

Key to the non-metallic *Lasioglossum* of the tallgrass prairie region and midwest US (sensu Gibbs et. al. 2013), incl. *L.(Evylaeus)*, in part *L. (Hemihalictus)* and in part *L. (Sphecodogastra)*, but excluding *Lasioglossum s.s.* sensu McGinley (see separate key for *Lasioglossum s.s.*)

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Females:

1. Hind femur scopal hairs reduced to a single row of simple, hamate hairs, progressively reduced in size towards apex of femur; Onagraceae specialists, crepuscular, nocturnal and matinal flight period2

Hind femur scopal hairs abundantly plumose, not reduced to a single row of simple, hamate hairs that are progressively reduced in size towards apex of femur; day-flying species.....5

2. Ocelli tremendously enlarged, much larger than diameter of antennal sockets, each almost touching the margin of the compound eye, distance between lateral ocellus and margin of compound eye much less than the diameter of lateral ocellus; abdomen largely orange to reddish-orange, usually with some darker splotches here and there; throughout TGP region in sandy areas.....*texanum* (Cresson)

[Note: a very similar species, *noctivaga* (Linsley and McSwain), occurs in the southern Great Plains east to western OK and western TX; the mandibles of that species are much longer than those of *texanum*, about as long as the compound eye; *texanum* mandibles are much shorter than the length of the compound eye.]

Ocelli much smaller, about the diameter of an antennal socket or slightly larger, never almost touching the margin of the compound eye, at least one ocellar diameter away from the margin of the compound eye; abdomen entirely dark.....3

3. Dorsal surface of propodeum entirely reticulate or reticulo-striate; propodeum with dorsal and posterior surfaces not confluent, but separated by a sharp edge or carina, at least in part; posterior surface of propodeum with lateral carinae strong and usually reaching posterior margin of dorsal surface, or nearly so; mandible as long as eye or nearly so, largely straight, not curved; pleura reticulate to rugose; distribution in TGP unclear, may not occur in TGP.....*oenotherae* (Stevens)

Dorsal surface of propodeum variable but never entirely reticulate, the posterior margin to some degree smooth, dorsal and posterior surfaces confluent, not separated by a sharp edge or carina; posterior surface of propodeum with lateral carinae reduced, not reaching posterior margin of dorsal surface; mandible shorter than length of eye, curved; pleura smoother, never reticulate or rugose.....4

4. Supraclypeal area polished, mostly without microsculpture, punctures sparse, many punctures separated by 3-4 times their diameter; wings clear; western margins of TGP, rare, becoming common in the Great plains proper.....*lusorium* (Cresson)

Supraclypeal area dulled by microsculpture, punctures dense, most punctures separated by twice their diameter or less; wings pale yellowish-brown; northern TGP only.....*aberrans* (Crawford)

[Note: *danforthi* and another possibly undescribed species occur at Four Canyon, Ellis Co. OK.]

5(1). Dorsal surface of propodeum entirely reticulate or reticulate-striate; posterior surface of propodeum with lateral carinae strong and usually reaching dorsal surface, or nearly so; pleura reticulate to weakly rugose.....6

(includes *cinctipes*, *nelumbonis*, *pectorale*, *truncatum*, *quebecense*, *comagenense*)

Dorsal surface of propodeum variable but never entirely reticulate, the posterior margin to some degree smooth; posterior surface of propodeum with lateral carinae reduced, not reaching dorsal surface; pleura never reticulate or rugose.....10

(includes *birkmanni*, *foxii*, *lustrans*, *macoupinense*, *pectinatum*, *fedorensis*, *sopinci*, *swenki*)

6(5). Propodeum (except for dorsal surface) covered with dense whitish tomentum, obscuring integument; scutum very densely punctate centrally, becoming roughened-reticulate laterally and anteriorly, where punctures are not discernible; T1-T2 with extremely faint, minute punctures, appearing smooth; wetland-associated species; throughout TGP in wetland areas.....***nelumbonis***

Propodeum without dense tomentum, integument readily visible; scutum variously punctate including lateral and anterior areas, without roughened-reticulate areas; T1-T2 variable.....7

7(6). Inner hind tibial spur serrate, with 3-5 small teeth; T1 punctures strong, close, many punctures separated by one puncture width or less; T2-T3 with apical margins weakly tessellate; dorsolateral angle of pronotum obtuse, not produced as a right angle; throughout TGP region***cinctipes***

Inner hind tibial spur strongly pectinate, with at least 2-4 long narrow teeth present on middle portion of spur; T1 punctures smaller, fainter, more scattered; T2-T3 apical margins usually shiny, without much tessellation; dorsolateral angle of pronotum a right angle or nearly so.....8

