Setting priorities

Before determining any solutions it is worth remembering the conclusions drawn in the the Technical Report: - Economic Impact of Recreational Sea Angling in Scotland (Radford et al 2009).

1. There are around 100,000 Scottish Sea Anglers
2. There are around 50,000 Sea Anglers from the Rest of the UK
3. At least £140m is spent in Scotland when undertaking the Sport
4. Around 3000 jobs and £70m of income are supported by the activity
5. If the activity ceased there would be at least 1600 fewer jobs and £37m less income in Scotland.

Throughout the work of the Strategy Group we have continually identified the biggest impact on the potential for sea angling in Scotland as being the availability of **'More and Bigger Fish'.**

The intention of this document is to attempt to articulate the issues which we feel need to be taken into account, it is not a simple process of identifying a 'top ten', the decisions will need to take into account a variety of factors, some of which have many complex relationships.

- The location and mobility of sea anglers
- Type of angling followed by an angler – generalist, specimen hunter etc
- Angling method – boat, shore, kayak etc
- Geographic location of a species
- Impact of commercial fisheries
- To what extent it may be biologically feasible to regenerate any depleted stocks
- Means by which regeneration may be achieved – Angling Regeneration Centre, MPA, legislative restriction on damaging activities etc.
- Availability of suitable infrastructure and access
- Relative importance to a local economy
- Tourism attraction

All of these may also vary by time of year.

So we end up with a 'n' dimensional matrix, with 'n' different opportunities for weighting the options depending on the outcomes desired by different segments of the sea angling population, politicians, fisheries managers and Scottish people.

Decision Principles

- Where sea angling stocks are acceptable, they must be maintained.
- Where sea angling stocks are poor, they should be protected from commercial over exploitation.
- Focus should be given to those species which support tourism in areas with fragile economies.

Recommended Priorities

1. **The Solway** is the last remaining sea angling destination of choice for which supports a broad cross section of species of interest to the various types of sea anglers; it is also a prime sea angling tourism destination and hosts two of the remaining sea angling festivals.

   If this area is to continue to support the £25 million or so, the viability of the tope and pollock stocks must be maintained and steps need to be taken to regenerate other stocks and further develop the supporting infrastructure.

   The area would lend itself well to be identified as an Angling Regeneration Centre.

2. **Mull, Lorn, Etive and Sunart** the waters in the area provide real opportunities for an angler to catch the 'fish of a lifetime' for common skate and spurdog – both species have been extensively overfished by the commercial sector but are now showing some signs of recovery – the areas need to be protected from all forms of destructive commercial activity.

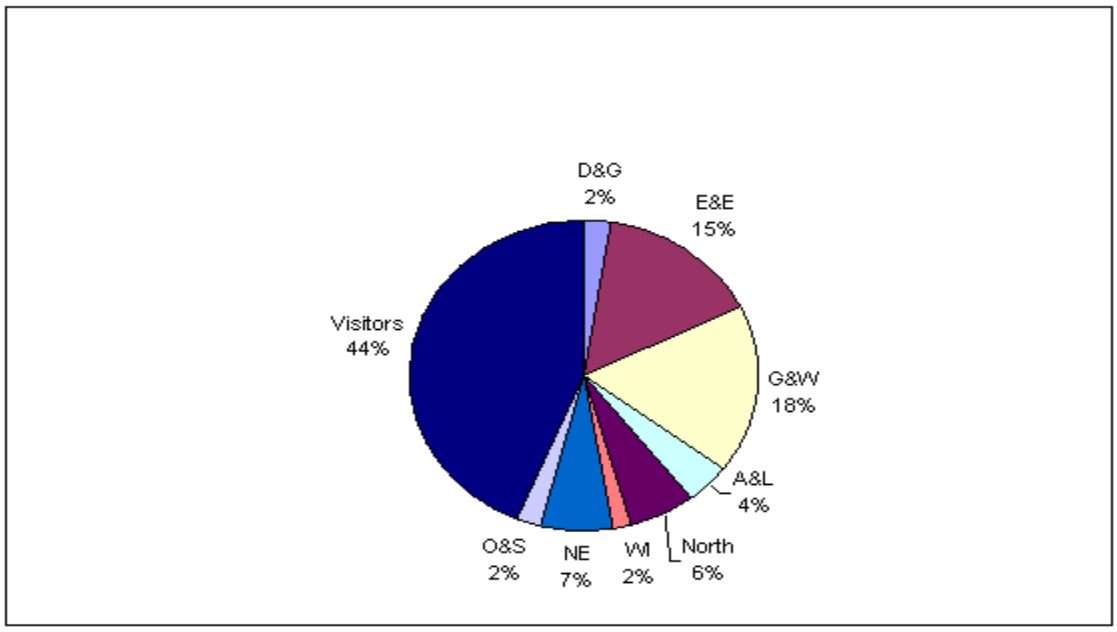
3. **The Clyde –** stocks are so depleted that immediate action in the form of gear restrictions and some form of '3 mile' limit are required and where appropriate (spawning / nursery grounds) areas should be excluded from all forms of destructive commercial activity.

