

Taxonomic voucher specimens for study of post-wildfire forest habitat in Douglas County, Oregon

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Cite this work as:

Galbraith, S. M., J. H. Cane, A. R. Moldenke, L. R. Best and J. W. Rivers. 2019. *Taxonomic voucher specimens for study of post-wildfire forest habitat in Douglas County, Oregon*. Catalog: Oregon State Arthropod Collection. 3(4) p. 1—12. DOI: http://dx.doi.org/10.5399/osu/cat_osac.3.4.4618.

Abstract

Post-disturbance salvage logging has negative consequences on certain components of forest biodiversity, but few studies have looked at how early seral-adapted organisms are influenced in salvage-logged areas while controlling for local severity of the wildfire. In this study (Galbraith et al., in revision), we investigated the influence of an essential group of pollinators – wild bees – to recent post-wildfire salvage logging within managed mixed-conifer forest in the Pacific Northwestern U.S. We compared bee communities and relevant habitat features in salvage-logged areas to unlogged sites, both of which experienced high-severity fire. These specimens- collected using Blue Vane Traps- were identified to the lowest possible taxonomic level by A. R. Moldenke and L. R. Best. Three hundred and ninety two taxonomic voucher specimens were deposited into the Oregon State Arthropod Collection to serve as a reference for future research (Accession: OSAC_AC_2019-09-10-01-001).

Description of the collection

We collected bees and sampled bee habitat characteristics in 17 severely burned forest sites within the Douglas Fire Complex (Table 1) as part of a larger study investigating the influence of wildfire severity on wild bees (Galbraith et al., 2019). Sampling took place during four sampling rounds each in May through September 2016 and 2017. During each collection period, we sampled bee communities using blue vane traps (BVTs; Springstar Inc., Woodinville, WA). At each sampling site, we hung two traps with no killing agent or preservative, each on 1.8 m tall T-posts. We left traps for 48h, after which we removed them and placed them into a cooler with dry ice to kill captured insects, then froze samples until processing in the lab.

We assigned each captured bee to genus using keys from Michener et al. (2007) and Stephen et al. (1969). Species-level identifications were determined where keys were available for the following genera: *Agapostemon* (Stephen et al., 1969), *Anthophora* and *Ceratina* (www.discoverlife.org), *Bombus* (Williams et al., 2014), *Halictus* (Roberts, 1973), and *Xylocopa* (Hurd and Moure, 1963). Remaining species-level identifications were made by Andrew Moldenke and Lincoln Best. No species keys were available for several genera in our region (e.g., *Lasioglossum* (*Dialictus*) and some *Osmia*); specimens in these genera were grouped to morphospecies.

Table 1. List of sampling locations within the Douglas Fire Complex (UTM 10N)

Site ID number	Post-wildfire treatment	UTM coordinates
4	Unlogged	10 N 452951 4728980
6	Unlogged	10 N 455712 4729922
7	Unlogged	10 N 459864 4728947
8	Unlogged	10 N 457875 4730556
27	Unlogged	10 N 454113 4728147
28	Unlogged	10 N 451751 4737841
29	Unlogged	10 N 450936 4733986
39	Unlogged	10 N 455995 4726212
42	Unlogged	10 N 449506 4735955
1	Logged	10 N 455434 4728316
3	Logged	10 N 457519 4731092
9	Logged	10 N 456163 4729656
11	Logged	10 N 458417 4734234
26	Logged	10 N 455265 4727319
31	Logged	10 N 460302 4727944
38	Logged	10 N 456793 4726957
41	Logged	10 N 447994 4735111

We collected a total 3,561 specimens representing 21 genera and 111 morphospecies of bees. Of these, 65 were identified as known species and 46 were grouped by morphospecies (mostly within subgenus *Lasioglossum* (*Dialictus*)). Bees of different sexes could often not be matched at the morphospecies level, which inflated the number of morphospecies in our collection. See Galbraith et al. (in revision) for a list of abundances of each species.

Up to five specimens per sex per species were selected for the voucher collection. Individual-level data including the specimen's unique identification number, assigned species or morphospecies, and sex are provided in Table 2.

