

SAVING NEMO

By Ricardo M. Salas

How one Spanish adventurer is swimming the world to protect the oceans.





Nacho Dean's crossing at the Bering Strait in 2018. / Ignacio Dean

What does a man do after traveling around the world on foot? That was the question inside Ignacio 'Nacho' Dean's head, a 38-year-old man from Spain who spent three years walking around the world, covering 33,000 km, 31 countries and four continents—with 12 pairs of shoes. In the summer of 2016 Nacho arrived at Madrid's iconic Puerta del Sol, fulfilling his dream of becoming the first Spaniard in completing this ambitious endeavor. Now, he's about to complete yet another challenge under the name of *Expedición Nemo* ['The Nemo Expedition'], with which he intends to swim between five of the world's continents, to raise awareness about the deteriorating state of the ocean.

Since the Hispanic continental model—unlike its American counterpart—only contemplates the five inhabited continents (America, Europe, Africa, Asia and Oceania), Nacho intends to swim the straits of

Gibraltar (between Spain and Morocco), Meis-Kas, (between the Greek island of Kastellorizo and the town of Kas, in Turkey), Bering (linking Russia and Alaska), Papua–Papua New Guinea (between southeast Asia and Oceania), and, the Gulf of Aqaba (connecting Africa with the Arabian Peninsula in the Red Sea). The Spanish swimmer has already completed the first three of these crossings, with the Bering Sea being his last, a challenge in which he swam from the Big Diomedede island in Russia, to Alaska's Little Diomedede, a stretch of 3.7 Km in waters below 3°C.

Dean was first inspired to embark on this journey after noticing the amount of plastic which was to be found along the coastlines of Central Asia during his solo walking trip (under the name *Earth Wide Walk*), this drew his attention towards the dreadful effects of pollution, overfishing and climate change in the world's oceans.

The Ocean in Peril

Part of the reason for which the ocean is oftentimes forgotten in the public agenda is because of its size and depth. The oceans cover 70% of the earth's surface and are home to countless ecosystems around the globe, providing stable streams of food to millions of people who depend on these precious resources. But even the oceans are finite. Industrial fishing methods are reducing the global fish supplies at a dramatic rate, and experts believe (Porrás Ferreyra, 2018) that millions of communities will

have little or no food security in a near future if fisheries continue to be exploited at the current pace. Fishing methods such as bottom trawling pose a great threat to marine life due to the number of animals which are unintentionally caught in fishermen's nets. Some estimates (Fishforward, 2018) even suggest that between 5 to 20 kilos of bycatch are caught in trawlers for each kilogram of shrimp. According to *WWF*, a total of 38 million tons of sea creatures are unintentionally caught each year, leaving many of these animals dead, or critically injured.



Orange roughy trawler. © AFMA / Fishforward

Then, there is the problem of plastic. Every year more than 8 million tons of plastic are dumped into the ocean, and should this trend continue, it is expected (Gray, 2018) that there will be more plastic than fish by weight in the sea by the year 2050. Recent reports also indicate that most of these plastics are washed into the oceans by rivers.

Surprisingly enough, 90% of all plastic waste comes from just 10 rivers systems, eight of them being in Asia (the Yangtze, Indus, Yellow, Hai He, Ganges, Pearl, Amur, and the Mekong) and the other two in Africa—the Nile and the Niger. Dame Ellen Macarthur, a British yachtswoman who was made famous for breaking the solo record (Early, 2017) for

sailing around the world in 2005, now dedicates her life to fight against the increasing amounts of plastics in the world's oceans. Her research institute found (Ellen Macarthur Foundation, 2018) that more than 1.2 million plastic bottles are produced *every minute* at a global level, with 95% of all plastic packaging materials being thrown away only after a single use. By 2021 these numbers will rise by another 20%, especially with the constant urbanization of China and the Asia Pacific region.

Furthermore, the levels of pollution in the seas are so alarming, that tiny plastics and polymers are starting to enter the ocean's food chains and making their way into human bodies, with some studies (Karami et al., 2018) revealing that these sorts of microscopic plastics can be found in items such as canned foods and—quite surprisingly—packaged beer (Liebezeit & Liebezeit, 2014).



Nacho swimming the Strait of Gibraltar amongst heavy vessel traffic. / Ignacio Dean

The Rising Sea

There is also another impending risk associated with the effects of climate change in the sea. In September, a 42,000-ton container ship crossed (Jacobsen, 2018) the Northern Sea route of the Arctic Ocean for the first time, transporting fish and consumer electronics between Asia and Europe for the first time thanks to the melting sea ice that global warming is causing in the North and South poles.

