



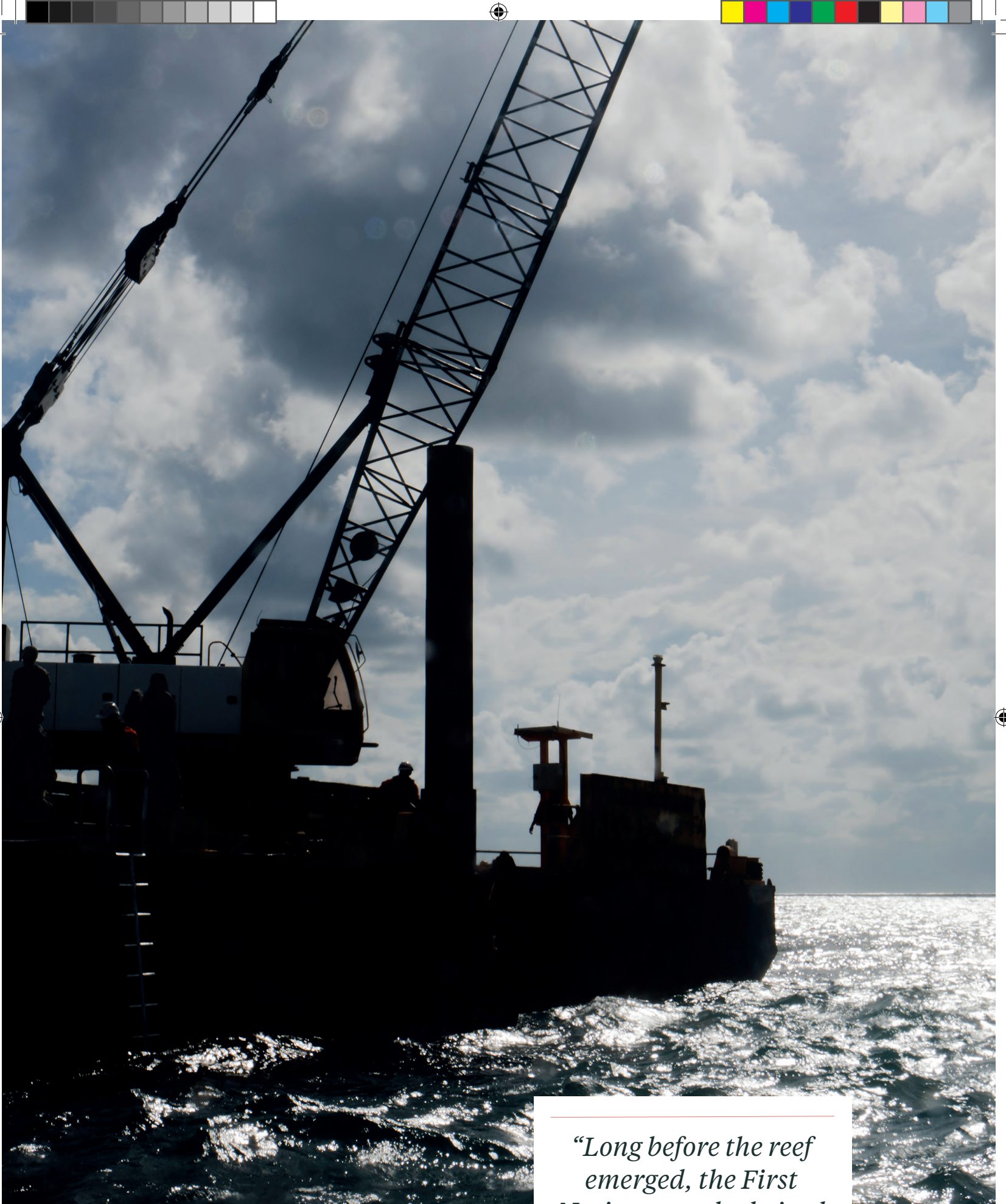


Inspiring change

On Australia's John Brewer Reef, situated within the realms of the Great Barrier Reef, the Museum of Underwater Art seeks to foster change by blending art, marine science, and conservation.

Words by Christian Bartens

Photographs by Jason deCaires Taylor



“Long before the reef emerged, the First Nations people thrived on the land now covered by its waters.”



Once you enter the water and begin your descent, a surreal underwater world opens up beneath you. A large structure resembling a greenhouse comes into view with numerous fish species darting around it, while human-like figurines slowly reveal their colourful coral coverage upon getting a closer look. Beneath the crystalline waters of the John Brewer Reef lies an experience that unites art, science, and conservation: MOUA, the Museum of Underwater Art. As the world's largest collection of coral reefs and a UNESCO World Heritage site, the Great Barrier Reef holds immense ecological, economic, and cultural significance. It is this invaluable treasure that MOUA is dedicated to safeguarding for future generations.

