

# **Bugs United**

Buglife Strategy 2014-2020

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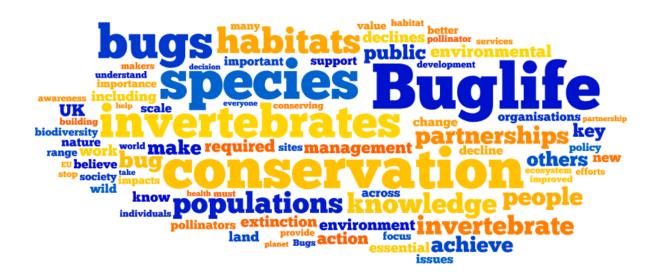


Fig 1 - Strategy word cloud

# **Buglife!**

In 2002 Buglife started its world changing mission. Before that point there was no European champion for the conservation of all invertebrates, from bees to earthworms and spiders to corals – bugs as they are more colloquially called. Buglife has become the focus point for efforts to save bug species from extinction and to halt the general decline in bug populations.

Buglife is responsible for 40,000 species in the UK, we are the only organisation in Europe dedicated to conserving all invertebrates, and outside Europe there is only one other organisation with similar aims (Xerces in the USA which is comparable in size to Buglife).

In the first twelve years of our existence we created and promoted advice on habitat management for bugs; tackled the conservation of neglected habitats such as soft rock cliffs, freshwater ditches and high quality brownfield sites – habitats essential for many bug species, that as a result of our efforts are now widely recognised as being of conservation importance; and created new invertebrate habitats on a range of sites, including a number of roofs in London. Buglife has been a dedicated and when required determined advocate on behalf of bugs. The charity has led campaigns to restrict the use of deadly insecticides destroying aquatic life and bees, and has taken high profile legal action in desperate circumstances to save the homes of highly endangered species from inappropriate development. Just as necessary has been our work to routinely represent the needs of invertebrates in numerous policy consultations and through the development of legislation.

Buglife's most significant impact to-date has been the increase achieved in public awareness of invertebrate conservation issues. Awareness of issues such as pollinator decline and environmentally damaging pesticides are now vastly higher than when Buglife was established. Buglife has also become a positive voice for some of the least loved invertebrates, such as wasps and spiders, and their habitats, emphasising the important ecological roles bugs undertake. We are a favoured port of call for journalists seeking authoritative knowledge and opinions on bug issues.

Buglife works primarily through developing and fostering partnerships with others, which can be where others lead and our contribution is more technical or can be equal and joint leadership. For instance partnership is central to our first nature reserve at Canvey Wick, managed with the Land Trust and the RSPB and to establishing a national scheme in which anglers monitor the health of insects in the rivers. Although Buglife has grown to



become a charity with an annual turnover of £1 million and 26 staff members, the scale of change that is required to reverse the declines in invertebrates can only be achieved by influencing, persuading and encouraging the efforts of many other organisations and individuals.

Concepts such as B-Lines and 'Get Britain Buzzing' will, if adequately supported by society, put back large areas rich in wild flowers, reversing the decline of pollinators and other wildlife.

To succeed in our aims we must deepen our partnerships with those whose focus is nature and its conservation, but this will not be enough, we must also broaden our partnerships with businesses and a range of other bodies. People and the economy depend on a healthy environment and it makes sense for them to adapt their activities to save and enhance invertebrate populations.

The problems facing invertebrates remain considerable, but Buglife has many solutions to contribute and even more to develop in the future.

"Even a one-inch insect has five tenths of a soul" - Japanese proverb

# Vision, Mission and Values

## **Vision**

A wildlife-rich planet where species, including invertebrates, thrive alongside people.

## Mission

Buglife's aim is to stop the extinction of invertebrate species and to achieve sustainable populations of invertebrates.

We will accomplish our aim by protecting, improving and expanding their habitats (homes) and strengthening the respect given to bug species. We will achieve this by:-

- Mobilising, inspiring, enabling and persuading others to take action, through the development and dissemination of knowledge and values.
- Undertaking practical conservation projects.
- Promoting the value of invertebrates and raising awareness about the challenges to their survival.
- Shaping the development of relevant legislation and policy.



