

Makahiki or the New Year?

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Hauoli Makahiki Hou! Happy New Year.

I've often wondered whether the ancient Hawaiians celebrated the new year. They probably didn't in the sense that we do with resolutions and commitments to change our old ways, although their culture is believed to have evolved from an ancient Chinese culture who definitely celebrated the New Year with a bang! In ancient Hawaiian times, their whole existence revolved around survival, including planting, harvesting, and preserving food resources for today and also tomorrow. This meant saving, not for the rainy days, but for the dry ones. Keeping sour poi and drying fish were some ways of saving for tomorrow. It was fortunate that poi could ferment or sour, but they could also make pai ai and keep it for a while.



Lo'i at Ha'ena, Kauai managed by Hui Maka'ainana O Makana, a community-based resource management project

This is why I believe that Makahiki was probably their celebration of the New Year. The end of the year was the harvest, and the New Year was Makahiki, a time to celebrate a bounteous harvest, to have fun, and rest up for challenges of the upcoming year. Everyone knew when Makahiki started, so you didn't have to send out invitations. With the rising of the constellation

Pleiades or Makali'i, this signaled the start of Makahiki. Other ancient cultures also used this same constellation, also known as the Seven Sisters, as the start of the Harvest Festival, including the Quechua of Equador in South America.

If there were famine in the land, you really had nothing to celebrate. In fact, in many cases, you died before the Makahiki celebration. During Makahiki, all battles ceased, similar to calling a time out in a football game or even a half-time ceremony, but much longer at a few months. Makahiki included games of strength and skill, including uma or arm wrestling, kukini or foot races, pohaku ho'oikaika or shot put, huki huki or tug of war, o'o ihe or spear throwing, haka moa or chicken fighting, and konane or checkers, just to name a few. One game we don't play much anymore is spear catching, but that's understandable. Although it was critical to their survival, there was no room for error.

Makahiki was really a way to stay in shape in mentally, physically, and spiritually for the battles to come, and to anticipate growing more food in order to subsist. The shortage of food gave impetus to battles and also war, including raiding someone else food sources. Battles had many other objectives, such as increasing their domain and natural resources, and even recruiting new talent or breeding stock. In the world today, we still fight for this reason, but you can add water and oil to the list of reasons for war. Food production consumed a big portion of their day, as compared to fishing which was a small part of food production. You could go without fish, but you couldn't go without a staple, including taro, sweetpotato, or breadfruit. The survival of those living in the most isolated chain of islands depended on their ability to grow food, and lots of it.

They also believed that in order to do this, they had to stay in good graces with the Gods. This is what *PONO* is all about, being righteous in thought, word, and deed, so you would continue to be blessed with the basic things required for their survival. The first Hawaiians were simple and had one God, Iō. Their governance revolved around community-based management or 'aha, with a community board composed of commoners, artisans, and experts respected in their communities. Everything seemed to have worked fine. Coordination and collaboration was the key to their survival, including sharing and bartering, and there was a large land and ocean resource to tap into, with lots of room for expansion.



The idea of one God soon became a moving target when the Tahitians arrived, and really screwed things up with notions of a caste system, of royalty, and of a hierarchy with the masses working for THEM! The Tahitians introduced the idea of polytheism or many Gods to Hawaii, and it revolved around praying for success in growing certain key crops since food was so vital to their survival. Those whose staple was taro revered one God, while those whose

staple was taro had another, and even the breadfruit had another. I used to think that this was the worst thing that happened to Hawaii until I found out recently that those were my ancestors, and if it wasn't for them, I probably wouldn't be here today telling you this.

TAX TIME

The Tahitians also introduced the idea of taxes to fund their hierarchy, with tax districts or land divisions, and a place to drop off your taxes, like a tax office in each district.

They called it ahupua'a or pig altar, which was the suggested tax payment. I don't know where they came up with this idea, but it seemed to have stuck today, especially the tax idea. I guess this is where the concept of life, death, and taxes originated.

They even had a God of war to assure that their battles would be calculated and victorious. For example, Kamehameha made sure his crew carried Ku-kailimoku, or the God of war into each battle for protection and guidance. Kamehameha anointed a trusted individual to carry this feathered ki'i or manifestation of a God in the shape of a feathered human head and Hawaiian helmet, with eyes made of oyster shell. They carried this guy whenever he went into battle, which was pretty often.

