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# Pre-Colonial Foodways

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# Pre-Colonial Foodways

## **Abstract**

By the time Europeans reached the shores of the Americas, the Indigenous peoples of the northern continent had developed food systems that efficiently utilized their abundant landscape to provide a relatively nutritious diet. The diversity of Indigenous food ways mirrored the diversity of the ecosystems of each people's homeland. Lush forests east of the Mississippi harbored plentiful game and provided fertile soil for fields of corn, beans, and squash. Peoples who lived along the ocean coasts gathered tidewater resources, like shellfish, seaweed, and sea urchins. They also perfected seafaring vessels that could take them far from land, even to hunt large game—like seals, dolphins, and whales. Moreover peoples living in regions with seemingly scarce resources developed rich food systems. The peoples of the southwest not only harvested the incredible diversity of their desert landscape, they also invented complex systems of irrigation, allowing them to farm with the little water at their disposal. By viewing most non-human entities as cognizant beings, including animals, plants and even stones, and by emphasizing reciprocal relationships with these other beings, Indigenous peoples learned to hunt, gather, fish, and grow with the restraint needed to ensure continued abundance of food sources. These practices present alternatives to Euro-centric hierarchical models of human and non-human relationships, offering possibilities for establishing more sustainable subsistence practices than those most Americans currently practice.

## **Disciplines**

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## **Comments**

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## PreColonial Foodways Christina Gish Hill

By the time Europeans reached the shores of the Americas, the Indigenous peoples of the northern continent had developed food systems that efficiently utilized their abundant landscape to provide a relatively nutritious diet. The diversity of Indigenous food ways mirrored the diversity of the ecosystems of each people's homeland. Lush forests east of the Mississippi harbored plentiful game and provided fertile soil for fields of corn, beans, and squash. Peoples who lived along the ocean coasts gathered tidewater resources, like shellfish, seaweed, and sea urchins. They also perfected seafaring vessels that could take them far from land, even to hunt large game—like seals, dolphins, and whales. Moreover peoples living in regions with seemingly scarce resources developed rich food systems. The peoples of the southwest not only harvested the incredible diversity of their desert landscape, they also invented complex systems of irrigation, allowing them to farm with the little water at their disposal. By viewing most non-human entities as cognizant beings, including animals, plants and even stones, and by emphasizing reciprocal relationships with these other beings, Indigenous peoples learned to hunt, gather, fish, and grow with the restraint needed to ensure continued abundance of food sources. These practices present alternatives to Euro-centric hierarchical models of human and non-human relationships, offering possibilities for establishing more sustainable subsistence practices than those most Americans currently practice.

Native food systems before contact prioritized food as a way to strengthen the health and robustness of communities. Although preserved foodstuffs were important trade items, the purpose of food production was not profit. Subsistence practices were embedded in social organization, religious beliefs, and generations of experience with a particular landscape. Food was produced not only to feed the body, but to heal and strengthen it like medicine, to offer to spiritual entities as a sign of respect in ceremonies, to bolster community cohesion through the generosity of feasting, and to trade as part of sustaining intertribal relationships. Native food production before European contact did not seek to tame the wilderness or exploit its resources for profit. Instead it sought to encourage abundance through careful management of the landscape, guided by reciprocal relationships of responsibility often expressed using the language of kin. In fact, Native peoples often emphasized their responsibility as caretakers of the land.<sup>1</sup> The intimate interactions between people, plants, animals, and land established mutual respect. Buffalo Bird Woman, a nineteenth century Hidatsa agriculturalist, revealed this

relationship in a quote about tending corn. “We cared for our corn in those days as we would for a child; for we Indian people loved our gardens, just as a mother loves her children; and we thought that our growing corn like to hear us sing, just as children like to hear their mother sing to them.”<sup>ii</sup> The people nurtured the corn, and in turn, the corn sustained the people. The parent child kinship metaphor articulated the responsibilities bound up in this reciprocal relationship. Because Native diets consisted of species collected through hunting and gathering as well, this ethic of responsibility extended beyond domesticated species to include the entire edible environment and the wider web it depended on.

Native peoples achieved such intimate interactions with non-human entities through prayers, songs, and ceremonies, through stories that articulated the consequences of abusive behavior like hoarding or wasting, and through stewardship undergirded by generations of keen observation.<sup>iii</sup> In this way, Native land management established reciprocal relationships that emphasized responsible use of the landscape, rather than the two extremes of either resource extraction or landscape preservation. Gathering practices and management strategies emphasized the co-existence of other species.<sup>iv</sup> For instance, Native peoples utilized fire both on the plains and in forested landscapes to destroy pests and to create habitats that were resource rich for large game like deer, elk, and buffalo.<sup>v</sup> Not only did these activities change the ecology of specific landscapes, they often increased the biodiversity of a region to the benefit of both human and non-human inhabitants. Native peoples also adeptly harvested plants to encourage them to grow more plentiful. Corn is the obvious example. Over generations of careful seed selection, the Indigenous peoples of the Americas created a fully domesticated plant from wild stock, breeding hundreds of varieties along the way. Many agriculturists even planted corn, beans, and squash together, knowing they would nurture each other. Certainly since its domestication, corn has needed people to survive, but other wild plants, like Indian potatoes, also lived reciprocally with the people who ate them, blurring the Euro-American distinction between wild and domesticated. By digging the soil for these tubers, gatherers aerated it and broke off little corms which would propagate into new plants.<sup>vi</sup> While these plants were never fully domesticated, Native gatherers intentionally managed the potato beds as they dug, with the idea of improving the health and fertility of the tuber population. Prayers and ceremonies showed proper respect to plants, animals, and other resources like water or stones that gave up parts of themselves to nurture human beings. Such practices demonstrate a sense of responsibility to manage the landscape to the welfare of plants and animals, establishing a reciprocal relationship based on physical nurturing as well as religious reverence and a respect for the plant, animal, or stone as a cognizant entity capable of choosing to sacrifice its life to sustain the people.<sup>vii</sup>

