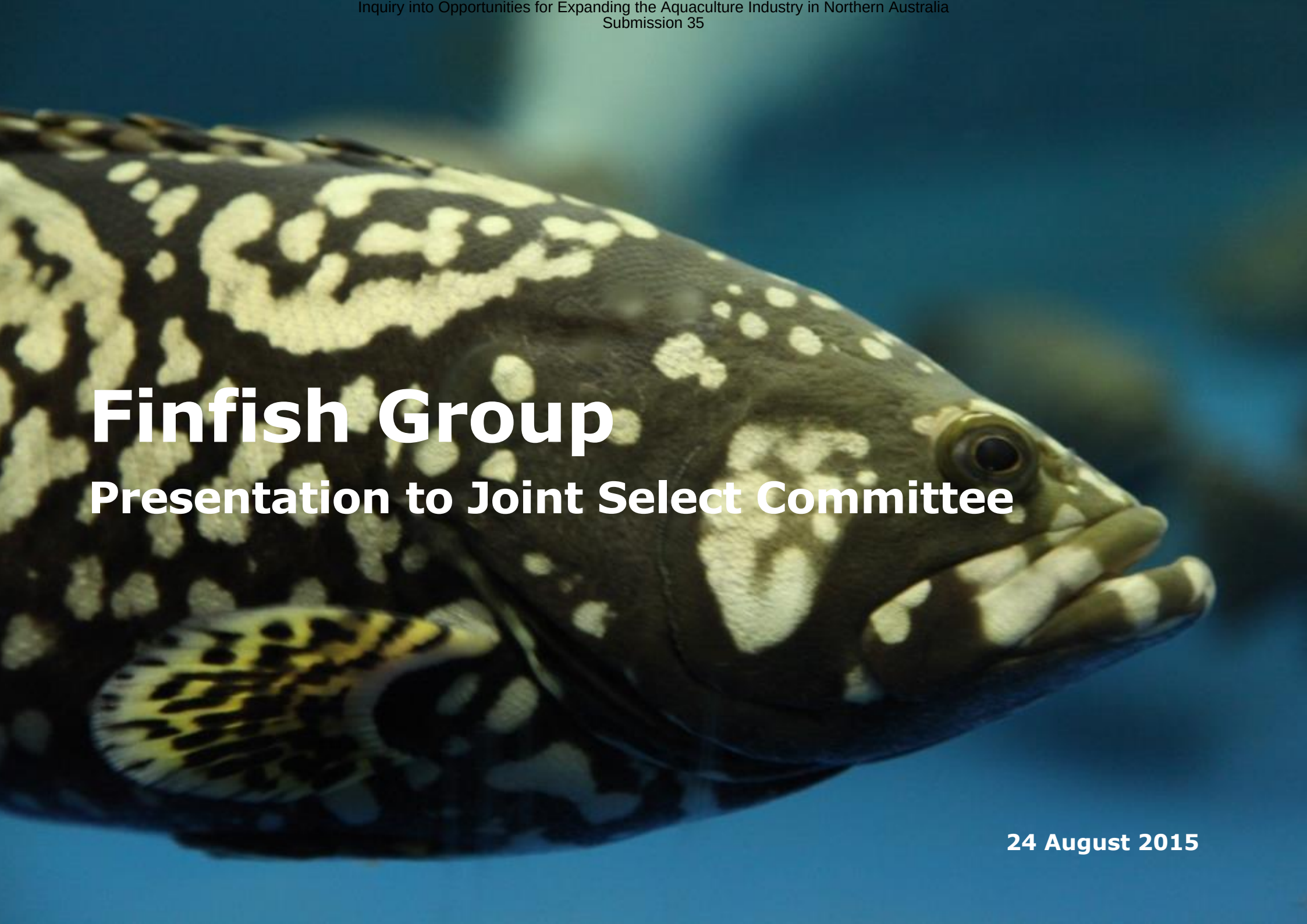


Finfish Group

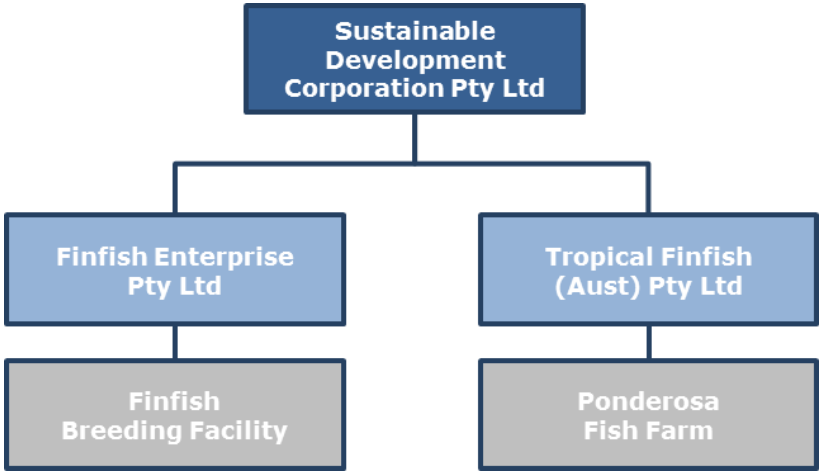
Presentation to Joint Select Committee

24 August 2015

Introduction

Finfish sustainably produces tropical fish for consumption

Finfish is a privately owned group of companies employing 22 personnel who operate world class tropical finfish production facilities in Cairns.



Finfish breeding facility (FBF)

Finfish's Intellectual Property resides primarily within its breeding facility (FBF) which is located in Portsmith. The facility is capable of commercially breeding 3 species of fingerlings from the Grouper family:

- Giant Grouper (*Epinephelus lanceolatus*);
- Gold Spot Grouper (*Epinephelus coioides*); and
- Tiger Grouper (*Epinephelus fuscoguttatus*).

Coral Trout (*Plectropomus leopardus*) is also being produced with ongoing R&D required to enhance survival rates and commercialise production.

The FBF's controlled environment contains unique systems and processes that achieve consistent monthly spawning from the broodstock, producing in excess of 200 million fertilised eggs per annum. The facility has recently been expanded to enable annual commercial production of up to 360,000 Giant Grouper fingerlings (50 mm) or 1.0 million Gold Spot Grouper fingerlings (50 mm). A further expansion to 2.5 million fingerlings per annum is targeted to commence during 2016.

Finfish grow-out facility (Ponderosa)

Finfish operates one grow-out facility, the Ponderosa farm, located in Yorkey's Knob. The 17 hectare pond farm is capable of producing 350 tonnes of product per annum.

The initial commercial focus is on the production of Giant Grouper due to their high commercial value and fast growing attributes. Finfish is seeking to expand its breeding facility and develop additional grow-out facilities in Australia with the aim of producing and selling 1,500 tonnes of fish per annum into the global market, primarily targeting Australia, Asia and the Middle East.

