

Winter's Tail

How One Little Dolphin Learned to Swim Again

told by Juliana, Isabella, and Craig Hatkoff

One cold winter morning, just off the east coast of Florida, a baby female dolphin managed to get tangled up in a crab trap. In the effort to free herself, the dolphin caused the ropes securing the crab trap to the buoy to become wrapped around her tail. The more she struggled, the tighter the ropes became, quickly strangling her tail. Luckily, a nearby fisherman caught a glimpse of this unusual situation and came to set the little dolphin free. It was not clear she would survive. And even if she did survive, how would a dolphin manage without a tail? How would she swim? How would she thrive?

Life without her tail would cause many challenges, but with the help and care of a great number of **dedicated** people, a dolphin named Winter would beat the odds. In return, Winter's story would inspire and warm the hearts of people all over the world.



Essential Question

What benefits come from people working as a group?

Read about how a group of people worked together to help an animal in need.



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A badly injured Winter in Mosquito Lagoon shortly after being freed.

December 10, 2005, was a chilly Saturday. Jim Savage was the only fisherman braving the bitter wind in Mosquito Lagoon that morning. As Jim steered his boat in the dim light, he noticed a line of crab traps rigged just beneath the water's surface. One trap seemed to be going in a direction opposite from the others. Something was pulling it against the strong wind. Jim idled his boat and steered slowly toward the trap. Even before he could see anything, he heard a harsh, rasping sound over the sound of the waves. When he searched the murky water, Jim found a baby dolphin gasping for breath. She was caught. A rope from the trap was wrapped tightly around both her mouth and tail.

The dolphin was so tangled in the rope that her small body was curled like a horseshoe, her mouth pulled close to her tail. Jim spoke to her, assuring her that he was there to help. He knew he needed to free her head first so she could raise her blowhole out of the water and breathe normally. The dolphin struggled as Jim used his fish-cleaning knife to cut the line that tied her mouth and tail together.

Several minutes later, Jim pulled off the last of the rope, and the young dolphin swam away from the boat. She kept her distance from the fisherman, but she did not leave the lagoon. After thirty minutes, Jim understood that she was too exhausted, too injured. He called Florida's Fish and Wildlife Conservation Commission. The workers there would know how to take care of a wounded dolphin.

Jim watched over the dolphin until the rescue team arrived a few hours later. As soon as they saw the cuts around the dolphin's tail, they knew they would need to move her somewhere safe so she could heal.

Even though she was injured, the dolphin was not easy to catch. But they finally corralled her. After lifting her from the lagoon, the rescue team tried to help her relax before carrying her to the transport van. They had a long drive ahead of them, all the way across Florida to the Clearwater Marine Aquarium.

Teresa, from the Hubbs-SeaWorld Research Institute, tries to keep a shivering, injured Winter warm and calm.



A small, anxious crowd awaited the dolphin's arrival at the aquarium. The group included a veterinarian, dolphin trainers, and volunteers. When the van pulled up, they were all ready to help. It had not been an easy journey. The dolphin had been out of the water for more than three hours. On top of that, the night air was cold. It was so chilly that the group decided to name the dolphin Winter.

The rescue workers carefully moved Winter to a holding tank. Abby, the head dolphin trainer, stood alongside Winter in the tank. Immediately, the veterinarian evaluated Winter's health. It was clear the little dolphin was badly injured. The vet estimated that Winter was only two or three months old. In the wild, baby dolphins drink their mother's milk until they are about two years old. Winter was so young that she would not know how to eat a fish if they offered it to her. But she needed food. The only choice was to gently insert a special feeding tube down her throat. Winter was probably still scared from her ordeal so, although the tube did not hurt, she continued to struggle.

Abby and the rest of the aquarium staff knew, however, that it was good that Winter was struggling—it showed she still had the heart and energy to try to protect herself.

It would take time for Winter to accept help from all of the many people who were making it possible for her to survive.



A volunteer coaxes Winter to drink from a bottle.

On Winter's second day at the aquarium, Abby showed her a bottle. The bottle contained a milk formula developed for zoo animals. At first, Winter did not know what the bottle was for. It took her a week to get the hang of drinking from it, and then the staff no longer needed to feed her with the tube. Each day, they weighed Winter. She started to gain weight. It was a good sign.

Winter was still very sick. The rope from the trap had been wrapped so tightly around her tail that it had stopped the blood flow. Pieces of her tail were starting to flake off, little by little.

