# Food, Ecology: Past, Present, Future

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## **Colonization of Food** and Ecology



Throughout the process of colonization, Native foods and land practices have been extremely disrupted. Plants that have historically been food sources have become limited due to land development, land that has housed specific plants have been sold as private property, and climate change has greatly affected the flora and fauna of California. While food and ecology systems have been colonized within California, groups are fighting back and trying to decolonize and reclaim land and food practices.



# Plants

# Chia Seeds

## Salvia columbariae

California Hearst Museum number 1-19769



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Past: Chia seeds were a very important source of food for Native

Californians. It was a common food source for long distance running. Chia seeds also were used for medicinal purposes like treating fevers and infections.

**Present:** While Chia seeds are still used within Indigenous communities, they often use store-bought chia seeds which is not the same species that previous generations of Native Californians harvested and used. Native communities purchase chia seeds because there are not enough wild chia seeds to harvest and eat.

**Future:** While it is not considered an endangered plant, its scarcity is only expected to continue because of livestock grazing and plant competition.

## Sugar pine nuts Pinus lambertiana

Tuolumne County, California Hearst Museum number 1-14012



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**Past:** Sugar pine nuts were harvested by climbing trees, harvesting the pine cones, breaking the cones in half, and then

shaking out the nuts. The nuts were eaten whole but they were also ground into a pine nut butter commonly called lopa.

**Present:** Sugar pine nuts are still being harvested amongst Native communities.

**Future:** Sugar pines have been greatly affected by wildfires, which often lead to infestation of beetles and where a tree would normally be able to recover from the damage caused by the fire, the beetles often lead to post-fire mortality. This is only expected to get worse as wild fires continue to get more common.





## Cattails

## Typha latifolia

Wawona, Mariposa County, California Hearst Museum Number 1-10250

## Past: Cattails had a lot of functional purposes in Native life,

leaves were used as weaving material and the down was used in home goods. The heads and the seeds were eaten and the roots and pollen were used for medicinal purposes.

**Present:** Cattails are still used in a similar way to the past within Native Californian traditions, but mainly within ceremonies.

**Future:** There are no immediate threats to cattails but they are seen as a nuisance and are often removed.



# Black Oak Acorns

## Chukchansi Yokuts Culture

Dunlap, Fresno County, California Hearst Museum number: 1-10808



**Past:** These California black oak acorns are native to California and are found throughout the state. Before colonization, many oak tree species flourished in the western United States, and Native tribes were the cultivators of this land. Acorns were a staple food of Native diets and oak

trees were thriving.

## **Present:**

In the harvesting process, acorns are peeled, leeched, and pounded into flour, which can be used in cakes, soups, and bread. Pictured is the cooking of acorn with hot stone in baskets. Native people still produce acorn flour. Electric corn grinders and steel pots are used today, but baskets are the preferred acorn cooking vessel.



**Future:** Due to pests, competition, urban developments, and disease, the oak tree population is declining rapidly. If no action is taken, this source of life and culture will fade away



## **Fungus** Chukchansi Yokuts Culture Madera County, California Hearst Museum number: 1-4045

**Past:** When the fungi population was flourishing in California, they were collected and consumed year-round. Fungi products were used to fuel fires, eaten in Native cuisine, and consumed as a source of medicinal

antioxidants.

**Present:** Native tribes are experts on the varieties of fungi, discerning different species by their colors, textures, and sizes. Harvesters use their hands, small knives, and sticks to carefully extract mushrooms in order to avoid disturbing the fungal ecosystem. They also strategically leave fungi behind for other wildlife. Mushroom harvesters have noticed the native mushroom population dwindling in recent decades. This disappearance could be linked to many causes, such as climate change, land exploitation, and the commercial industry of mushroom harvesting.

**Future:** Environmental efforts are ongoing to restore and sustain habitats and fungi populations. Environmental activists are trying to restore these species, and Native technologies and techniques are integral to this process.

# **Dried Elderberries**

## Chukchansi Yokuts Culture

Picayune, Madera County, California Hearst Museum number: 1-10418



**Past:** There is very little information on the history of elderberries and their significance in Native cultures. Elderberries were collected, dried, and stored. These berries would be boiled and would also be eaten raw.

**Present:** The Blue Elderberry tree, native to California, Oregon, and Texas, still grows rapidly today. They are tough and thrive in dry conditions, thus they still flourish in the Californian climate. Today, elderberries are used in jams and syrups.



