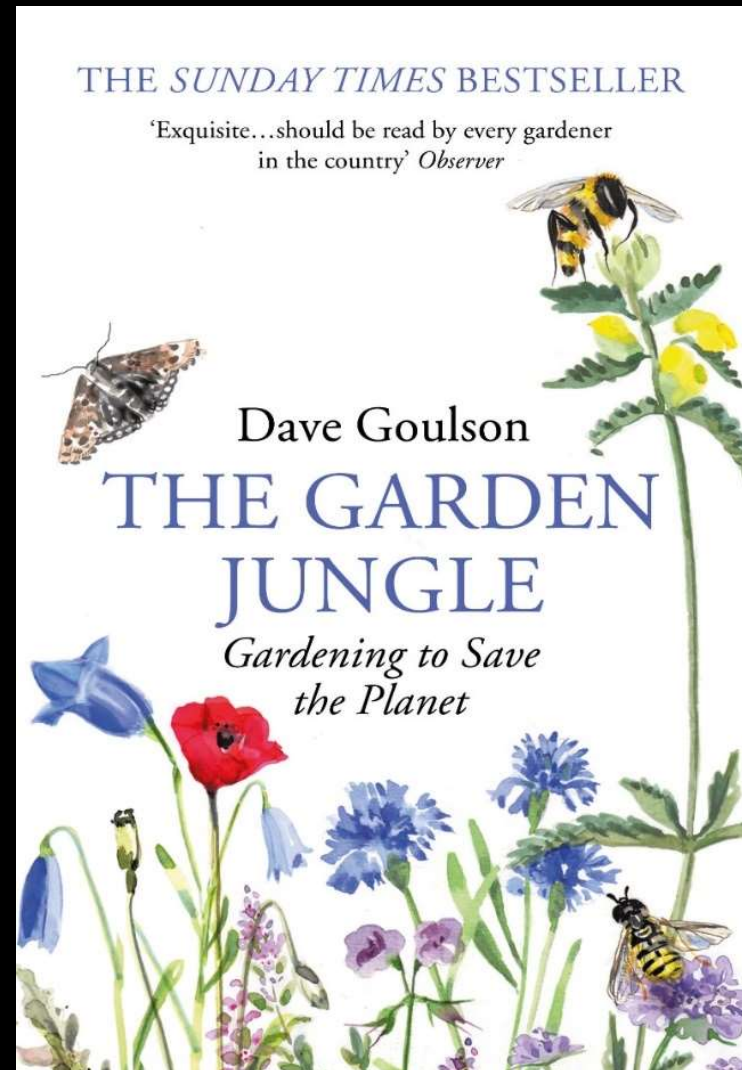
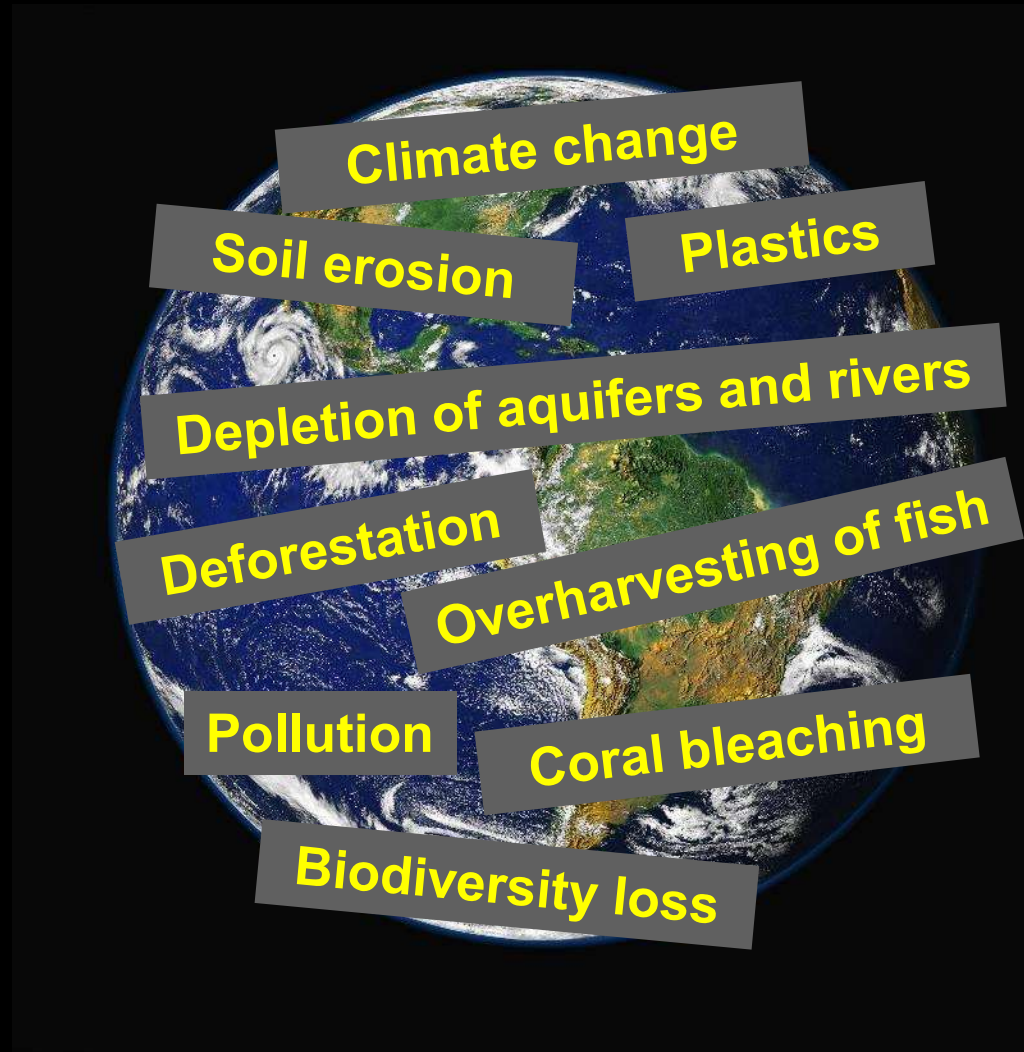