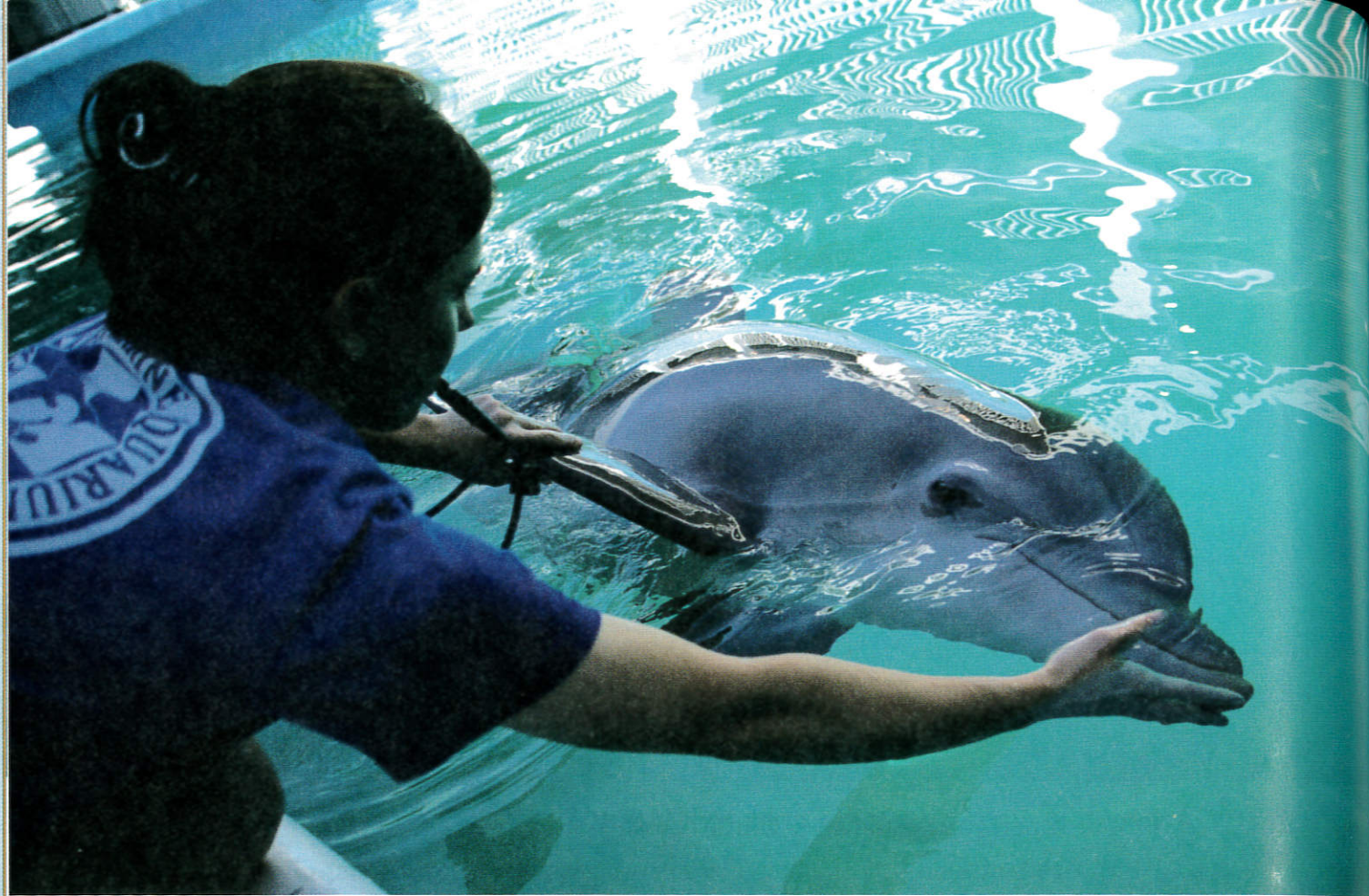
Nonetheless, by the end of the week, Abby and the other trainers no longer felt they had to support Winter in the water. They encouraged her to swim on her own. And then, just as everyone feared, Winter lost her tail. What was left was a fleshy stump that would heal over time.

Would Winter be able to swim without her tail?

STOP AND CHECK

Ask and Answer

Questions How did the aquarium trainers help Winter? Go back to the text to find the answer.



Winter and Abby enjoy their training sessions together.

