

Thinking pink boosts state

ROGER HANSON

THE salmon industry, which bolsters regional Tasmania, is worth more than half a billion dollars a year to the state's economy and still growing, says a new report.

Bigger salmon growing regions such as Norway and Scotland are now looking at Tasmania's innovations.

The Huon region is rapidly becoming known around the world for harvest practices, quality and production of premium Atlantic salmon.

Tasmanian Salmonid Growers Association chief executive officer Adam Main said the new food production ScoreCard report emphasised the growth of the sector, which now employs more than 1100 people.

"The industry welcomes release of the ScoreCard, [which] identifies why aquaculture is one of the key sectors of the economy," Dr Main said. "It also important to note the majority of investment and jobs growth is in rural and regional Tasmania."

The report, produced by the Department of Primary Industries, Parks, Water and Environment, shows the salmon industry grew by more than \$390 million in the seven years to 2012.

"The industry has matured and for the past 20 years has been in a growth phase," it said.

Huon Aquaculture's business development manager David Morehead said the industry must grow in a controlled and sustainable way to satisfy increasing consumer demand for salmon.

"Our pressure comes from our success. Our growth isn't just about getting bigger. We're committed to growing smarter with the highest level of sustainability," Dr Morehead said.

He said the newly announced roll-out of a \$43 million stock protection system would help stop fish losses to seals and improve fish growth.

"This could deliver a 10 per cent increase in salmon production without putting one more pen in the water" he said.

Huon Aquaculture is investing

Tassie a leader in innovation



BOOM: Petuna's Wayne McDermott with a farmed salmon.

in recruitment, training and development and expects its workforce to grow from 450 to about 850 in the next four years.

The \$7.14 million provided under the Regional Development Australia Fund to relocate fish farming infrastructure from the Strahan waterfront to a proposed aquaculture hub at Smiths Cove at Macquarie Harbour is significant.

It allows expansion of the salmon industry on the west coast covering 362ha of leasable area on-water. The industry is setting targets to almost double production from 34,000 tonnes to more than 60,000 tonnes by 2020 and 79,000 tonnes by 2030.

Tassal's head of sustainability Linda Sams said Tasmania was a great place to grow food, and

salmon was no exception.

"Tassal is grateful for the support provided to industry by the Tasmanian Government ... [but] any growth has to happen in a well thought-out and responsible way," she said.

The vast majority (93 per cent) of Tasmania's food trade revenue comes from 10 categories, including beef, confectionery, salmon, potatoes, dairy, beer, lobster and abalone. All other foods represent about 7 per cent of trade revenue.

Primary Industries Minister Bryan Green said salmonid aquaculture was a priority sector under the State Government's Economic Development Plan.

"The State Government has provided strong and strategic support to the aquaculture industry," Mr Green said.



SAFETY CAGE: Huon Aquaculture owners Peter and Frances Bender on the caged floating platform of the new predator-proof salmon pens at Hideaway Bay in Tasmania's deep south.

Picture: KIM EISZELE

New fish protection pen gets the seal of approval

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RISING out of the Huon River like a giant jigsaw crown is a world-first salmon protection pen, which is the first link in Huon Aquaculture's \$43 million program.

The system, launched at the Hideaway Bay farm in the deep south, is revolutionising pen design for the salmon industry globally, Huon Aquaculture's managing director Peter Bender said.

One pen has been in trials

for four months and is doing what it was designed to do: keep seals out safely and salmon in.

The project will create 15 new jobs at the farm and generate another four jobs building pens in the Huon. It has 140 pens at two sites.

The protected Australian fur seals and other predators cost the company about \$15 million a year in lost production, or about 10 per cent of the 14,000 tonnes of salmon it farms a year.

The system uses two nets

instead of one, with high netting to keep seals from jumping into the pen and keeps fish away from seals. The designs provides a fully enclosed walkway for the first time.

"It is new technology that is allowing us to do this and the pens are expected to bring safety improvements for farm workers, seals, sea birds and the salmon they protect," Mr Bender said.

"It brings together cutting-edge technology in a way never seen before. We are using in-situ

net-cleaning technology instead of anti-fouling agents."

The intelligent and inquisitive seals weighing more than 400kg not only decimate fish stock, but pose a major threat to the safety of the company's 450 staff.

"You can imagine working in a pen as a diver and a 450kg seal comes lunging at you. They can bite divers' air hoses and their bite can inflict serious wounds," Huon Aquaculture co-founder Frances Bender said.

"We are in seals' environment

and we have to work with them. The best way to protect and keep seals safe is prevent them from entering our pens in the first place, thereby teaching them to eat elsewhere."

Seals cleverly work their way into pens. They gradually force open a gap and then call in other seals to join the feed. They target any weakness above and below the water. In the past 12 months there have been almost 11,000 seal sightings within farm leases and more than 1000 seal entries

to Huon Aquaculture's pens from July 2012 to June this year.

A section of the protection system uses local windsurfing knowledge.

"One of our staff is a windsurfer and with his input we're using technology from that sport so the system can withstand buffeting Tasmanian winds," Mrs Bender said.

The cutting-edge protection system is made from Dyneema, a lightweight synthetic fibre used to make bulletproof vests.

