacked by an exotic intruder and turned into “zombies”, at the visitor center in San Pedro Valley Park. The program will begin at 4pm on Saturday, Oct. 18th, as Park closes at 6pm then.



Concern about threats to honey bees and other pollinators is mounting. In the U.S., hive failure rates are increasing as **honey bees** deal with introduced mites, diseases, pesticides & other stressors. Recently a new threat to honey bees, the parasitic **phorid fly, *Apocephalus borealis*** (AKA the Zombie Fly), shown on bee's abdomen in photo below, was discovered in San Francisco. Bees infected by the fly (Zombees) show disoriented zombie-like behavior, leaving their hive at night to die under nearby lights.

San Francisco State's John Hafernik will discuss the implications of zombie fly parasitism for honey bees in the Bay Area and beyond. He will also provide information on how the public can get involved in tracking prevalence of parasitism across North America through the citizen science project ZomBee Watch (zombeewatch.org).



Dr. Hafernik serves as President of the Board of Trustees of the California Academy of Sciences and is a past president of the American Association for the Advancement of Science, Pacific Division and of the Pacific Coast Entomological Society. Dr. Hafernik received his PhD from UC Berkeley. His research focuses on evolutionary and ecological processes and conservation biology. Currently, he is investigating the impact of the aforementioned new parasite of honey bees, which he discovered on the SF State campus, on hive health. He is co-founder of ZomBee Watch, the citizen science project that has been featured by Scientific American, Discovery Channel, KQED and many other media outlets.

NEWS BRIEFS

NEW WEBSITE FOR “FRIENDS” NEEDS HELP: The Friends of SPVP is creating its own website, a site meant to be a resource for Friends members, volunteers, & the public. For this effort we are seeking interested folks with experience & expertise in web design and willing learners, to participate & contribute. Interested parties can contact Bing Huey at: binghuey@hotmail.com

2 NEW VISITOR CENTER STAFFERS are on board. These energetic volunteers are: **Eileen Wilkerson & Stephen Bellinger**—many thanks to them, to our dynamic leader, **Mila Stroganoff**, and to **Shirley Drye & Jim Mackey** for working 3 shifts each in an August replete with cancellations!

PORTIA HALBERT PRESENTS the MARBLED MURRELET

ON SATURDAY, SEPTEMBER 6th

On Saturday, September 6th, at 5pm, we look forward to having the “land manager”, the environmental scientist, **Portia Halbert**, of the Santa Cruz District of the California State Parks, as our speaker. She will speak on an exciting at-risk bird of our coast, the Marbled Murrelet, (photo by **Peter La Tourette**) a bird that nests high up in large trees of the coastal forests. Until recently, this bird's habits were little known, perhaps due to its choice of nesting sites and its amazing speed through the trees.



Ms. Halbert has been with the California State Parks for 13 years, after her graduation from Arizona State University. To get her foot in the door, she started working in an entry kiosk, and then on the Santa Cruz District Resource Crew, working finally on projects that placed fake murrelet eggs into some of the Parks, which eventually led to her becoming a restoration consultant. In one of the restoration projects for this elusive bird, she wrote a grant that financed the “vomit egg” effort to trick the egg and baby-eating Stellaris Jays into rejecting these crucial progenitors of the adult Marbled Murrelet. But since she works to manage parkland and restore habitat in the 70,000 acres of Parks in Santa Cruz and San Mateo counties, in a way, she considers herself to be a land manager.



ON THE TRAIL

A beautiful **Bing Huey** view of a simple **Rosilla** flower with a **Tachinid fly** enjoying its bounty. Color photo on b. board.

