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Consultation response on the National Pollinator Strategy

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Q3) What is your organisation Buglife – The Invertebrate Conservation Trust

Q4) Do you have any comments on the vision and aims for pollinators (in Chapter 2)? If 'Yes', please comment in the box below

We welcome the clear vision for reversing declines in pollinators and achieving sustainable pollinator populations due to '*their important for food production and biodiversity as well as their intrinsic value to the public*'. We are also encouraged by the commitment "*to act and play a leading role*", as strong government leadership will be key to this strategy's delivery and success. However although we welcome much of what is stated in the key outcomes regarding awareness, habitats and networks, the strategy still needs more practical action. Building partnerships is essential, as is monitoring and evidence gathering, and reviewing and refreshing the strategy as new evidence emerges, however we know that pollinator populations are declining now and urgent action is required to address this. There is sufficient evidence that we need bigger, better, joined up habitats and we would like to see a strong, clear commitment to new work to restore lost habitat, buffer and expand the remaining habitat patches, and join it up.

Paragraph 17 introduces the aim of the strategy as "*to safeguard pollination services and wider environmental benefits by aiming to reduce losses in the diversity of pollinator*

species". This is aim is rather negative, almost conceding that there will pollinator diversity will still be lost regardless of the implantation of this strategy. We would suggest that this opening sentence should read "*to safeguard pollination services and wider environmental benefits by aiming to increase diversity of pollinator species*".

We believe that the aim to 'Improve our understanding' is only as good as the scope and quality of the questions posed. It is a concern that some pertinent questions may not be addressed e.g. "what is the role of specific wildflowers (e.g. thistles, ragworts, umbellifers, brambles, assorted spring-flowering shrubs) in sustaining pollinator abundance across a landscape?" or "does specific habitat such as chalk downland, woodland, heathland or moorland improve pollinator abundance in adjacent agricultural landscapes?" or "what are the seasonality issues affecting pollinator populations?", or "what are the drivers of change and their relative importance?"

We disagree that evidence for decline only exists for butterflies and moths (page 13, para. 18). Good evidence of declines exists for many bees and some other pollinator species, but comes from non-standardised sources. Nevertheless, it is often as informative as standardised data, especially where it is linked to demonstrable loss of specific habitats or specific sites and collated by county recorders who have a very good knowledge of their 'patch' which they regularly survey. The standardised data that is regarded as 'safe' is not always linked to loss of habitat/sites, is often a snapshot in time, and is often weaker than is purported, especially if based on coarse hectad data and not involving targeted and informed searches. Furthermore, we believe that better use needs to be made of existing data and expertise, especially that which falls short of peer-reviewed studies such as that which is available through Local Record Centres and specialist recording schemes and societies.

Q5) Have we given a fair summary of main areas of concern for pollinators and the available evidence (in Annex 1)?

Yes ☐ No ☐

Q6) If you answered 'No' to question 5, please use the box below if you wish to identify any further issues about the areas of concern and the available evidence.

In general the summary in Annex 1 is fair however we would seek clarification on a number of statements made in the text. We would challenge the assertion that '*We are therefore not able to state categorically whether pollinators are in trouble in the UK*". We know that the ranges of many species have contracted and there have been local extinctions. This is a good proxy for measures of abundance and is a strong indicator that pollinators are in trouble in the UK. Data is limited for many groups of pollinators, but if you take the data that we do have, it follows a similar pattern of decline to that of better studied groups such as Lepidoptera.

We would also seek clarification as to which 'areas' of Great Britain are showing an **increase** in solitary bee diversity based on robust (as opposed to extrapolated) data. Whilst solitary bee diversity is thought to have increased locally in the late 20th century through increasing provision of flower-rich brownfield land in particular, that land is now generally disappearing far more rapidly than it is being replaced. Regions such as the Midlands are possibly gaining new southern bees in response to climate change, but bee diversity continues to decline overall as bee-friendly habitat continues to be lost or degraded. A higher proportion of bees, wasps and ants fall into the Red Data Book and Nationally Scarce categories than any other equivalent group of invertebrates with very high levels of threat facing many species[1].