Prof Dave Goulson
University of Sussex
[@DaveGoulson](https://twitter.com/DaveGoulson)









Climate change

Soil erosion

Plastics

Depletion of aquifers and rivers

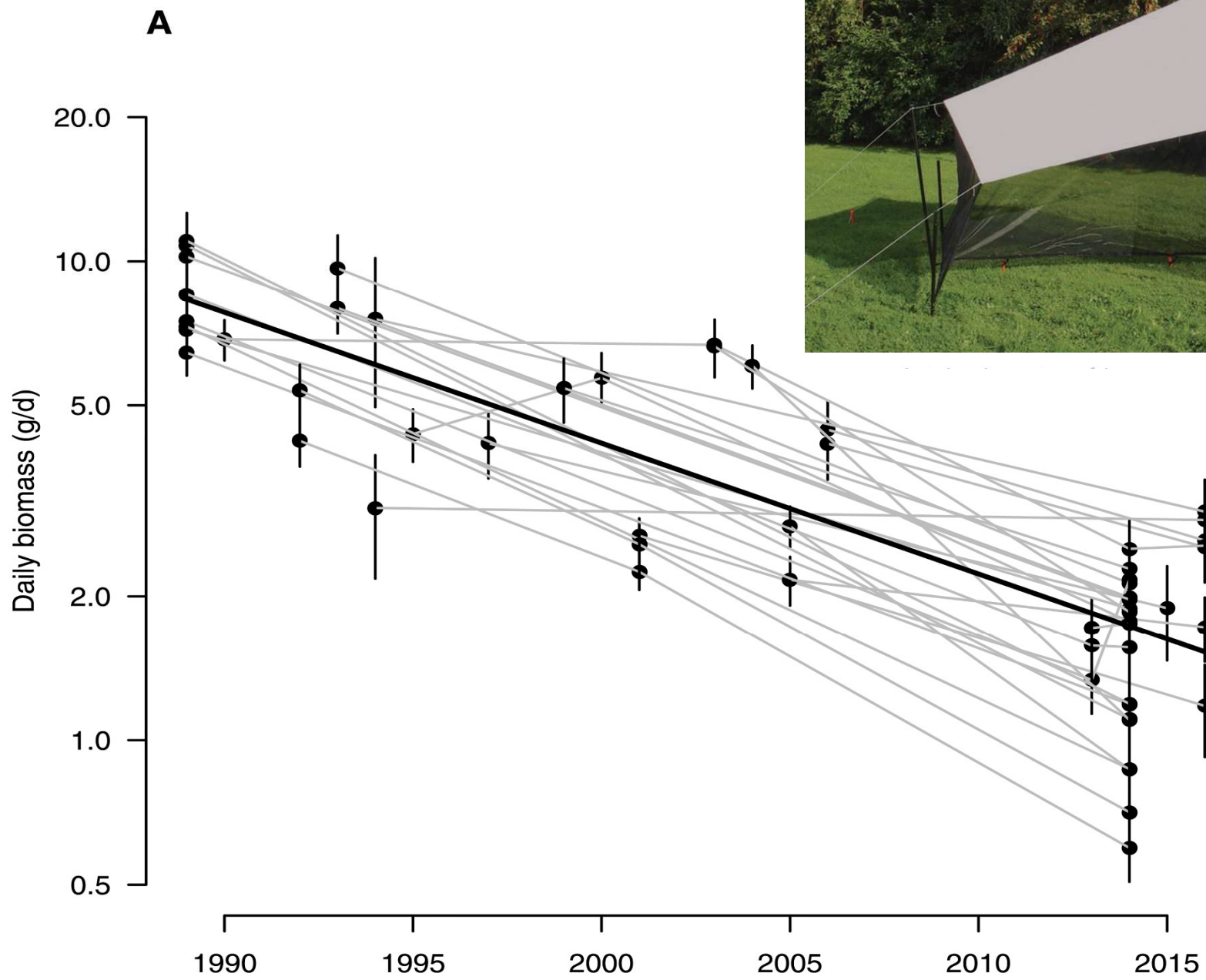
Deforestation

Overharvesting of fish

Pollution

Coral bleaching

Biodiversity loss

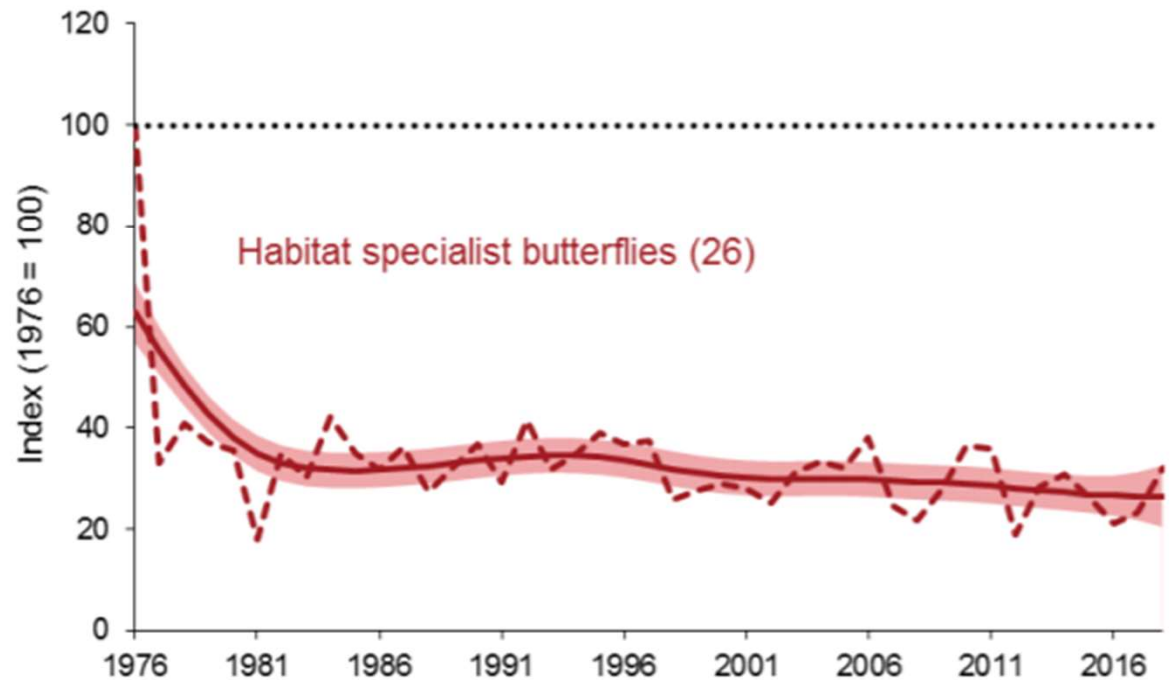
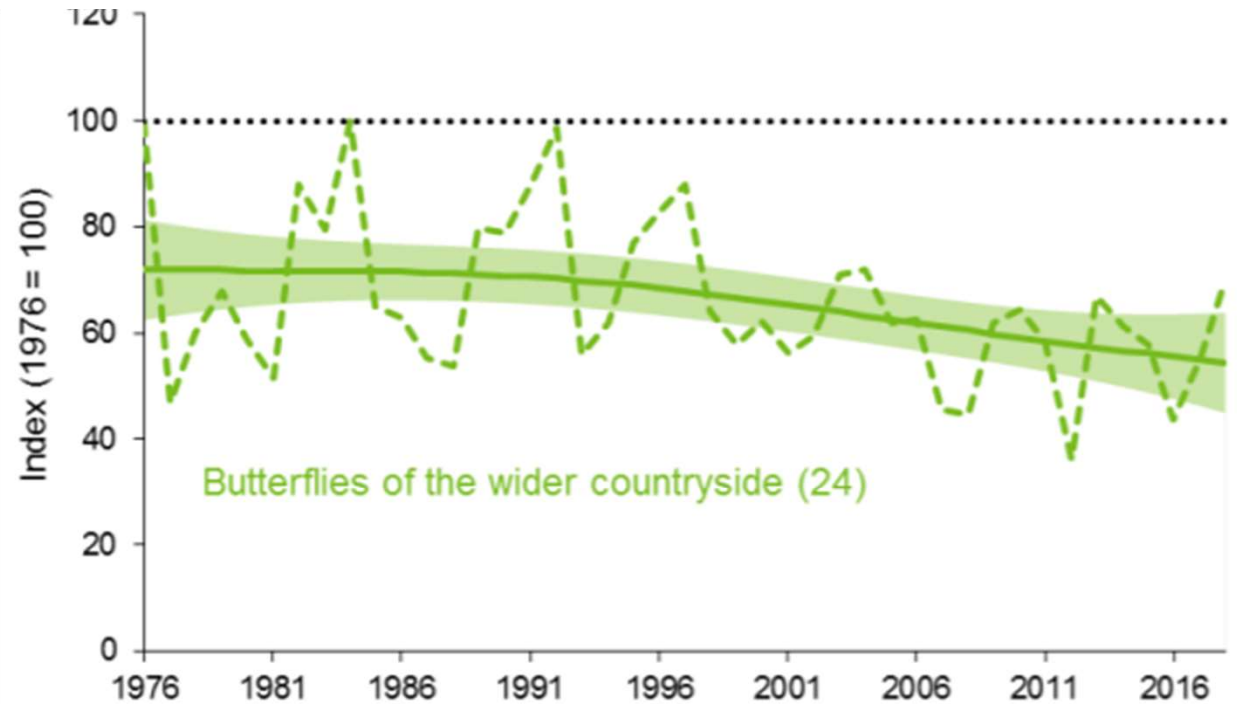


