KILLER

On Feb. 24, 2010, a SeaWorld Orlando orca named Tilikum killed his trainer, Dawn Brancheau, in a shockingly violent display of aggression witnessed by park visitors—his third fatal victim in 27 years of captivity. The tragedy dredged to the surface age-old questions about the wisdom and morality of holding intelligent, socially complex, self-aware animals in small tanks to perform tricks in front of an audience. In his upcoming book *Death at SeaWorld*, author David Kirby exposes the risky business of keeping killer whales in captivity. The edited excerpt that follows examines the inner lives of SeaWorld's orcas and the backstage doubts experienced by four trainers who worked at the Orlando location.

by DAVID KIRBY

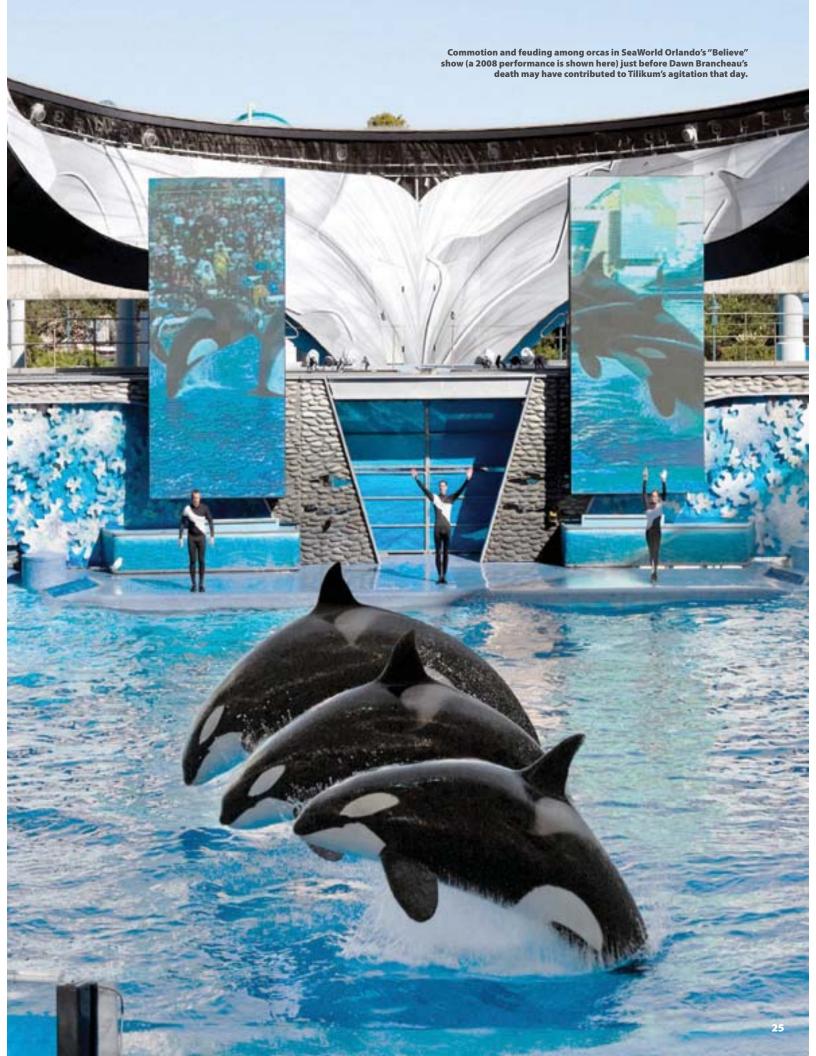
obody likes cognitive dissonance, the itchy, uncomfortable feeling that your previously held beliefs about a person, place, or thing—a job, say—do not conform with what your eyes and ears are telling you. Human nature goes into overdrive to eliminate, or at least tone down, the unbearable internal conflict.

Denial and rationalization are thus highly useful for collecting a paycheck. As the great muckraker Upton Sinclair put it, "It is difficult to get a man to understand something when his salary depends upon his not understanding it."