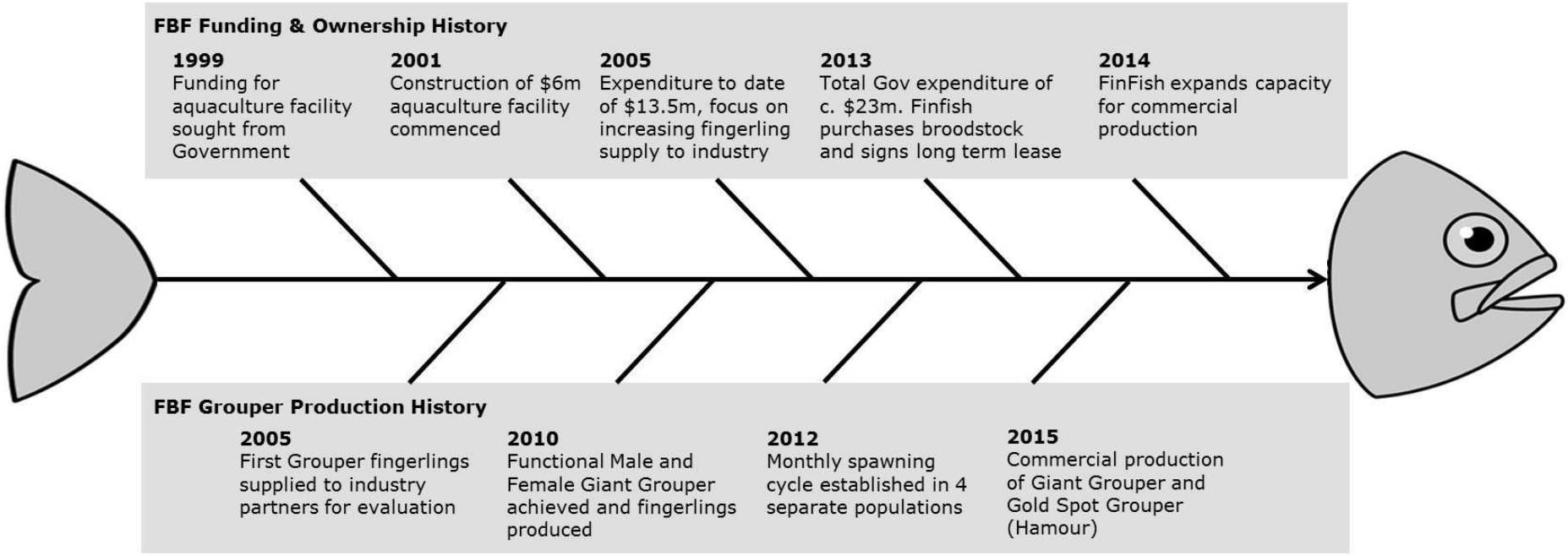
FBF History

A $23m government funded research facility

In 1997 the Queensland Government held a workshop in Hong Kong to review the "Impacts of Destructive Fishing Practices on the Marine Environment" (APEC 1997).

This determined that an alarming decline in the health of coral reef ecosystems was occurring with more than 30% of reefs degraded beyond recovery and a further 30-60% facing destruction.

Following the workshop, the government formed the Tropical Marine Finfish project that would focus on the aquaculture of high-value Grouper species for the Live Reef Food Fish trade. This led to the creation of the aquaculture facility in 1999.