There is a lack of consideration of pesticides other than neonicotinoids. Recent improvements in the assessment methods for pesticides to assess non-target impacts on pollinators have indicated that whilst testing identified impacts on honeybees, the impact on wild pollinators has been widely overlooked. This fact needs to be acknowledged and surveillance methods applied to look for pesticide impacts on all pollinators, and take action to prevent these impacts if necessary.

There is also a paucity of information on species of conservation priority (section 41 and/or red listed). Buglife would recommend that the issues and needs of these species are investigated and a short report produced to complement Annex 1 to ensure that the needs of these species are incorporated into any actions resulting from the strategy.

Q7) Do you have any suggestions on the best way to communicate the 'Call to Action' (once agreed) to many different audiences (in Chapter 3)?

Yes [X] No

Q8) If you answered 'Yes' to question 7, please use the box below to offer your suggestions

Evidence shows that high quality advice and training is key to the successful delivery of environmental measures[2]. We therefore believe that Government should place a high priority on effective communication with landowners, farmers, agronomists and planners to achieve the objectives of the National Pollinator Strategy. Making information available, including online, is important but not sufficient in itself: tailored advice and face to face contact are more effective methods of securing behaviour change.

Good advisers are key to getting farmers to 'own' the aims of environmental measures and they make a huge positive difference to environmental outcomes. They can often be

[1] Falk, S. J. 1991. A review of the scarce and threatened bees, wasps and ants of Great Britain. Research and Survey in Nature Conservation 35. Nature Conservancy Council,Peterborough.

[2] See for example: Natural England Evidence Synthesis Paper (2013) Evidence for New Environmental Land Management Scheme (NELMS) Design. http://www.naturalengland.org.uk/Images/nelms-evidence-synthesis-paper_tcm6-36208.pdf and RELU (2012) Improving the success of agri-environment initiatives http://www.relu.ac.uk/news/policy%20and%20practice%20notes/37%20Bullock/PPN37.pdf

important ‘gatekeepers’, providing links between farmers and local communities. It is not surprising then that all the evidence suggests that farmers welcome high quality, consistent advice in this area, when they are offered it. Buglife therefore urges Government to ensure that Natural England and others are adequately resourced to provide independent advice to farmers on helping pollinators as part of their roles.

Buglife believes that it is vital to engage with farmers at the start of their careers via Agricultural Colleges, as well as through ongoing professional development via assurance schemes and associated training, to help embed good practice in the industry. Government could explore whether the Call to Action could be integrated into agricultural training programmes.

In addition there should be a training programme on pollinator conservation for other key advisory services such as Natural England, Forestry Enterprise, Environment Agency and Local Authority staff so that they are also empowered with the knowledge that they will need to make a profound improvement.

Q9) Do you agree with the priority actions summarised in Chapter 3?

The strategy as it currently stands does not clearly communicate a desire to create a coherent and resilient ecological network of habitats to support and benefit pollinators. In order to do this the strategy should clearly align itself to deliver high quality habitats, and also to the Biodiversity 2020 strategy as well as the Natural Environment White Paper and Making Space for Nature. The strategy should clearly aim to achieve bigger, better, more joined up habitats for pollinators, resulting in more sustainable pollinator populations, with greater resilience in face of climate change. This could be reinforced by amending the key outcomes detailed on page 4 as follows:

- Bigger, better managed and more connected diverse and flower-rich habitats to support our pollinators on farmland and public land, in towns, cities and gardens, along transport networks and on land surrounding other infrastructure such as water treatment works and flood defences; - this should include nesting/shelter not just flower-rich.

