



# PETALUMA WETLANDS ALLIANCE

P.O. Box 2182, Petaluma CA 94953-2182  
[Petalumawetlands.org](http://Petalumawetlands.org)

## PWA NEWSLETTER May 2023



### PWA Alive and Well

Mary Kadri, PR/Outreach Chair

### *Annual Picnic and Election Coming Up!*

Please plan to attend the PWA Annual Picnic and Meeting **starting at 12:00 noon Saturday, June 17<sup>th</sup>, at McNear Park at the corner of G and 11<sup>th</sup> Streets.** We will conduct an election at the picnic. *All members are eligible to vote.* PWA always provides some food, but potluck additions have been most welcome and delicious! Come on out, meet the new docents, visit with old friends, and play “Wetland Jenga!” Mark your calendars and see you there.



Anne Taylor  
doing Wetland  
Jenga at last  
year's picnic.

John Shribbs has served PWA as President for four years, and PWA By-Laws limit the 2-year term to two terms. Thus, John will be “termed out.” A PWA nominating committee nominated Mary Kadri as the new President, Cynthia Rathkey as the new Vice President, and Kathy Cherrstrom as the new Secretary. Susan Kraemer is stepping down as Secretary. Jerry Taylor, our PWA Treasurer has offered to stay on, and we are grateful for his offer. Those are the four positions that are elected.

There are other very important positions that are by appointment. One of those will be Joanne Figone, who will be taking on membership and communications, so you will likely get to know her name. Thank you, Joanne!

Education Chair is another extremely important position that is open! We are hoping that among some of the docents getting experience this spring and fall with our third- graders, there will be one of you willing to take on the coordination of this valuable program! There are many people ready and able to assist, so you will have help!

If you have any ideas for activities or ways to up our game, please come to the picnic and share them!

### ***And Don't Forget PWA Volunteer Cleanup Days Also***

PWA will continue to have its own members engage in cleanup days also. In February at low tide, Keith White spearheaded a cleanup effort by the Sheraton entrance along the river, and a couple of truckloads of garbage were taken out.

**John Shribbs will be leading a cleanup this SATURDAY May 6 at 9 am at Shollenberger Park.** We will walk to the SW corner of the circular path and clean up at the river edge. It's a good way to get to know people and do good at the same time! PWA supplies gloves, grabbers, and buckets. All you do is come with boots, water, hat and a little energy!

### ***PWA Outings: Past and Planned***

Watch for emails from PWA about planned outings, such as a Native American history-based walk at Lake Tolay, and an “Explore by Kayak” day on the Petaluma River. (bring or rent kayaks at Petaluma River Turning Basin.) These outings will also be posted on our Petaluma Wetlands Alliance Facebook page.

In March, a group of PWA members had the pleasure of touring the Casa Grande United Anglers Fish Hatchery, and we were quite impressed. It's great to see young people doing this important work, and amazing to see the level of sophistication of the program and equipment.

Do you have a request or an idea for an outing? We want to hear it!

### ***New Kiosk Posters at Shollenberger***

What's new at Shollenberger Park? Well, yes, there is finally lots of beautiful water! And what else? There are NEW POSTERS in all the kiosks! (Thanks to Joanne Figone, Mary Kadri, Cynthia Rathkey, Linda Sheppard, Keith White, and Photographers extraordinaire Marty Slonim and Len Nelson.) Take a 2.5 mile stroll around the park (with an added detour over the Adobe Creek Bridge to the kiosk on the Alman Marsh side) and have a look!

