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CREIGIAU ALLOTMENTS

Wildlife Pond Project
Summer 2026

Introduction

The aim of this project was simple : to help support and improve the biodiversity on our allotment site.

2026 has been (yet) another record breaking year here in Wales when it comes to high average temperatures and very low rainfall.

We know we can’t fix the world, but we can influence the small pocket of land that we manage as Creigiau Allotments.

The project was conceived by the Allotment Committee Chair, Gareth Banks and the Allotment Committee Secretary, Amanda Thorpe.

We give our kind thanks to Cardiff Local Nature Partnership, for supporting the project with materials and plants, and for Tarmac (Creigiau Quarry) for supplying us with a decent quantity of (very) local rocks!

Many thanks for checking out this brief guide to how we went about building it!

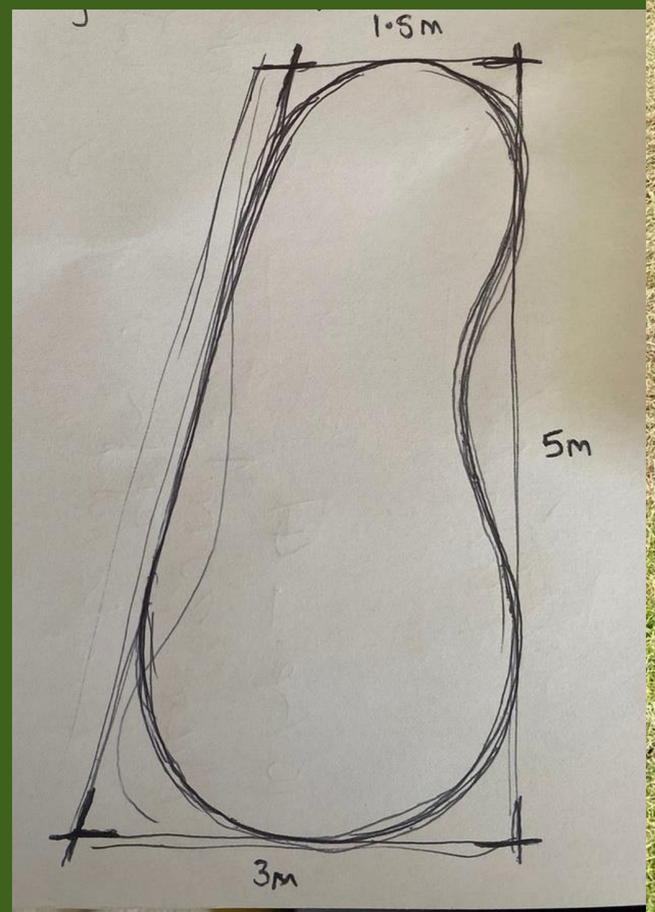
Gareth Banks - Chair, Dynevor Gardening Association (Creigiau Allotments)

We started the project by identifying an appropriate area of land at the bottom of our site.

This grassy area next to the boundary hedge was a decent size, but too small to be a plot.

Its nicely tucked out the way, but gets good sun throughout the day. Whilst its next to the hedge, there’s not too much tree cover nearby, which is important when the leaves drop in autumn!

Step 1 was to sketch out the basic size and shape for the pond, based around the area we’d chosen for it.



We then marked out the basic shape using a nice long tow-rope (many thanks Phil Thorpe!) and some gardening canes

With hindsight, this was a very smart first step, because I changed my mind about the final shape of the pond many times over the next few days. But with only a length of rope on the ground at this stage, these design changes were pretty low impact.

I’d highly recommend this “marking-out” step for this reason. Once the digging starts, tweaking the shape gets a fair bit harder of course!



Then the real graft began!

We broke ground just a few days after the rope went down, and the first step was to remove the very top layer of turf and stack it up as tidily as I could nearby (behind the apple tree at the bottom of the pond), just in case we wanted to use it again at the very end of the build.

I did this with a decent quality stainless steel spade, cutting down about three inches so the turfs had a reasonably good bit of soil to help the grass stay alive.





The next step was to define the first step down that would act as the space to bury the exposed edges of the underlay and liner, once the main construction phase was complete.

I came in about 20cm from the outside edge of the pond , and started digging down again, removing the top soil and putting it to one side as I went.



I removed the top soil all the way across the pond down to a depth of around 25cm. This new level will create the planting shelf that runs around the perimeter of the pond, for flora that likes to sit in water, but doesn’t like to be submerged too deeply.

All the top soil that was removed was used to enrich the allotment plot right next to the pond.



The next step was to define the width of the plant shelf, which I decided to set at around 30cm in from the edge of the first level down.

I used a short length of decking cut to the right size (30cm long) to use as a guide for the blade of my spade for the next dig down.

I dug one spade depth all the way round using my spacer jig to define the shape of what is the deepest section in the middle of the pond.

You can see a blue tarp laid out at the bottom of the pond, ready to accept all the low-fertility sub soil that’s about to be removed.



The next step was to dig out the main pond cavity, being midful to create a “shallow end” at the bottom of the pond to help ensure any small aminals can get them selves out more easily

A good amount of the low fertility sub-soil will go back in, once the underly and liner are in place.

This will give the pond a more natural appearance, and will help provide a more natural habitat for the insects and plants that will establish first.



At this stage, all the digging is now completeand I have a nice big pile of sub-soil on my tarp.

The depth of my main pond cavity gets progressively deeper towards the top end of the pond.

As well as the shallow “beach” section at the bottom end, I will incorporate a sloped rocky section at the top end, and a wooden ramp halfway along. All three of these features are design to ensure that creatures that fall in accidentally, can get themselves out again.

I also constructed a hazel screen at this point too, to try and ensure nobody stumbled into the pond cavity, now it was fully dug (see the next two slides)







These photos were taken at Forest Farm, the home of the very wonderful **Cardiff Local Nature Partnership** who sourced the liner and underlay materials for us, as well as a terrific package of pond plants and containers!!

Chris and I are collecting the liner and underlay (which weighed an absolute tonne!). Huge thanks to Chris for letting us use his pick up!





I rolled out the felt underlay on the path down to the pond, so I could cut it up into strips that would be laid into the pond.

This fully recycled fleece material protects the underlay from being punctured by stones and roots that may be left in the pond cavity.

And becasue the lovely team at Cardiff LNP sourced a generous amount for use, I was able to put down two full layers of fleece before the liner went in



These pre-cut strips of underlay were positioned into the pond cavity, making sure each strip overlapped the previous one by around 15cm on each joint.



This photo shows all the strips of underlay in place(two layers) ready for the liner to go on top

The liner then goes in, over the overlay, being very careful not to peirce or damage it . Although its already been trimmed a fair bit in this photo, I’ve also made sure to leave loads of excess around the edges as this will get pulled into the pond as it fills with rain water.



I then put 2 more layers of fleece on top of the liner, to protect it from the sub-soil about to go back in





This photo is a shot taken at Creigiau quarry, who kindly hosted a visit by Rob Raven and I. Quarry manager Emyr gave us a superb guided tour and we got the chance to discuss the type and quantity of stones that we needed to help with the pond construction.
Tarmac very kindly donated and delivered all the stones for free!

I used the limestone from the quarry all the way around the perimeter. They help the pond look really good but also create loads of great nooks and crannies for creatures to live and breed in.









We had a very hot and dry summer this year, so we had to wait a very long time until we had enough rain to prove that the pond would even hold water (hence the dopey look on my face when it did!)

At this stage, the liner and underlay are still visible. Its important not to trim them back until the pond has a good amount of water in it. Once it was pretty full and the weight of the water had made sure it found its final shape, I could them trim off and bury the excess using sub-soil from the excavation

Here you can see that I've trimmed off all the excess liner and underlay, and covered it over using some of the sub-soil from the excavation



After a few more rainy days, the pond really started to fill properly so we added a few plants to help oxygenate the water, and accellerate the appreance of new life in the pond.

And just a couple of days later I got an email saying that our pond-plant bundle was ready for collection!!

Once again, huge thanks to the superb **Cardiff Local Nature Partnership** for all their fantastic help and supprto with the project!





Apart from some fencing, the pond build is now more or less complete, and we can enjoy watching it establish and natiralise over the coming months and years.

Pond Plants used:

Marsh Marigold – Caltha Palustris
Flag Iris – iris pseudacorus
Pond waterlily – Nymphaea Alba
Pond waterlily – Nymphaea Darwin
Flowering Rush – Butomus Umbellatus
Loosetrife – Lythrum Salicaria
Water Mint – Mentha Aquatica
Water Forget Me Not – Myosotis Scorpioides
Slender Pickerel Weed - Pontederia Cordata Lancifolia
Brooklime – Veronica Beccabunga
Water Cress – Rorippa Nasturtium Aquaticum
Preslia Cervina – Mentha Cervina
Hornwort – Ceratophyllum Demersum

Thank you