Summary - How to Rewild!
Online Q & A with Devon Wildlife Trust

6pm – 7pm, Thursday 7th October 2021

Hosted by Devon Wildlife Trust, this online workshop is aimed at any individuals, community groups or businesses in Plymouth who are involved or interested in running a rewilding project in a public space.

Devon Wildlife Trust's Conservation Manager, Ed Parr-Ferris, will be talking about the environmental factors to consider when planning a rewilding project, how rewilded spaces can be managed & how to show its impact on the wildlife.

Martin Howitt from The Data Place, will also be giving an update on the Plymouth Rewilding Network Mapping Platform and how you can get involved.

There'll be time for our ecology expert Ed, to answer your questions and help inform the next steps with your rewilding idea.

greenminds · Plymouth City Council · Real Ideas · National Trust · Plymouth College of Art · Devon Wildlife Trust · The Data Place · University of Plymouth · European Union European Regional Development Fund · UIA Urban Innovative Actions

#GreenMindsPlymouth FB: @NaturePlymouth Twitter: @GreenMindsPlym

Summary ~ How to Rewild!
Online Q & A with Devon Wildlife Trust

Click the link below to watch the recording
of this online session:

https://greenmindsplymouth.com/knowledge-hub/resources/webinar-how-to-rewild-q-a-with-dwt

greenminds PLYMOUTH CITY COUNCIL REAL IDEAS National Trust PLYMOUTH COLLEGE of ART Devon Wildlife Trust THE DATA PLACE UNIVERSITY OF PLYMOUTH EUROPEAN UNION European Regional Development Fund UIA URBAN INNOVATIVE ACTIONS

#GreenMindsPlymouth FB: @NaturePlymouth Twitter: @GreenMindsPlym

What's been done so far?

At Green Minds, we're helping to facilitate a 'Plymouth Rewilding Network'. This was created in December 2020 following an online workshop which highlighted the need for people to connect & support each other in taking rewilding action, as well as getting ecological expertise & guidance.

One of the key themes was to improve ecological knowledge & gain a better understanding of the practicalities of rewilding. Most recently, we have compiled & recommended these resources to get you started:

- **Plymouth Rewilding Network Summer Social Summary & How to rewild guidance:** https://greenmindsplymouth.com/news/summer-rewilding-network-social
- **Introduction to Habitats in Plymouth Webinar:** https://greenmindsplymouth.com/knowledge-hub/resources/introduction-to-plymouth-habitats-webinar

#GreenMindsPlymouth FB: @NaturePlymouth Twitter: @GreenMindsPlym

What's been done so far?

As well as providing rewilding guidance & resources, we have also been working on a mapping platform with a focus group which will help connect groups across Plymouth. The Data Place & University of Plymouth have been working on a prototype – watch this recording (from 4.45) to see a preview of the map & how you can search for places, organisations, people, services, activities & how everyone is connected.

We need your help!

In order to get the Plymouth Rewilding Network Map ready to go on the Green Minds website, we now need to hear from you! If you're part of a group taking rewilding action or volunteering to help the environment & wildlife, complete this quick survey: **https://forms.gle/WiU8iFLnGt5VWrZc8**

Any questions? Email Martin Howitt at martin@thedata.place

#GreenMindsPlymouth FB: @NaturePlymouth Twitter: @GreenMindsPlym

How to Rewild!
Online Q & A with Devon Wildlife Trust

We have included a copy of the presentation given by Devon Wildlife Trust's Conservation Manager, Ed Parr-Ferris, and his answers to every question received for this event.

If your question wasn't covered in the recording, you can find Ed's responses to your question later in this document.

How can we rewild Plymouth?

www.devonwildlifetrust.org

green minds

UIA

Devon Wildlife Trust

The Wildlife Trusts

Well if you remember my [previous talk introducing rewilding], this is about enabling natural processes to be able to shape our landscapes.

But I think you would agree that we may not want this scale of natural process in the middle of Plymouth! I'm not sure that wildfires or snow are that likely here either!

Although we may see more and more flooding, storms and 'vigorous' coastal process in future.

www.devonwildlifetrust.org

green minds

UIA

Devon Wildlife Trust

....and while many might like to see this type of succession-dominated process – to others this may also seem like letting go a little too much.

....and while we love the Tamar, Tavy and Plym, perhaps this level of river processes would be a step too far.

We need to consider how far we can go & what's appropriate in an urban context.

www.devonwildlifetrust.org

green minds

UIA

Devon Wildlife Trust

....and while we all want to see the return of a range of species – walking to the Spar shop might prove a little hindered if these guys were grazing the road verges!

Bison may be a more extreme example of rewilding, but we certainly need to keep all these processes in mind as guiding principles.

So what can we do?

Well the first thing we can do is make SPACE for big nature. Stepping back from hard development and infrastructure from rivers, drains, roads, woodlands, parks, etc does three things:

1) It gives a space for nature to thrive, to develop and adapt to its new setting which means different species can survive here.

