

NATURE'S NEWSFLASH 2011



November Issue

'Aloha! Nature's Newsflash is a quarterly publication that features stories and insights of conservation activities that help preserve and protect Moloka'i's native natural resources. If you would like to contribute information to our publication, please send it to The Nature Conservancy, P. O. Box 220, Kualapuu 96757. Let's all make a difference by....."Thinking globally, acting locally".....

2011 Pelekunu Stream Monitoring!

By: Russell Kallstrom, TNC Information Coordinator

Most Hawaiian stream animals like 'o'opu and hihiwai have a two part, or diadromous life cycle, living part of their life in the stream and part in the ocean. Pelekunu stream on Molokai's north coast is one of the last healthy remaining continuous perennial streams in the state where native species of this kind are able to complete their life cycle because the stream flows to the ocean year-round.

The Nature Conservancy conducts stream monitoring in Pelekunu every couple of years to detect trends in the stream life and to check that everything is okay. Stream monitoring includes counting, sizing and recording native 'o'opu (fish), hihiwai (freshwater limpets), and various 'opae (shrimp) species and non-native species like the Tahitian prawn to determine their densities in the main Pelekunu stream and a couple of its tributaries. Past years monitoring data showed decreases in hihiwai densities likely caused by over-harvesting during summer months when hihiwai spawn or lay eggs. To ensure the survival of our native stream species please do not gather during spawning times and only gather enough for home consumption.

This year's stream monitoring took place on Sept 13-14 where Conservancy staff led TNC marine staff, interns and community members. TNC staff decided to



Coral Gonzales diligently counts, sizes & records every stream species in her plot. Great Job Coral!



We were excited to see 'O'opu Alamo'o about half-way up Pelekunu stream! As they mature, the males' tails will turn a bright orange.

engage community members in this year's monitoring and plan to do this on future monitoring trips. Lani Sawyer, who has childhood ties to Pelekunu valley and Coral Gonzales, with an interest in marine conservation were this year's community members. I want to thank all those who participated - Brian Naeole, Wailana Moses, Manuel Mejia, Nahaku Kalei, Brad Wong and of course Lani and Coral. Preliminary impressions from this year's survey suggest the hihiwai population is in the process of recovery.

Striving for Aloha Aina... By: Ililani Sawyer

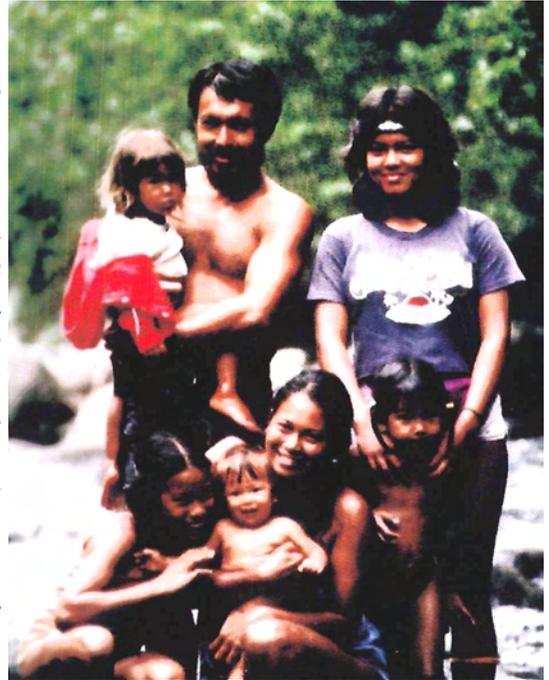
My family and I moved into Pelekunu valley in September 1978. I was 10 years old. Our first month of residence in the valley was right next to the "Big River". Mom (Zennie Sawyer) explained, she and Dad decided to move into Pelekunu valley to continue "To strive to live Aloha Aina." **"Aloha Aina means to Love the Land,"** thus coming from their involvement in the Protect Kaho'olawe movement. Moving to Pelekunu valley was Uncle Walter Ritte's idea, but it was Dad's desire to move there. "Lucky we were able to adapt and learn quickly," says Mom. "The Big River has always been the life of Pelekunu. The valley's abundance of resources for food, water, and building supplies were plentiful and endless during our 6 years of living in Pelekunu.

