



FIT2FIGHT

HOW I LEARNT TO MANAGE THE ASIAN HORNET IN MY APIARY

Alan Baxter

2 April 2026













Hawking



Foraging paralysis





**Asian Hornets are probably here
to stay**

Not the end of the world

**We can learn to live with
them**

Raise our game

**Think out of the
box**

**Get the basics
right**

What is Fit2Fight?

AH Life cycle

The principles behind the system

The 3 pillars

Adapting to AH life cycle

Defence

Counter-attack

Timing of action - traffic light system

Discussion

WHAT IS FIT2FIGHT?

Good basic beekeeping

Adapted to lifecycle of AH

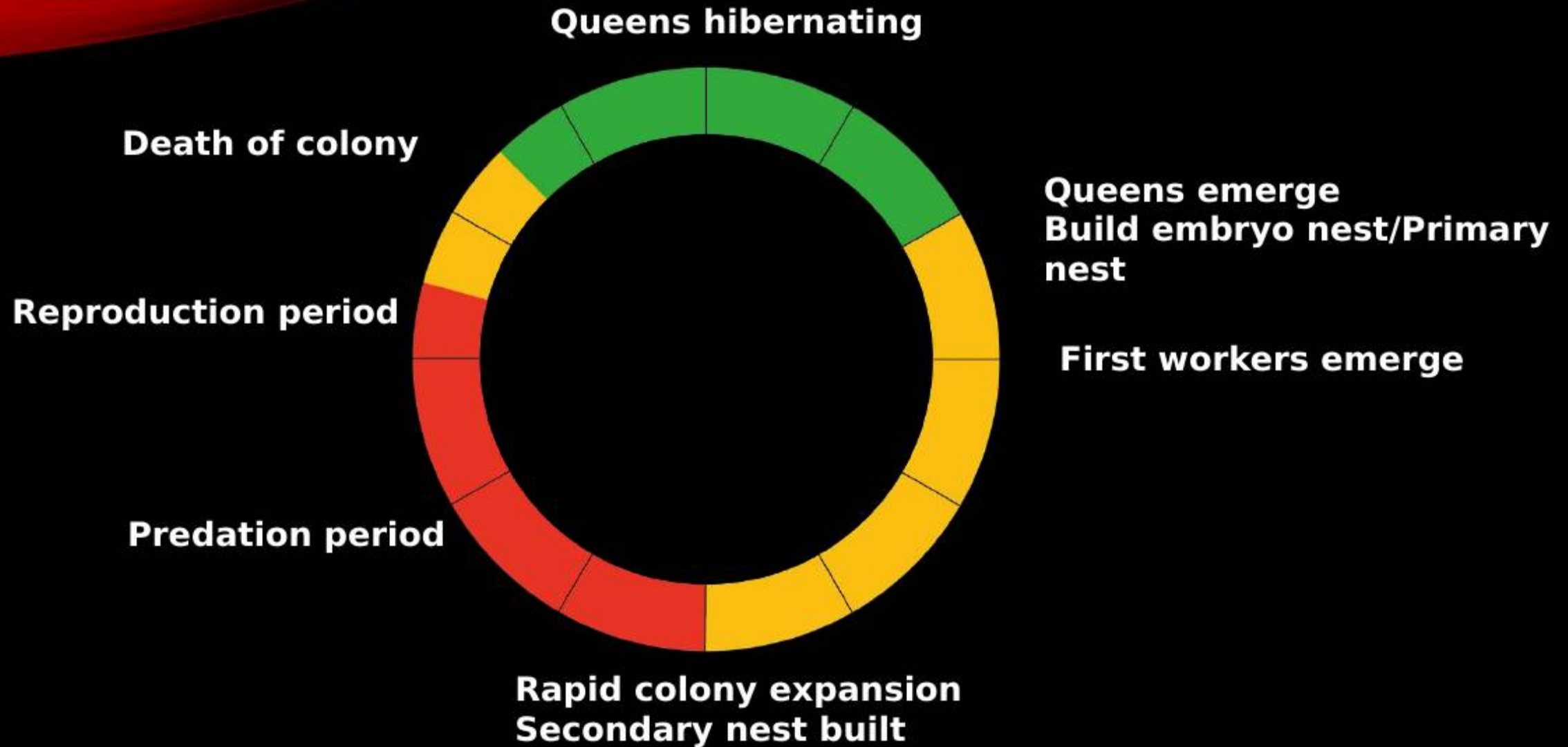
Take command of the situation

Colonies to function and survive predation

We continue to love keeping bees

Enjoy the fruits of their, and our, labours

ASIAN HORNET LIFE CYCLE



Fit2Fight

Underlying principle :

