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Sea Angling

Recreational sea angling (RSA) encompasses fishing from both the shore and boat using rod, line and hook. As highlighted by the Scottish Sea Angling Conservation Network, there are 5 main types of RSA's.

- 1. The competition angler who wants to catch plenty of fish
- 2. The pleasure angler who wants to catch fish but enjoys the other social benefits of angling
- 3. The species hunter who wants to record as many species as possible
- 4. The specimen hunter who wants to target specimen sized fish
- 5. The specialist who targets a particular species

Northern Ireland waters are extremely diverse, offering a wide range of fishing opportunities and in addition to species such as pollack, mackerel and wrasse they contain a large number of elasmobranchs species (sharks, skates and rays). The Sea Angling Ireland website (www.sea-angling-ireland.org) has highlighted a number of angling areas around the coast of Northern Ireland and the species that are expected to be caught in these areas (Table 1). However RSA are concerned that there is a decline in the number and species of fish available for them in comparison to historical catches. Indeed, in recent years the practice of angling from a boat has changed in response to decreases in the amount of fish being caught. Whilst previously when fishing from a boat, anglers tended to drift, they are now anchoring their boat and putting rubby dubby bait on the anchor, to increase the chances of catching a fish.

RSA's are principally of the mind of catch and release and therefore feel that they have minimal effects on fish stocks. Anglers believe that commercial fisheries are the biggest threat to fish stocks and the environment and that whilst fish are a shared resource, the needs of RSA remain somewhat forgotten during decision making.

 Table 1 Areas highlighted by Sea Angling Ireland and the species expected to be caught

| Area | Catch | | | | | |
|-------------------------|---|--|--|--|--|--|
| Portrush Harbour | Small codling, coalfish | | | | | |
| Blue Pool, Portrush | Coalfish, Pollock, wrasse | | | | | |
| Skerries Rocks | Big Pollack, Ballan wrasse, codling | | | | | |
| Dunseverick | Ballan wrasse, mackerel, large Pollock, big coalfish, conger eels | | | | | |
| White Park Bay | Flounder, turbot | | | | | |
| Ballintoy | Plaice, dabs, turbot, Ballan wrasse, mackerel, Pollack, coalfish, cod | | | | | |
| Ballycastle | Pollack, Ballan wrasse, flounder, bass, small turbot, dabs, plaice, dogfish, | | | | | |
| | whiting, codling, sea trout, coalfish | | | | | |
| Torr Head | Tope, Pollack, coalfish, Ballan wrasse, mackerel | | | | | |
| Layd Church | Cod, conger eel, dogfish, wrasse | | | | | |
| Salmon Rock, Cushendun | Codling, flounder, whiting, plaice | | | | | |
| Limerick Point | Codling | | | | | |
| Glenarm | Plaice, coalfish, codling, dogfish, conger eels | | | | | |
| Blackarch | Pollack, coalfish, conger eels, rock cod, Ballan wrasse, mackerel | | | | | |
| Ballylumford Harbour | Wrasse, cod, whiting, haddock, dogfish, coalfish, Pollack, conger eel | | | | | |
| Portmuck and Browns Bay | Pollack, wrasse, small coalfish, dogfish | | | | | |
| Gobbins Cliffs | Wrasse, Pollack, mackerel | | | | | |
| Blackhead Lighthouse | Ballan wrasse, dogfish, conger eel | | | | | |
| Whitehead Promenade | Wrasse, cod, whiting, flounder, plaice, haddock, dogfish, Pollack, conger eel | | | | | |
| Carrickfergus Harbour | Cod, whiting, flounder, haddock, dogfish, coalfish, conger eel, mullet | | | | | |
| Bangor Pier | Large conger eel, wrasse, coalfish | | | | | |
| Orlock Head | Mackerel, Pollack, coalfish, wrasse | | | | | |
| Donaghadee Pier | Pollack, coalfish, wrasse, mackerel, whiting, coaly, dab, codling, rockling | | | | | |
| Ballyhalbert Pier | Pollock, coalfish, whiting, rockling | | | | | |
| Portavogie | Pollock, codling, rockling, coalfish | | | | | |
| Portaferry | Dogfish, codling, mackerel, Pollock, coalfish, flatfish, tope | | | | | |
| Ramore Head | Pollock, mackerel | | | | | |
| Magilligan | Flounder, bass, dogfish | | | | | |
| Roe Estuary | Flounder, silver eel | | | | | |