Looking back at their earlier years at SeaWorld, former trainers such as Jeff Ventre, John Jett, Samantha Berg, and Carol Ray marvel at the denials and justifications they used to muzzle the whispering doubts that followed them to sleep at night. They were loyal team players at the world's premier marine-life enterprise. No matter what their eyes and ears were telling them, they still thought SeaWorld was a great place to work—for people and animals alike.

After all, they had been trained to believe many workplace myths: The whales and dolphins in their care were happy, healthy, and pampered, with longer life spans than animals fending for themselves in "the dark, scary ocean," as SeaWorld officials sometimes called the natural environment. The trainers were part of the SeaWorld "family": They were fairly if not richly rewarded for their one-of-a-kind jobs; their bosses, while not always congenial, were leading experts in animal behavior; and above all, they felt safe, even while doing water work with killer whales. No one at SeaWorld ever led them to believe otherwise.

Over time, however, cognitive dissonance grew stronger; the soothing balm of denial and rationalization eventually began to wear off.





Jeff and John had become good friends; they spent many Orlando nights over beer at local hangouts, where talk often turned to the more disquieting aspects of their jobs. Each recognized the other as a critical thinker, and both

had ethical questions about keeping marine mammals in captivity, and its effect on the animals' mental and physical health. They were also growing skeptical about the integrity and intelligence of their supervisors and the relatively low pay they received. Such discussions were reserved for quiet corners in dark pubs, far from the earshot of other SeaWorld staffers.

One thing the men noticed was that orcas, because they were so smart, easily got bored. The animals needed to invent ways to amuse themselves when humans weren't interacting with them. Frequent targets of their restlessness were birds—usually seagulls, but other Florida fowl as well. Captive killer whales in San Diego had been observed leaving small bits of food on the surface to attract hungry birds, then ambushing and killing them, for fun, not a meal. In

other cases, the killer whales would float a whole fish on the surface as bird bait. This indicated purposeful intelligence: the willingness to forgo food up front for the potential of a greater reward later on. The use of bait to attract a victim was a form of tool deployment, a hallmark of intelligence in animals.

The doubts that began to germinate in John's and Jeff's minds were sometimes planted from people on the outside. SeaWorld executives had already anticipated that anti-captivity critics—activists and scientists—who routinely showed up to observe the animals would also try to make contact with staff members. But the company had done a thorough job of infusing its employees with a general disdain for anyone who criticized the business of keeping cetaceans in tanks. All members of groups such as the Animal Welfare Institute, the Whale and Dolphin Conservation Society, In Defense of Animals, and, of course, The HSUS were almost universally despised at SeaWorld. They were nut jobs to be avoided at all costs.

ne outsider did manage to break through the wagons to connect with a few of the trainers in Florida. Her name was Astrid van Ginneken, M.D., Ph.D., a tall, athletic woman from Holland with gray-blond hair pulled back behind the ears and a deep, heavily accented voice. Jeff first noticed her back in the spring of 1988, sitting alone for hours in the stands at Shamu Stadium, during shows and in between, watching one of the killer whales: Astrid first arrived after the female Gudrun had been brought to SeaWorld from the Netherlands.

Jeff began speaking with the stranger, even though most staff dismissed her as that "crazy Dutch whale lady." Eventually, he became more cautious and met Astrid off-site, to avoid prying eyes and ears.





Tilikum floats in the medical pool on the day of Dawn Brancheau's death. "I think Tilikum is the loneliest whale in the world," said HSI's Naomi Rose after an April 2010 visit in which she observed him spending much of the time motionless in a back tank.

Astrid, who had designed an innovative computerized patient record system for Erasmus University Medical Center in Rotterdam, first fell in love with killer whales after seeing one at the Dolfinarium Harderwijk theme park in the Netherlands. It was Gudrun, whom the Dutch aquarium-together with SeaWorld—had captured off Iceland in 1976, along with the female Kenau. The two orcas were brought to Harderwijk, east of Amsterdam. Kenau was quickly sent

Higher mortality rate of captive orcas compared to those in the wild

to SeaWorld in Orlando but Gudrun remained. Astrid found herself spellbound by the giant blackand-white orca with the gentle personality.

