Interview



A Mermaid's Tale Linden Wolbert

A professional mermaid talks about getting started, details of constructing her tail, and her joy in bringing out the child in everyone.

How did the idea of becoming a mermaid come about?

I had no idea that I could or would become a mermaid when I was younger, or even when I was in college. I grew up in Pennsylvania, and very landlocked, but I loved the water from a young age. I loved to swim, and I was obsessed with Jacques Cousteau. But the world of the oceans and the underwater realm felt so out of reach. My only conduit for seeing or reaching the underwater world was television, or the rare trips to the New Jersey shore or Ocean City in Maryland. They had to tear me away from the beach because I was just obsessed. I also looked at nature guides and learned of all the tropical fish that I had never seen before.

That's when I decided that I really wanted to make underwater films. I thought this would be the coolest thing because that's how I was in touch with the underwater world as a young person. I chose to go Emerson College in Boston and double



Mermaid Linden. Photo: @reynosophotography

major in film and science. I wanted to marry those two passions of science and media and create underwater wildlife documentaries. I took every single class in the science department, and sometimes went on field trips even though I had already been on them. I ended up coming out to Los Angeles in the final semester of my senior year, for a residential internship program. Students can experience something in the LA film or television market at no risk as an intern, and hopefully get their foot in the door and stay.

It worked, and I stayed. I interned at a very small production company that had done some wildlife related stuff, but they went more toward reality so I didn't remain there. I ended up taking the job as Residence Director for the program upon graduating. It was a great way to have a good salary and pay off the crazy student loans that I had accrued over the past four years.

That's when I started scuba diving for the first time. I saved up my "sand dollars" and I became a certified scuba diver. I swam every moment I wasn't working. I also found out about the sport of freediving, which is breath-hold diving for depth and distance, and that's where the whole mermaid thing really was born. I was still working at Emerson, and was invited to go film an underwater documentary as an underwater camera person in the Cayman Islands in 2005. I saw people there using monofins, which are single-bladed fins with two foot pockets, and you swim like a mermaid or a dolphin.



I thought it was one of the most beautiful thing the way these men and women were swimming, and diving in to the abyss and disappearing down a line. One of the competitors who had the same shoe size as me let me try her monofin. I flew through the water. At that moment, I felt this incredible sense of power and oneness with the water. It's one of those quasi-spiritual moments where you just know that there's something in this. That's when I realized that I should really be a mermaid, and I've never looked back since

What about being a mermaid attracted you and how did that fit in with your film and science background.?

I wanted to find a way to give back or pay-forward in the way that I had received access to the oceans as a child. I wanted to appeal to children through the underwater documentaries I was dreaming of creating. When I realized that, oh my gosh, this fin turns me into a mermaid! What if I *became* a mermaid and educated kids about the oceans through this amazing vehicle? It's much more interesting than some talking head or a normal documentary. What if presented this scientific information in a very cool, fun, memorable way that appeals to children, and that is fun and has fantasy. And that was it.

When I came home from Grand Cayman, I knew that I couldn't stay in my job, so I put in my notice and my parents graciously permitted me to move into a room above the garage at their house that

didn't even have plumbing, a room we called "the hut."

Almost immediately, I started getting booked to do underwater modeling work with PADI, the Professional Association of Diving Instructors, the world's largest scuba agency. I got a passport for the first time to go to Grand Cayman. Now my schedule started filling rapidly, and I was traveling all over the world. I swam in cold waters, warm waters, tropical waters, temperate waters, and really honed in on my scuba skills

I also started
learning more and
more about
freediving, and
thought that I really
needed to create a
mermaid tail for myself.
After I stopped traveling like
crazy, I mentioned to a few of
my friends that I was thinking about
creating my own mermaid tail from a
monofin I had purchased and neoprene
wetsuit material

At that point, a friend from Emerson put me in touch with Alan Holt. He said that Alan wanted to shoot an underwater music video, and I was the only person he knew who could help him with this. Maybe I could give him some advice, or shoot it for him. I went in to this meeting thinking I'm helping Alan with underwater production

services, but he told me that he's not really a music video director or producer, He's a special effects artist. I asked him what that meant, and he told me that he made stuff for Hollywood, like costumes.

I told him that I wanted a mermaid tail and explained my idea for creating one. We put our heads together and created the cocktail napkin sketches that eventually

became what I call my "baby," my first-born mermaid tail. That first tail ended up weighing 30 lbs of silicone, and took seven months to build through blood, sweat, and tears. It was the hardest thing, to this day, that I ever created – it was crazy!

We worked on it dayin and day-out. Alan was
working full-time during the
day on *Terminator: Salvation*, but
he'd come over in the evenings and
on weekends to work with me on this
mermaid tail project. I had no idea what I
was getting into, but I learned so much by
the time we were done.

What parts did you work on, and what did you learn?

