Angling:
A Social Research Overview

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1. Introduction

The purpose of this paper is to provide an overview of existing and recent research into the social aspects of angling in the UK and to highlight gaps in knowledge. This is in order to shape discussions going forward as to the priority areas for research in angling, as a basis for a wider discussion about an angling research agenda.

1.1 Evidence Based Policy

In an age when there is an increasing emphasis on evidence based policy and practice, it is perhaps not surprising that angling, as with many other mass participation activities, has begun to develop a body of evidence to help promote it to policy makers, funders and decision makers. Furthermore, since the election of the Labour government in 1997, there has been a growing focus on how activities that people undertake might deliver a range of social objectives and this has also influenced research on angling.

As such, although 'popular culture' – sport, culture, recreation – has historically had a relatively distant relationship to policymakers, there has been a process whereby different sectors – individual sports, the arts, music, and angling – have sought to make a case that it is beneficial and should receive support. Initially this was based on the numbers of people who took part – in angling’s case the oft-quoted figure of 4 million anglers – but more sophisticated approaches are being developed.

In England and Wales, the Environment Agency has led this process as part of its remit to:

- maintain improve and develop fisheries
- enhance social and economic benefits from fishing
- promote water-related recreation

However, we can also see similar efforts emerging recently in Scotland and in terms of other regions of the world the process is arguably more advanced (the US, Australia). In England and Wales, the formation of the Angling Trust, which has unified leading angling bodies, has given an added impetus to the desire to present a robust, evidenced case for public support.

Policy related social research in angling has tended to focus on those areas and headline figures that seek to demonstrate angling’s worth to those that can support it and regulate it. It has been on the whole initiated and financed by organisations whose role, or part of it, is to promote angling. As such, it has focused on a number of key issues:

- The economic benefits of angling
- Participation – levels and demographics
- Public attitudes to angling

Less prominent in research has been the social effects of angling - a more robust understanding of the societal benefits of angling participation, development and organisations. This includes its effects on people’s health and well being, on young people, crime and substance misuse, physical activity etc.
1.2 The ‘Hidden’ Nature of Angling

Part of the context in which angling research has to take place, is that in some ways it is a ‘hidden’ activity, despite the large numbers participating. Angling does not enjoy the high public and media profile of mass participation sports, such as football, cricket, cycling and rugby; its activity tends to take place away from the public gaze; and it has sat uncomfortably between different policy and academic concerns – sport, leisure, recreation and activity, and environment. The funding of angling to a great degree reflects this position, coming through both sports and environmental routes.

In part this means that in terms of social science research, although there is a growing body of literature, this is tiny compared to some other areas of recreation of comparable size. Angling barely features at all within the disciplines of the sociology of sport (or indeed sociology at all) or leisure studies; and there are only a handful of studies that have attempted to explore the cultural aspects of angling, with virtually none in the UK.

1.3 New Impetus

At the Institute of Fisheries Management conference 2008, there were a number of calls for greater efforts to be made to explore the social aspects of angling and to integrate these with other environmental and natural science approaches to the subject.

- Ron Essig (American Fisheries Society) spoke of the new investment being made in the US in social research – with 31% of the Sportfish budget devoted to research and surveys
- Ian Cowx (HIFI) spoke of the need to understand the social benefits of angling more and the need to develop knowledge systems in angling to support social objectives.

In Australia the Australian Recreational and Sport Fishing Industry Confederation Inc (Recfish Australia) has said that the social and economic importance of recreational fishing is a priority area for research.

In the UK advocates of angling have made some significant claims about the social and economic importance of angling as part of their promotion of the activity: that it is good for health and well being; that it can help young people develop; that more anglers mean a better environment; that rural communities benefit from a strong angling sector; and that it is a gateway activity to a whole host of other positive outcomes, including volunteering, education, bio-diversity, physical activity, accessing green environments etc. However, compared to other sectors, we know relatively little about angling’s impacts and potential in these areas.

Two current research studies are worthy of note here and are referred to through this report as between them they address a number of important issues:

- The Angling in the Rural Environment project, run by Newcastle, Durham and Hull Universities which began its dissemination in May 2009
- The Social and Community Benefits of Angling project run by Substance and funded by the Big Lottery Fund which runs from 2009-2011

1.4 Purpose

This report is particularly concerned with the societal, personal and community impacts of angling. The report will attempt to summarise:

- The different areas of social research interest in angling
- The key research issues and policy contexts in different areas of work
- Indicative examples of existing research
- Gaps in knowledge and key emerging questions

It should be noted that whilst we provide examples of existing research in order to illustrate where we have knowledge and where there are gaps, we do not claim that this review is comprehensive. In each of the areas of concern there are a myriad of relevant studies that might be applied to angling. The ongoing literature reviews in the AIRE and Social and Community Benefits of Angling projects, will continue to add to this knowledge throughout its term.

For convenience we have divided the report into a number of areas of research inquiry. These are in some ways arbitrary and mask the very considerable overlaps between different areas of and approaches to angling research, but nonetheless help us to scope angling research and identify gaps in knowledge. As such the report is ordered as follows:

i. Economic Impact
ii. Participation: People and Practices
iii. Social Inclusion
iv. Health and Well Being
v. Rural Communities and Tourism

1.5 A Note on Angling Literature

It should be noted that what this report is not is a comprehensive review of angling literature more broadly. It is a significant feature that although angling does not benefit from the breadth and depth of research that exist in other areas of recreation, it does of course have an enormous body of literature dating back many centuries.

This literature tends to be focused in one of a number of areas:

- instructional and advisory books on ‘how to fish’;
- experiential accounts of angling;
- biographical and individual stories of angling; and
- treatise on the ‘meaning’ and culture of angling.

Alongside this, and perhaps because of the relative absence of angling coverage in mainstream media, there is also a very extensive publishing industry in angling magazines and weekly papers.

Whilst these are not the focus of this report, angling literature plays an important role in a number of ways. It is a source of information and data, particularly useful in providing an historical perspective on current angling practices and it is also part of the experience of angling and the ways that it is understood, practiced and communicated, informing an understanding of the place of angling in society. Such a body of literature deserves its
own area of research, and studies are relatively rare, with some notable exceptions\(^2\). However, it is with regard to research that explores the wider social effects of angling that this report is focused on.

2. Economic Impact and ‘Value’

2.1 UK Research

It is unsurprising that the principal focus of research into angling in the UK (and elsewhere) has been with regard to its economic impact. Although not the focus of this report, much of this work has been commissioned or conducted by angling-related organisations seeking to promote the sport and, given the pre-eminence put on economic development by policy makers, local and national government and regional development agencies, it is in some ways to be expected.

The Environment Agency itself has been a source of much of this knowledge. The Our Nation’s Fisheries Report (2004), reported that the total capital value of the inland recreational fisheries of England and Wales was £3 billion and an EA report in 2001 calculated that ‘annual expenditure by coarse anglers (on fishing permits, tackle, travel, accommodation and other costs directly associated with their fishing outings) amounted to almost £2 billion’.

More recently, in 2009, The Economic Impact of Inland Fisheries report has said that:
- Angler gross expenditure across the whole of England and Wales was £1.18 billion
- Coarse angling was responsible for £971 million of this
- Household income from angling was £980 million
- 37,386 jobs were generated across England and Wales

However, it said that in terms of economic impact we need to be careful of not assuming that the absence of angling, would mean that all of those impacts would be lost to the economy:

*In the unlikely event of all forms of angling ceasing, expenditure would be diverted to other activities creating income and jobs elsewhere in England and Wales. Thus, although income and jobs would be lost in angling services, there would be increases elsewhere.*

With regard to sea angling, the most influential report has been that conducted by Drew Associates in 2004 – Research Into the Economic Contribution of Sea Angling. This said that:
- Total expenditure by anglers resident in England and Wales was estimated as £538m per year
- Around half of the expenditure (52%) was by own boat anglers and reflects the importance of capital expenditures on boats and equipment.

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5 *Ibid:* v
• Shore anglers were the next most important group (37% of the total expenditure).
• In terms of first round impacts, the spending translates into 18,889 jobs and £71m in suppliers.

Further, the Drew report said that visitors (travelling over 50 miles) spent £192m (35% of the total) and concluded that: ‘Overall, the prospects appear reasonably stable, but with considerable regional variation, and vulnerability to an increased switching of activity to locations outside England and Wales.’

In Scotland there have been a number of recent studies, notably The Economic Impact of Game and Coarse Angling in Scotland. This estimated angler spend at £113m, and in contrast to England, high value salmon and sea trout angling accounting for the majority – over 65% (£73m). It concluded that freshwater angling in Scotland ‘results in the Scottish economy producing over £100m worth of annual output, which support around 2,800 jobs and generates nearly £50m in wages and self-employment income to Scottish households.’ The most recent report in Scotland (2009) has been on the economic impact of sea angling which reported that it was worth £140m to the Scottish economy and 3,200 FTE jobs.

A number of regional economic impact studies have also been conducted. For example, Invest in Fish South West, a stakeholder-led project in the South West of England reported in 2005 that sea angling in the South West ‘generates £165 million of expenditure within the region each year – £110 million of this is from resident anglers and £55 million is from visiting anglers’. It estimated that sea angling is responsible for 3000 jobs in the region.

The Angling in the Rural Environment project (AIRED) run by Newcastle, Hull and Durham Universities found in their study of the Swale and Ure catchment in Yorkshire found that ‘angler expenditure is lower than EA estimates’ with average spend per angling visit just £17. However, they also stress that ‘well being derived from the type of angling found in North Yorkshire… is unlikely to be fully measured using narrow economic proxies’ but that income from angling could make a crucial difference to family or business viability. We return to this below.

