



Unit 3

Sustainability

Tides, Fishing, and Star-Gazing (A`o Hōkū)

Hawaiians were always keenly aware of the constant fluctuations of the ocean. They timed their fishing and harvesting practices in response to the tides, currents, and seasons. Currents affect fish activity by causing them to move in and out near the shores. The movement of the tide through an *`auwai kai* (channel) creates a current that attracts fish. When the tide is going out, fish swim against the current and head toward shore. When the tide is coming in, the fish swim toward the open ocean. It was during these times that fish could most easily be caught, usually with throw nets. The *`auwai kai* were favorite spots for fishing for the *`ama`ama* (striped mullet), *awa* (milkfish), *kaku* (barracuda), *awa`aua* (ladyfish), and *papio* (jack).

Hawaiian *mele* (songs), *oli* (chants), and *mo`olelo* (stories) provide a window to the past of how the early Hawaiians maintained and planned their fishing activities based on the celestial effects and seasonal changes. One such example is a writing from Malo where he writes, "*Kū Lua (second Kū): End of the days kapu to Kū; a day of low tide, so people went down to the shore to fish.*" *Kū Lua* was the fourth night of the first moon phase, which Hawaiians called *Ho`onui* ("growing bigger"). Another writing from Malo says, "*Ole Kū Kahi (first `Ole Kū): The farmer does not plant on this day. A day of rough seas so that it is said, 'nothing is to be had from the sea' (Kepelino).*" *`Ole Kū Kahi* was the seventh and twenty-first nights of the month, where *`ole* means "nothing." The Hawaiians neither planted nor fished during the three *`ole* nights (7–9 on the lunar calendar) because of no or low productivity.

A`o hōkū (star gazers) kept annual calendars of the different phases of the moon to determine when it was best to fish or not to fish. It was their duty to watch the moon to determine when a "*kapu*" (ban) needed to be placed on the land and sea. They figured out that the biological clocks of all life forms resonate in predictable relationships with *Lā*, *Kahonua*, and *Mahina*. They were able to "forecast the times of heightened activity for all forms of sea life wherever they went" (Rothery, 2003). *A`o hōkū* were responsible for making adjustments to the annual calendar by adding an extra day or an extra month so that the seasons would correspond with *Lā*. The Hawaiian calendar then, differed from our western calendar in that it didn't have 31-day months. It alternated months of thirty days with months of twenty-nine days.

Because they knew their seasons so well, the Hawaiians were able to develop a "fishing season" which corresponded to their twelve- or thirteen-month calendar years. These fishing seasons were intricately woven into the calendar with accompanying religious rituals. It was believed that particular religious rites made it possible to fish for a specific type of fish, and it was *kapu* to catch fish out of the proper season (Handy et al., 1991).

There is no evidence as to whether the early Hawaiians knew this, but scientific studies show that with relation to *Mahina*, fish are more active for four

days leading up to the full moon and for four days after the new moon. The fluctuation of day length too (due to the tilt of *Kahonua*) affected fish activity as well: Light shining on the surface of the skin covering the pineal gland caused it to secrete the hormone melatonin, which in turn increased or decreased fish activity.

Historical notes show that Kane`ohe Bay was known for its swarms of *uhu* (parrot fish) during the months of May, June, and July each year. *Keawanui*, an isolated place on Mokapu Peninsula, was a well-known feeding ground for *uhu* in the early days. Eyewitness accounts told of great schools of *uhu* gathering so close together that they formed an almost-solid mass, moving about along the reef.

Kanawai – Governance for Native Hawaiians (the Kapu System)

The first fish caught was always reserved for the gods and offered on the altar of the fish god (*Kū`ula*) as soon as the canoe (*wa`a*) came to shore. That first fish was given to the high priest (*kahuna nui*) and it was his responsibility to perform the offering. After that, the best fish from the catch were set aside for the chief (*ali`i*), who took generous amounts to satisfy his personal needs and those of his household. Then, the teachers and experts (*kahuna a`o*) received their share, followed by the land overseer (*kono`hiki*), and finally the commoners of that particular land division (*ahupua`a*).

The *ali`i* always got the best fish. When there were no “good fish” from a particular catch, journeys were made to other *ahupua`a* in order to get what was wished for. *Ali`i* had only to command, and servants would go out to procure what was wanted. (This was the “way of life” in the Hawaiian hierarchy.)

Commoners got what they wanted by performing a “courtesy barter,” usually within their own family (*‘ohana*) or village. The courtesy barter system is where goods are traded between the shore people (*kō kula kai*) and the upland residents (*kō kula uka*). Although in a more “friendly” format, the barter system has lasted to the present day as a way of dealing between friends.

In early times, apportionments of seafood were given according to need rather than as payment for the share of work in the fishing expedition. In this way, all were cared for. Sharing the catch had one restriction—what was taken was supposed to be for one’s own use. An exception was made for those who could not come to the shore, and in those cases a child, relative, or messenger would ask for a share to take it back to the absent member.