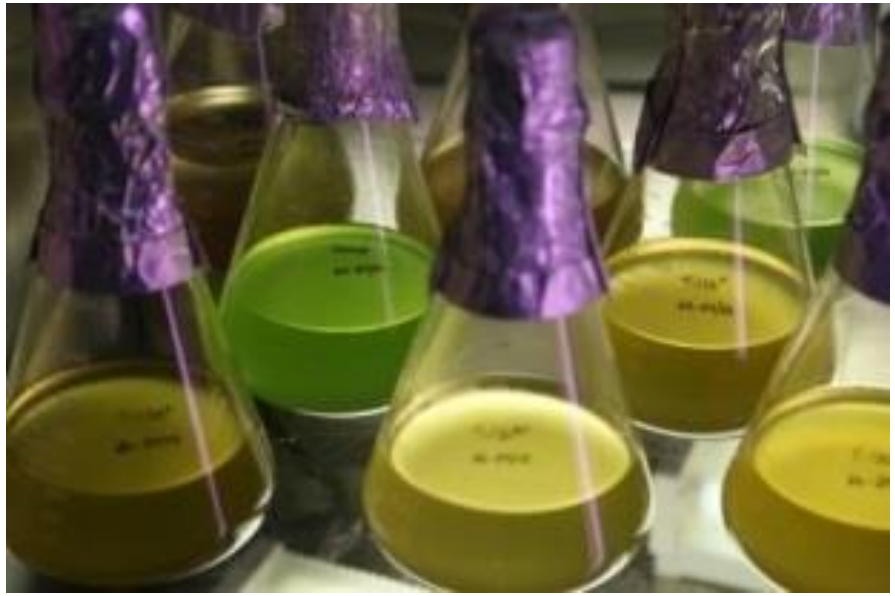
Commercialise New Innovation

Finfish is continuing R&D to commercialise new products

Developing innovation to the point of commercialisation is a long and expensive investment. Across government and private ownership, approximately $26m has been spent over a 15 year period at the FBF, developing the breeding and hatching technologies.

Finfish is currently maintaining a research and development spend of at least $2.0m per annum to continue the development of technologies to manage bio-security and disease risk, and enhance survivability of all species to a level where commercialisation is achievable.

Finfish has commenced the next step towards commercialisation of the breeding technologies by establishing a small market for the most advanced species, Giant Grouper. It now has to grow this market by investing in large scale grow-out facilities.



New Aquaculture Products and Projects

Finfish is seeking to invest in state of the art grow-out systems

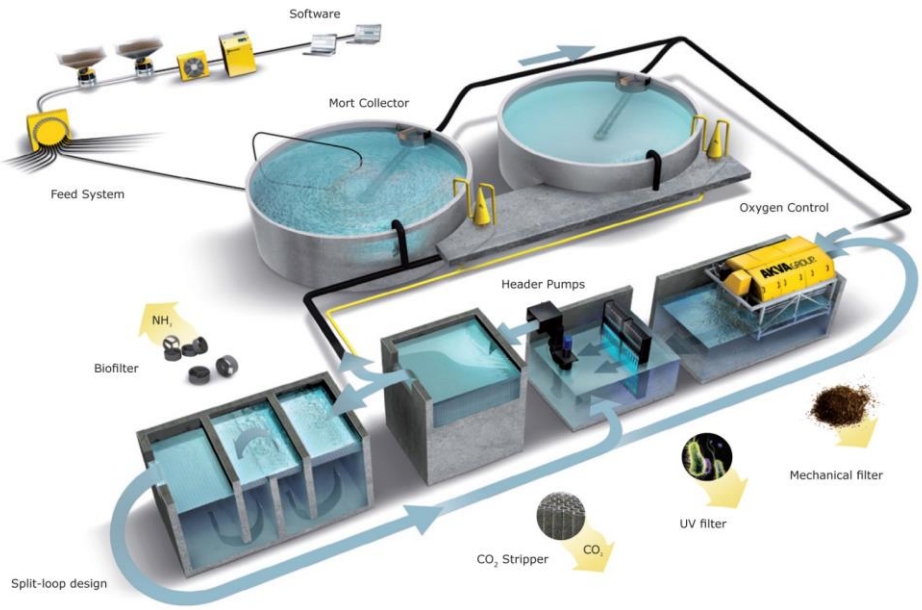
Grouper is a species highly prized by both Asian and Middle Eastern countries, but is relatively unknown in Australia. To establish the size and appetite of the Australian market for the Giant Grouper, Finfish determined that the fingerlings needed to be grown-out into consumption size fish. To accomplish this, Finfish leased the Ponderosa pond farm at Yorkey's Knob and also entered into a Joint Venture arrangement with an independent pond farmer near Cardwell. Finfish is now a vertically integrated operation covering all aspects of production from egg to plate.

Finfish has collected significant data relating to the growth performance of the species together with extensive market data for the product offerings (chilled and live at various sizes). It has also identified considerable challenges associated with pond farming tropical marine finfish, particularly the significant mortalities that result from Noda Virus outbreaks and predators such as birds and crocodiles.

Finfish believes that to successfully commercialise its products, fingerlings need to be grown-out in an environment where critical elements such as temperature, water quality and waste treatment are all controlled.

