Annex C – The History of the Hawaiian Culture

August 15, 2011

Origins of the Ancient Hawaiians and Their Culture

The first major Hawaiian island, Kauai emerged from the Pacific only six million years ago. This was millions of years before modern man walked out of Africa, but a blip in time compared to the 4.5 billion year history of our ancient planet. The Hawaiian Islands were formed above a 40 million year old volcano creating a hot spot under the Pacific Plate. As the pacific plate moves to the Northwest, the static hotspot continues to create islands. The effect of this is an island chain, one of which, the big Island, became the 5th highest island in the world. The next island in the chain, the seamount of Loihi is building and will surface in 10,000 years.

The isolation of the Hawaiian Islands in the middle of the Pacific Ocean, and the wide range of environments to be found on high islands located in and near the tropics, has resulted in a vast array of endemic flora and fauna. Hawaii has more endangered species per square mile than anywhere else.

Ancient tribal Polynesians arrived on this virgin scene after long, amazing sea voyages in their double-hulled canoes. The early Polynesians were an adventurous seafaring people with highly developed navigational skills. They used the sun, stars and wave patterns to find their directions. Ancient Polynesians even created incredible maps of wave patterns by binding sticks together. Bird flight paths and cloud patterns were used to discern where islands were located. Entire villages set forth upon ocean going double-hulled canoes to discover unsettled lands.

Maternal mitochondrial DNA evidence indicates that the ancient Polynesians, including the Hawaiians, are genetically linked to indigenous people of Southeast Asia. This is supported both by archeological and linguistic evidence. During the period of 3000-15000 BC, Speakers of Austronesian languages spread into the western islands of Micronesia and then Melanesia. The historic path of the ancient Polynesians can be followed with a large degree of certainty through the archeological record they left behind. About 1500 BC, a distinct culture appeared in Northwest Melanesia, known as the Lapita. This culture stands out in the archeological record with its large permanent villages with beach terraces located along the coasts. They also developed pottery in a wide variety of shapes and patterns.

From its origins in Melanesia, the Lapita culture spread some 3,700 miles to the East to Samoa and Tonga. Here the distinct Polynesian culture developed and spread outward into the rest of the Polynesian triangle. Archeological evidence indicates that the Polynesians had reached the eastern corner at Easter Island, the Western corner at New Zealand and the Northern corner of Hawaii by 700 A.D. In contrast, the Viking culture had not settled in Iceland until 875 AD.

Ancient Polynesian explorers most likely reached South America as well, evidenced by the fact that the sweet potato is grown throughout ancient Polynesia but originated in the Andes! However there is no evidence that the Polynesians settled in South America or that the South Americans traveled to Polynesia in pre-history.

The great Polynesian migrations were made by whole villages and in their great double-hulled canoes. They brought their crops, pets and some stowaways that settled the islands along with them like geckos. The ancient Polynesian's motivation seems to have been population pressures and their legends speak of their great explorers as discoverers, not conquerors.

By 850 AD the seven main Hawaiian Islands were settled. A second wave of migrations may have arrived around 1100 AD from Tahiti. The isolated Hawaiians had less and less contact with the rest of the Polynesian world and developed their own distinct culture. Hawaiian culture was certainly well established by 1400 AD; the exciting history and culture of ancient Hawaii was in full swing!

Heyerdahl Theory

An original approach to solving the puzzle came from Norwegian scientist Thor Heyerdahl, who revived the theory of a South American origin. Thor Heyerdahl, the Norwegian scientist believes the Polynesians are an offshoot of American Indians who drifted by rafts upon ocean currents into the Pacific. In 1947, Heyerdahl made the Kon-Tiki raft trip to prove his theory. He drifted 4,300 miles from Peru to the Tuamotu Archipelago in the South Pacific. His adventures, told in his book, Kon-Tiki, have popularized his theories. Heyerdahl believes that Indians from northwest America floated by raft to populate Hawaii; however, scientists upholding the theory of Indonesian origin point to the similarities in language, artifacts, food plants, and food animals.

Heyerdahl used both ethnographic and botanical evidence. He found legends in eastern Polynesia that spoke of migrations from the east, and he noticed that the important food plant the sweet potato (kumara or kumala) undoubtedly originated in Peru where it was also known by a cognate name (cumar). Other botanical evidence supported the possibility of an American connection. Moreover, early Spanish colonists in Peru recorded legends that indicated knowledge of lands to the west and of voyages to them on large balsa log rafts. The great statues and stone platforms of Easter Island, west of Chile, also closely resembled South American styles and methods. Although Heyerdahl has since been proved to be mistaken in the matter of stonework, the evidence collected during the raft trip provided strong support for an ancient connection between Polynesia and South America.

Summary of Findings

The Polynesians, he argued, were thus a mixed population of Asian and South American origins.

The theory also explained some striking parallels between the cultures of Polynesia and British Columbia.

Heyerdahl tried to account for many otherwise inexplicable cultural anomalies.

The excavations ultimately provided evidence for the rejection of his migration theory, because they reveal a continuous Polynesian cultural tradition for the whole of Easter Island's history.

The evidence collected during the raft trip by Heyerdahl provided strong support for an ancient connection between Polynesia and South America.

The presence of the sweet potato on Easter Island and throughout Polynesia proves that Polynesians went to South America at an early date and returned.

Overview of Hawaii's Culture

Hawaii is a tropical paradise which has more than its share of pristine beaches, stunning sunsets, towering waterfalls and reefs teeming with colorful fish. What sets these islands apart from the rest of the world is its native Hawaiian culture. It is a culture that is filled with fascinating customs, music, legends, traditions and values.

The Flower Lei

Today, probably the most enjoyable and unforgettable Hawaiian custom is the flower lei. Custom dictates that a lei should be offered graciously with a kiss and removed only in private. It is considered rude to remove a lei once it is accepted in view of anyone, but especially in view of the person(s) who gave it to you. Lei designs are limited only to the imagination and range from the simple common one-strand orchid or tuberose presented as a special treat to those who arrive by plane or ship to the more elaborate or rare depending on how important the occasion may be.

Expert Canoe Builders and Non-Instrument Navigators

Early Hawaiians have a history of being expert canoe builders. The tradition requires that prayer and food offerings are made to forest gods before, during and after the tree is taken from the forest. Cultural protocols determine exactly how the tree for a canoe would be felled.

Early Hawaiians were also master non-instrument navigators. Using only the sun, moon, stars and waves, they were known to traverse the Pacific, which resulted in the occupation of many small islands in Polynesia. The Hawaiians had an intimate knowledge of the location and types of celestial bodies. Everything from the North Star to the South Cross has Hawaiian identities and lore.

The Hula

Another Hawaiian icon is the hula. It is an image of swaying hips, graceful hands and colorful costumes. The hula has evolved over the years from an activity exclusively for men and for religious purposes to today's contemporary dances, where both the men and women dance for fun, expression and enjoyment. Hula today has two major forms, the ancient or hula kahiko, and the modern, or hula auana.

Hula kahiko is accompanied in the Hawaiian language along with drums and other percussion implements. Hula kahiko is performed for storytelling or for religious and ceremonial purposes. Dancers are adorned with bark cloth, coconut fibers and native grasses, plants and ferns.

Hula auana is colorful, fun, upbeat and musical. Auana dances are accompanied by song in either English or Hawaiian, as well as ukuleles and piano guitars. The dancers' dresses are colorful and are decorated with flower prints.

The Music

Music has also grown to be a familiar and popular part of Hawaiian culture. Ever evolving from a beginning of simple drumbeats and chants, music today is filled with a multitude of artists and genres that include hapa-haole (Hawaiian melody with English lyrics), traditional, luau, kolohe (naughty or teasing hula), chalangalang, jawaiian and more.

The Legends

Another facet of the culture lies in legends. Ancient Hawaiians were known to be storytellers. Legends were a way of documenting history, knowledge, facts and beliefs from generation to generation. Some of the more popular legends include the story of the demi-God Maui, who pulled the island up from the bottom of the sea, the wicked, deceptive and jealous volcano goddess Pele, and her snow god sister Poliahu. There are legends about the Kumulipo, which tell about the creation of the Hawaiian Islands and others that tell fishing stories about the shark gods.

The Hawaiian culture also has many superstitions and omens, which are widely known and still observed today. Rain and rainbows are considered blessings from the gods. This is especially true if it rains during weddings. Taking pork over the Pali Highway, which connects the leeward to the windward side on the island of Oahu, is considered a deed that is said to anger the gods and to bring bad luck or at least car trouble. It's still considered bad luck to bring bananas on a boat, to step over a baby who is lying on the floor, and to wear a lei if you are pregnant.

Another dark omen that is more modern in nature is about the taking of lava rocks from a volcano, which will lead to being followed by bad luck. Many such rocks are known to be returned by visitors to Hawaii via mail. People often times send the rocks they collected and took home back to the Hawaii Volcanoes National Park with no return addresses.

The Hawaiian culture is rich, living, mysterious and unique. It's what truly makes Hawaii special. So, when you're in Hawaii, be sure to look past the sunsets, sunshine, surf and sand and take the time to explore the culture that makes the Hawaiian Islands truly special and unforgettable.

Hawaiian Tattoos

Tattooing has been an important part of tribal life on the Polynesian islands for centuries, and Hawaii is no different. The tattoo artists of Hawaiian tribes were carefully trained and held in

high regard within the community. In fact, having a good tattoo artist was a symbol of wealth and status at that time.

In the beginning, native designs were tattooed on the skin to designate tribe and hierarchy (even today Hawaiians view tattoos on a man's body as a sign of status and importance) and was part of a warrior's rite of passage to get the markings that he was a full member of the community. The most heavily tattooed were the royal family, followed by other court officials and those who had married into royalty.

Black ink is the most common color of a Hawaiian tattoo and a feature still prevalent on the islands today. Other colors were rare, but when they were employed, were made up of various brightly colored island flowers, such as the Hawaiian Iris.

Before modern safety procedures arrived, it was important to get tattooed by an artist who knew what he was doing because some of the contents of the ink they used were poisonous, and ancient instruments would have meant that the person getting tattooed was subject to extreme pain. Of course even today it is important that a tattoo artist knows what he is doing, but now regulations are so strict that it is almost impossible for amateurs to operate, whereas back then, the profession was open to whoever wanted to do the job.

In the old Hawaii, skin was inked with tools from nature, like cactus barbs, bird beaks, fish bones, urchin spines and sharp animal claws. The tattoo tool would be hit by a stick to make the punctures, while assistants stretched the skin and wiped away blood.