## **Strap line**

"Saving the small things that run the planet"

### **Values**

#### Buglife.....

#### • .....is passionate about bugs.

We believe that it is essential to value all bug species for their usefulness, beauty and right to exist. We engage and inspire people with our deeply held conviction about the great significance of invertebrates to life on earth and with enthusiasm and positivity. We want to make sure that people understand and experience the wonder of bugs and value them as much as other wildlife

#### .....is the voice of the invertebrates.

We believe that it is essential to be the professional advocate for invertebrates and their conservation. We influence the public, policy makers and land managers so they can make better decisions for bugs. We champion invertebrate conservation and encourage people to manage the planet more sustainably. We are the only organisation in Europe committed to conserving all invertebrates - around 64% of all species.

#### .....disseminates knowledge.

We believe that it is essential that we have a broad expertise in invertebrates and conservation; we are linked into many other key expert individuals and organisations, we gather and harness knowledge and evidence and channel this to the public and decision makers. We educate others about the wonder and diversity of invertebrates and their value to humans and the environment. We are highly scientific in our approach, but we strongly believe that action is required now and incomplete knowledge isn't an excuse for inaction.

#### .....is outcome focussed.

We believe that it is essential that nature conservation activities have defined outcomes against which we judge success, the outcomes must be clear and there has to be a shared vision with partners and society of how to achieve them.

#### • ....works with others.

We believe that it is essential that we bring others on board to engage them in achieving conservation outcomes. We convene others, developing and sustaining shared visions, creative collaborations and meaningful partnerships. Mobilising others is the route for us to change society, solve problems and achieve a wildlife-rich planet where species thrive alongside people.

#### .....is courageous.

We believe that it is essential for us to say it as it is, to be determined - not afraid, and we believe in justice.

"Float like a butterfly sting like a bee" - Muhammad Ali

# **Personality**

- unifying,
- purposeful,
- leading edge (breaking new ground, going where others follow),
- professional,
- expert,
- good humoured,
- passionate,
- influential,
- and, where necessary, determined.



## The Context

### **NATURE**

"In all things of nature there is something of the marvellous." - Aristotle

Everyone needs somewhere to live.

And when that home goes life gets difficult. For the weakest, for the smallest, for those low down the food chain, things can hang on the edge. So everyone needs someone to stand up for them. Our natural world is no different from the human world.

Most species are in decline and the wild places we value are under threat.

"We are in the stickiest situation since Sticky the stick insect got stuck on a sticky bun."

- Rowan Atkinson (Edmund Blackadder)

This needn't be the case. We know how to make a difference. Targeted action can stop and reverse the decline of species; whether it's in the rivers running through our cities, on our roofs, in urban green-space, in the open land of our countryside, on our coasts or in our seas.

Buglife stands up for invertebrates: the little things that make the world go round. They process our waste, create soil, pollinate plants and allow life to blossom. They are the beating heart of every ecosystem. We all value and need their work more than we realise or imagine. But ignorance is driving bugs to extinction and it needn't be the case. That's why Buglife stands up for them and makes targeted interventions.

"We are the voice of wildlife. They can't speak for themselves." - Bruce McCloskey



For bugs, applying what we know to the way we manage land is the vital link that will allow them to thrive within rich and diverse ecosystems. Buglife cannot do this alone. Putting the management needed in place means working with the people who manage the land to help them do it in the most effective way possible that works for them and for bugs.

And we know this is worth doing because it needs to be done for the health of our environment, and because people want it to be done, too.

Almost everyone says it is important that people respect and preserve the environment and prevent extinctions. This is more than just words; hundreds of thousands of people in the UK regularly volunteer to do things that make a difference for nature, in their back gardens, in local parks and in our countryside. People coming together through organisations make a huge difference. In the last hundred years the conservation movement has saved species, rescued habitats, restored special places and re-introduced lost British animals.

Habitat losses, species declines and extinctions are happening. But they don't have to be the story. People working together with business, government and society can take action on a scale sufficient to reverse declines and prevent further extinctions, and can establish sustainable bug populations at the core of resilient and viable landscapes. Available knowledge, if applied to land management and protection, would create a landscape in which more bug species could thrive. Buglife will channel expertise to these initiatives. We know we can make a difference – our successes show this. We just need to do things on a big enough scale – which depends on building effective partnerships. We are clear that doing this should also benefit our partners.



Our experience is that the best way to achieve healthy bug populations is to protect, create and maintain good habitats and to give help to particular species where that is required.

Our track record shows us to be a trusted and reliable partner, helping to embed invertebrate conservation across the varied habitats of our country and elsewhere across the globe.

#### KNOWLEDGE

"Our treasure lies in the beehive of our knowledge. We are perpetually on the way thither, being by nature winged insects and honey gatherers of the mind." - Friedrich Nietzsche

Knowledge is required to support actions and understand change.

Invertebrates are everywhere: bugs make up 98% of all animal species, infusing literally every square metre of the UK. This is true everywhere across the world. Bugs are at the heart of every ecosystem. The sheer number of species and their importance in all habitats means there is a basic challenge because of the scale of action required to secure both bug populations and the benefits they provide to the ecosystems of which they are a key part.

We can only act on what we know. We understand much and, where we have put that knowledge into practice, the conservation movement has achieved a lot. We have brought species like the Ladybird spider back from the brink of extinction, rescued threatened freshwater crayfish populations and developed better ways of managing brownfield sites for the benefit of their invertebrate populations.

We can make a step change in the scale of activity by reaching out with existing knowledge to those who have resources and can take action. We will measure and understand what works in practice, and communicate this so that everyone can be empowered to act – we cannot be part of all partnerships, but we can make our knowledge available so that all partnerships can act on a sound basis. New technology, powerful advocacy tools and practical advice will help us.

We will develop more effective monitoring to understand better the changing status of bug species. Improved knowledge of how bugs respond to efforts to help them will enable accurate targeting and lead to better results. Buglife will contribute to the development of citizen-supported science and monitoring for a range of species; using new technology and building on existing partnerships, especially with our Member Organisations.

More research will be required to understand the reasons for declines in vulnerable species and to devise the policy and practical solutions to the declines. The backdrop to this challenge is reductions in academic entomology, meaning less research and fewer trained scientists, with no government institute filling the growing void, and with shrinking financial support for the statutory nature conservation agencies.

Buglife and our Member Organisations will develop links with the research community to focus applied research on priority species and habitats.

## **MONEY**

"We use nature because she is valuable - we abuse nature because she is free."

- Barry Gardiner

Austerity measures have hit the natural environment hard. The Department of Environment, Food and Rural Affairs is on course for a planned 49% budget cut between 2009 and 2016 and key taxpayer funded biodiversity budgets are vaporising.

Nature conservation accounts for a very small proportion (0.7%) of grants given by charitable trusts. Environmental charities have not yet been sufficiently well-resourced to enable them to effect the changes necessary to stop and reverse biodiversity loss.



The UK public donations to charitable causes has also fallen significantly to the smallest amount since 2004/05, with the proportion going to environmental causes dropping below 3%.

However, before the recent modest decline in funding for environmental causes, between 2005 and 2010, environmental non-governmental organisations saw strong income growth; an average of 21% in real terms.

There has been a flourishing of corporate partnerships between environmental charities and businesses, relationships that have contributed significantly to the growth and development of many charities.

Globally, nature conservation continues to attract more followers and resources, and nearly half of UK environmental grants are made to overseas work.

"When you have seen one ant, one bird, one tree, you have not seen them all." - Edward O. Wilson

Charitable giving is linked to the macro-economic situation and, as prospects for growth are improving, the whole sector hopes for a corresponding increase in donations.

Moreover, all charities face an increasing pressure to demonstrate relevance. Buglife will develop its understanding of the links between environmental condition and economic and social benefits, and work to implement projects to deliver these in ways that benefit all bugs.

#### **SOCIFTY**

"The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value" - Theodore Roosevelt

Buglife is the only EU charity dedicated to conserving all invertebrates. We have 29 member organisations including almost all the UK specialist societies dedicated to different groups of invertebrates. The conservation movement as a whole includes organisations dedicated to other species groups, to particular local areas, and to wildlife as part of a wider agenda. Together we have millions of members and thousands of volunteers; we are a standing army ready to make the natural world stronger, more resilient and more relevant to everyone.