UK butterflies

Down by 46%



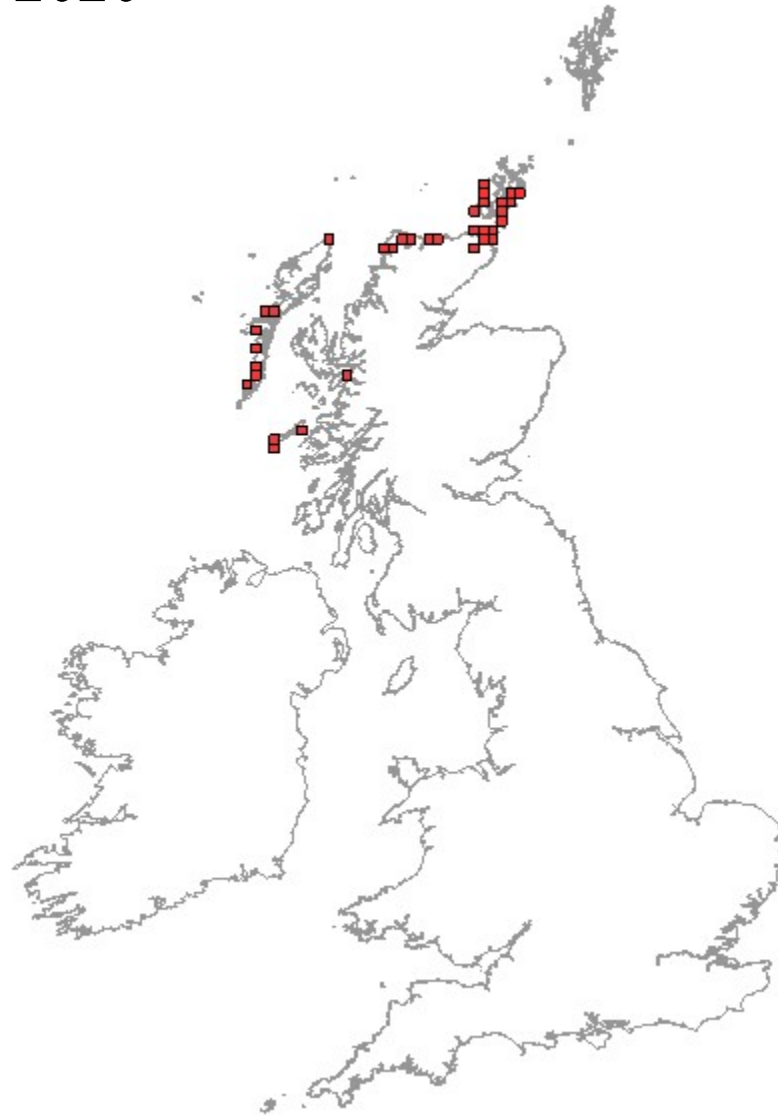
Down by 77%



Great yellow bumblebee



2000-2020



From NBN



www.ahv-research.com

Why does loss of insects matter?

“If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago.

If insects were to vanish, the environment would collapse into chaos.”

