

Land of the West Wind

Volume 18 Issue 2 July 2018

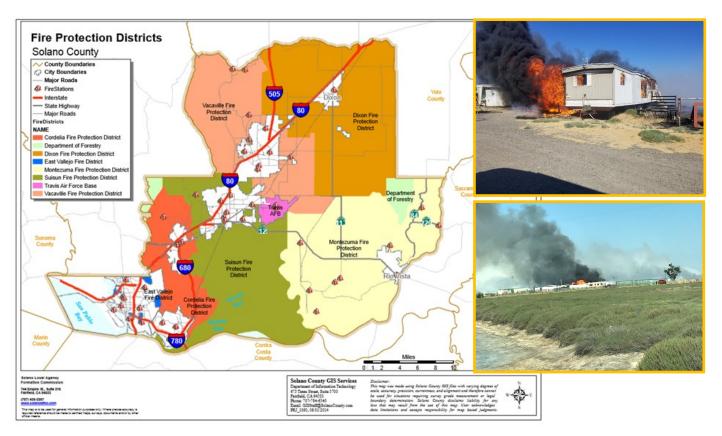
Fire in Suisun! By SRCD Staff

Fire has far reaching and profound impact on wetland ecosystems. Under correct conditions, fire can be used to reset plant succession, control invasive plant species, and cycle nutrients in the soil. There are both spring and fall seasons for controlled burns in Suisun Marsh, and many duck club managers still put on waders and spend hours of painstaking labor torching overgrown marsh plants. However, there has been a decrease in controlled burns in marshland over the last few decades. An increase in air quality initiatives, conflicting science, and more frequent droughts have helped make fire less popular as a management tool. Does this mean that fire has no place in the future of wetland management? Not by a long shot. There is increasing consideration that fire may be the most effective way to control particularly aggressive invasive plants such as phragmites. Despite the benefits, the risk associated with burning in peat soil is significant.

"[Peat] fires are characterized by having a significantly greater thermal time compared to fine fuels like foliage. The persistent smoldering of thick fuels is typically observed for a few days after a flaming wildfire has passed" - Guillermo Rein -Professor of Fire Science at Imperial College, London.

In recent years, controlled burns in Suisun marsh have operated smoothly, but accidental fires still occur. The fire shown below burned a significant portion of The Marsh Club on June 24 and 25, destroying buildings and marsh infrastructure in the process. The cause appears to have been an electrical failure—creating the sparks which ignited the blaze. There have been three major structure fires in Suisun Marsh in the last year, and many of the older clubhouses, memorabilia, and associated Suisun Marsh history has been lost forever.

Although we can never entirely prevent these unfortunate accidents, we can take steps to be prepared. Please see our emergency preparedness guide on page 3, and the map of fire districts below to find out which district your property falls under, and what steps you can take to help responders reach you more quickly.



Land of the West Wind

Quarterly newsletter of the Suisun Resource
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SRCD's public meetings are held at 2 PM on the second Wednesday of each month at the Solano County Supervisors Chambers 675 Texas Street, Fairfield, CA 94533

SRCD represents private landowners of the Suisun Marsh at the Federal, State, and local levels. Its historic goal has been to achieve a water supply of adequate quality so that preferred wetland habitat values will be retained through appropriate management practices. Through cooperation with landowners and various agencies, SRCD seeks to develop new programs aimed at protecting and improving the Suisun Marsh for future generations.

Tidal Elevation and Growth of Wetland Plants

By: John Takekawa, Suisun Resource Conservation District

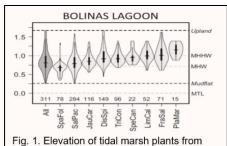
Along the Pacific coast, tidal salt marsh plants grow at different elevations. The elevation where they are found in marshes is related to their ability to withstand being submerged in a saltwater environment. In a cooperative study led by the U. S. Geological Survey, we examined the elevation of tidal marsh plants at a dozen marshes in California, Oregon, and Washington (Janousek et al. 2018, Estuaries and Coasts—see the SRCD website under References).