The seeds of MOUA were sown in 2016 when Dr Adam Smith from Reef Ecologic hosted a reef leadership course in Townsville. Among the attendees were Paul Victory, the former chair of SeaLink and North Queensland Tourism, and the Director of the Cancun Marine Park, which already boasted an underwater museum at the time. It was during this meeting of kindred minds that the concept of an underwater museum on the Great Barrier Reef emerged, driven by the mission to protect it. With the vision in place, the artist Jason deCaires Taylor was enlisted in June 2017 to conduct a feasibility study for this audacious endeavour. Having fallen in love with the Great Barrier Reef during his tenure as a diving instructor many years before, Jason returned to this captivating wonderland to craft a series of mesmerising underwater sculptures.

For deCaires Taylor "art is a means of exploration." He recalls: "By bringing my artwork into such an unusual context, we may start to understand more of ourselves and our connection to nature. Working on the Great Barrier Reef for the first time, one of the world's most biodiverse regions, provided a unique starting point for such an exploration."

The Great Barrier Reef holds significant ecological and economic value. It stands as one of Earth's most diverse ecosystems, harbouring an extensive array of marine species, and acting as a natural defence against storm surges and coastal erosion. It supports various industries, generating employment opportunities and billions of dollars in revenue. However, it is the Great Barrier Reef's cultural significance that fuels MOUA's inspiration and empowers its artists to delve into our relationship with nature.

Referred to as the Sea Country by Indigenous Australian communities, the reef embodies a living link to their forebears, a repository of ancient wisdom, and a source of profound spiritual meaning. Long before the reef emerged, the First Nations people thrived on the land now covered by its waters. They possessed an intimate understanding of the diverse ecosystems, skilfully utilising nature's resources for sustenance and survival. Their bond with the land and sea was deep-seated, forming the bedrock of their contemporary culture and traditions.

| PREVIOUS: View from inside the Coral Greenhouse without coral growth shortly after it was submerged.

| THIS PAGE: The Ocean Sentinel sculpture of Jayme Marshall being installed on John Brewer Reef.



“The biomorphic design now seamlessly blends with nature, allowing the sculptures to integrate into the reef.”



As deCaires Taylor aptly articulates: "Australia and its Indigenous communities have a rich historical connection to art and the environment. Some of the earliest examples of human communication and storytelling were discovered here. As our urban societies become more distanced from the natural world, we have a lot to learn from these communities, their connection to nature and unique way of living sustainably."

Jason deCaires Taylor was one of the first contemporary artists to use the underwater world as an exhibition space. Before his installations on the Great Barrier Reef, he built underwater sculptures and explored conservation themes in Mexico, Norway, the Maldives, Spain, and the Bahamas, while also creating artificial reefs to provide homes for marine life in barren areas of the seabed. "Working on the Great Barrier Reef, the largest natural reef in the world, presented a different objective. Here, the focus shifted towards communication and developing an underwater museum which acted as a portal or interface to further showcase the incredible inhabitants and processes in this beautiful yet threatened submerged world," he says.

Unveiled as MOUA's inaugural installation in early 2019 on the Strand promenade in Townsville, the Ocean Siren is a captivating four-metre-tall sculpture that stands as a poignant symbol of the Great Barrier Reef's vulnerability to rising sea temperatures. Inspired by Takoda Johnson, a young Indigenous girl from the Wulgurukaba tribe, the sculpture depicts her holding a Bayliss shell, an indigenous communication artifact, while gazing towards Magnetic Island and the expanse of the reef. During the night, the Ocean Siren's colours shift based on real-time water temperature data provided by AIMS, the Australian Institute of Marine Science, offering a visual representation of the prevailing conditions.

The sculpture underscores one of the most critical threats facing the reef: climate change. Elevated sea temperatures and ocean acidification result in coral bleaching, a detrimental process that weakens and kills coral, endangering the entire reef ecosystem. The Ocean Siren, with its lights mirroring a thermal imaging camera, brings the science of the reef to urban areas, effectively conveying the urgency of addressing this vital issue.

