Acorn Harvest

by Jim Gormely

In the fall of 2011, the sidewalk along the side of my house was covered with acorns. It was like walking on marbles and I shoveled a few wheelbarrows full. Many acorns sprouted in my garden and lawn.

This fall there are only a few acorns on the ground. I have heard folklore about predicting next year's winter weather based on the size of the acorn harvest. So, research for this article took me to the University of California's data, and to our local Miwok neighbors.

The seed of an oak tree, the "nut," is called an acorn. According to the University of California data, only one acorn in 10,000 will grow up to be an oak tree. Sixteen species of oak trees are present in California. Oaks are deciduous (lose their leaves). Live oak trees which have leaves year around appear not to lose their leaves like the other oaks, but the leaves are replaced each year with new ones.



Some species of oak trees bear acorns yearly, while others bear every two years. When acorns do fall, the second fall is the desired harvest. There is a first falling of premature acorns which do not have the nutritional value of the second. Speaking of nutritional value, ground meal from acorns provides more calories per serving than either wheat or corn meal.



Black Oak Acorn

After two days spent with the Miwok tribe of Tuolumne County, I learned that the tribe prefers the acorn from the Black Oak (Quercus kelloggii). They are plentiful, nutritious and taste sweet after processing.

During our meetings I experienced the making of "Acorn." The preparing of "Acorn" is a very reverent event. It must be done the right way, the old way. This way is taught verbally to each generation. During the days of acorn making, nothing negative can be thought or spoken. The children know this and have a great time as the parents cannot say no. Even during the cooking, if the boiling acorn liquid splashes on your skin, you cannot say "owww." Anything negative can displease the acorn spirit and future crops may be bad.

The acorns are gathered by each family, and each has its favorite tree. The processing is not done quickly as there are several steps to complete. Acorns contain a substance called gallotannin, which is poisonous, and must be removed before eating. The first step is to crack the acorn outer shell, then peel off the red skin covering the inner seed. Next, they grind the acorn into a fine flour and then rinse the flour many times for 24 hours (until the rinse water is clear) to remove the brownish tannin.

Now it is time to cook the acorn. I saw red hot lava rocks pulled from the fire and placed into the watery acorn. After adding several hot rocks and replacing cold rocks, the acorn came to a boil. Acorn is cooked from the inside out while regular cooking is from the outside to the inside. This was acorn soup. Acorn mush, or oatmeal, is made by adding more flour to the soup. Acorn bread is made by pouring the mush onto a large, flat very hot rock pulled from the fire.

In a good year, the oak tree will have several thousand flowers. Late spring frost can blight the flowers and, of course, drought and insects can affect the crop. Exceedingly dry soil conditions may cause early leaf drop and retard acorn production. Rain fall in prior years can boost development of the acorn.

Oak trees begin producing acorns at about 20 years of age, but 50 years is not unusual for the first crop. An average 100-year-old oak tree will produce 2,200 acorns per year. Strong production might happen every four to ten years.

Acorns are dispersed by squirrels and birds and are buried for future consumption. Some that are not claimed grow into oak trees. Thus, an important interaction between insects, animals and plants gives us an oak tree.

Now, the answer to the question about the effectiveness of weather prediction based on the acorn harvest? It depends.

Jim Gormely, a recent graduate of the Master Gardener program, is fascinated by the galls and acorns produced by the oaks on his property.