



Derbyshire
Wildlife Trust

15 WAYS TO REDUCE FLOODING TOOLKIT

www.derbyshirewildlifetrust.org.uk



LET NATURE HELP

Nature can help us reduce flooding near you by absorbing rainwater into the ground.

Derbyshire Wildlife Trust is busy working alongside landowners and communities to undertake large scale natural flood management projects. From adapting river valleys with leaky dams and creating new woodland areas, to reintroducing beavers.

It doesn't stop here though - everyone, including you, can make a difference to local flooding in your area by using some or all of 15 ideas in this booklet. Whether you are a business or a school, you could take some simple actions together to store and slow rainwater.

As an individual you can make some easy adaptations to your garden, yard, driveway – or any patch of land you care for – and help it to hold far more rainwater than you probably imagined!





After 800 years, beavers are back in Derbyshire and you can go visit them at our Willington Wetlands nature reserve.

Beavers are often known as eco-engineers. They go about their day-to-day life shaping the wetlands for their own benefit, having a huge impact on surrounding areas and helping to reduce flooding, by digging canal systems and damming water courses.

Use this booklet to find out what you can do

TAKE ACTION TODAY

FURTHER RESOURCES

Want to learn more about how nature based solutions can help communities that are at risk of flooding? Take a look at the Derwent Connections project.

SCAN ME



LET'S GET STARTED

- Choose hedges over fences
- Reduce hard surfaces
- Grow don't mow
- Have a diverse range of plants
- Improve soggy soil
- Create a rain garden
- Build raised beds
- Go Potty for Wildlife
- Grow your own grub
- Plant a tree
- Get a water butt
- Create a pond
- Make a pond in a pot
- Grow a green roof
- Dispose of waste correctly

CHOOSE HEDGES OVER FENCES



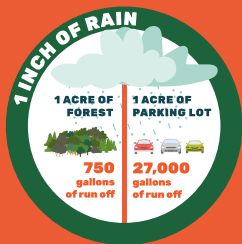
Hedges are a better choice of boundary than fences or walls as they absorb water, heat and CO₂, and allow wildlife to move about between gardens.

5 SIMPLE STEPS

- 1.** Choose your plants. Native shrubs and trees like hawthorn, field maple, blackthorn, beech, hornbeam and holly make an ideal mixture of hedging plants.
- 2.** Grow rambling plants such as wild rose, bramble and honeysuckle through your hedge to provide even more shelter and food for wildlife.
- 3.** Plant your hedge. The best time for planting is between November and March, but never plant into waterlogged or frozen ground.
- 4.** Hedges should not be pruned until late winter or early spring, avoiding bird nesting season.
- 5.** In the first spring, prune to encourage bushier growth.



REDUCE HARD SURFACES



The RHS estimate that a quarter of homes have hard paved gardens. Where you can remove hard surfaces and astro turf. Here's some steps you could take:

5 SIMPLE STEPS

1. Avoid paving over any areas of your garden.
2. Replace hard surfaces with grass and plants to encourage wildlife to return to your garden and improve rainwater drainage.
3. You can also add borders or a lawn to help soak up the rain.
4. If you can't have a lawn, try using stones and pebbles over bare soil to improve the drainage.
5. Don't forget about your driveway. Could you plant some shrubs around it?



GROW DON'T MOW



Want to help reduce flooding, save time and enjoy visits from bees, butterflies, hedgehogs and all sorts of wonderful wildlife in your own gardens?

Take part in our **#GROWDONTMOW** challenge!

5 SIMPLE STEPS

1. Pick a patch or your whole garden, large or small.
2. Leave it and let the grass grow....easy!
3. How long you leave your grass to grow is up to you, the longer you leave in between cutting the better, but cut at least once in the autumn and once in the spring
4. Watch your garden transform and brim with wildlife
5. A mossy lawn is great as it can hold lots of water too and is beneficial for wildlife and carbon storage!



