



# Sustainable Use of Pesticides: Draft National Action Plan

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**The Wildlife Trusts' Preliminary Analysis**  
February 2021

# Introduction

The Sustainable Use of Pesticides: Draft National Action Plan (the 'NAP') was published for 12 weeks' consultation on Friday 4 December 2020. Within it, the UK Governments set out their ambition to minimise the risks and impacts of pesticides to human health and the environment, while ensuring pests and pesticide resistance are managed effectively.

This National Action Plan will aim to deliver on the commitments to reduce pesticide use made by the UK and devolved Governments\*, help establish their policy direction, and identify areas where they can be more ambitious in the future.

Pesticides have been used in agriculture for centuries, but over recent decades there has been an exponential growth in synthetic chemical use. Government policy has incentivised a model of farming based on increasing food production through using high-yielding seed varieties, artificial fertilisers, and pesticides.

The widespread and unnecessary use of pesticides is a key driver in the catastrophic decline of insect populations<sup>1</sup>, which in turn threatens our food security and risks ecological collapse. In the last fifty years, human activities have reduced the numbers of insects dramatically. Recent evidence suggests that abundance of insects may have fallen by 50% or more since 1970.

Insects are a critical part of all terrestrial and freshwater food webs, providing food for numerous larger animals such as birds, bats, reptiles, amphibians, and fish. They provide important ecosystem services and perform vital roles such as pollinating crops and wildflowers, controlling pests, improving water quality, and recycling nutrients in the soil.

It is not just insects that are at risk of pesticides. Pesticides in the water environment can impact both drinking water resources and aquatic life, and new figures released by the Environment Agency in 2020 revealed that every single waterbody in England failed chemical standards<sup>2</sup>. Annual capital and running costs for the removal from our drinking water of pesticides originating from agriculture is approximately £120 million.

In 2019, UK MPs declared a dual Environment and Climate Emergency, stating that loss of biodiversity constitutes a real and present threat to our future. The catastrophic decline in insects and the poisoning of our waterways are live demonstrations of this dual emergency.

## What needs to happen?

It is not too late to reverse the declines in biodiversity loss if we start now, but we need transformative change.

The Wildlife Trusts believe that a significant reduction in pesticide use is urgently needed to reverse insect declines, improve human health, and create a wilder future. Failure to do so risks a collapse of the natural systems on which humans and wildlife depend.

Achieving this reduction requires leadership from the UK Governments to create effective legislation, regulation, and enforcement around pesticide use, set ambitious pesticide reduction targets, and properly support farmers and land managers to switch to long-term alternatives.

There is a role for everyone to play, by reducing or ceasing domestic and unnecessary use of pesticides, but government-led action is crucial if the UK is to lead the way with a world-class pesticide management framework.

## The Wildlife Trusts want to see...

1. **An ambitious quantitative UK pesticide reduction target** to reduce the overall use of — and risk from — chemical pesticides by 2030.
2. **A halt to the unnecessary use of pesticides** where people live, work and farm, with support for all sectors to make the transition towards becoming pesticide free.
3. **Support for farmers** to adopt Integrated Pest Management and other agroecological practices.
4. **No weakening of UK pesticide standards** through future trade deals, including continued application of the precautionary principle to assessing risk.

**The Wildlife Trusts are urging the public to respond to the consultation too, and have made it easy for supporters to back these suggested changes.**

\*In reference to the commitments made within Defra's 25 Year Environment Plan, the Welsh Minister's Natural Resources Policy, the Environment Strategy for Scotland, and the goals of the Environment Strategy for Northern Ireland to protect and enhance the environment for future generations.

# Our concerns on the Revised National Action Plan's Proposals

In the very first paragraph of the executive summary, the NAP states that pesticide use is an important component of management, including in the maintenance of our public green spaces and the streets on which we live.

The Wildlife Trusts believe that this sets completely the wrong context for the NAP, and directly contradicts the Government's stated commitments to "*minimise and eventually phase out the use of pesticides*". If the Government sticks to this approach to pesticide use, the NAP sets itself up to fail.

Moreover, the NAP fails to reference the ecological emergency or adequately address the serious decline in insects. If insects are to thrive and help support healthy ecosystems, we need to significantly reduce the threat to insects from pesticides.

The Wildlife Trusts fear that the revised NAP will fail to deliver on the UK and devolved Government's environmental commitments, and we believe that the actions proposed will fall short of the real changes needed to reverse the staggering decline in insects we have witnessed in recent years.

