



Land of the West Wind

Volume 17 Issue 4

December 2017

Grizzly Island Wildlife Area Waterfowl Harvest Update

By: Orlando Rocha, CDFW

Opening weekend for our hunters was outstanding, we held our own against some of the larger Valley hunt areas and our averages for opening weekend were up considerably; 4.60 Saturday and 1.97 on Sunday. The average was up from the previous year a 1.66 in 2016/17 to a 4.60 this year; we actually had less hunters opening Saturday but shot more birds than in recent history. We have not seen numbers like this since before the drought period and the last time we had opening day averages over a 4-bird average was back in 2006/2007.

A quick overview shows us that there were more mallards shot this year than last, which is due to improved nesting conditions of course due to the heavy rains we received in the winter and spring. The top five birds of both seasons are relatively consistent: northern shoveler, green-winged teal, mallard, American wigeon and gadwall. Total numbers for opening weekend during the last 2 seasons are summarized on page five. After opening weekend averages have fallen due to the familiar November doldrums, but

(Harvest Figures on pg. 7)



An Abundance of Scientific Projects in Suisun Marsh

A large number of exciting research studies are currently ongoing in Suisun Marsh. Studies by UC Davis, USGS, California Department of Fish and Wildlife, Department of Water Resources and many other partners are yielding impressive results, and are likely to reveal much more information in the next few years. There was by no means enough room to include all the information that may affect those who enjoy the bounty of waterfowl in the marsh, but a few of those studies are described here. Also, some of the researchers are looking for club participants and may be in contact for your help.

Wintering Ecology of Diving Ducks in Suisun Marsh

By: Susan E. W. De La Cruz, PhD

USGS Research Wildlife Biologist

The USGS San Francisco Bay Estuary Field Station is currently evaluating diving duck wintering ecology in Suisun Bay and Marsh. The San Francisco Bay-Delta region is particularly noted for its importance to diving waterfowl that forage on invertebrates and plant material in sediments. Scaup (both greater and lesser - *Aythya marila* and *A. affinis*), surf scoters (*Melanitta perspicillata*), canvasback (*Aythya valisineria*), and ruddy duck (*Oxyura jamaicensis*) are among the most numerous diving waterfowl wintering in the estuary. Scaup and other diving ducks are abundant in Suisun throughout winter, with peak mid-winter counts reaching as many as 68,000 or 57% of all scaup in the Bay-Delta region.

Previous work has demonstrated exchange of diving ducks between Suisun and other Bay-Delta sub-bays; however, what drives movement among sub-bays and habitat use within Suisun itself is unclear. In addition, little is known about food quality and availability for diving ducks using Suisun. Given diminishing freshwater flow, sea level rise,

(Wintering, cont. on pg. 2)

Land of the West Wind

Quarterly newsletter of the Suisun Resource
Conservation District
Address: 2544 Grizzly Island Road
Suisun, CA 94585
Telephone: (707) 425-9302
Fax: (707) 425-4402
Water Manager office: (707) 426-2431
E-mail: srkd@suisunrcd.org
Website: www.suisunrcd.org

SRCD Staff

Steven Chappell, *Executive Director*
John Takekawa, *Operations Manager*
Kelli Perez, *Office Supervisor*
Tim Edmunds, *Biologist/Water Manager*
Phelan McKinney *Biologist/Water Manager*
Jeff Taylor, *Biologist/Water Manager*
Marque Mouton, *Caretaker LJI*

Board of Directors

Tony Vaccarella, *President*
(650) 365-1642
Terry Connolly, *Finance*
(707) 422-6700
Arnold Lenk, *Agency Relations*
(925) 284-3100
Jim Waters, *Legal*
(510) 409-3864
Mike Lewis, *Personnel*
(707) 224-3824

Associate Directors

Dennis Becker
Kurt Black
Bill Brush, *PR*
H. Kent Hansen

Directors Emeritus

(*deceased)
James Bancroft
Paul Crapuchettes*
Ray Lewis*
Dr. William Coon*
Greg Palamountain*
Timothy Egan*
Leland Lehman*

**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.

Wintering Ecology of Diving Duck, Continued:

and planned tidal wetland restoration, information is greatly needed to improve our understanding of diving duck ecology in Suisun and how projected habitat changes may influence them.

Our study is designed to evaluate diving duck use of Suisun Marsh and Bay with the ultimate goal of identifying management and restoration regimes that may benefit these species.