2.2 Global Research

The focus on economic impact has been mirrored elsewhere in the world, with a number of studies in the US, Australia, Canada and other nations. The US has perhaps the most extensive body of work on economic impact and has led in some new areas of work. For example, one study has explored the links between angler spend and river

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9 Invest in Fish South West (2005) The Motivation, Demographics and Views of South West Recreational Sea Anglers and their Socio-economic Impact on the Region
quality\textsuperscript{11}; and another in Australia\textsuperscript{12} has sought to employ contingent valuation methods which has been employed in other circumstances to ascertain the non-use and social value of activities and facilities.

### The Social Value of Angling

Narrow economic impact studies are favoured by national and local governments and agencies promoting economic and tourism development, as well as by the media seeking simplistic messages and easily communicated evidence. They also provide a useful underpinning for other assessments of angling’s social roles. However, there are a number of issues that suggest that new approaches are needed:

- Economic impact studies are often very narrow in terms of the wider impacts angling participation and development might produce.
- There are a wide variety of interpretations of economic impact and studies are rarely conclusive.
- As the AIRE study has highlighted, the economic volume of angling, particularly at a regional or local level, ‘falls below the radar’ of development agencies including when competing against other recreational activities. As such approaches are needed to capture the full range of potential impacts of angling development and participation in other ways in order to demonstrate its ‘value’.

This reflects thinking in a growing body of work that seeks to assess other valuations of activities, interventions and investments - in other words their ‘social value’. Social value can include assessments such as social capital, social return on investment and subjective aspects of citizen’s well being, such as improved environments and participation in decision making.

There is no one methodology for assessing social value. An ongoing Substance study for Supporters Direct\textsuperscript{13} has reviewed a number of approaches to assessing social value in football. These include the following:

- **Social Return on Investment (SROI)** - an approach developed and promoted through the SROI Network as well as by the New Economics Foundation\textsuperscript{14}. Whilst this is attractive in seeking to embrace the viewpoints of and impacts on a wide range of stakeholders, and has a good degree of influence with government at present, its ultimate aim of using proxies to determine a simple financial ratio of return on investment can undermine wider understandings of social value. It can also be a complex and costly exercise.

- **Social Accounting Methods** have gained in popularity recently but embrace a wide variety of approaches ranging from local economic spending (the Local Multiplier 3 approach), to quality assurance methods (PQASSO) to Social Accounting and Audit (SAA) approaches. Ashton (2008) says that social accounting provides ‘a means to


\textsuperscript{13} There are a series of working papers on this issue at: http://valuefootball.substance.coop

allow organisations using them to consider their own performance in the context of their peers through like-for-like reporting against set themes with consistent methodologies\(^\text{15}\).

- **Contingent Valuation Methods** (CVA) have been employed in rural development literature, but predominantly in the US. Although they attempt to provide non-use valuations of activities and venues, there are a number of criticisms of the approach as it can rely on uninformed valuations\(^\text{16}\). However, this might be useful for instance in assessing wider non-user community perceptions of habitat improvements undertaken by angling clubs and community valuations of green spaces.

- **Mixed method, qualitative and qualitative monitoring and evaluation** approaches have attempted to broaden the base of project and programme evaluations beyond the purely economic and statistical. This could include qualitative and quantitative monitoring of angling projects, the ability to report in a real time, flexible way, the ability to produce exemplar case studies and the relationship of project and programme delivery to key government agendas and outcomes. The recent use of the Substance Project Reporting System by Get Hooked on Fishing is one example of this, but a broader adoption of more robust monitoring and evaluation of angling interventions is required if the broader social value of those are to be understood.

- **Assessments of ‘well being’** of green spaces and ‘natural’ environments increasingly advocate an ‘ecosystems approach’ that seeks to explore the interactions of people and the environment, rather than more crude assessments of, for instance, spending patterns in rural areas. This is discussed in more detail in Section 5.

There is a real opportunity in this regard for angling not only to devise new, robust approaches to assessing social value that will have a wider application across rural recreation and beyond, but also to ‘steal a march’ on other forms of recreation that have not yet addressed the issue of social value. It is notable that this approach is being adopted in Scotland, with Scottish National Heritage currently tendering for an assessment of the social value of Scotland’s natural resources.

Exploring and embracing social valuations of angling may offer new ways in which the ‘value’ of angling can be more fully assessed. This could include the social value to small rural communities of angling, the value of facilities such as fisheries beyond its local economic impact as well as a developing broader range of indicators for assessing the benefits of angling participation and development.

In terms of moving this area forward one approach might be:

i) Commissioning a small scale study to review methodological approaches to assessing social value and its applicability to a variety of angling contexts.

ii) Conducting a limited number of pilot studies to ‘test’ methodological approaches.

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iii) undertaking a larger, wider study assessing the social value of a range of angling (e.g. a club, a national initiative (NFW), a facility development, a social intervention programme etc.).
3. Participation: People and Practices

3.1 Overall Participation Levels

Participation levels in angling has been another focus for much of the existing research in angling. One of the most commonly held perceptions within the general public and media is that angling is the largest participatory leisure activity in the UK. However, evidence in this regard tends to be somewhat contradictory and leaves a number of aspects of angling participation unexplored but is important in understanding the potential extent of other benefits we come on to discussing.

The EA report *Public Attitudes to Angling 2005* calculated that 8% or 3.5m people had been fishing in freshwater in the previous two years. This is a relatively large proportion of the population, especially so when one considers, as the report itself states, that ‘the number of anglers suggested… is still considerably greater than sales of Environment Agency Rod Licences in any one year (approx. 1 million), even allowing for licence evasion and the proportion of anglers who do not fish every year.’ The authors also caution that ‘2005 data again show a considerable disparity on figures obtained in the 1994 National Anglers Survey - 2.3 million coarse anglers, but this may be due to a different survey technique.’

Given that this number also excludes the numbers of sea anglers, estimated by the Drew report at 1.1-1.2m, the total figure has always raised some scepticism. Indeed, the Drew report quotes the General Household Survey of 1996 which indicated just 5.3% of over 16s (as opposed to over 12s in the EA’s figures) had been angling in the previous year in all forms of fishing. This meant it was ‘around the 20th most popular sport/physical activity, with walking top at 68.2% and swimming at 39.6%.’

Sport England’s *Active People Survey*, which calculates activity in sports and active recreation by adults in England and Wales during the preceding four weeks, suggested in June 2009 that the numbers of adults fishing in that time period was 0.58% of the adult population. However, the APS relates only to anglers who regard their activity as moderate or greater physical activity and differences in time frame to other studies make comparison difficult.

The *Economic Impact of Coarse and Game Angling in Scotland* estimated a total of 1.4m angler days annually in Scotland which suggests a number of actual participants well below that figure; and this also includes visitors, some of whom will have been counted within statistics from England and Wales (and vice versa).

Some regional studies have also suggested very high numbers of angler participation, such as the *Invest to Fish Report* in South West England which said that 240,900 residents of the South West [of a population of 5 million] go sea angling and visitors

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18 *Ibid*: 17
19 Drew Associates, *op cit*: 7
spend 750,000 days sea angling in the region. This amounts to around 5% of the adult population involved in sea angling alone.

One emerging issue in relation to angling participation levels is the definition of participation in angling, which varies significantly from study to study. It also raises a wider, more qualitative issue about how people define themselves as anglers - which may be a far greater number than are actively fishing at any one time. This raises a number of interesting questions about the nature of participation in angling:

- Do people identify themselves as anglers even if they may not have fished for some time?
- Can ‘participation’ and self-identification as an angler include non-fishing activities (participation in web forums for instance)?
- Does this happen because angling, unlike many more active sports, allows participation into old age or for those with less physical ability and so is an activity people feel they can return to or continue with, even if not ‘currently active’?

**Participation: Beyond the Numbers Game**

Whilst the ‘total numbers debate’ is interesting and important, it is perhaps a diversion from other, more important issues. These include unpacking and differentiating what is meant by ‘angling participation’ - it is an activity that has so many different forms and overlaps and it can extend well beyond the actual act of fishing that can still deliver benefits to individuals and communities. It is also important to understand in more detail the demographics of angling participation in different contexts (e.g. social class, location in relation to Indices of Multiple Deprivation, urban/rural locations etc.).

Understanding the extent and configuration of angling participation however also requires more qualitative approaches that can communicate to policy and decision makers, funders and developers issues such as:

- Why people go fishing
- How successful angling development initiatives and schemes are
- How participation might be increased and managed
- What individual benefits are experienced from participation
- What wider social and community impacts angling participation can have

Further, when we consider the breakdown of angling participation – and particularly in relation to attempts to promote angling to both policymakers and the wider public - important issues of democratisation and diversity emerge.

### 3.2 Age: Younger and Older People

There has been a major drive over the last decade to increase young people’s participation in positive activities. This is encapsulated by the Government Ten Year Youth Strategy, *Aiming High for Young People: A ten year strategy for positive activities* published by the Department for Children Schools and Families in 2007. This calls for a transformation of ‘leisure-time opportunities, activities and support services for young

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21 Invest to Fish, *op cit*
people in England’ and for ‘all young people to enjoy happy, healthy and safe teenage years that prepare them well for adult life and enable them to reach their full potential – in short, to achieve the five Every Child Matters outcomes and be on the path to success.’

It is recognised that ‘participation in positive activities, and support and guidance from trusted professionals and adults, play an important role in enabling young people to gain skills’ and the strategy sets out the need to:

- foster a more positive approach to young people across society and in particular within communities;
- increase their participation in high quality positive activities, which build resilience and social and emotional skills; and
- empower young people to have greater influence over services for them, with parents and communities playing their part.  

