



Meghan Garrity is the Founder of SHRED, Surfers Helping Reduce Environmental Damage. This young entrepreneur and environmentalist is committed to doing her part to make a difference. Based in Southern California, this lifelong surfer and high school student hopes to inspire surfers and others alike to protect our vulnerable oceans and coastline.

CHAPTER 16.

Shredding For The Environment

MEGHAN GARRITY

I am in my favourite surf spot in Southern California, Lower Trestles. Surfers come from all over the world to experience “Lowers”, as the locals call it. Just a few months ago Carissa “Riss” Moore won her fifth World Surf League title here and, a couple of times, I have been lucky (and honoured) to see her and other legends in the “line-up” just surfing with us normal folk. I just about died the day I saw my idol, Lakey Peterson take a right break, cut back and then head down the line for what seemed like an eternity. I had met her last August in Laguna Beach and was so nervous I could hardly speak. Fortunately, my dad took our picture and she signed one of my surfboards so I can enjoy the memory forever.

Lowers is always crowded with intimidating “groms” (kid surfers) and highly advanced surfers. Everyone in the lineup is hunting for the next wave. The one mile+ walk from the nearest parking never seems to deter the thrill seekers. The area is actually part of the massive US Marine Corps Base known as Camp Pendleton. By massive, I mean approximately the size of Rhode Island. The various beaches in the area were off limits to civilians until 1971, although many a brave surfer risked arrest in their quest to experience the amazing waves which naturally form here. But this morning is different. The Thanksgiving Day holiday seems to have pulled many people away from this pristine location. I am grateful for this and for the fact that the marines now allow us to enjoy this surfing paradise.

Even better than the sparse crowd is the fact that the “big four” (wave height, swell direction, wind and tide) are all aligned to be the most favorable conditions I have surfed since I was a grom learning at El Porto. Most of the online surf sites were forecasting less than ideal conditions, but mother nature changed her mind and I am in for a real treat today. The swell coming from the South/Southwest direction has created three to five foot waves, perfect for my skill level and appetite. It’s exactly low tide and the water looks clean and glassy.

What little wind there is seems to be coming from the east forming what we call off-shore breezes which can help shape the waves. I even see a bunch of great left breaks which are perfect since I surf “goofy footed” (right foot on the front of the surfboard).

As I finish my stretching routine, I can feel the warmth of the sun waking up over my shoulders. Its light begins to glisten on the beautiful Pacific Ocean in front of me and I unconsciously take a deep breath and feel the beauty of my surroundings. I think about the exciting adventure before me and my heart begins beating harder. Today is going to be epic! To use a surfing term, I am “stoked”!

Surfing As A Teacher

I wish everyday could be like the one I just described. Being a teenager and a high school student does not allow me the freedom to surf every day, or even nearly as much as I would like. Also, most days the surf conditions are not this ideal. Often there is too much wind and it is blowing onshore. The swell doesn't always come from the right direction. I can't always surf low tides. And sometimes there are simply no waves! Plus, as great as my 4/3 wetsuit is, my face, hands, feet, and brain still freeze in the icy winter water (I don't like surfing with booties).

But the worst days of surfing are usually better than any day that I am not surfing. Sitting on my board in the lineup anticipating the next good wave, I focus on gratitude. I try to take in the beauty and power of this ocean. I feel the cold, often numbing temperature of the Pacific. I taste the salt from the water I swallowed on my last ride. I hear the conversations of my fellow surfers and the high-pitched mewling of the seagulls sharing the water with us. It puts me in an amazing mood!

My dad has always been really supportive of my surfing and he says it is a sort of natural classroom for success and happiness in life. I didn't really understand what he meant when I was young, but now that I am older I realize that surfing has helped me develop several valuable qualities which have helped me in other areas of my life. These include:

- **Patience:** The years it has taken me to become a good surfer and will the waves ever come today?
- **Confidence:** Just because I am a teenage girl, I'm not going to let that old dude snake my wave!

