KENT COUNCIL'S POLLINATOR ACTION PLAN







NOVEMBER 2022

CONTENTS

Foreword	3
Kent's Plan Bee – an introduction to the county council's pollinator action plan	4
What are pollinators?	5
What's the problem?	7
What do pollinators need?	8
What's being done?	9
Action in Kent	10
Kent's Plan Bee - the pollinator action plan	13
Kent's Plan Bee monitoring measures	16
The long-term plan	17

FOREWORD



Seán Holden, Founder and chair Kent County Councillor for Cranbrook

Kent's Plan Bee, our county's pollinator action plan, has blossomed into a second edition and involves more people than ever in looking after the habitats and food sources for these vital insects. And we don't only mean bees but all pollinators - butterflies, hoverflies, moths, wasps, sometimes ants, even mosquitoes and many others. This

edition of the plan adds new data and takes into account actions since it was adopted.

Mobilising

More than ever it's critical that the plan's primary aim of mobilising all the county's people gathers pace: at home; at work; at play; at school; on the farm; in the garden; on the building site - in fact everywhere. Why? Because a 2022 Kent Wildlife Trust and Buglife report showed Kent's flying insects declined by 72% in only 17 years.

So it's even more urgent than when I founded Kent's Plan Bee, as a personal initiative in 2013, after a disastrous winter for bees, with the dedicated support of KCC officer Allison Campbell-Smith in her off-duty hours. A third of our food comes to us via pollinators. It's simple. If they die, we die.

Interventions for pollinators

Kent's Plan Bee was active for five years before being adopted by Kent County Council as its official pollinator action plan. It has become a cross-party project which has drawn in more and more people through online summits; through work with charities like the Bumblebee Conservation Trust; through a superb newsletter; through engaging with influencers in government, local and national and, indeed, international. It's able to lend the weight of Kent County Council to interventions for pollinators such as curbing the backdoor reintroduction of neonicotinoids. It has also caused KCC to rearrange significantly how it operates on its own land and highways for the benefit of pollinators. Having founded it as a one-man and one-woman band in 2013, I am proud to see Kent's Plan Bee move to a second edition, working cross-party, with many Kent County Council councillors and officers and all our people in Kent beyond.



Susan Carey Kent County Council Cabinet Member for Environment

Kent's Plan Bee is about changes we can all make to make room for the pollinators that are vital for producing the food we eat and the very existence of the Kent countryside, our gardens and green spaces we love. It's already made a difference to how Kent County Council manages its land including many of our road verges.

We've made a start and plan to do more but there's no doubt that much more needs to be done. There's so much we can do as individuals and communities. So please read Plan Bee, sign up for the newsletter, join our Facebook page, take part in our online events and be part of Plan Bee.



Tracey Crouch CBE MP Chatham and Aylesford Parliamentary Patron, Kent's Plan Bee

I am really proud of all those who continue to work hard to support Kent's Plan Bee. Never has this been so important. It takes partnership and leadership to protect our natural habitat to ensure our pollinators not only survive but thrive when there are so many threats to their very existence. Working together we can ensure continued progress to

implement the action plan, now in its second edition, for the sake of a sustainable future for our pollinators, and in turn humankind.

KENT'S PLAN BEE

AN INTRODUCTION TO THE COUNTY COUNCIL'S POLLINATOR ACTION PLAN

Kent's Plan Bee is the County Council's pollinator action plan, adopted in 2019 and now refreshed after the initial two years of action.

It is designed to take the lead in the county to mobilise the people, the businesses, the schools, the gardeners, the farmers, the old and the young everybody who lives here - to act to improve the habitat and the food sources of these insects and to reverse their continuing decline. This action plan sets out what Kent County Council is doing to help these insects vital to our environment, food and economy.



The purposes of Kent's Plan Bee are to:

- Make the county council a community leader in action for pollinators, showing the way in its own operations and land management, and by supporting others to do the same.
- Ensure that pollinators' needs are always considered throughout Kent County Council's work and services.
- Put the conservation of pollinators and their habitats at the heart of the council's land management and planning.
- Make Kent County Council a significant contributor to the recovery of pollinator populations, supporting both biodiversity and the county's food producers.