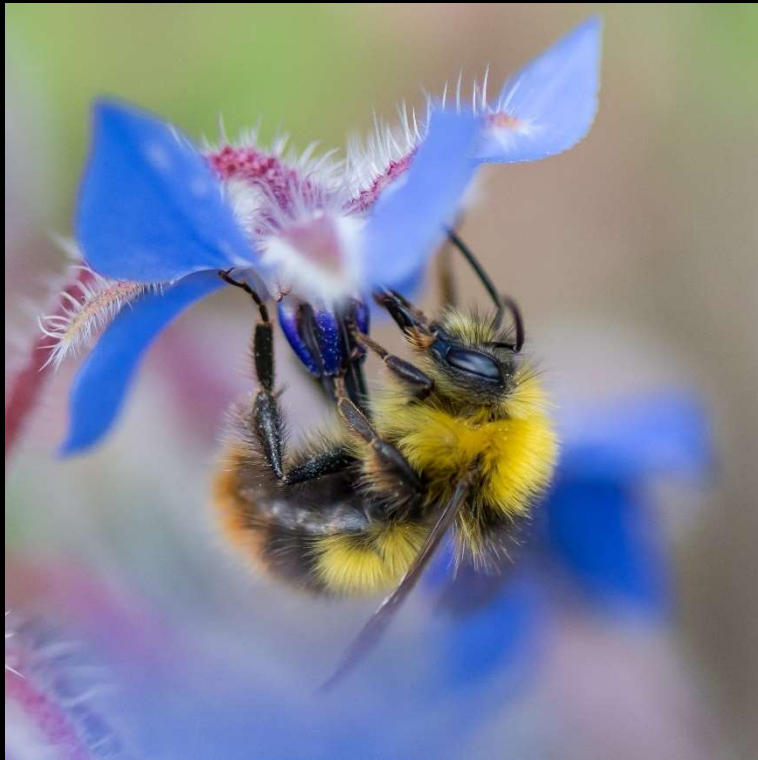
E O Wilson













Your produce choices
without bees



What can we do?

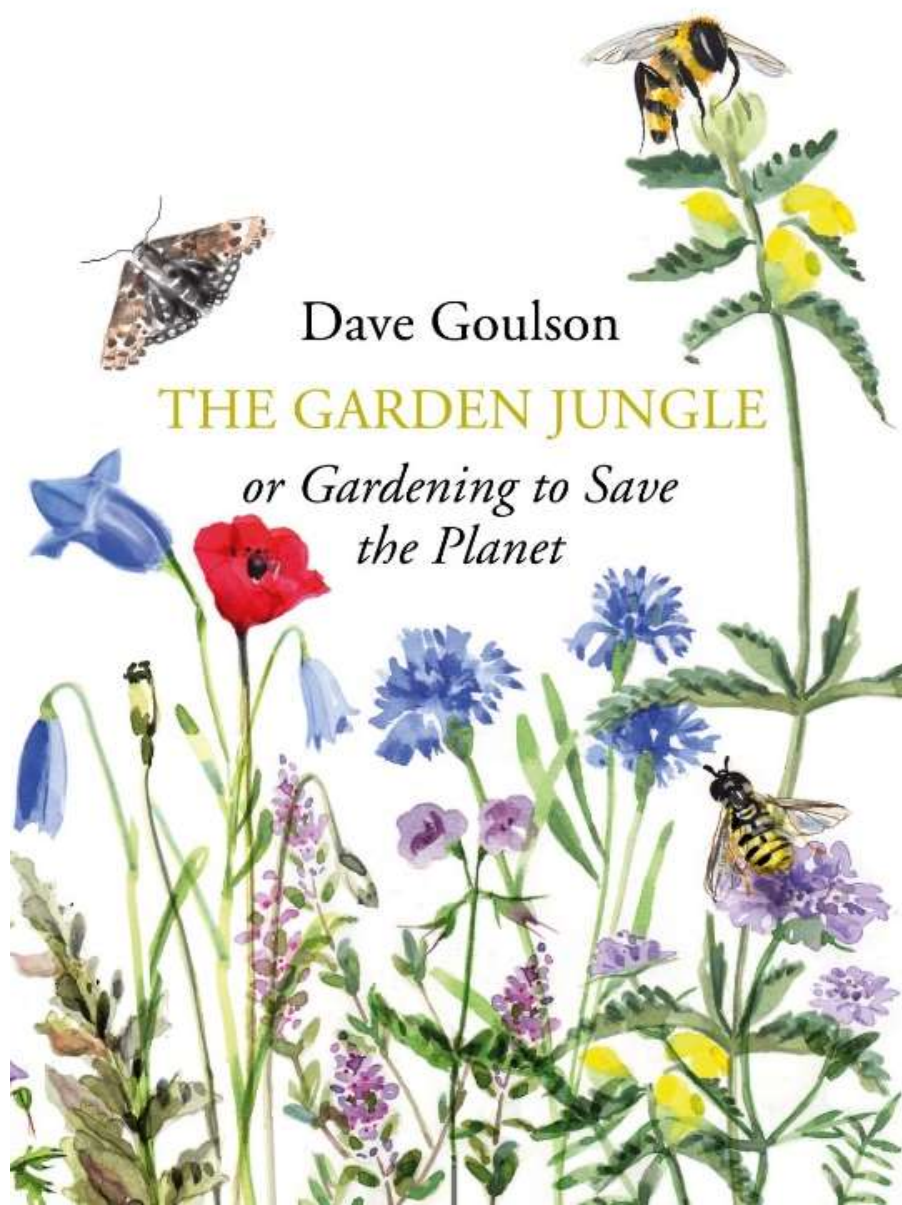


What can we do?

