For over a century, growing sugar cane and pineapple for export was the engine of Hawai‘i’s economy. Thus, the announcement 10 days ago that Hawaiian Commercial & Sugar Company (HC&S), the state’s last sugar cane plantation – with 36,000 acres in central Maui – will harvest and mill its last crop and cease operations this year is a historic milestone. That announcement brought forth a flood of personal memories of the days when I was a young man in the Territory of Hawai‘i, and commercial agriculture shaped the economy and culture of the Islands.

There is evidence that Hawai‘i’s early Polynesian settlers brought several varieties of sugar cane (kō in Hawaiian) to the Islands and cultivated it for domestic use. Commercial cultivation began in 1835 with the establishment of a plantation in Kōloa on the island of Kaua‘i. After the 1850 Masters and Servants Act allowed the importation of foreign laborers under strict contractual rules, more plantations were opened. Most workers were brought in from Japan, China, Korea and the Philippines. This gave birth to the distinctive multicultural, multiethnic tapestry – and the lingua franca, Pidgin, or Hawaiian Creole, that enabled people to communicate across ethnic lines – that continues to characterize Hawai‘i today and differentiates it from most other tropical destinations.

During the American Civil War, when sugar from the South was no longer available in the North, its price jumped 525 percent, from 4 to 25 cents a pound. This triggered the establishment of new plantations in Hawai‘i and the expansion of older ones.

I was born in 1933 and thus experienced four decades when plantations dominated the Islands’ economy and defined “local” culture. In those days, sugar cane was still generally planted, and often harvested, by hand. The “Big Five” plantation companies provided housing,
shopping and health care for their workers in company-owned villages, stores and medical facilities. Plantation stores carried a distinctive, tough checkered cotton cloth called *palaka*, which could be made either into work clothes or casual attire. Even today, old timers are proud to wear *palaka* shirts as a badge of honor and reminder of plantation days (https://hawaiipalaka.wordpress.com).

A glimpse into what plantation physicians endured during those years can be seen in a 2007 book by Frank L. Tabrah, M.D., *Healthcare Hawaii Style*. Copies can be found on Amazon and other Internet booksellers. You can also read a good selection of its pages free of charge on Google Books (http://tinyurl.com/PlantationPhysician).

Another plantation memory I have is that of the manager’s residence at Oahu Sugar Company’s (OSCO) Waipahu plantation. The manager, Hans L’Orange, had a son, Peter, who was a classmate of mine. On occasion, I was invited to spend the weekend at their home, which was a beautiful mansion on a hillside at the end of a drive lined with stunning Royal Palms (*Roystonea regia*). Peter’s parents loved throwing parties at their home. As Hans was a great supporter of the U.S. Navy, they often invited Navy officers to these events. In a collection of memories of Oahu Sugar Company by Jack Vorfeld, I found one OSCO executive recalling how he met Admiral Chester W. Nimitz, the legendary World War II head of the U.S. Pacific Command (CINCPAC) at the L’Orange home (www.judyvorfeld.com/oahusugarcompany-2.html).

Around 1949, when I was 15, Peter invited me and several other classmates to help park guest automobiles for a particularly large party. It was a gala evening with vehicles of many kinds, and I am happy to report we did not scratch a single fender.

One of the things I particularly liked about the OSCO manager’s residence was the swimming pool. In those days, residential swimming pools were few and far between. I think it was Hans L’Orange who tapped into one of the irrigation ditches that brought water from the mountains to the sugar cane fields of the generally arid leeward side of the island. The water was temporarily diverted into a hole in the ground. Swimming in that makeshift pool was a real treat for me and many other kids, although I recall that the water, fresh from the ditch, was a bit on the cool side.

While water is essential for every crop, sugar cane is especially thirsty. It has been said that to produce a pound of refined sugar, it takes up to 500 gallons of water.
Sugar plantation ... << From 2

Throughout Hawai‘i, water was brought to the field in a variety of ways including ditches, pipes and wells that tapped into aquifers.

One of the most ambitious water projects was in the rainy Hāmākua area on the northeastern side of the Big Island of Hawai‘i. For eons, heavy rains had fallen on the area’s steep cliffs, and the water flowed right into the sea. Following the successful construction of a ditch on Maui (actually the first of four parallel ditches that harvested runoff from the rainy northeastern slopes of that island and fed it to the sunny, but drier central-valley fields of HC&S, the plantation that will soon shut down), the Hāmākua-area plantations agreed to work together to create the Kohala Ditch along the coast to divert some of that abundant water to their fields.

It was an extremely tough job. No power tools were available so everything had to be done by hand. During construction, 17 workers died from various causes. Many mules also died when they fell off the steep cliffs, many of them over 1,000 feet high. According to one report, even the sturdiest of workers were so exhausted after a few weeks of labor that they required hospitalization. To add to the difficulty, it rained nearly every day from April through July in 1905, right in the middle of the 15 months allotted to build the ditch.

