

# Key to the Genus *Megachile* (females) of the Southern Lake Michigan Region

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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. 4<sup>th</sup> mandibular tooth with lateral margins essentially parallel, the tooth shape long-ovate (Fig. 3).  
Regionally rare; 4<sup>th</sup> mandibular tooth extremely narrow, 1/3 or less as wide as beveled cutting edge between 3<sup>rd</sup> and 4<sup>th</sup> teeth; S7 apically thickened and extended past apex of T6 ..... *Megachile fortis*  
Common; 4<sup>th</sup> mandibular tooth wider, about 1/2 as wide as beveled cutting edge between 3<sup>rd</sup> and 4<sup>th</sup> teeth; S7 not apically thickened and extended past apex of T6 ..... *Megachile latimanus*
    3. 4<sup>th</sup> 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 fuscous 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 3<sup>rd</sup> and 4<sup>th</sup> teeth (Fig. 7) ..... *Megachile rugifrons*
  5. Mandibles without a long cutting edge separating 3<sup>rd</sup> and 4<sup>th</sup> 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 campanulae*
    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 policaris*  
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 prevailingly black-pubescent; terga without white apical fasciae.
- 4<sup>th</sup> tooth truncate (Fig. 17) ..... *Megachile gemula*
- 4<sup>th</sup> tooth rounded (Fig. 18) ..... *Megachile mucida*
13. Abdominal scopa prevailingly pale-pubescent; terga with white apical fasciae.
14. 4<sup>th</sup> tooth truncate ..... *Megachile ingenua*
14. 4<sup>th</sup> 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 prevailingly fulvous (Fig. 20); 4<sup>th</sup> tooth angulate anteriorly and posteriorly along its margin (Fig. 21 & 22) ..... *Megachile mendica*
- Abdominal scopa prevailingly white; 4<sup>th</sup> 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. 4<sup>th</sup> tooth rounded; emargination between 3<sup>rd</sup> and 4<sup>th</sup> teeth deep (Fig. 10) ..... *Megachile addenda*
17. 4<sup>th</sup> tooth acute; emargination between 3<sup>rd</sup> and 4<sup>th</sup> 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 prevailingly pale-pubescent (Fig. 26); scopal hairs on S6 prevailingly pale, occasionally with some fuscous pubescence on the disc not restricted to the apical fringe ..... *Megachile brevis*

