WRECKS OF L.A.

3 Great Dives

RETURN OF AN ICON:
Diving with Giant Black Sea Bass

DIVING FRESHWATER:
Littlerock Dam

Abalone: How to find a 10' TROPHY

FULL FACE MASKS FOR DIVING: How and Why?
David Campbell
Founder of MarineBio.org

Interview by Michael Bear
Photos courtesy David Campbell and MarineBio.org

David Campbell is a graduate of Texas A&M (’93), a licensed Professional Consulting Environmental Geoscientist, and a Project Manager. David grew up reading and watching Jacques-Yves Cousteau and National Geographic’s books/films while traveling to more than 21 countries before the age of 14. He has been studying animals and our planet as long as he can remember. He is a lifelong fan of Jacques-Yves Cousteau, Dr. Edward O. Wilson, David Attenborough, Dr. Elliot Norse, Dr. Jeremy Jackson, Dr. Carl Safina, Dr. Sylvia Earle, Philippe Cousteau, Animal Planet [Jeff Corwin, Steve Irwin, and especially the Blue Planet, Planet Earth, and Life series].
**MarineBio**

An avid scuba diver since 1981 and an underwater photographer/videographer, he dives whenever he can, and is certified with NASDS/PADI as an Advanced Open Water diver with additional experience/training in Enriched Air (Nitrox), Wrecks, Night Diving, Rescue, and Deep Diving. To date, with over 700 logged dives, he has dived off Australia, Bonaire, Fiji, Galapagos, Honduras, Indonesia, Malaysia, Egypt, Sri Lanka, Thailand, and of course, the USA (California, Florida, and the Gulf of Mexico.)

**Interview with David Campbell**

Q: How did MarineBio.org come about?

A: I started MarineBio back in 1998 as a site to basically share my love of marine life with the world. I’ve always loved the ocean and especially the life in it.

I learned to dive when I was 14 in Sri Lanka back in 1980. To this day, I have yet to see such sights underwater. Groupers as big as cars, moray eels swimming about, fish simply everywhere... I remember it like it was yesterday. The last I heard, the reefs there have been decimated by bleaching and civil war.

In 1998 I was a field environmental geologist and I also enjoyed building websites. The Web was new back then, and the creative possibilities, incredible wealth of online resources, and instant visitor feedback had me hooked.

I was living in Santa Barbara at the time and Jean-Michel Cousteau’s group had seen a few sites I had built and came by for a meeting [with me]... They were very enthusiastic and we started discussing timelines and expeditions when I stopped and asked about their budget. It turned out they were looking for the site to be done pro bono.

A few days later I started building MarineBio myself... and have spent nearly every day since making it what it is now.

Q: In your view, what is MarineBio.org?

A: That’s a tough one. It’s a lot of things now, I guess. I consider MarineBio not “mine” anymore, thanks to the amazing help I’ve received from countless volunteers and visitors, advisors, and members who’ve helped in just about every way imaginable.

In a nutshell, it’s an online volunteer-based marine conservation and marine life group that runs sites all about marine life and its conservation.

Q: Is it only for marine biologists?

A: The funny thing is that, despite our name, it never really was primarily for marine biologists. There is a huge difference between marine biologists and marine conservation biologists [as I’ve come to find out]. First of all, there are many more marine biologists. In fact, there are only a couple universities that I know of that even offer degrees in marine conservation biology. That field is simply that new. MarineBio is mainly for the general public, hopefully to...
help the majority of people see and learn about what lives in the ocean so that they will hopefully help protect it. I try to keep the wonder factor high so as to not depress our visitors, though it’s tough sometimes, especially now with global warming/ocean acidification, overfishing, and ocean pollution at all-time highs. We’ve explored so little of the ocean and new species are being discovered every year. We simply have to learn to manage life in the ocean soon for so many reasons.

Q. **What is your background? Are you a marine biologist yourself?**

A. I am currently a Senior Professional Environmental Geoscientist and advanced diver/underwater photographer with more than 700 logged dives off California, Florida, the Caribbean, the Red Sea, Sri Lanka, and SE Asia. I have a BS in geology from Texas A&M with about 40 hours of additional biology courses (including marine biology) as a minor.