Tidal ranges along the coast vary by several feet from Mexico to Canada. The tidal range at each marsh depends on several factors related to its location. To examine where plants were growing in these marshes, we conducted surveys at hundreds of locations from mudflat to upland, and we measured the elevation at each with a GPS survey unit accurate to within 1-2 inches.

Our results indicated that tidal elevation (height) was more important than latitude (south to north) in determining the presence of plants, but common species often overlapped. Their area of occurrence or "niche breadth" varied across marshes, but elevation was very helpful in explaining their presence. Plants often were ordered consistently in an estuary from low to high marsh (Figure 1) with species such as Pacific cordgrass (*Spartina foliosa*) found at the lowest elevations and sea plantain (*Plantago maritima*) at the highest (Figure 2). You may have seen similar plant distribution in your managed wetlands based upon water depth.

As future sea levels rise and increase tidal ranges, plant communities will shift because of changing inundation and salinity. While many tidal marsh plants tolerate a range of elevations, some species such as Baltic rush (*Juncus balthicus*) and silverweed (*Potentilla anserina*) have narrow ranges (Figure 2) and may be lost to changing sea levels.

(Janousek, C.N., K. M. Thorne, and J. Y. Takekawa. 2018. Vertical zonation and niche breadth of tidal marsh plants along the northeast Pacific coast. Estuaries and Coasts. *In press.*)



mudflat to upland at Bolinas Lagoon. Species include Pacific cordgrass Spartina foliosa, pickleweed Salicornia pacifica, jaumea Jaumea carnosa, salt grass Distichlis spicata, slender arrowgrass Triglochin concinna, spurrey Spergularia canadensis, sea lavender Limodium californicum, alkali heath Frankenia salina, and sea plantain Plantago maritima.



Fig. 2. Clockwise from upper left: Pacific cordgrass Spartina foliosa, Baltic rush Juncus balthicus, silverweed Potentilla anserina, and sea plantain Plantago maritima.

911 Location Services and Cell Phones

For most of us, a cell phone is almost always an arm's reach away. Accessibility to emergency services is greater than ever before, but unfortunately, calling 911 is not always as effectives as we think.

"While wireless phones can be an important public safety tool, they also create unique challenges for emergency response personnel and wireless service providers." - FCC consumer guide for wireless services.

Wireless phones are mobile, and therefore not associated with one fixed location or address. According to the Federal Communications Commission:

"While the location of the cell site closest to the 911 caller may provide a general indication of the caller's location, that information is not always specific enough for rescue personnel to deliver assistance to the caller quickly."

(911, Continued from page 2)

It is worth noting that most landowners have cell phones with area codes outside of the Marsh, and therefore area codes will not help emergency responders. The unreliability of cell phone location services and the lack of comprehensive location information is not infrequent. According to a USA today article:

"In California, more than half of cellphone calls didn't transmit location to 911 from 2011 to 2013"

This shortcoming of cellular devices is often overlooked, but it makes it all the more important to know where you are if you find yourself in an emergency situation.

Suisun Marsh is in a unique situation due to relative distance from emergency dispatch centers and the many slough channels and waterways that sometimes make the route or routes for responders to arrive circuitous and confusing. It took more than thirty minutes for fire trucks to arrive at the recent fire on The Marsh Club, and close to an hour for the fire on Gum Tree Farms last year.

For these reasons, SRCD recommends that members keep the Latitude and Longitude of their properties (decimal degrees) and accurate driving directions on hand in order to aid first responders. (See the emergency preparedness list and emergency contact cut-out below)

If you wish to know the GPS coordinates of the main structures ie. Clubhouse on your property in the Marsh, call SRCD Water Managers office to help you record your locations:

Phelan McKinney—(707) 426-2431 ext. 300 Tim Edmunds—(707) 426-2431 ext. 302 Jeff Taylor—(707) 426-2431 ext. 301

Safety Preparedness

By SRCD Staff

Sometimes things go wrong. Trees fall, levees fail, a car drives into a ditch. There have been three fires in the Marsh in the last year, and none were caused by carelessness or mistake. We can take steps and precautions to lower the chances of accidents and mishaps, but there is no way to thwart bad luck. We can never entirely remove the possibility of tragedy, and so it is important to be prepared should disaster strike.

