



TINNED TUNA'S HIDDEN CATCH

TINNED TUNA IN THE UK

The UK is the second highest consumer of tinned tuna in the world, consuming the equivalent of more than 700 million tins of tuna in 2006 alone.² Retailers and suppliers in this country must therefore take considerable responsibility for the environmental consequences of current fishing practices for tuna.

Fishing practices used by the global tuna industry are contributing to the sharp decline of populations of sea turtles, sharks, rays and other marine animals. Marketing campaigns attempt to make tuna fishing look like a quaint cottage industry, but the truth is that the tuna trade is all about big business.

Tinned tuna is worth around US\$2.7 billion per annum worldwide.³ Suppliers Princes (owned by Japanese multinational Mitsubishi) and John West (owned by private equity firm MW Brands) dominate the UK market:

- ✗ John West accounts for 31.3% of the standard tinned tuna market value in the UK and 27.7% of the volume.
- ✗ Princes are the second biggest with a 27.1% market value and 24.9% volume share.⁴

The tuna industry has taken action in response to consumer pressure to ensure that virtually all tinned tuna in the UK is dolphin friendly, but this alone is insufficient to ensure that the industry is sustainable in the long term. Many fishing practices that are labelled dolphin friendly still result in the catch of a host of non-target species, known as bycatch, including turtles, sharks, rays, juvenile tuna and a huge range of other marine life.

Worldwide, up to 90% of stocks of large predatory fish have already been wiped out.⁵

We can only protect marine ecosystems and guarantee continued supply of fish like tuna by changing the way oceans are managed. This change needs to incorporate major alterations to fishing practices and setting aside large areas as marine reserves – national parks at sea – where no fishing takes place. The creation of a large scale network of marine reserves is now widely recognised as essential by marine scientists but they currently cover less than 1% of the world's oceans.⁶

DWINDLING TUNA STOCKS

What we call tuna is really a number of different predatory fish of varying colours and sizes, widely distributed across the oceans of the world. Most tinned tuna sold in the UK is a small species called skipjack, though the larger, more commercially valuable yellowfin and albacore tunas are also sometimes sold in tins. Yellowfin is the main type of tuna sold fresh by retailers.

Years of being badly managed and over fished has left tuna stocks in crisis. Of the 23 commercially exploited tuna stocks identified:

- ✗ At least nine are classified as fully fished
- ✗ A further four are classified as overexploited or depleted
- ✗ Three are classified as critically endangered
- ✗ Three are endangered
- ✗ Three are vulnerable to extinction.⁸

All 23 stocks are heavily fished and in 2007 the overall global picture was characterised by declining catches. Even previously healthy fisheries are now under pressure. Worldwide, yellowfin stocks have now reached a state where over fishing is suspected to be occurring in all oceans with many stocks in serious decline.⁹ Without more effective management of tuna fishing, even stocks of the healthiest remaining species, like those of skipjack – the least valuable tuna – risk collapse.

79% of European consumers consider the environmental impacts of seafood to be an important factor in their purchasing decisions.¹

