

Obituary for Kenneth Lee Marten, Ph.D.

University of California–Berkeley, Zoology

Born: 5 January 1946

Died: 5 July 2010

The ethology community suffered a loss in July when zoologist and ethologist Dr. Ken Marten passed away in his sleep at his home in Hawaii. Ken's pioneering spirit combined curiosity, intelligence, and ingenuity with humor and sensitivity. I was one of the last people to work with him for an extended period of time (1990 to 2000). In a bittersweet coincidence, Ken had just written his own bio three months ago for an elementary school reunion; I use it here, sometimes quoting Ken, to flesh out the details of the rich and colorful life he led before we met. Although I provide a biographical overview, this is not a recounting of Ken's scientific accomplishments—it is a collection of memories honoring the life of an exceptional human being.

Nature was Ken's true love. Allowed to roam freely as a child through Topanga Canyon in California, he kept pet snakes, lizards, skunks, squirrels, a mynah bird, and even raised a deer from birth—letting it sleep on his bed at night and

treating it as he treated his dogs. I have a vivid memory of watching Ken, years later in Hawaii, whistle and chirp and fling mealworms at wild Red-Vented Bulbuls. He visited the same spot for over 15 years, and he recognized the individual birds that caught his treats and responded to his "bulbul Kailua dialect." He was certain they were primarily ones he had raised and later released, as well as their progeny. "King" Marten, one of Ken's adopted bulbuls, even visited the dolphins at our lab at Sea Life Park. Ken cherished his birds like beloved children—the unfortunate (but endearing) downside being that anything you loaned him was generally returned spotted with bird poop.

Ken's profound respect for animals, coupled with a drive to understand them, led to a Bachelor of Arts in Zoology from the University of California–Berkeley on a Regents scholarship. He applied to Harvard for his doctorate, and was accepted with a full fellowship, but, eager to "savor the differences in people throughout the



Ken and Okoa at the Earthtrust lab in Hawaii; she liked to get our attention by knocking on the lab windows with her pectoral fin. Note Ken's ever-present fan and the vintage television. (~1990)

world,” he turned it down to join the Peace Corps, for which he taught science at a teachers’ training college in the jungle of Ghana, West Africa. Soon thereafter, he was drafted into military service. A passionate pacifist, Ken viewed war as “massive serial killing” and was vehemently opposed to participating in any form of it. He applied to be a conscientious objector and spent the next several years being serially redrafted. When his request was ultimately rejected, he appealed, acting as his own lawyer. Finally, at age 24, the Supreme Court granted him conscientious objector status. Although the legal battles had consumed a valuable part of his youth and dreams, he took solace in the fact that his experience served as a “test case to allow young men in the future to be able to be conscientious objectors, based not on their religious past, but on their moral convictions.”

A fearless and avid explorer, Ken built his own hang glider in 1972, based on a NASA prototype. Test-flying this crude contraption one day, he was faced with a strong headwind, forcing him to abandon the glider, free-fall 80 feet, and land on a rock-covered hill. The resulting fractures in his back, neck, and pelvis rendered him temporarily paraplegic and nearly killed him. Fortunately, his athleticism and determination, acquired from being a first-class pommel horse gymnast in his teens, allowed him to make a near-miraculous recovery. Ken’s athletic wanderlust led him to re-injure himself in a bad rock-climbing accident (involving a hair-raising waterfall rescue) about a year later. The repercussions of Ken’s severe injuries stayed with him throughout his life, and he felt they were in some way responsible for the extreme hypersensitivity to temperature that eventually became one of his defining characteristics.

Returning to academic pursuits, Ken authored landmark publications in 1977 on sound transmission and attenuation in temperate and tropical forest habitats as a function of sound frequency and height above the ground, drawing attention to their significance for animal vocalization. In 1978, while completing his doctorate in Zoology at the University of California–Berkeley, Ken received the Rolex Award for Enterprise, which he used for a conservation study of African wild dogs in the Serengeti Plain; his eventual thesis was on ecological sources of natural selection for long distance vocalizations, with special reference to the African wild dog.

Ken’s interest in combining science and conservation next led him into “the most hellacious period” of his life as a porpoise observer on tuna-purse seine boats for the National Marine Fisheries Service. Trained to count the number of cetaceans killed, and to report if a boat exceeded an annual quota of around 5,000 (after which the boat would



During our research on self-awareness, we covered the surface of one of the lab windows with a reflective mylar film to turn it into a one-way mirror for the dolphins. Ken is in the tank checking the dolphins’ perspective. (1990)

have to stop fishing), he was not a popular man on the ship. When Ken witnessed the slaughter of 2,000 dolphins in the first set of his first day, he quickly realized a boat could exceed its quota in a single day. In order to stop Ken from taking observations, and to protect their livelihood, deckhands threw explosives at him (the same ones used on the dolphins). Ken resorted to sewing the real data inside his jacket to avoid having it taken away by the tyrannical skipper. Ken felt that the abuse he experienced on the tuna boats aged him by 50 years, but he also gained a renewed sense of gratitude for the kindness and support of friends and family back on land. And Ken had the last word: In 1988, he testified before Congress on the tunaportpoise problem, which ultimately contributed to amendments to the Marine Mammal Protection Act that were specific to reducing the mortality of dolphins in the yellowfin tuna fishery in the eastern tropical Pacific.