Endangered Sharks

To make matters worse, excessive emissions of CO₂ are also devastating entire coral reefs around the world, with areas like the Great Barrier Reef in Australia losing around 25% (Davidson, 2018) of their corals due a rise in global water temperatures and ocean acidification, which will destroy entire ecosystems and the livelihood of millions of people whose income depends on the state of fisheries and tourist destinations.

Another worrying fact is the rate at which some animal species are being killed for human consumption. The most gruesome example is the

way in which millions of sharks are finned in the open seas each year to meet the demand for a luxurious and popular dish: Shark fin soup. The port of Hong Kong—which receives about 50% of all of the dried shark fins in the world—commercializes around 6,000 tons of the product per year. The global appetite for this exotic dish has led to the reduction (Sadovy de Mitcheson et al., 2018) of almost 90% of shark species such as the hammerhead and the oceanic whitetip in recent years. Shark finning is also one of the most wasteful

existing industries, since most of these animals are finned while they are still alive, with 95% of the sharks being discarded and left to a slow and painful death as they sink to the bottom of the ocean.

These are just a few of the impending risks that are threatening the world's oceans, and with three of the five crossings under his belt, Nacho Dean plans to highlight the deterioration of the seas through this inter-continental endeavor, which—if successful—will make him the first Spaniard to swim between five continents in history.



Shark fins dry out in the sun on one of Hong Kong's rooftops in 2013. / [Antony Dickinson](#) / NPR

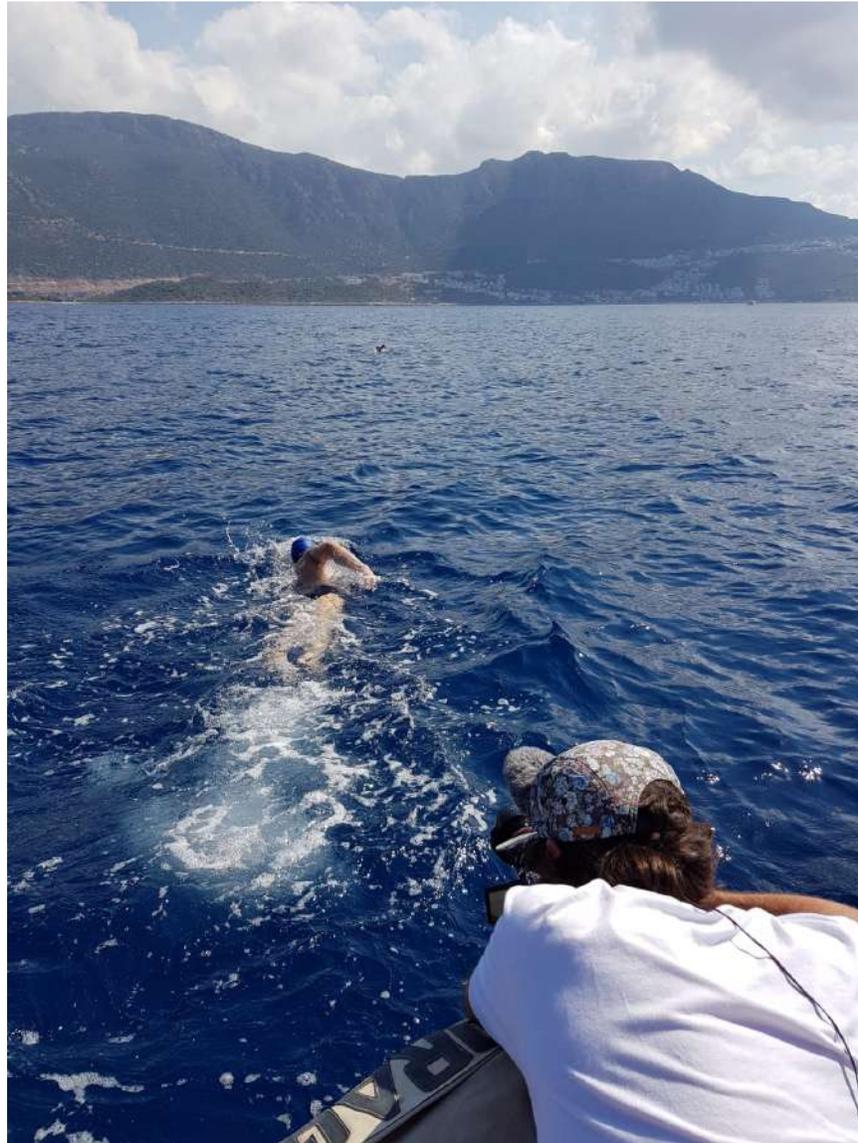
Full Interview with Nacho Dean

R.-What motivated you to embark on a challenge of this nature?

