



**The Quarterly
Magazine of
Fisheries
Management**

FISH



Fisheries in Society

– **Casting for Recovery**

Providing free fly fishing retreats for women with breast cancer

– **Clyde in the Classroom,**

20 years of building Future Stewards

– **Apple Cast North West**

Supporting and helping people achieve their full potential

– **Charities and Society**

The Institutes planned move to charitable status

– **Eels in society**

Is the European eel adequately protected?

– **The Anglers' Riverfly
Monitoring Initiative (ARMI)**

A UK-wide citizen science project for water quality assessment

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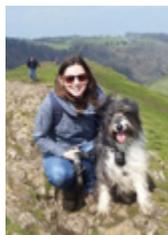
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If you would like to contribute to FISH please get in touch.



Karen Twine



Harriet Alvis

Welcome from the new editing team!

We'd first like to take the opportunity to thank Lawrence for all the work he has done for FISH magazine over the last 8 years, and we are excited about the challenge of taking the baton and finding the most interesting and exciting stories from the fisheries world for your reading pleasure.

Karen

My background is in fisheries science. I'm now working between Analysis and Reporting and the Environment Monitoring Service, maintaining my love for fish (specifically barbel!), but I also have a keen interest in invasive non-native species.

Harriet

My background is in river restoration and fisheries and I work for West Wales Rivers Trust. I first became involved with the IFM when I completed a Fisheries Management diploma (which I definitely recommend!).

For this edition of FISH, we have chosen to look at the many difference ways that fisheries can have a positive impact on our society. From inspiring young and disadvantaged communities, to helping people overcome mental and physical illness, or providing the focus for developing a satisfying career in the UK and overseas.

If you haven't done so already via the IFM survey, we'd like to ask you to contact us and let us know what themes would be of interest to you, or if there are any questions that you would like answering. Please email fish@ifm.org.uk with your suggestions.



View from the Chair

Politics and environmental legislation

So, the electorate surprised us all before Christmas and gave Boris a whopping majority. Whilst this has allowed parliament to progress beyond stalemate and 'get Brexit done' on 31 January, there is a danger that the size of the mandate could cause new policy and legislation to go unchecked. The Government has made high claims for their draft environmental legislation,

but IFM and others will scrutinize them to ensure they have substance so that the environment and fisheries will see real improvements. Examples include the Fisheries Bill and the Agriculture Bill - more of which below.

In the recent cabinet reshuffle the previous Fisheries Minister, George Eustice was promoted to Environment Secretary. Victoria Prentis is our new Fisheries Minister.

Second Reading for Fisheries Bill

Two weeks after its introduction, the legislation that will give the powers to implement an independent fisheries policy moved a step forward. Lords' Minister, Lord Gardiner, led the Second Reading of the Fisheries Bill in the House of Lords on Tuesday 11th February. Main issues raised during the reading included the Government's commitment to and definition of sustainability, collaboration with the devolved administrations and future fishing quota allocation.

The next step in the progress of the Bill is the Committee stage (a line by line examination), which will take place in the House of Lords on Monday 2nd March. For more information see the Press Release on the Defra website, or track the progress of the Fisheries Bill on parliament.uk.

Agriculture Bill

As land use can have a major impact on watercourses, the new Agriculture Bill is also of major interest to us. The Government's stated objective is to support farmers to farm more innovatively and protect the environment.

It sets out how farmers and land managers in England will in the future be rewarded with public money for "public goods" – such as better air and water quality, higher animal welfare standards, improved access to the countryside or measures to reduce flooding. This is intended to contribute to the government's commitment to reaching net zero emissions by 2050, while at the same time, helping to boost farmers' productivity.

The Bill will replace the current subsidy system of Direct Payments which pays farmers for the total amount of land farmed, skewing payments towards the largest landowners rather than those farmers delivering specific public benefits.

It is stated that the new measures will provide a better future for agriculture in this country, maximising the potential of the land for food production and for delivering public goods. The reforms set out in the Bill are supported by the conservative manifesto commitment to maintain overall annual funding for farm support at current levels for the duration of this Parliament.

IFM and other environmental organisations will be commenting on these and other new laws as the UK untangles itself from the EU, to seek the

best possible environmental standards. IFM's position and policy statements and responses to consultations can be found at: <https://ifm.org.uk/about-us/policies/>

EU Eel Regulation - 10 years on

In this edition of FISH you'll find an article on the European eel by one of its most eminent scientists, Willem Dekker. After 200 years of gradual decline, and a 90% reduction since 1980, the eel population is in a critical state. The EU Eel Regulation of 2007, implemented in 2009, required member states to formulate and implement 'Eel Management Plans' with the objective to recover the stock. 10 years on and the ICES working group on eel reports that the decline has halted and that there has been a real but steady increase of an average of 8% per year since the lowest point of 2009. This is very pleasing news and of course we hope that the trend continues. It does show that good legislation and co-ordinated action can have a positive impact on fish populations – even one so widespread and complex as the European eel.

Of course, the eel is a truly European species and a single population. To protect it meant the collaboration of European countries. Whilst the UK was one of the strongest proponents of the EU Eel Regulation (England and Wales produced additional protective laws), one wonders whether such collaboration could have been as effective without the umbrella legislature of the European Union.

As ever, your views on anything IFM or fisheries management are appreciated and you are welcome to contact me direct at chairman@ifm.org.uk.

With best wishes.

David Bunt | IFM Chairman

Casting for Recovery UK & Ireland (CfR)





I am delighted to introduce to you **Casting for Recovery UK & Ireland (CfR)**, a project run by The Countryside Alliance Foundation (charity no 1121034) which delivers retreats for ladies who have, or have had breast cancer. Our retreats combine counselling and medical support with the opportunity of learning to fly fish; all of which is free for ladies.



The majority of women who participate in our retreats do not attend a breast cancer support group and can often feel isolated by their experiences of breast cancer. The retreats offer an opportunity for the women to talk through their concerns with a medical advisor or counsellor, in either a group setting or one-to-one, to help them move forward. These concerns range from fear of recurrence and the physical effects of the disease and its treatment, to body image issues, depression and advice on seeking a second opinion.

CfR has been delivering retreats to ladies in the UK & Ireland since 2007. Fourteen ladies attend each retreat and ladies apply to attend with places allocated by ballot. We take ladies at any stage of their illness, with the proviso that they are at least three months clear of any active treatment and are medically cleared to attend. We will be delivering six retreats in 2020 at venues across the UK & Ireland and our 2020 retreat programme is shown below:

24-26 April - Mount Falcon, Co Mayo (ROI)

15-17 May - Garnffrwd Fishery
& Stradey Park Hotel, Llanelli (Wales)

12-14 June - Coniston Hotel, Skipton
(North Yorks)

24-26 July - Kimbridge on the Test (Hampshire)

28-30 August - Arundell Arms, Lifton (Devon)

25-27 September - Forbes of Kingennie,
Dundee (Scotland)

Our two and a half day retreats are staffed by volunteers including counsellors, specialist nurses and qualified casting instructors. The retreats help improve the wellbeing and self-confidence of ladies, many of whom apply as they are worried about their health and the wider impact that a cancer prognosis can have on them and their loved ones.

One day is devoted to counselling, relaxation and meditation techniques, and most importantly, meeting and spending time with people who understand what they've been through. Ladies are taught how to tie a fly and a few basic casting techniques before having the opportunity to try fly fishing on the final day. Our programme relies upon the support of a loyal team of volunteers – from the qualified casting instructors, our healthcare volunteers, the fishing guides and to the volunteers making teas and coffees and providing logistical support. Many of our volunteers are past participants who want to give something back to the charity and some volunteers have been with us for almost 10 years.