I know a little about this. My great-great-great grandfather, Keaoua Kekuaokalani, was the protector of Ku-kailimoku and would carry it into battle. He was Kamehameha's nephew, son of his youngest brother, Keli'imaika'i. If Kukailimoku went down, they all went down so he had a very, very important job, to say the least. Lucky for them, except for a few setbacks, Kamehameha usually prevailed and it was pretty decisive most of the time, such as when he pushed Kalanikupule's forces over the Pali, and taking control of Oahu.

The Kapu System kept the populace in order, and was an important part of daily life. It dictated what kinds of foods the sexes could eat, when certain fish could be caught to preserve the stocks. It controlled much of daily life and kept the masses in order, and easier to govern. After the death of Kamehameha, there were some who wanted the Kapu System abolished because it was too stringent and male chauvinistic. Liholiho or Kamehameha II, along with Ka'ahumanu, wanted to do away with the Kapu System, and this would be done by breaking the eating or 'ai kapu which dictated that males and females ate separately. This ceremony was called the Ai Noa or free-eating.

It was believed that when one kapu fell, the entire Kapu System would follow. Keaoua Kekuaokalani opposed the abolition of the Kapu System after his uncle died, and felt that we needed to adhere to the old ways. He challenged the authority of his cousin, Liholiho, and opposed this ceremony in Kailua, Kona to change life for good in Hawaii. There may have been some internal conflict going as well since Keaoua Kekuaokalani was a favorite or punahele of his uncle, and may have had aspirations to take over his job as Commander-in-Chief after he died.

Liholiho and Ka'ahumanu invited Keaoua Kekuaokalani to the ceremony, but he refused. Keaoua Kekuaokalani had major support from many of the ruling chiefs on the Big Island from Hamakua and Ka'u, willing to fight to maintain the old ways. He could have mustered up a formidable challenge to his stop his cousin, but he refused their assistance because he thought he could do it with 300 men and some rifles and pistols.

To make a long story short, he and his wife, Manono were gunned down by Kalanimoku's forces under orders from Liholiho in an area near Keahole, south of Kailua-Kona. Kalanimoku was Manono's half-brother, which didn't seem to make a difference. I guess blood is not always thicker than water; power is. Keaoua Kekuaokalani and Manono fell to the ground in the form of a cross, and this was taken as a *ho'ailona* or omen that Christianity would be arriving. The area near Keahole is called Kuamo'o, which is another name Keaoua Kekuaokalani is known as, Ka iwi kuamo'o kekuaokalani.

There are many lessons to be learned from this unfortunate incident:

1) Don't be hard-headed and think you can go it alone. Ask for help and seek the advice from those who have the knowledge and experience, especially if you're venturing into uncharted waters.

2) Make sure you perform your due diligence; conduct reconnaissance and have up-to-date information and before taking on a major task like fighting with your cousin.

3) The goal of running a business, as in life, is to survive. Stay in business and stay alive!

4) Don't play with guns!

I think this applies to farming as well. Seek the advice of experts, and plan your steps carefully. Learn from your mistakes and always try to improve on what you're doing. Don't be complacent and feel comfortable about where you're at; always try to improve.

Learning from Your Mistakes

Sometimes, the well laid plans of mice and men fall short and things don't go as planned. Battles became important educational experiences that allow them to learn from their mistakes, debrief, and refine their strategies and skills. Like the time Kamehameha went into battle on Maui, and his forces were almost annihilated by his uncle Kahekili, who was older, more experienced, and wiser than him. Age does have its privileges.

Kamehameha even sent in his first-string offensive line, his elite forces known as Alapa Elua, who were lured into a valley with no way out. As the battle raged, water in the stream turned red from all the blood, called Kanohowailuku or the river of destruction. From this experience, he learned the hard way that in any battle, you always have to plan another way out. I call it **Plan B**, and I think it still applies today, even in farm planning and farming. We learn and plan, and plan and learn.