**Any organism under threat
has a better chance of survival if it's
healthy, strong in numbers and well-fed**



3 Pillars of Fit2Fight

1. Healthy bees

2. Strong colonies

**3. Well nourished adults and
larvae**

Pillar1

Healthy bees

Rigorous health inspections

Strict apiary hygiene

Comb change

Low varroa load



Health Inspection

Visit in its own right

Observe hive entrance

Watch the adult bees

Recognise healthy brood

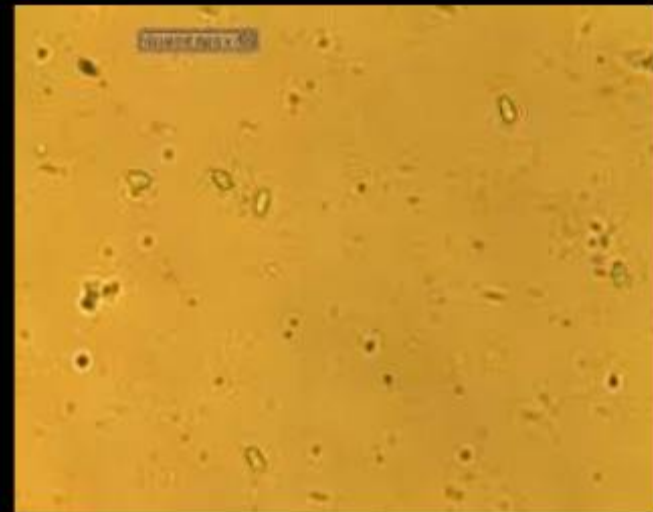
**Know when
something looks
wrong**

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Health inspections

- **Adult bees**
- **Nosema**
- **DWV**
- **CBPV**



Brood

AFB



EFB



Chalk brood



Sacbrood

Varroa

Regular testing/monitoring

IPM

Drone brood uncapping/removal

Comb trapping or queen trapping

Miticide

Oxalic acid when broodless



**Shook
swarm
Swarms in quarantine**

Pillar 2

Strong colonies

Unite weak ones in spring

Rigorous swarm prevention

Double brood

**Maximum foraging force before
predation starts**

Strong going into winter

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Swarm prevention

Understand the swarming process

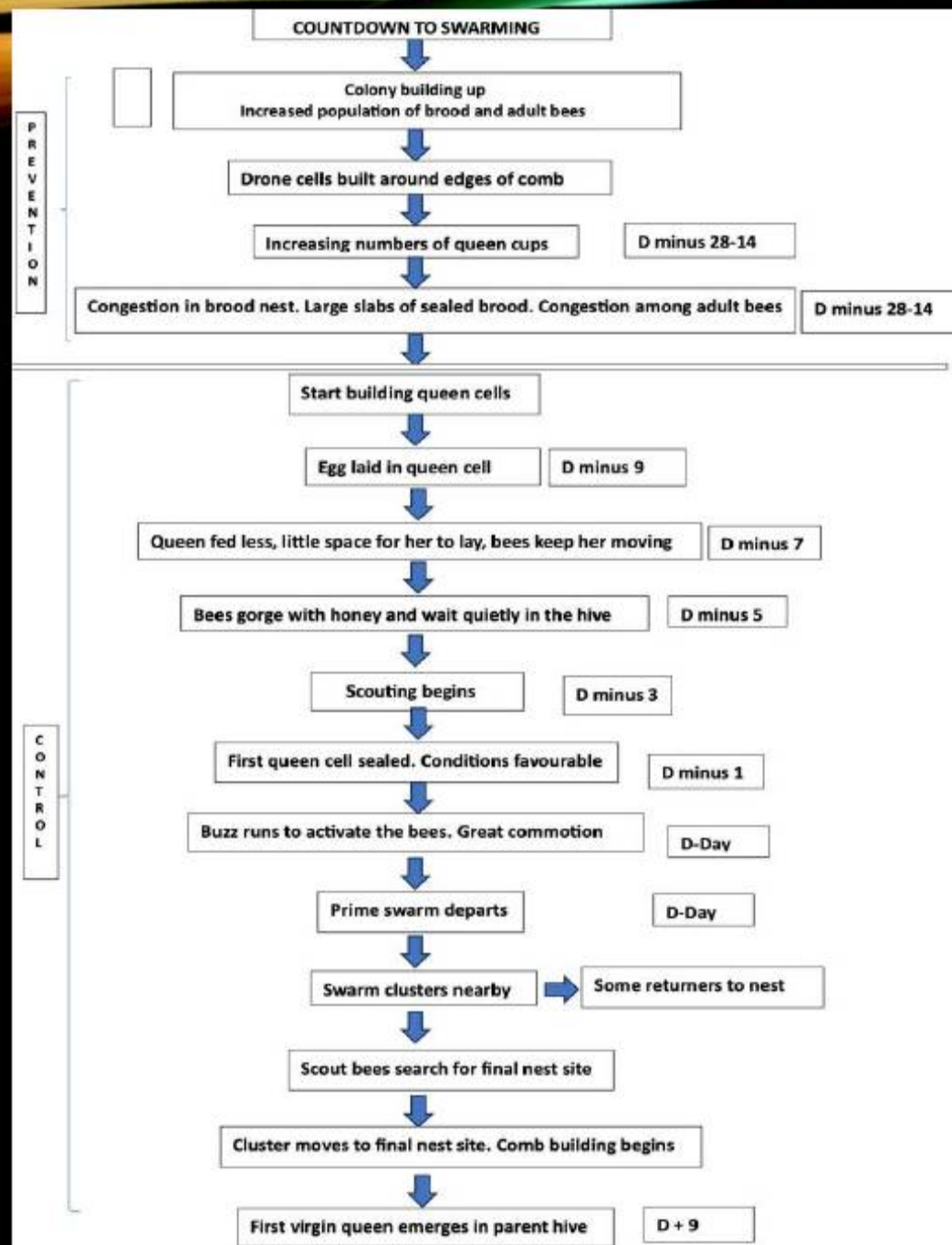
‘Countdown to swarming’

Learn to recognize the signs

Watch them like a hawk

Don't be caught napping

Take pre-emptive action



Swarm control

Know and practice your chosen methods

Pagden

Damaree

Etc...

Have all the kit ready

Queens

Young and productive

Selected for:

Hygienic behaviour/ disease re

Strong spring build-up

Low swarming

Change every year if necessary



Queen rearing

Spring

First drones - drone foundation

**Queens mated & in nucs or colonies by
end June**

Before predation starts

Pillar 3

Well-fed stock

Syrup

Pollen

Water



When to feed

Spring

Avoid starvation

Stimulate queen to lay

Build up colonies for spring flow

Summer

Replace foraging during predation

Keep queen laying

**Autumn
bees**

Stimulate queen to produce winter

Build up stores

Winter

Top up stores

A person wearing a blue long-sleeved shirt and grey trousers is pouring a thick, golden-brown liquid from a white plastic bucket into a wooden beehive box. The liquid is being poured from the bucket's spout into the box, which already contains some of the same liquid. The beehive box is made of dark wood and has a metal mesh screen on its side. The background is a grassy field with some dry grass. The text "Syrup or fondant" is overlaid in large white letters across the middle of the image.

Syrup or fondant

WHY DO THEY NEED SUGAR?