In 1986, work brought Astrid to a conference in Washington, D.C., where she visited the Natural History Museum, which was having a blockbuster exhibit on whales. Again, Astrid was enraptured by

the creatures. She purchased a few books on cetaceans at the museum store. Two of them were about whales: Erich Hoyt's Orca: The Whale Called Killer, and Rex Weyler's Song of the Whale, which tells the story of Paul Spong's metamorphosis from dispassionate scientist to global whale advocate. She was deeply inspired by what she read.

Astrid went back home with a deep desire to see Gudrun again. She arrived at the Dutch aquarium early one Sunday to see if the orca was still there. She was. But it was November now. The park was closed for the season. The staff allowed Astrid some time with her.

As they approached, the trainer cautioned, "Gudrun doesn't like strangers much. She can be very nervous in their presence. So please don't look her in the eye, and don't make any wild movements or that sort of thing." But Gudrun acted calmly around the stranger. Astrid felt they had a bond. Using her charm and enthusiasm, her university credentials, and the reference of a curator she knew at the New York Aquarium, Astrid talked her way into a standing invitation to visit Gudrun. She was even allowed to feed her.

Astrid visited every week for the next year. "She dramatically changed my life," Astrid told Jeff one day, "because somehow she broke through my shield."

In the fall, it was announced that Gudrun would be transferred to Florida on a "breeding loan." Astrid was allowed to stay with Gudrun in the final hours before the flight, in mid-November 1987, keeping the animal calm and hand-feeding her fish.

Gudrun had a rough time when she got to Florida. Not only did top female Katina assert her dominance by raking and shoving the newcomer, but SeaWorld

began breeding her almost immediately. She was locked in a back pool with the aggressive Kanduke, who chased her around the tank, trying to penetrate her over and over, and often succeeding. What seemed like serial rape to Jeff produced the birth of Taima in July 1989. Born during a summer storm, her name was a Native American word for "crash of thunder." It would prove to be an appropriate moniker.

In Europe, Gudrun had spent most of her time with bottlenose dolphins. SeaWorld officials were unsure what kind of mother she would be, but Gudrun showed herself to be loving and competent with Taima. Within a year, the two of them were performing daily at Shamu Stadium.

Astrid had been disturbed to see Kanduke's rough treatment of Gudrun. But after Kanduke died in 1990 and was replaced by Tilikum in 1992, things began to get better for the Icelandic female. Both Gudrun and Taima took to Tilikum soon after he arrived, Astrid observed, unlike the dominant matriarch Katina, who harassed Tilikum and raked him with her teethunless she was in estrus (heat) and wanted to mate.

"Gudrun is different," Astrid told Jeff. "Maybe she comes from Tilikum's clan in Iceland, or maybe their personalities just match better. We'll never know. But they do spend a lot of time together, and very harmoniously."

The two also mated harmoniously. There was no "rape" between Tilly and Gudrun. One day, a trainer informed Astrid that Gudrun was in estrus and invited her to watch the pair mate in a back pool. She watched in amazement and even captured the ritual on her camcorder.

"Tilikum was so gentle!" she marveled to Jeff later that day. "He would swim behind her, and Gudrun would be in the lead, and she would look back at him, as if to say, 'You're still following me, right?' And then he would swim up to her and caress her with his head, or he'd roll over and take her on his chest. It was so romantic. Afterwards, they were completely content, resting side by side. It was totally different from Kanduke."

n New Year's Eve 1993. Tilikum's fourth offspring, named Nyar, was born to Gudrun. Nyar did anything but thrive. The infant girl seemed to suffer from congenital birth defects. She was physically and mentally unsound. Gudrun rejected her calf and tried to drown her several times before SeaWorld separated the two. Nyar made little

progress and had trouble swimming correctly. Blood

tests showed she suffered from immunosuppression.



She had trouble learning and was unfit for shows. Nyar often spent time in the company of Tilikum, her father, who treated her with great gentleness.