Promote wildlife-
friendly gardening

Turn our cities, towns
and villages into a
network of insect
reserves





Dave Goulson

THE GARDEN JUNGLE

*or Gardening to Save
the Planet*

Dave Goulson

GARDENING for BUMBLEBEES

*A Practical Guide
to Creating a Paradise
for Pollinators*





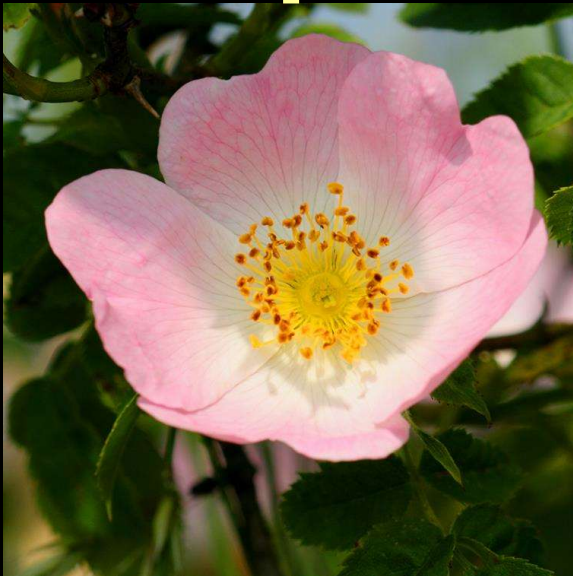


70,000 varieties of 14,000 plant species are available in UK alone....



But which ones are best?

Avoid double varieties.....







Many lists of best flowers, but most not based on science



ORIGINAL PAPER | [Open Access](#) | Published: 14 September 2019

Quantifying the attractiveness of garden flowers for pollinators

[Rosi Rollings](#) & [Dave Goulson](#) 

Journal of Insect Conservation **23**, 803–817(2019) | [Cite this article](#)

Compared 111 species / varieties over 5 years...

Results

Overall top performers:

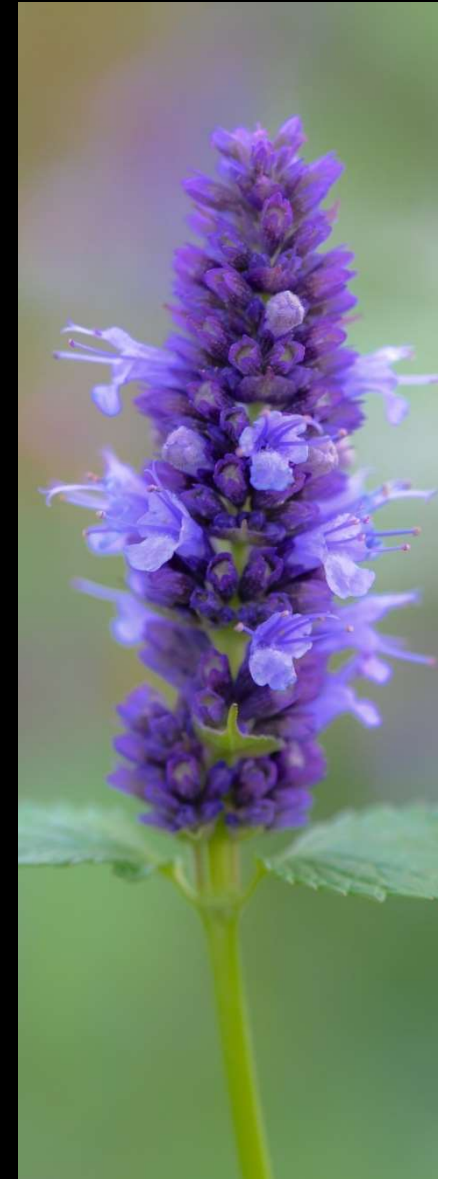
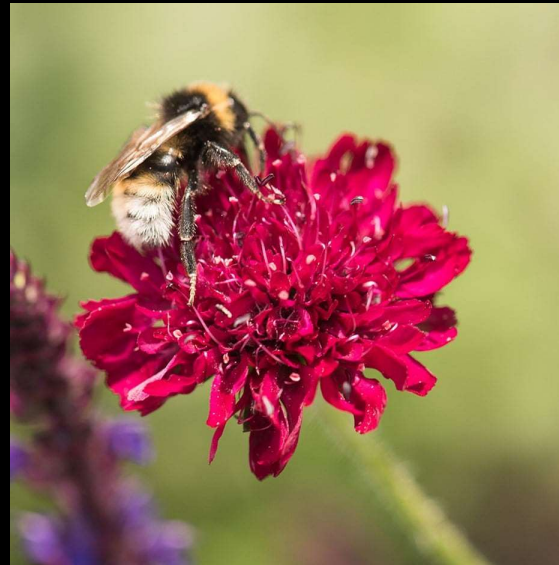
- *Calaminta nepeta*, lesser calamint
- *Helenium autumnale*, sneezeweed
- *Geranium 'Rozanne'*



Results

Best for Bumblebees:

- *Echium vulgare*, viper's bugloss
- *Stachys byzantina*, lamb's ear
- *Nepeta racemosa*, cat mint
- *Knautia macedonica*, Macedonian scabious
- *Agastache foeniculum*, giant hyssop