N.- Well, *Expedición Nemo* [Spanish – ‘The Nemo Expedition’] was born as a sequel of my trip walking around the earth, every time I got to a coast, I had to take a boat to move around. We live in a planet

were more than 70% of its surface is covered by water, so I was in debt with the ocean... I thought, why not swimming to bridge all of the earth's continents? I wanted to dedicate this expedition to send a message of conservation and awareness to save the oceans. It wasn't only about the sports

challenge or a personal dream, I wanted this message to transcend and go beyond that.



Nacho bridging Europe with Asia at the Meis-Kas border. / Ignacio Dean

R.- When you talk about sending a message of conservation, which is the most worrying threat for the oceans?

N.- Well, the oceans are intimately linked to the seas and rivers. There's no doubt that this [pollution] is a global problem, everything is linked in nature. We always think that the Amazon is the earth's lungs, but most of our oxygen is actually generated in the ocean. And in the same way, the ocean also absorbs

most of the global CO₂ emissions, which is why the waters are becoming increasingly acidic, something which you can see in the coral reefs, which are bleaching and becoming whiter. And in shellfish as well, their shells are becoming thinner and more fragile, those are also some of the consequences of the acidification of the oceans.

R.- What are the plans after you have done the final crossing?

N.- We want to document the environmental state of each of the marine ecosystems that we go through in each strait. There are plenty of problems directly affecting the ocean: global warming (which melts the polar caps and raises coastline levels), overfishing (which threatens biodiversity), excessive vessel traffic, and so on. But each strait has its own concrete issues, so we want to do a documentary where we will not only talk about this sports challenge, also about the environmental problems in the ocean. We will talk about immigration as well—because we are talking about crossing intercontinental borders—borders, which have divided so many peoples in one or other form until now. We are also interviewing marine biologists, meteorologists, long distance swimmers, activists, and many other people. We want to have as much footage as possible to launch a documentary as soon as we can.

R.- Let's talk about your physical preparation, the logistics and the challenges before crossing each strait.

N.- Each swim is really just the cherry on the cake, it is the culmination of a lot of preparation and logistics which lie behind. The swim is the excuse, the 'hook' to raise awareness about the issue.

One of the main difficulties is that water is a completely different environment: all of your previous training is worthless here. You can be the strongest guy in the gym, but if you don't swim with the proper technique, you'll just sink to the bottom. But swimming is equally difficult as it is stimulating, I am enjoying the process. It also comes to a point where you train so hard that you have to talk with physiotherapists and do all sorts of special exercises to avoid any injuries. It a very scientific approach to

training that one has to take. I had been walking and climbing for years before, and now, in less than 12 months, I had to become sufficiently fit and have a good enough technique to be able to face this challenge.

R.- Do you do all of this by yourself?

N.- I don't have a trainer. I am self-taught and do all of the trainings by myself. But I have people who aid me and go side by side with me in every strait. The strait of Gibraltar, for instance, is one of the most challenging and most transited straits in the world. There is an organization operating there which goes by the name of ACNEG, which helps and escorts all swimmers who intend to do the crossing. The Mediterranean accounts for more of 50% of all global maritime traffic; and all of those vessels go through Gibraltar, so the association was in charge of radioing the coastguard and other vessels to inform them to keep a safety distance from us. On the contrary, there is no infrastructure at all at the Bering Strait; so, what we had to do there was talk to the Inuit people and have them escort in with a small boat, I even carved a traditional-style knife with them.

R.- Was that the toughest swim so far?

The Bering Strait was one of the most challenging ones, it was 3.7 kilometers with waters at 3°C, very strong currents which go from towards the north. There are dangerous animals as well, orcas, walruses, and of course the fact that you are in such a remote location. It took us three days, several flights and a helicopter just to get there! That's what I mean when I say that the swimming part is really just the icing on the cake.



Nacho's hand-carved knife during his stay with the Inuit people in Alaska. / Ignacio Dean

R.- Let's go back to the environmental message and the conservational aspect of your challenge. What worries you the most about the state of the ocean?

N.- Many people ask me about what I see while swimming, and of course I see beautiful sceneries, a different perspective of the coastline; but you also see pollution, you see plastic... *But the problem is actually what you don't see. I don't see any fishes, I don't see any animals. The seacoasts have been totally depleted. There is no life, they have all been sacked!* It is calculated that by 2050 there will be more plastic than fish in the sea. We are exploiting the oceans at such a rate that we are leaving it without any fish. We are exploiting the planet beyond its regenerating capacity. This last August, for instance, we had already consumed all of the fish that we should have consumed in one full year. My greatest worry is plastic pollution, there are islands of garbage floating that are pushed around by the currents. Thousands of animals die with 20 or 30 kg of plastic in their stomachs, so many species... I have performed necropsies o animals where we have cut

them open and seen an incredible amount of plastic in their stomachs. There is garbage more than a thousand meters below the sea, where not even light comes through! There is garbage floating around our planet, we are turning the earth into a dump yard!

