

# The Elusive "VELB" Seen at Mitigation Sites

Endangered Valley Elderberry Longhorn Beetles Spotted



A male VELB observed in June 2010. Photo by Michelle Boercker, River Partners.

ate spring and early summer 2010 marked a significant milestone for endangered species protection. While monitoring elderberry mitigation sites, our biologist, Michelle Boercker encountered several valley elderberry longhorn beetles ("VELB"). A male was sighted on May 18th, a female on May 20th, and a male and two females on June 2nd.

VELB sightings are exceedingly rare; many biology professionals only see a live specimen in a lab during their entire career.

"I felt like I had won the lottery," recalls Michelle. "The odds that I would actually see one were so low. In general, the USFWS recommends that VELB counting take place between February 15 and June 30. That is when flight period is most likely to occur. We at River Partners were extremely lucky to hit the right time period when they appeared at these particular sites by the Feather River."

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Sacramento River. Photo by River Partners staff.

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Flame skimmer. Photo by Michael Rogner.

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# Message from the Board Chair

By Irv Schiffman

### On the River with **River Partners**

n a relatively mild Saturday this past July, I joined about 50 paddlers on a River Partners canoe ride down the Sacramento River. River Partners began organizing these paddling excursions five years ago and my trip was the tenth one in the series. The trips are free community events in which participants provide their own canoes or kayaks and are prepared to paddle from six to 12 miles depending on the route. The rides are usually down the Sacramento River but they have gone down the Feather, Stanislaus, and Bear rivers as well.

Paddling the region's waterways provides an intimate experience with the great outdoors, a chance to know the river, to see how it sculpts the landscape and, perhaps equally important, a great upper-body workout. River otters and bald eagles are among the wildlife that have been spotted in and along the waterway. A more expansive learning experience takes place when participants disembark onto a site that is a River Partner's restoration project.

My excursion departed from the Drumheller restoration project, a 226 acre property which is part of the Sacramento National Wildlife Refuge and across from the old Princeton Ferry in Colusa County. River Partners started restoring the site in 2004. Once a failing prune orchard, it is now a riparian forest of sycamores, cottonwoods, black willows and valley oaks as well as fields of native grasses.

After some time on the swift flowing river we arrived at our takeout point, a newly acquired site called Willow Bend. River Partners purchased these 150 floodprone sloping acres so as to continue an existing riparian corridor. Here we ate our lunches while Tom Griggs, our senior restoration ecologist and Helen Swagerty, senior restoration biologist, discussed the ecology of the site along with plans for its restoration.

From the two scientists we learned that while dams on the Sacramento had modified the river system, at Willow Bend it is still possible to see natural processes at work. For instance, we observed how bands of willows captured the shifting sand and gravel during high river flows to build the gravel bar or beach on which we sat. We could see how the river was meandering westward and, looking upward, we could view how riparian plant succession had taken place across the restoration site.

Michael Rogner, a restoration biologist, discussed how wildlife is attracted to our restoration sites and detailed the particular birds that might be visiting Willow Bend. After lunch, Tom led participants on a walking tour of the site, pointing out its native and non-native flora.

These Saturday excursions are intended to familiarize community members with the work of the organization as well as invite paddlers to join us as a "River Partner." In the last five years over 500 folks have signed up for our canoe rides and we hope to continue these recreational and educational ventures for many Saturdays to come.



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### **Project Updates**

### **Living Wetlands Display at Merced County Fair**

River Partners
hosted a booth with
Old MacDonald's Farm,
an agricultural literacy
group that employs atrisk youth from Merced
and Stanislaus Counties.
With their assistance
our display had a
running creek, native
plants, geese and ducks.
There were even a few
crawdads.



# **Battle Creek Wildlife Area**

River Partners has started a restoration plan for the Tompkins parcel of the Battle Creek Wildlife Area, which is owned by the Department of Fish and Game. In addition to planning, the project will involve restoring 30 acres to mixed riparian woodland and eliminating the invasive species, Tree-of-Heaven.

### Yellow-billed Cuckoo Research

Working this summer with PRBO Conservation Science, River Partners' biologist Jessica Hammond has been leading a survey crew in an effort to study the Yellow-billed Cuckoo population on the Sacramento River National Wildlife Refuge. This monitoring data will build on Ms. Hammond's master thesis research and contribute valuable information about the status of this endangered species.



Yellow-billed Cuckoo. Photo by MDF, © WikiCommons

### **River Partners Hosted 10th Paddling Trip**



Debbie Hatch on River Parters' 10th paddling trip, Sacramento River. Photo by Jay Hatch.

River Partners began organizing paddling trips along the valley's rivers in 2006. On July 31<sup>st</sup>, we completed our 10<sup>th</sup> trip with the help of 50 kayakers, canoers, and volunteers from the Chico Paddleheads. The tour started at the Drumheller Unit of the Sacramento River National Wildlife Refuge and ended at our new site, Willow Bend. The highlight for many was the bald eagle waiting on the shore of the pull out site.