In September 2011, I was blessed to be a part of the Nature Conservancy's stream monitoring in Pelekunu valley. There were two monitoring groups. Each group monitored certain parts of the river which collectively covered majority of the "Big River" from the river mouth at the beach to the waterfalls of the back valley wall. We counted the amount of each species of o'opu, prawns, and hihiwai in randomly picked plots which varied in sizes up to 3x3 square feet. This experience was such an enlightening and enriching experience to study the river that I grew up around.

One thing that stood out for me during this monitoring trip was I remembered the "Big River" having A LOT more hihiwai. I believe the hihiwai population has decreased significantly since the early 1980's. The Nature Conservancy's stream monitoring statistics relays that from 2002-2008 the hihiwai density decreased about 60%. From 2008-2011 the hihiwai population showed a slight increase but has not made a complete comeback from that decline. I haven't seen hihiwai being served at parties lately and am praying that this might be the reason why the hihiwai population is making a comeback. I strongly believe we should save hihiwai for our families to enjoy, not to be served at parties. I've seen too many times where hihiwai end up in trash cans, uneaten by party-goers who don't know what it is or has no desire to eat it. Hopefully by making this information public knowledge we will all take part in preserving our native stream species.

The decline of hihiwai isn't the only visually noticeable change I have witnessed since living in Pelekunu. The vegetation and land itself is changing due to alien invasive plants like *Clidemia* that chokes out everything and leaves the understory bare and susceptible to erosion. Feral animals like pigs and goats add to the erosion problem that is happening in Pelekunu valley. Many have witnessed this type of massive erosion near and in Wailau valley. Erosion hurts and will kill native stream life.

The stream monitoring that the Nature Conservancy is doing is important to our island so that we are able to see what is going on with one of our important resources on Molokai and have data to prove it. As Molokai residents, we should be concerned and aware of what is happening to our island so that our resources are not depleted like many of the other islands. If this world came to a halt where no barge or fuel was available, I have always believed we could survive off of our island. We would be one of the few islands that would be able to do this. The circle that completes my heart, mind and soul - My Dad, Richard Sawyer, and Mom, Zennie Sawyer must have knew and thought about this long ago, to live **"Aloha Aina"**. To **"Aloha Aina..Love our Land,"** we must protect, love and take care of the resources on Molokai (from mauka to makai) so that she will be able to take care of us and our keikis. Mahalo Nature Conservancy for loving Moloka'i the way we do.



Sawyer Ohana in the Pelekunu river (early 1980's)

What is 'Ua'u kani?

By: Jay Penniman,



Polynesian and Hawaiian navigators as well as local fisherman still use the 'Ua'u kani (Wedge-tailed shearwater, *Puffinus pacificus*) to orient themselves when travelling among far separated islands and to locate schools of fish. This important modest seabird is well known as the "Aku Bird". The 'Ua'u kani and their relatives were among the first colonists on the Hawaiian Islands, arriving long before people.

Their activity brought, and continues to bring, essential nutrients from the sea to the land. Those nutrients combined with the mineral rich soils of the Hawaiian islands have allowed our unique native plant communities to flourish.

'Ua'u kani spend their entire lives on the open ocean and return to land only to breed and raise their chicks. These amazing birds mature at 5-7 years, live 30-40 years, mate for life, return to the colony at which they hatched if there is space available, and use the same burrow (ground nest) to breed each year. When the colony space is filled, young birds will seek new colony areas. The Nature Conservancy's Mo'omomi Preserve is one such area where a new seabird colony began in 1999. The first 3 nests were identified by TNC staff who contacted Dr. Fern Duvall of Hawaii Division of Forestry & Wildlife. Fern began banding 'ua'u kani chicks at Maui Nui colonies in 1997 by placing a metal ring with a unique number around one leg. Mo'omomi Preserve is now a regular banding site twice a year. In Spring, teams of banders capture adult 'ua'u kani returning to the colony to breed and either record their band number or give them one if they don't have one. In the Fall, chicks are banded before leaving their burrows. Over the past 12 years, the Moomomi Preserve seabird colony has grown from 3 active burrows to 555 active burrows! By banding birds and recapturing them we learn where young birds recruiting into the breeding population came from and how long they survive in their breeding colony. Our banding studies are indicating that the predator-free off shore islet colonies like Mokapu and Molokini are a source population to keep the high-island bird colonies viable.



On October 6, 2011 ninety-eight chicks were successfully banded!
Picture above: Clayton English, MLT Field Leader, gently holds a 'ua'u kani chick while Jay Penniman puts a band on it's leg.