Elasmobranches

Northern Ireland waters host approximately 30 species of sharks, skates and rays which are highly valued by RSA (AFBI, 2009). Due to the late maturity, slow growth rate and slow recovery rate, elasmobranches are particularly vulnerable to overfishing. Whilst most elasmobranch species do not have a directed commercial fishery but are caught as bycatch, in Area VIIa there is a commercially important ray fishery prosecuted by vessels from Belgium, Ireland and the UK.

A report by the International Council for the Exploration of the Seas (ICES) in 2008 highlighted that there has been a general decline in the landings of skates and rays from the Celtic Sea with species such as the common skate (*Dipturus batis*) which had been widely distributed in the Irish Sea now being rarely found.

From the 2008 report ICES recommended a number of management plans which should be implemented for elasmobranches. For those species which do not have a targeted species but are primarily caught as by-catch and whose numbers is severely reduced (white skate and angel shark), they should not be landed but returned to sea as they have a high survival rate. For species which are still present but whose numbers are depleting, such as the common skate and undulate ray (both these species have been removed from the Irish Specimen List for conservation purposes), target fisheries for these species should not be permitted unless they are otherwise proved as being sustainable.

Whilst some elasmobranchs are in decline there has been an apparent increase in the number of certain species such as the dogfish. An examination of the number of specimen fish landed into Northern Ireland indicates a general increase in the numbers of Blackmouthed dogfish, Greater spotted dogfish, Lesser spotted dogfish and Spur dogfish (Table 2). For species which have been shown to be stable or increasing in number, whilst no management measures are necessary at this time, it is important that the distribution is monitored appropriately to prevent depletion of the stocks through over fishing.

In 1970 the Inland Fisheries Trust launched a marine sport fish tagging programme in Ireland. This was in response to a decline in a number of important elasmobranches species and it was believed that such a programme would put an end to the killing of fish by anglers and would instead encourage the practice of catch and release. Inshore Fisheries Ireland (previously The Central Fisheries Board) now runs the programme which is the second largest in the world (second to the USA). To encourage the tagging programme a Marine Sportsfish Tagging Programme Conservation Award is presented to the person who has tagged the most fish each year. To date approximately 43,000 fish have been tagged

with about 50 charter skippers and the same number of anglers taking part in the tagging programme in 2010. The blue shark represents 44% of the total number of fish tagged followed by the thornback ray (23%) and tope (15%) (Inland Fisheries Ireland, 2011).

 Table 2 Irish Specimen fish caught in Northern Ireland

| Species | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Ballan wrasse | 1 | | | | | | | | | 4 | 0 |
| Bass | | | 2 | 0 | 1 | 2 | | 1 | | | |
| Blackmouthed Dogfish | | | | | | | | 3 | 16 | 14 | 28 |
| Blonde Ray | | | | | 1 | | 6 | 3 | | 3 | 1 |
| Cod | | 1 | | | | | | | | | |
| Conger eel | | | | | | | | | 9 | 5 | 7 |
| Cuckoo ray | | | | 2 | | | | | | | |
| Cuckoo Wrasse | 4 | 2 | 2 | 1 | 2 | 6 | 4 | 8 | 4 | 28 | 34 |
| Dab | 1 | | | | | | 1 | | | | |
| Gilthead Bream | | | | | | | | | | 1 | |
| Greater spotted Dogfish | | | | | 1 | 1 | 1 | 9 | 13 | 10 | 7 |
| Grey Gurnard | | | | | | 1 | | | | | |
| Herring | | | | | | | | | 3 | | |
| Homelyn Ray | | | | | 1 | | | | | | |
| Lesser spotted Dogfish | | | 1 | 4 | 4 | 3 | 5 | 7 | 5 | 4 | 19 |
| Ling | | | | 1 | | | | | | | |
| Plaice | 2 | | 1 | | | | | | | | |
| Pollack | 2 | 1 | 4 | | 2 | 4 | 11 | 5 | 2 | 1 | 2 |
| Spur dogfish | 5 | 26 | 13 | 15 | 28 | 16 | 34 | 55 | 86 | 59 | 83 |
| Thick lipped Mullet | | | | | | | 3 | 5 | 3 | 7 | 5 |
| Three bearded rockling | | 1 | | | | 2 | 4 | 2 | 1 | | |
| Торе | 7 | 23 | | | 2 | 1 | 1 | 18 | 10 | 10 | 8 |
| Trigger fish | | | | | | | 1 | | | | |
| Turbot | | | 1 | 1 | | | | | | | |

