

The Economic Contribution of Coarse Angling in Ireland

2015



1 The Economic Contribution of Coarse Angling in Ireland

Inland Fisheries Ireland (IFI) is the state agency responsible for the protection, management and conservation of the Republic of Ireland's inland fisheries and recreational sea angling resources. The Republic of Ireland has over 70,000 kilometres of rivers and streams, 144,000 hectares of loughs and over 5,600 kilometres of coastline, all of which fall under the remit of IFI.

In coarse angling terms, Ireland has traditionally had a wealth of resources; however, in more recent times there has been anecdotal evidence to suggest that fish stocks in many of Ireland's freshwater fisheries have been affected by a wide range of factors which include: invasive aquatic species; changes in water quality; illegal fishing and fish poaching; cross hybridisation of species and increased competition from the spread of the non-native fish species roach (Rutilus rutilus).

Until recently, very little had been done to estimate the contribution of the Irish angling resource to the Irish economy. In 2012, Tourism Development International (TDI) on behalf of IFI conducted their 'Socio-Economic Study of Recreational Angling in Ireland' to try and gather information relating to domestic anglers and the level of angling tourism from overseas markets. Anglers were surveyed at given angling locations and asked to provide information detailing their expenditure patterns as well as their motivations and angling preferences corresponding to their 'current angling trip'. The report, which was published in 2013, estimated the total economic contribution of recreational angling in Ireland to be approximately €755 million with an estimated 406,000 individuals having participated in angling over the course of 2012. This figure included 252,000 domestic Irish anglers, 41,000 trips from Northern Irish anglers and 113,000 from overseas markets. The estimated 252,000 Irish anglers represented some 7% of the adult population aged 15 years or more.

More recently, in 2015 IFI commissioned an omnibus survey in conjunction with Millward Brown which suggested that some 7.6% of the population aged 15 years or older considered themselves to be recreational anglers; this gives an increased total of 273,600¹ domestic anglers based on April 2014 population data (CSO). The margin of error for the omnibus survey is +/- 1.53% with 95% confidence (at 50% reporting incidence) based on 4044 face to face interviews.

 $^{^{1}}$ 3,600,000 population over the age of 15 x 7.6%



In the following sections the key markets for coarse angling in Ireland will be examined and expenditure estimates will be made based on the most current data available. The key markets which will be focused upon are those of Irish domestic anglers, Northern Irish anglers and overseas anglers. Where expenditure ranges are estimated in respect of these markets a mid-point value is assumed for each; this mid-point will be presumed to be close to being accurate.

In estimating the total annual expenditures for domestic Irish anglers, three different data sources will be used: Source A uses annual expenditure figures as reported by domestic coarse anglers surveyed for the 2013 TDI report along with current angler participation estimates based on the 2015 omnibus survey; Source B uses average annual expenditure figures as reported by all angler types in the TDI report along with 2015 omnibus participation estimates and, finally, Source C uses participation figures based on coarse angler participation estimates and mean daily and overnight expenditure figures as reported across all angling types in the 2013 TDI report.

Following this analysis, the total contribution of coarse angling to the Irish economy will be estimated taking into account such factors as economic multipliers (i.e. the knock on effect of initial rounds of expenditure) and leakages (i.e. the economic loss associated with importing goods). Comparisons will then be drawn between the economic contribution of coarse angling to the Irish economy and the economic contribution of coarse angling in other countries with comparable angling cultures and angling resources to those of Ireland.