Stop cutting your verges and any grassy land, why not try just cutting a path through it.



HAVE A DIVERSE RANGE OF PLANTS

You can improve water absorption all year round by growing lots of different types of plants.

5 SIMPLE IDEAS

- 1.** Plant lots of insect and bird friendly plants in your garden.
- 2.** One of the easiest ways to create diversity in your garden is to buy ready mixed, native wild flower seeds.
- 3.** Avoid planting all of the same plants together.
- 4.** Follow the instructions on the seed packet or container.
- 5.** Make sure you don't use pesticides on your plants.



IMPROVE SOGGY SOIL

You can improve heavy, flood-prone flower beds by mixing in lots of organic matter.

5 SIMPLE STEPS

- 1.** Add coarse garden compost to your soil.
- 2.** Aerate your soil or lawn by stabbing it with a garden fork.
- 3.** When planting new plants you can improve drainage by mixing grit into the base of the planting holes.
- 4.** Protect the roots of shrubs from becoming waterlogged by planting shrubs on slightly raised mounds.
- 5.** Don't walk on soil when it's saturated to avoid making it worse by compacting the ground further.



CREATE A RAIN GARDEN



Rain gardens are designed to keep water where it's needed. Create a small indentation or pond to capture rainwater from your roof, driveway, and any other hard surfaces.

5 SIMPLE STEPS

- 1.** Choose the location for your rain garden – check where rainwater from the roof flows and choose a suitable area that is lower.
- 2.** Dig a hole or ditch into the ground, 6-12 inches around the edge of the hole, allowing space for water to flow in.
- 3.** Use the soil you have removed to create a lip around 3 sides to help keep water in.
- 4.** Add appropriate plants such as common reed, reed mace, water mint, yellow flag iris and floating sweet grass.
- 5.** If you have space, you could add a channel to guide water to the rain garden. You could even add other linking elements such as a water butt, planter, or pond.

BUILD RAISED BEDS

Raised garden beds are great for areas where heavy soil is prone to flooding. Beds raised up a few inches above ground level will help to improve garden drainage.

5 SIMPLE STEPS

- 1.** Choose an area for your raised bed.
- 2.** Remove turf or hard surfaces underneath.
- 3.** Build your raised bed. You can get ready-to-build kits or construct frames out of wooden sleepers or decking timber.
- 4.** Fill with peat free compost and soil.
- 5.** Add your plants!



#GO POTTY FOR WILDLIFE



Go Potty for wildlife on your balcony, window ledge, patio or community area, use whatever space you have. You don't have to use a traditional pot, in fact the more creative the better and it's a great way to recycle - why not use an old pair of wellie boots, a cracked teapot or even find an old tyre and use it as a container. Just one pot or several - it is up to you!

5 SIMPLE STEPS

1. Find an old container, anything will do.
2. Add some peat free soil.
3. Plant some seeds or bulbs.
4. Water them and watch them grow.
5. The less rain that goes down the drain, the less reaches our rivers. If you can, position planters in a place where water will be guided into them.



Why not try getting all the business on your street or industrial estate to get a planter to guide rainwater.

GROW YOUR OWN GRUB

Growing your own organic food, not only is it great for you and wildlife it also improves your soil and reduces food miles and the amount of pesticides entering the water course– all helping ease flooding.

5 SIMPLE STEPS

- 1.** Chose where you are going to grow your herbs, fruit or veg. You can start small with few herbs in pots on the windowsill, some pots in the garden, a whole raised bed, or even an allotment.
- 2.** Decide what to grow and make sure it is the right season.
- 3.** Get some peat free compost and start planting. Make sure you grow organic and avoid any harmful chemicals.
- 4.** Don't forget to water.
- 5.** When it's ready pick your grub and get cooking!



PLANT A TREE



Trees have a vital role to play in protecting the environment including reducing the effects of flooding. If you're a community group or an individual planning to plant a number of trees, it's really important to follow the "right tree, right place" principles.