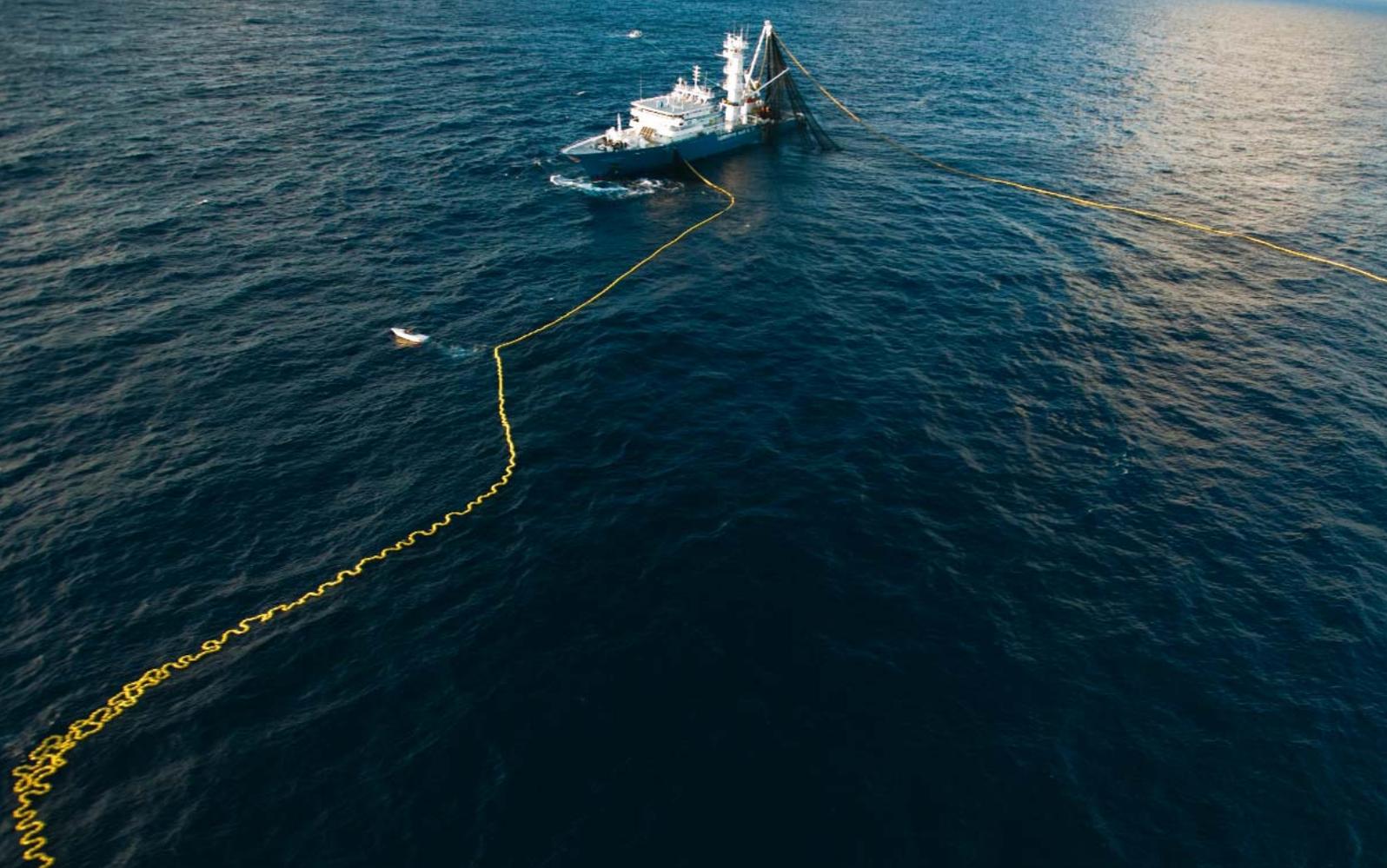


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'The balance of power between the fishing fleets and tuna has shifted too far in favour of the fleets.'⁷

Professor Callum Roberts,
University of York





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A GROWING FAD

The majority of tinned tuna is caught using fish aggregation devices (FADs) which use floating objects to encourage tuna to gather in particular locations and then scoop them up in huge nets known as purse seines. But FADs do not just lure the tuna that fishermen want to catch. On average, every time a FAD is used, for every 10kg of catch, 1kg will be unwanted, consisting of juvenile tuna, turtles, sharks, rays and a wide variety of other species.¹⁰ Scientific research from 2005 concludes that the total bycatch from the use of FADs amounts to 100,000 tonnes every year.¹¹

FADs act as death traps for young tuna. According to the University of Hawaii's pelagic fishing program, FADs fished by purse seine nets are considered a major contributor toward yellowfin and bigeye stocks being pushed towards depletion.¹² The over fishing of both bigeye and yellowfin is exacerbated by the number of juveniles of both species that are killed as bycatch, including in fisheries where the target species is actually skipjack. Given that yellowfin and bigeye are of high commercial value, it is not only environmentally destructive, but also short sighted in economic terms to be killing their young, especially in the pursuit of less valuable fish.

