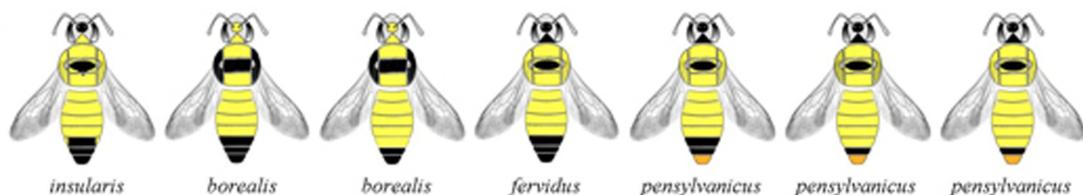


Males :

1a. T1-T4 with yellow hairs...*insularis, borealis, fervidus, pennsylvanicus*

1b. T1-T4 not all yellow.....2



2a. Red, orange, or brown on one or more T's.....*affinis, ternarius, rufocinctus* (red morphs), *griseocollis*

2b. No abdominal segments red, orange, or brown.....3



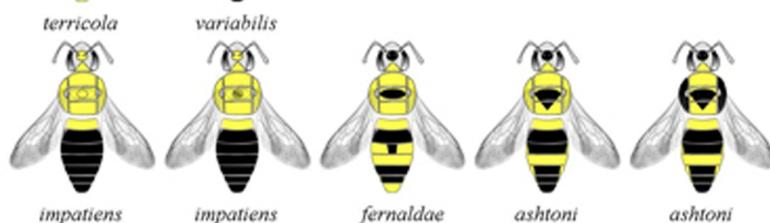
3a. T1 black, other T's variable.....*terricola, variabilis*

3b. T1 yellow, other T's variable.....4



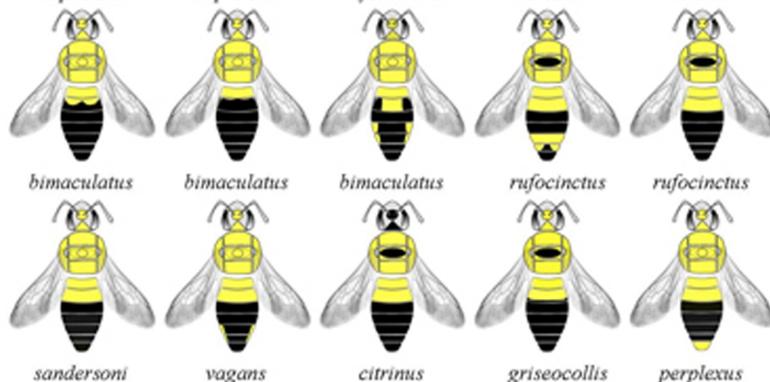
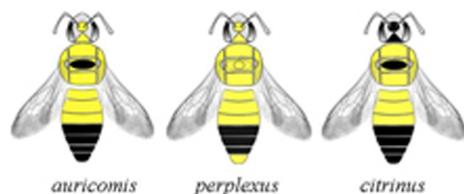
4a. T1 all yellow, T2 all black, other T's variable.....*impatiens, fernaldae, ashtoni*

4b. T1 all yellow, T2 at least partly yellow.....5



5a. T1 all yellow, T2 at least partly yellow, T3 black.....*bimaculatus, perplexus, rufocinctus* (black morphs), *sandersoni, vagans, citrinus, griseocollis*

5b. T1-T3 at least partly yellow*auricomis, perplexus, citrinus*



These guides and drawings are based on a variety of reference works, field observations, and collection of bumblebee specimens in New England. Some important identification characters are not depicted, including dimensions of the mandibular space, body size, and placement of the ocelli. Not all specimens will be identifiable with this guide, unless the accompanying keys are used. Leif Richardson, October, 2008. leif.richardson@state.vt.us.