



KIMBERLEY MARINE

RESEARCH STATION • CYGNET BAY

OCTOBER/NOVEMBER 2016



Buccaneer Archipelago. Photo: M. Stegert

News from Cygnet Bay



Collecting height data. Photo: K. Mullan

New Shell Delivery

In mid-October, the Cygnet Bay Pearl Farm received a new stock of *Pinctada maxima* from Eighty Mile Beach on the northwest coast of Australia. Measurements were taken during the delivery and will be used in the future to examine survival and growth.

Hatchery Operations

First operations on our oysters were completed in early November. December will include x-raying and monitoring of our oysters to determine the success of the seeding. This way Cygnet Bay can track how many oysters accepted the nuclei. Throughout the whole pearl producing process, Cygnet Bay is involved in all aspects to ensure the best quality pearls are harvested.

Research at KMRS

***Pinctada maxima* Spat Analysis**

In April 2014, the Cygnet Bay hatchery spawned its very first batch of *Pinctada maxima*. After two years the oysters have finally reached size to be seeded for the first time. The success of the different families within this group was examined. The KMRS intern team produced a comprehensive report of the results that can be utilized in future farm operations. As the 2016 season comes to an end, Cygnet Bay reflects on the dedication that the pearling team demonstrated, and is excited to start operations on the next generation of Cygnet Bay spat.



First Operations Team. Photo: G. Firman



Our first chain diatom. Photo: S. Dawe

Phytoplankton Monitoring

In November, the collaboration of KMRS interns and leading research scientists at CSIRO has produced the preliminary experimental design for a comprehensive water quality and phytoplankton monitoring program. This will be the first of its kind in the Kimberley region. KMRS invites collaboration with any scientific bodies that would like to contribute to the first-ever research that is being established here in the Kimberley. Please contact the KMRS team if interested.

research@cygnetbaypearls.com.au

Rock Oyster Recruitment

KMRS interns have continued collecting data on the interspecies competition and recruitment of the rock oysters. In order to further this research, the interns have designed new settling substrate to determine the best type of surface for the rock oyster spat settlement. Hopefully in the New Year, the first deployment of these new tiles will transpire. The results of this will provide information to local organisations that may want to cultivate rock oysters.

Other news from Cygnet Bay

Australian Geographic

The Cygnet Bay Pearl Farm will be featured in an upcoming story on the biological aspects of lustre. Being the oldest working pearl farm in Australia, Cygnet Bay has pioneered the pearling

industry, while continuously contributing to public outreach and research. The Australian Geographic team interviewed and photographed members of the pearling crew and KMRS. The interest was focused on how Cygnet Bay and other companies have adapted to the changing industry.



Sampling at Waterfall Reef. Photo: A. Lienesch

Sea Snake ID

Blanche D'Anastasi is a PhD candidate that interested in the sea snake ecology and conservation. The sightings of sea snakes contribute to ongoing research on their ecology. We would like to invite anyone who sights a sea snake to report it through the following link:

<https://docs.google.com/spreadsheets/d/1ubY1Qaq4JYRRKxKOEIL1g0ysaRTovXIZpxsCgwnpdRs/edit#gid=0>

Continuing Coral Research

Dr. Chris Cornwell and Dr. Steve Comeau from the University of Western Australia came back to Cygnet Bay during October to continue their reef studies. These studies are looking at the water chemistry and calcification rates of corals and coralline algae at Waterfall Reef and other local coral communities. We look forward to reading their findings.

Staff news

KMRS Interns

Welcome Samantha Dawe

Samantha is a local Western Australian who completed her Masters of Science in marine biology and ecology this year. She is ecstatic to join the KMRS team and looks forward to learning new techniques and gaining experience in aquaculture. Her passion for science and the ocean started young and she is looking forward to acquiring skills to further her career.

Thank you and goodbye to Katey Rawstron

Katey has returned to New Zealand and is grateful for the field and lab experience obtained here at KMRS. Following her internship, she feels ready to return to university and complete her Masters. Highlights of her time at Cygnet Bay include assisting UWA scientists, exploring the Buccaneer Archipelago with friends and seeing some of the fascinating wildlife here in the Kimberley.

Photo of the month



Sunrise over Cygnet Bay. Photo: G. Firman

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KMRS is on Twitter! Follow KMRS on Twitter (@KMRS2009) and Facebook (facebook.com/kmrs2009) for frequent updates on the research and happenings in and around Cygnet Bay.



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