



# FROM WAVE *to* TABLE

BY JENNY QUILL

## WHEN YOU LIVE *in* HAWAI'I,

it's easy to take for granted that we are surrounded by an ocean teeming with life, a briny deep that is host to an almost endless bounty, from 'ahi, mahi, moi and abalone to one of the purest sea salts in the world. In this special section of HONOLULU, you'll meet a few of the hard-working people committed to harvesting Hawai'i's marine cornucopia.

# UP CLOSE with ABALONE:

"Why is mine wiggling around so much?" I squeaked as my abalone wriggled in its shell, its body sliming its way across the palm of my hand. "She's freaking out," laughed Al Salomon, Big Island Abalone Corp.'s facilities manager and today's tour guide. For the record, I wasn't freaking out. I'll cop to being slightly disgusted—it was like being licked over and over again by a snail—but I was mostly curious as to why my abalone, and no one else's, was shimmying around in its shell like it was competing on *Dancing with the Stars*.

The tour had started out with the group—a mix of curious locals, a mother-daughter duo from out of state and myself—ambling away from the office through the front part of the farm, as Salomon gave us a crash course in all things abalone. Abalones are sea snails, members of a class of marine mollusks that have one-piece shells. They cling to surfaces using a very strong, muscular foot that, can exert 3,600 pounds per square inch of pressure—talk about strong suckers! Big Island's Kona Coast Abalone (its branded name) is a stock of Ezo abalone, a popular domestic species from Northern Japan known for its tenderness and versatility—it can be prepared sashimi style, grilled, steamed or fried.

Big Island Abalone operates a nursery and hatchery, says Salomon, as he points in the direction of a black tent, the abalone nursery. When spawning occurs, the female abalones in the broodstock—a group of sexually mature adults that are separated from the rest for the purpose of breeding—can deposit upwards of 5 million eggs. The tiny eggs settle at the bottom of the tank and are then removed and transferred to the hatchery where they'll continue to grow for one to two months. Once they're ready, the babies move over to the nursery for four months.

The abalone feed on dulse, a special blend of edible algae that Big Island Abalone developed in partnership with Oregon State University. The algae are grown on-site in 32, 40-foot-wide tanks. Salomon asks if we'd like to sample the dulse, which he claims has been used in salads at Alan Wong's. Well, if it's good enough for Alan Wong, it's good enough for me, so I take a bite. It isn't bad: It tastes like really salty, limp lettuce, best left to the abalone, in my opinion.

Our tour group shuffled along while Salomon talked about the grow-out tanks, where the abalones are transferred following their time in the nursery. There are 336 cages filled with approximately 1.5 million abalone ranging in age from eight months to two-and-a-half years. The abalone will stay in the grow-out tanks for a maximum of 30 months, or until they're large enough to harvest, at which point they're placed

## AW, SHUCKS

Shucking live abalone requires a deft hand. Here's how it's done:

Clean abalone by rinsing lightly with fresh water.

Rub abalone foot with salt to remove fluid, assure cleanliness and facilitate the contraction of the meat.

Rinse off salt thoroughly and place abalone in the foot-up position. On the thin edge of the shell, insert a table knife between the meat and shell and slice until the muscle is freed from the shell.

Remove gonads and internal organs.

Remove the mouth. Wipe meat clean. Clean and rinse the shell for presentation or as a memento.



PHOTO: OLIVIER KONING

into a carbon-dioxide-solution tank, which helps prevent suction by relaxing the muscle, and then removed from the cages and onto a conveyor belt where they're weighed and sorted. From there, the abalone are shipped to restaurants, hotels and homes in Hawai'i, on the Mainland and in Japan.

At the end of the tour, we stood around a makeshift hibachi in anticipation of the abalone tasting. There were looks of both excitement and trepidation on the faces of the tour-group members, many of whom had never had abalone (myself included). When Salomon finished grilling them, he served them to us sans seasonings, just fresh-as-can-be abalone. My first few bites were chewy, but the flavor was light and it had a salty-sweet taste; I could see how, with a little butter and garlic, it would be delicious.