I grew up watching and reading Jacques Cousteau and planned on being a marine biologist from a very early age. Since marine biology is usually a Master’s/PhD degree, I chose geology for my undergraduate degree because geology is the study of the entire planet (and also because my father is a well known geologist). Needless to say, invertebrate and vertebrate paleontology were my favorite courses.

In my opinion, geology should be taught in high school as only geology gives you a real sense of time and the incredibly complex and powerful forces at work on this tiny planet we call home.

Since then I’ve mainly had to work for a living, cleaning up the environment for industry up here on land, where I’ve been able to see firsthand the damage we’re capable of and the impacts we’re causing to our environment.

I’ve since read countless books on marine conservation and marine species and plan to try for a master’s in marine conservation that’s offered at Scripps in La Jolla soon.

Q. **Do you have an ‘ocean conservation ethic,’ and if, so what is it?**

A. Yes, and I believe Dr. Safina said it best when he said:

> “Extending a sea ethic would mean recognizing the ocean’s importance to the continued existence of life on our planet and to human futures. From this recognition would flow an appropriate sense of moral imperative, commitment, and urgency—urgency toward ending overfishing and wasteful by-catch and aggressively rebuilding depleted ocean wildlife populations, stabilizing human effects on world climate, slowing habitat destruction, stemming global transport and accidental introduction of “alien” species, curbing the flow of contaminants and trash, developing sustainable seafood farming, cultivating an informed approach to the seafood marketplace, and implementing networks of protected areas in the sea.”

And my personal view of animal life from countless interactions with them parallels the following quote by Henry Beston in 1928:

“We need another and a wiser and perhaps a more mystical concept of animals. Remote from universal nature, and living by complicated artifice, man in civilization surveys the creature through the glass of his knowledge and sees thereby a feather magnified and the whole image in distortion. We patronize them for their incompleteness, for their tragic fate of having taken form so far below ourselves. And therein we err, and greatly err. For the animal shall not be measured by man. In a world older and more complete than ours they move finished and complete, gifted with extensions of the senses we have lost or never attained, living by voices we shall never hear. They are not brethren, they are not underlings; they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendor and travail of the earth.”

Q. **Many marine scientists are concerned about the current ecological conditions of the ocean—are you optimistic or pessimistic?**

A. Another tough one. I vacillate between both almost daily. We, as a species, have the knowledge and the power to fix nearly anything. I’m optimistic because my three year old son is growing up fast, and I so badly want him to have a world full of life and wonder. I’m pessimistic because of what →
I’ve seen happening in politics and the media in the last 10 years (especially in the US). I’m pessimistic because I know what it's like to have your hands full with everyday life. I know what it feels like to think problems like global warming and overfishing should be handled by those in power, after all, they're the ones who are causing the problems. And I know how hard it is to know who to believe, especially these days.

What gets me up and moving though, is knowing that there are countless others out there who do know the truth about things and welcome skepticism. Facts based on evidence that are verifiable are the hand railing I use to help me wade through it all and seek out real solutions to our problems. MarineBio seeks to follow that course as well.

Q: We have all seen a lot in the media recently about sharks and the fact that many species are threatened. Do you think it's too late for some species, or is there still time to avert disaster?

A: I consider Jaws one of the all-time worst movies for exactly that reason. Pure fear mongering that has probably directly caused the death of millions of innocent sharks (I know, I know, they didn't mean to at the time...). And it has most likely kept millions of people from becoming scuba divers. Why is that important? Because I have yet to meet a diver who doesn't know firsthand how important marine conservation is. If only those movies could have been about killer mosquitoes. They might have helped prevent the death of millions of us instead.

The fact that many species of sharks are threatened is actually a very new issue. The thing about science many don't understand is that there are actually very few scientists out there. There are far more lawyers, doctors, and engineers. And it goes doubly so for marine biologists. And few marine biologists are actually involved in marine conservation. Most have to work hard for a living in academia, government agencies, or the fishing industry. By the time it was discovered that shark populations have been drastically reduced due to finning/overfishing, and as by-catch in nets and longlines, many areas had already been depleted of sharks altogether. Over 700 dives in twenty years and I’ve seen maybe a dozen sharks-total. And most of them were far off in the distance. Sharks have few young and are therefore very sensitive to overfishing. Their roles in ecosystems as top predators are also just beginning to be understood and the global finning industry is thought to be in the billions of dollars. On top of that, enforcing shark fishing rules is expensive and as long as the demand for fins is high, it will be a major fight to keep many shark species from going extinct.