This five-year study will complement work being conducted by the USGS Western Ecological Research Center, Department of Water Resources, and UC Davis on dabbling ducks in the Suisun region. The primary objectives of the diving duck project are to:

- 1) estimate abundance and distribution wintering diving ducks in Suisun Bay and Marsh
- 2) evaluate habitat use in Suisun Marsh and Bay as well as regional and migratory movements using GPS-GSM telemetry
- 3) assess temporal changes in diving duck body condition in relationship to prey and habitat availability, and
- 4) determine diet, prey availability and physical drivers of key prey types in managed and restoring wetland habitats



Photo credit: Donna Dewhurst - USFWS

To accomplish these objectives we will work at several sites around Suisun to capture and mark live birds, collect foraging diving ducks and



(Surf Scoter) Picture from DU

sample their invertebrate prey. We look forward to working with club owners to understand invertebrate prey that is available to waterfowl using their ponds. This work would be conducted in conjunction with UC Davis efforts to sample seeds in ponds. To minimize interference with hunting activities, all sampling will take place in a two-week

period in early November. With Landowner permission, collecting samples will be completed in one visit that will only last 2-4 hours, and we will work closely with all landowners to ensure we do not cause any disturbance. After duck season ends, we will resample these wetlands in the same way to estimate seasonal changes of these food resources.

Grizzly Island Wildlife Area (GIWA) Elk update

*By: Orlando Rocha,
CDFW Environmental Scientist*

Currently our elk population on Grizzly Island Wildlife Area is approximately 400 animals. Over the last 4 years we have seen calf counts sky rocket, 72 in 2014, 77 in 2015, 62 in 2016 and 48 in 2017.



Photo by Jeremy Todoroff.

What does this mean for our hunters?

In order to maintain a stable population we have increased tags over the last four years. Our hunters successfully harvested 48 animals in 2014, 58 animals in 2015, 79 animals in 2016, and 83 animals this past year. Next year, we will likely issue a few less tags since our calf counts have begun to stabilize, but there will still be plenty of tags to be issued to our hunters. We look forward to providing this hunting opportunity every year and having our hunting public assist us with our elk management.

Our herd is very healthy and all animals taken this season were in great condition. Winter and spring rains really provided great vegetation growth and plenty of feed for our herd. The elk have begun to roam a bit more than in years prior, which is probably due to the good habitat on surrounding landowners' property. If you have a club that adjoins our property you may be seeing more use from our elk, or maybe you are seeing elk for the first time on your property. If you are, we would like to know so please contact us here at the GIWA headquarters office, as we are interested in elk use outside of the wildlife area. 707-425-3828.

Managed Wetland Mosquito Reduction for 2017 Fall Flood Season

With the days growing shorter and the temperatures starting to cool, it is clear that fall is here. The Solano County Mosquito Abatement District (SCMAD) is completing its 87th year controlling mosquitoes for Solano County. Solano County is one of 48 out of the 58 counties in the State that experienced West Nile Virus activity in 2017.

The fall flooding of the Suisun Marsh began in August and continued thru October. The vast majority of duck clubs began flooding after October 1st. There were 2160 acres requiring larvicide treatments on duck clubs and there were 2471 acres



Dipper used to survey mosquito content in standing water

treated on CDFW property. Thank you to all club owners that participated in the 50/50 cost share program, signing and returning the Waivers to the SCMAD office. Again, we received very close to a 100% response this year. The continued communication and cooperation between Suisun Marsh landowners, Suisun Resource Conservation District and SCMAD is proving again to be a valuable tool in minimizing and managing mosquito populations within the Suisun Marsh and surrounding areas.

Wishing all a safe and plentiful hunting season!
-Richard Snyder,

SCMAD District Manager

Fond Farewell to Bruce Wickland: Welcome to New SRCD Staff



After 18 years with the Suisun Resource Conservation District Bruce Wickland has announced his retirement.

Bruce started as SRCD Biologist, became District Biologist in 2001, and has been Operations Manager since 2007. Prior to his work with SRCD he worked for 7+ years with the Department of Fish and Game and 6+ years with Ducks Unlimited.

“I leave with mixed emotions,” said Wickland. “The Suisun Marsh is a unique and wonderful place and I feel blessed to have spent most of my working life here. I will miss it but at the same time I am excited to start this next phase of my life. There are lots of hunting and fishing trips waiting for me now that I have more time! Many thanks to all who have

helped make the last 18 years such a pleasure.”

