

A Walk Around the MISSION DAM

At the Mission Trails Regional Park



This "adventure" starts at the San Diego Mission Dam. The dam is approximately 2 miles west of West Hills High School. Go west on Mission Gorge Road, past K-Mart to Father Junipero Serra Trail. This "self-guided adventure" lets you take a 1 1/2 mile stroll to find and identify some of the chaparral plants living in our "biome." To earn credit for this trip you will make some drawings, rubbings, notes, and identify specific plants found in the park. Be sure to read over all four pages of this adventure before you begin. In order to make the "rubbings" take a crayon or a very soft pencil with you. You should wear cheap comfortable clothes (you'll probably get dirty). The Mission Dam area has been recognized for a long long time (even longer than Mr. Engberg has been around!...Now that's a long time!). To prove you found this area, and to know for sure that you are starting in the correct place, find the plaque near the parking area for the dam and finish the rubbing shown below.



The trees over the Plaque are called Western Sycamores (*Plantanus racemosa*). Take note of their leaves, branches and general "look." As with the other trees and shrubs mentioned you will be expected to recognize them later in this trip! I'll leave space here and there for your "field notes." (For FULL CREDIT on this paper YOU MUST make sketches and copious, accurate notes!) AS SHOWN HERE

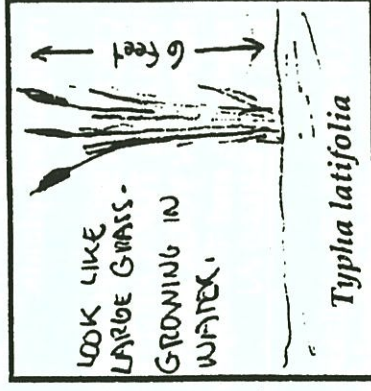


GO DOWN THE PAVED TRAIL TOWARDS THE PICNIC AREA

The dark green short trees on your left between the ramp and the road are California Scrub Oaks (*Quercus dumosa*)

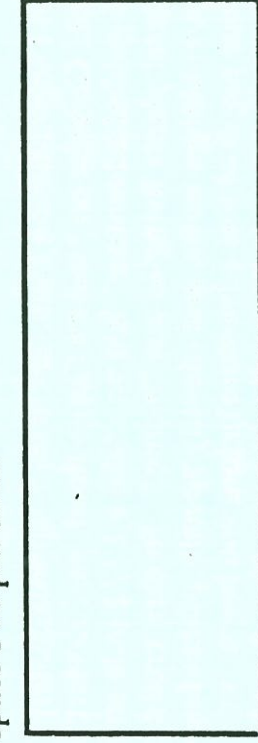
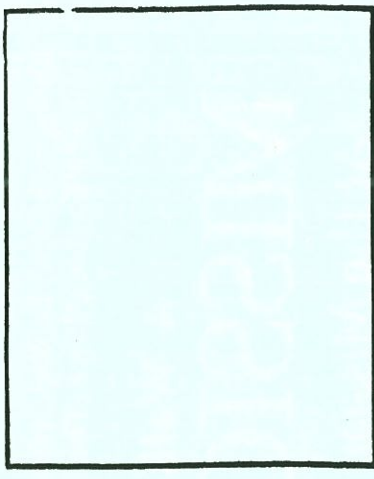
GO PAST THE ROCK THE THAT TELLS YOU THAT THE DAM WAS BUILT BETWEEN 1813 AND _____.
What kind of tree is that behind the rock? _____

CONTINUE ALONG UNTIL YOU CAN SEE THE DAM and the Cat tails (*Typha latifolia*) growing in the pool produced by the dam. STAY ON THE "LEFT BANK" (*La rive gauche* comme on dites en français) UNTIL YOU REACH THE 1 METER ROUND CONCRETE PERSON HOLE COVER.



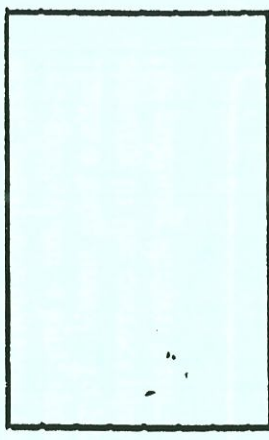
Just over the top of the Person Hole Cover is a Lemonade Berry (*Rhus integrifolia*). It is the large shrub between the trail and the road. Notice the small "fruits", the shape, and the color of the leaves.