Furthermore, the strategy calls for increased inter-generational exchange and promoting better relations across generations to ‘help adults gain a greater understanding and appreciation of the issues and challenges young people face’ and for ‘young people to develop a better understanding of the concerns of the wider community.’

Angling has always appealed to people of all ages and there are a large number of projects, interventions, clubs and approaches at grassroots level that are promoting angling activities for young people. However, although there is an enormous focus in angling development on young people, Our Nation’s Fisheries reported that

- Men aged 35 to 54 years dominated the angling population
- Game fishing has the highest average age
- 7% of young people below the age of 17 go fishing
- 9% of the population aged 12 and older in England and Wales can be considered as anglers

There is also evidence that there is considerable potential for addressing this, with relatively high numbers of non-angling young people interested in taking up the activity.

Further, angling has a long tradition of inter-generational exchange, with learning often routed through kinship or familial ties. Some anecdotal evidence suggests that these dynamics are declining, with family breakdown and lack of leisure time undermining them, something that can be more pronounced in deprived communities. Substance’s report Getting Hooked… reported that:

‘…in one case, a young person who had considerable problems at home reported that his father refusal to take him fishing; and for another we heard that the father had actually stolen his son's fishing equipment…’

Identifying and researching successful ways in which inter-generational as well as familial learning in angling can be sustained and reinvigorated should be an important focus of future

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23 Ibid: 13
24 Ibid: 41
work in this regard. Angling’s ‘hidden’ nature is also a factor in lower numbers of young anglers, especially in a more media-driven age and mediatised youth cultures:

‘Unlike mainstream with sports like football, the young people will not have undertaken the activity at school, nor watched it on television…. for the vast majority GHOF provides their first introduction to the sport.’

Initial evidence from the Social and Community benefits of Angling project has highlighted that the emphasis on youth activity provision in the last decade has resulted in a large number of angling related youth projects and initiatives in both England and Scotland, ranging from the more challenging youth inclusion projects to mass participation and schools activity. Outlining the scope and extent of this provision, as well as identifying successful approaches to engaging young people, is a core element of that project going forward. However, there is arguably a need for a wider audit of youth provision in angling to demonstrate to sections of government the breadth and depth of positive activities currently being provided.

An associated theme is the provision of information on activities in ways that young people can easily access on their own terms. Substance are currently involved in a major pilot project for DCSF called Information and Signposting, as well as work supported by DCMS with national sports bodies, to devise new ways of providing activity information to young people. This work utilises the Plings tool (www.plings.net) and angling has been invited to take part in that work, which will assist in the identification of the breadth of provision by angling for young people. Broadening angling’s participation in that sort of work - for instance to include angling activities that are not part of the governing body’s remit - will assist a more comprehensive understanding of the angling offer.

Angling also appears to have a great deal to offer in terms of participation for young people in particular but also for inter-generational activities and those who are less physically able/active.

The Sport England Satisfaction with the Quality of the Sporting Experience (SQSE) Survey(2009) recorded that 39% of overall angling respondents had a long-standing illness, disability or infirmity. This was almost double overall other sport respondents (19%). General participants were more likely to have a long-standing impediment (41%) than club members (26%). Although the sample is not of a general population, and despite 80% of overall angling respondents saying that their illness or disability limited their activities in some way, these very high figures show that angling is an activity that allows the less physically able to participate in large numbers. However, in the SQSE there was a higher level of dissatisfaction felt toward catering for disabled access amongst overall anglers (13%) compared to other sports (8%) and although small numbers this might be an area for research and development.

### Young People Research

Key issues for ongoing research in relation to youth participation and developing successful approaches include:

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26 Ibid: 31
- Auditing - identifying what angling provision for young people is ‘out there’ to show how angling is contributing to this key national youth agenda.
- Times and styles of delivery - Researching whether angling helps meet the specific need for Friday evening and weekend activity provision when the need is greatest?
- Safe places: Does angling provide safe places to go for young people?
- Delivery: Identifying good practice in delivery, particularly in relation to marginalised young people
- Empowerment: Does angling empower young people by including them in decision making and designing the provision of activities and services?
- Information: How does angling provide innovative ways to supply information to young people on their own terms that moves beyond traditional website and leaflet approaches?
- Every Child Matters: How do angling clubs, projects and programmes help meet the ECM outcomes of: stay safe, be healthy, enjoy and achieve, make a positive contribution, achieve economic well being?
- Marginalised young people: what particular approaches are required to provide opportunities for excluded young people (see also social inclusion, below).
- Inter-generational: Identifying the extent to which angling does, and can develop, ways of bringing younger and older people together.
- Non-institutional: Embracing an understanding of non-institutional forms of participation (e.g. outside of club structures, which can be less attractive to some young people)

Some of these are important issues being explored in the *Social and Community Benefits of Angling Project* and that project will develop findings on an annual basis until the end of 2011. However there are probably two immediate priorities that are not within the remit of that project:

i) An audit of the angling offer for young people that helps to refine, validate and provide more comprehensive data so that this can be communicated more effectively (for example through Plings) along with ways in which young people themselves can evaluate that provision.

ii) A wider adoption of better monitoring and evaluation of youth angling projects and interventions.

### 3.3 Gender

*Our Nation’s Fisheries* reports that just 5% of anglers are female, something also reflected in other studies.

Men aged 35 to 54 years dominated the angling population. Women comprised only five per cent of anglers, and children below the age of 17 only seven per cent. Salmon and sea trout anglers tended to be older than coarse and trout anglers, with 60 per cent being over the age of 45 (compared with 50 per cent for coarse anglers).

This is supported by the Active People data (June 2009) which says that 1.13% of the active male population and just 0.06% of the active female population had been angling in the previous four weeks. In terms of percentages, this is an overwhelming disparity, and much more pronounced than in almost all other forms of active recreation in the UK.
Boxing, where female participation is at 3.7%\(^{27}\) of all boxers, is one comparable examples and these figures do not include activities such as ‘boxercise’ or kick boxing aerobics which are increasingly popular with young women.

However, in terms of absolute numbers, the small percentage of female participants masks a very significant number of female participants given the large total numbers of anglers (175,000 if we take 5% of 3.5m), which is certainly larger than, for example, boxing.

This situation contrasts to some other countries where female participation, although declining, is much higher. Schroeder \textit{et al} report in their study of female anglers in Minnesota that:

‘In the 1980s, overall participation in fishing was increasing, and women comprised the fastest growing segment of new anglers (Toth & Brown, 1997). In the 1990s, however, the number of female anglers in the United States declined 10%, whereas the total number of anglers decreased 5% (U.S. Department of the Interior, Fish and Wildlife Service, 2004). In 2003, 403,871, or 38%, of Minnesota’s resident fishing license holders were women.’\(^{28}\)

Smith’s historical study of female participation in angling says that there is active involvement ‘of an estimated 15 million women in the sport of angling’. They go on to argue that this level of participation ‘easily outstrips the literary/academic documentation of this involvement’\(^{29}\).

What is lacking in these accounts is research that seeks to understand how and why this disparity exists and with what effects on the social impact of angling. If angling is to achieve wider public, governmental and funding support, it needs to understand, explain and address its gender imbalance better.

### Overcoming Gender Disparities

Specific research into gender disparities in angling will need to explore:

- The different cultures of angling and how this encourages or limits female participation.
- The institutional barriers to female participation and male domination of angling organisations.
- The role and success of interventions such as Fishing For Everyone and Casting for Recovery in increasing female participation in angling.
- Projects that successfully attract females to angling.

This could involve:

i) Quantitative studies of female anglers’ participation in different contexts.

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\(^{27}\) [http://www.abae.co.uk/Images/Executive_Summary_of_Study_report_regarding_the_barriers_and_development_solutions_for_women_to_participate%5B1%5D_tcm97-126634.doc](http://www.abae.co.uk/Images/Executive_Summary_of_Study_report_regarding_the_barriers_and_development_solutions_for_women_to_participate%5B1%5D_tcm97-126634.doc)


ii) Qualitative research with female anglers, potential anglers and non-anglers to understand the barriers that exist and solutions to them.

iii) Research into the cultures and institutions of angling within an historical setting.

3.4 Ethnicity

The imbalance in female participation is reflected to a lesser extent by disparities when it comes to Black and Minority Ethnic communities (BaME), which are estimated at well under 1% of anglers (although from a much smaller total population). The Active People Survey says just 0.09% of the population who had been angling were from ‘non-white’ communities.

There are few studies that address this issue, although two from the US have sought to explore cultural differences in attitudes to angling. Hunt and Ditton (2001) say that the only discernable difference between Hispanic-Americans and the white population was a ‘greater importance on achievement, defined here in terms of the competence testing aspects of fishing’.

However, they also report that participation among non-white populations is much higher than in the UK: ‘about 9% of anglers in the U.S. general population were Hispanic’. Notably they also said that this is increasing:

‘this is expected to increase to 16% by 2025 (Waddington, 1995) [and that] as a result, Hispanics will account for up to 55% and 69% of the new participants in freshwater and saltwater fishing, respectively, in the next quarter-century (Murdock et al., 1992).’

Hunt et al’s study of African-American anglers also suggested differences in attitude toward angling:

African Americans had stronger attitudes toward catching large numbers of fish, catching large fish, and retaining the fish they catch than Anglos. African Americans and Anglos did not differ on the catching something construct. Results supported subcultural theory explaining differences in attitudes between race and ethnic groups.

This has particular relevance to some of the current debates and disputes in the UK where differences in attitudes to angling by anglers from Eastern Europe (such as keeping carp caught) have caused some conflict with other anglers.

