



Monica Barlow & Nicola Bradbear
Bees for Development



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Working with natural beekeepers world-wide







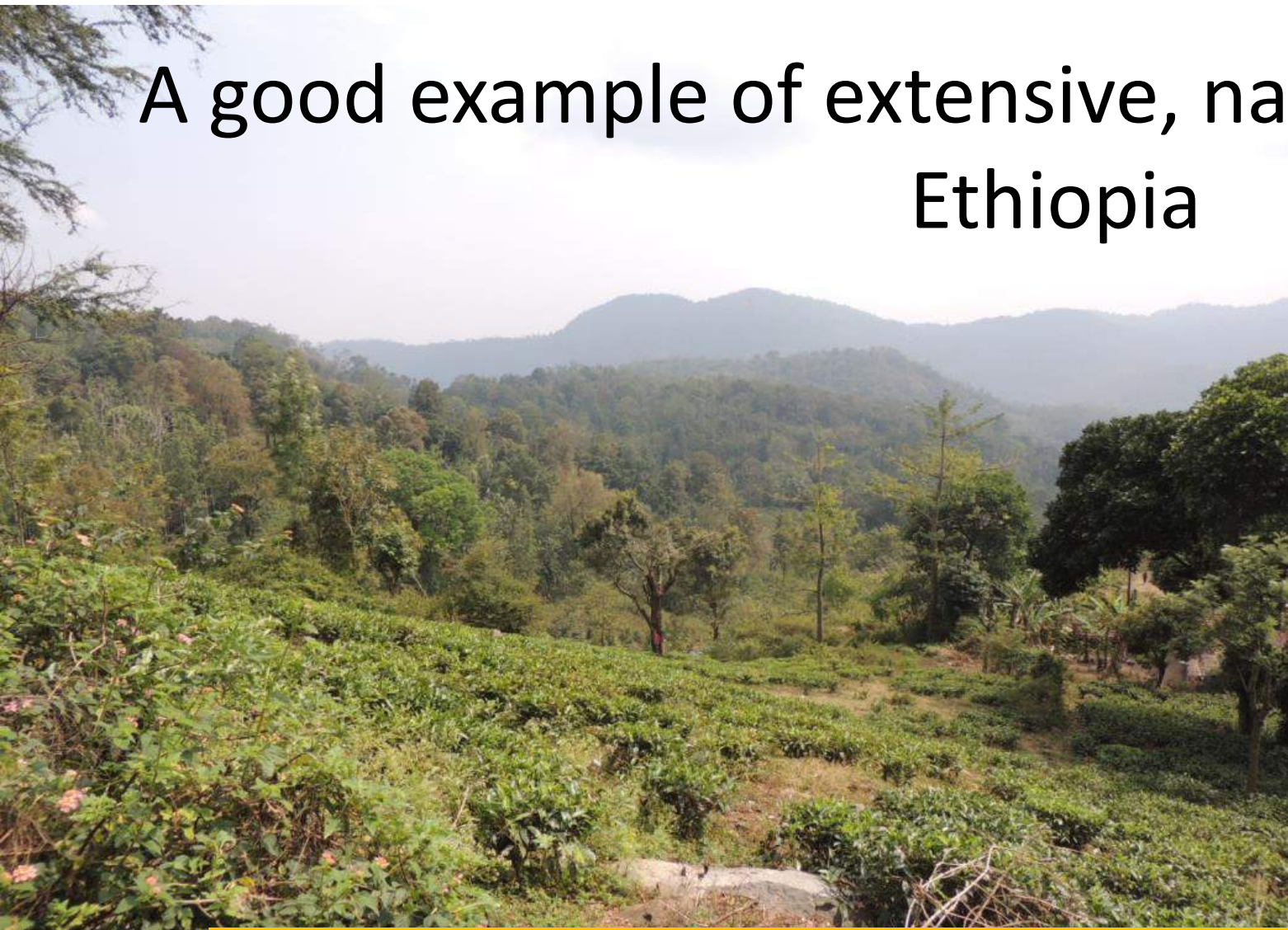








A good example of extensive, natural beekeeping in Ethiopia



Simple hives, dispersed over a wide area



Kedir's bees are healthy *because* ...