One of the many strengths of the CfR programme is the way we can use our countryside as a place of healing. Another is enabling ladies who have, or have had, breast cancer to step off the treadmill of their busy lives and the chance to reflect and have some time to themselves. Ladies tell us that the opportunity to share experiences and to learn a new skill has had a positive impact on dealing with their diagnosis and living with breast cancer. As one of our recent ladies tells us: *"Thank you Casting for Recovery for a wonderful, healing weekend with*



great people in beautiful surroundings. I loved learning to fish and am amazed at how much further down the road to full recovery I feel!" Another lady said: "My head is still in a spin thinking of all the new friends I have made and the new experience of picking up a rod! Thank you so much for allowing me to be me! Cancer survivor. Able to try anything!" And another "I feel truly privileged to have been offered a place on a retreat. It far surpassed any expectations I had. I have come away feeling calm, relaxed, happier in my own body and with a sporting skill that was just magical to learn. Words cannot describe what you have done to help me through my emotional journey after cancer. Thank you to you all"

As mentioned, CfR visits some truly beautiful venues across the UK and Ireland and has inspired the generous and loyal support of donors large and small. With retreats being offered throughout the UK and Ireland each venue we use is unique, but the one thing they all have in common is that they have all been hand-picked to provide women with an opportunity to experience their time in the peaceful surroundings of the countryside at beautiful venues. It is our mission to continue to provide women with powerful tools for healing and to help and support them in moving forward.

692 ladies have participated in CfR retreats over the last 13 years and we celebrated our 54th retreat in October last year. There is considerable interest from ladies to participate, with many more ladies applying for a place than we can accommodate. It costs on average £7,000 to deliver each retreat; this includes accommodation to ladies and volunteers and the retreat logistics. Various fundraisers are held throughout the year to ensure we can continue to offer the magic that is CfR.

If you know of anyone that may be interested in attending one of our retreats or have any ideas with regards to fundraising opportunities then please visit our website for more information or contact us at:

cfr@ca-foundation.org





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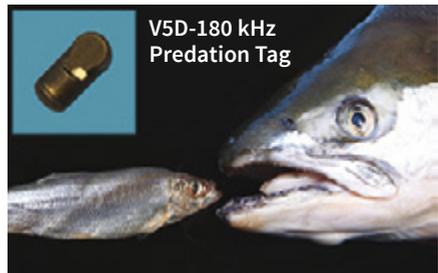


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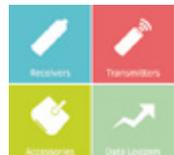
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Clyde in the Classroom, 20 years of building Future Stewards

Dr William Yeomans

The Clyde River Foundation's Clyde in the Classroom (www.clydeintheclassroom.com) project is celebrating its twentieth anniversary this year. Running between Christmas and Easter annually, it has now involved more than 33,000 students from ~75% of the 550 Primary Schools across the eight counties of the River Clyde catchment in Scotland.

The project was brought to the UK by Alastair Stephen of the then West Galloway Fisheries Trust in the early 1990s as "Salmon in the Classroom" and arrived on the Clyde in 2001 via our then Project Officer, John Bray, who had previously run a similar project on the Spey. We made education a core part of the Foundation's work from the very beginning – hence the 20-year unbroken delivery run – and scaled it up to a size appropriate for a catchment containing 1.5 million people. We have six launch days annually at the Glasgow Science Centre, each involving approximately 500 children, around 3% of the annual schools' footfall there.

The project involves raising brown trout from eggs to fry within a classroom hatchery. Each class is assigned a scientist to visit weekly to check on the fish and to answer any questions the children and teacher might have. The children are responsible for the day-to-day care of the hatchery, keeping the water at the right temperature and monitoring the development of the fish until they have reached the fry stage. As fry, the fish are ready to feed and are released into their local river by the children.

The concept is brilliant (and not ours); to use part of the life cycle of the fish viewed at first-hand



Pupils from Blairdardie Primary School meet brown trout eggs from the Clyde River Foundation

to engage young people with river ecology and encourage them to think of conservation – it was never designed to stock fish into the Clyde. We use brown trout as the study fish because the species is ubiquitous across the Clyde catchment, and now relatively common in the urban rivers now recovering from centuries of pollution and man-made habitat degradation.

The generic project has been adopted far and wide, but what makes Clyde in the Classroom unique is its range, scope and longevity. Clyde in the Classroom was trialled in 2001 at five



schools in Glasgow and has grown to the current commitment of 120 classes from 100+ schools annually; this employs six people full-time for three months. We put working scientists into 15-20% of the Primary schools in the catchment simultaneously and the adoption of the Scottish Curriculum for Excellence has seen Clyde in the Classroom incorporated routinely in some schools. It has also provided us with a foundation for our broader education programme.

The big messages are straightforward. The River Clyde is a recovering river still vulnerable to human impact, and education and public engagement can inspire beneficial changes in behaviour. Making both local and global connections can strengthen the message and hands-on involvement can promote a sense of ownership. We aim for sustainable, long-term community management, driven by our Future Stewards.

For more information contact:

info@clyderiverfoundation.org

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Apple Cast

– Neil Farnworth

Cast North West began its life in August 2006 at Spring View in Wigan, with a small pond and a metal cabin providing young people in the area with an alternative to education and also a diversion from being on the streets causing anti-social behaviour. After a short period, I knew if I was going to make a success of the project, we needed to be a not-for-profit venture. This was for two reasons:

- To develop the project, we would need capital funding that would allow the project to progress over the coming years
- I would need support on the changes to OFSTED regulation and child safeguarding, to move with the development of alternative education.

The selection of various trustees allowed the charity to keep up to date with any changes, but also gave me valuable insight into what was needed to be successful. I do feel that without this support from trustees over the 14 years, we would have not been as successful as we are today.

In 2008 this vision was achieved by becoming a registered charity. From this point we started to show steady growth and gain various pots of funding that enabled our development. After two years of seeing a natural progression of pupils attending, we sought their consultation, on how we could develop the programme and suit their needs better. From this, it was identified that due to inclement weather, angling was less appealing and accessible in winter months, which is why we saw drops in attendance.

Considering the options, I spoke with experts from the Environment Agency and Defra to develop the first indoor angling centre; this has had mixed reaction from the angling community. The reason for the negative reaction is that some people changes from the usual angling experience, or don't fully understand the rationale behind the changes, which were to ensure we could continue to teach angling through conditions that make angling less enjoyable for those we were trying to engage with the sport. This has kept our attendance rate for young people in alternative education above average



at 85%, throughout the year; and ~90% for our attendees with mental health issues and disabilities.

Angling will never truly be an indoor sport, but we really need to look at the amount of young people coming through the sport we love, increasing the appeal to at least try it, whilst we hope they'll get 'the bug'. It is easier for a young person to stay in a warm house and play on their x-Box than be sat outside, particularly in the cold and wet, catching minimal numbers of fish. The indoor angling centre has helped in a big way to keep young people engaged but also benefitted their learning, helping to improve bite indication skills due to the lack of wind allowing participants to see every movement.

In 2016 Cast North West was approached from a Trust called Red Apple to construct our vision for the future. We planned a three year transition to develop this vision and improve our education package. This transition went well and we were lucky to receive large amounts of funding to assist with this development. After 12 months and a lot of consultation with Red Apple, it was decided that the merger would take place and we would become AppleCast LTD.

AppleCast Limited is now based in Newburgh on a 23.6 acre site in West Lancashire, specialising in education and engagement activities for excluded young people (SEN), young people with learning or physical disabilities, and adults with additional needs. We have also recently begun to move towards supporting adults with mental health issues, through the establishment of small support groups.

We use the angling and the wider natural environment, together with practical educational activities, to increase education and improve well-being. We believe that you must address the underlying issues and barriers to engage people in education or therapy, and angling enables us to do this in a short period of time.

We offer a range of activities that provide a more work-based learning platform for people of all disabilities to develop education and practical skills along with improving health. Education can be based around fishery management, land-based studies, horticulture and environmental conservation. This varied approach allows participants to try more than one option, allowing them to develop skills and create a person-centred plan for achievement and development.



Angling is the main tool of engagement and research shows that its characteristics can improve health and mental well-being, which positively impact on wider outcomes in education, employment, and social exclusion. This shows the importance of the angling engagement and how this develops trust and friendships.

