The return of Baja's mantas

For the first time in nearly two decades, giant Pacific manta rays are returning to the southern reaches of the Gulf of California - welcome news for local marine biologists and divers, as well as the ocean tourism industry.

Photographs by Erick Higuera and Joanna Lentini

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At the turn of the last century, the southern portion of the Sea of Cortez was renowned for its manta rays, along with the region's other 'Big 5' - sea lions, whale sharks, scalloped hammerheads and mobula rays. Then, in 2002 - an otherwise warm and typically beautiful year - the unthinkable happened: the Pacific giant manta ray population collapsed.

For the next 16 years, the region saw a dramatic decline in scalloped hammerhead sharks too. But while shark fishing in the region was not a new phenomenon, the mantas' disappearance perplexed scientists. As time went on, rumours circulated and suspicions grew, until one day lifeless mantas were discovered stacked up on the sandy shores of a local shark fishing camp. Whether the fishing operation was to blame for the manta ray collapse is unconfirmed, but it certainly would have contributed towards the species' predicament.

Now, a decade and a half later, manta rays have returned in small numbers to an islet called La Reina, just 40 miles off La Paz, Baja California Sur, Mexico. Their reappearance has made the local news, and spread excitement across the region. Amongst those celebrating is marine biologist and underwater cinematographer Erick Higuera. Having lived in La Paz since 1997, Higuera has spent the last two decades photographing and filming below the surface there. Higuera understands the significance of their return, as manta rays are important indicators of a healthy ocean and, as their wide distribution points out, play an integral role in the ecological function of our oceans. Higuera and his colleague Dení Ramírez work closely with WWF Mexico and Pelagios Kukanja, a La Paz-based non-profit dedicated to researching and protecting sharks and rays.

Baja California Sur's capital city, La Paz, has long been a destination for passionate divers hoping to dive with pelagic creatures. Situated on the south-eastern coast of the Baja peninsula, La Paz was considered one of the best manta diving spots in the world. This quintessential Mexican town boasts a waterfront dotted with eco-conscious cafes, boutique mezcalerias, and fantastic food, graced by a sprawling turquoise sea to one side and sun-scorched mountains to the other.

Reflecting on the diving at the turn of the century, Higuera recalled a time and place where manta rays were a common occurrence - where one would typically encounter five or six mantas every day from July through to November. The reliable presence of mantas also meant more tourists, and therefore more opportunities for local businesses - whether hotels, restaurants or dive operators. As natural capital, manta rays attract tens of millions in tourism dollars for dive and snorkel activities worldwide, and well in excess of US$100 million in direct spend, including related tourism expenditures.

With Mexico consistently listed as one of the 'Top 10' manta destinations on the planet, the Baja peninsula has much to gain from this hopeful return. "Healthy manta populations are a valuable natural resource," says Higuera, "and offer considerable economic potential via ecotourism. Ecotourism is a growing segment of the global tourism industry that is making a positive contribution to the environmental, social, cultural and economic wellbeing of destinations and local communities around the world. Ecotourism provides effective economic incentives for conserving and enhancing bio-cultural diversity and helps protect the natural and cultural heritage of the planet."

While nature may appear to be resilient on its own, much of this progress has undoubtedly resulted from dogged conservation efforts by multiple organisations in the region. In fact, recent manta ray sightings are a testament to their impact and importance. Through constant engagement with the local community and fishermen, these organisations have maintained an ongoing dialogue to promote ocean education and awareness. Higuera asserts: "Ecotourism is an effective vehicle for empowering local communities around the world to achieve sustainable development." Local scientists and fishermen are in talks surrounding the re-emergence of the rays and how to protect this important natural resource.

Enrique Castillo, owner of FunBaja, a La Paz-based dive operation, has noted a 30% drop in business since the mantas' disappearance. While the region has certainly missed the manta rays and felt the sting economically, an amazing array of marine life has maintained a consistent presence, which has continued to attract divers over the last fifteen years. Whether permanent residents or transients, animals such as sea lions, mobula rays, whale sharks, humpback whales, dolphins and orcas can be spotted there. Now, with the re-emergence of manta rays, Castillo has been inundated with enquiries from divers wanting to see them.

