

Bumble Bees of New England

Red/Orange on Abdomen

Tricolored Bumble Bee

Bombus ternarius



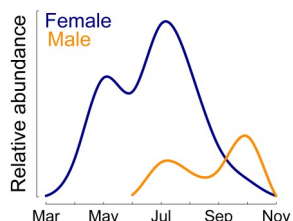
© Cory Gregory

Distinct black shield

Never red on T1

Paler orange than *B. rufocinctus*

Abdominal pattern: YRRYB



Red-belted Bumble Bee

Bombus rufocinctus



© Lara Maynard

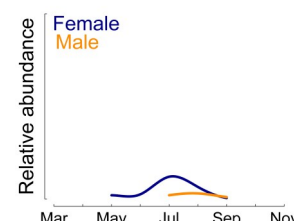
Oval shield

Some with no red or yellow beyond T2 and are difficult to identify



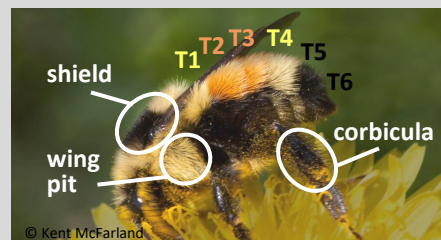
© Spencer Hardy

Rare outside Champlain and Hudson River Valleys



Anatomy

Only females (queens and workers) of non-parasitic species have corbicula (pollen storage sacs) on hind legs. Only females possess a stinger, and they have 6 (numbered T1-T6 terga (abdominal segments) vs. 7 in males.



© Kent McFarland

Photographing for Identification

Take many photos from directly above (for the abdominal pattern) and from the sides (for wing-pit color), or record a video in HD and select frames later.

Limited Yellow on Abdomen

Common Eastern Bumble Bee

Bombus impatiens

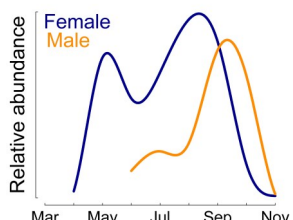


© paulzc

Smudge-like shield

Only species in the Northeast with no yellow on T2

Most abundant and widespread bumble bee in New England



Two-spotted Bumble Bee

Bombus bimaculatus

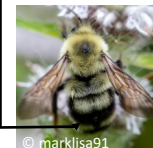


© samwilhelm

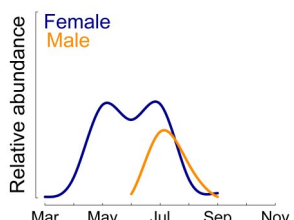
Distinct dot

Always some yellow in middle of T2 but does not extend to sides - relatively longer hair than *B. griseocollis*

Males may have yellow on T3-T5



© marklisa91



Brown-belted Bumble Bee

Bombus griseocollis

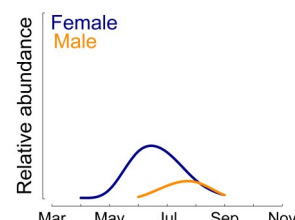


© Spencer Hardy

T1 yellow

Amber arch on T2 (not squared like *B. bimaculatus*) - shorter hair than *B. bimaculatus* and extends to sides

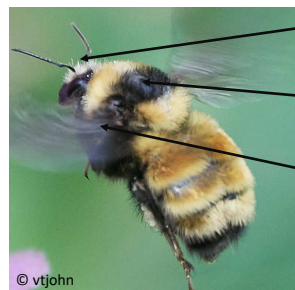
Primarily found in warmer and more urban locations



Predominantly Yellow Abdomens

Northern Amber Bumble Bee

Bombus borealis



© vtjohn

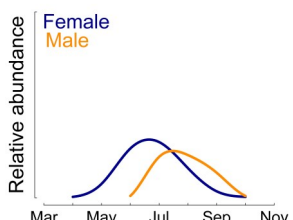
Yellow hairs on face

Thick black bar

Black wing-pits

More orange than *B. fervidus*

Fond of large grasslands



Golden Northern Bumble Bee

Bombus fervidus



© rstu525

Black hairs on face

Thinner black bar than *B. borealis*

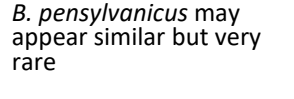
Yellow wing pits

Associated with large grasslands in broad valleys (April—October)