2 Domestic Anglers

2.1 Source A: Domestic Coarse Angler Expenditure

(based on domestic angler participation rates estimated using 2015 omnibus survey figures and annual expenditure figures as indicated by Irish coarse anglers in 2012)

Irish anglers have a high tendency to fish for multiple species and, as such, it is difficult to categorise them by species sought. However, the most recent survey work carried out by IFI (Millward Brown, 2015) indicated that when anglers were asked to choose only one angling type above all others a total of 7% of Irish domestic anglers indicated that coarse angling was their preferred angling type; this gives a total of 19,152² Irish domestic coarse anglers based on current population data³. The 2013 TDI report indicated that domestic Irish anglers across all angling types spend an estimated €1,974 annually on their fishing with coarse anglers showing the highest average expenditure figures of \in 3,469. Following further analysis of sampling methodology, this figure is presumed to be overestimated due to an avidity bias associated with competitive coarse match anglers who have been shown to spend a disproportionate amount compared with other domestic coarse anglers. If it is presumed that annual angler expenditure figures remain the same in 2015 as were reported in 2012, with total expenditure then calculated by angling category, a gross expenditure figure of $\leq 66,440,000$ for domestic coarse anglers can be determined, this is shown in Table 1. However, as has been explained above, this figure is presumed to be overestimated.

Table 1: Source A – Annual Domestic Coarse Angler Expenditure		
Number of Recreational Anglers in 2015	19,152	
Annual Expenditure on Angling	€3,469	
Total Domestic Coarse Angler Expenditure (Rounded)	€66,440,000	

2.2 Source B: Domestic Coarse Angler Expenditure

(based on domestic angler participation rates estimated using 2015 omnibus survey figures and expenditure figures as recorded across all angling types in 2012)

The TDI report indicated that the average per person expenditure for Republic of Ireland anglers for their 'current angling trip' was \in 178. Taking into account the average number of trips taken during the past 12 months by Republic of Ireland anglers (8.28), average

 $^{^{2}}$ 3,600,000 x7.6% angler participation x 7% coarse anglers = 19,152

³ CSO 2014



annual spend using this source can be estimated at $\in 1,473$. This figure does not include fixed or overhead expenses such as boats, engines and capital expenditure on fishing tackle; when the figure is adjusted to include these items, the estimated annual expenditure rises to $\in 1,974$. In order to arrive at an estimate of total domestic expenditure on recreational coarse angling, a mid-point is assumed in the expenditure ranges indicated (Table 2); for domestic coarse anglers this mid-point is $\in 33$ million.

Table 2: Source B – Annual Domestic Coarse Angler Expenditure			
Number of Recreational Coarse Anglers in 2015	19,152		
Annual Expenditure on Angling	€1,473	€1,974	
Total Expenditure Range	€28,210,896	€37,806,048	
Total Expenditure - Mid-Point Value	€33,000,000		

This method of evaluation, where the average annual expenditure across all angling types is used to estimate expenditure for coarse anglers, is presumably less accurate; this is because it is likely to give a much lower expenditure figure for coarse anglers than that reported by the coarse anglers themselves.

2.3 Source C: Domestic Coarse Angler Expenditure

(based on domestic angler participation rates estimated during the 2013 TDI report and mean daily and overnight expenditure figures as recorded amongst coarse anglers in 2012)

The 7% of the adult population who reportedly went fishing in 2012 months equates to 252,000 individuals; of these, some 223,000 participated in one or more day fishing trips.

Results from the 2013 TDI report indicated that of the estimated 223,000 domestic Irish anglers who went on a day trip for the purposes of fishing, some 19% had been on a day trip to participate in coarse angling (42,000) in 2012 (Table 3). Of the 54,000 Irish anglers who stayed on an overnight angling trip, 31% (17,000) of them had done so at least in part to fish for coarse fish species. As shown in Table 4, it is possible to estimate a range using these figures for the volume of domestic coarse anglers; however, this range is likely to be more accurate towards its lower bound estimate as it is subject to a level of duplication between anglers making day fishing trips and those taking overnight trips. It should be noted that, due to the high number of Irish anglers who target multiple species,



not all of these trips can be attributed solely to the pursuit of coarse fish species as indicated and this creates an anomaly between the reported figures for anglers who went on an angling day trip (223,000) and the sum of day trips categorised by species sought (366,000) as seen in Table 3.

