

# Kimberly Olson

## Oregon Bee Atlas Collection and Identification Report

### 1 All Your Collections

Kimberly Olson caught 151 bees across 2 counties from August 09, 2024 to August 10, 2024, representing 26 unique taxa, including 24 unique species.

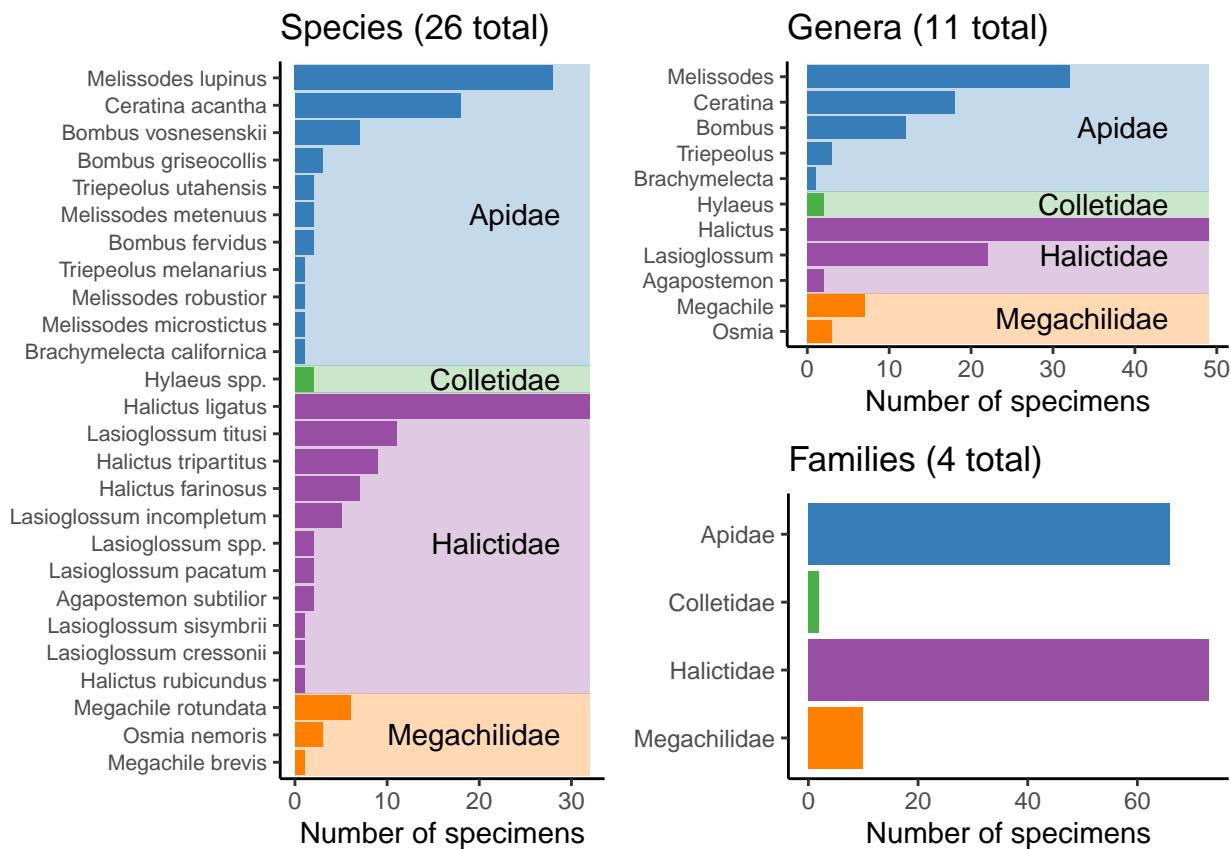


Figure 1: Bees caught by Kimberly Olson, broken down by species, genus, and family.

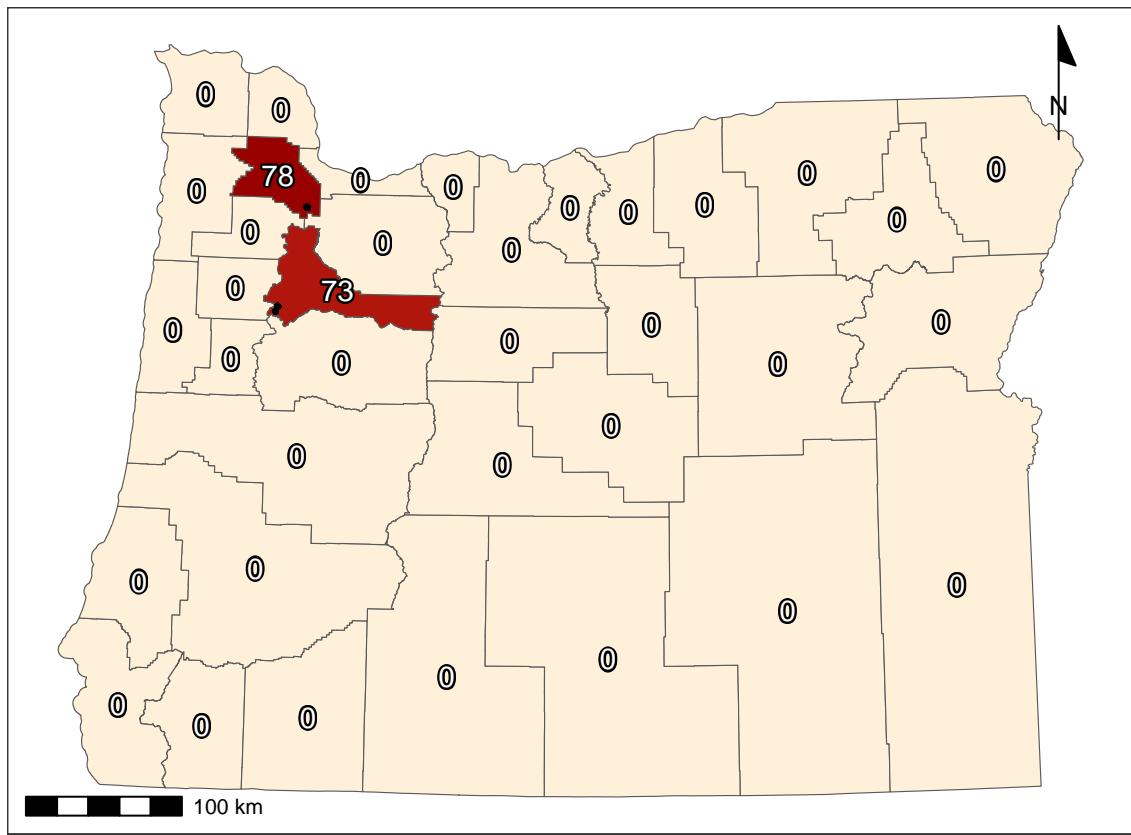


Figure 2: Bee catch locations for Kimberly Olson (within Oregon), along with total catches per county.

## 2 Total Catches

Volunteers from the Oregon Bee Atlas project caught 22478 bees across 36 counties from January 24, 2023 to December 13, 2023, representing 90 unique species and 48 unique genera. The **Nimble Net Kudos** (most specimens collected) goes to Scott Sublette, Dan O'Loughlin, and Michael O'Loughlin, who caught a total of 2274, 1283, and 1255 specimens. The *positive* kind of **Darwin Award** (most species collected) goes to Scott Sublette, Ellen Silva, and Michael O'Loughlin, who caught a total of 77, 74, and 72 unique species. Well done!



Figure 3: Bees caught by all volunteers, broken down by species, genus, and family.

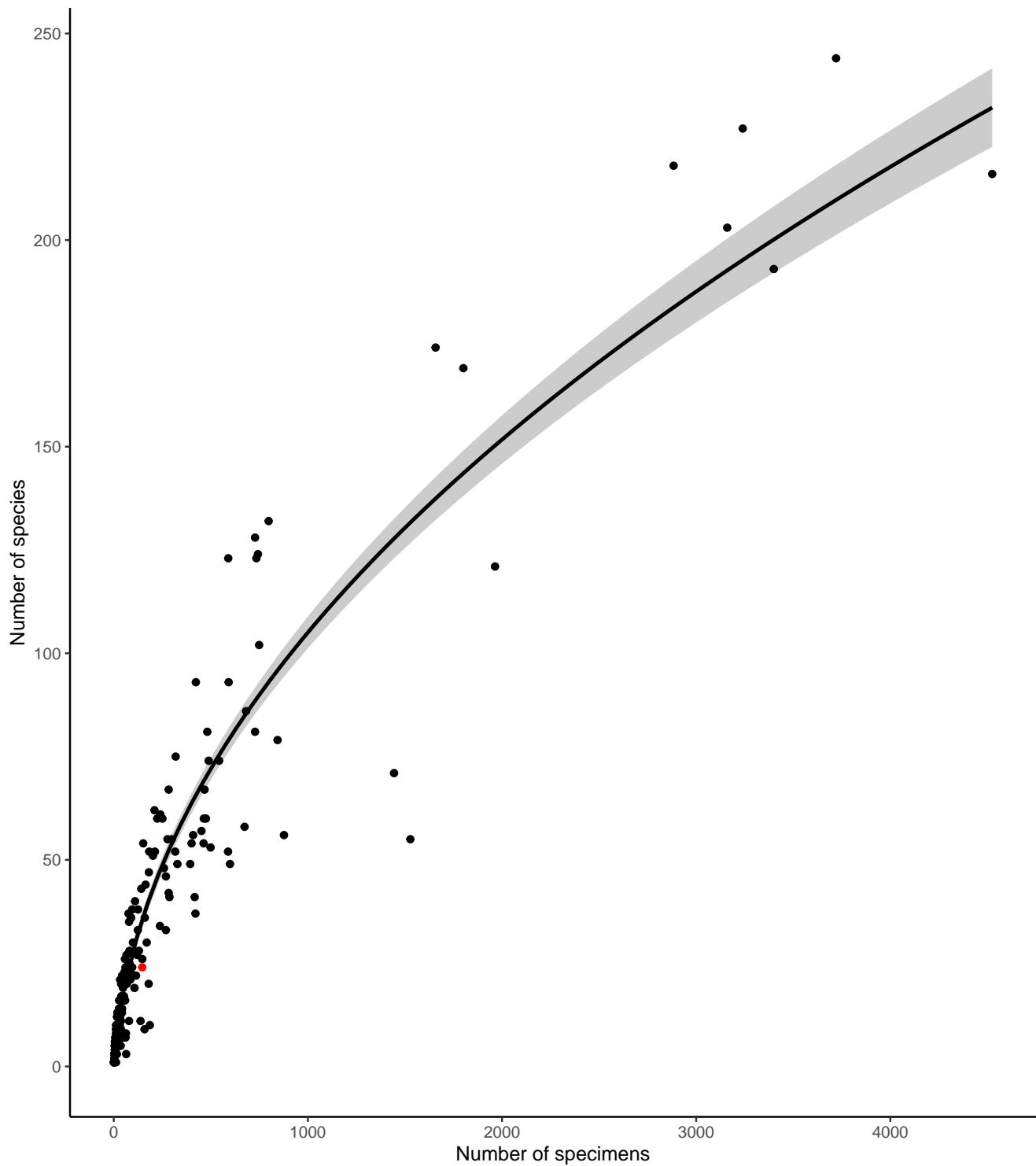


Figure 4: Number of bee specimens and unique bee species caught by all volunteers, with your effort shown in red. This graph should give you an idea of how many specimens you would need to catch to begin seeing rarer bee species.



Figure 5: Total specimens caught per county, along with catch location of each specimen (black dots). For genus- and species-specific information for each county, see Tables 3 and 4.



Figure 6: Total catches per (Level III) ecoregion, along with catch location of each specimen (black dots).

### 3 Flight Phenology

West of (and including) the Cascade Mountains, most bees (90%) were caught between April 13 and September 02, but the peak of season (50% of specimens) was from May 21 to July 26.



Figure 7: Phenology plot for all bee species caught in or West of the Cascade Mountains, sorted by median abundance times. Percentiles of overall emergence times (50th & 90th) are shown in grey shaded regions. Date ranges for each species (minimum, first, second, third quartiles, and maximum) are shown only for species with  $>10$  specimens.

**East of** the Cascade Mountains, most bees (90%) were caught between April 28 and September 16, but the peak of season (50% of specimens) was from June 02 to August 07.

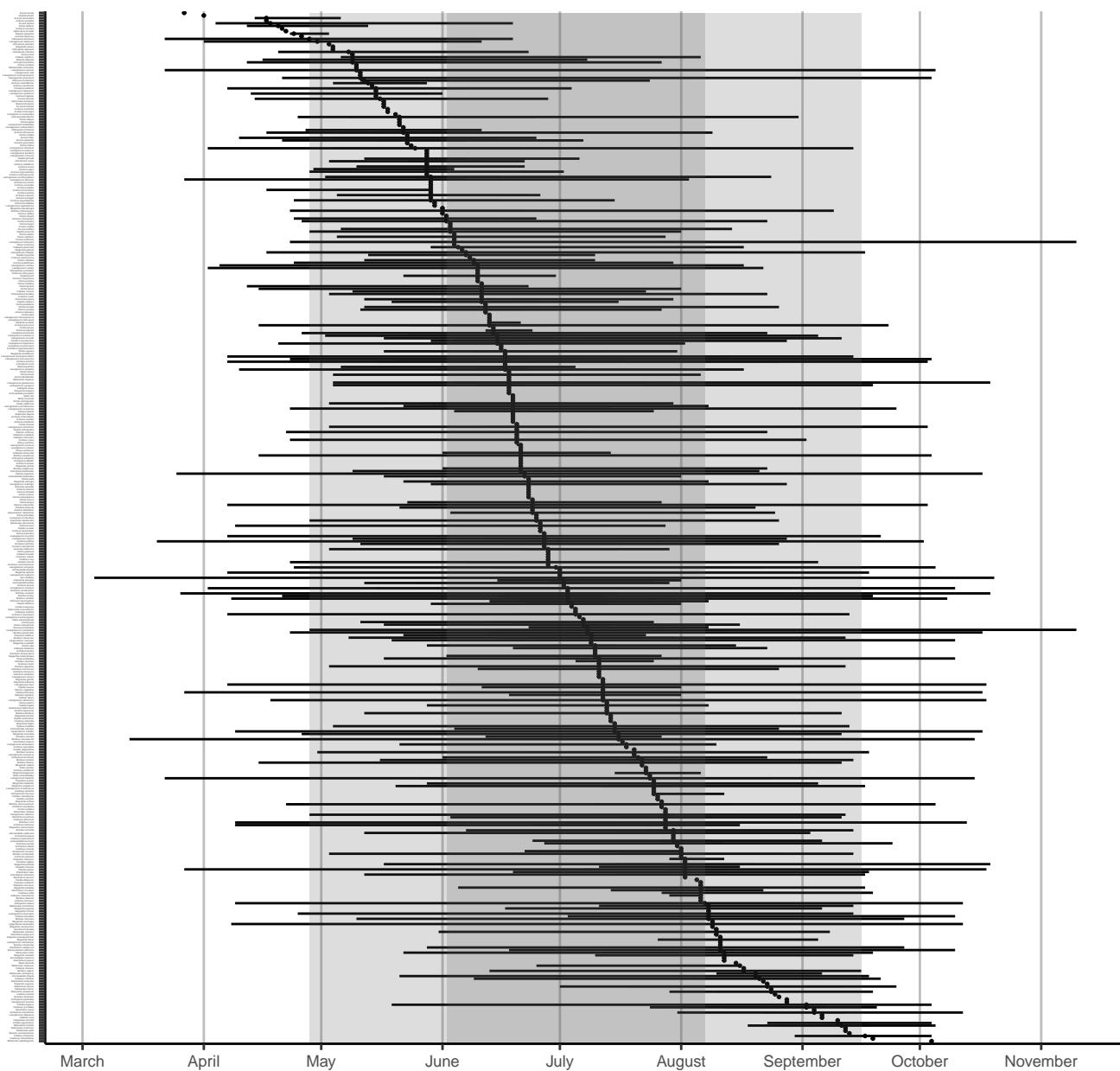


Figure 8: Phenology plot for all bee species caught east of the Cascade Mountains, sorted by median abundance times. Percentiles of overall emergence times (50th & 90th) are shown in grey shaded regions. Date ranges for each species (minimum, first, second, third quartiles, and maximum) are shown only for species with >10 specimens.

## 4 Plant genera

Volunteers collected specimens from a total of 636 unique flower genera, with most volunteers sampling from 19 flower genera (median value). The **Flower Power Kudos** (most sampled flower genera) goes to Michael O'Loughlin, Lori Humphreys, and Dan O'Loughlin, who collected bees from a total of 246, 210, and 188 genera of flowers. Well done!

The flower genera that had the most specimens caught on them were *Ericameria*, *Phacelia*, and *Penstemon*, which yielded a total of 6308, 4129, and 3411 specimens. The flower genera that were popular with the most species of bees were *Phacelia*, *Penstemon*, and *Ericameria*, hosting a total of 179, 167, and 140 unique bee species. See Tables 1 and 2 for more details.



Figure 9: Recorded number of flower genera per county.

Table 1: Number of bee specimens collected from each plant genus. Plants with few records are great targets for future sampling.