Raptors in Shollenberger	Ave Rapaces en Shollenberger
<p>Moderate size hawk 16-20 inches long</p>  <p><b>Red Shoulder Hawk — a resident hawk</b></p> <ul style="list-style-type: none"> <li>ID info: reddish brown shoulders and chest, and a long black tail with white bands</li> <li>Juvenile: mostly brown</li> <li>Diet: catches lizards, snakes, amphibians, and small mammals by swooping down on them</li> <li>They use the same nest year after year; nests of sticks are about 2 ft in diameter</li> </ul>	<p>Large size hawk 18-21 inches long</p>  <p><b>Northern Harrier</b>—look for it flying low over grasslands</p> <ul style="list-style-type: none"> <li>ID info: Slim body with long tail with a distinctive bright white rump patch</li> <li>Females &amp; juveniles are brown; males are silvery gray (often called the “gray ghost”)</li> <li>Diet: rodents, frogs, and small birds</li> <li>It is the most owl-like of raptors in that it uses hearing and sound to catch prey</li> </ul>
<p>Halcón de Hombros Rojos — un alcón residente</p> <ul style="list-style-type: none"> <li>ID info: hombros y pecho café rojizos, cola negra y larga con bandas blancas.</li> <li>Los jóvenes son principalmente cafés.</li> <li>Diet: caza lagartijas, culebras, anfibios, y pequeños mamíferos abatiéndose sobre su presa.</li> <li>Usan el mismo nido año tras año; los nidos de palos son aproximadamente de 2 pies en diámetro.</li> </ul>	<p><b>Aguilucho Pálido</b> — se encuentra volando bajo sobre pastizales</p> <ul style="list-style-type: none"> <li>ID info: Cuerpo delgado con cola larga con un parche distintivo en el arco de color blanco brillante. Las hembras y los pichones son cafés; los macho son gris plateados (se conocen como “fantasma gris”).</li> <li>Diet: roedores, sapos, y pájaros pequeños</li> <li>Es el ave rapaz más parecida a la lechuza puesto que usa el oído y el sonido para atrapar a su presa.</li> </ul>
<p>Moderate size hawk 15.5-16.5 inches long</p>  <p><b>White Tailed Kite</b>— can be seen hovering in sky over open grasslands:</p> <ul style="list-style-type: none"> <li>ID info: medium size hawk with a white body and black shoulders</li> <li>Diet: prefers rodents and insects</li> <li>It hovers in the air over prey, then drops quickly to grab it</li> </ul>	<p>Our smallest raptor 9.5-10.5 inches long</p>  <p><b>American Kestrel</b> — often seen on utility lines waiting for prey</p> <ul style="list-style-type: none"> <li>ID info: A colorful, jay sized falcon with a rusty colored head and blue-gray wings; It's face has white stripe between two black cheek stripes</li> <li>Diet: insects, small rodents, small snakes, lizards, and frogs</li> <li>Kestrels hide their excess food in cavities, bushes, tree limbs and fence posts to save for leaner times or to keep away from thieves.</li> </ul>
<p><b>Halcón Blanco</b> — se pueden ver rondando en el cielo sobre pastizales abiertos.</p> <ul style="list-style-type: none"> <li>ID info: Halcón de tamaño mediano con el cuerpo blanco y hombros negros</li> <li>Diet: prefieren roedores e insectos.</li> <li>Ronda por el cielo sobre su presa, luego cae rápidamente sobre ella para apresarla</li> </ul>	<p><b>Cernicalla Americana</b> — se ven con frecuencia en cables eléctricos esperando su presa</p> <ul style="list-style-type: none"> <li>ID info: colorado, halcón del tamaño de una grullita con lomo cobrizo y alas gris-azul, su cara tiene una raya blanca entre dos rayas negras en la mejilla.</li> <li>Diet: insectos, pequeños roedores, culebras pequeñas, lagartijas y sapos</li> <li>Los cernicallas esconden la comida que sobra en cavidades, arbustos, ramas de árbol y postes para guardarlos para momentos de necesidad o para protegerlos de ladrones</li> </ul>
	<p>Our largest hawk 19-22 inches long</p>  <p><b>Red Tailed Hawk</b> — can be seen circling high overhead as it hunts</p> <ul style="list-style-type: none"> <li>ID info: Hawk grande, café oscuro con la parte inferior de sus alas blanca o pálida con una distintiva cola corta coral roja ladrillo</li> <li>Diet: large number of rodents which are often agricultural pests</li> <li>It's loud harsh drawn out Keerer is often the sound used in the movies for all eagles and hawks</li> </ul>
	<p>Large vulture 26-27 inches</p>  <p><b>Turkey Vulture</b> — seen soaring high overhead with wings in a wide teetering V shape</p> <ul style="list-style-type: none"> <li>ID info: large bird with black and silver underwings, and small, featherless red head</li> <li>Diet: uses a keen sense of smell to find fresh carcasses, keeping our environment clean</li> <li>Buttre messes themselves they may use is vomiting on bird, animal or human that gets too close</li> <li>Difference — se ven volando alto con alas en forma de V, amplias tambaleándose</li> <li>ID info: ave grande con la parte inferior de sus alas negra y plateada, y cabeza pequeña sin plumaje</li> <li>Diet: usa un sentido de olfato agudo para encontrar animales muertos, manteniendo nuestro ambiente limpio</li> <li>Como mecanismo de defensa pueden vomitar en una ave, animal o humano si se acercan demasiado</li> </ul>