4. **Angling Centres** - 10 key locations around Scotland's coastline should be identified for development as Sea Angling Centres.

Background.

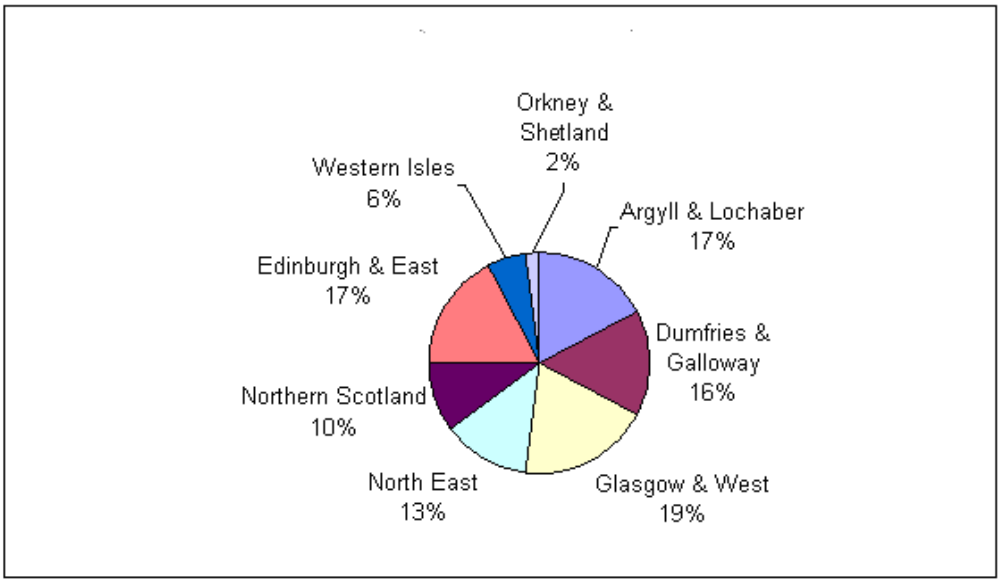
All figure and table numbering relates to those in the Technical Report: - Economic Impact of Recreational Sea Angling in Scotland (Radford et al 2009)

Location and Mobility



Origin of Sea Anglers in Scotland Fig 6.9.1

This shows quite clearly the importance of population size in determining where sea anglers come from (rather than activity rates) with visitors from south of the border being dominant.



Angler Days by Destination Fig 6.9.2

The most important feature is that these are much more equal and reflect, at least in part, the area of a region and the distance from the main population centres both north and south of the border, rather than only the population.

Origin > Destination ⩛	A&L	D&G	G&W	NE	NORTH	E&E	WI	OS	Total
Argyll & Lochaber	104,925	7,641	800	1,976	1,001	1,160	9,409	377	127,288
Dumfries & Galloway	848	15,012	379	124	22	131	786	0	17,303
Glasgow & West	61,330	46,247	256,740	19,389	5,187	7,287	9,177	1,559	406,917
North East	14,609	2,048	1,929	81,449	19,827	4,263	4,468	6,580	135,173
Northern Scotland	669	2,190	0	1,894	102,475	824	3,110	3,295	114,457
Edinburgh & East	29,736	30,310	5,680	33,030	8,919	207,819	10,588	4,577	330,660
Western Isles	0	0	0	123	7	123	34,119	0	34,371
Orkney & Shetland	0	0	0	149	421	0	237	27,575	28,382
Visitors	40,499	129,631	4,255	36,094	6,487	29,261	8,673	377	127,288
Total	252,615	233,080	269,783	234,307	144,346	250,868	80,567	74,640	1,540,206
Flow IN	125,327	215,777	-137,134	99,134	29,889	-79,792	46,196	46,258	345,655

Table 6.9.6 shows the estimated number of days by origin and destination and the net flow into the regions. As might be expected the industrialised central belt, Glasgow & West and Edinburgh & East are substantial exporters predominantly to the adjacent regions, Argyll & Lochaber and Dumfries & Galloway. The substantial flow of visitors into the Western and Northern Isles is also worth noting.

