

natterchat

Froglife's newsletter - amphibians, reptiles & nature news
Issue 21 autumn/winter 2020



Education Edition



TRANSFORMING LANDSCAPES

TRANSFORMING LIVES

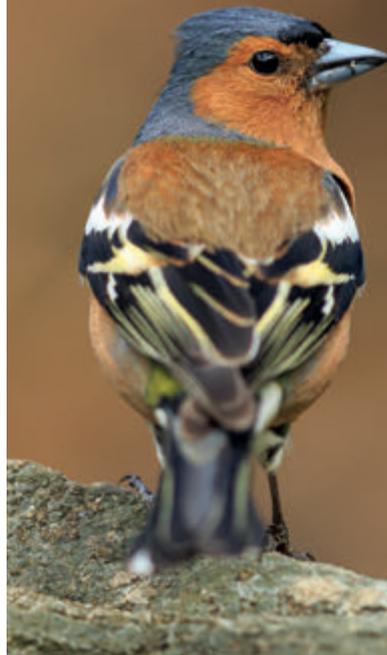
TRANSFORMING RESEARCH

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Photo: Craig Mackay



Garden Wildlife Health (GWH) is a collaborative project between the Zoological Society of London (ZSL), the British Trust for Ornithology (BTO), Froglife and the Royal Society for the Protection of Birds (RSPB) which aims to monitor the health of, and identify disease threats to, British wildlife.

Visit www.gardenwildlifehealth.org to find out more

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To advertise in or to sponsor an edition of *Natterchat* please contact Kathy Wormald at kathy.wormald@froglife.org.



Help us find dragons...

Grab your phone, get your wellies, and go out dragon hunting next spring to help us map amphibians and reptiles.

Our free **Dragon Finder smartphone app** will help you to identify all the different amphibians and reptiles you might spot in the UK. You can also use it to record your sightings, adding to our Living Atlas of where the animals can be found.





'Dear supporters,

I am sure like me, you are all pleased that we are

gradually coming out of lock-down and Froglife is pleased to report that we have started delivering physical, outdoor nature focused education sessions again. The Froglife staff are delighted to be out and about, engaging directly with so many of our supporters.

We have dedicated this edition of the Natterchat to our Education programme. A huge thanks to everyone who has contributed. We have shared a great range of articles covering various ways in which sessions are delivered, how we evaluate our work, the impact that it has on those attending our sessions and how we use art to relay our messages.

Although Covid-19 and the subsequent lock-down was challenging we did still manage to deliver sessions to a wide range of audiences. The Froglife staff immediately set about developing and delivering on-line courses, workshops and sessions. All of which were over-subscribed and the feedback that we received was almost 100% extremely positive. We even organised online Pond Doctor sessions inviting people to ask

questions about wildlife gardening, building and maintaining ponds and identifying and recording species.

Of course our raison-d'être is not to have people sitting indoors participating in digital on-line delivery but instead to encourage people to get outdoors and to take positive action to improve conditions for our native wildlife, especially our native reptiles and amphibians, hence it is great to see our staff out delivering physical sessions again. It was also great to hear of so many people who during lock-down were really enjoying engaging with nature and our natural environment. We know that many new ponds and improved wildlife habitats were built in gardens. As so many have witnessed engaging with nature is not only beneficial for our natural environment but also for our mental and physical well-being.

We would like to thank all those who gave us additional support during financially challenging times, this has certainly helped us to continue with our work. As always we are very appreciative of the grants, donations, friendships and corporate backers, your support is crucial to our delivery.'

Kathy Wormald, CEO

K. Wormald



SIGN OUR WILDLIFE TUNNEL CAMPAIGN!

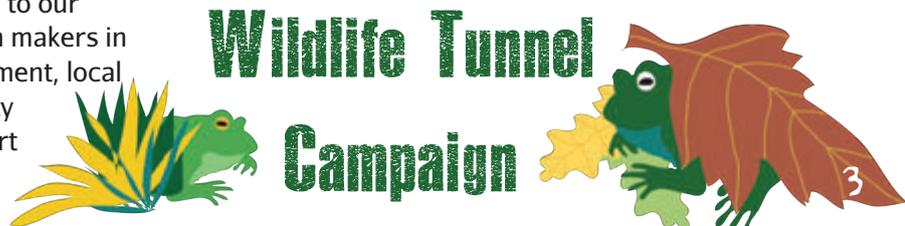
Just before lockdown we launched our Wildlife Tunnel Campaign. We engaged new audiences and signatories through various events including our stands at London Train stations where people were able to experience the movements of a toad passing through a tunnel under a road using our Virtual Reality headsets. Obviously this had to come to an end - however our campaign is

still under way!

So please sign and forward so that we can reach an even more substantial number of signatories to educate and provide greater impetus to our decision makers in Government, local authority transport

departments and all ecological consultants and property developers. **Help us save more lives!**

www.froglife.org/2020/03/02/wildlife-tunnel-campaign/





Picturing Ponds



by Jules Howard, Froglife Patron

I think I'd always assumed that at some point there would be a global pandemic. The fatalist, introvert, science-fiction fan in me had always imagined it would come but when it came it didn't quite pan out the way I imagined. Instead of mobilising me to achieve all sorts of amazing and worthy things, the lockdown saw me spend an inordinate time just... well, staring into my pond. No dark thoughts, I should say. Just spending more time there, staring at the comings and goings of my freshwater world, taking in what the pond was belching out by way of emerging dragonflies, mayflies, caddisflies and, of course, adult amphibians. I think my pond saved me from a range of minor mental health disasters. In fact, it definitely did. And I don't think I was alone.

Many wildlife organisations, including Froglife and the British Dragonfly Society, have suggested that, during this torrid time, more people than ever have been doing their bit for freshwater life, preparing their own garden wildlife ponds as special lockdown nature projects. For educational purposes. For wildlife conservation. For fun. Heck, for all of these reasons. This is very much a good thing. The more ponds, the better, of course.

But I worry that not everyone gets this far. This is a gut-feeling (one based on having talked to tens of thousands of members of the public

about wildlife ponds over the years) but I can't help but think that for every family that reaches for a spade, there may be three or four families that are warm to the idea of digging a pond and doing their bit for local freshwater but that can't somehow picture how it might work in their garden or backyard space.

The trouble is, when people picture garden ponds they tend to picture that single kind of wildlife pond - the 3 x 1 metre kidney-shaped pond seen in gardening books and gardening TV programmes the world over. But the classic garden wildlife pond is not the only garden wildlife pond design. In fact, there are many more types of wildlife pond out there; there are big ones, small ones, upcycled ponds, or raised ponds, for instance. To help people picture, for real, how ponds like these may look in an outdoor space, they have to be able to imagine it. They have to be able to see it. They need to see for real how such a pond might look.