Yet, even without exploitation as the driving force behind subsistence practices, during the thousands of years on the land. Archeologists have revealed that over-use of the land coupled with catastrophic weather events have led to cultural dissolution. Both the Chacoan peoples in 1150CE and Mesa Verde peoples in

1300CE interspersed from a few urban centers to create many villages, probably as the result of ecological pressures, especially drought.<sup>viii</sup> The inhabitants of Cahokia, the largest urban center in Native North America, also eventually dispersed under the strain of a changing environment.<sup>ix</sup> The harsh lessons gained by surviving these changes in the land have been enshrined in narratives, reminding listeners to maintain respectful relationships with their environment. For example, the Apache relate a cautionary tale about a spring that went dry because their ancestors failed to treat its resident snakes with respect.<sup>x</sup> Living on a specific landscape, making mistakes on it, and learning the benefits of practicing this reciprocity with non-human inhabitants over the course of hundreds of years allowed Native peoples to develop the complex knowledge of how to best utilize incredibly diverse and nutritious food systems for their populations.

Indigenous peoples have lived in the Americas for at least 15,000 years, perhaps longer. During this time, Native people were not just shaping their ecosystems through hunting and gathering, they were also tending specific plants so carefully that they eventually domesticated them. According to archeological evidence, Native peoples began domesticating edible seed-producing plants like sunflower, sumpweed, chenopod, knotweed, pigweed, giant ragweed and maygrass as early as 9,000 years ago. The first archeological evidence of maize domestication dates to over 6,000 years ago in central Mexico.<sup>xi</sup> Archeologists believe maize was first cultivated in North America around 5,500 years ago. There is also evidence that eastern North America staged its own agricultural revolution around 4,000 years ago, independently domesticating plants such as sunflower, squash, and beans.<sup>xii</sup> By the time Christopher Columbus arrived on the Caribbean shores, maize was central to the diet of agricultural peoples stretching from the Atlantic seaboard in the east to the Missouri River on the Plains in the north and to the four corners of the southwest. Yet the distinction between wild and domesticated plants was not as sharp as it is for modern Americans. Native farming communities still hunted and gathered edible plants to supplement their diets. Wildlings were often encouraged to grow among the corn, beans, and squash.<sup>xiii</sup> Indigenous peoples did manage these species to encourage their productivity, so while they were not actively domesticating the species, they were not completely wild either. Regardless, most agriculturalists did place the plants they farmed in different categories from the plants they gathered.

While Native peoples of North America did share general worldviews about the relationship between people and the land, their specific foodways were quite distinct depending on geography. To reflect this great diversity, scholars have grouped the Indigenous peoples of North America into regions based mainly on shared environment and more loosely on cultural similarities: the Northeast, Southeast, Great Plains, Southwest, California, Great Basin/Plateau, and the Northwest Coast. While these groupings are often problematic for categorizing specific Native peoples, they can be useful in an overview of Indigenous foodways because groups utilizing similar resources often had similar food systems.

The Northeast extends over the northeastern United States from the Atlantic seaboard to the Mississippi River, and consists of three main ecological zones: the Coastal Region, the Saint Lawrence-Lowlands Region, and the Great Lakes region. Peoples living along the coastal region fished along rivers and in the ocean, catching cod, trout, herring, and bluefish, as well as both salt and freshwater eels. Native peoples harvested many varieties of shellfish including the hard-shelled clam or quahog (a Narragansett word originally), soft-shelled clam, razor clam, mussel, oyster, scallop, cockle, conch, and whelk. They also captured crustaceans such as lobster and crab. The Pequot, Mohegan, Montauk, Narragansett, Wompanoag, Abenaki, and Penobscot among others, harvested the rich clam beds off the coast of Connecticut, Rhode Island, Cape Cod, and Maine. Purportedly, many beds were as large as three feet deep and spread anywhere from ten to twenty acres. Large deposits of oysters flourished off the coast of Maine. Natives prepared shellfish and crustaceans by baking, roasting, drying them in the sun, and smoking them over fires. The Penobscot in Maine packed oysters in birchbark boxes to preserve them for winter.<sup>xiv</sup>

Across the northeast, people collected wild plants, including fruits like huckleberries, persimmons, wild grapes, and strawberries. Strawberries were such a delicacy that many Algonquin peoples named a month after them and held festivals celebrating their gathering time. The people also harvested nuts such as hickory, walnut, butternut, and hazelnut. One of the most important plants gathered, however, was the groundnut, a starchy tuber. It was readily available, could be dug almost year round, and had a high protein content. When dried, the groundnut could be stored for several years. Groundnuts were used in soups, with meat, and pounded to make bread, by peoples Indigenous to the northeast and later by the Europeans who settled there.

For peoples of the Great Lakes region, wild rice was a vital staple. Its prominent place in Ojibwe historical narratives reveals the importance of this resource. The narrative of their migration from the east centers around the prophecy that the people should stop when they reach the land where food grows on water. These knowledgeable ancestors were speaking of wild rice. The harvest was so important that the people named a month after it. Ojibwe, Dakota, and Menomini peoples gathered wild rice at the end of the summer by first tying off the stalks and then gliding through the water, using long clubs to beat the rice off the plant into the bottom of their boats. They dried and stored it in baskets and birch bark boxes for the winter. It was also an important trade commodity throughout the region. Wild rice was used to thicken stews or was parched and carried by traveling parties. In 1661, Pierre Radisson, a French man who visited the area wrote that, "for each man a handful of that they put in the pot, that swells so much that it can suffice a man."<sup>xv</sup> Because of its nutrition, durability, and portability, wild rice became a staple for non-Natives moving into the area. The harvesting and marketing of it by Ojibwe peoples continues to this day.<sup>xvi</sup> In fact, Ojibwe people value their relationship with wild rice so highly, that today they seek to protect it from genetic manipulation and the desired exploitation for a market economy implied by this research.<sup>xvii</sup>

Three sisters agriculture also developed as a central food system in both the North and the Southeast. The Iroquois and the Cherokee called corn, bean, and squash “the three sisters” because they nurture each other like family when planted together. These agriculturalists placed corn in small hills planting beans around them and interspersing squash throughout of the field. Beans naturally absorb nitrogen from the air and convert it to nitrates, fertilizing the soil for the corn and squash. In return, they are supported by winding around the corn stalks. The squash leaves provide ground cover between the corn and beans, preventing weeds from taking over the field. These three plants thrive together better than when they are planted alone.