Source of carbohydrate

Energy for

work

Production of brood

food

Making wax

Keeping warm

WINTER BEES' FAT

BODIES

Spring feeding

larvae



Sugar syrup dilution

Thin 1:1

Immediate use

Stimulative feeding

Spring build up

During active Asian Hornet predation

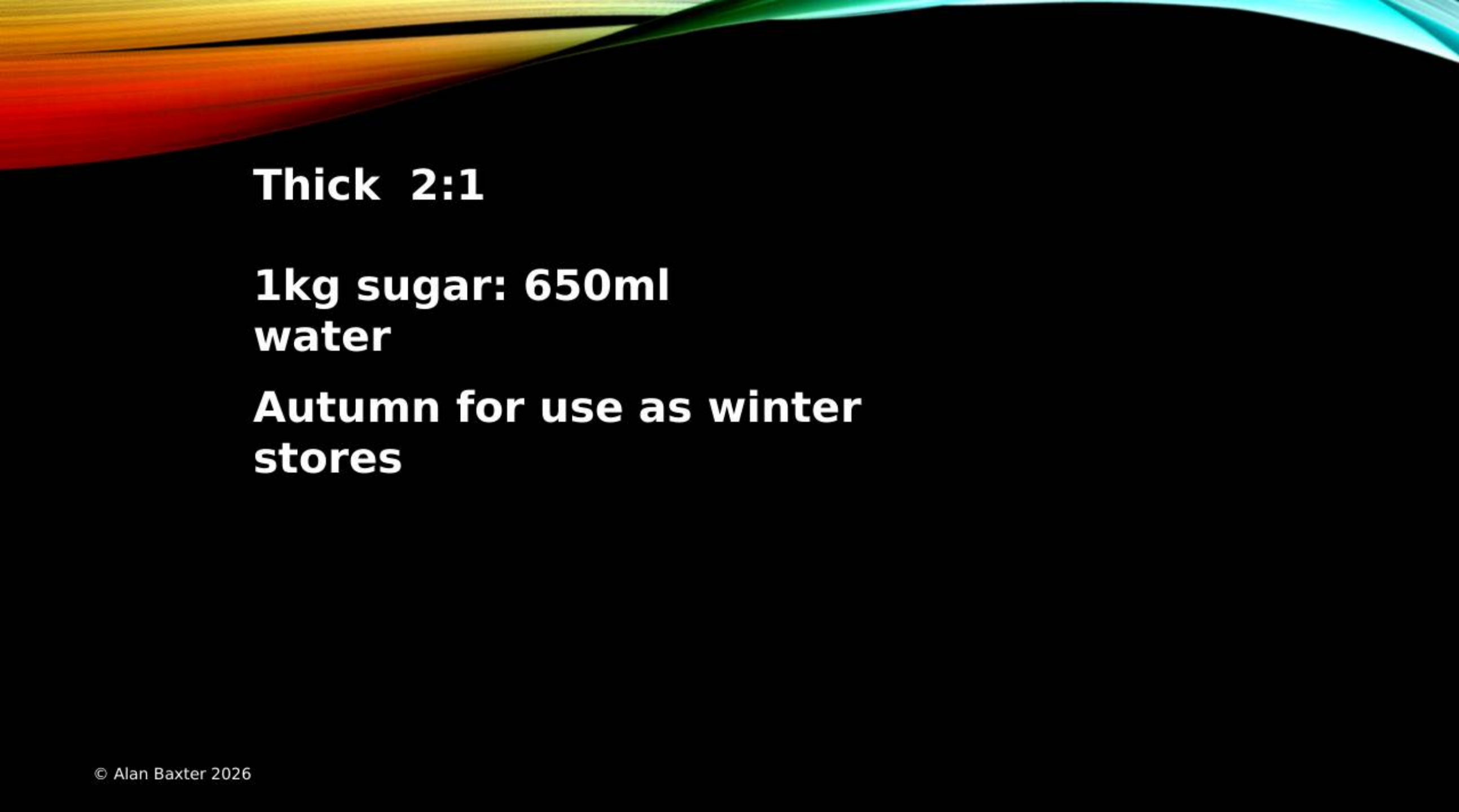
Autumn for winter bees

**Intermediate or 'rescue'
feeding**

1kg sugar: 1Litre water

Spring rescue

Comb drawing



Thick 2:1

**1kg sugar: 650ml
water**

**Autumn for use as winter
stores**

Fondant

**In winter to prevent
starvation**



Candy board

Can reduce condensation



**Why do
they
need
pollen?**

They need protein

Development of glands

Growth and repair of tissue

Production of brood food

Making wax

Stimulate queen to lay

Winter fat bodies

**Feeding spring
larvae**



Pollen contains essential nutrients:

Protein & Amino acids

Vitellogenin

Lipids, essential fatty acids

Sterols

Carbohydrates and fibre

Vitamins and minerals

Bioactive compounds



Not all proteins are equal

**Bees need a diverse pollen diet to
maintain healthy microbiome**

**In areas of monoculture bees can be
malnourished**

Feed pollen:

Early spring to stimulate queen to lay *

Late spring to stimulate queen to continue to build-up foraging force

Summer during active predation when no foraging

Early autumn for queen to produce winter bees

Pollen supplement



Commercial

Home made

Pollen substitute %

Pollen supplement

%

Fat-free Soya flour*

75

60

Brewer's yeast

25

20

Natural pollen

0

20

Total

100

100

***Dried fat-free skimmed milk and dried egg yolk can also be used.**

Pollen substitute - recent research

“A proportion of adult worker bees ingest pollen substitute patties, however they do not feed it directly to the larvae, store it as bee bread, or eject it as debris.

