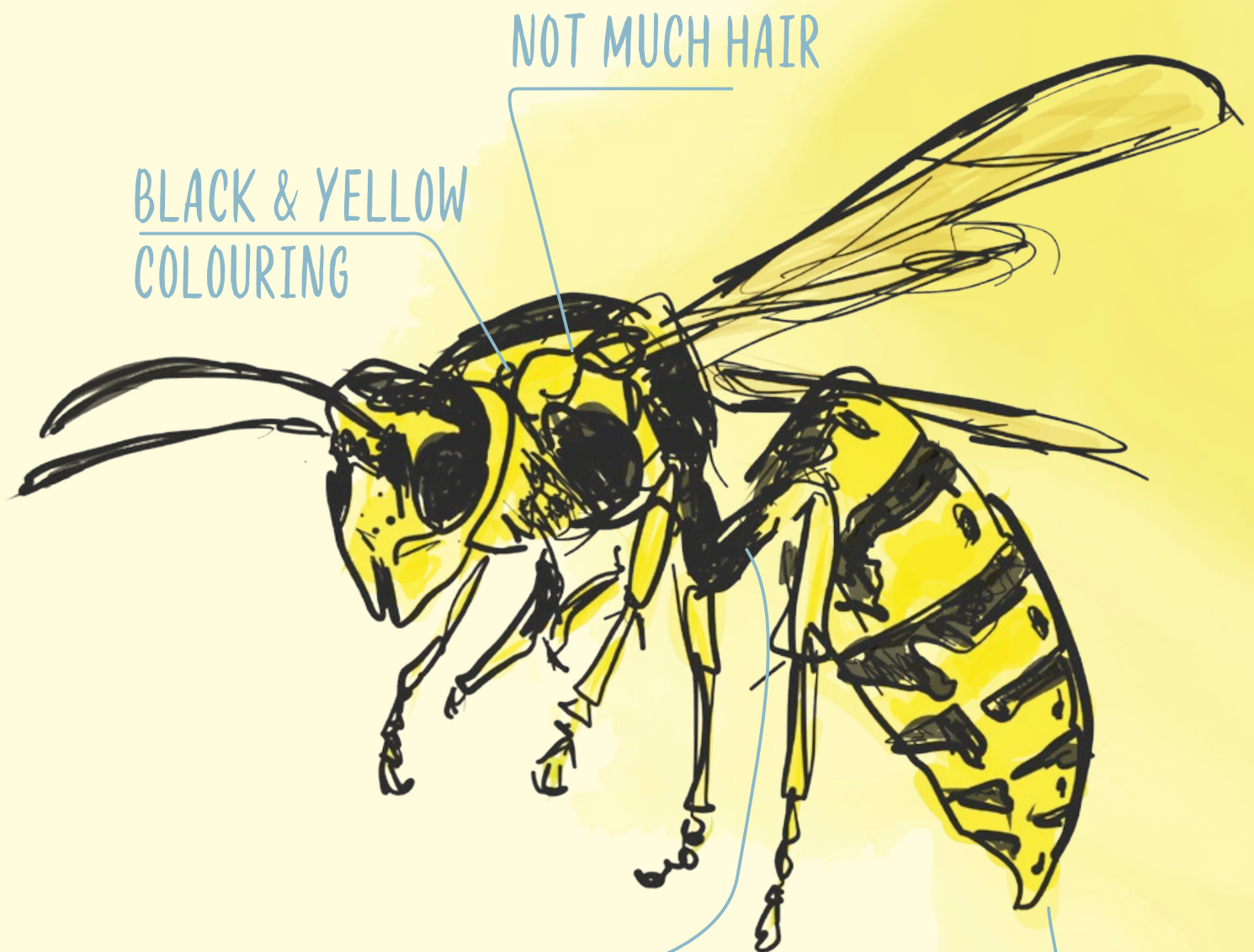


# Wasps

Social wasps live in colonies which only last **a year** and then die off in the autumn. Only **fertilized queens** survive the winter, in a state of torpor (a kind of hibernation) in places which are protected from the frost.



