

# The B-Lines Initiative

Buglife – The Invertebrate Conservation Trust is committed to halting declines in our native insect pollinators, which have suffered significant declines over recent decades as a consequence of habitat loss, pesticide use and other factors. Native insect pollinators provide an essential 'ecosystem service' – being responsible for the pollination of a large proportion of our food crops and our native plants. Further declines could lead to dramatic reductions in crop yields, alongside further deterioration in our native flora. Large areas of wildflower-rich habitat need to be both restored and created to provide essential food and shelter for pollinators. To increase opportunities for species to move around the countryside as our climate changes, Buglife is promoting the need to identify and develop priority dispersal corridors – **The B-Lines.** 

## **B-Lines and the National Pollinator Strategy (England only)**

The Government's National Pollinator Strategy 2014 sets out a 10 year plan to help pollinating insects survive and thrive across England. It outlines actions to support and protect the many pollinating insects which contribute to our food production and the diversity of our environment. Many of the Strategy's actions are about expanding food, shelter and nest sites across all types of land so that our 1500 pollinator species can survive and thrive. In addition it promotes the need for "more, bigger, better, joined-up, diverse and high-quality flower-rich habitats (including nesting places and shelter) supporting our pollinators across the country". **Buglife's B-Lines Initiative** is already showing the way! Working with partners across the country we are demonstrating how a joined-up approach can help conserve our native insect pollinators.

### The Key Issues:

- Agricultural intensification in our countryside, in conjunction with loss of land to urban development, has
  resulted in a significant decline of wildflower-rich habitats 97% of wildflower-rich grasslands have gone
  since the 1930s.
- Loss of habitat is one of the key factors which has led to the decline in a range of insect pollinators and other wildlife, effects being exacerbated through increased use of pesticides, losses of small wildflower-rich areas (for example hedge bottoms) and increased field sizes.
- Many areas of wildflower-rich habitat now exist as small patches often isolated from each other by large
  expanses of less wildlife-friendly habitat. This fragmentation of habitats is a matter of concern the
  populations of insect pollinators they support become marooned and unable to move in response to climate
  change.
- Around 250 UK pollinators are in danger of extinction and on the UK BAP priority list.
- Six of our twenty five species of bumblebee have declined by at least 80% in the last fifty years. These losses are mirrored for butterflies (71% of British butterfly species are in decline) and hoverflies (38% of species in decline).
- Insect pollinators play a major role in food production **over 90% of the world's crop species are insect pollinated**. In the UK the value of insect pollination to agriculture is £510m p.a. or 13% of UK agricultural revenue. Worldwide the value is estimated as £132 billion.

### **Key Issues continued:**

• **80% of British plants are insect pollinated**, with 62% of wildflowers being pollen transmission limited (i.e. less pollination = less seeds and eventually less flowers). There is evidence that insect pollinated plants are declining faster than wind and water pollinated plants.

### Why B-Lines?

**Urgent action is needed** to conserve our native insect pollinators across our rural and urban landscapes.

- Dramatic losses of habitat and the fragmentation of the remaining resource is threatening survival of many species.
- To support populations of species it is important to enhance the condition of existing wildlife areas and develop larger clusters of habitat. However this will not be sufficient to ensure their long-term survival if the environment becomes unsuitable as a result of climate change.
- Species may be driven to extinction by climate changes unless their populations are able to disperse across large enough distances to find suitable climatic conditions.
- A 'channelled' pattern of habitat, such as corridors or chains of stepping stones will enable rapid movement of species across a landscape as well as maintaining strong populations on individual habitat patches<sup>1</sup>.
- Overall substantially more wildflower-rich habitat is needed, extending existing high quality habitats and increasing connectivity between these along defined dispersal corridors **The B-Lines.**

Work needs to be carried out across the UK at a landscape-scale; enhancing and restoring our existing wildlife areas and then carrying out strategically planned large-scale expansion of wildflower-rich habitats. B-Lines provides a mechanism to do this while also capturing the imagination of landowners, business and the public in a way that smaller less ambitions programmes cannot do.

## How B-Lines support wider conservation work

The B-Lines have the potential to provide a wide range of benefits to both wildlife and agriculture. Many of these benefits are highlighted specifically in 'Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services' including:

- Making significant contributions towards the UK Biodiversity Action Plan targets (habitats and species) in a strategic and joined up manner, reducing fragmentation in our wildlife resource and creating landscapes more resilient to climate change
- Providing a range of ecosystem services, in particular the conservation of pollinator services and the benefits these bring to our farming sector
- Bringing nature to people in a highly visible form
- Taking a more integrated, joined up and effective landscape-scale approach as advocated in The 'Making Space for Nature' (Lawton)<sup>3</sup> review, by advocating the creation of a coherent and resilient ecological network.

In addition creation of the B-Lines will help the Coalition to achieve its manifesto commitment to "introduce measures to protect wildlife and promote green spaces and wildlife corridors in order to halt the loss of habitats and restore biodiversity"<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> Habitat re-creation strategies for promoting adaptation of species to climate change. Hodgson J.A. et al. Conservation Letters 00, 1-9 (2011)

<sup>&</sup>lt;sup>2</sup> Biodiversity 2020: A strategy for England's Wildlife and ecosystem services – Defra 2012

<sup>&</sup>lt;sup>3</sup> Lawton et al., 2010: Making Space for Nature: a review of England's wildlife sites and ecological network. Defra

<sup>&</sup>lt;sup>4</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/78977/coalition\_programme\_for\_government.pdf

#### We aim to:

- Identify and map priority B-Lines across the UK forming a coherent insect pollinator dispersal network.
- **Promote and raise awareness** of B-Lines to ensure wide ownership of the network enabling others to develop and deliver sections of B-Lines.
- Encourage decision makers to support the development of a national B-Lines network
- **Work with** Statutory agencies to ensure agri-environment schemes play a full role in delivering B-Lines, through improved targeting of appropriate management options.
- Work with partners, including wildlife bodies, land owners and managers, local communities and businesses to support and fund the creation of B-Lines.
- *Initiate* programmes of work to restore and create new wildflower-rich habitats
- Seek funding to enable B-Lines to be created and extended around the UK

#### We would like others to:

- Work with us to identify and map B-Lines, ensuring these link to create a coherent UK network. Local
  Authorities, Local Nature Partnerships and Biodiversity Partnerships can play a key role, alongside other
  organisations and individuals.
- **Support** the B-Lines approach and agree to deliver work in B-Lines according to our <u>Guiding principles</u>. The support of a large number of organisations and individuals is needed to deliver the B-Lines. Landowners, towns and village communities, local authorities, MPs, local politicians, national wildlife organisations and businesses can all play a part.
- Proactively develop and implement programmes of habitat restoration and creation within the already
  mapped B-Lines network. As mapping extends across the country we would wish to follow this up directly
  with delivery on the ground
- *Target* existing work programmes and funding (for example agri-environment) within the B-Lines to help ensure we develop the network of habitats needed.
- **Provide funding** to enable Buglife and other partners to deliver a programme of wildflower-rich habitats across the B-Lines network
- Look to link B-Lines with other wildlife conservation programmes across the country (for example Living Landscapes, Nature Improvement Areas, Futurescapes)
- Promote B-Lines as a priority approach for the conservation of insect pollinators.