- Sustainable, robust (resilient to environmental change) and increasing populations of bees and other pollinators to support pollination services; and also ensure no extinction of pollinator species;

- Enhanced awareness and evidence of action across a wide range of businesses, other organisations and the public of the actions they can take to support pollinators.

The strategy overlooks the threat of extinction faced by many pollinator species. There are 199 pollinating species on the Section 41 list of priority species as defined by the

National Environment and Rural Communities Act (2006). Many more species are listed as at threat of extinction on status assessments and red lists.

The importance of these species should be acknowledged by the strategy, for maintaining species diversity, as well as genetic and functional diversity of pollinators in the UK. An overall aim of the strategy should be to prevent any pollinator extinctions and so maintain a rich and diverse community of pollinators; allowing pollinators to be reactive and resilient to environmental changes. The specific management requirements and information regarding these species (much of which has been collated by Buglife and other NGOs already) should be embedded within the information and the 'call to action' provided to land managers, particularly farmers (via agri-environment schemes) and large-scale land managers, as well as brownfield managers as some brownfield sites are havens for rare and threatened pollinator species.

We welcome the acknowledgment of the importance of brownfield sites for maintaining pollinators however the action that is "Disseminate 'Call to Action' advice to brownfield site managers" will not be adequate to secure and protect brownfields to benefit pollinators. Additional actions are needed including defining high environmental value brownfield land, identifying the quality of sites and protecting the best sites in local plans.

The fate of pollinators at a local level is often largely dictated by planning decisions. The planning system can therefore play an important role in protecting key pollinator sites. Guidance is required for developers and planners to ensure that key pollinator sites are recognised and protected. Local authorities will also need clearer guidance on how to assess the value of brownfield sites for wildlife – planning policy favours development on brownfield sites but they can be very important for pollinators.

To influence at a local level it is essential that the Department for Communities and Local Government (DCLG) also becomes a key partner in this strategy and its implementation. In particular DCLG should encourage local authorities to produce pollinator plans, to incorporate pollinator habitats into their local plans, and pesticide use practice, and public space policy and minerals strategy.

The strategy should recognise SSSI targets as they make important contributions to pollinator conservation, but designations should be revised to include pollinator populations. Less than 15% of SSSIs mention insects as being features deserving consideration in management of the SSSI. Therefore key sites should be afforded appropriate protection through SSSI notification or LWS/SINC designation, with no prejudice between greenfield and brownfield sites. Losses of pollinator foraging and nesting habitat should be adequately compensated for to ensure there is no loss to the functional network of pollinator resources in the area. We also propose that legislation is developed to prevent the un-licenced destruction of nesting wild bees or their nests with pesticides or poisons.

Buglife believes that Priority Action 2 – "*Ensure pollinators represent a key focus of CAP reform*" needs to be strengthened. It is critical that the current CAP reform work is closely linked with the NPS and its implementation to secure good outcomes for pollinators. It is key that a targeted, well-funded and well-designed agri-environment scheme is required, complemented by effective greening in the wider countryside, and a coherent package of support for High Nature Value farming.

We believe that the New Environmental Land Management Scheme (NELMS) has the potential to deliver significant benefits for pollinators. Scheme agreements need to deliver resources for a range of pollinators over their whole active season, including tree and shrub resources which are important as early and late forage sources. In addition standard pollen and nectar mixes alone are poor at achieving a long forage season. Better designed mixes need to be encouraged (they often provide resources only during a short period over the summer and mainly include plants accessible to bumblebees, not other insects), and the maintenance of species-rich grassland need to be included in the mid-level scheme as well as in the higher tier.

Targeting will also be key to effective delivery for pollinators by NELMS, with limited resources focused on 'hotspots' for pollinators for the mid-tier scheme and on S41 species for the higher-tier. This will facilitate a robust and healthy landscape for pollinators with bigger and more joined up habitats rather than scattering measures across the countryside and with little benefit.

Guidance and advice will be key to delivering general measures for pollinators as well as specific advice for rare pollinators. It should be ensured that a comprehensive advice system is in place before the new scheme starts.

