

# National aquarium dolphins are learning their biggest trick yet—traveling to a new home

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There was something about the big blue mat that on this particular morning Jade just didn't like.

It made no matter that the 18-year-old bottlenose dolphin, one of seven owned by the National Aquarium, had seen this identical pad many times before. Perhaps she was spooked by the photographer at the edge of the pool holding a clicking black box that obscured her face. Or the problem might have been the big green beach umbrella that threw dark and unfamiliar circles of shade over the pool.

Whatever the reason, when trainer April Martin knelt down at one end of the mat and positioned her hand vertically with her fingers pointing skyward (a signal for Jade to propel herself out of the water and land belly-first on the pad) the dolphin was having none of it. She made a half-hearted little hop barely strong enough to push her snout onto the mat and then immediately fell back into the pool.

Martin turned and walked a few steps away from the bucket of fish with which the [dolphins](#) are rewarded.

"Jade isn't getting positive reinforcement," Kerry Diehl, the Aquarium's assistant curator of the Dolphin Discovery exhibit observed. "But she'll get a chance to try again."

During the next 30 months, Jade will have many opportunities to perform that maneuver—the first in a series of skills that the trainers hope will culminate in the fall of 2020 with the seven dolphins riding in the back of a truck and then on a plane to their new home in a giant oceanside sanctuary.

In 2016 and after years of protests by animal activists who said it was inhumane to keep such intelligent animals in a small, concrete pen, the Aquarium announced that it had embarked upon a bold, five-year plan to relocate the dolphins to a new outdoor home that's as similar as possible to their natural environment in the tropics while still providing the animals with human protection.

The Aquarium's initiative builds on a trend of placing captive dolphins and whales in larger pens that incorporates aspects of their environment in the wild. Sea World, for example, bowed to public pressure and moved its orcas to a bigger and more natural looking habitat.

But the Aquarium's \$10-\$15 million undertaking is an order of magnitude more ambitious and complex. Its scope is unprecedented, according to Janet Mann, a Georgetown University professor and dolphin expert—and is accompanied by unprecedented hazards.

"This is a brave thing for the Aquarium to do," said Mann, who directs the Potomac-Chesapeake Dolphin Project and Australia's Shark Bay Dolphin Project. "They are taking a big risk, and I admire them for making the effort. Unless it's a glorious success—and I hope that it is—they are going to get criticism from everyone."

The Aquarium will attempt to improve the dolphins' quality of life by vastly increasing the size of their habitat and exposing them to the fish, sea plants and changes in the weather they would encounter in the wild, while simultaneously providing them with the food and medical care on

which they depend. And though visitors won't be able to get as close to the dolphins as they can in the Aquarium, they'll be able to observe the captivating creatures from a seaside boardwalk as Jade, Spirit, Chesapeake and the others swim in the currents and occasionally do one of the spectacular backwards flips known as "breaching."

The new sea pen will be between 50 and 100 times larger than the dolphins' current home, said John Racanelli, the Aquarium's president and CEO—potentially up to 800 feet long by 500 feet wide, and it will be separated from open water by a double fence. There will be a research center on the premises as well a medical laboratory and a food preparation and refrigeration site.

"We've looked at about 30 possible locations so far," Racanelli said. "It's very, very likely that our final site will be in the Florida Keys."

A leading contender is a former quarry in Cudjoe Key about 20 miles from Key West. Another possibility is a site on No Name Key inside a deer refuge.

"There also are a couple of marinas for sale," Racanelli said. "They're a little expensive, but they're great locations."

However large the sea pen is, Mann said it won't approximate the dolphins' natural range of about 100 square kilometers.

"It is impossible to build a sea pen that would adequately replicate the home range of any of these animals," she said. "For dolphins to live within a few meters of each other day in and day out is highly unnatural behavior in the wild, where they may not see even their closest friends for days or weeks or months at a time."

She said that releasing the dolphins into the ocean isn't a viable option.

