Supplementary Material:

Table S1. Laboratories, institutions, and individuals that contributed Montana *Megachile* specimens. “Specimen” refers to physical bee specimens with unique identifying codes that we examined on loan.

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| Laboratory, Institution, or Individual | Number of Specimens Examined and Included in Dataset |
| USDA-ARS NPARL – United States Department of Agriculture - Agriculture Research Service, Northern Plains Agricultural Research Laboratory, Sidney, Montana (Alexandra Morphew and Joshua Campbell). | 4 |
| AMNH – American Museum of Natural History, New York, New York (Jerome G. Rozen, Jr. and Corey S. Smith). | 22 |
| OSUC – C.A. Triplehorn Insect Collection, The Ohio State University, Columbus, Ohio (Luciana Musetti). | 3 |
| CAS-ENT – California Academy of Sciences Collection, San Francisco, California (Robert L. Zuparko). | 21 |
| CESC – Catherine E. Seibert Personal Collection, Belgrade, Montana (Catherine E. Seibert). | 562 |
| CMDC – Casey M. Delphia Personal Collection, Bozeman, Montana (Casey M. Delphia). | 135 |
| EMEC – Essig Museum of Entomology, University of California, Berkeley, California (Peter T. Oboyski). | 1 |
| INHS – Illinois Natural History Survey Insect Collection, University of Illinois Urbana-Champaign, Champaign, Illinois (Tommy McElrath). | 7 |
| KMOC – Kevin M. O’Neill Lab Collection, Montana State University, Bozeman, Montana (Kevin M. O’Neill). | 605 |
| MTEC – Montana Entomology Collection, Montana State University, Bozeman, Montana (Michael A. Ivie, Casey M. Delphia, and Kevin M. O’Neill, including the CMDC and KMOC). | 2,156 |
| PMNH – Peabody Museum of Natural History, Yale University, New Haven, Connecticut (Larry Gall). | 48 |
| SEMC – Snow Entomological Museum Collection, University of Kansas, Lawrence, Kansas (Jennifer C. Thomas, Victor H. Gonzalez, and Zachary H. Falin). | 156 |
| TAMUIC – Texas A&M University Insect Collection, College Station, Texas (Karen W. Wright). | 11 |
| UCMC – University of Colorado Museum of Natural History, Boulder, Colorado (Virginia L. Scott). | 27 |
| WFBM – William F. Barr Entomological Collection, University of Idaho, Moscow, Idaho (Luc Leblanc). | 19 |

Table S2. Laboratories, institutions, individuals, online data aggregators, and publications that contributed Montana *Megachile* records. “Record” refers to data corresponding to a specimen with a unique identifying code. Records were included in our dataset if they were not a new county record or were identified by an expert taxonomist.

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| Laboratory, Institution, Individual, or Publication | Number of Records Included in Dataset |
| Adhikari *et al*. (2019) | 17 |
| AMNH – American Museum of Natural History, New York, New York (Jerome G. Rozen, Jr. and Corey S. Smith). | 1 |
| Ann Rodman, Yellowstone National Park, Wyoming. | 15 |
| Bethanne Bruninga-Socolar, University of Minnesota, St. Paul, Minnesota. | 3 |
| BMEC – Bohart Museum of Entomology, University of California Davis, Davis, California. | 1 |
| CUIC – Cornell University Insect Collection, Ithaca, New York. | 2 |
| Delphia *et al*. (2019a) | 243 |
| GBIF (Global Biodiversity Information Facility) | 3 |
| INHS – Illinois Natural History Survey Insect Collection, University of Illinois Urbana-Champaign, Champaign, Illinois (Tommy McElrath). | 1 |
| Kuhlman and Burrows (2017) | 1,010 |
| LaManna *et al*. (2020) | 378 |
| Marirose Kuhlman, MPG Ranch, Missoula, Montana. | 4 |
| MSBA – Museum of Southwestern Biology, University of New Mexico, Albuquerque, New Mexico. | 1 |
| Reese *et al*. (2018) | 3 (Records not included in LaManna *et al*.2020) |
| USGS DRO – USGS Patuxent Wildlife Research Center, Laurel, Maryland (Sam Droege). | 4 |
| SCAN (Symbiota Collections of Arthropods Network) | 6 |
| SMRC – Severin McDaniel Insect Research Collection, South Dakota State University, Brookings, South Dakota (Paul J. Johnson). | 7 |
| SEMC – Snow Entomological Museum Collection, University of Kansas, Lawrence, Kansas (Jennifer C. Thomas, Victor H. Gonzalez, Zachary H. Falin). | 23 |
| UCRC – University of California Riverside Entomology Research Museum, Riverside, California (Douglas Yanega). | 1 |
| UTEP – University of Texas El Paso Entomology Collection, El Paso, Texas. | 4 |
| BBSL – U.S. National Pollinating Insects Collection housed in the USDA-ARS Pollinating Insects Collection, Logan, Utah (Terry Griswold). | 76 |

