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Year one achievements

We've had a fantastic year, achieving all sorts of positive things for the Arun and Rother landscape. There are currently 60 individual projects (or programmes) that we are involved in; we have recruited 369 volunteers who have collectively contributed 575 days of their time to the project. Through a number of courses, walks and events we have met hundreds of people to tell them about our (and your!) work to make the ARC area a great place for people and wildlife. Read on about some of our projects in this newsletter and for a fuller list of our achievements from the first year.

The launch of ARC Explorer

By the time you read this, the ARC project will have gone digital following the launch of our new wildlife app, ARC Explorer, over the weekend of 17/18 January. Designed for tablets, mobile phones and computers, ARC Explorer allows users to record what they encounter, with their findings directly contributing to conservation efforts in the region.

ARC Explorer includes a feature known as *Upkeep*. This allows users to send pictures of what they see to the community feed, where others can view and comment on them, driving community participation in the education, management and maintenance of the area. This could include anything seen in the project area from a flooding incident to an unidentifiable species.

This is the first phase of the app. We'll be adding new content (for example new trails and additional species) over the coming months, making it an increasingly comprehensive resource for users. The Android version of the app is now available for download, and the iOS version will be available imminently. To receive information about the app just add your email address to the website (link below).

We will be promoting the app over the coming months, encouraging people to get out and about into nature to help us record and identify wildlife and let us know about issues they encounter when out and about. Log onto the new mobile website and get downloading – and let us know what you think!

<http://arcexplorer.org.uk/>

Clear as crystal: restoring Botany Bay's chalk stream

The ARC project team were lucky to be approached by the owners of land, known as Botany Bay in Lavington Park near Duncton. It soon became clear that this site hosts one of the best chalk streams in the whole of Sussex.

These rare chalk watercourses are ecologically unique; beautiful examples of crystal clear water flowing straight from the base of the South Downs. This one needed a bit of help to bring it back to its best and the owners have already begun restoring the stream, removing the old concrete and metalwork left there from a derelict 1970's fishery.



Collapsed old fish farm dam



After a number of surveys and a great deal of hard labour involving diggers and skips, much of it by volunteers, the Botany Bay chalk stream is finally starting to flow as naturally as it once did.

Every time we visit the site we discover something else rare or breathtaking, such as these tufa deposits - shells and twigs which have been 'fossilized' by the chalk water.



Tufa deposits



We look forward to continued collaboration with the Botany Bay project.

As well as a unique place for wildlife, the site also has huge potential as an educational resource. ARC is working with the Botany Bay project team to get this site ready for year three of the ARC river field trips for local schools.

The ARC project has been able to support this project through its [community grants](#) funding programme.

Dragons and Damsels

The Arun & Rother river valleys are home to many dragonflies and damselflies, including some of the rarest dragonflies in the UK.

The Arun is also one of only seven rivers in the UK where you can find the Common Club-tail dragonfly, and one of only two outside Wales.

One of our key projects this year was to train local volunteers to identify dragonflies. Some fantastic volunteers came forward and we'd like to thank them for sending in so many dragonfly records.

Our dragonfly surveyor, Dave Sadler, made an amazing contribution too. He comprehensively surveyed over 60km of river and wetlands for dragonflies in the ARC project area. Dave managed to record some unique and rare behaviour of the Common Club-tail dragonfly including mating and egg carrying, as well as some very interesting information about Arun & Rother dragonflies.



Mating Common Club-tails. Image: Dave Sadler.

Woodlands for water

Woodland plays many important roles in our landscape, from helping us to regulate rainfall and our climate, to providing us with fuel, building materials and beautiful breathing and recreation spaces.

In November we invited landowners to come and meet the experts and to hear about exciting opportunities for woodland creation and management. Information was provided about woodland and farming grants, keeping rivers cool for fish, wood fuel, natural flood management using trees and much more. Over 40 people attended the networking event. The presentations from the day are now available on the Arun & Western Streams Catchment website. <http://arunwesternstreams.org.uk/arc/woodlandsforwater>.

A big thank you to the South Downs National Park Authority, Forestry Commission, West Weald Landscape Project, Arun & Rother Rivers Trust and the Woodland Trust for their help with the event.



If you would like to create wet woodland then please contact fransouthgate@sussexwt.org.uk.



Female Common Club-tailed dragonfly carrying eggs. Image: Dave Sadler.

