



Early History of the Yolo Basin

by Don Morrill, Development Director

Who among us wouldn't have loved to have seen the Sacramento Valley as it was before 1850? The Yolo Basin at that time was an enormous wetland, some 40 miles long and up to 7 miles wide, fed by Putah Creek, Cache Creek, and the annual winter overflow from the Sacramento River (Thompson 1957). Early observers describe an enormously rich biological system in the Sacramento Valley.

Along the major waterways—the Sacramento, Cosumnes, San Joaquin, Mokelumne and others—natural levees or berms of sediment were deposited over thousands of years. The streamside berms supported large riparian forests of cottonwoods, sycamores, alders and oaks, intertwined with a network of vines, brush and flood debris at their bases. Behind these natural barriers were vast marshes or “backswamps” of cattails, tules, and other freshwater wetland plants.

Here in what is now Yolo County, local Indian villages, built on the western edge of the Yolo Basin used the wetlands to obtain food and to gather tules for the construction of shelters, boats, duck decoys and storage structures. Calling areas like it “yoloy”, meaning a place abounding with tules, the local people lived in villages of 200-1500 residents near water. During the wettest winters, they moved west to higher ground. The word “yoloy” was transformed by European settlers into Yolo.

Early visitors reported that the tules at the time stood ten to fifteen feet high, and birds of all types regularly darkened the sky. Tule elk, antelope and deer, and their predator, the grizzly bear abounded. Early observer, Lansford W. Hastings, described being “greatly annoyed by the almost deafening, tumultuous...noises of the innumerable flocks of geese and ducks...continually flying to and

fro...at times blackening the very heavens... with their tumultuous croaking and vehement squaking.” (Hastings 1845:99)

According to historians, the first European to visit the Sacramento Valley was Gabriel Moraga, a young Spanish officer who led a small group of explorers north from San Francisco Bay in 1808 through the Delta to the large river feeding it. He named it the “Sacramento River” in honor of his church's holiest sacrament, and continued up to the mouth of the Feather River.

Another early European explorer of the Sacramento River was Otto von Kotzebue, a Russian naval commander who in November 1824 led a small flotilla of “baidarkas”



(skin kayaks) carrying other Russians and also Native Alaskans. They were guided up the river by a Spanish soldier and pilot. Here's what Kotzebue saw—

“The many rivers flowing through this fruitful country will be of the greatest use to future settlers. The low ground is exactly adapted to the cultivation of rice; and the higher, from the extraordinary strength of the soil would yield the finest wheat harvests. The vine might be cultivated here to great advantage. All along the banks of the river grapes grow wild, in as much profusion as the rankest weeds: the clusters were large;

and the grapes, though small, very sweet and agreeable flavoured. We often ate them in considerable quantities, and sustained no inconvenience from them. The Indians also eat them very voraciously. ...

...An abundance of deer, large and small, are to be met with all over the country, and geese, ducks and cranes on the banks of the rivers. There was such a superfluity of game,

— continued on p. 2

Foundation Joins New Delta Conservancy Board

On June 9, 2010, Yolo Basin Foundation took on a new role as a board member on the recently created Delta Conservancy. Last year's Water Bill created the Conservancy to promote ecosystem protection and restoration, economic vitality, agriculture, and environmental education in the Delta. The Water Bill specifically stated that a representative of the Yolo Basin Foundation should be on the board. There are 11 voting members including representatives of the Delta Counties' boards of supervisors and 12 non-voting members. The Yolo Basin Foundation joins the 11 other non-voting members, including Delta Protection Commission, US Fish and Wildlife Service, US Bureau of Reclamation, and Central Valley Flood Protection Board. We are grateful to Senator Lois Wolk for recognizing the Foundation's unique role in creating the largest restoration and environmental education project in the Delta. We look forward to working with the full spectrum of Delta interests on guiding habitat and education activities to create a better future for this vitally important area.

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that even those among us who had never been sportsmen before, when once they took the gun into their hands, became as eager as the rest. The sailors chase the deer very successfully... In the night we were much disturbed by bears, which pursued the deer quite close to our tents, and by clear moonlight we plainly saw a stag spring into the river to escape the bear; the latter, however, jumped after him, and both swam down the stream till they were out of sight.” (Kotzebue 1830:143-144)

Some of the earliest geographical references to the basin and the lower Sacramento Valley described it as an “immense sea” in severe winters, and that “the whole country was annually inundated.” Despite those warnings, exultant California gold rush settlers built settlements such as “Fremont” at the mouth of the Feather River, and “Sacramento City” at the mouth of the American. Fremont was abandoned in 1851, and Sacramento experienced substantial winter flooding during its early decades of existence.