CONTINUE ON TO THE MONUMENT THAT IS BETWEEN THE TRAIL AND THE RIVER TELLING OF THE HISTORY OF THE DAM. How far down the river was the *Mission de Alcalá*? _____ miles. CONTINUE ON DOWN THE TRAIL TO THE POINT WHERE THE TRAIL GOES BETWEEN TWO 3' ROCKS. On the left between you and the raised road is a second kind of oak. This is the **California Live Oak** (*Quercus agrifolia*) Will you be able to tell this from the one you saw earlier? Better do a good job of drawing and describing it in the space I've put here.

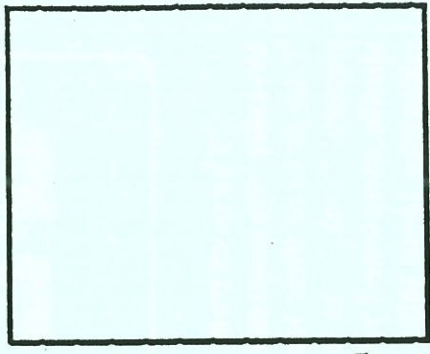
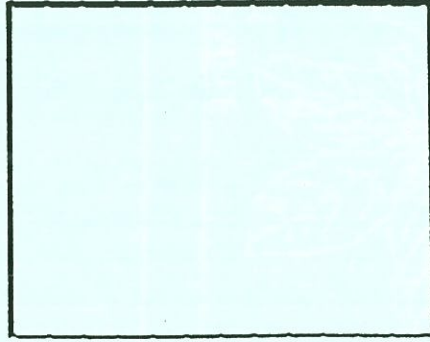


CONTINUE ON DOWN THE TRAIL UNTIL YOU FIND A SECOND CONCRETE PERSON HOLE COVER. THE LARGE LEAFED TREE BETWEEN IT AND THE RIVER IS A Fremont Cottonwood (*Populus fremontii*)

JUST A LITTLE FURTHER DOWN THE TRAIL AND ABOUT 10 METERS BEFORE YOU CROSS COME TO THE BRIDGE; you walk under a large shrub that partially covers the trail and is found in large numbers on the bank between the trail and the road. This is the **Wartystem Ceanothus** (*Ceanothus verrucosus*)

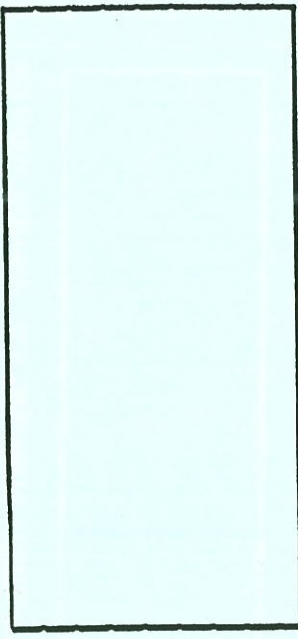


CROSS THE BRIDGE There are trees on both sides of the bridge as you cross. These narrow leaved trees are **Sandbar Willows** (*Salix hindsiana*)



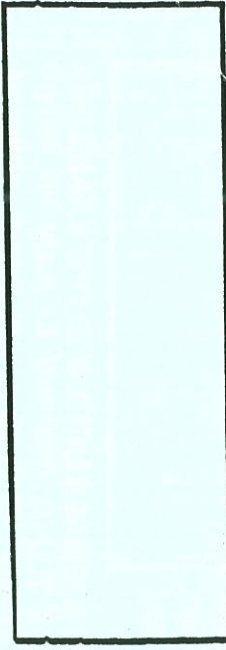
THE BRIDGE HAS TWO BENDS IN IT. AT THE SECOND BEND, AT ABOUT 5 METERS FROM THE SOUTH RAIL, there is a shrub that is often covered with red berries. This is the **Toyon/Christmas Berry** (*Heteromeles arbutifolia*) Leave the bridge and take a close look at the dark green leaves. You'll need to recognize these in the summer when the characteristic red berries are not present.