2) It allows space for those processes that could otherwise cause us problems (flood, river and coastal changes, big animals, succession) to instead be able to shape that space and find a balance that works.

3) By linking up these bigger spaces, nature can move across the city where otherwise it may be blocked.

www.devonwildlifetrust.org

green minds

UIA

Devon Wildlife Trust

The Wildlife Trusts

The next thing is to change how we view where nature can be. Nature shouldn't just be in parks and window boxes – nature should be everywhere. This will do two things:

1) It means that there is even more space for nature with ever more niches that support not just a range of species but whole ecosystems (and the natural processes they deliver).

2) This makes nature, with all its benefits, accessible to everyone. Let's not look at our cities and be constrained by what is there now, but instead think of where nature 'could' be.

We should have a presumption that nature will be a key part of everything we do – a path, a shed, an allotment, an extension, a new road, a housing development – and that we just need to figure out which things will do best where and how we can help them.

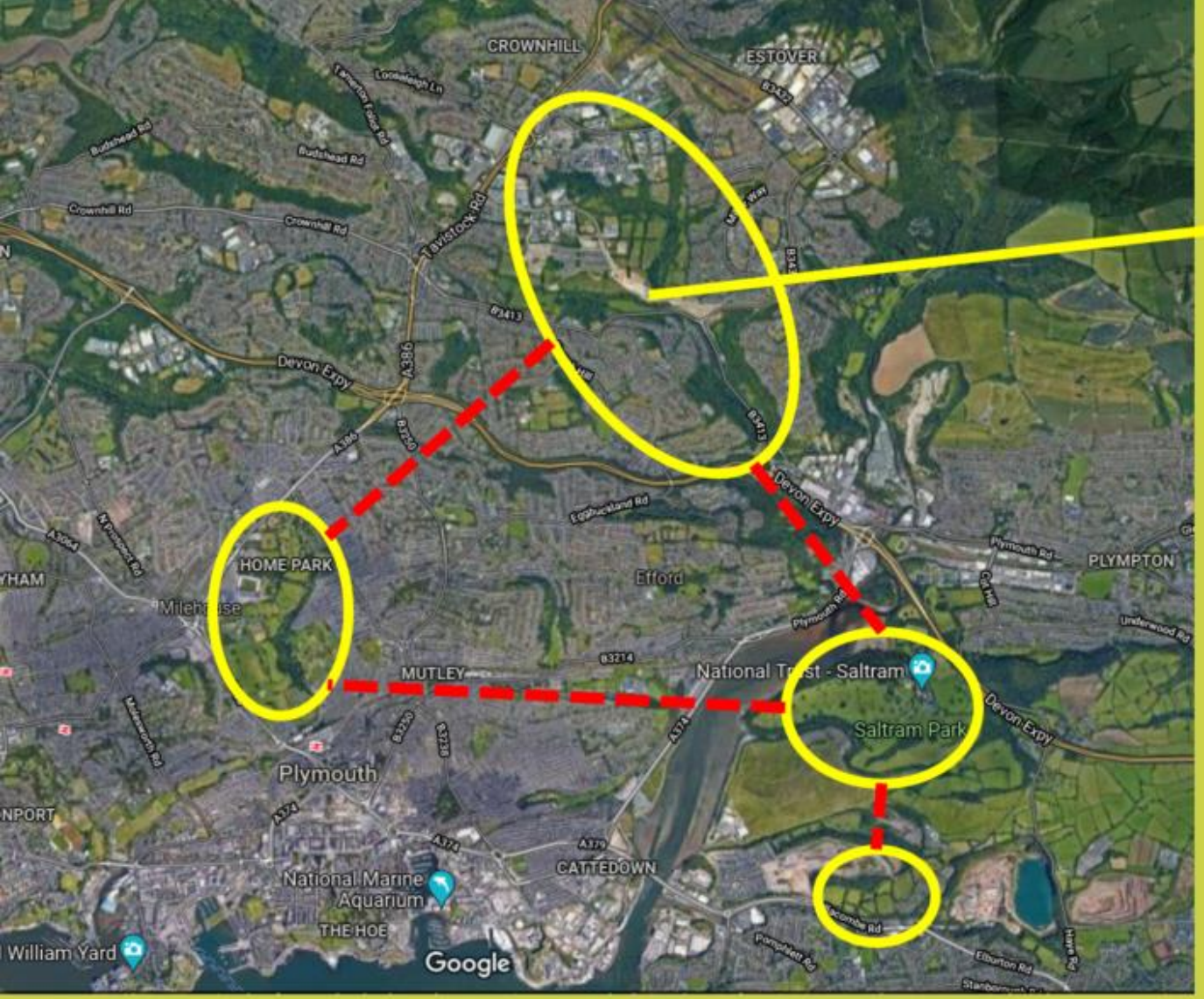
In the rush to rewild we must not forget that ‘traditional’ nature conservation work is a critical part of the mix.