While adult worker bees do ingest the pollen substitute patties, the patties do not completely replace natural pollen in terms of function”

•WHY THEY NEED WATER

Internal metabolism

**Temperature
regulation
Diluting stores**

Producing brood food



Hot weather or drought

Crop spraying

Bearding

During predation

Contact feeder



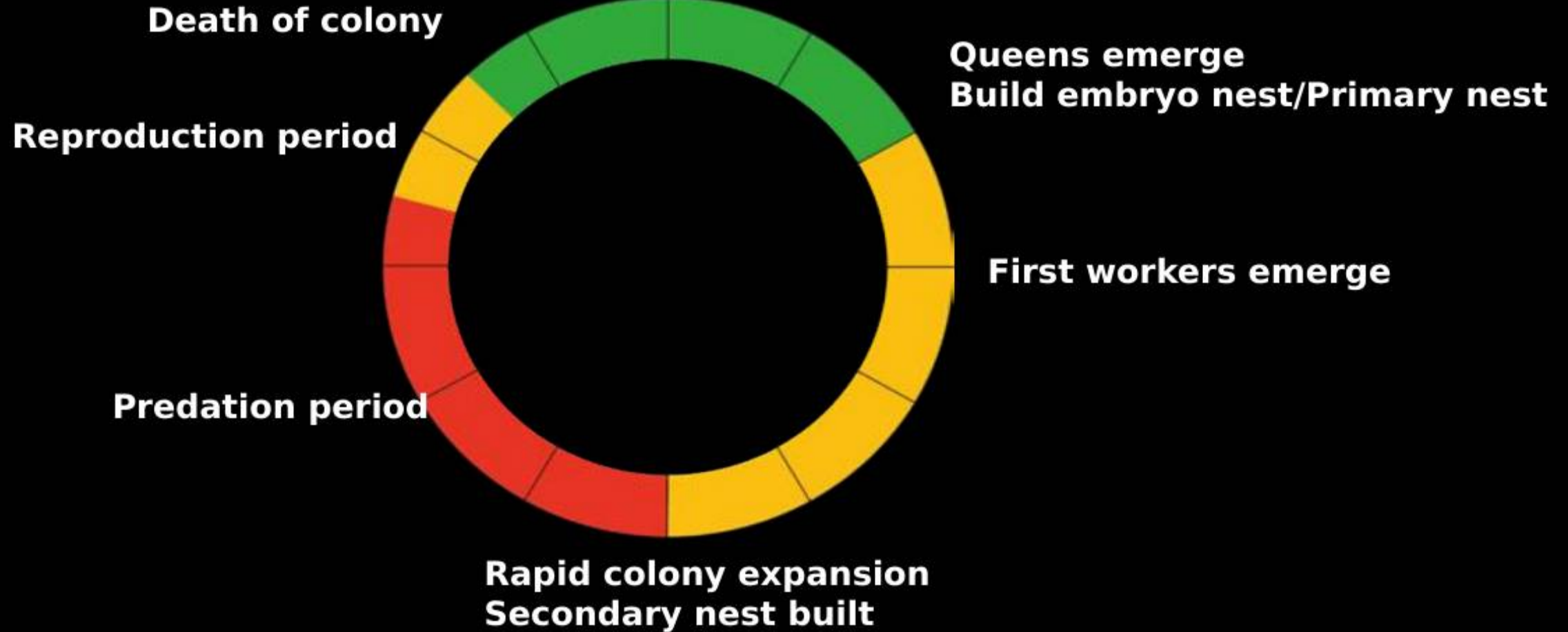