Table 3: Species Targeted on Day Fishing Trips in 2012 – Domestic Anglers			
	Participation Estimates	Estimated Number of Anglers	
Salmon Only	9%	20,000	
Salmon and Sea Trout Combined	22%	49,000	
Sea Trout Only	10%	22,000	
Brown Trout	30%	67,000	
Pike	28%	62,000	
Coarse (Excl Pike)	19%	42,000	
Bass	10%	33,000	
Sea Angling (Excl Bass)	32%	71,000	
Total		366,000	

Source: Millward Brown Lansdowne/Household Survey. Total percentage figure is overestimated as a result of anglers targeting multiple species on their trips

In order to mitigate the bias caused as a consequence of this multiple species approach and in the absence of more complete data, calculations will be multiplied by 0.61 to reflect the ratio of actual day trips taken by domestic anglers (223,000) versus day trips as categorised by species targeted (366,000).

Table 4: Domestic Coarse Anglers – Volume Estimates by Category				
	Anglers on Dev Ficking Overnight			nge
	Day Fishing Trips	Fishing Trips	Minimum	Maximum
Coarse Anglers	42,000	17,000	42,000	59,000

The overall average number of day trips taken by all domestic anglers was 13.61. Average expenditure per trip was \in 82 for domestic local anglers and \in 120 for non-local day trip



visitors. By using these figures in conjunction with the participation numbers given above, an estimate of the gross expenditure of day visit Irish coarse anglers can be made. Again, a mid-point value of \in 101 will be used to estimate the expenditure of local and day trip anglers as shown in Table 5.

Following on from this, an estimate of the maximum combined expenditure of day trip coarse anglers is found to be in the region of \in 69 million and a minimum expenditure in the region of \in 47 million with the true figure likely to be somewhere in the middle of these two estimates so approximately \in 58 million. When this figure is adjusted to account for multiple species bias an estimation of annual coarse angler expenditure of \in 35 million is arrived at.

Table 5: Source C - Expenditure Estimates for Domestic Day Trip Anglers		
Angler Days	571,620 ⁴	
Mean Expenditure (per day)	€101	
Coarse Angler Expenditure	€58,000,000	
Coarse Angler Expenditure (allowing for multiple species adjustments @ 0.61)	€35,000,000	

According to the TDI report, some 54,000 domestic Irish anglers (or 1.5% of the adult population) went on an overnight angling trip in 2012 and of those anglers who made overnight trips the average number of trips for the year was 5.25. The average trip duration relating to these trips was 2.08 nights per trip giving a total of 589,680 domestic fishing nights for the year.

Some 17,000 of the domestic anglers (31%) who went on overnight angling trips during 2012 (Table 4) did so at least in part to fish for coarse fish species⁵. If the overall average number of trips taken by all anglers was 5.25 and the average trip duration was 2.08 nights per trip, this would result in 185,640 domestic fishing nights. Coarse anglers indicated an expenditure of €432 on the 'current trip'. This gives an overall gross expenditure figure for overnight trips from domestic coarse anglers of €38.5 million.

 $^{^{4}}$ 42,000 coarse angling participants x 13.61 average day trips = 571,620 angler days

⁵ These anglers probably targeted multiple species on their overnight trips.



Table 6: Species Targeted on Domestic Overnight Fishing Trips			
	Participation*	Estimated Number of Anglers	
Salmon Only	12%	6,000	
Salmon and Sea Trout Combined	30%	16,000	
Sea Trout Only	18%	10,000	
Brown Trout	26%	14,000	
Pike	28%	15,000	
Coarse (Excl Pike)	31%	17,000	
Bass	20%	11,000	
Sea Fish (Excl Bass)	42%	22,000	
Total		111,000	

Source: TDI/ Millward Brown Lansdowne/Household Survey Total Domestic Overnight Trips in 2012. Total percentage figure is overestimated as a result of anglers targeting multiple species on their trips

However, an allowance must again be made to reflect the high incidence of multiple species being targeted by Irish anglers. In order to do this it is presumed that of the 17,000 anglers who reported having overnight trips to target coarse species, not all of their trips were taken specifically to target these coarse species. In the absence of more complete data, the figures given for overnight trips will be multiplied by 0.49^6 to reflect the ratio of actual trips taken (54,000) versus trips as categorised by species targeted (111,000) in the TDI report (Table 6). Using this estimation a calculation of \leq 19 million relating to overnight coarse angling trips is arrived at (Table 7).