We have many successes around the work we complete and helped many people to progress and live a near-normal life. We feel people of all disabilities have the skills to succeed and achieve in education or the completion of practical tasks to develop skills.

Over the last three years we have seen a considerable growth in attendance, from 100 to 245 referrals attending AppleCast. We also work with people from the Armed Forces completing angling sessions to improve mental well-being and develop skills. This has been very successful with participants engaging well in the angling but also looking to participate in other activities on site. We are looking to set up a dry stone walling course, bird of prey experience and animal husbandry.

FACEBOOK Post from Martin Mazar placed on CAST North West site



"Today was my last day at Cast and being there has taught me a lot. Ive met some really nice people and i learnt many things. With the staff i had my ups and downs but as i got to know them properly i realised that they all try the best to help the youngsters like myself. I spent almost a year there and it felt like i had a second family and it makes you see things in other peoples view. It was like a work place for me and i had many laughs with the staff and the rest of the lads but i also knew that when something bad happened to you or you felt down they were always there to cheer you up and put a smile on your face. For anyone who dont what Cast is like its like work but the differenc is that at Cast work was fun and it was all teamwork. Id like to say a massive thankyou to all the staff!!!! Hopefully ill be back in summer and im looking forward to seeing you all again and if anyone reads this who has never been there, trust me you need go and see for yourself its amazing!!! It was a massive experience and it was nice to meet all these people!!! Once again cheers for everything"!!



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MF	12.10.18	RED/BLUE LINE
A	MF	RED/BLUE LINE
Revision	Date / Initials	Amendments
Client	MR NEIL FAR	
Project	PROPOSED D ECO CENTRE COBBS BROW NEWBURGH	
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Calum Gordon, director of Splash Gordon Ltd realised there was a real need for such a tool to clear ponds and lochans of emergent weed and detritus. The rake is used at Shell Oil's St Fergus gas terminal to keep their 1-acre fire pond clear of weed, it is also used at Dumfries House plus many other large estates.

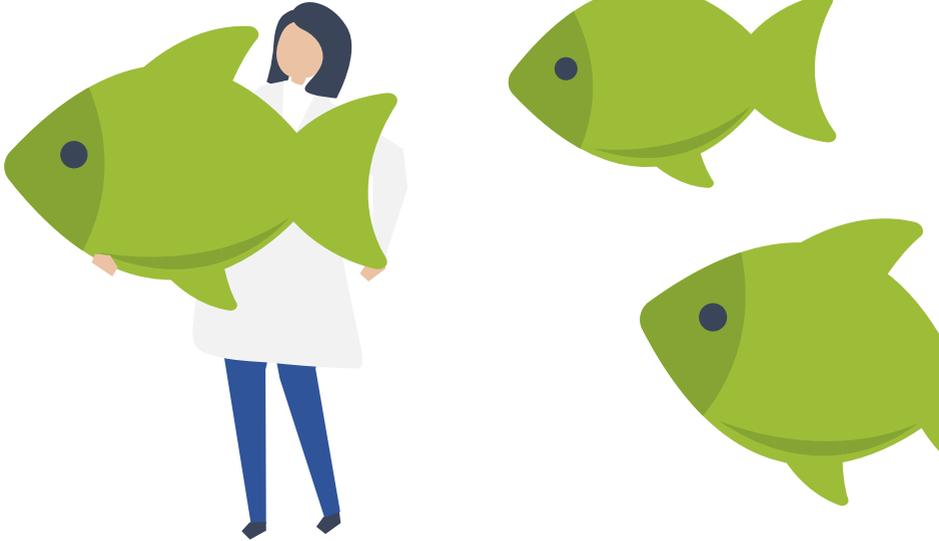
It takes just 10 minutes to set up the system, bolt the rake together, lay out gather rope to far shore, attach the winch to a suitable tree or ground anchor.

The rake is sat on the float and the float is pulled to any area of any sized water body, it is easily deployed by pulling on both gather rope and winch rope, the rake slides off the float and lands on the lake floor. The winch is then used to haul the rake across the lake floor.

The off-set tines of the rake force weed to zig zag up through the rake and jam, weeds are up rooted and cropped at their base, the rake also gathers detritus and sludge. The winch hauls the loaded rake right up onto dry land, two men then simply tip it forwards to dump the weed then set it back on the float for the next haul. Mobile pond life has to opportunity to return to the pond un harmed.

Charities and Society

Valerie Holt



The Institute has been looking for several years at whether or not we should become a charity, having first considered it in the 1990s. Following changes in legislation, more detailed consideration has been given again during the last four years. At the 2019 Annual General Meeting, members voted to proceed with applying for charitable status. At the Council meeting in December 2019 it was agreed that we would apply to become a Charitable Incorporated Organisation. This is a new form of charity that became available in 2013, is regulated solely by the Charity Commission and so does not require the charity also to be registered as a company subject to UK Company Law.

There are many benefits to becoming a charity - public trust, strict control of assets, tax relief, gift aid and the ability to apply for funding from many grant giving trusts and lottery funds. Although it means we cannot lobby politically it will not impede the consultation process that we undertake on many government issues.

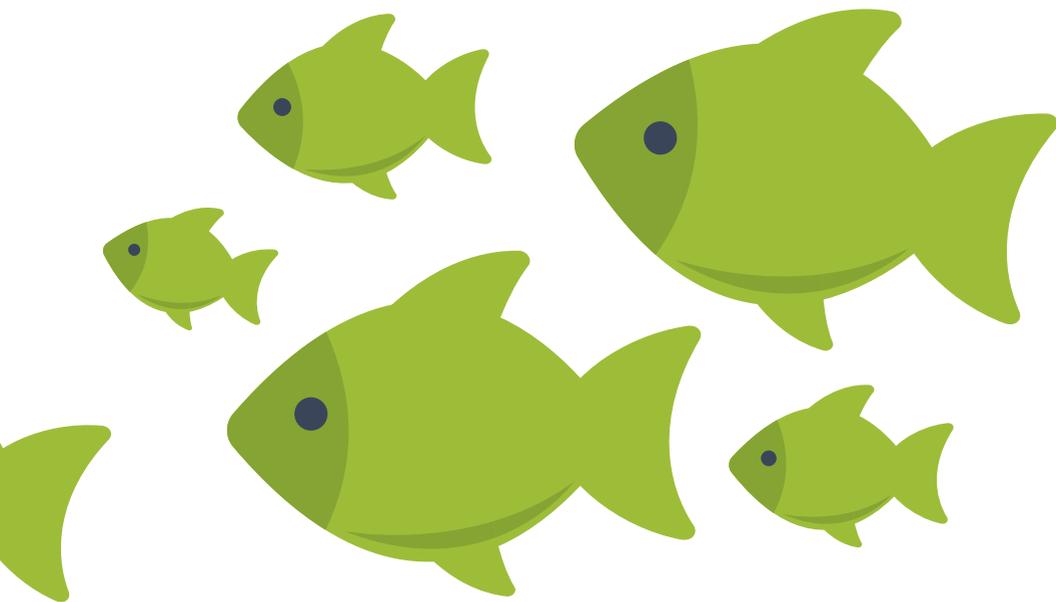
The governance structure of the Institute will require changes as there will need to be a Board of Trustees who cannot receive any remuneration except legitimate expenses.

We are currently looking at new Objects for the Institute that will closely follow our previous aims and objectives and will show our commitment to the profession and the environment, and also encompass education, all for the overall benefit of the public.

There are many environmental and fisheries charities in the UK, such as Wild Trout Trust, Salmon and Trout Conservation, Atlantic Salmon Trust, Rivers Trusts, Canal & River Trust, Marine Conservation Society, Fisheries Society of British Isles, Freshwater Biological Association, to name but a few. There are also all the wildlife organisations, as well as many professional institutes.

Britain has a long history of charitable giving, with the oldest registered charity dating back to the Sixth Century. The oldest charity in the UK is The King's School, Canterbury established in 597AD.