The Coral Greenhouse, submerged in late 2019 and officially inaugurated in early 2020, is a ground-breaking underwater museum. Sitting at a depth of 16 metres and just a short swim from the Ocean Sentinels installation at John Brewer Reef near Townsville, it is ideal for freediving and scuba diving alike. With its impressive 12-metre height and weight of 58 tons, this architectural

marvel explores marine science, coral gardening, art, and architecture, offering a fresh and immersive perspective on the Great Barrier Reef and its ecology. "We spent 12 days with Jason surveying sites, looking for beautiful soft, sandy seabed where we can install the sculptures without doing any damage to the reef," said Paul Marshall, chief environment officer at Reef Ecologic, one of the project partners.

The biomorphic design now seamlessly blends with nature, allowing the sculptures to gradually integrate into the reef, while the porous structure creates a sanctuary for marine life. Crafted from pH neutral cement and corrosion-resistant steel, the Coral Greenhouse can withstand the ever-changing marine conditions. Inside, figurative sculptures modelled on local school children serve as powerful reminders of the importance of protecting our precious marine world for future generations. The surrounding gardens, coral planter boxes, and floating trees inspired by local species complete this extraordinary underwater marvel. Surrounded by a coral nursery and underwater trees that have been specifically designed to facilitate coral rehabilitation, the installation date of the Coral Greenhouse was perfectly timed to coincide with a coral spawning event so that coral larvae would attach to the structure's clean surface area. "The sculptures themselves are all made from a pH-neutral marine cement with a textured surface to help settlement," says deCaires Taylor.

The coral flourishing on the Coral Greenhouse and its various installations serves as a testament to the reef's resilience, demonstrating that even in the face of adversity, the Great Barrier Reef can rebound. This uplifting message urges visitors to enact individual changes and collaborate towards a sustainable future.

The Ocean Sentinels, submerged in early 2023 and officially opened on World Ocean Day, is a series of underwater sculptures arranged in a snorkel trail at a depth of only five metres and just a short swim from the Coral Greenhouse installation. Standing 2.2 metres tall and weighing between 1 to 3 tons, the sculptures are a unique blend of human figures and marine elements, symbolising the fusion of art and science.

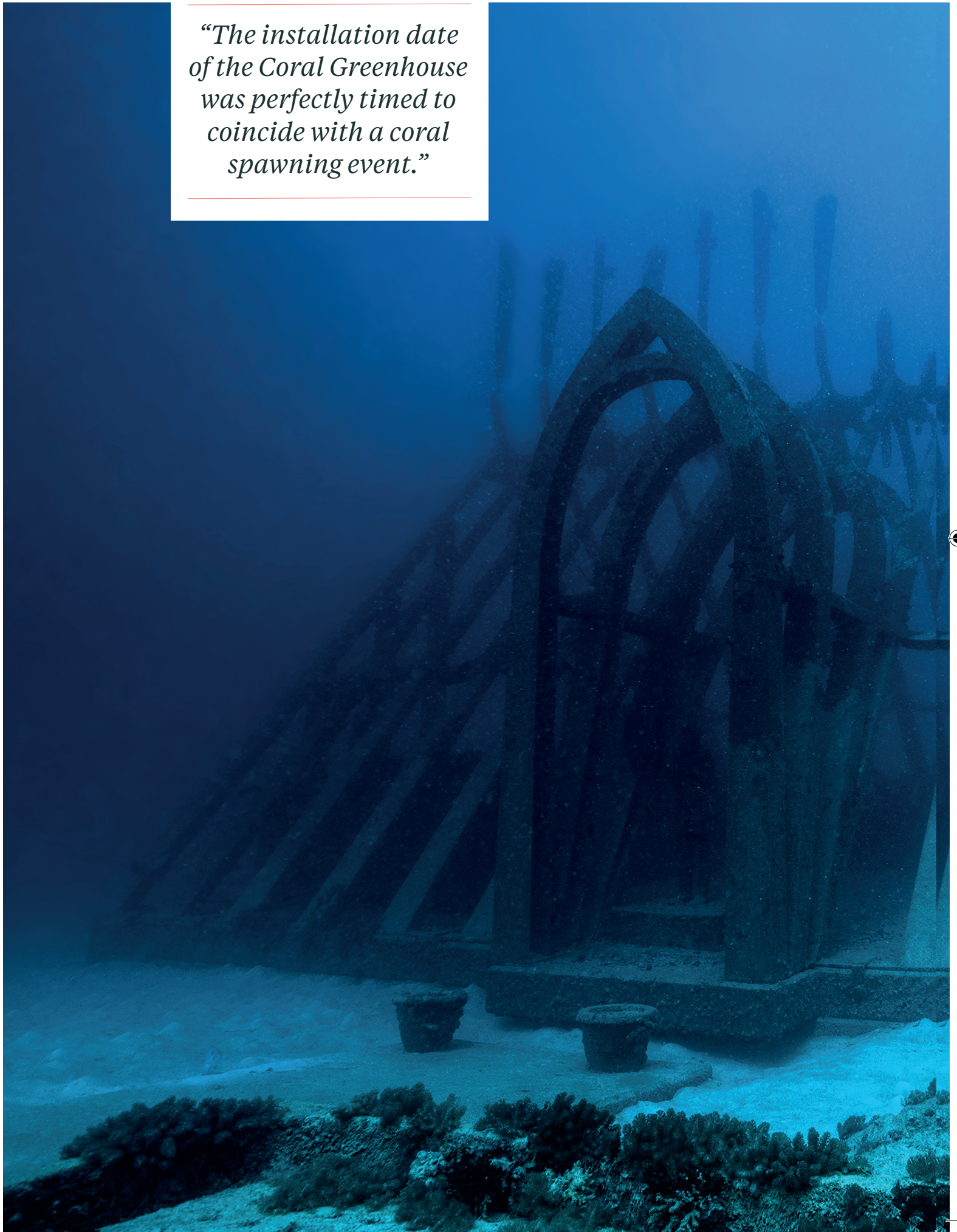
Each sculpture is modelled on a renowned marine scientist or conservationist, highlighting their significant contributions to reef protection. Crafted from a sustainable and resilient earth friendly concrete, the artworks are designed with a low centre of gravity to withstand the powerful forces of the ocean. With their surfaces intentionally designed to attract marine life, the sculptures are expected to transform over time as corals, sponges, and hydroids colonise them, mirroring the reef's dynamic nature – and further strengthening the Coral Greenhouse's message of resilience.