All of the major types of corn cultivated today were grown by Native peoples at the time of contact with Europeans—dent, flint, flour, sweet corn, and popcorn.<sup>xviii</sup> Each type was put to different purposes by Indigenous agriculturalists. Dent was good for roasting, flint stores well and was quite resistant to insects, and flour corn was ground into flour for breads and thickener. Popcorn could be roasted over a fire until white and fluffy and sweet corn could be eaten with very little preparation. Corn could also be prepared as gruel, mush, or hominy. Hominy, a word with Algonquian origins, involved removing the hull of the grain by soaking it in lye, and by doing so, increasing its nutritional content. In fact, Native peoples could have easily prepared corn as many as forty different ways, including creating dishes that mixed the three sisters together for added nutrition.

Sydney Mintz argued that corn was “the nutritive anchor of an entire culture,” because it was a foundational food for so many peoples of the Americas for thousands of years.<sup>xix</sup> He notes that for many Native peoples, corn literally meant life—it was the definition of food.<sup>xx</sup> As a plant, corn is well-suited to such a role. It is simple to grow, fast to mature, produces abundant yields, and is easy to store for long periods. Iroquoian understandings of the three sisters illustrate the cultural importance corn, beans, and squash had for peoples of the region. They called corn by a name that translates as “our life” or “it sustains us.”<sup>xxi</sup> Iroquois peoples practiced many religious ceremonies designed to honor the three sisters, who were not only thought of as individual plants, but spiritual entities who supported the life of the people. The Corn Sprouting Ceremony in May honored the tender shoots so they would continue to grow and the Green Corn ceremony celebrated the harvest.

Corn held as central a role in the foodways of Southeastern peoples as it did for those directly to the north. They also celebrated the Green Corn Ceremony, honoring the appearance of immature corn in its milky stage. For the Cherokee, the ceremony focused around giving thanks for the harvest, securing fertility of crops, and preparing and eating green corn. Occurring during mid-to-late-summer, this ceremony ushered in the new year, providing opportunities for people to renew all aspects of their life. It was a time to reconcile any ill-will between people, to clean out their houses, rid themselves of any old items, and renew their relationships and homes. The celebrations included fasting and feasting, games, dances, naming

ceremonies, and building a new sacred fire. This celebration was even more important for peoples east of the Mississippi than planting or harvest ceremonies. It marked the social and spiritual regeneration of these communities.

Many Native communities, including the Iroquois in the Northeast, the Cherokee in the Southeast, and the Mandan, Hidatsa, and Arikara on the Plains, recognized a strong connection between women and corn. Women tended to the plants as they grew but they also controlled the distribution of the products of their labor, giving women substantial economic power. Furthermore, the plants themselves were connected with potent female spiritual beings. Among the Cherokee, Selu, the first woman, produced corn, beans, and squash from her body to feed the people, embodying the spirit of corn. By honoring corn in the Green Corn Ceremony, the Cherokee paid homage to women in general, recognizing their remarkable power to sustain their communities.<sup>xxii</sup> Cherokee communities continue to celebrate the ceremony today. They simultaneously are working to save the corn honored in the celebration. Both the Muskoke Food Sovereignty Project and the Center for Cherokee Plants work to propagate traditional vegetables and protect them in newly established seed banks.<sup>xxiii</sup>

In most agricultural societies east of the Mississippi, hunting supplemented farming and gathering, creating one set of roles for women and one for men. The fact that women provided the majority of a community's nutritional needs garnered them a respected status equal to that of men. These peoples highly valued hunting as well. Hunters not only provided important protein, they also procured other animal products the community depended on, like hides, furs, antlers, hooves, and sinew to create clothing, blankets, and tools. As a high status activity, skilled hunters were important to the community and praised accordingly. Yet, when Europeans established a colonial presence in the east, they introduced market trade that escalated the value of deer hides, and therefore hunting, beyond subsistence needs, creating an expectation of access to European goods in Native communities. Families enjoyed cloth, iron tools, metal knives, and new types of food and drink. Native hunters soon required guns, as well as the bullets and powder that only trade could provide. Over time, the agricultural peoples of the region became embedded in the global economy that demanded cheap leather to make the belts that ran the new machines driving the Industrial Revolution. Eventually, they came to depend on the market economy which they could access more efficiently with the hunt rather than the harvest as they had in the past.<sup>xxiv</sup> This shift not only affected the people's material culture; it dramatically changed gender relations and all the social, political, and religious spheres organized by them.

A similar pattern emerged on the American plains, as Native men began to hunt for the buffalo hide trade. This region stretches from the Mississippi River in the east to the Rocky Mountains in the west and as far north as Canada and south as Texas. Very small numbers of people lived on the plains as early as 12,000 years ago. For centuries, Indigenous peoples came and went from the region, as the climate of the region cycled through wetter and dryer periods.<sup>xxv</sup> When the horse arrived around

1600, however, peoples living along the river bottoms who occasionally ventured onto the plains to hunt were free to create a more permanent life there.

It would be difficult to overestimate the importance of bison for Plains peoples, like the Lakota, Cheyenne, Crow, Kiowa, and Comanche. These communities sustained themselves with the large animals, as they provided for most of the people's material needs, including hides for dwellings and clothing, bones for tools, sinew for thread, hooves for glue, dung for fire, bladders for water containers, and even medicines. These groups supplemented their diets by gathering tubers such as prairie turnips<sup>xxvi</sup>, groundnuts, breadroot, and sunchokes and berries such as chokecherries, wild plums, wild grapes, and buffalo berries, as well as obtaining corn, beans, and squash through trade. While most plains people hunted bison and gathered wild plants, a few were agriculturalists, namely the Mandan, Hidatsa and Arikara on the northern plains and the Omaha, Osage, and Pawnee on the southern. Both before and after the hide trade inserted Indigenous people in the global market economy, these agricultural goods were in high demand on the plains. Hunting tribes often traveled to sedentary agricultural villages to trade buffalo robes, meat, and prairie turnips for braided strings of corn, and dried squash and beans. Buffalo Bird Woman, a Hidatsa agriculturalist, told her biographer that the Standing Rock Lakota Sioux would come every year to purchase corn. "They came not because they were in need of food, but because they like to eat our corn, and had always meat and skins to trade to us. For one string of braided corn, they gave us one tanned buffalo robe."<sup>xxvii</sup> When Euro-American fur traders came into the region, they discovered the value of these agricultural products as well, depending on them for portable food during their long travels.