Adapting our beekeeping to life cycle of Asian Hornet

**According to the level of
risk**

ASIAN HORNET LIFE CYCLE

Queens hibernating





Risk

GREEN

Area where no AH have been seen yet

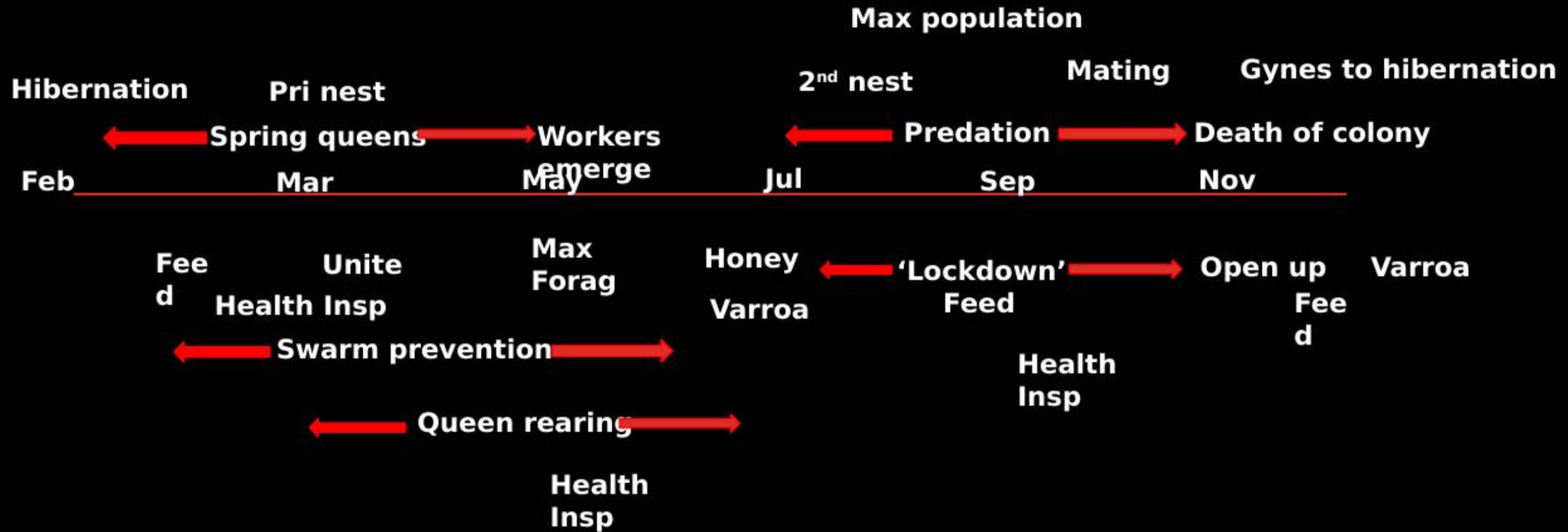
AMBER

AH confirmed in my area

RED

AH hunting in or near my apiary

Adapting to the AH life cycle -timeline



In a Nutshell

Early spring build up

Max foraging force

By the time predation starts:

