Key to the Genus Megachile (females) of the Southern Lake Michigan Region
Laura Rericha/CRI & FPDCC 2020

1. Mandibles 5-dentate (Fig. 1).

2. Mandibles lacking beveled cutting edges (Fig. 2) ................................................ Megachile montivaga (in part)

2. Mandibles possessing beveled cutting edges (Fig. 1).

3. 4th mandibular tooth with lateral margins essentially parallel, the tooth shape long-ovate (Fig. 3).
   Regionally rare; 4th mandibular tooth extremely narrow, 1/3 or less as wide as beveled cutting edge between 3rd and 4th teeth; S7 apically thickened and extended past apex of T6 ................................................. Megachile fortes
   Common; 4th mandibular tooth wider, about 1/2 as wide as beveled cutting edge between 3rd and 4th teeth; S7 not apically thickened and extended past apex of T6 ................................................ Megachile latimanus

3. 4th mandibular tooth with lateral margins apically converging, the tooth shape triangular (Fig. 1)

4. T6 with appressed fulvous pubescence (Fig. 4) ............................................................... Megachile relativa

4. T6 with appressed black or fusaceous pubescence (Fig. 5).
   T6 with erect, black hairs distributed throughout segment (Fig. 6); less than 15 mm in size ......................
   .................................................................................................................................................. Megachile centuncularis
   T6 with erect black hairs on lateral portion of segment only; size 15 mm or more ........ Megachile inermis

1. Mandibles 4-dentate (Fig. 9 & 10) or obscurely 5-dentate (Fig. 2).

5. Mandibles each with a long cutting edge separating 3rd and 4th teeth (Fig. 7) ............................... Megachile rugifrons

5. Mandibles without a long cutting edge separating 3rd and 4th teeth.

6. Teeth absent of beveled cutting edges between them (Fig 2).

7. Abdominal scopa predominantly black-pubescent (S3-S6) (Fig. 8); size > 20 mm long .......... Megachile sculpturalis

7. Abdominal scopa pale-pubescent; size < 15 mm long.

8. Clypeal margin weakly crenulate (Fig. 2) .............................................................. Megachile montivaga (in part)

8. Clypeal margin strongly crenulate (Fig. 9).
   T5 pale-fasciate; median portion of clypeus shallowly emarginate, the emargination beset centrally with a small, rounded projection or bead-like process ................................................................. Megachile exilis
   T5 not fasciate; median portion of clypeus with a quadrangular emargination absent of a projection or bead-like process (Fig. 9) ................................................................. Megachile campanulæ

6. Teeth with at least one pair with a beveled cutting edge between them (Fig. 10).

9. Beveled cutting edge absent between the inner teeth (teeth 3 & 4).

10. Gena with pronounced ventral spine (Fig. 11) ................................................................. Megachile pugnata

10. Gena not spinose.

11. Clypeus beset with erect, black pubescence (Fig. 12) .................................................. Megachile frugalis

11. Clypeus beset with pale pubescence.
   Clypeus without a blunt median angle (Fig. 13); S5 black-pubescent on apical half of segment .......... Megachile pobicaris
   Clypeus with a blunt median angle (Fig. 14); S5 pale-pubescent throughout .......... Megachile inimica
9. Beveled cutting edge present between the inner teeth (teeth 3 & 4) (Fig. 21).

12. Sterna apically white-fasciate (with short hairs) beneath long, suberect scopal hairs (Fig. 15); T2 with two lateral, opaque, ovate foveae (Fig. 16) ......................................................... Megachile rotundata

12. Sterna not fasciate beneath the scopal pubescence; T2 without foveae.

13. Abdominal scopa prevailing black-pubescent; terga without white apical fasciae.

   4th tooth truncate (Fig. 17) ..................................................................................... Megachile gemula

   4th tooth rounded (Fig. 18) .................................................................................... Megachile mucida

13. Abdominal scopa prevailing pale-pubescent; terga with white apical fasciae.

   14. 4th tooth truncate ........................................................................................................ Megachile ingenua

   14. 4th tooth not truncate, instead rounded to acute.

   15. S6 with a distinct region (about ¾ length of segment) absent of scopal hairs (Fig. 19).............
       ......................................................................................................................... Megachile petulans

15. S6 scopal hairs evenly distributed (or if an area absent of pubescence exists, then area much less
    than ¾ length of the segment).

   16. T6 straight in profile (Fig. 20).

       Abdominal scopa prevailing fulvous (Fig. 20); 4th tooth angulate anteriorly and posteriorly
       along its margin (Fig. 21 & 22) ........................................................................ Megachile mendica

       Abdominal scopa prevailing white; 4th tooth not angulate both anteriorly and posteriorly
       (Fig. 23) ........................................................................................................ Megachile dakotensis

16. T6 concave or sinuate in profile, the apex slightly upturned (Fig. 24).

   17. 4th tooth rounded; emargination between 3rd and 4th teeth deep (Fig. 10) ......................
       ......................................................................................................................... Megachile addenda

   17. 4th tooth acute; emargination between 3rd and 4th teeth shallow (Fig. 27).

       Lateral margins of terga beset with much black pubescence (Fig. 25); scopal hairs on S6
       black ................................................................................................................ Megachile texana

       Lateral margins of terga prevailing pale-pubescent (Fig. 26); scopal hairs on S6
       prevailing pale, occasionally with some fuscous pubescence on the disc not restricted
       to the apical fringe ................................................................. Megachile brevis