Early agriculture in the Yolo Basin during the 1850’s consisted primarily of summer grazing of cattle and pigs. According to early settlers, the tules were a productive feeding, watering and resting area for those animals, particularly for herds that had been driven a considerable distance.

The Yolo Basin, like other low lying areas called “swampland,” wasn’t part of any individual Spanish or Mexican land grants. Upon statehood in 1850, the federal government granted the land to the state. Land nearby that was periodically flooded in winter was judged highly productive for grain, particularly wheat. It wasn’t until lands were turned over to county supervisors to distribute in 1868 through local “swamplands districts” that the Yolo Basin wetlands were made available to individuals demonstrating commitment to drain them.

In the next article, the earliest history of private agriculture in the Yolo Basin will be presented. 🌊

References used and/or recommended reading:

- Donald C. Cutter, tran. and ed. , *The Diary of Ensign Gabriel Moraga’s Expedition of Discovery in the Sacramento Valley, 1808.* 1957
- John Hart, “The Once and Future Delta”, *Bay Nature Magazine*, April/June 2010 See www.baynature.org
- Lansford W. Hastings, *The Emigrants’ Guide to Oregon and California*, 1945
- Robert Kelley, *Battling the Inland Sea, American Political Culture, Public Policy, and the Sacramento Valley 1850-1896*
- Joann L. Larkey and Shipley Waters, *Yolo County, Land of Changing Patterns.* 1987
- Kent G. Lightfoot and Otis Parrish, *California Indians and their Environment.* 2009
- Kenneth Thompson, “Historic Flooding in the Sacramento Valley,” *Pacific Historical Review* 20 (Sept. 1960)
- John Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta, California” Dissertation for Ph.D. in Geography, Stanford, University, December, 1957

Nature Notes:

Muskrats, Beaver

by Melanie Pope, Education Director

Muskrats, beavers and otters, oh my! Aquatic mammals have been creating quite a stir at both the Demonstration Wetlands and the Wildlife Area this school year. “Fur Fever” peaked this year at California Duck Days when at least one pair of North American river otters made a splashing show, rolling and diving about, teasing visitors as they gathered around the permanent pond. Following this rare performance, people came for weeks to visit the Demonstration Area in search of the exhibiting otters, and at one point, as many as four individuals were spotted.

The excitement continued when during a later school field trip, another wet furry mammal was seen swimming about in one of the ponds close to a frequently visited parking lot. This time, the aquatic mammal was a common muskrat. Students and adults alike gazed in awe as this creature swam quietly near the shore of the pond, providing both excitement and an educational moment for all.

On a similar note, a sign of another common aquatic mammal, the beaver, has been viewed by many of the school group tours. At the Wildlife Area in the pond just north of parking lot C, we slow down the bus and the cars to peek through a small clearing in the tules to gather a glimpse at the mound of sticks and debris that make the lodge home for the beaver. With all these sightings combined, aquatic mammals have become quite a topic for compare-and-contrast lessons with the students this year.



ROB FLOERKE

The **North American River Otter** (*Lutra Canadensis*) is a member of the weasel family, weighing anywhere from 11-30 pounds and measuring 2-4 feet long. It is a voracious carnivore with a diet containing both fish, crayfish, amphibians and turtles. The bones and exoskeleton of these prey items left in the otter scat (droppings) offer a hot topic when we stop the school children for a lesson on which carnivorous animal left this clue behind. Although rarely seen during the day, the scat and slides between ponds are convincing evidence that this animal

ivers and Otters, Oh My!

can be found near many of the ponds in the Wildlife Area. The river otter feeds at dawn and dusk and can be seen in small family groups, usually females with pups. Burrowing in the banks near the waters edge, the otter uses the bank sides as thoroughfares as it comes and goes from pond to pond.