Table 7: Domestic Coarse Anglers on Overnight Trips		
Number of Anglers on Overnight Trips	17,000	
Average Number of Overnight Trips	5.25	
Average Expenditure (per trip)	€432	
Total Overnight Domestic Coarse Angler Expenditure (Rounded)	€38,000,000	
Total Overnight Domestic Coarse Angler Expenditure (allowing for multiple species adjustments @ 0.61)	€19,300,000	

⁶ 0.49 = 54,000/111,000



The combined total of the expenditure calculations relating to domestic day trip and domestic overnight coarse anglers amounts to \notin 54.5 million per annum. In order to estimate a figure for overall domestic coarse angler expenditure an average figure is calculated in respect of the three data sources identified above; this calculation, as shown in Table 8, amounts to \notin 51.3 million.

Table 8: Annual Domestic Coarse Angler Expenditure		
Source A	€66,440,000	
Source B	€33,000,000	
Source C	€54,500,000	
Combined Total	€153,940,000	
Annual Domestic Coarse Angler Expenditure Figure (Rounded)	€51,300,000	



3 Northern Ireland Angler Expenditure

In 2009, the *Watersports and Leisure Participation* survey estimated that there were 81,000 anglers (both sea and freshwater) in Northern Ireland, an approximate 5.6% of the total adult population (British Marine Federation *et al.* 2011). In 2012, an estimated 41,000 trips were made by Northern Irish individuals to participate in recreational angling in the Republic of Ireland; some 26% of these trips were, at least in part, to target coarse species (TDI, 2013). The individuals on these trips spent an average of €360 per trip and total expenditure on recreational angling in the Republic of Ireland by Northern Irish anglers in 2012 was estimated to be in the order of €14.6 million. Up to 26% of this amount partly relates to coarse angling giving an estimate of €3.8 million (Table 9). Once more there is a need to apply a discount ratio to this figure to allow for anglers who targeted multiple species on their trips; this ratio will reflect the incidence of actual trips made by Northern Irish anglers (41,000) versus the trips as reported by species sought (86,000) giving a discount ratio of 0.48. When this ratio is applied the estimated expenditure figure for Northern Irish coarse anglers is calculated at €1.8 million.

Table 9: Northern Ireland Angler Expenditure on Recreational Coarse Angling		
Number of Recreational Coarse Angling Trips in the Republic of Ireland in 2012.	10,600 ⁷	
Average Expenditure (per person per trip)	€360	
Expenditure Range in Republic of Ireland in 2012	€3,800,000	
Coarse Angler Expenditure (Adjusted for Multiple Species Bias @ 0.48)	€1,800,000	

⁷ Northern Ireland Coarse anglers who visited ROI in 2012 (TDI, 2013) – 26% of 41,000



4 Overseas Anglers

In 1999, an estimated 173,000 overseas visitors to Ireland participated in angling (Fáilte Ireland); by 2003 this figure had dropped to approximately 88,000 and since then the numbers of overseas anglers travelling to Ireland each year have never fully recovered. The TDI report uses overseas tourism figures for Ireland taken from Fáilte Ireland's 2011 *Tourism Facts* publication to help in estimating figures for 2012. Of the presumed 113,000 angling trips made by overseas visitors to Ireland in 2012, an estimated 21% (24,000) were, at least in part, to fish for coarse fish (TDI, 2013). With the benefit of hindsight it can be seen that overseas angler numbers were in fact higher in 2012 than presumed, with 118,000 angling visitors during the year; this figure as a percentage of *Total Overseas Visitors* based on figures taken from Fáilte Ireland's 2009-2013 Tourism Facts publications (Table 10) and cross referencing with Fáilte Ireland's total tourism figures for 2014, it can then be estimated that over 144,000 overseas anglers visited Ireland in 2014.