Astrid told Jeff that Gudrun's rejection of her calf would be rare in the wild. The Dutch scientist was on her way to becoming a bona fide killer whale researcher, having now spent six summer seasons on San Juan Island at the Center for Whale Research. Over the years that she visited SeaWorld, Astrid taught Jeff much about the natural history of killer whales in the wild, something he would never learn at the marine park.

The Dutch doctor was not overtly opposed to captivity and was by no means anti-SeaWorld. But many of the things Jeff learned from his discussions with her left a lasting impact. However inadvertently, Astrid was helping to change Jeff's feelings about captivity. Jeff's talks with Astrid added more fuel to his nighttime ruminations with John. Both of them were growing more concerned about the animals' healththe drugs in their morning meals, their collapsed dorsal fins, the way they kept dying.

And then there was the tooth issue.

Many of the killer whales had developed serious dental problems—mostly chipped and broken teeth, but also teeth that had been removed or had fallen out. Most disturbing of all were teeth that needed to have the pulp drilled out of the center, leaving behind a conical cylinder.

Jeff and John were beginning to believe that stress and boredom were adding to the tooth problem. The steel gates that separated the park's pools were made from horizontal bars. These gates were the first line of defense when the orcas went "off behavior" and became aggressive and in need of physical separation. Once separated, they sometimes bit down on the bars, a display of aggression called jaw-popping.

Even when they were not challenging each other through the restraints of the gates, some animals passed the time fighting boredom by simply chewing on the bars or on the corners of the concrete pools. Several times Jeff and John discovered teeth or fragments of teeth on the bottom of the tanks, especially near the gates.

Jeff and John were slowly coming to accept that life at SeaWorld was just too stressful for killer whales, though some animals seemed to handle confinement better than others. Katina, for example, was always businesslike and ready to follow signals consistently and predictably. But other animals were not so reliable.

Taima was the least predictable water-work whale in Orlando. Strong-willed and independent, she would break from control during sessions far more often

Many of the killer whales had developed serious dental problems—mostly chipped and broken teeth, but also teeth that had been removed or had fallen out.

than the others, then go off and do her own thing. The impetuous Taima had many "f-you" moments, Jeff liked to joke, as in "F- you, I'm not going to do the bow you just asked for; I'm going to swim circles on my back instead."

The best way to maintain control over trained animals is to remain hyper-observant of everything in the environment that might interfere other trainers, other animals, distractions in the crowd, even the weather in an outdoor stadium. The trainer must also constantly monitor the animal for any "precursor" of going off behavior, especially if it could lead to aggression. This

might include visual cues such as a widening of the eyes, an open mouth, or jawpopping; or spitting food at a trainer or ignoring hand signals, water slaps, or calls to return to stage.

Recognizing a precursor in time did not guarantee that the trainer could defuse aggressive behavior. Sometimes, social stress or changes in the environment produced completely unpredictable behavior—some of it potentially aggressive. Some whales were more prone to such stress-induced loss of control, such as Tilikum. When frustrated by stimuli around him, Tilly could suddenly display a host of aggressive and dangerous behaviors, such as mouthing the concrete stage, vocalizing in threatening tones, banging on gates with his head, even lunging up from the water at his control trainer during practice or exercise sessions. Tilikum was also inconsistent with "separations"—it was difficult to make him leave a pool when he did not want to go.

Tilikum also became stressed after spending too much time with the females. Ironically, he became agitated after prolonged separation from them, especially if visual access to his tankmates was blocked. He was highly averse to change in his environment, but he also disliked repetition during learning sessions. When bored during a session, he would repeatedly give incorrect responses.

Tilikum reacted better to some trainers than others, and his bond with John Jett was evident. John loved and trusted the huge animal. He put his hands on the big bull daily. He actually grew to feel sorry for the guy. "He's just a big, misunderstood puppy dog," John once remarked to Jeff. "He's very subdominant. He gets picked on all the time, and he has nowhere to run." John felt this killer whale needed him, needed his companionship. John thought he had made a difference in Tilly's life.