By integrating Indigenous cultures and traditions, these sculptures serve as an educational gateway to the Great Barrier Reef, underscoring its historical significance and the vital role played by leading marine

| *The installation of the Ocean Sentinel sculpture of Sir Charles Maurice Yonge on John Brewer Reef.*



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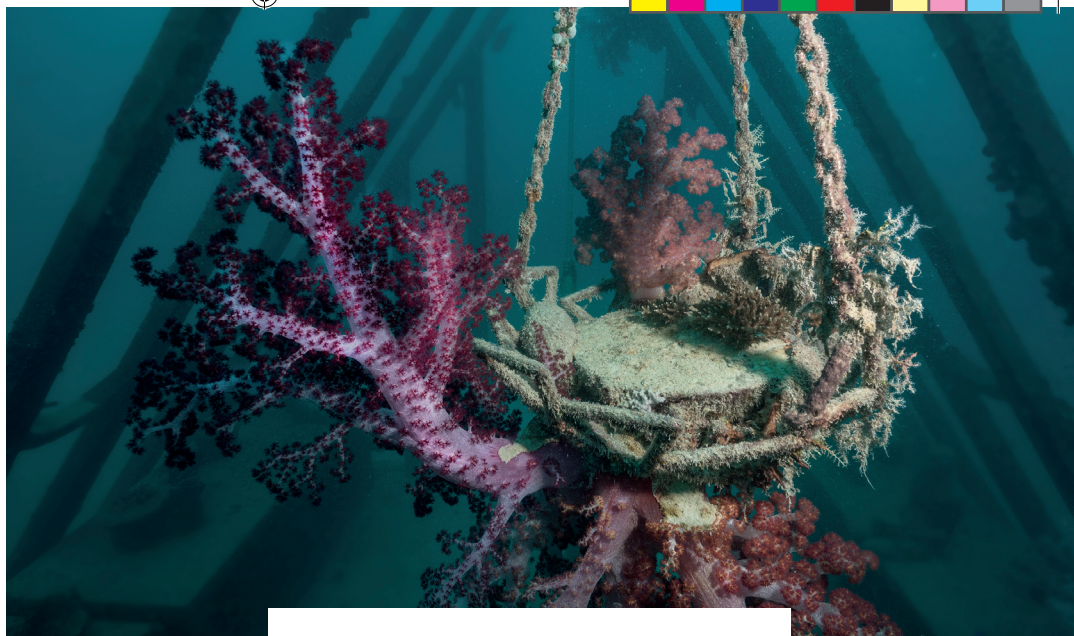


*A Coral Gardener statue with a shovel
in front of the Coral Greenhouse on
John Brewer Reef.*