Finfish is currently working with the AKVA Group, a leading aquaculture technology company based in Norway. Finfish is looking to design and construct an Australian first Grouper RAS system to be built in Cairns. This facility will enable the production of premium products and will assist the Company with achieving its targeted production of 1,500 tonnes per annum by the end of 2018. The concept study is expected to be completed prior to December 2015.

Finfish expects to employ up to 100 staff and invest $20m over the next 3 years to implement its growth strategy for domestic and international market expansion.



Seeking New Markets

Finfish has targeted Grouper production to meet specific markets

Finfish is breeding and producing Giant Grouper for sale in Australia and Asia, and Gold Spot Grouper (Hamour) for sale predominately into the Middle East.

Australia & Asia *– Giant Grouper*

The Giant Grouper is a fish prized by restaurants in Asia for its delicate white flesh and clean taste. The market in Asia is predominantly for a live plate size fish between 0.7kg and 1.0kg. Over 90% of the fish consumed globally is produced in Asia with an average 35kg per capita consumed. Grouper consumption in Asia is estimated to be 50,000 tonnes per annum.

The Giant Grouper is a protected species in Australia and until now has not been available in commercial quantities. Finfish's research & market analysis has confirmed that the Giant is seen as a premium fish by wholesale distributors, Cantonese restaurants and high end western restaurants. Accordingly, Finfish will target sales into both the live and chilled market segments in Australia. The Aquaculture market in Australia is currently $1.2bn per annum with varieties of finfish making up 40% of the market.

Middle East – *Gold Spot Grouper (Hamour)*

The Hamour makes up an estimated 50% of every fish order in restaurants across the UAE. This demand has led to over a 90% decline in the Hamour population in the UAE over the last 30 years (estimates from the UAE Ministry of Environment). The over fishing of Hamour juveniles has led to an estimated decline in the active breeding population to less than 2% of the total stock in UAE waters (20% would be considered healthy). Research and regulations by the governments are attempting to slow this decline including licence restriction, mesh sizes, location restrictions and fish size restrictions.

Finfish's unique ability to sustainably farm commercial quantities of Hamour offers an exciting opportunity for both the public to continue consumption and for governments to assist with repopulation of the reefs.

Benefits and Challenges

There are challenges facing sustainable aquaculture in Australia

Aquaculture is an industry that provides significant economic and environmental benefits including:

- Sustainable production of protein
- Solution to predicted food shortages
- Reducing destructive fishing practices
- Creating jobs and economic benefits for the region and country

To successfully achieve these benefits in a reasonable timeframe, prohibitive challenges need to be overcome:

Challenges	Potential Government Assistance

- Costs of continued innovation
  o Ongoing research and development costs
  o Competition for collaborative research grants
	- Access to capital
	  o Potential for government partnership
	  o Additional support for collaborative research

- Cost of expanding and operating
  o Significant construction costs of infrastructure
  o Insufficient regional support services
  o Very high electricity costs
  o High freight costs due to significant trucking distances and use of air freight for live fish
  o Costs to treat variance in coastal seawater supply
	- Access to capital
	  o Potential for government partnership
	  o Provide connections for investment
	  o Special tariffs for electricity in Aquaculture
	  o Incentives for renewable energy initiatives
	  o Access to agriculture/mining fuel rebates

- Challenging competitive environment
  o competing against cheap imports
  o labelling laws to be improved
	- Government support
	  o Enforcement of tougher labelling laws
	  o Vocal support for Australian produce

