



Seeing The Ocean In A New Way

Cruz Erdmann, Young Wildlife Photographer 2019
New Zealand

☀ Call to Action

Natural beauty and life is all around us! Wherever you are, grab a camera and capture natural beauty. Inspire others to protect the environment. You can follow Cruz on Instagram (@cruzerdmann).

☀ Values

- Environmentalism
- Creativity
- Activism
- Compassion

☀ Lessons Learned

Share your perspectives on the world with others. You might have just the right words, or images, to motivate others to start fighting for change.

We are intimately connected to our environment: our interactions with the ecosystems surrounding us affect not only the environment, but ourselves. By caring for the Earth, we are caring for each other too.

Beautiful images of our natural world can inspire change.

True, sustainable change is born from compassion. Be compassionate toward every living creature, and be passionate about your activism.

Cruz Erdmann didn't plan to become a wildlife photographer.

But when he was 10 years old, on one of the many diving trips he took with his dad, his dad gave him his old underwater camera. With that camera, Cruz started documenting the marine wildlife that had fascinated him his entire life. Barely two years later, he won the Young Wildlife Photographer of the Year award, organized by the Natural History Museum of London. He even got to speak at the World Economic Forum, where he presented his photography and his vision: using the power of the visual image to give the creatures living underwater a face for those who do not have the chance to see them any other way. Cruz believes that we have become so disconnected from our oceans that we no longer understand the negative consequences of our consumerism. Overfishing, pollution, and habitat destruction may very well destroy the delicate ecosystems that support marine wildlife. With his photography, Cruz wants to raise global awareness of the importance of these issues.

☀ Language Arts

Find out what endangered species there are in your area.

Then create a series of Instagram posts about 3-5 of these species using your own original photographs or drawings (if possible).

In your posts, offer information about these species: What makes them unique? What is their importance for the environment? What threats are they facing? How can we help?

Go on a nature walk, or visit a nearby body of water. (Put your electronic devices away while you do this!) Pay close attention to your surroundings. Listen to the sounds around you. Watch the animals, look at the trees, notice the smells. Observe in silence, and take notes. Then write an essay reflecting on what it felt like to pay

such close attention to nature. What surprised you about the experience? Why? Do you believe experiencing nature without distractions is beneficial? If so, why, and how is it? Do you believe it would motivate people to become more involved in environmental causes if they had more opportunities to observe nature? How can such opportunities be created?

Create a series of Tik Tok videos in which you discuss the importance of preserving our oceans, rivers, and waterways.

STEM Activities

Optical engineers need to understand how light rays work in order to design and create devices such as cameras, lasers, and fiber optics. In this activity, students will construct their own pinhole cameras to observe the behavior of light. They will learn how light rays travel in straight lines in the processing of images, and use light rays to create a photographic image. [Pinhole camera activity](#)¹.

In this lesson, students learn about recent scientific developments by viewing the New York Times slide show “Science in Pictures.”² They then create their own slide shows documenting the research, discoveries, and ideas they are learning about in science class. [Photographing scientific discoveries activity](#)³.

Cruz uses photography to raise awareness of the negative impacts people are having on our oceans, including through overfishing. For this activity, students will design and conduct research to discover firsthand what type of fish is being sold in their community, where this fish comes from, and whether that fish is an overfished species. They will then choose a method of presenting their findings to their communities to raise awareness of seafood choices available from sustainable fisheries. [Know the Fish activity](#)⁴.

Sustainability Innovations

In addition to shedding light on sustainable issues through photography, it is important to use sustainable practices in the photographic process. [Debris Free Oceans](#)⁵ highlights ways to use sustainable photographic processes and techniques, and ways for photographers to reduce waste.

[David Attenborough’s Great Barrier Reef](#)⁶ is one of his most impactful projects. This project explains the importance of Australia’s Great Barrier Reef, and gives viewers the opportunity to take a virtual tour and learn about why it is essential to save it. The success of this project has been heavily reliant on individuals like Cruz, who do not necessarily get credit for having taken these images. But they are shaping the views of people who cannot see the reef in person, and helping them to understand why it is important.

Cruz began his photography in Indonesia as a curious young student who realized that this could be his way of sharing the importance of oceans to the rest of the world. [The IndoOcean Project](#)⁷ is a marine research and ocean conservation project that is aligned with Cruz’s goals, by hosting international and local marine conservation projects in Indonesia.

Sustainability Career Pathways

Nature Photographer. It isn’t easy to make a career out of a passion for photography, but if you love taking photographs either above or below water, you might be able to make a career as a freelance photographer, perhaps supplemented by teaching, and/or other types of commercial photography. The first step is learning to [understand what makes a good photograph](#)⁸; it’s also important to learn about [how the industry works](#)⁹.

Photojournalist. Another way to make a career out of a passion for photography is to become a photojournalist. Especially when combined with strong photo editing and storytelling skills, one can make a career in photojournalism. Here is a [direct account from several well-known photojournalists¹⁰](#) about this career. And here is a [list of some resources for budding photojournalists¹¹](#).

Oceanographer. An oceanographer is a scientist who studies the ocean, and helps to protect, conserve, and restore marine environments. Oceanographers can study ocean life, chemicals, fluid dynamics and physics, or even the geology of the oceans' floors. Considering that oceans are the true "lungs" of the planet (producing up to 80 percent of the world's oxygen), and the fact that climate change deeply threatens our oceans both through global warming and acidification, the world certainly needs more oceanographers. [For more on this field and its vast diversity, visit here¹²](#).

1 https://www.teachengineering.org/activities/view/cub_soundandlight_lesson8_activity1

2 <https://www.nytimes.com/section/science>

3 <https://learning.blogs.nytimes.com/2009/11/25/science-class-in-pictures-photographing-scientific-discoveries/>

4 https://www.dropbox.com/s/su7kc6gl61zppap2/KNOW_the_Fish_WETA.pdf?dl=0

5 <https://debrisfreeoceans.org/sustainability-and-photography>

6 https://attenboroughsreef.com/understanding_the_reef.php

7 <https://indooceanproject.org/>

8 <https://digital-photography-school.com/9-things-need-know-become-nature-photographer/>

9 <https://www.masterclass.com/articles/how-to-become-a-nature-photographer#how-to-become-a-nature-photographer>

10 <https://www.format.com/magazine/resources/photography/how-to-become-a-photojournalist-guide>

11 <https://www.theartcareerproject.com/become/photojournalist/>

12 <https://www.environmentalscience.org/career/oceanographer>