As long as there are sufficient populations of any species left, it's not too late for them. We need to keep lowering demand for shark fins by educating everyone with the facts until [the demand is] gone, or at least sustainable. Did you know that there are probably thousands of restaurants that currently serve shark fin soup right here in the US? We should outlaw it here immediately to set an example.

Monk seals, the Vaquita, nearly all sea turtles, many whales, many corals, many rays and skates, too many seabirds, most groupers, seahorses, and at least 5 penguin species... all totaling at least 600 marine species, are also threatened with extinction. And those are only the ones we currently know about. We all have a lot of work to do because extinction is forever.

Q: What advice would you give to young people seeking to make marine biology a career?

A: Another tough one. On the one hand, I don't believe there could ever be too many marine biologists. It's a big ocean with lots of species and less than 1% of the ocean has actually been explored. And even less is protected. Ideally, I’d like half, at least, to become marine conservation biologists because of what we do know about marine life, we know even less about most of its conservation status. Take the beaked whales for instance. There are at least 16 species of beaked whales known, and yet we know almost nothing about their basic biology, let alone their conservation status. We could very easily be losing species right now without even knowing they ever existed. I consider learning all about the life on this planet not only a top priority for our species, but an essential one.

On the other hand, it's been very tough for marine biologists to find jobs. Really tough. Until jobs are created by the likes of the US Ocean Policy Task Force, agencies like NOAA, or private industry for marine biologists, the only jobs available will be the few in academia (teaching & research), agencies (like the
I believe everyone should do what they love to do. I also believe that people can only do their very best work doing what they love to do. I believe everyone should do what they love to do. I also believe that people can only do their very best work doing what they love to do. If a young person loves to learn about marine life, then I believe they should look into becoming a marine biologist.

One thing, though, I frequently have to explain to young people who want to become marine biologists is that the "marine mammal trainers" they see at Sea World are more akin to circus performers than marine biologists. Training marine mammals taken from the wild to perform circus tricks for cash is not only cruel, but is in no way natural or a way to get to know marine life. I recommend to them that they go whale watching, snorkeling, learn to dive, and look for opportunities to see marine mammals in the wild. If they then still find them fascinating, there is an entire field devoted to studying marine mammals called marine mammalogy, and college is where to study it.

Q: What is your vision for the future of MarineBio.org? Are there any upcoming projects you'd like to tell our readers about?

A: My vision for MarineBio is for it to be a group of experts from various fields in marine biology, conservation, and web technology with the site as a central place online for all things concerning ocean life and its conservation.

Our next phase mainly includes launching the remaining 3,000 or so common and endangered marine species that we currently have online in draft form. I hope to have them launched within the next 6 months.

We’re also working to build up the MarineBio Conservation Society membership base of ocean life advocates to help us fund our various projects. To date, I’ve covered most of the startup funding with more and more help now coming from donations and memberships.

I’m also working on making MarineBio a greater resource for students interested in becoming marine biologists, and for marine biologists working in the field and academia. And I have plans to greatly expand our information for kids... Other projects in the works include:

- A mobile version with complete access to all our conservation information and marine species.
- Greatly expanding our conservation information to include the very latest in research from both marine conservation and land-based studies.
- Expanding our ocean science section to more completely cover its various aspects.
- An annual report on the state of marine conservation and research.
- A marine mammal stranding database project.
- A project determining the current status of marine conservation efforts worldwide.
- An annual report reviewing marine conservation laws.
- An annual report reviewing marine conservation technology.

Q: How can people who are concerned about the ocean join MarineBio.org and help?

A: The easiest way to help is to join the MarineBio Conservation Society available via buttons on every page on marinebio.org. We’re also looking for corporate sponsorships and investors who are interested in marine life and its conservation.

I’m also looking for professors and graduate students who would be interested in being Directors of various marine species groups to help review and add marine species to our species databases.

I am also currently looking to hire a primary staff in the San Diego area in the near future. I will need a marketing guru, a lead editor, a science director, and a lead web development guru at least. Please contact me at david@marinebio.org or +1-713-248-2576 if you’d like to know more.