**Future:** Elderberry trees are grown around farmlands to attract insects and pollinators. This practice of elderberry hedgerows has proved to be beneficial for both farmers and the surrounding wildlife and will be used in the future.



# Lichen

#### Chukchansi Yokuts Culture

Ticetcu (historical village), Fresno County, California Hearst Museum number: 1-10759

## **Past:** Lichen was incorporated in basketry by being used as a yellow dye

for weaving. Lichens were also bundled for weather ceremonies. When submerged in water, the lichen would generate rainy weather, and if the bundle was tossed in fires, it would ward away thunderstorms. According to the Hearst collection card, this lichen was "eaten with salt as greens"

**Present:** There is not a lot of information on present-day native lichen use in California. However the Native practice of incorporating lichen in diets and in dyes still lives on, and there are many blogs online detailing the health benefits of lichen.

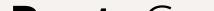


**Future:** Lichen growth is an indicator of healthy forest air quality, and organizations across California are working on future projects to study lichen growth and California's air quality.



# Camas Bulb

Klamath Reservation, Klamath County, Oregon Hearst Museum number: 1-14114



**Past:** Camas was a major staple in the diet of many Indigenous communities throughout Western North America, making it an important trade item. Roasting the bulb breaks down its starch into sugar, giving it a sweet taste. Camas were harvested in large quantities and were important components during feasts. Controlled burnings were crucial to take care of the land and to increase camas production.

**Present:** Use has declined due to the introduction of European crops, such as potato, and colonial pressures to farm non-Native crops. It may occasionally be used as a ceremonial food today, but the traditional knowledge of the camas has been lost over generations.

**Future:** There are efforts within Indigenous communities to reestablish traditional food systems. Efforts are made to protect ancestral knowledge of food on film or in books for future generations. Regaining land is important for agricultural autonomy.



Manzanita Berries

Bald Rock, Tuolumne County, California Hearst Museum Number: 1-10273

## Manzanita Flour

Northwestern California Museum Number: 1-2527b

**Past:** The manzanita berry was used by many Indigenous communities in

## California. It was prepared into a cider by crushing the berries and using water to filter the juice through a woven basket. The berries were also pressed into flour for soups. Some communities burned the bushes to protect the plant from insect damage. The leaves were used as a medicine by the Wintu and Miwok peoples to treat upset stomachs or used topically to treat poison oak rashes. The roots were also used to create black dye.

**Present:** The effects of colonization have limited access to traditional foods and contributed to the loss of traditional knowledge on foods. Manzanita bushes are drought tolerant. California has more than fifty species of Manzanita.

**Future:** Controlled burnings are important for the environment to prevent wildfires and promote higher crop production. Eating foods that are native to California is important for biodiversity and sustainability.