| Genus                 | Count | Genus                | Count | Genus                 | Count | Genus                 | Count | Genus                 | Count | Genus                   | Count | Genus                  | Count | Genus              | Count |
|-----------------------|-------|----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-------------------------|-------|------------------------|-------|--------------------|-------|
| <i>Ericameria</i>     | 6308  | <i>Chaenactis</i>    | 274   | <i>Rupertia</i>       | 65    | <i>Anchusa</i>        | 26    | <i>Alyssum</i>        | 10    | <i>Apium</i>            | 5     | <i>Actaea</i>          | 2     |                    |       |
| <i>Phacelia</i>       | 4129  | <i>Acer</i>          | 271   | <i>Adelphia</i>       | 64    | <i>Dichelostemma</i>  | 26    | <i>Cercis</i>         | 10    | <i>Cistus</i>           | 5     | <i>Allophylum</i>      | 2     |                    |       |
| <i>Penstemon</i>      | 3411  | <i>Sphaeralcea</i>   | 271   | <i>Ageratina</i>      | 64    | <i>Caryopteris</i>    | 25    | <i>Doronicum</i>      | 10    | <i>Corylus</i>          | 5     | <i>Bauhinia</i>        | 2     |                    |       |
| <i>Grindelia</i>      | 2796  | <i>Heracleum</i>     | 270   | <i>Calyptidium</i>    | 64    | <i>Navarretia</i>     | 25    | <i>Echinops</i>       | 10    | <i>Anthriscus</i>       | 4     | <i>Betonica</i>        | 2     |                    |       |
| <i>Rubus</i>          | 2658  | <i>Gaillardia</i>    | 263   | <i>Glebionis</i>      | 62    | <i>Pedicularis</i>    | 25    | <i>Heliospis</i>      | 10    | <i>Aruncus</i>          | 4     | <i>Bromus</i>          | 2     |                    |       |
| <i>Ceanothus</i>      | 2352  | <i>Crataegus</i>     | 261   | <i>Crocidium</i>      | 62    | <i>Petrosedum</i>     | 25    | <i>Hemerocheilis</i>  | 10    | <i>Asperugo</i>         | 4     | <i>Cardionema</i>      | 2     |                    |       |
| <i>Cirsium</i>        | 2349  | <i>Acniphyson</i>    | 258   | <i>Agoseris</i>       | 60    | <i>Pieris</i>         | 25    | <i>Kickxia</i>        | 10    | <i>Beta</i>             | 4     | <i>Castanea</i>        | 2     |                    |       |
| <i>Salix</i>          | 2169  | <i>Gilia</i>         | 247   | <i>Cotinus</i>        | 60    | <i>Erysimum</i>       | 24    | <i>Layia</i>          | 10    | <i>Crassula</i>         | 4     | <i>Celosia</i>         | 2     |                    |       |
| <i>Solidago</i>       | 1914  | <i>Malus</i>         | 243   | <i>Hirschfeldia</i>   | 59    | <i>Lewisia</i>        | 24    | <i>Liatris</i>        | 10    | <i>Damasonium</i>       | 4     | <i>Comandra</i>        | 2     |                    |       |
| <i>Potentilla</i>     | 1842  | <i>Marrubium</i>     | 234   | <i>Iliamna</i>        | 59    | <i>Lobularia</i>      | 24    | <i>Altiella</i>       | 9     | <i>Datura</i>           | 4     | <i>Cormus</i>          | 2     |                    |       |
| <i>Prunus</i>         | 1726  | <i>Vaccinium</i>     | 225   | <i>Persicaria</i>     | 59    | <i>Rhaponticum</i>    | 24    | <i>Choisia</i>        | 9     | <i>Elymus</i>           | 4     | <i>Crocus</i>          | 2     |                    |       |
| <i>Chrysanthemum</i>  | 1684  | <i>Veronica</i>      | 213   | <i>Arbutus</i>        | 57    | <i>Sambucus</i>       | 24    | <i>Diplacus</i>       | 9     | <i>Gypsophila</i>       | 4     | <i>Cydonia</i>         | 2     |                    |       |
| <i>Eriogonum</i>      | 1588  | <i>Philadelphus</i>  | 204   | <i>Foeniculum</i>     | 57    | <i>Stewartia</i>      | 24    | <i>Draba</i>          | 9     | <i>Helleborus</i>       | 4     | <i>Danthonia</i>       | 2     |                    |       |
| <i>Helianthus</i>     | 1563  | <i>Astragalus</i>    | 202   | <i>Blepharipappus</i> | 56    | <i>Cardamine</i>      | 23    | <i>Fraxinus</i>       | 9     | <i>Holcus</i>           | 4     | <i>Daphne</i>          | 2     |                    |       |
| <i>Lupinus</i>        | 1506  | <i>Raphanus</i>      | 199   | <i>Dales</i>          | 55    | <i>Chamaebatatica</i> | 23    | <i>Lagophylla</i>     | 9     | <i>Impatiens</i>        | 4     | <i>Dianthus</i>        | 2     |                    |       |
| <i>Ribes</i>          | 1419  | <i>Amansinica</i>    | 197   | <i>Eryngium</i>       | 55    | <i>Phlox</i>          | 23    | <i>Maianthemum</i>    | 9     | <i>Kopsiopsis</i>       | 4     | <i>Dipterostemon</i>   | 2     |                    |       |
| <i>Sympyotrichum</i>  | 1418  | <i>Convolvulus</i>   | 194   | <i>Lithospermum</i>   | 55    | <i>Robinia</i>        | 23    | <i>Melissa</i>        | 9     | <i>Mutarda</i>          | 4     | <i>Echinocystis</i>    | 2     |                    |       |
| <i>Hypochaeris</i>    | 1393  | <i>Hydrophyllum</i>  | 180   | <i>Mertensia</i>      | 55    | <i>Smithiastrum</i>   | 23    | <i>Mimulus</i>        | 9     | <i>Paonia</i>           | 4     | <i>Eucephalus</i>      | 2     |                    |       |
| <i>Arctostaphylos</i> | 1332  | <i>Polemonium</i>    | 179   | <i>Sorbus</i>         | 54    | <i>Aralia</i>         | 22    | <i>Papaver</i>        | 9     | <i>Pastinaca</i>        | 4     | <i>Festuca</i>         | 2     |                    |       |
| <i>Lomatium</i>       | 1308  | <i>Taraxia</i>       | 179   | <i>Lamium</i>         | 53    | <i>Erythronium</i>    | 22    | <i>Vernonia</i>       | 9     | <i>Prosartes</i>        | 4     | <i>Achlys</i>          | 1     |                    |       |
| <i>Taraxacum</i>      | 1286  | <i>Coreopsis</i>     | 178   | <i>Styrax</i>         | 53    | <i>Leptosiphon</i>    | 22    | <i>Vitez</i>          | 9     | <i>Pseudognaphalium</i> | 4     | <i>Actinidia</i>       | 1     |                    |       |
| <i>Melilotus</i>      | 1237  | <i>Iris</i>          | 178   | <i>Antennaria</i>     | 52    | <i>Pseudotsuga</i>    | 22    | <i>Aesculus</i>       | 8     | <i>Romanzoffia</i>      | 4     | <i>Allotropa</i>       | 1     |                    |       |
| <i>Calochortus</i>    | 1224  | <i>Amelanchier</i>   | 177   | <i>Cynoglossum</i>    | 52    | <i>Quercus</i>        | 22    | <i>Aronia</i>         | 8     | <i>Scabiosa</i>         | 4     | <i>Alnus</i>           | 1     |                    |       |
| <i>Eriophyllum</i>    | 1198  | <i>Armenia</i>       | 166   | <i>Cytisus</i>        | 52    | <i>Artemisia</i>      | 21    | <i>Baptisia</i>       | 8     | <i>Swainsona</i>        | 4     | <i>Alstroemeria</i>    | 1     |                    |       |
| <i>Erigeron</i>       | 1173  | <i>Angelica</i>      | 158   | <i>Geum</i>           | 52    | <i>Comium</i>         | 21    | <i>Calandrinia</i>    | 8     | <i>Tephrosaris</i>      | 4     | <i>Amaranthus</i>      | 1     |                    |       |
| <i>Lotus</i>          | 1147  | <i>Delphinium</i>    | 158   | <i>Ilex</i>           | 52    | <i>Eurybia</i>        | 21    | <i>Canadanthus</i>    | 8     | <i>Tiarella</i>         | 4     | <i>Anemone</i>         | 1     |                    |       |
| <i>Centauraea</i>     | 1106  | <i>Medicago</i>      | 158   | <i>Aurinia</i>        | 51    | <i>Heuchera</i>       | 21    | <i>Cordylanthus</i>   | 8     | <i>Tradescantia</i>     | 4     | <i>Anethum</i>         | 1     |                    |       |
| <i>Trifolium</i>      | 1070  | <i>Castilleja</i>    | 154   | <i>Boynkinia</i>      | 51    | <i>Micranthes</i>     | 21    | <i>Eruca</i>          | 8     | <i>Triantha</i>         | 4     | <i>Arctium</i>         | 1     |                    |       |
| <i>Leucanthemum</i>   | 989   | <i>Calendula</i>     | 142   | <i>Caragana</i>       | 51    | <i>Sisyrinchium</i>   | 21    | <i>Eupatorium</i>     | 8     | <i>Tribulus</i>         | 4     | <i>Argemone</i>        | 1     |                    |       |
| <i>Vicia</i>          | 988   | <i>Nemophila</i>     | 142   | <i>Viburnum</i>       | 51    | <i>Cicuta</i>         | 20    | <i>Ficaria</i>        | 8     | <i>Tropaeolum</i>       | 4     | <i>Atriplex</i>        | 1     |                    |       |
| <i>Chamaenerion</i>   | 983   | <i>Tanacetum</i>     | 139   | <i>Linum</i>          | 50    | <i>Pinus</i>          | 20    | <i>Lithodora</i>      | 8     | <i>Zeltnera</i>         | 4     | <i>Begonia</i>         | 1     |                    |       |
| <i>Balsamorhiza</i>   | 914   | <i>Marrubium</i>     | 138   | <i>Scandix</i>        | 50    | <i>Populus</i>        | 20    | <i>Nasturtium</i>     | 8     | <i>Agopodium</i>        | 3     | <i>Betula</i>          | 1     |                    |       |
| <i>Lepidium</i>       | 862   | <i>Cornus</i>        | 135   | <i>Nothochelone</i>   | 49    | <i>Bellardia</i>      | 19    | <i>Phyllodoce</i>     | 8     | <i>Armeria</i>          | 3     | <i>Cacaliopsis</i>     | 1     |                    |       |
| <i>Achillea</i>       | 828   | <i>Limnanthes</i>    | 133   | <i>Brodiaea</i>       | 48    | <i>Clematis</i>       | 19    | <i>Poa</i>            | 8     | <i>Asparagus</i>        | 3     | <i>Calibrachoa</i>     | 1     |                    |       |
| <i>Apocynum</i>       | 804   | <i>Verbera</i>       | 129   | <i>Cotoneaster</i>    | 48    | <i>Hymenoxys</i>      | 19    | <i>Spergula</i>       | 8     | <i>Astrantia</i>        | 3     | <i>Carex</i>           | 1     |                    |       |
| <i>Mentha</i>         | 786   | <i>Cardus</i>        | 123   | <i>Tragopogon</i>     | 48    | <i>Ladeania</i>       | 19    | <i>Stanleya</i>       | 8     | <i>Aucuba</i>           | 3     | <i>Catalpa</i>         | 1     |                    |       |
| <i>Sidalcea</i>       | 767   | <i>Mentzelia</i>     | 122   | <i>Tetradymia</i>     | 47    | <i>Abelia</i>         | 18    | <i>Tagetes</i>        | 8     | <i>Brunnera</i>         | 3     | <i>Cerithie</i>        | 1     |                    |       |
| <i>Ranunculus</i>     | 765   | <i>Triteleia</i>     | 118   | <i>Teucrium</i>       | 47    | <i>Altisma</i>        | 18    | <i>Xerophyllum</i>    | 8     | <i>Buzus</i>            | 3     | <i>Chaenomeles</i>     | 1     |                    |       |
| <i>Eschscholzia</i>   | 764   | <i>Dasisphora</i>    | 114   | <i>Echinacea</i>      | 46    | <i>Amorpha</i>        | 18    | <i>Jagua</i>          | 7     | <i>Calocedrus</i>       | 3     | <i>Chamaemelum</i>     | 1     |                    |       |
| <i>Holodiscus</i>     | 693   | <i>Dipsacus</i>      | 112   | <i>Kolkwitzia</i>     | 44    | <i>Ligustrum</i>      | 19    | <i>Pea</i>            | 8     | <i>Asparagus</i>        | 3     | <i>Calibrachoa</i>     | 1     |                    |       |
| <i>Allium</i>         | 667   | <i>Hoasackia</i>     | 111   | <i>Orthocarpus</i>    | 44    | <i>Physaria</i>       | 18    | <i>Circuta</i>        | 20    | <i>Astrantia</i>        | 3     | <i>Corydalis</i>       | 1     |                    |       |
| <i>Bellis</i>         | 662   | <i>Lonicera</i>      | 110   | <i>Stellaria</i>      | 44    | <i>Cymopterus</i>     | 18    | <i>Croton</i>         | 7     | <i>Crocosmia</i>        | 3     | <i>Glechoma</i>        | 1     |                    |       |
| <i>Plagiobothrys</i>  | 656   | <i>Fraseria</i>      | 109   | <i>Chrysolepis</i>    | 43    | <i>Bassia</i>         | 17    | <i>Centranthus</i>    | 3     | <i>Cucumis</i>          | 3     | <i>Gnaphalium</i>      | 1     |                    |       |
| <i>Camassia</i>       | 648   | <i>Euthamia</i>      | 108   | <i>Petroselinum</i>   | 42    | <i>Olsynium</i>       | 17    | <i>Delosperma</i>     | 7     | <i>Cypripedium</i>      | 1     | <i>Eremothera</i>      | 1     |                    |       |
| <i>Spiraea</i>        | 640   | <i>Bistorta</i>      | 105   | <i>Aster</i>          | 41    | <i>Umbellaria</i>     | 14    | <i>Eucryphia</i>      | 7     | <i>Chrysopsis</i>       | 3     | <i>Filipendula</i>     | 1     |                    |       |
| <i>Geranium</i>       | 607   | <i>Dieteria</i>      | 105   | <i>Gayophyllum</i>    | 41    | <i>Vancouveria</i>    | 17    | <i>Glandora</i>       | 7     | <i>Circaea</i>          | 3     | <i>Porsythia</i>       | 1     |                    |       |
| <i>Symporicarpas</i>  | 607   | <i>Malva</i>         | 105   | <i>Ligusticum</i>     | 41    | <i>Hydrangea</i>      | 16    | <i>Gleditsia</i>      | 7     | <i>Clinopodium</i>      | 3     | <i>Fremontodendron</i> | 1     |                    |       |
| <i>Berberis</i>       | 592   | <i>Anthemis</i>      | 104   | <i>Primula</i>        | 41    | <i>Kellokia</i>       | 16    | <i>Clintonia</i>      | 7     | <i>Conioselinum</i>     | 3     | <i>Fuchsia</i>         | 1     |                    |       |
| <i>Rosa</i>           | 575   | <i>Bidens</i>        | 104   | <i>Verbascum</i>      | 41    | <i>Lilium</i>         | 16    | <i>Heliotropium</i>   | 7     | <i>Crocosmia</i>        | 3     | <i>Glechoma</i>        | 1     |                    |       |
| <i>Jacobaea</i>       | 555   | <i>Thymus</i>        | 103   | <i>Columbiadoria</i>  | 40    | <i>Zinnia</i>         | 16    | <i>Hysopus</i>        | 7     | <i>Centranthus</i>      | 3     | <i>Magnolia</i>        | 1     |                    |       |
| <i>Senecio</i>        | 533   | <i>Mahonia</i>       | 101   | <i>Hieracium</i>      | 40    | <i>Kniphofia</i>      | 7     | <i>Isatis</i>         | 7     | <i>Microseris</i>       | 3     | <i>Onobrychis</i>      | 1     |                    |       |
| <i>Salvia</i>         | 520   | <i>Chondrilla</i>    | 99    | <i>Erica</i>          | 36    | <i>Townsendia</i>     | 7     | <i>Dahlia</i>         | 3     | <i>Littoralia</i>       | 3     | <i>Moenchia</i>        | 1     |                    |       |
| <i>Rhus</i>           | 493   | <i>Oenothera</i>     | 97    | <i>Pyracantha</i>     | 40    | <i>Umbellaria</i>     | 14    | <i>Deutzia</i>        | 3     | <i>Microseris</i>       | 3     | <i>Mycelis</i>         | 1     |                    |       |
| <i>Agastache</i>      | 489   | <i>Stachys</i>       | 97    | <i>Toxicoscordion</i> | 40    | <i>Urtica</i>         | 15    | <i>Parthenocissus</i> | 7     | <i>Gaura</i>            | 3     | <i>Nicotiana</i>       | 1     |                    |       |
| <i>Madia</i>          | 484   | <i>Purshia</i>       | 95    | <i>Barbarea</i>       | 38    | <i>Paeonia</i>        | 38    | <i>Physalis</i>       | 7     | <i>Iva</i>              | 3     | <i>Leucocrinum</i>     | 1     |                    |       |
| <i>Daucus</i>         | 482   | <i>Heterotheca</i>   | 94    | <i>Linaris</i>        | 38    | <i>Paeonia</i>        | 38    | <i>Pilosella</i>      | 7     | <i>Leycesteria</i>      | 1     | <i>Limonium</i>        | 1     |                    |       |
| <i>Sedum</i>          | 457   | <i>Cleomelea</i>     | 93    | <i>Erica</i>          | 36    | <i>Ipomoea</i>        | 34    | <i>Sanguisorba</i>    | 7     | <i>Lippia</i>           | 3     | <i>Linnaea</i>         | 1     |                    |       |
| <i>Clarkia</i>        | 451   | <i>Cucurbita</i>     | 93    | <i>Lithophragma</i>   | 36    | <i>Tulipa</i>         | 7     | <i>Townsendia</i>     | 7     | <i>Microseris</i>       | 3     | <i>Ludwigia</i>        | 1     |                    |       |
| <i>Hackelia</i>       | 436   | <i>Pyrrocoma</i>     | 93    | <i>Matricaria</i>     | 33    | <i>Urtica</i>         | 13    | <i>Galanthus</i>      | 6     | <i>Misopates</i>        | 3     | <i>Olea</i>            | 3     | <i>Lunaria</i>     | 1     |
| <i>Sisymbrium</i>     | 430   | <i>Polygonum</i>     | 91    | <i>Microseris</i>     | 35    | <i>Antirrhinum</i>    | 13    | <i>Abutilon</i>       | 6     | <i>Oralis</i>           | 7     | <i>Valerianella</i>    | 3     | <i>Lycopus</i>     | 1     |
| <i>Brassica</i>       | 423   | <i>Plantago</i>      | 89    | <i>Oreocarya</i>      | 35    | <i>Cerastium</i>      | 13    | <i>Antennaria</i>     | 6     | <i>Osmanthus</i>        | 3     | <i>Nicotiana</i>       | 1     | <i>Nuphar</i>      | 1     |
| <i>Drymocallis</i>    | 421   | <i>Thermopsis</i>    | 89    | <i>Cercocarpus</i>    | 34    | <i>Pentaglottis</i>   | 13    | <i>Caltha</i>         | 6     | <i>Petasites</i>        | 3     | <i>Pedicularis</i>     | 1     | <i>Parnassia</i>   | 1     |
| <i>Asclepias</i>      | 411   | <i>Heuchera</i>      | 88    | <i>Opuntia</i>        | 34    | <i>Glycyrrhiza</i>    | 13    | <i>Capsella</i>       | 6     | <i>Phoenicaulis</i>     | 3     | <i>Magnolia</i>        | 1     | <i>Polygonatum</i> | 1     |
| <i>Claytonia</i>      | 403   | <i>Perideridia</i>   | 86    | <i>Hylotelephium</i>  | 13    | <i>Reynoutria</i>     | 13    | <i>Tolmiea</i>        | 6     | <i>Phragmites</i>       | 3     | <i>Melaleuca</i>       | 1     | <i>Polystichum</i> | 1     |
| <i>Physocarpus</i>    | 403   | <i>Doellingeria</i>  | 84    | <i>Ipomoea</i>        | 33    | <i>Nothocalais</i>    | 13    | <i>Distichlis</i>     | 6     | <i>Phytostegia</i>      | 3     | <i>Moenchia</i>        | 1     | <i>Pteris</i>      | 1     |
| <i>Anaphalis</i>      | 401   | <i>Fagopyrum</i>     | 81    | <i>Scrophularia</i>   | 32    | <i>Galanthus</i>      | 13    | <i>Galinus</i>        | 6     | <i>Siempsia</i>         | 2     | <i>Mycelis</i>         | 1     | <i>Polygonatum</i> | 1     |
| <i>Prunella</i>       | 401   | <i>Trichostema</i>   | 80    | <i>Campanula</i>      | 32    | <i>Pentaglottis</i>   | 13    | <i>Hastingsia</i>     | 6     | <i>Skimmia</i>          | 2     | <i>Nicotiana</i>       | 1     | <i>Pteris</i>      | 1     |
| <i>Fragaria</i>       | 394   | <i>Myosotis</i>      | 79    | <i>Chorispora</i>     | 32    | <i>Platanthera</i>    | 13    | <i>Hemizonia</i>      | 6     | <i>Smilacina</i>        | 2     | <i>Pedicularis</i>     | 1     | <i>Polygonatum</i> | 1     |
| <i>Plectritis</i>     | 381   | <i>Thlaspi</i>       | 79    | <i>Collomia</i>       | 29    | <i>Elaeagnus</i>      | 12    | <i>Hyacinthus</i>     | 6     | <i>Streptanthus</i>     | 1     | <i>Polygonatum</i>     | 1     | <i>Polygonatum</i> | 1     |
| <i>Nepea</i>          | 376   | <i>Cosmos</i>        | 78    | <i>Kalmia</i>         | 29    | <i>Tolmiea</i>        | 11    | <i>Hyacinthoides</i>  | 2     | <i>Tiliacanthus</i>     | 1     | <i>Polygonatum</i>     | 1     | <i>Polygonatum</i> | 1     |
| <i>Lavandula</i>      | 372   | <i>Hesperocniren</i> | 78    | <i>Sonchus</i>        | 29    | <i>Luina</i>          | 5     | <i>Phragmites</i>     | 2     | <i>Tiquilia</i>         | 2     | <i>Santalina</i>       | 1     | <i>Polygonatum</i> | 1     |
| <i>Horkelia</i>       | 352   | <i>Solanum</i>       | 78    | <i>Wisteria</i>       | 29    | <i>Luetkea</i>        | 11    | <i>Tolmiea</i>        | 6     | <i>Oplapanax</i>        | 1     | <i>Saponaria</i>       | 1     | <i>Polygonatum</i> | 1     |
| <i>Lathyrus</i>       | 347   | <i>Oreostemma</i>    | 77    | <i>Caluna</i>         | 28    | <i>Matricaria</i>     | 11    | <i>Minuartia</i>      | 5     | <i>Rumex</i>            | 2     | <i>Stokesia</i>        | 1     | <i>Polygonatum</i> | 1     |
| <i>Wyethia</i>        | 341   | <i>Syringa</i>       | 77    | <i>Scrophularia</i>   | 31    | <i>Lutearia</i>       | 12    | <i>Laurus</i>         | 5     | <i>Saussurea</i>        | 2     | <i>Sizalix</i>         | 1     | <i>Polygonatum</i> | 1     |
| <i>Monardella</i>     | 339   | <i>Downingia</i>     | 76    | <i>Aconitum</i>       | 29    | <i>Elaeagnus</i>      | 12    | <i>Minuartia</i>      | 5     | <i>Silphium</i>         | 2     | <i>Streptanthus</i>    |       |                    |       |

