

INVESTING IN NATURE



EASY TIPS TO HELP WILDLIFE TO THRIVE



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Ariennir gan
Lywodraeth Cymru
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“If one way be better than another, that you may be sure is Nature’s way.” - Aristotle - Nichomachean Ethics

WORK AND HOME				
Space	Issue / problem	Nature’s way	Steps in the right direction	Think again!
Encourage Wildlife by offering clean, safe feeding places				
KITCHEN	Left over’s	Fix a bird table (a small plastic tray / large lid, punctured and hanging from a hook out of the kitchen window), pop the bits on there. Bring it in at the end of the day and wash thoroughly.	Food waste recycling bin / kitchen caddy for council collection	Putting in the bin for landfill, this could land you with a fine from the council.
		If you garden, make space for a compost bin . All vegetable waste, egg shells, salad, veg. leftovers can be popped into here and rot down allowing you to put all that nutrition back into your soil for free as well as providing homes for myriads of mini beasts. See how to make a start composting here . Or you could consider keeping hens ; they will eat most of your kitchen scraps and give you eggs.		
				

Encourage wildlife and increase productivity by putting nutrients back into the soil				
KITCHEN	Keeping things clean	Clean compost bins, bird tables etc regularly. Clean surfaces and containers discourage flies and vermin; there’s nothing there for them. Regular cleaning with basic household cleaners is enough, but most importantly do it!		Don’t waste time and money on lots of chemicals.
OFFICE	Spiders, flies and other creepy crawlies	Did you know those leggy spiders eat other spiders, even big ones? So if you are not keen on spiders, leggy ones are your friends. Other spiders are really good at eating things like flies and mosquitoes that can carry disease. Mint is an effective fly repellent and a pot by the	If you can’t live with our harmless household bugs put them outside and try collecting conkers in the autumn and	Chemical insecticides are something to be used reluctantly, read the instructions and if those don’t put you off, follow them with care. Remember you and your colleagues will be breathing those chemicals in too.

		door is easy to grow. In the building, using citronella or rosemary essential oils can be very effective and makes the room smell wonderful.	putting them around the windowsills as they are said to deter spiders.	
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Help protect river and sea life by reducing pollution of our watercourses



DOWN THE DRAIN	Fat and food waste blocks the sink and solidifies in the drains	<p>Keep an old oil bottle and drain the cool used oils and fats into it. When it's full you can take it to your local authority recycling site, most of which take oil to be made into biodiesel.</p> <p>Check that the glitter in your bath bombs and the exfoliant in your scrub is natural mica, salt, nut shells or other products that will harmlessly rot down</p>	<p>Pour onto paper and bin it or compost it</p>	<p>Fats and oils don't mix with water and any that go down the drain will go through the whole system then out into the river or sea. We all know oil is not good for birds so no one wants to see oiled wildlife.</p> <p>Microbeads are tiny plastic spheres sometimes used as abrasives in scrubs and toothpastes or sometimes just to make a product look pretty. They are so tiny even plankton can eat them and they do; so they get into the food chain right at the bottom and are causing all sorts of problems. Read more about microbeads and how to avoid them here.</p>
THE SMALLEST ROOM	Only 3 things should go down the loo, the 3 Ps poo, pee and paper.	<p>Although sewage is treated, the system is a bit creaky and many things get through and end up on the beach. Yes that's right, your beach where you go for the day or on holidays. A lot of this stuff is plastic so will stay in the water for hundreds of years and may end up in fish, the same ones that we eat! So if it's not one of the 3</p>	<p>Keep your cleaner use to just what is needed and use low impact brands that break down quickly to harmless products. Use enough products</p>	<p>Does the water need to be blue? Where does that dye and cleaner go, yes that's right!</p>

		<p>Ps bin it, you could be saving a turtle or a whale every time and your children from finding something you wish they hadn't when paddling. Keep loo cleaner use to just what is needed and use low impact brands that break down quickly to harmless products. Use natural air fresheners such as scented leafed plants and essential oils.</p>	<p>and elbow grease for hygiene, but don't have it constantly going down the drain. Never flush cotton wool buds, wet wipes or sanitary products, these should all go in the bin.</p>	
CLEANING	<p>Cheap, effective cleaning</p>	<p>Washing soda - cheap environmentally friendly and multi-purpose e.g. cleans the oven, removes tea stains, water softener Hemp soap is amazing. It cleans things you thought were beyond hope! Seems expensive but you use the tiniest amount. Elbow grease - it works wonders!</p>		<p>How will you spend the money you've saved on all those chemicals?</p>