### **River Partners**

# SCIENCE PAGES

# The Elusive "VELB" Seen at Mitigation Sites

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According to Helen Swagerty, River Partners' Senior Restoration Biologist, River Partners has been monitoring VELB for at least 10 years. The largest monitoring effort took place in 2004. River Partners received a grant to survey 10% of the 70,000 elderberry shrubs planted within the Sacramento River National Wildlife Refuge. "In all that time and among thousands of elderberry plants, we've only seen a live beetle in the field once – in 2002 at a mitigation site on the Sacramento River. That's what makes the May-June sightings so phenomenal."

The VELB is a medium-sized (about 2 cm in body length) brightly colored beetle. The species spends most of its life inside an elderberry shrub. Its larvae thrive on the woody pulp. When they reach



Female VELB observed in May 2010. Photo by Michelle Boercker.

maturity after 1-2 years, the adults emerge from the elderberry stems. Typically these "exit" holes are the only evidence of VELB presence on an elderberry plant (since actually seeing and counting them is practically impossible).

The VELB (Desmocerus californicus



A VELB exit hole. Documenting exit holes is the standard survey method for monitoring VELB, since they are rarely seen. Photo by River Partners staff.

dimorphus) is a federally-listed threatened species. Once part of the Central Valley's robust riparian corridor, its numbers rapidly declined with the clearing of habitat along valley rivers. The beetle depends solely on the elderberry plant (Sambucus mexicana), which grows in valley riparian zones, for its entire life cycle.

River Partners includes the elderberry shrub as part of its restoration designs wherever we are able. In addition to helping the VELB, the shrub produces distinctive white flowers that attract pollinators and its fruit is a food source for other wildlife.

Sometimes, in order to secure permits for our work, we are required to eliminate this plant species from our restoration plans.

However, large projects like the Bear River Set-back levee restoration site, the O'Connor Lakes restoration site, as well as our work on the Sacramento River National Wildlife Refuge, have allowed us

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# **Looking Back**

### Long-Term Monitoring of Restoration Sites

By Jessica Hammond

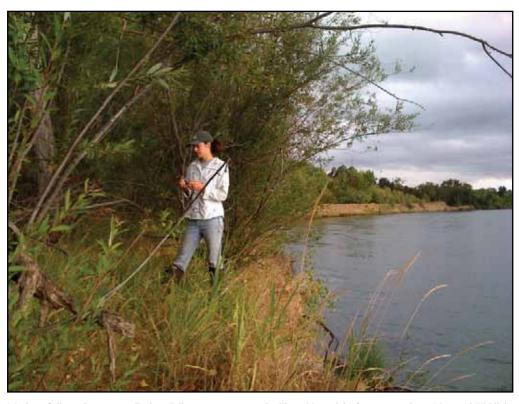
onitoring is an often underappreciated tool for science that has the potential to provide us with the data needed to document change through time. Understanding how environmental variables change, such as bird populations or plant succession, allows for informed and responsible management and conservation decisions.

At River Partners, monitoring is an integral part of every restoration project, and staff biologists record plant growth and survivorship during each growing season. The data collected allows us to show how well the habitat is performing, but more often than not monitoring can only take place during the first three growing seasons- the typical installation period of a restoration project. This information is vital to evaluating the success of restoration project in its early stages, but the question remains: what happens to the site after management stops?

In 2009, River Partners began to answer this question by developing the Long-Term Monitoring Project. Biologists re-

visited restoration plantings along the Sacramento River that had not been monitored for 8-15 years and collected

measurements on plants and other habitat variables including canopy cover and canopy density. The results of the Long-Term Monitoring Project provide us with an understanding of how restoration



Meghan Gilbart, Restoration Ecology Fellow, monitoring at the Flynn Unit of the Sacramento River National Wildlife Refuge in Tehama County near Red Bluff. Photo by Jessica Hammond.

plantings progress through time, and even how individual species perform and grow.

In addition to vegetation measurements, River Partners conducted

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stops?

avian monitoring in the summer of 2010 at each of the sites. By pairing the avian monitoring data with our vegetation data we can gain a better understanding of which

habitat features are important for birds and use this information to maximize the wildlife benefits we can provide with future restoration projects.

In an effort to share this information

with the worldwide restoration community and demonstrate the importance of Long-Term Monitoring projects, River Partners is preparing a manuscript that will be submitted to a peer reviewed scientific journal in 2010. The initial findings of the vegetation monitoring have already been presented at the Sacramento-Shasta Chapter Meeting of The Wildlife Society in November of 2009, and additional articles and presentations will also be produced from these valuable data sets that will further illustrate the success and importance of riparian restoration. We will also post these publications on our website: www.RiverPartners.org.

### **Upcoming Events**

### Sacramento River Paddling Trip

Last One Set for September 18

River Partners' last paddling trip of the season will take place Saturday, September 18. We will explore a 9-mile stretch of the Sacramento River between Big Chico Creek and Ord Bend County Park. For more information visit: www.riverpartners.org/news-and-events

# 2010 Great Sierra River Clean-Up

The Chico Paddleheads will host a clean-up of the North Fork Feather River in

conjunction with the 20th annual Feather River Festival. The clean-up will take place on Friday, September 24, 2010 from 11:00am to 3:00pm. A special clean-up celebration and awards ceremony for all volunteers will take place the same day at 6:00pm, followed by the Feather River Film Festival. Meet at the old "Indian Jim" School, off Hwy. 70 east towards Quincy at the 8.2 mile post past the Plumas County line. For more information, please contact Jim Welborn at 530-514-6054 or welby0502@yahoo.com.



