Introduction

Archaeological evidence shows that the lower Sacramento Region has been home to human populations for more than 4,000 years. During this time, the local environment was dominated by open grasslands, tule marshes, and tree lined rivers. The rich array of floral and faunal resources these habitats supported made this an attractive place to live and with tending, allowed a hunting and gathering lifestyle to thrive here for thousands of years.

Sacramento State University has many archaeological collections from the local vicinity. These collections include an abundance of dietary remains in the form of discarded animal bones, carbonized seeds from earth ovens and in baked clay impressions, and freshwater mussel shells. Through the study of these collections, researchers and students have been able to recreate the environment and lifeways of the indigenous people of Sacramento’s past.

Past Food Resources

The archaeological record shows that people living here not only utilized commonly recognized resources (i.e., deer, salmon, and acorns) but also many other native California species. The remains of most or all of these animals can be found throughout the 4,000 year archaeological record:

- **Mammals**: Pronghorn, tule elk, black-tailed jackrabbit, cottontail, North American beaver, California ground squirrel, raccoon
- **Birds**: Northern pintail duck, mallard duck, greater scaup, green-winged teal, Canada goose, greater white-fronted goose, snow goose, American coot, sandhill crane, doubleshelled cosmos, California quail
- **Reptiles**: Western pond turtle
- **Shellfish**: Western pearlshell mussel, Rocky Mountain ridged mussel, nuttals anadrom (all three are freshwater mussel species)
- **Fish**: River and Pacific lamprey eel, white and green sturgeon, chinook salmon, hardhead, Sacramento sucker, Sacramento blackfish, Sacramento perch, Sacramento spathula, hitch, and the now extinct thick-tailed chub

Paleoecological evidence from archaeological collections show that common plants used in indigenous diets included:

- **Plants**: Grey pine nuts, acorns, buckeye, manzanita, brodiaea, hairgrass, bedstraw, peppergrass, fescue grass, meadowgrass, tarweed, broad-leaf lupine, buttercup, clover, goosefoot, red mints, arrowleaf to spring, sheep sorrel, wild cucumber, wild grape, wild rose, elderberries, and the common tule.

Past Sustainability

- Resource management techniques, such as plant patch tending and burning, kept nutritious plants productive, waterways clear for the rearing of juvenile fish, marshlands open for waterfowl, and foothill woodlands full of acorns.

- Living on these diets, populations in Sacramento grew over time; estimates for the Sacramento region are as high as 57 people per square mile along the Cosumnes River and the Sacramento River south of Yuba City in the last 500 years prior to European arrival.

- Such high population densities put stress on the most sought-after wild resources, in particular, large, high-profit game, such as tule elk and pronghorn (K-selected species). The resulting reduction in the population of these important resources led to a shift in the economic focus of the people living here. Less profitable, yet less depressible (r-selected species) and abundant resources, such as acorns, small fish and birds, and small mammals increased in dietary importance. This shift in economics is visible in the dietary remains recovered from local archaeological sites 1200 to 200 years ago.

Modern Impacts

Devastation of the local Native Californian population in the 1800’s, coupled with the introduction of non-native plants and animals by European colonists, led to a widespread loss of traditional management practices. Hydraulic gold mining, cattle grazing, irrigation diversions for agricultural crops, and river damming for hydraulic power augmented habitat destruction in the Sacramento Valley.

The loss of a diet based on local prime resources combined with an introduction of a diet based on a small suite of non-native agricultural crops and domestic animals continues to contribute to a wide array of dietary health problems among Native Californians including obesity and diabetes (Burrows et al. 2000; Kuhnlein and Receveur 1996; Kuhnlein 1995; Shintani et al. 1991).

Conclusions

- Archaeological evidence shows that diets of Native Californians of the Sacramento area incorporated a large array of nutritious locally available plant and animal resources for thousands of years.

- High population densities and introduced resources by Euro-American colonists limited the availability of traditional foods, visible in the archaeological record.

- The sudden loss of a broad traditional diet has had detrimental effects on the health of many Native Californians.

- Returning to a broader diet based on ancestral foods may be good for you too!