This has been maintaining the species and habitats that we still have, maintaining ark sites of species that can re-populate the landscape.

So we must be careful not to lose or degrade these as they remain our most precious resource.

The skills learnt in managing these sites will also be similar to those needed for rewilding – or certainly kick-starting rewilding.

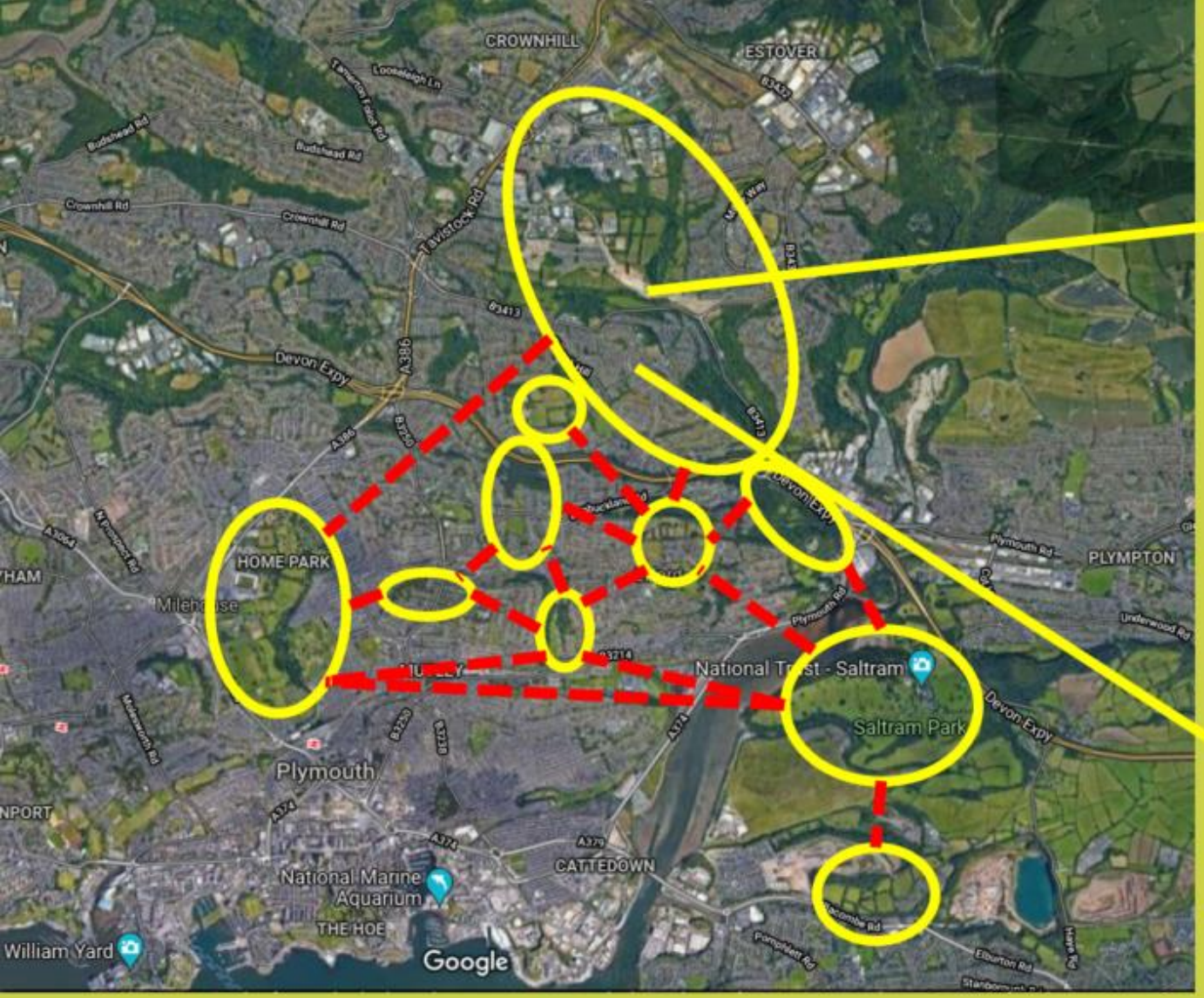
If you own a big site, think about physical connectivity and how spaces are connected, as well as functional connectivity (eg. looking at how seeds blow or birds fly across a site).



So for a council, the key work is to look at their larger sites and ensure these are both as nature-rich as they can be, but also they are connected, so wildlife can move between them – a ground beetle or millipede can only get between sites if they are physically connected.

Although it is still worth working on sites that are also in the area but less connected as these may still be useful to more mobile species.