Bison was profoundly important to Plains peoples. The Blackfoot called it "real food" and the Lakota word for bison translates to "big meat." By eating the meat raw and including organ meat in their diet, plains peoples could even gain important vitamins from bison. A fresh kill meant a feast for the entire village, as well as meat that could be dried in the sun for long-term storage. Pemmican was another favorite. This high protein, high energy food was made by taking very lean bison meat, fire-drying it until brittle, pounding it until fluffy, and adding melted tallow and dried berries. Pemmican was easy to transport, rich and delicious, and satisfied hunger with small amounts.

Native people recognized the value of bison for survival and hunted them as early as 11,000 years ago.<sup>xxviii</sup> In order to kill such massive animals, early hunters drove bison off cliffs, trapped them in deep snow, and built corrals of brush or logs, herding them into these containments, often killing more than they needed and sharing their kill with other predators, namely wolves. As Plains peoples like the Comanche, Kiowa, Cheyenne, and Crow learned to tame and ride wild horses, their life on the plains changed dramatically. They could travel much longer distances in search of herds and could more easily hunt from horseback, allowing groups to emerge who almost entirely subsisted by the bison. Because one animal became central to survival on the plains, most Native peoples honored them in religious

narratives and maintained respectful relationships with bison through ceremony. Many plains peoples, like the Blackfoot and Lakota, articulated their relationship with bison in kinship terms, requiring the accompanying honor and reciprocity one would show to a relative. Hunters often made food offerings to the spirits of animals killed to honor them and ensure the respect of living animals who might give themselves up to the hunter in the future. Buffalo also played prominent roles in the historical and religious narratives of plains communities, White Buffalo Calf Woman of the Lakota probably being the most famous example. She brought all the ceremonies central to the Lakota way of life, including the sacred pipe.<sup>xxxix</sup> Furthermore, certain community-wide ceremonies were often focused, at least in part, on the well-being of the bison and its relationship with the people. The Bison Dance, performed yearly by the Mandan, was designed to honor the buffalo so they would make themselves available for the hunt.<sup>xxx</sup> The Cheyenne, Lakota, and Crow among others came together for yearly sun dances that honored bison and attempted to secure their fertility.

Yet, by the 1870s, the bison has almost disappeared from the Great Plains. The debate over the causes of this decline have revealed that dramatic changes engendered by Euro-American encroachment and the introduction of market forces such as the new technology of the horse and gun, the desire to escape epidemic disease devastating settled communities, and an increase in the population dependent on bison as their primary food source all contributed.<sup>xxxi</sup> Native people on the Plains entered the market economy through the hide trade, killing bison not only to provide them directly with the means to survive, but also with robes for trade to obtain European materials that became necessary to their new way of life. Supplying the commodities market with hides, meat, skins, and tongues lead to changes in Plains peoples' economic systems, gender relationships, and social organization.<sup>xxxii</sup> The railroad increased the speed of trade, bringing Euro-American hunters to the region faster and shipping larger quantities more easily. While Plains hunters had killed thousands of buffalo with corrals and cliff jumps previous to the acquisition of horses, bison numbers had not dwindled.<sup>xxxiii</sup> But these new forces, coupled with the encouragement of the United States government policy that sought the extermination of bison as part of their effort to subdue Plains peoples, essentially destroyed the vast herds. Considering the importance bison held in plains societies, it is no wonder that the United States government attempted to control these plains people in the 1850s and 60s by exterminating the animal. By 1884, few were left. The federal government encouraged hunting bison by the thousands, not only to supply the market, but also to rid Plains peoples of their most valuable food source.<sup>xxxiv</sup> These changes had profound consequences, causing immense suffering for people and bison alike. Today many tribal nations are working to repair the rifts in their relationship with bison by developing tribal herds.<sup>xxxv</sup> Some Plains tribes mostly maintain herds for use by tribal members as a culturally appropriate food for feasts and source of ceremonial items. Communities have also developed commercial bison production, for example Tanka headquartered on the Pine Ridge reservation.

Native peoples of the Southwest also struggled with the environmental changes brought by European colonization. The Spanish arrived in the southwest region in the mid-1500s. While exploring the region spread over present-day Arizona, New Mexico, southern Colorado and Utah, and northern Mexico, they encountered arid desert, mountains, pine and juniper forests, and several relatively lush river bottoms. They arrived in an area that had been inhabited for at least 6,000 years. The Hopi pueblo of Oaribi is one of the oldest continuously occupied settlement north of Mexico. Many peoples of the region lived in small agricultural villages, called “pueblos” by the Spanish. Beyond these villages lived peoples, like the Apache and Navajo, who subsisted mainly on gathering and hunting.

Agricultural practices of the region varied from intensive irrigated farming, providing up to ninety percent of the diet, to much more sporadic planting providing as little as thirty percent of a group’s subsistence. Famine was a real threat for pueblo peoples who depended heavily on their agricultural products of corn, beans, and squash. If the spring rains were sparse, even the people’s sophisticated irrigation systems might fail their crops. Larger game like deer, antelope, and mountain sheep occasionally provided meat, but were quite scarce. Some pueblos, particularly the Hopi and Zuni, traded their textiles and agricultural goods to plains peoples for bison meat.