BLACK & YELLOW  
COLOURING

NOT MUCH HAIR

NARROW "WASP WAIST"

SMOOTH STINGER,  
WHICH CAN BE PULLED OUT

## FOOD



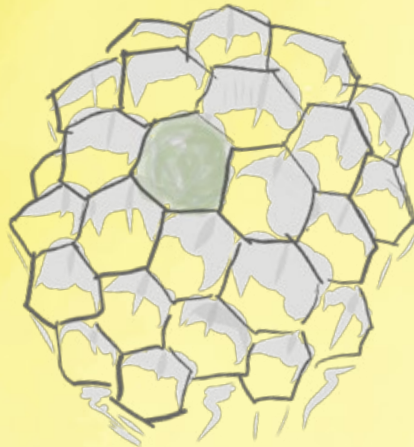
### ADULTS

Rich in carbohydrates: nectar, plant secretions, honeydew secretions produced by aphids, ripe and fallen fruit, cakes and other sweet items

### LARVAE

Rich in protein: insects (e.g. flies, mosquitoes, caterpillars, grasshoppers) and spiders, meat

## PAPER NESTS



## USES

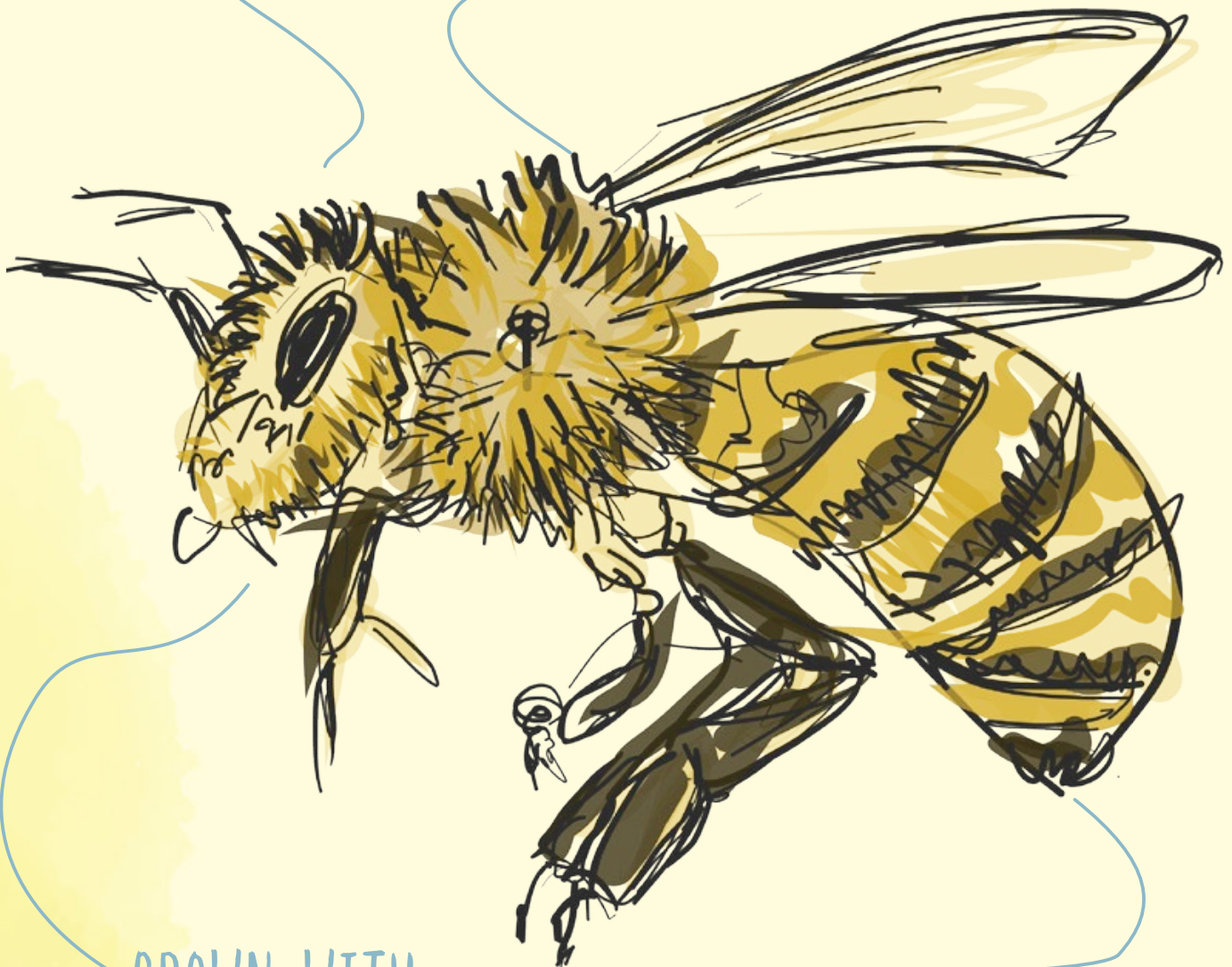
- Wasps help control pests:
  - ▶ a colony of hornets can consume 500 g animal material per day at the height of summer; a large wasp colony 3-4 times as much
- Wasps act as “health inspectors”: they eliminate mouldy fruit and leftover meat; they process rotting wood:
  - ▶ check the spread of fungal mould and pathogens
  - ▶ speed up the decay process
- Wasps pollinate flowers