All the data from our volunteers and from Dave will help us target wetland restoration and advice across the catchment. Some of the results:

- 27 species (11 damselfly and 16 dragonfly)
- Evidence of breeding observed for 16 species (one more than noted in the SSSI citation).
- Notable species including: Hairy Dragonfly, Common Club-tail, Scarce Chaser and Brilliant Emerald. The first three show strong breeding populations.
- 443 unique dragonfly and damselfly records
- Over 6,800 individual records
- Over 670 records of copulating pairs
- 230 records of pairs or lone females ovipositing (depositing eggs)
- 992 males, 946 females, and 119 teneral (newly emerged)

The full report can be downloaded from: <http://arunwesternstreams.org.uk/resources>

How natural are our riverside lowlands?



Floodplain meadows and wetlands have suffered from severe and rapid declines over the last century.

There are now only a few pockets left that have not been drained, developed or agriculturally altered. We found some fantastic new pockets of wetland including a stand

Diffuse water pollution workshop for students

Sometimes run-off from farms can cause problems for our rivers. On 24 November a group of 35 students (A level & Foundation degree) from Sparsholt College attended a whole day workshop to find out about the problem and learn how to fix it.

The day began with a series of presentations introducing the issues and the magnitude of the problem in the Arun & Rother catchment. Talks were also given about the advice/funding available from Natural England's Catchment Sensitive Farming scheme and the synergies between water quality and wildlife improvements in the new countryside stewardship scheme. Tim Lock (a local farmer and trustee of the Arun and Rother Rivers Trust) gave an excellent presentation on the types of nitrate related mitigation measures that have been implemented on his farm over the years.

The course was delivered by Vee Moore and colleagues from the Arun and Rother Rivers Trust with input from the RSPB and Natural England.

Vee delivered another diffuse water pollution workshop at the Brinsbury Campus of Chichester College on 15 Jan.

of over 1000 Southern Marsh Orchids and a number of nationally rare species.

Since 2013, we have been carrying out detailed surveys of Sussex river floodplains and we now have information on over 2000 hectares of grassland habitat across Sussex. This has only been possible because many landowners have given us access for the survey and we'd like to thank them for their support.

Thanks to the survey, we have been tracking the location of invasive species, and mapping some of our rarest wetland habitats such as fen and flowering floodplain meadow. The results of the survey have also helped landowners to access stewardship grants and advice.

If you are interested in restoring flowering wet meadows then please contact Fran Southgate:
fransouthgate@sussexwst.org.uk / 01273 497555.



In the afternoon, we held an interactive exercise involving water quality testing of two silt traps adjacent to a tenanted arable field on the Leconfield Estate. Students worked in groups of 5 - 6 to test ditch, river and silt trap water quality for a number of parameters (e.g. turbidity and nitrates).



Help from ARC may be just a phone call (or e-mail) away...

ARC exists to promote a rich and thriving river system where wildlife flourishes and people value the natural and cultural heritage of the area. We might be able to help you help us look after your landscape. Read on to find out how.

Fen restoration



Rotary ditcher

Do you own or manage low lying land in the Arun & Rother river valley?

Would you like to create habitat for wading birds, dragonflies and flowering wetland plants?

If so, the Arun & Western Streams Catchment Partnership has funding to bring in a 'rotary ditcher' to help create wader scrapes and other wetland features in the floodplain. Despite its appearance, this machine is 'low impact' and a fantastic tool for micro-profiling soil. Its special tyres prevent soil compaction and the soil spreader attachment means there is no need to find space to store spoil from the digging work.

If you would like to find out more about the machine or are interested in using it, then please contact Vee Moore: projectdevelopmentofficer@arrt.org.uk / 07884 868 151.

Pond training

In 2015, we will be joining forces with the Freshwater Habitats Trust to deliver a range of training days on pond surveying and management, an extension of their PondNet programme. The aim is to collect information about trends in pond quality and pond species, including uncommon plants and animals.

These pond courses are free to attend. For more information about PondNet visit : www.freshwaterhabitats.org.uk/projects/pondnet/.

For more information about the courses being offered in the ARC project area, please contact Debbie.coggles@rspb.org.uk.

ARC Community fund

Our grants are already helping projects like the Botany Bay Project mentioned above. If you are involved with a local community group in the Arun & Rother catchment, and you need help with funding to manage your Local Wildlife Site, pond or school grounds then we would love to hear from you.

