



Micah Barker: Environmental Entrepreneur

BY GILLIAN CULFF

Micah Barker's business, Bioscape Hawai'i, was inspired by two epiphanies. Barker was installing high-end water features at luxury homes on the Big Island's Kohala Coast when he made a shocking discovery. "I saw that these homes are maintained by different companies—window cleaners, pest control, landscape companies—that were applying enormous amounts of chemicals right before the clients returned to their homes. For the clients, this was their paradise getaway, where they loved to kick off their shoes and run around the grounds in bathing suits, barefoot, where little kids were crawling around and playing on chemical lawns. I was shocked and horrified; I saw a need for something new to happen down there."

A surfer and waterman who grew up in Waimea, Barker had been walking the Kohala Coast for years when he made a second disturbing observation. Over the course of a decade of explosive resort development, the anchialine ponds there had steadily declined. The pools' once-crystalline waters, kept clear by opae'ula, or native shrimp, were overcome by algal bloom resulting from shrimp death and nutrient discharge from landscaping chemicals. Seeing this, Barker felt compelled to do something to protect Hawai'i's fragile marine ecosystem.

An ambitious entrepreneur from an early age, Barker became interested in landscaping soon after graduating first

in his class from Parker School. He studied Hawaiian ethnobotany and was impressed to learn that the Hawaiian culture was one of only five sustainable cultures in human history. He studied plant and soil sciences, pursued commercial training in aquaponics, earned certificates in permaculture design and teaching and became a Landscape Industry Certified Technician (LICT) in ornamental maintenance and softscape installation. He also worked for three years in home construction, learning everything from machine work, framing and finish carpentry to concrete work, plumbing, and electrical.

In 2011 Barker founded Bioscape Hawai'i, a licensed contracting company providing organic stewardship landscape services to Kohala Coast resort residences. One of Barker's first observations in working in coastal landscapes was how unsustainable, expensive and counterintuitive the prevailing landscaping design and maintenance model was. "These landscapes were like living nurseries in the ground, requiring constant plant replacement," he explains. "They used an intense amount of resource inputs—human labor, water, fertilizers—and there were consistent plant failures. There were lots of pests, and the soil was depleted and lifeless. When I dug a hole for a new water feature there were no worms. The root structures of the plants were very minimal; everything was out of balance." Barker attributes chronic plant failure to inappropriate plant selection, overwatering, failure to build healthy

topsoil; and use of chemicals.

A full-service company, Bioscape Hawai'i offers sustainable design, installation, and maintenance, including organic mulching, fertility, and pest control. Ideally, as contractor and functional designer, Bioscape is hired first and selects an appropriate landscape architect, working collaboratively to plan the landscape. Barker designs and installs water-harvesting earthworks to collect and distribute rainwater throughout the property—as much as 40,000 gallons can be harvested annually from a 5,000 sq. ft. roof in the arid coastal climate—conserving water where it's scarce and expensive. On an upcoming project, Barker is pioneering the use of HDPE piping throughout the irrigation system, reducing harmful PVC. By being involved in the design and installation, Bioscape prevents unnecessary plant failure, reduces inputs needed for maintenance, and eliminates the use of toxic chemicals. Typically, Barker's clients see a water bill reduction of 30-50%.

Bioscape's clients are happy. Gary Borman, a Puako homeowner, says, "Micah has transformed our property into a biodynamic non-toxic ecosystem. Using the right amount of water, mulch, compost teas, and organic products, Micah has been able to eliminate the use of pesticides and synthetic fertilizers to help restore the soil to a naturally balanced state. He created an aesthetically pleasing tropical garden that sup-

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LICT Recertification Update

Keeping your Landscape Industry Certification current with NALP (formerly PLANET) is an important part of your credentials as a professional landscaper.

Landscape companies retain their listing on the List of Companies with Certified staff posted on the LICH web site (www.hawaiiscape.com) when employees stay current with their certification by re-certifying with NALP every two years. Companies and clients know that a landscaper is keeping abreast of changes and new information in the landscape industry when LICTs can be found on the NALP Honor Wall.

This year there have been two changes in the process of staying certified: the two year recertification fee has increased to \$100 (be sure to download the new recertification form from the LICH web site); and LICTs can now re-certify online and keep a record of their CEUs, as they occur, on the NALP web site (<https://www.landscapeprofessionals.org>). Twenty-four CEUs are required in each two year period leading up to one's recertification date, which is found on the LICT wallet card issued by NALP. LICH does



not have the office staff to track CEUs for you; each LICT is responsible to keep a record of their Continuing Education Units.

To prepare to re-certify, every time you attend a workshop, conference, class or company safety meeting, make sure to save any record of the event. Starting this year in 2016, see if the event has a CEU coupon for you to take home. Keep a file of these records. Also, keep a copy of the NALP Recertification Requirements in your file so that you know what category of CEUs you have just earned. You now have the opportunity to keep a record of

your CEUs online on the NALP web site. Go to <https://www.landscapeprofessionals.org> (there is a link to the NALP web site on our own hawaiiscape.com site as well); go to Certification, then Recertification Center. To Log In, you will need to telephone the Certification Department of NALP (1-800-395-2522) for a username and password to access the online CEU Submission/Tracking Form. This new online option to maintain your hard-earned Landscape Industry Certified credential offers faster turnaround and automatic receipt of your recertification fee plus CEU tracking for future recertification.

If the online process for recertification does not appeal to you, make sure to download the Recertification Requirements Form and the Renewal Application from www.hawaiiscape.com, fill out your form, and Mail the form and your check to NALP.

Any questions? Feel free to call Garrett at 808 960-3650. Stay Certified!

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Garrett Webb, Landscape Industry Certified Manager (LICM) is the State Administrator for the Hawaii LICT Program and President for LICH.

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ports the coastal marine ecosystem."

Barker has big plans for the company, which is transitioning from a maintenance-based model to one focused on landscape contracting, design, and installation. Additionally, Barker is launching a subsidiary that will offer money-saving water-management solutions to homeowners, including 24/7 monitoring, remote leak detection, and technical support. "Everything comes down to water," says Barker. "Overwatering leads to weak root systems and pest proliferation." By cutting their water

use, customers save money on both water and plants.

As a side project, Barker and employee Wynton Wizinowich are co-founding the Sustainable Land Company, offering permaculture design and management planning for rural, off-grid properties. Although he has apprenticed with some of the world's best permaculture teachers in Australia, Kenya and India, Wizinowich considers Barker his primary teacher. "He has an engineer's mind," Wizinowich says. "He figures out how things work very quickly and effectively. He's proven to me many times that he has good intuition about jobs. I'm always learning from Micah."

Client Doug Mackenzie, a Kiki'o homeowner, is impressed with Barker's

professionalism. "He delivers what he says, and he's thoughtful about commitments. He's an impressive young man with a very bright future."

That future includes growing Bioscape Hawai'i and having a greater impact on the environment. "The larger we get," Barker explains, "the better off the land is and the more of an example we are. Other people can do this. We're proving that you don't have to deplete resources to make money. We're helping to reconnect people with the natural world. That's very rewarding."

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Gillian Culff is a writer, editor, and creative writing teacher. You can find more of her work at www.gillianculff.com.