Additional Data

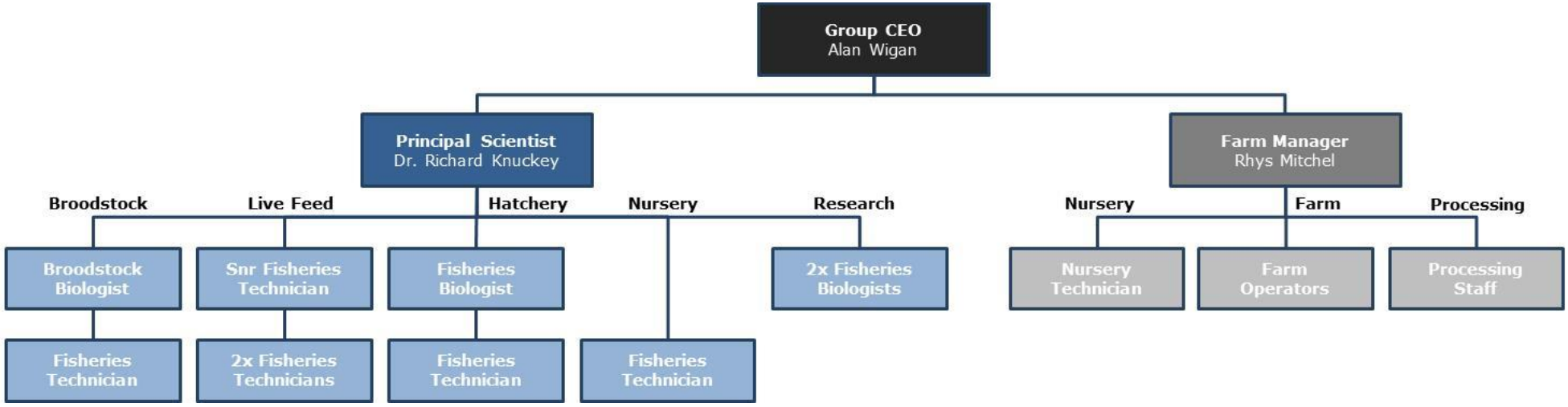
Our People

The FBF facility is managed by Dr Richard Knuckey, one of the world's leading experts on Grouper aquaculture

Dr Richard Knuckey completed his PhD at the CSIRO Marine Laboratories in Hobart, where he developed a flocculation process to produce microalgal concentrates for aquaculture feeds.

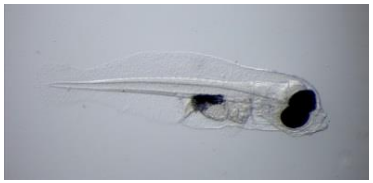
Dr Knuckey has 28 years of experience in the aquaculture industry, of which the last 15 years have been on the development of Grouper hatchery and grow-out technologies for tropical Groupers at the FBF in Cairns. Dr Knuckey commenced research on Grouper aquaculture in 1999 and developing larval diets and hatchery methods for a range of tropical Grouper species. Dr Knuckey has recently overseen the development of Grouper aquaculture in Australia and its expansion from research to a commercial proposition.

Dr Knuckey manages a highly dedicated team of individuals who pride themselves on developing the latest technologies.



Production Process

World class facilities - broodstock, live feed, hatchery, and nursery

Finfish Breeding Facility				Ponderosa
Broodstock	**Live Feed**	**Hatchery**	**Nursery**	**Grow-out Facilities**
Specially controlled environment allows for broodstock to spawn every month Four species of broodstock from the Grouper family; Giant, Gold Spot, Tiger, and Coral Trout	An integrated facility to culture copepods, rotifers and artemia; high nutritional value live feed for fish larvae to consume and digest	The larval cycle from egg to fingerling takes 35 – 45 days Fingerlings are weaned onto pellet food around day 35 and transferred to the nursery when they reach 20mm – 25mm	Fingerlings can stay in the Nursery for 14 days (50mm) to 35 days (100mm), ready for sale to grow-out facilities	Grow-out facilities include RAS systems, open ponds and sea cages Finfish is planning to vertically integrate and become a grow-out producer
  Giant Grouper – Broodstock	  Live Feed Cultures	 Day 0 - Hatching  Day 3 – First Feeding	 Day 43 – Nursery  Day 68 - Ready for sale	 Grow-out RAS system in Australia