A husband and wife purchased a pound right then and there, and it was brought out in a red mesh bag, the abalone still dripping wet. As the couple put the abalone in their cooler, they talked about grilling them up later that evening for their family. Fresh from the farm and straight to the table. It doesn't get any better.

📍 For tour or where-to-buy information, visit [www.bigislandabalone.com](http://www.bigislandabalone.com) or call 808-989-8852. Tours cost \$10 per person and children under age 6 are free. Big Island Abalone is also sold at the KCC Farmers' Market every Saturday as well as the Honolulu Farmers' Market every Wednesday at the Neal S. Blaisdell Center.



PHOTO: COURTESY OF CHEF MAVRO

‡ Chef Mavro has made his abalone ceviche (rear) with salted cod croquettes for a James Beard dinner.

### Chef Mavro's Big Island Abalone ceviche with cilantro essence

For ceviche:

- 2 fresh, medium-size abalone
- 2 daikon, sliced into chips
- 1 tablespoon lime juice
- 2 tablespoon tomatoes, *brunoise* (finely diced)
- 1/2 each jalapeño peppers, peeled, *brunoise*
- 1 tablespoon cucumbers, peeled, *brunoise*
- 1 garlic clove, chopped
- 1/2 teaspoon grated ginger
- 1 tablespoon extra-virgin olive oil
- 1 teaspoon red onions, minced
- 1 teaspoon parsley, chopped

Rub abalone with daikon chips. Tie daikon chips to the flesh of the live abalone. Steam gently for four minutes or until they are dead. Chill in refrigerator. Remove abalones from their shells and slice paper-thin. Season with salt and pepper. Add remaining ingredients in a bowl and season with salt and pepper. Spoon the mixture on top of the abalone slices.

For cilantro essence:

- 2 tablespoons fresh cilantro
- 1 tablespoon *soubise* (puréed, cooked onions with cream)
- 1 tablespoon extra-virgin olive oil

To taste sea salt

To taste fresh ground white pepper

Blanch cilantro in salted, boiling water for 30 seconds. Refresh in ice water. Squeeze out the water and place the blanched cilantro in a blender. Add *soubise* and blend on high. Reduce speed to low and drizzle in olive oil. Season with sea salt and fresh, ground white pepper. Strain through a fine sieve and chill.

# A SEA OF CHANGE

If the set of the '80s post-apocalyptic movie *Mad Max Beyond Thunderdome* was crossed with a high-tech science lab, it might look something like the NELHA (Natural Energy Laboratory of Hawai'i Authority) campus. Located about six miles north of Kailua-Kona, NELHA is home to 30 or so companies developing new ocean-science and renewable-energy technologies. It started out as NELH in 1974, when the state Legislature set aside 322 acres at Keāhole Point for the project.

The research focus at NELH was on ocean thermal energy conversion (OTEC), a process that utilizes the temperature difference between the warm surface water and cold, deep-sea water of the ocean to generate electricity. In 1980, the first of two pipelines was built to draw deep-sea water from a depth of 2,000 feet and surface seawater from 45 feet. (The most recent pipeline was completed in 2001, and is pumping water from 3,000 feet below the ocean's surface.)

Over time, it became obvious that the ocean water being used for OTEC research had other potential applications, so, in 1984, new legislation was drafted that allowed NELH to host commercial businesses. Today, NELHA's tenant businesses are focused on a variety of activities, including bottling deep-sea water and growing shrimp, seahorses, kampachi, abalone, lobster, oysters and pharmaceutical algae.

Public presentations about the history of NELHA, its tenants and the uses of deep-sea water are held Tuesdays, Wednesdays and Thursdays from 10 to 11:30 a.m. at NELHA's Hawai'i Gateway Energy Center, a zero-net-energy facility (it produces more energy than it consumes) that uses photovoltaic cells for energy production and deep,

cold seawater for cooling. A requested donation is \$8 for adults and \$5 for children and seniors (children age 8 and under are free). For more information, call 808-329-8073 or visit [www.keaholepoint.org](http://www.keaholepoint.org).

This month, NELHA will begin hosting quarterly fish markets featuring its tenants' products, and is hoping to expand to a weekly market in the future.