Table S3. Montana *Megachile* specimens by collecting method (N = 2,681). “Pan trap” refers to data entered as: “Bee bowl”, “Bowl”, “Bowl trap”, “Pan”, and “Pan trap” and where no color was associated with the trap. “Blue pan trap” refers to data entered as: “Blue pan trap”, “Blue bowl”, and “Blue cup”. “Yellow pan trap” refers to data entered as: “Yellow pan”, “Yellow pan trap”, “Yellow bowl”, and “Yellow cup”. “White pan trap” refers to data entered as: “White bowl”, “White pan trap”, and “White cup”. “Bee Bucket” refers to data entered as: “Bee bucket”, “Yellow bucket”, “Bucket trap”, and “Yellow bucket trap”. “Pitfall trap” refers to data entered as: “Pit trap”, “Pitfall trap”, and “Pitfall”.

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| Collection Method | *Megachile* specimens |
| Bee bucket | 27 |
| Blue vane trap | 2 |
| Flight intercept trap | 118 |
| Japanese beetle trap | 44 |
| Lindgren funnel | 40 |
| Malaise trap | 7 |
| Net | 846 |
| Pan traps | Total = 1,060 |
| Pan trap | 776 |
| Blue pan trap | 6 |
| White pan trap | 7 |
| Yellow pan trap | 271 |
| Pitfall trap | 38 |
| Sweep net | 6 |
| Trap nest | 432 |
| Crossvane-panel trap | 6 |
| Yellow vane trap | 55 |

Supplementary Material 2:

Erroneous Records

*Megachile policaris* Say, a species found mainly in the central to southern U.S. (Discover Life 2021), was recorded on Discover Life from Haugan, Montana (KSEM506871, Discover Life 15 May 2021). We worked with the SEMC to locate the specimen, which was indeed misidentified. The specimen was reidentified by Victor Gonzalez as *Megachile fidelis* Cresson (*in lit*. 13 Jan 2021). The record has been updated online in the SEMC database (SEMC 2021) and on Discover Life.

A single specimenof *Megachile circumcincta* (Kirby) was recorded by Adhikari *et al*. (2019) from Chouteau County, Montana (MTEC 035028). However, the specimen was reexamined and reidentified as a male *M*. *perihirta* and is included under that name in our dataset. It is possible that the range of *M*. *circumcincta* could extend into Montana (see Discussion: Unrecorded *Megachile* Species Potentially in Montana), but as of now, this species is not recorded in the state.

A Montana record of *Megachile inimica* Cresson was published by Pearce *et al*. (2012). The specimen (MTEC 57005) was re-examined and reidentified as a male *M*. *pugnata*. There is a record on Discover Life as a state centroid for *M*. *inimica* (Discover Life 27 June 2021), but it is unknown whether that record is representative of the Pearce *et al*. (2012) literature record. We predict this species could eventually be found to occur in Montana (see Discussion: Unrecorded *Megachile* Species Potentially in Montana).

There is a misidentification of *Megachile concinna* Smith from Montana in an unpublished species list as part of a dissertation in gray literature (Pearce 2008). The specimen (MTEC 088326) was re-examined and reidentified as a male *M*. *lippiae*.