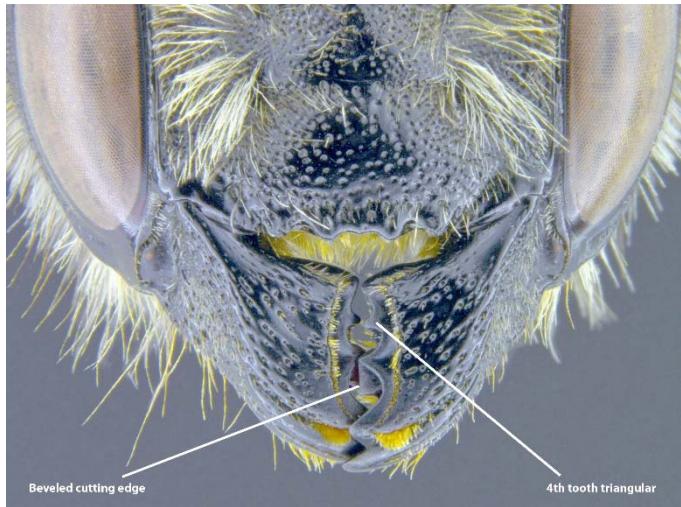


Fig. 1



Fig. 2

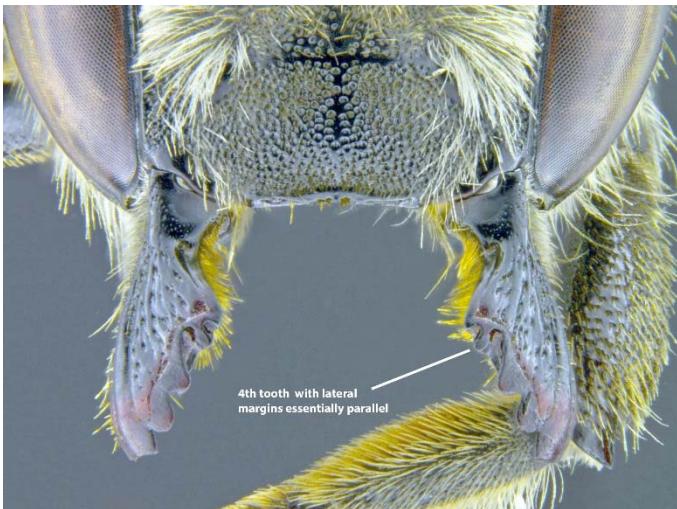


Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

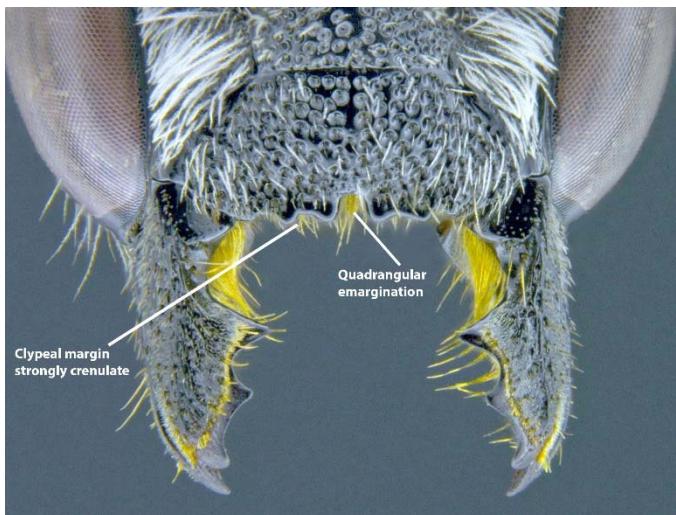


Fig. 9

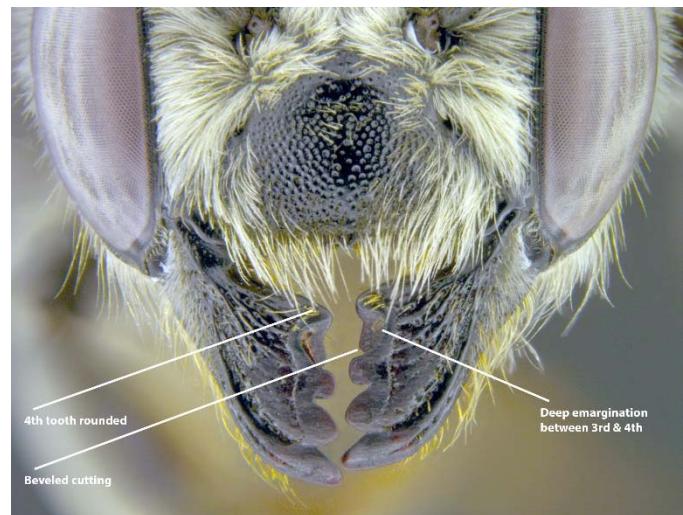


Fig. 10



Fig. 11



Fig. 12



Fig. 13

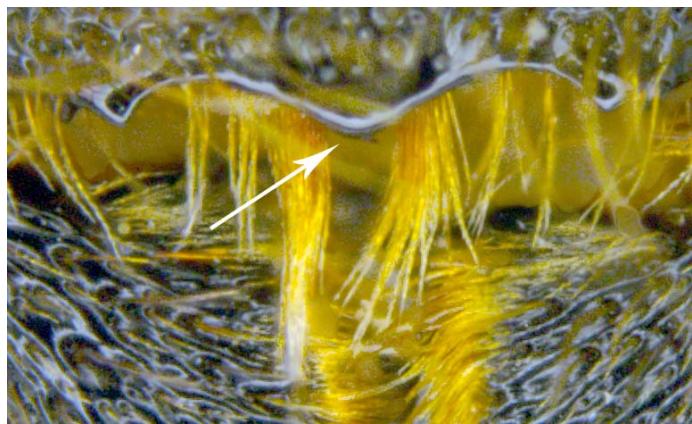


Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20

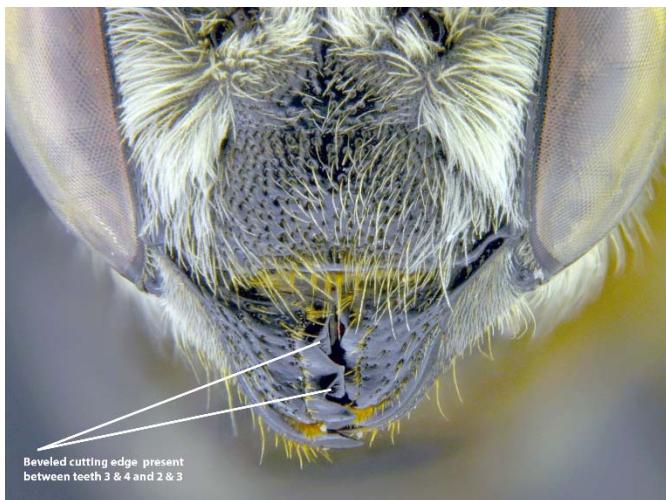


Fig. 21

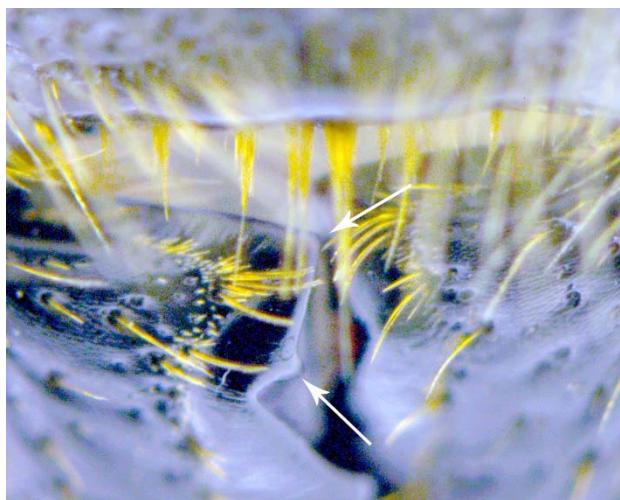


Fig. 22



Fig. 23



Fig. 24



Fig. 25



Fig. 26

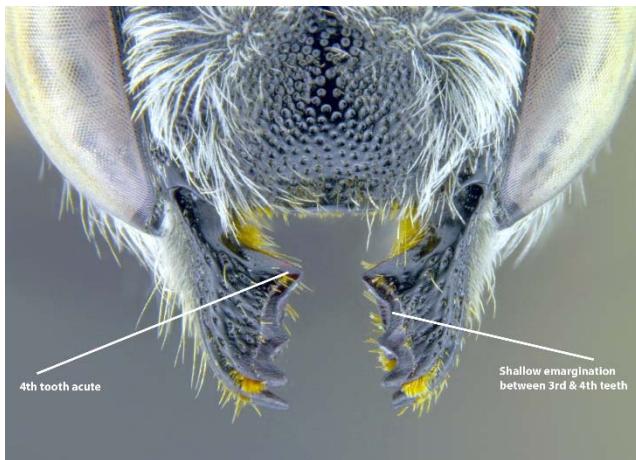


Fig. 27