Kale Kraze

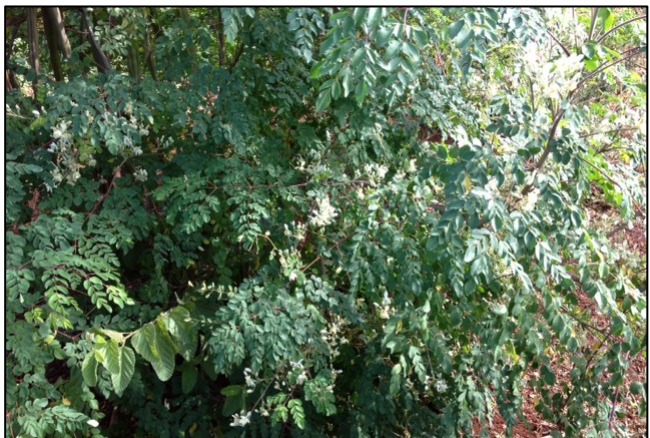
Kale is quite the craze these days with many people juicing it with fruits. The favorite variety of kale in Hawaii is Lacinato kale, known by many names such as Nero di Toscana, Palm Tree kale, and Dinosaur kale. It was also one of the vegetables Thomas Jefferson grew in his garden at Monticello. It was introduced to the US when Renee Shepherd of Renee's Garden Seed imported seed from Italy in the 1980's. It's amazing what a new variety can create, and this one created a real stir all over the place, including Hawaii. Most of the other kale varieties, with the exception of the Couve Tronchuda or Biera, known as Portuguese kale and also Ethiopian kale are not adapted to our hot climate. The result is a bitter, strong tasting kale that's not acceptable in the marketplace.

Recently, a friend of mine Frank Morton crossed Lacinato kale with a Red Russian kale to create Lacinato Rainbow which is a mixture of the two parents and everything in between. Frank is a vegetable breeder at Wild Garden Seed, an organic seed company in Philomath, Oregon. He even crossed kale with broccoli called Purple Peacock which I featured in last month's newsletter, and you can consume the whole plant. About a month ago, I contacted Frank, and he mentioned that the temperature was -5 degrees Fahrenheit, the lowest in 25 years! He reveled at the idea of selecting for cold tolerance from this storm. Some people can see the silver lining in everything, while others just think about this freezing weather.

The problem was that the ones that were not super cold-tolerant didn't survive. I had him cross Lacinato or Dinosaur kale with Tronchuda or Portuguese kale to create a larger selection of kale for tropical areas such as Hawaii, and we were looking forward to testing the seed this spring. He emailed me that they 'ate it' from the frigid weather, but this is understandable since they're not cold tolerant. Well, back to the drawing board.

If You Don't Plant, You Cannot Harvest

A mantra I used to repeat in many of our beginning farmer classes was just this. It sounds like a no-brainer, but it's profound at the same time. It tells us we 'gotta get hep' and put our noses to the grindstone if we want to farm, but farming isn't easy and you really have to dig deep and decide if you really want to go down this road. You may want to just grow for subsistence, such a fruits and other



One of 25 marungay selections growing at Noah Freeman's Farm

perennial survival food. I call some of these famine foods, ones which can grow well without a lot of care, and is there when you really need them. I will touch upon some of these perennial types, some of which are actually annuals that keep on growing in Hawaii.

The first is moringa or kalamungai which it's better known on Molokai. High in nutrients, it's known as the Miracle Tree in many parts of the world. Dried leaves added to food are great for lactating mothers to add nutrients to their milk. Grown from seeds and cuttings, they're very drought tolerant. We're presently conducting a kalamungai variety trial at Noah Freeman's Farm of Indian and Hawaii selections. Traditionally used in soups such as chicken papaya, its turned into a vitamin supplement or green food added to shakes and every kind of meal.

Pigeon pea, also known as gandule or gandodi beans, has been a backyard plant since the early 1800's in Hawaii, and its pods was our snack food. A legume, this is a great meat substitute and the same plant can produce for years. Its better boiled with a little salt. Pigeon pea is grown from seed, and there are many tree forms. They can also double as an infield windbreak. Another bean is the wing bean, a perennial vine that will continue to produce, and is great stir fried or in soups.