In Scotland the Scottish Sea Angling Conservation Network (SSACN) run a similar Shark Tagging Programme which in 2011 tagged almost 2,500 fish with almost 80% of this number being made up of tope, common skate and spurdog. The rate of recapture has given them an insight into the movements of species. For example the rate of recapture of common skate is 50.4% indicating that the common skate remains in the same area with little migration. However, tope tagged in the programme have been recaptured as far away as Portugal and Iceland (SSACN, 2011).

Socio-economics of recreational sea angling

Little is known about the value of RSA to the UK economy. A number of surveys have been carried out to estimate the economic value of RSA in England and Wales, however there is much disagreement in the figures presented. In 2000 a report prepared for the Welsh Assembly estimated that, in Wales, there was 12,000 local anglers and 28,000 visiting anglers (visitors are not necessarily people from outside of Wales, but may be people visiting the coastal area). The estimated expenditure was £28 million, £21.8 million of which came from visiting anglers.

In 2004 the Drew report estimated total expenditure of sea anglers in England and Wales to be worth £538 million annually with angling expenditure supporting over 18,500 jobs and providing £71 million in income to suppliers. It was also estimated that 1.1 million adults participated in RSA with an average spend per angling household of £489. In 2006 Nautilus Consultants estimated the annual expenditure per angling household at £1028. In 2005 Simpson and Mawle assessed the levels of participation in RSA and estimated that 3 million people over the age of 12 were active sea anglers.

Whilst there is a lot of variation in the figures estimated, what is clear is the significant economic value that RSA has to the UK economy and the support it provides to coastal areas and local businesses. In Northern Ireland it was estimated that in 2005, whilst game angling was the most popular form of angling, there were over 5,000 RSA with 2,923 anglers fishing from the sea and 2,138 fishing from shore. It was estimated that the spending of local sea anglers on expenses such as food, boat hire, travel costs etc was £1,459 per angler per year giving an estimated total expenditure of £7.4 million by local anglers. The report also estimated that in 2005 Northern Ireland hosted 450 visiting anglers for the sole reason of engaging in sea/shore angling (Pricewaterhousecoopers, 2007). Anglers believe that these numbers would increase significantly if fish stocks in Northern Ireland were returned to productive levels, encouraging visitors to come to the country.

Anglers believe that the value of fish changes depending on whether it is being targeted by RSA's or commercially with its value as a sports fish being much greater than its value as a commercial catch. For example, whilst sea bass is not commercially targeted in Northern Ireland, in terms of angling, sea bass is seen as one of the most prized fish. So whilst commercially it is worth only the value of the fish (between 2005 and 2009 this totalled at £2,141) recreationally it is worth a lot more in terms of tourism and the value anglers bring to local businesses, transport costs, bait purchase etc. In the USA, striped bass which is one of the most prized fish recreationally is believed to be up to 26 times more valuable as a sport fish than as a commercial catch (Southwick Associates Inc, 2005).

