

# BOGDIVERSITY THURSDAY



—*from Head Naturalist Clinton*

## Early Season Bees

POST #30—May 19, 2022

Spring is still slowly waking up in the Sax-Zim Bog and one group of insects that has been becoming more obvious on the landscape are bees! Right now, many queen bumble bees are flying, as are some early season ground nesting bees. For today's post, let's take a quick peek at a few notable early season bees!

In the Sax-Zim Bog and beyond, bumble bees are hopefully familiar. These large, often very fuzzy bees have interesting life histories. They nest in the ground and only queens overwinter! Early in the season, they search not only for nectar sources, but also for places to nest. In the photos below, the two earliest observed queen bumble bees found by Head Naturalist Clinton in the Sax-Zim Bog are featured.

However, bumble bees only make up a small portion of the bee fauna in most areas. Non-bumble bees included solitary bees, mason bees, carder bees, cuckoo bees, mining bees, cellophane bees, metallic sweat bees..... and many more! These amazing bees are often overlooked, though their colors and behaviors vary

widely and are quite interesting. Two fairly easy to observe groups that are active in late April and early May are the cellophane bees and nomad bees.

Cellophane bees get their name from their waterproof material they produce to line their nests. When dry, this material resembles a thin, clear plastic. They nest in the ground and their nest entrance holes often resemble small ant mounds. Often, these bees can be seen hiding in their nest holes, but you must be patient to see these lovely bees at their nests.

The last early bees that we will consider today are the Nomad Cuckoo Bees! Their genus, *Nomada*, are obligate nest parasites of mining bees and cannot complete their life cycles without their hosts (unlike their namesake birds). Nomad bees fly very fast and low around sandy patches, looking for nesting mining bees. When a female finds a potential nest site, she will simply enter the nest and lay an egg on an open cell of the ground nesting bee host. The host will continue to store food for its young and then seal up the cell. When the Nomad bee larvae hatches, it will kill the host larvae, and then eat the food stored for the host's larvae before emerging as an adult bee!

Lately, our native bees have been getting a lot of attention due to massive declines. You can support these species by gardening with native plants or creating nesting areas like patches of open ground for these bees to use as nest locations!

More information about a few early season bees below!

(Photos below of bees below by Head Naturalist Clinton)



This queen Tri-colored Bumble Bee is seeking out a place to nest! Queen bees emerge very early in our area and this queen was seen on April 30th. Tri-colored Bumble Bees get confused with a number of species including Red-belted, Rusty-patched, and Black-tailed Bumble Bees. It takes a keen eye to separate these species!



Many species of Nomad Cuckoo Bee are reddish, with yellow markings, but Black and Yellow Nomad Bee looks like a wasp! These fascinating nest parasites go undetected at nest sites by mimicking the scent of hosts.



This queen Perplexing Bumble Bee is nectaring on willow! Willows are a hugely important early season nectar source for bees of all kinds. Recently, Head Naturalist Clinton found a flowering willow with dozens and dozens of bees visiting its flowers! The diversity present included a few bumble bees, but many smaller native bees.



Unequal Cellophane Bee is a fairly commonly observed species of Cellophane Bee in our area. They have been flying lately in the Sax-Zim Bog and there is at least one nest constructed along Gray Jay Way so far this season. What a lovely bee!