I worked on everything. The only thing I didn't physically do myself is mold my own legs. I'm a very participatory mermaid, and I like to be hands-on with things. Alan very sweetly permitted me to do everything



Alan Holt makes plaster cast of Linden's lower body.

with him, and taught me as we went along. It was an amazing experience.

It started off with a molded cast of my body from my waist down to my feet and created a duplicate of my legs in fiberglass. Then we got a ton of clay, piled it on to this version of my legs and proceeded to sculpt every single scale, inspired by real fish that I searched for online. I wanted to be very sleek, very hydro-dynamic, but very simple, beautiful, and unique. I don't know how

many scales are on this tail, but hand-sculpting was taking forever. We eventually created a template that we traced and created free-hand. It's imperfect, just like a fish.

I designed the crescent shape of the fluke. Most mermaids have a dolphin fluke or whale tail fluke shape. When you think about the shape of a mermaid tail, it's that shape. I wanted to be different. Even if you just saw my silhouette, you'd know that's Mermaid Linden. It's

a crescent because the fastest fish in the world have that shape of fluke, and I wanted to have speed. I wanted it to be a functional,



Linden wanted her tail to have a unique crescent shaped fluke for speed.

beautiful, resilient, mermaid tail, and we created just that.

Were you guys concerned about weight at the time, or just getting it built?

We were more concerned about buoyancy than weight. We did tests, and thought that it would be much more negatively buoyant in the water than it turned out to be. Tail 1.0 was lined with 3mm neoprene wetsuit material, which is buoyant – it's rubber with little bubbles in it. On land, the tail would be very heavy, but in the water you just want it be neutral. You don't want it to float too much or you'll burn oxygen struggling to stay down.

We thought that the silicone, being more negatively buoyant, would balance out the neoprene. We did all our tests in my



Sculpting scale patterns into clay.



Pouring Bondo before adding fiberglass onto clay sculpting.

parent's swimming pool. Fresh water has a different salinity than salt water, which makes you float more. We factored in swimming mostly in fresh water because at that point, I wasn't sure how much I'd be diving in the ocean with it. It turns out that I did a lot of dives in the ocean and saltwater tanks, and it was too buoyant. I ended up having to wear lead weights taped to my legs inside the tail. It was pretty awful and truly a health hazard.

No one really understands the technical challenges you face as a mermaid. People just think I swim around and it's easy. But you have to be in peak physical condition, you have to be psychologically outfitted to dive to crazy depths with sharks around you, you have to have a costume that works, and fits, and functions, and isn't going to fall apart in the middle of a shoot. We ultimately created that.

We chose a tinbased silicone because it was very firm, it gave excellent propulsion with the fluke, and the silicone was very tough. We tinted the silicone with phthalo green (an almost fluorescent green color). and we used a siliconebased airbrush paint mixed with Pearl Ex metallic powder pigments. I chose my colors and Alan was excellent with his little

airbrush spray gun. I will never forget finishing painting, putting the thing on and swimming in the pool with it for the first

time. I cried, I celebrated, I nearly exploded into a million pieces I was so excited. It took us over seven months to get this thing made, and no one had any idea what we had gone through.

After we sculpted all that clay, we needed to make a fiberglass mold of each side at a time, starting with the front. The clay was perfect: Alan shined it, sprayed it with a special spray, smoothed it out, and it was just gorgeous. It was so weird to pour Bondo and

put fiberglass all over it and cover this piece of artwork. Then we had this negative mold that was amazing, and Alan was just amazing too.

How much did Tail 1.0 cost to make?

With time, materials, and labor, it was like US\$20K. Silicone, tons of materials, feeding several people during work, and hard labor for seven months straight isn't cheap. It was really a labor of love, and Alan really was dedicated to this project. The care that he put into it was admirable, considering that I had been a perfect stranger before we really began the process.

How does the tail stay on your lower body when you put it on, and how do you actually put such a thing on?



Linden with finished fiberglass negative mold and body cast.



Above: Pouring phthalo green tinted silicone. **Below**: Halves of mold bolted together, during silicone pour.



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Tail 1.0 was lined with neoprene, so it was easy to slide into. It was fitted to my body because it was molded from my body, so I really had to shimmy to put it on. The most challenging part, and the downfall of Tail 1.0, is that we had to add a clip at the top of the tail. We thought we'd have a zipper, but that didn't really work out. We made flubs all along the way, had changes of plan, and things didn't work the way we imagined. We thought the silicone would be rigid enough, and that it would stay taut on my waist, but that was not the case. Water came in and it ballooned out, it was a nightmare. So what were we to do?

