







#### **CLEAN SEAS TUNA - BACKGROUND**

- > Founded by Hagen Stehr.
- Listed on the ASX in December 2005.
- Two businesses: Kingfish commercial and Southern Bluefin Tuna (SBT) Research and Development (R&D).
- Only company in the world to:
  - successfully breed SBT in an on-land facility
  - successfully transfer SBT juveniles from land to sea cages.





#### **CLEAN SEAS TUNA CORPORATE INFORMATION**

- Shares on issue 480.8M.
- Capitalisation AU\$60M.
- Cash position \$8.6M as at 31/3/11.
- Current substantial shareholders -
  - Stehr Group 20%
  - Teigen 17%





Current Share Priceas at 13/5/11 – 12.5c



#### **BOARD**









☐ **Hagen Stehr AO** appointed non-executive Founding Director.



December 2009. Background in listed horticultural companies in Australia and an international corporate finance career in South Africa and the UK.

Experience in listed primary production companies, new market development and international finance.

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#### **BOARD**

☐ Marcus Stehr appointed Operations Director.

Responsible for Clean Seas' Marine Operations.



Paul Steere appointed in May 2010.
 14 years as Managing Director of New Zealand King Salmon.
 Strong aquaculture business skills and proven change manager.



Peter Housden appointed in December 2010. Chairman of the Audit Committee and brings strong financial and management expertise. Over 40 years experience in accounting, finance and management across a range of industries.





#### **CORNERSTONE INVESTOR – Frode Teigen**

CST raised \$6.9 million with the placement in March 2011 of 62.7m shares at 11c per share with leading international aquaculture industry investor, Mr Frode Teigen of Norway. The placement increased his holding from 4% to 17%.

Mr. Teigen is:

☐ One of the world's largest private investors in the global aquaculture industry

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☐ The largest single shareholder in Akva Group, the world's most recognised brand of recirculation aquaculture technology.





#### **GLOBAL THEMATICS**

- Considerable over-fishing of SBT/NBT.
- SBT stocks have declined since commercial fishing started.
- NBT stocks have declined since 1950s.
- Japan restricting catch of Pacific tuna in 2011.
- Average current sale price/kg for SBT, gutted and gilled, is 2,500 yen (\$AU28.31)
- World population to increase considerably with little land available for protein production.











Secured
hatchery and
grow out
facilities at Arno
Bay, South
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2002

2006

2008

2009

2010

2011

Hatchery modernised and extended; on-land broodstock system built



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Successfully spawned SBT broodstock -

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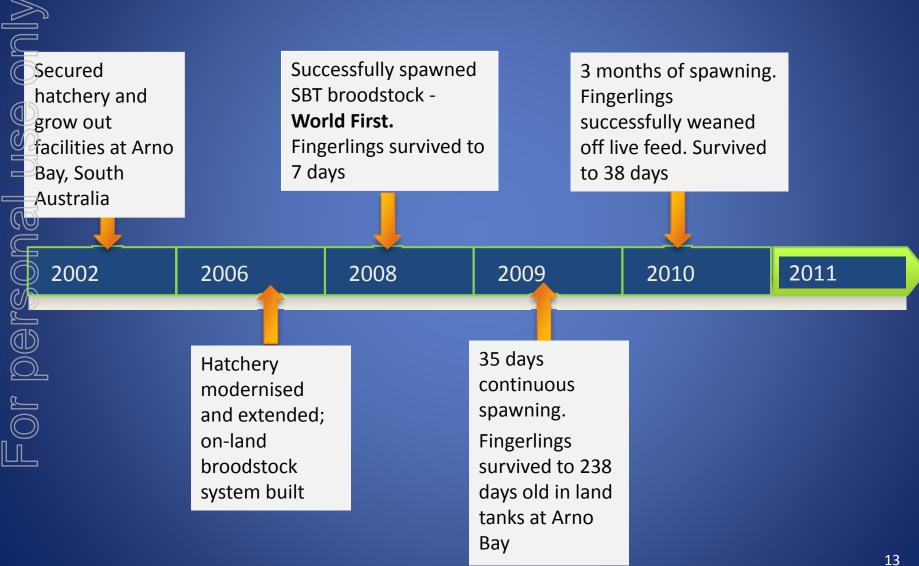
2010

2011

Hatchery modernised and extended; on-land broodstock system built 35 days continuous spawning.

Fingerlings survived to 238 days old in land tanks at Arno Bay







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#### **SBT MILESTONES ACHIEVED**

Successfully spawned Secured 3 months of spawning. hatchery and SBT broodstock -**Fingerlings** grow out World First. successfully weaned facilities at Arno Fingerlings survived to off live feed. Survived Bay, South 7 days old to 38 days Australia 2002 2011 2006 2008 2009 2010 World First. 35 days Hatchery successfully modernised continuous transferred over and extended; spawning. 140 fingerlings on-land **Fingerlings** to sea, 53 are at broodstock survived to 238 110 days+ and system built days old in land growing tanks at Arno Bay

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#### Southern Bluefin Tuna Research & Development

# What Others Say...

"Clean Seas may finally have given the future of bluefin aquaculture legs."
(Or at least a tail.)"

