



# KIMBERLEY MARINE

RESEARCH STATION • CYGNET BAY

**JANUARY—FEBRUARY 2022**



Cygnet bay from the lookout, at high tide.

Photo by: Alexandra Owen

## IN THIS EDITION...

It's the start of a new year at Cygnet Bay, and staff have been busy getting prepared for things to come in the year ahead after a Christmas break. Exciting new developments are happening around farm for tourism, algae production is in full swing and ongoing research projects continue.

### ***Weather***

It has been a hot start to the year, with the hottest day so far being recorded at 36.4 degrees, at the beginning of February. This was hotter than the highest recorded temperature last February by 0.4 degrees! January recorded 282mm of rainfall, making it one of the wettest starts to year we have had in a while. Most of this was contributed within a 24hour period, where a tropical low delivered a 'once in a 20-50 year rainfall' event. This left Broome flooded, and regional communities isolated with the Great Northern Highway between Fitzroy Crossing and Halls Creek closed due to flooding. We are thankful that we had no significant damage here at Cygnet Bay.

So far this February we have only had 138mm of rain, and anticipating some more rain to come!

## BIG THINGS HAPPENING AT CYGNET BAY...



The new eco-friendly safari tents being developed. Photo by: Craig Waters.

There are lots of new exciting things in the works for tourism at Cygnet Bay, including renovations to the restaurant and new accommodation being built. Our project manager, Craig, is one busy man implementing and overseeing these renovations at the farm!

On the list of new accommodation being constructed includes 15 new high end eco-structured safari tents and 30 new caravan bays to accommodate for more visitors throughout the year.

The restaurant is seeing big changes both behind the scenes and front of house. Complete overhaul renovations will give smoother service for our in-house guests and our functions. The whole team at Cygnet Bay is so excited to welcome back our visitors this season to see the changes we have made.

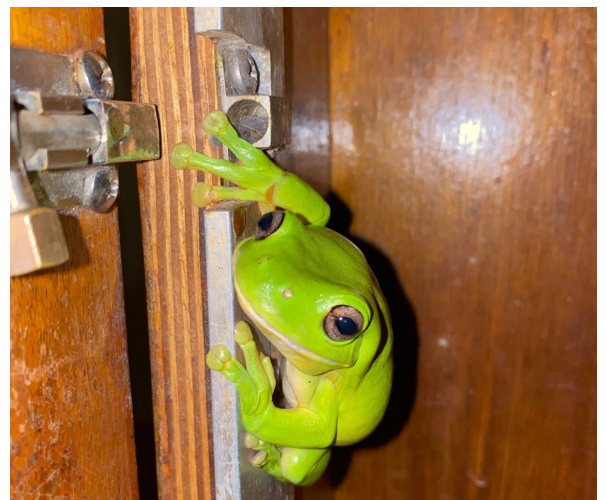


Photo of the Month! One of the many friendly faces we have here at Cygnet Bay. Photo by: Alexandra Owen.



## NEWS FROM THE RESEARCH STATION

### *Algae...*

Algae production is well underway, with Interns Gaby and Alex very busy growing large batches of Algae in the lab, in preparation for the first *P. maxima* spawning of the year. Four species of algae are currently being cultivated, building stocks to sustain growth of *P. maxima* through its different life cycle stages, following a successful spawning event. The hatchery team are patiently awaiting the arrival of our beloved Hatchery Technicians, and the next full moon to kick start spawning.



Intern Alex adjusting the aeration in some of our actively growing algae

### *Monthly sampling...*

Starting the year off with the continued monthly water sampling to look at the health of our waters. Water temperatures are seen to be on the rise due to La Nina with salinities dropping as a result of high rainfall. We are collecting random samples of our pearl oysters from the lines at sea to analyse RNA samples which coincide with the results of our water samples. This allows us to see the overall health of our water system and the pearl oyster production.



A Poritidae coral recruit under microscope

### *Coral tiles..*

Ongoing research projects are being continued from last year, including our coral frames project. Interns have been identifying coral recruit species growing on our coral tiles, such as this coral recruit under the microscope shown above, which comes from the Poritidae family of stony corals. This allows us to monitor the coral reef systems health. As it has been one of the hottest months of yet, and will be interesting to see if coral recruitment has been affected by the increase of sea water temperature.





# AROUND THE FARM

## *Golden pearls...*

In January, we harvested a golden pearl during one of our Pearl hatchery Tours, which was graded as an A1+ pearl and valued at \$2500. Golden pearls are harvested from gold-lipped *P. maxima* oysters, and while these oysters are naturally occurring, its rare to find them and be able to harvest an oyster from them. What a lucky find!



New intern Gabriela Ferreira on a field trip to monitor corals. Photo credit: Alexandra Owen.

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Kimberley Marine Research Station



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A Golden pearl, harvested from a gold-lipped *P. maxima* oyster. Its rare to find and harvest a pearl from these naturally occurring oysters.

## STAFF NEWS

### *Two new interns for 2022!*

Gaby started in January as a recent graduate student from Murdoch University as a marine biologist. She is excited to learn the production of *P. maxima* and the health of the coral reef systems in the Kimberley.

Alexandra also joined us at KMRS in February. Alex graduated from Murdoch University with a BSc in Marine Biology and Environmental Science, and she's keen to gain re-search experience and learn more about our corals displaying high resilience to thermal stress.