R.- In a previous conversation you also talked about the alarming consumption of shark fins in Asia. The numbers are shocking...

N.- We hardly have any idea! We are looting the seas. It is exactly like that saying which asks that if a tree falls in a forest and no one is around to hear it, does it make a sound? Well, of course it does! The fact that we are not aware of what happens to the oceans, there is garbage even a thousand meters below the surface! Car tires, bottles... While I was walking through several countries in Central Asia, like India and Bangladesh, I saw families and entire communities who lived in dump yards. Many of the so-called 'slums' are located in the world's most populated areas, where people haven't been taught

to recycle and plastics are drowning these places. We must be smarter about the way we package our foods: just go to your local supermarket and you'll see how everything is wrapped in plastic.

R.- What can everyday people do to make a difference and counteract these effects? The ocean is so vast that it seems hard to make a tangible contribution. What can people do?

N.- We are all on the same boat: citizens, companies, governments and many authorities. We all have to take matters into our own hands. We must increase our investments in R&D and we must push for a change in legislation. We must also invest in green energies, in education, that is the role our

authorities. As for the rest of us: we can take small steps like lowering our consumption rate, which is strongly related with the foundations of our materialist society, because the basis of our current economic models are consumerism and materialism. If you realize, *ecology* and *economy* have the same etymological root: 'Eco' – which means *home* in Greek [*oikos* being the original term]. Economics studies the administration of resources in a household, and ecology studies the environment and state of that home. Unless *economy* and *ecology* hold hands together, we'll be walking down the wrong path. It is unthinkable that our consumption patterns suppose the destruction of that very same home—our planet—in which we live in.



Ignacio Dean in his previous adventure, arriving at the zero Km marker in Madrid's Puerta del Sol, after walking the globe.

/ Fernando Villar / *El Correo Gallego*

R.- It seems like there will be thousands, of communities along the coastlines which won't be able to feed their children in years to come...

N.- That is the great crisis of our times: the global population will only keep increasing, but our resources are finite. There is a crisis in our current economic models: we rely (almost) solely on fossil fuels like oil and coal. We also believe that our only job as citizens is to cast a vote every certain number of years, and that is simply wrong. *We engage in politics with our daily actions—where do you buy your clothes? Who made them? Where do they come from? Which products do you consume? How do you commute? That is the power that we have!* Walking or biking to get to work, using public transport, consume local produce... In a globalized economy, who doesn't like to eat Japanese sushi, fly to New York and own a small tusk figurine from Africa in the living room? And these consumption patterns have become even easier with the internet.

R.- Tell us about your last two steps in this challenge, and the crossing of these two remaining straits.

N.- I plan on connecting the strait between Papua and Papua New Guinea at the end of October or early November, and to complete the strait of Aqaba by December—if all goes well.

R.- What are the dangers that you will have to face in the two remaining stretches?

N.- In Papua, I'll be swimming in the Sea of Bismarck, a distance of 19 km. I will have to watch out for all of the poisonous Jellyfish (the Irukandji) which inhabit those water and are extremely dangerous, as well as sharks. What I'm most worried about are marine animals. And by the same token, crossing the Red Sea will mean swimming 25km, the longest stretch of the journey, in waters with very high surface temperatures and very high salinity. I'll have to watch out for marine traffic as well, since those waters are a very busy crossroads and there is a lot of pollution in the area, which could provoke nausea or vomiting, not to mention that sharks are also caught in the area, which means that there are a few of them out there!



Nacho Dean in a helicopter ride after bridging Asia and America at the Bering Strait. / Ignacio Dean

In brief – The Nemo Expedition

1. Strait of Gibraltar: 15.1 Km in 3 hrs. 55 mins., connecting the Isla de las Palomas (Spain) and Punta Cires (Morocco). ✓
2. Meis-Kas: 7.1 Km in 2 hrs. (connecting Kastellorizo (Greece) and the city of Kas (Turkey). ✓
3. Bering Strait: 3.7 Km in 1hr 11 mins., connecting Big Diomedede (Russia) and Little Diomedede (Alaska). ✓
4. Bismarck Sea (Asia – Oceania): 19 Km between Papua and Papua-New Guinea. ○ Pending
5. Gulf of Aqaba (Africa – Asia): 25 Km in the Red Sea connecting Egypt and Jordan. ○ Pending

Image: Oleg Magni



