



**Proceedings of the 2014 Vitacress Conservation Trust's
Chalk Stream Headwaters Forum
Sparsholt College - 7th November 2014**

Guest Speakers:

Dr. Pete Shaw

University of Southampton

Simon Tonkin

Conservation Grade

Peter Marren

British Wildlife's "Twitcher in the Swamp" / Action for the River Kennet

Graham Roberts

H&IOWWT

Ben Rushbrook

H&IOWWT

Facilitated by:

Tim Nevard

VCT Trustee

With thanks to:

Professor Gail Taylor

VCT Chair

Carrie Hutchings

VCT Coordinator

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Morning Session

Welcome

Professor Gail Taylor (Vitacress Conservation Trust Chair)

Professor Taylor opened proceedings by welcoming the audience and guest speakers to the 8th annual Chalk Stream Headwaters Forum. Professor Taylor explained the importance of the Forum to the current and future preservation of our Hampshire chalk streams, and touched briefly upon the history of the Forum.

Professor Taylor introduced Tim Nevard, (Vitacress Conservation Trust Trustee)

Introduction

Tim Nevard thanked the members of the audience and speakers for their attendance before explaining a few brief changes to the format as a result of feedback from the previous year. Mr Nevard noted the importance of the Forum, and encouraged all members of the audience to participate both during the Q&A sections and the coffee/lunch intervals.

Tim Nevard introduced Dr Pete Shaw (University of Southampton)

Presentations 1 & 2:

'Update on the Bourne Rivulet Initiative and Phosphorus Research' (Dr Pete Shaw)

Dr Pete Shaw thanked Tim Nevard for his introduction, before giving an overview of his presentation. Dr Shaw proceeded to explain the background of the Bourne Rivulet Initiative (BRI), and proposed a rhetorical question to the audience – “Does the BRI still have a role to play?” Dr Shaw told the audience that in his view the BRI still has an important role to play, primarily as an exemplar as a local focus group, addressing local headwater issues and its strong connections with other established and emerging organisations mean it is extremely valuable.

Dr Shaw then introduced Arthur Leung's Phosphorus Research Project and gave a general overview of the work that has been carried out to date. Dr Shaw explained the two forms of phosphorus in question; reactive and un-reactive phosphorus – these fall into 3 sub-forms: soluble, colloidal and particulate. Dr Shaw explained the sub forms are determined by particle size. Dr Shaw listed the sites chosen on the Itchen for sampling and presented a map illustrating the sites.

Dr Shaw proceeded to show the results of testing for each site; showing high fluctuations between the different sites, and he suggested reasons for these anomalies and the possible implications for the river. Dr Shaw discussed the results found on the main Itchen at the Itchen Abbas and Easton sites, and suggested possible reasons for the variance in phosphorus levels; highlighting the unpredictability of the results and the need for further testing to take place.

Tim Nevard thanked Dr Pete Shaw, acknowledging his continued efforts and dedication. Mr Nevard proceeded to introduce the second speaker: Graham Roberts (Hampshire and Isle of Wight Wildlife Trust).

‘Update on the Upper Itchen Initiative’ (Graham Roberts)

Mr Roberts thanked Tim Nevard for his introduction, and proceeded to acknowledge the impressive turnout at the Forum. Mr Roberts then gave a brief overview of his presentation, and began by explaining the group’s composition and commending the group members on their continued hard work. Mr Roberts informed the audience that the River Itchen is currently failing its ecological status, and highlighted the importance of addressing this issue immediately. Images of the Itchen’s poor condition were displayed.

Mr Roberts continued his presentation by discussing the Environment Agency’s Initiatives, such as: the River Basin and Flood Risk Management Plan, and the Watercress Discharge and Environmental Management System Permits. He acknowledged the benefits of these new initiatives and explained the newly proposed changes to fish farm permits and abstraction licenses. Mr Roberts then presented a map of the Itchen, detailing the locations of all fish farms and watercress farms located on the river, before touching on the Test and Itchen Restoration Projects – detailing individual projects. One such project was the improvements made to the Houston Backbridge – Mr Roberts commended the hard work put into the project and showed pictures of the work that had been carried out.

Mr Roberts then explained the new initiatives set out by Natural England, such as: the protection of designated sites, the River Basin Plans, the Test and Itchen Diffuse Water Pollution Plan, and the Sediment Fingerprinting Project. Following this, Mr Roberts touched upon Invertebrate Fingerprinting, Environmental Stresses to Rivers, Wildlife Trust Initiatives and the Itchen Grazing Project.