Winter did start to swim on her own, but she did not swim like other dolphins. Her tail stump swished from side to side, more like the motion of a fish or a shark than the up-and-down tail action of a dolphin. Still, it was amazing! Winter had taught herself an entirely new way to swim! Her trainers were impressed, but they were also concerned that she might damage her backbone by swimming the wrong way.

Although Winter's tail had fallen off, the wound had healed. She was getting used to her new home and her handlers. Whenever someone arrived next to her pool with a bottle, she gave a cheery welcome of clicks and whistles. By the time Winter was about five months old, she began daily training sessions with her handlers. They used training **techniques** similar to those used with the aquarium's other dolphins, and she learned to listen to their signals. Winter was a quick and enthusiastic learner.

Winter had learned to trust the people who cared for her, but she had not seen another dolphin since arriving at the aquarium. Now it was time to meet a new friend. The trainers decided to introduce Winter to Panama, a female dolphin who had been rescued as well. The trainers were not sure how Winter would react to Panama—or how Panama would react to Winter. Would Panama even recognize Winter as a dolphin?

When they first brought Winter to the new tank, Panama kept her distance. Winter stayed by the edge, where she felt safest, and watched the older dolphin swim laps around the pool. But Winter got tired of waiting. If she wanted to make a friend, it was clear she would have to make it happen. Now, whenever Panama passed, Winter swam out to greet her. Panama tried to ignore Winter, but Winter was unfazed. She kept playfully approaching Panama. Finally, after three long days, Panama gave up. She stopped trying to swim away from Winter, and the two dolphins have been together ever since.

Panama lets Winter trail just behind her, the way baby dolphins follow their mothers.