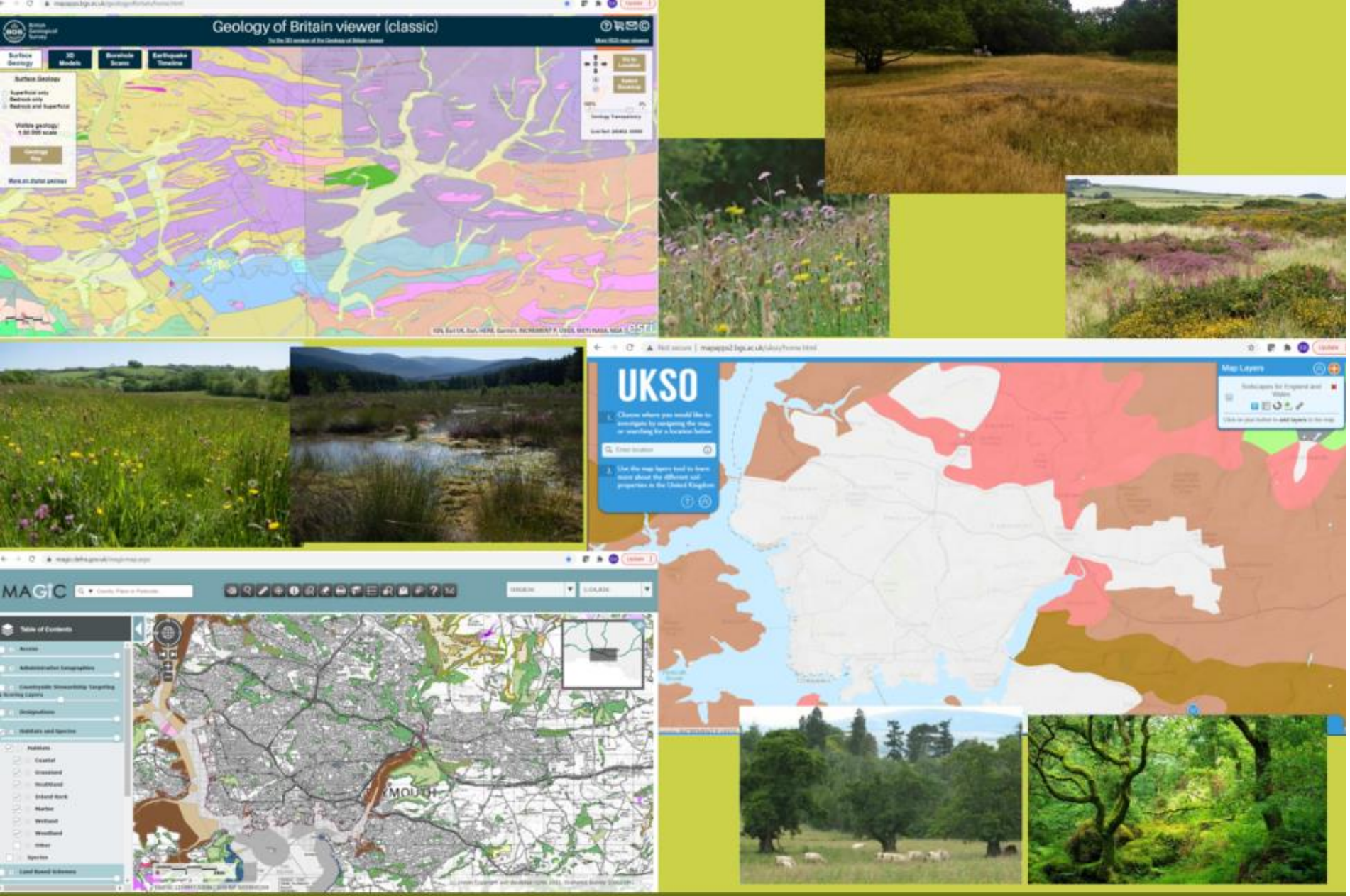
This is where communities come in – you may not own a site, but your role in managing and protecting them are really valuable (eg. road verges)...



And this is where communities come into their own. Looking at your own local patch in the context of the bigger geography of these larger sites, means you can create the networks – for nature and natural processes.

Starting with the existing greenspaces and then joining these up within the streets, gardens and even roofs – trying to think of as many different habitats as possible that are suitable for your area.

Think of all habitats – not just generic grassland / wildflower or woodland mixes. To help overcome this, you need to get to know your site...



Once you're looking at a particular site or area, you really need to get to know it. There are online tools that can help you understand its **geology, soils, existing habitats and designations.**

I'd strongly recommend digging a few holes across your site and looking at the soil (with landowner permission) – send it off for sampling to understand everything about it.

Armed with this information you can then figure out which habitats your site could support – the acidity will help you understand whether this should be calcareous grassland, acid grassland or heathland. The wetness may point to rush pasture or lowland fen.

And of course in nature open and wooded habitats normally cohabit the same areas – so think parkland with patches of open and closed.

But if we just put a fence around sites and leave them – they are unlikely to become species-rich habitats…or at least not in the next hundred years.

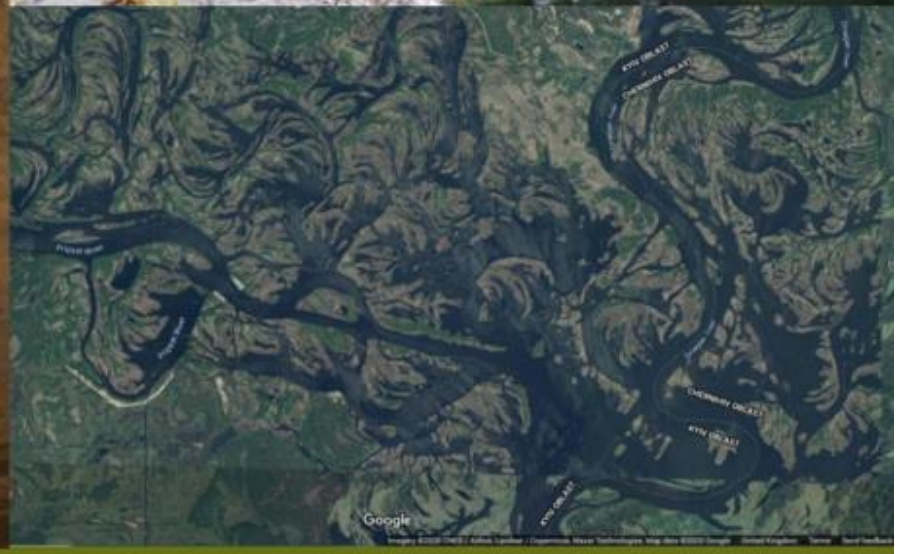
That is because amenity grasslands, bowling greens, most green spaces and even most farmland have only a couple of species of plants in them (probably almost no animals or fungi).

So where will these come from if there are none in the area?

...and that's where we need to give things a kick-start. By sourcing the right seed (preferably **locally sourced**) based on the information you've collected from getting to know your site (eg. soil type, exposure, how the site is used by people and wildlife), we can create a new seed bank in each area.

We don't have to seed or plant up everywhere – but having enough sites with a rich diversity of species scattered across a landscape will mean there is seed which can spread along networks.

Green Minds partners such as Devon Wildlife Trust, Plymouth City Council and National Trust, can help with advice on where you can source local seed.



And of course we may need to do some structural changes too – especially around watercourses, which are often canalised or culverted. While it may not be suitable to put beavers everywhere, we can still create diverse renaturalised waterways which will benefit nature and people – especially if we can reconnect floodplains (however small) and recreate riparian wetlands.

So learning from those big natural systems and replicating what we can in an urban environment – especially allowing space for natural processes. Even small wetland areas in a city make a huge difference.

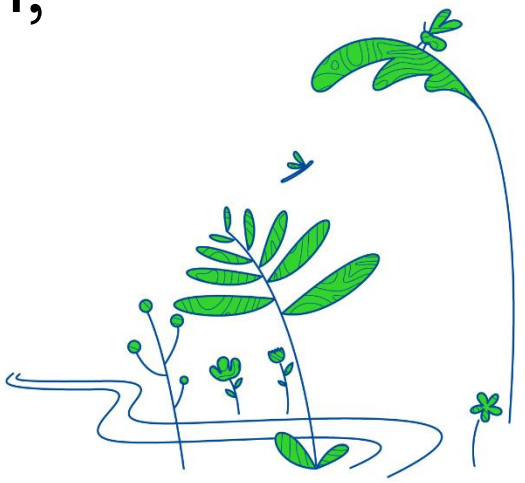
Before we move onto the Q&A, The Wildlife Trusts are lobbying government for 'Wildbelt'.

This is a designation that would recognise when land is being restored for nature. At the minute, there is no protection for such land, so it could easily be bought, ripped up and built on. Wildbelt would prevent that, ensuring these sites can reach their potential and provide for nature and people in perpetuity. This is part of a series of demands we are making of government to make nature recovery happen.

Find out more about this campaign: https://www.wildlifetrusts.org/blog/sue-young/planning-changes-england-needs-wildbelt-protect-land-recovery

Time for the Q&A!

If you asked a question when you registered for this event or emailed a question to wildlife@plymouth.gov.uk before 7th October 2021, you'll find the responses from Ed Parr-Ferris (Devon Wildlife Trust) here...



“We would like to know how to develop native shrubland and what if any trees we should plant to enhance our natural surroundings yet consider the view that our park benefits from.” – *Karen @ The Village Hub (Blockhouse Park)*

1. Great to hear you are looking at ‘native shrubland’ – good term too – I also like the word ‘furze’. I’m always frustrated by the term scrub which sounds like something nasty.

2. Look at your soils – I suspect well modified, but depending on various things it could support species like gorse, heather, hawthorn, alder buckthorn, blackthorn, bramble, honeysuckle, hazel, guelder rose, whitebeam, dog rose, dogwood, spindle, broom etc.