3.5 Community Cohesion

Increasingly public policy has sought to address not only a lack of diversity in some areas of society but also developing greater ‘community cohesion’ between different


groups. A research study conducted for the Department of Communities and Local Government, *What Works in Community Cohesion?* emphasised the need for:

- A common understanding of ‘community cohesion’
- A recognition of the complexity of the issues
- The prominence of ‘meaningful interaction’ between people and groups as a key indicator of cohesion
- The importance of adopting approaches that have been proven to work in generating cohesion

Angling has much to offer in this regard and most especially in terms of its ability to generate ‘meaningful interaction’ between people and groups from different backgrounds. For instance, anecdotal reports from one angling-based inclusion project in London run by Thames 21 has suggested that a process of inclusion and education overcame conflict and also created meaningful interaction between people from different backgrounds. However, there is almost no research as to how angling can act in this regard nor about which approaches should be developed. Angling needs to identify, research and provide robust evidence of how it can meet community cohesion outcomes and at present there is an absence of this sort of evidence.

### 3.6 Angling Cultures, Practices and Barriers

Four interlinked areas of inquiry underpin all aspects of research into participation that require greater scholarly attention:

i. A better understanding of how angling is practiced in different settings, exploring the ‘lived experience’ of angling and anglers and the different cultural attitudes that exist

ii. A better understanding of the very different and varied forms of fishing and what personal benefits can be obtained from each.

iii. A broadening of the notion of ‘participation’ that goes beyond the accepted conceptualisation of it only as the act of fishing and to understand the full range of activities that constitute angling participation (and the benefits from these).

iv. The barriers to participation (and its benefits) that exist in angling

#### 3.6.1 Angling Cultures

A number of research publications have sought to explore in more qualitative ways the cultures and practices of angling and these are predominantly from the U.S.. Schroeder *et al’s* (2006) study outlined contrasting attitudes to practices between men and women anglers which showed significant differences, such as men reporting higher involvement in fishing; and women being motivated by catching fish for food.

Their 2008 paper, *Untangling the Line*, sought to explore how the cultures of changing ethnic demographics in urban areas affected angling participation, based on a focus group approach with different communities.

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32 Department for Communities and Local Government (2007) *What Works in Community Cohesion?* Research study conducted for DCLG and the Commission on Integration and Cohesion, London Department for Communities and Local Government

Results suggest that individuals from these communities perceive fishing to provide benefits similar to those reported in research with White respondents. However, individuals from these communities of color face unique constraints to their fishing participation.

Some studies have explored the relationship between different angling settings and their participation, such as Moeller and Engelken (1972) which sought to ‘…determine the relative importance of eight selected factors that influence the success of a typical 1-day fishing trip.’ Several studies have focused on the relationship of the practice to fish and especially toward practices of killing fish and catch-and-release: Sutton (2003); Anderson et al (2007); Arlinghus et al (2007); Ghi-OkOh and Ditton (2008); Bruskotter and Fulton (2008); and Steinbac et al (2009).

Finn and Loomis (2001) has suggested that the conditions in which trout anglers achieve their aims of catching preferred fish are important to their participation: ‘trout anglers place significantly more importance on catching their preferred size, number, and/or species of fish on their next trip under conditions of increasing catch-deprivation than under conditions of catch-satiation.’

In Australia, Palmer (2004) found differing attitudes to recreational fishing between traditional and new communities and that ‘the management of recreational fishing in the Park is permeated by the tensions and opposition of contested ideas and perspectives from non-Aboriginal fishers and Aboriginal traditional owners.’ Another Australian study (Franklin (1996)) looked at the changing nature of human-animal relations in hunting and angling and ethical attitudes toward them, finding that ‘Hunting and angling in Australia are comparatively free from the criticism that such sports attract in the USA and the

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UK. Cook and Sneddon (2007) have also explored these issues of perspectives on animal welfare.

The only substantial anthropological/sociological study of angling has been Washabaugh’s *Deep Trout*, a book that considers the social and cultural history of fly fishing in the US; the way many angling writers ‘give analysis a bad name’; as well as outlining relevant debates about the complex and at times contradictory relationship between angling conservation initiatives and ‘natural’ environments.

To say that a social practice such as fly fishing is complex is only to acknowledge that it harbours an abundance of habits, unconscious values and unintended consequences that operate right alongside thoughtful consideration and conscious control over behaviour. As a result, such practices often seem simple and docile when they are actually quite complex… We aim to peer beneath the cosmetically retouched surface of fly fishing in order to see it as a social complexity rather than an essential simplicity.

What is important about this is that it recognises the interrelationship between the cultures of angling, its history and the relationship of these to policy and practice.

### 3.6.2 Types of Fishing and Angling Activities

The focus of research into the personal and community benefits that angling can deliver needs to move from the general claims made about angling to the varied and specific benefits that different types of angling and different angling activities can deliver. Whether considering physical activity, well being, health or wider community regeneration issues, different angling practices will deliver different outcomes in different contexts. If angling is to ‘make its case’ in a more effective way, then it needs to be able to be more specific about what benefits it can deliver through which activities.

The *Interim Report on Angling Participation* from Substance’s study has started to raise some emerging issues in this regard. Even between different disciplines there are notable differences:

- More game anglers (34%) classified participation in their sport as high intensity physical activity as opposed to Sea (17%) and Coarse (11%) anglers.
- Game anglers took part in more environmental and habitat improvement projects (38%) than Sea (20%) or Coarse (20%) anglers.
- There was a greater importance of Coarse angling to individuals who have restricted mobility due to age, health or a permanent disability.
- Coarse anglers were also more likely to be a member of an angling club (80%) than Game (71%) and Sea (49%) anglers.
- Sea anglers are more social creatures than their Coarse and Game counterparts
- Over 67% of Sea anglers contributed to websites, blogs or online discussion boards compared to 58% (Coarse) and 56% (Game) anglers.

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41 Stolk, P (2009) op cit
However, within these there exist vastly differing forms, locations and practices of angling, something that the project will be exploring in more qualitative ways in the ongoing research.

### 3.6.3 Angling Practices

This relates to another area which is that most studies concerned with angling participation restrict the conceptualisation of participation to the act of fishing itself. This is also true of some policy initiatives and funding streams, but not others - the EA for example promote angling participation as a means to wider activities and personal and social benefits. However, the general approach of research studies as well as funding is to focus on the activity of fishing, which is partly a result of a configuration of angling development within a relatively rigid sports development framework. As both our own research is starting to show, and as any cursory review of angling literature, press, online forum or conversation will indicate, anglers’ participation often stretches far beyond just fishing.

Understanding the full breadth of what participation in angling involves is an aspect the *Social and Community Benefits of Angling* project is investigating:

Conventional representations of angling participation tend to focus, quite understandably, on the physical actions associated with the act of ‘going angling’... These representations are undeniably central to angling participation; however, it is equally important that such representations are extended to more accurately represent the diverse ways through which individuals engage with angling. Monitoring river fly populations, mentoring young people or maintaining a club website are useful examples of how people participate in angling in ‘other’ ways. Cultivating a deeper understanding of what constitutes angling participation will help identify the contributions that angling makes to personal, communal and environmental health and wellbeing, and better inform those responsible for programmes, funding and policies that relate to personal and community development.\(^{42}\)

The initial survey in this study revealed that angling participation involves not only fishing but also:

- Preparation activities (bait and rig preparation, fly tying etc.)
- Knowledge gathering and reading through TV, print media and internet articles
- Participation on internet forums, social networking sites and other new communication forums
- Participation in clubs: attending meetings and matches, running clubs and coaching
- Associated voluntary and environmental stewardship work (e.g. river clear-ups)

Alongside this, the motivations that anglers have for going fishing suggest the importance of certain types of environment within the practice of going fishing - such as experiencing ‘green’, quiet and ‘natural’ environments.

The Sport England satisfaction survey also suggests that:

- **Overall anglers** were more satisfied with the opportunity their participation provided to relieve stress, unwind etc when compared to other sports (92% compared to

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Anglers were also more satisfied than other sports with the buzz/sense of exhilaration associated with their sport (87% compared to 75%).

- Satisfaction with the quality of the natural environment where participation occurs was higher for overall angling (83%) compared to other sports (60%).

Again these are very general figures and tell us little about the distinctions within angling and the contingent factors affecting anglers’ experiences.

As such we need to ‘unpack’ what we mean in terms of the practice of angling itself to provide a better understanding of what different disciplines, locations, practices and methods entail. This is especially so if our concern is in demonstrating the benefits of angling participation, because many of those benefits may come from non-fishing angling activities, such as: walking to fishing sites and exercising; accessing and appreciating green spaces; participating in clubs and online communities; taking positions of responsibility; helping to improve natural habitats etc. General assessments of angling’s contribution that refer to angling participation in a general sense - even within particular ‘disciplines’ whose boundaries are increasingly blurred - will inevitably be flawed.

### 3.6.4 Barriers

The participation issues outlined in terms of age, gender and ethnicity, as well as government priorities to increase active recreation and the desire of angling related bodies (such as the EA and Angling Trust) to increase participation in fishing, all suggest a need to understand more about the barriers to participation.

Findings of research that the EA has carried out in recent years says that in general:

‘In a poll of lapsed anglers and non-anglers, the principal barriers to going fishing were identified as:
- not having someone to go fishing with – this was particularly evident among younger age groups
- not knowing where to go fishing within an easy travelling distance
- not having any gear to use as a beginner.’

However, the hidden nature of angling is also important in this regard:

‘Research in 2003 showed that among people who do not fish, the possibility of going fishing had simply not occurred to about half of them.’