Table 2: Number of bee species collected from each plant genus

| Genus                 | Count | Genus               | Count | Genus                 | Count | Genus                | Count | Genus                   | Count | Genus                   | Count | Genus                  | Count | Genus | Count |
|-----------------------|-------|---------------------|-------|-----------------------|-------|----------------------|-------|-------------------------|-------|-------------------------|-------|------------------------|-------|-------|-------|
| <i>Phacelia</i>       | 179   | <i>Fragaria</i>     | 41    | <i>Aster</i>          | 19    | <i>Coriandrum</i>    | 10    | <i>Alyssum</i>          | 5     | <i>Aliciella</i>        | 3     | <i>Achlys</i>          | 1     |       |       |
| <i>Penstemon</i>      | 167   | <i>Triteleia</i>    | 41    | <i>Boysinia</i>       | 19    | <i>Cynara</i>        | 10    | <i>Baptisia</i>         | 5     | <i>Anthriscus</i>       | 3     | <i>Actinidia</i>       | 1     |       |       |
| <i>Ericameria</i>     | 140   | <i>Angelica</i>     | 40    | <i>Digitalis</i>      | 19    | <i>Dicentra</i>      | 10    | <i>Canadanthus</i>      | 5     | <i>Armeria</i>          | 3     | <i>Allotropa</i>       | 1     |       |       |
| <i>Grindelia</i>      | 133   | <i>Bellis</i>       | 40    | <i>Alcea</i>          | 18    | <i>Hymenoxys</i>     | 10    | <i>Croton</i>           | 5     | <i>Asparagus</i>        | 3     | <i>Alnus</i>           | 1     |       |       |
| <i>Rubus</i>          | 129   | <i>Collinsia</i>    | 40    | <i>Antennaria</i>     | 18    | <i>Lythrum</i>       | 10    | <i>Delosperma</i>       | 5     | <i>Astrantia</i>        | 3     | <i>Alstroemeria</i>    | 1     |       |       |
| <i>Cirsium</i>        | 126   | <i>Marrubium</i>    | 40    | <i>Arbutus</i>        | 18    | <i>Orthocarpus</i>   | 10    | <i>Diplacus</i>         | 5     | <i>Bassia</i>           | 3     | <i>Amaranthus</i>      | 1     |       |       |
| <i>Eriophyllum</i>    | 123   | <i>Onopordum</i>    | 40    | <i>Caragana</i>       | 18    | <i>Primula</i>       | 10    | <i>Galanthus</i>        | 5     | <i>Boechera</i>         | 3     | <i>Anemone</i>         | 1     |       |       |
| <i>Erigeron</i>       | 120   | <i>Lonicera</i>     | 39    | <i>Cosmos</i>         | 18    | <i>Caluna</i>        | 9     | <i>Glandora</i>         | 5     | <i>Brunnera</i>         | 3     | <i>Anethum</i>         | 1     |       |       |
| <i>Potentilla</i>     | 120   | <i>Cryptantha</i>   | 38    | <i>Hesperochiron</i>  | 18    | <i>Erythronium</i>   | 9     | <i>Heliotropium</i>     | 5     | <i>Capsella</i>         | 3     | <i>Arctium</i>         | 1     |       |       |
| <i>Sympotrichum</i>   | 119   | <i>Heracleum</i>    | 38    | <i>Hieracium</i>      | 18    | <i>Euonymus</i>      | 9     | <i>Isatis</i>           | 5     | <i>Centromadia</i>      | 3     | <i>Argemone</i>        | 1     |       |       |
| <i>Solidago</i>       | 117   | <i>Raphanus</i>     | 38    | <i>Lactuca</i>        | 18    | <i>Hydrangea</i>     | 9     | <i>Kalmia</i>           | 5     | <i>Chrysopsis</i>       | 3     | <i>Atriplex</i>        | 1     |       |       |
| <i>Ceanothus</i>      | 115   | <i>Diasiphora</i>   | 37    | <i>Lamium</i>         | 18    | <i>Leptosiphon</i>   | 9     | <i>Leucophysalis</i>    | 5     | <i>Cirsaea</i>          | 3     | <i>Aucuba</i>          | 1     |       |       |
| <i>Melilotus</i>      | 113   | <i>Medicago</i>     | 37    | <i>Lasthenia</i>      | 18    | <i>Narcissus</i>     | 9     | <i>Matriaria</i>        | 5     | <i>Clinopodium</i>      | 3     | <i>Begonia</i>         | 1     |       |       |
| <i>Lupinus</i>        | 109   | <i>Anthemis</i>     | 36    | <i>Ligusticum</i>     | 18    | <i>Oreocarya</i>     | 9     | <i>Notholithocarpus</i> | 5     | <i>Conioselinum</i>     | 3     | <i>Betonica</i>        | 1     |       |       |
| <i>Trifolium</i>      | 109   | <i>Crataegus</i>    | 35    | <i>Plantago</i>       | 18    | <i>Petrosedum</i>    | 9     | <i>Pilosella</i>        | 5     | <i>Crassula</i>         | 3     | <i>Betula</i>          | 1     |       |       |
| <i>Eriogonum</i>      | 108   | <i>Tanacetum</i>    | 35    | <i>Adelinia</i>       | 17    | <i>Platanthera</i>   | 9     | <i>Rheum</i>            | 5     | <i>Cucumis</i>          | 3     | <i>Buxus</i>           | 1     |       |       |
| <i>Salix</i>          | 105   | <i>Claytonia</i>    | 34    | <i>Columbiadoria</i>  | 17    | <i>Salsola</i>       | 9     | <i>Sambucus</i>         | 5     | <i>Cymopterus</i>       | 3     | <i>Calochortis</i>     | 1     |       |       |
| <i>Chrysanthemus</i>  | 102   | <i>Eriodictyon</i>  | 34    | <i>Cotoneaster</i>    | 17    | <i>Scrophularia</i>  | 9     | <i>Symplytum</i>        | 5     | <i>Dahlia</i>           | 3     | <i>Calibrachoa</i>     | 1     |       |       |
| <i>Calochortus</i>    | 100   | <i>Hydrophyllum</i> | 34    | <i>Downingia</i>      | 17    | <i>Aconitum</i>      | 8     | <i>Townsendia</i>       | 5     | <i>Daturu</i>           | 3     | <i>Calocedrus</i>      | 1     |       |       |
| <i>Chamaenerion</i>   | 98    | <i>Castilleja</i>   | 33    | <i>Foeniculum</i>     | 17    | <i>Aronia</i>        | 8     | <i>Abronia</i>          | 4     | <i>Deutzia</i>          | 3     | <i>Carex</i>           | 1     |       |       |
| <i>Achillea</i>       | 97    | <i>Corrus</i>       | 33    | <i>Hirschfeldia</i>   | 17    | <i>Bellardia</i>     | 8     | <i>Aesculus</i>         | 4     | <i>Echinops</i>         | 3     | <i>Catalpa</i>         | 1     |       |       |
| <i>Centauraea</i>     | 96    | <i>Descurainia</i>  | 33    | <i>Linaria</i>        | 17    | <i>Cakile</i>        | 8     | <i>Ajuga</i>            | 4     | <i>Eriastrum</i>        | 3     | <i>Cerinthe</i>        | 1     |       |       |
| <i>Senecio</i>        | 96    | <i>Oenothera</i>    | 33    | <i>Linum</i>          | 17    | <i>Cardamine</i>     | 8     | <i>Aruncus</i>          | 4     | <i>Frazinius</i>        | 3     | <i>Chaenomeles</i>     | 1     |       |       |
| <i>Ribes</i>          | 95    | <i>Rhus</i>         | 33    | <i>Persicaria</i>     | 17    | <i>Cercis</i>        | 8     | <i>Asperugo</i>         | 4     | <i>Fritillaria</i>      | 3     | <i>Chamaemelum</i>     | 1     |       |       |
| <i>Rosa</i>           | 90    | <i>Amelanchier</i>  | 32    | <i>Viburnum</i>       | 17    | <i>Chorispora</i>    | 8     | <i>Calandrinia</i>      | 4     | <i>Galium</i>           | 3     | <i>Chimaphila</i>      | 1     |       |       |
| <i>Geranium</i>       | 85    | <i>Dipsacus</i>     | 32    | <i>Dichelostemma</i>  | 16    | <i>Cuscuta</i>       | 8     | <i>Choisya</i>          | 4     | <i>Gleditsia</i>        | 3     | <i>Clindonia</i>       | 1     |       |       |
| <i>Leucanthemum</i>   | 84    | <i>Marath</i>       | 32    | <i>Kolkwitzia</i>     | 16    | <i>Elaeagnus</i>     | 8     | <i>Cistus</i>           | 4     | <i>Actaea</i>           | 2     | <i>Cormus</i>          | 1     |       |       |
| <i>Prunus</i>         | 84    | <i>Oreostemma</i>   | 32    | <i>Lapsana</i>        | 16    | <i>Escallonia</i>    | 8     | <i>Cordylanthus</i>     | 4     | <i>Aegopodium</i>       | 2     | <i>Corydalis</i>       | 1     |       |       |
| <i>Helianthus</i>     | 83    | <i>Sphaeralcea</i>  | 32    | <i>Leontodon</i>      | 16    | <i>Hemizonella</i>   | 8     | <i>Damasonium</i>       | 4     | <i>Allophylum</i>       | 2     | <i>Corylus</i>         | 1     |       |       |
| <i>Vicia</i>          | 83    | <i>Corcospis</i>    | 31    | <i>Mertensia</i>      | 16    | <i>Jasmea</i>        | 8     | <i>Distichlis</i>       | 4     | <i>Apium</i>            | 2     | <i>Cypripedium</i>     | 1     |       |       |
| <i>Allium</i>         | 82    | <i>Delphinium</i>   | 31    | <i>Nothochelone</i>   | 16    | <i>Lobularia</i>     | 8     | <i>Draba</i>            | 4     | <i>Arum</i>             | 2     | <i>Elymus</i>          | 1     |       |       |
| <i>Camassia</i>       | 81    | <i>Philadelphus</i> | 31    | <i>Stephanomeria</i>  | 16    | <i>Pieris</i>        | 8     | <i>Eruga</i>            | 4     | <i>Bauhinia</i>         | 2     | <i>Eremothera</i>      | 1     |       |       |
| <i>Spiraea</i>        | 81    | <i>Thymus</i>       | 31    | <i>Styrax</i>         | 16    | <i>Robinia</i>       | 8     | <i>Humeralis</i>        | 4     | <i>Beta</i>             | 2     | <i>Fagus</i>           | 1     |       |       |
| <i>Sidalcea</i>       | 80    | <i>Vaccinium</i>    | 31    | <i>Blepharipappus</i> | 15    | <i>Torella</i>       | 8     | <i>Hesperis</i>         | 4     | <i>Bromus</i>           | 2     | <i>Filipendula</i>     | 1     |       |       |
| <i>Arctostaphylos</i> | 79    | <i>Acer</i>         | 30    | <i>Crocidium</i>      | 15    | <i>Weigela</i>       | 8     | <i>Hibiscus</i>         | 4     | <i>Camellia</i>         | 2     | <i>Forsythia</i>       | 1     |       |       |
| <i>Taraxacum</i>      | 79    | <i>Carduus</i>      | 30    | <i>Echinacea</i>      | 15    | <i>Zinnia</i>        | 8     | <i>Hylotelephium</i>    | 4     | <i>Cardionema</i>       | 2     | <i>Fremontodendron</i> | 1     |       |       |
| <i>Plagiobothrys</i>  | 78    | <i>Frasera</i>      | 30    | <i>Ilex</i>           | 15    | <i>Abelia</i>        | 7     | <i>Lavula</i>           | 4     | <i>Castanea</i>         | 2     | <i>Fuchsia</i>         | 1     |       |       |
| <i>Salvia</i>         | 77    | <i>Amsinckia</i>    | 29    | <i>Microseris</i>     | 15    | <i>Agapanthus</i>    | 7     | <i>Lagerstroemia</i>    | 4     | <i>Celosia</i>          | 2     | <i>Glechoma</i>        | 1     |       |       |
| <i>Hypochaeris</i>    | 76    | <i>Iliamna</i>      | 29    | <i>Pyrocoma</i>       | 15    | <i>Amorpha</i>       | 7     | <i>Layia</i>            | 4     | <i>Centranthus</i>      | 2     | <i>Gnaphalium</i>      | 1     |       |       |
| <i>Lotus</i>          | 75    | <i>Menziesia</i>    | 29    | <i>Trichostema</i>    | 15    | <i>Aralia</i>        | 7     | <i>Nasturtium</i>       | 4     | <i>Daphne</i>           | 2     | <i>Knautia</i>         | 1     |       |       |
| <i>Balsamorhiza</i>   | 74    | <i>Nemophila</i>    | 29    | <i>Borago</i>         | 14    | <i>Pentaglottis</i>  | 7     | <i>Oreoteca</i>         | 4     | <i>Comandra</i>         | 2     | <i>Grayia</i>          | 1     |       |       |
| <i>Syphocarpas</i>    | 74    | <i>Polemonium</i>   | 29    | <i>Colomia</i>        | 14    | <i>Ipomopsis</i>     | 7     | <i>Ozalis</i>           | 4     | <i>Dipterostemon</i>    | 2     | <i>Leucocrinum</i>     | 1     |       |       |
| <i>Lomatium</i>       | 72    | <i>Mahonia</i>      | 28    | <i>Erysimum</i>       | 14    | <i>Conium</i>        | 7     | <i>Mimulus</i>          | 4     | <i>Crocus</i>           | 2     | <i>Holcus</i>          | 1     |       |       |
| <i>Anaphalis</i>      | 71    | <i>Viola</i>        | 28    | <i>Sonchus</i>        | 14    | <i>Cotinus</i>       | 7     | <i>Pastinaca</i>        | 4     | <i>Echinocystis</i>     | 2     | <i>Leycesteria</i>     | 1     |       |       |
| <i>Erythranthe</i>    | 70    | <i>Myosotis</i>     | 27    | <i>Stellaria</i>      | 14    | <i>Doronicum</i>     | 7     | <i>Photinia</i>         | 4     | <i>Euephelus</i>        | 2     | <i>Limonium</i>        | 1     |       |       |
| <i>Agastache</i>      | 69    | <i>Purshia</i>      | 27    | <i>Tragopogon</i>     | 14    | <i>Narthecium</i>    | 4     | <i>Phyllodoce</i>       | 4     | <i>Eucryphia</i>        | 2     | <i>Linnaea</i>         | 1     |       |       |
| <i>Apocynum</i>       | 68    | <i>Bistorta</i>     | 26    | <i>Artemisia</i>      | 13    | <i>Ficaria</i>       | 7     | <i>Phytolacca</i>       | 4     | <i>Daphne</i>           | 2     | <i>Ludwigia</i>        | 1     |       |       |
| <i>Nepeta</i>         | 68    | <i>Fagopyrum</i>    | 26    | <i>Campanula</i>      | 13    | <i>Papaver</i>       | 7     | <i>Tithonia</i>         | 4     | <i>Ligularia</i>        | 2     | <i>Mycelis</i>         | 1     |       |       |
| <i>Asclepias</i>      | 67    | <i>Packera</i>      | 26    | <i>Cercocarpus</i>    | 13    | <i>Eryngium</i>      | 12    | <i>Pedicularis</i>      | 7     | <i>Physalis</i>         | 4     | <i>Nicotiana</i>       | 1     |       |       |
| <i>Mentha</i>         | 65    | <i>Solanum</i>      | 26    | <i>Chrysolepis</i>    | 13    | <i>Buddleja</i>      | 6     | <i>Pentstemon</i>       | 3     | <i>Festuca</i>          | 2     | <i>Lycoptis</i>        | 1     |       |       |
| <i>Ranunculus</i>     | 65    | <i>Verbena</i>      | 26    | <i>Gutierrezia</i>    | 13    | <i>Calathia</i>      | 6     | <i>Pinus</i>            | 4     | <i>Garrya</i>           | 2     | <i>Lunaria</i>         | 1     |       |       |
| <i>Wyethia</i>        | 65    | <i>Whipplea</i>     | 26    | <i>Helianthella</i>   | 13    | <i>Pentaglottis</i>  | 7     | <i>Quercus</i>          | 4     | <i>Gratiola</i>         | 2     | <i>Lycopus</i>         | 1     |       |       |
| <i>Sisymbrium</i>     | 64    | <i>Acimopsis</i>    | 25    | <i>Oemleria</i>       | 13    | <i>Physaria</i>      | 7     | <i>Ozalis</i>           | 4     | <i>Polygonatum</i>      | 2     | <i>Macrorhiza</i>      | 1     |       |       |
| <i>Clarkia</i>        | 62    | <i>Dalea</i>        | 25    | <i>Phlox</i>          | 13    | <i>Populus</i>       | 7     | <i>Reynoutria</i>       | 4     | <i>Kniphofia</i>        | 2     | <i>Machaeranthera</i>  | 1     |       |       |
| <i>Drymocallis</i>    | 62    | <i>Doellingeria</i> | 25    | <i>Satureja</i>       | 13    | <i>Sabulina</i>      | 7     | <i>Romanzoffia</i>      | 4     | <i>Kopsiopsis</i>       | 2     | <i>Magnolia</i>        | 1     |       |       |
| <i>Eschscholzia</i>   | 61    | <i>Erodium</i>      | 25    | <i>Sisyrinchium</i>   | 13    | <i>Scandix</i>       | 7     | <i>Scabiosa</i>         | 4     | <i>Laophyla</i>         | 2     | <i>Melaleuca</i>       | 1     |       |       |
| <i>Gilia</i>          | 61    | <i>Monarda</i>      | 25    | <i>Anchusa</i>        | 12    | <i>Scutellaria</i>   | 7     | <i>Swainsona</i>        | 4     | <i>Laurus</i>           | 2     | <i>Moenchia</i>        | 1     |       |       |
| <i>Jacobaea</i>       | 61    | <i>Polygonum</i>    | 25    | <i>Argentina</i>      | 12    | <i>Sinapis</i>       | 7     | <i>Tithonia</i>         | 4     | <i>Ligularia</i>        | 2     | <i>Oncyclis</i>        | 1     |       |       |
| <i>Plectritis</i>     | 61    | <i>Syringa</i>      | 25    | <i>Spergularia</i>    | 12    | <i>Hedera</i>        | 6     | <i>Minuartia</i>        | 3     | <i>Phoenicaulis</i>     | 2     | <i>Opopanax</i>        | 1     |       |       |
| <i>Hackelia</i>       | 59    | <i>Calendula</i>    | 24    | <i>Teucrium</i>       | 12    | <i>Buddleja</i>      | 6     | <i>Physalis</i>         | 4     | <i>Physostegia</i>      | 2     | <i>Pleiacanthus</i>    | 1     |       |       |
| <i>Rudebeckia</i>     | 59    | <i>Cucurbita</i>    | 24    | <i>Lithophragma</i>   | 12    | <i>Cathla</i>        | 6     | <i>Impatiens</i>        | 3     | <i>Omphalodes</i>       | 2     | <i>Osteospermum</i>    | 1     |       |       |
| <i>Lepidium</i>       | 59    | <i>Agoseris</i>     | 22    | <i>Navarretia</i>     | 12    | <i>Eupatorium</i>    | 6     | <i>Veronica</i>         | 3     | <i>Patrinia</i>         | 2     | <i>Parnassia</i>       | 1     |       |       |
| <i>Crepis</i>         | 51    | <i>Brodiaea</i>     | 22    | <i>Opuntia</i>        | 12    | <i>Gentiana</i>      | 6     | <i>Juniperus</i>        | 3     | <i>Pelargonium</i>      | 2     | <i>Pedioecactus</i>    | 1     |       |       |
| <i>Lavandula</i>      | 51    | <i>Diceria</i>      | 22    | <i>Rupertia</i>       | 12    | <i>Hastingsia</i>    | 6     | <i>Lippia</i>           | 3     | <i>Petunia</i>          | 2     | <i>Phedimus</i>        | 1     |       |       |
| <i>Berberis</i>       | 50    | <i>Perideridia</i>  | 22    | <i>Erythrina</i>      | 12    | <i>Heliospasis</i>   | 6     | <i>Minuartia</i>        | 3     | <i>Phoenicurus</i>      | 2     | <i>Platycodon</i>      | 1     |       |       |
| <i>Chaenactis</i>     | 50    | <i>Malva</i>        | 22    | <i>Teucrium</i>       | 12    | <i>Helleborus</i>    | 6     | <i>Petroselinum</i>     | 6     | <i>Physostegia</i>      | 2     | <i>Pleiacanthus</i>    | 1     |       |       |
| <i>Hypericum</i>      | 49    | <i>Cynoglossum</i>  | 21    | <i>Limanthes</i>      | 11    | <i>Kuckzia</i>       | 6     | <i>Pyracantha</i>       | 3     | <i>Picea</i>            | 2     | <i>Polystichum</i>     | 1     |       |       |
| <i>Gaillardia</i>     | 48    | <i>Euphorbia</i>    | 21    | <i>Arabis</i>         | 11    | <i>Lewisia</i>       | 11    | <i>Sanguisorba</i>      | 6     | <i>Montia</i>           | 3     | <i>Rhamnus</i>         | 1     |       |       |
| <i>Prunella</i>       | 48    | <i>Euthamia</i>     | 21    | <i>Chamaebatia</i>    | 11    | <i>Sherrardia</i>    | 6     | <i>Sanicula</i>         | 3     | <i>Portulaca</i>        | 2     | <i>Skimmia</i>         | 1     |       |       |
| <i>Veronica</i>       | 48    | <i>Geum</i>         | 21    | <i>Clematis</i>       | 11    | <i>Lithodora</i>     | 6     | <i>Securigera</i>       | 3     | <i>Stanleya</i>         | 2     | <i>Tetragonia</i>      | 1     |       |       |
| <i>Madia</i>          | 46    | <i>Bidens</i>       | 20    | <i>Echium</i>         | 11    | <i>Maianthemum</i>   | 6     | <i>Petasites</i>        | 3     | <i>Tiarella</i>         | 2     | <i>Sarcobatus</i>      | 1     |       |       |
| <i>Lathyrus</i>       | 45    | <i>Calyptegia</i>   | 20    | <i>Eremogone</i>      | 11    | <i>Noccea</i>        | 6     | <i>Poa</i>              | 3     | <i>Silphium</i>         | 2     | <i>Saussurea</i>       | 1     |       |       |
| <i>Taraxia</i>        | 45    | <i>Frangula</i>     | 20    | <i>Gaultheria</i>     | 11    | <i>Tagetes</i>       | 6     | <i>Tephrosieris</i>     | 3     | <i>Tolmiea</i>          | 2     | <i>Stokesia</i>        | 1     |       |       |
| <i>Cichorium</i>      | 44    | <i>Gutierrezia</i>  | 20    | <i>Hyacinthoides</i>  | 11    | <i>Teesdalia</i>     | 6     | <i>Urtica</i>           | 3     | <i>Tordilis</i>         | 2     | <i>Streptanthus</i>    | 1     |       |       |
| <i>Epilobium</i>      | 44    | <i>Limnanthes</i>   | 20    | <i>Ladeania</i>       | 11    | <i>Scorzonera</i>    | 6     | <i>Valerianella</i>     | 3     | <i>Triodanis</i>        | 2     | <i>Styphnolobium</i>   | 1     |       |       |
| <i>Arnica</i>         | 43    | <i>Lithospermum</i> | 20    | <i>Leucis</i>         | 11    | <i>Toxicodendron</i> | 6     | <i>Tribulus</i>         | 3     | <i>Tripleurospermum</i> | 2     | <i>Tilia</i>           | 1     |       |       |
| <i>Astragalus</i>     | 43    | <i>Roripa</i>       | 20    | <i>Micranthes</i>     | 11    | <i>Cyanea</i>        | 6     | <i>Tropaeolum</i>       | 3     | <i>Tulipa</i>           | 2     | <i>Tiquilia</i>        | 1     |       |       |
| <i>Convulvulus</i>    | 42    | <i>Heuchera</i>     | 19    | <i>Tetradymia</i>     | 11    | <i>Vernonia</i>      |       |                         |       |                         |       |                        |       |       |       |

## 5 County records

Table 3: Number of bee specimens from each county, by genus. You may want to focus your sampling in under-sampled counties.

