

# Small Hive Beetle

## Seasonal Behaviour

**SHB reproduction affected by availability of food in the hive (pollen & brood) and environmental conditions (temperature & humidity)**

### Spring

As temperatures increase SHB begin to move around unless it is very dry. Expect some activity after rain. Beetles fly at dusk, can fly long distances.

### Summer

Multiple generations possible with high humidity & rain (more larvae & pupae survive)  
Hives become vulnerable to mass reproduction & slime out from mid summer if wet.

**Key environmental conditions that decrease beetle numbers**

Low temperature  
Dry conditions, low rainfall  
Low humidity



**Key environmental conditions that increase beetle numbers**

Warm - High temperatures  
High rainfall  
High humidity

### Winter

Too cold for adults to fly & move into hives.  
Pupation slows down.  
Larvae won't survive outside hives. Ideal time to act to reduce numbers of adults in hives

### Autumn

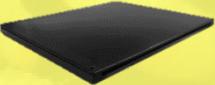
As temperatures decrease SHB life cycle slows down.  
Fewer SHB to fly around.

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## General Management Options

Maintain traps/trap products, use as many options as necessary, especially during Spring and Summer as numbers build up

### *In hive:*

- ❖ **Vinyl backed fibrous mat** (“fluffy mats”), with fluffy side folded in, on top of frames under lid  
- ❖ **Chux® cloths folded** (15 × 30 cm) on top of frames under queen excluder in brood box 
- ❖ **APITHOR™** chemical trap either on the bottom of hive or on top of frames (replace every 3 months) 
- ❖ **“Trench traps”** to hang between frames, in any box (range available commercially) 
- ❖ Modified, **gridded bottom boards** (range available commercially) 
- ❖ Use either **vegetable oil or diatomaceous earth (DE)** in bottom boards and trench traps 

### *Out of hive:*

- ❖ **External traps** with attractant mix. Fly traps from hardware stores, 
- ❖ Mix 1 cup water; 1 tspn yeast powder; 1 tbspn sugar; 2 tbspn honey.
- ❖ Mix up before midday, Hang downwind of hives.
- ❖ Replace yeast mixture as needed
- ❖ **Chickens** will scratch around hives and eat larvae 
- ❖ **Cane toads** eat larvae at night under hives (Qld!) 