Early tattoos were mainly made up of an array of geometric and symmetrical designs found in nature, such as stones, waves, sun and rain. But the art soon evolved - much like today - as a means of celebration and self-expression, with more pictorial forms, such as images of animals and flowers. Today, these motifs that represent the island world remain, in the form of lizards, sea turtles, sharks and dolphins.

Placement was important too - ancient lithographs show Hawaiian women wore designs concentrating mainly on their hands, feet, fingers and calves, and both men and women had facial tattooing, typically found on the brow ridge, cheek, cheek bone and chin.

What makes Hawaiian tattoo designs different from other parts of the world, and, indeed their Pacific Island neighbors, is that they are bolder and larger and – given that they were originally used for individual identification rather than ceremonial purposes - usually have a hidden, personal meaning.

Temple Worship

Traditional Hawaiian lifestyle was suffused with a spirituality that touched all aspects of everyday life. Over centuries, the culture also evolved highly ritualized temple worship to honor the major akua, or gods.

Temples or shrines - heiau - took two forms: walled enclosures or raised platforms. These structures of stone marked off areas that included smaller wooden structures including houses for particular functions and an `anu`u or oracle tower. Different heiau were built for the two main types of services. The mapele heiau honored Lono and ceremonies invoked blessings for successful crops and other peacetime needs; pigs were a common sacrificial animal. The luakini heiau was a war temple honoring Ku and services included human sacrifice.

Large temple images carved of wood - similar to others found throughout Polynesia - are often figures standing with flexed knees, arms and hands with mouths open in a teeth-bared expression. Feather god images - found only in Hawai`i - were also made, their intricate feather work attached to a basketry framework. Other smaller images, often of stone, adorned smaller local or family shrines such as ko`a (fishing shrines).

While worship of family or local gods was conducted by individuals, temple worship was performed by ali`i and priests, or kahuna. Kahuna were the highly trained caretakers of tradition and wisdom. They were often specialists in particular areas such as healing (kahuna lapa`au), divining the future (kahuna kilokilo), or in blessing practical undertakings like canoe building (kahuna kalai wa`a). Kahuna were also political advisors to the chiefs and held positions of great power within society.

Religious ceremonies honored important life events such as birth, conception, attaining adulthood and death as well as group undertakings like canoe building or the dedication of new homes. Luakini ceremonies sought the gods' blessing in warfare. Ceremonies during Makahiki honored Lono, the harvest bounty and the seasonal reign of peace.

Architecture

Hawaii's benign climate meant ancient Hawaiians lived their lives mostly outdoors, pursuing everyday activities in the midst of warm sunshine and gentle breezes. House structures and other buildings were used primarily for storage or as protection against rough weather.

Ancient Hawaiian Hut

Commoners generally had a single house while chiefs had a complex of separate houses used for different purposes. The grass house, or hale, followed the basic construction pattern common throughout Polynesia. The wooden framework consisted of ridgepole, rafters, and purlins or horizontal supports running between vertical wall posts. Thatching material - most commonly sweet-smelling pili grass - was tied to the purlins in bundles with thatch at the ridgepoles carefully layered and braided to prevent rain and wind from entering the house. Other thatching materials included various grasses, pandanus leaves, ti, sugar cane leaves and banana trunk fiber. Lashing was done with braided `uki`uki grass, coconut husk fiber or `ie`ie; no nails were used. Hale typically had a small door opening and no windows.

Hawaiian architects - members of the kahuna class with special building knowledge - were called poe kuhikuhi pu`uone. It's believed they designed fishponds, irrigation systems, heiau and other significant structures. These large projects were often sponsored by a chief and construction involved the whole community.

Decades after Western contact, grass hale continued to be built and used. In 1816, traditional grass hale was still prevalent, though adobe and coral block houses were also being built near Honolulu harbor. By 1837, pili grass and local woods were still the main materials, but buildings began to incorporate Western design elements such as windows, high ceilings and large portal entrances. New materials also began to be used. In 1795, John Young and Isaac Davis built the first Western-style masonry buildings in Kailua-Kona. Three years later, a brick palace was built at Lahaina.

Farming

Hawaiians lived surrounded by ocean and voyaging played a pivotal role in their history and everyday life, but the bedrock of Hawaiian society were the traditions and work of farmers. Throughout ancient times, planters and farmers remained a stable element of society while ruling ali`i bloodlines rose and fell in positions of power. At the core of the island political economy, control of arable land identified status and political power. Resource-rich ahupua`a - mauka/makai divisions fed by the upland watershed - formed the more influential chiefdoms.

The Hawaiians' Polynesian cousins in the Society Islands took the canoe as their societal metaphor, likening their community to a boat with its mast, outriggers and paddlers all working toward a common goal. Hawaiians identified instead with taro, the staple crop that symbolized the Hawaiian family unit with its main root, or corm, surrounded by offspring shoots and topped by spreading green leaves.

The produce of the land complemented the rich sources of protein found in the sea. As a result, over the span of many generations, Hawaiians developed their agricultural methods and traditions to a highly sophisticated level.

Fishponds

Ancient Hawaiians were the first islanders in the Pacific to make use of ponds and fish farming. Hawaiians developed aquaculture to supplement their other fishing activities. Permanent fishponds guaranteed a food supply for the population in lean times and increased the wealth of the managing chief. Tended ponds provided fish without requiring fishing expertise, and harvesting the pond - unlike fishing at sea - was not weather-dependent.

Hawaiians built fishponds on Kaua`i, O`ahu, Lana`i, Maui, and Moloka`i with the highest concentration of ponds on Moloka`i. Hawai`i Island had the fewest ponds due to its abrupt coast and lack of reef and lagoons.

Hawaiians stocked their fishponds with awa (milkfish), `ama`ama and `anae (two kinds of mullet), `ahole (sea-pig), `opae (shrimp), `o`opu (guppies), and puhi (eels). Other sea fish entering the ponds were ulua, kahala (amberjack), kumu (goatfish), manini (surgeon fish), `o`io (bonefish), and uhu (parrotfish).

Flightless Birds

Flightless birds are birds which lack the ability to fly, relying instead on their ability to run or swim. They are thought to have evolved from flying ancestors. There are about forty species in existence today, the best known being the ostrich, emu, cassowary, rhea, kiwi, and penguin. It is believed by some that most flightless birds evolved in the absence of predators on islands and lost the power of flight because they had few enemies — although this is likely not the case for the ratites (the ostrich, emu and cassowary), as all have claws on their feet to use as a weapon against predators.

Two key differences between flying and flightless birds are the smaller wing bones of flightless birds and the absent (or greatly reduced) keel on their breastbone. The keel anchors muscles needed for wing movement. Flightless birds also have more feathers than flying birds.

Food Preparation

Food preparation in ancient times involved a variety of cooking methods including broiling, boiling and roasting. Though Hawaiians lacked metal utensils or ceramic containers, they used wooden and gourd bowls, stones and the drying power of the sun to great effect. In Hawaiian society, it was the task of the men to prepare food and meals.

Cooking Methods

Broiling food using hot coals (ko`ala) or hot ashes (pulehu) was a common way to cook if a meal was prepared out in the fields away from home, or if the small amount of food being prepared did not warrant use of a larger earth oven, or imu. Food was cooked by being spread out flat on a level bed of coals, or it was warmed over or near a fire and periodically turned. Breadfruit and unripe bananas could be broiled this way in their skins. Other foods needed protection from burning and were wrapped in ti leaves (laulau). Fish could be wrapped in a leaf package called lawalu, but a whole fish could also be broiled without being wrapped.

Ancient Cooking Grill (Imu)

Hawaiians boiled foods but as their containers - made of wood or gourds - were susceptible to burning, the heat was introduced by dropping heated stones into the water-filled container rather than applying heat to the outside of the container. Food was placed in a bowl with water and the stones then added, or food and hot stones were placed in the container in alternating layers with the water added last. Many foods were cooked this way including greens (the tops of new taro leaves or the tender ends of sweet potato vines). In cooking fowl, hot stones were also placed inside the body cavity.

Roasting and steaming were achieved in the imu, or earthen oven. The process of cooking in the imu was called kalua. The oven consisted of a shallow pit dug in the ground, either in a covered, protected place or out in the open if the weather was fine. The pit was filled with kindling surrounded by larger pieces of wood with fist-sized stones arranged over the wood. Once the kindling was lit, the flames were fanned by blowing through a length of bamboo. Once the fire

was spent, the hot rocks were spread to create an even floor, and they were then covered with a layer of grass or leaves to prevent scorching of the food.

Taro, breadfruit, sweet potatoes and other foods or food packages were arranged over the stones and covered with more leaves, preferably ti leaves. On top of all this, a last layer of old mats and kapa was laid. Once enough time had elapsed to cook the food, the mats and kapa were peeled off. The cooked food and hot rocks were removed, the cooks' protecting their bare hands by dipping them first in bowls of cold water. The food was placed in containers to cool and was served cold.

Cooking time in the imu depended on the type of food. Sweet potatoes cooked in two hours; taro took three to four hours. Chicken or fish was cooked in a laulau or ti leaf package or without any wrapping. For whole chickens or other fowl, special cone-shaped stones were heated and placed in the body cavity. Pig also was cooked whole with hot stones added to the abdominal and thoracic cavities, the cooking speeded by adding heat to both the inside and outside of the animal. Large pigs, however, were not cooked in an imu. After being dressed, their inside flesh was salted and hot rocks placed inside. The whole body was wrapped in old kapa and mats and placed on a poi board for 48 hours. After that time, the cooked meat was removed from the inside outward. Using salt in this process helped the meat stay preserved for a considerable time.

Clothing

Living in a benign climate, Hawaiian requirements for shelter and clothing were minimal. The basic garments were a malo, or loincloth, for men, a pa`u, or skirt, for women and a rectangular shawl or kihei for both. All were made of kapa, a bark cloth made from wauke, mamaki, oloa, `akala, or hau plant fibers. While kapa is produced throughout Polynesia and the first settlers brought wauke plants (paper mulberry) with them, as Hawaiian kapa evolved, its quality surpassed that of any other region. Kapa in Hawai`i displayed a wide variety of textures, weights and designs. Hawaiians used a number of unique techniques including producing watermarks with patterned beaters, printing designs with bamboo stamps, achieving greens and blues with vegetable dyes and beating perfumed flora into the cloth to impart a fragrance. At least 68 individual types of kapa were produced, each with a specific name. Kapa was used for many things other than clothing, including bedding or sheet material and as banners or as wrapping material.