Table 10: Fáilte Ireland Overseas Visitor Numbers 2000 – 2014			
Year	Number of Overseas Visitors to Ireland	Number of Overseas Anglers	Overseas Anglers as a Percentage of Total Overseas Visitors
2000	6,181,000	-	-
2001	5,840,000	-	-
2002	5,919,000	-	-
2003	6,178,000	88,000	0.0142
2004	6,384,000	93,000	0.0146
2005	6,763,000	84,000	0.0124
2006	7,417,000	106,000	0.0143
2007	7,739,000	128,000	0.0165
2008	7,436,000	142,000	0.0190
2009	6,555,000	132,000	0.0201
2010	6,037,000	127,000	0.0210
2011	6,505,000	113,000	0.0174
2012	6,518,000	118,000	0.0181
2013	6,986,000	128,000	0.0183
2014	7,604,000 ⁸	144,400 ⁹ /132,000 ¹⁰	0.0190 ¹¹ /0.0174 ¹²
Source: Fáilte Ireland Tourism Facts			

Source: Fáilte Ireland Tourism Facts

⁸ Central Statistics Office, January 2015.

⁹ Estimate based on anglers as a percentage of total overseas tourists 2009-2013

¹⁰ Based on lowest previous figure available (anglers as a percentage of total tourist numbers, 2011). Actual figure 132,310.

¹¹ Average based on 2009-2013 figures

¹² Based on lowest previous figure available (2011)



However, for the purposes of this study the more conservative lower bound estimate of 132,000 overseas tourist anglers will be used, this is based on the lowest figure for anglers *as a percentage of total overseas visitors* (0.0174) which was reported in Fáilte Ireland's tourism figures for 2011. Again it will be presumed that the percentage estimates given for overseas coarse anglers remain constant at 21%. On the basis of this, it is estimated that 27,700 overseas anglers came to Ireland in 2014 with coarse fish species being targeted. There are two recent estimated average expenditure figures for overseas anglers; firstly, Fáilte Ireland's 2011 *Survey of Travellers* (Source D) estimated that overseas anglers as estimated the average expenditure by overseas anglers as €1,027 per person per trip during 2012. This gives an annual expenditure range by overseas coarse anglers of between €23.75 and €28.5 million; again a mid-point value will be used, in this instance €26.1 million.

Once again there is a discrepancy between the figure given for numbers of overseas anglers who visited Ireland in 2012 (113,000) and the number as reported by angling category (168,000) in the TDI report and an allowance must be made to mitigate this. In this instance, the figure of \in 26.1 million is multiplied by 0.67 to reflect the ration of actual trips versus trips reported by angling category and a final figure of \in 17.5 million is arrived at.

Table 11: Overseas Coarse Anglers 2014		
Number of Anglers on Overnight Trips	27,700	
Average Expenditure (per trip) – Sources D & E	€858	€1,027
Total Expenditure Range	€23,766,600	€28,448,000
Total Expenditure Mid-Point Value	€26,100,000	
Coarse Angler Expenditure adjusted for multiple species (x 0.67)	€17,500,000	



5 Total Expenditure on Recreational Coarse Angling – All Anglers

As previously stated, in order to arrive at an estimate of total expenditure on coarse angling, a mid-point in the expenditure ranges indicated in respect of domestic, Northern Ireland and overseas anglers will be used. If it is presumed that the an average of the figures for domestic anglers from Sources A, B and C is close to being accurate, then a calculation can be made estimating the total direct expenditure of anglers from all markets on Irish coarse angling to be in the region of \in 70.6million (Table 12).