The **Beaver** (*Castor canadensis*), is the largest rodent in North America, measuring 2-3 feet in length and weighing 30-40 pounds, although large specimens may top 100 pounds. While the river otter is a top predator, the beaver is a herbivore with a diet consisting of leaves, bark, roots, and aquatic plants. Like the river otter, the beaver has claws on its front feet, but only its back feet have webbing to help propel itself and maneuver in water. The large, flat bare tail of the beaver also aides in its swimming abilities, while a transparent set of eyelids help the beaver see underwater. Beavers are notorious for the dams they build to raise the water level and protect the impressive dome lodges they erect as safe haven dwellings. Fish and Game staff members spend many hours pulling sticks and mud from drain pipes that beavers have worked hard to plug up during the night! Once aggressively hunted for its thick dark brown fur, the beaver population is now stable.



DAVE FELIZ



DAVE FELIZ

The **Common Muskrat** (*Ondatra zibeticus*) is a smaller (16-24 inches long and weighing 1.5-4 pounds) member of the rodent family. It has a more rat-like appearance with a long, scaly, slightly flattened tail, which acts as a swimming aid. Although muskrat feet are very slightly webbed, the tracks of these animals show more distinct toes with small claw marks. The tail drag mark is also usually visible. The muskrat is an omnivore, eating mostly aquatic plants like tules and cattails but will also eat freshwater clams and crayfish. Mostly active at dawn and dusk, the muskrat commonly makes burrows in the banks of the ponds, which serve double-duty as a residence and a feeding site. The muskrat gets its name from the musk-scented odor it secretes as a defense mechanism. Introduced to the area during the fur trade, and often hunted for food, muskrats are now fairly common and widespread in wetland areas.

Next time you are visiting in the Wildlife Area or are taking a stroll in the Demonstration Area, you may get a glimpse of one of these three aquatic mammals. If you are looking closely, you will certainly find clues revealing their presence. Whether it is a track,

Birding in Ecuador with YBF!

Yolo Basin Foundation is sponsoring an outstanding birding trip to Ecuador March 16-28, 2011. Terry Colborn, an amazing local birder, tour leader and YBF board member will serve as the tour's liaison. The trip is limited to a maximum of 8 participants.

Ecuador is recognized as one of the world's premier avian regions with more than 1,600 species, including 120 species of hummingbirds! The 13-day customized tour will include six different climate zones, each with its own special species. The group will have an English-speaking Ecuadorian guide who is an expert birder.

In addition to the exceptional birding opportunities, the tour will include a special full-day cultural experience in Otavalo with its world famous Indian market.

To obtain a copy of the tour itinerary, pricing and application, go to www.yolobasin.org. For more information call Terry Colborn at 916-705-8991.

Photo credit: Long-tailed Sylph by Chris Hartzell. www.photostrokes.net



scat, or a chewed up log, you will certainly enjoy piecing together the evidence as a nature detective student would. You might just find yourself putting down your bird watching binoculars and stooping over a pile of scat or a line of tracks and deciphering which aquatic mammal preceded you on the trail. 🐾

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The Yolo Basin Foundation is a non-profit public benefit corporation dedicated to the appreciation and stewardship of wetlands and wildlife through education and innovative partnerships.

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"Bus Fund" Contributors Make Field Trips Possible

Generous donors from the Sacramento region gave funding to sponsor bus transportation for the *Discover the Flyway* school program during the 2009-10 school year. Our "Bus Fund" paid for 29 buses, which transported some 980 children (43 classes) who otherwise would not have been able to experience our full day science and social studies-based wetland and wildlife field trips at the Yolo Bypass Wildlife Area.

Teachers, principals, and accompanying parents are always informed of these public-spirited donors, and they have consistently expressed thanks by letter and in program evaluations.

The following is the kind of response we often get from teachers who understand the need for transportation, particularly for low-income community schools.

"The students...continue to talk about the...experiences... It is inspiring to see that our local businesses are giving back to the community. You may think you gave a simple little donation, but in reality you've helped (enrich) the minds of...fifty three students. The trip to the Yolo Wildlife Area meant so much to my students!"— 4th Grade Teacher, Woodland

The following donors contributed generously to the "Bus Fund," making such field trips possible for these students in 2009-10 and will continue for the 2010-11 school year:

- Arata Brothers Trust
- AT&T Foundation
- Brandenburger Properties
- Davis Rotary Club
- Davis Sunrise Rotary Club
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