In an attempt to provide more security for their risky agricultural endeavors, southwest pueblos practiced many religious ceremonies designed to improve the productivity of their crops. Often religious narratives dealt with famine. For example, the Zuni explained a past period of extreme draught by the flight of their Corn Maidens. Because of this, during their rain ceremony, harvest rituals, and winter solstice ceremony, the Corn Maidens played important roles. Among the Hopi, corn appeared in almost every ceremony practiced by the community.<sup>xxxvi</sup> Corn even entered into religious narratives and rituals among peoples whose agricultural practices were less central to subsistence such as the Apache and the Navajo.

Communities who practiced less intensive agriculture relied on the desert’s rich supply of highly nutritious plants, including prickly pear, wild onion, common purslane, dandelion, beeweed, saguaro fruit, cholla buds, yucca, and agave, as well as seeds like pumpkin, sunflower, amaranth, and pinyon nuts. Agave, a large plant similar to the artichoke, was a staple for the Mescalero Apache. There is archeological evidence to indicate that some Indigenous groups cultivated the plant in orchards hundreds of acres across. While the plant is toxic raw, it can be consumed when roasted. The Apache would create huge roasting pits to process the hearts, making them edible. Pinyon nuts were another staple of Native peoples throughout the southwest and the Great Basin. Remains of pinyon nuts have been excavated from most ancient burial sites in the region.<sup>xxxvii</sup> These nutritious nuts could be eaten raw or cooked, and were used in stews, made into porridge, or even ground for flour and baked into bread. Many peoples of the southwest depended on pinyon to carry them through resource scarce winters and to supplement

agricultural crops. An early ethnobiologist, J.S. Newberry stated, “in cases where for any reason a failure of this crop occurs, some tribes or bands have been brought nearly...to starvation for the want of the nutriment they afford.”<sup>xxxviii</sup>

Colonization by the Spanish dramatically changed southwestern foodways. Like other European colonizers, the Spanish introduced new foods like sugar and wheat flour. Probably the most profound shift in southwestern agricultural practices instigated by Spanish colonization, however, was the introduction of sheep. The Navajo in particular adopted sheepherding as a part of their ambulatory way of life. Over time, sheep became woven into the fabric of southwestern foodways and economies, so that today, Navajo peoples are thought of as shepherds before anything else by non-Natives. Sheep remain central to Navajo foodways, and provide an important economic staple for the reservation in wool. Along with sustaining their animal husbandry, the Navajo are attempting to revitalize their agricultural practices. The people never stopped farming, but they have come to depend more on Western agricultural practices. The Navajo Nation Traditional Agricultural Outreach is working to renew Navajo dryland practices and to encourage more participation in farming by community members. Throughout the southwest, restoring agriculture as a community practice has increased access to fresh, culturally appropriate foods and decreased diabetes and obesity.<sup>xxxix</sup>

Although California as a cultural region shared some subsistence practices with the southwest, such as harvesting cactus and pinyon nuts, it has such a diverse ecosystem that the peoples in the area utilized a wide variety of foods. In fact this region was so ecologically rich that its peoples were able to subsist entirely on hunting and gathering while remaining relatively sedentary. They certainly practiced seasonal rounds, traveling to specific sites to acquire certain foods, but unlike plains peoples, they had little need to travel large distances. The peoples gathered a wide variety of wild plants, hunted small game, gathered insects, and those along the coast utilized the Pacific Ocean’s rich tidewater resources.

California peoples are perhaps most famous for their staple food—the acorn. While white oak trees produce copious amounts of acorns, the nuts must be carefully processed through a technique called leaching. They have a high natural concentration of tannic acid, making them extremely bitter to the taste and hard on the stomach, causing indigestion. Native peoples dried the acorns, then cracked them open and grinded the nut into a meal. They would then wash the meal over and over. The water first turned yellow, indicating tannic acid, but when it finally ran clear, they knew the meal was safe to eat. It was then used to thicken stews or pounded into flour to make bread. By inventing this process, Native peoples turned a toxic but abundant resource into a staple food source. In fact, California peoples depended so heavily on acorns, they built large granaries to ensure safe storage for extended periods.<sup>xl</sup> With the arrival of Europeans, the Native peoples of California experienced a dramatic population decline, enduring the Spanish mission system, the influx of European disease, the Gold Rush, and the brutality of American settlement between 1800 and 1850. Disease, massacre, and exposure destroyed

nearly seventy-five percent of an already decimated population.<sup>xli</sup> Those who survived retained knowledge of foodways, however, including processing acorns, and they continue to utilize it today.

Like the California peoples, the peoples of the Northwest coast lived in such a lush ecosystem, they could subsist as sedentary hunters and gatherers. This area extends along the northwest coast of the Pacific Ocean all the way from present-day Alaska to the northern corner of California. The region is characterized by temperate rainforests, densely wooded and incredibly diverse. In fact, peoples like the Tlingit, Haida, Tsimshian, and coastal Salish living in this region built permanent villages of cedar plank houses along the beaches, not even needing to travel far from their homes to hunt, gather, and fish.

Northwest coast peoples hunted deer, elk, and bear. Some peoples, including the Tlingit, Tsimshian, Bella Coola, and Kwakiutl, also hunted mountain goat, roasting the meat and turning the hair into yarn for elaborate chilkat capes. This region provided many types of edible plants, including rockweed (a brown seaweed rich in iodine and vitamin B12), eelgrass (the only known grain from the sea used as food), and camas bulbs (starchy lily bulbs eaten raw, roasted, or pounded into flour). Peoples of both the northwest coast and the plateau region utilized camas bulbs as well as arrowhead, a potato-like tuber found in the muddy bottoms of shallow lakes. These nutritious roots were difficult to harvest; women accomplished it by wading into the water barefoot and nudging them out of the muck with their feet. The freed tuber would then float to the surface to be scooped up.