QR Codes were added to some: try them out to hear and see the birds in action! The display cases at the two entrances to Shollenberger have also gotten a facelift, so be sure to check those out too. Soon, we will be initiating a “Photo of the Month” contest, and the winning photo, taken of the wetlands during the previous month will be printed and showcased in the display cases. There will be a notice posted soon in the display cases with information on how to submit photos.

## *PWA Calendar Resumes Publication*

## ***Wetland Business Neighbors Partner with PWA for Wetlands Cleanups and Caretaking***

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It might be good for PWA to create a list of beneficial native plants that companies could use for landscaping, as well as other helpful acts. Perhaps an Oakmead Business Park list of Do's and Don'ts (such as "Do plant Coffeeberry" or "Don't" use weedkiller chemicals.) If a reader would like to work on this, please do, and send to either John Shribbs or Mary Kadri ([marykadri@gmail.com](mailto:marykadri@gmail.com)).

Other companies such as Paragon Labels and BioMarin, have offered to help to have their employees engage in community service by cleaning up the wetlands. On April 15<sup>th</sup>, Paragon employees helped to pull out a truckload of plastic and other garbage out of the central pond and Gray's Marsh.

Perhaps someone would like to liaison with the businesses to introduce PWA and form more of these types of partnerships!

## Docent Development News

## Anne Taylor, Docent Chair

Thanks to the great article by Clark Miller in the Argus Courier, right before our Docent Training started, we now have 18 new docents, most of whom want to participate in the school program. They are truly a breath of fresh air because many of the previous school docents are no longer participating. Many are retired teachers.



### **"Docent Graduation"**

Photo of new docents,  
plus at far-left Docent  
Development Chair  
Anne Taylor and  
Director of Parks and  
Rec Drew Halter

The trainees learned about all the activities that PWA does, basic wetlands science, our bird research, and many other topics. They went to Shollenberger Park for a history and bird walk. they learned about the school program by experiencing the activities that the third graders do.

The final session or "graduation" included a few lessons, followed by a celebration with the current docents. Petaluma Director of Parks and Recreation, Drew Halter, presented the new docents with certificates, and PWA gave them PWA name badges and hats.

Since then, most are volunteering for PWA.

The new docents are: Gail Abrams, Carole Barlas, Squirrel Booth, Nancy Coulson, Carolyn DiGiuseppi, Susan Garbini, Justine Frazier, Anne Halley, Cindy Mathiesen, Steve Miyano, Dave Poteracke, Barbara Ramirez, David Sandri, Cathleen Springer, Jill Stephens, Jim Stephens, Jeff Weiss, and Keith White.