There is however, very little in depth research or evidence in the UK and elsewhere about the barriers to participation potential anglers experience nor into successful approaches to overcoming them. This applies to barriers for the white, male population as well as those targeted as priority areas in documents such as the EA’s Angling in 2015 – women, the young, ethnic minorities and the less able.

### Cultures and Practices

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i) Understanding Cultures of Angling

The absence of work from the UK is stark. If we are to understand how angling operates in practice – in order to better inform policy toward and funding into how angling can be developed and benefits from angling can be achieved – then we need this more in depth, qualitative analysis of the activity in all its forms.

This can help us provide better approaches to issues such as:
- Encouraging and diversifying participation
- Making appropriate interventions in very different angling ‘settings’
- Addressing concerns over catch-and-release and appropriate approaches to killing fish
- Engaging with different cultures of different social groups

Not only is research into different attitudes toward angling by people from different backgrounds important, it should also explore ways in which such conflicts might be resolved and how wider social benefits – such as community cohesion might be generated. As with female and youth participation addressing the imbalances in angling institutions and decision making is a key area for ongoing enquiry.

This will require both qualitative and quantitative approaches, case study research as well as robust monitoring and evaluation of interventions.

ii) Overcoming Barriers

Much of the research on angling participation demographics raises as many questions as it answers. It is also overwhelmingly quantitative in nature, yet the questions raised often require a more qualitative understanding of the issues and processes such as:
- What motivates and de-motivates people from going fishing
- What ‘everyday’ barriers exist in contemporary life to angling
- What the ‘lived experience’ of angling participation is and how this encourages/discourages different groups
- Understanding both cultural and institutional differences and obstacles
- Exploring practice – the delivery and effect of interventions to increase participation as well as institutional and organisational practices and barriers.

There is therefore a research imperative to understand more about how barriers to angling operate in practice and within the day-to-day lived experience of people’s lives; how successful approaches can be identified, developed and broadened; better monitoring and evaluation of initiatives that seek to increase as well as diversify angling participation.
4. **Participation Benefits: Social Inclusion**

4.1 **Definitions and Policy Context**

Social exclusion is a term that has gained currency in the last decade and a half and has been a particular focus of government policy in the UK. Although the term is too often used very loosely to cover a multitude of problems, it has been defined as:

> 'what happens when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdowns.'\(^{45}\)

Understanding the extent and nature of these problems is a first step to both addressing them as well as researching them. Both practice and research require quite different approaches when dealing with disadvantaged and marginalised groups than in mainstream recreation or sports development.

The ability of activity based interventions to address issues of marginalisation and exclusion in society, and to provide pathways and gateways to personal and community development has been a key focus of government policy and support in recent years. There are a number of key policy documents that outline government thinking around activity and social inclusion. Angling needs to better address and demonstrate benefits it can deliver in relation to these, which include:

- **Aiming High for Young People: A Ten Year Youth Strategy** (2007)
- **Extended Schools: Building on Experience** (2007)

As such social inclusion policy and research in relation to sport, recreation and activity has moved beyond attempts at generating participation *per se* – which is focused overwhelmingly on simply increasing numbers - and toward attempts at addressing social exclusion, which often requires very different approaches. Although there are a growing number and wide range of angling projects attempting to address issues of social exclusion, there has been relatively little research into how angling, specifically, can make a contribution in this regard. There is also a general lack of understanding of the differences and added value this can bring from more ‘straight’ participation initiatives.

4.2 **Research**

Although there is relatively little research about how angling can contribute to these agendas - and in some areas such as community cohesion, a complete absence of study - there are some relevant reports, particularly of individual projects and interventions.

Substance’s *Getting Hooked* report outlined how angling could contribute to youth development:

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• Fishing offers something new, different and an alternative to mainstream sports, and especially team sports
  o A less hi-octane activity than, for example, football
  o An activity which is an individual pursuit but ones which also offers communality.
  o An activity which often takes place out of normal, urban, environments, but also one which offers specific potential for rural communities.
  o A means of engaging young people - often when ‘traditional’ means of ‘learning’ sport have broken down - which offers opportunities for mentoring, discussion, learning in other areas (e.g. conservation), and transferable skills training.
• The use of coaches and peer coaches who can act as role models for young people, within a learning environment
• The actual catching of fish is a key element in retaining the engagement of young people
• Fishing is an activity that can last a long time and which requires significant concentration but has times of great excitement
• The wider learning that is possible including bio-science on fish, habitats, life cycles and welfare as well as wider environmental and conservation learning.\(^\text{46}\)

The report also highlighted the key difference in approach of Get Hooked On Fishing to more traditional angling development projects. This emphasises the personal development of participants as its ultimate aim rather than angling participation and it employs both longer term engagement and a pathway approach.

Research on the Home Office’s Positive Futures programme has highlighted the different approaches that are needed in relation to social inclusion, as opposed to more general participation delivery. This is something angling social inclusion projects need to both embrace and be evaluated against. This is most notable with regard to the pre-eminence that needs to be given to longer term relationship-building than is common in most sports development approaches:

‘Successful relationship building may be assisted by sports competency, but is primarily driven by the young people's identification with the socio-cultural background and approach of the workers. Projects’ capacity to create the right cocktail of characters with the necessary blend of skills to work in this multi-dimensional field will define their success.’\(^\text{47}\)

Furthermore, research into social inclusion work with young people has advocated that the full value of sport and activity-based interventions:

Can only be realised when sport is undertaken within a ‘developmental approach’. In this sense it is the adoption of a personal and social development model which is ‘sacred’ to sport-based social inclusion programmes rather than ‘sport’.\(^\text{48}\)

\(^{46}\) Brown, A (2006) op cit: 32
\(^{48}\) Crabbe, T et al (2006) op cit: 19
There is a growing body of work at a project level about how angling can deliver against the broad social inclusion agenda. This includes youth based projects but also increasingly those that address issues of exclusion for adults as well. One example is the EA-supported Fishing4U project, in Sussex and its work with young people and those from BME backgrounds. This is expanding to work with a number of inclusion organisations including MIND, Local Authorities, Primary Healthcare Trusts, Countryside Partnerships and other groups who believe angling is a worthwhile pastime which brings benefit to local communities, particularly where young people may have been, or are about to be, excluded from school.’ The evaluation report of Fishing4U is an example of how project level research can contribute to an overall greater understanding of angling’s potential contribution in this regard.

The Social and Community Benefits of Angling project is at present scoping the extent of youth based social inclusion projects in angling and identifying ways to collate and aggregate outcomes. Much evidence of projects’ impacts exists within project records, funding applications, articles and websites and there is a need to bring this data together to present a national picture. Further evidence will be held by key funding agencies, including the EA and ADB.

There is some evidence of how angling is an increasingly important element of broader non-angling inclusion projects, such as that quoted in the ADB’s Whole Sport Plan:

In 2006/07 PF [Positive Futures] projects delivered an aggregate of 60 angling sessions to 330 attendees. In 2007/08 PF projects delivered an aggregate of 168 angling sessions to 1,045 attendees, more than a 300% increase in angling participants.

The University of Gloucester is undertaking ethnographic research into a project in the Forest of Dean which is a ‘long term “inclusion” project linking marginalised youngsters to mentors using fishing’ that seeks to build a relationship strategy with a view to developing the young person’s cognitive and social competencies. Notably this work stresses that ‘our project ideas are not about fishing, they are about using an activity that has a salience to a young person that may avail that person to learn more important things in a particular situation.’

One of the key areas of inquiry in the Social and Community Benefits of Angling project is how angling can help address issues of exclusion for young people and provide a developmental framework for them. This is based on a qualitative case study and action research approach in conjunction with Get Hooked on Fishing, but also looking at good practice elsewhere. Key issues for that research are:

• The engagement of young people suffering a form of disadvantage and marginalisation in angling
• The extent to which projects can provide long term, ongoing engagement of young people at risk rather than one-off or time limited interventions
• The delivery of developmental outcomes – rather than angling outcomes - for young people involved (educational, health, skills and training, peer mentoring, volunteering etc.)

The Environment Agency, Get Hooked on Fishing and Substance have a tri-partite agreement for Substance to provide a system for Get Hooked on Fishing from 2009 to better monitor and evaluate their work. Utilising Substance’s Project Reporting System, this seeks to generate detailed quantitative, outcome based, qualitative and case study evidence of the charity’s impact on young peoples’ lives. There is a need for a wider adoption of robust monitoring and evaluation at project level to help build up a greater body of evidence.

**Joining Up the Data**

Although there is some work being undertaken at both local and national level about the impacts that angling projects can have against the broad social inclusion agendas, there is still a need for more understanding of:

- How specifically angling, in relation to other activities, can meet the different elements of social inclusion, youth inclusion, youth strategy and community cohesion policy imperatives
- How angling provides a distinctive way of achieving outcomes in these areas
- Identification of best practice approaches that include the longitudinal engagement and relationship building
- How broader community engagement and cohesion can be generated around angling projects
- The benefits of participatory research and project evaluation
- Ways in which different sorts of data – project monitoring and evaluation and research – can be brought together
- How funding from sources that have traditionally not supported angling might support the wider development of good practice

This will require:

i) The development and dissemination of knowledge within angling about the specific requirements of social inclusion work.

ii) A wider adoption of robust and longitudinal monitoring and evaluation of projects that seek to address social exclusion through angling.

iii) Quantitative work to scope and monitor both numbers of projects and project outcomes.

iv) Longitudinal qualitative research to understand the role that angling and angling projects can play in young people’s lives and their personal development.
5. Participation Benefits: Health and Well Being

5.1 Definitions and Policy Context

The Department of Health White Paper, *Choosing Health* (2004) outlined the overarching health priorities for the next ten years. These included tackling health inequalities, combating obesity particularly amongst young people and men, stopping smoking, reducing alcohol and substance misuse, and reducing teenage pregnancies. However it also called for the promotion of ‘mental wellbeing’ particularly in areas of high levels of deprivation.