Many of our earliest charities were founded by religious groups, the nobility, or wealthy individuals to help the neediest members of society. This was normally the poor – especially orphans, widows and the sick or disabled persons. Help would be provided in the form of



shelter, food, clothing and caring for the sick. Charitable organisations often took the form of hospitals, orphanages and poor houses. There were also charities to protect animals; the RSPCA started in 1824, the RSPB in 1889.

As the number of charities has increased over the centuries, so has the range of causes. While many charities are still focused on helping disadvantaged people, many others are tackling global issues like climate change, conflict, and HIV.

It's interesting to note that, in Britain, health charities like Cancer Research remain the most popular causes to which to donate.

Today there are over 180,000 registered charities in the UK, employing thousands of people to work all over the world on a huge range of issues. This usually includes working 'on the ground' to provide support and relief services like vaccinations, pet care, sanitation or shelter, as well as campaigning to change government legislation and raising awareness to change people's attitudes.

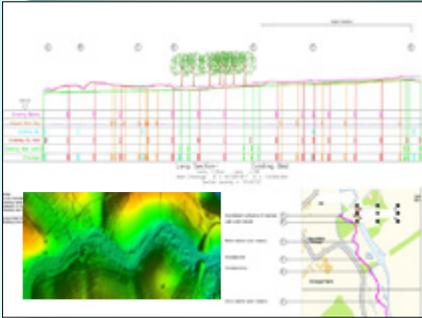
In the UK, about 50% of adults donate to charity, which means we have one of the highest giving levels of any country in the world. As most UK

charities don't receive any money from the government, donations from individuals are the most important source of funding for a charity to carry out its work.

In the past, charitable donations tended to be quite localised – for example giving to the parish church or hospital, but today around a quarter of donors give to overseas causes. International aid charities like the British Red Cross and Oxfam use a lot of their funds to help people in countries affected by natural and man-made disasters.

One wonders if there are now too many charities, vying for the finite funds of donors. Many charities seem to duplicate the work of others and perhaps a time will come when there is an amalgamation of like-minded charities.

Whatever your views, they are a definite benefit for society, bringing much needed succour to the poor and needy but, perhaps more importantly, bringing a realisation to the general public that our planet is in danger and we need to work together to bring about a halt to the decline of the global environment.



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Eels in society, Is the European eel adequately protected?

– Dr Willem Dekker

The stock of the European eel (*Anguilla anguilla*) is currently in a difficult and uncertain condition. Twelve years after the adoption of a European action plan to protect the eel, it is time to review what has been done, and what has been achieved – and to consider the next steps. Is the European eel adequately protected?

The [Sustainable Eel Group](#) (SEG) is the European non-profit organisation, working on the acceleration of the recovery and responsible management. SEG requested [Dr. Willem Dekker](#) of the Swedish Agricultural University in Stockholm, to evaluate the past and current situation. He played a key role in bringing the eel problem to the political attention in the 1990s, and had a leading position in the design of the protection framework in the 2000s.

History of the European eel fishery

Just over a hundred years ago, eels occurred in all rivers, lakes, ditches and marshland, all over the United Kingdom and Ireland, even all over Europe – eels were exploited by small-scale farmers, supplying a welcome source of food and fat. In England, a thousand years ago, eel fisheries were recorded in the Domesday Book, as a source of income to be taxed. Those eel fisheries were found at watermills, and probably also at dams and in some lakes, all over the country - near the coast but also all over the Midlands. By the end of the 1800s, however, water works increasingly had blocked





the immigration of young eels, water pollution increasingly troubled the production, and the small-scale fisheries largely vanished.

The fisheries adapted to the changing circumstances in the early 1900s, shifting focus to larger waterbodies closer to the sea, and developing new and larger fishing gears. It was in this period that the famous large-scaled eel fisheries in mainland Europe developed (the Baltic lagoons, the major rivers, many lakes), and that modern fishing gears emerged from their smaller and simpler predecessors.

Additionally, the “invention” of modern eel-smoking (in contrast to the dried or salted eel of before) turned this low-priced poor-man’s-food into a luxury product, for wealthy city customers. The UK played a relatively minor role in this, due to the distance to the main markets in central Europe, but eventually the modernisation penetrated here too.

This modernisation of the fisheries, however, did not stop the further degrading of inland waters, and the continuation of the decline of the eel stock. Until the 1960s, intensification, modernisation, and expansion of the fisheries more than compensated for the ongoing decline – the eel fisheries essentially prospered, hardly aware of the looming future. Since the 1960s, however, commercial catches have consistently been in decline. From over 20,000 tonnes in the 1950s, to not more than 2,500 tonnes now in Europe as a whole (circa 5% down per year, on average, for decades and decades). From around 2,500 tonnes in the UK before World War II, to around 400 tonnes in recent years – all now mostly from Lough Neagh in Northern Ireland. In addition to this, the situation deteriorated rapidly after 1980, when recruitment of young eel from the ocean crashed, falling down (circa

15% down per year, on average) for thirty years in a row! Though the details differed from site to site, this decline was observed all over Europe. The problem to manage, to protect and recover the eel stock is essentially a shared, European problem!

Introducing protective measures

As early as 1850, people were aware that the eel stock was in decline, and actions were undertaken to mitigate or compensate the decline. Though the fishery expanded and prospered, the stock itself was not adequately protected, and slowly, slowly – very slowly – the stock declined. In the early 1990s, the need to protect the eel finally became recognised and unavoidable – but what to do? Specific protective actions in one country were impossible or ineffective in another. What appeared to be a main problem in one country (e.g. desertification in Spain), was irrelevant in others (e.g. Scandinavia, where hydropower and other migration barriers have much more importance). For years, the discussions continued, discussing different solutions (e.g. summer-closure of the fisheries, or a winter-closure? Setting a minimal size for all of Europe?).

By 2007, finally, a European action programme was adopted, that addressed both the urgent need to protect, as well as the diversity in impacts and circumstances. This European action plan comprised two actions: on the one side (the EU Eel Regulation, the internal protection plan), all EU Member States were obliged to develop a national eel management plan, adapted to their local circumstances but with a uniform goal (reduce impacts and mortalities, so as to enable a recovery). On the other side (CITES listing, setting international trade restrictions), the import/export of eel to/from the EU was regulated, in order to avoid that excessive international trade would undermine the internal-European protection programme – since 2010, the import/export to or from the EU has effectively been banned completely.

Many threats for the eel

Commercial and recreational fisheries, water management, water pollution, migration barriers at sluices and pumps, new parasites

and diseases, cormorants, possibly climate change in the ocean – all of these factors are potentially involved in the decline of the stock. Eel management is not a simple issue, and national Eel Management Plans have to deal with all of these impacts. Europe has an open internal market: young eels, caught in one country, can easily be transported to another, and then flown to China. Police- and customs-actions within different countries are quite effective, but transport from one EU-member country to another brings you from one administrative region to another – and crossing the border, the paper-trail is often completely erased. After the trade of young eel to Asia was banned in 2010, illegal export began – or more correctly, the trade that was legal before, continued on an illegal basis. What is the largest wildlife-crime in Europe, in money terms? Yes, indeed: eel smuggling to Asia.

The Eel Regulation turns out a success

Now, in 2020, after a century of negligence and decline, the EU eel policy appears to be a success: awareness of the situation is growing; protective actions are taken all over Europe; and debates on the causes, available options, and potential consequences have intensified. What has been the key to this accomplishment – that is: why did the Eel Regulation and the CITES listing become a success, where all earlier attempts (in the 1800s and 1900s) failed? First of all, this is a coordinated protection plan, covering the whole of Europe (and more). At the same time, it is not an authoritarian approach, dictating over-simplified actions to all involved. Instead, while the objectives and targets have been set internationally, the responsibility for implementing tailor-made action is handed over to national governments, triggering societal discussions between countrymen-stakeholders. And finally, the Eel Regulation advocates a comprehensive approach, addressing fisheries (legal and illegal, commercial and recreational), habitat-related issues, hydropower, and whatever impacts more. However, ten years after the start, it is also clear that both the EU Eel Regulation, and the CITES listing currently are having implementation problems and are not yet achieving the full desired effect. For the Eel Regulation, fisheries have been reduced, but non-fishing actions are

much harder to achieve (hydropower, water management, pollution etc.). For the CITES listing (closing the trade across outer borders of the EU), the discovery of extensive smuggling networks that violate the trade ban demonstrate the need for increased effectiveness. Have we paid a high price, but delivered too little, so that all of this is in vain and the eel demise is unstoppable?