“Like music and art, love of nature is a common language that can transcend political or social boundaries.” - Jimmy Carter

<p>Encourage wildlife by creating new spaces for nature to thrive</p>				
<p>OUTDOOR AREA</p>	<p>We have almost no outside space</p>	<p><i>A vertical garden?</i> It can be as simple as using an old pallet and fixing it against the wall (either fix some lining material to the base or rest it on the ground or on a row of bricks) stuff it with soil and peat free compost and poke seeds and cuttings into all the holes (you can dip the cuttings into rooting powder first to give them extra help). For some other ideas see here.</p>	<p>Even if you only have a wall you could put up nest boxes or construct a bug hotel (see below).</p> 	<p>Clearing your outside space of every last living thing or covering with non-permeable surfaces. This does no good to wildlife and nothing for surface water run-off to prevent flooding. More about the role of planting and flooding here.</p>

<p>OUTDOOR AREA</p>	<p>Our site is all concrete</p> <p>or</p> <p>We're on contaminated land</p>	<p>Dumpy bags make great raised beds! You can create some edging but it doesn't need to be strong. You can even plant a tree in a dumpy bag. You can sometimes get free compost from your local council's composting site but check it is okay to use for vegetables if you want to use it for that though.</p> <p>How about filling old containers such as sinks, baths, buckets to use as flowerbeds? (They need a hole, so a leaky one is perfect!)</p>		
<p>OUTDOOR AREA</p>	<p>There is little of interest and we want to introduce something 'arty'</p>	<p>A bug hotel is a deliberately built structure for a wide range of beetles, bees etc. Bug hotels are a great project for the garden or even in a yard. They can be as simple as some canes pushed into a tin can or they can be real works of architecture or of art. Do you want a structure or a barrier, fence or wall even a seat - include a bug hotel in the design. See some examples here. If you can incorporate a bug hotel into a structure along with some nest boxes for the birds or bats then you will be giving every bit of help you can to nature. You can see an example of a snazzy bin shelter which is also a bug hotel created by Bron Afon Housing Association here. Or here is a lovely drystone wall, itself a great place for nature with a bug area built in.</p>		<p>If you use slug pellets, sprays, lawn weed killers and all the other things that are available to make your garden 'perfect', it may delight the eye but it should chill the heart as you will be making your garden a toxic space for nature and killing far more than you ever intended.</p>
<p>NATURE'S PESTICIDES</p>	<p>Nature is a battlefield, sometimes you can use this to help control pests</p>	<p>Our battle with garden pests has been going on since we started to grow food. A nature friendly way of battling pests when their impacts become too great is to use soft solutions such as nematodes, which will only target specific species. Nematodes can be used on a wide variety of pests including the really difficult ones such as slugs and vine weevil. Of course you will be helping other predators to fight on your behalf by making your garden wildlife friendly and the ladybirds,</p>	<p>It is possible to buy ladybirds and other predators to put into greenhouses and control things like aphids. You need to have a problem before you introduce them or they will have nothing to eat.</p>	<p>Don't introduce non-native creatures to your garden. Even seemingly innocuous creatures can have great impacts such as the harlequin ladybird, which has conquered the world having been introduced into America and Europe to eat aphids. Unfortunately it also</p>

	lacewings, hoverflies and even wasps will be keeping the 'plant munchers' down.		eats our native ladybirds, see more here .
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One touch of nature makes the whole world kin. William Shakespeare			
Ponds	Even a tiny water feature in the garden will offer birds fresh drinking water and a place to bathe and you don't need any more than a washing up bowl sized pool to add great value to the space. If your pond has some plants that emerge from the water you may well get dragonflies as well as water beetles, hoverflies and other creatures. Make certain it is easy for hedgehogs to get out; they are strong swimmers but need an escape route. Even in a pond the size of a baby bath you might be lucky enough to get frogs or toads , which will keep the slugs down for you. Find out more here .	When removing pondweed use a rake and pull the weed onto the pond side, leave it for a few days so that the creatures can make their way back into the pond and then compost the weed.	Should you decide you have to get rid of a pond choose a time of year when it has as little as possible in it. This is not easy as ponds are of real value to wildlife all year. Try to find another pond very locally that you can move any creatures to but don't take them any distance or you may introduce disease. Better still, relocate it to somewhere else in your garden, dig the new one first and just move the water over.
Sheds and shelters	Your shed is already sheltering many spiders and other insects but all shelters in the outdoors can be made real wildlife havens. When you are building a shed consider putting a green roof on it. This will replace the natural habitat that your shed has covered. Choose a native flower turf or tough plants that can cope with a dry area such as thymes to give as much benefit to nature as possible. Green roofs also slow down water runoff and help to prevent flooding and water-logging, find more here .		
Hedges	Hedges and trees can add so much more nature to your space because they go up. One Devon hedge was found to contain over 2,000 types of plants and animals, it was 85m long and had a ditch and a bank so perhaps bigger than your project can manage but even a few feet of hedgerow can offer extra space for nature, as well as extra privacy and sound-proofing for your area. Native plants are probably the best choice. Find out more about hedges here .	Even a non-native hedge with more exotic plants can offer shelter and food to wildlife.	