There is growing evidence that FADs seriously disrupt the life cycles of even those tuna that are not caught. In May 2008, scientists reported that FADs appear to pull tuna and other fish away from their migratory routes, causing them to become undernourished, with potentially serious broader ecological consequences.¹³

Despite all this, purse seine fishing with FADs has expanded considerably in recent years and currently accounts for about 70% of reported tuna catches.¹⁴

THE END OF THE LONG LINE

Long lining involves setting out a length of line of up to 100km in length, to which numerous shorter lines of baited hooks are attached. As long lining is generally targeted at only more commercially valuable tuna species, it is only likely to be used for fish at the higher end of the tinned tuna market. A number of measures can be used to minimise the impact of long lining, but take up of these has been varied and long lining remains responsible for the deaths of turtles, seabirds, sharks, rays and billfish in large numbers.¹⁵

'I am concerned that the capture of juvenile individuals of large tuna species such as bigeye and yellowfin as a result of the indiscriminate nature of floating fish aggregation devices (FADs) is impacting significantly on the productivity and ultimately the long term sustainability of these species.'
Mike Mitchell, Head of Seafood Sustainability at the Foodvest Group (including Youngs and Findus)

Killed alongside the skipjack tuna that finds itself in your tin is almost the entire cast list of Finding Nemo.¹⁶

KILLED FOR TINNED TUNA

Turtles

Six of the seven sea turtle populations worldwide feature in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species and all five Pacific sea turtles are listed as critically endangered, endangered or vulnerable. Among the most dramatic declines have occurred in the Pacific Ocean, where nesting populations of leatherback turtles have plunged by over 95% in the last three decades and loggerheads by 80–86% over a similar period.¹⁷ Fishing with FADs may cause severe problems for local populations of turtles¹⁸ while research indicates that thousands of marine turtles die each year in long lines in the Pacific Ocean alone.¹⁹

Sharks and rays

Sharks and rays are being killed in massive numbers by tuna fishing. More than three quarters of the oceanic pelagic shark and ray species are now classified as threatened or near threatened by the IUCN. Many of these species are caught regularly in purse seine nets targeting tuna.²⁰ Cutting fins off sharks, often while they are still alive and then throwing them back in the ocean is also common practice on tuna fishing boats. The fins can be sold at top prices in countries where shark fin soup is a delicacy. In the central Western Central Pacific Ocean, total shark mortalities have been estimated at 500,000 – 1.4 million sharks annually based on observer data from long line fisheries.²¹

For each 1,000 tons of yellow fin tuna caught in FAD sets over three years, fishermen caught nearly 111,000 other individual animals, including sharks, rays, marlins and sea turtles.²²



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A DOLPHIN FRIENDLY LABEL IS NOT A GUARANTEE OF SUSTAINABLY FISHED TUNA

Virtually all tinned tuna sold in the UK is certified by the Earth Island Institute (EII) as dolphin friendly or dolphin safe.²³ The EII was one of the organisations to pioneer dolphin safe certification in response to the setting of tuna fishing nets on schools of dolphins. This certification demonstrates that the tuna industry is able to respond to environmental concerns. There should be no relaxation of such standards, but they need to be expanded so that other marine life is also safe from tuna fishing.

The Friends of the Sea certification scheme is now beginning to certify some skipjack tuna fisheries. While the scheme claims to deal with wider sustainability issues connected to tuna fishing, it does not take into account the impacts of purse seine fishing with FADS and has started to certify fisheries where over fishing is acknowledged to be taking place.

'The real problem is giving ourselves high fives for solving the tuna dolphin problem when we've just created other problems.'²⁴

Timothy Essington,
University of Washington



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TIME FOR CHANGE

The fishing industry must stop using FADs and all purse seine and long line vessels must have observers on board 100% of the time to make sure they use all possible means to reduce bycatch.

Industry must move towards the best methods of catching tuna by prioritising pole and line and trolling. These methods of catching tuna are already in use in various smaller fisheries and are highly targeted towards adult tuna, avoiding the bycatch associated with other methods. These fisheries are also more likely to support locally based industries in developing countries.

