



KIMBERLEY MARINE

RESEARCH STATION • CYGNET BAY

JULY – AUGUST 2018

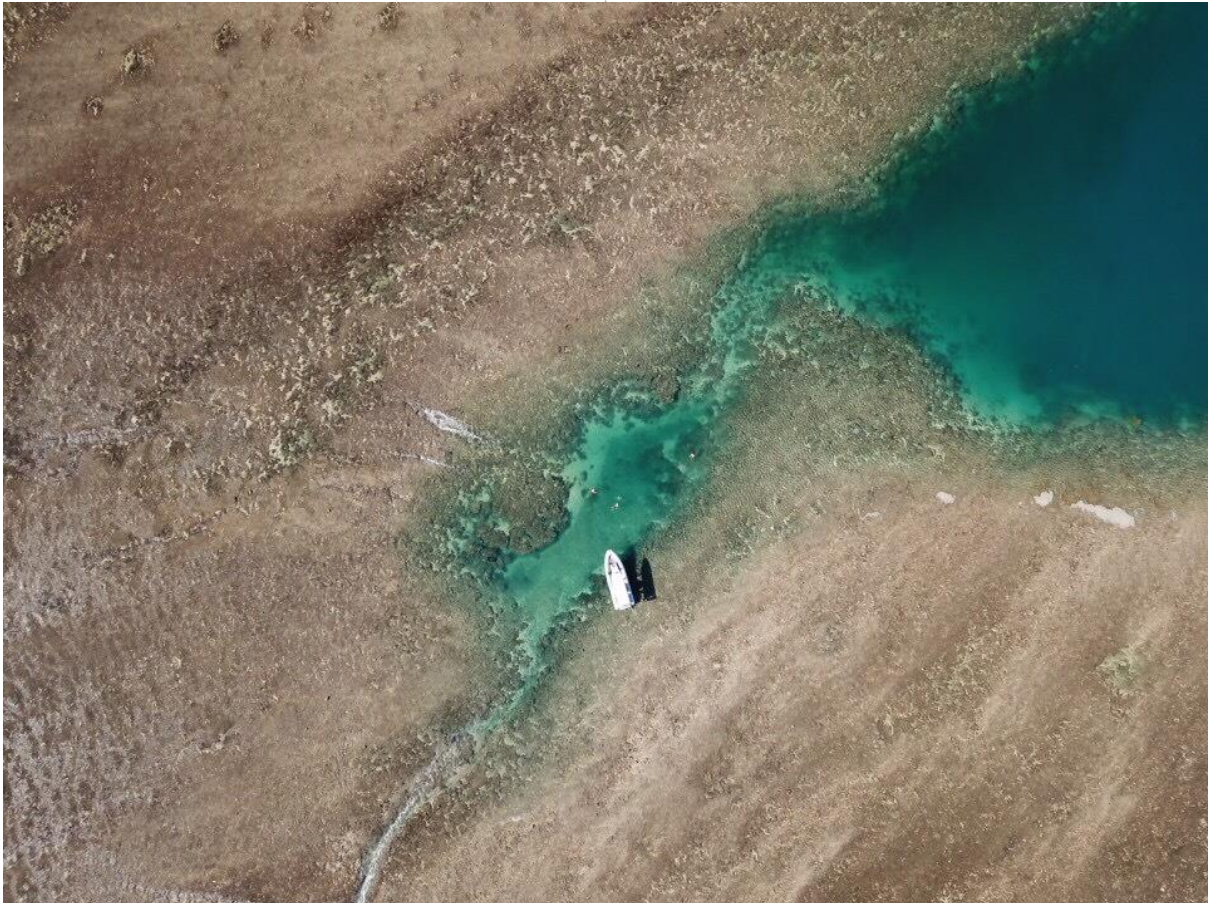


Photo credit: Jamie Hornblow, 2018

News from the Research Station

Spat Growth and Survival

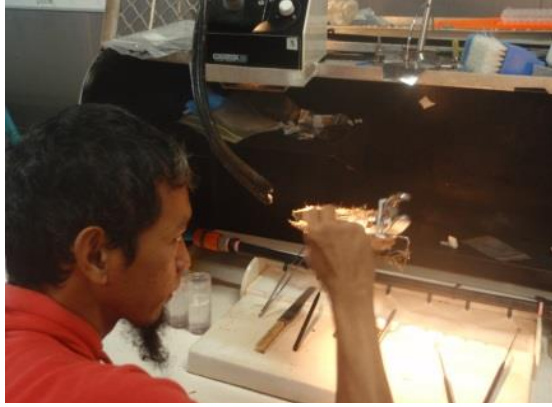
With the recent arrival of spat, interns have been busy collecting and recording various data from deployed spat frames to understand their biology to assist with investigations into Juvenile Pearl Oyster Mortality Syndrome (JPOMS). The spat collected have been growing well with some requiring extra attention whilst collecting samples due to their shell size. In addition to those out in the field, spat in the hatchery aquariums have continued to be observed to gain more understanding of spat growth, survival and environmental influences.



Settled Spat

Harvesting

The pearling/hatchery crew have been hard at work harvesting this year's pearls. This year sees the first harvest from our very own farm bred oysters which spawned in 2014. These oysters were seeded in 2016, so we look forward to what they have produced this season. It



Garata places a tag on the inside of the shell for brood stock sampling.

has been an exciting and yet challenging time for all crew involved, as the farm has experienced strong winds for most of the season making it difficult to bring in oysters to seed / harvest.