Two nutritious leaves I like to eat are sweetpotato and chayote or pipinella as it's called in Hawaii. The Filipinos have a sweetpotato variety that has leaves the shape of fingers, and is more tender than many other varieties. This is grown from 12-18 inch tip cuttings or lau, while chayote is grown by planting the fruit half way in the ground. Both make a tasty, nutritious green salad by blanching the shoot tips and mixing it with fresh tomatoes and onions. A sauce can be added such as Patis or anchovy sauce, or a diluted vinegar and shoyu sauce.

You can't leave green onions out of the backyard since we use it for so many dishes, from saimin to fried fish to poke. They can be grown from seed or stem bases. One of



Avocado, taro field, and banana windbreak at Tubz Kalipi's Farm

them is *akakai*, also called Hawaiian onion but is actually a shallot. It's a tasty green onion that will form a small reddish bulb or shallot at the end of summer. You can dry it up and replant it. There are many 'new plants' being added to this mix including Ethiopian kale, Portuguese kale, Lacinato kale, and countless others.

Let's not leave out some essential tree crops such as breadfruit, oranges,

lemon, limes, and avocados. With the recent arrival of greening disease of citrus in the US, the price of citrus can only increase. Avocados will also increase since Hawaii growers will now be allowed to ship the 'Sharwil' avocado to the mainland during winter months, and possibly creating a short supply in the Hawaii market. Why buy a Hass avocado from California or Mexico when you can eat a great tasting Hawaiian avocado from your backyard?

The U.S. Army has a manual of survival foods in the Pacific and has many ideas for crops that grow wild in Hawaii which could be part of your food security plan.

Heavy Clouds but Little Rain

When I think of global warming or global chilling, these kinds of weather phenomena probably affected ancient Hawaiians in the same way it's affecting us today. Areas that were once rainy became dry while areas that were dry became wet. A lot of these weather changes occurred with just a slight change in wind direction. In dry winters as we've just experienced, trade winds are cut off, and the other winds predominate, including westerly and southerly winds. In Hawaii, northeasterly winds or tradewinds as we call it usually blow 3/5's of the time based on long-term weather data. You can see how the terrain has been altered by this predominant wind and accompanying rains with the formation of cliffs on the northeasterly and windward sides of most islands.

On Molokai, for example, clouds originating from the northeast converge on the sea cliffs of northeast Molokai, climbing the cliffs if they come in too low, and dropping rain in the mountains. As they reach a warmer land mass, the clouds lift and start moving faster dropping less rain. You can see that in Hoolehua, or even the south shores from Kamalo to La'au. Since the Maunaloa mountains are too low to trap clouds, very little rain drops on the west side of the island except for the highest areas.

When the winds and clouds come from the west, they will drop rain on the west side, including Maunaloa, and on occasion, drop some rain in Hoolehua, but the warm arid climate of this area will cause clouds to lift, and instead of dropping rain in the East Molokai mountains, it will rain offshore on the north and east shores. This change in wind direction, can cause different areas to rain than areas that rain from the prevailing trades or northeast winds. When Hilo has a drought, you know the weather has been altered by wind direction. This is a simplified version of very complicated weather phenomena involving high and low pressure areas and major global shifts in wind direction.

The weather affects everything, what insects and diseases will prevail, and which crops will do well and which ones won't. This winter was dry and warm, but a little erratic, and you could grow crops such as tomatoes, eggplants, and chili peppers, which would normally have a hard time if it was a regular cold and wet Hawaiian winter. In addition,

our winter crops such as lettuce, broccoli, head cabbage, won bok, pak choy, green onions, and kai choy did well in this weather.

As we head into spring, another great season is upon us and is starting off to be on the coldest side. Weeds are a big challenge in the rainy season, so advance planning is required to keep the weeds in check and will help the crop to grow without too much competition, especially in its critical early stages.

NUTS, MAN!

I was in Honolulu for work and my Mom shared these boiled peanuts with me. I couldn't believe the size of them, just monsters. Turns out it was planted by a neighbor I grew up with. His father was an unreal gardener, and it seemed to have rubbed off on him. I'm trying to get some seeds from him as he's drying them up so he can store seeds for next season. Definitely something I'd like to grow in my garden! Just 4 fits on an iPhone screen.

Well, that's it for now. Much more to come. Have a productive New Year, and strive to be better!

