

The Yellow or Golden Northern Bumble Bee (*Bombus fervidus*): A Species of Great Conservation Need



During our Rhode Island bumble bee survey (2019-2021) we saw or collected 40 specimens of *Bombus fervidus*. This was 0.41% of the total number of bees observed or collected (9,546). The International Union for Conservation of Nature (IUCN) listed *B. fervidus* as vulnerable in 2014. If this species' relative abundance continues to decline at the same rate, we project that the species will go extinct in the next 70-80 years (2094).

Bombus fervidus visiting *Monarda fistulosa* (bee balm). Photo by Casey Johnson.

Conservation actions:

- Restoration, creation, and preservation of native plants and natural grassland habitats.
- Restriction of harmful pesticide use on or near suitable habitat.
- Protection of species from diseases introduced by managed bees.

Flower species that support populations of *Bombus fervidus*

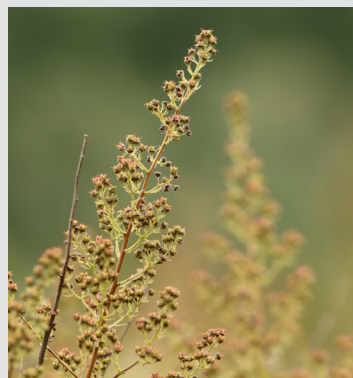
Pollen resources (important as a protein source to produce offspring):



Rosa virginiana
Virginia rose
Jun - Aug



Rosa carolina
Carolina rose
Jun - Aug



Spirea alba
Meadowsweet
Jun - Sep



Rubus odoratus
Flowering raspberry
Jun - Jul

Other pollen sources include:

- *Rosa nitida*
- *Rosa palustris*
- *Spirea tomentosa*

Photos (left to right): Nicole Bell.

Flower species that support populations of *Bombus fervidus*

Nectar resources (important as a carbohydrate source to power adult flight):



Penstemon digitalis
Foxglove beardtongue
May - Jul



Penstemon hirsutus
Hairy beardtongue
May - Jun



Gentiana clausa
Closed gentian
Jul - Sep



Monarda fistulosa
Bee balm
Jul - Sep



Scutellaria galeniculata
Common skullcap
Jul - Sep



Mimulus ringens
Allegheny monkey-flower
Jun - Sep



Prunella vulgaris
Common self-heal
Jun - Aug



Impatiens capensis
Spotted touch-me-not
June - Sep

Other nectar sources include:

- *Pontederia cordata* (Pickerelweed)
- *Lupinus perennis* (Wild lupine)
- *Baptisia tinctoria* (Yellow wild indigo)
- *Cirsium discolor* (Field thistle)

Photos (left to right): N. Bell, R. Baranowski, R. Baranowski, N. Bell, R. Baranowski, R. Baranowski, N. Bell, N. Bell

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