Hawaiian Garments

Other garments included the kihei, a type of cloak worn over one shoulder. Ti leaf capes provided protection against cold or rain. Ali`i wore feather capes, cloaks, helmets and leis as signs of rank and status. Made from the feathers of hundreds or thousands of birds attached to a mesh backing, feather garments used striking geometric patterns, most often in yellow and red. Since only a few feathers were taken from each bird caught (the live bird was then released), gathering the feathers for one cape could take decades or even generations.

Recreation

Living in a landscape and climate that supplied abundant food and materials for comfortable living without excessive labor, Hawaiians had ample leisure time. They were great sportsmen, inventing games and contests to entertain both players and spectators. Hawaiian athletes were especially skilled in all types of water sports; Cook and his crew members commented they'd never seen men and women so comfortable and agile in the water.

Hawaiians surfed, swam, raced canoes, wrestled, sped down hills on narrow sleds called holua, sharpened their battlefield skills with war games, and competed in more pedestrian games like konane (checkers) and `ulu maika (bowling). Makahiki season, celebrating the harvest and the gifts of the god Lono, were traditionally times of many athletic contests and performances.

Hula, a highly-evolved art form, combined dance, religious observance, celebration and poetic literary composition. Always accompanied by story and chant, hula was not only an expression of the words but an athletic dance of grace and strength as well. Hawaiian oral literary traditions, many of them surviving today as hula chants, were a record of historical and legendary events, a repository of cultural values and knowledge, and artful expressions about the mysteries of life in highly metaphorical language.

Warfare and Weapons

Wars were frequent in ancient Hawai`i with chiefs attacking rival islands or battling rival factions on their own island. Although frequent, wars required months of careful preparation and were not undertaken lightly. A chief consulted advisors as well as kahunas or priests, then drew his army from among lower-ranked chiefs and faithful warriors.

Armies fought their battles during daylight hours. Individual champions fought each other or whole armies battled. Women often accompanied the men into battle.

Hand-held weapons of wood and stone meant combat was close and fierce. Warriors used short and long spears for thrusting and throwing. Clubs were carved from wood or made of a shaped stone lashed to a wooden handle. Daggers were carved from wood but other cutting weapons were edged with shark's teeth. Tripping weapons - invented by Hawaiians - were made of a weight attached to a long cord that could be thrown and wrapped around an enemy's legs to bring him to the ground. Warriors used slings to throw stones with great accuracy from a distance.

Warriors trained rigorously and kept in top athletic form by competing in games like boxing, wrestling and foot races during peacetime. Many practiced lua or hula, the two related traditions of martial arts and dance.

Ahupua`a

The concept of private property was unknown to ancient Hawaiians, but they did follow a complex system of land division. All land was controlled ultimately by the highest chief or king who held it in trust for the whole population. Who supervised these lands was designated by the king based on rank and standing. A whole island, or mokupuni, was divided in smaller parts, down to a basic unit belonging to a single family.

Each mokupuni was divided into several moku, the largest units within each island, usually wedge-shaped and running from the mountain crest to shore. O`ahu was divided into six moku.

Each moku was divided into ahupua`a, narrower wedge-shaped land sections that again ran from the mountains to the sea. The size of the ahupua`a depended on the resources of the area with poorer agricultural regions split into larger ahupua`a to compensate for the relative lack of natural abundance. Each ahupua`a was ruled by an ali`i or local chief and administered by a konohiki.

Within the ahupua`a, `ili were smaller divisions (two or three per ahupua`a) that constituted the estate of the chief. Each `ili could be formed of noncontiguous pieces called lele, or jumps. Mo`o were sections of the `ili that were arable; usually these agricultural units did not extend to the sea. Smaller yet were the kuleana, or land tracts used by the common people for cultivation of crops. The size of kuleana, like the size of ahupua`a, depended on the natural fertility and abundance of the land.

The ancient ahupua`a, the basic self-sustaining unit, extended elements of Hawaiian spirituality into the natural landscape. Amidst a belief system that emphasized the interrelationship of elements and beings, the ahupua`a contained those interrelationships in the activities of daily and

seasonal life.

Shaped by island geography, each ahupua`a was a wedge-shaped area of land running from the uplands to the sea, following the natural boundaries of the watershed. Each ahupua`a contained the resources the human community needed, from fish and salt, to fertile land for farming taro or sweet potato, to koa and other trees growing in upslope areas. Villagers from the coast traded fish for other foods or for wood to build canoes and houses. Specialized knowledge and resources peculiar to a small area were also shared among ahupua`a.

Although there was no private ownership of property, land tenure of the maka`ainana (commoners) was stable. They paid weekly labor taxes and annual taxes to the konohiki, or local overseer, who collected goods to support the chief and his court. The konohiki supervised communal labor within the ahupua`a and also regulated land, water and ocean use.

Stewardship of the land and its resources was formalized through the kapu system. The kapu (taboo) - administered and enforced by konohiki and kahuna, or priests - placed restrictions on fishing certain species during specific seasons, on gathering and replacing certain plants, and on many aspects of social interaction as well. In this way, the community maintained a sustainable lifestyle. Through sharing resources and constantly working within the rhythms of their natural environment, Hawaiians enjoyed abundance and a quality lifestyle with leisure time for recreation during the harvest season of the year. This lifestyle also encouraged a high level of artistic achievement. Many crafts, including Hawaiian kapa and feather work, were the finest in the Pacific. Hawaiians devoted themselves to competitive sport and martial arts as well as expression through dance and chant, creating rich traditions that continue today.

Sharing Resources

The `ohana, or extended family, was the basic social unit of the Hawaiian community. Each `ohana lived and worked within land units, or `ili, within the larger ahupua`a land division. Most exchange and sharing of food, material goods, services or labor took place within the `ohana and operated more as a system of voluntary giving than of barter. The `ohana lived in kauhale, or clustered households, within short distance from fields and fishing grounds. Based on archaeological evidence, coastal settlements in drier areas may have been seasonal with family groups moving down to the sea from their upland homes during the fishing season. Groups living nearer the coast would exchange sea foods, salt, gourds and coconuts for what grew at higher elevations: taro, wauke, bananas, olona, medicinal herbs, timber and thatching materials. Nearly all the basic necessities of Hawaiian life came from plants. The ancient culture had no metal tools or pottery, but used stone and bone tools and woven, carved, or gourd containers.

Native Hawaiian Healing

The Hawaiian word for health is "ola". It also means "life". Hawaiians obviously believed you could not have health without life, nor life without health. The ancient Hawaiian Health System was well developed. They had a medical profession, medicines, treatments, a lengthy apprenticeship program for medical specialists (kahuna) and training facilities located in special healing heiau (temples). They also had designated places of healing such as Coconut Island (Mokuola) at Hilo on the Big Island of Hawaii, famous for its curative spring waters.

Nature Herbs for Healing

Massage in Progress

Similar to the organization of today's medical profession, noted Hawaiian Cultural Scholar, George Kanahele tells us there were:

Kahuna haihai iwi skilled in setting broken bones.

Kahuna haha diagnosed illnesses by feeling with the fingers.

Kahuna hoohanau keiki delivered babies.

Kahuna hoohapai keiki induced pregnancy.

Kahuna laau lapaau treated patients with herbs and were general practitioners.

Kahuna lomilomi were physical therapists and skilled in massage.

Kahuna paaoao diagnosed and treated illnesses of infants.

At five years of age and they would spend upwards of fifteen to twenty years in training. During this time they studied anatomy, learned how to diagnose disease, how to choose the right cures or medicines, particularly the use of medicinal plants, and learned sacred prayers. They also learned how to perform simple surgical procedures, set bones and perform autopsies. They employed the use of steam baths, massage, and laxatives and undertook empirical research.

Since the Hawaiians viewed the body, mind and spirit as one, Hawaiians believed that the body could not be healed without healing the spirit. Accordingly, they used a combination of psychic, spiritual, and natural treatments to cure illnesses.

In particular, before a patient was treated, the kahuna performed a ritual of hooponopono (making things right), a type of counseling with the aid of prayer to cleanse the mind and heart of negative thoughts and feelings.

Banned by the early missionaries as pagan ritual, today hooponopono is included in the traditional Hawaiian Healing programs now being implemented by Hawaiian Health Care Centers serving Native Hawaiians. The program offered at the Waianae Coast Comprehensive Health Center on Oahu's leeward coast (home to many native Hawaiians) includes:

Hooponopono: Traditional Hawaiian family problem solving process making things "right".

Lomilomi: Traditional, spiritual and physical muscle stress relaxation by licensed therapists.

Lau Lapaau: Healing with the use of compounding herbs and other traditional remedies.

Pale Keki: Mother and child care, before, during and after birth.

Laau Kahea: Spiritual or faith healing through prayer and chants - a form of exorcism.

History of Modern Hawaiian Culture

Around the 16th century, the Superb voyagers, Polynesians from the Marquesas Islands migrated to Hawaii. The Polynesians were navigating by the sun and stars, reading the winds, currents, and the flight of seabirds. Polynesians sailed across 2,400 miles of open oceans in great double-hulled canoes. Polynesians were well-established on the islands when about 800 years ago, Polynesians from the Society Islands arrived in Hawaii. These Polynesians were claiming descent from the greatest gods, and became the new rulers of Hawaii. After a time of voyaging back and forth between the Society Islands and the Hawaiian Archipelago, contact with southern Polynesia ceased. During the 400 years of isolation that followed, a unique Hawaiian culture developed.

The Polynesians brought with them items essential to their survival: pua'a (pigs), `ilio (dogs), and moa (chickens); the roots of kalo (taro) and `uala (sweet potato); the seeds and saplings of niu (coconut), mai`a (banana), ko (sugar cane), and other edible and medicinal plants.

Hawaii was a highly stratified society with strictly maintained castes. The alii (chiefs) headed the social pyramid and ruled over the land. Highly regarded and sometimes feared, the kahuna (professionals) were experts on religious ritual or specialists in canoe-building, herbal medicine, and healing. The maka`ainana (commoners) farmed and fished, built walls, houses, and fishponds and paid taxes to the paramount chiefs and his chiefs. The Kauwa, the lowest class, were outcasts or slaves.