Governments must cooperate to establish marine reserves to make large areas of the world's oceans off limits to fishing. There is overwhelming scientific consensus that a large scale network of global marine reserves is needed to safeguard the world's marine ecosystems from destructive fishing practices. Greenpeace is calling for 40% of the world's oceans to be protected as marine reserves.

Some progress was made earlier this year when Pacific Island Nations declared that areas in the Pacific Commons – high seas between the islands with abundant tuna and other marine life – should be off limits to fishing. Making tuna fishing sustainable is critical not only to the environment, but also to the economic future of the Pacific Island Nations. At the moment, the Pacific Island Nations get too little of the economic benefit from adjacent waters that are mainly being exploited by long distance fleets from deep water fishing countries. Marine reserves over the Pacific Commons will not only allow fish stocks to recover, but could also provide a boost for developing economies in the region.

WHAT SUPERMARKETS AND TUNA BRANDS CAN DO

Around 70% of tinned tuna in the UK is sold in supermarkets, so the action of major retailers and tuna brands can help transform this trade.²⁵ Retailers and tuna brands must:

- ⊙ **Stop buying tuna caught using FADs**
By rejecting tuna from purse seining with FADs, retailers can encourage best practise in the tuna fishing industry.
- ⊙ **Only purchase tuna caught using sustainable catch methods**
The Co-op and Sainsbury's have already moved their sourcing towards pole and line fisheries for tinned tuna.²⁶ Other UK retailers and tuna brands must now follow suit by prioritising tuna caught by low impact methods like pole and line and trolling. If buying tuna caught using purse seine nets, independent verification must be available to show that FADs have not been used.
- ⊙ **Support the creation of marine reserves**
UK retailers and tuna brands should publicly support the call for the Pacific Commons to be protected by designated marine reserves as part of a large scale global network of marine reserves and ensure they are not selling any tinned tuna caught in the area.

By changing the way tinned tuna is caught and setting up marine reserves – where ocean ecosystems are protected and where fish stocks can recover from over fishing – we can bring an end to the damage that current tuna fishing practices cause to the marine environment.

THE SOLUTIONS EXIST, BUT WE MUST ACT NOW

TIME AND TUNA ARE RUNNING OUT.

Strategically placed marine reserves can benefit migratory species like tuna by improving habitat quality and feeding opportunities, allowing greater survival of offspring, and providing protection at aggregation sites and migration bottlenecks.²⁷