Time magazine – November 23, 2009
Naming Clean Seas No 2 in the Top 50 Best
Inventions of the Year



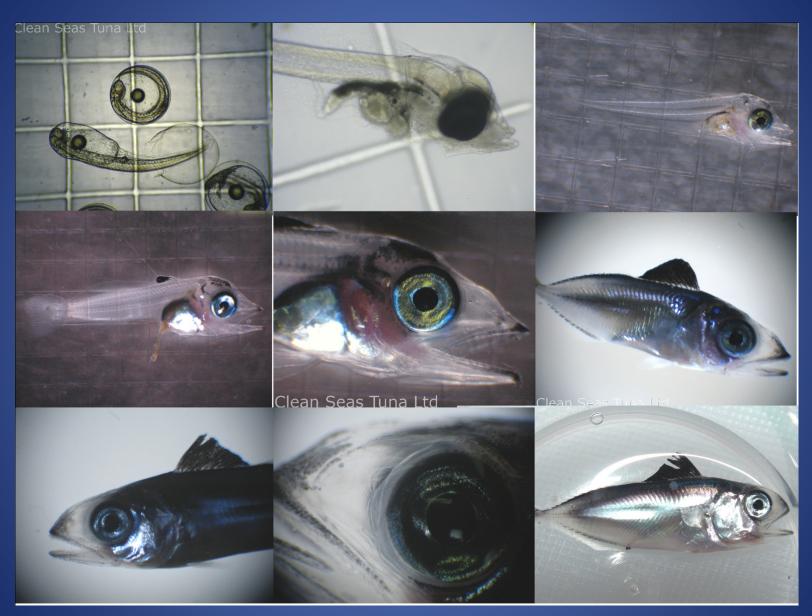


#### **TUNA BROODSTOCK and HATCHERY – ARNO BAY**



#### **GROWING CYCLE OF TUNA LARVAE**







#### **CURRENT R&D FOCUS**

- ✓ Stocking of tuna larvae into new production SBT hatchery and new pilot scale R & D tanks for trials.
- ✓ Stocking of larvae into third party research partner facilities (Port Stephens and Darwin) for trials including use of copepods for early larvae feed.





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- ✓ Trialling of different water treatment options for early larval rearing systems.
- ✓ Early larval nutrition including live feed enrichments.

#### **CURRENT R&D FOCUS cont'd**

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- ✓ Trialling of commercial and prototype manufactured weaning diets.
- ✓ Dynamics of parental contribution to egg supply assessed using genetic markers.
- ✓ Successful development of an immortal SBT cell line for detection and identification of viruses.
- ✓ Scoping of alternative live fish larval prey for SBT larvae.



- ✓ Improvements in swim bladder inflation.
- ✓ Safe transfer of fingerlings to sea cage.
- ✓ Use of lights on sea cages.



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#### **2011 SEASON COMPARED TO 2010 SEASON**

- Thorough "deep clean and dry out" of all systems after season 2010.
- Commissioning run of Yellowtail Kingfish larvae in new larval rearing and nursery systems.
- First use of state of the art, new SBT facilities.
- On-site R&D team in new recirculation facility.
- Improvements to stabilise water quality in larval tanks.
- Establishment and stabilisation of clean and healthy rotifer live feed cultures.



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#### **LEARNINGS FROM 2010-11**

- Full understanding of the technical and mechanical aspects of the new larval rearing facility.
- The need to increase capacity for live feed production.
- The critical importance of drying out and disinfecting the hatchery systems.
- How to successfully transfer fingerlings to the ocean with low mortality rates.
- The benefits of installing and using solar lighting at sea cages.



#### **NEXT PRIMARY GOALS**

2013 2014 2012 2015 For personal Goal: To transfer a Goal: To harvest significantly greater aquaculture number of tuna grown tuna fingerlings from the land based Arno Bay hatchery to the sea cage facilities



#### **GOALS FOR 2012 TO 2015**

- ase only For personal
- Development and use of enhanced nutrition and diets 2012.
- Construction of the 2<sup>nd</sup> tuna broodstock facility completion 2012.
- > Transfer at sea tuna broodstock to the 2<sup>nd</sup> facility late 2012.
- > Tuna spawning utilising the new facility end of 2013.



#### **EXPANSION OPPORTUNITY**

A need for a second onshore SBT broodstock tank facility, together with expanded nursery and integrated R&D facility has been identified to provide the following benefits:

- Extended spawning season.
- Earlier production of fingerlings.
- Opportunity for increased trials each season.
- Two facilities spread the risk
  - conduct two different seasons at the same time, e.g. different photo periods, different temperatures.
- Increased utilisation of the hatchery.
- Should bring success forward.



#### **ARNO BAY KINGFISH HATCHERY and R&D FACILITY**





# PROGRESS ON THE KINGFISH BUSINESS - including cost savings and efficiencies

- Earlier production from hatchery in YC11, even earlier aimed for YC12.
- Restructuring of marine operations resulted in lower head count and cost savings.
- Net washer has reduced overall operating costs. 2nd to be purchased.



- Feed barges and automated feed stations providing efficiencies and lower costs.
- Improved feeding regime.



## PROGRESS ON THE KINGFISH BUSINESS cont'd - including cost savings and efficiencies

- Considerable work on new diets feed research farm introduced.
- Greater fallowing of sites starting.
- One harvest vessel with new, efficient pump.
- Consolidation of processing and logistics.
- Genetic programme underway.
- Focus on improving farm gate returns as well as cost savings.



## FARMGATE RETURNS – LARGE FRESH KINGFISH

AU\$9.13 kg March 2011

AU\$7.73 kg March 2010

Despite strengthening exchange rate





# Thank you for your attention and for your continued interest in the company

CLIFFORD ASHBY Managing Director

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