- Resilience: I just got pounded and held under on the last wave; but I'm gonna own the next wave.
- Adaptability: I often have to try three or four break areas to find one that is firing.
- Courage: Sometimes you just have to go for the six foot wave that is towering over you
- Humility: The ocean, the tides, the winds are immensely powerful and should always be respected

The other thing that surfing has helped me develop is an appreciation of the ocean and its ecosystems. Our oceans, shorelines and the various life forms that exist within and around them are vulnerable. There are so many issues to be concerned with including rising sea temperatures, pollution and water contamination, overfishing and deep-water drilling. There are some great organizations working to combat these issues and I am hopeful they will continue to have a positive impact.

SHRED:

Over the last several years, I have wondered what I can do, as a young surfer, to improve our ocean environment. I have done hours of research and talked to environmental scientists and other surfers. Along the way, I have become passionate about educating and inspiring my fellow surfers to make a positive difference in the quality and sustainability of our oceans, marine life, and beaches. Earlier this year, I founded SHRED to help me do this in a more organized and powerful way. SHRED stands for Surfers Helping Reduce Environmental Damage. It is also a really popular surfing term used to describe when a surfer has an amazing ride and really shows skill. I always hope to “shred” a few times in a day of surfing and so the name is just a perfect fit marrying my passions for surfing and the environment.

I didn't know exactly what SHRED would become when I created the platform and it is still evolving. The idea is to make the biggest impact that I can, recognizing the constraints of my age, my life and educational responsibilities, my limited scope (I'm not a famous or professional surfer) and my lack of financial resources. SHRED is basically my response to the question I asked myself: “What can I do right now to make a meaningful difference?”.

At SHRED we focus on five key areas:

1. Plastics
2. Sunscreen
3. Surfboard Wax
4. Surfboards
5. Wetsuits

Plastics:

Most people are aware that plastics are not biodegradable and generally bad for the environment if not disposed of properly or recycled. Plastics present an especially dangerous problem for the ocean because as they are exposed to salt water, the sun and waves they break into smaller pieces called microplastics. These can be virtually invisible and easily digested by fish and other sea life.

It is estimated that there are over 200 million metric tons of plastics circulating throughout our oceans and that roughly another ten million tons finds its way into the oceans every year. By and large, the plastic pollution problem is a human problem and we can all do our part to reverse the negative impact on our oceans and coastline. Fortunately, many people are waking up to this catastrophe and great organizations like 4Ocean and The Ocean Conservancy are making a huge impact. We hope that by raising awareness within the surfing community, each individual can make a difference every time they surf.

Sunscreen:

Ever since I was a child my mom made sure I put sunscreen on and it has become a habit for me to apply it a few minutes before surfing. But, it wasn't until I took environmental science in school that I learned that many of the ingredients in the popular sunscreens are damaging to the environment, especially the ocean. Chemicals like oxybenzone, octinoxate and a few others are bad for beach and marine wildlife and devastating for coral reefs. Since sunscreens eventually wash off, they easily circulate in the water meaning the dangerous chemicals can spread for miles.

There is no doubt that protecting our skin from the sun's harmful rays is extremely important to surfers since the sun we face is magnified by the mirror effect of the ocean water. The best protection is coverage from wetsuits and rash guards, but in Southern California we want to enjoy the summer days and surfing in just a swimsuit is

a welcome reprieve from those winter days. The good news is that there are many sunscreens that do not include harmful chemicals, yet are still very effective. They tend to have mineral-based ingredients like zinc oxide and titanium oxide.

Surfboard Wax:

As we progress as surfers, we develop our own favorite types and styles of wax for our boards. The wax is really important for balance and grip and it is hard to surf without it. Of course, many popular and widely sold waxes are made from petrochemicals. Ultimately, these seep into the water and can be very harmful to the ocean ecosystem and can also pollute beaches. There are some environmentally friendly alternatives which use more organic ingredients. I have also experimented with making my own wax which has combined my interest in science and been a fun exercise. We hope that surfers can either buy surf wax made from environmentally friendly ingredients or try their hand at making their own.