SRCD encourages its constituents to keep information on the location of clubhouses, the nearest emergency centers, and a list of who to call if something goes wrong. Solano County offers an emergency alert system called Alert Solano. The system allows public safety officials, such as the Solano County Sheriff's Office and fire department, to send out a message about a potential safety hazard or concerns. Those who have registered for Alert Solano receive warnings including road closures, natural disasters, and severe weather alerts.

"Alert Solano allows us to send important messages to you through the convenience of your email, cell phone and text messaging, giving us the ability to let you know about incidents and emergencies that may affect you – as they happen." says Don Ryan, Solano County's Emergency Services Manager. If you would like to register for alert Solano, you can visit: www.solanocounty.com/depts/oes/alertsolano/.asp

SRCD is in the process of acquiring an Automated Electronic Defibrillator (AED) to be stored at the SRCD office, and brought to events. You never know what might save your life. Each club should consider purchasing one for the club-house.

Emergency Preparedness (Post on Clubhouse Wall):

- 1. Pre-program emergency numbers into your phone
- 2. Save coordinates and directions to your clubhouse and include places to meet emergency services (for coordinates, see Google Earth or call your water manager)
- 3. Know location of nearest first aid kit and automated external defibrillator (AED).
- 4. Locate your nearest hospital or clinic and record directions.
- 5. Register for Alerts on Alert Solano (www.alertsolano.com)
- 6. Enter coordinates, cut out, and laminate for your wallet!

Suisun Marsh Emergency Contacts Club# Lat: 38. _ _ _ Lon: 12 _ _ Solano County Sheriff Dispatch 707-421-7090 Benicia Police Department 707-745-3412 Fairfield Police Department 707-428-7300 Suisun City Police Department 707-421-7373 Suisun Fire Protection District 707-425-3605 Cordelia Fire Protection District 707-864-0468 Montezuma Fire Protection District 707-374-5962 Solano CountyAnimal Control 707-784-4733 Poison Control 800-222-1222 U. S. Coast Guard 415-399-3547

Suisun Conservation Fund's 15th Annual

Shoot and Social Fundraiser

Sporting Clays Shoot, Steak BBQ, Raffle, and Auction
All proceeds to benefit SRCD Landowners





Friday, July 27th, 2018 @ 9:00 AM

Birds Landing Hunting Preserve and Sporting Clays

2099 Collinsville Road, Birds Landing, CA 94512

Cost \$75.00 per Person

The organizing committee is actively soliciting volunteers, donations of cash, auction, and raffle prizes.

For more information contact: SRCD @ (707) 425-9302 or SRCD@SuisunRCD.org, Bill Brush @ (925) 831-6238, Bud Tonnesen @ (707) 688-0957

Please RSVP on the form sent previously, by email, or to the evite sent to your email

Please RSVP by Monday, July 23
Pay with check, cash, or credit card before or at the event

SRCD Water Manager's Update By: SRCD Staff

Work season is well underway, and many of our SRCD programs are wrapping up as we shift our focus from permitting to reporting. Clubs that participated had a successful pest plant control treatment on July 10th, and now our Lepidium and Phragmites programs have concluded.

Diversion Reporting for the California Water Board was due July 1st. The SRCD water managers provided assistance to many landowners during the process of filing, but there is still more work to do. If you have questions regarding amendments or filing for previous years, please contact the water manager office.

Water Manager Office: (707) 426-2431

This year saw a major increase in participation in the Preservation Act Implementation (PAI) grant, and the program will continue next year as well. If you have not yet upgraded your water control infrastructure to HDPE pipe and stainless-steel gates, this may be your best chance.

Entering the late summer months, it becomes important to think about a flood up schedule for early fall. The sooner you coordinate with your water manager, the smoother fall flood up becomes.

Your water managers remind you to take photos during construction of any exterior levee work for environmental reporting.