## Our top concerns

### **Failure to commit to a reduction in the environmental impacts of pesticide use**

While The Wildlife Trusts welcome the commitment within the NAP to establish a clear set of targets for reducing the risks associated with pesticide use, we are concerned that the current wording within the NAP represents a shift from that within the commitments made by the UK and devolved Governments, which clearly states that the Government will act to reduce the environmental *impact* of pesticides.

### **No commitment to phasing-out of the use of pesticides in certain areas and pesticides of particular concern for wildlife and human health**

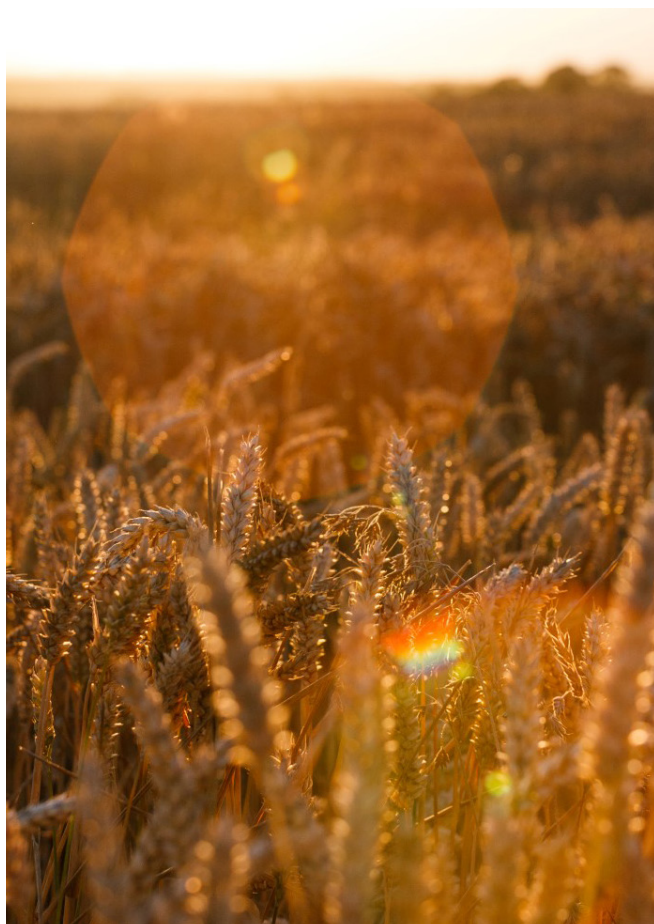
The NAP identifies the need to reduce the risks to wildlife and humans posed by pesticide use, yet fails to do that on three counts. It does not set out to phase out their use in areas where pest management is unnecessary, nor to phase out chemicals known to have significant environmental and human health risks, nor to regulate use of those for which the risks are unknown.

### **Inadequate support for Integrated Pest Management**

Integrated Pest Management (IPM) is an approach to managing pests, diseases, or weeds in which chemical pesticides are used only as a last resort, if at all<sup>3</sup>. While The Wildlife Trusts welcome the promotion of IPM techniques in the NAP, this needs to go much further to place IPM at the heart of pest management in the UK.

### **No detail on maintaining current protections and to following the precautionary principle**

Following the UK's departure from the EU, all regulatory decisions on pesticides are now the responsibility of UK and devolved Governments. While The Wildlife Trusts support the commitments around maintaining regulation made in the NAP, it fails to provide detail as to how these will be guaranteed, and Defra's recent derogation on neonicotinoids in England<sup>4</sup> undermines these promises.



WHEATFIELD © CHRIS MAGUIRE

# Preliminary Analysis

## Commitments to targets on pesticide use

### Reducing the risks associated with pesticide use

With the UK formally exited from the European Union, there is a huge opportunity for the Government to take decisive action to reduce overall pesticide use. A statutory pesticide reduction target would allow the multiple stakeholders in UK pesticide policy to contribute to a common goal, consolidating a wide range of existing government activities on pesticides, and enable farmers to make informed decisions about their own future pesticide use.

The UK Government's 25 Year Environment Plan commits to *"reducing the environmental impact of pesticides"* and the NAP must deliver on this commitment and the commitments made in other devolved nations, recognising the catastrophic effects of routine exposure of wildlife to a harmful cocktail of insecticides, fungicides, and herbicides which is common practice through much of the UK.

The Wildlife Trusts are concerned that the current wording within the consultation document represents a change from these commitments instead referring to the *risks* associated with pesticide use when committing to targets.