A Culture Unfolds

The roots of Hawaiian culture stretch south to older areas of Polynesia and beyond to the islands of the Western Pacific and the edges of Asia. The first settlers to Hawaii brought with them the more ancient Polynesian traditions and lifestyles. Over generations, they adapted their beliefs and ways of living to accommodate their new island home, adding new gods like Pele to their pantheon and honing new skills such as surfing. As a distinct Hawaiian culture took shape, it grew in response to Oahu's forests and coral reefs, Molokai's shallow offshore waters, Kauai's steep valleys, Maui's high summit and Hawaii Island's ever-changing volcanic lands.

Differences between Hawaii and the larger Polynesian family grew more pronounced once the

era of transpacific migrations ended. In many artistic endeavors - kapa making, featherwork, hula - Hawaiians surpassed the rest of their cousins in skill and proficiency. A highly structured and sophisticated culture blossomed in the Islands' benign climate and lush abundance. Over time, Hawaiian society grew as distinct as Hawaii's endemic plant and animal communities, left for eons to evolve in isolation.

Hawaiian Language

The language of the Austronesian language family was once the major language spoken in the Hawaiian Islands. Hawaiian is spoken as a mother tongue by only a few thousand of Hawaii's inhabitants but is popular as a second language.

The closest relatives of Hawaii are Tahitian, Marquesan, and Maori, used in east Polynesia. More distant lingual relatives include the Samoan and Tongan languages, used in west Polynesia. More than 200 Hawaiian words have been traced to a specific proto-Malayo-Polynesian language used in Southeast Asia 5,000 years ago.

Hawaiian is written with an alphabet of only 12 letters: five vowels a, e, i, o, and u, and seven consonants h, k, l, m, n, p, and w. More than 200 Hawaiian words have entered English, including aloha, hula, lei, luau, poi, and ukulele. Although the number of Hawaiian speakers is steadily decreasing, the language is not expected to become extinct for at least several generations. Hawaiian remains the mother tongue of the isolated island of Niihau, and it is used extensively throughout the state in place names. Many residents of Hawaii study the language in public schools—some students choose immersion programs where all subjects are taught in Hawaiian. The University of Hawaii also provides Hawaiian language instruction.

Social and Political Structure

Hawaiian society evolved into a highly stratified hierarchy. The highest authority in all arenas was the moi, or king, the alii holding the highest chiefly rank. The moi was the ultimate owner of all annual taxes. He oversaw important religious rites and acted as leader during times of war. The top two advisors to the moi were the kalaimoku, or chief minister, and the kahuna nui, or high priest.

The alii, or chiefs of all ranks, stood beneath this highest level. All alii held their position at the pleasure of the moi, but their rank depended on the combined genealogies of their parents. Genealogical standing could be complicated. If a high chief could not find a woman of comparable rank to marry, he might marry his sister or the daughter of his brother. A child from this type of union would maintain a high rank and a high status in the family. After the birth of such a child, the husband and wife could take other partners with less regard for genealogical standing.

Alii of lesser rank were the children of men favored by a chief who had married women of alii lineage. Lesser still were those called alii due to a special skill or strength; these were alii in title only and their position could not be passed to their children.

The lives of high ranking alii were regulated by many kapu, or restrictions. Commoners were required to prostrate themselves in the presence of alii, one's shadow was not allowed to fall on the person or house of an alii, none but an alii could enter his house by its private doorway, and any lower-ranking individual was to kneel in the presence of an alii that was eating. Alii were looked after by attendants; the moi was attended by many. Attendants to the moi - most often high-ranking alii themselves - sat with the moi while he ate, entertained him at night with stories and games, looked after his food, cared for his religious idols, composed chants for him, and watched over him as he slept.

Kahuna was a class of priests and highly-skilled craftsmen. Their mastery of religious rites and practices pertained to their specific profession (for instance, canoe building). Some, like the kahuna of medicine, might specialize in one area of their profession.

The largest group in Hawaiian society was the maka`ainana, or common people. These were laborers and workers who produced most of the goods in life. They did construction work, farmed, fished, and fought for their chiefs during wartimes. They were taxed annually by the moi and local alii, paying in kind with food, clothing and other goods and keeping a third of what they produced for themselves. While they stood at the lower levels of society, maka`ainana did have the right to move to a different area or rebel if the local ruling alii was harsh and unfair.

At the bottom of the social ladder was a small group of kauwa, or outcasts. These, like the alii, were born to their position.

Legal System

A system of laws known as kanawai enforced the social order, similar to a police force in a city. Certain people, places, things, and times were sacred -- they were kapu, or forbidden. Women ate apart from men and were restricted from eating pork, coconuts, bananas, or a variety of other foods. Kapu regulated fishing, planting, and the harvesting of other resources, thus ensuring their conservation. Any breaking of kapu disturbed the stability of society; the punishment often was death.

Village Life

Village life was rich and varied: Hawaiians fished in coastal waters and collected shellfish, seaweed, and salt along the shore. They raised pigs, dogs, and chickens and harvested sweet

potatoes, taro, and other crops. Men pounded taro into poi (the staple food of Hawaiians), while women beat the inner bark of wauke (paper mulberry) into kapa (bark cloth).

They worshipped akua (gods) and `aumakua (guardian spirits) and chronicled their history through oli (chant), mele (song) and hula (dance). Over several hundred years the people of Hawaii cultivated traditions that were passed on through generations. But the sounds of taro pounding and kapa beating, rhythmical signatures of Hawaiian village life, would fade away after Captain James Cook arrived in 1778 and introduced the rest of the world to Hawaii.

History of Hawaiian Food

Background

When the first wave of islanders arrived somewhere around the 3rd century AD, there was hardly any edible plants or animals on the island. Hawaii has an interesting culinary history that has brought about this melting pot of cuisines in the islands. These brave voyagers are believed to have brought around 30 edible plants as well as pigs, poultry and dogs to eat. They soon found out that the taro they had brought was perfectly suited for the wet and humid conditions of the islands. This became the Hawaiian's staple along with plenty of fish, coconuts and bananas. Their diet had some wonderful new introductions when globe roaming discoverers found the islands. Captain Cook introduced goats, English pigs and seeds for onions, melons and pumpkins to the islanders. Soon after that, pineapple was first cultivated there, along with the discovery of the wonderful attributes of sugar cane.

Settled by Polynesians who themselves derived from the Indomalayan regions found no indigenous animals, except for the bat…which could not be used for food. During the 300-500 AD periods, the Polynesian seafarers arrived on the Hawaiian Islands; few edible plants existed in the new land, aside from a few ferns and fruits that grew at higher elevations. Botanists and archaeologists believe that these voyagers introduced anywhere between 27 and possibly more than 30 plants to the islands, mainly for food. The most important of them was taro. The most important plants were taro and sweet potato.

Taro is the main ingredient used to make poi. The genus plant is grown throughout the Tropics for its starchy corms (swollen underground stems), which yield about 50 percent starch but which must be cooked before eating to eliminate a poisonous substance, calcium oxalate. The staple diet was poi usually made from taro, but sweet potato and other starches were used when necessary. Poi, the national dish of Hawaii, is made from boiled taro that is pounded, and then fermented to form a sticky, edible paste.

The terrain and climate proved to be especially suitable for growing wetland taro. Also important were breadfruit, various yams, sugar cane and coconut. In addition to taro, sweet potatoes and yams were planted. The Marquesans, the first settlers from Polynesia, brought breadfruit, and the Tahitians later introduced the baking banana. These settlers from Polynesia also brought coconuts and sugarcane. They found plenty of fish, shellfish, and limu (horseshoe crab) in the new land. The primary protein was fish which was eaten raw as well as cooked.

Pigs were raised for religious sacrifice, and the meat was offered at altars, some of which was consumed by priests and the rest eaten in a mass celebration. Since pigs were generally reserved for the nobility, for the bulk of the population it was wild fish and shellfish from the streams, the reef and the ocean. Fish, which is a mainstay of the Hawaiian diet, was plentiful in the island waters as were shrimp, turtles, sea urchins, limpets and shellfish.

Flightless birds were easy to catch and nests were full of eggs for the taking. Most Pacific Islands had no meat animals except bats and lizards, so ancient Polynesians sailed the Pacific with pigs, chickens and dogs as cargo. The early Hawaiian diet was diverse, and may have included as many as 130 different types of seafood and 230 types of sweet potatoes. Some species of land and sea birds were consumed into extinction.

Menehunes

During the 13th and 14th centuries, waves of immigrants from Tahiti overwhelmed and absorbed the original people. Since the earliest Hawaiians were possibly somewhat smaller than the later immigrants, they may have formed the legends of the menehunes (little people), who were depicted by the later Hawaiians as hard working elves. The islands were first visited by Spanish explorers who apparently found no viable use for them.

Immigrants Influence of Hawaiian Food

When the Hawaiian workers had had enough of that, the pineapple and sugar cane barons brought in the Chinese, around 1850, to work the fields. The Chinese brought their woks and stir fries that were quickly adapted into local cuisine. Next the Portuguese were imported with their love of pork, chili peppers and malasadas (sweet deep fried donuts). The Japanese were the next wave of laborers to come, adding yet another rich layer of culinary complexity to Hawaii with their cuisine.

Spicy dishes and meat turnovers were contributed by the fiery Puerto Ricans immigrants. The Filipinos were close on their heels, bringing adobo style and garlic rich dishes to the strata of Hawaiian fare. Last but not least, the Vietnamese laborers were brought over right before the sugar and pineapple industries went belly up, adding lemongrass, coconut milk and ginger to the fusion.

It did not take Hawaii's statehood to make mainland Americans practitioners of island cookery. The immigrants had influence on the Hawaiian food. The food landscape began changing dramatically once the sugar plantations began to flourish following the signing of the Reciprocity Treaty with the United States in 1876. A substantial number of Chinese, Japanese (who had a tremendous effect on the food in the islands) Okinawans, Koreans, Puerto Ricans, Portuguese and Filipinos arrived in the islands between the 1880's and the 1930's. Each of these groups demanded their own foods on the plantations, and the plantation stores went out of their way to accommodate and please them.

Hawaii was characteristically Polynesian until the 19th century, and its diet of fish and fruit remained unmodified until the coming of the missionaries and clipper ships from New England. Dried meat and salted fish had fed American sailors, and these foods became part of the Hawaiian tradition---just as pipikuala, the jerked beef that is broiled in tiny pieces and served with a sweet and sour sauce, and as lomi, the thin fillets of salted salmon that some New Yorkers have described as better in its indigenous way than lox (smoked salmon) from their favorite delicatessens back home in the Big Apple. Mixed with chopped onions and tomatoes, lomi is habitually served as a salad.