A legal architecture acknowledging the importance of nature is broadly in place. The foundations for responsible decisions that protect and enhance nature are enshrined in statutes that:-

- commit countries to conserving biodiversity, using it sustainably, and being fair and equitable in sharing resulting benefits;
- guarantee the public and wildlife NGOs participation in environmental decisionmaking and access to relevant information and environmental justice;

- require the maintenance of certain species in Favourable Conservation Status;
- require an assessment of environmental impacts of certain developments and land use changes before they can be permitted;
- protect species and sites;
- place duties on public office holders to have regard to, or further, the conservation of biodiversity.

Bugs are unable to represent their own interests so it falls to Buglife to ensure that the law is applied correctly, respected and improved.

"The important thing to remember is that bugs don't actually talk." - Dave Foley (Flik)

On our own, Buglife is innovative, pioneering and influential. When we work with others in partnership or through alliances our movement is a powerful force for shaping and informing the political and policy landscape.

For the sake of future generations, decision makers must act to sustain and restore the environment. Species and habitat declines and the resulting damage to ecosystem services come with an economic, not just an environmental, cost.

"If future generations are to remember us more with gratitude than sorrow, we must achieve more than just the miracles of technology. We must also leave them a glimpse of the world as it was created, not just as it looked when we got through with it" - Lyndon B Johnson

It takes political leadership to speak this truth and deliver the actions that will make sustainability a reality. So we need to support such leadership, hold it to account and help to build political consensus for the necessary actions. Leadership that prioritises a healthy environment has previously prevailed, even in times of financial constraint, with shortening media cycles and acute electoral pressures, so we know it can emerge again.

Together we can achieve more than on our own.



# The Business Case

## The Need

Bugs are declining faster than vertebrates and plants in the UK, and probably elsewhere on the planet. Conventional conservation measures and a 'business as usual' approach will not achieve sustainable populations or stop extinctions of bugs.

Invertebrates are essential to life as we know it, for humans they provide immeasurable value by:-

- pollinating £18 billion worth of crops across the EU every year, and feeding us, both directly (e.g. scampi) and via fish that depend on invertebrates,
- recycling nutrients and building fertile soils,
- cleaning water,
- providing us with medicines that save thousands of lives,
- sustaining a countryside rich in birds, flowers and fruit,
- being an accurate indicator of the health of our environment and
- inspiring people with their beauty, adaptability and industry.

We have enjoyed these benefits and it is right that we should enable our children and grandchildren to do so as well.



In addition it is a common belief that we have a stewardship duty to look after other species and prevent their extinction.

We now need to employ new approaches, apply existing knowledge, acquire new insights and develop fresh solutions to problems. These innovations must be promoted and partnerships developed with a wide range of interests to ensure that invertebrates are conserved for the benefit of future generations.

There is no organisation with comparable delivery experience or that is better able than Buglife to access and apply the knowledge and resources required to provide a relentless focus on bug conservation issues.

"The very man who has argued you down, will sometimes be found, years later, to have been influenced by what you said" - C.S. Lewis

## The Proposal

With a high profile and a sound record of success, Buglife is best placed to continue to lead on invertebrate conservation and to continue to change society by innovation through partnership.

We will continue to promote invertebrate conservation, using messages that resonate with large numbers of people.

We will build active partnerships to promote common objectives.

We will also undertake foundation building activities, including:-

- defining important invertebrate areas that will form a basis for protecting and managing the most important sites and landscapes for bugs,
- designing projects and producing guidance focussed on outcomes that others will apply, often in partnership with Buglife, to ensure key ecosystem services are conserved,
- bringing specialist knowledge together and being the channel that converts it into policy and practice,
- building up a network of other partners, starting with our Member Organisations, to improve the underlying knowledge base of invertebrate monitoring and surveillance, thereby improving understanding of the status of bugs, trends in their populations, and the condition of important sites for bugs,
- training and capacity building to bring on the next generation of invertebrate specialists and recorders, and
- educating children about the importance of bugs, the threats they face, and how to look after wild populations.

We will focus on pollinators and freshwater invertebrates, because everyone understands that these animals provide important ecosystem services, but they are under immediate threat (see Boxes 1 and 2 below).

Given the clearly vast scale of the task required to reverse the current declines in invertebrate populations and to stop the current extinction crisis, Buglife will have to grow in capacity to be able to deliver change and establish and manage the new partnerships that we will build. By 2020 we aim to have doubled the size of the charity.