Given that the NELM scheme is only expected to cover 35 – 40% of the farmed area, there is a clear need for other Greening and cross compliance to support pollinators across the rest of the landscape. We continue to believe that a National Certification Scheme is the most effective way to deliver Greening that would be most beneficial to pollinators, and urge Government to review the implementation of Greening in England at the earliest opportunity.

With regard to pesticides, the strategy should include a commitment to promote the further improvement in robustness of the EU pesticide approval 'test method' for pollinators including developing methods that have a stronger statistically significant evidence base for a wider range of pollinator species (especially Lepidoptera and hoverflies). The UK has already been involved in the review and development of the pollinator 'test method' and we believe that an acknowledgement and commitment to this work should be included in this strategy.

Buglife welcomes the commitment to review and update guidance on Integrated Pest Management (IPM) but believes that the current approach to IPM in the UK National Action Plan for pesticides does not go far enough to secure IPM implementation by UK

farmers. Implementing pollinator focused initiatives could achieve real change for pollinators, with clear and coordinated action, and better developed Integrated Pest Management (IPM). Currently there is great disparity in the interpretation of IPM amongst stakeholders, as well as their understanding of its capacity to deliver reductions in pesticide use and wider benefits through habitat creation to encourage natural pest control and to benefit pollinator populations. The NPS gives the Government another opportunity to step up efforts on widespread implementation of IPM in England. We recommend that a clear definition of IPM is developed that builds on the principles set out in the Sustainable Use Directive. We urge the Government to end commission-based selling of pesticides as this is a counter-productive practice which undermines any efforts to reduce pesticide use. Furthermore, crop and sector-specific IPM protocols should be developed and extension and outreach services provided to assist farmers in implementing IPM. Mandatory training in IPM for all sectors should be incorporated into existing assurance schemes.

Over 40,000 bumblebee colonies are imported into the UK each year to assist with the pollination of crops such as tomatoes and soft fruit. There is growing evidence that imported bees can spread disease to indigenous bees, causing catastrophic crashes of their populations - this has already happened to wild American bumblebees and several times in domesticated Honeybees. Commercial bumblebee importers claim that their stock is disease-free, but a recent published study by the University of Sussex has shown this to be incorrect. Increasing international trade in diseased bees is a disaster waiting to happen. The use of foreign bees is usually driven by commercial expediency and it would be a wise precaution to replace this importation trade with trade in home bred indigenous bees. We believe that the NPS should include a clear statement on favouring the use of naturally occurring pollinators, and a commitment to stop the importation of bumblebees and other pollinators for crop pollination.

Q10) We would welcome any examples of good practices which are already helping pollinators which we've NOT mentioned in the consultation document or the separate supporting document (such as, land management in towns and cities, local authority initiatives particularly in fruit growing areas, management of farmland, and integrated pest management and knowledge sharing networks). If you have any further examples please provide in the box below.

High quality habitat is essential if we are to be successful in aiding the long-term survival and dispersal of insect pollinators. It is important that this habitat fulfils all the key requirements of pollinators and other invertebrates i.e. food, foraging, nesting and overwintering resources.

Buglife is promoting the development of a network of B-Lines throughout the UK to help support both our native insect pollinators and other wildlife in the wider countryside. The key aims of the B-lines initiative are to restore and create high quality wildflower-rich habitat, helping to conserve populations of a wide range of insect pollinators; and to help link small fragments of habitat, assisting species movement and dispersal. The overall

aim is to maintain and develop high quality habitats rich in native species. Although a wide range of habitats are important to insect pollinators, we believe the primary focus should be on increasing the area of wildflower-rich habitats, for example grasslands, heathland and lowland fens. In addition to these key habitats overall wildlife value it would also be beneficial to develop scattered scrub, woodland edge habitats and species rich hedgerows, as well as taller-grown grassy areas to provide useful shelter, nesting and food supply.