Salmon was common enough to the early Hawaiians to be known as "the pig in the sea." Other fish were used after the coming of the missionaries to produce such things as fish chowder in the basic Yankee fashion. Bananas and pineapples had become important in the kitchens of the New England women whose seafaring men had brought back the tropical fruits from various ports of call. The 50th State acquired a cuisine as international as any of its sisters.

Scotland Contribution

Scots from Scotland, who came to the islands as technicians and plantation overseers added their native scones and shortbreads to the daily fare of thousands of Hawaiians who generations before had adopted the Portuguese wheat bread of the first European immigrants.

Portuguese Contribution

Cornmeal and red bean soup, also brought by the Portuguese have been accepted as Hawaiian by islanders of all ethic roots.

Migration of Hawaiian Food

Rather than submitting to a single style, island cooks have incorporated many European dishes, along with those from the Chinese, Japanese and Korean sources, developing a culinary tradition that may be the most festive in the world! The traditional Hawaiian feast is the ultimate of American picnics, cookouts and barbeques. It has added much to the variety of outdoor feasting on the American mainland, especially in California.

USA Food Influence into Hawaii

During this period of 1920's and 1930's, certain forces began to produce a Creole food as local food. One was the arrival of home economists at the university from the Columbia Teachers college in New York to train the locals. They trained large numbers of home economics teachers and school cafeteria managers. Sympathetic to the various ethnic foods on the islands, they urged brown rice, milk and ensured that the food served in the public school system was an all-American diet of hamburger, meat loaf, salisbury steak and mashed potatoes. This exposure to American food was reinforced for the many that joined the service following the bombing of

Pearl Harbor in the Second World War. Hawaii's food today is a confusing mixture, a tapestry of the foods of a dozen different ethnic groups.

Modern Hawaiian Cuisine

Modern Hawaiian cuisine is a fusion of many cuisines brought by multiethnic immigrants to the Hawaiian Islands, particularly of American, Chinese, Filipino, Japanese, Korean, Polynesian and Portuguese origins, including plant and animal food sources imported from around the world for agricultural use in Hawaii. Many local restaurants serve the ubiquitous plate lunch featuring the Asian staple, two scoops of rice, a simplified version of American macaroni salad (consisting of macaroni noodles and mayonnaise), and a variety of different toppings ranging from the hamburger patty, a fried egg, gravy of a Loco Moco, Japanese style tonkatsu or the traditional luau favorite, kalua pig. Modern Hawaiian cuisine may also include a style of cuisine that has emerged over the past two decades, now known as Hawaii regional cuisine.

"Aha'aina" Celebration

At important occasions, a traditional feast, ʻahaʻaina, was held. When a woman was to have her first child, her husband started raising a pig for the ʻAhaʻaina Mawaewae feast that was celebrated for the birth of a child. Besides the pig, mullet (fish of inshore waters), shrimp, crab, seaweeds and taro leaves were required for the feast. The modern name for such feasts, lūʻau, was not used until 1856, replacing the Hawaiian words ʻahaʻaina and pāʻina. The name lūʻau came from the name of a food always served at a ʻahaʻaina-young taro tops baked with coconut milk and chicken or octopus.

Pig Seasoning

Prior to cooking, pigs were killed by strangulation or by holding their nostrils shut, in order to conserve the animal's blood. The common condiment for the pig in Ancient Hawaii is sea salt and Inamona, a relish made of roasted, mashed kukui nutmeats. Meat was prepared by flattening out the whole eviscerated animal and broiling it over hot coals or it was spitted on sticks. Large pieces of meat, such as fowl, pigs and dogs, would be typically cooked in earth ovens, or spitted over a fire during ceremonial feasts.

Imu Methodology

Hawaiian earth ovens, known as an imu, combine roasting and steaming in a method called kālua. A pit is dug into earth and lined with volcanic rocks and other rocks that do not split when heated to a high temperature, such as granite. A fire is built with embers (burning fragment), and when the rocks are glowing hot, the embers are removed and the foods wrapped in ti, ginger orbanana leaves are put into the pit, covered with wet leaves, mats and a layer of earth. Water may be added through a bamboo tube to create steam. The intense heat from the hot rocks cooked food thoroughly — the quantity of food for several days could be cooked at

once, taken out and eaten as needed, and the cover replaced to keep the remainder warm. Sweet potatoes, taro, breadfruit and other vegetables were cooked in the imu, as well as fish. Saltwater eel was salted and dried before being put into the imu (underground oven). Chickens and pigs were put into the imu with hot rocks inserted in the abdominal cavities. Men did all of the cooking, and food for women was cooked in a separate imu; afterwards men and women ate meals separately. The ancient practice of cooking with the imu continues to this day, for special occasions.

Hawaiian Customs - Emerging of the Luau

In ancient Hawaii, men and women ate their meals apart. Commoners and women of all ranks were also forbidden by the ancient Hawaiian religion to eat certain delicacies. In 1819, this custom was changed when King Kamehameha II abolished the traditional religious practices. A feast where the king ate with women was the symbolic act which ended the Hawaiian religious tabu, and the luau was born! The favorite dish at these feasts is what gave the luau its name; young and tender leaves of the taro plant were combined with chicken, baked in coconut milk and called luau (meaning leaf of the taro.)

A Pig in BBQ Pit

The traditional luau feast was eaten on the floor. Lauhala mats were rolled out and a beautiful centerpiece made of ti leaves, ferns and native flowers about three feet wide was laid the length of the mat. Bowls were filled with poi, and platters of meat were set out along with dry foods like sweet potatoes, salt, dried fish or meat covered in leaves were laid directly on the clean ti leaves.

Much to the consternation of the proper Victorian visitors, utensils were never used at a luau. Instead everything was eaten with the fingers with coconut shell cups to drink from. Poi of various consistencies got its name from the number of fingers needed to eat it…three fingers, two finger, or the thickest…one finger poi.

In 1847, one of the largest Luaus ever was hosted by Kamehameha III. The list of foods prepared included 271 hogs, 482 large calabashes of poi, 3,125 salt fish, 1,820 fresh fish, 2,245 coconuts, 4,000 taro plants and numerous other delicacies. King Kalakaua, who was known as the 'Merrie Monarch' for his love of parties and dance, invited over 1500 guests to his 50th birthday luau. They were fed in shifts of 500!

In 1883, a guest at King Kalakaua's coronation luau described the lavish decorations typical of the traditional luau; "Tables were draped with white, but the entire tops were covered with ferns and leaves massed together so as to almost form a tablecloth of themselves. Quantities of flowers were placed about, mingling with the ferns…the natives turned out in great numbers, and the scent of their leis of flowers and maile leaves was almost overpowering."

Luau's today are not quite as big as those hosted by Hawaiian royalty in the 1800's, but they are a lot of fun and feature the same traditional foods…and utensils are allowed.

History of Hawaiian Food Dishes

In 1778, Captain James Cook visited the island of Niihau, leaving a ram goat, ewes, a boar, an English sow, and seeds for melons, pumpkins, and onions.

In 1792, grape vines were introduced by Captain Vancouver. Marin is credited with the first Hawaiian vineyard.

In 1793, Captain George Vancouver brought the first cattle to the islands; longhorns from California were presented to King Kamehameha I. With no natural predators, the new cattle multiplied out of control; the king hired an American man named John Parker to capture and domesticate cattle. Many of the cattle were butchered and beef was introduced to Hawaiian cuisine.

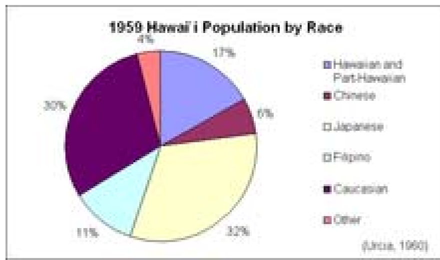
In 1813, pineapple was first cultivated in Honolulu by Don Francisco de Paula Marin, a Spanish botanist and advisor to King Kamehameha I.

In 1815, Marin planted a row rare Mission grape variety. In 1812, Marin also brewed the first beer. In 1817, Marin also planted the first coffee crop, but his plantings failed. Marin, called "Manini" by the Hawaiians, experimented with planting oranges, limes, beans, cabbages, potatoes, peaches, melons, maize and lettuce.

By the late 19th century, pineapple and sugarcane plantations owned and run by American settlers took over much of Hawaii's land, and these two crops became the most important sources of revenues for the Hawaiian economy.

Ethnic Foods

The figure below depicts the Hawaiian population by race. A summary of the foods attributed to different ethnic groups is discussed below.



Distribution of Hawaiian Population

In 1959, the demographics of Hawaii showed that Japanese immigrants were the largest ethnic group at that time. As the plantations expanded the demand for labor grew, so the plantation owners hired immigrant workers, which included Chinese, Koreans, Japanese, Filipinos, and Portuguese.

Each ethnic group wanted its own food in workplaces, and farms and grocery markets were established. In 1850, the Chinese brought their woks and stir fries and that was quickly adapted into local cuisine. The Chinese immigrants brought Cantonese cuisine, cooking the first stir fry, sweet and sour, and dim sum dishes in the Islands, and replaced poi with rice adding their own herbs and spices. Chinese rice growers imported familiar fish varieties from Asia to stock local streams and irrigation ditches.

Korean immigration to Hawaii brought kimchi and barbecue pits were built to cook marinated meats. Korean style bulgogi or boneless meat with moderately-sweet garlic sauce and galbi or meat with bones and moderately-sweet garlic sauce as well, and another Korean favorite bibimbab or mixed rice with seasoned vegetables, kimchi, namul, sweet and spicy gochujang and bulgogi topping also became an integral part of Hawaiian cuisine.

In the late 19th century, the Portuguese immigrants came to Hawaii from the Azores, introducing their foods with an emphasis on pork, tomatoes and chili peppers, and built forno (oven), their traditional beehive oven, to make Pão Doce, the Portuguese sweet bread and malasada. Whalers brought in salted fish, which ultimately became lomi-lomi salmon.

The Japanese were the next wave of laborers to come, adding yet another rich layer of culinary complexity to Hawaii with their cuisine. The Japanese cuisine was the most influential in Hawaii. The Japanese brought bento and sashimi, and although many of their vegetable seeds would not grow in the climate of the Islands, they succeeded in making tofu and soy sauce. The homes of Japanese immigrants lacked ovens, so their cooking relied on frying, steaming, broiling, and simmering, leading to the popularization of tempura and noodle soups in Hawaii. By the early 20th century, the Japanese were the largest ethnic group and rice became the third largest crop in the Islands.