(continued on page 4)



A NATURALIST'S PERSPECTIVE

By Jim Mackey

Do you remember your first experience with nature? Mine might have been when I was about eight, in Akron, Ohio. My younger sister, **Joyce**, and I found a large, nearly-dead carp trapped in a small pool by the Cuyahoga River. We



somehow got it up a steep, wooded hill and put it in our bathtub, hoping that it would revive. However the only revival was that of our Mother when she found it. When I was 10 my Uncle and Aunt were managing an Appalachian camp in Massachusetts one summer and they bravely

invited me to join them. One day there I was stunned to see a frog at eye-level on the trunk of a tree! I examined the little guy and found that it had pads on its toes. In the nature center it proved to be alert, agile and able to change color from gray to green in minutes. It was a gray treefrog. (James Mackey photo is of the Cuban tree frog, taken in Florida)



In 1947, at the end of my senior year in high school, my steady girl friend dumped me. I responded to the sudden freedom by bicycling across eastern Ohio into West Virginia. Next, a friend and I took my family's only car, a clunker, and drove west on a camping trip. We reached

Yellowstone, where I was impressed by the Stellar jays and white pelicans. My final trip that summer was on a Greyhound bus to Florida. The driver embarrassed me by pulling over, in the Carolinas, and making me leave the Black section, in back, and sit up front. In St. Petersburg I was in a bad mood and even critical of the brown pelicans, which I compared unfavorably with the white pelicans I had seen at Yellowstone. However, fast-forwarding to Dec. 1983, my family and I visited my wife's sister, **June**, in south Florida and found it to be a wildlife paradise. I especially enjoyed the big Cuban treefrog (see top photo) that appeared at June's kitchen window.

Back to 1947. I enrolled at the University of Akron and majored in biology. In the summer of 1948 I got a job with the Forest Service in Minnesota. We installed a phone line, fought a small fire, caught northern pike and canoeed toward common loons and beaver. In 1951 I left the U. of Akron with a B.S. in biology and a clarinetist from the marching



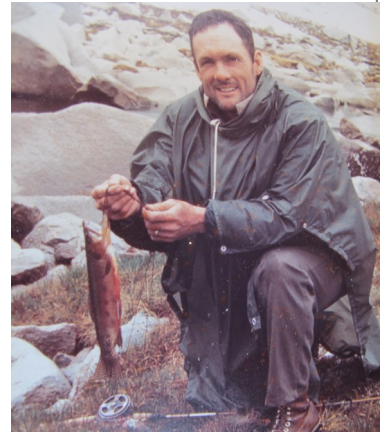
band (wife - **Joyce** shown qualifying to marry a herpetologist). Ohio State University. I began a two-year study of mourning doves, trapping them on the nest, banding and marking them. In 1954 we left OSU, I with an M.S. in zoology and we moved to Eugene, Ore..

At the University I began a research assistantship, under **David Jameson**, to study morphological variation between populations of Pacific Treefrogs! I got paid to wade in ponds at night, catch and measure breeding treefrogs - from the Coast to Valley to Cascades. In 1957 Joyce and I left Eugene with a Ph.D. in biology and moved to San Francisco. (**James Mackey** shot of tree frog with operative vocal sac)



San Francisco State University. I have enjoyed teaching a variety of courses, including animal ecology, vertebrate natural history and herpetology, as well as working in the field with fine graduate students on problems of newt and lizard ecology. In 1970 we bought some acreage in Mendocino County. A pond there harbored treefrogs, dragonflies and newts. A 100-foot high rock-pinnacle had a rattlesnake den at the top.

Back-packing. In 1974 my Brother, **Bruce**, and I took an eight-day trip in the John Muir Wilderness Area. The place names made the area seem holy for biologists: Evolution Basin, and Mounts Darwin, Mendel and Lamarck. A highlight was my catching a beautiful golden trout! In 1975,



Bruce and I took our four children on the first of several back-pack trips - usually to Desolation Valley. (**Jim Mackey** and his 2 children; **Jim Jr.** and **Robbin** are on the right)



The Mackey Vernal Equinox Bird Blitz (VEBB). IN 1984, Bruce, Jim Jr. and I conducted the 1st VEBB - an all-day attempt to record as many species of birds as we can. We have repeated this celebration of spring every year since then - often with six participants. Our record is 130 species, and the present total is 223!