To achieve this we will continue to grow support from individuals and charitable trusts while increasing significantly the number of mutually beneficial relationships with businesses.

"You miss 100% of the shots you don't take." - Wayne Gretzky

# Box 1

## **Tackling the Pollination Crisis**



The decline in bees and other pollinators is one of the most pressing challenges faced by society. The science shows that pollinator declines are already measurably reducing our ability to feed ourselves and the ability of wild plants to produce seeds. Despite this, actions to fix the problem are piecemeal and uncoordinated, agri-environment schemes have only managed to recreate 0.3% of the area of wildflower habitat lost since 1945, and monitoring of pollinator populations is inadequate.

Pollinator Action Plans are a start. But farmers and agri-businesses must realise that bringing in bees on the back of lorries is not an economically or environmentally viable solution. Wildflower meadows are not just beautiful, they are practical. So maintaining and creating habitats for wild pollinators amongst farmland and achieving pollinator safe pesticide use are vital.

The public know the scale of the problem and are calling for action. Parliamentarians tell us they have received more letters on this subject in the last year than almost any other.

Slowly, we are winning. Work initiated by Buglife that questioned the safety to wild pollinators of modern insecticides resulted in a partial ban in neonicotinoid insecticides across the EU.

Buglife schemes such as 'B-Lines' and 'Get Britain Buzzing' provide inspiring and practical solutions to pollinator declines.



# Box 2 Securing Healthy Freshwater



Freshwater habitats are under increasing pressure from the water demands of a growing population, a wide range of pollutants, poor management, climate change and invasive species. Only 8% of ponds are in good condition, 87% of headwater streams in South East England are degraded and two-thirds of our rivers are failing ecosystems.

However, bugs are already used to measure the health of water bodies and the importance of riverflies and other bugs, for sustaining fisheries and maintaining clean water ecosystems, is increasingly appreciated.

In partnership with others, Buglife was instrumental is stopping pollution from Cypermethrin sheep dip, establishing a network of volunteers to monitor river health, rescuing populations of endangered crayfish and promoting the understanding and conservation of under-valued habitats such as ditches and seepages.



# What We Will Achieve.

## **Primary Impacts**

### 1) Improved habitat management and protection

Habitat loss and damage are the primary causes of declining populations of invertebrates.

What Buglife will achieve by 2020 -

Improved management of key habitats, including loss prevented and areas restored and created, to enable the recovery of bug populations and to stop further local and national extinctions.

- Important Invertebrate Areas forming a basis for conservation action that benefits invertebrates, including incorporation into site management plans, input into Nature Improvement Areas and other landscape scale conservation initiatives, and revisions to the SSSI series
- A measurable improvement in land management and a reduction in the impact of damaging practices on key habitats for invertebrates
- Better connectivity for key habitats especially more wild flowers in the countryside for pollinators
- Existing pesticides that are unsafe for bees and other wild pollinators removed from EU
  market and their use restricted outside the EU, and improved testing and risk
  assessment for pesticides prior to approval
- Habitats Directive, Wildlife and Countryside Act and biodiversity duties properly enforced to protect habitats
- Invertebrates always considered as part of any environmental impact work and a planning system without a net negative impact on key bug habitats

#### 2) Threatened species

Species are the bottom line of biodiversity conservation. Halting and reversing declines of species will guide every aspect of our work.

What Buglife will achieve by 2020 -

Fewer key invertebrate species in decline and no preventable extinction of native species or globally significant populations of introduced species in any of the UK countries

- Targeted rare species will have improved status through the creation of new habitat, improvements to management of habitats, and the removal or avoidance of threats
- Habitats Directive, Wildlife and Countryside Act and biodiversity duties properly enforced, with progress towards achieving favourable conservation status for bugs

"It doesn't matter what you do for species if you don't protect their habitat." - Jamie Rappaport Clark

## **Themes**

So that our work is focussed we have selected two themes that encompass subsets of the most urgent and topical conservation issues that impact very directly on people. These themes will be embedded across our primary impacts and will guide our communication and advocacy efforts.