Kent's Plan Bee commits Kent County Council to:

- 1. Manage the land it owns, controls and influences in a way which benefits pollinators' habitat and forage.
- 2. Work with partners across the county to better protect pollinators and improve the habitats on which they rely.
- 3. Raise awareness of the importance of pollinators and the need to safeguard these vital insects, mobilising the people of Kent to take their own action within communities, workplaces, schools and homes.
- 4. Monitor and evaluate its action for pollinators, so that we understand the impact of our efforts and direct continued action and resources to where they are most needed.

WHAT ARE POLLINATORS?

Pollinators are essential to our environment, our food production and our lives. They are so-called because they carry the reproductive pollen grains from flower to flower, enabling fertilisation for seeds, nuts and fruit to be produced. Through pollination, new generations of plants grow, which in turn support wild habitats and other wildlife. Without pollination, most wild and cultivated plants, from trees to strawberries, could not reproduce. The conservation group Buglife says every third mouth of our food depends on insect pollinators.

They are central to Kent's fruit farms – 40% of the county's agriculture. They serve crops like oil seed rape, clovers and other nitrogen fixing plants, important for livestock grazing and wild flowers. They add to the diversity of plant species, habitats and wildlife in Kent as well as its natural beauty, making Kent a better place to live, to enjoy and to visit. Losing our pollinators would be a major ecological and economic disaster.

Many different insect groups are excellent pollinators. The best known of them are bees, including bumblebees, solitary bees and the honey bee. But other wild insects are equally vital for pollination including wasps, hoverflies, moths and butterflies. Even some beetles, mosquitoes and ants have a pollinating role. Many plants have evolved to offer nectar to attract insects. Whilst insects are feeding on a flower's nectar or collecting pollen to feed to their young, pollen grains stick to the insects' bodies and transfer to the reproductive organs of the next flower they visit.



Hoverfly





Antler Moth



Solitary Bee



White Tailed Bumblebee



Social Wasp

Brown Argus



Honey Bee



Solitary Wasp

Bumblebees and Solitary Bees are vital to wild plant populations and to many commercial crops including orchards, soft fruit and tomatoes. Kent has over 170 wild bee species, including 22 of the UK's 24 bumblebee species, and many that are rare or scarce. Bee species of national priority in Kent include England's rarest bumblebee, the Shrill Carder bee, which is only found in a handful of locations in south Wales and southern England and generally scarce even there. We also have the nationally restricted Brown-banded carder and Moss carder bees. These three are all long-tongued bumblebees that need a plentiful supply of deep-structured wildflowers and tussocky, long grass to nest in. Kent is also home to the nationally scarce solitary bee species of Reed Yellow-face bee, Sea Aster mining bee, which is found on the saltmarshes of north Kent, and the Long-horned bee.

There is just one species of **Honey Bee** the UK, and it is the only pollinator kept by humans, producing honey and other products. Honey bees can also be used to pollinate some crops such as soft and top fruit, in a managed way, with hives moved from crop to crop. Unfortunately, we cannot solve our pollinator decline by simply introducing more hives of honey bees – in fact this can actually have a negative impact on our wild bee and pollinator populations, by increasing competition for food.

Wasps are more numerous than bee species, with over 7,000 species of social and solitary wasps in the UK and over 200 species recorded in Kent. The adults often forage nectar for energy while they wait to ambush insect prey, many of which are crop pests, to feed to their young. Although wasps often have a bad reputation, particularly some social wasps that live in large nests, they are vital indicators of the health of ecosystems, and play essential roles in controlling other invertebrate numbers, as well as carrying out pollination. Kent's wasps are diverse in size, shape and colour ranging from the large European Hornet to the metallic Ruby-tailed wasp. A number are nationally scarce, including the Fourbanded Weevil wasp, found in soft rock cliffs and coastal habitats.