Well *cough now Froglife have an app for that. It's Froglife's **Wildlife Pond Visualiser app**, available via Google Play for free - it works on most Android devices. I must confess, this project has been one of the most exciting digital projects that I have ever worked on. The app lets you use your device's camera to place a selection of 'virtual' wildlife ponds in your

backyard space to see for yourself how a wildlife pond might look. As well as this, the app includes lots of tips and information on creating your own backyard paradise for amphibians. It's simple, fun and, of course, free. A bit of inspiration; an accessible bit of fun; a home-schooling project; a springboard to, hopefully, inspire a few more wildlife ponds in your local neighbourhood. So give the app a go (search for '**Wildlife Pond app**' on our website www.froglife.org for more info) and let us know how it inspires your wildlife pond projects. We've had 'Clapping for Carers'. Perhaps now, it's time to 'Dig for Victory'.

As well as being one of Froglife's patrons, Jules is a self-proclaimed pond enthusiast, working with ponds for almost twenty years, inspiring and educating more than 150,000 young people about the value of freshwater in the process. He is author of The Wildlife Trusts' 'The Wildlife Pond Book' - the best-selling guide to creating a pond paradise in your backyard space.



Nature Trails



"Spending time in green space or bringing nature into your everyday life can benefit both your mental and physical wellbeing" Mind UK

**by Emily Millhouse, London
T.O.A.D. Project Manager**

Froglife have delivered a range of wellbeing programmes across the UK, from the **Kirklees Natural Achievers project** (aimed at men suffering poor mental health, learning difficulties or social isolation) to the regional **Green Pathways for Life** projects (which works with people living with dementia).

Recent work in London has seen Froglife working alongside GP practices in Ealing and Lambeth to give new opportunities for service users to get involved with their local green spaces. A series of two nature trails guide the public across 10 parks within the 2 London boroughs, and highlight areas of the parks that are good for wildlife. Service users, volunteers and park friends of groups have all been involved in restoring ponds, creating bog gardens, building hibernaculum, pathway clearance and much more across the boroughs. These programs combined the benefits of being active, working as a group and meeting new people with being outdoors and doing something with a purpose. The improvement of these parks not only benefit the wildlife within them, but also improves the space for the public to visit and enjoy.

Case Study: One participant commented that not only had their knowledge and appreciation for amphibians and their habitats been increased, but also joining the volunteer sessions had vastly improved their confidence and the outdoor environment made them feel less stressed and anxious.



ADAPTIVE LEARNING



by James Stead, Come Forth for Wildlife Project Manager

Back in March 2020, Froglife very quickly became adept at changing its teaching methods. James Stead, the Project Manager for Froglife's **Come Forth for Wildlife** project operating in the Forth Valley of Scotland, shares some of the ways he and his colleagues have been educating people of all ages and backgrounds during the pandemic with social restrictions in place:

"As well as the timely release of our **Virtual Reality Wildlife Pond app** (see page 4) we adapted our training courses for online delivery. Focusing on species survey methods, ecology and habitat management for amphibians and reptiles, they have been teaching over 100 participants a range of skills in this field. Our **Pond Doctor** online events have been educating those looking to create new ponds in their gardens or restore old ones with free advice in a virtual setting.

To offer a different option to our online education resources we also developed a new booklet promoting activities at home in the garden to create fantastic resources for amphibians, reptiles and a range of other wildlife.

Gardens are an increasingly important resource for wildlife in the UK and managed with our species in mind they can provide an important home where natural areas are being lost. For amphibians and reptiles in particular, inter-connected habitats are key as these species cannot easily move between sites compared to birds for instance. Creating wildlife gardens with connectivity allows natural movements of species throughout areas especially where loss of habitat is occurring, due to degradation or development, or perhaps larger scale issues like climate change.

Froglife's **Come Forth for**

Wildlife project, funded by the National Lottery Heritage Fund, is encouraging residents to become **Garden Guardians** and together create gardens and local green spaces for wildlife to thrive.

The **Garden Guardians** booklet is your physical teaching guide to help you get started. Within the booklet you can find advice on many activities to undertake in the garden including pond creation, building basking spots, enhancing connectivity or creating wild areas. There's also a section on guerrilla gardening to help amphibians and reptiles in your local green space.

Completing each of the activities in the booklet earns you a **Garden Guardian** badge - with four badges earning yourself a Guardian Sign to display showing your achievements! With residents completing these challenges we can create neighbourhood wildlife corridors offering a connected network of

habitats vital for our frogs, toads, newts, snakes and lizards year round.

You'll be amazed by the wildlife that visits your garden with just a few simple changes and you can not only enjoy some time in the garden creating these simple features but then experience the thrill of seeing what wildlife comes to use it!

You can pick up a free copy of the **Garden Guardians** booklet at events run by **Come Forth for Wildlife** (www.froglife.org/what-we-do/events/) or, while restrictions are in place, you can order a copy to be delivered for free (bit.ly/2VfkuHU). Hopefully you'll learn something and before you know it you could have a garden providing a vital link for amphibians and reptiles in your area."





So, what is a Garden Guardian and how do you become one? Froglife has set you some challenges - when you complete a challenge collect a badge. Collect them all and you'll be a true Garden Guardian with a wild space bristling with wildlife!





LEARNING FROM THE PAST TO EDUCATE FOR THE FUTURE: *the need for evidence in conservation education programmes*



by Harriet Downey, Postdoctoral Research Associate, Conservation Evidence, University of Cambridge

The last few years have revealed something that has long been suspected by many: that being in nature is good for you! Studies have shown that spending time in nature can increase happiness, reduce stress and increase physical well-being (e.g. Kardan et al. 2015; Richardson et al. 2016; White et al. 2019). Indeed, it has even been suggested that simply having a natural view from a hospital window may help to speed recovery after surgery (Ulrich 1984).

These findings have led to an increased interest in encouraging people into nature. In the UK, there has been a rise in the number of forest schools, nature retreats, and even forest bathing courses! There is also a growth in the numbers of people volunteering in citizen science projects, nature reserves, and other conservation projects. This has been an opportune time for conservation projects to engage people with programmes raising people's awareness of nature in order to help protect and conserve it. But is this the result?

Many studies show that learning about a particular conservation issue increases people's awareness of it.

However, there is very little evidence to show that greater awareness has produced any biodiversity benefits such as increases in the abundance or diversity of taxa, or reductions in unwanted behaviour such as illegal shooting, or walking off trails at nature reserves (reviewed in Thomas et al. 2019).

There are a few places to turn to look for the evidence behind conservation interventions; one of these is the Conservation Evidence project that summarises the outcomes of conservation interventions. The database has many actions to do with education and awareness, so what does the evidence there say?

The overwhelming picture is that there are very few studies exploring what works in conservation education. For example, providing educational programmes, a commonly employed method, had no studies involving it. There were a very small number of studies into raising public awareness of conservation issues (e.g. buying peat free compost), and the action with the most studies was in the usage of signs and access restrictions to reduce disturbance at birds nest sites. This has 25 studies and has been scored as likely to be beneficial, with some variation in the results between studies ([conservationalevidence.com/actions/309](https://www.conservationalevidence.com/actions/309)). The action

'Provide education programmes about amphibians' has six studies and has also been assessed as likely to be beneficial, however only one of these studies led to a measured biodiversity outcome.