### A) Pollinators

Pollination is of fundamental importance to the environment and people. Threats to pollinators and the services that they provide are of primary and growing current concern. We will keep a focus on raising awareness of pollinator conservation issues across all our work to achieve our primary impacts.

### B) Freshwater

Our freshwater habitats – rivers, streams, ponds, lakes, ditches, swamps, springs and seepages - and the bugs they sustain are subject to multiple threats and, despite the essential ecosystem role of invertebrates in water, they do not receive adequate attention. We will maintain a focus on conservation and awareness raising to address threats in these habitats.

"We are all earthlings" - Germaine Greer



## **Auxiliary impacts**

These are the means that support the achievement of the primary impacts.

#### 1) Awareness and Education

What Buglife will achieve by 2020 -

- Increased acknowledgement amongst decision makers and the public (including particularly children) of:-
  - the wonder, beauty and importance of bugs and awareness of their conservation requirements,
  - o the big issues affecting them and the action required to achieve positive change and

- the appropriateness of individuals and society taking responsibility for resolving threats to invertebrates
- Bugs contribution (services) to the environment and people are better understood, valued and protected across government, business and general public (especially freshwater and pollination)
- Land managers with increased willingness and motivation to foster invertebrate populations
- Important Invertebrate Areas promoted in the UK; the public, land managers and decision makers more aware of the most important sites for invertebrates
- Increased awareness of key bug species most vulnerable to extinction; the public, land managers and decision makers more aware of the most important invertebrates for conservation
- A constituency of public concern about conserving bugs and an appreciation of their beauty and wondrousness that is closer to that currently achieved for birds

"Perception is reality" - Lee Atwater

## 2) Knowledge

What Buglife will achieve by 2020 -

- A prioritised list of habitats and associated Buglife actions required to conserve their bugs
- Important Invertebrate Areas for the UK defined
- Key groups of global and UK bugs most vulnerable to extinction identified and prioritised
- Reviews undertaken of science and knowledge for particular issues relating to conserving or valuing invertebrates - identifying knowledge gaps, assessing problems, demonstrating solutions and defining policy recommendations
- Science and knowledge of habitat management and threatened species in a more useable/accessible format
- Science, data and evidence, including long term monitoring, directly relevant to bug conservation improved in terms of quantity, quality and availability



## 3) Support and Funding

By 2020 Buglife will -

- Have identified motivations to give, so that people can be effectively targeted for support
- Have mobilised more of the public to take invertebrate conservation action

- Have built effective delivery partnerships with a range of conservation organisations, businesses and others, including new partnerships that will supply or attract funding
- Have doubled project income to around £2million per annum
- Have greatly increased the amount of unrestricted income, taking it from less than 30% to 45% of our total income, chiefly through developing corporate partnerships and donations from individuals
- Have represented bugs and key habitats in a range of effectual fora and have developed consensus about the conservation significance of bugs
- Have improved communications about Buglife activities and priorities with businesses, trusts and other potential funders

"Keep away from those who try to belittle your ambitions. Small people always do that, but the really great make you believe that you too can become great." - Mark Twain

### 4) Organisational Structure and Function

By 2020 Buglife will -

- Have maintained and developed internal skills, expertise and capacity and be seen to be authoritative and effective in compiling and communicating knowledge
- Have improved internal systems and communications e.g. use of extranet, people systems, financial systems
- Have implemented a relationship management and recording system to underpin engagement with partners and key stakeholders
- Have enhanced ability to think big, to be flexible and to respond quickly
- Maintain our greening efforts, limiting our CO<sub>2</sub> production and ensuring that we operate a sustainable business with as small an ecological footprint as possible
- Have maintained a positive, inclusive, united culture
- Have ensured that facilities and support services effectively support delivery

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." - Margaret Mead.

## **United for Bugs**

Buglife has grown hugely in capacity and capability in the last decade. We have significant national and international achievements and we have already built many partnerships and persuaded many individuals and organisations to take up our cause.

Stopping the extinction of invertebrate species and achieving sustainable populations of invertebrates will be very hard work, but we know we can make new friends for bugs and build momentum and capacity to deliver a better future.

"Competing is intense among humans, and within a group, selfish individuals always win. But in contests between groups, groups of altruists always beat groups of selfish individuals." - Edward O. Wilson



#### **Photo Credits:-**

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