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- 1 Constant cravings: *The European consumer and sustainable seafood choices*. www.seafoodchoices.com/resources/documents/EUConsumer2005.pdf.
- 2 Calculation is based on 185g tins.
- 3 As cited in Glitner Bank *Tuna Seafood Industry Report*, August 2007, p.32: <http://english.m5.is/?gluggi=frett&id=33429>.
- 4 AC Nielsen Scantrack data; GB Total Coverage MAT; 17 May 2008.
- 5 R.A. Myers and B. Worm. 'Rapid Worldwide Depletion of Predatory Fish Communities', *Nature*, 423, 2003, 280–3.
- 6 See http://compassonline.org/pdf_files/NCEAS_Marine_Reserves_Consensus_Statement.pdf; www.york.ac.uk/depts/eeem/gsp/mem/marine_reserves_consensus.pdf and *Turning the Tide – Addressing the Impact of Fisheries on the Marine Environment*: www.rcep.org.uk/fishreport.htm, paragraphs 8.59 and 8.63.
- 7 Prof Callum Roberts quoted in *The Los Angeles Times* on 19 June 2008 www.latimes.com/business/la-fi-w-tuna20-2008jun20.0,1769339.story.
- 8 J. Maguire et al, 'The state of world highly migratory, straddling and other high seas fishery resources and associated species', 2006: www.fao.org/docrep/009/a0653e/a0653e00.htm. IUCN assessments are now out of date, but if anything, the status of the species is likely to have deteriorated since assessment.
- 9 Seafood Watch Seafood Report: Yellowfin tuna: www.montereybayaquarium.org/cr/cr_seafoodwatch/content/media/MBA_SeafoodWatch_YellowfinTunaReport.pdf; Seafood Watch Seafood Report: Bigeye tuna www.montereybayaquarium.org/cr/cr_seafoodwatch/content/media/MBA_SeafoodWatch_BigeyeTunaReport.pdf; Western Pacific Fisheries Management Council, Press release, 21 Aug 2007, www.wpcouncil.org/press/2007.08.21%20Press%20Release%20on%20WCPFC%20SC3.pdf.
- 10 D. Bromhead et al, *Review of the impact of fish aggregating devices (FADs) on tuna fisheries*. Australian Department of Agriculture, Fisheries and Forestry, 2003.
- 11 T. Dempster and M. Taquet, 'Fadbase and Future Directions for Ecological Studies of Fad-Associated Fish', 2005 www.spc.int/coastfish/news/Fish_News/112/Dempster_112.pdf.
- 12 'The Associative Dynamics of Tropical Tuna to a Large-Scale Anchored Fad Array': www.soest.hawaii.edu/pfrp/biology/holland_itano.png.html.
- 13 J. Hallier and D. Gaertner, 'Drifting fish aggregation devices could act as an ecological trap for tropical tuna species', 2008: http://hal.ird.fr/docs/00/26/91/72/PDF/Hallier_GaertnerMEPS7180_Prev2.pdf.
- 14 J. Hallier and D. Gaertner, 'Drifting fish aggregation devices could act as an ecological trap for tropical tuna species': http://hal.ird.fr/docs/00/26/91/72/PDF/Hallier_GaertnerMEPS7180_Prev2.pdf.
- 15 Seafood Watch Seafood Report: Yellowfin tuna: www.montereybayaquarium.org/cr/cr_seafoodwatch/content/media/MBA_SeafoodWatch_YellowfinTunaReport.pdf.
- 16 C. Clover, *The End of the Line*, Ebury Press, London, 2005, pp.179–180.
- 17 R. L. Lewison et al, 'Quantifying the effects of fisheries on threatened species: the impact of pelagic longlines on loggerhead and leatherback sea turtles', 2004: http://seamap.env.duke.edu/apps/pewlongline/LewisonEtAl2004_LonglinesOnTurtles.pdf.
- 18 D. Bromhead et al, 'Review of the impact of fish aggregating devices (FADs) on Global Tuna Fisheries', 2003: <http://affashop.gov.au/PdFiles/PC12777.pdf>.
- 19 R. L. Lewison et al, 'Quantifying the effects of fisheries on threatened species: the impact of pelagic longlines on loggerhead and leatherback sea turtles', 2004: http://seamap.env.duke.edu/apps/pewlongline/LewisonEtAl2004_LonglinesOnTurtles.pdf.
- 20 *The Global Status and Conservation of Oceanic Pelagic Sharks and Rays*, 2008: http://cms.iucn.org/news_events/news/index.cfm?uNewsID=979.
- 21 Seafood Watch Seafood Report Monterey Aquarium, *Blue Marlin, Striped Marlin, Hawaii Region*, 2008: www.montereybayaquarium.org/cr/cr_seafoodwatch/content/media/MBA_SeafoodWatch_HIStripedBlueMarlinReport.pdf.
- 22 Martin Hall, Inter-American Tropical Tuna Commission reported in *Forbes*: www.forbes.com/technology/2008/07/24/dolphin-safe-tuna-tech-paperplastic08-cx_ee_0724fishing_2.html.
- 23 For more detailed discussion of this issue see Greenpeace UK, *Recipe for Disaster*: www.seafoodchoices.com/resources/documents/RecipeForDisaster_GreenpeaceUK.pdf.
- 24 Timothy Essington, University of Washington reported in *Forbes*: www.forbes.com/technology/2008/07/24/dolphin-safe-tuna-tech-paperplastic08-cx_ee_0724fishing_2.html.
- 25 Oceanic Development, *The European tuna sector, economic situation, prospects and analysis of the impact of the Liberalisation of Trade*, Scientific Convention SC12, final report, November 2005.
- 26 Correspondence from Sainsburys dated 10 July 2008 and correspondence from the Co-op dated 2 July 2008.
- 27 C. M. Roberts et al, 'The role of marine reserves in achieving sustainable fisheries', 2005: