



A Citizen Science project with a difference

The Rock Pool Project was recently recognised by *The Guardian* newspaper, who placed the project top of their list of wildlife and nature activities in the UK. Project co-founder Alan Smith explains more.

The Rock Pool Project is a citizen science venture with a real difference. Conceived in 2017 in Cornwall, England, it seeks to be fully self-sustaining and make the joys of discovering wildlife accessible to people of all ages and backgrounds, whilst collecting vital data on rock pool biodiversity around the British coast.

In addition to inspiring young people to appreciate the natural world and collecting biodiversity data, one of our project's central aims is to be sustainable and long-lasting. Dr Ben Holt is a prominent marine ecologist whose extensive experience working with citizen science projects brought a lot of reward and success, but also frustration. He found that many such projects, including Capturing our Coast—for which he was the South West Project Officer—are finite and tend to wrap-up after two years or so. Our project is therefore supported through income from the activities we provide, taking the pressure off our dependency on grant funding. This, we hope, has allowed us to create a project that is able to grow and evolve for future generations.

Education is as important as data



Figure 1. A range of studies have shown that time spent in nature, experiencing wildlife and being active, benefits us physically and mentally. Image © Billy Rickards.

collection to us and a fundamental aspect of citizen science. For our project, and indeed our planet, to be nurtured and maintained long-term, we must inspire adults and children to engage with our wildlife and ecosystems (Fig. 1). With experienced schoolteachers such as myself in the team, we pitch our activities to different ages, engage children with fascinating, hands-on learning and link everything we do to the national curriculum, benefiting schools as well as students. These teaching skills also help us to educate adults involved with the project and to communicate effectively with people from all walks of life. The fact that even within my current school, in a Cornish town just 5 miles from the coast, there are children who have never visited the beach, shows the importance and necessity of trying to inspire young people of all backgrounds.

The educational aspect of The Rock Pool Project, therefore, supports the scientific work undertaken by our members and staff, and vice versa.

Ben explains further: 'For us, citizen science is more than just giving people the opportunity to assist professional scientists, it's building a community that learns about our

natural environment together. It is unfortunate that, despite having huge amounts of biodiversity data in the UK, we actually know very little about how our marine ecosystems vary from place to place, or over time. We have designed our activities to address this issue through fun, discovery-based surveys which collect data to help us answer these questions. We share all this information with the wider public via the National Biodiversity Network and, most importantly, we provide detailed feedback to our participants, encouraging them to learn more about the wildlife they have discovered.'

Thanks to software we have developed, everyone who carries out one of our surveys receives a customised report with images and information



Figure 2. Participants in The Rock Pool Project receive a personalised rock pooling report.



Figure 3. Alan and Ben have built a passionate and diverse team to develop a successful, not-for-profit organisation which offers a variety of activities, including digital rock pooling surveys, rock pool bingo for families, private biodiversity safaris, and national curriculum linked school visits. Image © Paul Smith.

about the animals and seaweeds they find, along with statistics about their discoveries and the overall trends (see Fig. 2). Not only is this a totally unique keepsake but it is also an invaluable educational resource, allowing hours of engaging, cross-curricular follow-up learning back in the classroom. For younger children, we have created our popular rock pool bingo cards, allowing even toddlers to begin surveying—with suitable supervision and safety of course!

Requiring simply a camera phone or one of our waterproof devices, our easy to use digital rock pooling system, ‘DRoPS’, has allowed us to engage people of all demographics and not just preach to the converted. A real highlight for us was our highly successful Filling the Holiday Gap initiative last



Figure 4. Ben Holt making rocky shores accessible with the mobile rock pool. Image © The Rock Pool Project.

summer, when we took disadvantaged families rock pooling around their local area, giving them the skills and confidence to do so for the first time. We are delighted that many of these families have now made this a regular hobby which they enjoy together.

As well as guiding people to explore rocky shores, we have also taken our unique mobile rock pool, complete with inhabitants and algae, to schools, care homes, public beachfronts and city centres (see Fig. 4). Quite literally, we want to share our astonishing coastal wildlife with everyone, if we can!

It has been hugely rewarding to develop this project from nothing more than an idea with a great friend of over twenty years. Ben’s expertise and passion for citizen science is evident throughout all we do, and I hope my desire to share the joys of marine wildlife is too. Our careers took us on vastly different paths. Ben became a successful ecologist and has conducted his research at universities in the UK and abroad. Initially, I travelled extensively, including an overland journey from Europe to Australia, before returning to London and working for *The Trailfinder* travel magazine. I then followed in my parents’ footsteps and retrained as a primary school teacher.

We kept in touch throughout and, in 2017, having completed my first year teaching in Dubai, I flew home to the UK for the summer and finally had the chance to meet up with Ben for the first time in almost a decade. On our kayaking and rock pooling trip in Ben’s new home county of Cornwall—coincidentally where I grew up—it turned out that we had both been separately mulling over ways to establish a project engaging people with marine wildlife. Thanks to our extraordinary team members, mentors, volunteers and interns—whose invaluable experience in business, marketing and other unfamiliar fields we have gratefully built upon, we have been able to establish and grow the project to where it is today (Fig. 3).

Our aim for the future is to build a rock pooling community across the UK, collecting and sharing discoveries online through ‘DRoPS’. We currently have an exciting summer project underway, focused on developing this digital rock pooling system further and we would urge any interested individuals or groups to contact us. We also hope to work with many more schools and organisations around the UK to inspire a new generation of people passionate about our marine life as well as continuing to develop the long-term sustainability of the project.

If we are to better understand, protect and conserve our astonishingly beautiful, yet delicate, coastal ecosystems we need to educate and introduce more and more people to it. The fundamental reasons we set up The Rock Pool Project were because we simply love discovering wildlife and wish for as many other people to experience this joy as possible. If this sounds like something you would like to get involved with then please check out our website, www.therockpoolproject.co.uk, and get in touch—we would love to hear from you.

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