Alan and I were sitting there practically in tears, when my mom came up to say that there is a solution. We ended using silicon to attach a tough 3 inch tapestry fabric band, that we got at Joann's, inside the waistline which made it more rigid. Then we sewed a large hook onto the inside of that which clipped at my waist, on the side of my hip. While it worked, it never fit my waist the way I wanted it to. There was always a little gap there. Also, the little clasps dug into my hip bone and left permanent bruises for years. It was painful and uncomfortable.

We placed a competition monofin from the Ukraine inside the fin with the straps off to open up the foot pockets. We also took the fiberglass off the blade and replaced it with polycarbonate, which is much more resilient. Alan did research to find an epoxy that would adhere the polycarbonate to this tin-based silicone. We also wanted the fluke



Alan and Linden lift silicone tail from the fiberglass mold.



Linden inspects fluke details in latex tail.

to be more translucent, but that didn't work out. The silicone was more opaque than we expected. The story goes on and on. This tail was insane to make.

Why did you finally retire Tail 1.0?

Tail 1.0 just got old. We retired it in 2015. We also created a foam "land tail" from the same mold that I wore for land-based performances at the LA county fair. That was it's own challenge because decontaminating the mold from the silicone injection was challenging and we had a couple of failures initially. Mark Viniello was the specialist who did the foam run for us, and he did an amazing job once we had really cleaned it out. Then Alan helped me paint that in the same colors as the first one.

Swimming Tail 2.0 was created in 2015, ten years after Tail 1.0. Unfortunately, Alan was overseas doing a special effects

shoot, so he referred me to <u>Vincent Van Dyke</u>. Vincent had a whole team of people, which was a luxury. I showed up and said "this is what I want," and he told me to come back in three days at a certain time.

Tail 2.0 was also very challenging. Vincent is an incredibly well experienced special effects guy, and he confessed at the end of Tail 2.0 that it was one of the most challenging projects that he had ever done. He was working with old technology and an old mold, but using a new type of

silicone. Instead of tin-based silicone, we used a platinum based silicone from Smooth-On that would allow for more flexibility. The idea was to create a very elastic, fitted waistline because I could not bear to have clasps digging into my hips any more. He and his team worked tirelessly to make it work, and did an amazing job.

At 46 lbs, Tail 2.0 is heavier than Tail 1.0, and it really is a burden to travel with. I pack it in a big brass drum case that is expensive ship by air, and TSA doesn't know what to think about it. I get some interesting looks and questions at the airport!



Alan and Linden painting the tail using Pearl Ex metallic powder pigments.

Tail 2.0 is heavier because the layer of what was once light-weight neoprene has been replaced with heavier silicone. We also had to ensure that the tail would not fall off because it didn't have a clasp at the waistline that relied on my hips to hold it up. With Tail 2.0, they molded the lower part of my legs from mid-shin down to my ankle, and created two leg tubes that my feet have to slide into to ensure it stays on. In the end it proved to be superfluous, and I had to develop a system for getting out of the tail because it sucks me in so much

Do you need someone to help you get into and out of it?

I can get into it by myself, but I cannot get out by myself. To put it on, I use a blend of conditioner and water and slide right in. To get out, I need someone to hold the fluke while I heave myself out of the tail. I wear neoprene socks over the top of a pair of pantyhose to make it easier to get out of. The neoprene socks stay suctioned in and the pantyhose slide out of the neoprene socks. So although they went over the top



Linden is happy that her tail works.



Linden takes her mermaid tail for a swim.

with it, kudos to the Vincent Van Dyke team because the tail stays on.

We're hoping that I'll eventually have a budget for Tail 3.0, where we upgrade what we had to work with on Tail 2.0.

What would you do for Tail 3.0?

Vincent has a vision in his head, and I really love everything about it, but the thing I most need to figure out is why, after about two hours, my feet go into excruciating pain around my heels with both Tail 1.0 and Tail 2.0. It might be because I'm on ballet pointe for hours at a time, with great resistance as I kick through the water. I think that it actually cuts off the blood circulation to my heels and eventually, they start throbbing with pain. It's awful because I'll be siting in a pool with 20 kids smiling and I'm in

terrible pain. It's all I can do not to break into tears, but I have to keep my smiling disposition.

So for Tail 3.0, I want to figure out whether something can be done to relieve the pressure, or whether it is inevitable because you're on ballet pointe and you just have to set a time limit for it.

The tail must take a real beating when you transport it and wear it in the water What do you do to maintain Tail 1.0 and Tail 2.0?

Tail 1.0 has become a closet fixture. It got to the point where the silicone was starting to crack. While it's not exactly a full wardrobe malfunction, it would be horrific to me if I'm in the water with children and anything happens so they don't believe that



Fluke comes out of the water as Linden takes a dives

I'm real. We constructed that tail to hide my legs, hide my heels. When you have a crack form in the silicone that starts spreading... that's something I can't let happen.