The executive summary of the NAP states that *"it is essential that the use of pesticides does not pose unacceptable risk to environmental health"* but fails to detail what level of risk is deemed *"acceptable"*, or the decision process behind this assessment. The Government could satisfy the commitment to reduce risk through, for example, increasing the number of regulatory visits to farms, or by introducing stricter measures for the disposal of old chemicals. While important, neither of these actions will reverse the declines in the UK's wildlife seen in recent years.

Other countries have successfully introduced quantitative pesticide reduction targets, such as Denmark which adopted a target for an overall pesticide use reduction of 40%, supported by a pesticide tax. While it is important not to oversimplify the complexity of moving away from chemical use, and a range of sub-targets are necessary to prevent perverse impacts on the environment, a reduction target has shown to be a key driver for innovation and has helped identify effective mechanisms for meeting the country's overarching objective of pesticide use reduction<sup>5</sup>.

### Phasing out the use of pesticides

In November 2020, Lord Goldsmith stated that Government ambition was to *"move as far as we can away from the use of pesticides at all. That is*

*reflected in government policy... We want to minimise and eventually phase out the use of pesticides"*<sup>6</sup>. The Wildlife Trusts welcome this aim but are concerned that this does not appear to be reflected in the NAP as it currently stands.

Years after publication of the previous NAP there is still no baseline against which to measure progress. This continues to be held up as an excuse for not setting reduction targets yet. The NAP proposes setting clear targets for a reduction in the risks associated with pesticides by the end of 2022, but we are in the midst of a biodiversity crisis now. The Wildlife Trusts expect to see the NAP reflect this urgency.

### An improved indicator framework

We welcome that the consultation's acknowledgement that the indicators for the effects of chemicals on wildlife in the environment must be improved from those used in the 2013 NAP, stating that these are currently being developed as part of Defra's outcome indicator framework for the 25 Year Environment Plan (YEP). The NAP specifically mentions that the H4 indicator (H4 — Exposure and adverse effects of chemicals on wildlife in the environment) will be used to track changes in the exposure of, and consider risk to, wildlife from chemicals in freshwater, marine and terrestrial ecosystems.

However, in Defra's 2020 update for the outcome indicator framework<sup>7</sup>, the status report for H4 states *"This indicator is not available for reporting in 2020, and research work is in progress to develop this indicator."* Defra must provide a clear date for the development of this indicator.

Furthermore, the NAP should set out how any framework will link across to additional indicators developed within the outcome indicator framework for the 25 YEP. Any indicators developed through the NAP must be complimentary and have read-across to those developed through the 25 YEP framework.



HAIRY-FOOTED FLOWER BEE © PENNY FRITH

## Failure to commit to phasing-out of the use of pesticides in certain areas and pesticides of particular concern for wildlife

### Failure to phase-out of the use of pesticides in certain areas

The NAP lays out Government's strategy to combat increasing resistance to pesticides, minimise effects of pesticides on the environment, and ensure they pose no risk to human health, yet fails to set out how the use of pesticides in public areas, particularly those such as parks and schools that do not have to produce food, will be phased out.

Many towns, cities and boroughs are already committing to phasing out in certain areas or indeed whole towns, but a national steer would drive this faster. There is significant public support for this approach. In polling commissioned by PAN UK and SumOfUs in September 2017, 68% of people wanted schools, parks, playgrounds, and other open spaces in their local area to be pesticide free<sup>8</sup>.

Reducing pesticide use in urban areas would provide crucial refuges for insects from pesticides used in agricultural environments. Furthermore pesticide clean-up is also technically challenging and economically impractical. Annual capital and running costs for the removal from our drinking water of pesticides originating from agriculture is approximately £120 million,<sup>9,10</sup> a cost that is passed on to consumers.

### Failure to phase-out pesticides of particular concern for wildlife

The Pesticide Usage Survey is the main source of data which Defra uses to assess pesticide use. This survey records information on the weight of pesticides applied and area of application but does not gather any record of the variation in the chemical properties of the active substances applied, the frequency of pesticide applications, and their associated impacts on human health and the environment.

The Wildlife Trusts acknowledge that the Government recognises this as a key limitation in monitoring the use of pesticides and welcome the commitment to developing new ways of monitoring that account for the relative toxicity of substances being used.

