Capturing Japanese giant hornets with a glue sheet

In the wild, Japanese honeybees typically nest in spacious cavities, such as hollow trees, in order to build their nests. However, in this particular case, this colony has chosen to settle between these large rocks since last year.

During a recent visit, it was observed that the colony was thriving. However, the current situation has taken a turn for the worse as dozens of giant hornets are now seen entering and exiting the colony’s entrance. Giant hornets are known to attack honeybee colonies and forcibly take over. They eliminate all the larvae, pupae, and honey within the colony. Additionally, they exhibit aggressive behavior towards anyone who approaches the colony they have seized. These hornets are bringing back fragments of the captured honeybee colony to their own nest. There is a risk that these hornets may pose a threat to the local residents in the area. Therefore, our plan is to capture the giant hornets and inspect the remnants of the Japanese honeybee colony using an endoscope.

Protection Measures

For our protection, we will employ a type of adhesive pad commonly used to capture mice. The pad will be strategically placed near the entrance of the colony to capture the hornets. When we conduct inspections on beehives, it is typically unnecessary to wear a bee suit for protection as the hornets are usually in the scouting phase and not yet aggressive. However, since the hornets in question are currently defending a food source, we will take precautionary measures by suiting up, as there is a possibility of their aggression. We will also have a hornet repellant available as a backup countermeasure.

Capturing Hornets

To capture the hornets, we will position the glue trap at the entrance. The sticky sheets of the trap effectively capture the giant hornets. As the first hornet is captured, its pheromones will attract more hornets to the adhesive surface. We will leave the sheet in place until evening, allowing more and more hornets to be trapped as time passes. Research suggests that Japanese honeybees modify the hornet’s forage site-marking pheromone by smearing collected leaves at the entrance of their hive, potentially altering the hornet’s behavior or recognition.

Once we have completed the hornet capture process, we will proceed to investigate the interior of the wild nest using an endoscope. The aim is to assess the remaining contents within the colony. At present, there seems to be minimal activity inside the nest, with pieces of honeycomb scattered throughout. The comb has been destroyed, and no larvae or pupae are present. To prevent further entry by hornets, we will close off the entrance.

In summary, the plan involves capturing the invading giant hornets using adhesive traps, protecting ourselves with appropriate gear, and inspecting the remnants of the Japanese honeybee colony with an endoscope. The ultimate goal is to address the hornet infestation and safeguard the colony from further damage.