On-going protection of the Mo'omomi colony as well as other Maui Nui bird colonies from introduced predators such as mongoose, dogs, cats and rats is critical to the survival of the 'ua'u kani. As many as 60 'ua'u kani have been found killed by loose dogs at Mo'omomi Preserve this past year. TNC staff, volunteers and others have also been working to remove non-native invasive plants to encourage native coastal vegetation growth which 'ua'u kani seems to be attracted to. Volunteers are essential for carrying out this work. One of the most significant actions citizens can take is to keep dogs and cats under control and not free ranging where seabird colonies exist. Seabirds are important members of our community and we need to do our part to ensure their survival. Please Malama our 'ua'u kani.

James Crow, Fern Duvall, Clayton English, Travis Fernandez, Bill Garnett, Coral Gonzales, William "Butch" Haase, Russell Kallstrom, Elizabeth Kashinsky, Shannon Lopez, Wailana Moses, Brian Na'ole, Glynnis Nakai, Audrey Newman, Jay Penniman, Pauline Sato, Kathy Tachibana, Kapono Uahinui, Isabelle Newton Walker, Lynnette Williams, & Joan Yoshioka.

Mahalo to ALL who helped with this year's banding in April and October!

Long-thorn Kiawe Removal Project on West Molokai

By: William "Butch" Haase; Molokai Land Trust Executive Director

The Molokai Land Trust (MLT) joined forces with the MoMISC (Molokai/Maui Invasive Species Committee) crew to tackle the brutal job of removing a potential devastating pest to our dry areas on Molokai. This new pest is called Long-thorn kiawe (*Prosopis juliflora*) which is very invasive and is on the [Hawaii State Noxious Weed List](#). Different from the kiawe (*Prosopis pallida*) we are used to seeing, long-thorn kiawe can grow as a rambling shrub or tree and forms dense thickets, crowding out native plant species and preventing beach access. Despite its value as cattle fodder, it took over pasture land where it was introduced in South America, Asia and Australia. It has 6 cm (2.5 in) long thorns which will pierce slippers, shoes and even truck tires. The common kiawe that we grew up with on the West End of Molokai grows into a tree and has thorns that are either absent or less than 3 cm (1 in) long.

Long-thorn kiawe is native to Africa. Its introduction history to Hawaii is unknown but was first noted invading in 1978, possibly introduced for agriculture reasons or accidentally introduced. Long-thorn kiawe produces thousands of seeds per year which are carried by water and animals. We are not sure how long-thorn kiawe got to Molokai. We do know that it is now found on the west end with Kaupoa Bay having the largest known population. With the permission of the landowner (Molokai Properties Limited), MLT and MoMISC spent three days at Kaupoa Bay removing the majority of that population. Future survey work is needed to determine the full extent of the infestation before the next round of eradication is scheduled.



Mahalo Nui Loa!



Manu Adolpho, Joan Aidem, Linaka Akutagawa, Lorena Atchison, Donna Bicoy, Guy Brito, Rick Chong, Connie Clews, Patricia Crandall, Fern Duvall, James Espaniola, Albert Espaniola, Francis & Bill Feeter, David Gomes, Coral Gonzales, Jordan Gorospe, Eddie Gorospe, Michael Grinnell, Sue-Ann Hasegawa, Keith Hirashima, Brandon Hirashima, Collin Hirashima, Ama Jacobs, Harvey James, Ryan Kamakani Johnston, Makaila Kaholoaa, Puna Kalipi, Guy "Tommy" Larson, Karen Liliker, Doug & Lil Macmillan, Debra Mapel, Margaret Marcom, Kamakou Mariano, Hiilani Mollena, Dara & Brennan Naeole, Glynnis Nakai, Kawai Naoopii, Cody Nip, Patti Pile, Kaai & Makana Puailihau, Kamalani Puailihau, Alex Salazar, Jakey Samaniego, Lani Sawyer, Phyllis & Cyrus Siu, Kathy Tachibana, Roblen Talon, Matt Tanielu, Thena Tengan, Ellyn Tong, Jennie Tongonan, Kahiau Torres-Batara, Esther Torres-Umi, Alanna Villa, Aloha will, Shawn Withers, Joe Yamamoto, Nate Yuen.

Funding for Nature's Newsflash is provided in part by the State of Hawaii's Natural Area Partnership Program.

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