# Ecology

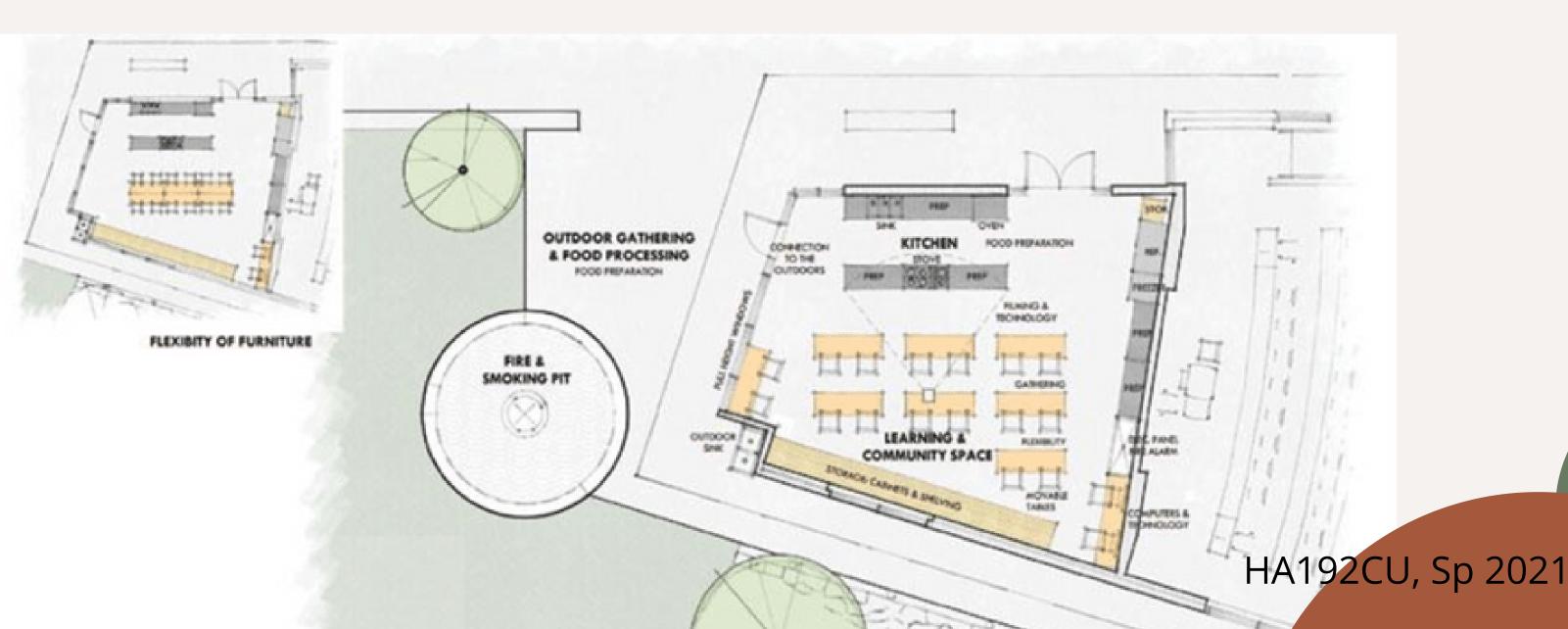
Ecology is the relationship between living things and the environment. This series of photos, ranging from the early to mid-1900s, is drawn from collections at the Hearst Museum. Even through colonization, Indigenous folks continue to fight and emphasize how important relations are to their environment, food system, and overall culture.

# Winnowing Wheat

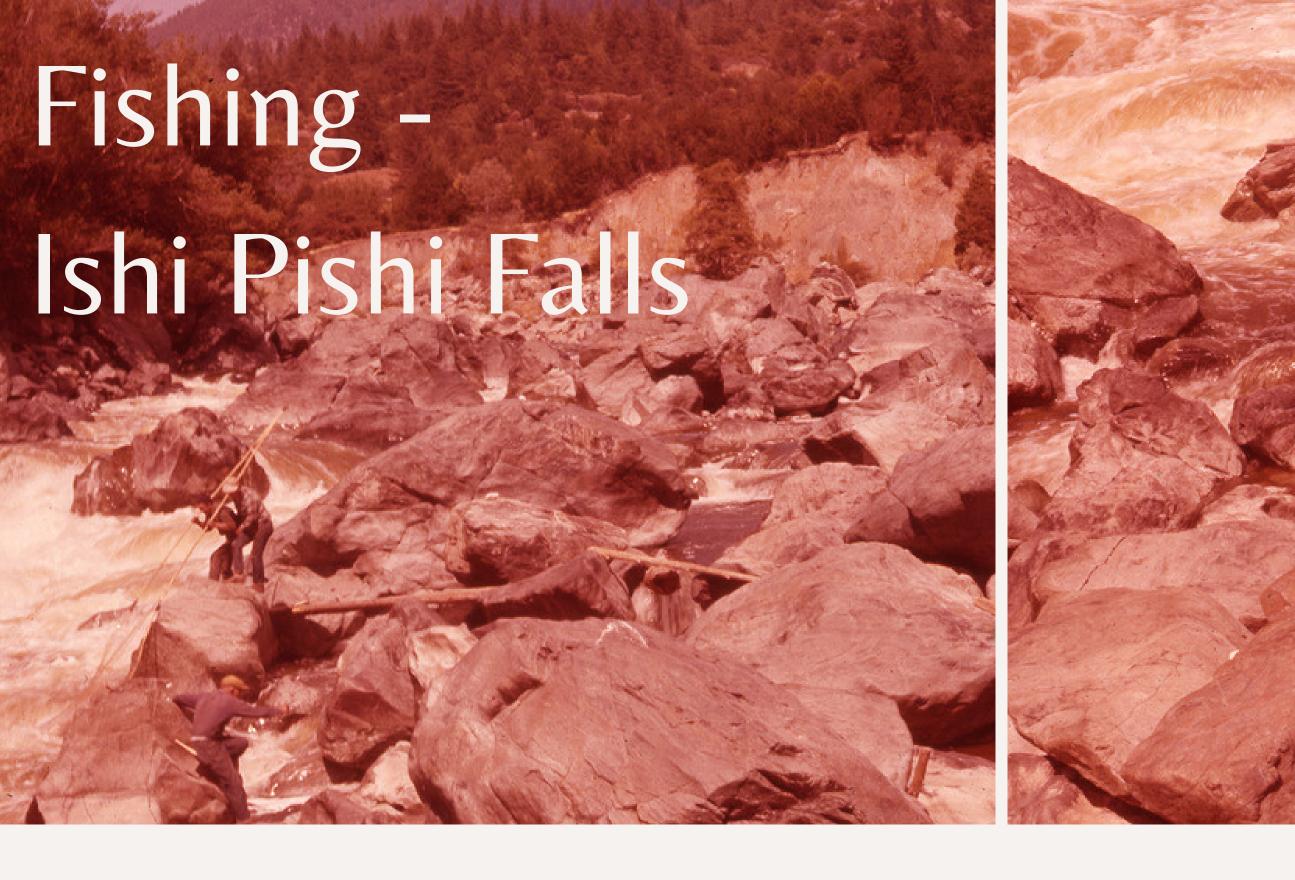
Northwest California; Hupa Reservation, Humboldt County Hearst Museum Number: 15-20879

**Past:** Pictured are folks on the Hupa reservation winnowing wheat. There is a large piece of machinery in the background. Winnowing is a method in which grains are separated from the chaff. This is a practice that can be used to harvest various plants that contain seeds or grains within a hard casing.

**Present:** Colonization altered the food **Future:** Currently in its building and system through the introduction of fundraising phase, the food sovereignty non-native plants and forced labor. It lab and cultural space are in the works has and continues to replace a at Humboldt State University. This space will function to educate folks on food traditional diet that consists of native plants and species and often leads to sovereignty and how colonialism has folks not getting the nutrients they affected Indigenous practices and the need to live a healthy life—especially food system in an effort to rebuild the those from Indigenous origins. relationship.



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Ishi Pishi Falls, Klamath River, Humboldt County, California Hearst Museum Number: 25-4864 and 25-4857

**Past:** Using handheld dip nets, folks fish along the Klamath at Ishi Pishi Falls. The Klamath River provides for a bountiful ecosystem and the Tribal Council projects that it used to support 1.2 million salmon annually precolonization (Karuk Tribe).

**Present:** In 2017, there was a run of only 11,000 Chinook salmon. During the 2019 and 2020 salmon runs the California Department of Fish and Wildlife further restricted fishing. There are exceptions: "members of the Karuk Indian Tribe listed on the current Karuk Tribal Roll may fish at Ishi Pishi Falls using hand-held dip nets." This is the only place Karuk citizens can fish and it also happens to be along treacherous rocks.

**Future:** With the opening of dams, it is hoped that the ecosystem and practices can be restored.

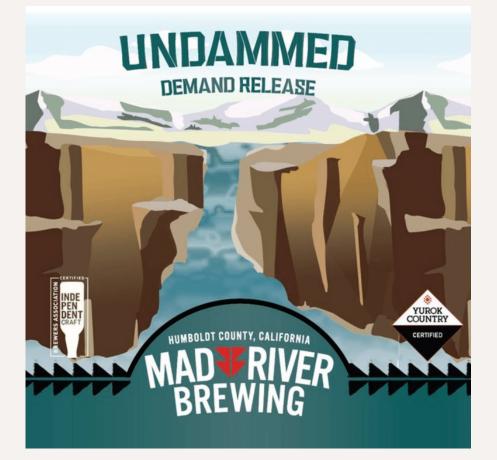
# The Klamath River

Del Norte County, California Hearst Museum Number: 15-11492

**Past:** This is a photograph looking up from the mouth of the Klamath River. It documents a moment in the early 1900s before large dams stopped the river.

**Present:** Due to dams further up the Klamath River, blue-green algae bloom. When damming does not prevent salmon from swimming upstream, they encounter this dangerous algae in their path. Not only do the dams halt fish and water from running freely but they prevents natural sediments and organisms from flowing, creating an imbalance in the ecosystem. A Yurokowned brewery called Mad River Brewing has created a hard seltzer called "Undammed: Demand Release" to bring attention to the issues faced by Tribes along the Klamath River.

**Future:** After decades of protest, debate, and communication, four of the six dams are set to be removed by 2024.







# Food and the Museum Institution: Past, Present, Future

# Past: Undocumented History

All these foods were collected for the permanent collection of the Phoebe A. Hearst Museum of Anthropology. The collections cards detail certain information, such as the collector, acquisition date, and a short description. These catalog cards are missing information, and most are very brief or left blank. For example, on this card for dried elderberries, under the "context of use" title is simply the phrase: "an aboriginal food."

## **Catalog Card for Dried Elderberries:**

No.       No.       Alter Coll.       Coll.       190         Collector       S.A. Barrett       Donor       Mr         Description       Specimen, ethnobotanical; elderberries, dri         Provenience (incl. craftsman) California, Madera County, Pic         Native name and meaning       Materials, techniques         Context of use (incl. role in trade)       "An aboriginal food"         Photo	6 Date Acc.	File 8.1
Provenience (incl. craftsman) California, Madera County, Pic Native name and meaning Materials, techniques Context of use (incl. role in trade) "An aboriginal food" Photo Published Conservation	s. P.A. Hearst	No. Pcs. 1
Native name and meaning       Materials, techniques         Context of use (incl. role in trade)       "An aboriginal food"         Photo	ed	
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### Why were these foods collected for the museum in the first place?

The field of anthropology was founded in the colonial and capitalist desire to collect. Academic anthropologists were white males who were interested in accumulating the most "authentic" and "exotic" collection.

In the late nineteenth and early twentieth centuries, Native populations across the United States were declining after centuries of forced assimilation and government-sponsored genocide. Anthropologists were alarmed by this disappearance and sought to supply museums with native artifacts for future study. While they disregarded the lives of native people, they were obsessed with their belongings. Through *salvage anthropology* scholars excavated, pillaged, and collected as many objects as they could from these "dying" cultures.

In reality, Native people and cultures were and are resilient against colonization. This narrative of "dying" Native cultures was a myth. Native people were still alive, but they were not embodying the colonial idea of what an "authentic," "savage," and "uncivilized" native culture should look like.

This history can explain the massive collection of food samples and the lack of information in the Hearst Collection. These objects were not collected because of their cultural value and contexts, but they were collected for the sake of collecting. The anthropologists were not knowledgeable about the contexts and importance of these foods, but they acquired them in order to build the institution's collections. *Salvage anthropology* inspires the idea that anything and everything can be preserved and studied, even chia seeds and lichen.

# Present: Frozen in Time

Maintaining these organic artifacts entails a meticulous preservation process. These foods in the Hearst collection are stored in air-tight glass jars and housed in metal cabinets. All materials in the packaging and padding of these objects are used to minimize damage by pests, humidity, and light. Thus, these foods were sprayed with pesticides and are currently stored in cool, dark environments in the collections department.





This entire preservation process is to conserve the colors and textures of the objects from when they were first collected. This process of continuously maintaining these objects is unnatural, for these plants were not meant to live forever. This process of preserving these specimens makes it nearly impossible to try and re-grow these plants and return them to nature.



## Future:

We must ask the following questions:

Why are these foods stored and preserved in a museum?

How do we understand these foods when they are plucked out of their natural contexts and frozen in time?

How should food be represented in the museum space? Does it belong in the museum space?

## How do we move forward?

The process that entails caring for living plants is the opposite of preserving artifacts. Constant water and sunlight are red flags from the point of view of artifact conservation. We propose that these foods do not belong in a museum, frozen in time. Instead, we propose living collections as an alternative. We imagine partnerships with the UC Botanical Garden and curating a space for sharing culture such as Cafe Ohlone serving food at the Hearst Museum.



# Conclusion:

Colonization has had a lasting impact on the food systems of Native peoples. The various foods and photographs in this section are fragmented aspects of Native life altered through colonization. Foods that were widely cultivated by Native communities are decontextualized, defamiliarized, and frozen in time for visual consumption. Would a growing, revitalized collection of plants be more appropriate for the present? In the future, can the museum become a space to welcome new life?



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