<p>Trees</p>	<p>One large native tree can provide as much food for bees as an acre of wild flower meadow. You might not have room for an acre of wildflower meadow but there is a tree for every space. Oak trees are one of the best for nature but do get very large. But don't despair as even the open canopy of birch trees or the rowan offer beauty and lots of benefits for nature. Find out more here. If you have a food growing area, fruit trees can give you both a crop and additional space for nature.</p> <p>Silver birch provides food and habitat for more than 300 insect species. The leaves attract aphids, providing food for ladybirds and other species further up the food chain, and are also a food plant for the caterpillars of many moths, including the angle-shades, buff tip, pebble hook-tip, and Kentish glory. Birch trees are particularly associated with specific fungi including fly agaric, woolly milk cap, birch milk cap, birch brittlegill, birch knight, chanterelle and the birch polypore (razor strop). Woodpeckers and other hole-nesting birds often nest in the trunk, while the seeds are eaten by siskins, greenfinches and redpolls.</p>	<p>If you can't fit in a tree a flowering shrub such as cotoneaster, which can be trained against a wall and will have flowers for the bees and berries for the birds, can add enormous nature benefit to your space.</p> 	<p>Don't put in a tree that will quickly outgrow its space. Their nature benefit grows as they do and will be lost if they have to be cut down.</p> <p>If you are growing fruit trees avoid pesticides.</p>
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<p>Did you know dead wood has more life in it than a living tree?</p>			
	<p>Logs and brash</p>	<p>Not only do logs and log piles provide places for creatures to hide but also something for them to eat. They are an ideal use for a shady, damp corner. There are two types - stacks of logs or logs sticking up in the ground, find out more here and here. If you want something more artistic, how about a stumpery like this one here? You can also incorporate mushroom logs into your piles and add to your kitchen garden's</p>	

		productivity (here).		
SOIL	Compost	No halfway house here - only use peat free compost if it says 50% peat free it is 50% peat so is not peat free at all.	Check that the plants you buy were grown in peat free compost too, preferably locally but certainly in UK.	Peat extraction is destroying rare habitats and releasing CO ₂ into the atmosphere. Compost with any peat in it is also destroying rare habitats and increasing CO ₂ levels. See more here .
	Suppressing weeds	The nature-friendly weed suppressant is a good mulch, even better if it is compost you have made yourself. Water the ground well before applying a thick layer of mulch. This will not only keep down the weeds but as you add it year on year it will improve the soil as the bugs that will revel in it break it down. If you use bark chippings as a mulch check they are British not imported hardwoods. Find more about mulches here .	Mulches that won't rot down such as gravel or crushed glass are not as good for nature, but still better than membranes.	Using a weed suppressing membrane is tempting as it reduces work but it also traps things like earth worms preventing them from finding food and prevents birds from being able to forage for them.
Did you know that it's illegal to dig up any plants from the wild but with all but the rarest you can take a few seeds?				
WILD SPACES	Make the most of what you have already	Always look to see what is there already before you do anything to wild areas. Nature is not meant to be tidy - for example brambles are good for lots of creatures - so get advice before starting anything. You can ask your county biodiversity officer who will be with the council or your local Wildlife Trust . Remember that a space may not need improving for nature, it may need a bit of maintenance but already be really important for the things that live there as it is. Anything you do will have an impact and things will be lost as well as gained so it's important to know what you may be losing. If you are going to camp, kayak, enjoy the nature through bush craft or one of the many other ways we can enjoy nature this site has some good	Bring the wider countryside into your outdoor space by incorporating wild flowers. 	Garden plants do not belong in the wild, not even as memorials or to brighten the place up. You will inevitably harm or take up the space of the things that should be there. Find out about the plants and animals causing problems here . Sometimes the species is nearly right but not actually the same as the natives such as Spanish Bluebells or fancy garden daffodils, these can be every bit as harmful as out and out exotics. Making a site suitable for more types of creatures may not be the best thing if it means you make it less suitable for one special creature that is not common elsewhere.