This lack of evidence suggests we have a long way to go before we can understand whether the projects being undertaken have the behaviour change or biodiversity outcomes desired. These projects are often deployed at a huge financial cost to the organisations involved. As money and time is limited in conservation, to ensure it is being spent on the right projects and that they are the most effective measures for conserving biodiversity, we need to understand what methods work best, including which (if any) education methods. Some might argue that some methods are common sense and do not need to be measured. However, there are many examples of 'common sense' methods being ineffective (Berthinussen and Altringham 2012) or sometimes even harmful (Athreya et al. 2011).

One reason for why there is little evidence of education programme success is that studies report the wrong outputs. For example, it is common to report the numbers of leaflets distributed, number of people engaged, or the number of schools

visited, as study outputs. Whilst these numbers are important, they are part of the methods and cannot be reported as impact. This may be happening because they are easier to record than the intended outputs of behaviour or ecological change (Asch and Shore 1975). This is justified by the expectation that knowledge and concern for the environment directly translates into undertaking more environmentally aware actions (Price, Vining, and Saunders 2009). However it has been argued that this link is unsubstantiated (Hungerford and Volk 1990) as there are often social, economic or other barriers that do not allow changes in behaviour to occur (McKenzie-Mohr et al. 2011). If behaviour change is the desired outcome of a project then this is what should be measured in order to make real positive change (Heimlich 2010, Verissimo 2013). If we focus on the outputs such as behaviour change and biodiversity outcomes (e.g. reduction of a threat to a habitat or increase in population of a species), we can better understand the true impact of conservation interventions related to human behaviour (Ferraro & Pattanayak 2006) and can move towards evidence-based practice where we learn from past errors and build on previous success.

“In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we have been taught”. This famous quote of Baba Dioum has been used many times to stress the importance of education in conservation programmes. In conservation, education is a commonly used method for affecting ecological outcomes. Conservation biologists are often not trained in how to correctly design and monitor these programmes in order to measure the right outcomes. Ecological and behavioural outcomes may not be immediately obvious and may require longer-term monitoring and the use of methods from other fields. Employing these will lead to more successful projects and a better chance at saving what we love.

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References

Asch, J., & Shore, B. M. (1975). The Journal of Environmental Education, 6, 25-33.

Athreya, V., Odden, M., Linnell, J. D., & Karanth, K. U. (2011). Conservation Biology, 25, 133-141.

Berthinussen, A., & Altringham, J. (2012). PLoS one, 7, e38775.

Ferraro, P. J., & Pattanayak, S. K. (2006).

PLoS Biol, 4, e105.

Kardan, O., Gozdyra, P., Misic, B., Moola, F., Palmer, L. J., Paus, T., & Berman, M. G. (2015). Scientific Reports, 11610.

Heimlich, J. E. (2010). Evaluation and Program planning, 33, 180-185.

Hungerford, H. R., & Volk, T. L. (1990). The Journal of Environmental Education, 21, 8-21.

McKenzie-Mohr, D. (2011). Fostering sustainable behavior: An introduction to community-based social marketing. New society publishers.

Price, E. A., Vining, J., & Saunders, C. D. (2009). Zoo Biology: Published in affiliation with the American Zoo and Aquarium Association, 28, 361-376.

Richardson, M., Cormack, A., McRobert, L., & Underhill, R. (2016). 3 PLoS one, 11, e0149777.

Thomas, R. E., Teel, T., Bruyere, B., & Laurence, S. (2019). Environmental Education Research, 25, 172-192.

Ulrich, R. S. (1984). Science, 224, 420-421.

Verissimo, D. (2013). Conservation Evidence, 10, 29-31.

White, M. P., Alcock, I., Grellier, J., Wheeler, B. W., Hartig, T., Warber, S. L., ... & Fleming, L. E. (2019). Scientific Reports, 9, 1-11.



as for their produce. 654 gardeners across 62 allotments and gardens have taken part in these workshops so far with 69% of people gaining more understanding of how to recognise and survey toads. To add to this success 72% of attendees said they would learn more themselves, as a result of the workshop. This is not only a benefit to toads, but also our other native species, such as slow-worms that are often found on allotment sites but not often monitored or recorded.

VR Experience

As mentioned in a previous Natterchat edition, Froglife have a variety of digital techniques to engage the public in amphibian and reptile conservation. Up until Covid, the **London T.O.A.D** Project used virtual reality to put the participant in the body of a toad and learn from a 'toad's eye view' the challenges they face in the UK. The team have toured the experience around London, even visiting train stations and to events such as New Scientist Live and have had some strong results to show that this method of engagement can also make a significant learning impact, with 90% of people surveyed saying that they had learnt something new. After the 3 minute virtual reality experience 52% of people asked said they would like to learn more for themselves. It also prompted people to consider increasing wildlife habitat in their garden, with 62% of people stating they would make improvements to their garden.

Through the variety of learning activities built into the **London T.O.A.D** project, not only have we directly engaged with a significant number and range of people but we have also received important feedback that supports the reasons behind the project:

- 86% of people said that they were more aware of threats to UK toads.
- 77% of people said they had more understanding of how to help toads locally.

Help toads and other wildlife at www.froglife.org/what-we-do/education/london-t-o-a-d/t-o-a-d-campaign/





Learning from Lockdown

by James Pender

Hampton Nature Reserve managed by Froglife in Peterborough is well known for its amphibians and

reptiles especially it's internationally important population of Great Crested Newts. I first visited on a guided tour with Peterborough

Bird Club to look at reptiles and having once seen a Hen Harrier, over the reserve from the road, I wondered about the birdlife at this site. However, knowing that the site was not managed specifically for birds and that at 300 acres it was not very large, I stuck to birding at the more well-known sites around the town. That is until the Coronavirus crisis led to lockdown...

Not being able to travel due to restrictions, I volunteered to survey the birds at Hampton Nature Reserve which is five minutes walk from my home. My target was to look for warblers, newly arrived after their epic migratory journey from Africa as the reserve has a large section of scrub which is suitable for many species, however I was blown away by the dawn chorus on 9th May 2020 in which ten species of warbler as well as other songbirds like Common Cuckoo, Blackbird and Song Thrush created a beautiful orchestra to sooth my lockdown stress.

Most notable amongst them was the Grasshopper Warbler whose



song doesn't sound like a birds at all, rather a loud grasshopper stuck on repeat or a fishing line being reeled in. This is a scarce breeder with only 16,000 pairs across the UK, which has been badly affected by drought in its wintering grounds in the Sahel just to the south of the Sahara, so even better to discover a second bird holding territory on 15th May 2020! Lesser Whitethroat, another bird that winters in the Sahel, was also a good find, with two singing birds and a female later observed feeding two young. I also heard 2 male Cetti's Warblers making their explosive songs amongst the reeds - they only bred for the first time in Britain in 1972 and have since been expanding

their range northward helped by milder winters and warmer summers.

The numbers of Cuckoos calling, an enigmatic sound of spring/summer, was also impressive with 3-4 males present: a much higher density than other nearby sites within Peterborough such as Nene Park. The jewel in the crown was however was my first ever UK sighting of Spotted Crake - this long legged wetland bird related to the Moorhen is a very rare breeding bird present at most in as few as 40 sites in spring and their population is thought to be only somewhere between 28-70 breeding pairs in the UK.