In 1900, Puerto Rican immigration to Hawaii began, contributing spicy, Spanish-seasoned thick soups, casseroles, pasteles, and meat turnovers. Spicy dishes and meat turnovers were contributed by the fiery Puerto Ricans immigrants.

In 1909, when the Filipinos reached Hawaii, bringing peas and beans, the adobo style vinegar and garlic dishes, choosing to boil, stew, broil, and fry food instead of baking, and eating sweet potatoes as a staple instead of rice. The Filipinos were close on their heels, bringing adobo style and garlic rich dishes to the strata of Hawaiian fare.

In 1919, Samoans arrived, building their earth ovens above ground instead of below like the imu, and made poi from fruit instead of taro. In 1975, after the Vietnam War ended, Vietnamese immigrants arrived, and Thai and Vietnamese cuisine was added to the menu, featuring Southeast Asian lemongrass, fish sauce and galangal.

Last but not least, the Vietnamese laborers were brought over right before the sugar and pineapple industries went belly up, adding lemongrass, coconut milk and ginger to the fusion.

Modern Hawaiian Cuisine

The Modern Hawaiian cuisine is a fusion of many cuisines brought by multi-ethnic immigrants to the Hawaiian Islands, particularly of American, Chinese, Filipino, Japanese, Korean, Polynesian and Portuguese origins, including plant and animal food sources imported from around the world for agricultural use in Hawaii.

Last but not least, the Vietnamese laborers were brought over right before the sugar and pineapple industries went belly up, adding lemongrass, coconut milk and ginger to the fusion.

Mix all those cultures together with the local produce and you get Hawaiian cuisine. There is nothing like it. Some of the popular dishes are Kalua pork, Poké, raw tuna mixed with sesame oil, soy sauce, green onions and seaweed, the Loco Moco, breakfast dish consisting of rice, hamburger patties, fried eggs and brown gravy, the Spam Musubi, spam layered with sticky rice and wrapped with nori. Haupia pudding is a coconut pudding cut into squares that look like soap. Modern Hawaiian cuisine may also include a style of cuisine that has emerged over the past two decades, now known as Hawaii Regional Cuisine (HRC).

Hawaii Regional Cuisine

In 1991, 12 Hawaiian chefs established Hawaii Regional Cuisine, a culinary movement that inventively blends Hawaii's diverse, ethnic flavors with the cuisine of the world. Hawaii Regional Cuisine takes advantage of the freshest island ingredients: cattle raised on the upland pastures of Hawaii's Big Island, fruits and vegetables grown from rich, volcanic soil in Upcountry Maui, and some of the best quality fish in the world, to name a few. Today, you can experience Hawaii Regional Cuisine throughout the islands by a variety of esteemed chefs. The

12 original award-winning chefs continue to dream up mouth-watering entrees and signature desserts in world-renowned restaurants, from Waikiki to Waimea.

Old Hawaiian Lau vs. Today's Luau

In old Hawaii a luau meant a lavish food extravaganza to honor royalty, foreign dignitaries, powerful chieftains, or hundreds of guests at important weddings, christenings or birthdays. Each guest is customarily greeted with leis of flowers or kukui nuts. Much preparation is required for these often three-day parties. Guests eat a bit, dance a bit, drink a little and sing a lot. A luau is the true experience of "aloha." Today the luau is a major visitor attraction and dozens are held daily throughout the islands. Needless to say, some preparations have been streamlined, although the traditional roast pig and other authentic dishes are still served.

Oahu Cuisine

One of the main tenets of Hawaii Regional Cuisine is to take advantage of the freshest island ingredients: cattle rose on the islands' upland pastures, fruits and vegetables grown from volcanic soil, and fish from one of the best managed fisheries around. From Waimanalo greens to Kahuku corn you'll find some of the freshest locally grown foods, fish and beef in Oahu's restaurants. Five of the original chefs behind the Hawaii Regional Cuisine movement have restaurants on Oahu: Alan Wong, Roy Yamaguchi, George Mavrothalassitis, Sam Choy, and Philippe Padovani.

Maui Cuisine

The fertile fields of Kula in Upcountry Maui are a major source of fresh produce and citrus in the islands. The Maui onion, famous for its sweet taste, is a result of the rich volcanic soil and cool climate on the slopes of Haleakala. Three of the original chefs behind the Hawaii Regional Cuisine movement have restaurants in Maui: Beverly Gannon, Mark Elman and Peter Merriman.

Hawaii's Big Island Cuisine

The fertile farms and gardens all around the Big Island offer fresh produce and the upcountry pasturelands around Waimea nurture grass-fed beef and lamb. These are the ingredients that go into the famously delicious, creative dishes served in the finest Big Island restaurants. You can tour Kahua Ranch to learn about Hawaii's rich paniolo (Hawaiian cowboy) past.

But you really need to taste these creative dishes to see what Hawaii Regional Cuisine is all about. Two of the original chefs behind the Hawaii Regional Cuisine movement have restaurants on Hawaii's Big Island: Peter Merriman and Roy Yamaguchi. Honolulu Magazine has named Merriman's the best Big Island Restaurant for 13 consecutive years, and they are also in several locations in Kapalua, Maui and Poipu, and Kauai. Roy Yamaguchi is a James Beard Award winner based on Oahu, but has locations here in Waikoloa as well as Poipu on Kauai, and Lahaina on Maui, as well as Waikiki, Hawaii Kai and Koolina on Oahu.

Farm to Table Maui

Follow the farm-to-table process by taking a walking tour of the cool, upland farms of Upcountry Maui. Then head to sunny West Maui and South Maui to enjoy the fruits of our chefs' labors in Maui's most prestigious restaurants.

The fertile fields of Kula in Upcountry Maui are an ideal place to take a farm tour. The rich volcanic soil is responsible for Maui's freshest citrus and vegetables, including the sweet Maui onion. It is located 4,000 feet above sea level in Kula; take a farm tour of Oo Farm, the private farm of Lahaina restaurants PacificO, IO and the Feast at Lele. Not far from Oo Farm is the 8.5 acre Alii Kula Lavender Farm. Take a garden tour and see more than 25,000 lavender plants as well as protea, hydrangea and other exotic flora. The views from these serene upcountry hills are amazing. The award winning Surfing Goat Dairy is a 42-acre dairy located in lower Kula where visitors can learn about the cheese making process, tour the pastures and — for the truly adventurous — actually milk a goat.

When you're done, head seaside to Lahaina and get a taste of Maui's fresh flavors in its fine restaurants. Chef James McDonald serves farm fresh cuisine at his restaurants IO, Pacific, and the Feast at Lele. Other esteemed farm to table restaurants can be found in Kapalua, Kaanapali, Kihei and Wailea. Three of the original chefs behind the Hawaii Regional Cuisine movement have restaurants in Maui: Beverly Gannon, Mark Elman, and Peter Merriman.

Hawaii: Biggest consumer of Spam

Spam Musubi

The Hormel company's canned meat product Spam has been highly popular in Hawaii for decades. Hawaiians are the second largest consumer of Spam in the world and Guam is first. Originally brought to Hawaii and Guam by American servicemen during WWII which included spam ham as part of the daily rations, spam became an important source of protein for locals after fishing around the Islands was prohibited during World War II. In 2005, Hawaiians consumed more than five million cans of Spam.

Spam is used in local dishes in a variety of ways, most commonly fried and served with rice. At breakfast, fried eggs are often served with it. Spam can also be wrapped in ti and roasted, skewered and deep fried, or stir-fried with cabbage. It is added to saimin or fried rice, mashed with tofu, or served with cold sōmen or baked macaroni and cheese. It is also used in chutney for pupu, in sandwiches with mayonnaise, or baked with guava jelly. Spam musubi, a slice of sweet and salty marinated Spam tied to a cake of rice with a strip of nori, is very popular as a snack in Hawaii. Spam musubi is served in sushi restaurants in Hawaii, having become popular in the 1980s.

Cattle Ranching

In the 19th century, John Parker brought over Mexican cowboys to train the Hawaiians in cattle ranching. The Hawaiian cowboys of Kamuela and Kula came to be called paniolos. Cattle ranching grew rapidly for the next one hundred years. In 1960, half of the land in Hawaii was devoted to ranching for beef export, but by 1990 the number had shrunk to 25 percent. The paniolos chewed pipikaula ("beef rope"), a salted and dried beef that resembles beef jerky. Pipikaula would usually be broiled before serving. With the influence of Asian cooking, beef strips are commonly marinated in soy sauce. When beef is dried in the sun, a screened box is traditionally used to keep the meat from dust and flies. Dried meat could often be found as a relish or appetizer at a lūʻau.

Development of the Hawaiian Regional Cuisine

In 1905, George R. Carter, Territorial Governor of Hawai'i, promoted increasing local agricultural production saying that "there was a time when Hawaii supplied California with flour, potatoes and other vegetables. Now California produces its own vegetables and sends part of the surplus here." Newspaper editorials of the time also questioned why locally-grown guavas were rotting on the ground while agri-business was planting non-native pineapples in Hawaii. These concerns were not addressed until almost a century later, when the regional cuisine movement began encouraging the food industry to "grow local, buy local, and eat local."

Since the 1970s, pineapples were grown more cheaply in Southeast Asia, so the Hawaiian agriculture has taken a diverse approach, producing a variety of crops including squash, tomatoes, chili peppers and lettuce.

From 1978-1988, chefs who came to Hawaii would avoid Hawaii-grown ingredients like their European counterparts, preferring to ship everything in from the U.S. mainland, or as far away as Australia, New Zealand, and Europe.

In August 1991, a group of chefs in Hawaii came together to form an organization to create a new American regional cuisine, highlighting Hawaii's locally grown ingredients and diverse ethnic styles.

In 1992, twelve chefs including Sam Choy, George Mavrothalassitis, Alan Wong, Peter Merriman, and Roy Yamaguchi formed a nonprofit as Hawaii regional cuisine and worked to publish the 1994 cookbook by Janice Wald Henderson, "The New Cuisine of Hawaii." Sam Choy was one of the founding contributors of Pacific rim cuisine. These chefs are responsible for the development of the Hawaiian Regional Cuisine. This group also sponsored a cookbook to be sold for charity. The goal of this new group of chefs was to link local agriculture with the restaurant industry, making Hawaii Regional Cuisine a reflection of the community. For this, they took an uninspired international hotel cuisine based on imported products and replaced it with a cuisine based on locally grown foods.

