



'Iliahi (Hawaiian Sandalwood)

Situated over 2,000 miles from the nearest major landmass, the tropical Hawaiian Islands lie in the central Pacific Ocean. The islands were formed by volcanoes, and the rich volcanic soil is ideal for farming. Among the other successful crops that are grown, Hawai'i's native 'iliahi (Hawaiian Sandalwood) trees have long been prized for their beautiful aroma and unique properties. When dōTERRA purchased the land, the landscape was highly degraded, and dōTERRA now has the unique opportunity and ability to have a meaningful and positive impact on various native species that were mismanaged for decades. The Kealakekua region is home to many of these native species, including 'iliahi, and together, dōTERRA and the State of Hawai'i have put a plan in place for a brighter future.

The Hawaiian name for Sandalwood is "'iliahi"

Kealakekua: The Pathway of the Gods

Located near the western coast of Hawai'i Island, Kealakekua is a region whose history is deeply intertwined with the many unique and endemic species of Hawai'i.

"Kealakekua [translated, the Pathway of the Gods] Bay and the surrounding land area have been recognized as one of the most, if not the most, significant historical places in Hawai'i...Supported by the abundance of agricultural products from the upland Kona field system and the rich marine resources of the bay, the Kealakekua area became a densely populated settlement and a religious-political center" due to the residence of the king (ali'i) of Hawai'i Island, a priest compound, and chiefly burial sites.

"Kealakekua was also the site of the first extended contact between Native Hawaiians and Western explorers, specifically Captain James Cook in 1779.

"Kealakekua [has] remained a significant place after contact, playing a major role in the early history of the Protestant missionaries in Hawai'i... During the Great Māhele [division of land] of 1848, Keohokālole, mother of King Kalākaua and Queen Lili`uokalani claimed most of the lands around Kealakekua."—

Excerpts from the Kealakekua Stewardship Area Management Plan.

Historical Context

Shortly following European contact, in the early 1800s the 'iliahi trade with China boomed. The significant revenue generated by the trade caused substantial exploitation of Native Hawaiians by forcing them to harvest the 'iliahi from the Kealakekua region under extremely difficult conditions.

Being mindful of the past is essential to dōTERRA and the Hawaiian people. Our involvement with the Kealakekua Mountain Reserve is an opportunity to participate in a redefined future for Hawaiian native growing trees, including of course 'iliahi. Lani Yamasaki, a respected native Hawaiian practitioner, notes, "By reforesting the land with 'iliahi and other native plants, 'iliahi becomes a symbol of regeneration, health and healing for both the land and the community." The reverent approach to 'iliahi management on the Kealakekua Mountain Reserve represents Ka Lā Hiki Ola or The Dawning of a New Day.

Kealakekua Mountain Reserve

The Kealakekua Moutain Reserve (KMR) was established on land that was previously an over-logged and overgrazed ranch - practices which historically inhibited natural regrowth. Although several key native species are difficult to find on the island due to its history of over-harvesting, there are still many indigenous trees in the forest, which covers approximately 9,000 acres of the recently formed Reserve.

To form KMR, a conservation easement was signed to protect these precious native plants, including 'iliahi trees. This management plan outlines harvesting limitations





that must be followed at KMR to guarantee the regeneration and prosperity of the forest, and although some logging may be done in KMR, the amount and types of wood that may be harvested are controlled by the State of Hawai'i to prevent future overharvesting. To ensure the renewal and growing vitality of the native forest, KMR works with registered foresters and the State of Hawai'i's Division of Forestry and Wildlife to select appropriate trees for harvest.

KMR's forest management aims to have a functioning native forest ecosystem with abundant 'iliahi. Leading the largest native forest planting effort in Hawai'i, KMR ensures sustainable collecting of 'iliahi without compromising our initiative to restore the forest to its original beauty. With the Reserve and management plan in place and our extensive nursery and ambitious replanting efforts, the 'iliahi trees and other Hawaiian species can begin to thrive again.

Partnership for Comprehensive Impact

The Kealakekua Mountain Reserve works closely with Hiki Ola, a non-profit organization advancing a new day of reverencing Kealakekua as stewards of its gifts. Hiki Ola empowers stewards through education, protecting the environment, and preserving the culture. This partnership acknowledges the past while paving the way for an abundant future with

the concept that the land shapes the people and the people shape the land. Wellness Advocates and native Hawaiians who visit KMR are engaging with, learning from, and changing because of the land. Community engagement initiatives include:

- Working with the Ke Kula 'o 'Ehunuikaimalino (K-12 Hawaiian language immersion public school)
- Partnering with Hālau Ka'eaikahelelani to preserve and perpetuate the hula culture - a Native Hawaiian form of dance expressing stories, traditions, and songs/chants through trained movements - and designating a portion of the Reserve for the growth of
- Hosting Wellness Advocates (known as Reforestation Advocates) who participate in reforestation activities in the planting areas and visit the nursery and distillery

hula plants



QUICK FACTS

Located on the western coast of the Big Island, or the Island of Hawaii, the Kealakekua Mountain Reserve (KMR) is composed of 9,600 acres.

KMR was a ranch for many years, used for cattle and logging, which hindered regrowth of the native forest. To reverse the damage, a conservation easement now restricts approximately 9,000 of the total acreage, protecting it from further overharvesting. Now the land can only be used for sustainable harvesting of forest timber, which must be carefully monitored.

Various native Hawaiian trees are being planted at KMR,

including 'ohia, as well as several that serve as hosts for Sandalwood, like koa, a'ali'i, and hoawa.

We anticipate that **KMR will be the largest native forest** planting effort in the state of Hawaii starting in 2020.

According to the current management plan, which promotes complete sustainability, living Sandalwood trees can be harvested in limited quantities and dead trees can be removed freely.

There are several species of Hawaiian Sandalwood, called illiahi, one of which is Santalum paniculatum.



Growing 'iliahi: It gets by with a little help from its friends

Though the 'iliahi tree can grow to be more than 30 feet tall, it can't reach such heights on its own. 'Iliahi is a hemiparasitic plant, meaning that it needs a host for some of its nutritional needs. Many trees, including 'iliahi, can produce their own carbon through photosynthesis, but they must connect to the roots of other plants to receive water and other nutrients, such as nitrogen from the soil. Generally, an 'iliahi tree will be connected to many other trees and plants, which together support the healthy development of 'iliahi.

Distilling 'iliahi: Getting to the heart of the matter

The internationally prized essential oil from 'iliahi exists throughout the tree, with the highest concentrations found in the heartwood. The ratio of heartwood to sapwood in 'iliahi trees increases substantially as the trees age. It is, therefore, important to allow trees to grow to maturity before harvesting them for oil. This also enables the trees to fulfill their important ecological roles in the forests where they reside.

Once harvested, the wood is chipped. Then to obtain the essential oil a traditional distillation process is used to prevent damage to the essential oil. Steam is passed through the chipped wood, separating the essential oil from the wood. As the water and oil mixture cools, the essential oil separates from the water by rising to the top of the mixture, thus allowing it to be collected.

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