I learnt over lockdown that fantastic

wildlife can be found near to home, even on the edge of a housing estate, that small sites can be a valuable oasis of wildlife diversity and that sites managed well for reptiles and amphibians also encourage the breeding of a wide variety of birdlife too!

James has enjoyed watching and studying birds since he was a teenager 30 years ago and has been fortunate to take part in bird surveys and censuses in places as diverse as Scotland, Nepal, Bangladesh, Portugal, Kenya and Surrey. He currently works with the Leprosy Mission and one of his roles in the team is as an Environmental Sustainability Focal person.



Froglife Ecological Services Training Courses

FES offer a range of courses and training appropriate for both beginners and experienced naturalists alike.

We have run a number of courses for organisations such as councils and government departments (FERA and NE), charities and volunteer groups.

Our current standard courses include:

- **Great Crested Newt Survey: Working Towards a Licence**
- **Reptile Ecology and Survey Techniques**
- **Habitat Creation, Restoration and Enhancement for Amphibians**

Most of our courses involve an element of field work or site visits that are carried out adhering to Covid-19 safety guidelines. In general our courses last one day, however the **Great Crested Newt: Working Towards a Licence** course requires a site visit and short additional classroom session the following morning.

In addition to our standard courses we are able to offer bespoke training courses to cater to groups such as NGOs, charities, government departments, volunteer groups, "Friends of" groups and councils. We can also offer virtual training courses that can be tailored to suit the group's needs.

Places are limited and are on a first come first served basis. Full payment is required on booking. If you are interested in booking a place on one of our courses or would like to discuss a bespoke course please email:

Marie.Homewood@froglife.org



FES
Froglife Ecological Services



le

ONE GIANT

Froglife's Leapfrog Schools programme builds or restores wildlife ponds and other habitats to provide wonderful learning resources for schools. This year we helped Queen Emma School, Cambridgeshire, with their outdoor classroom. Here's what happened:



We dug a pond... here's the digger in action, securing the pond liner



We created accessible paths



We made a firepit and seating - socially distanced!



We improved the area for wildlife



We joined in with Queen Emma's celebration day

up

FOR SCHOOLS



And here's what the children and teachers thought!



OUTDOOR CLASSROOMS WITH FROGLIFE

We offer 3 packages for outdoor classrooms, based on the size of the pond. Typical costs are:

	Cost of pond only	Cost of pond plus dipping platform
BASIC	£2,553	£2,960
SUPERIOR	£3,303	£4,150
OUTSTANDING	£4,288	£5,390

All costs exclusive of VAT

We can offer a range of additional features for your outdoor classroom, including carved wooden benches, more seating options, accessible paths, raised beds, pond planting, wildflower planting, firepit, interpretation boards, identification boards, shed, chalkboard, wildlife homes, bird/bat boxes.

Let us know what you would like and we will provide a quote. Contact Sheila.gundry@froglife.org for more information.

"The results have been amazing! We now have a wonderful pond (complete with frogs!) in which the children can do pond dipping, as well as a wormery, bird boxes, bat house, insect homes and much, much more" Head Teacher - Coates Primary School, Cambs

"Leapfrog helped us to create a "Secret Garden" in our school grounds. This area was specifically highlighted in our Ofsted report as being a useful tool for the school and was fundamental in helping the school attain green flag eco-schools status" Julie Branch, former Head at Farcet School

We're

leaping forward for dementia



By Zak Mathergratton, Project Manager, Somerset Green Pathways for Life, Frome

Time spent in nature has proven positive benefits for our health and wellbeing, both physical and mental. It seems we humans have an inbuilt affinity with the wild, revealing our often forgotten status as animals, along with the wildlife species who share our parks, gardens and countryside. Biophilia is a theory coined by psychologists and biologists to encapsulate this intrinsic attraction we have towards natural spaces and processes, developed over hundreds of thousands of years of human evolution. According to this view, our reliance upon nature has developed beyond meeting our material needs, to supporting us as healthy creatures in mind, body and spirit.

There is emerging evidence that



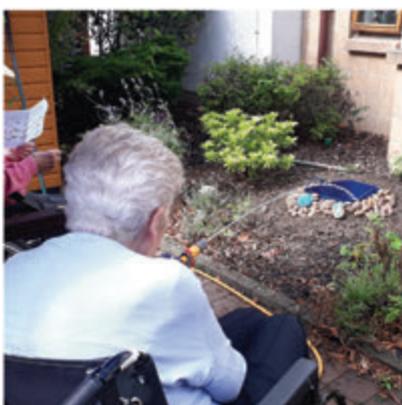
these benefits are particularly strongly felt in people living with dementia or affected by symptoms of memory loss. Nature provides a rich tapestry of sensory and cognitive delights, opportunities for adventure and stretching the self, all in a setting which, according to the Biophilia concept, people automatically find comfortable, relaxing, and familiar.

At Froglife we have been running nature and wildlife based activity sessions for people living with dementia or symptoms of memory loss since 2018. We've seen the benefits first hand, whether it's

getting dirty hands, planting scented herbs, helping to build a bird box, or simply getting out to a natural space, we repeatedly see nature's power for creating positive emotions, awakening senses, and drawing out memories and stories.

Dementia is an umbrella term covering dozens of conditions, the most common being Alzheimer's disease. Each type of dementia affects different areas of the brain, which in combination with a person's life history, background and personality, cause every individual affected by dementia to have their own unique experiences and challenges.

"We heard sparrows cheeping, doves cooing, thrushes singing "whee-ho-ha". In addition we saw a pair of gold-finches, a starling, a sea-gull and a tit."



Over the last two decades, the concept of 'person centred care' has revolutionized the way people living with dementia are treated. In place of an often stigmatised one-size-fits-all diagnosis, this approach prioritises maintaining identity, abilities and self-expression through empowerment, encouragement and positive emotional interaction. Again nature provides us with a full toolbox for this approach. We integrate hands on nature conservation tasks in our sessions, enabling people to feel properly connected with their local wildlife and green spaces. Challenging 'risk averse' notions that people living with dementia can't use

"It was funny seeing the wee tadpoles."

sharp tools or get dirty hands.

As the 2020 coronavirus lockdown period has unfolded, people all over the country have become increasingly aware of the value of getting out into natural spaces. The barriers faced by many have also become more apparent. Research has shown that people living with dementia already faced numerous barriers in accessing outdoor spaces and activities, including the impact of risk aversion and reduced confidence, as well as practical considerations such as clear signage. As we (tentatively) come out of lockdown, these issues of risk and confidence are magnified for people living with dementia. Many social groups and events previously relied upon are still on hold or have moved online, using public transport is discouraged, and social distancing rules can create uncertainty, tension, and even conflict as roads and public spaces become busier once again.

"I've not seen him as alert all morning in a long time...I think he's really enjoyed it...He was always interested in birds."

At this time more than ever, working alongside people living with dementia is incredibly important, to rebuild confidence in accessing nature and the outdoors in a safe and inclusive way.