- Colonies are widely spaced
- Natural nesting - maintains colony integrity
- Minimal interference - bees are not stressed
- No human-caused transmission of diseases



Naturally nesting bees are healthy *because...*

- Less stress: promotes health and resilience
- Swarming is self-healing
- Natural reproduction among a large population ensures genetic fitness and resilience
- Allows genes and natural selection to protect the population - not medicines
- Natural evolution of bees.





Skep beekeeping in Turkey

Skep beekeeping in Macedonia

(from the film
Honeyland)





Natural beekeeping in Nepal



Natural beekeeping in El Salvador

Some definitions

Fixed comb hives



Movable comb hives:

- Frame hives
- Top-bar hives

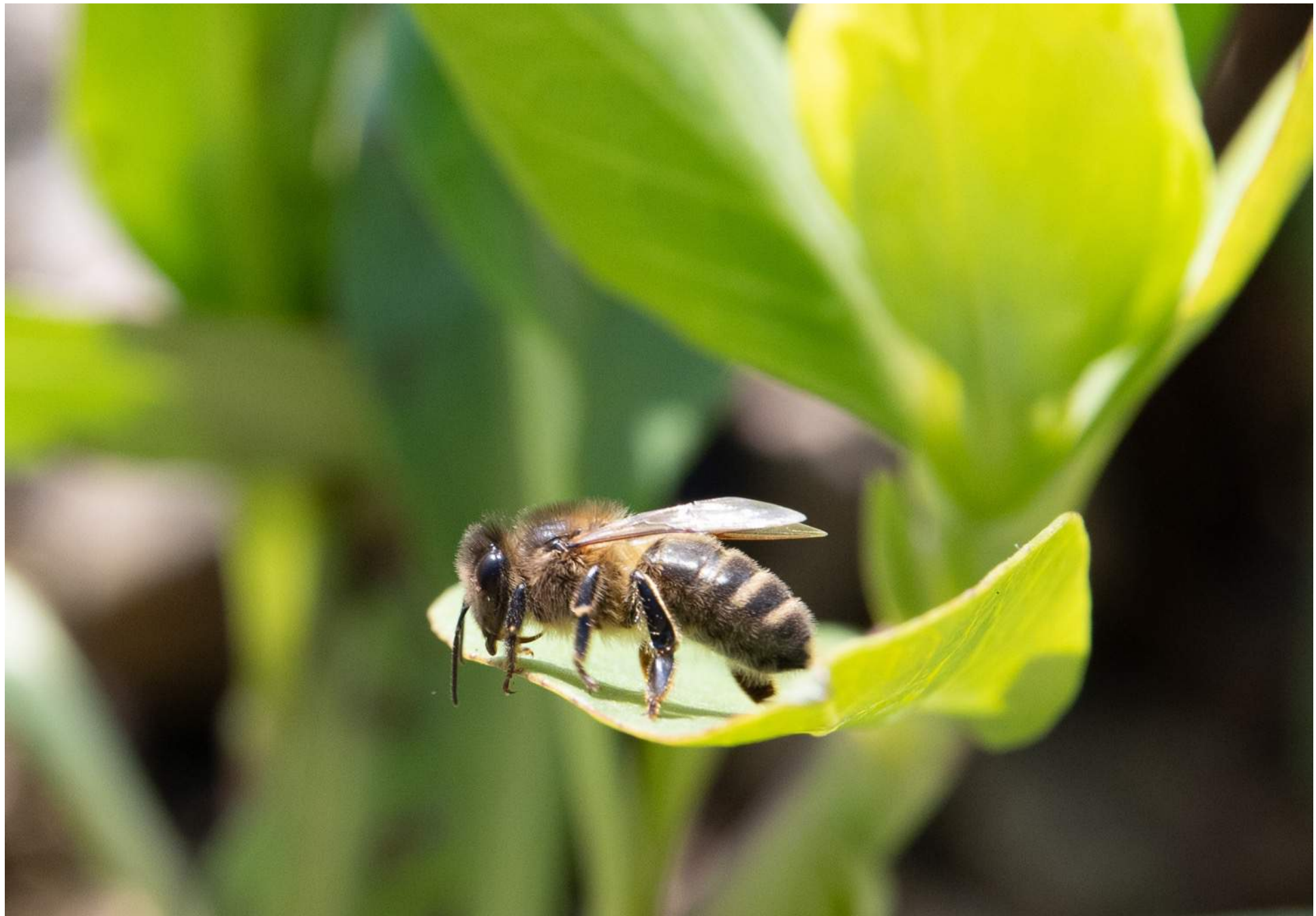


Bees and flowers



bees need flowers and flowers need bees

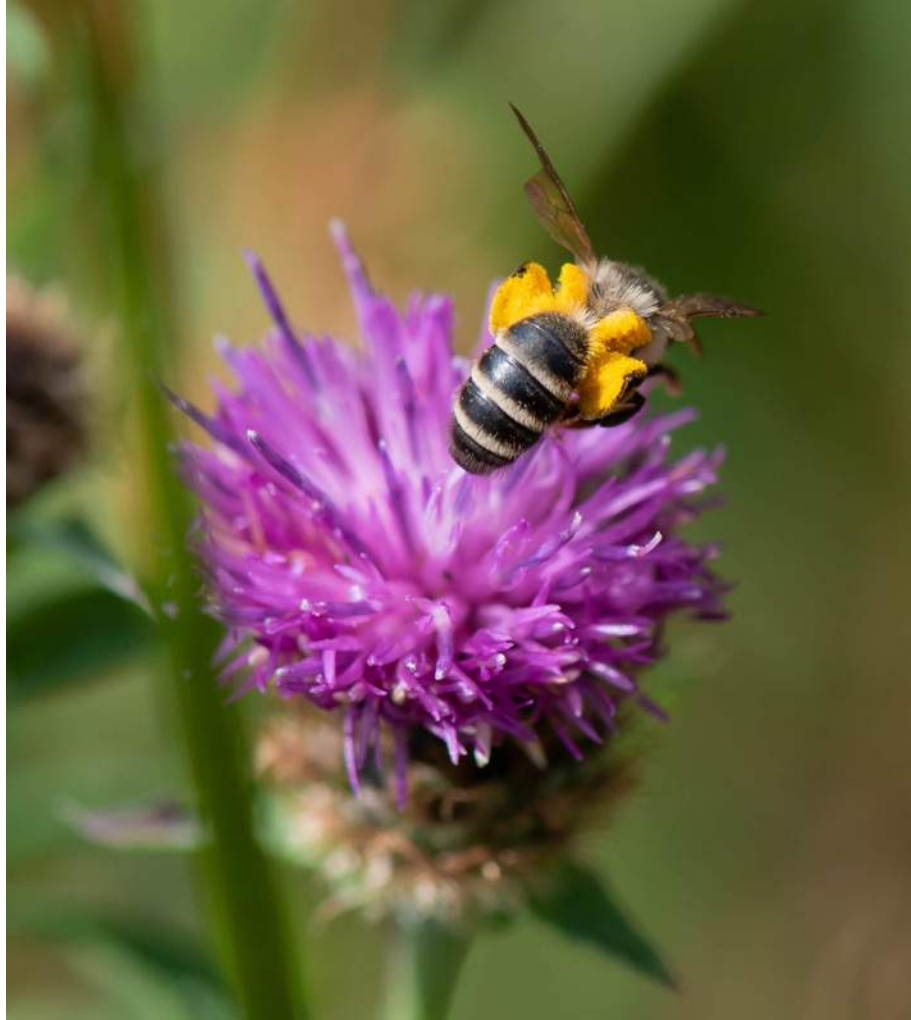




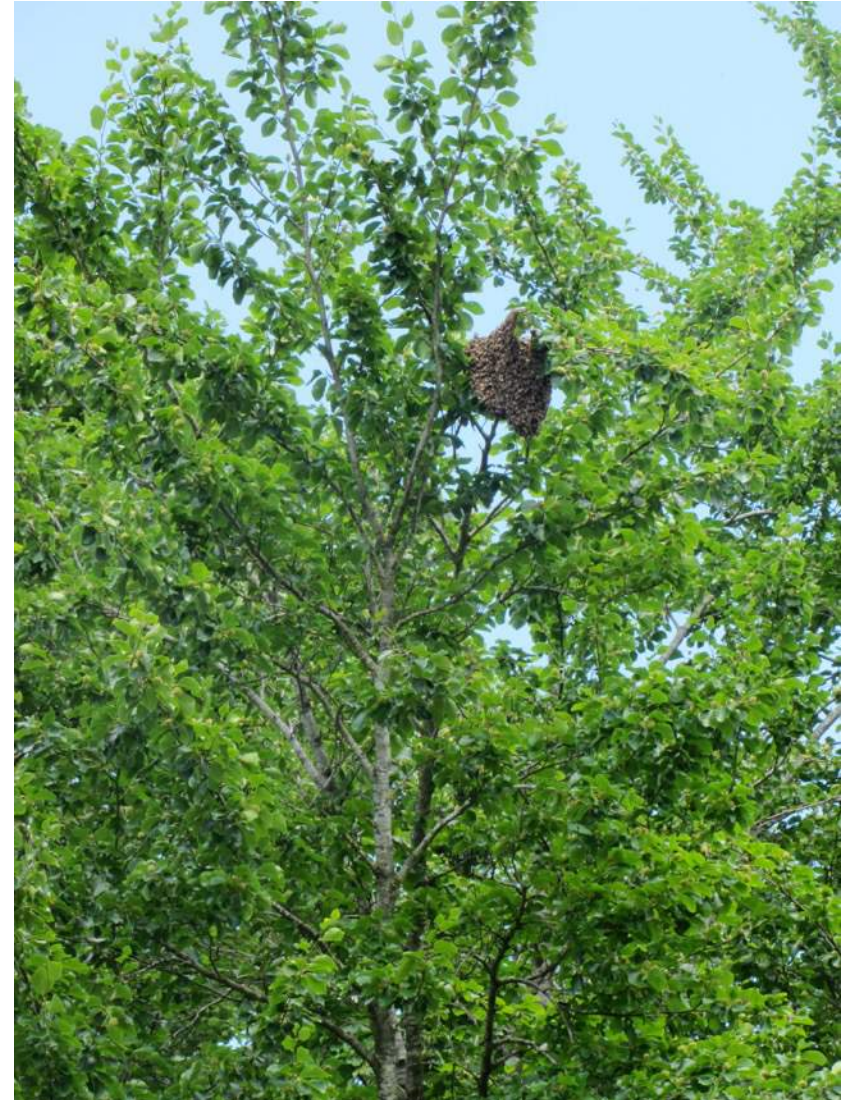
... bumble bees



... and solitary bees



honey bees are just 1 of over 250 species of bee in Britain





early Spring:
bees need pollen -
protein to raise brood











Trees provide abundant flowers



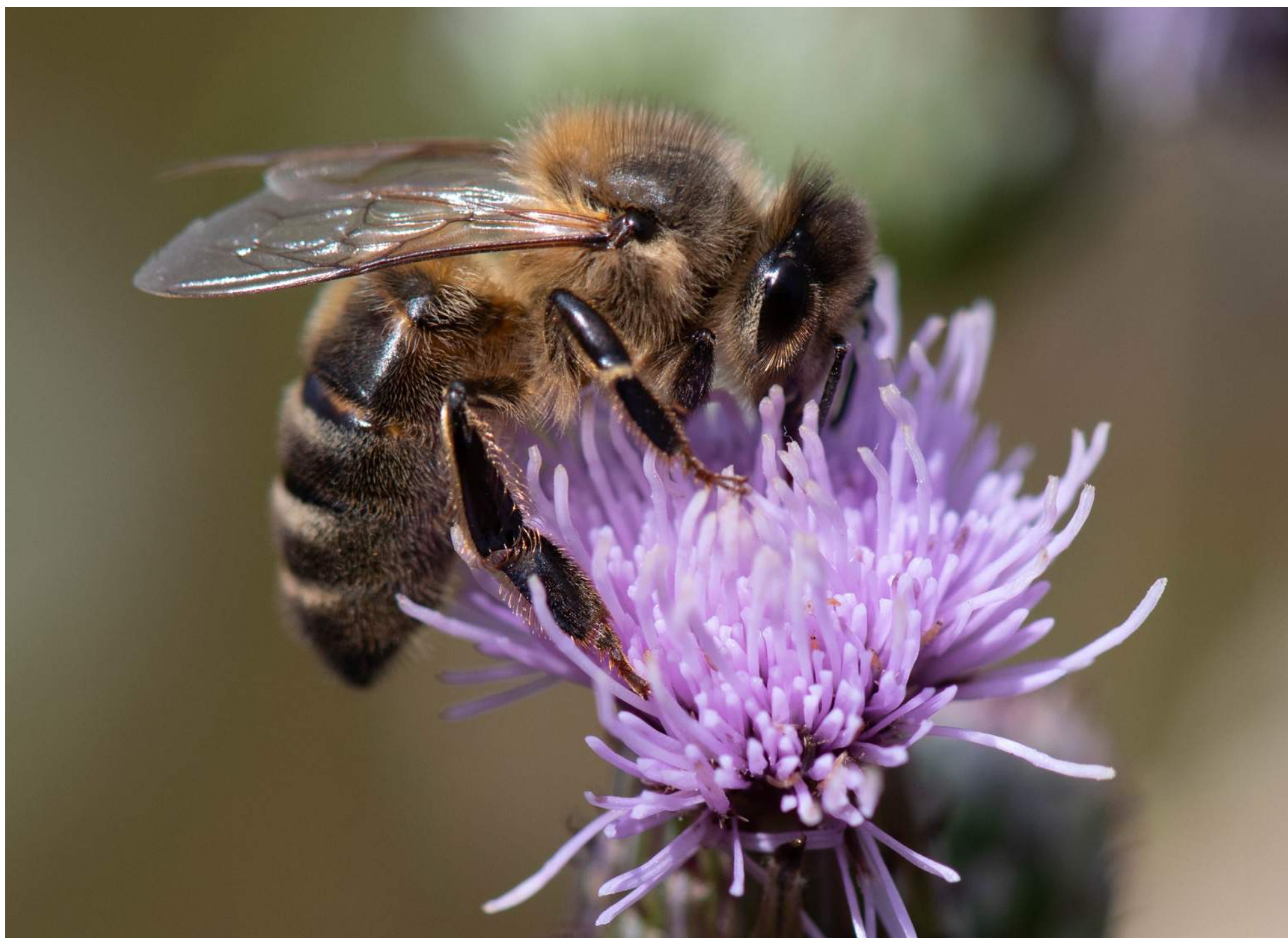


Summer meadows for clover and wild flowers



wild edges and rough grassland





Flowers for bees and other pollinators

- Trees – willow, hazel, cherry, plum, pear, apple, field maple, sycamore, horse chestnut, lime, sweet chestnut
- Hedgerows – hazel, hawthorn, blackthorn, buckthorn, dog rose, ivy
- Meadow and pasture – clovers (especially white), trefoil, knapweed, sainfoin, lucerne alfalfa
- Ditches and pond edges – purple loosestrife, st johns wort, meadowsweet, hemp agrimony
- Weeds! – bramble, dandelion, Himalayan balsam, rosebay willowherb, thistle, ragwort
- Gardens – raspberry, blackberry, brassicas, phacelia
- And many many more – let them grow!





weeds or flowers?







LESS MOW

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NO SPRAY



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HEDGEROW MANIFESTO

care for these natural resources







...our native wild flowers...



Where next?

- ▶ Local flowers – local ecology
 - ▶ Less mow – no spray
- ▶ Pockets and patches – leave them wild
- ▶ Hedgerows and verges – let them grow
 - ▶ Plants are for pollinators!



One species of honey bee is native to Britain.
Honey bees live in a large, social colony:
a superorganism



- Honey bees are wild animals
- They live as a sophisticated super-organism
- We cannot infinitely change the way they live, for our own economic or beekeeping interest, without losing part of their vitality and excellence.
- Nature is not endlessly able to cope with interferences and manipulations of these complex, sensitive organisms.
- We must incorporate more aspects of animal welfare and bees' natural behaviour into our routine care.

Beekeeping with
Apis mellifera in
frame hives is the
'globalised'
method

Is it everywhere sustainable?

Is it becoming more difficult
and less cost-effective?



