ABOVE: ALVA BEACH GROW-OUT FACILITY

Frequently Asked Questions

A). What is Aquaculture and why is it so important?

Aquaculture is the farming of aquatic animals and plants such as Crustaceans, Fish, Aquatic Plants, Algae and Molluscs. Common aquaculture practises consist of cultivation in ponds, rivers, tanks, lakes and the ocean. Here at Pacific Reef Fisheries we use ponds and tanks to breed and grow our stock.

Aquaculture is critically important as a current and future industry as it reduces the pressure on wild caught populations and ensures that sustainable seafood will be available for years to come.

B). What does Pacific Reef Fisheries farm and how much?

Pacific Reef Fisheries produces two different types of marine species:

- **Black Tiger Prawns** (*Penaeus monodon*) – Approximately 1000 tonnes are grown annually
- **Cobia** *(Rachycentron canadum)* – Approximately 90-100 tonnes are grown annually

Prawn Health Monitoring

Cast nets used to sample prawns and check on current health status.

Aeration

Paddlewheels (Above) are used to created oxygen and water currents in ponds.

MBD's High Rate Algal Ponds (HRAP)

High Rate Algal Ponds help bioremediate discharge water from production ponds.

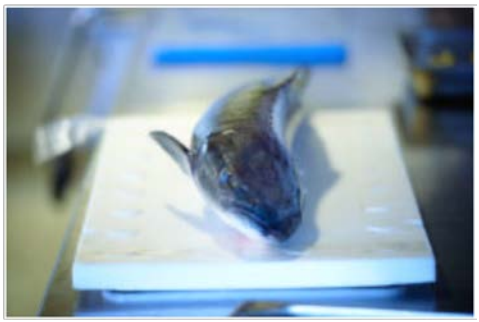
Prawn Harvest

Pacific Reef Fisheries harvest in two ways. For Drain Harvest (above) the pond is fully drained and prawns are collect in a net on the outlet of the pond. Partial Harvest nets are set in the pond to take out only a small percentage to thin out biomass within the pond system.

WORLD STATISTICS FOR SEAFOOD PRODUCTION

Source: FAO. 2016. The State of World Fisheries and Aquaculture 2016. Contributing to food security and nutrition for all. Rome. 200 pp.

~45%	~55%
Total Aquaculture	Total Wild Caught



Cobia (*Rachycentron canadum*)

Cobia grow to a maximum length of 2m and can weigh up to 78kg. Pacific Reef Fisheries Cobia are harvested when then reach 4kg – 10kg depending on market requirements.

C). What type of environmental impact does Pacific Reef Fisheries have on the environment?

Pacific Reef Fisheries environmental footprint is very low due to the state of the art Bioremediation facility and Environmental Management Plans in place to ensure that all operations comply with Local, State and Federal permits.

A four stage Bioremediation process takes place before discharge water is released to the environment.

Stage 1: **Settlement Ponds** – Allow suspended solids to settle and promote production of filter feeding organisms to help reduce nutrient loads

Stage 2: **Sand Filter** – Reduces Total Suspended Solids and Total Nutrients by 70% and 30% respectively.

Stage 3: **High Rate Algal Ponds** - Reduces Total Suspended Solids and Nutrient Concentrations further to background levels (Intake Water).

Stage 4: **Mangrove Wetlands** – 23ha of constructed mangrove wetland (450oT Biomass) polishes the water even further. This wetlands serves as a great nursery for many native fish, bird, reptile and invertebrate species.

D). What do you feed your animals?

Pacific Reef Fisheries feed both the Black Tiger Prawns and Cobia a pellet based diet. This food is produced by RIDLEY which is an Australian owned and operated company. For more information about our feeds visit the Ridley website - www.ridley.com.au

E). What measures do Pacific Reef Fisheries take to prevent diseases such as White Spot Syndrome Virus?

After the outbreak of White Spot Syndrome Virus (WSSV) in SE Queensland in December 2016, Pacific Reef Fisheries have implemented a comprehensive review of our Biosecurity Management systems. Whilst border control to prevent entry of diseases into our country is the first line of defence, we as a business need to ensure we also have protective measures to prevent the entry of such diseases into our systems.

For any other information please see our website (www.pacificreef.com.au) or contact us on: administration@pacificreef.com.au

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