Hoverflies, and other fly species, can mimic bees and wasps in appearance as defence from predators. They also play a vital but often unsung role as pollinators, with many species feeding on the nectar and pollen of wildflowers and crops. In farming, they play an essential role in pollinating carrots and fruit crops. Their larvae's diet includes other insects, so some predatory hoverflies are also used as biological control agents. The enormous variety of hoverflies and flies in Kent range from the robust Hornet mimic hoverfly to the Ladybird fly, which mimics a ladybird and is only recorded nationally in Kent, Sussex and Surrey.

Butterflies and Moths species are also very diverse, with a number of declining and nationally rare or scarce species found in Kent. Many butterflies and moths have close associations with specific semi-natural habitats and wild plant species. Adults feed on nectar and are important pollinators of many wildflowers, though they are thought to be less significant pollinators for food crops. There are nationally notable populations amongst the 42 butterfly species in Kent including Heath Fritillary, Duke of Burgundy and Silver-spotted



Fisher's Esturine Moth EL

Skipper. Of over 2000 species of moth in the UK, Kent is home to the greatest concentration of rare and threatened moths, including Fisher's Estuarine moth, Black-veined moth, Fiery clearwing and Kentish Neb moth. The majority of moths are night-flying, and the conservation of these many species is dependent on a diversity of plants that are adapted to nocturnal moth pollination. Typically these are plants with white or pale coloured flowers that only open or produce nectar and scent at night.

Beetles are the single largest group of insects and are found in a diverse range of habitats. A quarter of the UK's many thousands of species are known to forage on nectar and pollen and, in the process, act as pollinators.

Mosquitoes can be overlooked as pollinating flies. Males, such as of the Banded mosquito found in Kent, can pollinate flowers whilst feeding on nectar.

WHAT'S THE PROBLEM?

The loss of pollinators is a direct threat to our ability to feed ourselves as human numbers globally increases towards nine billion by 2050. Without bees, hoverflies and other insects visiting flowers there would be no strawberries, apples, coffee, avocados, chocolate, cherries, olives, blueberries, carrots, grapes, pumpkins, pears, cotton, plums or peanuts. And that's just the first course. There would also be fewer flowers in our gardens or countryside.

Despite their importance, pollinators are in serious decline as a result of habitat loss, pesticides and climate change. The Bumblebee Conservation Trust reports that two species of bumblebees went extinct in the past 80 years, with eight species, a third of those remaining, now endangered. Butterfly Conservation reports similar concerns, with over three-quarters of our butterfly species having declined since 1976¹ and two-thirds of our common and widespread moths declined between 1968 and 2007².

In 2022, the citizen science survey Bugs Matter³ reported a decline in flying insects by 59% between 2004 and 2021. More worrying was that in Kent this figure was a staggering 72%. These figures indicated a rapidly declining trend in insect abundance nationwide, consistent with research that has shown declining trends globally.

The main threats to pollinators are habitat loss, climate change, pesticides, disease and invasive species.

HABITAT LOSS

Changes in our land use, including insensitive urban development and intensive farming, have resulted in habitat loss and fragmentation, the most significant cause of pollinator decline.

Pollinators need flowers to forage and places to shelter, nest and overwinter, within vegetation, hedgerows and soil. But since the Second World War, we have lost 97% of our wildflower meadows as a result of modern farming practices and urban development. Where wildflower-rich habitats do still exist, these are often small, isolated areas separated by land uses hostile to pollinators, making it difficult for insects to move around our landscapes.

CLIMATE CHANGE

By disrupting seasonal patterns and flowering periods of plants, climate change is impacting pollinators. It affects the timing of flowering plants that they rely on for food and disrupts nesting behaviours and emergence after winter. It is also thought that a warming climate could restrict or alter the range of pollinators.

PESTICIDES

The increased use of pesticides has adversely impacted pollinators and the plants on which they depend. Neonicotinoid pesticides are particularly harmful to bees, affecting their central nervous system, and consequently are now under a general ban across the European Union. Furthermore, some routinely used herbicides have also been shown to affect pollinators and their use, of course, reduces the availability of food plants throughout the year.