During the final part of his presentation, Mr Roberts acknowledged the successful prevention of the flooding of Winchester by the work carried out on Winnall Moors floodplain, and highlighted the need for further wetland investment. Finally, Mr Roberts paid respects to Nigel Holmes, who recently passed away; Mr Roberts commended Mr Holmes’s dedication to his work, and acknowledged Mr Holmes’s many projects.

Questions from the floor

Peter Evans, ex- local resident, long-standing involvement with the Bourne Rivulet.

Mr Evans began by acknowledging the proposed invertebrate fingerprinting project, before explaining the issue of spoil heaps on watercress farms. He said that £50% of nutrients from watercress crops end up on spoil heaps and the total phosphorus in leachate from spoil heaps was 6 times higher than that of a normal site.” Mr Evans asked why “the Environment Agency does not consider the proximity to headwaters of these spoil heaps an issue?”

Tim Sykes, Environment Agency

Mr Sykes indicated that the EA have contacted all watercress farms and plan to visit these farms to discuss this issue. “The health of our rivers is top priority and we will address this issue appropriately.”

John Baker, Tichborne Fishing

“Do you have any ideas where the phosphorus on the Tichborne is coming from? Do you plan to do further sampling?”

Dr Pete Shaw (Speaker)

“I suspect field drains, rainfall, uncurbed roads and large areas of arable land in comparison to the size of the stream all contribute. At present we have further meetings planned to discuss the continuation and possible expansion of the sampling.”

Paul Knight, Salmon and Trout Association

“We have spent £15,000 on samplers which covered one year. Not until September 2017 will the EA come out with a report as to whether compliance has been met. Therefore we intend to continue our independent sampling work.”

John Slader, Salmon and Trout Association

“What about the chlorine discharged to the Upper Itchen?” (Directed at Graham Roberts)

Graham Roberts (Speaker)

“We are fully aware of a processor located on the Upper Itchen which is washing its crops in chlorine for a specific retailer.”

John Slader, Salmon and Trout Association

“Isn’t this illegal, Graham?”

Graham Roberts (Speaker)

“This is currently a very grey area in terms of legislation; more legislation is being drawn up as we speak to efficiently tackle this problem.”

Tim Nevard (VCT Trustee)

“Graham, can you tell us who this is?”

Graham Roberts (Speaker)

“I’m afraid I am not in a position to do so at this moment in time.”

Peter Evans, local resident, long-standing involvement with forum

“We had a similar issue with high chlorine levels in our local watercourse; this was stopped and we saw a dramatic improvement in water quality. The Environment Agency’s testing levels of detection are too high; their field monitoring parameters are too high to recognise and tackle the issue.”

Tom Davis, Test and Itchen Association

“Pete, what alternatives are there to explain the Itchen Abbas phosphorus spike?”

Dr Pete Shaw (Speaker)

“There is a doubling of flow at this site, and a doubling of phosphate levels. Land use plays a significant part in phosphorus levels, as do watercress farms. Ideally you need to measure every water quality parameter, everywhere. Unfortunately this is not possible. However, the introduction of more sampling sites has been suggested.”

Martin Burton, Independent Consultant

“The Itchen status is bad. Will new housing plans along the Itchen Catchment be possible? Is Hampshire at maximum capacity?”

Graham Roberts (Speaker)

“This is an interesting issue; ultimately it is down to the Council to deem whether or not it is possible, however our contributions and campaigns in regards to this subject should help to influence their decision. These housing plans need to be considered very carefully.”

Martin Burton, Independent Consultant

“My concern is that the river basin projects are down to the Council and the water companies, not the Environment Agency.”

Tim Sykes, Environment Agency

“We are at maximum capacity in terms of sewage systems; further housing would require the construction of new sewage systems – this is simply not feasible financially, especially when coupled with the capped abstraction licenses, so new housing will need to be constructed away from the Itchen Catchment.”

Andy Thomas, Wild Trout Trust

“Are there are messages for river keepers with regards to reducing phosphorus levels?”

Dr Pete Shaw (Speaker)

“Phosphorus in the silt and sediment is a factor which has to be considered; the use of water meadows in order to remove silt from river systems should be investigated wherever possible, in order to reduce the phosphorus levels.”