8(7). Anterior face of T1 centrally minutely tessellate or lineolate, giving the appearance of a “fingerprint”; smaller bee, 7mm or less in length; throughout TGP***pectorale***

Anterior face of T1 smooth and shiny, without tessellation, and no trace of a “fingerprint”, though tiny punctures may be scattered on surface; bee usually larger, 8 mm or more in length.....9

9(8). Head slightly wider than long; T1 shiny without any tessellation or microsculpture, T1 punctures somewhat faint, scattered; T2 with well-defined smooth apical area, medially about equal to length of preapical area; T2 with strong complete basal fasciae; T2-T3 without any apical fringes; widespread through TGP region

..... **truncatum** (Robertson)

Head slightly longer than wide; T1 dulled by weak (often very weak) microsculpture, punctures very obscure; T2 without a defined apical area; T2 with weak incomplete basal fasciae; T2-T3 with distinct apical fringes especially laterally; in northern TGP region only..... **quebecense** (Crawford)

[Note: *comagenense* (Knerer and Atwood), not otherwise treated in this key, is very similar to *quebecense* but T1 is shiny in *comagenense*, dull in *quebecense*; the two are largely sympatric and of sparse occurrence on northern prairies. The recently-described *L. seillean* Gibbs and Packer is essentially identical to *quebecense*, but occurs in the far north of eastern Canada.]

10(5). Pronotum with dorsoventral ridge present, ridge extending down from dorsolateral angle at least to the oblique sulcus, or all the way to the anterior margin of pronotum11

(includes *pectinatum*, *fedorense*, *swenki* and *sopinci*)

Pronotum without a dorsoventral ridge, dorsolateral angle present but not extending downward as a ridge, instead the area below dorsolateral angle is smooth and rounded14

11(10). Hypostomal area distinctly flattened, shiny, without sculpture, and separated from genae by an angle; hind tibial spur simple (with 15-20 very tiny teeth hardly visible); anterior face of T1 with erect and suberect hairs, but without appressed tomentum; tergal margins dark, concolorous with rest of terga; central TGP...**pectinatum**

Hypostomal area minutely striate and confluent with genae, not set off from genae by an angle; hind tibial spur pectinate; anterior face of T1 often with patches of appressed tomentum laterally, as well as erect and suberect hairs; tergal margins often light-colored to translucent, much lighter in color than rest of terga; terga occasionally orangeish to reddish, all or in part.....12

12(11). Dorsal surface of propodeum largely reticulo-rugose; mesonotum polished, shiny; dorsolateral angle of pronotum produced as a prominent right-angle; southeastern US, one midwestern (IL) record.....**sopinci** (Crawford)

Dorsal surface of propodeum posteriorly smooth, with macrosculpture only at base of propodeal surface, not throughout; mesonotum dull; dorsolateral ridge of pronotum variable; distribution variable; sand obligate species.....13

13(12). Hypoepimeral area finely, densely punctate; dorsoventral ridge of pronotum incomplete, terminating at the oblique sulcus; ocelli slightly larger than *fedorense* (below); northern and central TGP, in sandy areas.....**swenki** (Crawford)

Hypoepimeral area impunctate; dorsoventral ridge of pronotum complete, reaching anterior margin of pronotum, beyond the oblique sulcus; ocelli slightly smaller than *swenki*; throughout TGP, in sandy areas.....**fedorense** (Crawford)

14 (10). Two submarginal cells usually present, rarely three; inner hind tibial spur minutely serrate, almost appearing simple; anterior face of T1 with appressed or subappressed hair patch on either side of midline; punctures on scutum centrally weak and well-separated; Asteraceae specialist; throughout most of TGP except upper northern part.....**L. (*Hemihalictus*) *lustrans***

Three submarginal cells usually present; inner hind tibial spur pectinate; anterior face of T1 with scattered erect hairs only, without any appressed or subappressed hairs; punctures on scutum close, 1-2 puncture widths apart or closer; polylectic.....15.

15 (14). Mesopleura including hypoepimeral area dull and impunctate; head slightly longer than broad, resembling *macoupinense*, see below; dorso-lateral area of propodeum smooth, without microstriations; central and northern TGP.....***foxii***

Mesopleura and hypoepimeral area shiny and minutely punctate, punctures especially evident on hypoepimeral area; dorso-lateral area of propodeum with fine, close, parallel microstriations.....16

16(15). Head slightly broader than long, clypeus projecting about one-third below suborbital line; throughout most of TGP except upper northern portion

.....***birkmanni*** (Crawford) (formerly *macoupinense*)

Head slightly longer than broad, clypeus extending about two-thirds below suborbital line; all of northern and central TGP

.....***macoupinense*** (Robertson) (formerly *divergens*)