A follow up report by the Audit Commission, *Are We Choosing Health?* highlighted an increasing focus on mental health and well being issues:
• Depression will be the second leading cause of disability internationally by 2020.
• Mental health problems are associated with significant burdens of physical ill health
• Mortality rates for people with a severe mental illness are two and a half times higher than the average
• Stress-related sickness accounts for half of all absences from work, and mental illness is the most common factor for people on incapacity benefit in the UK.
• Social and environmental factors such as deprivation, unemployment and family composition are significant contributors, requiring a multiagency response.  

5.2 Research

Newton (2008) warns against conflating the issues of health and well being too much and future research into angling’s potential impact in these areas needs to be cognisant of that. The government defines ‘well being’ as:

’a positive physical, social and mental state; it is not just the absence of pain, discomfort and incapacity. It requires that basic needs are met, that individuals have a sense of purpose, that they feel able to achieve important personal goals and participate in society.’

It is enhanced by conditions that include:
• supportive personal relationships
• strong and inclusive communities
• good health
• financial and personal security
• rewarding employment
• and a healthy and attractive environment

Anecdotal evidence suggests that angling (as well as other outdoor recreation) can contribute against these agendas in a number of ways - physical activity, health promotion, reducing stress and generating well being from accessing ‘green spaces’. However, there is as yet no research on angling in the UK that provides evidence specifically in this regard although there is an increasing public awareness of its potential.

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5.3  **Angling and Physical Activity**

There is a huge body of evidence supporting the benefits to health and reducing obesity of increased physical activity and there is little need to review that literature here. The Department of Health and Sport England strategies both seek to increase the numbers of people undertaking moderate intensity sport and physical activity for at least 30 minutes on at least three occasions per week.

There are conflicting claims made about angling in terms of its physical activity and a widespread public and policy perception that it has little to offer in this regard. Sport England have argued that angling is a low intensity activity (which limits funding to it from this source). The *Active People Survey* has calculated the following rates of physical activity in angling (from April 2008 to April 2009):

- 1x30 sport indicator: Percentage and number of the adult population in England participating for at least 30 minutes at light intensity at least once a week in Angling (0.32% and 132,500 respectively)
- Once a month sport indicator; percentage and number of the adult population in England participating for at least 30 minutes at light intensity at least once in the past four weeks of Angling) 0.63% and 263,800 respectively

The Angling Development Board has argued that it is a ‘moderate’ physical activity and has requested that Sport England’s intensity classification of angling be reviewed. The ADB have cited US research that suggests light intensity activities are those having less than 3.0 METS, moderate intensity activities are those having 3.0-6.0 METS and vigorous intensity activities are those having more than 6.0 METS. The ADB say:

- Fishing sat down is measured as 2.5 METS
- Fishing from a river bank, including walking along a riverbank or wading in a stream, whilst wearing waders is measured as 4 METS ‘similar to a recreational badminton session’.
- If the fishing session involves carrying equipment weighing 50lbs or more while standing or walking the intensity is increased and may be classified as vigorous intensity.

This suggests that it is misleading to attempt to generalise about angling in this way and, as with the need to ‘unpack’ different forms of participation in angling and broaden the notion of that, we need to differentiate between different forms and locations of angling practice if we are to produce meaningful research about the contribution angling has to make to increasing physical activity.

Early dissemination from the AIRE study support this assessment that the picture is far from straightforward, where few ‘saw angling as good for physical health, though as a retiree, one angler commented “so the exercise I get from angling is handy”. For another, the “problem is you’re sat on a box all day”.

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Initial findings from surveys Substance are conducting as part of the *Social and Community Benefits of Angling* project suggest widely differing responses by anglers to the question of how much physical activity their participation entails. Whereas around two-thirds of anglers overall say that their participation involves ‘moderate’ activity, more localised studies suggest that for as many as two thirds of anglers their participation involves ‘intense’ activity. Reflecting our concern to ‘unpack’ angling participation, the different disciplines and angling locations mean that the picture is very complex and any general assessment to rate angling in this regard will be flawed. The first interim report for that project is due in December 2009 and it will be focus of qualitative interviews with anglers as the study progresses.

To provide more robust evidence, there is however, a need for more accurate recording of physical activity indicators amongst anglers that might include monitoring heart rate, distance travelled and steps. The impact of ‘excitement’ on heart rate - such as in pursuing or catching a fish - is another area for future study.

### 5.4 Green Space and Health

There is a large body of evidence that suggests the links between people’s access to ‘green environments’ and improved health. Although there are no studies that relate angling to health in this regard, it would be a fertile area of future research – not only in terms of how angling might provide a gateway for people to access green spaces who otherwise would not do so, but also what additional benefits that angling participation might bring. There is much anecdotal evidence already that anglers report reduced stress levels and increased relaxation when fishing, something reported by the AIRE project as well as in the early stages of the Substance angling research.

Research by Lamb *et al* (2002) supported claims about the effectiveness of promoting outdoor activity over and above other forms of exercise. Pretty *et al’s* (2005) seminal studies on the benefits to physical and mental health of ‘green exercise’ showed that ‘pleasant’ rural and urban views whilst exercising had the most positive effect on blood pressure and self-esteem and mood.

With regard to young people there are growing claims that children with Attention Deficit Disorder have better levels of concentration when exposed to nature and that children can benefit generally from ‘a green learning environment’. Reynolds *et al* (2002) provided qualitative evidence that it was easier to motivate participation in ‘natural’ environments and other studies have supported this – Giles-Corti *et al* claim that

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people with good access to large, attractive public open space were 50% more likely to achieve high levels of walking.\textsuperscript{50}

Mitchell and Popham’s (2008) study\textsuperscript{61} on the health effects of exposure to natural environments concluded that ‘populations that are exposed to the greenest environments also have lowest levels of health inequality related to income deprivation [and that] physical environments that promote good health might be important to reduce socioeconomic health inequalities.’ There are of course negative aspects to those living in ‘rural’ environments, especially issues of social isolation, high suicide rates and so forth.

Other studies have provided evidence that green environments can improve recovery from surgery (Ulrich (1984)\textsuperscript{62}) something that is particularly relevant to schemes such as Casting for Recovery. In relation to mental well being, some research (Hartig \textit{et al} 1991) has shown that natural environments can have a restorative effect on stress\textsuperscript{63}, something which has been reported by anglers. Louv and Frumkin (2007) have gone so far as to argue forcefully that ‘evidence suggests that children and adults benefit so much from contact with nature that land conservation can now be viewed as a public health strategy.'\textsuperscript{64}

With regard to those living in urban areas, there is also a growing body of evidence of the health benefits for senior citizens of regularly accessing ‘green spaces’\textsuperscript{65} and that people with more accessible green space were both healthier\textsuperscript{66} and more sociable, with evidence that those living in neighbourhoods with more green space had:

‘more social activities and more visitors, knew more of their neighbours, reported their neighbours were more concerned with helping and supporting one another and had stronger feelings of belonging.’\textsuperscript{67}

However, there is no evidence or research that relates these issues and findings to angling specifically.

\textsuperscript{50} Giles-Corti B, Broomhall MH, Knuiman M, Collins C, Douglas K, Ng K, Lange A, Donovan RJ. ‘Increasing walking How important is distance to, attractiveness, and size of public open space?’ American Journal Preventive Medicine, 2005 Feb;28(2 Suppl 2):169-76


\textsuperscript{62} Ulrich R S. (1984) ‘View through a window may influence recovery from surgery’ Science 224, 420-21


5.5 Well Being and Green Spaces

Dr Julie Newton’s report *Wellbeing and Natural Environment* provides a useful overview of the issues relating to green spaces and well being. Newton concluded that in relation to green spaces, there is ‘a wealth of material exploring the generic wellbeing benefits of the natural environment’. Further:

- The natural environment provides synergistic physical, mental and social wellbeing benefits.
- There is a need for more widespread agreement about what constitutes robust and reliable evidence, including between social and medical research.
- In-depth and rich qualitative studies are ‘important for unpacking and explaining the relationships illustrated through quantitative research methodologies [and that] further work in this area should seek to combine both quantitative and qualitative methods’.
- Research also needs to encompass the negative impacts of green spaces and its importance to those living in rural areas.
- Most research originates from US, Scandinavia, Holland and Japan and more research is required to explore wellbeing benefits in the UK.
- There is a need for increased dialogue between academics, practitioners and policy makers and for multi-disciplinary research.

Newton supports an ‘ecosystems approach’ that explores the ‘interaction between people and the environment’ and also says that more research is required to unpack the benefits of different types of green spaces for different groups of the population, different types of green space and different types of exposure.

‘whilst there is a substantial amount of research investigating the broad wellbeing effects of green spaces, little is known about the impact of variation in quality of green space and variation amongst different social groups.’

For angling, the focus needs to be on the particular effects it might have in enabling access to ‘green’ environments for different groups. For instance, Wells and Lekie’s research into the effects of exposure to natural environments said that ‘childhood participation in “wild” nature such as hiking or playing in the woods, camping, and hunting or fishing… have a positive relationship to adult environmental attitudes’ (our emphasis).