Table 12: Sum of Expenditures		
Domestic Coarse Anglers (Average of Sources A, B & C)	€51,300,000	
Northern Ireland Coarse Anglers	€1,800,000	
Overseas Coarse Anglers	€ 17,500,000	
Total Estimated Expenditure € 70,600,000		
Figures are rounded for ease of interpretation		

This figure of €70.6 million corresponds with an overall increase in overseas visitor numbers in 2014 compared with 2012, an estimated increase in overall domestic angler numbers from 252,000 to 273,600 based on the most recent estimates provided through the Millward Brown omnibus survey in 2015 and also a participation estimate of 7% of Irish anglers considering themselves to be coarse anglers above all other angling types.

Table 13: Total Net Expenditure										
Gross Expenditure										
Total Domestic Expenditure (including N.I.)	€53,100,000									
Total Overseas Angler Expenditure	€17,500,000									
Total Gross Expenditure for all Coarse Anglers	€70,600,000									
Economic Contribution										
Leakages	20%									
Expenditure (less leakages)	€56,480,000									
Indirect and Induced Multiplier	1.7									
Indirect Expenditure	€39,536,000									
Net Contribution	€96,000,000									

Final figures are rounded for ease of interpretation



Based on estimates from the Central Statistics Office Input-Output figures for Ireland, TDI estimated the composite multiplier for recreational angling expenditure to be 1.70. This figure in part reflects the high indirect impact multiplier of the hotel and catering industry which comprises a large element of the direct expenditure of the anglers in the 2013 Study of Recreational Angling. The combined net expenditure for coarse angling in Ireland, following adjustments to allow for leakages and multipliers, is thought to be in the region of \notin 96 million (Table 13) and this figure can be seen in comparison with other Irish angling types in Table 14.

5.1 Expenditure Patterns

Coarse anglers indicated and expenditure per trip of \in 519 with per person expenditures amounting to **€**432; these figures do not include transport costs. On average, coarse anglers spent \in 271 (52% of their total expenditure) on food, drink and accommodation. Of all anglers, coarse anglers had the highest expenditure figures for both bait (\in 55) and competition fees (\in 73) and some of the lowest expenditures relating to boat hire (\in 3), permits (\in 4) and other retail items (\in 1).



Table 14: Estimated Contribution of Angling in Ireland by Angling Type – 2014/2015																	
Angling Type	Domestic Participation Estimate				Northern Irish ¹³ Participation Estimate				Overseas Participation ¹⁴ Estimate			Total Participation			€ Millions		
	%	Number of Anglers Total	€ Total	€ per person	%	Number of Anglers Total	€ Total	€ per person	%	Number of Anglers Total	€ Total	€ per person	Number of Anglers	Gross Expenditure Per Angler	Net Expenditure Per Angler	Gross Expenditure	Total (Inc. Multipliers)
Sea	24	65,664	€94,940,000	€1,446	11	4,510	€1,623,600	€360	16	21,120	€20,000,000	€943	91,294	€1,273	€1,731	€116	€158
Bass	4	10,944	€30,732,000	€2,808	5	2,050	€738,000	€360	17	22,440	€21,000,000	€943	35,434	€1,473	€2,004	€52	€71
Salmon & Sea Trout	23	62,928	€102,187,000	€1,623	42	17,220	€6,199,200	€360	37	48,840	€45,845,000	€943	128,988	€1,197	€1,628	€154	€210
Pike	12	32,832	€68,430,000	€2,084	5	2,050	€738,000	€360	5	6,600	€5,800,000	€943	41,482	€1,808	€2,459	€75	€102
Coarse	7	19,152	€51,300,000	€2,678	12	4,920	€1,771,200	€360	14	18,480	€17,500,000	€943	42,552	€1,659	€2,256	€71	€96
Brown Trout	22	60,192	€90,770,000	€1,508	25	10,250	€3,690,000	€360	11	14,520	€14,200,000	€943	84,962	€1,281	€1,742	€109	€148
Stocked Fisheries ¹⁵	2	5,472	€9,521,300	€1,740	-	-	-	-	-	-	-	-	5,472	€1,740	€2,366	€9.5	€13
Other Angling Type ¹⁶	6	16,416	€28,564,000	€1,740	-	-	-	-	-	-	-	-	16,416	€1,740	€2,366	€28.5	€39
Totals	100%	273,600	€476,000,000	€1,740	100%	41,000	€14,700,000	€360	100%	132,000	€124,345,000	€943	446,600	€1,378	€1,875	€615m	€836m