Japanese-American baker Robert Taira, came up with a recipe for the Hawaiian version of Portuguese sweet bread in the 1950s. Taira began to commercially produce the bread in Hawaii, and it became successful in Honolulu bakeries and coffee shops, with plant production expanding to California and South Carolina. By the 1980s, Taira's company, King's Hawaiian Bakery, was grossing US$20 million annually.

Creation of the Mai-Tai

Don the Beachcomber, a former bootlegger, opened what is acknowledged to be the first of Tiki restaurants, and claims the creation of the mai tai. As servicemen and servicewomen from the Pacific theater of World War II began coming home, they brought recipes and tastes that could not be satisfied at the Italian, French, and American restaurants of the era. Tiki restaurants soon began appearing that were often accompanied by tiki bars with tropical drinks. One of these chains that took advantage of this new clientele with a taste for the exotic was run by Trader Vic. Of the 26 restaurants which at one time existed, only a few, such as the Emeryville location, remain. Much of the food served at tiki restaurants is considered to be Cantonese cuisine, but the fusion of Hawaiian ingredients is what made it tiki.

Ingredients of the Hawaiian Regional Cuisine

These ingredients are common in the Hawaiian Regional Cuisine.

Breadfruit (Artocarpus altilis)

Breadfruit

“Breadfruit has been an important staple crop in Oceania for more than 3,000 years. It is believed to have originated in New Guinea and the Indo-Malay region and was spread

throughout the vast Pacific by voyaging islanders. Europeans discovered breadfruit in the 1500s and were amazed and delighted by a tree that produced prolific, starchy fruits that, when roasted, resembled freshly baked bread. Sir Joseph Banks (1769) quote about breadfruit: “Regarding food, if a man plants 10 (breadfruit) trees in his life, he would completely fulfill his duty to his own as well as future generations.”

Sweet Potato

The sweet potato is one the main staples of the HRC cuisine.

Native Americans were already growing sweet potatoes when Columbus arrived on America's shores in 1492. African slaves in the South called the sweet potato "nyami" because it reminded them of the starchy, edible tuber of that name that grew in their homeland. The Senegalese word "nyami" was eventually shortened to "yam." "Yam" also refers to sweet potatoes that are grown in Louisiana. When the orange-fleshed, Puerto Rican variety of sweet potatoes was adopted by Louisiana producers and shippers, they called them "yams" to distinguish them from the white-fleshed sweet potatoes grown in other parts of the country.

The yam reference became the trademark for Louisiana-grown sweet potatoes. There is a difference between sweet potatoes grown in northern states and those grown in Louisiana. Sweet potatoes produced in the northern states are mostly "firm" and tend to be drier, more mealy, and yellow in flesh. People in Louisiana enjoy the second type, "soft", which is higher in natural sugar, is moist, and has a bright orange flesh color. Most often it is the "soft" type which is referred to as a yam. They are full of beta-carotene/vitamin A which regulates cell production and turnover so skin's surface is smooth.

Sweet potatoes are stored in temperature and humidity controlled warehouses that extend the yam's shelf life for the entire year. So the "season" for fresh yams is 12 months. Canned yams are also available year round. Yams should not be refrigerated unless cooked. True yams (from tropical and subtropical regions of the world) contain more starch and less sugar than sweet potatoes -- and they must be cooked before eaten.

In the 18th and 19th centuries, Both Louis XV and Empress Josephine's fondness of the sweet potato encouraged two short periods of popularity for this veggie. The sweet potato is not a potato or even a distant cousin. Potatoes are tubers; sweet potatoes are roots. Louisiana offers ideal soil and climate conditions to grow sweet potatoes. The CSPI ranked the sweet potato at 184 in nutritional value, more than 100 points ahead of the baked Idaho potato, spinach or

broccoli. It takes six to eight weeks after harvest for sweet potatoes to reach their peak in sweetness when baked. Studies have consistently shown that a high intake of beta carotene-rich vegetables and fruits, like sweet potatoes, can significantly reduce the risks for certain types of cancer. February is National Potato Lovers Month!

The following nutrients of a sweet potato:

Sweet potatoes provide twice the recommended daily allowance of vitamin A; it provides the daily requirements of vitamin C; it is an important source of beta-carotene, vitamin B6, iron, potassium and fiber. It contains no fat or sodium. The more orange color of the sweet potatoes means they are richer in beta carotene.

Taro Description

Colocasia esculenta (Taro) is a tropical plant grown primarily for its edible corms, the root vegetables whose many names include Taro and Eddoe. Taro is the main ingredient used to make poi. Taro (Colocasia esculenta): A popular and ancient plant that has been harvested for at least 30,000 years by indigenous people in New Guinea. There are hundreds of varieties of taro, and the corn of the wetland variety makes the best poi, as well as taro starch or flour. The dry-land variety has a crispy texture and used for making taro chips. The smaller Japanese variety is used for stewed dishes.

It is believed to be one of the earliest cultivated plants. Rhizomes are of different shapes and sizes. Leaves are up to 40×24.8 cm, sprouts from rhizome, dark green above and light green beneath, triangular-ovate, sub-rounded and mucronate at apex, tip of the basal lobes rounded or sub-rounded. Taro is closely related to Xanthosoma and Caladium, plants commonly grown as ornamentals, and like them it is sometimes loosely called elephant ear.

Taro and Eddoe

Taro was probably first native to the lowland wetlands of Malaysia (taloes). Estimates are that taro was in cultivation in wet tropical India before 5000 BC, presumably coming from Malaysia, and from India further transported westward to ancient Egypt, where it was described by Greek and Roman historians as an important crop. In India, it is known as "arbi" or "arvi". In Indonesia, it is called talas or keladi. In Australia, Colocasia esculenta var. aquatilis is native to the Kimberley region of Western Australia; variety esculenta is naturalized in Western Australia, the Northern Territory, Queensland and New South Wales.

Candle Nut (Aleurites Moluccana)

Candle Nut (Aleurites Moluccana) or Kukui: Roasted kernels traditionally used as candles; main ingredient in the ancient Hawaiian condiment, 'inamona. Large brown fruit with little pulp and a thick rind that encloses one or two very large seeds, the candlenuts. The nuts have a variety of uses, both edible and otherwise. A medium or large sized, spreading, tropical tree is up to 50-80ft tall. Candlenut trees are somewhat hardy and will survive temperatures to 25-28F. They grow very well in tropical climates with ample rainfall, but also adapt to dry climates.

Candlenut's need little if any care after they are established. It takes 3-4 months to germinate. Cooked nuts are generally edible, although some strains contain high amounts of cyanide. Usually the nut is pressed for its oil, which is used for a variety of industrial purposes like soap making, varnishes, and fuel. The oil is sometimes used medicinally similar to castor oil, as well as a laxative. In Southeast Asia, the oil is sometimes applied topically to treat headaches, fevers and swollen joints. Native Range: Native to Malaysia, Indonesia, the Philippines, and South Pacific Islands including Hawaii.

Coconut Description

The coconut palm, Cocos nucifera, is a member of the family Arecaceae (palm family). It is the only accepted species in the genus Cocos. The term coconut can refer to the entire coconut palm, the seed, or the fruit, which is not a botanical nut. The spelling cocoanut is an old-fashioned form of the word. Early Spanish explorers called coconuts/cocos nucifera "coco" (meaning "monkey face").

Coconut Tree Palm

Found across much of the tropics, the coconut is known for its great versatility as seen in the many domestic, commercial, and industrial uses of its different parts. Coconuts are part of the daily diet of many people. Its endosperm is known as the edible "flesh" of the coconut; when dried it is called copra. The oil and milk derived from it are commonly used in cooking and frying; coconut oil is also widely used in soaps and cosmetics. The clear liquid coconut water within is a refreshing drink and can be processed to create alcohol. The husks and leaves can be used as material to make a variety of products for furnishing and decorating. It also has cultural and religious significance in many societies that use it.

Plant

Cocos nucifera is a large palm, growing up to 30 meters (98 ft) tall, with pinnate leaves 4–6 meters (13–20 ft) long, and pinnae 60–90 cm long; old leaves break away cleanly, leaving the trunk smooth. Coconuts are generally classified into two general types: tall and dwarf. On very fertile land a tall coconut palm tree can yield up to 75 fruits per year, but more often yields less than 30 mainly due to poor cultural practices. In recent years, improvements in cultivation practices and breeding have produced coconut trees that can yield more.

Fruit

Botanically the coconut fruit is a drupe, not a true nut. Like other fruits it has three layers: exocarp, mesocarp, and endocarp. The exocarp and mesocarp make up the husk of the coconut. Coconuts sold in the shops of non-tropical countries often have had the exocarp (outermost layer) removed. The mesocarp is composed of fibers called coir which have many traditional and commercial uses. The shell has three germination pores (stoma) or eyes that are clearly visible on its outside surface once the husk is removed.

A full-sized coconut weighs about 1.44 kilograms (3.2 lb). It takes around 6000 full-grown coconuts to produce a ton of copra.

Seed

Within the shell is a single seed. When the seed germinates, the root (radicle) of its embryo pushes out through one of the eyes of the shell. The outermost layer of the seed, the testa, adheres to the inside of the shell. In a mature coconut, a thick albuminous endosperm adheres to the inside of the testa. This endosperm or meat is the white and fleshy edible part of the coconut.

Nutrients

Although coconut meat contains less fat than many oilseeds and seeds such as almonds, it is noted for its high amount of medium-chain saturated fat. About 90% of the fat found in coconut meat is saturated, a proportion exceeding that of foods such as lard, butter, and tallow. There has been some debate as to whether or not the saturated fat in coconuts is healthier than other forms of saturated fat. Like most nut meats, coconut meat contains less sugar and more protein than popular fruits such as bananas, apples and oranges. It is relatively high in minerals such as iron, phosphorus and zinc.

Tacca Leontopetaloides

Tacca leontopetaloides is a species of flowering plant in the yam family Dioscoreaceae, that is native to tropical Africa, South Asia, Southeast Asia, northern Australia, New Guinea, Samoa, Micronesia, and Fiji. It was intentionally brought to tropical Pacific Islands with early human migrations. Common names include Polynesian Arrowroot, Pia (Hawaii, French Polynesia, Niue, and Cook Islands), Masoa (Samoa), Mahoaʻa (Tonga), Yabia (Fiji) Gap (Guam) and Taka (Indonesia).