		advice on best practice.		Never leave any litter, even biodegradable stuff like orange peel, in the countryside, bring it all back with you. See why here .
BIRDS, BEASTS AND RELATIVES				
Did you know there are more than 200 types of bees in Britain and they need a different variety of habitats to survive?				
BUGS	Pollinators are in a bit of a pickle; they are struggling, but did you know that we need them to produce a third of our favourite foods?	<p>It's not just our bees and butterflies, it's lots of other useful insects that are disappearing due to factors like habitat loss and use of pesticide.</p> <p>Pest control: If a product says that it "kills bugs" then that's all bugs including bees, ladybirds and butterflies. Ladybirds eat aphids, such as greenfly and bees can make honey from their sticky honey-dew. If they get too rampant hose the plant to knock them down but leave some for the young ladybirds.</p> <p>Most pests in the garden have useful predators and if we can make the garden attractive for the predators then they will keep the pests down naturally and the garden will at the same time be a haven for pollinators.</p> <p>Planting for Pollinators: Plant open faced flowers; watch which plants attract bees and butterflies in your neighbour's gardens or at the garden centre. Choose plants to flower throughout the year, e.g. spring - crocuses, late autumn - ivy, when other flowers will not be available. There's lots of advice available on line and here's a good site to get you started on pollinator planting.</p>	<p>Avoid unnatural double flowers; they have lost their ability to provide pollen and nectar. Leave dead plants over the winter; last year's die-back provides a 'warm duvet' for the plants and insects over the cold winter.</p>	<p>If you cut everything back ruthlessly and remove all cuttings to the green waste bin you will make a very sterile garden, unwelcoming to nature.</p> <p>When purchasing plants ask the nursery/garden centre what insecticides have been used so that you can buy the ones that have been least affected. Asking these questions may help change nurseries and garden centres change their buying behaviours too. Particularly avoid plants where systemic insecticides have been used as they poison the whole plant for weeks.</p>



BUGS	Wasps	Wasps can be a real pain if they are nesting near where you want to be and also in the autumn. But why don't you notice them until then? This is because all summer they are collecting caterpillars to feed their young and are too busy to bother you. Did you know that leaving an old wasp nest where it is can discourage a new queen from setting up home there in the future?		
BIRDS	Birds in the garden	Our birds are struggling, even once common ones such as sparrows. One of the reasons is fewer places to nest. Even if you don't have a garden you're likely to have space to put up a nest box. You'll be rewarded by seeing all the activity and know you did this, giving a bird family a home. You can find out about nest boxes here , including how to build them to the right size for different birds. Feeding the birds is very rewarding and helps them to survive the winter and feed their young in the summer. Different birds like different foods, find more here . Remember if you start feeding, the birds do come to rely on you so you should keep it up. Also you must keep everything very clean as, just like us, the birds can pick up bugs from each other when they all come together in one spot. Remember a bird, or other creature, which seems common where you are may be rare in a national or global context so you could be making a real difference. We should be proud of Wales' natural heritage.	If you use slug pellets source organic ones as traditional ones are very poisonous to everything and will kill blackbirds , hedgehogs and also the beetles that eat slugs. There are some organic pest control tips here .	Don't discourage the birds; to have swallows nesting in the eaves is considered lucky and any mess from these, or other birds, can be quickly cleared away. Put a board on the ground to catch droppings and mess; remove it once they've fledged - and enjoy watching the flying lessons! Unfortunately many bird species are plummeting, probably because of the loss of insects, which are food for most of our birds, (even seed eaters feed bugs to their babies) and because they are finding less and less places to nest.
SLUGS	Some slugs damage plants - but not all.	Did you know some slugs eat slugs ? So even some slugs are our garden friends. There are many ways to discourage slugs that won't hurt other creatures, find out more here . Another solution is to use nematodes, a tiny worm that eats slugs.	There are organic slug pellets but follow the instructions carefully as they also kill earthworms. You can make ' lobster pots ' by cutting the neck	Using metaldehyde or methiocarb based pellets endangers lots of things in nature, as well as dogs and children find out more here .



			off a pop bottle, inserting the neck back into the bottle and taping it back on. If you put the organic pellets in there the slugs go in and can't get out so the pellets won't be in contact with the soil and that should protect the worms.	
HOVERFLIES	Harmless hoverflies are often mistaken for wasps and killed.	Do you notice bugs that look like wasps but spend all their time hovering around flowers? These are hoverflies and they are one of our best friends in the garden as they eat aphids and other small pests. They usually start out as wriggly things in water and then turn into the wasp or bee mimics we see. They can't sting at all but they want predators to think they can. They need open faced flowers with really short tubes to the nectar. Find out more here .		Killing these hoverflies through using insecticides on your flowers will just make your garden safer for fast breeding pests and will also kill ladybirds and lacewings.