3. Consider viewpoints and sensitive areas (e.g. archaeology). Try to frame viewpoints with shrubs and use standard trees to break a view. That way, you are not competing with the view but adding to it – I note there are already a few trees. Think whether you want a patch of scrub, a hedge or individual shrubs as this will all affect choice of species.

4. When planting, you should probably do a patch at a time so as not to be overbearing – people are wary of change, especially big change. You can also learn.

5. Use tree guards where needed (look for compostable/biodegradable ones) and make sure you remove as soon as possible. Consider rabbit fencing as an alternative as shrubs want to bush out from base and guards will create a lollipop.

6. Sow tussocky species-rich grassland around and between your shrubs – this will make it support far more species.

“What is the best trees to plant to benefit wildlife, air pollution and people / low maintenance but long life spell?” - *Kim*

1. Main thing here is to plant a rich diversity of trees and shrubs that are appropriate to the soils, landscape and area.

2. Next it is good to use species that (a) are evergreen such as holly or yew, (b) hold onto their leaves long into winter such as field maple or hornbeam – probably avoid beech as this isn’t really native to this part of UK (c) have a dense structure such as hawthorn, blackthorn (d) plant range of species to provide cover at different heights (high canopy, mid canopy and understorey) (don’t forget that climbers can really help – ivy is evergreen and can really help to provide cover at all heights throughout the year – it’s also awesome for wildlife.

3. Plant taller trees in middle of area away from roads, paths, infrastructure etc, creating a ‘wedge’ with the shrubs. This will mean far less maintenance.

4. Plant relatively densely and don’t worry about some losses – these will provide gaps and open areas as well as deadwood habitat

5. Longevity should be guaranteed so long as there is a good species diversity and actually deliberately leave gaps so new trees can germinate in these spaces.

“Biodiversity enhancement (likely rewilding through wildflower planting) throughout housing associations. Looking forward to listening to other ideas to inspire me in my projects at work.” - *Libby*

Consider multiple grassland types and other habitats too – heath, rush pasture, trees, shrubs, etc. Be aware of species like willow which have a spreading root system and can potentially cause problems with utilities. If you’re thinking of tree planting, checking underground services will be important especially in an urban setting.

“Whether to leave a one acre area of land to do its own thing, or to plant in it.” - *John*

Probably unlikely – have a look at the presentation and other answers, but depends on what is there now and what is nearby.

“How micro can a wilding site be? Thinking of large city planters so not to dismantle the planter structures”

Even a pebble can be a great habitat – eg. for lichen and moss, even pots with plants based on what is in the surrounding landscape can work well. Generally the smaller the site, the more management is needed to mimic natural processes (eg. trampling, disturbance). Get to know your site and how it’s used (eg. people pressure, site access), think about site management and adjust it if needed. Also think about what your site might be like in 100 years time and how future generations can care for it – don’t rush into it, consider your options and monitor whether the changes you’re making are actually working.

“If a derelict plot was found, what would be recommended? Would it be better to turn it into a wildflower meadow or to introduce other plants like trees/bushes. Presumably a risk assessment would have to be made to see if the ground is contaminated? I read that Red Bartsia is an invasive species in the USA. They can't get rid of it. What is the position in Devon? I notice that it is part of the wildflower mix here.” - *Caroline*

1. Definitely get to know your site first. Health and safety (those formally using the site but also if anyone is getting in there informally), risks (like contaminated ground and water problems), INNS (Invasive Non Native Species) and obviously soils and opportunities.

2. I would always advocate a mixed approach – some bare ground, some grasslands, heathlands where possible, wetlands (however small), shrubland and woodland. But keep it appropriate to the site and consider species like willow that have roots that can damage underground utilities.

3. INNS are always a problem on disturbed sites – buddleia, montbretia, heliotrope and JKW are frequent in urban sites. Ensure you don’t spread these and get advice on how to tackle specific species – please try to use alternatives to pesticides.

4. Red bartsia is native in the UK a common plant of verges, moorland, neutral and acid grassland, heathlands - and valuable for invertebrates. Any plant taken outside its home range can become a problem. This is one danger of the internet age – one country’s native plant is another country’s INNS – always check this.

Devon Invasive Species Initiative is a good resource: https://www.devonlnp.org.uk/joint-initiatives/disi/

“How can you create meaningful ecology/biodiversity net gain in city centre sites without falling foul of "tokenism" and how do you know what you incorporated has a high chance of success (recently the push for bee hives on roofs in central London resulted in not enough fauna to meet the bee population demand).” – *Darren @ Babcock*

1. As explained earlier, need to look at landscape scale picture (not operate at site level alone) and understand how this site is connected and what it offers different species and processes.