EXPERT WITNESS As a Ph.D. student, Naomi Rose tackled the question of why male killer whales in British Columbia's Johnstone Strait don't dis-

following Dawn Brancheau's death.

perse from their mothers (the answer: In exchange for babysitting their siblings, they receive mating access to their mothers' female associates). As she pursued her studies, Rose began to question what happens to captive orcas when deprived of their natural habitat and family. Chronicled in Death at SeaWorld, her path led her in 1993 to The HSUS and Humane Society International. The following edited excerpt details the explosion in media interest Rose encountered

On Feb. 24, 2010, Naomi was in her cubicle in The HSUS's Gaithersburg, Md., office, catching up on email, when a message appeared in her inbox from Richard Patch, a colleague who handled marine mammal legislative issues. He was a reliable source for breaking news, and today's bulletin was no exception.

"Trainer killed at SeaWorld," the subject line announced.

The message was brief, short on details. Richard had just heard on the news that a trainer in Orlando had drowned in the killer whale pool. More details would be available soon. Naomi immediately began emailing around to colleagues and checking news websites.

Within the hour, media were coming to her in search of comment and perspective. Over the years Naomi had carved out a niche as one of the world's leading authorities on captive marine mammals. She was now a go-to person among major media whenever captive cetaceans made the news. However inadvertently, Naomi had become the Jane Goodall of marine life held in captivity.

She was stunned by the death in Orlando but had no time to emotionally process the news. The next several days melded into a blur of telephone interviews and live appearances at radio and TV studios around the capital. She was featured prominently in many of the thousands of news stories reported around the world.

Some people were already calling for the perpetrator's extermination, even certain anti-captivity activists. But Naomi knew that death was not the answer for Tilikum. "It's not his fault what happened, just as it wasn't Dawn Brancheau's," she told The Guardian, "The fault lies with using these wild animals as entertainment."

Naomi told AOL News, "SeaWorld should have changed their policy in terms of Tilikum years ago. This was an accident waiting to happen. One of the biggest problems is that SeaWorld miseducates the public. What the public is seeing isn't a contented animal behaving naturally, but a caricature dragged into a box and not given any choice."

That night, Naomi appeared on Larry King Live. "My personal opinion and my organization's opinion is that orcas are a species that doesn't belong in captivity," she said. "... They're very large animals. They're very social. They're very intelligent. And those are very small enclosures for an animal of that size."

By the end of the long day, Naomi realized just how profoundly everything had changed. Suddenly, killer whales were part of the national conversation, and much of that discussion was firmly centered on captivity. No attack by a captive orca had ever prompted such serious questions about the industry. Naomi had seen nothing like it.

"It's extraordinary," she remarked to her husband, Chris. "The captivity issue in the U.S. just went from zero to 60 in one second." Tough questions were now being asked by a national media that had, until now, uncritically celebrated SeaWorld for more than a generation. Dawn's death may have been tragic and pointless, but it certainly wasn't meaningless.



ven Katina had her bad moments. She had once mouthed a trainer's waist and on other occasions bumped her head into a hip, a torso,

or a hand. Once, she pushed a trainer around the pool inappropriately.

Katina had other issues. She was highly protective of new calves, especially while doing water work, and would often try to separate a youngster from a trainer by swimming between them. Katina at times also "displaced" other orcas to demonstrate her dominance, ramming from the side like a pushing foul in basketball. She routinely displaced Tilikum when she was left with him for extended periods.

Sometimes Katina showed outright chutzpah, especially around newcomers, engaging in "f- you" moments of her own. Instead of working with someone, she might refuse to make eye contact, slink beneath the surface, play with her food, or refuse to open her mouth for fish. Katina was so bossy that, when she decided she didn't want to cooperate, she could actually force the other killer whales into disobedience as well. Those who still followed their trainers' signals, despite her lead, received a harsh displacement from the queen.

But even Katina had to defend her status at times. In 1994, her daughter Kalina, the original Baby Shamu, returned to the pools of Orlando after spending four and a half years on tour at SeaWorld locations in Ohio, San Diego, and Texas. Kalina was 9 years old. She had left one calf behind in Texas and was pregnant for a second time.