Honey off and varroa treatment done

'Lockdown' during

**predation
Any manipulations at dawn or dusk**

DEFENCE

AIMS

Reduce level of predation

Reduce stress of predation

Colonies function as normally as possible



DEFENSIVE MEASURES

Grow grass around hives

Group hives together

Varroa board

Entrance reducers

Tangle of branches

Muzzles

Harp



Muzzle



Stop It

Electric Harp



COUNTER-ATTACK



Trapping

Controversial

Misunderstood & often misguided

Appropriate

Proportionate

Timely

Not a magic silver bullet

Spring queen trapping

Places where there were nests previous late autumn

When

Feb to May

**Where
apiary)**

Around site of old nest (or

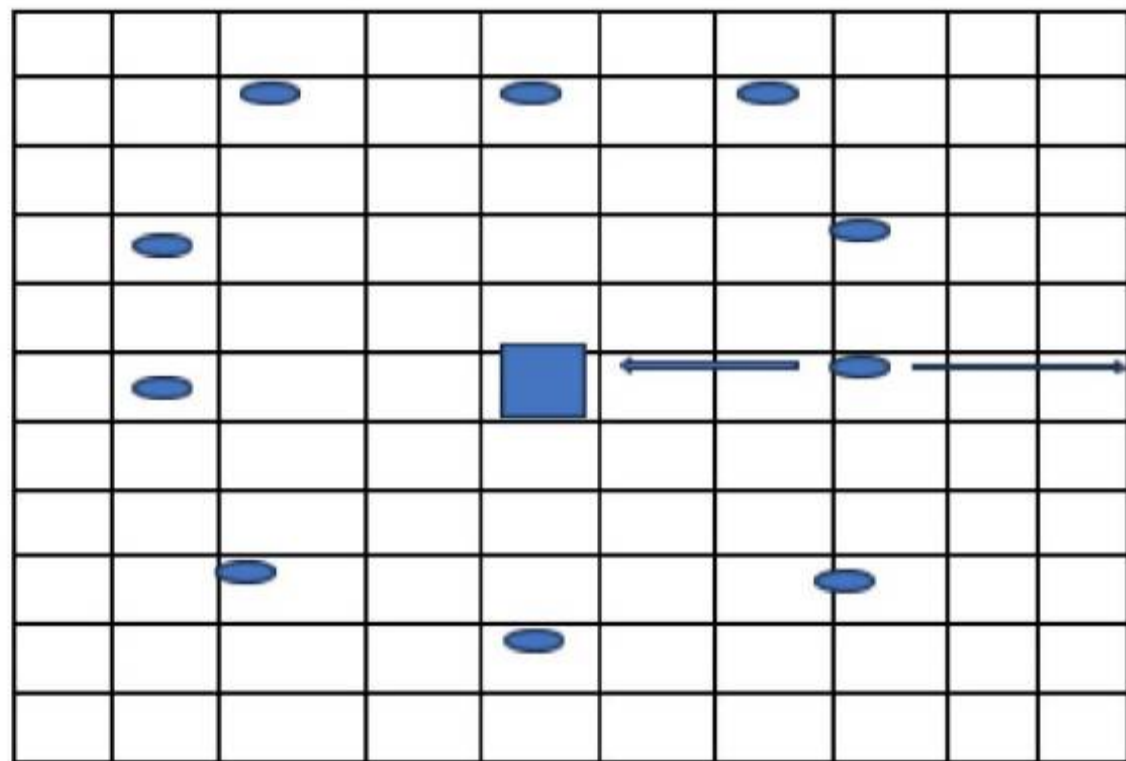
Why

Catch emerging foundress queens

What with

Selective traps

Spring queen trapping/apiary protection



■ Apiary/nest

● Traps



Monitoring

When

Feb to Nov

Where

Convenient place

Why

Presence of all castes

What with

Bait stations

Selective traps



**“A dead hornet is just a dead hornet,
A live hornet can tell you where it lives”**

**John de Cartaret
Asian Hornet Expert
Jersey**

BAIT STATION



BAIT STATION



Zero bycatch

'Decoy' trapping in the apiary

When only **during active predation**

Where **in the**
apiary

Why **to reduce stress on the**
bees

What with **selective traps**

Decoy trap layout

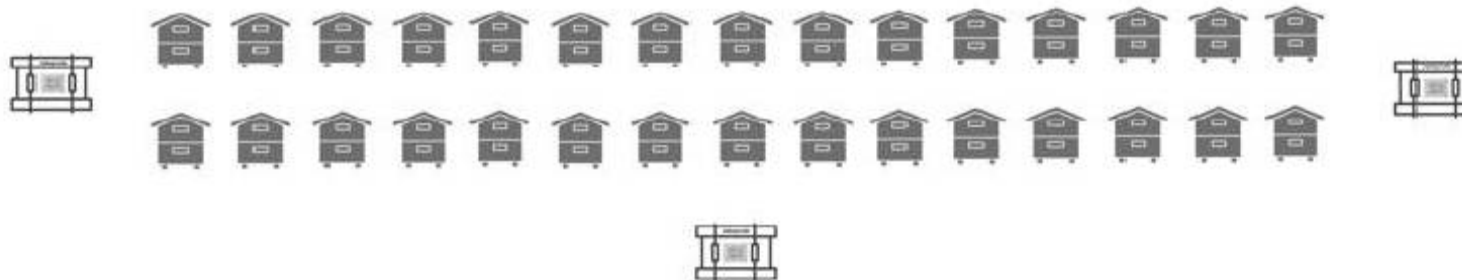
Pour les petits ruchers :



Pour les ruchers de taille moyenne :



Pour les grands ruchers :