When would the tide turn?

In 2007, the political decision to protect the eel was taken in Brussels and the EU Eel Regulation was implemented in 2009. That year, the very first eels (silver eels) were actually protected; in 2011 (two years of ocean migrations later), the first positive effect could have occurred. Lo and behold, that was exactly what we observed! Since 2011, the thirty-year decline in recruitment of young eel from the ocean halted, turning into a slight but statistically significantly increase. Though the stock is still only a fraction of what it has been before, this indicates that protection policies can have an impact, and complex problems can be reversed, even if they involve all of Europe.

It will take a long time to achieve the full recovery (another period of thirty years? Or more?), and we have to acknowledge that so far it has only been a short range (8 years) yet of upward trend. Additionally, we have to face the fact that the level of protection for the eel is not yet as good as we intended to achieve, in many countries. The Eel Regulation is effectively providing a framework and setting a target, but not all EU Member states have implemented it effectively. At the bottom line, however, it is very hopeful to note that the trend is as positive as could have been expected – we could not realistically have expected much more. This improving picture strongly urges all parties involved, to implement the eel protection policies further and to polish up what actions have already been taken, all over Europe. Then, there will be good hope that the recruitment of young eel will increase even further!

Anyway, after more than half a century of gloomy deterioration, there are now good reasons for optimism: we've got the eel by its tail again!

For more information please contact: Dr. Willem Dekker, Swedish Agricultural University, Department for Aquatic Resources, Institute for Freshwater Research. Willem.Dekker@SLU.SE

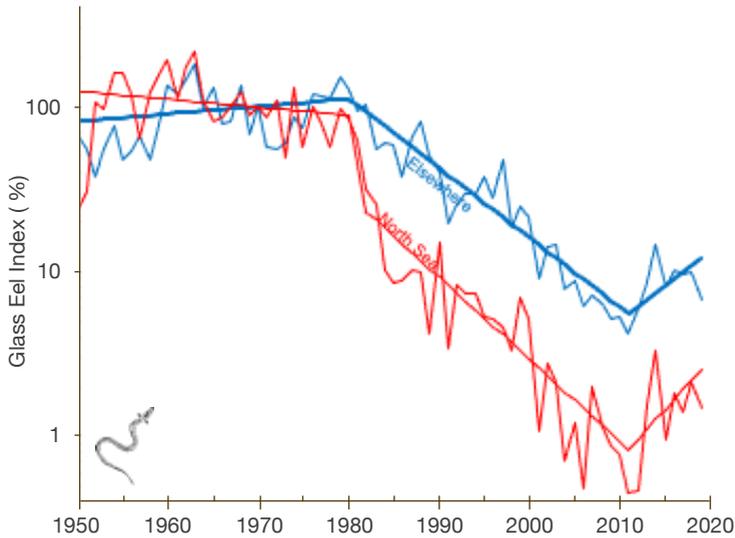


Figure 1 Trends in the abundance of young eel arriving at the European continent (Data: ICES 2019; linear trend lines added for 1950-1980, 1982-2011 and 2011-2018. Note the logarithmic scale of the vertical axis).

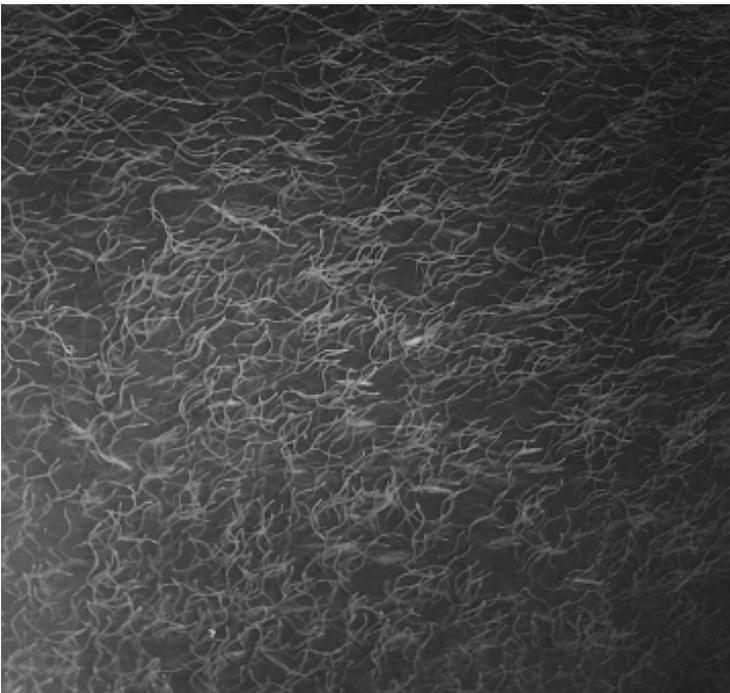


Figure 2. Young eel, in front of the Dutch coast – this photograph was taken in April 1958. Until 1980, abundances like this were the normal situation. Since, the recruitment of young eel gradually declined, to just one percent of this.



The painting "Proverbs" (1559) by Pieter Brueghel the elder (c.1525 – 1569), and a detail.



"We've got the eel by its tail again – Dutch proverb indicating "to achieve the impossible".



Two silver eels along the Swedish east coast, on their way towards the Sargasso Sea.





The Anglers' Riverfly Monitoring Initiative (ARMI): a UK-wide citizen science project for water quality assessment

By Ben Fitch



The natural guardians of a river are those who dwell most often on the riverbank or in its waters - anglers and conservation volunteers being two notable examples. The Anglers' Riverfly Monitoring Initiative (ARMI) enables such people to protect river water quality by monitoring pollution sensitive invertebrates, so contributing to river fisheries improvement. Organised by the Riverfly Partnership (RP), which receives funding support from Environment Agency (EA) to coordinate ARMI in England, and launched nationally in 2007, ARMI is a citizen science project which complements the work of statutory agency staff in England, Wales, Scotland, and Northern Ireland by providing an effective early warning of river pollution and by filling the spatial and temporal gaps in statutory agency freshwater biological monitoring programmes.

Whilst the primary focus of ARMI is to detect and report acute river pollution incidents, a growing body of case study evidence shows that ARMI is providing additional benefits specific to Water Framework Directive (WFD) priorities; benefits which can be reaped by fisheries managers, statutory agency staff and catchment partnerships.

ARMI in practice

- 3300 trained volunteers monitors active UK wide
- 150 ARMI river groups
- 56 ARMI catchment hubs
- 2300 regularly monitored ARMI sites
- EA, SEPA, NRW, NIEA area ecology staff provide training support, site location appraisal, trigger level setting, pollution incident response and feedback.
- Online ARMI dataset available under Open Government Licence

Volunteers are trained to use a three minute kick sample plus a one minute manual search, applied proportionally across all habitats within the sampling area. The sample is sorted according to the eight ARMI target groups: cased caddis, caseless caddis, mayfly, blue-winged olive, flat-bodied stone clinger, olives, stoneflies, and freshwater shrimp. Logarithmic abundance estimates for each group are recorded and an ARMI score derived, the latter then compared to a site specific, statutory agency set 'Trigger Level' score to determine whether or not an acute pollution may have occurred. ARMI data is recorded in the field and entered into the national database via the Riverfly Partnership website.