When Kalina returned to Florida, she began fighting with her own mother for dominance. Katina put down the rebellion, but the insubordination was unheard of in killer whale society—at least in the wild. Jeff located a copy of Kalina's official animal profile and discovered that Baby Shamu had developed an entire repertoire of behavioral issues while on tour across the country.

Among the things that might upset the young star, according to her profile, were "major environmental and social changes, unclear/confusing situations, divided attention," and (rather ironically given her travels and many truncated relationships) "long term separation."

Kalina had several "aggressive tendencies" as well. "When excited or confused, she may slide over, push or bow over her trainer in the water," the document warned. "[She] will aggressively and physically displace less dominant whales when frustrated, confused or sees an imbalance in attention." While playing with toys or trainers, Kalina had also "shown extreme excitement to borderline 'aggression.' Aggression involves anything from slight bumping or sliding over her trainer to a complete bow over her trainer." She also "opened her mouth on trainers" on several occasions.

John was eventually able to shake off his doubts about worker safety at SeaWorld. But his days of denial and rationalization about the welfare of the animals were coming to an end.

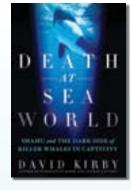
"You know, every day I go in to work, it becomes more painful for me to see these animals in this environment," John confided in his buddy Jeff over beers at a local pub. "But I keep telling myself that maybe my presence is going to make their lives better. And I really do try to make their lives better, especially Tilikum. I work as hard as I can for that poor guy."

▶ A FREELANCE WRITER in New York City, David Kirby has previously written about factory farming for All Animals. Available July 17, Death at SeaWorld can be preordered now online. See the book tour schedule—and pledge to get the facts before patronizing facilities such as SeaWorld—at humanesociety.org/seaworld.

Editor's Note: Six months after Dawn Brancheau's death, the Occupational Safety and Health Administration assessed SeaWorld the maximum penalties and sanctions allowed under federal law. One citation—exposing employees to the hazard of interacting with orcas without adequate protection-banned work with orcas unless trainers are separated from the animals by physical barriers or other similar methods of protected

contact. In May, SeaWorld lost its challenge of the citation and will now have to comply with OSHA's abatements, although it can appeal.

Death at SeaWorld follows Jeff Ventre, John Jett, Samantha Berg, and Carol Ray as they left SeaWorld to become outspoken advocates against captivity. The book also chronicles the fates of SeaWorld's animal cast of characters. Kanduke, captured in 1975 off British Columbia, spent much of his time at SeaWorld



Orlando alone, floating motionless at the surface, Kirby writes. Used mainly for breeding and not for water work, he had minimal interaction with the trainers. The females often picked fights with him, raking their teeth over his skin. In 1990, a few weeks after trainers reported that Duke had been acting "slow," he died.

After being impregnated by Tilikum in 1995, Gudrun was used to pose for photos with tourists in

the dry slideout area of one of SeaWorld Orlando's pools. "The weight on her unborn calf must have been immense," notes Kirby. When she went into labor, the calf's pulse couldn't be found, and the body had to be pulled from her with chains. Four excruciating days later, Gudrun swam over to gently nudge her 2-year-old calf, Nyar, "as if to ask for an overdue rapprochement" for previously rejecting her, writes Kirby. Shortly after, Gudrun died. Within

months, Nyar was dead, too.

As if mimicking her mother's aggressive behavior, Gudrun's older daughter Taima attacked the three calves she bore by Tilikum. Following Brancheau's death, she became virtually the only companion to Tilikum, a fellow exile from water work. In June 2010, she died from complications giving birth to their fourth calf.

Kalina, the original "Baby Shamu," died in 2010 of an infection. Her mother, Katina-captured off Iceland in 1978—is still performing at SeaWorld Orlando.

Captured in 1983 off Iceland, Tilikum was held primarily in a back pool for almost two years after killing Brancheau. Shortly after her death, The HSUS's Naomi Rose flew to Orlando with an HSUS videographer and observed him spending little time with trainers. Two months later, his close companion Taima died. At approximately 31 years of age, Tilikum is back in the show, where he performs in the "big splash" finale. He has outlived most other male orcas in captivity. His days are likely numbered.