DISEASES AND INVASIVE SPECIES

Evidence suggests that some honeybee diseases can spread to our wild bumblebees. A further threat is invasive species such as the Asian hornet, which if allowed to take hold could devastate our native bee populations.

Pollinators have been in serious decline for many years and a loud and clear message is coming from scientists, wildlife organisations and the government that they need help and quickly otherwise all of us, plants, pollinators and people, face serious problems.

¹https://butterfly-conservation.org/sites/default/files/soukb-2015.pdf ²https://butterfly-conservation.org/sites/default/files/2021-03/StateofMothsReport2021.pdf ³Bugs Matter (kentwildlifetrust.org.uk)

WHAT DO POLLINATORS NEED?

Like all animals, pollinators need food which for them is nectar and pollen foraged from a variety of flowering plants.

SHELTER

They also need to be able to shelter, nest and overwinter in diverse habitats such as hedgerows, scrub and tall grass, burrows and holes in tree trunks. Many have different needs again in their larval (young) stages. Honey bees have their shelter (hives) provided but they still have problems in common with other pollinators.

FORAGE

Foraging grounds for all pollinators have been steadily eroded. All pollinators need flowering, semi-natural habitats like wildflower meadows, hedgerows and woodland edges. They need agricultural landscapes which have unimproved grassland, hay meadows, clover-rich grassland, orchards and arable crops. In Kent many of these are declining and are in short supply. Large fields of wind pollinated crops, like wheat, do not support pollinating insects.

BEYOND THE COUNTRYSIDE

It's not only the countryside where pollinators' needs can be better met. They can find food and shelter in gardens, parks, roadside verges and any other open area. It's quite easy to provide for pollinators by making sure they have the right plants. They include common knapweed in wildflower meadows, red clover in pasture, hawthorn and bramble in hedgerows and woodland, and cosmos in bedding areas.



Gardening for pollinators(c) Bex Cartwright

WHAT'S BEING DONE?

Kent's Plan Bee is part of a much wider movement. In 2014, the government published the National Pollinator Strategy for England, a ten-year plan to rescue these insects and to help them to thrive. Subsequently, in 2022, it published the associated three-year Pollinator Action Plan. Buglife, Friends of the Earth and Bumblebee Conservation Trust have also published strategies and policies to address the decline of pollinators.

WHAT CAN LOCAL GOVERNMENT DO?

The National Pollinator Strategy lays great emphasis on local action and looks to local authorities to take a leading role. Kent County Council (KCC) unanimously agreed in May 2018 to produce its own Pollinator Action Plan. Local authorities, from parish to district, borough and to county are well placed to make a significant contribution. They can do it directly through land management and development control and by giving leadership in local communities and, of course among their thousands of council staff. Kent County Council is responsible for 1,320 acres of country park and verges along 5,000 miles of road, as well as numerous other sites and buildings where it can and does take a lead in action.

WHAT DIFFERENCE CAN AN ACTION PLAN MAKE?

The environmental groups Buglife, Friends of the Earth and Bumblebee Conservation Trust say that a pollinator action plan like Kent's Plan Bee can:

- ensure pollinators' needs are taken into account across a local authority's work;
- raise the awareness of pollinators' needs across all of a local authority's staff, contracts and networks;
- do the same in local communities through its staff and elected members who represent those communities;
- help to identify previously unrecognised ways to help pollinators;
- ensure the wellbeing of pollinators is a principal consideration in land management;
- help pollinator populations to recover to the benefit of farming and food production;



Brown Argus

ACTION IN KENT

KENT'S PLAN BEE – ACTION SINCE 2020

Changes to Kent County Council's rural swathe cut – in 2022, Kent Highways changed their rural swathe cut regime of one per annum to two, to provide greater gains for pollinators. At the additional cost of £300k per annum, two cuts each year (running March to May and September to October) will keep forage for pollinators free of cutting at an optimum flowering and feeding period. Over time, this new approach will create an extensive network of habitat mosaics, which are interconnected and managed to optimise the range of habitats provided for pollinators across Kent's rural verge network.

