



2011 Winner: Yamazaki Double-Weight Branchline

Innovative Japanese Design to Reduce Seabird Bycatch Wins Both the Smart Gear 2011 Grand Prize, and the Tuna Prize

For the first time since the Smart Gear competition was established in 2005, a winning design, that reduces the accidental catch and related deaths of sea birds in tuna fisheries, has won more than one award.

Kazuhiro Yamazaki, a captain on a Japanese tuna vessel, is the 2011 Smart Gear winner, receiving a \$30,000 grand prize, and also received the special tuna prize of \$7,500, offered by the International Seafood Sustainability Foundation (ISSF)

The winning design – a double-weight branch line – sinks long line hooks beyond the range of seabirds, such as albatrosses and petrels, and reduces injuries and fatalities to crews caused by rapidly recoiling weights and hooks.

Results have been staggering. The device has proven to be safe and effective at reducing seabird bycatch in pelagic (tuna) longline fisheries. In 2010, over 95,000 branch lines with the Yamazaki double weight system were hauled with no injuries to fishermen, reducing seabird bycatch by 89% more than un-weighted branch lines, with no effect on fish catch rates.



Double-Weight Branchline Fast Facts

When a research effort to find best practice seabird bycatch mitigation in the Japanese fleet fishing in the South Africa began, Kazuhiro Yamazaki, Fishing Master of the F/V Fukuseki Maru No 5, quickly emerged as the leader and innovator in this fleet.

The double weight system he conceived was in reaction to the need he saw to weight branchlines in a way that was safe and acceptable to Japanese fishing masters.

As a result, the simple and cost-effective device is proving to solve the seabird bycatch problem in tuna fisheries.

The results of which will ensure the sustainability of the tuna fishery and the livelihoods for fishing generations to come - all in a way where the catch of fish is a critical part of the solution.



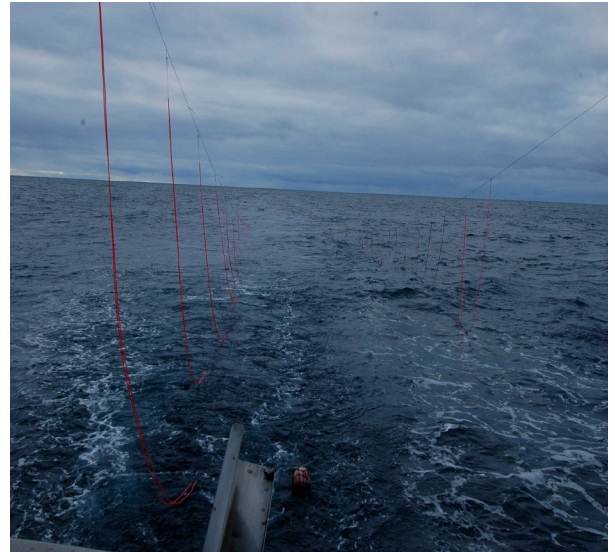
How it works

The Yamazaki double-weight configuration consists of two leads placed at either end of a 1 to 1.5 meter section of wire or wire trace. This weighted section is inserted into a branchline 2 meters above the hook. The weight nearest the hook is free to slide along the branchline while the second lead is fixed.

The double weight reduces the danger of weight recoil injury to crew members by spreading the mass of the weights across the wire trace, as two smaller weights are better than one, and by including a sliding weight that dampens the speed at which the weight recoils.

The double weight system is also easier to handle on deck than a single weighted swivel – it is easier to coil and it prevents jackknifing as it is thrown into the water in line setting.

2011 SMART GEAR WINNER AND TUNA PRIZE
YAMAZAKI DOUBLE-WEIGHT BRANCHLINE



Conservation Potential

The conservation potential of Yamazaki double-weight branchline is substantial. It is an innovation that meshes practicality and safety with function and conservation, and breaks down the barriers to the adoption of branchline weighting as a seabird bycatch mitigation measure in world tuna commissions and in domestic fisheries.

Branchline weighting and bird scaring lines deployed properly are the key to seabird conservation in tuna longline fisheries. Used in combination with night setting seabird bycatch should can be reduced to the lowest level possible.

This innovation has also paved the way for the Agreement for the Conservation of Albatrosses and Petrels to endorse the simultaneous use of branchline weighting, bird-scaring lines and night fishing as best-practice seabird bycatch mitigation in pelagic longline fisheries. Trials with this device reduced seabird bycatch compared to un-weighted branchlines by 89% with no effect on fish catch rates. It has the potential to spread conservation success to the oceans of the world and allow tuna fisheries, and albatross and petrels to coexist.

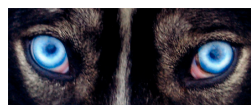
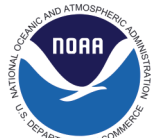


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