Tagging of Brood stock

This year also marks the first trials of tagging our brood stock for genetic studies with James Cook University. Just like PIT tags for turtles and other marine life, these tags will assist with quality control for sampling oysters used as brood stock. Samples were also taken from the foot of the oyster for genetic sequencing.

Other research from the interns

Phytoplankton

Interns have been inspecting water samples from three sampling sites at Cygnet Bay to identify phytoplankton under the microscope. Understanding the diversity and abundance of phytoplankton at Cygnet Bay is assisting researchers in determining oyster health and water quality at the farm. Looking at the last year of sampling, data has confirmed increased numbers of phytoplankton in the autumn months across all locations, with the most common phytoplankton being diatoms.



Planktoniella sp.

Coral Transects

We are continuing to monitor the condition of our intertidal reefs near the front beach of KMRS. Interns have been monitoring the health of the corals through photo identification using the Coral Point Count software. The health of these corals has remained steady with little evidence of coral bleaching occurring to date. This is great news for Cygnet Bay, having witnessed bleaching events in 2016.



Tile deployed for Rock Oyster Spat recruitment

Rock Oyster Monitoring (*Saccostrea spp.*)

The interns have been assisting with Andy's Rock Oyster survival trials. Aims of this project include, trialling 3 separate locations within Cygnet Bay to assess variations in spatfall densities, assessing survival rates of spat and continuing to explore relationships between barnacles and limpets. This project is in its second month of set up, with the second lot of tiles being deployed. It is hoped that this project can provide some answers for oyster spat collection and grow out trials for rock oysters. The ultimate goal is to determine the possible economic viability of *Saccostrea spp.* with contribution and involvement of the local indigenous communities.

Celebrity Visits

Nick Cummins 'Honey Badger' / Bachelor 2018

The 'Honey Badger' gave his 'crack of approval' whilst on tour at the Pearl Farm. We must have made an impression, as he gave us a 'rose' while visiting the pearl farm in July before he vies the attention of 25 beautiful women in this seasons Bachelor.



Photo courtesy of Jamie and Jessie Hornblow.

Masterclass Voyage 2018

Cygnet Bay celebrates the journey of the Australian Pearl from the East coast to the West coast of Australia. Visitors have a chance to witness pearling from Broken Bay (NSW) and Cygnet Bay (WA) with James Brown, to gain insights into the mastery of producing the best quality pearl.

Lunar Eclipse / Blood Moon



Image of the different phases of the moon during the eclipse. (ABC, 2018)

Interns, staff and visitors were up early on the 28th July to observe the longest total lunar eclipse of the 21st century. The eclipse lasted 1 hour and 43 minutes. Mars was also shining its brightest during the event, making the view even more spectacular.

Staircase to the Moon

During the last weekend of July, interns had their first opportunity to witness the Staircase to the Moon. The Staircase to the Moon takes place 2-3 days each month between March and October, and can be viewed from the lookout at Cygnet Bay and other various locations around Roebuck Bay.

Film Festival

The annual Mud and Saltwater Short Film Festival saw previous intern Courtney's film on life in the mangroves of Cygnet Bay. We wish her all the best in the competition which showcases various film makers' works in the Kimberley.

Shinju-Matsuri and Cygnet Bay Pearl Farm Harvest Festival Starts! (25 August – 2 September 2018)

Shinju Matsuri Festival of the Pearl started on the 25th August 2018. The Cygnet Bay Pearl Farm celebrates another successful harvest in which visitors can experience jewellery design, Champagne sundowners, and films by starlight and live music.

The Cygnet Bay Pearl Farm Harvest Festival starts on the 31st August and concludes on the 2 September. Details of the event can be found on

<http://www.cygnetbaypearlfarm.com.au/harvestfestival/>



Rose seeding a virgin oyster bred on the farm.

Visitors

Meet Rose Crasp (Pearl Technician from Broken Bay Pearls)

Rose Crasp visited the farm to gain some experience in seeding *Pinctada maxima*. Rose has 10 years of experience seeding Japanese Akoya (*Pinctada fucata*) oysters on the Central Coast of NSW at Broken Bay. These oysters are much smaller than their WA counterpart and can only be seeded once. We hope you gained a lot of valuable experience with seeding Mother of Pearl Oysters at Cygnet Bay, WA.

Meet our new Interns

Welcome Abbie Leonhardt and Elise Pinto. Both our interns come from Murdoch University with backgrounds in Marine Science. Abbie has recently completed her studies in Bachelor of Science (Marine Science and Conservation and Wildlife Biology) in June 2018 and hopes to gain some practical experience in marine science whilst experiencing more of the Kimberley region during her stay here at Cygnet Bay. Elise graduated with a Bachelor of Science in Marine Science, Eco-tourism and Environmental Technology in 2013. She hopes to gain more skills and experience in marine research in addition to learning more about oyster husbandry and the Kimberley region.



Abbie and Elise with Andy's 3-monthly Rock Oyster Sampling Project

If being an intern at KMRS sounds like something you would love to do, email your resume and cover letter to kmrs@cygnetbaypearls.com.au.

Community News

Science Week at One Arm Point Remote Community School

Liam Rawlins and the interns joined 'Science Week' at the One Arm Point Remote Community School earlier in August to teach kids about pearling and marine science done at Cygnet Bay. Students enjoyed opening up the demonstration oysters and finding the where pearls are harvested in addition to participating in activities designed to provide an understanding and experience in marine science research conducted at the KMRS.



Liam showing one of our oysters to the students

Photo of the Month



Humpback Whales at Cygnet Bay - Jamie Hornblow

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+ 61 8 9192 4999



research@cygnetbaypearls.com.au



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