

Pesticides & Consequences



Image: RSPCA

We've been working with Pesticide Action Network in the UK (PAN UK,) helping to promote their campaign Pesticide Free Towns & Villages. PAN aims to protect the public and wildlife from exposure to pesticides in public places – particularly schools, parks and playgrounds where children are exposed. They are also raising awareness of the consequences of pesticide use in our gardens.

The greatest impact of pesticides in the UK is on agricultural land. More than 70% of UK land is classified as agricultural this includes arable, horticultural and grazing land. In less than 20 years – since 1990 – the exposure of the UK public and environment to pesticides has increased enormously:

- > The toxicity of pesticides has increased. So although less chemical application by weight is required, products are much more lethal.
- > The area of land being treated with pesticides has increased – up 63% from 1990 to 2016
- > The number of times individual crops are treated with pesticides, in a single growing season has increased. E.g. the average number of treatments for individual cereal crops during 2016 was 18, and for potatoes a whopping 32 treatments
- > The number of different pesticide products being used in combination – insecticides, herbicides, slug killers, fungicides – on particular crops has increased. E.g. in 1975 the average number of different pesticides applied to potatoes was around 5. By 2014 the average for potatoes had risen to 30 different pesticides. *Source: Government Survey Stats: <https://secure.fera.defra.gov.uk/pusstats>*

This is obviously bad news for people as well as wildlife and rural and urban gardens have become the last refuge for some of our most iconic declining species such as hedgehogs, bumble bees, butterflies and some birds. There was hope that hedgehogs were thriving in our gardens but the latest survey published earlier this year by the Mammal Society and Natural England shows that they are continuing to decline fast. In 1995 hedgehog numbers were estimated at 1.5 million. In 2018 the latest survey estimates numbers are 66% lower, concluding that they could become extinct in Britain in the next 10 years, along with a fifth of our other mammal species.

Pesticide Action Network is campaigning for people to stop using pesticides in gardens because of the serious unintended consequences:

- > Insecticides designed to target aphids also kill non-target insect species such as vital pollinators: bees, butterflies and hoverflies
- > Most slug killers, insecticides, herbicides and fungicides – are water soluble and end up remaining in soil and water for many years, sometimes indefinitely. Manufacturers' claims that they are 'biodegradable' have been proved to be false. For example neonicotinoids, nicotine-based neurotoxins used in insecticides, are known to accumulate in soil and persist for many years
- > Once dissolved pesticides combine in soil forming a chemical cocktail many times more toxic than the individual agents. Studies have shown for example that neonics become 1000 times more toxic when mixed with herbicides and fungicides