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TIDEPOOLING AT VISAKHAPATNAM UNCOVERS A WORLD OF STRANGE, COLOURFUL CREATURES

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A curtain of haze covered the sky during the evening low tide, casting Rushikonda Beach in a pall of gray. Along the coast, the rocks rose out of the golden sand, as the receding water lapped gently against the shore. Shaded in monochrome, the landscape almost looked empty; but tucked into the nooks and crannies of the rocky shore was a colourful world bustling with life. Low tide on the Visakhapatnam coast offers a chance to see the hidden secrets of the marine world. The intertidal zones — areas that are uncovered and covered back up during low and hide tides — are entirely different ecosystems, where a multitude of organisms living on the shore survive changes in a world that is constantly oscillating between land and sea.

At Rushikonda Beach in Visakhapatnam intertidal life thrives on the many rocks that are spread across the coast. Walking the beach during low tide will bring to light this alien landscape. Visakhapatnam-based East Coast Conservation Team (ECCT), a non-profit organisation working on the conservation of wildlife, in collaboration with Green Paw is leading a citizen science project to document the marine biodiversity of the region.

“Marine biodiversity is very less documented in Andhra Pradesh and even less explored in intertidal areas,” says Sri Chakra Pranav Tamarapalli, founder and project manager, ECCT. The organisation along with Green Paw is working towards highlighting marine life and intertidal biodiversity in Andhra Pradesh. They have planned tidepooling walks to engage with people as well as document the species under projects called Intertidal Biodiversity of Andhra Pradesh and Marine Life of Andhra Pradesh in the citizen science portal iNaturalist. Anyone with a mobile phone and Internet connection can document marine organisms in intertidal areas and add the observations to the above mentioned projects on iNaturalist mobile applications available for Android and iPhone.

The project has so far recorded more than 230 observations and 90 species in intertidal areas of Visakhapatnam. More than 15 shore walks have been conducted so far with about 200 participants. “It’s a crash course in marine biology and a revelation for all of us. We are completely oblivious about the blooming marine life near our coast. The best part was watching my seven-year-old daughter lap up every piece of information with excitement and discover a new world of marine creatures,” says Neha Sarwate, who participated in her first tide pooling walk last week. “These experiences not only make a person aware of marine biodiversity but also inspire them towards conservation of our planet,” she adds.

The tidepooling event (intertidal biodiversity walk) was held last Sunday at Rushikonda by ECCT and Green Paw. Poking around the rocks and pools, a group of people discovered fascinating creatures last week almost everywhere they looked.

“During new moon and full moon weeks, the low tide is much lower, exposing a lot of the rocky shore from the water and leaving pools of water behind along with a lot of marine life,” explains Honey Seles of ECCT. The process of looking for these organisms is called tide pooling. About 15 people participated and learnt about marine biodiversity and came across species like blennies, hermit crabs, moray eel, stone crabs, sea anemones, sea urchins, zoanthids, star fishes and much more. The event also documented the Polyclad flatworm, which happens to be the first record of the entire order of Polyclad flatworms on the east coast of mainland India. “We found two specimens of the same species on the same day,” Pranav adds. Polyclad actually

means ‘numerous branches’ In Greek. The intestines of this flatworm are branched. During a tidepooling walk last year, Anita Rao and her sister Sunita scrambled across some of the rocks in Rushikonda to find tide pools with crabs, urchins, anemones and many sea stars in different sizes. “Rushikonda is full of miracles,” Anita says. “We will undoubtedly return again.”

Invertebrate and primitive organisms and also vertebrates like fishes can be seen in tidal pools. The producers of the ecosystem are algae and phytoplankton that produce food for the intertidal diversity. The rocks are filled with various species of green and brown algae. Most commonly seen algae are Sargassum, sea grapes, feather caulerpa and fan algae. “You usually have a good two hours of tide pooling if you time it well,” says Pranav.

“It’s also important to keep track of time so you don’t get caught on the beach with the tide coming in.” There are dozens of creatures found in Visakhapatnam’s tide pools, varying from place to place. But the most accessible tide pools are found near the Rushikonda coast. If you are lucky, you may get to spot the shy moray eels that are ambush predators lurking in holes of rocks. Whether you are enjoying sunny summer days or balmy, gray winter evenings, poking around in rocks, peeking in at the homes of these strange tiny neighbours on the beach can be a fascinating experience.

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