ARMI sites are typically sampled every month and confirmed trigger level breaches are reported to statutory agency staff who use ARMI data to help inform what investigative work and appropriate response action of their own may be required. Since its launch, ARMI has established a track record for effectively detecting river pollution incidents. The dedicated ARMI volunteer network, comprising large numbers of anglers, provides regular 'eyes and ears' on our riverbanks whilst giving participants the chance to develop their understanding of how 'their' river ecosystem functions: the pressures upon it and what that all means to fish health and populations.



Increasing numbers of ARMI participants are seeking to broaden their knowledge and RP is responding by developing additional 'Riverfly Plus' methods. As well as enhancing participants' attributes, Riverfly Plus schemes can improve volunteer engagement, motivation, and retention. More detailed evaluations of river health benefit fishery managers, statutory agency staff and catchment partnerships too because better data and information are available to them.

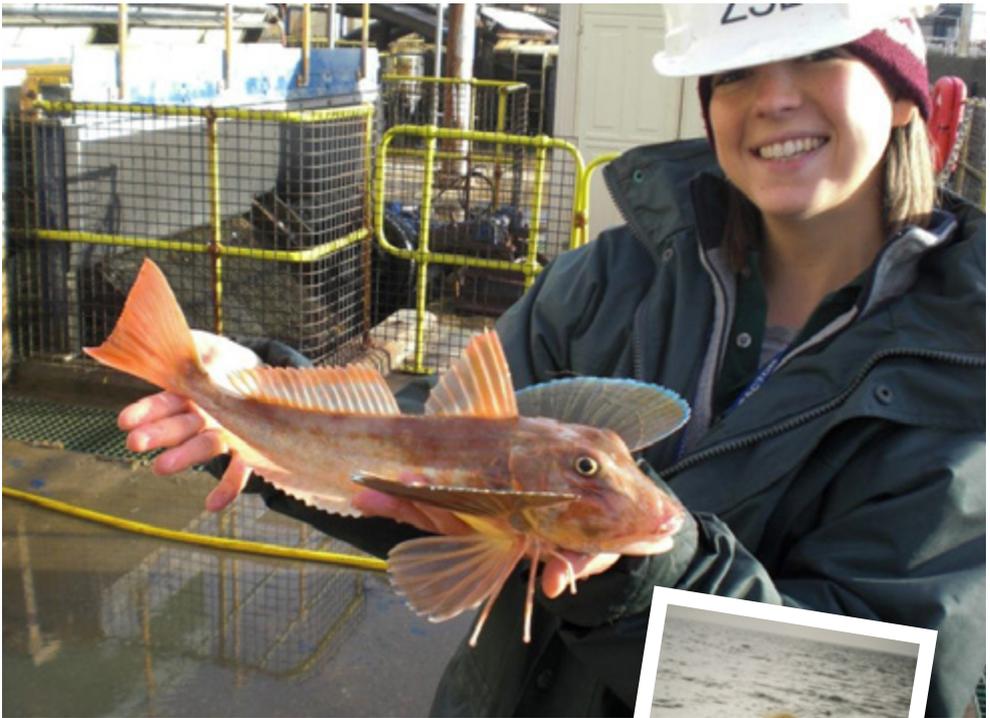
For further information about RP, ARMI and Riverfly Plus please email ben@riverflies.org or ami@riverflies.org.



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Being a woman in fisheries, building a career

– Sarah Hussey

Being from London, people often ask how I got into working in fisheries. From an early age, my Dad used to take me, my brother and sister coarse fishing at Boxers Lake, North London. I remember the excitement of reeling in a fish, not to mention chasing my younger sister with a bait box full of maggots. From these moments, I was hooked!

I remember sitting in my careers class at 16 and asked what I wanted to be, to which I replied “work with animals”. The response I got was not encouraging to say the least, although it was one of the better reactions, “Pah, you only

want to because you watch Animal Hospital”. Undeterred, I chose to read Zoology at Queen Mary’s, University of London and was lucky enough that my undergraduate degree was very aquatic based. I spent a summer seine netting and collecting fish samples fishing on the Blackwater estuary as part of my dissertation and it was working on this project with a talented PhD student that spurred me on to apply for the Aquatic Resource Management MSc at King’s College, University of London.

I have a lot to thank Judy England for, who was my boss at the Environment Agency. My first role



from 2012 to 2016 ran a fish identification scheme for teams around the UK. I know it's not for everyone but I loved the commercial aspect of the job, although nothing beats putting on a drysuit for work!

The more events I attended, representing the company, the more I started to notice a gender divide. Fisheries science is still very much dominated by a certain white, middle-aged male demographic. I remember attending a meeting for a construction job which required a fish relocation and the project manager kept asking my male colleague who was working on habitat mitigation all the fishery questions. Once I answered a couple of his questions, he realised I knew what I was talking about and he proceeded to direct them at me.

After nearly 5 years, I left Thomson Ecology and went to establish a fisheries team for another ecological consultancy. I think by this time I was feeling like I needed a change in job but still

was in the Ecological Appraisal team undertaking electric fishing surveys. After contacting my local Thames region office, I spent my MSc dissertation analysing non-native invasive species (INNS) in the Greater London area and then went on to become employed. Perhaps because I had great support and the team had a great leader, I wasn't conscious about being female working in the fisheries sector.

I wanted to gain as much experience as possible, and after travelling the world for almost a year, I interned at the Zoological Society of London, working as part of the fisheries and freshwater team. At the time, I also had two other paid jobs to allow me to work in this role. Again, I had great support from my boss, Alison Debney. I adored this role and would lead fish and INNS surveys, secured funding for the seal tagging project and worked on some incredible projects such as Project Ocean.

After working for the charity sector and for a non-departmental public body, I felt it was time to work in the private sector. I worked my way up in Thomson Ecology and became their lead fish biologist. I've got a good business brain and saw an opportunity to offer new fisheries services through the consultancy which led to me establishing and running their fisheries and aquatic team. I became a member of CIEEM, gained my white-clawed crayfish licence and

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wanting to work in fisheries. When working on consultancy projects, especially construction jobs, it felt like fish and aquatic biology were a tick box exercise and I felt that I wanted to do more. For me, working in a career that brings about positive change is important. That's when I decided I wanted to side-step into seafood! I currently work for Sea Farms Ltd, a seafood processor based in the Midlands. The name might confuse some, because I work as their fisheries biologist on their wild supply chains, rather than on our farming ones. The company specialise in supplying shellfish into UK retail and business to business and we source seafood all over the world. We have various sourcing policies to adhere to around sustainability and ethics, although Sea Farms Ltd want to do the right thing and are strong in these areas. It was so refreshing to hear from a company that genuinely strives to make improvements, rather than because they 'had to' and that is what attracted me to the company.

No two days in my week are the same and I love the variety. For new seafood sources, it's my role to research and analyse fisheries data and determine whether we can progress based on sustainability and ethical credentials. I work on fishery improvement projects (FIPs) and one of my projects is on the Japanese flying squid fishery in China. We collaborate with other seafood companies around the world, fishermen, not-for-profit organisations, regulators and other stakeholders to gather data on the stock, improve traceability on the water and ensure long-term sustainability. Sourcing all over the world allows me to travel which is such a job perk, although often they're really long days and you need the patience of a saint with some suppliers and a great deal of diplomacy when it comes to navigating the political landscape of some countries.

A humbling part of my role is ensuring the ethical treatment of people throughout each supply

chain from the fishermen out risking their lives to workers in the factory processing the catch. It's a huge responsibility but we are part of some excellent industry initiatives and have our own safeguards in place. I sit on the Responsible Fishing Vessel Standard (RFVS) technical advisory board which aims to ensure the health and wellbeing of fishing crew and ensure the safety of the vessel they work upon.

If I look at the demographic within the seafood industry, there is a good representation between genders, although within fisheries science, it's still skewed towards men. Women are certainly lacking in the board room! The biggest worry however, is the lack of entry from school and University leavers into the industry. I certainly was never aware of opportunities within the seafood sector throughout my early career but having friends working in the food sector, everyone seemed to have great job satisfaction. Last year I joined the Young Seafood Leaders Network, an initiative run by Seafish, the UK Seafood authority and I sit on their steering group. I was thrilled that with the age bracket from 25 to 40, I was considered young! The network's aim is to nurture and retain talent within the industry, with members working across a variety of sectors (catching, processing, aquaculture, NGO). The steering group decided it wanted one of its tasks to make seafood an enticing career choice for the next generation.