|                       | Baker | Benton | Clackamas | Columbia | Coos | Crook | Curry | Deshutes | Douglas | Gilliam | Grant | Hamilton | Hood River | Jackson | Jefferson | Klamath | Lake | Linn | Lincoln | Malheur | Mariette | Morrow | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wasco | Washington | Wheeler | Yamhill | TOTAL |      |     |     |       |
|-----------------------|-------|--------|-----------|----------|------|-------|-------|----------|---------|---------|-------|----------|------------|---------|-----------|---------|------|------|---------|---------|----------|--------|-----------|------|---------|-----------|----------|-------|-------|------------|---------|---------|-------|------|-----|-----|-------|
| <i>Agapostemon</i>    | 26    | 65     | 47        | 1        | 66   | 1     | 53    | 3        | 126     | 6       | 10    | 77       | 363        | 3       | 65        | 21      | 40   | 31   | 3       | 176     | 67       | 19     | 41        | 10   | 18      | 1         | 72       | 28    | 20    | 26         | 92      | 74      | 87    | 2045 |     |     |       |
| <i>Andrena</i>        | 162   | 672    | 343       | 23       | 335  | 3     | 345   | 91       | 853     | 28      | 60    | 140      | 435        | 111     | 715       | 314     | 849  | 774  | 517     | 668     | 126      | 100    | 205       | 470  | 30      | 222       | 155      | 213   | 14    | 138        | 168     | 205     | 586   | 732  | 301 | 849 | 11952 |
| <i>Anthidiellum</i>   | 1     | 4      | 0         | 0        | 0    | 0     | 0     | 23       | 0       | 13      | 3     | 0        | 7          | 7       | 0         | 11      | 3    | 28   | 26      | 48      | 16       | 1      | 1         | 0    | 5       | 0         | 0        | 1     | 0     | 0          | 6       | 8       | 2     | 5    | 0   | 219 |       |
| <i>Anthidium</i>      | 12    | 30     | 32        | 2        | 29   | 20    | 39    | 7        | 85      | 7       | 1     | 69       | 65         | 36      | 66        | 39      | 79   | 47   | 55      | 56      | 53       | 15     | 16        | 51   | 1       | 19        | 5        | 1     | 8     | 11         | 6       | 25      | 35    | 120  | 17  | 41  | 1200  |
| <i>Anthophora</i>     | 38    | 6      | 9         | 1        | 7    | 3     | 125   | 24       | 527     | 18      | 32    | 88       | 351        | 19      | 205       | 55      | 107  | 183  | 410     | 56      | 1        | 14     | 232       | 15   | 20      | 0         | 0        | 20    | 0     | 19         | 29      | 92      | 57    | 33   | 90  | 11  | 2897  |
| <i>Anthophorula</i>   | 0     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 0   | 39    |
| <i>Apis</i>           | 1     | 77     | 42        | 16       | 9    | 5     | 5     | 36       | 30      | 49      | 1     | 4        | 1          | 79      | 34        | 3       | 58   | 58   | 5       | 23      | 29       | 37     | 15        | 73   | 0       | 99        | 26       | 17    | 4     | 34         | 8       | 2       | 127   | 103  | 6   | 181 | 1297  |
| <i>Ashmeadiella</i>   | 40    | 0      | 0         | 0        | 0    | 0     | 0     | 44       | 1       | 132     | 7     | 2        | 33         | 182     | 33        | 63      | 28   | 44   | 53      | 70      | 16       | 0      | 38        | 30   | 0       | 3         | 0        | 11    | 0     | 5          | 3       | 16      | 9     | 2    | 19  | 1   | 885   |
| <i>Atoposmia</i>      | 17    | 0      | 1         | 0        | 0    | 0     | 2     | 2        | 4       | 2       | 0     | 23       | 34         | 7       | 131       | 7       | 9    | 35   | 8       | 28      | 0        | 1      | 0         | 1    | 0       | 0         | 4        | 0     | 15    | 2          | 25      | 0       | 0     | 2    | 0   | 360 |       |
| <i>Biastes</i>        | 0     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 8       | 13        | 0       | 1    | 6    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 28  |       |
| <i>Bombus</i>         | 266   | 571    | 401       | 217      | 382  | 66    | 284   | 486      | 813     | 277     | 17    | 437      | 886        | 561     | 738       | 291     | 283  | 1438 | 416     | 1370    | 681      | 549    | 150       | 651  | 31      | 547       | 90       | 56    | 266   | 258        | 238     | 356     | 279   | 925  | 176 | 659 | 16112 |
| <i>Brachymerlecta</i> | 4     | 0      | 0         | 0        | 0    | 0     | 0     | 12       | 5       | 58      | 2     | 0        | 25         | 23      | 2         | 98      | 0    | 26   | 37      | 112     | 9        | 0      | 1         | 14   | 4       | 1         | 0        | 0     | 0     | 3          | 1       | 1       | 0     | 1    | 7   | 0   | 446   |
| <i>Callopis</i>       | 9     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 5       | 20      | 32    | 0        | 0          | 34      | 11        | 1       | 7    | 46   | 63      | 34      | 0        | 0      | 0         | 0    | 1       | 0         | 18       | 0     | 3     | 0          | 1       | 0       | 3     | 0    | 288 |     |       |
| <i>Ceratina</i>       | 21    | 492    | 137       | 6        | 170  | 5     | 89    | 18       | 212     | 149     | 2     | 55       | 48         | 152     | 311       | 47      | 475  | 115  | 77      | 722     | 76       | 36     | 7         | 355  | 3       | 271       | 296      | 29    | 9     | 42         | 30      | 26      | 71    | 604  | 55  | 836 | 6049  |
| <i>Chelostoma</i>     | 21    | 0      | 0         | 0        | 0    | 0     | 2     | 4        | 113     | 3       | 0     | 16       | 12         | 0       | 14        | 2       | 4    | 17   | 9       | 1       | 0        | 2      | 1         | 0    | 0       | 0         | 0        | 16    | 0     | 0          | 2       | 5       | 9     | 0    | 1   | 0   | 254   |
| <i>Coelioxys</i>      | 22    | 4      | 2         | 2        | 8    | 0     | 9     | 1        | 44      | 2       | 3     | 11       | 44         | 9       | 18        | 5       | 16   | 17   | 25      | 14      | 12       | 8      | 20        | 15   | 4       | 0         | 2        | 0     | 0     | 2          | 8       | 4       | 2     | 3    | 4   | 343 |       |
| <i>Colletes</i>       | 49    | 13     | 1         | 1        | 2    | 6     | 164   | 28       | 828     | 8       | 69    | 89       | 206        | 40      | 120       | 74      | 49   | 37   | 269     | 63      | 81       | 21     | 126       | 8    | 30      | 0         | 1        | 114   | 29    | 26         | 10      | 48      | 185   | 15   | 61  | 6   | 2877  |
| <i>Diadasia</i>       | 107   | 1      | 0         | 0        | 0    | 0     | 8     | 1        | 19      | 14      | 0     | 31       | 63         | 3       | 25        | 0       | 46   | 44   | 7       | 0       | 0        | 1      | 246       | 1    | 0       | 0         | 0        | 11    | 0     | 1          | 12      | 9       | 0     | 1    | 42  | 2   | 695   |
| <i>Dianthidium</i>    | 50    | 2      | 1         | 0        | 0    | 0     | 79    | 7        | 76      | 5       | 0     | 31       | 79         | 3       | 110       | 12      | 115  | 50   | 72      | 13      | 1        | 3      | 71        | 0    | 4       | 0         | 0        | 1     | 0     | 10         | 1       | 15      | 10    | 0    | 19  | 1   | 841   |
| <i>Dioctrys</i>       | 1     | 0      | 0         | 0        | 0    | 0     | 1     | 0        | 4       | 0       | 0     | 2        | 4          | 0       | 0         | 0       | 1    | 3    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 17  |       |
| <i>Dufourea</i>       | 4     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 48      | 3       | 0     | 9        | 46         | 121     | 65        | 15      | 35   | 26   | 3       | 29      | 0        | 11     | 0         | 5    | 0       | 0         | 0        | 0     | 4     | 9          | 3       | 3       | 0     | 0    | 20  | 1   | 460   |
| <i>Epeorus</i>        | 4     | 1      | 0         | 1        | 0    | 8     | 1     | 1        | 19      | 0       | 3     | 3        | 12         | 0       | 17        | 2       | 10   | 4    | 6       | 8       | 5        | 1      | 2         | 2    | 0       | 0         | 0        | 4     | 3     | 1          | 2       | 0       | 1     | 3    | 2   | 0   | 126   |
| <i>Eucera</i>         | 32    | 57     | 21        | 0        | 3    | 1     | 25    | 2        | 65      | 0       | 16    | 22       | 44         | 21      | 39        | 23      | 73   | 44   | 22      | 54      | 3        | 4      | 60        | 23   | 2       | 6         | 33       | 60    | 1     | 33         | 33      | 34      | 252   | 48   | 57  | 110 | 1323  |
| <i>Habropoda</i>      | 9     | 1      | 1         | 0        | 0    | 8     | 6     | 6        | 104     | 5       | 1     | 19       | 6          | 52      | 1         | 34      | 31   | 27   | 51      | 38      | 0        | 21     | 0         | 0    | 0       | 1         | 6        | 38    | 0     | 1          | 4       | 101     | 0     | 3    | 0   | 576 |       |
| <i>Holcitis</i>       | 340   | 689    | 289       | 26       | 328  | 20    | 302   | 99       | 444     | 89      | 18    | 174      | 315        | 554     | 559       | 132     | 905  | 703  | 357     | 488     | 281      | 115    | 344       | 687  | 67      | 205       | 191      | 77    | 44    | 256        | 273     | 225     | 544   | 912  | 407 | 999 | 12458 |
| <i>Heriades</i>       | 4     | 16     | 6         | 0        | 16   | 0     | 6     | 2        | 119     | 14      | 0     | 4        | 1          | 24      | 19        | 28      | 49   | 66   | 5       | 21      | 7        | 3      | 0         | 39   | 8       | 23        | 2        | 1     | 0     | 8          | 2       | 2       | 0     | 55   | 2   | 13  | 565   |
| <i>Hesparapis</i>     | 1     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 6   |       |
| <i>Holcopastes</i>    | 5     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 5   |       |
| <i>Hoplitis</i>       | 52    | 14     | 9         | 1        | 6    | 0     | 35    | 3        | 100     | 11      | 3     | 95       | 214        | 65      | 86        | 150     | 222  | 49   | 73      | 51      | 3        | 37     | 22        | 49   | 5       | 5         | 6        | 35    | 1     | 20         | 33      | 74      | 40    | 59   | 21  | 10  | 1659  |
| <i>Hyaleuc</i>        | 92    | 80     | 50        | 4        | 40   | 2     | 66    | 43       | 427     | 19      | 9     | 69       | 209        | 46      | 230       | 107     | 338  | 217  | 275     | 176     | 26       | 19     | 18        | 114  | 40      | 34        | 74       | 141   | 7     | 40         | 34      | 68      | 151   | 170  | 77  | 111 | 3623  |
| <i>Lasioglossum</i>   | 319   | 955    | 340       | 67       | 302  | 26    | 607   | 95       | 945     | 118     | 52    | 297      | 678        | 197     | 724       | 258     | 965  | 704  | 555     | 736     | 698      | 157    | 438       | 646  | 53      | 234       | 329      | 268   | 161   | 199        | 191     | 282     | 514   | 1079 | 620 | 901 | 15710 |
| <i>Megachile</i>      | 133   | 153    | 65        | 15       | 122  | 5     | 80    | 44       | 558     | 121     | 90    | 138      | 240        | 183     | 327       | 97      | 214  | 456  | 215     | 251     | 109      | 132    | 162       | 206  | 37      | 40        | 16       | 104   | 13    | 131        | 36      | 60      | 113   | 277  | 67  | 41  | 5051  |
| <i>Mellecta</i>       | 0     | 0      | 0         | 1        | 0    | 0     | 7     | 0        | 10      | 0       | 0     | 10       | 9          | 0       | 1         | 6       | 16   | 5    | 17      | 1       | 0        | 0      | 5         | 0    | 0       | 0         | 2        | 0     | 3     | 5          | 9       | 18      | 1     | 9    | 1   | 136 |       |
| <i>Melissodes</i>     | 116   | 293    | 78        | 4        | 107  | 9     | 161   | 41       | 477     | 51      | 53    | 70       | 223        | 30      | 197       | 20      | 101  | 212  | 207     | 166     | 93       | 30     | 328       | 303  | 16      | 105       | 24       | 153   | 9     | 35         | 39      | 24      | 110   | 496  | 78  | 265 | 4724  |
| <i>Micralictoides</i> | 0     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 35  |       |
| <i>Neoliarri</i>      | 0     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 17  |       |
| <i>Nomada</i>         | 22    | 209    | 70        | 1        | 69   | 2     | 104   | 19       | 447     | 5       | 5     | 80       | 48         | 26      | 108       | 80      | 211  | 121  | 60      | 193     | 28       | 26     | 37        | 55   | 4       | 52        | 53       | 31    | 3     | 29         | 40      | 51      | 138   | 153  | 44  | 217 | 2841  |
| <i>Normia</i>         | 0     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 6   |       |
| <i>Oreopasites</i>    | 0     | 0      | 0         | 0        | 0    | 0     | 0     | 0        | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0       | 0        | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0    | 0   | 4   |       |
| <i>Osmia</i>          | 351   | 266    | 222       | 9        | 91   | 3     | 387   | 94       | 989     | 89      | 26    | 707      | 676        | 581     | 1054      | 656     | 1103 | 684  | 742     | 651     | 46       | 206    | 131       | 385  | 35      | 125       | 148      | 148   | 19    | 154        | 303     | 533     | 922   | 406  | 207 | 309 | 13458 |
| <i>Panurginus</i>     | 18    | 42     | 60        | 3        | 6    | 0     | 35    | 15       | 1       | 7       | 65    | 6        | 38         | 104     | 15        | 0       | 321  | 6    | 13      | 82      | 42       | 22</   |           |      |         |           |          |       |       |            |         |         |       |      |     |     |       |

Table 4: Number of bee specimens from each county, by species

|                                 | Baker | Benton | Clackamas | Columbia | Crook | Crook | Douglas | Gilliam | Grant | Harrison | Hood River | Jackson | Jefferson | Josephine | Klamath | Lake | Lane | Linn | Malheur | Marion | Morrow | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wallowa | Wasco | Washington | Wheeler | Yankee | TOTAL |    |     |    |     |
|---------------------------------|-------|--------|-----------|----------|-------|-------|---------|---------|-------|----------|------------|---------|-----------|-----------|---------|------|------|------|---------|--------|--------|-----------|------|---------|-----------|----------|-------|---------|-------|------------|---------|--------|-------|----|-----|----|-----|
| <i>Agapostemon femoratus</i>    | 1     | 0      | 0         | 0        | 0     | 0     | 33      | 0       | 24    | 0        | 2          | 40      | 204       | 0         | 2       | 3    | 0    | 13   | 118     | 0      | 0      | 69        | 0    | 0       | 0         | 1        | 29    | 0       | 0     | 0          | 1       | 540    |       |    |     |    |     |
| <i>Agapostemon melliventris</i> | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 21     |       |    |     |    |     |
| <i>Agapostemon subtilior</i>    | 15    | 2      | 14        | 0        | 7     | 0     | 11      | 1       | 64    | 0        | 2          | 27      | 87        | 0         | 53      | 4    | 14   | 13   | 106     | 10     | 20     | 0         | 43   | 21      | 13        | 16       | 4     | 3       | 0     | 28         | 1       | 1      | 0     | 13 | 25  | 35 | 653 |
| <i>Agapostemon virescens</i>    | 0     | 62     | 8         | 0        | 22    | 0     | 0       | 0       | 1     | 1        | 0          | 1       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 37     | 379   |    |     |    |     |
| <i>Andrena amphibola</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 7     |    |     |    |     |
| <i>Andrena angustitarsata</i>   | 0     | 0      | 1         | 0        | 0     | 0     | 5       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1    | 3       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 1     | 4       | 5     | 0          | 1       | 32     |       |    |     |    |     |
| <i>Andrena annectens</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 3      |       |    |     |    |     |
| <i>Andrena astragali</i>        | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 7     |    |     |    |     |
| <i>Andrena bartschii</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena birtwelli</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 1    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 3     |    |     |    |     |
| <i>Andrena candida</i>          | 1     | 0      | 0         | 0        | 0     | 0     | 1       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 2    | 3       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 13    |    |     |    |     |
| <i>Andrena candidiformis</i>    | 0     | 0      | 0         | 0        | 0     | 0     | 5       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 3    | 1       | 1      | 2      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 13    |    |     |    |     |
| <i>Andrena cerasifoli</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 2       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena chapmae</i>          | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena chlorogaster</i>     | 0     | 0      | 0         | 0        | 0     | 1     | 0       | 1       | 0     | 3        | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 21    |    |     |    |     |
| <i>Andrena cleodora</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena commoda</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena costillensis</i>     | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena crataegi</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena cressoni</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 14    |    |     |    |     |
| <i>Andrena cuprotincta</i>      | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 1     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 4    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 15    |    |     |    |     |
| <i>Andrena cyanophila</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena evoluta</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 9       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 9     |    |     |    |     |
| <i>Andrena fuscicauda</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 2       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena hippotes</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 8     |    |     |    |     |
| <i>Andrena illinoiensis</i>     | 0     | 0      | 2         | 0        | 0     | 0     | 2       | 0       | 2     | 0        | 0          | 1       | 12        | 0         | 0       | 0    | 1    | 4    | 0       | 1      | 0      | 0         | 0    | 21      | 0         | 2        | 0     | 0       | 0     | 0          | 1       | 0      | 2     | 4  | 55  |    |     |
| <i>Andrena lawrencei</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena macropinensis</i>    | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 3         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 3     |    |     |    |     |
| <i>Andrena meditonensis</i>     | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 5         | 0         | 0       | 0    | 0    | 0    | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 6     |    |     |    |     |
| <i>Andrena melanochroa</i>      | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena merrimani</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena microchloris</i>     | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1    | 11      | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 14    |    |     |    |     |
| <i>Andrena miranda</i>          | 0     | 0      | 0         | 0        | 1     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena miserabilis</i>      | 0     | 0      | 1         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 1     |    |     |    |     |
| <i>Andrena nevadensis</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 2         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena nigroceraulea</i>    | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1    | 22      | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 28    |    |     |    |     |
| <i>Andrena nivalis</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 0     |    |     |    |     |
| <i>Andrena nothocaloidis</i>    | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 2       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 0     |    |     |    |     |
| <i>Andrena pallidifovea</i>     | 0     | 0      | 2         | 0        | 0     | 0     | 1       | 0       | 0     | 0        | 2          | 4       | 0         | 0         | 2       | 1    | 6    | 3    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 25    |    |     |    |     |
| <i>Andrena pernata</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena perplexa</i>         | 0     | 0      | 3         | 2        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 3    | 0       | 2      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 29    |    |     |    |     |
| <i>Andrena pipera</i>           | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 3     | 0        | 0          | 0       | 45        | 0         | 0       | 1    | 0    | 0    | 9       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 59    |    |     |    |     |
| <i>Andrena prunorum</i>         | 13    | 32     | 2         | 0        | 8     | 0     | 4       | 5       | 52    | 0        | 5          | 6       | 17        | 0         | 33      | 12   | 9    | 28   | 11      | 9      | 5      | 1         | 7    | 18      | 3         | 11       | 5     | 11      | 1     | 31         | 8       | 8      | 16    | 31 | 426 |    |     |
| <i>Andrena salicifloris</i>     | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 2     |    |     |    |     |
| <i>Andrena scura</i>            | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 38        | 0         | 0       | 1    | 0    | 0    | 3       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 44    |    |     |    |     |
| <i>Andrena sladeni</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 1         | 0         | 0       | 0    | 0    | 0    | 3       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 4     |    |     |    |     |
| <i>Andrena stratiotis</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 3         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 3     |    |     |    |     |
| <i>Andrena topazana</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 1       | 0         | 0         | 0       | 0    | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0      | 5     |    |     |    |     |
| <i>Andrena transigra</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0        | 0          | 0       | 1         | 0         | 0       | 0    | 0    | 0    | 2</td   |        |        |           |      |         |           |          |       |         |       |            |         |        |       |    |     |    |     |

Table 4: Number of bee specimens from each county, by species (continued)

|                                 | Baker | Benton | Clatskanie | Columbia | Cross | Crook | Douglas | Grant | Hood River | Jackson | Jefferson | Josephine | Klamath | Lake | Lane | Lincoln | Linn | Malheur | Marion | Morrow | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wasco | Washington | Wheeler | Yamhill | TOTAL |    |     |     |      |      |      |
|---------------------------------|-------|--------|------------|----------|-------|-------|---------|-------|------------|---------|-----------|-----------|---------|------|------|---------|------|---------|--------|--------|-----------|------|---------|-----------|----------|-------|-------|------------|---------|---------|-------|----|-----|-----|------|------|------|
| <i>Anthophora affabilis</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 1       |       |    |     |     |      |      |      |
| <i>Anthophora albata</i>        | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 5       |       |    |     |     |      |      |      |
| <i>Anthophora bomboides</i>     | 5     | 0      | 3          | 0        | 1     | 0     | 1       | 3     | 1          | 0       | 0         | 4         | 3       | 0    | 1    | 0       | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 5       |       |    |     |     |      |      |      |
| <i>Anthophora californica</i>   | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 1          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 2       |       |    |     |     |      |      |      |
| <i>Anthophora cratichii</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 1       |       |    |     |     |      |      |      |
| <i>Anthophora curta</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 9       |       |    |     |     |      |      |      |
| <i>Anthophora edwardsii</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 2       |       |    |     |     |      |      |      |
| <i>Anthophora exigua</i>        | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 5         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 7       |       |    |     |     |      |      |      |
| <i>Anthophora maculifrons</i>   | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 25         | 0       | 0         | 0         | 2       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 32      |       |    |     |     |      |      |      |
| <i>Anthophora pacifica</i>      | 10    | 2      | 0          | 0        | 0     | 0     | 9       | 0     | 11         | 0       | 0         | 4         | 3       | 0    | 0    | 2       | 20   | 6       | 37     | 3      | 0         | 0    | 0       | 0         | 0        | 0     | 1     | 4          | 12      | 0       |       |    |     |     |      |      |      |
| <i>Anthophora peritoma</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 1       |       |    |     |     |      |      |      |
| <i>Anthophora porterae</i>      | 1     | 0      | 0          | 0        | 0     | 0     | 0       | 9     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 10      |       |    |     |     |      |      |      |
| <i>Anthophora terminalis</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 5          | 2       | 0         | 2         | 7       | 9    | 11   | 0       | 0    | 5       | 1      | 0      | 0         | 2    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 50      |       |    |     |     |      |      |      |
| <i>Anthophora urbana</i>        | 7     | 1      | 1          | 0        | 0     | 0     | 36      | 3     | 199        | 7       | 18        | 34        | 114     | 1    | 139  | 14      | 45   | 66      | 205    | 33     | 0         | 10   | 131     | 9         | 6        | 0     | 0     | 2          | 0       | 4       | 0     | 1  | 28  | 1   | 1119 |      |      |
| <i>Anthophora ursina</i>        | 2     | 0      | 0          | 0        | 0     | 0     | 4       | 0     | 2          | 0       | 0         | 4         | 0       | 0    | 1    | 0       | 0    | 0       | 35     | 0      | 0         | 0    | 2       | 0         | 0        | 1     | 8     | 6          | 0       | 0       | 0     | 65 |     |     |      |      |      |
| <i>Anthophorula chionura</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 38     | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 38      |       |    |     |     |      |      |      |
| <i>Apis mellifera</i>           | 1     | 77     | 42         | 16       | 9     | 5     | 5       | 36    | 30         | 49      | 1         | 4         | 1       | 79   | 34   | 3       | 58   | 58      | 5      | 23     | 29        | 37   | 15      | 73        | 0        | 99    | 26    | 17         | 4       | 34      | 8     | 2  | 127 | 103 | 6    | 181  | 1297 |
| <i>Ashmeadiella atlantae</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 4       |       |    |     |     |      |      |      |
| <i>Ashmeadiella buconis</i>     | 6     | 0      | 0          | 0        | 0     | 0     | 11      | 0     | 6          | 0       | 0         | 7         | 11      | 0    | 0    | 0       | 1    | 4       | 13     | 0      | 0         | 1    | 11      | 0         | 0        | 0     | 0     | 0          | 0       | 6       | 0     | 77 |     |     |      |      |      |
| <i>Ashmeadiella cactorum</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 1          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 5      | 0      | 0         | 0    | 4       | 0         | 0        | 0     | 0     | 0          | 0       | 10      |       |    |     |     |      |      |      |
| <i>Ashmeadiella californica</i> | 3     | 0      | 0          | 0        | 0     | 0     | 5       | 0     | 0          | 2       | 0         | 6         | 23      | 15   | 13   | 1       | 4    | 2       | 8      | 2      | 0         | 19   | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 103     |       |    |     |     |      |      |      |
| <i>Ashmeadiella cubiceps</i>    | 2     | 0      | 0          | 0        | 0     | 0     | 1       | 0     | 1          | 0       | 0         | 3         | 8       | 5    | 6    | 0       | 0    | 0       | 4      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 31      |       |    |     |     |      |      |      |
| <i>Ashmeadiella difigita</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 1          | 0       | 0         | 0         | 23      | 0    | 0    | 0       | 0    | 0       | 4      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 31      |       |    |     |     |      |      |      |
| <i>Ashmeadiella foreata</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 1       |       |    |     |     |      |      |      |
| <i>Ashmeadiella foxiella</i>    | 1     | 0      | 0          | 0        | 0     | 0     | 6       | 0     | 0          | 0       | 1         | 3         | 0       | 1    | 0    | 0       | 4    | 0       | 1      | 4      | 0         | 0    | 3       | 0         | 0        | 0     | 0     | 0          | 0       | 26      |       |    |     |     |      |      |      |
| <i>Ashmeadiella propodis</i>    | 1     | 0      | 0          | 0        | 0     | 0     | 0       | 1     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 3       |       |    |     |     |      |      |      |
| <i>Ashmeadiella timberlakei</i> | 1     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 10         | 0       | 0         | 4         | 4       | 0    | 1    | 0       | 1    | 1       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 1       | 26      |       |    |     |     |      |      |      |
| <i>Atoposmia obiecta</i>        | 1     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 1         | 1       | 5    | 3    | 0       | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 17      |       |    |     |     |      |      |      |
| <i>Atoposmia anthodysa</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 3       |       |    |     |     |      |      |      |
| <i>Atoposmia copelandica</i>    | 7     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 1          | 2       | 1         | 0         | 13      | 6    | 0    | 5       | 2    | 3       | 6      | 2      | 0         | 0    | 0       | 1         | 0        | 0     | 0     | 0          | 0       | 64      |       |    |     |     |      |      |      |
| <i>Atoposmia elongata</i>       | 4     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 1         | 1         | 0       | 53   | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 62      |       |    |     |     |      |      |      |
| <i>Atoposmia oregonia</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 1          | 0       | 1         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 6      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 10      |       |    |     |     |      |      |      |
| <i>Atoposmia triodonta</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0       | 4    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 5       |       |    |     |     |      |      |      |
| <i>Biastes fulviventris</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 1       |       |    |     |     |      |      |      |
| <i>Bombus appositus</i>         | 8     | 6      | 2          | 0        | 1     | 0     | 0       | 0     | 2          | 4       | 0         | 1         | 13      | 16   | 6    | 0       | 0    | 3       | 8      | 4      | 1         | 6    | 0       | 27        | 0        | 2     | 1     | 0          | 0       | 7       | 5     | 7  | 153 |     |      |      |      |
| <i>Bombus caliginosus</i>       | 0     | 28     | 3          | 21       | 12    | 14    | 0       | 37    | 2          | 34      | 0         | 0         | 0       | 1    | 8    | 2       | 3    | 10      | 0      | 139    | 94        | 3    | 0       | 19        | 0        | 32    | 14    | 0          | 61      | 0       | 0     | 35 | 0   | 57  | 629  |      |      |
| <i>Bombus centralis</i>         | 56    | 0      | 0          | 0        | 0     | 0     | 63      | 0     | 40         | 0       | 6         | 67        | 141     | 0    | 0    | 7       | 0    | 37      | 65     | 0      | 0         | 0    | 13      | 0         | 6        | 0     | 0     | 14         | 0       | 44      | 34    | 46 | 11  | 1   | 55   | 0    | 706  |
| <i>Bombus fervidus</i>          | 18    | 60     | 5          | 26       | 34    | 1     | 24      | 6     | 14         | 8       | 2         | 18        | 147     | 25   | 3    | 5       | 12   | 14      | 30     | 77     | 65        | 16   | 24      | 79        | 2        | 7     | 4     | 1          | 8       | 20      | 9     | 16 | 23  | 103 | 23   | 95   | 1024 |
| <i>Bombus flavifrons</i>        | 6     | 32     | 1          | 2        | 0     | 0     | 0       | 8     | 4          | 3       | 0         | 10        | 1       | 27   | 40   | 1       | 8    | 35      | 4      | 78     | 11        | 42   | 0       | 13        | 1        | 0     | 1     | 0          | 10      | 4       | 6     | 8  | 1   | 12  | 0    | 3    | 372  |
| <i>Bombus flavidus</i>          | 4     | 51     | 88         | 18       | 81    | 1     | 4       | 0     | 3          | 12      | 0         | 19        | 13      | 59   | 35   | 2       | 8    | 49      | 14     | 198    | 21        | 78   | 0       | 15        | 1        | 150   | 9     | 0          | 8       | 50      | 45    | 3  | 91  | 0   | 25   | 1163 |      |
| <i>Bombus griseocollis</i>      | 36    | 20     | 2          | 0        | 9     | 0     | 3       | 0     | 38         | 0       | 6         | 10        | 6       | 1    | 5    | 27      | 2    | 5       | 4      | 7      | 0         | 1    | 30      | 72        | 1        | 1     | 2     | 24         | 0       | 41      | 5     | 12 | 27  | 21  | 19   | 27   | 464  |
| <i>Bombus huntii</i>            | 35    | 0      | 0          | 0        | 0     | 0     | 0       | 40    | 0          | 128     | 0         | 1         | 27      | 196  | 0    | 1       | 16   | 2       | 24     | 45     | 0         | 0    | 63      | 1         | 3        | 0     | 1     | 4          | 0       | 17      | 16    | 4  | 4   | 0   | 3    | 631  |      |
| <i>Bombus impatiens</i>         | 0     | 0      | 0          | 1        | 0     | 0     | 0       | 0     | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 1       |       |    |     |     |      |      |      |
| <i>Bombus insularis</i>         | 18    | 0      | 0          | 0        | 1     | 0     | 0       | 0     | 2          | 1       | 0         | 6         | 20      | 8    | 49   | 0       | 3    | 72      | 22     | 1      | 0         | 1    | 0       | 0         | 0        | 0     | 0     | 0          | 7       | 0       | 0     | 0  | 0   | 229 |      |      |      |
| <i>Bombus melanopygus</i>       | 0     | 77     | 50         | 13       | 25    | 15    | 3       | 73    | 21         | 6       | 0         | 12        | 29      | 26   | 17   | 160     | 0    | 74      | 47     | 25     | 0         | 41   | 0       | 75        | 2        | 0     | 9     | 0          | 1       | 3       | 2     | 56 | 0   | 15  | 877  |      |      |
| <i>Bombus mixtus</i>            | 10    | 118    | 98         | 87       | 95    | 7     | 4       | 51    | 15         | 26      | 0         | 14        | 3       | 82   | 99   | 41      | 101  | 58      | 2      | 308    | 182       | 69   | 1       | 111       | 4        | 114   | 20    | 0          | 82      | 11      | 19    | 46 | 2   | 215 | 9    | 129  | 2233 |
| <i>Bombus morrisoni</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 3       | 0     | 29         | 0       | 0         | 2         | 0       | 0    | 3    | 0       | 4    | 4       | 4      | 1      | 0         | 0    | 10      | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 1     | 0  | 0   | 57  |      |      |      |
| <i>Bombus nevadensis</i>        | 6     | 1      | 2          | 0        | 2     | 0     | 8       | 0     | 12         | 0       | 0         | 2         | 17      | 1    | 4    | 5       | 0    | 1       | 1      | 0      | 0         | 0    | 5       | 3         | 1        | 0     | 0     | 4          | 0       | 21      | 10    | 10 | 10  | 8   | 3    | 147  |      |
| <i>Bombus occidentalis</i>      | 1     | 0      | 3          | 0        | 0     | 0     | 0       | 0     | 0          | 7       | 1         | 0         | 2       | 4    | 3    | 1       | 1    | 0       | 10     | 8      | 2         | 0    | 20      | 0         | 0        | 0     | 0     | 0          | 0       | 1       | 8     | 0  | 0   | 0   | 72   |      |      |
| <i>Bombus rufocinctus</i>       | 0     | 1      | 0          | 1        | 4     | 0     |         |       |            |         |           |           |         |      |      |         |      |         |        |        |           |      |         |           |          |       |       |            |         |         |       |    |     |     |      |      |      |

Table 4: Number of bee specimens from each county, by species (*continued*)

Table 4: Number of bee specimens from each county, by species (continued)

|                                  | Baker | Benton | Clatskanie | Columbia | Cross | Crook | Curry | Douglas | Gilliam | Grant | Hood River | Harney | Jackson | Jefferson | Josephine | Klamath | Lane | Linn | Malheur | Marion | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wasco | Washington | Wheeler | Yamhill | TOTAL |    |     |     |     |     |      |    |   |    |
|----------------------------------|-------|--------|------------|----------|-------|-------|-------|---------|---------|-------|------------|--------|---------|-----------|-----------|---------|------|------|---------|--------|-----------|------|---------|-----------|----------|-------|-------|------------|---------|---------|-------|----|-----|-----|-----|-----|------|----|---|----|
| <i>Eucera edwardsii</i>          | 6     | 5      | 3          | 0        | 0     | 0     | 2     | 0       | 7       | 0     | 0          | 6      | 4       | 1         | 0         | 1       | 8    | 30   | 0       | 1      | 0         | 4    | 0       | 3         | 0        | 1     | 6     | 5          | 5       | 33      | 20    | 5  | 22  | 200 |     |     |      |    |   |    |
| <i>Eucera frater</i>             | 3     | 16     | 0          | 0        | 3     | 1     | 4     | 0       | 1       | 0     | 0          | 2      | 3       | 0         | 0         | 2       | 10   | 5    | 1       | 8      | 30        | 0    | 1       | 0         | 4        | 0     | 3     | 0          | 1       | 6       | 5     | 5  | 33  | 20  | 5   | 22  | 200  |    |   |    |
| <i>Eucera fulvitorsis</i>        | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 0    | 7  |   |    |
| <i>Eucera hirdi</i>              | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 1    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 1    |    |   |    |
| <i>Eucera lunata</i>             | 0     | 13     | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 2    | 23 |   |    |
| <i>Eucera virgata</i>            | 1     | 6      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 1     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 1   | 24   |    |   |    |
| <i>Habropoda cineraria</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 7     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 10   | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 29   |    |   |    |
| <i>Habropoda danneri</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 52      | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 2    | 1       | 4      | 3         | 16   | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 78   |    |   |    |
| <i>Habropoda depressa</i>        | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 4    | 0       | 12     | 0         | 1    | 7       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 24   |    |   |    |
| <i>Habropoda miserabilis</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 34   |    |   |    |
| <i>Habropoda tristissima</i>     | 9     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 1       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 25   |    |   |    |
| <i>Halictus confusus</i>         | 2     | 25     | 36         | 3        | 39    | 0     | 11    | 10      | 4       | 8     | 0          | 3      | 13      | 4         | 42        | 3       | 13   | 14   | 5       | 18     | 22        | 14   | 0       | 25        | 0        | 45    | 27    | 0          | 6       | 8       | 4     | 4  | 0   | 86  | 1   | 40  | 535  |    |   |    |
| <i>Halictus farinosus</i>        | 13    | 69     | 2          | 0        | 2     | 4     | 24    | 29      | 29      | 30    | 3          | 32     | 38      | 38        | 45        | 57      | 90   | 124  | 159     | 78     | 1         | 3    | 14      | 90        | 8        | 3     | 15    | 4          | 1       | 78      | 4     | 29 | 53  | 50  | 22  | 73  | 1314 |    |   |    |
| <i>Halictus ligatus</i>          | 221   | 306    | 116        | 4        | 91    | 5     | 94    | 0       | 99      | 21    | 7          | 59     | 105     | 19        | 185       | 15      | 474  | 324  | 18      | 148    | 73        | 10   | 227     | 367       | 41       | 58    | 63    | 34         | 12      | 72      | 105   | 60 | 176 | 340 | 202 | 395 | 4546 |    |   |    |
| <i>Halictus rubicundus</i>       | 7     | 73     | 22         | 14       | 37    | 3     | 12    | 25      | 22      | 3     | 0          | 6      | 18      | 2         | 68        | 7       | 55   | 21   | 13      | 96     | 93        | 16   | 13      | 50        | 2        | 22    | 27    | 5          | 20      | 17      | 10    | 23 | 10  | 109 | 11  | 64  | 996  |    |   |    |
| <i>Halictus tripartitus</i>      | 89    | 169    | 81         | 2        | 97    | 5     | 151   | 28      | 272     | 13    | 2          | 64     | 124     | 65        | 174       | 45      | 254  | 84   | 152     | 102    | 1         | 66   | 70      | 134       | 14       | 30    | 51    | 19         | 0       | 44      | 98    | 89 | 188 | 234 | 154 | 363 | 3528 |    |   |    |
| <i>Halictus virgatulus</i>       | 1     | 1      | 0          | 1        | 0     | 0     | 1     | 0       | 0       | 0     | 0          | 0      | 411     | 1         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 420  |    |   |    |
| <i>Heriades carinata</i>         | 0     | 2      | 0          | 0        | 1     | 0     | 0     | 0       | 27      | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 19   | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 55  |      |    |   |    |
| <i>Heriades carinatus</i>        | 0     | 4      | 0          | 0        | 1     | 0     | 0     | 0       | 15      | 1     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 13   | 1       | 0      | 1         | 0    | 0       | 0         | 0        | 24    | 0     | 3          | 2       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 270  |    |   |    |
| <i>Heriades cressoni</i>         | 4     | 2      | 0          | 0        | 0     | 0     | 0     | 1       | 25      | 4     | 0          | 2      | 0       | 0         | 1         | 0       | 0    | 2    | 0       | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 42  |      |    |   |    |
| <i>Heriades variolosus</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 3    |    |   |    |
| <i>Heriades carinata</i>         | 1     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 6    |    |   |    |
| <i>Holcopasites pulchellus</i>   | 5     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 5    |    |   |    |
| <i>Hoplitis albifrons</i>        | 5     | 0      | 0          | 0        | 1     | 0     | 3     | 0       | 1       | 3     | 0          | 8      | 2       | 3         | 11        | 4       | 12   | 8    | 14      | 3      | 0         | 0    | 3       | 2         | 1        | 1     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 90   |    |   |    |
| <i>Hoplitis boharti</i>          | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 23   | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 24   |    |   |    |
| <i>Hoplitis emarginata</i>       | 0     | 0      | 1          | 0        | 0     | 0     | 0     | 0       | 0       | 1     | 0          | 0      | 0       | 0         | 0         | 0       | 11   | 0    | 0       | 0      | 0         | 9    | 0       | 15        | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 38  |      |    |   |    |
| <i>Hoplitis fulgidula</i>        | 3     | 0      | 0          | 0        | 0     | 0     | 0     | 3       | 0       | 7     | 2          | 1      | 10      | 47        | 0         | 8       | 6    | 23   | 3       | 20     | 4         | 0    | 2       | 0         | 1        | 2     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 3   | 152  |    |   |    |
| <i>Hoplitis grinnelli</i>        | 0     | 6      | 0          | 0        | 0     | 0     | 0     | 0       | 4       | 0     | 0          | 0      | 2       | 0         | 2         | 1       | 4    | 2    | 0       | 5      | 0         | 0    | 2       | 3         | 1        | 0     | 1     | 9          | 0       | 1       | 0     | 0  | 0   | 0   | 0   | 3   | 51   |    |   |    |
| <i>Hoplitis hypocrita</i>        | 3     | 1      | 0          | 0        | 0     | 0     | 0     | 6       | 0       | 14    | 0          | 0      | 3       | 6         | 0         | 2       | 6    | 5    | 0       | 2      | 2         | 0    | 0       | 10        | 6        | 0     | 0     | 2          | 2       | 0       | 1     | 0  | 0   | 0   | 0   | 5   | 1    | 1  | 2 | 80 |
| <i>Hoplitis louiseae</i>         | 1     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 1       | 8         | 0         | 2       | 0    | 0    | 2       | 5      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 23   |    |   |    |
| <i>Hoplitis orthognatha</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 10   |    |   |    |
| <i>Hoplitis plagiostoma</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 2    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 2    |    |   |    |
| <i>Hoplitis producta</i>         | 1     | 7      | 1          | 0        | 1     | 0     | 2     | 1       | 2       | 0     | 0          | 2      | 3       | 2         | 2         | 8       | 9    | 1    | 2       | 2      | 0         | 8    | 1       | 18        | 0        | 0     | 3     | 6          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 290  |    |   |    |
| <i>Hoplitis rematula</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 9    | 0       | 0      | 0         | 1    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 9   |      |    |   |    |
| <i>Hoplitis sambuci</i>          | 1     | 0      | 0          | 0        | 0     | 0     | 2     | 0       | 1       | 2     | 0          | 1      | 3       | 0         | 11        | 2       | 1    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 43  |      |    |   |    |
| <i>Hoplitis uvulalis</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 1       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 2    | 0       | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 6   |      |    |   |    |
| <i>Hylaeus Mesiilac</i>          | 11    | 1      | 0          | 0        | 3     | 0     | 1     | 0       | 15      | 1     | 0          | 0      | 10      | 0         | 3         | 2       | 6    | 0    | 12      | 0      | 0         | 0    | 4       | 1         | 2        | 2     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 2   | 92   |    |   |    |
| <i>Hylaeus basalis</i>           | 0     | 0      | 1          | 0        | 0     | 0     | 0     | 6       | 0       | 3     | 0          | 0      | 6       | 7         | 6         | 18      | 10   | 3    | 0       | 2      | 0         | 0    | 1       | 0         | 1        | 0     | 0     | 0          | 3       | 0       | 0     | 0  | 0   | 0   | 0   | 67  |      |    |   |    |
| <i>Hylaeus mesilac</i>           | 14    | 9      | 0          | 0        | 7     | 1     | 1     | 0       | 50      | 0     | 0          | 4      | 27      | 2         | 9         | 5       | 16   | 35   | 1       | 6      | 1         | 0    | 6       | 25        | 0        | 7     | 13    | 5          | 0       | 11      | 2     | 0  | 0   | 0   | 0   | 57  |      |    |   |    |
| <i>Hylaeus nunenmacheri</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 21  |      |    |   |    |
| <i>Lasioglossum aberrans</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 53   | 0       | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 0   | 57   |    |   |    |
| <i>Lasioglossum albitinneum</i>  | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 0       | 0       | 0     | 0          | 0      | 0       | 0         | 0         | 0       | 0    | 0    | 0       | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0  | 0   | 0   | 0   | 7   |      |    |   |    |
| <i>Lasioglossum albioglossum</i> | 2     | 0      | 1          | 0        | 0     | 0     | 0     | 19      | 0       | 6     | 1          | 1      | 0       | 0         | 0         | 0       | 13   | 2    | 20      | 12     | 1         | 13   | 3       | 3         | 0        | 5     | 0     | 0          | 2       | 2       | 0     | 0  | 0   | 7   | 4   | 121 |      |    |   |    |
| <i>Lasioglossum aspidurum</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 0     | 7       | 0       | 3</td |            |        |         |           |           |         |      |      |         |        |           |      |         |           |          |       |       |            |         |         |       |    |     |     |     |     |      |    |   |    |

Table 4: Number of bee specimens from each county, by species (continued)

|                                     | Baker | Benton | Clatskanie | Columbia | Crook | Curry | Douglas | Gilliam | Grant | Harney | Hood River | Jackson | Jefferson | Josephine | Klamath | Lake | Lane | Linn | Malheur | Marion | Morrow | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wallowa | Wasco | Washington | Wheeler | Yamhill | TOTAL |     |     |     |      |     |     |
|-------------------------------------|-------|--------|------------|----------|-------|-------|---------|---------|-------|--------|------------|---------|-----------|-----------|---------|------|------|------|---------|--------|--------|-----------|------|---------|-----------|----------|-------|---------|-------|------------|---------|---------|-------|-----|-----|-----|------|-----|-----|
| <i>Lasioglossum macoupinense</i>    | 0     | 0      | 0          | 0        | 0     | 0     | 1       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 16      | 3    | 2    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 1          | 2       | 14      |       |     |     |     |      |     |     |
| <i>Lasioglossum macroprosopum</i>   | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 3       |       |     |     |     |      |     |     |
| <i>Lasioglossum marinense</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 1    | 1    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 9       |       |     |     |     |      |     |     |
| <i>Lasioglossum megastictum</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 2    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 2       |       |     |     |     |      |     |     |
| <i>Lasioglossum melleps</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 1       | 0       | 0     | 5      | 2          | 0       | 0         | 0         | 15      | 1    | 13   | 16   | 3       | 2      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 7          | 1       | 2       | 69    |     |     |     |      |     |     |
| <i>Lasioglossum nevadense</i>       | 0     | 0      | 1          | 0        | 0     | 0     | 3       | 0       | 28    | 0      | 0          | 5       | 2         | 0         | 2       | 0    | 5    | 1    | 2       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 89    |     |     |     |      |     |     |
| <i>Lasioglossum nigrum</i>          | 0     | 1      | 1          | 0        | 3     | 0     | 2       | 0       | 8     | 6      | 0          | 1       | 4         | 3         | 16      | 3    | 6    | 5    | 6       | 14     | 1      | 8         | 0    | 4       | 0         | 0        | 0     | 0       | 2     | 1          | 7       | 0       | 4     | 0   | 4   | 112 |      |     |     |
| <i>Lasioglossum novascotiae</i>     | 0     | 1      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 1      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 5       |       |     |     |     |      |     |     |
| <i>Lasioglossum occultum</i>        | 0     | 15     | 13         | 0        | 5     | 6     | 0       | 4       | 10    | 0      | 0          | 0       | 0         | 1         | 8       | 2    | 3    | 8    | 1       | 17     | 14     | 3         | 0    | 14      | 0         | 4        | 5     | 0       | 10    | 0          | 0       | 0       | 5     | 25  | 0   | 60  | 233  |     |     |
| <i>Lasioglossum olympiae</i>        | 0     | 208    | 37         | 1        | 10    | 0     | 7       | 1       | 0     | 9      | 0          | 3       | 0         | 7         | 64      | 6    | 5    | 45   | 31      | 59     | 6      | 15        | 0    | 66      | 0         | 6        | 59    | 0       | 0     | 3          | 25      | 3       | 28    | 95  | 0   | 108 | 907  |     |     |
| <i>Lasioglossum orthocarpii</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 8     |     |     |     |      |     |     |
| <i>Lasioglossum ovaliceps</i>       | 2     | 0      | 0          | 0        | 1     | 0     | 4       | 0       | 12    | 0      | 0          | 1       | 3         | 3         | 7       | 2    | 5    | 2    | 11      | 0      | 0      | 1         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 1       | 2       | 1     | 70  |     |     |      |     |     |
| <i>Lasioglossum pacatum</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 1       | 0       | 2     | 0      | 1          | 2       | 0         | 1         | 0       | 1    | 0    | 0    | 0       | 0      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 16    |     |     |     |      |     |     |
| <i>Lasioglossum pacificum</i>       | 0     | 13     | 17         | 0        | 6     | 1     | 0       | 4       | 0     | 1      | 0          | 0       | 0         | 3         | 3       | 0    | 7    | 2    | 0       | 23     | 28     | 0         | 0    | 19      | 0         | 5        | 1     | 0       | 5     | 0          | 0       | 0       | 7     | 28  | 0   | 16  | 189  |     |     |
| <i>Lasioglossum pavonatum</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 5       | 0       | 8     | 0      | 7          | 0       | 0         | 0         | 0       | 1    | 0    | 1    | 0       | 15     | 44     | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 95  |     |      |     |     |
| <i>Lasioglossum prasinogaster</i>   | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 1       | 0     | 0      | 0          | 0       | 0         | 0         | 1       | 0    | 0    | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 8     |     |     |     |      |     |     |
| <i>Lasioglossum pruinosum</i>       | 1     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 2      | 1          | 1       | 0         | 0         | 2       | 0    | 0    | 0    | 0       | 3      | 10     | 5         | 1    | 0       | 0         | 8        | 0     | 4       | 0     | 0          | 5       | 0       | 3     | 0   | 46  |     |      |     |     |
| <i>Lasioglossum pulveris</i>        | 14    | 0      | 0          | 0        | 0     | 0     | 40      | 0       | 79    | 0      | 7          | 35      | 81        | 0         | 2       | 24   | 1    | 6    | 14      | 1      | 0      | 0         | 58   | 1       | 4         | 0        | 0     | 50      | 0     | 17         | 11      | 10      | 25    | 2   | 151 | 1   | 634  |     |     |
| <i>Lasioglossum punctatoventre</i>  | 5     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 1     | 1      | 0          | 2       | 2         | 0         | 0       | 0    | 0    | 1    | 5       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 0   | 18  |      |     |     |
| <i>Lasioglossum quebecense</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 4      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 2       | 0     | 4   | 18  |     |      |     |     |
| <i>Lasioglossum robustum</i>        | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 1       | 0    | 10   | 0    | 17      | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 28  |     |      |     |     |
| <i>Lasioglossum rufofuscum</i>      | 3     | 14     | 5          | 0        | 6     | 0     | 4       | 3       | 7     | 2      | 0          | 3       | 19        | 1         | 17      | 3    | 34   | 8    | 5       | 31     | 2      | 6         | 0    | 10      | 1         | 5        | 28    | 0       | 1     | 2          | 2       | 0       | 2     | 11  | 11  | 47  | 293  |     |     |
| <i>Lasioglossum sandhouseiellum</i> | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 4       | 0         | 1         | 0       | 0    | 1    | 13   | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 1        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 22  |     |      |     |     |
| <i>Lasioglossum sedi</i>            | 2     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 5     | 0   | 10  |     |      |     |     |
| <i>Lasioglossum sequoiarum</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 11   | 0    | 3    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 14  |     |      |     |     |
| <i>Lasioglossum sisymbrii</i>       | 19    | 8      | 9          | 0        | 4     | 0     | 12      | 0       | 33    | 0      | 0          | 10      | 40        | 6         | 11      | 30   | 5    | 7    | 24      | 22     | 1      | 2         | 36   | 26      | 2         | 3        | 10    | 0       | 0     | 7          | 9       | 18      | 9     | 27  | 3   | 35  | 428  |     |     |
| <i>Lasioglossum tegulariforme</i>   | 0     | 0      | 0          | 0        | 0     | 0     | 1       | 0       | 2     | 0      | 0          | 0       | 0         | 0         | 5       | 0    | 0    | 3    | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 14  |     |      |     |     |
| <i>Lasioglossum tenaz</i>           | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 8   |     |     |      |     |     |
| <i>Lasioglossum testaceum</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 2   |     |      |     |     |
| <i>Lasioglossum timbuktai</i>       | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 1   |     |      |     |     |
| <i>Lasioglossum titus</i>           | 1     | 251    | 64         | 8        | 31    | 0     | 12      | 4       | 1     | 1      | 0          | 33      | 26        | 0         | 44      | 0    | 64   | 65   | 15      | 58     | 20     | 6         | 12   | 191     | 5         | 4        | 56    | 1       | 2     | 1          | 15      | 11      | 8     | 206 | 8   | 101 | 1325 |     |     |
| <i>Lasioglossum trizonatum</i>      | 0     | 0      | 0          | 0        | 0     | 0     | 8       | 0       | 3     | 0      | 0          | 3       | 6         | 0         | 0       | 0    | 3    | 7    | 2       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 3     | 1       | 0     | 0          | 0       | 0       | 0     | 0   | 0   | 39  |      |     |     |
| <i>Lasioglossum tuolumnense</i>     | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 5     | 0      | 0          | 0       | 0         | 0         | 0       | 1    | 0    | 8    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 19  |     |      |     |     |
| <i>Lasioglossum villosulum</i>      | 0     | 60     | 40         | 18       | 45    | 0     | 0       | 0       | 0     | 7      | 0          | 0       | 0         | 4         | 0       | 0    | 0    | 1    | 0       | 0      | 38     | 91        | 14   | 0       | 65        | 0        | 27    | 6       | 1     | 33         | 0       | 0       | 0     | 0   | 18  | 62  | 0    | 75  | 605 |
| <i>Lasioglossum yukonum</i>         | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 1   |     |      |     |     |
| <i>Lasioglossum zephyrus</i>        | 0     | 1      | 0          | 0        | 0     | 0     | 2       | 0       | 0     | 2      | 0          | 0       | 3         | 1         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 8   |     |      |     |     |
| <i>Lasioglossum zonulum</i>         | 0     | 9      | 6          | 10       | 14    | 2     | 0       | 5       | 0     | 1      | 0          | 0       | 0         | 2         | 0       | 0    | 0    | 0    | 0       | 18     | 37     | 0         | 0    | 8       | 0         | 7        | 2     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 7   | 2   | 137  |     |     |
| <i>Megachile addenda</i>            | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 4     | 0      | 0          | 0       | 0         | 0         | 0       | 3    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 0   | 7   |      |     |     |
| <i>Megachile angelarum</i>          | 0     | 51     | 9          | 0        | 6     | 0     | 14      | 0       | 53    | 1      | 3          | 3       | 1         | 9         | 10      | 2    | 10   | 17   | 6       | 22     | 0      | 15        | 0    | 31      | 2         | 15       | 1     | 2       | 0     | 4          | 0       | 0       | 0     | 0   | 24  | 6   | 4    | 321 |     |
| <i>Megachile angrina</i>            | 0     | 0      | 1          | 0        | 0     | 0     | 0       | 1       | 0     | 0      | 0          | 0       | 0         | 3         | 0       | 4    | 0    | 0    | 0       | 0      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 11  |     |      |     |     |
| <i>Megachile apicalis</i>           | 5     | 1      | 0          | 0        | 0     | 0     | 1       | 0       | 10    | 1      | 5          | 1       | 2         | 5         | 16      | 11   | 3    | 4    | 0       | 5      | 0      | 0         | 3    | 0       | 13        | 0        | 1     | 0       | 0     | 35         | 0       | 0       | 0     | 1   | 9   | 1   | 133  |     |     |
| <i>Megachile brevis</i>             | 0     | 5      | 1          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 17  |     |      |     |     |
| <i>Megachile centuncularis</i>      | 0     | 2      | 0          | 0        | 0     | 0     | 0       | 0       | 1     | 3      | 1          | 0       | 1         | 0         | 0       | 3    | 0    | 0    | 0       | 4      | 1      | 3         | 1    | 0       | 0         | 1        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 24  |     |      |     |     |
| <i>Megachile cleomis</i>            | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 1       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 1   |     |      |     |     |
| <i>Megachile coquilletti</i>        | 0     | 0      | 0          | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 1         | 3       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 10  |     |      |     |     |
| <i>Megachile fidelis</i>            | 0     | 6      | 0          | 0        | 1     | 0     | 4       | 2       |       |        |            |         |           |           |         |      |      |      |         |        |        |           |      |         |           |          |       |         |       |            |         |         |       |     |     |     |      |     |     |

Table 4: Number of bee specimens from each county, by species (continued)

|                                   | Baker | Benton | Clackamas | Columbia | Cross | Crook | Douglas | Grant | Harney | Hood River | Jackson | Jefferson | Josephine | Klamath | Lake | Lane | Linn | Malheur | Marion | Morrow | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wasco | Washington | Wheeler | Yamhill | TOTAL |     |    |    |     |     |
|-----------------------------------|-------|--------|-----------|----------|-------|-------|---------|-------|--------|------------|---------|-----------|-----------|---------|------|------|------|---------|--------|--------|-----------|------|---------|-----------|----------|-------|-------|------------|---------|---------|-------|-----|----|----|-----|-----|
| <i>Melecta separata</i>           | 0     | 0      | 0         | 0        | 0     | 3     | 0       | 4     | 0      | 0          | 1       | 4         | 0         | 1       | 1    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 2       | 0         | 0        | 0     | 0     | 0          | 0       | 1       | 35    |     |    |    |     |     |
| <i>Melecta thoracica</i>          | 0     | 0      | 0         | 0        | 0     | 1     | 0       | 4     | 0      | 0          | 0       | 1         | 0         | 0       | 1    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 8       |       |     |    |    |     |     |
| <i>Melissodes agilis</i>          | 0     | 1      | 0         | 0        | 0     | 0     | 0       | 0     | 1      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 4       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 8     |     |    |    |     |     |
| <i>Melissodes bimacris</i>        | 0     | 0      | 0         | 0        | 0     | 1     | 0       | 6     | 0      | 2          | 0       | 0         | 0         | 0       | 0    | 0    | 3    | 1       | 0      | 8      | 1         | 0    | 0       | 5         | 0        | 0     | 0     | 0          | 0       | 1       | 38    |     |    |    |     |     |
| <i>Melissodes clarkiae</i>        | 0     | 5      | 0         | 0        | 0     | 0     | 1       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 6     |     |    |    |     |     |
| <i>Melissodes communis</i>        | 0     | 0      | 0         | 1        | 0     | 0     | 0       | 0     | 7      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 2    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 10    |     |    |    |     |     |
| <i>Melissodes dagosus</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 5    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 5     |     |    |    |     |     |
| <i>Melissodes lupinus</i>         | 1     | 115    | 8         | 0        | 1     | 0     | 3       | 3     | 2      | 0          | 0       | 2         | 3         | 0       | 2    | 0    | 3    | 13      | 8      | 45     | 2         | 6    | 2       | 152       | 2        | 0     | 8     | 0          | 0       | 0       | 1     | 2   | 72 | 5  | 42  | 503 |
| <i>Melissodes lustrus</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 1         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 1     |     |    |    |     |     |
| <i>Melissodes metenus</i>         | 2     | 7      | 1         | 0        | 0     | 0     | 25      | 3     | 0      | 0          | 0       | 5         | 1         | 0       | 2    | 0    | 0    | 3       | 2      | 13     | 2         | 0    | 0       | 10        | 0        | 0     | 0     | 0          | 0       | 0       | 8     | 0   | 3  | 87 |     |     |
| <i>Melissodes microstictus</i>    | 2     | 8      | 1         | 0        | 9     | 0     | 15      | 4     | 29     | 8          | 0       | 21        | 3         | 5       | 25   | 0    | 33   | 3       | 3      | 5      | 6         | 5    | 0       | 10        | 0        | 6     | 0     | 0          | 4       | 0       | 0     | 0   | 5  | 0  | 11  | 221 |
| <i>Melissodes pallidostigatus</i> | 0     | 12     | 0         | 0        | 0     | 0     | 2       | 0     | 0      | 0          | 0       | 1         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 15  |    |    |     |     |
| <i>Melissodes rivalis</i>         | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 1     | 0      | 10         | 0       | 4         | 1         | 2       | 1    | 0    | 0    | 0       | 1      | 1      | 7         | 4    | 0       | 1         | 1        | 1     | 0     | 0          | 0       | 0       | 1     | 1   | 39 |    |     |     |
| <i>Melissodes robustior</i>       | 0     | 8      | 0         | 0        | 3     | 0     | 0       | 0     | 17     | 0          | 1       | 0         | 2         | 0       | 0    | 0    | 3    | 0       | 9      | 0      | 0         | 0    | 19      | 2         | 14       | 0     | 0     | 0          | 1       | 0       | 0     | 0   | 21 | 0  | 1   | 101 |
| <i>Melissodes semilupinus</i>     | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 10         | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 6       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 16  |    |    |     |     |
| <i>Microlictoides ruficaudus</i>  | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 34   | 1       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 0   | 35  |
| <i>Neocarra vigilans</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 1         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 1   |    |    |     |     |
| <i>Nomia melanander</i>           | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 5   |    |    |     |     |
| <i>Osmia aglaia</i>               | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 1     | 0      | 0          | 0       | 0         | 0         | 1       | 0    | 14   | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 16  |     |
| <i>Osmia albilateralis</i>        | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 1      | 0          | 0       | 0         | 1         | 1       | 3    | 1    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 9   |     |
| <i>Osmia atriventris</i>          | 0     | 0      | 1         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 1   |    |    |     |     |
| <i>Osmia atrocyanea</i>           | 7     | 3      | 0         | 0        | 1     | 0     | 3       | 0     | 1      | 0          | 1       | 4         | 4         | 4       | 0    | 9    | 5    | 8       | 2      | 0      | 6         | 0    | 1       | 0         | 10       | 0     | 0     | 1          | 0       | 3       | 1     | 2   | 0  | 1  | 7   | 87  |
| <i>Osmia bakeri</i>               | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 1         | 0       | 1    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 2   |    |    |     |     |
| <i>Osmia bella</i>                | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 1      | 0          | 0       | 0         | 0         | 1       | 1    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 7  |     |     |
| <i>Osmia brevis</i>               | 33    | 0      | 1         | 0        | 0     | 0     | 2       | 0     | 5      | 0          | 0       | 18        | 5         | 0       | 9    | 8    | 9    | 4       | 3      | 0      | 0         | 0    | 2       | 1         | 0        | 0     | 0     | 0          | 1       | 5       | 6     | 0   | 0  | 1  | 113 |     |
| <i>Osmia bruneri</i>              | 5     | 0      | 0         | 0        | 0     | 0     | 2       | 1     | 10     | 0          | 1       | 17        | 22        | 0       | 11   | 3    | 7    | 0       | 17     | 0      | 0         | 0    | 4       | 0         | 3        | 0     | 4     | 3          | 0       | 5       | 0     | 119 |    |    |     |     |
| <i>Osmia buechala</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 2         | 0       | 0    | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 12  |    |    |     |     |
| <i>Osmia caeruleocephala</i>      | 0     | 1      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 2       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 1   |    |    |     |     |
| <i>Osmia californica</i>          | 1     | 0      | 0         | 0        | 0     | 0     | 8       | 0     | 1      | 0          | 0       | 3         | 3         | 0       | 1    | 0    | 0    | 0       | 6      | 0      | 0         | 0    | 2       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 27  |    |    |     |     |
| <i>Osmia calla</i>                | 2     | 0      | 0         | 0        | 0     | 0     | 5       | 0     | 15     | 0          | 0       | 26        | 17        | 0       | 5    | 2    | 0    | 4       | 14     | 0      | 0         | 0    | 1       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 1   | 0  | 96 |     |     |
| <i>Osmia carinata</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 1       | 0     | 1      | 0          | 0       | 0         | 18        | 5       | 0    | 9    | 8    | 9       | 4      | 3      | 0         | 0    | 0       | 2         | 1        | 0     | 1     | 0          | 0       | 0       | 0     | 0   | 0  | 3  |     |     |
| <i>Osmia cobaltina</i>            | 0     | 0      | 0         | 0        | 0     | 0     | 3       | 0     | 0      | 1          | 0       | 0         | 0         | 2       | 0    | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 1         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 16 |    |     |     |
| <i>Osmia coloradensis</i>         | 1     | 0      | 0         | 0        | 1     | 0     | 5       | 0     | 1      | 0          | 0       | 4         | 0         | 0       | 4    | 1    | 9    | 1       | 5      | 1      | 0         | 1    | 0       | 3         | 0        | 1     | 0     | 0          | 0       | 0       | 0     | 2   | 1  | 45 |     |     |
| <i>Osmia cornifrons</i>           | 0     | 2      | 0         | 0        | 1     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 3       | 0         | 7        | 2     | 0     | 0          | 0       | 0       | 0     | 0   | 26 |    |     |     |
| <i>Osmia cyanella</i>             | 15    | 3      | 0         | 0        | 0     | 0     | 9       | 1     | 4      | 2          | 0       | 3         | 0         | 0       | 8    | 5    | 10   | 1       | 0      | 5      | 0         | 1    | 0       | 1         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 2   | 1  | 4  | 382 |     |
| <i>Osmia densa</i>                | 7     | 1      | 1         | 0        | 0     | 0     | 12      | 1     | 7      | 4          | 0       | 8         | 2         | 2       | 16   | 7    | 90   | 3       | 8      | 3      | 0         | 4    | 0       | 3         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 5   | 7  | 8  | 1   |     |
| <i>Osmia dolorosa</i>             | 0     | 0      | 3         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 6   |     |
| <i>Osmia edtnae</i>               | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 2    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 2   |     |
| <i>Osmia enixa</i>                | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 1      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 5       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 6   |     |
| <i>Osmia exigua</i>               | 3     | 0      | 0         | 0        | 0     | 0     | 0       | 1     | 1      | 0          | 2       | 0         | 5         | 0       | 0    | 3    | 4    | 4       | 4      | 7      | 2         | 0    | 0       | 0         | 3        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 144 |     |
| <i>Osmia gabrieli</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 2    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 2   |     |
| <i>Osmia gaudiosa</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 1       | 0     | 1      | 0          | 0       | 1         | 0         | 0       | 0    | 1    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 1         | 0        | 1     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 9   |     |
| <i>Osmia gitarrum</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 1   |     |
| <i>Osmia glauca</i>               | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 0      | 0          | 0       | 0         | 0         | 1       | 0    | 7    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 8   |     |
| <i>Osmia integrata</i>            | 0     | 0      | 0         | 0        | 0     | 0     | 1       | 0     | 7      | 0          | 0       | 0         | 0         | 0       | 0    | 1    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 9   |     |
| <i>Osmia inurbana</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 1       | 0     | 0      | 0          | 0       | 0         | 1         | 0       | 0    | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 2   |     |
| <i>Osmia juxta</i>                | 3     | 0      | 0         | 0        | 0     | 0     | 0       | 0     | 2      | 0          | 0       | 0         | 0         | 0       | 8    | 5    | 7    | 5       | 0      | 1      | 0         | 3    | 0       | 0         | 0        | 0     | 0     | 0          | 0       | 0       | 0     | 0   | 0  | 0  | 1   | 39  |
| <i>Osmia kincaidii</i>            | 5     | 0      | 0         | 0        | 0     | 0     | 5       | 0     | 18     | 0          | 0       | 3         | 10        | 0       | 11   | 2    | 20   | 4       | 10     | 2      | 0         | 0    | 0       | 5         | 1        | 0     | 4     | 4          | 0       | 10      | 0     | 7   | 9  | 2  | 1   | 146 |
| <i>Osmia laeta&lt;/i</i>          |       |        |           |          |       |       |         |       |        |            |         |           |           |         |      |      |      |         |        |        |           |      |         |           |          |       |       |            |         |         |       |     |    |    |     |     |

Table 4: Number of bee specimens from each county, by species (continued)

|                                  | Baker | Benton | Clackamas | Columbia | Crook | Curry | Douglas | Gilliam | Grant | Harney | Hood River | Jackson | Josephine | Klamath | Lane | Linn | Malheur | Marion | Morrow | Multnomah | Polk | Sherman | Tillamook | Umatilla | Union | Wallowa | Wasco | Washington | Wheeler | Yamhill | TOTAL |     |      |      |      |      |       |
|----------------------------------|-------|--------|-----------|----------|-------|-------|---------|---------|-------|--------|------------|---------|-----------|---------|------|------|---------|--------|--------|-----------|------|---------|-----------|----------|-------|---------|-------|------------|---------|---------|-------|-----|------|------|------|------|-------|
| <i>Osmia rostrata</i>            | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 1       |       |     |      |      |      |      |       |
| <i>Osmia sananofae</i>           | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 1      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 1       |       |     |      |      |      |      |       |
| <i>Osmia similima</i>            | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 2       |       |     |      |      |      |      |       |
| <i>Osmia sladeni</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Osmia tanneri</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Osmia tersula</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Osmia texana</i>              | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Osmia tristella</i>           | 0     | 0      | 1         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 1       | 6     |     |      |      |      |      |       |
| <i>Osmia vandykei</i>            | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 1     | 0      | 1          | 0       | 0         | 0       | 2    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 4     |     |      |      |      |      |       |
| <i>Osmia visenda</i>             | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Peponapis pruinosa</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 3     |     |      |      |      |      |       |
| <i>Perdita albipennis</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 1       | 0     | 0      | 0          | 0       | 0         | 0       | 2    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 4     |     |      |      |      |      |       |
| <i>Perdita nevadensis</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Protosmia rubifloris</i>      | 0     | 17     | 23        | 0        | 19    | 0     | 0       | 1       | 0     | 0      | 0          | 0       | 0         | 11      | 155  | 2    | 169     | 10     | 2      | 63        | 0    | 0       | 0         | 16       | 0     | 16      | 12    | 0          | 0       | 0       | 0     | 24  | 39   | 0    | 77   | 656  |       |
| <i>Pseudanthidium nanum</i>      | 0     | 0      | 0         | 0        | 0     | 1     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 5       | 0     | 0   | 16   |      |      |      |       |
| <i>Sphecodes arvensiformis</i>   | 0     | 1      | 0         | 1        | 5     | 0     | 0       | 0       | 1     | 0      | 0          | 1       | 1         | 0       | 1    | 0    | 0       | 1      | 3      | 0         | 1    | 1       | 0         | 1        | 0     | 0       | 1     | 0          | 1       | 2       | 25    |     |      |      |      |      |       |
| <i>Sphecodes davisi</i>          | 0     | 0      | 4         | 0        | 3     | 0     | 0       | 0       | 3     | 0      | 0          | 0       | 1         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 1       | 12    |     |      |      |      |      |       |
| <i>Sphecodes kincaidii</i>       | 0     | 0      | 1         | 0        | 0     | 4     | 0       | 0       | 0     | 0      | 0          | 0       | 1         | 0       | 1    | 0    | 1       | 0      | 0      | 0         | 1    | 1       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 1       | 2     | 0   | 0    | 14   |      |      |       |
| <i>Sphecodes olympicus</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 1     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 1   |      |      |      |      |       |
| <i>Sphecodes pecosensis</i>      | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 7      | 0          | 0       | 0         | 5       | 0    | 1    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 2     | 15  |      |      |      |      |       |
| <i>Stelis ashmeadiellus</i>      | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 1       | 0     | 0      | 0          | 0       | 0         | 1       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 2     |     |      |      |      |      |       |
| <i>Stelis carinifex</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 1       | 0    | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 2   |      |      |      |      |       |
| <i>Stelis laticincta</i>         | 0     | 4      | 0         | 0        | 0     | 0     | 0       | 0       | 1     | 0      | 0          | 0       | 0         | 1       | 0    | 1    | 0       | 0      | 0      | 7         | 0    | 4       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 2     | 39  |      |      |      |      |       |
| <i>Stelis monticola</i>          | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 1      | 0          | 0       | 0         | 1       | 1    | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 6     |     |      |      |      |      |       |
| <i>Stelis rubi</i>               | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Stelis subemarginata</i>      | 1     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 1       | 0    | 0    | 0       | 0      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 1       | 6     |     |      |      |      |      |       |
| <i>Trachusa timberlakei</i>      | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 8     | 0      | 0          | 0       | 0         | 0       | 1    | 0    | 0       | 3      | 0      | 0         | 2    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 14  |      |      |      |      |       |
| <i>Tripeolus argyreus</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 2       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 2     |     |      |      |      |      |       |
| <i>Tripeolus californicus</i>    | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 1       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Tripeolus concavus</i>        | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 4    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 4     |     |      |      |      |      |       |
| <i>Tripeolus helianthi</i>       | 2     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 2     |     |      |      |      |      |       |
| <i>Tripeolus heterurus</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 5       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 5     | 0   | 11   |      |      |      |       |
| <i>Tripeolus lunatus</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     |     |      |      |      |      |       |
| <i>Tripeolus melanarius</i>      | 0     | 4      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 3      | 0      | 0         | 0    | 4       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 8     | 0   | 1    | 20   |      |      |       |
| <i>Tripeolus paenepectoralis</i> | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 1     | 0      | 0          | 0       | 0         | 3       | 0    | 0    | 0       | 3      | 0      | 0         | 0    | 1       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 1     | 0   | 9    |      |      |      |       |
| <i>Tripeolus utahensis</i>       | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 10   | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 10  |      |      |      |      |       |
| <i>Xylocopa californica</i>      | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 8       | 12     | 1      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 21   |      |      |      |       |
| <i>Xylocopa tabaniformis</i>     | 0     | 0      | 0         | 0        | 0     | 1     | 1       | 0       | 0     | 8      | 0          | 0       | 0         | 17      | 0    | 55   | 17      | 1      | 16     | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 0   | 116  |      |      |      |       |
| <i>Xylocopa virginica</i>        | 0     | 7      | 0         | 0        | 0     | 0     | 0       | 0       | 0     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 0      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 7   |      |      |      |      |       |
| <i>Zacosmia maculata</i>         | 0     | 0      | 0         | 0        | 0     | 0     | 0       | 0       | 4     | 0      | 0          | 0       | 0         | 0       | 0    | 0    | 0       | 1      | 0      | 0         | 0    | 0       | 0         | 0        | 0     | 0       | 0     | 0          | 0       | 0       | 0     | 5   |      |      |      |      |       |
| <b>TOTAL</b>                     | 1265  | 3073   | 1104      | 312      | 1105  | 115   | 1463    | 752     | 3362  | 614    | 109        | 1356    | 2923      | 1462    | 2979 | 867  | 3288    | 3371   | 2500   | 3314      | 1455 | 964     | 1458      | 2929     | 214   | 1320    | 916   | 408        | 415     | 984     | 701   | 909 | 1375 | 3459 | 1299 | 3669 | 57809 |

Table 5: Your determination accuracy in 2023.

| Taxon                   |
|-------------------------|
| No specimens identified |

## 6 Taxonomic Accuracy, 2023

In 2023, you did not have specimens to identify.

In 2023, volunteers from the Oregon Bee Atlas project identified 45.4 % (9918) of the 21864 bee specimens to the level of genus, with an average accuracy of 94.6%. Volunteers also identified 0% (0) of the specimens to species level, and had an average accuracy of NaN% (see Table 6). Nicely done!

Table 6: Determination accuracy for all volunteers in 2023.

|               | Taxon                | Specimens ID-ed | Correct ID | % Correct |
|---------------|----------------------|-----------------|------------|-----------|
| <b>Family</b> |                      |                 |            |           |
|               | <i>Andrenidae</i>    | 1171            | 1121       | 95.7      |
|               | <i>Apidae</i>        | 3080            | 3039       | 98.7      |
|               | <i>Colletidae</i>    | 422             | 396        | 93.8      |
|               | <i>Halictidae</i>    | 2297            | 2266       | 98.7      |
|               | <i>Megachilidae</i>  | 3020            | 2970       | 98.3      |
|               | <i>Melittidae</i>    | 4               | 1          | 25.0      |
|               | <i>TOTAL</i>         | 9994            | 9793       | 98.0      |
| <b>Genus</b>  |                      |                 |            |           |
|               | <i>Agapostemon</i>   | 86              | 86         | 100.0     |
|               | <i>Andrena</i>       | 682             | 662        | 97.1      |
|               | <i>Anthidiellum</i>  | 30              | 7          | 23.3      |
|               | <i>Anthidium</i>     | 125             | 124        | 99.2      |
|               | <i>Anthophora</i>    | 198             | 184        | 92.9      |
|               | <i>Apis</i>          | 85              | 85         | 100.0     |
|               | <i>Ashmeadiella</i>  | 58              | 47         | 81.0      |
|               | <i>Atoposmia</i>     | 46              | 44         | 95.7      |
|               | <i>Biastes</i>       | 3               | 3          | 100.0     |
|               | <i>Bombus</i>        | 1671            | 1670       | 99.9      |
|               | <i>Brachymelecta</i> | 5               | 5          | 100.0     |
|               | <i>Calliopsis</i>    | 21              | 10         | 47.6      |
|               | <i>Ceratina</i>      | 273             | 268        | 98.2      |
|               | <i>Chelostoma</i>    | 27              | 24         | 88.9      |
|               | <i>Coelioxys</i>     | 43              | 42         | 97.7      |
|               | <i>Colletes</i>      | 265             | 245        | 92.5      |
|               | <i>Diadasia</i>      | 71              | 59         | 83.1      |
|               | <i>Dianthidium</i>   | 97              | 78         | 80.4      |
|               | <i>Dioxytis</i>      | 2               | 1          | 50.0      |
|               | <i>Dufourea</i>      | 53              | 52         | 98.1      |
|               | <i>Epeolus</i>       | 10              | 9          | 90.0      |
|               | <i>Eucera</i>        | 60              | 57         | 95.0      |
|               | <i>Habropoda</i>     | 49              | 47         | 95.9      |
|               | <i>Halictus</i>      | 902             | 862        | 95.6      |
|               | <i>Heriades</i>      | 40              | 29         | 72.5      |
|               | <i>Hesperapis</i>    | 4               | 1          | 25.0      |
|               | <i>Holcopasites</i>  | 1               | 1          | 100.0     |
|               | <i>Hoplitis</i>      | 231             | 195        | 84.4      |
|               | <i>Hylaeus</i>       | 157             | 151        | 96.2      |

Table 6: Determination accuracy for all volunteers in 2023. (*continued*)

| Taxon                            | Specimens ID-ed | Correct ID | % Correct |
|----------------------------------|-----------------|------------|-----------|
| <i>Lasioglossum</i>              | 1163            | 1101       | 94.7      |
| <i>Megachile</i>                 | 562             | 546        | 97.2      |
| <i>Melecta</i>                   | 21              | 20         | 95.2      |
| <i>Melissodes</i>                | 370             | 322        | 87.0      |
| <i>Micralictoides</i>            | 14              | 14         | 100.0     |
| <i>Neolarra</i>                  | 3               | 3          | 100.0     |
| <i>Nomada</i>                    | 207             | 201        | 97.1      |
| <i>Osmia</i>                     | 1670            | 1639       | 98.1      |
| <i>Panurginus</i>                | 140             | 120        | 85.7      |
| <i>Perdita</i>                   | 319             | 249        | 78.1      |
| <i>Protandrena</i>               | 8               | 7          | 87.5      |
| <i>Protosmia</i>                 | 48              | 33         | 68.8      |
| <i>Pseudoanthidium</i>           | 4               | 1          | 25.0      |
| <i>Sphecodes</i>                 | 79              | 65         | 82.3      |
| <i>Stelis</i>                    | 31              | 21         | 67.7      |
| <i>Trachusa</i>                  | 6               | 5          | 83.3      |
| <i>Triepeolus</i>                | 43              | 41         | 95.3      |
| <i>Xylocopa</i>                  | 10              | 9          | 90.0      |
| <b>TOTAL</b>                     | 9993            | 9445       | 94.5      |
| <b>Species</b>                   |                 |            |           |
| <i>Anthidiellum robertsoni</i>   | 7               | 7          | 100.0     |
| <i>Apis mellifera</i>            | 68              | 68         | 100.0     |
| <i>Bombus appositus</i>          | 8               | 7          | 87.5      |
| <i>Bombus caliginosus</i>        | 32              | 24         | 75.0      |
| <i>Bombus centralis</i>          | 43              | 38         | 88.4      |
| <i>Bombus fervidus</i>           | 43              | 43         | 100.0     |
| <i>Bombus flavidus</i>           | 23              | 22         | 95.7      |
| <i>Bombus flavifrons</i>         | 57              | 54         | 94.7      |
| <i>Bombus frigidus</i>           | 3               | 0          | 0.0       |
| <i>Bombus griseocollis</i>       | 46              | 46         | 100.0     |
| <i>Bombus huntii</i>             | 50              | 46         | 92.0      |
| <i>Bombus insularis</i>          | 9               | 7          | 77.8      |
| <i>Bombus kirbiellus</i>         | 1               | 0          | 0.0       |
| <i>Bombus melanopygus</i>        | 42              | 20         | 47.6      |
| <i>Bombus mixtus</i>             | 139             | 121        | 87.1      |
| <i>Bombus morrisoni</i>          | 4               | 4          | 100.0     |
| <i>Bombus nevadensis</i>         | 13              | 12         | 92.3      |
| <i>Bombus occidentalis</i>       | 5               | 3          | 60.0      |
| <i>Bombus rufocinctus</i>        | 6               | 4          | 66.7      |
| <i>Bombus sitkensis</i>          | 29              | 15         | 51.7      |
| <i>Bombus sylvicola</i>          | 45              | 14         | 31.1      |
| <i>Bombus vagans</i>             | 4               | 2          | 50.0      |
| <i>Bombus vancouverensis</i>     | 259             | 257        | 99.2      |
| <i>Bombus vandykei</i>           | 31              | 24         | 77.4      |
| <i>Bombus vosnesenskii</i>       | 269             | 252        | 93.7      |
| <i>Brachymelecta californica</i> | 3               | 3          | 100.0     |
| <i>Ceratina pacifica</i>         | 1               | 0          | 0.0       |
| <i>Halictus confusus</i>         | 35              | 28         | 80.0      |
| <i>Halictus farinosus</i>        | 28              | 24         | 85.7      |
| <i>Halictus ligatus</i>          | 208             | 207        | 99.5      |
| <i>Halictus rubicundus</i>       | 16              | 15         | 93.8      |

Table 6: Determination accuracy for all volunteers in 2023. (*continued*)

| Taxon                                | Specimens ID-ed | Correct ID | % Correct |
|--------------------------------------|-----------------|------------|-----------|
| <i>Halictus tripartitus</i>          | 108             | 107        | 99.1      |
| <i>Halictus virgatellus</i>          | 7               | 6          | 85.7      |
| <i>Holcopasites pulchellus</i>       | 1               | 1          | 100.0     |
| <i>Lasioglossum anhypops</i>         | 3               | 3          | 100.0     |
| <i>Lasioglossum aspilurum</i>        | 1               | 1          | 100.0     |
| <i>Lasioglossum boreale</i>          | 2               | 2          | 100.0     |
| <i>Lasioglossum cooleyi</i>          | 23              | 0          | 0.0       |
| <i>Lasioglossum cressonii</i>        | 1               | 1          | 100.0     |
| <i>Lasioglossum diatretum</i>        | 1               | 1          | 100.0     |
| <i>Lasioglossum diversopunctatum</i> | 4               | 4          | 100.0     |
| <i>Lasioglossum glabriventre</i>     | 1               | 1          | 100.0     |
| <i>Lasioglossum helianthi</i>        | 1               | 0          | 0.0       |
| <i>Lasioglossum incompletum</i>      | 74              | 72         | 97.3      |
| <i>Lasioglossum inconditum</i>       | 2               | 2          | 100.0     |
| <i>Lasioglossum kincaidii</i>        | 2               | 2          | 100.0     |
| <i>Lasioglossum nevadense</i>        | 1               | 1          | 100.0     |
| <i>Lasioglossum olympiae</i>         | 1               | 1          | 100.0     |
| <i>Lasioglossum ovaliceps</i>        | 5               | 5          | 100.0     |
| <i>Lasioglossum pavonotum</i>        | 10              | 10         | 100.0     |
| <i>Lasioglossum pruinosum</i>        | 4               | 4          | 100.0     |
| <i>Lasioglossum pulveris</i>         | 6               | 6          | 100.0     |
| <i>Lasioglossum quebecense</i>       | 1               | 0          | 0.0       |
| <i>Lasioglossum ruidosense</i>       | 3               | 3          | 100.0     |
| <i>Lasioglossum sisymbrii</i>        | 19              | 19         | 100.0     |
| <i>Lasioglossum titusi</i>           | 24              | 20         | 83.3      |
| <i>Lasioglossum zephyrus</i>         | 1               | 1          | 100.0     |
| <i>Lasioglossum zonulum</i>          | 4               | 4          | 100.0     |
| <i>Megachile perihirta</i>           | 1               | 0          | 0.0       |
| <i>Micralictoides ruficaudus</i>     | 14              | 14         | 100.0     |
| <i>Osmia atrocyanea</i>              | 1               | 0          | 0.0       |
| <i>Osmia brevis</i>                  | 2               | 0          | 0.0       |
| <i>Osmia coloradensis</i>            | 1               | 0          | 0.0       |
| <i>Osmia cyanella</i>                | 3               | 0          | 0.0       |
| <i>Osmia densa</i>                   | 5               | 0          | 0.0       |
| <i>Osmia sculleni</i>                | 3               | 0          | 0.0       |
| <i>Protosmia rubifloris</i>          | 15              | 15         | 100.0     |
| <i>Trachusa timberlakei</i>          | 5               | 5          | 100.0     |
| <b>TOTAL</b>                         | 1887            | 1678       | 88.9      |

Table 7: Your determination accuracy.

| Taxon                   |
|-------------------------|
| No specimens identified |

## 7 Taxonomic Accuracy, All Years

Over your time in the Atlas you identified of your specimens to genus level and to species level (see Table 7). In total, volunteers from the Oregon Bee Atlas project identified 40.5 % (47150) of the 116490 bee specimens to the level of genus, with an average accuracy of 93.9%. Volunteers also identified 0.8% (875) of the specimens to species level, and had an average accuracy of 70.4% (see Table 8). Nicely done!