Graham Roberts (Speaker)

“These river systems need a degree of silt for fish and fly life. It is an interesting issue and a compromise which satisfies both factors should be the ultimate target. In terms of trees, the ‘Keeping Waters Cool’ project and the planting of trees look like a conflict, but it is all about how it is done.”

Andy Thomas, Wild Trout Trust

“What are your views on the felling of trees as a river management tactic?”

Charlotte Rose, Natural England

“Complete clearance of trees should be avoided – the habitats they provide for riverine species, as well as ecological impacts such as shading are important to the health of a river. A balance should be achieved in order to provide maximum ecological benefits.”

Close for Morning Coffee...

Presentation 3:

Tim Nevard introduced Simon Tonkin (Conservation Grade/RSPB)

‘No Turtle Doves, Lots of French Hens’ – chalk streams and their key roles for migrant birds (Simon Tonkin)

Mr Tonkin began his presentation by thanking Tim and the audience, before detailing his personal background and involvement with a variety of migrant bird species with the RSPB. Mr Tonkin then informed the audience of the declining state of the Turtle Doves and asked the audience to raise their hands if they have seen a turtle dove this year. Approximately 10-15 people raised their hands.

Mr Tonkin presented a world map highlighting migratory routes taken by the Turtle Dove and the vital role of chalk stream valleys. He explained that many birds are not returning from migration and those that do return are failing to rear enough young, broods declining from three to four in the 1960s to one today - rarely producing more than two chicks. This is due to a lack of the Turtle Dove’s diet; the bird only feeds on the seeds of a small number of arable weeds such as Fumitory and a lack of these seeds, coupled with not enough nesting habitat, is causing the decline in population.

Mr Tonkin stated that the 3 main issues facing Turtle Doves are agricultural intensification (lots of French hens), hunting and deforestation. The need for immediate action in chalk stream valleys to preserve migratory bird species was made clear by Mr Tonkin, who compared the decline in the Turtle Dove to the extinction of the Passenger Pigeon in early 20th Century North America. Mr Tonkin finished his presentation by thanking the audience and VCT for the opportunity to present the case for the Turtle Dove!

Questions from the floor

Paul Knight, Salmon & Trout Association

“Fewer birds, especially swallows and swifts, are being spotted along our chalk stream; is this because of declining bird populations or because the aquatic invertebrates upon which they feed are declining?”

Simon Tonkin (Speaker)

“It is a function of both of these factors; fewer and fewer migratory birds are returning to the UK, and those that do are not finding enough suitable habitats and food. The numbers of invertebrates in our chalk streams are depleting and this is having an adverse effect on migratory bird species.”

Tim Nevard, VCT Trustee

“Do you think that the Turtle Dove could follow the Passenger Pigeon into extinction?”

Simon Tonkin (Speaker)

“The short answer is yes, unless we do something. From one of our commonest migratory birds, the Turtle Dove is in massive decline – 96% since the 1960s – and if we want to continue to hear its distinctive cooing in our gardens and villages, we need to act decisively to improve the sustainability of our farming practices.”

Rose O’Neill, WWF

“Can you tell us more about Conservation Grade?”

Simon Tonkin (Speaker)

“Conservation Grade’s ‘Fair to Nature’ principles require that farmers actively manage at least 10% of their land for wildlife – including buffering of watercourses. The habitats they create and maintain not only provide for wildlife but also aquatic features. We want farmers to take an integrated management approach, which will save them money and create a more resilient future for agriculture.”

Martin Burton, Independent Consultant

“It seems to me, that we need to educate future generations on these issues if we are to ever find solutions. Can anyone here from Sparsholt tell me if the students are being taught about how to preserve the future health of our rivers?”

Megan Cameron, Former Sparsholt College student

“I am a former student of the college and I can confirm that ecology and conservation are preached to the students by their lecturers – the future generations are being well prepared for the industry and hopefully the state of our rivers in years to come will reflect that.”

Presentation 4

Tim Nevard introduced Ben Rushbrook (Hampshire and Isle of Wight Wildlife Trust)

‘Return of the Native’ – Crayfish conservation in chalk streams (Ben Rushbrook)

Mr Rushbrook thanked Tim for his introduction and began his presentation by giving his background in conservation and the general outline of his PowerPoint. Mr Rushbrook introduced the audience to the White-clawed Crayfish (WCC), giving basic information about its anatomy, distribution and feeding habits.

