



## Frequently Asked Questions

### 1. What is ApiShield?

ApiShield is the world's first integrated hive trap to safeguard honeybee colonies from predation by hornets, wasps, wax moth and robber bees. It consists of a base with an enclosed drawer. There are eight side entrances (four on each side) providing one-way access to the drawer. Wasps, hornets and other predators (including wax moths) that use these side entrances are trapped in the drawer and cannot escape. There is a separate front entrance allowing bees to enter their hive as usual.

### 2. How do I use it?

ApiShield is installed under the brood box (replacing the hive floor) with the side entrances initially blocked using the supplied panels. This ensures that the bees learn to use the front entrance. After a minimum of four to five days, the side panels should be removed; bees will continue to use, and guard, the front entrance. Predators such as wasps and hornets, attracted by the smell and sound of the colony, will bypass the guarded front entrance and instead try to enter the hive via the (undefended) one-way side entrances, thus becoming trapped in the cassette. Please see supplied leaflet for detailed instructions.

### 3. What are the advantages of ApiShield?

ApiShield traps only pests affecting honeybee colonies – hornets, wasps, wax moth and robbing bees. Unlike bait traps, ApiShield does not affect non-target organisms and pollinators and does not unnecessarily attract predators into the apiary. With no on-going costs and just one trap, used on your weakest colony, able to protect up to five colonies, ApiShield is a highly economical investment. Unlike bait traps, which can require frequent replenishment, ApiShield maintenance can be easily incorporated into your usual husbandry routine. The honey bee colony sound and odour is the only bait required and is constantly present in any hive and always attractive to Asian hornets. Late-season trapping of Asian hornet queens reduces the number of new hornet nests next year, keeps hornet populations down and inhibits invasive spread. ApiShield guards against robber bees, which are known to transmit a wide spectrum of infectious diseases and honeybee pests, such as varroa mites. ApiShield will also catch native wasps at the end of the season.

### 4. When should I use it?

ApiShield is best used after the main honey flow and just as wasps start to predate hives. Exact month timings will vary according to region, but in southern England, for example, installing traps from the beginning of August to the first frosts in November is about right. It should be removed and stored in a dry place outside of these months.

### 5. Do I need one ApiShield for every colony?

No. Studies have shown that one ApiShield provides sufficient protection for up to four or five colonies in an apiary. This is because predators are opportunists and will seek out what appears to be the easiest prey. Where possible, ApiShield should be installed on the apiary's weakest colony.

### 6. Do I need to treat/protect my ApiShield?

Yes. ApiShield is constructed of soft wood and must be protected. We recommend treating annually with an insect-friendly weather-protective paint.

### 7. Does it work?

Studies conducted by Vita, the University of Thessaloniki and the UK's National Bee Unit (NBU) have demonstrated that ApiShield is very effective in trapping wasps and Asian hornets, and in particular Asian hornet queens when they are looking for a nesting place at the end of the season. In this way, ApiShield can help prevent the proliferation and spread of the Asian hornet.

### 8. What about the Asian Hornet's "hawking" behaviour?

Typically, Asian hornets are seen hovering ("hawking") outside a hive entrance, catching and consuming returning honey bee foragers. When they perceive the colony to be sufficiently weak, or when their nutritional needs change from proteins to sugars (ie late autumn) the hornets change their behaviour to predate colonies and invade the hive, destroying and consuming the remaining bees, brood and stores in the hive. However, hornets are opportunist hunters and before beginning this hawking behaviour, they assess the strength of the colony to determine whether it is safe to enter immediately. The unprotected side entrances to the ApiShield trap give this false impression, encouraging hornets to enter.

### 9. Does ApiShield replace other forms of traps?

ApiShield can be used in conjunction with standard bottle traps, such as a homemade trap that can be put together using instructions on the NBU fact sheet "An Asian hornet monitoring trap", which can be found on this web page: <http://bit.ly/nbuasianhornet>.

### 10. What should I do if I think I've trapped an Asian hornet (*Vespa velutina*)?

In the UK, if you think you have found an Asian hornet, please notify the Great British Non Native Species Secretariat alert email address at [alertnonnative@ceh.ac.uk](mailto:alertnonnative@ceh.ac.uk) immediately. Additionally, you can report sightings on their website: <http://bit.ly/non-native>.

### 11. How do I dispose of trapped predators?

After two or three days, predators trapped in the ApiShield cassette will have died of dehydration or desiccation. Since some may still be alive when checking, we recommend that anyone in the vicinity wears bee protection. Please do not use insecticidal sprays (fly/wasp killers) as residues may enter the hive and affect the bees.

### 12. Will it trap my bees?

No, bees from colonies with ApiShield installed will orientate to the correct entrance of the trap and continue to use only that entrance. It is possible that robber bees from other colonies may be trapped – this can help to prevent cross-infection and the spread of disease.

### 13. Is the entrance the right size?

In extensive trials in both hot and temperate climates, we have found that the entrance is an ideal size, in terms of ventilation and temperature control, ease of bees entering and exiting the hive, and ability of the bees to protect their entrance.

### 14. Do I need to use a varroa floor?

No. ApiShield's unique design allows it to act like an open mesh floor; varroa will fall through and be unable to return to the brood box.

### 15. What size hives is ApiShield available for?

ApiShield is available for British National size hives (external dimensions: 46.5 x 46.5 cm). ApiShield is also available for Langstroth (43 x 41 cm) and Dadant (43 x 50 cm) hives. Note that there can be slight variability in external dimensions of hive bodies, all under the name of "Dadant" or "Langstroth". Although it may not be a perfect fit with some variants, ApiShield will fit the majority of Langstroth/Dadant hives in current use.

### 16. Where can I find more information?

Please see our website <http://vita.sh/ApiShield> or contact us on [info@vita-europe.com](mailto:info@vita-europe.com) or call +44 1256 473175.