2. Look at geology, soil, existing nearby habitats, aspect, any other impacts on your site (contaminants, Invasive Non Native Species, people pressure, etc). Understand your site before you start and start by saying what function does this site play in the wider landscape, then how can you enhance/restore this site to do this better.

3. Take your time and monitor your interventions – are they working, do you need to change something. You may need to remove nutrients before starting if you want to create a species rich habitat, you may need to strip out toxins/metals, you may need some infrastructure to make things work better.

4. Don’t forget the ongoing management, especially as things are getting started. You can rarely plant a grassland and just walk away – it may take several dressings with seed to top-up or add different species, it may need grazing (or replicated through cutting AND REMOVING) at certain times of year, trees may need thinning and guard removed, access may need to be altered, etc – it may take several years of activity before you can start to relax your management. This will all need funding and support.

5. I would aim to help native wild-life first and foremost. So while domesticated bees are wonderful pollinators, they are just that, domesticated. Introducing swarms of domestic animals will offset native wild animals (in this case native wild pollinators). I would focus on creating the habitats that support native wild pollinators and then if honey bees also benefit, that’s great.

“1. Do you always need free roaming herbivores to browse and control scrub growth during the rewilding process to increase species and habitat diversity or can you leave naturalisation and regeneration to take its course?

2. Should we be prioritising certain types of rewilding such as the creation of wildflower meadows over woodland (for example) to have a greater impact on overall species decline?” - *Alice*

1. Remember that succession and grazing are just two of many natural processes that can be brought into play when rewilding/renaturalising.

2. This really depends on scale as many sites won’t suit grazing due to size, location, risks etc. In general, the smaller the site the more active the management must be to maintain a diversity of species. So it is only when you get to very large sites that large roaming herbivores (or even predators) are possible or suitable.

3. Remember that smaller animals graze too – rabbits (non-native), hare (non-native), water vole, geese, deer. These are often present and so should be considered when planning a site.

4. You can of course leave a site to succeed or to be controlled by other non-biological processes (e.g. flood, salt) and this is probably best decided when researching your site. But remember that succession alone is unlikely to result in a species-rich site that supports wildlife and natural processes.

“If you include yellow rattle which dies in winter will you be left with bare mussy patches or will enough grass survive to maintain lawn?” - *Helen*

Yellow rattle along with other parasitic plants (e.g. eyebright, red bartsia) will only reduce vigour and rarely kill off grasses and other plants. They are used to create a less competitive sward that allows niches for other species to get a hold.

For a good flowering lawn, I would oversow with a flowering lawn mix that includes things like yarrow, birds-foot trefoil, red clover, oxeye daisy, cowslip, primrose, selfheal, hedge bedstraw (and no doubt many more species) that tolerate being mown albeit to a higher level. These mixes should also include slower-growing grasses like crested dogstail, meadow grasses, bents and sweet vernal grass that will maintain a good coverage year round – although many of the flowering plants (e.g. yarrow) will too.

Be careful around removing topsoil as this changes the soil structure among other factors (there’s still research being done into the effects of this) – try a less dramatic approach first to see if wildflowers establish.

“We know the benefits of leaving areas wild for our wildlife – what is the best way to spread this message to inspire others?”

Even in rural areas / farmland, leaving areas for wildlife can cause controversy. Public engagement is critical – be positive and optimistic! Start with easy to reach groups then widen your audience. Take people on a walk – what do they notice? People often look at spaces like wallpaper – it’s 2D and they don’t necessarily interact with it, it’s just something that’s there and taken for granted. Sometimes people assume just because something is green it’s natural, but that’s not the case – eg. ‘green’ fields are often considered natural, but we know there often aren’t many species there. By taking people out and asking what is / isn’t in space, getting them interacting with the environment, they start to connect to nature and the space.

“What do you think are the biggest problems in raising public awareness? How do you think we can develop an ecological human consciousness or human to non human ecologies in practice?” - *Kirsty*

1. People don’t know what they don’t know and so those who have not been introduced to wildlife and nature and had it embedded in their lives don’t ever think of it – and if they do they think it’s not relevant to them. So we need very local examples of how nature benefits people everywhere and especially on people’s doorsteps. Covid has shown us that people can and do learn quickly about how much nature can do for us – we just need them to wake to this.

2. I mention nature everywhere and also the ‘benefits’ we get from nature. Most people now live in human ghettos, with nature exiled outside and even water is put into pipes underground. We need to reintegrate nature into our everyday – break open culverts, enjoy walking through clouds of butterflies (and midges!) and feeling cooler under the shade of trees. When these benefits become a part of everyday experience we are going to make progress.

3. We also need to understand our place in nature. As a part of our ghettos we have also outsourced all our ‘dirty work’ so we don’t have to look at it – whether that producing power, food and resources or dealing with waste including sewage. We need to be reconnected to these things and understand what happens when we are operating beyond our and the planet’s means. Every community should be ‘twinned’ with its suppliers and waste processors to bring them closer – that way we will find it harder to hide the ugly bits and be forced to deal with them and their consequences.