Trips abroad. In 1985 Robbin, Jim Jr. & I joined a Calif. Acad. of Sciences sponsored safari to Kenya. Our leader was the CAS Herpetology collections manager, **Jens Vindum**, who
(Continued on page 3)

(Jim Mackey continued)

had been a graduate student of mine. We saw many kinds of amazing birds and mammals, but I was most pleased to find a genuine African chameleon. (J. Mackey photo, Kenya) By the way, we flew in a hot air balloon over the Masai-Mara! In 1992 Robbin and I joined another CAS trip - to Panama and Costa Rica. We saw wild parrots and monkeys - that partly define a tropical fauna. And I saw a basilisk (Jesus lizard) running on the water! Finally, in 1999, on a trip to the Big Island of Hawaii, I snorkeled with Robbin and a great green turtle!



So there is a bewildering diversity of living things. If I had to



select the most bizarre one I would pick the octopus stinkhorn fungus. If you doubt it, check the reaction of picnickers when you point some out under their table in the Trout Farm Picnic Area of our Park next May. (J. Mackey photo)

CREEK WILLOW

By Shirley Reusch Drye

Creek Willow is the local common use name for **Arroyo Willow**, whose Latin binomial is ***Salix lasiolepis***. Our Creek Willow is deciduous and catkin bearing. It is valuable in controlling stream bank and hillside erosion. There are one or two other species in our park, but they are not easy to differentiate. (photo of *Salix lasiolepis* is from Banning Ranch w.s.)



I, personally, first noticed these tree-like plants growing in many of the eroded gullies (as we would have called them where I grew up in Kansas) or arroyos on our local hills. They looked more bush-like to me then. It took me several years to gain knowledge of these willows. I initially had trouble even calling them willows, since in Kansas we had only Weeping Willows and Pussy Willows. These were willows? I bought a tree book, and there they were!



In our park, the Creek willow is easily identified by its shredded and damaged bark which results from our local **mule deer** scraping the soft moss-like skin, called velvet, from their new antlers. (photo by Kim Cabrera)

The deer grow new antlers each year, and each year must rid their new antlers of the “velvet” coating them by scraping the antlers against any hard substance.

I happened on a television documentary a number of years ago on the related white-tailed deer of another western state. The narrator showed pictures of the bloody web of material on the deer’s antlers which occurred in their efforts to rid themselves of this material. He commented that the scraping must “hurt” the deer or be painful.



Knowing that our deer would have to go through the same ordeal, I thought that there must be evidence of it on trees. I began looking in our park, and the very first Creek Willows I came to, sure enough, had shredded and damaged bark. Everywhere I looked at our creek willow, including the Sanchez Adobe grounds, the bark was shredded and damaged! I personally did not see this destruction on other trees.

I asked myself, why the Creek willow? I returned to one of my tree books, and there it was—the bark contained *acetylsalicylic acid*, which is aspirin. These deer are smarter than we are! They clearly preferentially used our willow because it gave them relief from the pain of scraping that stuff off their antlers!



Since I am an archaeologist, I already knew of our native Ohlone people’s use of the Creek Willow. The long, slender withes [a tough flexible branch of a willow, etc.] were and are used in basket-making all over the state of California. Fish traps and quail traps were also made of the willow withes. The Ohlone people were wise enough, undoubtedly to observe the deer predominately using the willow to rid their new antlers of velvet while soothing the inflammation. Thus the Ohlone learned how to abate pain and an illness-produced fever: chew some willow bark or make a willow bark tea!

Coincidentally, the Ohlone used the larger willow poles as the framework for their dwellings, sun shades, acorn storage silos and boats. They understood how to husband the willows to produce the poles. When the “sap is up,” (for us this is January to June) the bark can be stripped off in very long pieces, which the Ohlone used to bind the structures’ frameworks together. Other times of the year,



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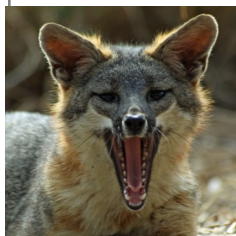
ON THE TRAIL (continued)

Barbara Kempster was delighted to see a **bobcat** on her late morning ramble as she passed the South Walnut Picnic Area on August 15th. The previous day another SPVP regular, **Randy Burns**, spied a bobcat in our Park. But



Ron Wilson found that the **bobcat** he saw at the Park/Church boundary on August 30 at 11am did not like his company, proof is above, in his photo of that day.