 ¹³ Reported Northern Irish angler figures by angling category have been adjusted using a ratio of 0.48 to allow for the targeting of multiple species
¹⁴ Reported overseas angler figures by angling category have been adjusted using a ratio of 0.67 to allow for the targeting of multiple species

¹⁵ When asked to choose one type of angling in the 2015 omnibus survey some 2% of Irish anglers categorised themselves as preferring' Stocked Fisheries'; expenditure estimates based on average expenditure figures reported across all angling types ¹⁶ When asked to choose one type of angling in the 2015 omnibus survey some 6% of Irish anglers categorised themselves as 'Other Angling Type'; expenditure estimates based on average expenditure

figures reported across all angling types



6 Employment

According to Fáilte Ireland, $\in 1$ million of tourist spending supports 36 jobs. In arriving at an indicative assessment of employment supported by recreational angling in Ireland, the expenditure estimates presented in Table 14 in respect of overseas anglers ($\in 124$ million) and Northern Ireland anglers ($\in 14.7$ million) can legitimately be classified as tourist spending.

Not all of the estimated €476 million in domestic recreational angling expenditure can be classified as 'tourist' spending however. To arrive at an estimate of domestic tourist angling expenditure, the volume of overnight trips needs to be taken into account and in the TDI report this is estimated to be 37% of total domestic angling expenditure. Taking into account overseas and Northern Ireland expenditure, total tourist angling expenditure can be estimated at approximately €315 million.

Table 15: Total Tourist Angling Expenditure							
	Total Expenditure						
Domestic Angler Expenditure Northern Ireland Expenditure Overseas Angler Expenditure	€176,300,000 €14,700,000 €124,345,000						
Total Tourist Expenditure	€315,500,000						

Source: TDI / Fáilte Ireland / Household survey

Therefore, applying the Fáilte Ireland formula of 36 jobs supported for every $\in 1$ million in tourist expenditure, recreational angling can be estimated to support approximately 11,350 jobs (based on 36 jobs per million in tourist expenditure). Approximately 1,380 of these jobs are supported by coarse angling as shown in Table 16.

Table 16: Number of Jobs Supported by Angling Tourism Expenditures (categorised by angling type)												
		Domestic Angl	ers	Northern Ire	eland Anglers	Oversea	as Anglers	Expenditure / Jobs				
Angling Type	Number of Anglers Total	€Total Domestic Expenditure	€ Domestic Tourism Expenditure	Number of N.I. Anglers Total	€Total N.I. Expenditure	Number of Overseas Anglers Total	€ Total Overseas Expenditure	Total Tourism Expenditure	Number of Jobs Supported			
Sea	65,664	€ 94,940,000	€ 35,127,800	4,510	€ 1,623,600	21,120	€ 20,000,000	€ 56,751,400	2,043			
Bass	10,944	€ 30,732,000	€ 11,370,840	2,050	€ 738,000	22,440	€ 21,000,000	€ 33,108,840	1,192			
Salmon & Sea Trout	62,928	€ 102,187,000	€ 37,809,190	17,220	€ 6,199,200	48,840	€ 45,845,000	€ 89,853,390	3,235			
Pike	32,832	€ 68,430,000	€ 25,319,100	2,050	€ 738,000	6,600	€ 5,800,000	€ 31,857,100	1,147			
Coarse	19,152	€ 51,300,000	€ 18,981,000	4,920	€ 1,771,200	18,480	€ 17,500,000	€ 38,252,200	1,377			
Brown Trout	60,192	€ 90,770,000	€ 33,584,900	10,250	€ 3,690,000	14,520	€ 14,200,000	€ 51,474,900	1,853			
Stocked Fisheries	5,472	€ 9,521,300	€ 3,522,880	-	€ -	-	€ -	€ 3,522,880	127			
Other Angling Type	16,416	€ 28,564,000	€ 10,568,680	-	€ -	-	€ -	€ 10,568,680	380			
Totals	273,600	€ 476,000,000	€176,284,391	41,000	€ 14,700,000	132,000	€ 124,345,000	€ 315,329,391	11,354			



