Information

FISHING METHODS LEAGUE TABLE

This table has been developed to provide an overview of over 30 fishing methods in general use and to help identify the most sustainable fishing methods available in terms of their impact on marine habitat and species and the effectiveness of their management.

***Impact on habitat* – considers the impact of the fishing gear on the seabed and/or other habitat such as coral, seamounts etc.**

***Impact on target species* – considers the impact of the fishing gear on the target species itself - how selective a method is it? How many juvenile or undersized fish are discarded or thrown away? etc. Factors such as the mesh size in use will have an impact on the number of undersized fish discarded or thrown away.**

***Impact on non-target species* – considers the impact of the fishing gear on non-target species – often referred to as by-catch - these may be other fish species or non-fish species such as marine birds, turtles or mammals. The extent of the impact on non-target species depends on a number of factors such as the target fish species and the area in which the fishing activity is taking place. For example pelagic or mid-water trawling is associated with unacceptable levels of dolphin by-catch in seabass fisheries whereas fishing using the same method for herring no such problem is encountered.**

***Management* – here the management framework, specifically regulation and/or effort controls, and its effectiveness is considered for fisheries in EU and UK waters only.**

A number of *Mitigation or Conservation Measures* are also listed for each method which if implemented in all cases would improve the selectivity of the method further reducing its impact on marine habitat and/or species.

Graphic	Impact	Fishonline criteria score
	Very low impact/Well managed	0
	Low impact/Management requires some improvement	0.25
	Some impact/Management requires Improvement	0.5
	Moderate impact/Poorly managed	0.75
	High impact/Unacceptable	1

Key	Gear Type
	Manual e.g. Dive caught
	Static e.g. Longlines
	Encircling e.g. Purse Seine
	Towed e.g. Dredging
	Illegal/Highly damaging to environment e.g. Chemical

Table reviewed and updated by Adam Townley, Bangor University, July 2013

Fishing Method	Examples of Species Targeted by Method	Impact on habitat	Impact on target species	Impact on non-target species	Management	Mitigation or Conservation Measures Available (but not necessarily applied)	Rating (Overall)
Dive caught	Scallop (King)					Licensed diving only; closed areas; minimum landing size of 100 mm or 110 mm in some areas e.g. Isle of Man, Wales.	
Hand Gathering or rake	Molluscs e.g. Cockle					Byelaws on minimum landing size	
Handline	Mackerel					Licensing; minimum landing size of 20cm	
Jig	Squid				N/A	Gear and licensing restrictions	
Pole and line	Tuna, Mahi mahi					Monitoring of bait fish used; minimum landing size; Total Allowable Catch (TAC)	

Rod and line (Commercial)	Trout					Licensing; closed seasons; gear restrictions; and minimum landing sizes	
Spear or harpoon	Tuna, grouper				N/A	Limit number of fishermen; report catch details	
Bottom longline	Cod, haddock, rays, ling and huss					Restrictions on number of hooks, length of line, soak time	
Drift net (Coastal)	Herring, sardine					Licensing; mesh size restrictions; effort controls	
Fixed or gill net	hake, turbot, brill, sole					Attachment of acoustic deterrent devices; dyes to make nets more visible; closed areas; effort Controls; exit panels; scaring devices e.g. pyrotechnics; white mesh – visible to seabirds	

Pelagic longline	Toothfish, tuna, swordfish					Various measures inc. circular-shaped hooks and bait type to reduce turtle by-catch; various measures to reduce seabird bycatch, e.g. scaring devices and deploying line deeper; magnets to reduce shark bycatch	
Pelagic longline (used in fisheries where measures to reduce bycatch are in use e.g. MSC Certified fishery)	Tuna, Patagonian toothfish (Chilean seabass), hake; swordfish					Fishing at night; increasing weight on lines – ensures they are out of reach of seabirds; set lines underwater; offal disposed away from lines; dyed bait so it is less visible to seabirds; streamers used as a scaring device	
Pot or creel	Crab					Limit on boat size; minimum landing size; escape gaps in pot; closed areas and seasons.	

Pot or creel	Dublin Bay prawn					Minimum landing size; closed areas; limit pot numbers	
Tangle Net	Spider crab, turbot, sole, angler or monkfish					Effort controls; restrictions on number and length of nets; mesh size	
Trap	Octopus, cuttlefish, prawns, turbot					Restrictions on the number of traps; escape gaps	
FAD (Fish Aggregated Device) Associated Purse-seine	Tuna					Control number and density of FADS; area closures; gear technology changes	
Purse-seine	Mackerel, tuna, herring, sardine					Dolphin friendly methods where applicable, e.g. medina panel and backdown principle; bycatch quotas	

Beam trawl (vessel <24m, 220Kw)	Flat fish e.g. plaice, sole, turbot, lemon sole. Also monkfish and cuttlefish					Square Mesh Panel (SMP) to reduce bycatch of benthos; mesh size; square mesh; closed areas; replacement of skids with wheels	
Beam trawl (vessel >24m, >220Kw)	Flat fish e.g. plaice, sole					Electric ticklers (experimental); Square Mesh Panel (SMP) to reduce bycatch of benthos; mesh size; square mesh; closed areas; replacement of skids with wheels	
Bottom trawl (shelf seas)	Demersal e.g. cod, haddock, monkfish					SMP; square mesh; mesh size; separator panels and grids etc.; closed areas; increasing dropper length	

Dredge (National)	Scallop, oyster					Closed areas; gear restrictions; effort controls; less damaging gear; seasonal closures; statutory closures to protect seabed features; VMS (vehicle Management System) to control access; gear rest; effort controls	
Dredge (Coastal within 6 nm in Lyme and Cardigan Bay; Shetland (MSC Certified) only)	King scallop					No demersal tow gears where seabed is vulnerable/ protected; number of dredges is limited; limitations on the number of dredges per bar; mesh size allows juveniles to escape; minimum landing sizes	
Hydraulic or suction dredge	Molluscs e.g. cockle, clam					Closed areas; gear restrictions; effort controls	

Pelagic or mid-water trawl	herring, mackerel, hoki, horse mackerel, Pilchard					Sorting grids, e.g. Nordmøre grid; minimum landing size; EU ban on mid- water pair trawling	
Pelagic or mid-water trawl with known high bycatch	Seabass					Sorting grids; EU ban on mid-water pair trawling; area closure; mesh size restrictions; TED (Turtle Excluder Devices)	
Seine net	Demersal fish e.g. cod, sole, lemon sole, red mullet, squid, dab					Effort controls; licensing; mesh size restrictions; selective panels	
Troll	Tuna, swordfish					Visible hooks; set lines below reach of seabirds	

Bottom trawl (Deepwater coral reefs & seamounts)	Demersal e.g. orange roughy	☹	☹	☹	☹	Moratorium on high seas bottom trawling	☹
Chemical	Reef species e.g. grouper	☹	☹	☹	N/A	Illegal	☹
Drift net (High Seas)	Tuna, shark	☺	☹	☹	N/A	Illegal	☹
Explosive	Reef fish e.g. snapper	☹	☹	☹	N/A	Illegal	☹