There is a misidentification of *Megachile fortis* Cresson from Montana in an unpublished species list as part of a dissertation in gray literature (Simanonok 2018). We located the vouchers in the Burkle Community Ecology Lab at Montana State University (8713MS16, 19715EE, 20725MS16, 11617MS16, 9721EE) and reidentified them as female *M*. *latimanus/M*. *perihirta*. The vouchers, however, have not yet been fully curated or deposited in a museum collection.

*Megachile fortis* Cresson was originally included in the provisional list of Montana *Megachile* based on Sheffield *et al*.’s (2011) Map 33, showing a range reaching along the northern border of the U.S. (including all of Montana), from Manitoba to British Columbia. With verified records of the species in eastern Colorado and South Dakota (Mitchell 1936; Hurd 1979; Scott *et al*.2011) and Montana squarely in-between, this large and obvious species seemed certain to be in the state. However, the British Columbia record, based on Ivanochko (1979), was dropped as incorrect by Sheffield and Heron (2019), even though the Alberta, Saskatchewan, and Manitoba records were maintained on the Bees of Canada website (Sheffield 2021).  These records for Alberta, Saskatchewan, and Manitoba made it onto Discover Life (2021) as centroid records.  However, no Alberta or Saskatchewan specimens were cited anywhere.

Our failure to find this very distinctive species in Montana made us investigate this situation further. An inquiry was made to Sheffield, and the following answer was received (Cory Sheffield, *in lit*., 07 April 2021): “Sheffield *et al*. used shade maps which gave an inaccurate representation of its distribution in Canada based on the actual data. Thus, the only “good” data point is the occurrence from Manitoba.” Thus, *M*. *fortis* is in fact not known from Alberta or Saskatchewan and therefore is now not expected in Montana.  Except for the Manitoba record, there are no verified specimen records north of 44°N (Mitchell 1936; Hurd1979; Discover Life 2021).  The sole actual Canada record is in the Canadian National Collection of Insects (Ottawa)—a single specimen from Awame, Manitoba, east of 100°W—and has been located, reexamined, and verified by Sheffield (*in lit*., 16 June 2021). Our original expectation was thus due to the misleading nature of using distribution polygons simply encircling the furthest flung data points, as they then enter the literature as records without corresponding voucher specimens.

In a similar situation is *Megachile sublaurita* Mitchell. As a species recorded from Utah (Mitchell 1936), Colorado, and the southwest U.S. (Discover Life 30 May 2021), and from Hays, the southern prairies of Alberta (Ivanochko 1979; Sheffield *et al*. 2011), it was expected to be widespread in eastern Montana, but no specimens were found.  Specimen-verified records of this species are all south of 40°N, with the northernmost available record being from Mesa, Colorado (39.104°N, 108.456°W, BOLD record BEECD299-09 at York University). No one has apparently examined the Alberta specimen since Ivanochko’s (1979) Master’s degree thesis, and no further specimens were found from Canada (Sheffield *et al*. 2011). Combined with the lack of Montana specimens, this suggests a misidentification is involved. The whereabouts of the specimen was not reported, and it is not in any of the collections Sheffield *et al*. (2011) examined, which included all the major Canadian repositories. We tentatively consider the Alberta record incorrect based on the known distribution of the species. As such, it is not suspected from Montana.

Fultz (2005) recorded several *Megachile* species in her thesis, and those specimens were reexamined for this project. One specimen, recorded as *Megachile vidua* Smith, was reexamined and updated as a male *Megachile frigida* Smith (MTEC 088592).Another species included by Fultz was *Megachile integra* Cresson, which was recorded in her thesis with a question mark. When reexamining this material, we did not come across any specimens with this label information, did not identify any of the material as *M*. *integra*, and do not expect *M*. *integra* to occur in Montana based on its range (primarily eastern U.S. to Kansas). Therefore, in Table 2, we do not include *M*. *integra* under Fultz (2005).