

SHREWSBURY TOWN COUNCIL
CLIMATE EMERGENCY & NATURE RECOVERY COMMITTEE
16 January 2025

Officer: Danny Powell – Operations Manager

THE USE OF HERBICIDES & PESTICIDES BY SHREWSBURY TOWN COUNCIL

Purpose

To highlight the reduction in usage of Herbicides and Pesticides by the Town Council.

Introduction

The use of chemicals in Agriculture and Horticultural has been widespread and extensive over several decades. This not only had a negative impact on the environment but also the operatives who applied it. The environmental impact is now well documented, and their use is reducing. New alternative control methods are being developed and implemented across the industry.

Pesticides and Fungicides

The use of these control methods has reduced with the development and production of plants and grasses which are less susceptible to pest and disease. Research into the conditions in which these two problems thrive, has identified ways in which they can be dealt with to reduce the need of chemical spraying. This has then markedly reduced the number of products that are available to use and the cost to procure them has increased to a level that they have become the final solution in the control of diseases.

At the Town Council we have introduced maintenance procedures which reduce the conditions for pest and disease to develop and in cases where we have to use chemicals then we look at the range of products available and choose the one which cures the problem but has as little impact on the environment as possible.

Herbicides

Herbicides can be broken down into several subgroups. These are based on how they work, contact, translocated, residual.

The Town Council uses all these types across our facilities and open spaces. Again, their use is kept to a minimum and other operations are carried out where practical.

The public mainly think of weedkilling as the use of glyphosate-based weedkillers e.g. Roundup this is not the case. We use several selective weedkillers which only kill certain types of weeds but do not damage plants or grasses.

In all cases the type of chemical to be used and its location are considered before it is applied.

Glyphosate based weedkiller use has been reduced by Town Council over the last two years, during this time we have not purchased any glyphosate-based products.

The use of Translocated weedkillers (glyphosate) is requested by some of our external contracts, as this is a once-a-year operation that reduces the overall cost of the contract. Cheaper to spray once around an obstacle than strim around it on every visit.

We also use glyphosate products to control Japanese Knotweed through stem injection.

At this present time most commercial total weedkillers on the market are glyphosate based.

Contact weedkillers only kill the green growth, they do not spread through the whole plant. At the present time, we do not have any of these products in stock.

Residual weedkillers are sprayed over clean soil once any weed growth has been removed. They put a coating on bare soil or porous surfaces which stop weeds growing for a period of 6 months. They are best used through the summer months, and they break down and disappear after this period. The Town Council has a number of these in stock, which are used on established shrub beds and around street furniture.

The new residuals are far less toxic and last for a shorter period on the soil surface. The previous residuals which are no longer on the market built up in the soil structure.

Selective weedkillers are used on sports turf and only kill out broad leaved weeds in turf.

Alternative Weed Control

There are now several alternative weed control products or methods of weed control that can be used:

Pelargonic acid (fatty Acid)

Acetic acid (strong Vinegar)

Citric acid

Clove oil

Also boiling hot water, heat guns and hot foam.

These products and control methods are on the market and the Town Council have trialled them or have had them demonstrated.

Boiling Water and Hot foam are sprayed on to individual weeds to kill the green leaf growth, but the plant root system can still be alive, and the plant regrows. This is an expensive operation to purchase, boiling hot water and foam is being used in the public realm has a danger to the public and the operator applying it. There is also the cost of keeping the foam and water at boiling point.

Heat guns, these again only kill the top growth, and the weed regrows in a matter of weeks. There is also the added danger of setting fire to surrounding plants and grass land. During dry conditions this could become a serious problem. During a trial I carried out, the weeds regrew in about 14 days and the grass I was near started to smoulder and was scorched.

Pelargonic Acid and Acetic Acid, when trialled this killed light weed growth and new weeds. Older more established weeds the products had little effect on. Also, the regrowth was within a 6-week period, and we had to go out and spray again, this results in a greater use of products and an increase in man hours to carry out the work.

Citric Acid is used to prevent worms casting on sports Turf. The Town Council has used this product with success.

Clove Oil, we are still to trial this product as a weed killer. At the present time it seems to be a product that is used in the USA.

Conclusion

The use of Pesticides and Herbicides at the Town Council has reduced over the last 25 years. More cultural methods of weed and pest control now take place. All our staff who apply chemicals are trained in their safe application and the best practise of using the smallest amount and least toxic product available. We will keep trialling new products and when we find products that work well and last, then they will become our preferred method of weed control.

At this point in time the use of chemicals to control pests, diseases and weeds is still a valuable tool in our maintenance programmes. To stop the use of chemicals would reduce the quality of service we can provide and increase our costs to external contracts. As a counter to their use, we will endeavour to further reduce their usage on Town Council sites.

RECOMMENDATIONS

That the contents of the report are noted