Huon Aquaculture Group, Australia's premiere privately owned salmon aquaculture company, expects the project will take three years to roll out.

The initial trial project for the new pen system was supported by funding through the Australian Government's Fisheries Research and Development Corporation (Atlantic Salmon Aquaculture sub-program: trial of a stock protection system for flexible oceanic fish pens).

● Video at themercury.com.au



RESEARCH: TIA honours student Olivia Churchill.

Lifting quality of our salmon

Cuppa
TIA

Feedback: Cuppa.TIA@utas.edu.au

THE Tasmanian Institute of Agriculture is working on a new quality measurement guide for the state's lucrative salmon industry.

TIA's Food Safety Centre is helping to ensure that the salmon "performs" at its highest ability for consumers.

"Tasmania has a unique global reputation in producing exceptional salmon products," TIA Food Safety Centre leader, Professor Mark Tamplin, said.

"A key ingredient to this success is supply chains that deliver the highest-quality products to consumers. Our centre is excited to be partnering with Huon Aquaculture on a research project that will help the salmon excel in its domestic and international markets."

At the centre of the project is TIA honours student Olivia Churchill.

"I am producing a mathematical model that explains how storage temperature affects the shelf life of whole fresh salmon," Ms Churchill said.

"When I complete my honours project, Huon Aquaculture will have a science-based tool to help them design supply chains so that their products have a long shelf life."

The company is supporting the project by supplying salmon so that she can assess how temper-

ature influences sensory and shelf-life properties.

When her research is completed, the data will be transformed into predictive models.

As part of her studies, a panel of TIA volunteers is assisting Ms Churchill. At different points of storage, they evaluate salmon against a set of Quality Index measurements that reflect product quality.

Her ultimate goal is to determine how these factors change over time and under different storage conditions.

"We plan to integrate Olivia's model into our traceability systems," Justin Thurley, manager of Huon Aquaculture's information technology services, said.

"This will allow us to provide better information to our customers in relation to product quality and freshness."

Huon Aquaculture Group produces more than 14,000 tonnes of fresh salmon a year and is recognised globally as a premium producer of fresh and smoked salmon products.

Huon employs more than 450 multi-skilled staff in most states of Australia. According to the Tasmanian Salmonid Growers Association, the industry as a whole produces nearly 40,000 tonnes of product a year, valued at more than \$400 million at the whole-sale level.

Fishing for consistency is the name of the game

WHAT fish is that? The answer may depend on where it is caught but there are now moves to standardise fish names in Australia.

The Australian Fish Names List and Standard, a world first, has been developed to create consistent fish names to build consumer confidence.

Seafood Services Australia

executive officer Michelle Christie said confusion over fish names can undermine confidence and long-term sustainability of the \$2.5 billion Australian seafood industry.

"Seafood consumers want to know when they ask for a specific fish anywhere in Australia they are getting the right fish," Ms Christie said.

"No other country has been able to achieve national consensus on fish names. This list now contains 5000 names of Australian and imported species."

"The standard has made labelling and marketing in Australia easier. All seafood must now be labelled with the correct Standard Fish Name, which helps provide clarity," she said.

The first application has been made to add the new group name Deepsea Dory to cover the four Oreodory species (Spiky Oreodory, Smooth Oreodory, Warty Oreodory and Black Oreodory).

While there are concerns that the group name Deepsea Dory is similar in name to the iconic species John Dory, Mirror Dory

and Silver Dory, they do not compete in the marketplace.

The second application has been to legitimise the use of the name Flake by adding a new group name Flake to cover two species, Gummy Shark and the species known in New Zealand as rig.

Flake has been the name used, especially in the fish and chip

industry, since about 1920. The industry had identified that the meat from other inferior species of shark has been sold under the name Flake.

"If this application is successful, the name Flake will apply to the flesh of the animal in the marketplace and not the whole animal that will continue to be referred to as Gummy Shark."

For more information visit the website www.fishnames.com.au.

Ms Christie said if there is information or evidence of fish mislabelling, consumers should contact the supplier first.

If dissatisfied with the explanation or response, contact the Australian Competition and Consumer Commission at www.accc.gov.au or phone 1300 302 502.

Growers thrown line of income

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VEGETABLES could soon be on the plate for use in aquaculture.

Innovative research into alternate uses for vegetable products reveals vegetables could be a source of high-protein fish food.

A healthy diet of vegetables could help the local aquaculture industry grow up big and strong.

The vegetable industry is currently considering research that

would see vegetables used to feed insects for the production of high protein fish food for use in aquaculture.

Australia's leading horticulture body, AusVeg, says feeding fish using vegetables may prove an excellent revenue stream for growers.

AusVeg spokesman Mr Kurt Hermann said 2.2kg of vegetables can produce 1kg of insects such as Black Soldier Flies, which are

about 42 per cent high quality protein and a viable alternative to fish-meal.

"Insects are a high quality, high yield and sustainable alternative to fish-meal," Mr Hermann said.

Australian aquaculture is restricted by its reliance on fish-meal to feed farmed fish.

"This is exciting research as we cast a wide net to find alternative uses for excess production."