B. pensylvanicus may appear similar but very rare



© Sunny Denington



Yellow-banded Bumble Bee

Bombus terricola

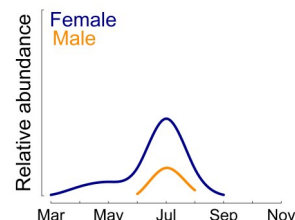


© Janet Nelson

Thorax black on rear 2/3

Abdominal pattern: BYYBBB

More common in cool and wet locations



Half Black Bumble Bee

Bombus (Pyrobombus) vagans



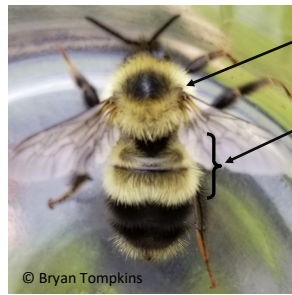
Yellow wing pits

T1 and T2 yellow

Length of malar space longer than width

Sanderson's Bumble Bee

Bombus (Pyrobombus) sandersoni



Yellow wing pits

T1 and T2 yellow

Length of malar space = width

The common *B. vagans* is nearly indistinguishable from the rare *B. sandersoni*, except under the microscope. Identification from photographs may be possible with extreme closeup photo of the front of the face. Otherwise, *B. vagans* and *B. sandersoni* individuals may be only safely identified to their subgenus (*Pyrobombus*).

Perplexing Bumble Bee

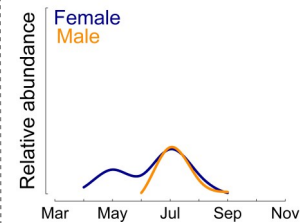
Bombus perplexus



Usually yellow between the wings

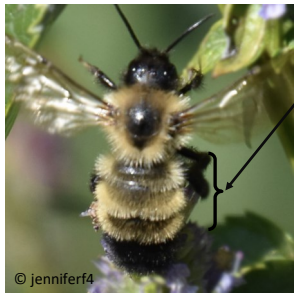
T1 and T2 (and sometimes other segments) yellow

Richer "egg yolk" yellow than other *Pyrobombus*



Lemon Cuckoo-Bumble Bee

Bombus citrinus



Males usually have T1-T3 yellow



Queens with single yellow band on T3

B. citrinus: uncommon in the Champlain Valley and very rare elsewhere. Most common late August—early September.
B. flavidus: uncommon but widespread and increasing. Most records of males in July.

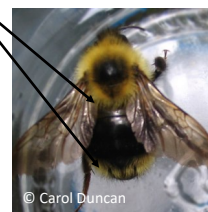
Fernald's Cuckoo Bumble Bee

Bombus flavidus



Males variable—usually have some red/orange on T7

Queens have yellow bands on T1 and T3



American Bumble Bee

Bombus pensylvanicus



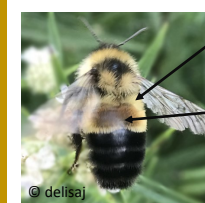
Middle of T1 often yellow

T2 and T3 entirely yellow

Males often have entirely yellow abdomen

Rusty Patched Bumble Bee

Bombus affinis



T1 yellow

T2 yellow surrounding patch of orange/brown hair

Ashton's Cuckoo-Bumble Bee

Bombus ashtoni



T2 often black with yellow on sides

Some white on T4 and T5

Males with yellow instead of white

Bumble-bee-mimic Digger Bee

Anthophora bombiodes

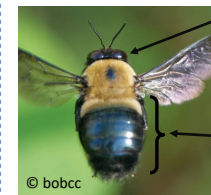


Similar to *B. vagans* and *B. sandersoni*

Protruding clypeus (area between mandibles)

Eastern Carpenter Bee

Xylocopa virginica

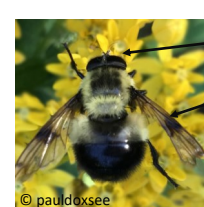


Wide, round head

Shiny, black abdomen

Eastern Swiftwing

Volucella evecta



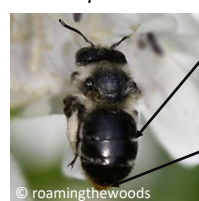
Short, feathered antennae

One pair of wings

Member of the hoverfly family (*Syrphidae*)

Orange-tipped Wood-digger Bee

Anthophora terminalis

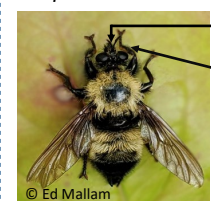


Thin hair bands on black abdomen

Orange tip on abdomen

Bumble Bee Mimic Robber Fly

Laphria thoracica



Long, bearded face

Rests with legs out front

Quick, jerky head movements