## PWA School Program News

Last winter when it was time to plan the Spring school program, we were experiencing a "triple-

demic”. It was decided that it would not be safe to be close to the third graders in their classrooms. Instead of doing a PowerPoint presentation and four 15-minute activities, there would be a presentation and a few demonstrations about birds – beaks and feet and feathers.

Later it became clear that there were not enough experienced docents available to do a full program and to train the new docents. Therefore, only four classes were selected for this year’s program. On a Monday two docents visited a classroom for PowerPoint slide show and demonstrations. The next day that class spent three hours at Shollenberger Park doing the regular activities, a bird walk, a habitat (nature) walk, and analyzing owl pellets. Two new docents assisted the experienced docents with each activity. We hope that in the Fall we will be able to have the “normal” program, and the new docents will become ready to work on their own.

## **PWA Membership/Information Reports**

**Kathy Cherrstrom, Chair**

### **Membership as of 4/30/23: 138**

During the months of January through April, our membership has decreased from **164** members to **138** members.

### **New Members: (Individual/Family)**

Due to the larger than usual number of people who enrolled in the Docent Training Program in January 2023, we added 18 (eighteen) new members. This resulted in a net total of 138 Members. This helped to offset the decrease in Membership.

### **Members Who Haven’t Renewed as of 12/31/22 - 44**

Thirty-Eight (38) members have not renewed. We will contact those members to ask if they would like to renew.

### **Park / City Events**

In February, I attended and gave a short presentation at the Docent Training for new members. It was well attended by many of our new and current Members.

Jerry Taylor, Mary Kadri, and I met at the Red Barn where a City event was being held. The Mayor was in attendance with whom we talked about our organization.

In March, Jerry, Mary, and I, along with several PWA members, met at the Fish Hatchery for a tour of the facility by the United Anglers (Casa Grande) students. It was very informative.

Jerry and I went out to Shollenberger Park for Membership drives in January, February, March, and April 2023. This resulted in a couple of new memberships (1 Family and 1 Individual).

Attended the monthly Team Leadership meetings at Lucchesi Center.

Met with Mary Kadri in late March to review the Membership Chair roles and responsibilities.

### **Future Events**

Jerry & I are planning Park Events for the months of April, May, and June 2023.

We will have sign-up sheets for Members who would like to volunteer out at the Park.

**Lifetime Memberships** have been approved by the PWA Board.

**Individual** - \$600.00

**Family** - \$1,000.00.

## Information Chair - Donations Received as of 4-30-23

<b>2022 &amp; 2023 1st Quarter - Dona2ons Received*:</b>	<b>\$3,192.00</b>
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**\*Includes donations for Al & Andy's Benches**

### *Local Third Graders Learn About Wetlands*

*Mary Kadri*

The PWA education program is finally up and running again, after a long hiatus due to Covid. Although the spring program is smaller than in years past, we are building it back up to where it was, so that eventually all Petaluma 3<sup>rd</sup> grade classes will have an opportunity to experience it! I was one of the three “shadow” docents in the Monday classroom session, so that I could watch a couple of experts in action, Nora Pearl and Boyce Quinn. The “shadows” will help build capacity for the fall, when they will then take on a classroom presentation.

Nora and Boyce held the students’ interest for an hour and a half, as students cupped their hands to understand what a watershed is: how the rainfall on the uplands, at the top ridge of their hands, “sheds” its rain down into the wetlands at the bottom, which absorbs some of the water like a sponge, and some of which eventually flows into the Petaluma River, where their hands meet. They learned how birds repair separated feathers by means of microscopic “velcro” that can stick the feathers back together so that air doesn’t go through, and the birds can fly well again. The students gasped when Nora brought out the entire set of intact feathers from a turkey! They were very engaged and had many questions. Boyce and Nora expertly gave a variety of students a chance to speak, but also asked at times for students to wait a moment until they finished. That was important in order to get through all the material! At the end, the “check for understanding” process that all good teachers end with, showed that students were able to call out the correct answers to all of the questions. Students were clearly primed and excited to visit Shollenberger the next day. And I felt excited to be with them again, as they were so eager!