HEY LOOK.... ANOTHER PERSON HOLE COVER.. Just beyond it, and slightly higher is a shrub with dark 3" shiny curled green leaves, the **Laurel Sumac** (*Rhus laurina*) This is one of the most common of the Chaparral Plants. It has a characteristic strong smell as well. Smell is another way of recognizing plants.



CROSS THROUGH THE ROCKS AND SAND TO THE FAR SIDE OF THE RIVER VALLEY, TURN RIGHT AND FOLLOW THE TRAIL UP THE RIVER. (THE RIVER IS NOW ON YOUR RIGHT. If it isn't you are lost and are going to die of starvation, thirst, exposure, and T-V deprivation) As you walk up this trail what are the three trees you pass by? 1. WILLOW 2. _____ 3. _____

CONTINUE The hillside on your left is covered with **California Buckwheat** (*Eriogonum fasciculatum*) a characteristic Chaparral plant. In the Spring and Summer it has white flowers. In fall and winter these flowers become brown.



CONTINUE (Watch where you step and where you put your hands. There are lots of samples of Coyote spoor [droppings] on this trail. And here's an educational bonus for getting this far. You can tell Coyote feces from dog feces, etc. by the pointed shape at the ends... Like this.

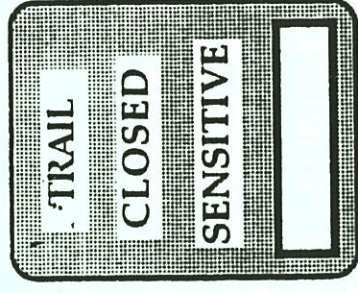


KEEP GOING UNTIL YOU GET TO AN INTERSECTION WHERE THERE ARE SOME WOODEN LOG STEPS GOING DOWN TO THE CREEK.

Near here there is a small patch of Cactus, **Beavertail Cactus (*Opuntia*)**. See it there? Here is a handy Bio-Hint... DO NOT KISS A CACTUS. Look down towards the base of the steps. What kind of Oak is that down there? CALIFORNIA LIVE OAK/SCRUB OAK. DON'T GO DOWN THE STAIRS, RATHER FOLLOW THE TRAIL NORTH, UP THE CREEK, AND AWAY FROM THE RIVER AND DAM. What is the most common type of tree in this little valley? _____. Does the Mission Trails Park encourage birds to breed here? YES/NO. What *evidence* is there that your answer is true? _____

_____. CROSS THE CREEK. Any **Toyon** in this valley? YES/NO. Go under the Oaks and across a second creek. Any *Eriogonum fasciculatum* around here? YES/NO. CONTINUE TO THE LARGE BURNED OUT OAK STUMP. What kind of tree is growing next to it? _____. LOOK AROUND. Any **Wartystem Ceanothus** within 10 meters of this stump? YES/NO. CONTINUE UP THE TRAIL TO THE "Y" IN THE TRAIL. Is the shrub in the arms of the "Y" a **Toyon**, **Sumac**, or a **Ceanothus**?

CONTINUE ON THE RIGHT ARM OF THE "Y" IN THE DIRECTION OF HIGHWAY #52. TAKE THE FIRST RIGHT TURN (about 30 meters from the "Y") AND FOLLOW THE RED DIRT TRAIL UP THE LITTLE HILL THAT TURNS AND HEADS BACK TOWARDS THE SOUTH AND THE RIVER. YOU ARE NOW ON THE "HIGH TRAIL"



HERE'S AN OBSERVATION QUESTION.

Why are some of the trails closed? (PUT YOUR ANSWER IN THE BOX TO THE RIGHT)



CONTINUE ON THE "HIGH TRAIL" Are there any **Quercus**, **Populus**, **Salix**, or **Plantanus** along this trail? YES/NOPE. Why or Why not? _____
See any evidence of animal life on this dusty trail? Things like droppings, tracks, etc. (I once saw nine fresh snake tracks along here) If yes, what sorts of things? _____

CONTINUE TO WHERE YOU CAN SEE THE DAM FROM THIS HIGH TRAIL. (DON'T GO DOWN THE WOODEN STAIRS TO THE RIGHT) TURN LEFT AND HEAD TOWARDS THE 1/2/3/4 Red and White Radio Towers. Are bikes allowed on this trail?