Surfboards:

Other than an ocean with waves, the only essential item we need to surf is the board. As the sport has gained popularity, surfboard manufacturing and designing has become a lucrative industry. Avid surfers don't just have one board, but rather several to meet the different wave and swell conditions they encounter. There are shortboards, longboards, funboards, and a few others for the more advanced. We surfers tend to build a collection of boards over the years, which can take up a lot of space (sorry mom!).

Today most of these lightweight, high performance surfboards are made with fiberglass, epoxy, polyester resin and polyurethane. Sadly, boards made with these compounds are not biodegradable and not recyclable. There are environmentally friendly boards, but often they are more expensive than other boards. We encourage those surfers who can, to buy these boards, but buying used boards or giving and trading boards is also great stewardship.

Wetsuits:

Similar to surfboards, most wetsuits are made with non-biodegradable products like neoprene. And, in places like Southern California wetsuits, often a few of different thickness, are a must to surf from November through April or May. There are some environmentally

friendly wetsuits available made from alternative to neoprene. These tend to be made from plant-based, chlorine-free ingredients. And, some inspiring people have even developed wetsuits made partially from recycled plastics. If surfers can afford these wetsuits, they are a great way to reduce environmental damage.

My Vision For SHRED:

Most surfers naturally love the environment and want to be eco-friendly and do the right thing. They easily understand the negative effects of plastics, but often haven't thought about their boards, wetsuits, waxes and sunscreen. The SHRED platform is a great way to inform and educate them, without judging or shaming. We are not striving for perfection, but rather gradual changes of habits and choices. If each surfer makes one or two changes in these areas, we will actually make a huge impact in reducing current and future damage to our environment.

Since launching, SHRED has connected with surfers and environmentalists in over fifty countries and on six continents. This is a tribute to the power and reach of social media tools such as Instagram, TikTok and also a testament to the desire and willingness of so many to join in this meaningful movement. Many followers who don't surf have committed to helping reduce plastic pollution in their local area and switching to marine and reef friendly sunscreen products.

The SHRED mission is to get surfers to adopt eco-friendly habits in as many of the five areas as possible. Those include:

- reducing/eliminating use of plastic; collection of plastic garbage left by others
- using reef safe sunscreens which do not have oxybenzone, octinoxate, and other harmful chemicals
- buying non-toxic, biodegradable surf wax or making their own eco-friendly surf wax
- buying used surfboards, or purchasing eco-friendly, sustainable surfboards if at all possible
- purchasing eco-friendly, sustainable wetsuits if at all possible, or keeping the ones they have longer

An ideal start would be for a surfer to drink their water or coffee out of a reusable bottle and bring a bag to collect any plastics they can easily grab from the beach or the water. If they apply one of the

many great sunscreens which don't contain oxybenzone, octinoxate and other harmful chemicals that would also be a big step in the right direction. A next great step would be purchasing wax not made from petroleum products or even making their own with natural, organic ingredients.

For those surfers really committed to embracing SHRED principles, using surfboards and wetsuits which are eco-friendly would be awesome. Since those are not affordable for all, we understand and encourage trading, sharing, buying used surfboards and wetsuits, if practical. The more surfers embracing this approach, the larger the market for these ocean friendly products will become. Ultimately leading to wider availability and, perhaps lower prices.

Reflection:

I have been blessed to grow up in Southern California with its many beautiful beaches and excellent surfing locations. Thankfully, my family has supported me in developing my passion for surfing and I am grateful for the many experiences and lessons the sport has taught me. Learning about the environmental impacts of plastics, sunscreens, surfboards, wetsuits and surfboard wax has been a bit sad and scary. However, starting SHRED and seeing the difference we can make through education and behavior change has been humbling and empowering. I am excited about continuing and growing the movement and know for a fact that we surfers will help reduce environmental damage. And that idea has me really stoked!