Buglife delivers a number of 'buzzing' projects in urban areas throughout the UK. These projects aim to create pollinator friendly habitats in urban parks and are delivered in partnership with local authorities. The creation of wildflower meadows within parks during these projects has involved sowing wildflower seed, the alteration of management regimes, creation of additional habitat features such as bee banks and bare earth scrapes, and community engagement activities such as wildflower planting days and pollinator surveys. We are currently in discussions with a number of local authorities with a view to developing similar projects.

The importance of brownfield (or post-industrial/previously developed) sites for supporting pollinator populations should not be overlooked. If properly managed, brownfield sites with high value for biodiversity can not only deliver suitable habitat for many rare and endangered species, but can also transform themselves into wild city spaces full of wildflowers that will attract pollinators and other animals. Such sites are an important part of the habitat network, providing corridors "stepping stones" for species to disperse around and through urban areas. Wherever possible brownfield sites with the highest potential for biodiversity should be protected from redevelopment.

Green roofs should also be considered as potential pollinator habitat in urban areas. Even the simplest sedum based roof can provide a foraging area for a wide range of inset pollinators. More extensive green roofs can incorporate wildflower habitats and features to provide shelter and nesting areas for insects. Further information on the creation of green roofs for invertebrates is available on our website.

Buglife has developed a suite of management advice and guidance for a variety of habitats, including arable fields, grasslands, soft rock cliffs and mineral sites, and also for priority species such as the Long-horned bee (*Eucera longicornis*), Sea aster mining bee (*Colletes halophilus*) and Shrill carder bee (*Bombus sylvarum*). Buglife has provided a series of advice sheets for farmers, allowing priority species to be effectively integrated into agri-environment schemes. We have also worked closely with government departments to ensure that invertebrates are effectively incorporated into new agri-environment schemes, for example we are currently supporting DEFRA and Natural England on the New Environmental Land Management Scheme.

There are many examples of what can be achieved to benefit pollinators with limited resources. For example, by avoiding top-soiling of new road cuttings the Ettington and

Southam by-passes in Warwickshire have developed in to excellent habitat for a wide range of pollinators.

Q11) Have we identified the right priority areas for further research and monitoring (in Chapter 3)?

Yes No [X]

Q12) If you answered 'No' to question 11, please use the box below to identify any further issues about priority areas for research and monitoring

Whilst we accept that more monitoring and research is required, the results of which may not be available for 10 years or more, by which time pollinator declines are likely to be even more severe. The extinction of our most threatened species, along with the loss of associated ecosystem services cannot wait for more research. The Government needs to take practical conservation action now to help our pollinator populations.

A number of reviews, scoping studies and feasibility studies are listed in the research section, but there is no commitment to fund actual research if recommended by these reviews. We believe that there needs to be a clear commitment of resources from the Government and wider research funders to support the research needed to underpin future action on pollinators.

With regard to research on neonicotinoid pesticides that has been proposed, we feel that evidence to-date on neonicotinoid pesticides clearly demonstrates the risks to honeybees, and the risks to other pollinators are, if anything, greater. There is therefore a pressing need for action now rather than further research. If further research is to be carried out into the impacts of neonicotinoid and other pesticides it must be carried out by independent researchers. Independent research identified the impacts of neonicotinoids on bees, other pollinators and other invertebrates (for instance on freshwater ecology). Relying on research solely undertaken by pesticides manufacturers will be open to challenges over the partiality of the researchers. We are also concerned that the proposed research package does not mention soil residues, which should be included to understand the long term impacts of these substances.

More research effort should be focused on increasing yields and the sustainability of low-pesticide input farming systems that incorporate the principles of Integrated Pest Management. The current debate over neonicotinoids highlights an untenable reliance of industry on a small group of chemicals. Research on low-pesticide input systems should also extend to their use in amenity settings by Local Authorities, etc.

