

## **The Climate Change Garden**

Our last speaker was Sally Morgan and we were all riveted by the information she gave us. A small change in the average global temperature, caused by human activity, has effects out of all proportion to that small change. Not only are they big effects but we are not able to control most of them and they affect amateur gardeners, professional gardeners, food growers and farmers as well as the natural world. Unpredictability is the big problem on top of many trends that we can plan for.

There is a trend to earlier Spring and later Autumn. Spring is earlier by five days every decade so some plants are starting their cycle 30 days earlier. This may be helpful, but for some wildlife there is a mismatch between their food supply and feeding their new offspring. Even in this country we may need to have two growing seasons, early and late, because summer is too hot and dry for food crops. Do warmer, shorter winters matter? Yes! Some fruit trees need a long 'chill time' of 7degrees C or less. Many apple trees need 1000 hours, plum and damson trees even more. A few apple trees need only 200 hours, for example, Bramley, Spartan and Saturn. Without chill time, blossoming is very erratic. You can see what this is going to do for diversity and food security in the long term.

Planning for extreme weather events is difficult as they are unpredictable. Torrential rain can do lots of damage. We need to be able to slow down the water run - off, spread it widely and then sink it to avoid flooding. Hard surfaces need to be permeable, not concrete or tarmac. Good planners are now dealing with this on new housing estates with good drainage systems into large wildlife areas. We couldn't have predicted that May 2021 would be the coldest for 400 years or that summer 2022 was the hottest on record with a long drought as well.

What can we do? Lots! Just one way to help is to do your best not to put more carbon dioxide into the atmosphere whilst gardening. Do not dig the soil because this may expose more carbon to the air where it can decompose and give carbon dioxide. Instead, mulch. That means protecting the soil surface, preferably with a thick layer of rotted plant material or rotted manure. This keeps the soil soft and doesn't disturb the mycorrhizal fungus or the worm population (both beneficial) and it keeps in the moisture.

Our speaker, Sally Morgan, along with Kim Stoddard, has published a book called 'The Climate Change Garden' and this was the basis of our illustrated talk. It is full of good ideas and information. I have one if you want to peruse before you buy.

Dorothy Richards