- Thank you,

The SRCD Water Managers

SRCD's Fall Marsh Landowner Science Workshop

5th September 2018, Wednesday, 8AM-4PM
F P Smith Parts & Equipment, 3190 Ramsey Road,
Fairfield –94534
Hosted by the Suisun Resource Conservation District
Supported by the Suisun Conservation Fund

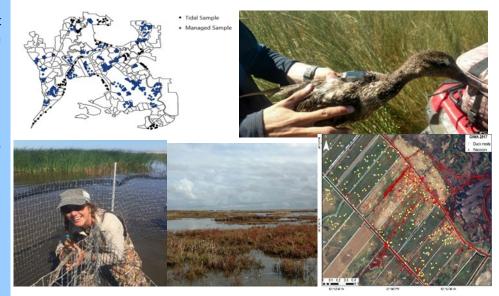
Science to Support for Habitat Management in Suisun Marsh

The Suisun Resource Conservation District is pleased to host a special 2018 fall landowner workshop, supported by the Suisun Conservation Fund, to present results of ongoing scientific studies supporting the understanding and management of Suisun Marsh.

We will have 1-2 invited special guest speakers including Dr. Karin Kettenring from Utah State University who will discuss invasive Phragmites ecology and control.

Talks on Suisun Marsh studies will include waterfowl diets, breeding ducks and their predators, movements of satellite-tracked birds, shorebird surveys, and habitat management. Discussion sessions, coffee breaks, and lunch will be included.

Please come and join us on the 5th of September for an entertaining science workshop.



Historical Perspective: Lower Joice Island By Phelan McKinney, SRCD Water Manager/Biologist Taken from the notes of Mr. James Bancroft, Previous Owner



Lower Joice Island is one of the oldest duck clubs in Suisun Marsh. It has changed drastically over the last century in terms of habitat, management practices, species distribution, and number of waterfowl harvested. Despite all these changes it has remained consistently hunted. Lower Joice Island now stands as both an example of the vicissitude associated with tidal wetlands, and a testament to the accomplishments of tenacious and passionate duck hunters and wetland managers.

While not everything is known about Lower Joice Island, examining the history we do know gives insight to new hunters like myself what the earliest days of waterfowling may have been like in brand new managed wetlands.

For hundreds if not thousands of years prior to the creation of levees, the area including Lower Joice Island is thought to have been used as a tribal hunting ground for Tule Elk, waterfowl, and other game by the Suisun Indians. Considering this, our records span only a tiny portion of the history of Lower Joice Island. We know that in the late 1870s, landowners began to build levees to "reclaim" tidelands. The original levees were built by hand labor, and although we now use dredges and excavators, the levee work continues to this day. Unfortunate-

ly, all early records in the clubhouse were destroyed by fire in 1906—an interesting coincidence as it was not associated with the San Francisco fire and earthquake that same year. All that remains recorded from before the fire is a silver goblet was engraved with the words "Joice Island Gun Club – 1886".

In 1902, the creation of Hunter Cut separated what would become Lower Joice Island from the present Joice Island Game Refuge to the north. Arthur Goodall purchased the island in 1902 and formed (or continued) the Joice Island Gun Club, managing the club until 1952. SRCD acquired the property in the year 2000, but there were many member owners along the way.

Historically, most hunting members of the gun club lived in San Francisco, and it was a significant trip to get into the

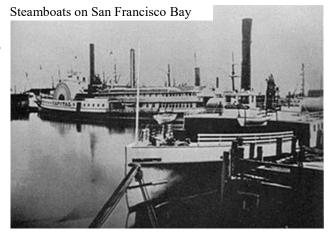
marsh to hunt. Before the automobile and paved roads, members would ferry from San Francisco to Oakland and then take the train to Pierce Harbor. From there, the club launch would carry members and their guests from pierce harbor to the clubhouse. The return journey was about the same, although it usually included fifty or more pounds of dead ducks, and sometimes included a hangover.