July 31 Sacramento River trip. Paddlers enjoy a walk on a sand bar and a dip in the river. Photo by Jay Hatch.

#### San Joaquin River Conference

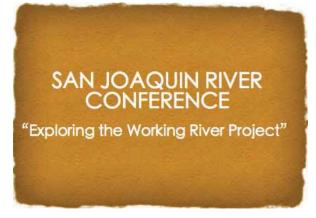
October 1-2, 2010 • "Exploring the Working River Project"

River Partners, as an active member of the San Joaquin River Partnership, is helping to organize a two-day conference to examine one of the largest river restoration projects now underway in the western U.S. The San Joaquin River Conference will take place on October 1 & 2, 2010, in Fresno. The conference

will bring hundreds of people from diverse backgrounds and interest together and explore the question, "What will successful river restoration look like?"

The conference brochure and registration information is available at **www.** 

sanjoaquinriverpartnership. org.



### Return of the Salmon Festival

Oct 16, 2010 Coleman National Fish Hatchery Anderson, CA

This is the 20<sup>th</sup> year celebrating the return of the Fall Run Chinook Salmon at the Coleman Fish Hatchery.

River Partners will host a children's activity booth, so please say hello if you're attending the festival.

# A Challenge to Our Friends!

### **Annie B's Community Drive Benefits River Partners**

ow is the perfect time to support River Partners. From August 1 through September 30, contributions to River Partners through the ANNIE B's COMMUNITY DRIVE will earn BONUS FUNDS from the North Valley Community Foundation. That means by making a contribution now, you give more to River Partners for FREE.

ANNIED COMMUNITY DRIVE
A Program of North Valley Community Foundation

The North Valley Community Foundation (NVCF) has generated special Annie B's funds for area nonprofits. To receive a portion of these funds, River Partners needs to raise money from our friends from **August 1 through September 30.** 

- Giving through Annie B's means More Trees, Fish, Birds, and Green Space.
- It means more opportunities for outdoor education and recreation.
- It helps us bring sizeable conservation projects to our region.
- Plus, it helps fund our school horticultural project.

River Partners has started a new program which works with agricultural programs in North Valley High Schools. Since we have a large inventory of native trees and plants, River Partners developed a way to "hire" high school classes to care for our plants until we needed them for our river restoration projects.



Students from Hamilton High School at a tree planting event. HHS is participating in our school horticultural project.

Currently eight local high schools are involved, growing out more than 48,000 trees and plants. Now we are asking community partners, like you, to help fund this project, which teaches realworld skills and engages students in an agriculture + conservation endeavor.

Please take a moment to complete the Annie B's form and send it to the North Valley Community Foundation. Your generous gift through **ANNIE B's COMMUNITY DRIVE** will contribute to the sustainable future of our rivers, help school programs, and promote growth in our community.

### **Become a River Partner or Make a Special Gift**

Annie B's Community Drive: Donate from August 1 through September 30, 2010 ONLY:

- Online at: www.nvcf.org through the Annie B's link., or,
- Send checks made out to: "Annie B's/ River Partners" c/o NVCF, 3120 Cohasset Rd. Suite 8, Chico, CA 95973

Other ways to support River Partners, especially AFTER September 30, 2010:

• Adopt-a-Tree • Make a Tribute or Memorial Donation • Donate on-line: visit www. RiverPartners.org, click on "support us." Or send checks, made out to River Partners, to: River Partners, attn: Development, 580 Vallombrosa Ave. Chico, CA 95926

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# Valley Elderberry Longhorn Beetles Sighted!

Continued from pages 1, 4

to bring back elderberry shrubs to new habitat areas and help the recovery efforts of the VELB.

The mitigation sites that RP biologist Michelle Boercker was monitoring were developed as an endangered species solution for the impacts from the setback levee construction work on the Feather River. River Partners assisted the Three Rivers Levee Improvement Authority and Levee District 1 by transplanting more than 120 elderberry shrubs that grew in the footprint of new setback levee construction. Thanks to the cooperation of the USFWS, who accepted River Partners' recommendation to plant multiple stems per basin (as opposed to one stem per basin), the transplanted shrubs have succeeded in their new locations. More than exit holes, River Partners has observed live VELB presence on these transplanted shrubs.

"The success of these mitigation areas shows that dialogue and collaboration among wildlife and flood control agencies can produce solutions that help endangered species and public safety," says John Carlon, River Partners president. "The USFWS recovery plan is working and I think we're on track towards the recovery of the VELB."

To view Michelle Boercker's field notes and photos, visit: www.riverpartners.org/reports-and-articles



Female VELB observed in May 2010. Photo by Michelle Boercker.