The next day I met back up with the same class at the park, and the student engagement continued. They learned to use the binoculars for the bird walk, excited about seeing the diving ruddy ducks with their blue beaks, a black-necked stilt hunting and one sitting on a nest, and even the red-winged

blackbirds that were so close and easy to see. They tasted pickleweed, learned about swallow nests, spotted a turtle on their habitat walk, and dissected owl pellets, which was a popular activity.

Thank you to all the leaders and docents who make this valuable program possible!

## **PWA Monitoring Program**

## **Len Nelson, Research Chair**

There are approximately 15 Barn Owl houses in Ellis Creek plus one in Shollenberger. Each year, in late October, PWA members clean them out to prepare them for the coming season.

The contents of each house is weighed and then disposed of. However, since 2020, one house, that by Pond B in one of the two large Eucalyptus trees there has a camcorder in it. So, it is possible to observe if there are any Barn Owls in it and whether they have chicks or not. Prior to then, we dissected the content of this house at the end of each season so we could determine the number of creatures the owls had consumed in the course of one year but we had no idea as to how many chicks were produced.

But we know that in 2020 8 eggs were laid and 5 chicks hatched and fledged.

In 2021, 5 eggs were laid and 4 chicks hatched and fledged. The average weight of the two nests was 10.5 pounds and the average number of creatures that were consumed was 855. This latter consisted of voles (number one), gophers, mice, birds and then some minor numbers of moles, rats, and shrews.

Then, in 2022, the Barn Owls laid 8 eggs and 7 hatched and fledged. At year's end, we cleaned the house out and weighed the debris and it came in at 18.95 pounds. About double that of the prior 2 years! The debris still needs to be dissected and the skulls and mandibles in it sorted by species. The weather has been wet and cold up until very recently, so this project has been put on hold, But it needs to be done. If helping with this project would interest you, let me know. It takes a team effort to accomplish it!

Now, we are in 2023 and it was with great expectations that the Barn Owls in the camcorder house were observed. On March 18, 2 eggs were seen and then 5 ten days later. On April 16th, one chick hatched. Things were looking positive! In prior years though, the female could be seen having rodents delivered to her while she cared for the eggs and chicks but this year that did not happen. No food offerings were seen being delivered or left behind. Three days later, on 4/19, the live chick was no longer seen and then the owl stopped incubating the other eggs and distanced herself from them. Sadly, the effort had been a failure. It appears reasonably clear that the female Barn Owl simply could not raise chicks on her own and had to act to preserve herself. Why the male did not do his part is anyone's guess, but the most likely guess is that it had met with a fatal outcome itself and could not do its good duty.

Barn Owls are capable of producing up to three egg clutches a year. Perhaps she will find another mate and try again or perhaps another Barn Owl will move into this box and do so. But there are 15 other boxes to choose from so there is also a chance that we will not be graced with a Barn Owl family to witness its development this year. We shall see.....or not.



**MAY 6<sup>TH</sup>**  
**PETALUMA SPRING  
FEATHER FEST  
FOR KIDS**

**Celebrate the Spring with kids birding**

Come join us for the annual Petaluma Spring Feather Fest for Kids; a half day of birding designed for kids ages 6-12.

At 9:30 A.M., we will go birding in teams of six kids each accompanied by experienced adult birders. We'll identify birds and observe their natural behavior in the Petaluma Wetland habitats. (Binoculars will be available to borrow.)