This has particular relevance for research on angling to understand its potential benefits better but also to contribute to wider debates on well being. Newton calls for evaluation of well being in terms of social indicators as well as economic or financial ones: ‘it is now argued the relationship between economic prosperity and wellbeing has broken down (Easterlin, 1996; Offer, 2006)’. The New Economics Foundation have produced a ‘Happy

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69 *Ibid*: 4

70 *Ibid*: 32

Planet Index\textsuperscript{72} as well as a pilot report on the ‘power and potential of well being indicators’\textsuperscript{73} which include economic, environmental and social indicators.

**Identifying Gaps - Well Being**

**Physical Activity**

There is a need for exploring in greater complexity the different levels of physical activity that different elements of angling participation can generate. Whilst ‘traditional’ sports science and other approaches might be appropriate, and given that there will be some exploration of this issue through the ongoing Lottery funded project, this is also an area where participatory approaches could be embraced. For instance the provision of cheap heart monitors, pedometers and other measuring tools to anglers, within a structured framework that allows both observation and reporting, could help establish a database of angler’s own experiences.

**Accessing Green Spaces**

The accessibility of green spaces to those living in urban areas could be a hugely fruitful area for ongoing research into angling and its benefits. Research might entail digital online mapping of angling opportunities in urban areas (e.g. free access to fishing) and conducting qualitative case study research with both anglers and non-anglers about the benefits experienced. The role of angling projects that seek to improve urban green environments - such as the Trout in the Town initiative - is also important in this regard, especially where it creates access to green spaces for non-anglers in the wider community as well as anglers.

The issue of accessing green space has important implications for researching the benefits of angling participation in a number of respects:

- Can angling provide a reason for, or act as a gateway to, accessing green spaces more often?
- Does angling provide a means by which greater sociability can be generated in green spaces?
- Can the creation of angling sites within urban areas increase access to green spaces?
- Do schemes that are initiated by anglers to improve urban river and other water habitats (such as Trout in the Town) create opportunities for accessing green spaces for other members of the community?

**Developing well being indicators**

There are a number of important issues in relation to angling’s potential to deliver health and well being outcomes that need further research. These include:

- Agreeing the key definitions and policy concerns with respect to the different outcomes of ‘health’ and ‘well being’


\textsuperscript{73} New Economics Foundation (2008) The power and potential of well being indicators’ Measuring young people’s well being in Nottingham, a pilot project by NEF and Nottingham City Council, London: NEF
• The need to build upon the growing body of literature that relates to physical and mental health benefits from ‘green spaces’ by building an evidence base for angling

• The extent to which different forms of participation in angling can provide a route by which people can: Increase physical activity; access green spaces; get relaxation; receive benefits in terms of their well being and mental health.

Important questions include:

• How different forms of participation in angling and associated activities (such as river clean-ups) generate different levels of physical exercise and help others access green spaces?

• Does angling provide similar positive well being as other forms of accessing ‘green spaces’?

• Does angling create pathways for people to access ‘green spaces’ particularly in urban areas?

• Are there both positive and negative effects from angling participation in terms of the generation of well being?

Finally, as argued in relation to economic benefit studies, attempts to quantify well being and health benefits in purely financial or statistical ways will always be limited and we need to understand more about the qualitative and social values of well being.
6. Participation Benefits: Angling, Tourism and Rural Communities

6.1 Definitions and Policy Context

One of the cited social and economic benefits of angling is that it helps sustain rural communities, providing a source of income and jobs as well as tourists.

Rural tourism, into which angling based tourism and rural angling development initiatives most often fit, has been difficult to define, given the difficulty of defining ‘rural’ through ‘objective’ measurements (land use etc., Lane (2004)) and the fact that ‘the phenomenon loosely called “rural tourism” takes differing forms, develops within a vast range of physical, social and political environments, and results in a wide diversity of outcomes’.

Lane’s (1994) paper proposed a typology of rural tourism and raised the notion of ‘pure’ rural tourism. However, many definitions of rural tourism presume that tourist visits to the countryside are fundamentally motivated by a desire to ‘experience rurality’, rather than for other reasons, a position that is ‘difficult to sustain’. This is particularly apparent when one considers angling, given the multiplicity of reasons that underpin an angling trip (see earlier reference to Moeller and Engelken’s (1972) study). Questions remain as to whether rural tourism embraces any form of tourism in a rural area, including rural areas as ‘playgrounds’ for other recreational activities (which could include angling).

Despite the conjecture over what constitutes rural tourism, interest in the issues associated with rural tourism gained impetus in the UK following the foot and mouth outbreak in 2001, which itself followed a decline in the importance of agriculture to rural economies. Defra’s Review of the Rural White Paper in 2004 said that:

the experience [of foot and mouth] clearly demonstrated how much people value the countryside and the relationship between agriculture and other economic activities, especially tourism and recreation. In fact, the wider economic and social impacts were found to be more significant than the direct costs to the farming industry.

State supported initiatives around angling tourism have grown in the UK, particularly in Wales, as well as Scotland and some English regions. However, Sharpley and Craven (2001) warn that ‘the scope of tourism in rural areas remains largely unrecognised, manifest in the continuing bias within national rural policy towards the agricultural sector’.

Defra’s review however, suggested this attitude was changing:

the choice of which sector to encourage may be affected by perceptions of what is rural and what are legitimate rural businesses. Food, farming and tourism may be given priority over other less traditional sectors, such as research and development, mining and quarrying… Tourism was seen as a key issue by many stakeholders during the scoping.

phase of the Review, because of its role as an economic activity, but also because elements of the sector capitalise on the quality of the rural landscape.  

Furthermore, ‘eco-tourism’, with which rural tourism is sometimes mistakenly conflated, has been defined as having eight characteristics (Honey 1999), which suggest a framework for assessment guided by the principles of environmental, economic and social/cultural sustainability:

- Involves travel to natural sites
- Minimises impact
- Builds environmental awareness
- Provides direct financial benefits for conservation
- Provides financial benefits and empowerment for local communities
- Respects local culture
- Is sensitive to the host country’s political environment and social climate
- Supports human rights and international labour agreements

6.2 Angling and Rural and Environmental Development Research

The AIRE project in particular has generated some important findings in relation to angling and the economic development of rural communities in the North Yorkshire region. The project collected data using 10 in-depth interviews with stillwater angling businesses in the Swale and Ure catchments and 4 agencies concerned with economic development, as well as a survey of 70 anglers (that included some in-depth interviews). Some initial findings suggest that:

- Different types of angling produce very different impacts
- The average distance travelled by anglers to go fishing was 28 miles and spending was relatively low
- Angling business need to be seen within a larger economic ‘jigsaw’ with complex inter-relationships into which angling business and income fits
- Angling income can be small, but can be very important - a difference between viability and non viability in some cases
- Angling tends to be ‘invisible’ in policy/development contexts and in England it is mostly not linked to rural development initiatives because it falls ‘below the radar of development indicators’.

The ‘small but significant’ role angling can play in household or business income is also reflected in the Assynt research (where people have multiple income-earning roles as well as voluntary roles in the provision of angling services). Also, there is emerging evidence of the key role of very significant voluntary contributions from a small number of individuals to provide the ‘angling offer’ locally, something routinely ignored in economic impact studies’ assessment of ‘cost’.

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77 Defra (2004): 57
The AIRE research has also raised some important issues about the role of angling in the context of rural environments, including:

- Angling development can have a mixed impact on natural habitats and biodiversity - e.g. the move to develop still water resources for angling can both create new freshwater habitats but also cause damage to them (e.g. nutrient enrichment from ground bait; deliberate and accidental movement of non-native species)

- There is a debate to be explored over ‘habitat improvement’ undertaken for particular species versus letting nature - or in most cases rivers - take their course and the associated tension between anglers accepting environmental change (e.g. increased flooding) and wanting to control it in the interests of angling.

This latter point relates to Washabaugh’s critique of Trout Unlimited in Deep Trout as well as work in the AIRE project on river rehabilitation work for pearl mussels. One further question emerging from the AIRE work is ‘does angling enhance green spaces and therefore encourage health and well being benefits, or does it force a particular version of green space to be protected/created/enhanced to benefit angling’?

The pressure of angling tourists can also have detrimental effects on the sustainability of the fishery itself as explored in Zwirn et al (2005):

> When angling tourists reach threatened freshwater ecosystems, however, there is a risk of degrading the very fishery and landscapes that attracted them, thwarting long-term economic development prospects and reducing biodiversity. Following the emergence of catch-and release recreational fishing, we believe that angling can be legitimately considered a form of ecotourism that contributes positively to conservation, science, and local or regional economic development.

One areas for focusing ongoing and future research is the input of anglers into environmental improvement projects. Substance’s Angling Participation survey suggests that a significant number of anglers (up to 35% in game angling) contribute to environmental improvement works. Some angling clubs, particularly on rivers, also make requirements on members to participate in working groups. Projects such as the Wild Trout Trust’s Trout in the Town scheme works with projects seeking to improve river habitats and almost all of these are initiated by anglers; and this sits alongside the work of River Trusts and Riverfly Partnerships. Substance’s ongoing work will provide some more information about this but it needs a particular focus to quantify and explain the extent of this work across the country.

### 6.3 Research and Angling Tourism Initiatives

Early research debates about rural tourism were summarised in a special issue of the Journal of Sustainable Tourism in 1994, and a useful summary of developments since then is provided by Richard Sharples and Lesley Roberts in 2004.

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This body of research has emphasised that rural tourism is not uniform, is contingent on a range of factors and that in the UK the term ‘rural’ has particular connotations not necessarily present in other nations and cultures. The research therefore emphasises that ‘rural’ is a ‘socio-cultural construct that reflect people’s learned perceptions of that which represents rurality and which are, therefore, culturally bound’. In other words, it means different things to different people, and is a changing and dynamic concept.