Our projects are ongoing across the country. In Glasgow, our first project specifically designed for people with dementia, we've engaged



Louise Smith, Learning Officer, Green Pathways, Scotland writes:

"The biggest impacts of these project will not be found within our facts and figures, but in the thoughts and feelings of our project participants and those who support them. One of our main goals is to ensure the project is as person-centred as possible with participants' choices and feelings as a cornerstone of all sessions. It is difficult to gain an insight into the projects impact through written feedback so we used a combination of note-taking during individual sessions and end of project interviews with project participants and group leaders separately to gain feedback.

Being given new opportunities to learn and engage with nature in a way participants hadn't before has been mentioned several times as one of the main positive facets of the project. And both group leaders and participants have said that the Froglife project had helped them to gain confidence in their own abilities and become more willing to take chances."

"They go up to the allotments now on their own, whereas they wouldn't have been as confident, even with the staff. The staff aren't as risk averse as they were either." Staff member, Alzheimer Scotland

During sessions, staff engage participants in discussions about the wildlife that can be seen in greenspaces and learn about the wildlife they have seen in their own gardens. Throughout home care sessions they are also encouraged to become involved, such as building birds boxes and mini-ponds, even in their courtyard garden, which was a huge success!

"Thank you so much. I've never seen my residents do that [build bird boxes] EVER. Your encouragement is what's getting them to do this and take part." Care Home Activities Coordinator



with over 250 people in care homes, community groups, day centres, allotment sites, and sheltered housing settings. Around 100 of these were people living with dementia, with the rest being a vibrant mixture of young people, care workers, volunteers, family members, and other service users. We've realised the value of intergenerational

and diverse participation in these activity sessions, for creating connections, sharing skills, and above all having fun!

"It's so nice outside today! Makes a difference from being inside!"

Our successes from this initial project enabled us to start another down in Somerset. There, we are working with people living in the community, helping people to retain skills, abilities, and confidence to keep accessing outdoor spaces, and even building new skills for helping wildlife along the way. The



Somerset project was adapted during the lockdown period to provide creative wildlife inspired activities via email, post, and local radio. We've now returned to the outdoors, with three sessions running each week. These often begin with a sensory exploration, bringing our awareness to our surroundings by paying attention to sounds, smells, touch, taste and sight. These kind of mindfulness inspired activities are fantastic for nature connection, and researchers are investigating the specific benefits for improving attention and cognitive abilities in people living with dementia. Then comes the hands on part, guided by the participants' preferences and abilities, the season, and the location. We have planted herbs in a medicinal garden, contributed to UK citizen science projects by counting butterflies, harvested potatoes, picked blackberries, made various nature inspired arts and crafts pieces, and we have a packed list of future activities for the next weeks and months.

Our sessions close with well-deserved tea and biscuits. We build a fire together to boil the

water, which is always lots of fun and brings a level of excitement and danger to our sessions! We've had some excellent early feedback from participants, shown in the boxes throughout this article.

We're now preparing to launch a new project in London called **Leaping Forward for Dementia**, which will provide wildlife gardening and nature skills workshops to people

living with dementia, plus 'train-the-trainer' sessions for carers and social workers. This will enable them to deliver their own workshops, supporting wellbeing and helping nature in London's communities. We have other projects under development across the UK, and we're looking forward to reporting back on our existing ones, so watch this space!





Education through Art



By Rebecca Wallbank, London T.O.A.D. Project Assistant

Froglife's commitment to finding alternative ways to spread an interest and passion for the conservation of our wildlife was a driving force behind my desire to work for them. They are a vibrant creative community, with projects throughout the charity involving art, craft and theatre.

Well before my time here, the **Peterborough Green Pathways** Project was leading the way in the use of the arts to educate. Seeded in 2010 with their Reptile Rummage mosaic sessions teaching children aged 7-11 about reptile ID, they have built a legacy of large community murals and installations. Mural projects were attended by small groups of young people who were not performing well at school and through a series of sessions they were given the opportunity to create new skills and memories. They visited local wildlife sites and searched for reptiles and amphibians; they spoke with the local community about the project and gathered their thoughts and ideas; they developed skills in artistic design and painting methods; they learnt to work together; and ultimately they created an artwork that continues to share their new-found interest in the natural world.

The science of psychology tells us that if a community feels ownership of their public space then anti-social behavior is reduced in that area. It

also tells us that there are mental health benefits from experiencing both art and nature. These concepts were brought together in the mural projects - a holistic approach which has created community champions of nature and outdoor spaces.

Another strong contender for the best use of art in our education work is our Mapestry programme. We're currently into the third of these tapestry projects which involve adult participants working with an established textile artist to create a piece showcasing their community, geographical area and local wildlife. The project encourages participants to consider what they love about where they live, both within the natural world and the man-made one. We introduce the idea that they are sharing their home with important amphibians and reptiles, which they may never have considered before. I have spent happy hours talking to people I would never have otherwise met, about their lives, loves and history - learning definitely goes both ways in this job.

Our **London T.O.A.D. Mapestry** is completed and ready for its tour of the capital, aiming to reach a whopping 22,000 people. In Scotland the newest of the Mapestry projects is well underway.

There is so much more to say of the power and joy that the arts can bring to conservation education, and of the enrichment and inspiration that the natural world can bring to the

arts, but I have no space in this Natterchat for a thesis. So I shall conclude with the determination that we at Froglife will continue to combine these two fundamental human needs at a time when their importance to human wellbeing is more noticeable than ever. We are back in force: to conserve, to care, to create.



Green Pathways Impact Review

Outcomes and Impacts in the last 10 years



we work on improving their confidence, social skills and positive behaviour and at the same time improve their knowledge and enjoyment of wildlife and nature, giving them transferable conservation skills to take forward. They're provided with the opportunity to show what they can really achieve in a different environment.

"My favourite part was just being outside." H, 5, Ruchill Saturday Club, Glasgow.

Though the wider Green Pathways projects work with vulnerable and disadvantaged young people aged 0 to 25 years old, different projects have focussed on different age ranges in order to best meet the needs of the areas and partnership organisations we work with, for example the Kirklees and Huddersfield area young people ages 16 to 25 would benefit most from our projects due to the socio-economics of the area as well as the