For northwest coast communities, however, sea resources made up the majority of their diet. The people gathered many species of shellfish and sea mammals including mussels, scallops, conch, and sea urchins, as well as seals, sea lions, dolphins, and whales. Often mammals were hunted by canoe with harpoons. Fish were also central to northwest coast foodways. These groups caught at least a dozen species of saltwater fish, including halibut and cod. One of the most highly prized fish of the area was oolichan or candlefish, called such because it was so rich in oil that one could insert a wick and the fish would burn like a candle. Many groups would make an annual pilgrimage to the lower Nass River in British Columbia where they would catch these fish through holes in the ice.<sup>xlii</sup> The Niska peoples specialized in preparing oolichan grease, made from these fish by allowing them to decompose in bins and skimming off the grease. The flavored varied depending on how long the fish were allowed to spoil. The Niska would then trade this valuable oil for dried fish, meat, tanned hides, and soap berries.<sup>xliii</sup>

The most important food source by far, however, for both northwest coast and plateau peoples was salmon. Every year, the salmon would migrate from the ocean up rivers and streams to spawn. Fish who were struggling upstream were easy prey and Native peoples of this region could catch thousands. The fishing season began in May and lasted through the summer. Spear-fishers awaited their catch on either side of the rivers. The Umatilla, Yakima, and Nez Perce all had designated family

fishing spots at Celilo Falls on the Columbia River that they would return to year after year. Families even built platforms out over the river to facilitate spear-fishing. Wielding three pronged spears, a fisher could catch dozens of fish at once. People also set up weirs along the river. These traps consisted of two fences made from willows. Fish would be able to navigate the first one, but would get penned in by the second.

The salmon runs provided Northwest Coast and Plateau peoples with sustenance to last them throughout the year. Once the fish were caught, women gutted and splayed them, mounting them on upright poles that were then propped up around an open fire. The fish would smoke dry in this way for about ten days. Once completed, the meat could be stored for year round use. While peoples in both regions supplemented their diet with game, plant foods, and other maritime resources, salmon sustained them, like corn sustained agricultural peoples, and buffalo sustained Plains peoples.

For this reason, many rituals focused on honoring the salmon and ensuring its fertility and abundance. One of the most important ceremonies was the Feast of the First Salmon. In preparation for the feast, families removed any dead plant or animal from their homes, and thoroughly cleaned them. They also brought any sick person outside temporarily. The first salmon caught was then taken by a religious specialist to an altar created for it. This salmon was laid out on a new reed mat, a red berry was placed in its mouth, and it was greeted as a highly honored guest. The specialist performed rituals and prayers before kindling a new fire. The fish was then tasted by everyone present and its head and bones were returned to the stream so that it could be reborn. Once the ceremony was finished, all the people were free to fish for the season. Monica Charles, a community activist from the Lower Elwha, tribe describes the purpose of the First Foods Feast in this way, "Every day something gives up life so you might live. They all do it knowingly.... We must give them thanks. This is why we do the traditional first foods ceremony."<sup>xliv</sup>

Salmon was such an important resource for Northwest Coast and Plateau peoples, they continued to depend on it into the twentieth century. While the people were able to provide for their families in this way for decades, the installation of dams, hydraulic mining, and commercial fisheries have now made this almost impossible. Prior to the colonial period, a rough equilibrium existed between salmon and their fishers. While the peoples of these regions had developed gear and techniques allowing them to catch salmon as efficiently as the industrial fisherman of the 19<sup>th</sup> and early 20<sup>th</sup> century, the fishers limited their catch to the needs of a relatively small population.<sup>xlv</sup> By the late 1800s, however, the salmon population was in decline due to a dramatic increase in numbers caught through commercial fishing for a larger population and in the ease of processing, preserving, and distributing salmon using steel cans.<sup>xlvi</sup> In the 1930s, the federal government began damming the waterways in the region, most famously the Columbia River. These dams prevented salmon from swimming upstream to spawn and managers of fish hatcheries struggled to find solutions to this problem. Today, Native peoples of the

area are working with ecologists to revive the salmon population. For example, the Nez Perce, along with the confederated tribes of Umatilla, Warm Springs, and Yakima have come together to form the Columbia River Intertribal Fish Commission to restore fish and protect the watersheds where they live, educate the public, and defend tribal treaty fishing rights.<sup>xlvii</sup> Their efforts have revitalized a foodway of vital central importance to the region's Native peoples, in turn rejuvenating an ecosystem as well.

Indigenous peoples throughout North America are facing similar problems. Their culturally significant food sources have been exploited and often faced extermination. Bison and salmon are examples. Changes in the landscape, increased settlement, removal from homelands, and the production of resources for market economies instead of subsistence have all impacted the ability of Native communities to continue pre-colonial food ways. Yet these foods are still central in origin stories, in religious ceremonies, in articulating social relationships, and even in expressions of collective cultural identity. It should not be surprising, then, that recovering these foods and procurement methods has become a central part of cultural revitalization efforts in many Native communities today.

Many American Indian peoples recently have adopted the concept of food sovereignty as an ideological framework to articulate the need for access to culturally appropriate foods produced in tribally sanctioned methods. By emphasizing the need to control production and distribution of these foods, Native communities have begun the work of renewing pre-contact relationships with their environment and its foods. Communities have planted their ancestors' seeds in their gardens, returned bison to their prairies, and fought to protect wild rice and salmon in their waters.

Many Native activists tend to use language that evokes an imagined authenticity, implying they are striving to recapture a traditional way of eating. At the same time, they are aware of the contradictions embodied in phrases like, "traditional Indian frybread." While frybread is an invention of skilled Native cooks trying to survive on rations during the reservation era of the nineteenth century, it has also become a quintessential American Indian food, recognized even by non-Natives as part of many Native peoples' foodways. This recent addition to American Indian tables is often a staple at pow-wows and other social gatherings, but it can even be an obligatory element of food preparation associated with ceremonies and offerings. Health and nutrition initiatives on reservations have come to recognize fry bread as a contributor to diabetes and obesity, and yet most communities would consider it a loss of cultural tradition if this food were erased from Native cooks' repertoires. Insisting that Indigenous food sovereignty should only protect and recuperate pre-contact foods is embedded in false assumptions about a static past. Not only have American Indian foodways changed with the influx of European ingredients, they had been changing before contact as well. The Ojibwe migrated to the food that grows on water, wild rice. The Cheyenne stopped growing corn and became buffalo hunters as they moved from the Missouri River to the high plains.