We have grants of up to £1,000 to give away to communities and landowners who are managing sites for wildlife. So far we have supported a range of projects from pond creation and restoration, site management plans, hedgerows, training and equipment, habitat creation and fencing for a school wildlife area. The application form is simple, and we have a short turn around for grant applications.

If you would like more information then please contact Fran Southgate: fransouthgate@sussexwt.org.uk / 01273 497 555.



Year one achievements in full

Habitat and species work:

Community engagement:

- * Our oral history project recruited 10 volunteers who have produced 10 interviews that will be archived at the West Sussex County Council record office
- * 192 people attended our Ecosystem services conference in June at Brighton University with Caroline Lucas MP delivering the keynote address
- * As of December, 369 volunteers have contributed 575 days of their time to the project (20% of our volunteering target).



New boardwalk for Rother walk at Midhurst, funded through the ARC Community Fund.



Year One oral history volunteers

Education and young people engagement:

- * Two classes of children participated in our field teacher led river days at the Coultershaw Heritage Site
- * 60 children joined us to learn about otters and water voles at Chesworth Farm nature reserve
- * 50 young people joined us for angling, kayaking, bushcraft taster sessions
- * 28 young people took part in our wildlife and landscape photography sessions
- * 5 teachers have gained Forest Schools accreditation enabling them to deliver outdoor learning sessions for young people

- * Delivered major capital works to improve fish and eel passage at three sites, stopping eels and fish from being trapped and isolated from their breeding grounds and habitats
- * 1km of chalk stream restored at Botany Bay in Lavington Park near Duncton
- * Restored approx 2 hectares of wet heath at Graffham Common
- * Trained over 40 local residents in water vole and dragonfly surveying in the Arun Valley
- * 14 community projects have received an average of £607 each from our community grants fund, delivering habitat and access improvements across the project area
- * Trained landowners and land managers, farmers and others in mink control and woodland management
- * Phase two of ditch restoration and access improvements at Waltham Brooks nature reserve complete
- * Around 40 people attended an ARC woodlands event held in November to learn about opportunities around tree planting
- * Created 2000m² of wader scrapes
- * Helped restore or create 14 ponds totalling over 9000m² of open water habitat
- * Helped restore half a hectare of species rich meadow and half a hectare of wet woodland
- * Supported a community floodplain restoration access improvements at Chesworth Farm
- * Trained volunteers to survey over 36km of watercourses for water voles
- * Surveyed over 61km of the catchment for dragonflies including the rare Common Club-tail
- * Restored over half a kilometre of hedgerow
- * Surveyed over 500 hectares of floodplain to National Vegetation Classification standard
- * Found moss species new or considered extinct to West Sussex
- * Advised more than 50 landowners on land management



Creating a shelter at bush craft workshop, Tilgate Park, Horsham

Looking forward to spring.....

Join the toad patrol

If you have a car, push bike or a love of surveying in the evenings, then give us a call, we need your help as a toad detective when these increasingly rare amphibians are on the move this spring.

Toads spend just a short time in early spring, migrating at night in order to mate and to find new territory. We know very little about the toads in the Arun valley, and often the only way we find them is after they have been squashed by cars driving over them on the road.

On Sunday 15 February the ARC project, working in partnership with the Amphibian and Reptile Conservation Trust, will be running a training session for local people on a number of aspects of toad conservation.

We are also looking for people to submit sightings of toads. The longer term aim is to establish toad crossing points and a network of volunteers to help our toads cross roads.



Common Toad. Andy Hay. rspb-images.com

Please contact Debbie.coggles@rspb.org.uk / 01273 763 378 for more information about this project or to book onto the training on 15 February.

We need lots of volunteers and no experience is necessary.

ARC gets blogging

Last but not least please visit the catchment website if you haven't recently – we've been adding different features and content. The latest addition is a Blogs section – with a recent post from one of our oral history volunteers. We always welcome suggested improvements, so do get in touch to let us know your ideas.

<http://arunwesternstreams.org.uk>

Contact the project team:

ARC Project Manager – Rachel Carless:

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ARC Project Conservation Officer – Sarah McIntyre:

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Project Development Officer (ARRT) – Vee Moore:

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ARC Ecological Advisor – Fran Southgate:

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