The audience was then shown how to correctly identify a WCC and how to distinguish it from other crayfish species. Mr Rushbrook explained the WCC's ideal water quality conditions, and used illustrations to show the typical habitat in which they are found. The audience was then informed of how the WCC populations have declined rapidly; due largely to the invasive Signal Crayfish.

The Signal Crayfish is a carrier of the 'Crayfish Plague' which has a 100% mortality rate on WCC; meaning it has very quickly destroyed entire localised populations.

The WCC populations have also declined due to high amounts of water abstraction, loss/destruction of habitat and water pollution; all resulting in there only being a handful of very localised populations of the species remaining in the Itchen headwaters. Mr Rushbrook emphasised the importance of river keepers and anglers practicing good biosecurity on rivers in order to prevent the spread of the Crayfish Plague.

Mr Rushbrook thanked all of the local river keepers and land owners for assisting his team in their conservation work, and explained how awareness of this issue is slowly being raised through posters, leaflets, conference talks and the project's website. Mr Rushbrook then commented on their discovery of a small sub-set of WCC which display anomalous diurnal behaviour in a stretch of the Candover Headwater – the crayfish are foraging and feeding during the day, which is not a recognised behavioural trait of the normally nocturnal species.

Mr Rushbrook finished his presentation by explaining the partnership breeding program being undertaken with the Bristol Zoological Society; juvenile WCC are being hatched in the zoo facilities and are being re-introduced into the Itchen in an attempt to create more localised populations of the species and hopefully an ark site. Mr Rushbrook acknowledged the Vitacress Conservation Trust as a major sponsor of this initiative. He finished by re-emphasising the importance of biosecurity, and asked any members of the audience who know of any potential areas for WCC re-introduction, or have any records of WCC populations, to see him during the lunch break.

Questions from the floor

Gail Taylor, University of Southampton/VCT Trustee

"Who regulates the introduction of non-native species? Because this is clearly causing a huge issue on the Itchen"

Ben Rushbrook (Speaker)

"DEFRA regulate this but I cannot knock them for the work they are doing. The fact of the matter is that the Signal Crayfish, and many other non-native species, were introduced into our river systems before the current more stringent regulations were in place. The damage is already done and it is about managing the problem as best we can."

Tom Davis, Test and Itchen Association

“Is the supplemented stocking of trout into our river systems contributing to the spread of the Crayfish Plague?”

Ben Rushbrook (Speaker)

“Fish are recognised vectors of the Crayfish Plague, but they are not considered to be major contributors to the problem. The spread of Signal Crayfish through fish consumption is a realistic problem, but not one that can be realistically tackled – the eradication of Signal Crayfish populations through river management needs to be enforced; it is illegal to return a Signal Crayfish to a river once it has been removed.”

Heb Lehman, Environment Agency

“With regard to fish stocking in this area, there is a protocol which states that the supplier has a survey completed of their site to confirm it is free of signal crayfish. So I would like to think that a lot of the issues relating to the spread of Crayfish Plague have been eliminated by this.”

Andy Thomas, Wild Trout Trust

“What strategies are in place for re-spreading WCC populations back across the Itchen Headwaters?”

Ben Rushbrook (Speaker)

“Our rearing project with the Bristol Zoological Society is our main project regarding re-introducing WCC into our Itchen Headwaters – through introducing juveniles and through re-locating egg bearing females. Moving egg bearing females can be a risky process as it causes stress, but the risk is worthwhile in trying to spread out the species. For example, moving females over physical structures on the river which would normally limit their distribution will be very beneficial to the species.”

Peter Evans, ex-Local resident, long-standing involvement

“Is there the possibility of developing Crayfish Plague immunity?”

Ben Rushbrook (Speaker)

“It has been attempted, but with no documented success to date. Research into this possibility will continue because, of course, this is the best possible outcome.”

Close for Lunch...

Presentation 5

Tim Nevard introduced Peter Marren (British Wildlife's 'Twitcher in the Swamp' / Action for the River Kennet).

'Suds and Sewers' – Experiences for the Kennet (Peter Marren)

Mr Marren thanked Tim Nevard, before introducing the audience to the village of Aldbourne. In a comical and light-hearted manner, Mr Marren told of how, every year, the sewers in the village have become over-run with rainwater; causing them to burst onto the streets and cover the village in sewer waste. The local stream, the Bourne, which feeds into the River Kennet, became heavily polluted with sewage and consequently had an adverse effect on the health of the Kennet.