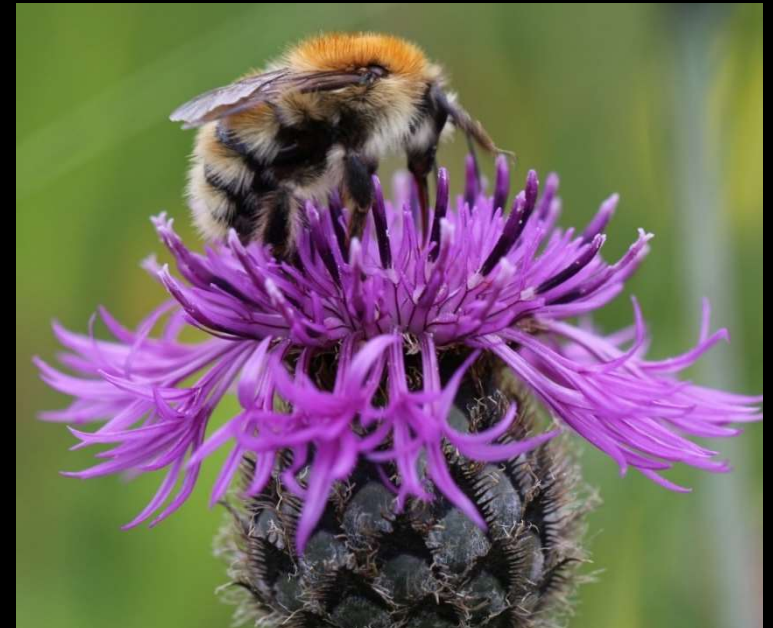


Results

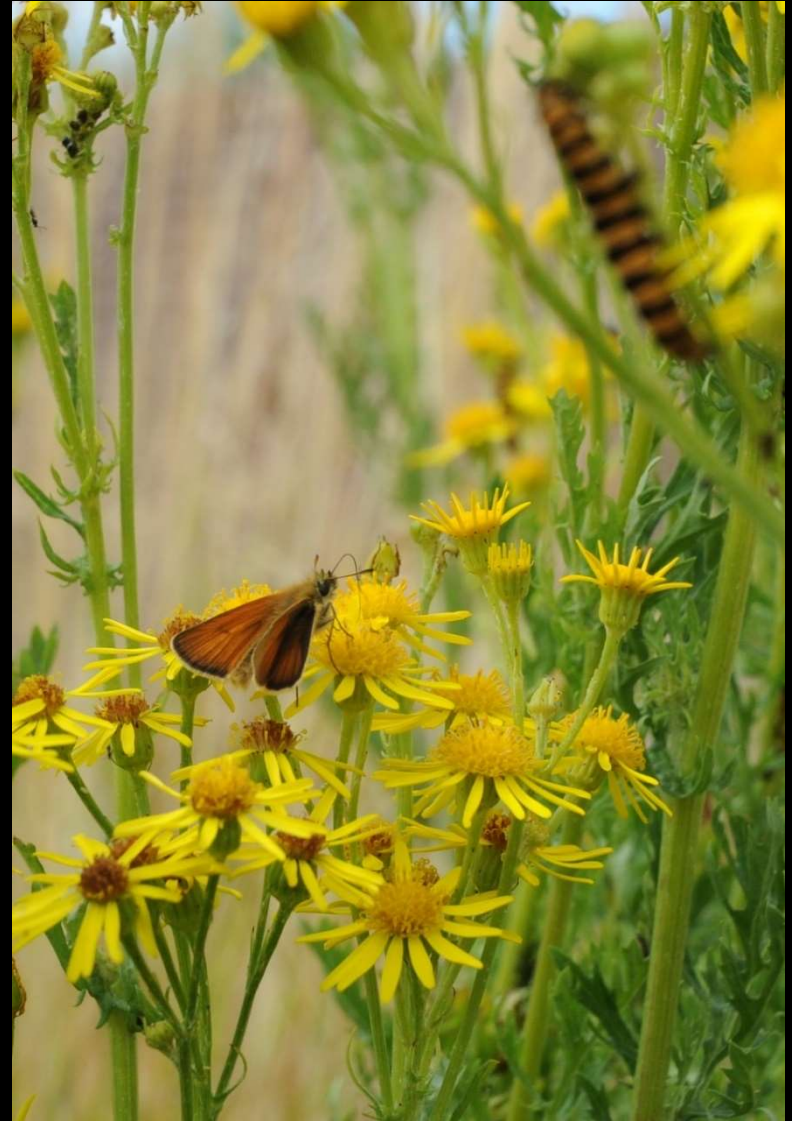
Natives and 'near natives' slightly better on average, but many exceptions:

Best natives:

- *Origanum vulgare*, marjoram
- *Echium vulgare*, viper's bugloss
- *Centaurea scabiosa*, greater knapweed



Reimagine 'weeds' as 'wildflowers'



Plant flowering trees:

e.g. Lime, Laburnum, Horse chestnut, Apple...