ANDRENIDAE				
identification	date collected	sex	labID	Oregon State Arthropod Collection UniquID
<i>Andrena prunorum</i> Cockerell, 1896	08.vii.2016	F	369	http://osac.oregonstate.edu/SP/OSAC_0001226781
<i>Andrena</i> morphospecies #1	30.vi.2016	F	534	http://osac.oregonstate.edu/SP/OSAC_0001226782
<i>Andrena</i> morphospecies #1	04.viii.2016	F	758	http://osac.oregonstate.edu/SP/OSAC_0001226783
<i>Andrena</i> morphospecies #2	26.v.2016	F	92	http://osac.oregonstate.edu/SP/OSAC_0001226784
<i>Andrena</i> morphospecies #2	22.vi.2017	F	4276	http://osac.oregonstate.edu/SP/OSAC_0001226785
<i>Andrena</i> morphospecies #2	29.vi.2017	F	4651	http://osac.oregonstate.edu/SP/OSAC_0001226786
<i>Andrena</i> morphospecies #4	28.vi.2017	F	4502	http://osac.oregonstate.edu/SP/OSAC_0001226787
<i>Andrena</i> morphospecies #5	08.vii.2016	F	371	http://osac.oregonstate.edu/SP/OSAC_0001226788
<i>Andrena</i> morphospecies #5	30.vi.2016	F	721	http://osac.oregonstate.edu/SP/OSAC_0001226789
<i>Andrena</i> morphospecies #7	25.v.2016	F	162	http://osac.oregonstate.edu/SP/OSAC_0001226790
<i>Andrena</i> morphospecies #9	18.v.2017	F	3752	http://osac.oregonstate.edu/SP/OSAC_0001226791
<i>Perdita nevadensis</i> Cockerell, 1896	03.viii.2016	F	1863	http://osac.oregonstate.edu/SP/OSAC_0001227277
<i>Perdita nevadensis</i> Cockerell, 1896	03.viii.2016	F	2414	http://osac.oregonstate.edu/SP/OSAC_0001227278
<i>Perdita nevadensis</i> Cockerell, 1896	03.viii.2016	F	2436	http://osac.oregonstate.edu/SP/OSAC_0001227279
<i>Perdita nevadensis</i> Cockerell, 1896	28.vi.2017	F	4697	http://osac.oregonstate.edu/SP/OSAC_0001227280
APIDAE				
<i>Anthophora bombooides</i> Kirby, 1837	27.vii.2017	F	5391	http://osac.oregonstate.edu/SP/OSAC_0001226799
<i>Anthophora pacifica</i> Cresson, 1878	19.v.2016	F	114	http://osac.oregonstate.edu/SP/OSAC_0001226803
<i>Anthophora pacifica</i> Cresson, 1878	19.v.2016	F	118	http://osac.oregonstate.edu/SP/OSAC_0001226804
<i>Anthophora pacifica</i> Cresson, 1878	25.v.2017	F	3703	http://osac.oregonstate.edu/SP/OSAC_0001226800
<i>Anthophora pacifica</i> Cresson, 1878	24.v.2017	F	3834	http://osac.oregonstate.edu/SP/OSAC_0001226801
<i>Anthophora pacifica</i> Cresson, 1878	23.vi.2017	F	4103	http://osac.oregonstate.edu/SP/OSAC_0001226802
<i>Anthophora urbana</i> Cresson, 1878	30.vi.2016	F	494	http://osac.oregonstate.edu/SP/OSAC_0001226807
<i>Anthophora urbana</i> Cresson, 1878	07.vii.2016	F	630	http://osac.oregonstate.edu/SP/OSAC_0001226809
<i>Anthophora urbana</i> Cresson, 1878	11.viii.2016	F	2741	http://osac.oregonstate.edu/SP/OSAC_0001226805
<i>Anthophora urbana</i> Cresson, 1878	11.viii.2016	F	2907	http://osac.oregonstate.edu/SP/OSAC_0001226806
<i>Anthophora urbana</i> Cresson, 1878	01.ix.2017	F	6131	http://osac.oregonstate.edu/SP/OSAC_0001226808
<i>Apis mellifera</i> Linnaeus, 1758	04.viii.2016	F	1136	http://osac.oregonstate.edu/SP/OSAC_0001226810
<i>Apis mellifera</i> Linnaeus, 1758	04.viii.2016	F	1142	http://osac.oregonstate.edu/SP/OSAC_0001226811
<i>Apis mellifera</i> Linnaeus, 1758	04.viii.2016	F	1145	http://osac.oregonstate.edu/SP/OSAC_0001226812
<i>Apis mellifera</i> Linnaeus, 1758	04.viii.2016	F	1146	http://osac.oregonstate.edu/SP/OSAC_0001226813
<i>Apis mellifera</i> Linnaeus, 1758	04.viii.2016	F	1147	http://osac.oregonstate.edu/SP/OSAC_0001226814
<i>Bombus caliginosus</i> (Frison, 1927)	27.v.2016	F	331	http://osac.oregonstate.edu/SP/OSAC_0001226821
<i>Bombus caliginosus</i> (Frison, 1927)	08.vii.2016	M	352	http://osac.oregonstate.edu/SP/OSAC_0001226825
<i>Bombus caliginosus</i> (Frison, 1927)	10.viii.2016	F	2843	http://osac.oregonstate.edu/SP/OSAC_0001226817
<i>Bombus caliginosus</i> (Frison, 1927)	11.viii.2016	F	2874	http://osac.oregonstate.edu/SP/OSAC_0001226818
<i>Bombus caliginosus</i> (Frison, 1927)	11.viii.2016	F	2900	http://osac.oregonstate.edu/SP/OSAC_0001226819
<i>Bombus caliginosus</i> (Frison, 1927)	11.viii.2016	M	2902	http://osac.oregonstate.edu/SP/OSAC_0001226822
<i>Bombus caliginosus</i> (Frison, 1927)	10.viii.2016	M	2976	http://osac.oregonstate.edu/SP/OSAC_0001226823