Thames Water has been fined heavily over multiple years for the incidents as it was their manholes bursting that caused the flooding, but the problem keeps on recurring. This year Thames Water are planning to put in place a "Drainage Plan" to tackle the problem; this is expected to include improved manhole covers, cleaning sections of the sewers and in the long term a portable sewage treatment plant. In April of this year, local schools released Brown Trout into the Bourne; it remains to be seen how successful the stocking was.

The River Kennet downstream of the Bourne is regarded by the Environment Agency as in "good" condition; however many river keepers and anglers strongly disagree with this. Declining fish stocks, invertebrate populations and underwater vegetation mean the Kennet is now a slow, deep, coloured river – a shadow of its former self. Mr Marren suggested part of the reason for the lack of action is due to the interpretation of "healthy" water quality parameters – the Environment Agency states that 120 micrograms/litre of phosphorus is the Kennet's target, whereas Natural England states it should be 60 micrograms/litre.

Mr Marren closed his talk by stating that abstraction from the Kennet is also an issue; over 50% of the water flowing through the Kennet is abstracted in order to supply Swindon. Mr Marren thanked the audience for their time.

Questions from the floor

Kerry Sims, Environment Agency

"We have just completed a consultation with Natural England regarding water quality targets for rivers; this should result in less confusion and differences in targets."

Martin Burton, Independent Consultant

"What are the indicators for healthy rivers?"

Kerry Sims, Environment Agency

“We measure diatoms, fish communities, habitats and all water quality parameters; this allows us to get an idea of the overall health of a river, as opposed to just knowing individual water quality factors – from which we cannot draw definite conclusions on a river’s health.”

Tim Nevard, VCT Trustee

“What issues are faced by the Environment Agency regarding this matter?”

Kerry Sims, Environment Agency

“We have limited resources and manpower; we cannot be everywhere at once and I don’t think people realise this sometimes. We do our best with what we have.”

Steve Rothwell, Vitacress

“The EA are good at setting standards, but poor at enforcing them; until they are more aggressive with their enforcement and prosecution powers the situation will not change.”

Peter Marren (Speaker)

“I think it is easier to give people hope that changes will be made, but when that hope is taken from us due to inaction, we naturally lose faith in the authorities.”

Tim Sykes, Environment Agency

“My experience is that rivers are treated on a priority basis; for example the sewage works on the River Test have been sorted out with brilliant results. We have to choose where to use our limited resources based on the ecological and economic issues associated with the problem in hand.”

Denise Ashton, Wild Trout Trust

“Do you think that if we paid more taxes, or if the EA got a larger budget allocation, we would see more results on our rivers?”

Tim Sykes, Environment Agency

“Naturally if we had more money and staff at our disposal we would be able to do more, but we have to remember that we in this room do not represent the whole communities’ views – we are biased towards the preservation of our rivers. Others may not want to pay more taxes in order to help rivers they do not care for.”

Paul Knight, Salmon and Trout Association

“We operate on a ‘yes but’ policy – we know that the Environment Agency are working at maximum capacity and they are doing all they can. What we need to do is put more political pressure on the water companies to clean up their mess.”

Peter Evans, ex- local resident, long-standing involvement

“In the last decade or so, we have seen very similar problems at St Marybourne; this too is caused by poorly designed sewage systems – it should be down to Southern Water to sort it out, not the EA.”

Peter Marren (Speaker)

“One final point I would like to make is that we need to also look at taking more action against the insecticide pollution which is happening on the River Kennet – this is adding to the already large problem of poor water quality in the river.”

Final Thoughts

Peter Evans, local resident, long-standing involvement

“How do watercress companies deal with the issue of discharging phosphorus into our rivers?”

Steve Rothwell, Vitacress

“I can shed some light on this; as of 2016 there will be annualised average phosphorus discharge limits imposed on all watercress farms – Vitacress were the first to agree to these limits. The Vitacress farms will be limited to under 80 parts per billion at any one time, looked at as an annualised average. But any one sample can be up to 3 times the uptake value, so over 200 will be the limit for one sample. High phosphorus discharge spikes are only occasional; these are when we clean our watercress beds or apply fertilisers. It is unfortunate to regulate a discharge characterised by occasional spikes by a single concentration limit devoid of any measure of duration or volume. A load based consent would have been better. But we are where we are and will comply. Vitacress will do this by recirculating water vs running it to the streams.”