The entire Kohala Ditch was 26 miles long, though the term “ditch” makes the project seem much simpler than it was. Through the mountains, the ditch consisted mainly of tunnels cut into the rock and flumes lined with hand-cut stone blocks and, in many stretches, borne on trestles that carried the channel high across the many gulches along the route. The entire ditch had to conform to a uniform, gradual slope. There were 57 tunnels in all, the longest of which was 2,500 feet, nearly half a mile (about 750 meters – http://keolamagazine.com/kom/then-now/the-kohala-ditch).

Once it was completed, keeping the water flowing at the right speed and the flumes free of obstruction from falling rocks, trees, etc. for 26 miles was a full-time job for several people. A tiny pathway had been built next to the ditch and the maintenance people would ride mules as they inspected the flumes and tunnels and did whatever it took to keep the water flowing. The trip to inspect and service the ditch took two to three days, so the plantation installed a small wood-frame cabin in an open valley where workers could spend the night.

One of the most memorable adventures of my youth was to accompany one of the maintenance workers for two days on the Kohala Ditch Trail. We rode mules on extremely narrow paths along those sheer cliffs for hours on end. To get past waterfalls, we often had to go behind them and thus wore waterproof parkas most of the time. We stayed in the cabin overnight and returned to the town of Hawi, at the tip of the island’s northernmost peninsula, the next day.

Inside view of the Kohala Ditch. Visible in the middle of the photo is one of the many points where the ditch transitions into a metal channel (trough) that is supported by a trestle (not visible in the picture), which carries it across a gulch to the next hillside (background).

A spectacular waterfall and the narrow Kohala trail (right). If you look closely, you can see two hikers just past the waterfall at right.
Sugar plantation ...

The gentleman who accompanied me was Bill Sproat, well-known in the Hāmākua district. Bill’s father, Jacob William Sproat, was from Missouri and had been heading for Tahiti when the vessel he was traveling on ran aground on the Big Island. He secured a job with Kohala Sugar as superintendent of the Kohala Ditch maintenance team.

Since Jacob was from Missouri where mules were heavily relied on as work animals, he did most of his work with their help. His job and the mules were passed on to my guide, Bill, and then to one of Bill’s sons who kept up the family tradition until Kohala Sugar folded in 1975.

One of Bill’s other sons, Buzzy, took his mule heritage to the island of Moloka‘i, where he provided mule rides down the 2,000 feet of steep cliffs to Kalaupapa, the isolated (by cliffs and sea) peninsula on the island’s north coast where people with Hansen’s disease (leprosy) were once quarantined. As reported by Honolulu Civil Beat, everyone loved Buzzy. In typical Hawai‘i plantation style, he didn’t care if you were famous, infamous, a politician, kama‘aina (longtime resident), malihini (newcomer), or just visiting for a few days. He treated everybody the same with dignity, respect and fun. Sadly, Buzzy passed away in 2014.

Small world time: A member of the Outrigger ‘ohana, Matt Sproat, who worked with us at Outrigger Reef Waikiki Beach for several years before his music career took off, is a member of the Hāmākua Sproat family.

One of the many causes for the decline of plantation agriculture in Hawai‘i is that land became more valuable for other purposes, such as housing, shopping centers, airports and, of course, hotels, condos and other visitor accommodations.

Another vivid memory I have in connection with the end of the era of large-scale agriculture in Hawai‘i, came to me one day while I was walking past a cane field at Ka‘anapali, on Maui’s western shore, shortly before the first high-rise hotels were built there. The last crop had been harvested and there was only bare dirt with a few weeds and some sections of track that had once brought rail cars into the fields to take sugar cane to the mill. I remember the feelings I had of both wonder and concern, as I knew that the field where I was standing would soon be replaced by hotel construction or, perhaps, condos, housing, tennis courts, parking lots, etc.

My experience in Hawaii‘i makes me wonder what will happen in other areas whose economies were based on agriculture but have shifted to other activities over time. Most of the islands in the Caribbean are examples of where this has happened, or is happening, as it has in Hawai‘i. In both Fiji and Mauritius, where Outrigger has properties, there are still broad areas devoted to agriculture – in fact to sugar cane. This is gradually changing, much as it has in Hawai‘i.

The country with the world’s largest sugar cane production currently is Brazil, and as human populations grow, I feel sure there will be pressure to put at least some of this land to other uses.

California is another example of the conflict between agriculture and other potential uses of land and water. There are no quick and easy answers, and I am sure we will be hearing more about these issues in years to come.

Nonetheless, as the closure of HC&S brings Hawai‘i’s plantation era to an end, the memories and cultural echoes of that time live on, and I hope they will continue to reverberate well into the future. Agriculture is an essential part of the heritage that makes Hawai‘i such a special place. Thanks for accompanying me on this very personal journey.