Table 8: Determination accuracy for all volunteers.

|               | Taxon                | Specimens ID-ed | Correct ID | % Correct |
|---------------|----------------------|-----------------|------------|-----------|
| <b>Family</b> |                      |                 |            |           |
|               | <i>Andrenidae</i>    | 6786            | 6064       | 89.4      |
|               | <i>Apidae</i>        | 17614           | 17375      | 98.6      |
|               | <i>Colletidae</i>    | 2847            | 2685       | 94.3      |
|               | <i>Halictidae</i>    | 14510           | 14302      | 98.6      |
|               | <i>Megachilidae</i>  | 11434           | 11275      | 98.6      |
|               | <i>Melittidae</i>    | 4               | 1          | 25.0      |
|               | <i><b>TOTAL</b></i>  | 53195           | 51702      | 97.2      |
| <b>Genus</b>  |                      |                 |            |           |
|               | <i>Agapostemon</i>   | 965             | 961        | 99.6      |
|               | <i>Andrena</i>       | 4750            | 4155       | 87.5      |
|               | <i>Anthidiellum</i>  | 56              | 24         | 42.9      |
|               | <i>Anthidium</i>     | 546             | 539        | 98.7      |
|               | <i>Anthophora</i>    | 1213            | 1144       | 94.3      |
|               | <i>Apis</i>          | 594             | 585        | 98.5      |
|               | <i>Ashmeadiella</i>  | 342             | 291        | 85.1      |
|               | <i>Atoposmia</i>     | 137             | 93         | 67.9      |
|               | <i>Biastes</i>       | 8               | 6          | 75.0      |
|               | <i>Bombus</i>        | 7802            | 7774       | 99.6      |
|               | <i>Brachymelecta</i> | 95              | 71         | 74.7      |
|               | <i>Calliopsis</i>    | 98              | 57         | 58.2      |
|               | <i>Ceratina</i>      | 2971            | 2923       | 98.4      |
|               | <i>Chelostoma</i>    | 82              | 63         | 76.8      |
|               | <i>Coelioxys</i>     | 152             | 143        | 94.1      |
|               | <i>Colletes</i>      | 1346            | 1229       | 91.3      |
|               | <i>Diadasia</i>      | 368             | 322        | 87.5      |
|               | <i>Dianthidium</i>   | 314             | 280        | 89.2      |
|               | <i>Dioxytis</i>      | 6               | 3          | 50.0      |
|               | <i>Dufourea</i>      | 260             | 217        | 83.5      |
|               | <i>Epeorus</i>       | 61              | 43         | 70.5      |
|               | <i>Eucera</i>        | 635             | 583        | 91.8      |
|               | <i>Habropoda</i>     | 279             | 259        | 92.8      |
|               | <i>Halictus</i>      | 5622            | 5393       | 95.9      |
|               | <i>Heriades</i>      | 223             | 179        | 80.3      |
|               | <i>Hesperapis</i>    | 4               | 1          | 25.0      |
|               | <i>Holcopasites</i>  | 1               | 1          | 100.0     |
|               | <i>Hoplitis</i>      | 748             | 605        | 80.9      |
|               | <i>Hylaeus</i>       | 1500            | 1454       | 96.9      |
|               | <i>Lasioglossum</i>  | 7189            | 6828       | 95.0      |

Table 8: Determination accuracy for all volunteers. (*continued*)

| Taxon                           | Specimens ID-ed | Correct ID | % Correct |
|---------------------------------|-----------------|------------|-----------|
| <i>Megachile</i>                | 2279            | 2223       | 97.5      |
| <i>Melecta</i>                  | 72              | 69         | 95.8      |
| <i>Melissodes</i>               | 2045            | 1860       | 91.0      |
| <i>Micralictoides</i>           | 16              | 14         | 87.5      |
| <i>Neolarra</i>                 | 3               | 3          | 100.0     |
| <i>Nomada</i>                   | 1220            | 1164       | 95.4      |
| <i>Nomia</i>                    | 2               | 2          | 100.0     |
| <i>Oreopasites</i>              | 3               | 0          | 0.0       |
| <i>Osmia</i>                    | 6165            | 6055       | 98.2      |
| <i>Panurginus</i>               | 750             | 567        | 75.6      |
| <i>Perdita</i>                  | 1147            | 1060       | 92.4      |
| <i>Protandrena</i>              | 27              | 9          | 33.3      |
| <i>Protosmia</i>                | 268             | 212        | 79.1      |
| <i>Pseudoanthidium</i>          | 6               | 3          | 50.0      |
| <i>Sphecodes</i>                | 454             | 354        | 78.0      |
| <i>Stelis</i>                   | 97              | 64         | 66.0      |
| <i>Trachusa</i>                 | 8               | 7          | 87.5      |
| <i>Triepeolus</i>               | 176             | 147        | 83.5      |
| <i>Xylocopa</i>                 | 62              | 60         | 96.8      |
| <i>Zacosmia</i>                 | 1               | 1          | 100.0     |
| <b>TOTAL</b>                    | 53168           | 50100      | 94.2      |
| <b>Species</b>                  |                 |            |           |
| <i>Agapostemon femoratus</i>    | 181             | 171        | 94.5      |
| <i>Agapostemon melliventris</i> | 14              | 14         | 100.0     |
| <i>Agapostemon subtilior</i>    | 228             | 214        | 93.9      |
| <i>Agapostemon virescens</i>    | 109             | 95         | 87.2      |
| <i>Andrena angustitarsata</i>   | 18              | 18         | 100.0     |
| <i>Andrena astragali</i>        | 1               | 1          | 100.0     |
| <i>Andrena chlorogaster</i>     | 2               | 2          | 100.0     |
| <i>Andrena crataegi</i>         | 1               | 1          | 100.0     |
| <i>Andrena cupreotincta</i>     | 14              | 14         | 100.0     |
| <i>Andrena fuscicauda</i>       | 2               | 2          | 100.0     |
| <i>Andrena illinoiensis</i>     | 1               | 1          | 100.0     |
| <i>Andrena nigrocaerulea</i>    | 2               | 2          | 100.0     |
| <i>Andrena pallidifovea</i>     | 1               | 1          | 100.0     |
| <i>Andrena perplexa</i>         | 1               | 1          | 100.0     |
| <i>Andrena piperi</i>           | 3               | 2          | 66.7      |
| <i>Andrena prunorum</i>         | 34              | 34         | 100.0     |
| <i>Andrena salicifloris</i>     | 2               | 2          | 100.0     |
| <i>Andrena vicina</i>           | 4               | 3          | 75.0      |
| <i>Anthidiellum robertsoni</i>  | 19              | 19         | 100.0     |
| <i>Anthidium atrifrons</i>      | 3               | 3          | 100.0     |
| <i>Anthidium banningense</i>    | 5               | 5          | 100.0     |
| <i>Anthidium duomarginatum</i>  | 1               | 0          | 0.0       |
| <i>Anthidium emarginatum</i>    | 5               | 0          | 0.0       |
| <i>Anthidium manicatum</i>      | 53              | 44         | 83.0      |
| <i>Anthidium mormonum</i>       | 12              | 12         | 100.0     |
| <i>Anthidium oblongatum</i>     | 14              | 14         | 100.0     |
| <i>Anthidium palliventre</i>    | 33              | 30         | 90.9      |
| <i>Anthidium placitum</i>       | 1               | 1          | 100.0     |
| <i>Anthidium tenuiflorae</i>    | 2               | 2          | 100.0     |
| <i>Anthidium utahense</i>       | 3               | 3          | 100.0     |

Table 8: Determination accuracy for all volunteers. (*continued*)

| Taxon                             | Specimens ID-ed | Correct ID | % Correct |
|-----------------------------------|-----------------|------------|-----------|
| <i>Anthophora bombooides</i>      | 3               | 3          | 100.0     |
| <i>Anthophora californica</i>     | 1               | 0          | 0.0       |
| <i>Anthophora neglecta</i>        | 3               | 0          | 0.0       |
| <i>Anthophora pacifica</i>        | 3               | 3          | 100.0     |
| <i>Anthophora urbana</i>          | 251             | 249        | 99.2      |
| <i>Anthophora ursina</i>          | 2               | 0          | 0.0       |
| <i>Apis mellifera</i>             | 492             | 488        | 99.2      |
| <i>Ashmeadiella aridula</i>       | 1               | 0          | 0.0       |
| <i>Ashmeadiella californica</i>   | 1               | 1          | 100.0     |
| <i>Ashmeadiella clypeodentata</i> | 1               | 0          | 0.0       |
| <i>Ashmeadiella cubiceps</i>      | 2               | 1          | 50.0      |
| <i>Ashmeadiella difugita</i>      | 1               | 0          | 0.0       |
| <i>Ashmeadiella eurynorhyncha</i> | 1               | 0          | 0.0       |
| <i>Ashmeadiella timberlakei</i>   | 1               | 1          | 100.0     |
| <i>Atoposmia abjecta</i>          | 3               | 3          | 100.0     |
| <i>Atoposmia copelandica</i>      | 6               | 6          | 100.0     |
| <i>Atoposmia oregonia</i>         | 4               | 3          | 75.0      |
| <i>Atoposmia triodonta</i>        | 1               | 0          | 0.0       |
| <i>Bombus Griseocollis</i>        | 1               | 0          | 0.0       |
| <i>Bombus Mixtus</i>              | 8               | 0          | 0.0       |
| <i>Bombus Nevadensis</i>          | 1               | 0          | 0.0       |
| <i>Bombus appositus</i>           | 48              | 36         | 75.0      |
| <i>Bombus caliginosus</i>         | 345             | 273        | 79.1      |
| <i>Bombus centralis</i>           | 201             | 187        | 93.0      |
| <i>Bombus fervidus</i>            | 362             | 325        | 89.8      |
| <i>Bombus flavidus</i>            | 145             | 134        | 92.4      |
| <i>Bombus flavifrons</i>          | 541             | 454        | 83.9      |
| <i>Bombus frigidus</i>            | 5               | 0          | 0.0       |
| <i>Bombus griseocollis</i>        | 140             | 138        | 98.6      |
| <i>Bombus huntii</i>              | 160             | 139        | 86.9      |
| <i>Bombus insularis</i>           | 33              | 25         | 75.8      |
| <i>Bombus kirbiellus</i>          | 1               | 0          | 0.0       |
| <i>Bombus melanopygus</i>         | 328             | 274        | 83.5      |
| <i>Bombus mixtus</i>              | 956             | 877        | 91.7      |
| <i>Bombus morrisoni</i>           | 11              | 10         | 90.9      |
| <i>Bombus nevadensis</i>          | 65              | 58         | 89.2      |
| <i>Bombus occidentalis</i>        | 33              | 27         | 81.8      |
| <i>Bombus rufocinctus</i>         | 58              | 36         | 62.1      |
| <i>Bombus sitkensis</i>           | 195             | 147        | 75.4      |
| <i>Bombus suckleyi</i>            | 2               | 0          | 0.0       |
| <i>Bombus sylvicola</i>           | 69              | 31         | 44.9      |
| <i>Bombus vagans</i>              | 24              | 8          | 33.3      |
| <i>Bombus vancouverensis</i>      | 829             | 802        | 96.7      |
| <i>Bombus vandykei</i>            | 86              | 62         | 72.1      |
| <i>Bombus vosnesenskii</i>        | 1378            | 1284       | 93.2      |
| <i>Brachymelecta californica</i>  | 45              | 43         | 95.6      |
| <i>Calliopsis zonalis</i>         | 1               | 0          | 0.0       |
| <i>Ceratina acantha</i>           | 679             | 665        | 97.9      |
| <i>Ceratina micheneri</i>         | 44              | 43         | 97.7      |
| <i>Ceratina nanula</i>            | 3               | 2          | 66.7      |
| <i>Ceratina neomexicana</i>       | 1               | 1          | 100.0     |
| <i>Ceratina pacifica</i>          | 8               | 6          | 75.0      |

Table 8: Determination accuracy for all volunteers. (*continued*)

| Taxon                          | Specimens ID-ed | Correct ID | % Correct |
|--------------------------------|-----------------|------------|-----------|
| <i>Ceratina sequoiae</i>       | 5               | 0          | 0.0       |
| <i>Ceratina tejonensis</i>     | 7               | 2          | 28.6      |
| <i>Ceratina timberlakei</i>    | 5               | 0          | 0.0       |
| <i>Chelostoma minutum</i>      | 1               | 1          | 100.0     |
| <i>Coelioxys alternatus</i>    | 1               | 0          | 0.0       |
| <i>Coelioxys rufitarsis</i>    | 4               | 0          | 0.0       |
| <i>Coelioxys sayi</i>          | 2               | 2          | 100.0     |
| <i>Coelioxys texanus</i>       | 4               | 0          | 0.0       |
| <i>Diadasia angusticeps</i>    | 7               | 7          | 100.0     |
| <i>Diadasia australis</i>      | 4               | 4          | 100.0     |
| <i>Diadasia diminuta</i>       | 17              | 17         | 100.0     |
| <i>Diadasia enavata</i>        | 100             | 99         | 99.0      |
| <i>Diadasia lutzi</i>          | 28              | 6          | 21.4      |
| <i>Diadasia nigritrons</i>     | 9               | 9          | 100.0     |
| <i>Diadasia opuntiae</i>       | 8               | 0          | 0.0       |
| <i>Dianthidium curvatum</i>    | 22              | 22         | 100.0     |
| <i>Dianthidium heterulkei</i>  | 9               | 0          | 0.0       |
| <i>Dianthidium pudicum</i>     | 12              | 12         | 100.0     |
| <i>Dianthidium subparvum</i>   | 3               | 3          | 100.0     |
| <i>Dianthidium ulkei</i>       | 24              | 17         | 70.8      |
| <i>Dioxys aurifuscus</i>       | 2               | 2          | 100.0     |
| <i>Eucera actuosa</i>          | 11              | 10         | 90.9      |
| <i>Eucera cordleyi</i>         | 18              | 4          | 22.2      |
| <i>Eucera edwardsii</i>        | 48              | 20         | 41.7      |
| <i>Eucera frater</i>           | 8               | 8          | 100.0     |
| <i>Eucera speciosa</i>         | 19              | 0          | 0.0       |
| <i>Habropoda depressa</i>      | 4               | 4          | 100.0     |
| <i>Habropoda miserabilis</i>   | 7               | 6          | 85.7      |
| <i>Habropoda tristissima</i>   | 3               | 2          | 66.7      |
| <i>Halictus Ligatus</i>        | 4               | 0          | 0.0       |
| <i>Halictus confusus</i>       | 149             | 122        | 81.9      |
| <i>Halictus farinosus</i>      | 284             | 246        | 86.6      |
| <i>Halictus ligatus</i>        | 1475            | 1464       | 99.3      |
| <i>Halictus rubicundus</i>     | 361             | 333        | 92.2      |
| <i>Halictus tripartitus</i>    | 723             | 684        | 94.6      |
| <i>Halictus virgatellus</i>    | 114             | 109        | 95.6      |
| <i>Heriades carinata</i>       | 2               | 0          | 0.0       |
| <i>Holcopasites pulchellus</i> | 1               | 1          | 100.0     |
| <i>Hoplitis albifrons</i>      | 5               | 5          | 100.0     |
| <i>Hoplitis boharti</i>        | 2               | 2          | 100.0     |
| <i>Hoplitis coleii</i>         | 1               | 0          | 0.0       |
| <i>Hoplitis emarginata</i>     | 1               | 1          | 100.0     |
| <i>Hoplitis fulgida</i>        | 7               | 7          | 100.0     |
| <i>Hoplitis grinnelli</i>      | 8               | 5          | 62.5      |
| <i>Hoplitis hypocrita</i>      | 1               | 1          | 100.0     |
| <i>Hoplitis louisae</i>        | 2               | 2          | 100.0     |
| <i>Hoplitis orthognatha</i>    | 7               | 7          | 100.0     |
| <i>Hoplitis producta</i>       | 12              | 10         | 83.3      |
| <i>Hoplitis uvulalis</i>       | 3               | 3          | 100.0     |
| <i>Hoplitis viridimicans</i>   | 6               | 4          | 66.7      |
| <i>Hylaeus basalis</i>         | 6               | 3          | 50.0      |
| <i>Hylaeus mesillae</i>        | 1               | 0          | 0.0       |

Table 8: Determination accuracy for all volunteers. (*continued*)

| Taxon                                | Specimens ID-ed | Correct ID | % Correct |
|--------------------------------------|-----------------|------------|-----------|
| <i>Hylaeus verticalis</i>            | 1               | 0          | 0.0       |
| <i>Lasioglossum albipenne</i>        | 3               | 3          | 100.0     |
| <i>Lasioglossum albohirtum</i>       | 7               | 7          | 100.0     |
| <i>Lasioglossum allonotus</i>        | 1               | 1          | 100.0     |
| <i>Lasioglossum anhypops</i>         | 6               | 5          | 83.3      |
| <i>Lasioglossum aspilurum</i>        | 2               | 2          | 100.0     |
| <i>Lasioglossum athabascense</i>     | 2               | 0          | 0.0       |
| <i>Lasioglossum boreale</i>          | 2               | 2          | 100.0     |
| <i>Lasioglossum brunneiventre</i>    | 4               | 4          | 100.0     |
| <i>Lasioglossum buccale</i>          | 3               | 3          | 100.0     |
| <i>Lasioglossum colatum</i>          | 1               | 1          | 100.0     |
| <i>Lasioglossum cooleyi</i>          | 24              | 1          | 4.2       |
| <i>Lasioglossum cordleyi</i>         | 5               | 5          | 100.0     |
| <i>Lasioglossum cressonii</i>        | 30              | 30         | 100.0     |
| <i>Lasioglossum diatretum</i>        | 5               | 3          | 60.0      |
| <i>Lasioglossum diversopunctatum</i> | 4               | 4          | 100.0     |
| <i>Lasioglossum egregium</i>         | 4               | 1          | 25.0      |
| <i>Lasioglossum glabriventre</i>     | 4               | 4          | 100.0     |
| <i>Lasioglossum helianthi</i>        | 1               | 0          | 0.0       |
| <i>Lasioglossum imbrex</i>           | 7               | 0          | 0.0       |
| <i>Lasioglossum incompletum</i>      | 79              | 73         | 92.4      |
| <i>Lasioglossum inconditum</i>       | 7               | 5          | 71.4      |
| <i>Lasioglossum kincaidii</i>        | 10              | 10         | 100.0     |
| <i>Lasioglossum macroprosopum</i>    | 2               | 2          | 100.0     |
| <i>Lasioglossum mellipes</i>         | 3               | 0          | 0.0       |
| <i>Lasioglossum nevadense</i>        | 9               | 9          | 100.0     |
| <i>Lasioglossum novascotiae</i>      | 1               | 0          | 0.0       |
| <i>Lasioglossum occultum</i>         | 3               | 2          | 66.7      |
| <i>Lasioglossum olympiae</i>         | 138             | 127        | 92.0      |
| <i>Lasioglossum ovaliceps</i>        | 12              | 12         | 100.0     |
| <i>Lasioglossum pacificum</i>        | 64              | 55         | 85.9      |
| <i>Lasioglossum pavonotum</i>        | 59              | 58         | 98.3      |
| <i>Lasioglossum pruinosa</i>         | 12              | 12         | 100.0     |
| <i>Lasioglossum pulveris</i>         | 27              | 27         | 100.0     |
| <i>Lasioglossum quebecense</i>       | 1               | 0          | 0.0       |
| <i>Lasioglossum rubicundus</i>       | 1               | 0          | 0.0       |
| <i>Lasioglossum ruidosense</i>       | 5               | 5          | 100.0     |
| <i>Lasioglossum sequoiae</i>         | 6               | 0          | 0.0       |
| <i>Lasioglossum sisymbrii</i>        | 105             | 101        | 96.2      |
| <i>Lasioglossum titusi</i>           | 260             | 214        | 82.3      |
| <i>Lasioglossum villosulum</i>       | 11              | 8          | 72.7      |
| <i>Lasioglossum zephyrus</i>         | 2               | 2          | 100.0     |
| <i>Lasioglossum zonulum</i>          | 25              | 22         | 88.0      |
| <i>Megachile angelarum</i>           | 25              | 22         | 88.0      |
| <i>Megachile anograe</i>             | 6               | 0          | 0.0       |
| <i>Megachile apicalis</i>            | 4               | 4          | 100.0     |
| <i>Megachile brevis</i>              | 23              | 1          | 4.3       |
| <i>Megachile fidelis</i>             | 6               | 5          | 83.3      |
| <i>Megachile melanophaea</i>         | 2               | 1          | 50.0      |
| <i>Megachile mellitarsis</i>         | 4               | 4          | 100.0     |
| <i>Megachile montivaga</i>           | 1               | 0          | 0.0       |
| <i>Megachile nevadensis</i>          | 8               | 0          | 0.0       |

Table 8: Determination accuracy for all volunteers. (*continued*)

| Taxon                            | Specimens ID-ed | Correct ID | % Correct |
|----------------------------------|-----------------|------------|-----------|
| <i>Megachile perihirta</i>       | 61              | 55         | 90.2      |
| <i>Megachile pugnata</i>         | 8               | 4          | 50.0      |
| <i>Megachile rotundata</i>       | 23              | 22         | 95.7      |
| <i>Megachile wheeleri</i>        | 4               | 4          | 100.0     |
| <i>Melecta edwardsii</i>         | 8               | 8          | 100.0     |
| <i>Melecta pacifica</i>          | 5               | 3          | 60.0      |
| <i>Melecta separata</i>          | 4               | 4          | 100.0     |
| <i>Melecta thoracica</i>         | 2               | 0          | 0.0       |
| <i>Melissodes agilis</i>         | 1               | 1          | 100.0     |
| <i>Melissodes bimatratus</i>     | 2               | 0          | 0.0       |
| <i>Melissodes metenuus</i>       | 3               | 3          | 100.0     |
| <i>Melitta americana</i>         | 2               | 0          | 0.0       |
| <i>Micralictoides ruficaudus</i> | 14              | 14         | 100.0     |
| <i>Nomia melanderi</i>           | 1               | 1          | 100.0     |
| <i>Osmia aglaia</i>              | 10              | 0          | 0.0       |
| <i>Osmia albolateralis</i>       | 1               | 0          | 0.0       |
| <i>Osmia atrocyanea</i>          | 10              | 9          | 90.0      |
| <i>Osmia brevis</i>              | 2               | 0          | 0.0       |
| <i>Osmia bruneri</i>             | 8               | 7          | 87.5      |
| <i>Osmia californica</i>         | 2               | 0          | 0.0       |
| <i>Osmia calla</i>               | 6               | 0          | 0.0       |
| <i>Osmia coloradensis</i>        | 1               | 0          | 0.0       |
| <i>Osmia cornifrons</i>          | 10              | 10         | 100.0     |
| <i>Osmia cyanella</i>            | 3               | 0          | 0.0       |
| <i>Osmia densa</i>               | 6               | 1          | 16.7      |
| <i>Osmia kincaidii</i>           | 3               | 3          | 100.0     |
| <i>Osmia laeta</i>               | 2               | 0          | 0.0       |
| <i>Osmia lignaria</i>            | 11              | 11         | 100.0     |
| <i>Osmia montana</i>             | 3               | 3          | 100.0     |
| <i>Osmia nemoris</i>             | 5               | 1          | 20.0      |
| <i>Osmia sculleni</i>            | 3               | 0          | 0.0       |
| <i>Perdita nevadensis</i>        | 1               | 1          | 100.0     |
| <i>Protosmia rubifloris</i>      | 168             | 167        | 99.4      |
| <i>Pseudoanthidium nanum</i>     | 2               | 2          | 100.0     |
| <i>Stelis laticincta</i>         | 5               | 5          | 100.0     |
| <i>Trachusa timberlakei</i>      | 5               | 5          | 100.0     |
| <i>Triepeolus concavus</i>       | 4               | 4          | 100.0     |
| <i>Triepeolus utahensis</i>      | 5               | 2          | 40.0      |
| <i>Xylocopa californica</i>      | 1               | 1          | 100.0     |
| <i>Xylocopa tabaniformis</i>     | 16              | 16         | 100.0     |
| <i>Xylocopa virginica</i>        | 1               | 0          | 0.0       |
| <i>Zacosmia maculata</i>         | 1               | 1          | 100.0     |
| <i>bombus flavifrons</i>         | 1               | 0          | 0.0       |
| <i>bombus melanopygus</i>        | 1               | 0          | 0.0       |
| <i>bombus sitkensis</i>          | 1               | 0          | 0.0       |
| <i>bombus vosnesenskii</i>       | 1               | 0          | 0.0       |
| <b>TOTAL</b>                     | 13393           | 12047      | 89.9      |