Charles Barter, Chairman NFU Watercress Association and Watercress Company

“These limits apply to all watercress companies, and **must** be met by 2016. Re-Circulation units, which we use abroad, are being considered in order to re-use the water.”

Rose O’Neill, WWF

“Will re-circulation units give any long term benefits over the current methods used?”

Steve Rothwell, Vitacress

“Potentially, through achieving better, stable water temperatures which will increase productivity, but realistically they would be in place purely to meet the phosphate limits, as opposed to providing any benefits to production levels.”

Michael Malyon, Riparian Land Owner

“Graham, from your time on the Itchen, what are your views on the current issue of otters?”

Graham Roberts (Speaker)

“There is no denying we have a population of otters on our watercourses. This is not an issue that can be eradicated, only managed as effectively as possible. River systems which are well balanced and managed should be able to cope with otters with no significant adverse effects – if the fish have suitable habitats and refuge areas, river keepers and otters should be able to exist in peace.”

Tim Nevard, VCT Trustee

“Who could give us an insight into invertebrate fingerprinting, as it sounds like an extremely worthwhile technique?”

Zam Baring, Wessex Chalk Streams & Rivers Trust

“We have been working closely with the Environment Agency on this subject. We have just received some funding from Esme Fairburn to go back over 30-35 years of EA catchment invertebrate samples. If we take all of this data over the last 35 years we can build a picture of the health of the Itchen and Avon in terms of flow, sedimentation, organic population and chemicals. Fingerprinting is looking at invertebrate species within the chalk stream and collating that information – and comparing it to that collated at other locations. This should provide an index which can be used to determine the health of a river based on which invertebrates are present. This information is available online at www.wcsrt.org.uk and is a very useful tool.”

Angus Menzies, Wiltshire Wildlife Trust

“We want to give volunteer monitors on our rivers access to this data in order to ease the identification of invertebrates during surveys.”

Peter Evans, ex-local resident, long-standing involvement

“Nick Everall from Aqua Science is heavily involved in invert fingerprinting and is very knowledgeable on the subject.”

Nick Sotherton

“Can we have Nick speak next year?”

Tim Sykes, Environment Agency

“The River Meon is facing very similar challenges to the Itchen; there is a group concerned about the Meon which has recently been formed. Would you allow them to attend the forum next year?”

Tim Nevard (VCT Trustee)

“Yes absolutely. The Meon flows through Hampshire and I’m sure some people in the audience today have links to this river already. If you could put us in touch with the group we can arrange for their attendance next year.”

Martin Burton, Independent Consultant

“In regard to the Meon, I believe one of the main issues is the proposed water abstraction in order to supply new housing – perhaps this should also be flagged up in the next Forum?”

John Baker, Tichborne

“We are all concerned about the declining invertebrate populations in our rivers; can anyone shed some more light on what is causing this problem?”

Paul Knight, Salmon and Trout Association

“We all know about the phosphorus issue, but I also think that septic tanks and industrial influences are also major hindrances to the health of our rivers – we need to collect credible evidence on this so that we can be taken seriously and take serious action against the perpetrators.”

Dr Pete Shaw (Speaker)

“While I feel that phosphorus is definitely having a drastically negative impact on our rivers and invertebrates, we also have many other negative factors contributing to the issue. For example we recorded very low phosphorus levels at the Tichborne site, so why aren’t the invertebrates there anymore? We need more time and more funding to allow us to carry out more investigations and research into the matter. The climate, habitats, other water quality parameters and pollution all play their part in the decline of invert numbers.”

Closing Remarks

Tim Nevard (VCT Trustee)

“Unfortunately we have run out of time, so will have to end here. Over the years, the Forum has provided a crucial stepping stone in identifying actions that can be taken at the local level towards preserving and improving our river systems. However, in looking around the room, we critically need more young people to become activists and ambassadors for chalk streams. When you leave today I therefore strongly encourage all of you to continue the dialogue and debate and try and engage the next generation. It is this dialogue that will help to spread knowledge and awareness and lead to action. Thank you all very much to everyone for your attendance and we hope to see you next year.”