Alongside the economic benefits of angling are a number of other benefits both for the individual angler and the community as a whole. The ranges of health benefits from angling, in its role in reducing stress and as a form of relaxation are well reported. During the 2007 Pricewaterhousecoopers survey of Northern Ireland anglers the survey results showed that whilst for 51.8% of anglers the greatest thing about fishing was catching a fish, 21% undertook angling to relax, 7.3% undertook it as a healthy outdoor activity whilst 6% viewed it as a means of releasing stress. It is also a sport accessible to those with disabilities and has been shown to provide wide environmental, educational and social benefits.

Management throughout the UK and Ireland

As for commercial fishing, RSA's are regulated by EU minimum landing sizes (MLS) as set out in Council Regulation 850/98. In addition Bye-laws have been created by some of the English IFCA's to increase the MLS or place MLS on species not covered by the EU (Table 3).

In England, The Tope (Prohibition of Fishing) Order 2008, whilst only permitting fishing of tope by rod and line, prohibits the landing in England of tope caught by anglers thus enforcing a catch and release scheme. The Tope (Prohibition of Fishing) (Wales) Order 2008 sets out the same regulations for Wales.

In Scotland in 2012 the Scottish Government intends to introduce an Order which will protect 26 of Scotland's most vulnerable elasmobranches species. RSA will still be permitted to catch these species but only on the basis of catch and release.

In Ireland, sea bass are highly protected. The Bass Fishing Conservation S.I. No. 826 of 2007 sets a bag limit on anglers of 2 bass in any 24 hour period. The Bye-law also prohibits angling during 15th May and 15th June when the bass will be spawning. The Bass

(Restriction on Sale) Order S.I. No. 367 of 2007 prohibits any bass being sold or offered for sale. The Bass (Conservation of Stocks) Regulations S.I. No. 230 of 2006 prohibits any Irish sea-fishing vessel from fishing for. Landing, transhipping or having on board any sea bass. The regulations also set out a minimum landing size of 40cm.

In the EU a number of regulations have been established to improve the knowledge of both recreational and commercial fishing efforts. Under Council Regulation (EC) No 199/2008 the UK have an obligation to set up a programme to collect data on the biological, technical, environmental and socio-economics of all fishing, including recreational fishing.

Council Regulation (EC) No 1224/2009 states that "Member states shall ensure that recreational fisheries on their territory and in Community waters are conducted in a manner compatible with the objectives and rules of the common fisheries policy". The regulation also prohibits the marketing of catches from recreational fishing.

In order to meet the requirements set out by the EU, in England the MMO has set up Sea Angling 2012, based on the method used by the Marine Recreational Information Programme in America, to increase the scientific knowledge of fish stocks and to ensure that RSA are fully represented in future decision making. The MMO will use the Office for National Statistics (ONS) to carry out face to face interviews to estimate how many people are participating in RSA and how often. In addition, the MMO will survey charter boat owners to estimate the number of fishing trips as well as the catches being taken. The Centre for Environment, Fisheries and Aquaculture Science (Cefas) will work alongside the IFCA's to interview anglers on the shore and from private boats with emphasis on what they have caught (kept and released) and the size of the fish. Cefas will also carry out an online survey for anglers as well as examining the socio-economics of RSA. Speaking about Sea Angling 2012 the UK Fisheries Minister Richard Benyon said "I want sea angling to have a bright future, but to achieve this we must understand what sea anglers are catching, what is being returned alive, and the economic and social benefits the sport provides. This is a chance for sea anglers to make sure their interests are taken into account when policies to improve and conserve fish stocks around our coast are developed".