Trap design

Top priority avoid bycatch

No trap 100%
guaranteed

Very stressful for
victims



Popular designs



Gard'Apis



Jabeprode



NO-NO





AVOID DROWNING

Sponge or rag in bottom of trap

Trap dimensions

Entry 8 mm queens
 7 mm workers

Escape 6.5
 mm

Bait

Trappit or equivalent

1/3 sirop

1/3 beer

1/3 white wine

Asian hornets

In pots with a sponge to avoid drowning

Timing & level of responses

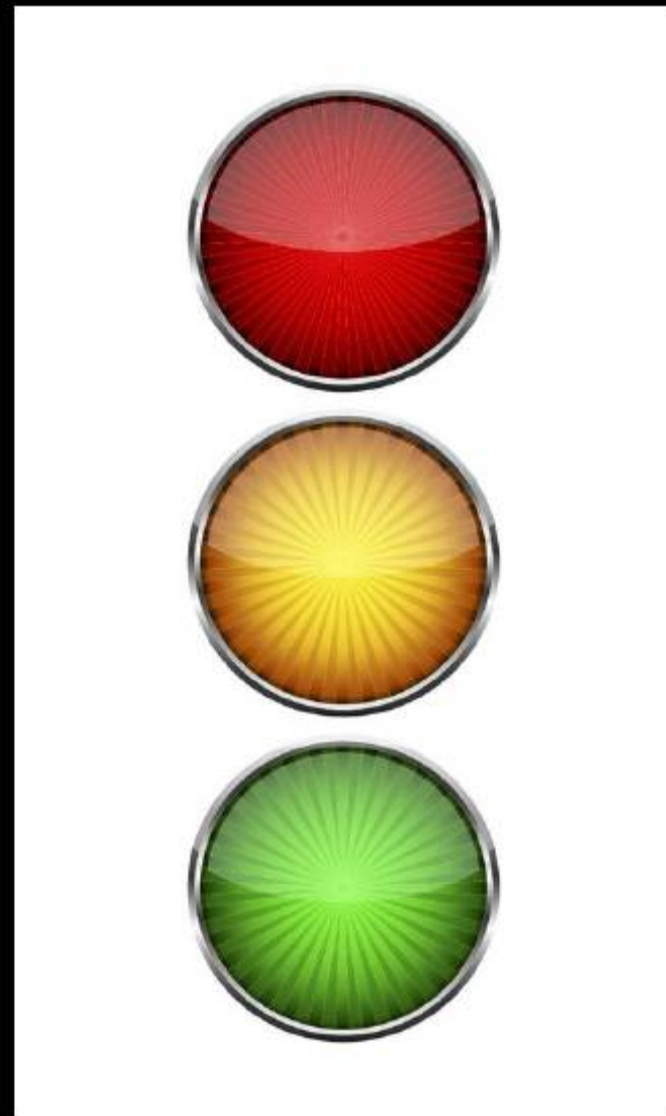
According to level of threat

Proportionate

Appropriate

Timely

**Discretion of
beekeeper**





GREEN

Grow grass around hives

Don't attract attention

Group hives together

Carry out monitoring

AMBER

Insert varroa boards*

Prepare to deploy entrance defences & traps

Move single hives

Prepare to remove honey harvest

Prepare to treat for varroa

Continue to monitor

RED

**Don't panic you're well
prepared
Report on AH Watch App**

Reduce entrances to minimum

Put out decoy traps

Prepare to start feeding syrup, pollen & water

Provide shade in hot weather





RED

Fit muzzles and install harps

**Open entrances at
night**

SUMMARY

**Asian Hornets are here to
stay**

**It's not the end of the
world**

**We can learn to live with
them**

Positive attitude



Get the basics right
Adapt to life cycle of the Asian Hornet

Take command in our apiaries

Healthy bees

Strong colonies

Well fed stock

GET THE BEES FIT2FIGHT



**THANK YOU FOR
LISTENING**

OVER TO YOU



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FIT²FIGHT



**A PRACTICAL GUIDE FOR
MANAGING THE ASIAN HORNET**

Alan Baxter

**2025 Second and
Updated version**

**[https://www.amazon.co.uk/
Fit-Fight-Second-Updated-
version/dp/1914934997](https://www.amazon.co.uk/Fit-Fight-Second-Updated-version/dp/1914934997)**