The key component of food sovereignty is not the reifying of some imagined culturally authentic way of eating, but the revitalization of a community's ability to make its own decisions about food. The food sovereignty movement allows Native communities to return to an emphasis on prioritizing food as a way to strengthen the health and robustness of both their people and their landscapes. By taking back control of food production, Native peoples have not only been able to revitalize pre-contact foodways, they have also been able to choose other foods to produce for their communities and even for wider markets. The Indigenous food sovereignty movement, in its many manifestations across the United States, has created models of sustainable harvesting and farming to inspire changes in our national food systems. Perhaps as Indigenous peoples reclaim their foodways, the value of reciprocity and the importance of procuring food while sustaining wider ecosystems will become apparent to us all.

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<sup>i</sup> M. Kat Anderson, "Tending the Wilderness," *Restoration and Management Notes*, Vol.14, No. 2 (Winter: 1996), 157.

<sup>ii</sup> Gilbert L. Wilson, *Buffalo Bird Woman's Garden: Agriculture of the Hidatsa Indians*, (Minneapolis: Bulletin of the University of Minnesota, 1917), 27.

<sup>iii</sup> M. Kat Anderson, "Tending the Wilderness," *Restoration and Management Notes*, Vol.14, No. 2 (Winter: 1996), 156.

<sup>iv</sup> M. Kat Anderson, "Tending the Wilderness," *Restoration and Management Notes*, Vol.14, No. 2 (Winter: 1996), 156.

<sup>v</sup> M. Kat Anderson, "Tending the Wilderness," *Restoration and Management Notes*, Vol.14, No. 2 (Winter: 1996), 160.

<sup>vi</sup> Dennis Martinez, Enrique Salmon, and Melissa K. Nelson, "Restoring Indigenous History and Culture to Nature," *Original Instructions*, ed. Melissa K. Nelson (Rochester, VT: Bear and Company Press, 2008), 90.

<sup>vii</sup> Tinker, George E. "The stones shall cry out: consciousness, rocks, and Indians." *Wicazo Sa Review* 19, no. 2 (2004): 105-125.

<sup>viii</sup> Lekson, Stephen H., and Catherine M. Cameron. "The abandonment of Chaco Canyon, the Mesa Verde migrations, and the reorganization of the Pueblo world." *Journal of Anthropological Archaeology* 14, no. 2 (1995): 184-202. Benson, Larry, Kenneth Petersen, and John Stein. "Anasazi (pre-Columbian Native-American) migrations during the middle-12th and late-13th centuries—were they drought induced?." *Climatic change* 83, no. 1-2 (2007): 187-213.

<sup>ix</sup> Munoz, Samuel E., Sissel Schroeder, David A. Fike, and John W. Williams. "A record of sustained prehistoric and historic land use from the Cahokia region, Illinois, USA." *Geology* 42, no. 6 (2014): 499-502. Milner, George R. "The late prehistoric Cahokia cultural system of the Mississippi River valley: Foundations, florescence, and fragmentation." *Journal of World Prehistory* 4, no. 1 (1990): 1-43.

<sup>x</sup> Keith H. Basso, *Wisdom Sits in Places: Landscape and Language Among the Western Apache*, (University of New Mexico Press, 1996), 13-17.

<sup>xi</sup> D. R. Piperno and K. V. Flannery, "The earliest archaeological maize (*Zea mays* L.) from highland Mexico: New accelerator mass spectrometry dates and their implications," *Proceedings of the National Academy of Science*, 98, no.4 (2001): 2101-2103.

<sup>xii</sup> Bruce D. Smith, *Rivers of Change: Essays on Early Agriculture in Eastern North America*, (Tuscaloosa: University of Alabama Press, 2007).

<sup>xiii</sup> Gary Paul Nabhan, *Enduring seeds: Native American agriculture and wild plant conservation*, (University of Arizona Press, 1989), 31-45.

<sup>xiv</sup> Linda Murray Berzok, *American Indian Food*, (Westport, CT: Greenwood Press, 2005), 85.

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- <sup>xv</sup> Carolyn Raine, *A Woodland Feast: Native American Foodways of the 17<sup>th</sup> and 18<sup>th</sup> Centuries*, (OH: Penobscot Press, 1997), 19.
- <sup>xvi</sup> Nesper, Larry. "Law and Ojibwe Indian 'Traditional Cultural Property' in the Organized Resistance to the Crandon Mine in Wisconsin." *Law & Social Inquiry* 36, no. 1 (Winter 2011 2011): 151-169, 153.
- <sup>xvii</sup> LaDuke, Winona. "Wild Rice: Maps, Genes, and Patents." *Recovering the Sacred: The Power of Naming and Claiming* (2005): 167-190.
- <sup>xviii</sup> Duccio Bonavia, *Maize: Origin, Domestication, and its Role in the Development of Culture*, (New York: Cambridge University Press, 2013), 13.
- <sup>xix</sup> Sidney Mintz, *Sweetness and Power: the Place of Sugar in Modern History*, (New York: Penguin books, 1986), 9.
- <sup>xx</sup> *Ibid*, 11.
- <sup>xxi</sup> Linda Murray Berzok, *American Indian Food*, (Westport, CT: Greenwood Press, 2005), 50.
- <sup>xxii</sup> Theda Perdue, *Cherokee Women: Gender and Culture Change, 1700-1835*, (Lincoln: University of Nebraska Press, 1999), 26.
- <sup>xxiii</sup> James R. Veteto, and Kevin Welch. "Food From The Ancestors: Documentation, Conservation, and Revival of Eastern Cherokee Heirloom Plants." *Seeds of Resistance, Seeds of Hope: Place and Agency in the Conservation of Biodiversity* (2013): 65. Tanya Denckla Cobb, Reclaiming Our Food: How the Grassroots Food Movement Is Changing the Way We Eat, "Food Heritage: Preserving Cultural Identities," (North Adams, MA: Storey Publishing, 2011) 194-195.
- <sup>xxiv</sup> Theda Perdue, *Cherokee Women: Gender and Culture Change, 1700-1835*, (Lincoln: University of Nebraska Press, 1999), 80.
- <sup>xxv</sup> Dan Flores, Empires of the Sun: Big History and the Southern High Plains, *OAH Magazine of History*, vol 27, no 4 (2013): 9-13.
- <sup>xxvi</sup> Kenneth C. Reid, "Psoralea Esculenta As A Prairie Resource: An Ethnographic Appraisal," *Plains Anthropologist*, 22, No. 78, Part 1 (November 1977): 321-327.
- <sup>xxvii</sup> Gilbert L. Wilson, *Buffalo Bird Woman's Garden: Agriculture of the Hidatsa Indians*, (Minneapolis: Bulletin of the University of Minnesota, 1917), 58.
- <sup>xxviii</sup> Barsh, Russel Lawrence, and Chantelle Marlor, "Driving bison and Blackfoot science," *Human Ecology* 31, no. 4 (2003): 571-593, 547.
- <sup>xxix</sup> Marla N. Powers, *Oglala Women: Myth, Ritual, and Reality*, (The University of Chicago Press, 1986), 42-50.
- <sup>xxx</sup> Virginia Bergman Peters, *Women of the Earth Lodges: Tribal Life on the Plains*, (Norman: University of Oklahoma Press, 1995), 137-142.
- <sup>xxxi</sup> Cite Isenberg, Flores, Nugent
- <sup>xxxii</sup> David Nugent, "Propoerty Relations, Production Relations, and Inequality: Anthropology, Political Economy, and the Blackfeet," *American Ethnologist* Vol. 20, No. 2 (May 1993), 336-362. Flores, D. 1991. Bison ecology and bison diplomacy: the southern plains from 1800 to 1850. *The Journal of American History* 78(2):465-485.
- <sup>xxxiii</sup> Shaw, J.H. 1995. How many bison originally populated western rangelands? *Rangelands* 17(5):148-150.
- <sup>xxxiv</sup> The intentional efforts of the U.S. federal government to encourage extermination of the bison have been clearly articulated by scholars like, Valerius Geist, 1996. *Buffalo Nation: History and Legend of the North American Bison*. Fifth House Ltd., Saskatoon, Saskatchewan.pp83-86, as well as Danz, H.P. 1997. *Of bison and man*. University Press of Colorado, Niwot, Colorado; Isenberg, A.C. 2000. *The Destruction of the Bison: an Environmental History 1750 - 1920*. Cambridge University Press, Cambridge, United Kingdom; Mayer, F.H. and Roth, C.B. 1958. *The Buffalo Harvest. Second printing* (1995). Pioneer Press, Union City, Tennessee.
- <sup>xxxv</sup> Torbit, Stephen, and Louis LaRose. "A commentary on bison and cultural restoration: Partnership between the National Wildlife Federation and the InterTribal Bison Cooperative." *Great Plains Research: A Journal of Natural and Social Sciences* (2001): 539. Freese, Curtis H., Keith E. Aune, Delaney P. Boyd, James N. Derr, Steve C. Forrest, C. Cormack Gates, Peter JP Gogan et al. "Second chance for the plains bison." *Biological Conservation* 136, no. 2 (2007): 175-184. Zontek, Ken. *Buffalo nation: American Indian efforts to restore the bison*. Bison Books, 2007.
- <sup>xxxvi</sup> Mary E. Black, "Maidens and Mothers: An Analysis of Hopi Corn Metaphors,"

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*Ethnology*, 23, No. 4 (Oct., 1984), 279-288.

<sup>xxxvii</sup> Linda Murray Berzok, *American Indian Food*, (Westport, CT: Greenwood Press, 2005), 72.

<sup>xxxviii</sup> J.S. Newberry, "Food and Fiber Plants of the North American Indians," *An Ethnobiology Source Book: The Uses of Plants and Animals by American Indians*, ed. Richard I. Ford (1887; reprint New York: Garland, 1986), 35.

<sup>xxxix</sup> Tanya Denckla Cobb, *Reclaiming Our Food: How the Grassroots Food Movement Is Changing the Way We Eat*, "Food Heritage: Preserving Cultural Identities," (North Adams, MA: Storey Publishing, 2011) 171-193. Enrique Salmon, *Eating the Landscape: American Indian Stories of Food, Identity, and Resilience*, (Tucson, AZ: University of Arizona Press, 2012).

<sup>xl</sup> Tushingham, Shannon, and Robert L. Bettinger. "Why foragers choose acorns before salmon: Storage, mobility, and risk in aboriginal California." *Journal of Anthropological Archaeology* 32, no. 4 (2013): 527-537. Gepts, Paul, ed. "Californian Indian Proto-Agriculture, Its character and legacy," *Biodiversity in agriculture: domestication, evolution, and sustainability*. Cambridge University Press, 2012. 190-214. Heizer, Robert Fleming. *The natural world of the California Indians*. Vol. 46. Univ of California Press, 1980. Kroeber, Alfred Louis. *Handbook of the Indians of California*. Vol. 78. Courier Dover Publications, 1925.

<sup>xli</sup> S.F. Cook, "The Epidemic of 1830 to 1833 in California and Oregon," in *American Archeology and Ethnology* 43(3): 303-26.

<sup>xlii</sup> Linda Murray Berzok, *American Indian Food*, (Westport, CT: Greenwood Press, 2005), 83.

<sup>xliii</sup> *Ibid.*

<sup>xliv</sup> Elise Krohn and Valerie Segrest, *Feeding the People, Feeding the Spirit*, (Centralia, Washington: The Northwest Indian College, 2010), 10.

<sup>xlv</sup> Robert T. Lackey, "Restoring wild salmon to the Pacific Northwest: chasing an illusion?" *What We Don't Know about Pacific Northwest Fish Runs --- An Inquiry into Decision-Making*, eds Patricia Koss and Mike Katz, (Portland: Portland State University, 2000), 91 - 143.

<sup>xlvi</sup> *Ibid.*

<sup>xlvii</sup> <http://www.critfc.org/about-us/mission-vision/>