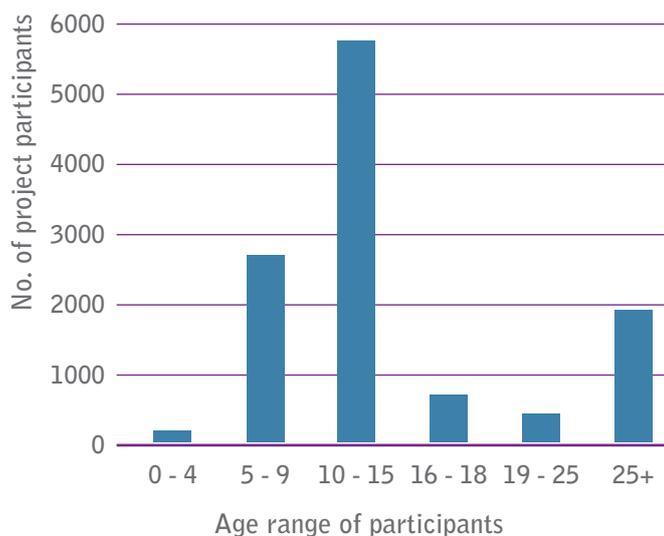
By Louise Smith, Learning Officer

Froglife's **Green Pathways** project encourages vulnerable and disadvantaged young people to take part in positive activities linked to conservation and the environment in their local community. We deliver practical and educational nature-based activities to help children and young people, aged 0 to 25, learn about and foster a life-long interest in nature and wildlife. We encourage them to care for their own environment and improve local greenspaces for wildlife. The project rests on a mass of scientific research that tells us that being outdoors and in nature helps with our mental and physical health no matter our age. During lockdown we have all seen a huge increase in the use of outdoor and wild spaces in which to exercise, take walks and escape the stress and anxieties of our homes. As we all

come out of lockdown we hope that the use of wild spaces stays constant and we are keen to get our sessions for the Green Pathways projects around the UK engaging young people with wildlife and conservation once more.

This project started in Peterborough in 2008 and through its success has grown throughout the UK with projects currently being delivered in Glasgow, Peterborough and Sussex. We also delivered a pilot project to engage with young people aged 16-25 years old in Kirklees in 2017-2018 and are looking to continue this in the future. During sessions that young people attend

Number of disadvantaged young people engaged through Green Pathways projects (2009-2019)



lack of opportunity for young people within this age range to engage with outdoor, wildlife-themed activities. The Glasgow project meanwhile works across the whole city to deliver activities to young people and children up to 25 years old, including family groups, from deprived areas.

Graph 1 (opposite) shows the number of young people we have worked with over the course of the last 10 years of the project split into their respective age ranges. While the largest number are within the 10 to 15 year old range we do engage with young people and children of all ages and believe that no one is ever too old or young to engage with Froglife and nature!

"I feel more confident with myself and I made some new friends." R, 11, Ken Stimpson Community School, Peterborough.

The Green Pathways projects has had a huge impact over the last 10 years. In total the project has worked with 15,067 people through sessions and engagement events, of which 12,828 were considered disadvantaged or vulnerable. The Peterborough project has worked with a total of 5,079 disadvantaged people over the 10 years of the project. Disadvantages can come in any form for the young person or child to be referred to this project, for example physical and/or learning disabilities, economic disadvantage, behavioural problems or simply a lack of confidence or social skills.

"It was a different kind of learning [going to the allotments] than in school." R, 7, Ruchill Saturday Club, Glasgow.

Activities the Green Pathways project delivers are tailored to each project, each site we work on and the young people we work with during sessions to ensure they are as impactful as possible. These can range from bigger projects creating a new pond, bog garden or hibernacula for amphibians and reptiles to engage young people and children with more practical conservation, to simpler nature walks, tree identification or mini-

beast hunts for younger children and families to start their wildlife journey. The most important part of the project in terms of the young people themselves is that the activities are engaging, interesting and most of all fun. This encourages them to both come back to sessions with Froglife and to foster a lifelong interest in nature and wildlife.

"I loved seeing my first frog!!!!" T, 7, Smelly Welly Club, Glasgow.

We use comprehensive feedback and evaluation techniques to evaluate specific outcomes of our projects, including quotes and conversations during sessions, feedback from group leaders, written forms for project participants and photo evidence. Through this evidence we can track changes in young people's confidence, social skills, positive behaviour, knowledge of wildlife, transferable conservation skills, and enjoyment of wildlife and the outdoors and determine the differences in these between the start and end of the project.

"I love Froglife. It gives me confidence and happiness and I especially love Olive Branch." Green Pathways Peterborough participant.

For each project and year of that project there are variances in, for



example, the percentage of young people who came out of the project with improved confidence. In order to review the impact of the project in the last 10 years we calculated averages across the years and projects (see table below). These figures show the very real difference we make in the lives of young people across our Green Pathways project areas. 88% of young people reported improved enjoyment of the outdoors and wildlife, 73% had improved confidence, 69% had improved social skills and 67% had improved positive behaviour. These figures show that the project had measurable impacts upon the young people we work with, but out with the facts and figures we gather for this project we also collect quotes, take pictures and create case studies of individuals

Average percentage of young people participating in the Green Pathways projects who showed improvements in confidence, social skills, positive behaviour, knowledge of wildlife, transferable conservation skills, and enjoyment of wildlife and the outdoors. (Percentages per project year averaged over 10 years)	
Knowledge of wildlife and nature (especially amphibians and reptiles)	77%
Enjoyment of wildlife and the outdoors	88%
Improved transferable conservation skills	77%
Improved confidence	73%
Improved social skills	69%
Improved positive behaviour	67%

for whom the project has had a huge personal impact which may not come across within our written feedback evaluations and figures.

“This was the first time I’d seen him smile.” Teacher of Green Pathways Peterborough participant. This is the kind of impact the Green Pathways team love the most! Immeasurable and immeasurably important.

We love seeing children and young

people come out of their shells and speak to us for the first time, smile with pure joy when they first see a frog in a pond, take that first brave step into a muddy puddle they’d not dared to before and make a lasting memory for themselves enjoying nature through our project that will last a lifetime.

The Green Pathways projects have been supported through a variety of funders and benefactors over the years without whose support we

would not be able to continue the projects. Current funders for the Green Pathways projects include: the Cambridgeshire Community Foundation, BBC Children in Need, The Craginsh Trust, John Spedan Lewis Foundation, the Garfield Weston Foundation, Glasgow Credit Union, St James Place and Waitrose Community Matters.

2806 Sessions ● **15067** people engaged ● **12828** disadvantaged young people worked with ● **31** referral/partnership organisations worked with per year ● Average of **22** greenspaces visited/improved per year ● **113** Volunteers



Case Study: Ruchill Saturday Club Sessions

One young person we worked with in Glasgow we'll call "T". T was part of a larger group of young people at a community centre in North Glasgow that we worked with at their local allotment site to teach them about wildlife, restore the pond Froglife created onsite that had become damaged and learn about growing wildlife friendly plants. T was very combative during initial sessions, was unwilling to engage in activities and often exhibited poor behaviour. We delivered a variety of activities to engage them more positively with wildlife including pond restoration work, pond dipping, gardening activities and bird box building. By the end of our sessions T would actively engage our Learning Officer in conversation about both wildlife and her other interests and experiences and had much improved confidence and positive behaviour.

"T has experienced loss and bereavement within in her immediate family and has found new confidence and friendship during the sessions, especially the bird box building. I can say with all confidence that T and L have both bonded via a really great life memory provided by [Froglife], learning life skills like measuring, designing, following instruction, sawing and building with an outcome which is tangible and nurturing for wildlife. From a very practical and hands on workshop which only [Froglife] could offer to them on site - and a friendship bonded and based around these activities, together that they have both genuinely enjoyed and continue to look forward to. Both regularly attend on Saturdays and actively ask questions and look forward to all the activities offered. This is most definitely down to working together with [the Learning Officer], who brings dedication and sensitivity to working with the young people every Saturday and the enthusiasm she brings to the project, the impact of which can't be underestimated with these young people." Jenny O'Boyle, Freelance Visual Artist, Community Art Worker and Youth Gardener.