Urban verge management for pollinators – along Fastrack's dedicated and shared bus route in the Dartford area, 10 pollinator road verges have been established and more are planned in Ebbsfleet and Gravesend, in addition to the installation of green roof bus shelters. Further to this pollinator planting is the creation of the bee bus, a double decker on the route featuring the Shrill Carder Bee and promoting the Kent's Plan Bee.

Supporting pollinators at our waste sites – species-rich grassland and trees for the benefit of pollinators were included in landscaping for the newly opened Allington Household Waste Recycling Centre (2022). And management for the closed landfill site, Shaw Grange (near Charing), will provide for pollinators by including sheltering and overwintering habitat and increasing the number of flowering, pollen rich plants.

Pollinator parks – Kent County Council's country parks are managed for the benefit of biodiversity, and pollinators are an integral part of this activity with grassland areas managed to maintain flowering plants and grasses diversity and optimum soil conditions. At Brockhill Country Park (Hythe) habitat is specifically managed for the benefit of solitary bees, providing foraging and nesting opportunities.



Changes to rural swathe cut



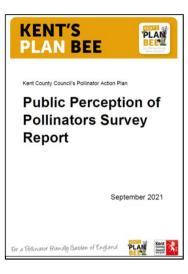
Fasttrack

Insecticide action – a review in 2021 confirmed no use of the damaging neonicotinoid. The Chair of the Plan Bee member group and Cabinet Member for Environment also lobbied the UK, and other European Governments, to take a stand against permissions for emergency use of neonicotinoids and urged Kent MPs to take part in a debate about this pesticide.

Trialling alternatives to herbicide use – Kent Highways has trialled alternatives for weed control however, no viable, effective, affordable and environmentally friendly alternatives have yet been found. Work continues on this and various contract renewals over the next two years present opportunities to further explore pesticide use reduction and trial alternatives.

Working with district and borough councils – a Plan Bee blueprint has been developed, focussing on the range of actions that could be taken at the local level by these authorities.

Raising awareness and mobilising the people of Kent – 1,500 people follow our Plan Bee Facebook page and 2,300 receive our monthly newsletter. Both provide advice on action to take and information of pollinator activities.



Over 5,000 people took part in our public perception survey in 2021 and we had 336 individuals and 16 organisation pledge to not cut their grass for the month of May, during the No Mow May campaign in 2022.

We have launched the Kent Children's University Pollinator Challenge, a 12-month programme of pollinator-themed activities and learning for children aged 5 to 14.

And we engaged with stakeholder and businesses across the county via two Plan Bee summits, in 2020 and 2021. Both attracted large numbers of attendees – the 2020 event

was one of the County Council's best attended online events that year, with 240 people taking part – demonstrating the level of interest in this important agenda.



Road side nature reserve



ROADSIDE NATURE RESERVES

The Kent and Medway Roadside Nature Reserves project has been going since 1994, protecting threatened wildlife and habitats in roadside verges with a network of sites now totalling 123. It's run by a team of voluntary road verge wardens and is a partnership between Kent Highways and Kent Wildlife Trust.

MAKING A BUZZ FOR THE COAST

A partnership project to safeguard rare bees by the Bumblebee Conservation Trust, which created and restored habitats and linked isolated populations by creating flower-rich 'stepping stones' along 135 miles of the coast from Dartford to Deal.

SHORT-HAIRED BUMBLEBEE REINTRODUCTION

A partnership of the Bumblebee Conservation Trust, Natural England, Hymettus and the RSPB was set up in 2009 to bring back the short-haired bumblebee to Dungeness and Romney Marsh in Kent, the place where they were last seen before going extinct in 2000. The project brought in short-haired bumblebees from Sweden and worked with farmers, landowners and conservation groups to create flower-rich habitats to support the new bees. This work now continues and is expanding its area as the Bee Connected project.