The emphasis on 'how pollinators are important for wild plants and the wider ecosystem' needs to be balanced by 'how do certain common wild flowers contribute to pollinator abundance in a manner that confers benefit to wild plants generally?'. Information on key flowering plants already widespread within farmland that support pollinators (e.g. thistles, ragwort, hogweed, cow parsley, bramble and various spring-flowering shrubs), needs to

be collated as too little attention is given to the value of such flowers and some are classified as injurious weeds and often get eradicated needlessly.

Q13) How could you contribute further to priority actions?

As the only organisation in Europe devoted to the conservation of all invertebrates, Buglife is well placed to help co-ordinate conservation action for pollinators in the UK and to deliver communications aspects of the NPS and habitat creation/restoration/enhancement schemes that will deliver pollination conservation on the ground. Buglife have technical expertise in the ecological requirements of pollinating insects and practical experience of managing sites for pollinators, and in providing guidance on how to manage land for pollinators for a range of stakeholders, including local authorities, minerals operators, developers and farmers. In addition, Buglife is the lead organisation in the UK on managing brownfield sites for the biodiversity value. Buglife is also delivering the only evidence-based landscape scale project to increase, enhance and connect habitat for pollinators, in the B-Lines Initiative.

We undertake a range of activities to create/improve pollinator-rich habitats in both urban and rural areas (see details in Q10), and this work can contribute significantly to the aims of this strategy.

Buglife has access to staff and volunteers with high levels of specific expertise for key pollinator groups such as hoverflies and bees and the habitats they use. Our staff are well placed to provide bespoke training to a variety of audience types on topics such as habitat creation and improvement, developing guidance, carrying out audit surveys, and site-specific management advice tailored to the particular needs of a landholding (especially where rare pollinators are present).

Q14) We have asked a number of specific questions. If you would like to provide any comments on related issues which we have not specifically addressed, please use the space below to report them.

Crucial to the success of this strategy is a 'joined up' approach to its implementation. We would like to see a strong implementation plan developed to ensure that the strategy achieves its aims. This implementation plan should include specific and measurable (SMART) targets to allow progress to be measured and a responsible body should be assigned to each one.

We would like to reiterate that more practical action is needed to address the declines in our pollinators. The Government could show a clear commitment to tackling pollinator declines by including habitat creation/restoration targets in the NPS, for example 'to create 100,000 hectares of permanent wildflower-rich grassland over the next 10 years to buffer and connect existing sites of high value for pollinating insects', and to identify the necessary funding mechanisms to achieve these.

In addition there are two Government departments that do not appear to have been sufficiently bought into the Strategy.

The Department for Communities and Local Government is responsible for ensuring that national priorities are taken up locally. It is essential that DCLG becomes a party to this Strategy. Their influence and leadership will be crucial in ensuring that the spatial planning system creates new pollinator habitats and does not destroy pollinator homes. DCLG should also have an overview of Local Authorities activities, producing pollinator plans, incorporating pollinator habitats into their local plans (especially B-Lines and brownfield sites of high pollinator value), reducing pesticide use and managing public spaces to prove pollinator habitats near people. DCLG should monitor Local Authority action in this regard and report on it as part of the Annual Review (enabling further action in the future if it is not happening). Their commitment to the Strategy is essential and they will need to develop specific actions so as to sustain pollinators within their area of influence.

The Department of Education should commit, as part of the Strategy, to ensuring that alongside their current commitment to ensure that all children understand where their food comes from, all children should understand pollination and its crucial role in food production.

We would urge caution in relying on a voluntary approach to land management. To achieve the vision set out in the NPS the Government needs to provide strong leadership and ensure that the necessary resources are made available to implement the actions.

Finally, funders should be encouraged to support the Strategy and opportunities for funding should be explored. For example the Aggregates Levy Sustainability Fund should be re-instated and directed towards restoring and creating wildflower areas in previous mineral workings.