“How can water catchment and storage design and implementation for diversifying amphibious wildlife be considered in urban site given levels of pollution?” – *Gin @ Cliik Community*

1. So you’re absolutely right – if we create that meandering river with riparian wetlands I showed you earlier, following the first rainfall event, the CSO’s (Combined Sewer Overflows) will kick out any amount of sewage and debris (nappies, sanitary items, etc) which will be hung like Christmas lights in our new habitats.

2. We are looking at exactly this on a project in Exeter and it is complex. Partly we must address those hidden issues like CSO’s and put pressure on government and water companies to replace them with better systems. We can help by trialling things with them. Second we can look to use nature to act as screens and filters – so wetlands and reedbeds can filter out huge amounts of nutrient and even some pretty noxious stuff from our water so should play a much bigger role in our water treatment systems than they currently do.

3. But critically we are in danger of ‘doing nothing’ – which will perpetuate the hidden problems. By creating these wetlands, however polluted, we challenge government and industry to do something about the pollution being created. Obviously we must be careful and avoid danger to the people who use these areas, so there is a balancing act here.

“I’m looking for some tips about how to rewild a very urban area with tiny gardens, small street planters and a very small open public space: Central Gardens, which is only there because it was a mass grave after the Plymouth blitz so couldn’t be built on.” - *Jenny*

1. Soil samples are critical to check for toxins, contaminants, nutrients, pH etc. If the site is really contaminated, it will be best to do two things (a) planters for trees but ensure these are smaller trees/shrubs that are shallow rooted (b) consider creating calaminarian grassland, which is seen on old industrial sites with high contaminant loads. Heathland can sometimes establish on these sorts of sites too.

2. For shade consider trees/shrubs/climbers/hedges – use trellis and other structures to enable climbers to spread out and give shade. You can plant any of these in planters if necessary, but they will always require more maintenance especially in the early days.

3. Consider green walls and roofs – which can help with cleaning air, dulling sound and bringing wildlife into a site.

4. If there are any wet areas, consider wetlands and reedbeds to help clean water before it moves off site – these are great habitats too and relatively self sustaining once established.

“When rewilding a small (2.5 acre) water meadow (small river one side, stream the other) is it better to leave it to its own devices totally? Or use corralled pigs or other 'disturbance' measures to help release the seed bank? The land was often sprayed and 'improved' over many years for cattle grazing.... It has been 'organic now for about a decade - and when the farmer left it alone lots of Lady's Smock and willows came up - but they kept topping it! We are in the process of buying it.” - *Jo*

1. Research, research, research. In the case of water meadows, there may be other considerations too – look at the tithe map to see what it was called and how it was used in 1840. Check the historic environment records to understand any important historic features.

2. Pigs are brilliant. They’re great at creating an abundance of disturbance. But I would be very nervous of putting them onto a small wet site as they will turn it into a ploughed field, which will run off into the water. If someone you know has pigs, consider bringing a couple in during dry weather for a very short period (you’ll need to watch how they do as it might be two days or it might be two weeks) – check if the pigs are ‘diggers’ or grazers’. They all dig but some do it more furiously than others. They generally aren’t good with historic features.

3. So first, I would try just leaving it for a season or two – see what comes up. If it is getting seasonally flooded, there will be lots of seed brought onto it from elsewhere (good and bad).

4. If the river and stream are not flooding it, consider taking ‘bites’ out of the bank. You should check with the local authority and/or the EA as you may need a licence for this.

5. Consider digging some shallow scrapes to hold water for longer periods. You could plant wet woodland species around (or half around) these (willow, alder) being mindful of willow’s propensity to damage nearby underground services.

6. If there are wetland species not coming in naturally, then look to oversow with these – preferably using local source.

7. Grazing – if you don’t want this to turn to just wet woodland (also very lovely) then you will need to graze periodically or cut and remove. You will need to plan this – fencing, gates, access routes, water (try to avoid stock drinking from the river/stream as this will really trash these area and cause pollution).

8. Be patient! We all want things to happen while we are alive and interested, but rewilding is the long game.

Finally…

If you haven't already looked at the resources on the Green Minds website, please refer to the following to help guide your rewilding project:

- **Plymouth Rewilding Network Summer Social Summary & How to rewild guidance / first steps:** https://greenmindsplymouth.com/news/summer-rewilding-network-social

- **Introduction to Habitats in Plymouth Webinar:** https://greenmindsplymouth.com/knowledge-hub/resources/introduction-to-plymouth-habitats-webinar

- **Green Minds Knowledge Hub:** https://greenmindsplymouth.com/knowledge-hub

- **Coming soon –** Rewilding in your community – Ideas into Action Online Workshop with POP Ideas (Thursday 14th October 2021, 6pm – 7:30pm).

#GreenMindsPlymouth FB: @NaturePlymouth Twitter: @GreenMindsPlym