Mow less!





ON THE VERGE

Butterflies and bees are attracted to the flowers in this area. The flowers are a mix of native and introduced species. The flowers are a mix of native and introduced species. The flowers are a mix of native and introduced species.







Wait for the cavalry.....





POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS
FOR ANIMAL TREATMENT ONLY



Science of The Total Environment

Volume 755, Part 1, 10 February 2021, 143560



Potential role of veterinary flea products in widespread pesticide contamination of English rivers

Rosemary Perkins ^a  , Martin Whitehead ^b, Wayne Civil ^c, Dave Goulson ^a

Once a month topical flea and worm treatment

- Stops fleas feeding in 3-5 minutes
- Prevents heartworm and controls intestinal worms and larvae

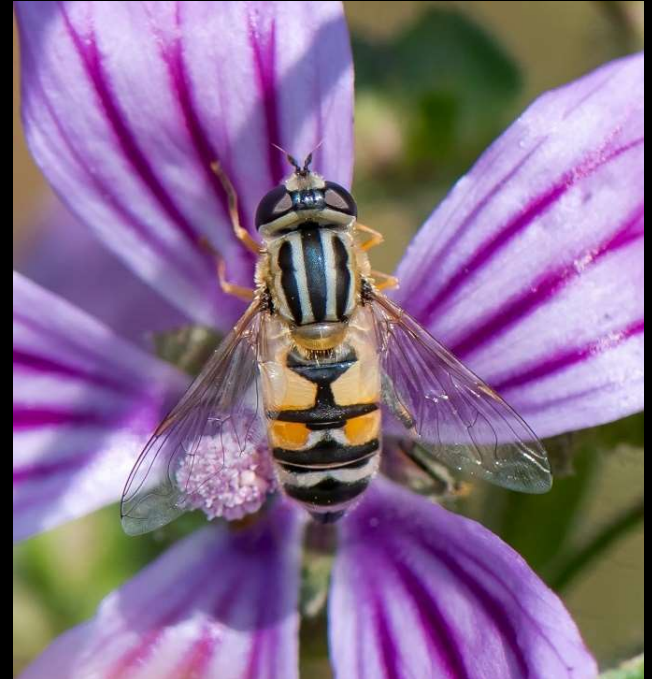






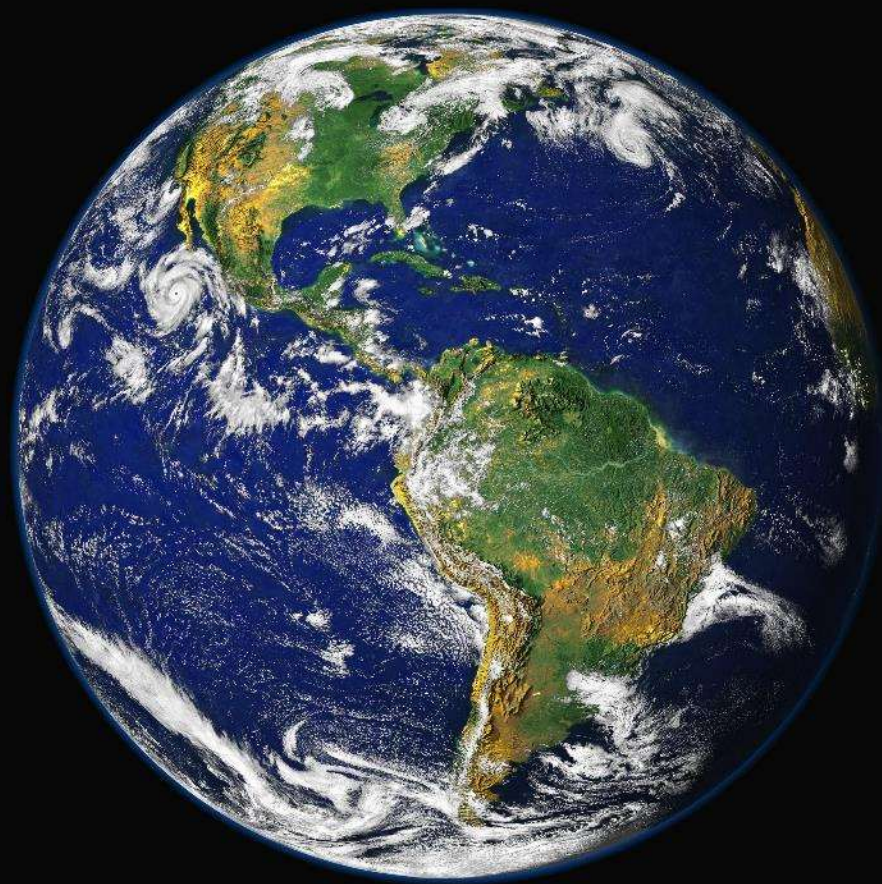


Make a hoverfly lagoon



And an earwig hotel?





*“Save a bee today;
save the world tomorrow”*