YES/NO How do you know? _____
ABOUT 300 METERS ALONG THIS TRAIL YOU WILL SEE A SMALL PATH LEADING OFF TO THE LEFT GOING TO A GROUP OF FLAT STONES. What indication is there

that Indians used to live here? _____

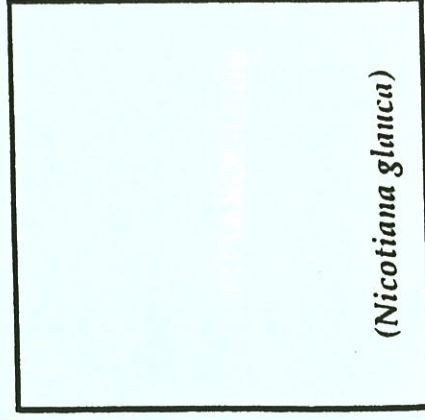
(Other indications that one sometimes finds are darken earth from fires, Pottery Shards, and *Opuntia* cactus patches.) Can you see Westhills High School from here? YES/NO.

CONTINUE ON TO THE INFORMATION KIOSK. Look over towards the HIGHWAY #52 bridge. What kind of trees do you see growing underneath? _____

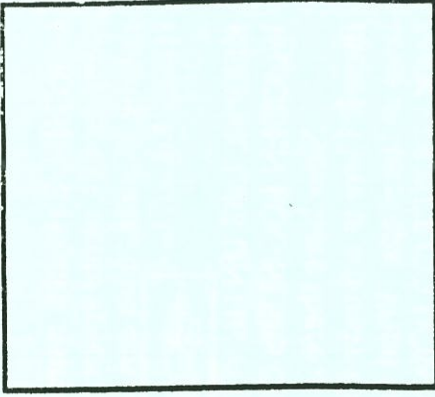
(The trail/road that goes up and under the bridge goes on all the way to Poway! It's a great jogging and biking trail, just ask those X-C studs & studentettes)

TURN RIGHT AT THE KIOSK AND HEAD TOWARDS THE RIVER.

On your right, just 3 meters before the first bridge is Wild Tobacco (*Nicotiana glauca*) Make a drawing of this plant's leaves and the typical trumpet shaped yellow flower in the space provided.



On you right, just at the bridge, there is a tree. In the space provided draw a leaf from this tree and name the tree. Look in the pool around and under this bridge. Are there any *Typhus* plants growing here? YES/NOPE



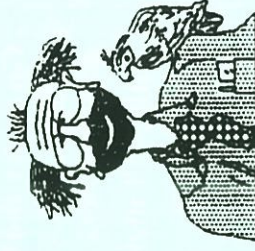
CONTINUE ALONG TO THE SECOND BRIDGE

Are there any **Cat tails** growing in the water here? YES/NO. What indications are there that sometimes the river flows **OVER** this bridge as well and under it?

GO UP THE SLOPE TO THE ROAD, TURN RIGHT, AND HEAD BACK TOWARDS THE MISSION DAM PARKING LOT.

As you walk along this road, list the trees and shrubs you recognize:

1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____



FOLLOW UP (This will be 25% of your grade)

The Kumeyaay Indians lived in this valley for centuries. They used the plants found here for food, clothing, housing, medicine, and all the necessities of life (The K-Mart was closed). **Choose two of the plants listed below and research how the Kumeyaay used them. YOU CAN USE THE SCHOOL LIBRARY FOR YOUR RESEARCH OR BETTER YET THE WONDERFUL LITTLE LIBRARY AT THE INTERPRETIVE CENTER.** Be sure to include the bibliography at the end.

Lemonade Berry
Poison Oak
California Scrub Oak
Sandbar Willow
California Buckwheat

Rhus intergrifolia
Rhus diversiloba
Quercus dumosa
Salix hindisiana
Eriogonum fasciculatum

California Live Oak *Quercus agrifolia*
Cat tail *Typha latifolia*
Beavertail Cactus *Opuntia (sp)*
Our Lord's Candle *Yucca whipplei*

PLANT #1:

PLANT #2:

BIBLIOGRAPHY: