

## How to: Conserve water in the garden



Gardening can be water intensive, especially during dry weather. Freshwater resources are under increasing pressure due to climate change and an increasing human population. Water should be used sparingly to avoid shortages and hose pipe bans. Reducing water use will also reduce our carbon footprint as a lot of energy is used to treat and deliver clean water to our mains.



Photo: Steve Head



Photo: Acabashi via Wikimedia Commons



Wood chip mulch

Photo: Rowan Adams via Wikimedia Commons

### Target species:

All species ultimately benefit from a lighter environmental from humans and growing appropriate plants in a drought-prone garden will keep them healthy.

### How to do it

#### *Substituting for or reducing mains water use*

- Set up a water butt to collect rainwater from your gutters - this is an excellent way of reducing or even eliminating the need to use water from the tap, for your potted plants indoors and in your garden. Some plants prefer rainwater as it has a lower pH, without dissolved calcium carbonate, and this is especially better for plants such as heathers, azaleas, rhododendrons, camellias and *Pieris* that need neutral to acidic soil conditions. A single water butt is quickly emptied, so concentrate on using this resource for acid-loving plants. Why not consider buying more than one butt and linking them together?
- Rainwater is far better than tap water for topping-up a small garden pond. Most tap water contains permitted levels of nitrates and phosphates which can cause algal overgrowth.

- Collecting water from your bath/shower/washing up bowl and reusing it to water your garden is another way of reducing clean mains water use. Make sure your water is cool before using and use a bucket or syphon to carry the water outside.
- It is a good discipline to water using a watering can rather than a hosepipe. The extra effort needed reminds you to water only around the base of the stem of the plant rather than all round the bed.

### *Reducing the need to water*

- Seriously consider not watering your lawn at all - although the grass may turn yellow and dry, it will regenerate quickly once it rains. Letting your lawn grow longer and setting the mower higher (around 5cm+) will also reduce the need to water as the grass will develop longer roots, making the lawn more drought tolerant, and the extra vegetation will shade the ground and reduce evaporation.
- Sprinklers can use a huge amount of water and are inefficient. Try to direct your watering to the base of your plants below the leaves or use a seep hose instead. Seep hoses buried under soil or mulch will deliver water directly to the plants' roots, so reduces water loss by evaporation from the ground surface.
- Mulching is also an excellent way of keeping water in the ground. Apply mulch on your flower beds and around the base of your shrubs and trees in spring, which will help the soil retain more moisture by helping rain seep into the soil, improving soil structure, and reducing the amount of evaporation, so you won't have to water your plants as much. You can buy commercial mulches such as shredded bark, and these also tend to suppress weeds. Adding home-made compost onto your soil will also help retain more moisture by increasing the organic matter content. See our How To: [compost guide](#) here. You could also add water-retaining crystals to soil in your planters to reduce the need for frequent watering.
- When you water your garden, water in the early morning before the sun is high in the sky or in the evening when the sun is lower. This will lessen the amount of water that evaporates from surfaces afterwards. Also check to see if your garden really needs to be watered, by looking at how much moisture is in the soil a spade's depth down into the ground. If the soil is dry, your garden is ready for watering.
- Don't panic if your garden pond level drops ("draws down") in dry weather. This is a normal event for natural ponds, and pond animals are adapted to survive low water levels.
- In the summer plants in pots will benefit from drip-trays or saucers underneath so when you water it doesn't all immediately run out of the bottom and can be drawn back into the soil as the plant removes water. This also helps to retain nutrients.
- A tip from hot-country gardeners is to scrape a shallow saucer of soil around the plant base, with a simple 2-4cm wall of soil around it. Then when you water, it all stays immediately above the roots, so is used very efficiently.

- Grow drought tolerant plants in your garden to further reduce the need for watering. Plants like lavender, rosemary, and other herbs grow well in dry conditions and are also great for pollinators. There are many other drought-resistant species, and the RHS website has a very useful list of suitable plants from trees to container plants [here](#).



Beth Chatto's beautiful [gravel garden](#) near Colchester has not been watered since it was planted in 1992 and is world renowned for its use of drought-tolerant plants.

Photo: ©The Beth Chatto Gardens Ltd by permission

#### **How easy is it to do?**

Very easy/easy. Making small changes to the way you water your garden is very easy and very effective at reducing your water use. Setting up a water butt is straightforward using a drainpipe diverter kit.

#### **How much will it cost?**

Water butts will cost around £20-£40 depending on size and will last you a very long time. Drainpipe diverters can be as little as £6 - £10. Using less water from the mains will save you money as your water meter reading will go down!

#### **How effective is it for the target species?**

Moving to growing more drought-adapted plants will mean that your garden as a whole will be healthier in dry conditions. A few small changes can make a big difference in the long run when it comes to water use, and all species everywhere (including humans) will benefit from less pressure on freshwater resources during the summer months.

#### **Golden rules – what the science tells us**

- Water scarcity will become a frequent annual occurrence during the summer months due to climate change, so we should all do our bit to reduce the amount of water we use where we can.
- Increasing the amount of organic matter by either mixing in compost or mulching helps to improve the soil's water retention ability, whilst also improving the soil quality,

reducing the need for both watering and adding of fertiliser. Mulching can also be used to suppress weeds.

- Watering your lawn isn't really necessary - the grass will spring back after a dry spell once there is rainfall. Mow your lawn less and at a longer height to reduce evaporation and encourage better root growth and drought tolerance.

### **Things to be aware of**

- Make sure any grey water you are recycling from your bath/shower/washing up bowl doesn't contain bleach, disinfectant, dishwasher salt or strong cleaners as these can harm plants and damage soil structure.
- Keep water butts in the shade if possible, to keep the water cool to reduce the growth of bacteria.
- Cover the water butt to avoid mosquitoes breeding in the water. Also try to keep the guttering clear of debris as organic material can encourage the growth of bacteria in the collected water.

### **Further information**

How to: [Garden sustainably](http://www.wlgf.org/ht_save_planet.pdf) without harming the planet. [www.wlgf.org/ht\\_save\\_planet.pdf](http://www.wlgf.org/ht_save_planet.pdf)

How to: Make your own [compost](http://www.wlgf.org/ht_compost.pdf) [www.wlgf.org/ht\\_compost.pdf](http://www.wlgf.org/ht_compost.pdf)

How to: Create and maintain [ponds for wildlife](http://www.wlgf.org/ht_ponds.pdf) [www.wlgf.org/ht\\_ponds.pdf](http://www.wlgf.org/ht_ponds.pdf)

RHS 'Mains to Drains' [web page](https://mains2rains.uk/) <https://mains2rains.uk/>

RHS list of [drought-tolerant](http://www.rhs.org.uk/plants/for-places/drought-resistant) plants [www.rhs.org.uk/plants/for-places/drought-resistant](http://www.rhs.org.uk/plants/for-places/drought-resistant)

Beth Chatto's [gravel garden](http://www.bethchatto.co.uk/garden-nursery/gallery/gravel-garden.htm) [www.bethchatto.co.uk/garden-nursery/gallery/gravel-garden.htm](http://www.bethchatto.co.uk/garden-nursery/gallery/gravel-garden.htm)