Table 3 EU and IFCA MLS

| | EU MLS | Southern | North | North | Eastern | Kent and | Sussex | Cornwall |
|-----------------|------------|----------|---------|---------|---------|------------|--------|----------|
| | | | Western | Eastern | | Essex | | |
| Bass | 36 | | 36 | 36 | 36 | 36 | 36 | 37.5 |
| Black sea bream | | | 23 | | | | | 23 |
| Blue ling | 70 | | 70 | | 70 | | | |
| Brill | | 30 | 30 | | | | | 30 |
| cod | 35 | | 35 | 35 | 35 | 35 | 35 | |
| Conger eel | | 58 | 58 | | | | | 58 |
| Dab | | 23 | 15 | | | | | 15 |
| Flounder | | 27 | 25 | | | | | 25 |
| Grey Mullet | | 30 | 20 | | | 30 | | 20 |
| haddock | 30 | | 30 | 30 | 30 | 30 | | |
| Hake | 27 | | | 27 | 27 | | 27 | 30 |
| herring | 20 | | 20 | 20 | 20 | 20 | 20 | |
| Lemon sole | | 25 | 25 | | | | | 25 |
| Ling | 63 | | 63 | 63 | 63 | | 63 | |
| Mackerel | 20 (30 in | | 20 | 30 | 30 | 20 (30 in | 20 | |
| | North Sea) | | | | | North Sea) | | |
| Megrim | 20 | | 20 | 20 | 20 | | 20 | 25 |
| Plaice | 27 | | 27 | 27 | 27 | 27 | 27 | |
| Pollack | 30 | | 30 | 30 | 30 | | 30 | |
| Red mullet | | 15 | | | | | | 15 |
| Red sea bream | | | 25 | | | | | 25 |
| Saithe | 35 | | 35 | 35 | 35 | | 35 | |
| Shad | | 30 | | | | | | |
| Skates/rays | | 40 | | | | | | |
| Sole | 24 | | 24 | | 24 | 24 | | |
| Turbot | | 30 | 30 | | | | | 30 |
| Whiting | 27 | | 27 | 27 | 27 | 27 | 27 | |
| Witch flounder | | 28 | 28 | | | | | 28 |

Management in Northern Ireland

Under the Fisheries Act (Northern Ireland) 1966 DARD were given the powers to promote sea angling and to 'take such other steps as appear to it appropriate to secure the furtherance and development of angling'.

The Loughs Agency manages RSA within Carlingford Lough and Lough Foyle. The Loughs Agency is an agency of the Foyle, Carlingford and Irish Lights Commission which was established under agreement between the UK and Irish governments.

In Northern Ireland no license is required for sea angling unless fishing for salmon or sea trout when a game license is required by law for each rod used.

Following questions raised in the Inshore Fisheries Review, the Department of Agriculture and Rural Development issued a consultation on the proposed introduction of regulations for the protection and conservation of Sea Bass in 2010. Whilst Sea Bass is an important species commercially in England and Wales there is no commercial fishery for bass in Northern Ireland with total landings of bass between 2005 and 2009 only amounting to 403 kg with a value of £2,141. In addition, there is a considerable lack of information available on landings as there is no requirement for landings to be submitted to the extent of other fisheries.

Issues consulted on included

- A maximum of 2 bass retained per 24 hours
- A closed RSA period from 15 May to 15 June (inclusive) to protect spawning fish
- Prohibition on first sale of bass to prevent recreational and commercial fisheries developing a trade in Bass leading to increased landings
- A minimum landing size of 40cm
- Banning on fishing for bass by any means other than rod and line
- Ban on the retention of bass on board any UK sea fishing vessel within the Northern Ireland zone

Table 4 lists the general responses to the sea bass consultation.

Table 4 General responses received during the sea bass consultation

| Proposal | Response | |
|----------------------|---------------------------------------|-----------------------------------|
| | RSA | Commercial |
| Daily catch limit | Support | Either agreed or no comment made |
| Closed season | Few objections. Anglers felt a catch | No views expressed |
| | and release period more suitable. | |
| | One suggestion was to add bass to | |
| | the current inland angling license as | |
| | game species which would create | |
| | source of information of catches. | |
| Prohibition on first | Anglers supported measure. Argued | Opposed as would increase |
| sale | that sea bass is of much higher value | discards and create an |
| | as RSA fish. | unnecessary new criminal offence. |
| MLS | Whilst most anglers supported this | Opposed |
| | some felt the size should be further | |
| | increased to 45-50cm. | |
| Ban on fishing other | Most agreed. | Commercial fishermen opposed |
| than by rod and line | | this as should be allowance for |
| | | by-catch |
| Ban on bass on board | Angler support. | Commercial fishermen opposed |
| fishing vessel | | this as should be allowance for |
| | | by-catch |

Potential Regulatory measures for RSA

Table 5 summarises possible actions for the management of RSA in Northern Ireland.