Jim Mackey saw quite a group of **quail** in the Park after I'd heard so many say, "Where are the quail this year?": A male quail & 6 chicks (no female) were in the entrance road on June 21. Then he saw 4 groups of quail in the S. Walnut on July 14. Females and males are in photo above.



Dr. Mackey also saw a **grey fox** in the South Walnut on June 27th. Unfortunately a man was feeding peanuts to some chipmunks in the area, and undoubtedly, the food chain slipped into place. (**Greg Kerekez** photo of grey fox)

In early August, **Bing Huey** took this fine macro shot of a rein orchid, *Piperia elegans*. Jim Mackey often sees them on the Montara Mt. trail.



Ron Wilson comments on his find at 11am-Aug.30: "Walnut Grove has a huge **yellow-jacket** nest in the ground within 20 yards of the yellow jacket bait trap. "Looks like they are dragging dirt out of the ground if I'm correctly looking at what is in the jaws of this guy." (cropped **Ron Wilson** photo)

**BARBEQUE IN HONOR OF HABITAT RESTORATION GROUP**

Istvan Puski & **Christine Guzman** built up an appetite as they worked on the native sun garden the morning of the August bbq. **Joseph Piro** and brother **Eric** grilled our burgers & links; **Carol Martinez** & **Skeeter** set up the feast. Thanks to all for the delicious side dishes & to **Eric Reiter** for the funky music.



Questions or letters to the editor? —email **Carolyn Pankow** at carolynjunepankow@yahoo.com or write **Carolyn Pankow**, Editor of, "Friends of San Pedro Valley Park", 600 Oddstad, Pacifica, CA 94044. She is th writer of all uncredited features.

The Leaders of "the Friends of SPVP": President: **Jim Mackey**; Vice President & Editor: **Carolyn Pankow**; Secretary: **Shirley Drye**; Interim Treasurer: **Bing Huey**; member at large: **Istvan Puski**; Visitor Center Staffing: **Mila Stroganoff**; Habitat Restoration: **Istvan Puski**; Trail Leader: **Joseph Piro**; Membership: **Jim Steele**; Programs: **Carolyn Pankow**; Trailside Store: **position open**; Mobile Display Board: **Katie Antista**

FACTOID

Amongst all the chirping of **crickets** during these days of late summer in Pacifica, listen for the staccato sound of the **katydid male**, perched up quite high, serenading to attract a female before giving her a packet of sperm. (**Calif. Angle-wing katydid** at right) But U of Toronto, Mississauga professor **Darryl Gwynne** found in his study of one species that there is a big cheesy, gooey substance that the male ejects when he copulates. Says Gwynne: "It's attached to his sperm packet, so while she's being inseminated, she can reach back & grab this mating gift & eat it. [saving his DNA]."



Shirley Drye's Creek Willow, (continued) the bark shreds when pulled from the wood. During the same season, between the bark & the wood is a white fiber that makes nice string. (photo center shows string made from willow.)



This, then is the story of our wonderful creek willow. You will look at it differently from now on.

JULY TRAIL DAY**Joseph Piro**

By

Despite an overcast sky, we had a nice turn-out for our July 12th Trail Day -- **Istvan Puski**, new-comers **Mike** and **Frances DeFreitas** and myself worked with **Rangers Greg Escoto** and **Chris Furniss** removing Cape Weed along both sides of the path from the back of the Visitor's Center to the bridge leading to the Plaskon Nature Trail. Pick axes, mattocks, shovels, rakes and wheel barrows were the favorite tools of the day! And be sure to keep an eye out for what we'll be re-planting here soon. (**Joseph Piro** photo of group)