Intensive beekeeping

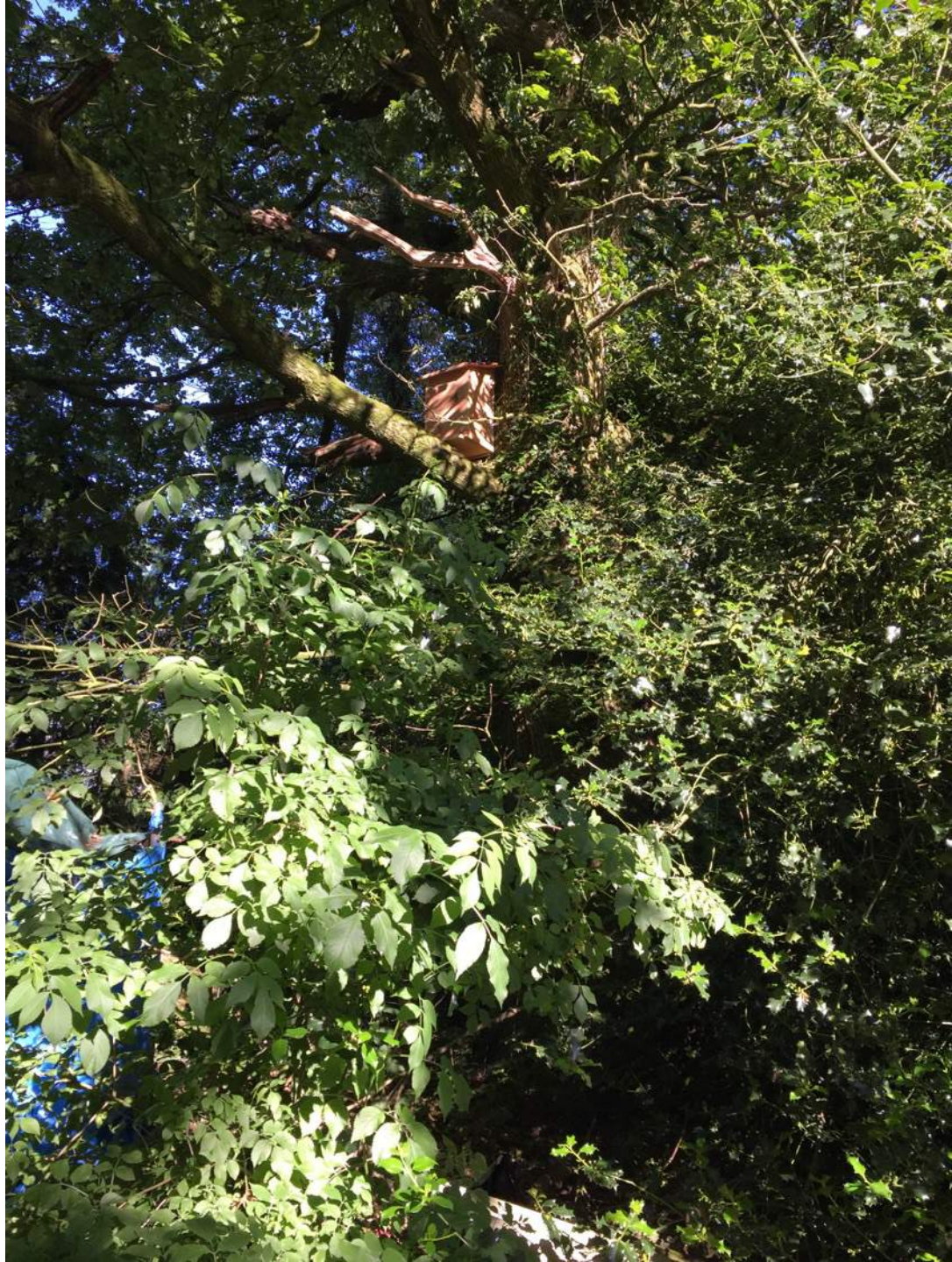
- High risk of disastrous disease outbreaks
- We try to control everything - food, genetics, health
- Population has no resilience – it is vulnerable
- Inspections, manipulations and transportation raise stress
- Exchange of frames and boxes – transmit diseases
- Natural reproduction constrained by swarm control and few drones