<i>Bombus caliginosus</i> (Frison, 1927)	10.viii.2016	M	2977	http://osac.oregonstate.edu/SP/OSAC_0001226824
<i>Bombus caliginosus</i> (Frison, 1927)	10.viii.2016	F	2978	http://osac.oregonstate.edu/SP/OSAC_0001226820
<i>Bombus caliginosus</i> (Frison, 1927)	22.vi.2017	M	4303	http://osac.oregonstate.edu/SP/OSAC_0001226826
<i>Bombus fervoidus</i> (Fabricius, 1798)	11.viii.2016	M	2877	http://osac.oregonstate.edu/SP/OSAC_0001226827
<i>Bombus fervoidus</i> (Fabricius, 1798)	07.vii.2016	F	446	http://osac.oregonstate.edu/SP/OSAC_0001226828
<i>Bombus fervoidus</i> (Fabricius, 1798)	23.vi.2017	M	4074	http://osac.oregonstate.edu/SP/OSAC_0001226829
<i>Bombus fervoidus</i> (Fabricius, 1798)	22.vi.2017	M	4249	http://osac.oregonstate.edu/SP/OSAC_0001226830
<i>Bombus fervoidus</i> (Fabricius, 1798)	22.vi.2017	M	4251	http://osac.oregonstate.edu/SP/OSAC_0001226831
<i>Bombus fervoidus</i> (Fabricius, 1798)	22.vi.2017	M	4252	http://osac.oregonstate.edu/SP/OSAC_0001226832
<i>Bombus flavifrons</i> Cresson, 1863	30.vi.2016	F	561	http://osac.oregonstate.edu/SP/OSAC_0001226837
<i>Bombus flavifrons</i> Cresson, 1863	07.vii.2016	M	627	http://osac.oregonstate.edu/SP/OSAC_0001226838
<i>Bombus flavifrons</i> Cresson, 1863	11.viii.2016	F	2873	http://osac.oregonstate.edu/SP/OSAC_0001226834
<i>Bombus flavifrons</i> Cresson, 1863	11.viii.2016	F	2881	http://osac.oregonstate.edu/SP/OSAC_0001226833
<i>Bombus flavifrons</i> Cresson, 1863	29.vi.2017	F	4462	http://osac.oregonstate.edu/SP/OSAC_0001226835
<i>Bombus flavifrons</i> Cresson, 1863	29.vi.2017	F	4567	http://osac.oregonstate.edu/SP/OSAC_0001226836
<i>Bombus melanopygus</i> Nylander, 1848	26.v.2016	F	319	http://osac.oregonstate.edu/SP/OSAC_0001226839
<i>Bombus melanopygus</i> Nylander, 1848	27.v.2016	M	334	http://osac.oregonstate.edu/SP/OSAC_0001226844
<i>Bombus melanopygus</i> Nylander, 1848	27.v.2016	M	335	http://osac.oregonstate.edu/SP/OSAC_0001226845
<i>Bombus melanopygus</i> Nylander, 1848	18.v.2017	F	3795	http://osac.oregonstate.edu/SP/OSAC_0001226840
<i>Bombus melanopygus</i> Nylander, 1848	25.v.2017	F	3896	http://osac.oregonstate.edu/SP/OSAC_0001226841
<i>Bombus melanopygus</i> Nylander, 1848	23.vi.2017	F	3968	http://osac.oregonstate.edu/SP/OSAC_0001226842
<i>Bombus melanopygus</i> Nylander, 1848	23.vi.2017	F	4076	http://osac.oregonstate.edu/SP/OSAC_0001226843
<i>Bombus mixtus</i> Cresson, 1878	18.v.2016	F	107	http://osac.oregonstate.edu/SP/OSAC_0001226846
<i>Bombus mixtus</i> Cresson, 1878	25.v.2016	F	141	http://osac.oregonstate.edu/SP/OSAC_0001226848
<i>Bombus mixtus</i> Cresson, 1878	25.v.2016	F	147	http://osac.oregonstate.edu/SP/OSAC_0001226849
<i>Bombus mixtus</i> Cresson, 1878	07.vii.2016	M	450	http://osac.oregonstate.edu/SP/OSAC_0001226854
<i>Bombus mixtus</i> Cresson, 1878	11.viii.2016	F	1111	http://osac.oregonstate.edu/SP/OSAC_0001226847