Table 5 Potential actions for the management of RSA in Northern Ireland

| Challenge | Resolution | Possible Action | Reasoning |
|---|----------------------------------|--|---|
| Obligations to protect marine environment | Protection of marine environment | Development of a RSA Code of Conduct | A code of conduct could be developed to include environmental, safety, and sustainability measures such as bait collection, sustainable angling techniques and disposal of litter. The code should also include knowledge of commercial and recreational regulations including the MLS of fish as set out by the EU and the location of any protected sites or closed areas. |
| Lack of data available/ Spatial pressures | Improved knowledge of RSA | Interaction between RSA's, government and scientists | Little is actually known about RSA in Northern Ireland and the stocks which it exploits. The 2007 Inshore Fisheries review stated that "the social and economic contribution of sea angling to Northern Ireland is not known and as a result, there is a lack of government support and investment in this sector. There is also a scarcity of data on sea angling in Northern Ireland". Under EU regulations, DARD must provide data on RSA. Data needs to be collected on the species exploited and where they are fished. RSA's are keen for areas to be protected for the sole use of RSA. However, without any knowledge of RSA such an idea cannot be realised. It is important that RSA's work with Government and scientists to provide the information required to gain a better understanding. Without this information balanced management decisions cannot be made. |
| | | Socio-economics studied | It is important that the value of RSA is known so that it can be managed accordingly. RSA in Northern Ireland is thought to be of already significant economic value with the possibility of further expansions brought about through appropriate management of stocks, input of resources and increased promotion, all of which would encourage new entrants to the sport, as well as increasing the number of tourists who come to Northern Ireland to participate in angling. RSA has the potential to significantly contribute to the Northern Ireland economy and this must not be ignored. |
| Sustainability | Protection of stocks | Sea Bass Regulations | Sea bass are seen as a prized fish amongst anglers and protection of the stock could lead to development of angling in Northern Ireland which would have |

| | | economic benefits. Whilst proposed sea bass regulations were put out to consultation in 2010, as yet nothing has come from the proposed measures with RSA's wanting regulations based on the Irish system whereby no by-catch of bass is allowed, commercial fisherman are however opposed to this. There were areas where there was general agreement such as a bag limit of 2 bass per 24 hours and these could now be regulated on. In addition, increasing the MLS of bass, whilst opposed by commercial fishing, would provide increased protection to the stocks. Female bass mature at around 42cm (Pawson and Pickett, 1996), therefore the current MLS provides no protection for females to reach maturity and spawn and contribute to the stock. | |
|--------------------------|------------------------------|---|--|
| | | Artificial reefs | "An artificial reef is a submerged structure deliberately constructed or placed on the seabed to emulate some functions of a natural reef such as protecting, regenerating, concentrating, and/or enhancing populations of living marine resources" (London Convention and Protocol/UNEP (2009). Artificial reefs have the potential to improve stocks of fish in the area by providing protection from the environment and predators. In addition, the presence of artificial reefs prevents the use of certain types of commercial fishing gear, such as dredges, which may also help the sustainability of fish stocks. |
| | Improved knowledge of stocks | Elasombranchs tagging scheme | Tagging schemes in Ireland and Scotland have been successful in increasing the knowledge we have on fish stocks. Some Northern Ireland anglers already participate in this scheme. By running a similar scheme in Northern Ireland, it would provide data on the stocks around Northern Ireland. Providing the resources for the scheme would also show that RSA in Northern Ireland is not being ignored. |
| Lack of focus in inshore | Increased responsibility | Willingness to manage and promote Northern Ireland sea angling | Whilst the Loughs Agency have responsibility for the activities within Carlingford Lough and Lough Foyle, RSA's believe that DARD are not upholding their responsibility to protect and develop RSA around the rest of the Northern Ireland coast. Responsibility must be taken for sea angling in the areas outside of the Loughs Agency remit. |

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