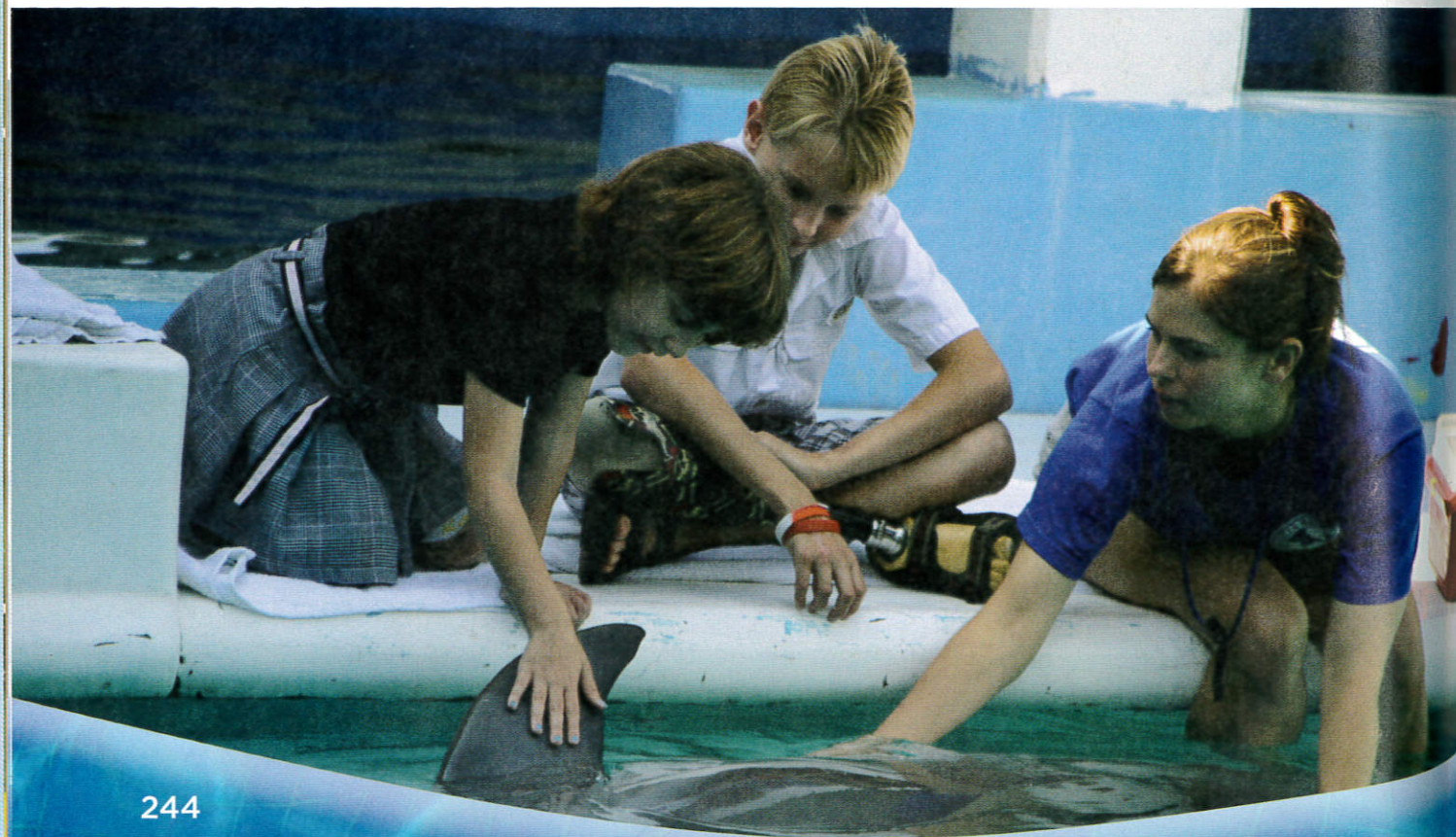


When Winter was about a year old, NBC's *The Today Show* broadcast a story about her on television. Now the word was out. Winter was famous. People started to come in droves to visit her at the Clearwater Marine Aquarium. The charming young dolphin also started to receive letters from her new fans, including many people who knew someone who had, or had themselves, lost or been born without a limb or had other disabilities. Everyone could relate to Winter.

Winter seemed to be able to overcome any **obstacle**. While her vets and trainers were happy that Winter was adjusting to her new life, they knew she was about to face her biggest challenge. Months of swimming from side to side had taken their toll. Abby helped Winter do special poolside exercises, but Winter's muscles were not as **flexible** and developed as they should have been. Winter needed to be able to swim like a dolphin again.

Luckily, Kevin Carroll heard about Winter on the radio and contacted the aquarium. Kevin was not only a dolphin lover, he was also a premier creator of prostheses—special devices that can help replace a body part such as an arm or a leg. Kevin believed he could help.

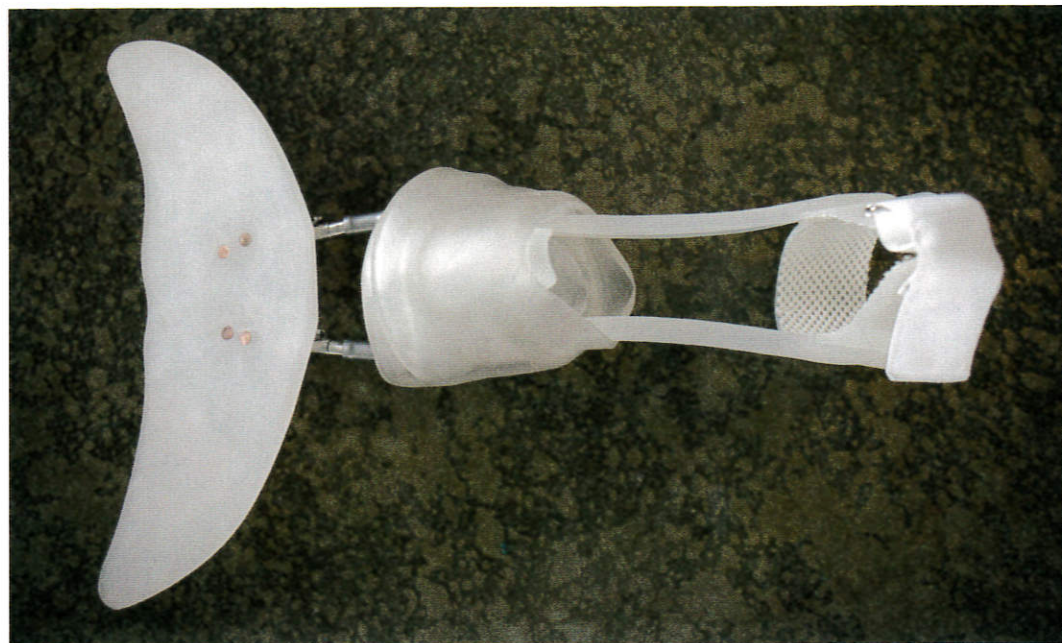
Winter helps others understand what it means to have a disability and how people can adapt to almost any circumstance.