Tail 1.0 and Tail 2.0 use the same repair technique: <u>Sil-Poxy</u>, the most expensive tube of non-toothpaste you'll ever buy. It's a universal silicone that's used for all sorts of applications and bonds to almost anything. It's this miracle product, and they charge you for that miracle. It's about US\$32 for a tube the size of a toothpaste tube.

Sil-Poxy is clear, so I can patch with it by mixing in the same powder pigments that were originally used for the tail. You'll see me with my gloves, my Sil-Poxy tube, and a little syringe to get into the crack if I have a crack or a hole form. The tail needs maintenance after every single booking. Pools are a nightmare: they're made out of concrete and are veryabrasive. You're kicking, you're carrying kids around. Don't even get me started on what beaches and sand do to my paint job!.

Unfortunately, we learned a hard lesson in Tail 2.0. I provided polycarbonate for the monofin for the fluke, and Vincent's team had the idea to physically bond it by drilling holes through it and then injecting the silicone to encase it. The problem is that the polycarbonate for Tail 2.0 was thinner than what we used in Tail 1.0. The fluke in Tail 1.0 was super-powerful. Tail 2.0 is much more flexible not only because we used this platinum based silicone that was much softer, but also the polycarbonate was much thinner as well and had holes drilled in it.

I was doing a shoot for *Shark Week* in the Bahamas in 2015, and the fluke cracked inside of the silicone at the end of the shoot. I was devastated. It came home in its drum case and got cracked further in transit. Vincent and his team had to open up the tail and completely replace the fluke. At that point, they did not drill any holes in the polycarbonate: they just shut it and hoped that it would be OK. It cracked again, so we are now on our third polycarbonate blade inside of Tail 2.0. We finally got a really thick grade, so hopefully it be the last time.

By the way, not only does the tail take a beating, but so does my body. Moving a 46 lb silicone appendage through the water is no small feat. My core strength is exceptional but I get a lot of back pain. When I first started and for the first few years, I was a cripple for the next few days after every event as my body was building up these muscles that now are just part of my musculature.

What about makeup? Ester Williams turned to Max Factor to create special underwater makeup. What do you use?

I've always worn minimal makeup, so when I wear mermaid makeup, I always feel like I have tons of stuff caked on my face. Early in my career I was more conservative with my makeup, and people would always comment what a "natural beauty" I was, while I always felt like I had put so much on.

The only water-proof thing I use is mascara. Everything else is normal makeup. The trick I learned is that you just don't



Linden uses ordinary makeup with special mascara.



Linden makes sure each child gets individual attention.

touch it. You cannot rub your face or touch your face. I don't even use a setting spray or anything special. I do put a heavier coat of lip gloss over my lipstick, which makes it more water resistant, but that's about it.

There's only one type of mascara that really works, and I've tried a lot of them. I use L'Oreal Voluminous Waterproof Mascara in Black Brown. Other colors of the same brand and type will run.

When you interact with adults and kids, do you have a fixed routine like the princesses at Disneyland, or is it different each time?

It really is different each time. When I put on my mermaid tail, my mermaid persona is me. I'm naturally very energetic, very bubbly, and very talkative. I love

interacting with people as a mermaid because everyone is smiling. It's my favorite part of my job. No matter who I look at, they're smiling. It's the coolest thing in the world!

I love doing the actual in-water performing too. It's very hard work, very physically taxing, and very emotionally taxing too. I'll be in the pool with anywhere from just five to as many as fifty kids at one party. My job is to make every child feel special, and have a moment where they are heard. They get to ask a question, to have an exchange, to take a picture, to swim with me. I always make sure every child gets to swim with me alone around the pool.

Since I was the first mermaid in Hollywood, and in most of the country for

that matter, I've gained an amazing clientèle base. I do play dates with celebrity children, I do high end night time events with alfresco parties, I go to swim in pools at oceanside resorts. I also do wishes with Make a Wish and Miracles for Kids. I love to build relationships with the kids. Some of them even write me letters and I send "sea-snail mail" back to them. I've experience so much joy, and I'm just so fulfilled in my work.

Linden Wolbert shares the life aquatic with humans as a professional mermaid "edutainer." Linden graduated from Emerson College with a BA in Film and Science, She is a PADI Master SCUBA Diver, AIDA International Freediving Judge and serves on the board of Reef Check Worldwide. She can hold her breath for over 5 minutes and dive to 115 feet. Her passion is reaching children with her message of ocean conservation, education and exploration. In 2013, Mermaid Linden cobranded with Body Glove International to create the 'Mermaid Linden' line of swim products. Linden has been featured on Bloomberg Businessweek, CNBC, Huff Post, Buzzfeed, Fortune, NPR, Fast Company, Shark Week, ABC 20/20, The Today Show, Univision, Inside Edition, AOL, MAXIM, UK Daily Mail, MSN and Entertainment Weekly among others. Learn more at her Mermaids in Motion website, and follow her on Instagram at @MermaidLinden.