Available research argues that common assumptions about rurality in the UK include the perception that rural areas are ‘special and worthy of protection’. Yet this prevailing viewpoint masks some complex issues which have implications for angling tourism/development initiatives:

i. The need to implement sustainable management systems to protect fragile areas;
ii. The need to mediate between the conflicting aims of conservation and development;
iii. The need to encourage balanced, broad-based but community-focused economic growth; and
iv. The need to maintain the ‘rurality’ of rural areas, where ‘in the case of the British countryside, much planning and policy making appears guided by a ‘countryside aesthetic’ (Harrison, 1991) that seeks to maintain a nineteenth century Wordsworthian countryside in a twenty-first century world’.86

Debates around these issues are evident within the Social and Community Benefits of Angling research focused on the remote Assynt area of northern Scotland87: the tension between the desire of some agencies and tourists to ‘preserve’ the ‘wilderness’ and the focus of some local people and organisations on promoting greater occupation of the land, community development and the reversal of declining populations. The role of angling within this situation, and the extent to which angling can contribute to community development without undermining one of the main reasons people go there to fish - namely its ‘extreme rurality’ - are core concerns.

Another underexplored area with regard rural tourism generally, and angling in particular, is the ‘wider benefits to rural tourism which are compatible with Government’s aim of reducing health inequalities and promoting healthier lifestyles. People visiting rural areas are more likely to carry out some form of exercise, and this needs to be better integrated into policy-making’88.

A number of initiatives focused on angling tourism have emerged in the UK in the last decade. These include:

• Fishing Wales, a partnership between the Environment Agency Wales and Wales Tourist Board which seeks to promote Wales as ‘the premiere destination for game, sea and coarse fishing’
• The promotion of angling within a broader portfolio of ‘country sports’ by the Country Sports Tourism Group in Scotland, including an initiative to promote wild brown trout angling in Assynt, Sutherland. This initiative was based on a report in 2004 that said

87 www.assynt.anglingresearch.org.uk
88 DEFRA (2004): 57
the value of country sports in Scotland was around £200m and 67% of the value of
game and coarse angling was attributable to visiting anglers\textsuperscript{89}.

- The promotion within English regions of angling tourism that includes work in
Northumberland where the angling offer is situated within ‘a plethora of wonderful
accommodation, restaurants and pubs’; a new angling festival in the Lake District;
and the South West of England\textsuperscript{90}.

As Sharpley and Roberts have argued, many of the recurring themes in sustainable
tourism ‘pose questions that remain unanswered’. This is also true of the initiatives listed
below, which collectively provide a focus for further study:
- the role(s) of state, regional and local government;
- capacity — particularly social and human — and its inculcation and transfer;
- stakeholder involvement;
- knowledge and expertise
- understanding of the roles that can be played by an integrated rural tourism sector;
and
- a lack of business and marketing skills.

6.4 Toward A Sustainable Angling Tourism Framework

Zwirn’s paper provides guidelines\textsuperscript{91} for eco-tourism angling, which could be adapted to
form a framework for assessing angling tourism initiatives in rural areas. The guidelines
address:

i. Nature experience - operators taking a broader perspective and view the fish
within the complex ecosystem

ii. Education and interpretation - providing accurate descriptions of the ecosystem
in which anglers will be fishing as well as the cultures of surrounding areas -
making guide training a critical element.

iii. Environmentally-sustainable operations - providing access to appropriate waters
and suitable levels of angling.

iv. Respect for local cultures - information to connect angler tourists to the traditions
of an area

v. Contributions to conservation, monitoring, and research - through both fees to
fish as well as participation in angling research (something both the AIRE and
Assynt studies attempt to incorporate)

vi. Contribution to local economies - preferential purchasing of local goods and
services

The issue of tourist understanding and respect for local cultural practices raises
important issues in relation to catch and release in particular, especially where
local/traditional practice may include fishing for food/sustenance. Such practices may
contrast with the cultural norms of angling visitors. This has been reflected in research
by Palmer (2004) cited in Section 2, as well as by Kelso (1982), cited by Zwirn\textsuperscript{92}. The

October 2004: 2; see also \url{http://www.countrysportscotland.com/news_item.asp?item_id=17}
\textsuperscript{90} \url{http://www.gethooked.co.uk}
\textsuperscript{91} \textit{Ibid}: 22
\textsuperscript{92} Kelso, D. (1982) \textit{Subsistence Use of Fish and Game Resources in Alaska: Considerations in
Department of Fish and Game, Division of Subsistence.
findings from these studies are relevant to the Social and Community Benefits of Angling research in Assynt, where the practice of keeping wild trout caught from well-populated lochs is welcomed by some visitors yet rejected by those more used to catch and release practices.

The Social and Community Benefits of Angling research in Assynt includes exploration of the role that new technologies can play in generating data and feedback from visiting anglers where very little is known beyond anecdotal evidence. This includes the establishment of a research website, www.assynt.anglingresearch.org.uk, an interactive map to generate catch reports and feedback on reasons for angling, online questionnaire, comment tools and historical sections.

### Identifying Gaps: Angling and Rural Community Benefit

Key research questions in relation to angling tourism include:

- The potential roles of angling tourism in rural social and economic development and the potential positive and negative impacts of this
- The often overlooked benefits to visitors in terms of welfare debates raised in the previous section; and
- The ways in which questions about angling tourism resonate within wider (global) experiences of development-led tourism:
  - Lack of experience/knowledge/training
  - Dependency on (publicly funded) initiatives
  - How it can support validity of local cultures
  - The high levels of rural business failure
  - The potential for angling to play a cohesive role in bringing together networks of suppliers and other businesses to provide a ‘whole’ offer93.

These are all issues which research into state-led initiatives to promote angling tourism in the UK need to address. However, the broader issues of the role angling plays in rural communities and how it can generate wider community and social benefit also need to:

- Embrace and explore the other questions relating to angling participation benefits outlined in this report, but in a rural context;
- Provide evidence of angling’s role within the wider social and cultural aspects of rural communities, including more qualitative research about angling cultures and practices;
- Explore ways in which angling can have a positive impact on issues of particular concern for rural communities - education, training, volunteering and employment.

Finally, generating a more participatory approach to research, in which both visiting anglers as well as local inhabitants in rural areas can take part, need to be explored. Experiments in using new technologies are important in this respect, especially given the remote and dispersed nature of angling in rural areas and limited research resources.

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93 Ibid: 123
7. Conclusions and Priorities - Toward an Angling Research Framework

There is an increasing amount of social research into angling which is helping to provide a basis for angling to demonstrate its positive personal, social, community and environmental impacts.

To date this has been focused on the contribution that angling can make to social inclusion as well as to rural development.

This project has also teased out that there is considerable quantitative research especially around economic impact of angling, participation numbers and demographics and public attitudes. However, its contribution to our society and culture - the qualitative aspects - are relatively poorly researched.

Yet it is qualitative dimensions that lie behind the reasons why people go fishing, why we might want and how we might encourage more people to enjoy its benefits and why more efforts should be made to protect access and opportunity. These qualitative aspects need to be fleshed-out by researchers and managers in order to persuade key decision makers that angling’s needs are important in Government programmes and strategic and local planning processes.

However, beyond the at times blurred distinctions between quantitative and qualitative, the project has also identified other gaps.

Internationally there is a larger body of work relating to different cultural attitudes and ethnic groups and their relationship to angling than exists in the UK; as well as around gender issues in angling.

There is also a body of work relating to ‘natural environments’ and health issues; and ‘green spaces’ and well being. Some of this (internationally) has been specifically on angling, but the majority of knowledge concerns how those environments can benefit health, education and well being more generally. There is therefore a need to explore this wider knowledge about the benefits of the ‘natural environment’ within the angling context further.

There is a huge amount of research into rural development, eco-tourism and sustainable tourism, although again most of this is not specifically focused on the contribution angling can make. Angling clearly has an important role to play in some rural communities and further investigation of this is a priority.

For angling in the UK to ‘compete’ in a crowded market place for funding (and one which increasingly demands value for money), local, national and European policy concessions, further development and a raised profile, there is a need for a step change in how it researches and evidences its social and community impacts. There are a range of important government social agendas that angling has much to contribute to, yet these needs to be evidenced and communicated better.
The unification of angling organisations north and south of the border and the renewed sports funding streams, alongside ongoing EA investment from rod licence revenues, provide an opportunity for this change to be made.

Particular areas for focus are:
- Exploring the social value of angling as well as the ‘critical difference’ angling might make within regional and urban economies, beyond headline statistics about overall economic impact
- Developing a broader definition of what participation entails, but a closer definition of ‘what makes an angler’ as well as a better understanding of angling practices and the benefits that can be accrued from those
- Identifying barriers to participation for particular groups - as well as the benefits that participation may bring them
- Being more specific about what angling can contribute to the various social inclusion and community cohesion agendas - as opposed to wider ‘sport development’
- Utilising knowledge in other research about health, well-being and access to ‘green’ and ‘natural’ environments to identify the contribution that angling can make
- Having a more refined understanding of how angling might contribute to rural and remote communities and how sustainable angling tourism might be developed and initiatives encouraged
- Embrace new approaches, including the utilising of IT research tools, information provision, evidence gathering and visualisation to create better access to evidence and opportunities

The EA, along with angling organisations, can play a central role in defining and agreeing an agenda for this research, bringing relevant researchers and research organisations together with angling bodies, as well as developing routes by which it might make effective change.

Substance will be developing an online angling research resource which will create a ‘virtual library’ to help access papers and research findings as part of its Big Lottery Funded research into angling.