



# The Wildlife *Watch* Binocular

PO Box 562, New Paltz, NY 12561

**SUMMER 2023**

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PHOTO © catchalure.com/blogs/news/cmon-bro-dont-leave-me-hanging



## THINK GLOBALLY, ACT LOCALLY

**DEBRA MUCCI** is forever on the lookout for wild animals who may need help, especially in her neighborhood. Unfortunately, it doesn't take long for her to find them. Debra doesn't mince words when she enlists the support of those who can help achieve permanent change. Her letter was emailed to: County Executive, Aileen Gunther, NY Assembly Member; Congressman Patrick Ryan, [parks@orangecountygov.com](mailto:parks@orangecountygov.com) Sean Patrick Maloney; the DEC; and Bridget Fahey of the Fish and Wildlife Service.

The subject line read:

***Fishing Line in Thomas Bull Memorial Park Killing Wildlife***

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## ROANNA'S NURSERY: CONSERVING CORALS

*By Bindu Gopal Rao*

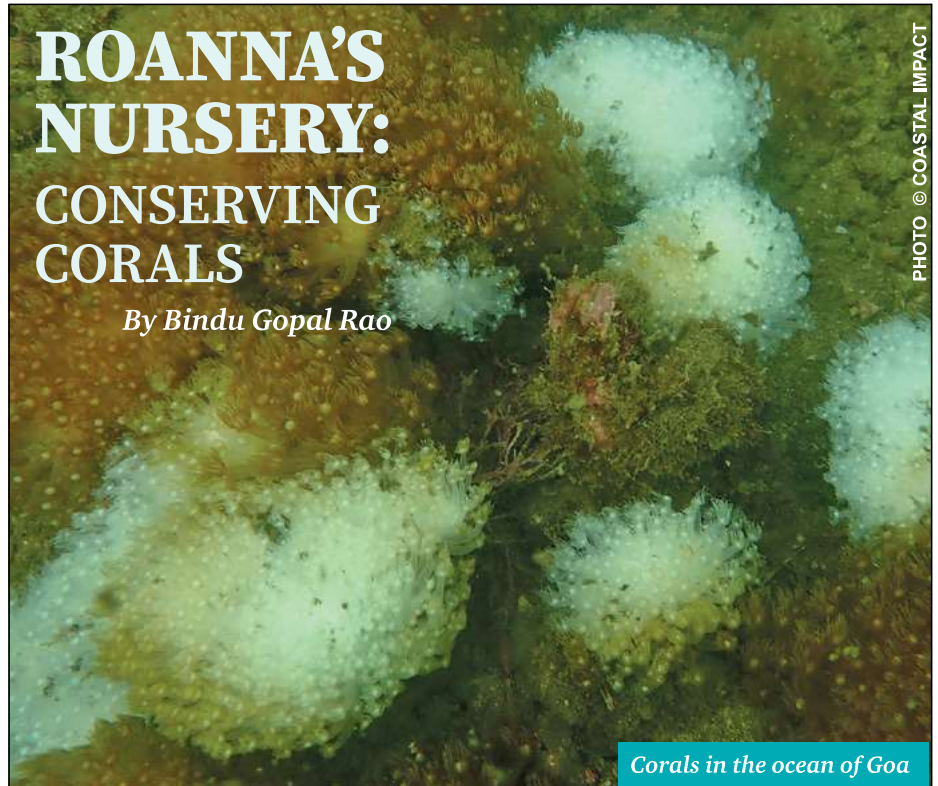


PHOTO © COASTAL IMPACT

*Corals in the ocean of Goa*

### Conserving Corals

Coastal Impact is a non-governmental organization (NGO) that works on marine conservation, education, and research; it studies and monitors Goa's marine ecosystems, spreads awareness, and initiates research and conservation actions. It also helps build interest and engagement among local communities and visitors about Goa's extraordinary marine ecosystems. It has just completed a coral micro-fragmentation transplantation project that seeks to rejuvenate coral reefs.

### The Case for Corals

Among the most diverse ecosystems in the world, coral reefs have seen a rapid decline in the last few decades. The coral cover that had already taken a very bad beating because of global warming, then they took another hit in April and May 2020. About 80 to 90% of the corals in Goa were bleached!

Bleaching causes the corals to become white as algae is flushed outside but the coral is still alive - barely. "That is when we realized

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that we should do something urgently about this,” explains Venkatesh Charloo, Founder Trustee of Coastal Impact. “So, we applied for a grant with The Habitats Trust and with the blessings of the Forest Department of Goa, we transplanted a species of hard coral called *Turbinaria* (commonly known as table coral). It is a very resilient coral and yet it was suffering from bleaching, so we decided to start with that.”