*Meet at Petaluma's  
Shollenberger Park  
at 9:30 A.M.*

*Dress warmly.  
Bring binoculars and  
field guides.  
Parents must  
accompany their kids.*

**This is a free event!**  
A pizza party will follow our  
bird walk.

Register your kids by  
May <sup>3rd</sup> by contacting  
Sheryl Nadeau  
707-318-6760 or by email  
at [33sheryln@gmail.com](mailto:33sheryln@gmail.com)

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Petaluma Wetlands Alliance  
[Petalumawetlands.org](http://Petalumawetlands.org)

## **Salinity in our Wetlands – A Report by Keith White, May 1, 2023**

I have wondered about water sources for our wetlands: rain, river flow, stream flow, storm culvert discharges, and tides, and how they interact and fluctuate to produce different environments. Salinity plays a major role and since November 2021 I have monitored salinity in the Shollenberger central pond and various locations in and near Alman Marsh, finding wide salinity variations over space and time briefly summarized below.

### **Shollenberger Pond**

The Shollenberger central pond's inflows and outflow are normally only via rain and evaporation. (Communing with the heavens?) However, it contains salt in the mud and water due to deposition of dredging spoils most recently in 2020. This salt is diluted by heavy winter rains leaving a full pond with low salinity measured as 7 parts per thousand (ppt), one fifth of ocean salinity, both after the big late October rains in 2021 and again after the recent December 26 through January 15, 2023, atmospheric river rains. Otherwise, the two years differed. After the first week of January 2022 rains were meager, the pond shrunk via evaporation, and salinity reached 27 ppt on February 4 and 89 ppt May 12. The pond dried up by late September with dried mud partly covered by salt crystals and what may have been pink algae. In early 2023 after the atmospheric rivers, rains persisted to the end of March. The pond remained full with minimal evaporation in cooler than normal weather, and salinity reached only 8 ppt on March 17 and 9 ppt on April 15.

### **Petaluma River and Tidal Channels Plus Pools in and Near Alman Marsh**

In July 2022 through April 2023, I monitored salinity in the river and in flowing tidal channel locations at a bridge over the large tidal channel near the Sheraton Hotel, at another bridge over a second tidal channel further downriver, and at two tidal locations on lower Adobe Creek, near the bridge close to Shollenberger Park and more upstream by the trail junction. Over this entire period river and channels all had essentially the same salinities: slightly below "ocean salinity" (35 ppt) in July 2022: at or slightly above ocean salinity August into fall, falling to ocean salinity or slightly lower by late November, dropping to zero after the December-January atmospheric rains, and rising only a few ppt by late April (but remaining zero in Adobe Creek with its flowing fresh water). While the two Adobe Creek sampling locations experienced essentially identical salinities, only the slightly downstream location has typical salt marsh vegetation. The reason is unclear and might be clarified by more intensive sampling over a wider range of conditions. Or lack of flat low-lying terrain adjacent to the creek at the upper location might hinder establishment of salt marsh vegetation which is favored by relatively flat areas intermittently but reliably inundated by saline water.

Thus, the overall salinity range in both river and tidal channel locations was zero to slightly over 35 ppt (ocean salinity) which is a significantly wider range (low and high) than river salinities reported by some sources.

I also sampled a number of pools reached only by very high tides, mostly located at upper ends of conspicuous tidal channels but including some pools in expanses of pickleweed without conspicuous tidal channels. Especially in summer and fall 2022 when salinity was high overall, the pools often had high salinities of 45-60 ppt, well above river and channel salinities, reflecting high evaporation before being flushed by the next very high tides. Samples taken at or close to very high tides (7 feet and above) had the same salinities as the river and channels, due to flushing by the very high tides. From December 2022 through April 2023 salinities in the pools were substantially less elevated over those in the river and channels, presumably due to lower temperatures and slower evaporation in cooler than normal conditions.

## PWA Board

President	John Shribbs
Vice-President	vacant
Secretary	Susan Kraemer
Treasurer	Jerry Taylor
PR/Outreach	Mary Kadri
Docent Development	Anne Taylor
Education	vacant
Research	Len Nelson
Maintenance & Restoration	John Richards, Craig Cherrstrom
Membership & Information	Kathy Cherrstrom
Electronic Medea	John Shribbs
Member at Large	Keith White
Member at Large	Stephanie Sanchez