

# PLUGGED IN

FUN FOR KIDS

A COOPERATIVE PROJECT OF THE SANTA BARBARA NEWS-PRESS AND THE EDUCATORS' ROUNDTABLE TO PROMOTE LEARNING AMONG YOUNG READERS IN NATURAL SCIENCE, HISTORY, TECHNOLOGY AND ART

## This Month's Theme: Santa Barbara County Agriculture (Part I)

### Before Agriculture in Santa Barbara County

A conversation with Jan Timbrook at the Santa Barbara Museum of Natural History

By Sally Isaacson, Santa Barbara Botanic Garden

I learned the following fascinating facts about our local Chumash people from Jan Timbrook, Curator of Ethnography at the Santa Barbara Museum of Natural History.

Originally the Chumash people did not grow crops, but they did manage their natural environment by burning, digging, and cutting or pruning plants to make them grow better.

The Chumash burned large areas to stimulate the growth of plants that would then produce more seed for people to eat. Fire burns away dense plant cover and enriches the soil with nutrients from the ash. Many native plants such as red maids, chia sage, and some grasses grow bigger and produce more seeds after burning. In some parts of the state, native people burned deer grass to produce better stems for basketry. Some favorite food plants with edible bulbs are also stimulated by fire.

Early Spanish explorers noted that along Central California's coastal plain there was no pasture for their livestock as the Indians had burned off the

Many food plants grow better after burning.



grass. In the 1790s, the Spanish governor of California declared that Indians who burned pasture would be punished, so this practice stopped.

Chumash harvesting methods also ensured abundant supplies of edible bulbs. Working with digging sticks made from hard wood, they dug up the bulbs after the seeds had already fallen from the plants. As they dug, small bulbs fell off and stayed in the soil. The digging loosened the soil and so both the fallen seeds and the small bulbs grew more quickly into new plants for future harvest.

The Chumash are known for their fine baskets. To obtain pearly white material to outline the designs, the Chumash cut old sumac plants to the ground. The next year's growth would be long and straight, easy to peel and free from knots — perfect for weaving. In other parts of California, willow and redbud trees were

pruned to produce materials for baskets.

### Bring Your Family for a Day Trip: Visit the Botanic Garden, Museum of Natural History and the Old Mission

Read this page and plan a day trip with your family to learn more. Head uphill to the Santa Barbara Botanic Garden. Hike to the old Mission Waterworks System. Look at the Native American basketry display just below the dam. Follow the aqueduct down the trail that follows Mission Creek. Cross the Campbell Bridge and then head up to the Garden's picnic area for lunch. Hop back in your car or on the Field Trip bus and go to the Old Mission to see where the water from the dam ended up. On the way down hill be sure to visit the Santa Barbara Museum of Natural History to see the wonderful Chumash exhibits.

pruned to produce materials for baskets.

Although they did not actually cultivate plants, we think that the Chumash took care of the wild tobacco that grows inland. They probably scattered the seeds and weeded around these plants, which were important for ceremonial use.

Probably due to the dry summers, agriculture was never adopted by most Indian peoples in our state. In other parts of North America where there is rain during the summer growing season, native peoples grew corn, beans, and pumpkins. It was not until the Mission Period that the Chumash began to practice agriculture. The Spanish then taught the Indians to grow wheat and fruit trees and to raise cattle and horses. Even then it was impossible to feed everyone, so the missionaries allowed Indians to continue their old traditions of gathering wild seeds, hunting and fishing.



Chumash house or *ap* in Ventura County.

## Beginnings of Agriculture in California

By Kristina W. Foss, Santa Barbara Mission Museum

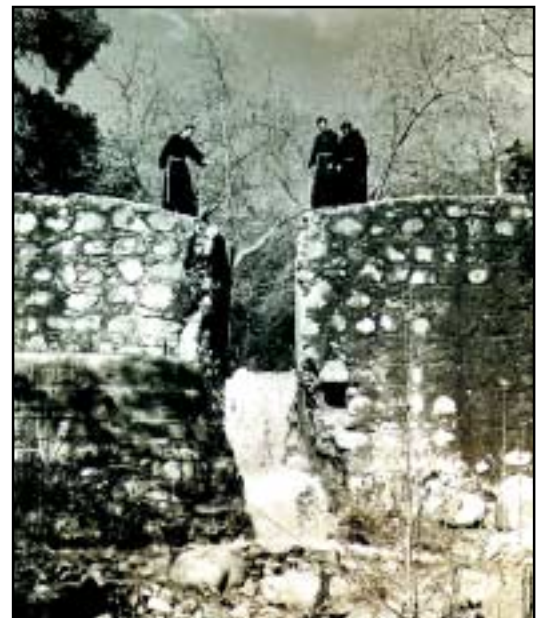
There are many different *cultures* or ways of living and working. Santa Barbara's native people, the Chumash, were *hunters* and *gatherers* before the Spanish arrived. They caught fish, birds, deer and other animals with hooks, traps, spears and arrows. They gathered plants for food and they used willow branches and tules to build their houses or "aps."

Soon after the Spanish in 1769, there was a long drought (a time of very little rainfall). The newly arrived Spanish padres knew how to control and store water using dams. Tile lined troughs or *aqueducts* were built to move water from one place to another. The mission padres supervised Chumash Indians as they built a dam on Mission Creek that can still be seen at the Botanic Garden. From there an aqueduct brought water 2 miles downhill to the Mission.

There the water was used for farming, drinking and washing clothes in the lavanderia. The big stone laundry basin has a Chumash carving of a mountain lion as the spout. Water poured from it into the last piece of aqueduct and into the Indian village that is where the Mission parking lot is today.

Once water was available, crops could be planted. The Spanish brought seeds and cuttings of many new food plants to the Missions. The Chumash learned to grow them and became very good at caring for crops and animals, a way of living called *agriculture*. They grew grapes, *olives*, corn, wheat, watermelons, beans and many kinds of fruit. In 1821 the Chumash harvested 12,820 bushels of grains and vegetables at Mission Santa Barbara. Over 2,400 *grapevines* were planted as well as the olive trees that give Los Olivos Street its name. The Indians' own gardens were so successful that they had extra produce to sell to the Spanish settlers and soldiers. Today, Santa Barbara Mission Museum still takes care of old grapevines and fruit varieties. Chumash Ernie Pico tends the garden as a volunteer.

Agriculture is very important today in Santa Barbara County. We all benefit from the crops introduced in the Mission times. Since Mission days, pioneers brought even more new crops. Goleta Valley Historical Society's Stow House is a pioneer farm that you can still see. Agriculture in our county grew from the hard work of the pioneer farmers beginning with the Chumash people of Mission times.



Padres stand atop the Mission Dam.



Water still flows in the aqueduct at the Botanic Garden.

Chumash volunteer Ernie Pico works in the Mission garden.



Mountain Lion water spout at the Old Mission.

## Word Search

Circle the hidden words:

AGRICULTURE  
CHUMASH  
GATHERER  
HUNTER  
ASH  
CULTURE  
GRAPEVINES  
OLIVES

A Y C H U M A S H L J  
G G G T N R Q S F L Z  
R R C A Q L E K D N K  
I A F K T V D G A E K  
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