### The Specifics

Beginning in January 2020, Charloo and his team have transplanted 192 pieces of coral over a year. They made metal frames that could hold 12 ceramic tiles each of a square foot. Each tile was secured to the frame with cable ties. These frames were then lowered at a site off Grande Island, a popular diving and snorkeling site opposite Goa's airport. Then four fragments of coral were secured with an eco-friendly epoxy-based adhesive to the corners of each tile. The broken but alive pieces of coral were found on the seabed and gently placed in a bag and brought to where the frames were, so there was no additional stress on the corals. The team has since regularly monitored coral growth and rate of growth is encouraging, mirroring the pattern elsewhere in the world where coral regeneration projects have been attempted. The Habitats Trust project was completed in December 2020, and the team is now looking for fresh funding to help with new projects as well as to continue monitoring the transplanted corals, which is a long-term process. The coral growth is being monitored monthly and the tiles are brushed and cleaned to remove sediment build up.

### Micro Fragmentation

The process used is called Micro Fragmentation Technique for Coral Regeneration and uses small coral fragments that are about two or three centimeters in dimension. These tiny fragments of corals can grow 25 to 40 times faster when compared to any other regeneration technique. So far more than a million pieces of corals have been transplanted worldwide using this technique. “The idea now is to build on this and transplant reef building corals of other endemic species where growth will be more rapid,” says Charloo. “Once the corals grow, they merge into each other and immediately increase the collective rate of growth—they become bigger very quickly. The success rate is very high in this non-invasive technique.”



PHOTO © COASTAL IMPACT

### YOU CAN ADOPT A FRAGMENT OF CORAL - Pooling Resources

The 192 transplanted coral fragments monitored by Coastal impact have been put up for adoption. Anyone can adopt a fragment of the coral for Rs. 5500 (67 USD) or adopt a tile that has four pieces for Rs. 20000 (245 USD). These funds are then used exclusively for transplanting new corals as well as monitoring existing corals. “The corals are renamed with the name chosen by the person adopting each coral fragment, who then receives a Certificate of Adoption, an 80G certificate Tax Exemption Certificate for 100% of the amount paid, as well as a photograph of the coral—and follow up photographs, says Charloo. “This project is called the Coral Crusaders Program.” Thus far nearly 100 fragments of coral have been adopted. The first coral was adopted by 10-year-old Samira Ram from Mumbai whom Charloo describes as the “first official Coral Crusader.” A couple of startup garment companies also adopted a few fragments to gift to their regular customers.

### Saving the Corals

As corals were being damaged when boats unintentionally dropped their anchors on them, Venkatesh and his team decided to put mooring buoys at different places around three islands. “We put cement blocks on sandy ocean beds and attached these to a large drum with ropes and chains,” says Charloo.

“The diving site also has an old shipwreck that was being damaged every year, so we also placed two mooring buoys there. One buoy was put at Roanna's Nursery, named after the first volunteer who worked with us” The Coastal Impact team realized last year

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## *In Loving Memory of Sheila Milkowski, a longtime Wildlife Watch member.*

Sheila's full obituary can be seen here: [legacy.com/us/obituaries/gazettenet/name/sheila-milkowski-obituary?id=52021595](https://legacy.com/us/obituaries/gazettenet/name/sheila-milkowski-obituary?id=52021595)

Sheila sadly passed away on April 20, 2023. Her obituary, published in the Daily Hampshire Gazette on May 25, 2023 said that she lived in NYC for many years where she taught school and had an after-school art program for underprivileged children.

She was an animal activist and became involved in the rescue of many cats, as well as a beloved raccoon. We wish people as kind as Sheila would live forever.

Wildlife Watch first heard about Sheila's passing from her close friend, Jackie Compton. Please see Jackie's letter against trapping in the C.A.S.H. COURIER, Summer 2023, on page 6.

## ROANNA'S NURSERY: CONSERVING CORALS *Continued from Page 2*



### **Making the Connect**

The team is also starting a Citizen Science Program named Marine Monitors where divers will be taken to conduct surveys on the transplantation sites and taught the techniques in maintenance, monitoring and fresh transplantation of corals. In addition, they would also conduct biodiversity surveys and monitor fish stocks which will assist in regular and long-term collection of data, and the uploading of the data onto web-based databases. Charloo says, "it is great as divers can come back repeatedly for dives and see how the corals have grown as well as monitor changes to the dive sites in terms of diversity." A few weeks ago, a fish sculpture made of cement by another company was installed near the transplantation site on which several different species of reef building corals were transplanted. Sea Urchins were also introduced to keep the algae from taking over to use nature to help nature and this seems to be working well so far. Charloo was honored by National Geographic on Earth Day as one of the Changemakers in India, and a short film featuring him was aired by NatGeo. Currently, Coastal Impact is in advanced discussions for funding three projects with corporates under their Corporate Social Responsibility programs. Meanwhile, the corals are growing slowly yet steadily, and the team is also seeing aggregations building with more fish species inhabiting the area. Marine life is seeing a lot of threat and the regeneration of coral with Micro Fragmentation is a great way to help this immensely valuable building block of our planet.

that, if more than one boat anchored to these mooring buoys, then the cement blocks were dragged along the seabed. "After a bit of research, we got helical anchors manufactured locally," adds Charloo. "These screw into the sand and can each absorb a pull of 1000 pounds."