5 SIMPLE STEPS

- 1.** Dig a hole big enough to fit the root ball in. Break up the soil in the bottom of the hole.
- 2.** Following guidance from the garden centre or shop, place your tree in the middle of the hole making sure that it's deep enough that the soil lines up with the soil mark on the stem.
- 3.** Spread earth carefully around the roots, ensure that the soil is in contact with the roots. Gently compress soil around the base of the tree. Add a stake for stability.
- 4.** Avoid plastic tree guards at all costs!
- 5.** Don't forget about your tree! The first weeks are especially important. Water as recommended.

GET A WATER BUTT



A water butt is a great addition to your garden, not only are they a great way to collect water and reduce flooding, they can be used to top up ponds and water plants. They are also great for reducing flooding.

5 SIMPLE STEPS

- 1.** You can either make your own water butt or buy one. Always make sure your water butt has a lid.
- 2.** Connect your water butt to your drain pipe. Raise it off the ground to ensure you can get your watering can underneath it.
- 3.** Wait for the rain!
- 4.** Use water from your water butt instead of using your hose.
- 5.** If you have room, add another!



CREATE A POND



Having a pond in your garden is a great way to collect rainwater. Any surface water storage area helps to reduce flooding by stopping water from going straight into drains and rivers.

5 SIMPLE STEPS

- 1.** Choose a spot, not under trees, then mark out your pond and get digging!
- 2.** Remove any sharp stones from the bottom of the hole. Put down a 5 cm-thick layer of sand.
- 3.** Dig a trench around the edge of the pond for the overhanging pond liner to drop into. Place the liner carefully in the hole and tuck the edge into the trench; weigh it down with large rocks. Snip off any excess liner.
- 4.** If possible, use rainwater to fill your pond. As the pond fills up, the liner will stretch. And wait for wildlife to visit.
- 5.** Carefully selected native plants can be introduced.



MAKE A POND IN A POT

Not got the space for a traditional pond – why not try making one in a container? A washing-up bowl, a large plant pot, or a disused sink could all be repurposed as ponds, providing you make sure creatures can get in and out.

5 SIMPLE STEPS

- 1.** Choose a spot. Your pond will want light, but not full sunlight all day. You can dig a hole and sink your container, or just have it sitting on top.
- 2.** If the container isn't watertight then use a piece of pond liner.
- 3.** Add a layer of gravel and rocks. Use logs or stones to create a range of depths and a slope for creatures to climb in and out. If your container isn't sunk in you'll need a ramp from the ground outside the pond.
- 4.** Fill your pond. Use rainwater as tap water contains chemicals.
- 5.** Start planting but be careful not to overcrowd. You only need one or two plants.

GROW A GREEN ROOF

Green roofs are a great way to utilise space for wildlife and increase water absorption.

5 SIMPLE STEPS

- 1.** Sheds, garages and other out building are all good places for green roofs, however, you will need to make sure they can support them.
- 2.** You can buy green roof kits.
- 3.** Ensure your roof is watertight before starting, most green roofs should have a waterproof layer, but if not you can install one.
- 4.** Construct your roof by building up the layers depending on which type of green roof you have chosen.
- 5.** You can add plants or just leave to grow naturally.



DISPOSE OF WASTE CORRECTLY



Lots of issues with flooding are due to blocked drains and fat bergs when household waste that shouldn't be is put down the sink or toilet.

5 SIMPLE STEPS

- 1.** Remember only to flush the 3 P's:
Pee, poop and toilet paper.
- 2.** Don't flush wet wipes, sanitary items, cotton wool or anything else down the toilet. Make sure you dispose of them correctly.
- 3.** Don't put oil down the sink.
- 4.** Let oil dry in the pan and then scrape it into the bin once cool.
- 5.** Alternatively wait until the oil has cooled down but isn't completely dry, mop it up with paper towel and put it in the bin.





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