Even the journey from the clubhouse to the blinds was not as simple as it is today. Before the present internal boat ditch system was created, on shooting day each hunter would be taken by launch from the clubhouse to one of several Suisun Slough landings. The hunter would load his bag of decoys into a wheel barrel and push it along a 12 x 2 boardwalk, trying not to trip over his eager retriever. From the end of the boardwalk he would pull along the route to his selected blind in a "tule splitter". In the pond near his blind or chosen tule stool location he would arrange the decoys, hide the boat, and proceed to collect a limit of 50 ducks. (Later this would become 25 ducks).

The return trip from the pond to the launch landing was even more challenging because even 25 large ducks could add more than 50 pounds of weight to an already overloaded tule splitter or wheelbarrow. On cold days, ice on the boardwalks was slippery, but undoubtably the frigid waters the hunters crossed inspired caution.

The old boardwalks were abandoned when the ditch system was developed around the 1950s. Since then there have been no Slough landing sites, no wheelbarrows, and no tule splitters. The island gradually grew into something entirely different than the environment that the early hunters were shooting waterfowl in. The island has since changed from a natural marsh of high ground



surrounded by tidelands to about 1,000 acres behind levees and 300+ acres of tidelands outside the levee system. The island's interior from the late 1800s until about 1985 was managed as a year-round deep-water marsh. Today it is managed more as a seasonal and semi-permanent marsh with the benefit of infrastructure.

We can learn from the past, and while the ecological future of Lower Joice Island is a complete topic on its own, but it is one only made possible through the rich history and hunting heritage that the island enjoyed in the past and retains today.

Water Quality Improvement Field Testing Study Giving Positive Results By: Stuart Siegel Principal Environmental Scientist, Siegel Environmental

SRCD is a lead partner in field testing water quality improvement strategies aimed to address low dissolved oxygen problems in Suisun Marsh's tidal sloughs that occur during the fall months mostly around flood-up time before hunting season starts. This work is funded by a grant from the U.S. Environmental Protection Agency (nearly \$900,000) with an equivalent amount of matching funds provided collectively by SRCD and all the project partners. The study is focusing on Peytonia and Boynton sloughs where problems have been most prevalent in the past. The study's intent is to find a suite of "best management practices" for club operations and for coordinating timing of water operations among all clubs along these two sloughs, including optimizing use of treated wastewater from the Fairfield-Suisun Sewer District.

Fall 2016 and fall 2017 saw intensive efforts working with the clubs along Peytonia and Boynton sloughs to identify and implement on-the-ground efforts for improved club operations and management and collect an array of field data. SRCD worked closely with all seven clubs along these two sloughs to understand and coordinate all the flood-up operations, help prepare for club improvements where they could be implemented in 2016 and 2017 (the grant provides funds to help for these improvements), install and operate water quality monitoring stations in the sloughs and clubs, and collect more water quality samples than anyone dares to count. Project partners have provided significant support in all this work. FSSD provided logistical support for all the water quality sampling. The Regional Water Quality Control Board has been providing field staff, monitoring equipment, and laboratory analysis as well as logistics support and quality assurance. EPA has been providing laboratory analysis. Consultants Tetra Tech, Siegel Environmental, and Bachand Associates have been providing field staff, monitoring equipment, and more logistics coordination than anyone imagined. The Department of Fish and Wildlife has been helping support the monitoring equipment, as has the National Estuarine Research Reserve (of which Rush Ranch is one of its Reserve sites).

For 2018, we will be implementing the last of the club best management practices during the summer, working with FSSD which is upgrading its Boynton Slough electric tide gate equipment for more flexible operations, and doing the final round of water quality monitoring in the fall. Once done, the project team is shifting into its data analysis and reporting stage. Look for new updates at the April 2019 Annual Landowners meeting.



Resource Conservation District

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Address Correction Requested

CUT AND MAIL THIS PORTION	
I would like to RSVP for the SR 2018.	RCD Annual Landowner Workshop Sept. 5,
**Please remit to: SRCD @ 2544 Grizzly Island Rd., Suisun, CA. 94585	
Email or call Kelli Perez (<u>Kperez@sui</u> Phone: (707) 425-9302 (ext. 6)	isunrcd.org) to RSVP
Name:	
Phone:	- -
Name:	Club #
Phone:	