“I would like to personally thank Bruce for his 18 years of service with SRCD and his unwavering commitment to support the private landowners in the management and enhancement of the Suisun Marsh managed wetlands,” said SRCD Executive Director Steve Chappell. “Bruce can be proud that he will be leaving the Marsh waterfowl and wetland habitats much improve as a result of his many years of dedication and efforts to carry out the mission of SRCD. “ SRCD will be hosting Bruce’s retirement party, just after waterfowl season. I hope you can join us to help SRCD express our appreciation of Bruce’s years of service in protecting and managing the Suisun Marsh. More details on the date and location will be forthcoming.”



John Takekawa joined the Suisun Resource Conservation District as the new Operations Manager starting in mid November. John’s background includes leading waterfowl and wetlands projects for 33 years as a supervisory research biologist of the U. S. Geological Survey and U. S. Fish and Wildlife Service. He founded the USGS San Francisco Bay Estuary Field Station in 1995 focused on Bay Area waterbirds and their habitats and developed the program to support 30 full-time staff as well as numerous graduate students. For the past 3 years, John has been working on bird conservation projects for the National Audubon Society, and he was inducted into the California Waterfowler’s Hall of Fame in February. John has coauthored more than 200 peer-reviewed papers with many on waterfowl ecology, and his projects have included numerous partnerships on the Pacific

coast and internationally in several countries. John attended the University of Washington, University of Idaho, and Iowa State University where he studied canvasbacks for his PhD. He has lived in Vacaville for the past 26 years, but he was born and raised in Minnesota and remains a lifelong Vikings fan.

Phelan McKinney joined SRCD as a Water Manager in October. He is a recent graduate from University of California Davis with a Bachelors of Science in Wildlife and Fish Conservation Biology. Phelan has worked on sampling and banding projects for Ducks Unlimited, UC Davis, and California Waterfowl Association. He spent the last summer working at the CWA Hunter camps, and looks forward to spending many more years in the wonderful Suisun Marsh.



Waterfowl Tracking Continues in Suisun Marsh

By: Michael Casazza USGS

The Suisun Marsh Waterfowl Research Team continued field work in the spring, summer and fall of 2017. During the spring and summer, the team monitored 660 duck nests, mostly mallard and gadwall, and 41% of the nests hatched which is above average. Most duck nests were located within the Grizzly Island Wildlife Area, but private duck clubs also provide nesting habitat for ducks and 4 duck clubs generously provided the opportunity to search their upland habitats. We found 20 nests at Grizzly Fairview Farms, 14 nests at Gang Bang Duck Club, 9 nests at Bul-Rush Farms, and 3 nests at Marsh Club. 12 transmitters were attached to Cinnamon Teal hens on nest. Additionally, the team tracked survival of 142 ducklings within the wildlife area and surrounding participating duck clubs, to look at habitat use and associated salinity levels.

After the nesting season, the team then banded nearly 1000 mallard and gadwall ducks during their summer banding program using swim in bait traps on several of the duck clubs surrounding Grizzly Island Wildlife Area. These clubs included Balboa Farms, Dead Duck Country Club, and Grizzly King. Soon after summer banding, the field crew started trapping efforts to capture pintail, wigeon and mallards in order to mark them with backpack transmitters. We deployed 5 transmitters on mallards, 25 transmitters on wigeon, and 31 transmitters on pintail during our fall capture efforts. Detailed movement information on these birds can be found at USGS website (www.werc.usgs.gov).



New Staff Continued:



Marque Mouton is a United States Marine Corps veteran from Louisiana and the new caretaker of Lower Joice Island. Marque is an accomplished outdoorsman and a lifetime hunter and fisherman. He has experience as a hunting guide in South Louisiana's famed "Hollywood Club" on Pine Island, and recently worked as a charter captain running fishing and sightseeing tours in the Vermillion Bay and Lake Calcasieu estuaries of southwestern Louisiana. Marque has over ten years of experience in the oil and gas industry where he learned many of the skills that make him such a valuable addition to our SRCD staff.

Suisun Marsh Waterfowl Research Program: UC Davis Grad Students Search for Seeds

This fall, the Suisun Marsh Waterfowl Project initiated new efforts to assess waterfowl food abundance and to evaluate the diet and body condition of ducks in the Suisun Marsh. The study is being coordinated by the Department of Water Resources and the Suisun Resource Conservation District. Biologists at UC Davis and USGS are working together to gather critical information on the importance of managed wetlands for wintering waterfowl in the Marsh. Participation of a growing number of clubs across the marsh is helping to provide a much better understanding of how the Marsh plays a key role in supporting populations of wintering waterfowl.