The most positive part of our longer term projects is the opportunity to engage with the same young person over the course of several years, seeing them progress through their Wildlife Journey with us and to hear about how their lives have changed throughout their time working with us. Some of the young people we work with, such as T, have very difficult home lives and do not always have an adult in their lives who show a genuine interest in what they have to say or their thoughts or feelings. We saw T's confidence visibly grow week to week and enjoyed seeing her gain the confidence to forge new friendships, gain new skills and be in nature more and more.

"I would however just like to say that I know they have all really enjoyed coming to Froglife. Not once did any of them say they didn't want to come along.

Their negative events within school dropped, as they knew they wouldn't be able to attend if they had more than 5 in any one week. Obviously TDA6C was a slightly different case and has continued to get herself into trouble at school.

They all tried things that they hadn't done before and I will always remember TDA6D lifting the cover off to find snakes underneath. Something that he wasn't keen on doing but did it anyway and had a massive smile on his face afterwards. None of them had held a frog or even seen a slowworm before.

They have all learnt new skills (including me) like how to cut the trees properly and how to start a fire. They have learnt so much about wildlife and the environment and have enjoyed being outdoors, in all weathers. I feel that their social skills have improved and they are definitely more confident." Louise Lawrence, teacher at Thomas Deacon Academy (Green Pathways Peterborough, 2012-2014).



TAKING A LEAF OUT OF KATE'S BOOK...



Kate Bradbury finds that we're never

too old to learn something new and that understanding the needs of wildlife is the best way to create habitats for them.

"My favourite thing about wildlife gardening is that I'm always learning. There's always something new to find out, be it the identification of a particular species or some new research on which flowers are best for bees, or supplementary food is best for this bird or that mammal.

Take hedgehogs, for example. When my mum was a child she and her siblings fed bread and milk to hedgehogs, which we now know can dehydrate and even kill hogs. Similarly, when I wrote my first book, *The Wildlife Gardener*, in 2012, official advice was to feed mealworms to hedgehogs, along with

peanuts, sunflower seeds, and cat and dog food. Since then, it has been revealed that mealworms are harmful to hedgehogs, too, while peanuts and sunflower hearts aren't particularly good for them, either. Keeping up to date with the latest knowledge can therefore save lives. It makes us better wildlife gardeners, too.

Our gardens act as refuges for a wide range of species. You might look into your garden and see the species that visit it as static - that the blackbird and robin have always been 'garden birds'. But of course, they haven't, they used to inhabit the woodland edge but have adapted to use gardens. Other species continue to adapt and are increasingly seen in gardens. Goldfinches have been visiting gardens only in the last 20 years - they're now the second most common bird in my garden, after house sparrows. When they first

started coming in we would feed them Niger seed, but a recent study conducted by the British Trust for Ornithology (BTO) suggests they prefer sunflower hearts. Long-tailed tits are also more likely to visit gardens. The variety of birds we see outside our doors is growing, and so is the range of food we offer to them.

The more we learn about wildlife and their needs, the better we are able to provide for them. Long gone are the mealworms and the Niger seed, and in their place are cat biscuits and sunflower hearts. I tweak habitats for this species or that, and am constantly on the look out for more ways I can improve my garden for wildlife.

And I will always keep pushing myself on those tricky solitary bee IDs and read scientific papers on the feeding preferences of particular birds. The more I learn, the more I can help



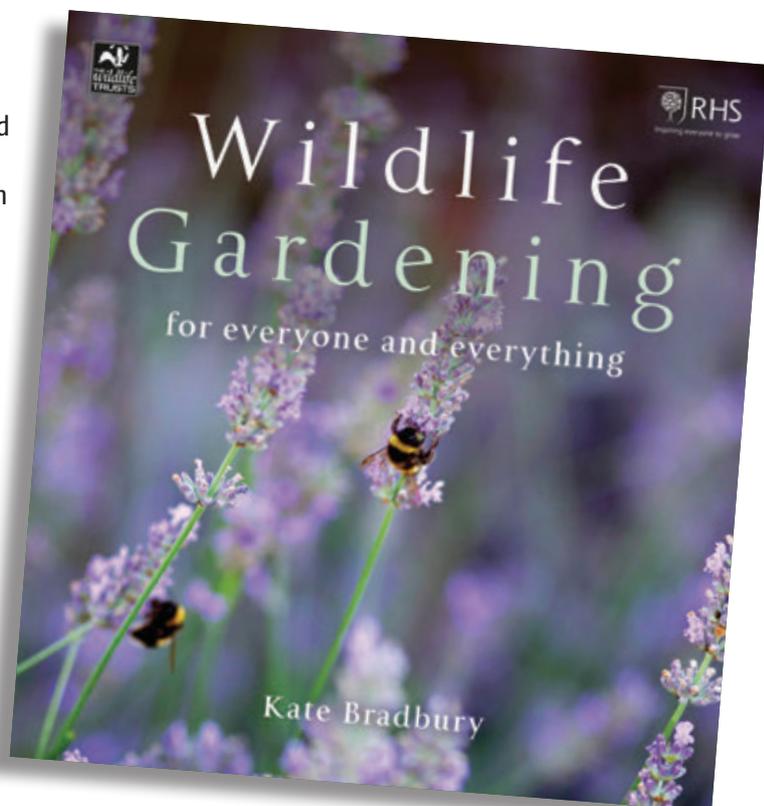
wildlife. But I can also include this latest information in my books, too.

If you want to improve your wildlife gardening skills, there's a fascinating array of information out there. Start with books - my most recent book on wildlife gardening is great (even if I say so myself!) but Jules Howard's 'Wildlife Pond Book' is excellent, and you'll learn a lot about bees from Brigit Strawbridge's 'Dancing with Bees' and Jean Vernon's 'The Secret Life of Bees.' Love hedgehogs? Read anything by Hugh Warwick. And, while new books are packed with the latest information you can't beat a good oldie, too. Trevor Beebee's 'Frogs and Toads' remains my favourite book on my favourite amphibians.

There's a friendly bunch of scientists, ecologists and amateurs on Twitter and Facebook who will gladly help with identification of plants and animals, and you can follow particular hashtags that interest you, such as #wildflowerhour.

So what's stopping you? Arm yourself with knowledge and set to creating the best wildlife garden you possibly can. The reward will be a garden packed with life to learn about and love. It's a win-win, in my book."

As well as being a Froglife Patron, Kate Bradbury is an award-winning garden writer, specialising in wildlife gardening. She also presents practical how-to wildlife gardening videos on BBC Gardeners' World Magazine website and made five films for BBC Springwatch as part of the Garden Watch campaign. She has written



three wildlife gardening books and regularly appears on the Radio and in the popular RHS gardening podcast.

