

JMF088

...<sup>1</sup> and Jarrod Fowler<sup>2</sup><sup>1</sup> Animalia. Arthropoda. Insecta. Hymenoptera. Apocrita. Apoidea. Anthophila.<sup>2</sup> <http://jarrodowler.com>Email: [j@jarrodowler.com](mailto:j@jarrodowler.com)*Genus species* Authority [Family]; Pan

1. *Agapostemon sericeus* (Forster, 1771) [Halictidae]; 100% L
2. *Agapostemon texanus* Cresson, 1872 [Halictidae]; 92% L
3. *Agapostemon virescens* (Fabricius, 1775) [Halictidae]; 83% L
4. *Andrena spiraeana* Robertson, 1895 [Andrenidae]; 75% L
5. *Anthidium oblongatum* Illiger, 1806 [Megachilidae]; 67% L
6. *Augochora pura* (Say, 1835) [Halictidae]; 58% L
7. *Augochlorella aurata* (Smith, 1853) [Halictidae]; 50% L
8. *Bombus bimaculatus* Cresson, 1863 [Apidae]; 42% L
9. *Bombus impatiens* Cresson, 1863 [Apidae]; 33% L
10. *Bombus perplexus* Cresson, 1863 [Apidae]; 25% L
11. *Bombus vagans* Smith, 1854 [Apidae]; 17% L
12. *Ceratina calcarata* Robertson, 1900 [Apidae]; 8% L
13. *Hylaeus modestus* Say, 1837 [Colletidae]; 0%
14. *Halictus ligatus* Say, 1837 [Halictidae]; 8% R
15. *Halictus confusus* Smith, 1853 [Halictidae]; 17% R
16. *Halictus rubicundus* (Christ, 1791) [Halictidae]; 25% R
17. *Lasioglossum cressonii* (Robertson, 1890) [Halictidae]; 33% R
18. *Lasioglossum leucomum* (Lovell, 1908) [Halictidae]; 42% R
19. *Lasioglossum leucozonium* (Schrank, 1781) [Halictidae]; 50% R
20. *Lasioglossum pectorale* (Smith, 1853) [Halictidae]; 58% R
21. *Lasioglossum tegulare* (Robertson, 1890) [Halictidae]; 67% R
22. *Megachile brevis* Say, 1837 [Megachilidae]; 75% R
23. *Megachile frigida* Smith, 1853 [Megachilidae]; 83% R
24. *Megachile frugalis* Cresson, 1872 [Megachilidae]; 92% R
25. *Megachile mendica* Cresson, 1878 [Megachilidae]; 100% R

Keywords: Exology, Melittology, Non-Musicology, Pollination Ecology

*Materials and methods*

During February 2014, ‘JMF088’ was recorded with 25 species of bees, which were collected via aerial netting from the Atlantic coastal pine-barrens of eastern Massachusetts, USA in June–August 2013.

Digital audio recordings (WAV; 88.2 kHz/24 bit) were made with a RØDE NT1000 studio condenser microphone (RØDE Microphones LLC, Santa Barbara, CA), a Behringer Eurorack UB802 mixer, a UCA202 U-Control USB audio interface (Music Group IP Ltd., 47877 Willich, Germany), an iMic USB audio interface (Griffin Technology, Nashville TN), a pair of Grado SR80i headphones (Grado Labs, Brooklyn, NY), Audacity 2.0.5 free digital audio editor (BIAS Inc., Petaluma, CA), and an Apple MacBook Pro laptop computer (Apple Computer, Inc.).

All recordings were made at a constant volume level ( $\pm 0$ dB) and were methodically edited with ‘Noise Removal’ to eliminate both ambient and human sounds.

For each species, recordings were made of sounds resulting from non-orthogonally, non-repetitively, and sequentially scraping and striking the abdomens, antennae, heads, legs, and thoraxes of two identical specimens.

To produce each species track, a five-minute track of silence (deadpot) was generated. Next, genus-specific recordings were non-repetitively and sequentially copied and pasted into a monitored deadpot when non-recurrent noises above a 3dB threshold haphazardly occurred around the home recording studio environment.

To yield ‘JMF088’, all 25 species tracks were multi-tracked. Within the stereo-field, species tracks were alphabetically organized from left to right and spatially organized at consecutive 8.33% intervals from pan 0%.

[jarrodowler.com/JMF088.wav](http://jarrodowler.com/JMF088.wav) = 105.8 MB; 88.2 kHz/16 bit. Total Running Time = 5:00.

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