A CONSERVATION STRATEGY FOR THE SHRILL CARDER BEE

Bumblebee Conservation Trust is also leading a national group of partners to delivery this strategy, which aims to increase habitat, connectivity, evidence data and have an increased understanding of the needs of this nationally rare bumblebee. The north Kent coast is part of the larger Thames Estuary focus area, one of only four areas in England and Wales where the species is still recorded.

KENT'S MAGNIFICENT MOTHS

A partnership project led by Butterfly Conservation is helping to save and celebrate some of the UK's rarest and most beautiful moths in East Kent. The project also offers opportunities for people to engage with these moths, help carry out recording work and become involved in vital habitat management work.



Shrill Carder Bee_Rosie Bleet



Shrill Carder Bee (c) Rosie Earwaker

KENT'S PLAN BEE The Pollinator Action Plan

OBJECTIVE 1

For Kent County Council to manage the land it owns, controls and influences in a way which benefits pollinators' habitat and forage

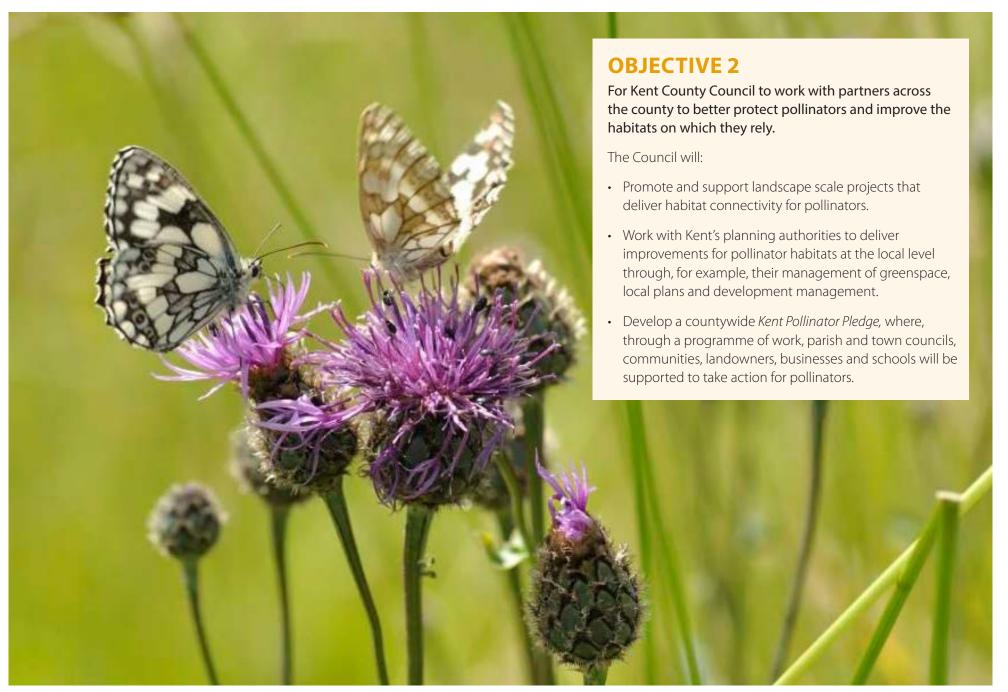
The Council will:

- Continue to review its land management practices and put in place, where it can, revised grass-cutting and maintenance regimes and apply pollinator-friendly planting. This applies to the highways network, country parks, schools and waste sites and our broader built estate.
- Introduce a dedicated policy to ensure that neonicotinoids are never used on County Council owned or managed land.
- Continue to lobby against any reintroduction or emergency use of neonicotinoids.
- Reduce the use of glyphosate across land owned or managed by the County Council, except where no viable alternative exists, and continue to review new methodologies as they become available.
- Identify ways to create corridors for wildlife throughout the landscape within and adjacent to the County Council's estate.