The importance of tourism

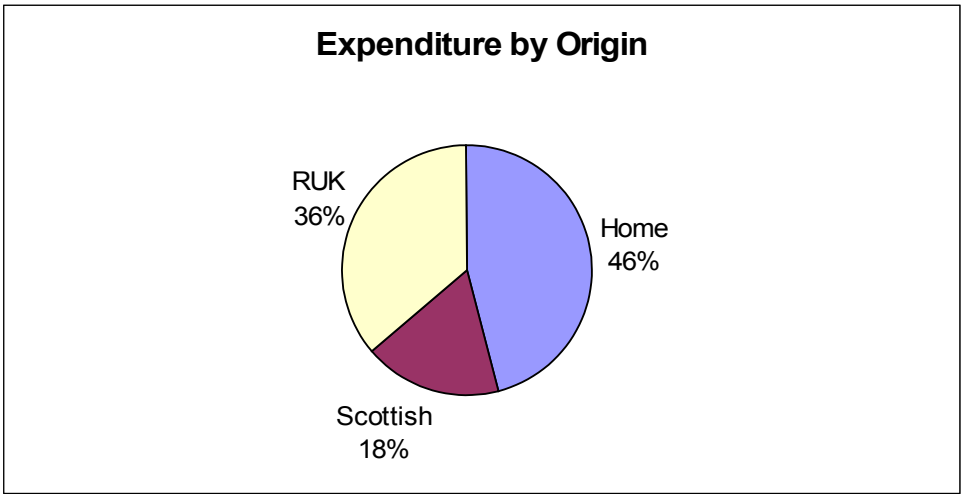


Fig 6.9.6 Expenditure by Origin of Anglers
This figure graphically illustrates the economic importance of visitors from south of the border

Table 6.9.14 summarises the estimate of the impact on jobs and incomes of a loss of sea angling in the region using the assumption that half of those Scottish anglers who would shift region would shift outside Scotland.

Table 6.9.14 The Economic Impact of Sea Angling in Scotland

Loss to Region	Percentage Loss	Jobs Lost	Income Lost
Home	41.8%	628	£14,054,777
Scottish Visitors	47.9%	296	£6,537,418
RUK Visitors	90.5%	751	£16,449,880
Total		1675	£37,042,075

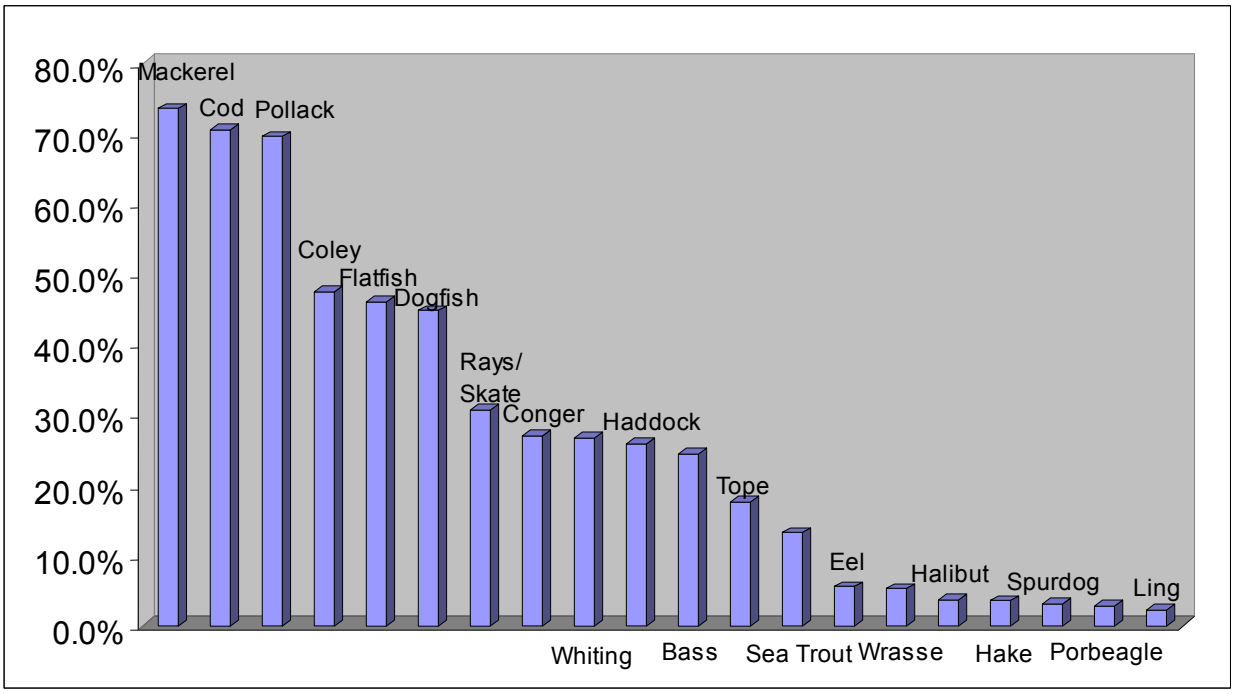
The most conservative assumption is that none of the "move regions" sea anglers would travel outside Scotland. Table 6.9.15 shows the estimates under that assumption.