Polynesian Arrowroot

Description

Several petioles 17–150 cm (6.7–59 in) in length extend from the center of the plant, on which the large leaves (30–70 cm/12–28 in long and up to 120 cm/47 in wide) are attached. The leaf's upper surface has depressed veins, and the under surface is shiny with bold yellow veins. Flowers are borne on tall stalks in greenish-purple clusters, with long trailing bracts. The plant is usually dormant for part of the year and dies down to the ground. Later, new leaves will arise from the round underground tuber. The tubers are hard and potato-like, with a brown skin and white interior.

Uses

The tubers of Polynesian Arrowroot contain starch, making it an important food source for many Pacific Island cultures, primarily for the inhabitants of low islands and atolls. Polynesian arrowroot was prepared into a flour to make a variety of puddings. The tubers were first grated and then allowed to soak in fresh water. The settled starch was rinsed repeatedly to remove the bitterness and then dried. The flour was mixed with mashed taro, breadfruit, or Pandanus fruit extract and mixed with coconut cream to prepare puddings. It is used as primary thickener, and cooked arrowroot is mixed with papaya, banana, or pumpkin in baked deserts. Haupia, a Hawaiian coconut cream pudding, uses pia as a thickener. In Hawaii, a local favorite is haupia, which was originally made with pia flour, coconut cream and kō (cane sugar). Today, Polynesian arrowroot has been largely replaced by cornstarch.

The starch was additionally used to stiffen fabrics, and on some islands, the stem's bast fibers were woven into mats.

In traditional Hawaiian medicine the raw tubers were eaten to treat stomach ailments. Mixed with water and red clay, the plant was consumed to treat diarrhea and dysentery. This combination was also used to stop internal hemorrhaging in the stomach and colon and applied to wounds to stop bleeding.

Cordyline Fruticosa

Cordyline fruticosa is an evergreen flowering plant in the Asparagus family. Asparagaceae, known by a wide variety of common names including Cabbage Palm, Good Luck Plant, Palm Lily, Ti Plant, Kī, La'i (Hawaiian), Tī Pore (Māori), Sī (Tongan), "Lauti" (Samoan), and ʻAutī (Tahitian).

Cordyline Fruticosa

Formerly treated in the family's Agavaceae and Laxmanniaceae (now both subfamilies of the Asparagaceae in the APG III system), it is a woody plant. It produces long panicles (16–24 in) of small scented yellowish to red flowers that mature into red berries.

It is native to tropical southeastern Asia, Papua New Guinea, Melanesia, northeastern Australia, the Indian Ocean, and parts of Polynesia. It is not native to either Hawaii or New Zealand but was introduced to both by Polynesian settlers..

Cultivation and Uses

The species was spread from its native range throughout Polynesia as a cultivated plant. Its starchy rhizomes, which are very sweet when the plant is mature, were eaten as food or as medicine, and its leaves were used to thatch the roofs of houses, and to wrap and store food. The plant or its roots are referred to in most Polynesian languages as tī. Māori ranked the sweetness of the plant above the other Cordyline species native to New Zealand.

Leaves were also used to make items of clothing including skirts worn in dance performances. The Hawaiian hula skirt is a dense skirt with an opaque layer of at least 50 green leaves and the bottom (top of the leaves) shaved flat. The Tongan dance dress, the sisi, is an apron of about 20 leaves, worn over a tupenu, and decorated with some yellow or red leaves.

In ancient Hawaii the plant was thought to have great spiritual power; only kahuna (high priests) and ali‘i (chiefs) were able to wear leaves around their necks during certain ritual activities. Kī leaves were also used to make a lei, and to outline borders between properties (for which its alternative name: terminalis). To this day some Hawaiians plant kī near their houses to bring good luck. The leaves are also used for lava sledding. A number of leaves are lashed together and people ride down hills on them.

In early 1900's, the roots of the kī plant were used as a glossy covering on surfboards in Hawaii. Ti is a popular ornamental plant, with numerous cultivars available, many of them selected for green or reddish or purple foliage.

Liquor drink: In Hawaii, kī rhizomes are fermented and distilled to make okolehao, a liquor.

Winged Bean

The Winged Bean (Psophocarpus Tetragonolobus), also known as the Goa bean and Asparagus Pea and Winged Pea, is a tropical legume plant native to New Guinea. It grows abundantly in hot, humid equatorial countries, from the Philippines and Indonesia to India, Burma, Thailand and Sri Lanka. It does well in humid tropics with high rainfall. There are also varieties that can be grown in most areas of the U.S..

Winged Bean

The winged bean plant grows as a vine with climbing stems and leaves, 3–4 m in height. It is an herbaceous perennial but can be grown as an annual. It is generally taller and notably larger than the Common bean. The bean pod is typically 15–22 cm (6–9 in) long and has four wings with frilly edges running lengthwise. The skin is waxy and the flesh partially translucent in the young pods. When the pod is fully ripe, it turns an ash-brown color and splits open to release the seeds. The large flower is a pale blue. Being a tropical plant, it is sensitive to frost. Most plants will not flower if the day length is more than 12 hours, meaning they will not produce pods in most temperate zones, although day length neutral cultivars do exist. The seeds have a hard coat and it helps to soak them before planting to hasten germination. The plant grows very quickly, reaching a length of four meters in a few weeks.

Nutrients

The beans themselves are similar to soybeans in both use and nutritional content (being 29.8% to 39% protein). They are also much richer in protein than potatoes. Each of these parts of the winged bean provides a source of vitamin A, vitamin C, calcium, iron, and other vitamins. The seeds contain 35% protein and 18% oil. The plant is one of the best nitrogen fixers with nodulation accomplished by the soil bacterium Rhizobium. Because of its ability to fix nitrogen from the atmosphere, the plant requires very little or no fertilizers.

Uses

This bean has been called the "one species supermarket" because practically all of the plant is edible. The beans are used as a vegetable, but the other parts (leaves, flowers, and tuberous

roots) are also edible. The tender pods, which are the most widely eaten part of the plant (and best eaten when under 1" in length) can be harvested within two to three months of planting. The flowers are often used to color rice and pastries. The flavor of the beans has a similarity to asparagus. The young leaves can be picked and prepared as a leaf vegetable, similar to spinach. The roots can be used as a root vegetable, similar to the potato, and have a nutty flavor. The dried seeds can be useful as flour and also to make a coffee-like drink.

List of of Hawaii Fish Dishes.

Tuna is the most important fish in Hawaiian cuisine. Varieties include the skipjack tuna (aku), the yellowfin tuna (ahi), and the albacore tuna (tombo). Ahi in particular has a long history, since ancient Hawaiians used it on long ocean voyages because it is well preserved when salted and dried. A large portion of the local tuna fishery goes to Japan to be sold for sashimi. Tuna is eaten as sashimi in Hawaii as well, but is also grilled or sautéed, or made into poke.

Ahi Poke: Raw ahi (yellow fin) tuna with chopped roasted kukui nuts, green onions, Hawaiian chili peppers, shoyu (soy sauce), sesame oil, Hawaiian sea salt, and limukohu (a type of delicate seaweed) served on a bed of red cabbage

The Pacific blue marlin (kajiki) is barbecued or grilled, but should not be overcooked due to its very low fat content. The broadbill swordfish (shutome), popular and shipped all over the mainland United States, is high in fat and its' steaks may be grilled, broiled, or used in stir-fry. The groupers (hapuu) are most often steamed. The red snapper (onaga) is steamed, poached, or baked. The pink snapper (opakapaka) has a higher fat, and is steamed or baked, served with a light sauce. The Wahoo (ono) is grilled or sautéed, and the dolphin fish (mahimahi) is usually cut into steaks and fried or grilled. The moonfish (opah) is used for broiling, smoking, or making sashimi.

Spices

Showing the island's Asian influence, Teriyaki has become the most popular way of treating meats, including Spam. Other common Asian spices include Five-Spice powder and Char siu from China, Wasabi and Shoyu (Soy sauce) from Japan, and Bagoong from the Philippines. Types of spices endemic to Hawaii cuisine include Huli-huli sauce and Chili Pepper water.

Bibliography of the Hawaiian Culture

A Culture Unfolds, Source:
http://www.hawaiihistory.org/index.cfm?fuseaction=ig.page&CategoryID=305

Breadfruit, Source: http://ntbg.org/breadfruit/breadfruit/history1.php

Coconut, Source: http://en.wikipedia.org/wiki/Coconut

Cordyline fruticosa, Source:
http://en.wikipedia.org/wiki/File:Cordyline_fruticosa_plant_with_fruit.jpg

Farm to Table with Chef James McDonald, Source:
http://www.gohawaii.com/stories/stories.html?video=10

Arm to Table Maui, Source: http://www.gohawaii.com/maui/guidebook/topics/farm-to-table

Hawaii Culture, http://www.alternative-hawaii.com/hacul/history1.htm

Hawaii Regional Cuisine on Hawaii's Big Island, Source:
http://www.gohawaii.com/big-island/guidebook/topics/hawaii-regional-cuisine

Hawaii Regional Cuisine on Maui, Source:
http://www.gohawaii.com/maui/guidebook/topics/hawaii-regional-cuisine-on-maui

Hawaii Regional Cuisine on Oahu

Source: http://www.gohawaii.com/oahu/guidebook/topics/hawaii-regional-cuisine-on-oahu

Hawaiian Tattoos, Source: http://www.to-hawaii.com/culture/hawaiian-tattoos.php

History of Hawaii Cuisine, Source: http://danazia.wordpress.com/2011/03/08/history-of-hawaiis-cuisine/

History of Hawaiian Food, Source:
http://www.kauaimenu.com/MenuPages/featurestory/history_of_food.htm

History of the Hawaiian Luau, Source: http://www.1stluau.com/history.html

James Dole Biography, Source: http://www.hawaiiforvisitors.com/people/james-dole.htm

Overview of Hawaii's culture, Source: http://www.to-hawaii.com/hawaiian-culture.php

Sweet potato recipe, Source: http://www.sweetpotato.org/facts/

Tacca Leontopetaloides, Source: http://en.wikipedia.org/wiki/Tacca_leontopetaloides

What is Hawaii Regional Cuisine? Source:
http://www.gohawaii.com/statewide/discover/essential-hawaii/hawaii-regional-cuisine