

SWT PESTICIDES POLICY – 03.02.20

Context

Insects form the bedrock for the healthy functioning of all the complex ecosystems that together make up our natural world, and the foundation upon which all life on earth depends, yet the quiet demise of their populations over recent decades has largely gone unnoticed. It is only now that the true extent of the 'shifting baseline' for invertebrate species has been acknowledged, and the effect of wide-scale habitat loss and 'quick fix' use of damaging pesticides by a number of industries has been truly recognized. The situation is critical, and the need for action for insects urgent.

A significant reduction in the use of pesticides, *particularly insecticides*, is needed to reverse invertebrate decline and to rebuild and strengthen our ecosystems to the point where we can put in place a robust and long lasting 'nature recovery network' across the whole country. A network that restores, connects and protects our wild spaces and habitats, providing not only homes for our wildlife, but routes upon which they can freely travel to expand their populations long into the future.

So it's vital that our gardens, parks, urban areas and farmed countryside are managed in a more insect-friendly way. This includes a major reduction in the amount, type, and frequency of pesticides, particularly insecticides, used to manage and look after these places. We recognise that it won't be easy to make the transition from routine *use*, to routine *avoidance* of these harmful chemicals – whether at home in our gardens and allotments; in parks and other public green spaces including road verges; or on farms and woodland. But we're committed to working with like-minded organisations to help identify new and realistic best practices to support doing this.

We urgently however need the Government to establish stronger incentives for change, and to set and enforce ambitious, national reduction targets for damaging pesticides. We need a systematic change in how we manage the landscapes and green spaces that our insects and invertebrates depend upon.

What is a pesticide?

A pesticide is a chemical substance used to kill harmful insects, small animals, wild plants, and other unwanted organisms. There are in fact seven kinds of pesticides including insecticides (insects), herbicides (plants only), rodenticides (rats & mice), bactericides (bacteria), fungicides (fungi), larvicides (insect larvae).

Does Somerset Wildlife Trust use pesticides?

Somerset Wildlife Trust does technically use a pesticide, however it only uses small amounts of herbicides (targets plants only) and in controlled circumstances and with very targeted applications to avoid contact with anything other than the target plant, typically where there is no reasonable alternative, to ensure the safety of grazing animals for example, or where there are very specific conservation management objectives for unique and special flora or fauna on our reserves – where in some cases usage is defined in our agri-environment agreements. As such, we keep detailed records of herbicide use. In 2018 for example across all the reserves we know that we had a total glyphosate use of 5.3 litres, representing just 3.2ml/ha of glyphosate across our total reserve

holding. We always carefully consider the available methods for achieving our management objectives, and keep our herbicide usage to a bare minimum. We use alternative methods to herbicide usage control unwanted plant growth wherever possible.

What do you use herbicides for and what do you use?

There are a small number of circumstances where we feel that the occasional and highly targeted use of a herbicide is essential in terms of delivering a greater conservation gain. Much of our use (Roundup Proactive/Hilite) is primarily to hand paint (thus minimizing amounts used and avoiding application to non-target plants) the stumps of cut scrub in specific areas where either grazing alone is insufficient to control the growth of scrub at the rate it encroaches on species-rich grassland areas, or in situations where using grazing animals in high enough numbers to ensure suppression of the scrub would result in the priority grassland areas being hugely overgrazed and poached resulting in unacceptable levels of damage to these important habitats. There are some scrub species, including those that are more invasive, non-native species, that will vigorously regenerate far quicker than we can control them in certain areas, so we have to take a sensible view on how we can most effectively control/reduce them for the benefit of meeting our habitat management objectives.

Other applications are via the use of a knapsack sprayer or Nomix controlled droplet sprayer - a unique low volume herbicide application system which allows very targeted application with no spray 'drift' – to minimize the potential for damage to a wider area.

We use very small amounts of *GrazonPro* to ensure that we are able to control weeds that would otherwise be toxic to grazing animals in order to fulfil our responsibilities to our graziers, and we have had cause to use *Fusilade Max*, a fast-acting and selective herbicide on one of our specialist reserves, where there are specific requirements agreed by project partners and Natural England for the conservation of rare flowering plants associated with traditional arable farming practices.

On our wetland reserves we put a great deal of effort into getting our water levels and grazing levels correctly balanced for wildlife. It's also vital that we manage scrub and rush on these species-rich wet grasslands to ensure that conditions are favourable to ground-nesting birds and other waders and water fowl (which are a conservation priority on these reserves), but at the same time are not favourable for predators. Higher water levels can help reduce and control both scrub and rush, but there are some areas where we have less control over the water levels, which means we have to selectively 'weed wipe' at certain points during the year. By using this technique – which essentially treats only the ~~only~~ targeted raised scrub species and not the surrounding grassland sward – we can keep usage to a minimum, as well as protect any surrounding water courses.

Why can't you just manually cut scrub and pull weeds instead?

Given the scale of our nature reserve holding, it would be impossible to do this effectively to achieve the conservation objects we require, using just manual removal alone. Where we can we do use a tree 'popper' to manually pull small scrub saplings in targetted areas, but as well as being quite time intensive, and not possible with larger saplings, it's not very effective on wet ground as it sinks into

the ground rather than pulling the tree out. Digging things up inevitably takes longer and actually this can trample the surrounding sward, disrupt the soil and do more damage in the longer term. We do try and remove as much Himalayan balsam and Parrots feather and ragwort manually as we can with the help of volunteer-groups for example at certain times of the year. We also undertake many days of manual scrub clearance with brush cutters and chainsaws every year and follow up cutting to keep on top of regrowth, to enable species rich grassland to re-establish and flourish on our reserves.