# Honey bees

Honey bees live in colonies which **survive for a number of years**, spending the **winters together in the hive**, where they cluster together for warmth, with the queen in the middle.

HAIRY

ROUNDER IN SHAPE



BROWN, WITH  
YELLOWISH-BROWN  
STRIPES

BARBED STINGER,  
DOESN'T COME OUT

# FOOD



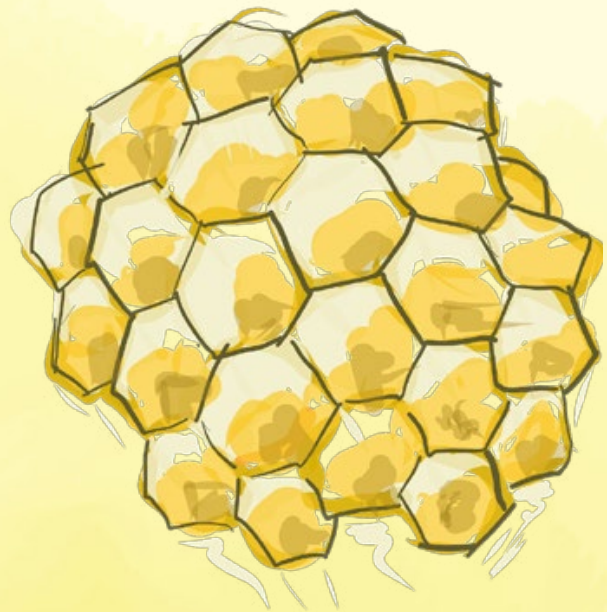
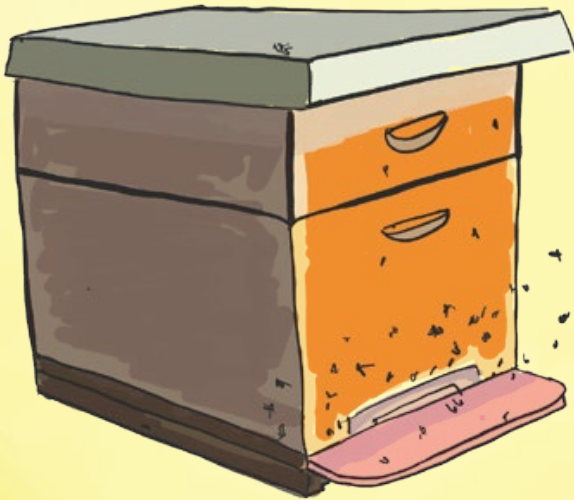
## **ADULTS**