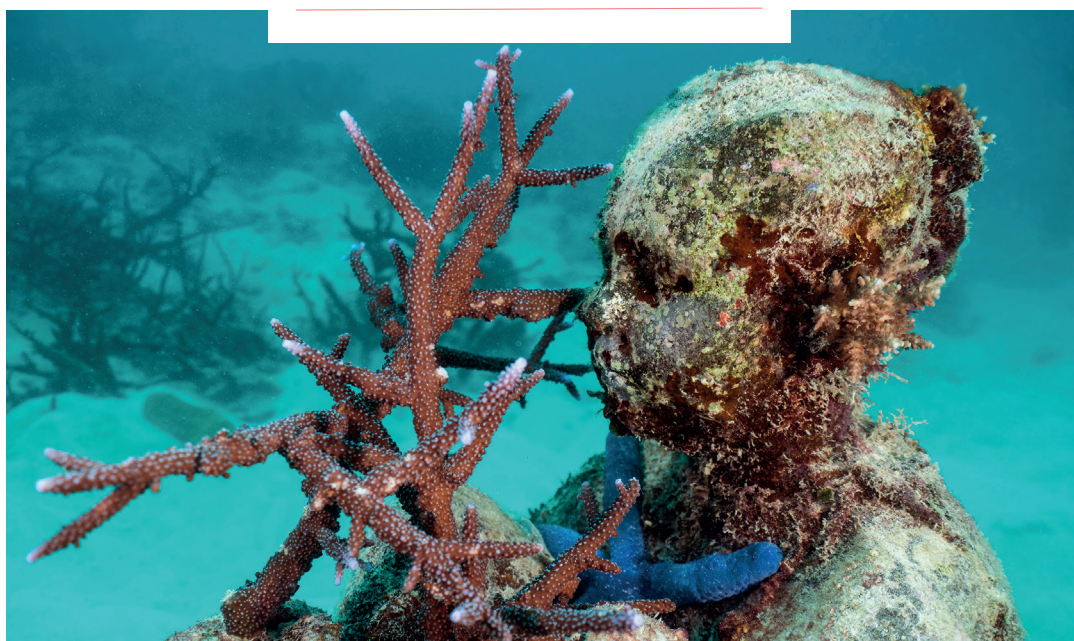




- | MAIN IMAGE: Coral gardener with coral tray modelled on a local Reef Guardian school student.
- | TOP: Hanging coral baskets with soft coral growth.
- | MIDDLE: Coral gardener with branching coral.
- | BOTTOM: Coral gardeners without growth right after they were submerged.



“The sculptures themselves are all made from a pH-neutral marine cement with a textured surface to help settlement.”





science institutions. As Dr. Katharina Fabricius, one of the Ocean Sentinels, says: "MOUA is a living piece of art that communicates to the people how important research is, how important coral reefs are, and how all these aspects – art, science, humanity, can come together to protect the reef."

Through MOUA, the reef's narrative unfolds, spotlighting its resilience, challenges, and the pressing demand for collective action. These submerged sculptures are more than static artworks. They are living embodiments of the reef's capacity for rejuvenation. As coral adorns the sculptures over time, visitors bear witness to the reef's resilience, igniting optimism and inspiring action. The essence of MOUA lies in kindling hope and galvanizing collective action. By amalgamating art and science, MOUA conveys that the Great Barrier Reef is not an irreparable loss, but a treasure that merits preservation. As custodians of the reef, we can all effect change by adopting simple alterations in our daily routines.

From the comfort of our couch, we can share reef-friendly messages on social media to help spread the word. In our households, we can embrace sustainable habits such as minimising food wastage, opting for energy-efficient appliances, and conserving water. In our communities, we can favour eco-conscious transportation choices and advocate for sustainability in workplaces and educational institutions. For boaters, responsible practices encompass proper waste disposal and adherence to designated zones.

"Our oceans are going through rapid change, and there are huge threats, from rising sea temperatures to acidification, and a large amount of pollution entering the system. Part of creating an underwater museum is about changing our value systems – thinking about the sea floor as something sacred, something that we should be protecting and not taking for granted," says deCaires Taylor.

The John Brewer Reef Site is currently attracting 5,000 divers annually and this number is forecast to grow to 15,000 over the next few years, thus "making a significant contribution to the local visitor economy", according to Paul Victory. "Five commercial diving companies are regularly taking visitors to the site and many locals are visiting in recreational vessels. The Museum of Underwater Art has brought together an international arts collaboration, science, indigenous conversation and tourism leaders to create a project inspiring reef conversations," he continues.

MOUA's mission reminds us that collective action, regardless of its scale, can yield significant positive transformations. By cherishing and safeguarding the Great Barrier Reef, we honour its ecological relevance, cultural heritage, and economic worth. Together, we can ensure that this underwater marvel persists as a source of inspiration and vitality for generations to come. ●

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Coral gardener before (left) and after (right) being submerged - with and without soft coral growth.