Tadpoles in the Classroom

For many of us our first wildlife memory is discovering the wonder of tadpoles and marvelling as they transform into hopping frogs. Through our Tadpoles in the Classroom programme more children will have this unique experience and will enjoy some real hands-on science.

Froglife provide all the equipment and guidance you need for keeping

tadpoles in your classroom and will run regular sessions with your class to help them learn about lifecycles, metamorphosis, habitats, biodiversity, ecosystems and much more. The sessions start after Spring half term holiday with going out to collect frogspawn from a local pond (ideally with the children) and bringing it back to the classroom. At the end of this process we release the froglets back to where we found

them (again with the children if possible). Tadpole/froglet welfare is a priority and local ponds are used for biosecurity reasons (reducing disease spread between water bodies).

We run this programme across the country where we have a Learning Officer based. Contact Sheila.gundry@froglife.org for more information and costs.





Taking a Leap into learning with the FROGLIFE CURRICULUM

Are you an expert on amphibians and reptiles or have you just started? Perhaps you know a lot about the frogs in your local pond but very little about the life cycle of a barred grass snake? At Froglife as well as wanting to learn more ourselves about amphibians and reptiles, a big part of our work is finding engaging ways to help people from all backgrounds to learn about amphibians and reptiles, to appreciate them and to take action to conserve them.

We do this in many ways: we contribute at a policy level, such as the consultation for the new potential Natural History GCSE; we develop innovative ways of learning, such as Virtual Reality www.froglife.org/what-we-do/education/london-t-o-a-d/london-t-o-a-d-virtual-reality-experience and we integrate key learning outcomes into all our hands-on programmes. To help us do this we developed the Froglife Curriculum

www.froglife.org/learning-zone/the-froglife-curriculum This looks at:

- Knowledge of amphibians and reptiles, including species, habitats and actions for conservation
- Appreciation of amphibians, including species, habitats and actions for conservation
- Action for conservation, both for species and for habitats

In each of these categories we have identified levels, from Level 0 (misconceptions) and level 1 (no knowledge) to level 5 (expert). We can then identify where individuals lie at the beginning of a learning programme and assess how they progress over time.

Have a look at the Froglife Curriculum to see where you currently lie and consider what you could do to increase your knowledge and understanding of amphibians and reptiles - and enjoy your wildlife journey!





YOU'RE NEVER TOO YOUNG TO LEARN ABOUT NATURE

As wildlife enthusiasts ourselves CJ Wildlife are well aware of the joys and benefits of the vibrant, natural world around us. Experiencing nature first-hand is a great refresh from the everyday routines and spending some time in a world that doesn't rely on screens and mobile phones is a benefit to both our mental and physical well-being. It is therefore just as important to teach our children to enjoy nature and develop an interest and respect for wildlife ongoing; it is their future.

Why not take learning outdoors? If you can include insect hotels or simple log piles plus a shallow water feature to your garden or outdoor area, there will be opportunities for seasonal antics to watch. From wriggly worms, vibrant fluttering butterflies or the fascinating work of pollen-laden bumblebees. The more adventurous can explore minibeasts using bug viewers and delight in identifying features on creatures that initially look like aliens!

You can also provide food and nest boxes in your garden which will help both resident birds and give fleeting visitors a reason to stay around. Many of our most common garden visitors are bright, attractive birds that are hard to ignore and can light the initial spark that fires a lifetime's interest. Make bird feeding part of your child's daily routine to check and fill the feeder - it's a great way to instil responsibility for wildlife. We have a vast array of garden and window feeders for getting started

plus 'build-your-own' kits that enable children to build and decorate their own creations and have a personal connection with the birds that use them. Or you set them a challenge with our Peanut Butter Modelling Clay to make inspired treats that the birds will love.

Putting out specialist foods and accommodation can encourage other charismatic but vulnerable wildlife such as hedgehogs and bats into gardens and offer a chance to watch them undisturbed from a convenient window, whilst also helping the wildlife by providing good quality nutrition.

To complement these activities, we have a great range of wildlife identification guides to give children a memorable one on one encounter with common garden wildlife. In our experience most youngsters need very little encouragement to investigate and everyone benefits from the joy of a child's reaction to seeing a tadpole turn into a frog for the first time.

CJ Wildlife are proud to be working in partnership with Froglife. Visit our website www.birdfood.co.uk on call freephone 0800 731 2820 to find out more. As a Froglife supporter you can also save 10% off when you buy from us, simply use discount code UKFROG18 when you order.



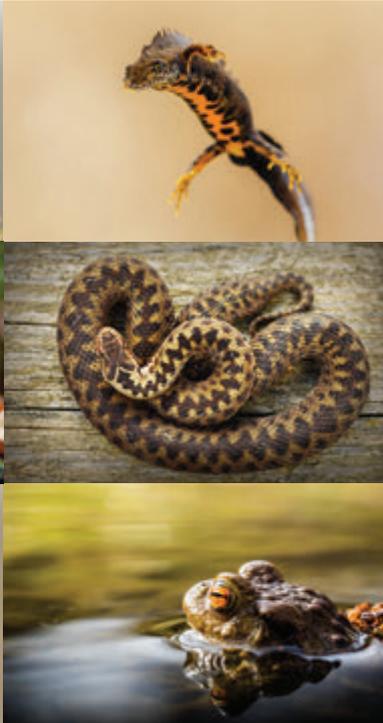
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or call 01733 602102

THESE ARE CHALLENGING TIMES AND FROGLIFE NEEDS YOUR HELP. IF YOU'VE BEEN INSPIRED BY SOME OF THE WORK WE DO IN THIS SPECIAL 'EDUCATION' EDITION PERHAPS YOU'D LIKE TO SUPPORT ONE OF THE PROJECTS THAT YOU LIKED READING ABOUT? OTHERWISE HOW ABOUT CONSIDERING A FROGLIFE FRIENDSHIP, SPONSORING AN AMPHIBIAN OR THE CONSTRUCTION OF A POND AS A SURPRISE BIRTHDAY, CHRISTMAS OR ANNIVERSARY PRESENT?

THERE ARE ALSO A NUMBER OF GIFTS YOU CAN BUY FROM OUR SHOP (SEE BELOW).

DO SHARE THIS ISSUE WITH FAMILY AND FRIENDS AND SPREAD THE FROGLIFE MESSAGE. WE REALLY APPRECIATE YOUR CONTINUED SUPPORT...



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And finally, but certainly not least, a big thank you to all of our volunteers especially all those toad patrollers who did such a terrific job again this year.

Give Froglife Friendship as an extra special gift to someone you know who cares about frogs (and all amphibians and reptiles!). As well as knowing your contribution is going towards their conservation, your friend or family member will also receive a special pack. Friendships start from £18.00.

We have a range of cards, books and gifts for all occasions in the online Froglife shop at www.froglife.org/shop. All funds raised support our conservation and education work.

The Froglife shop stocks Field Study Guides. Why not hop online to see the full range? Prices start from £3.00



The Perfect Pond is set in the British Countryside with native wildlife characters. This book introduces children to their natural heritage, and encourages discussion about UK species and their habitats, ecology and conservation. £4.95