From putting yourself out there, having a genuine passion for your work, you can be given opportunities to progress. As part of the YSLN, I was invited to sit on the Seafood Leaders Industry Group (SILG) which I am thrilled to be a part of. The SILG lead and support the work of the Seafood 2040 Strategic Framework (SF2040) for England.

Although working in seafood and predominately marine waters, I haven't lost my love for freshwater and estuarine habitats. I am the membership secretary and have been part of the Institute of Fisheries Management (IFM) London and South East Branch committee since 2014. I am also thrilled that at the end of last year, I was asked to become a trustee of the Living Rivers Foundation which I hope to use my fisheries knowledge for the Living Rivers Trust and can't wait to work on the various campaigns to monitor



and improve the Thames and Medway. I also still fish the River Lee with my Dad!

For anyone wanting a career in fisheries, I would say go for it! Be prepared to work hard and try to gather as much work experience as possible. Citizen science opportunities can really help with this. I spent years volunteering after work and on weekends and helping out on various aquatic jobs to gain the experience. It's such a competitive area, even more so for the conservation sector. Joining networks and charities can help build networks. I'm against positive discrimination, although more needs to be done to push women through the 'glass ceiling' at the boardroom level. I certainly want to be credited on my merit and credentials, rather than filling a gender requirement.



Travel writing, working for fisheries and conservation around the world



David Higgins
Travel Writing
mckeedi@hotmail.com

A flying fish powers towards me. It drops low and thrashes its caudal fin against the sea to get up and out of the water. It arcs a rapid flight and whacks both my thighs as it passes between my legs leaving two trails of scales on my shorts, before dropping against an unforgiving concrete. The incident is centimetres from a personal disaster. One of the hunting dolphins, that scared the fish into its final flight, passes within an arm's length as it skirts the concrete of the wharf walls. As I move away from the danger zone, one of the local Saints grabs the fish to convert it into fish cakes, a local delicacy on Saint Helena Island.

Earlier that evening a group of us had been on Egg Island ringing the seabirds, noddies, Madeiran storm petrels, sooty terns and

red-billed tropic birds. It had been a wonderful evening culminating in a pod of dolphins riding the bow as we returned. We could only make them out in the dark from the star-sparks of dolphin-shaped bioluminescence, like a living cartoon travelling ahead of us. Occasionally one would leap clear of the water turning off the streaks of shooting light before splashing back to create a wet firework display. However,



Professionals measure whale sharks with set length lasers but Morgan, Michael and myself use a knotted string, 12 metres in length. As I'm the slowest swimmer I'm tasked with taking the ID photos of their uniquely patterned flanks. Morgan and Michael swim alongside one of the pregnant females extending the string, which stops a few metres short of her length. Later we decide she's at least 14 or 15 metres, maybe more...it's taken all my will power not to exaggerate this estimate!

I now work for the Yorkshire Dales Rivers Trust and the Tees Rivers Trust exploring methods to reduce diffuse heavy metal pollution from the old mine workings of Swaledale and Teesdale. As soon as the project finishes I suspect I'll be heading off again. Money permitting.

one colleague was probably not counting his lucky stars due to an earlier incident. While disentangling a brown noddy from the mist nets under a beam of meagre red light, the bird chose that moment to regurgitate a half-digested fish. The relative positions of open-mouthed man and bird meant it could only have landed in his mouth. It was interesting to note the philosophical stance as he told the group, 'it tasted nowhere near as bad as you'd think.'

I left the UK in 2013 to work on St Helena Island for two years and then spent the next few years travelling and working abroad on a journey that took me to incredible places like the Falkland Islands, India, Africa, Sri Lanka, Ascension Island, Patagonia down to Ushuaia, Tasmania and Borneo. During that time I've been chased by hippos and elephants, had saw-scaled vipers strike at me in at least three near misses, sat with gorillas and watched shadows of condors pass over me creating Tolkin-esque darkness. I've sat with penguins and albatross and taken boat trips on ribbed inflatables down to the start of a raging Southern Ocean.

But the best of the best was swimming with whale sharks week after week after week during my second southern summer on St Helena Island. Large aggregations of mature adults, males and pregnant females, up to 45 of them on some occasions, would gather off the northern side of the island. As we snorkelled alongside the world's largest fish they would gulp down some of the world's smallest biology.







The Paul Coulson BLOG



Nice Weather for Ducks

Guess what? Yep, you're right, it's still raining!

In my last blog I wrote

"I am struggling to remember a day when we haven't had rain over the past couple of months here in East Yorkshire..... Obviously, the deluge at the start of November that fell over Yorkshire and Derbyshire was phenomenal and no amount of planning could have foreseen just how much water would have fallen in such a short period of time"

Well that statement was short lived as the amount of rain dropped by storms Ciara and Dennis topped that, and then some! The winds during storm Ciara were some of the strongest ever seen in East Yorkshire and they caused quite a bit of damage. It even led to the Humber Bridge been totally closed for only the second time in 39 years, and my football match was called off!

The difficulty comes in working out exactly how we manage what seems to be becoming an all too regular occurrence. Should we plant more trees, re-meander rivers, release more beavers, build more flood alleviation schemes, build houses on stilts or break out the dredgers? I imagine (hope) after this latest round of flooding there will be some long and complex discussions to be had on exactly how we plan for these events in the future.

Even though the weather has not been great we have still kept ourselves busy. The Ireland Branch held a very well attended one-day conference in January with over 120 delegates from across Ireland travelling to Dublin. The theme for the day was a reflection of the 50th Anniversary Conference, "Learning from the Past to Inform the Future". Talks ranged from angling participation to eDNA, and some very

interesting discussions were held both in and out of the conference. The Ireland Branch have been rejuvenated and will be holding some further events later this year, so keep an eye out for these.

Planning for our next specialist conference is well advanced and we have put together an exciting programme around the theme of Delivering Action for Salmon. We have talks relating to projects from across the length and breadth of the UK and Ireland, and on the third day we will also be holding field trips to look at salmon conservation projects across the Tyne catchment. The conference will be held in the unique 12th century, Grade 1 listed St Marys Heritage Centre on the banks of the Tyne with the dinner being held in the 13th century Blackfriars Banquet Hall. Suits of armour and swords must be left at reception on arrival.

The programme and registration details are on the website and we look forward to seeing some of you there.

The Southern Branch are also well advanced in their planning for the 51st Annual Conference, which will take place at the National Oceanography Centre in Southampton on October 6th – 8th. The theme for the conference is "Future Challenges" and a call for papers will be out soon, so get your thinking caps on if you would like to present some of your work.

Training Team on the Road

Over the winter we have once again held a series of fishery management workshops on behalf of the Environment Agency. This year we have travelled from Warrington to Kent, as well as Newcastle, Diss, Frome and Horseshoe Lake in Gloucester. This year has been our most popular series of workshops to date, with each event full to capacity (and some overcapacity), with waiting lists for some locations. The workshops cover a range of subjects from water quality to predation management, with the aim being to allow the clubs and fisheries in attendance to be better equipped to manage their waters.

During Storm Dennis we held the second IFM and EA Weed Management Workshop at Wicksteed Park near Kettering. Despite the storm, over 120 delegates from across the



Midlands were in attendance. Talks on the day covered a wide range of subjects from algae control to the use of technology to monitor vegetation. We finished the day with a case studies session which allowed the delegates to highlight their own weed problems, with the aim of getting some advice and guidance from the speakers and other delegates. This is a really useful session as the combined knowledge in the room can usually come up with some positive management suggestions.

The spring also sees us hold the field course weekends for our three distance learning courses (Certificate, Diploma and Award). These weekends are a great opportunity for people enrolled on the various courses to get some practical experience whilst meeting other students and tutors. We will be pulling nets, electric fishing, sampling bugs and visiting various fisheries over the two days. These courses are always good fun, even if the weather can be somewhat inclement at times!