As a Visiting Research Scientist for the Naval Ocean Systems Center in 1983, Ken went to Hawaii to do research on the “big bang theory,” a euphemism to describe the notion that toothed whales might be able to debilitate their prey with sound. This is also when he met his wife and soul mate, Annie. In 1984, Ken Norris invited him to join the faculty at the University of California–Santa Cruz as a bioacoustician at Long Marine Lab, and Ken

spent the next six years there as director of the Marine Acoustics Services Laboratory. In 1990, Ken and Annie returned to Hawaii, which is when I first met him.

Impressed with Ken's background in both science and conservation, Don White, a cofounder of Greenpeace and founder of the conservation organization Earthtrust, contacted Ken and asked him to run Earthtrust's underwater research lab focusing on dolphin behavior and cognition. The novel idea at Project Delphis, as we were called, was not to use food for a reward but, instead, to use dolphins' natural curiosity to motivate them to interact with people and computers in the lab. The belief was that demonstrating the dolphins' exceptional cognitive faculties—making it easier for people to relate to them and thus more likely to boycott tuna—was the best way to stop the killing of dolphins in the eastern tropical Pacific. When interviewed on programs for PBS and National Geographic, Ken prided himself in being adept at embedding his conservation message into what he said about the science, in such a way that they couldn't edit out his conservation proselytizing. The high visibility of these programs helped realize Ken's goal of promoting public appreciation and empathy for dolphins.

Our work together ranged from finding evidence for self-awareness in dolphins, developing an infrared underwater touch-screen for interacting with the dolphins, and documenting dolphins using underwater bubble rings and vortices as a form of play, to running an identification and site fidelity study with wild spinner dolphins. Ken was most excited by his final, unfinished work with Earthtrust, aimed at developing a shared language between humans and dolphins—beginning with a lexicon by electronically simulating dolphin whistles, studying dolphins replying with the same whistles, and working with the dolphins to attach word meaning (e.g., basic nouns, verbs, and prepositions) to distinct whistles.

We worked in close quarters, and we had our differences, but we were a dynamic and productive team. Ken's intellectual generosity, open-mindedness, mellow personality, and playfully wicked sense of humor were largely responsible. Once we were looking for non-invasive methods to mark a dolphin in order to test it for self-awareness. Ken had bought some Gentian Violet (a purple-hued bactericide) and was wondering whether it would be suitable. So he tried it on himself. He turned to me, catching me off-guard, and casually stuck out a vibrant purple tongue; I still remember how hard we laughed. Ken had a great, easy laugh—part mischievous, part cackle. He loved a good dirty joke, but he hated limericks. Nothing could torture him more than saying the first line of a limerick—

he said they replayed over and over in his mind, preventing him from thinking about anything else. Ironically, in other ways he embraced repetition. For several years, he arrived at the lab with the same type of Subway foot-long sandwich stuck in his severely duct-taped briefcase, and the same song (the drum solo in Surfari's "Wipeout") blasting in a repeating loop on his Walkman. Ken's brilliance was paired with eccentricity in the most positive sense.

A victim of Hawaii's climate, combined with unrelenting thermal discomfort from his old injuries, Ken would have had his desk fan surgically attached if he could have. His work uniform consisted solely of a pair of shorts—he was at all times shirtless and barefoot, while I had on three layers of clothing; he kept the lab **frigid**. The only time in ten years that I saw Ken get truly mad (including the day a tank window broke and the pump failed, flooding the lab knee-deep) was the day the a/c in the lab wasn't working and he got overheated.

Ken had a brilliant mind, but appearance and organization were not his concerns. He kept an ever-present, near-toppling pile of papers on his desk, which was his preferred method of filing. Over time, layers built up like strata. Pretty much anything that seemed "lost" was just somewhere down in The Stack. Cables and other lab paraphernalia got taped to any available surface—Ken didn't care how things looked as long as they worked. And he was not discerning when it came to technology for the lab—as long as it was free and functional. An innovative thinker (and tenacious scavenger), Ken could devise ways to put almost anything to work for us. As a consequence, we often ended up with equipment that was outdated; it seemed Ken was always on the phone to past colleagues, partly to catch up, but mostly in search of technical specs, or an old software driver, or a hydrophone part he hoped they still had lying around.

Perhaps Ken's only regret in the adventurous and passionate life he led was that he didn't have children. In addition to his birds, the many students he worked with helped to fill that void in him. Ken adored the young people who helped us with our research, mentoring and nurturing them in their pursuits as if they were his own children. Ken treated me with great freedom, respect, and affection. I thank him for the laughter and for his caring, generous, and easygoing spirit. He was unforgettable and will always have a special place in my heart. *Aloha, Ken – a hui hou.*

—Suchi Psarakos, Kailua, Hawaii