

# Ag exporters chill out as new temp tracker technology reassures buyers



Andrew Marshall @BurrenAndrew 23 Jun 2020, 4:30 p.m.

<https://www.farmonline.com.au/story/6803605/chilled-ag-export-openings-emerge-as-slow-boat-freight-beats-flying/?cs=5374>

Agribusiness



Australian Organic Meats business development manager Sam O'Leary, with an Escavox tracker on the O'Leary family's property Glenbye in Central West NSW.

Amid the many global market challenges caused by coronavirus, big cuts to air freight services may actually trigger new, and potentially cheaper, freight breakthroughs for exporters.

With air cargo space harder to secure and expensive, farm sector exporters are taking a fresh look at refrigerated sea freight, and like what they are discovering.

By using new supply chain temperature monitoring technology, exporters and their customers have found chilled meat and horticultural products arrive in foreign supermarkets just as tasty and safe as ever, despite the longer travel times.

University of Tasmania research and data logging trials supported by Meat and Livestock Australia and meat processors have also helped convince authorities in the Middle East to extend the shelf life limits on chilled beef from 70 days to 120, and chilled lamb to 90 days.

Previously exporters often only sent meat via sea freight if it was frozen.

The same data logging technology is being used in trials and commercial shipments of South Australian seafood, and fruit and vegetables, guaranteeing real time temperature monitoring for exports to Asia and within supply chains around Australia.

Critical to the success of several of these initiatives has been a low-cost tracking device developed by young Sydney-based firm, Escavox.

Trackers, the size of a smartphone and costing from about \$30 to \$80, are embedded in boxes of product moved from farms or meat plants all the way to overseas supermarket shelves or within Australia.

We can now monitor all the various legs of the supply chain and provide information for multiple parties so they can all be protecting the eating quality of products at the other end-  
Darryl Lyons, Escavox

As long as they have access to a mobile phone signal they can relay information about temperature movements in refrigerated store rooms, trucks, shipping containers, distribution centres or inside retail stores.

If the signal is blocked or unavailable at sea, data is stored and automatically downloaded once connectivity resumes.

## Fast feedback

The results give producers, exporters and their customers fast, independent feedback on any unusual temperatures or weak links in the supply chain, and help all players involved better manage the food journey.



*Darryl Lyons*

While data logging technology has been available to the food industry for some time, Escavox co-founder and refrigeration technician, Darryl Lyons said results had tended to be downloaded at the end of a journey, or only used in specific locations such as stores or packing plants.

"Historically the data has been used in a bit of a blame game - protecting your own business position at a certain point in the supply chain," he said.

"We can now monitor all the various legs of the supply chain and provide information for multiple parties so they're all protecting the eating quality of products at the other end."

## Tracking cuts waste

Escavox had also reduced the risk that retailers may unnecessarily discard or discount product they feared had been subjected to too much travel time or abnormal temperature fluctuations, without having a full picture of the supply chain story.

Seaborne transport has fantastic temperature management, but we need to know it has been set and maintained at the right temperature all the way to the store- Simone Tully, Australian Organic Meats

Among the exporters now using the company's trackers is Australian Organic Meats which sources beef from about 50 suppliers, mainly in Central Queensland, for US, Middle East and Asian retailers.

Prior to the coronavirus pandemic, AOM's 300 tonne annual market in the Gulf States was serviced by air freight, taking just 24 hours, but since March chilled primal cuts have gone via sea, taking about five weeks.

"Seaborne transport has fantastic temperature management, but we need to know it has been set and maintained at the right temperature all the way to the store," said director, Simone Tully.

## Integrity retained

Having Escavox technology monitoring AOM shipments meant premium end customers in markets such as Qatar and Saudi Arabia could have confidence their meat's integrity was not eroded by the longer freight journey from Australia.

"Escavox has given us irrefutable data to pass on to our customers," she said.

"The product will be fine in transit and have good shelf life as long as temperature consistency is maintained through the chain."

Real time trackers not only promised to protect exporters' price premiums, but also open up more markets based on the intelligence Escavox was gathering to inform traders how long products could be in transit without losing quality.

"I'm pretty excited about it," Ms Tully said.

"It's much more advanced than other data loggers we've seen and more user-friendly for ordinary people in the supply chain who aren't necessarily tech savvy, like me."

While trackers sent overseas could be returned and reused, AOM is keeping them in its customers' stores to continue monitoring shelf and coolroom temperatures for up to a year.

AOM business development manager Sam O'Leary said chilled meat kept consistently at minus one degree Celsius retained its quality for up to 170 days.

Until recently the company's air freighted exports relied on speed and dry ice to move chilled product safely, but as there were far fewer aircraft flying because of the collapse in international passenger movements, sea freight was a more viable option.

"Air freight can be quite competitive, depending on the market and the situation, but we've got more alternatives to work with now," he said.

Our highly competitive agriculture sector is a great launching pad for exporting Australian innovations in food security and ag tech- Simon Birmingham, Trade Minister

Last week Trade Minister Simon Birmingham said previous shelf life restrictions in the United Arab Emirates, which effectively encouraged air freight rather than exports by sea, had cost Australia's vacuum-packed chilled meat exporters up to \$60 million a year in sales to that single market alone.



"Our highly competitive agriculture sector is a great launching pad for exporting Australian innovations in food security and ag tech," he said.

"Huge opportunities exist for agriculture to move along the value curve from commodities to branded products and even into pre-packaged meals."

Sydney-based avocado marketer The Avolution, which manages the logistics between 120 farms Australia-wide to markets in Brisbane and Melbourne, is also deploying Escavox tracking inside shipping containers bound for Malaysia, Hong Kong and Singapore.

Chief executive officer Antony Allen said for the first time his company, which handles 20 per cent of Australia's crop, had virtual eyes over its full logistics operation, and independent information telling him "what's gone wrong, when it occurred and where".