A new website

I am pleased to say that the Institute will be rolling out a new website in the summer. We are aware that our current website is no longer fit for purpose and is in desperate need of an overhaul. To help facilitate the move to a new shiny website we will be working with a design company called Studio Republic based in Winchester. Studio Republic are an ethically and sustainably run company who work exclusively with ethically-minded businesses, charities, and non-profit organisations, so are perfect fit for the Institute. We have some ideas as to how we can improve the website but we would also welcome

suggestions from members on any features they would like to see included.

Winter Blues

I have only managed to get out fishing once since my last blog, this is due to a combination of work, family and terrible weather. The canal has been in flood for most of the winter months which has made it unfishable and led to the cancellation of a couple of rounds of the winter league. Mind you, the one round they did manage to fish I was pleased to have missed as it was a real struggle to say the least. Mike did fish and managed one bite and one fish in the five hours, this was better than quite a few others in the section whose floats never even moved!

The one match I did manage to fish was at Conifer Lake, which is a fishery owned by a friend of mine. Although I don't do much stillwater fishing these days in a winter it was nice just to get out and catch a few fish. I ended up fourth on the day, which was first out of the money unfortunately, but I had a nice day catching a few carp and good size silver fish for 40lb.

With the nights drawing out, and the weather hopefully turning, I'm hoping to get out a bit more, though I imagine the rivers will be out of sorts until the end of the season, unfortunately.

Tight lines. 

Paul Coulson - Director of Operations

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07960 939 836

IFM News

For further details on up and coming events: www.ifm.org.uk/events

Ireland Branch

The Ireland branch held a very successful one day conference on the 23rd January at the City North Hotel, Dublin titled 'Learning from the Past to Inform the Future'.

Over one hundred delegates attended from all parts of the Isle and some making the trip from over the water. They were treated to an interesting variety of presentations covering topics such as angling participation, regulation, cross border cooperation, tracking and monitoring to habitat restoration.



After the great success of hosting the 2017 annual conference in Belfast, the branch delivered in Dublin, hosting a fantastic day full of learning, discussion and networking.

The branch aims to run further events this year so please check the branch page of the website for details or contact the branch direct.

Welsh branch

The Welsh branch held their annual general meeting in the Welsh capital on the 30th January and as ever, provided attendees with three scintillating talks to accompany the branch duties.



The venue was the function room above the Tiny Rebel brewery bar which may have been instrumental in attracting a large turnout for the event. Delegates were treated to fine food, beer and presentations throughout the evening. There were talks from Pete Clabburn from Natural Resources Wales, Dave Clarke and Andy Don from the Environment Agency.

Southern Branch

The Southern Branch held a meeting early in February to discuss events for 2020 via a new approach, video conferencing! By enabling committee members to dial in for an hour from their desktops it allowed more people to participate. The meeting was successful, and the branch discussed hosting this year's annual conference in Southampton in October alongside future branch events. The next meeting is proposed to be less 'virtual' and details of that and other proposed events this year can be found on the branch page of the website.

Midlands & Lincolnshire

After the success of the 50th Conference, The Midlands and Lincolnshire Branch are already talking about planning their next event and AGM. Unfortunately, the proposed February meeting of

the branch had to be postponed last minute due to the vagaries of Storm Ciara causing a ‘white out’ in Nottingham, the venue location. The branch is looking at rescheduling the meeting very soon and updates will be on the website.

London & SE Branch.

On the 5th February, the branch held a meeting with a presentation from Molly Tucker from the Port of London Authority and Tanya Ferry from the Living River Foundation on the Plastic legacy in the tidal Thames.

IFM Led Winter Workshops

On 15th February, 120 anglers and fishery managers attended the second EA/IFM Weed Management Workshop held at Wicksteed Park

in Northamptonshire. The speakers included EA fishery staff, academics and consultants who covered subjects ranging from algae control, to the future of herbicides and the use of machinery to manage problematic macrophytes. Delegates were also invited to submit their own case studies for discussion which led to a very useful session to finish the day.

In addition, our hugely popular weekend Fishery Management Workshops have been taking place across the country covering Thames, Greater Manchester & Cheshire, Cumbria, Wessex and Kent, with two more taking place over the next month in Norfolk and the North East.

Event	Date and Location
IFM and EA Fishery Management Workshop	April 4 th -5 th Newcastle
IFM Yorkshire and North East Branch Artifishal Screening	April 28 th Cedar Court Hotel, Harrogate
IFM Award Field Course Weekend	April 25 th - 26 th
Electric Fishing Training Course	May 2 nd – 3 rd . Rempston, Nr Loughbrough
World Fish Migration Day	May 16 th . Various Locations
10 th Specialist Conference. Delivering Action for Salmon	May 12 th – 14 th St Marys Heritage Centre - Newcastle
51 st Annual Conference. Future Challenges	October 6 th – 8 th National Oceanography Centre, Southampton

Branch Contacts

If you want more information on IFM activities in your region, please contact the branch secretaries through the email addresses below:

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Other contacts

For help with careers in fisheries, contact Careers Officer Mike Lee, careers@ifm.org.uk

For advertising in FISH or on our website, contact Iain Turner, advertising@ifm.org.uk

Breaking News...



'Weird eyeless creature' - fact or fiction?

A weird eyeless creature with a dolphin head and tadpole tail has apparently washed up on a Pacific beach in Mexico. It is yet to be identified by fisheries scientists, could that be because it's a fake?

Largest subterranean fish species discovered

A cave in northeastern India, obly accessible in the dry season has been found to hold the largest known subterranean fish. They usually only grow up to a few inches, due to food availability; but this new species is around 18 inches! It was found in Um Ladaw Cave, over 100 metres below the surface, and dozens were seen swimming in the pool.

Soaring ocean temperatures have already cut the world's fish stocks by nearly 5%

Total catches from marine fisheries have fallen by 5% as sea temperatures have risen, although in the North Sea and East China Sea reductions of up to 35% have been recorded. This has impacted species such as cod, herring and shellfish. Dr Malin Pinsky, an ecologist at Rutgers University in New Jersey, who contributed to the research, has said to the Independent "We were stunned to find that fisheries around the world have already responded to ocean warming,"

A New Junior Member of Team IFM

On the 23rd January Scott and Libby West welcomed Ben Patrick West to their family. Weighing 7.4lb he is a new PB for Scott. Everyone at the Institute sends their best wishes to Scott and Libby and we can't wait to see Ben at a South West Branch event shortly.



A Date For Your Diary



51st Annual Conference



**National
Oceanography
Centre**

**National Oceanography Centre
Southampton
October 6th - 8th, 2020**

FISHTEK

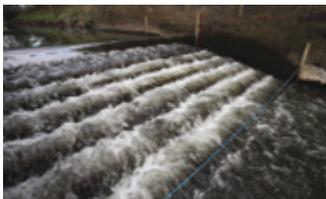
CONSULTING



- Fish and eel pass design, fabrication and installation, including full CAD capabilities
- Tidal gate fish passage mitigation, including design, fabrication and installation of bespoke dampers and spring retarders



- Fisheries assessments and surveys, including PHABSIM studies, electro-fishing, quantitative mapping, advanced quantitative experimental design, migration and barrier studies



- Fisheries monitoring and R&D, including pit-tagging, DIDSON/ARIS & camera monitoring, telemetry studies, field-based experiments and product development



- Fisheries impact assessments of hydropower installations and appropriate mitigation measures
- In-house civil construction design and project management

Unit 1 Shiners Bridge, Webbers Way, Dartington, Totnes, Devon, TQ9 6JY
www.fishtek.co.uk +44 (0) 1803 866680 info@fishtek-consulting.co.uk

Members and their **FISH**



Karen Twine. Almost without a barbel!

Do you have a picture of yourself with a fish?

If so **FISH** would like to hear from you.

Send your images to: fish@ifm.org.uk