



NZ Deepwater trawlers

Recognition of a problem

Traditionally trawlers that process their catch at sea discharge some or all of their offal as they fish. This practice draws seabirds around the stern where they are at risk of being hit by the steel cables (warps) that tow the net through the water. Seabirds are also at risk when they try to remove fish from the net when it is near the surface.

Around the year 2000, observers began reporting seabird deaths in the New Zealand Sub Antarctic squid trawl fishery. This fishery operates near the Auckland Islands and Snares Shelf, breeding area to a wide range of seabirds including the endemic white-capped albatross. Observer records showed this was the main seabird being killed on the warps in the squid fishery, while sooty shearwaters and white-chinned petrels were the main species caught in nets.

By 2005 this issue had come to a head, and trawl fisheries in other parts of the world began to recognise they had a similar problem.

In 2006 the newly established Deepwater Group (the industry group overseeing New Zealand's deep-sea trawl fisheries) recognised the seriousness of the issue and tasked two operational and solution-focused people, Richard Wells and John Cleal to address it on their behalf.

Start with What People Already Know

As Richard puts it "You can't manage seabirds, but you can manage people." Richard and John knew that skippers and crew understood risk management systems as applied to vessel, crew and seafood safety, so they decided to adopt the elements of these systems and apply them to seabird risks. They developed standards for offal discharge management, a training programme, a reporting system and an auditing process. These elements supported the mandatory Government requirements for seabird scaring devices. Because crew thought seabird deaths were caused by longliners, not trawlers, part of the initial process was convincing them there was a problem. Richard and John did this by showing them video footage of seabirds being hit by warps at the stern and many were shocked and surprised.

A critical aspect of the risk management system is vessel specific risk management plans. These plans describe what each vessel is required to do by law to safeguard seabirds, as well as the additional things like seabird trigger levels, offal management measures and contingency actions to deal with machinery breakdowns, large seabird congregations or other changes in risk that may occur day to day at sea.

Training Every year the Deepwater Group provides in-port training to deepwater officers, crews and vessel managers. This is funded by industry and Government and the learning resources have been developed collaboratively. This training ensures the latest best practices are passed on, and allows John to check vessel management plans, seabird scaring devices and provide feedback on improvements that each individual vessel can make.

Skipper Buy-In Over time skippers have become far less fearful about reporting when they capture seabirds. This feedback is critical for Richard and John, as it helps them work out which vessels might need help with their onboard practices. There is also real-time support available, where skippers can ring or email John, 24/7, and ask for advice.

Collaboration Early on the Deepwater Group decided they needed independent auditing of their vessel management plans, and asked the Government to undertake this role using their observers. Auditing industry led processes was a new idea for Government, but they agreed and the system is now well oiled. While at sea observers check the practices used on board and fill out an audit form and return a copy to the Ministry for Primary Industries. Collaboration with Government has become a critical part of the system, and both Government and industry rely on each other for the system to work.

Good Ideas Spread Both Australian and South African industry have seen the benefit in the risk management approach the Deepwater Group have taken and developed similar risk management plans for sectors within their fleets.

Progress So Far All 34 large trawlers in the New Zealand deepwater trawl fleet operate under the seabird risk management system and are audited on average twice a year by Government observers. The average rate of capture of albatrosses on trawl cables in the squid trawl fishery has halved since the system was introduced and this rate is expected to continue to reduce as vessels bed in and improve their practices. Net captures of small diving seabirds remains an issue. The Department of Conservation has undertaken some trials of net binding and other mitigation techniques with limited success thus far. The search for solutions continues.