AUG/SEP **KIMBERLEY MARINE** RESEARCH STATION ● CYGNET BAY 2015

Harvest Season

Between June and September is when most of our annual crop will be harvested, in other words Cygnet Bay Pearls will be born. With Garata and Mike, the two technicians that are operating our shell, as well as harvesting the final product after approximately two years, Cygnet Bay is currently in the full swing of making gems. But the process of harvest is more than just another operation on the shell. First, the panels with seeded oysters will have to get thoroughly cleaned on the pearling boats and brought ashore where they have time to relax and adapt to the sudden disturbance of their life out in the ocean. We keep them in tanks, circulated with filtered Cygnet Bay ocean water. Gary the Hatchery manager and Flynny, one of our experienced Pearlers will make sure the shell is taken care of and will then get prepared for the technicians to do the rewarding work.

Bala pulling up a panel with Pinctada maxima ready to be harvested

The technicians at work

Mike (left) and Garata (middle) harvesting pearls and the outcome of a morning's harvest (right)

What's new in Cygnet Bay

The Cygnet Bay Crew has grown to its maximum of 60 Staff for this dry season. September and October are usually the months in which our family will get smaller again and lots of people leave over the wet season. This year we had a particularly great community with lots of friendships that developed over work (of course), bon fires, volleyball games, ping pong tournaments and afternoons on the beach or around our beautiful new Restaurant and Pool area. Hopefully people could feel the good vibes when visiting the Bay, staff at least had the time of our lives and one or the other might even come back to the farm in the future.

Research at KMRS- Corals are out

That's what Verena Schoepf, researcher from the University of Western Australia, does not think at all! Corals are what it is all about! Especially the ones that she studies in the Kimberley are outstanding, literally sticking out of the water for up to a few hours. This is really rare because corals usually grow in the photic zone of our tropical oceans, adapted to a certain range of environmental conditions. Usually coral polyps have a very narrow window of light, sea temperature and pH level tolerance in which they can survive, reproduce and grow, and their capability to adapt to climatic changes is weak. If

Shell island at a low spring tide exposing several coral species to the sun and air

the temperatures get too high or the pH of the water increases too quickly corals bleach, which means a death of the animal and left behind will be only the calcareous skeleton. The Kimberley region is tropical enough to have different coral species grow but due to the big tidal cycles (ranging up to 11m), there is a bit more to them than most people think. "I am interested in the branching corals and it is absolutely fascinating to see how they cope under the conditions of the massive fluctuation in tidal level. Some of the corals around my research site on Shell Island are exposed to the sun and air for multiple hours! I call them intertidal and compare them to another, deeper site on Shell Island where the

The group of researchers deploying a tripod for the experiment

corals are sub tidal, meaning not exposed to dry air." explains Verena to the camera that Alexandra Sorgenicht, film maker from Germany holds. During their stay at the KMRS Alexandra films everything Verena researches as part of a documentary for the German TV program Arte. The documentary will be in 5 blocks, each following a different female researcher on a different part of the world, Verena in Northwest Australia being one of them. With a transfer experiment she hopes to find out what makes these corals adaptive and whether they are quicker in adjusting to new environmental conditions compared to corals growing somewhere else. We wish you good luck and great findings!

Photo of the Month

The whales are back! As Humpback whales (Megaptera *novaeangliae*) feed in the polar seas and migrate thousands of kilometres towards the tropics to mate and calve, some of these giants show up around the Islands off One Arm Point and Cape Leveque. The evening sun lights up the blow vapour of a mother and calf surfacing almost simultaneously close to Tallon Reef.

Photo: Natalie Prinz