Table 6.9.15 Loss to Scotland under restrictive assumption

Loss to Scotland	Loss %	Jobs Lost	Income Lost
Home	15.8%	238	£5,322,071
Scottish Visitors	15.7%	97	£2,137,367
RUK Visitors	90.5%	751	£16,449,880
Total		1086	£23,909,318

Species anglers target

Respondents to the internet survey were asked to record the species they fished for in each region. Fig 6.9.4 shows the simple aggregation of the returns to each region.


80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
Mackerel
Cod
Pollack
Coley
Flatfish
Dogfish
Rays/
Skate
Conger
Haddock
Tope
Eel
Halibut
Spurdog
Ling
Whiting
Bass
Sea Trout
Wrasse
Hake
Porbeagle

Summary of inshore species stock status

Species	SW	W	N	E	Vulnerability to commercial pressure	Offshore stock status	Inshore Association	Inshore stock status SW	W	N	E
Mackerel	Y	Y	Y	Y		Good, stable	Phase of migration				
Conger	Y	Y	Y	N		Unknown	Adults can be residential inshore, juveniles offshore, spawning grounds not confirmed				N/A
Cod	Y	Y	Y	Y		Bad, especially on west coast - possibly recovering in N Sea	Inshore as juveniles and in some areas adults remain inshore throughout life				
Pollack	Y	Y	Y	N		Unknown - no assessment	Juvenile inshore and adults live around inshore reefs				
Bass	Y	N	N	Y		Unknown - no assessment	Phase of migration		N/A	N/A	
Saithe	Y	Y	Y	Y		Good	Juveniles inshore, adults eventually move offshore to spawn				
Plaice/Dab	Y	Y	Y	Y		Generally good (except big species like Halibut, Turbot)	Juvenile nursery areas, adults move offshore				
Turbot	D	D	Y	Y		Bad	Juvenile nursery areas, adults move offshore				
Flounder	Y	Y	Y	Y			Juvenile nursery areas				
Haddock	Y	Y	Y	Y		Good in north sea, concern on west coast	Juvenile nursery areas, adults move offshore				
Whiting	Y	Y	Y	Y		Good in north sea, concern on west coast	Juvenile nursery areas, adults move offshore				
Common skate	N	Y	N	N		Bad	Adults may be residential, but also migrant – SSTP tagging programme				
Thornback	Y	Y	Y	N		Unknown - no assessment	Anecdotal evidence for inshore nursery areas, little known about adult movements				N/A
Spotted ray	D	D	Y	N		Unknown - no assessment	Anecdotal evidence for inshore nursery areas, little known about adult movements				N/A
Cuckoo ray	D	Y	Y	N		Unknown - no assessment	Anecdotal evidence for inshore nursery areas, little known about adult movements				N/A
Blonde ray	D	D	N	N		Unknown - no assessment	Anecdotal evidence for inshore nursery areas, little known about adult movements			N/A	N/A
Dogfish	Y	Y	Y	Y		Good	All life stages found in inshore areas			N/A	N/A
Spurdog	Y	Y	Y	N		Bad	Adults may be residential, but also migrant – SSTP tagging programme				N/A
Porbeagle	N	N	Y	N		Bad	Phase of migration	N/A	N/A		N/A
Tope	Y	Y	N	N		Unknown - no assessment	Phase of migration			N/A	N/A
Smoothound	Y	N	N	N		Unknown - no assessment			N/A	N/A	N/A
Wrasse	Y	Y	N	Y		Unknown - no assessment				N/A	
Grey Gurnard	Y	Y	Y	N		Unknown - no assessment					N/A
Red / Tub Gurnard	Y	Y	Y	N		Unknown - no assessment					N/A
Mullet	Y	Y	Y	Y		Unknown - no assessment				N/A	N/A