Rich in carbohydrates: nectar, honeydew secretions produced by aphids

## **LARVAE**

Rich in protein: pollen

# BEE HIVE (HONEYCOMBS)



# USES

- Bees pollinate flowers
- Bees supply honey

# Lifecycle

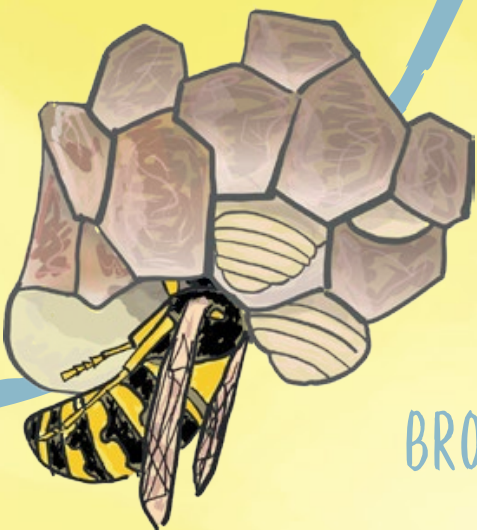
## of social wasps

Spring – autumn



1. SHAKING OFF ITS WINTER TORPIDITY, THE YOUNG QUEEN GOES ON A SPRINGTIME SEARCH FOR THE RIGHT PLACE TO START A NEW COLONY

- Builds a paper nest with brood cells, using chewed wood pulp
- Subject to a multitude of dangers (e.g. moisture, predators, rivals, parasites)
  - ▶ 9 out of 10 queens perish before a new colony has been established



2. THE QUEEN LAYS EGGS IN THE BROOD CELLS AND LOOKS AFTER THE LARVAE AS THEY HATCH

- The larvae pupate and emerge some four weeks later as female worker wasps

## 5. THE NEW QUEENS OVERWINTER

- The colony (the old queen, the workers and the males) dies out in autumn, leaving only the fertilized queens to survive the winter
- The abandoned nest is not re-used

## 4. WITH THE ONSET OF SUMMER, REPRODUCTIVE WASPS ENTER THE SCENE

- Production of workers ceases
- Fertile females and males take to mating flights.

## 3. THE COLONY GROWS AND FLOURISHES; THE WORKERS' CONCERN NOW IS EXTENDING THE NEST AND CARING FOR THE BROOD

- The queen's sole concern now is laying another set of eggs



# The various types of social wasps



LONG-HEADED WASPS



SHORT-HEADED WASPS



HORNETS



- active until late July / early August
- medium-sized colonies
- not aggressive
- do not visit picnic tables or barbecues ► not a nuisance

- active until late October / mid-November
- large colonies
- not inclined to attack, but may be aggressive around the nest
- may be a nuisance at picnic tables or barbecues in late summer

- active until mid-November
- medium-sized colonies
- not aggressive
- do not visit picnic tables or barbecues ► not a nuisance
- active at night – attracted to light
- largest of all wasps

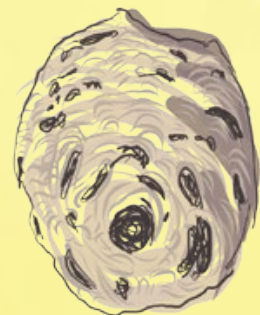
## TYPES OF NEST



- above the ground / suspended
- grey, often with yellow/coloured stripes
- parallel-veined, slightly bent structure



- concealed in or on the ground, or in dark cavities
- grey, or yellow-ochre to brown
- scalloped structure



- usually in above-ground cavities
- yellow-ochre to brown (with large air pockets)
- large nest opening at bottom ► secretions underneath

# How to live with wasps

## TIPS ON HOW NOT TO GET STUNG

- avoid any sudden or hectic movement
- do not block the wasps' flightpath to their nest – and never plug the entrance hole!
- do not blow at a wasp – the CO<sup>2</sup> in your breath will generate an alarm signal
- cover up any foodstuffs outdoors, and clear away leftovers
- cover glasses, and do not drink from cans or bottles
- wipe children's mouths and hands with a moist cloth
- strong-smelling perfumes and creams can attract wasps, and dark clothing can make wasps agitated ► best to avoid

Attracting wasps to traps is unkind and leads to them (and a host of other useful insects) suffering a prolonged and agonised death. Please don't do it – you're only killing individuals; the colony will survive.

natur&mwelt is happy to give advice on how to deal with wasps and their nests. In most cases, it is perfectly possible for humans and wasps to live in harmony. The main thing is to observe the nest and identify what kind of wasps live there. This is the basis for deciding what, if anything, needs doing.

- The solution is often relatively simple, like installing fly screens on windows and doors.
- In some cases, deflection measures work, like using sheets or screens to get wasps to change their angle of approach to their nest.
- Occasionally, nests can be moved.
- Destroying the nest is not normally necessary, and should be a last resort only.

### Further information from:



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