Did you know hedgehogs were roaming the earth long before humans?

HEDGEHOGS	Hedgehogs are disappearing as fast as tigers!	There is not one cause for this but we can help. They need big areas to look for food, at least the size of a football pitch, and one of the reasons for their decline is not being able to get from garden to garden so when building a fence make certain it has spaces for hedgehogs to get through. Also they need safe places to sleep, have their babies and hibernate. Learn more here .	Hedgehogs are insect eaters, although they appreciate cat biscuits or dog food left out for them. 	Again, an over-tidy garden, every corner trimmed and mown, with immaculate fencing and pesticides is the worst for hedgehogs. Another big danger is power garden tools particularly strimmers so think hedgehog if using one.
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<p>BATS</p>	<p>Bats get a bad press - horror films etc. They will never get stuck in your hair nor harm you.</p>	<p>Bats are used to living close to humans and have shared our buildings for many years. However modern houses are built without the nooks and crannies of older buildings (and without the drafts) so it's harder for them to make a home. Roost boxes can also be put up on walls and in trees. A single bat can eat 3,000 insects in a night and they can live for 40 years. If you have a bug friendly garden that will help bats too. Find out more here.</p>	<p>If you are putting up a new building incorporate special bat bricks (here) which give bats a home without actually letting them into the loft space.</p> 	<p>Bats have legal protection. If you have bats ask the Bat Conservation Trust or your council's biodiversity officer for advice before doing anything that may disturb them in any way.</p>
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EVENTS				
<p>OUTSIDE EVENTS</p>	<p>The site</p>	<p>We all love to get outdoors and have fun and it's a great way to thank people for their efforts, celebrate what you have achieved and let new people know about what you are doing. However the temporary arrival of lots of people can have quite an impact.</p>	<p>Check the area just before, to make sure that there is no obvious sign of something that may be injured by your activity.</p>	<p>Think about what you might be disturbing, are birds nesting, can you go further away from them or hold the event outside the nesting period? A night-time event may have greater impact for some animals Are you planning to use fireworks? Is this the best site for them?</p>
	<p>Fires</p>	<p>Collect wood for bonfires, but don't build it until the day you want to light it, to be sure there are no hedgehogs or other creatures using it as a log-pile. Position fires well away from hedges and trees. For smaller fires and barbeques use a metal fire wok, metal tray or flat stones to prevent the ground being damaged.</p>	<p>Never build a bonfire in advance, it will often have creatures using it as a home Never build fires under trees or near hedges, it will cause them permanent harm and may kill them.</p>	<p>Don't burn wood with paint on it as it may release toxic smoke.</p>

	Balloon and lantern releases	There is no good way to do this, even biodegradable releases are still really harmful.	Don't do it!	Helium balloons are wind blown, deflated they kill farm animals, wildlife and sea creatures as well as creating litter. Lanterns can be even worse! They have been known to cause major fires. Find out more here .
	Utensils	<p>The old saying of Lord Baden Powell should apply to us all: "Leave nothing behind but your thanks."</p> <p>Make your job easier by ensuring everything used is either reusable or recyclable or compostable. You can even get compostable knives and forks. In an ideal world everyone would take their own waste home.</p>	Organise the rubbish and recycling and ensure people know what is expected of them and that you know how you can dispose of everything responsibly. If you put up posters and banners remember to take them back down again.	Don't let people behave like festival goers, everything from the tents to the wellies left behind in the field. See here .

FUNGI	<p>Fungicides are widely used in gardens and agriculture without thought that they may be having wider impacts but we are now starting to realise that most, possibly all, plants rely on fungi to get many of their nutrients and to really thrive. When we spray fungicides we kill these fungi too. Find out more about this relationship here.</p>	
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<p>RECORDING NATURE</p> 	<p>Lots of people want to know about the nature in your patch if you can get a photo of what you have noticed. You don't have to be an expert or even know what you are looking at as there are great web sites like i-spot to help you know what you are looking at. It's a great way to get children interested in nature too. If you can record your wildlife people will know it's there and that is important because if we don't know what's there how will we know if we are losing it?</p>
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