7 Similar Markets

In the U.K., coarse fishing is the preferred type of angling for almost 60% of anglers, as opposed to 25% for game fishing and 15% for sea angling (Angling Times/Substance Research 2009). In the U.K. coarse anglers comprise specialist carp anglers, pike anglers and match anglers who target species such as bream, roach, rudd, perch and tench. Although estimates vary, it is indisputable that recreational angling in the U.K. has millions of participants and is acknowledged as making a valuable contribution to the U.K. economy. According to the U.K. Centre for Fisheries Aquaculture and Science, total effort on freshwater angling by licensed anglers in England and Wales in 2005 amounted to 30 million angler days and coarse angling was the most popular angling type. Angler gross expenditure across the whole of England and Wales was estimated to be £1.18 billion, with coarse angling responsible for over 83% or £971 million of this. Household income of £980 million and 37,386 jobs were also generated across England and Wales as a result of recreational angling.

The U.K. Environment Agency 'Public Attitudes to Angling' report said that 9% of the population over 12 years of age in England and Wales (equivalent to 4.2 million people) had been fishing in the U.K. in 2010. Sales of the U.K. Environment Agency Rod Licence (a legal requirement for anyone fishing in freshwater in England and Wales) increased by 35% from 2000 to 1,431,981 in 2011. Sport England also estimated that the numbers taking part in angling once per week stood at 134,000 with 980,000 taking part once per month.

In coarse angling terms, fisheries in the U.K. had traditionally been comparable to those available in Ireland and the traditional U.K. closed season for coarse angling from the 15th of March to the 15th of June saw an influx of U.K. coarse anglers into Ireland to avail of the year round coarse angling on offer. However, a number of factors contributed to a decline in visiting U.K. angler numbers and these included the abolition of the coarse angling closed season on U.K. stillwaters in 1995 and a huge increase in the availability of commercial carp fisheries. These carp fisheries enabled anglers to target much larger fish in comfortable surroundings and provided a form of angling with which the traditional wild Irish coarse fisheries could not compete. Interest in coarse angling in the U.K. increased in line with an increase in these carp fisheries and coarse angling still remains by far the most popular form of angling for U.K. anglers.



In recent years there has been an upsurge in interest in wild Irish coarse angling amongst U.K. anglers and this was confirmed by the readership of the Angler's Mail (over 302,000 anglers) who voted Ireland as the top angling tourism destination for 2014. Similarly, Irish organisers have increased the number of coarse angling festivals being held from 17 in 2010 to 43 listed in 2015; these events are of particular interest to U.K. coarse anglers and a high proportion of their participants are visiting from the U.K.



8 Conclusion

Pike and coarse angling in Ireland are underrepresented in terms of participant numbers and they provide a higher return per angler than many of the other angling types considered in this report. There is considerable scope for increasing the participation of both domestic and overseas anglers through increased angling event organisation, improved infrastructure on pike and coarse fisheries and a more focused management approach for the benefit of these pike and coarse fish species.

Coarse and pike angling in Ireland can provide significant economic benefits to rural and peripheral regions whose natural angling resources can attract both domestic and overseas angling participants. In many cases these rural areas may be devoid of any alternative tourist attractions and angling can provide an important and sustainable source of income for both the catering and accommodation service providers in these marginalised communities. Recreational angling also has the ability to attract anglers at times outside of the main tourist seasons; the shoulder periods of March through May and again from mid-August through to October provide some of the best angling in Ireland and, as a consequence of this, they are the most popular angling months. These shoulder periods can help to extend the traditional tourist season for both accommodation and service providers with the potential to also provide increased employment and entrepreneurial opportunities within these communities.