The NAP specifies that it will ensure that uncertain or contradictory evidence will continue to be dealt with using a precautionary approach. Phasing out pesticides known or suspected of causing significant harm to wildlife and/or human health, particularly in the areas mentioned above, should be a priority for the NAP.

While research into pesticide use is welcome, this appears to commit only to doing research into the need for more research, pushing the setting of targets further and further down the track. In the meantime, highly harmful pesticides continue to accumulate in our soils and waterways, even when alternative approaches are available. The NAP should apply the precautionary principle and not use lack of research as an excuse for delaying target setting.

There is public support for tighter restrictions on chemicals. In polling commissioned by PAN UK and SumOfUs in September 2017, 80% of respondents said that pesticides that have been shown to be hazardous to health should be completely banned<sup>8</sup>.

### Assumption that pesticides are necessary for maintaining public spaces

The NAP suggests that pesticides will continue to play an important role in supporting the UK's national infrastructure and public spaces, such as recreational, transport, and amenity areas, and even school playing fields.

At the same time, the NAP acknowledges that engaging in IPM has allowed amenity managers to achieve their pest management goals without the use of chemical pesticides, and states that Government is working to ensure amenity managers fully utilise IPM and reduce their reliance on chemical pesticides.

Indeed, we have much evidence that pesticides are not necessary for maintaining public spaces. In 2019, France banned the use of all non-agricultural pesticides and they are not alone — Belgium, the Netherlands, Luxembourg, Italy and numerous other countries, cities, and towns throughout Europe and the wider world have banned the use of pesticides to protect the health and wellbeing of their citizens.



WILDFLOWER MEADOW © JAMES ADLER

## Inadequate Support for Integrated Pest Management

### Education, knowledge exchange and advice

Demonstration farms are welcomed, but in order to be effective these should be geographically well-spread, represent a full range of crop and farm types, and funding should be committed to enable effective demonstration activities, ranging from on-line resources to regular events.

Various advisory services are described, but there is no detail as to how they will promote IPM. We support the development of a better model for independent (from chemical companies) advice — which should explain IPM as the route which Government favours, not just an option. The Wildlife Trusts endorse the principles of Catchment Sensitive Farming and agree that it should be supported.

The Wildlife Trusts via Wildlife and Countryside Link withdrew our membership of the Voluntary Initiative (VI) in 2019<sup>21</sup>. We called then for the VI and the Pesticides Forum to be replaced with mandatory measures designed to support farmers to adopt non-chemical alternatives to reduce pesticide use.

### Improving standards and knowledge sharing in amenity

We support working with BASIS and the Amenity Forum, and these are both routes to ensure IPM is at the forefront of training and advice. However, the consultation needs to focus more broadly on use of pesticides in non-farming settings not just rely on two vehicles for communication. Links with the Local Government Association, Countryside Management Association, Agricultural Colleges and all those delivering certified pesticides training are all needed.

Awareness via websites such as the RHS is welcome, but this is likely to reach only those looking for it. Public awareness work should also focus much more closely on retailers and consumers.

### Research and development to support IPM

It is good to see a list of current projects and some intention to fund research, but the commitment is vague and more urgent and impactful investment will be needed. Pesticide resistance is becoming more prevalent and we support research into non-pesticides alternatives.

The section on research and development within the consultation document could be taken to imply needing to find new pesticides or modes of application, which The Wildlife Trusts would strongly disagree with.

We have witnessed so many repetitive cycles of a pesticide being discovered and promoted as the new “wonder chemical” — a safe and effective solution to all our problems — only for it to be banned within a couple of decades it because it has been a disaster. That is a cycle that we desperately need to stop. Any funded research must reduce harmful chemical use and collateral impacts.

## De-regulation — the risks of pesticide use in a post-Brexit UK

### Dangers of simplification

The draft NAP states an aim to make the system of regulation simpler for pesticide users, with processes being streamlined where this does not interfere with an “*overriding need for protection*”. The Wildlife Trusts agree that a simple and transparent regulatory process is important, however any simplification must not result in watering down of environmental protection.

The Wildlife Trusts strongly oppose any changes in the NAP which increase the potential for pesticides to harm wildlife and the environment, and the NAP must not result in any weakening of current UK pesticide standards.

### Failure to commit to maintaining current standards

Following the UK's departure from the European Union, all regulatory decisions on pesticides are now the responsibility of UK Governments. They are to consider the framework of law and policy on pesticides that is needed post-EU. The NAP commits to:

- (a) maintaining current protections;
- (b) basing regulation on the best available scientific knowledge;
- (c) following the precautionary principle where there is uncertainty over levels of risk.