Kevin Carroll (left) and his team face many challenges in devising the perfect tail for Winter.

Being a dolphin, Winter was a special case. Not only would her prosthesis have to work in the water, it would also have to handle the force of each thrust of her tail. A team of experts—including Kevin Carroll, vets, dolphin trainers, and marine mammal researchers—came together to help make Winter's new tail a reality.

Everyone shared ideas about how to create the best prosthesis for Winter. It was something that had never been done before, and there were many obstacles. The first was the fit. Winter did not have a tail joint or any other place for a prosthesis to attach to her body. In addition, dolphins have especially sensitive skin. The team would need to figure out how to connect the tail without causing irritation or discomfort to Winter. The second concern was the tail's **function**. They needed a design that would **mimic** the up-and-down movement of a swimming dolphin.



Winter's special tail

Finally, there was a concern for Winter herself. How would she react to wearing the tail? Abby and the other trainers worked tirelessly, preparing Winter. First they needed to help Winter get used to the feel of wearing a prosthesis. Then they could teach her how to swim with her own prosthetic tail.

The development team quickly realized they would have to create a sleeve designed specifically to fit Winter. They made a mold of her peduncle so the new sleeve would be a perfect fit. Then Kevin Carroll went one step further. He created a special silicone gel that would be smooth against Winter's skin and would add a cushion to make the prosthesis more comfortable for Winter to wear.

It took several months and several designs for the team to develop a prosthetic sleeve and a tail that matched the natural motion of an actual dolphin tail. They ended up with a unique design. There would be two sleeves. The main silicone sleeve would fit right on Winter's peduncle. A second sleeve would fit on top of the first and would hold the tail and its brace in place.

STOP AND CHECK

Ask and Answer Questions How is Winter's prosthetic tail unique? Find details that support your answer.

Abby spent many hours training Winter how to move her body while wearing the prosthetic tail. Abby needed Winter to understand that, when she was wearing the prosthesis, it was a signal for her to swim by using her tail, not her fins, to move herself forward.

Winter seems to like her new tail. She will sometimes swim in circles, chasing it, or show off by swimming right past Panama and flicking her tail in her friend's face. Some days, she doesn't want her trainers to take it off!

Winter now wears her tail every day for a short period of time. A trainer is always close by to keep an eye on her. The goal is for Winter to eventually wear the prosthesis a few hours every day, which will be enough to keep her backbone healthy and her body flexible. Even after Winter's first brief outings with the new tail, her trainers could already see an improvement.

Winter adjusts like a pro and learns to swim with her new tail.



Winter had a big party on her third birthday, complete with a cake and candles. Many people came to help her celebrate, and she seemed happy to see them all.

We cannot know what Winter is really thinking, but her trainers admit that she seems to have a special understanding with the people who visit her. The people feel a connection to her as well. From children who have prostheses, to veterans who lost a limb fighting in a war, to one little girl who didn't want to wear a hearing aid until she met Winter, people see how Winter has learned to adapt and are inspired by her story.

With the help of Kevin Carroll, Winter is also sharing her prosthetic technology. After creating the silicone gel for her sleeve, Kevin realized that the same material that made it more comfortable for Winter to wear her prosthetic tail could help people who wear prostheses, too. Kevin put the gel to the test on a veteran of the Iraq war who was having difficulty with his **artificial** legs. The silicone gel created an extra cushion that helped reduce the veteran's discomfort. It was a big breakthrough, making life a little easier for people needing prostheses.

Special guests present Winter with her birthday cake!



Winter may have lost her family, her home, and eventually her tail, but she found a new home and family at the Clearwater Marine Aquarium. She found Panama, Abby, and the vets, trainers, and volunteers who take care of her on a daily basis. With the help of all of these people, she also has a new tail. Through these changes, one thing has stayed the same: Winter's uplifting spirit and her resilience have helped her adjust and make the most of every situation.

And her story is far from over. She is still learning all of the things she can do with her special tail, and her trainers and prosthetic designers are still learning how they can help her even more. Every step of the way, they will need to be open to new ideas and be willing to try different solutions. Their shared goal is to help Winter live a long, healthy, and happy life.

As for Winter, she seems ready for any new challenge. As champion, inspiration, and friend, Winter is one little dolphin who gives people hope and shows us that anything is possible.

STOP AND CHECK

Summarize How has Winter affected the lives of others? The strategy Summarize may help you.