"People love these animals and they want to let them go free, but if they do, they aren't going to make it," she said. "Even in the wild, it takes dolphins a long time to perfect foraging behaviors. There's a lot that they pick up through social learning. For dolphins raised in captivity, it could take a generation or two for them to learn the necessary hunting skills."

A cautionary example occurred in 1992 at the Atlantis Marine Park Project in Australia, according to a first-person account by marine biologist Kelly Waples that's posted on the website for the PBS documentary series, "Frontline."

After an intensive 10-month period designed to teach survival skills to nine captive dolphins, the animals were released into the ocean. The former captives struggled, losing weight and becoming emaciated, Waples wrote. One dolphin followed fishing boats, begging for food. Three were eventually recaptured and given a new home at a local [aquarium](#). The other six dolphins haven't been seen since early 1992, Waples wrote.

Racanelli said that the Aquarium is seeking private funds to buy and build its new site, though some monies will be provided by a fee charged to visitors who will use the boardwalk. Because the Aquarium's goal isn't to raise successive generations of dolphins dependent on humans, the animals will continue to receive their equivalent of birth control pills. But Racanelli said that the sanctuary might eventually become a home for other dolphins living now in captivity. Or, it could serve as a refuge for severely injured wild dolphins.

"We're trying to find a site that can hold up to 20 dolphins," Racanelli said. "We've already started to hear from other organizations who would like to retire their dolphins. We'll be able to accommodate a reasonable number of requests, provided we get the funding."

Meanwhile, the Aquarium's staff is slowly introducing unfamiliar elements such as beach umbrellas that the dolphins will find in their new environment. Staff members are experimenting with wearing sunglasses (necessary for humans working outdoors in the Florida Keys) which make it impossible for the dolphins to see their trainers' eyes.

Algae is being allowed to grow in the dolphins' tank for the first time, and eventually, water from their natural environment will be mixed with the water in their current pens—first a trickle, then much more. For the dolphins, that's a risky change.

"There are organisms that these animals will encounter that they haven't been exposed to, microbes that will get inside their guts and lungs," Mann said.

Though it's impossible to anticipate everything new that the dolphins will encounter in their new home, Mann said there are plenty of potential stresses associated with the move that trainers can predict—including the need to put the animals into a truck and transport them to the airport. That's why Martin has been working to teach Jade what trainers refer to as "hauling up" behavior.

Once Jade is comfortable leaping onto the mat, the pad will be replaced with a stretcher. She'll learn to lie quietly while people gather on either side. Then, she'll be taught to remain unperturbed while the humans lift the stretcher into the air and load it into the back of an open-top truck fitted with a large container holding water. Jade will rest on the stretcher, with the water lapping about halfway up her sides.

"The stretcher is a dolphin version of a child seat," Aquarium spokeswoman Corinne Weaver wrote in an email, adding that the water also helps support and stabilize the animals. Trainers will climb in the truckbed and ride alongside the dolphins, monitoring their vital signs and

behavioral cues to ensure that the animals don't become over-stressed.

"Eventually, the dolphins will be in the truck as it's driving around the streets of Baltimore," Racanelli said. "Our goal is that when they get ready to move to the sanctuary in 2020, they will have done every behavior associated with the move but ride in an airplane."

That date is roughly 30 months away; for now, it's enough for Jade to leap completely out of the water and onto the blue mat.

After giving the dolphin a few seconds to collect herself, Martin walked back to the blue pad, crouched beside it and again positioned her hand at a vertical angle.

Without hesitation, the dolphin lifted herself from the water, landed fully on the mat, and shoved her snout into Martin's palm.

The trainer threw out both of her arms to the sides, smiled extra-wide and said in a loud and enthusiastic voice, "Good girl!" Then she tapped Jade on her back—a sign for the dolphin to return to the pool—and tossed her some fish.

Jade seemed aware that she'd performed well. "Ack, ack, ack," she squealed excitedly.

"You're amazing, Kiddo," Martin said.

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