Dan Smith collecting soil cores
Photo Credit: Matthew Falcon

Dan Smith, a PhD student at UC Davis, is examining the abundance of waterfowl foods in the Marsh—especially those in wetlands managed for moist-soil seed plants. Dan and crews from USGS have been collecting soil cores from numerous managed and tidal wetlands this fall. At the end of duck season, the crews will be out resampling these wetlands so that they can measure how much food was consumed by birds over the winter. The soil cores are taken back to UC Davis where they are washed, and all the seeds contained within them are identified and weighed. The information gathered from these soil cores will provide estimates of overall seed abundance for each wetland sampled, and in turn, these estimates can be extrapolated for the entire Suisun Marsh. By combining this information with analyses on the energetic values of seeds, along with other studies in the Suisun Marsh Waterfowl Project, we will develop a better understanding of how waterfowl utilize the Marsh, how many birds the Marsh can currently support,

and can assess the potential consequences of future habitat change.

UC Davis Masters student Jackie Satter is conducting a marsh-wide study of the diets and body condition of wintering waterfowl. She and her crew are collecting esophageal samples at the Grizzly Island Check Station and at a number of private clubs throughout the Marsh. This study is similar to one conducted nearly twenty years ago by Ed Burns (now with the Natural Resources Conservation Service, NRCS), but the current project is designed to include more duck species and to expand the number of sites and sample collections. Satter's work will provide updated reference material for waterfowl food preferences in the Suisun Marsh. By comparing this information to the data on food abundance and availability collected by Dan Smith, the project aims to help managers and duck club owners plan for plentiful, healthy overwintering duck populations in the Marsh. Satter will also compare her findings to Burns' data to examine how food preferences may have changed among species over time with the influences of long-term drought, varying weather patterns and salinity levels, and the expansion of tidal restoration efforts.



Jackie Satter examining a mallard esophagus

UC Davis,

The results of these projects will contribute to a better understanding of waterfowl food production in the Marsh, as ducks endure winter and transition into preparing for migration and the breeding season. This information will provide an assessment of the current condition of different waterfowl species throughout the Marsh, and will help managers and resource agencies plan for the most effective practices to maintain the productive waterfowl habitats, and the ducks that they support, for future generations to appreciate and enjoy.



Grizzly Island Waterfowl Harvest Update Figures:					
2017/2018 Opening Weekend Summary					
Date	Total Waterfowl Hunters	Total Ducks	Total Geese	Total Waterfowl	Average
10/21/17	341	1535	27	1569	4.60
10/22/17	143	273	5	282	1.97
Top Five Birds for Opening Weekend 2017/2018					
Bird:	Northern Shoveler	Green-winged Teal	Mallard	American Wigeon	Gadwall
Number Harvested	657	529	342	138	43
2016/2017 Opening Weekend Summary					
Date	Total water-fowl Hunters	Total Ducks	Total Geese	Total Waterfowl	Average
10/22/16	392	652	0	652	1.66
10/23/16	142	136	0	142	0.96
Top Five Birds for Opening Weekend 2016/2017					
Bird:	Northern Shoveler	Green-winged Teal	Mallard	American Wigeon	Gadwall
Number Harvested	273	208	203	29	31

The season is well underway, and you can find more refuge hunt results at the California Department of Fish and Wildlife website at www.wildlife.ca.gov

Land Of The West Wind
SRCD Newsletter

2544 Grizzly Island Road
Suisun CA 94585

Address Correction Requested



PRESORTED NONPROFIT
U.S. POSTAGE PAID
SUISUN, CA 94585
PERMIT NO. 124

Address Correction Requested

A Reminder to Hunters in the Marsh

Legislation signed last year will go into effect on January 1, 2018. New Ammunition regulations will include:

- It is no longer legal to import ammunition bought outside the state without first shipping it to a licensed vendor
- All ammunition sales or transfers be conducted through a licensed ammunition vendor

Please note! The new rules listed here do not include all the stipulations of the new laws.

More regulations go into effect in July, and again next year.

Take the time to find out more information and be prepared.

SRCD Update:

Reminder that Actual work performed reports are due on December 15th. If you are a landowner in the Marsh and you have not submitted your report yet, please find the time to do so. Call the SRCD office at (707) 426-2431 or contact your water manager.

Tim Edmunds - (707) 639-6689

Jeff Taylor - (707) 639-6690

Phelan McKinney - (707) 631-0819

tedmunds@suisunrcd.org

jtaylor@suisunrcd.org

pmckinney@suisunrcd.org