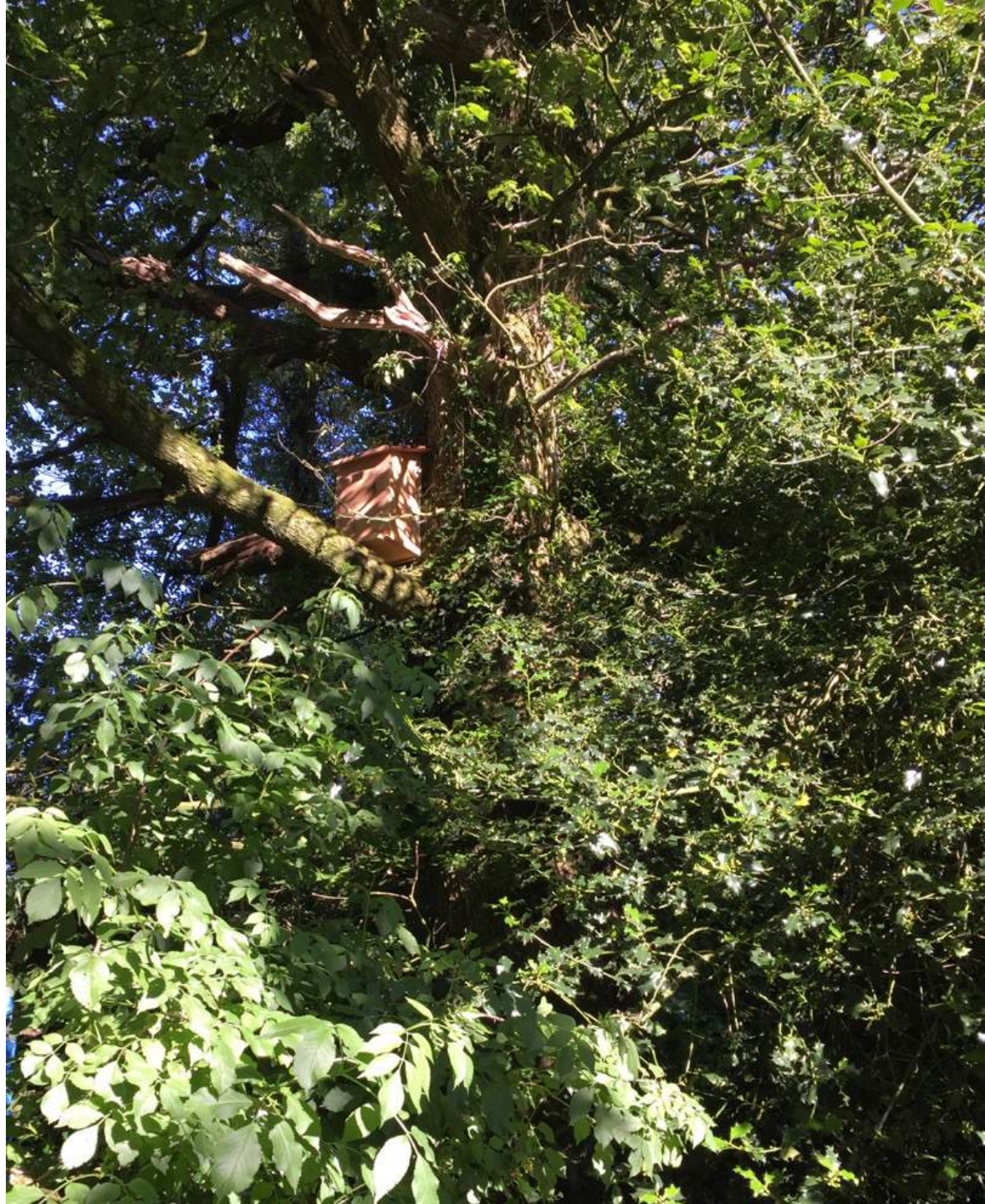
Bees for Development Bee House











Natural Beekeeping

- Management reflects natural life-cycle of the superorganism
- Minimal interference
- Own comb
- Drones
- No chemical inputs
- Low density of colonies



Natural – skep beekeeping in Britain



- ▶ Beekeepers used to consider the whole honey bee population

They ensured that some colonies swarmed



Swarming is an important part of a honey bee colony's self-healing behaviour



A swarm weighing 2 kg consists of around 15,000 bees containing 0.6 kg honey



Swarm has a
completely fresh start



3+ week broodless period in
colony that swarmed

Taking a more natural, extensive approach

Use hives that allow bees to live more naturally:

- Warré hive
- Oscar Perone hive
- Japan 'Pile of boxes hive'
- Top-bar hive
- Layens hive
- And many others.....





Natural Beekeeping
for you

We organise training



People are keen to learn simple beekeeping







In summary



Natural beekeeping is practised world-wide



Honey bees are one of our indigenous bee species



They are wild insects that live as a superorganism



They need a 40 litre tree cavity or a BfD Bee House



Natural beekeeping respects the behaviour of honey bees as a superorganism



You can be a natural keeper of bees!



Natural beekeeping will restore healthy honey bee populations



Thank you for your interest

Please support our work

Happy to answer your questions!



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