- Look for opportunities to 'green' its buildings and assets with pollinatorfriendly planting and such things as bee hotels.
- Ensure the needs of pollinators are recognised across the range of Council services and functions and are considered within all strategies and polices which may impact on, or present opportunities for, pollinators.
- Develop approaches within KCC's planning services that will help to protect pollinator habitats.
- Provide training, as required and appropriate, for staff involved in land management to increase their understanding of the needs of pollinators and how they can help them in the course of their work.



Shrill Carder Bee (c) Dave Watson



Butterflies at Ranscombe (c) Old Chalk New Downs

OBJECTIVE 3

For Kent County Council to raise awareness of the importance of pollinators and the need to safeguard these vital insects, mobilising the people of Kent to take their own action within communities, workplaces, schools and homes.

The Council will:

- Host an annual Plan Bee summit, to bring together partners and interested parties to review, discuss and progress action for Kent's pollinators.
- Deliver a rolling communication campaign to inform and influence the people of Kent and engage them in action for pollinators.
- Encourage and support pollinator friendly gardening.
- Support schools in activities relating to pollinators through access to resources and activities.
- Build an expert network of advisors and mentors to help to guide and steer Plan Bee action across the county.



Gardening for pollinators (c) Bex Cartwright



OBJECTIVE 4

Shrill Carder Bee (c) Rosie Earwaker

For Kent Council to monitor and evaluate its action for pollinators, so that we understand the impact of our efforts and direct continued action and resources to where they are most needed.

The Council will:

- Establish annual pollinator surveying (using the UK Pollinator Monitoring Scheme's flower insect timed count survey method or something similar) at selected sites across County Council owned and managed land, to monitor the effect of land management practices on pollinator numbers and provide an indicator of the impact of Plan Bee.
- Contribute to the annual Bugs Matters survey through our own service fleet vehicles and encouragement of staff participation.
- Publish a set of Plan Bee performance measures and report progress against these every two years.
- Keep up to date on the latest scientific evidence on pollinator health and respond as appropriate in respect of decision-making, asset management and service delivery.

Gardening for pollinators (c) Bex Cartwright

KENT'S PLAN BEE Monitoring measures

The following will be used to monitor and measure the progress and impact of Kent's Plan Bee. A report will be published every two years.

Objective 1 – For Kent County Council to manage the land it owns, controls and influences in a way which benefits pollinators' habitat and forage	 Annual UKPoM FIT Count monitoring results. Number (area) of KCC estate sites taking part in No Mow May. Number (area/length) of rural verges with conservation cuts. Pesticide/herbicide use on KCC managed highways and KCC estate. Area of KCC estate in active management for pollinators.
Objective 2 – For Kent County Council to work with partners across the county to better protect pollinators and improve the habitats on which they rely	 Number of districts with a pollinator action plan. Number of pollinator pledges by parish and town councils.
Objective 3 – For Kent County Council to raise awareness of the importance of pollinators and the need to safeguard these vital insects, mobilising the people of Kent to take their own action within communities, workplaces, schools and homes	 Number of No Mow May pledges across Kent. Facebook engagement. Number of pollinator pledges by community groups, schools, landowners, businesses etc.
Objective 4 – For Kent County Council to monitor and evaluate its action for pollinators, so that we understand the impact of our efforts and direct continued action and resources to where they are most needed	 Number of UKPoM FIT Count surveys completed. Number of KCC staff and vehicles taking part in the Bugs Matter survey.

THE LONG-TERM PLAN

Kent's Plan Bee is a continuing plan which is intended to be long term. The many actions set out and the raising of understanding and determination to act among the county's one and a half million people will necessarily take time.

It will come in phases; some of the work, like changing grass cutting regimes, is dependent on contract renewals which are not yet due.

The need for action for pollinators, Kent's Plan Bee, was agreed unanimously by Kent County Council in May 2018, underlining the importance the elected members attach to the programme on behalf of the people they represent.

It is being overseen by a cross-party member group which reports to the Cabinet Member for Environment... and ultimately by millions, even billions, of tiny Kent residents on whom we depend, as they depend on us.



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