La Reina, the site in which fourteen giant mantas have recently been encountered, sits three miles north of Cerralvo Island, the first island as you enter the Gulf of California from the south, and a little under an hour and a half from La Paz by boat. The dive site is an easy, shallow dive, which boasts schooling fish, barracuda, and a handful of jovial sea lions. Higuera has had the opportunity to spend the past few weeks in the water with the manta rays and has been able to tag five of fourteen identified individuals - the majority of which he believes to be juveniles no larger than three metres.

Higuera recalled the sheer surprise and happiness he felt when he encountered mantas at the site earlier this summer. He soon found himself spending most of his time at the dive site trying to tag individual rays, and explained the importance of doing so: "The tagging of marine animals with electronic sensors is increasingly

PREVIOUS & OPPOSITE: After 16 years the Pacific giant manta ray has finally returned to the southern Gulf of California.

MAIN IMAGE: Sea lions can be encountered at La Reina, which sits in close proximity to the permanent sea lion colony of Los Islotes.

TOP: Two schools of fishes drift past one another at the same shallow dive site 14 manta rays have recently re-emerged.

MIDDLE: Marine biologist Erick Higuera has tagged five of the 14 manta rays spotted at La Reina.

BOTTOM: Manta rays are a valuable natural resource that attract tourists and inject life into local businesses.

“As tourists are once again flocking to La Paz, Higuera and his colleagues are working tirelessly to establish a code of conduct to ensure divers and snorkelers respect the [marine life]."

Balandra Bay is considered one of the most beautiful bays in Mexico. It is a short drive from downtown La Paz.

being undertaken by scientists worldwide to track their movements. Electronic tags are revealing when, where and how marine animals travel and how these movements relate to the ocean environment."

Higuera says the goal is to "help us to predict them, based upon an understanding of what drives their movements. That information has a key role to play in marine conservation and fisheries management." He is specifically looking for data that reveals from where the mantas come and where they go after they visit La Reina.

Keeping track of their travels can perhaps help to define a protected area in the future. There has been some speculation that La Reina may very well be a nursery for a re-emerging manta ray population in the Gulf, and if this is in fact true, a campaign to protect La Reina could materialise. Higuera believes "the challenge for marine science now is to ensure these manta rays are protected, so they do not quietly disappear before we can fully understand just how important they are."

Higuera understands the significance of the mantas' return for the local economy as well as the local reefs and ocean ecosystem. He says: "Giant manta rays are highly valued by ocean tourism operators because they are normally curious and friendly with humans. They are a major driver of tourism. People travel to the farthest corners of the planet for a chance to encounter one of these majestic creatures in the wild." The encounters Higuera has had with the new population have taken place throughout the water column - from the surface down to 25 metres - making the rays accessible to snorkelers as well as divers.

For those who have had the opportunity to encounter these magnificent creatures in the wild, the experience can be life changing. And as tourists are once again flocking to La Paz, Higuera and his colleagues are working tirelessly to establish a code of conduct to ensure divers and snorkelers respect the re-emerging population. The information they produce will be distributed to boat captains, divers, dive guides, fishermen and anyone else who may have contact with the rays. The first workshop, held on September 13, 2018 in La Paz, delved into the proper etiquette for interacting with the vulnerable species. It also pointed out the importance of the mantas return and the necessity of preserving the site.

The re-emergence of manta rays has not only breathed new life into local dive operations, but has also breathed life into an organisation that had been dormant for some time. Manta Mexico, a non-profit organisation founded by Paul Ahuja, was first established in 1999 to monitor and study the manta ray population in the southern Gulf of California. With the decline of the rays the organisation went idle. Now, hopeful about the mantas' return, Manta Mexico is the driving force behind the code of conduct workshops.

As this organisation, made up of a number of smaller bodies and supported by WWF Mexico, continues with its efforts to raise awareness and implement its newly created protocols, the question remains whether the new manta ray population will return next season. The species' re-emergence in the southern Gulf of California is certainly promising, but their long-term survival depends on the local community's ability to recognise their value and implement changes that will safeguard their future.

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