

Bumblebee Nest Relocation and Tagging Plan for Washington State 2025 Season

Contact: Alex Wikstrom
wa.waspaway@gmail.com

Purpose

- Ascertain the nesting health of nesting habitation within Washington State.
 - Observe relocation success of Bumble bee nests.
 - Observe health and habitation of non-relocated nests.

Objective

Various bumbles species are in decline and under threat. Most homeowners don't realize that the style in which their property is managed can mean the decline and success of a species. Allocating preserves to harbor bumbles is a notable approach to reduce their decline, especially for certain species. However, I believe these methods do not satisfy the needs of our native species entirely. Most social insects, though small, need ample space to forage, and rear their young. This applies to Bumblebees. Preserving isolated island like areas for these creatures in amongst housing developments, where only a few hundred acres are provided for habitation, does not facilitate natural setting where normally these insects thrive in thousands of acres in connected field and forests.

My plan is to provide the public with resources to relocate bumblebee nests and tag non-relocated ones.

Since I have been in the public eye for a number of years now, I have gained the attention of social media in my area and beyond. Through this, we can advertise to the public free relocation and tagging services for bumblebee nests.

I am testing this plan in the 2024 season. And so far, have had great success in the attention and data desired.

Importance

In my years of providing control of stinging insects, I have seen many bumblebee nests destroyed due to the lack of help for their relocation and the lack of knowledge from the homeowner.

Providing solutions to people's bumblebee problems is paramount to have them thrive. If an effective relocation and tagging program is enacted, our bees might just thrive in neighborhoods and cities.

Removals

It is known that bumblebees don't typically do well after relocation. However, I believe this can be eliminated with the right approach. I am evaluating relocation protocols and procedure types, this season.

Removal Procedure Type 1

The Bumblebee Nest Extractor Vac (BNEV) is a multiple compartment box that suctions the worker into an empty chamber. The nest is inserted into a chamber adjacent to them with a screen wall. The air flow passes through both chambers until all workers are collected. The vacuum is shut off; opening sealed, and the screen wall separating the workers and nest is then lifted, so they can easily find their nest in darkness. After a few hours, the extractor can then be reopened to let the workers ingress and egress. The vacuum chamber then acts as a nesting box, so the least amount of stress and movement of the bees is provided and as many workers are collected as possible.

Removal Procedure Type 2

This removal procedure does not include a vacuum. Instead, a process called Gradual Nest Containment (GNC) offers a gentler approach to relocation and should be done in the morning. Once the nest is located, it is put into a box typically made of wood. The box has only one hole on the side. The nest is placed into this box, then returned to the exact place the nest originally was. The hive is then left alone until dark; 12 hours if possible. Once dark, most, if not all the workers are inside the box. The single entrance hole is then shut, and the box can be located to the place of choice and the entrance reopened.

Tagging Non-Relocated Bumblebees

Tagging bumblebee nests that don't need relocation services is another way to ascertain the health of the tagged species.

Tagging Process

The tagging process is simple. A home or property owner informs us of a bumble nest. We travel to the location, record the data of the nest location using "BNT-Initial" data sheet. After that had been completed, return in 2 weeks to collect data again on the condition of the nest using "BNT-Check" data sheet. This process is repeated until nest has ended its natural course.

Execution

Advertise free bumble bee relocations for nests that are in awkward or dangerous places. This can be done using social media and other platforms, such as radio and local TV etc. The traction I have had only using Facebook has been insurmountable. My relocation and interest count continues to rise throughout the season.

Organizing Relocation

One individual collector will be responsible for a sector or city boundary. The more collectors the better. When a member of the public needs a removal, the collector will perform the relocation. The collector will fill out the "BNR-Pre-Post" data sheet. He will designate a place where the bumblebees can be located and returned to every 2 weeks for data collection. The designated relocation plot will need to be recorded and be a part of the program. So, advanced planning will be necessary to allocate property that is easily accessible. When the collector visits the relocated nest, they will fill out a "BNR-Check" data sheet. As mentioned before, this should be done every 2 weeks.

Close of Season

After all the tagged and relocated nests have completed their cycle, the data collected will be compiled and stored for use in scientific research.