The Wildlife Trusts fully support these three commitments. However, the NAP must provide detail as to how they will be guaranteed, especially as Defra's recent derogation on a neonicotinoid treatment<sup>4</sup> undermines all three promises and demonstrates the need for such a commitment.

### Assessing risk

The consultation document does not clearly state that risk assessments for environmental health will account for risks associated with cumulative impacts, “cocktail” effects, sublethal impacts, and bioaccumulation in end environments (e.g. riverbed and marine sediments). Furthermore, these areas are



not included in the NAP plans for further research and development to support regulation.

Not only does bioaccumulation lead to greater concentrations of individual chemicals, there is also a growing body of evidence that pesticides can become more harmful when combined (a phenomenon known as the 'cocktail effect'<sup>12</sup>). Many of the active ingredients in these pesticides can persist in the environment for days and weeks, and even when they do start to break down, the resultant products can have further negative impacts on wildlife.

These are key areas of risk in the use of pesticides and the NAP must set out what research will be conducted into these areas and how they will be integrated into risk assessments.

## Pesticides in freshwater ecosystems

### Failing waterbodies

The impact of all pesticides upon the aquatic environment should be considered, even if use in or near water is not envisaged, as the water environment is vulnerable to pesticide pollution via direct application, drift, leaching and improper disposal.

Pesticides in the water environment can impact both drinking water resources and aquatic life. Various Water Framework Directive (WFD) measures are used as indicators under the NAP — yet new WFD figures released for English waters in 2020 are not included in the NAP.

In the 2020 classification assessment, every single waterbody failed chemical standards. These universal failures were caused by chemicals identified as posing a significant risk to the aquatic environment, with a proportion of these comprising of insecticides, fungicides, and herbicides<sup>13</sup>.

These failures highlight the importance of robust assessment *before* such products come on to the market, since it is often costly or infeasible to seek to remove contamination and reverse harm once chemicals are already in the environment.

### Monitoring impacts on freshwater ecosystems

There are many knowledge gaps regarding mixture toxicity, the "cocktail effect". An integrated approach based on combining chemical monitoring, mixture modelling, effect-based methods and ecological monitoring is recommended to develop a better understanding of the impact of real-world chemical mixture pollution on the water environment, and to inform risk management actions.

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# What needs to happen?

## The Wildlife Trusts want to see the revised National Action Plan

### 1. **Set an ambitious quantitative UK target for the reduction in the impacts of pesticides on the environment by 2030.**

While further research into pesticide use is welcome, pesticides continue to accumulate in our soils and waterways, even while alternatives are available. The NAP must acknowledge the UK Governments' stated commitments to minimise and eventually phase out the use of pesticides.

### 2. **Set out a strategy to phase out pesticide use in public areas, particularly green spaces, pavements and around hospitals and schools.**

The UK Governments must halt the unnecessary use of pesticides, and the use of pesticides which present significant environmental concerns, while providing support for all sectors to make the transition towards becoming pesticide free. Currently, the NAP fails to set a commitment to phase-out the use of harmful chemicals in our public green spaces and along the streets we live on and fails to detail a strategy to phase-out the use of the most damaging chemicals for wildlife.

### 3. **Drive forward Integrated Pest Management.**

The UK Governments must maintain their commitment to ensure that IPM is at the heart of pesticide policy. IPM should be integrated into agriculture incentive schemes, and support, advice, and training on IPM should be available and promoted to all farmers. Advice should only be supported if it is independent of chemical companies.

### 4. **State that no simplification of regulation will occur that compromises environmental protection by failing to protect wildlife and insects from harmful chemicals.**

There must be no deregulation or regression of UK pesticide standards post-Brexit. The NAP should state how it will maintain current protections, including the precautionary principle.

**Support The Wildlife Trusts and take action for insects  
by responding to the consultation**

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STAG BEETLES © TERRY WHITTAKER/2020VISION

No matter where you live in the UK, there is a Wildlife Trust inspiring people about the natural world. Each day we work to save, protect and stand up for the wildlife and wild places near you.

Supported by more than 850,000 members, we take action for insects on our 2,300 nature reserves, through our work with landowners, farmers and policy makers, and by encouraging everybody to look after insects where they live. We hope that you will join us.



**The Wildlife Trusts**

[info@wildlifetrusts.org](mailto:info@wildlifetrusts.org)

[wildlifetrusts.org](http://wildlifetrusts.org)

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