<i>Bombus mixtus</i> Cresson, 1878	18.v.2017	F	3694	http://osac.oregonstate.edu/SP/OSAC_0001226850
<i>Bombus mixtus</i> Cresson, 1878	23.vi.2017	M	4075	http://osac.oregonstate.edu/SP/OSAC_0001226851
<i>Bombus mixtus</i> Cresson, 1878	22.vi.2017	M	4256	http://osac.oregonstate.edu/SP/OSAC_0001226852
<i>Bombus mixtus</i> Cresson, 1878	22.vi.2017	M	4310	http://osac.oregonstate.edu/SP/OSAC_0001226853
<i>Bombus sitkensis</i> Nylander, 1848	22.vi.2017	F	4250	http://osac.oregonstate.edu/SP/OSAC_0001226855
<i>Bombus sitkensis</i> Nylander, 1848	22.vi.2017	F	4376	http://osac.oregonstate.edu/SP/OSAC_0001226856
<i>Bombus vandykei</i> (Frison, 1927)	23.vi.2017	F	3945	http://osac.oregonstate.edu/SP/OSAC_0001226857
<i>Bombus vandykei</i> (Frison, 1927)	23.vi.2017	M	3946	http://osac.oregonstate.edu/SP/OSAC_0001226861
<i>Bombus vandykei</i> (Frison, 1927)	23.vi.2017	M	3947	http://osac.oregonstate.edu/SP/OSAC_0001226862
<i>Bombus vandykei</i> (Frison, 1927)	29.vi.2017	F	4466	http://osac.oregonstate.edu/SP/OSAC_0001226858
<i>Bombus vandykei</i> (Frison, 1927)	29.vi.2017	M	4513	http://osac.oregonstate.edu/SP/OSAC_0001226863
<i>Bombus vandykei</i> (Frison, 1927)	27.vii.2017	F	5323	http://osac.oregonstate.edu/SP/OSAC_0001226859
<i>Bombus vandykei</i> (Frison, 1927)	27.vii.2017	M	5325	http://osac.oregonstate.edu/SP/OSAC_0001226864
<i>Bombus vandykei</i> (Frison, 1927)	27.vii.2017	M	5326	http://osac.oregonstate.edu/SP/OSAC_0001226865
<i>Bombus vandykei</i> (Frison, 1927)	27.vii.2017	F	5594	http://osac.oregonstate.edu/SP/OSAC_0001226860

<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	F	1110	http://osac.oregonstate.edu/SP/OSAC_0001226866
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	F	1112	http://osac.oregonstate.edu/SP/OSAC_0001226867
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	F	1113	http://osac.oregonstate.edu/SP/OSAC_0001226868
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	M	1114	http://osac.oregonstate.edu/SP/OSAC_0001226871
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	M	1115	http://osac.oregonstate.edu/SP/OSAC_0001226872
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	F	1116	http://osac.oregonstate.edu/SP/OSAC_0001226869
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	M	1117	http://osac.oregonstate.edu/SP/OSAC_0001226873
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	M	1118	http://osac.oregonstate.edu/SP/OSAC_0001226874
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	F	1119	http://osac.oregonstate.edu/SP/OSAC_0001226870
<i>Bombus vosnesenskii</i> Radoszkowski, 1862	11.viii.2016	M	1120	http://osac.oregonstate.edu/SP/OSAC_0001226875
<i>Ceratina tejonensis</i> Cresson, 1864	30.vi.2016	F	466	http://osac.oregonstate.edu/SP/OSAC_0001226876
<i>Ceratina tejonensis</i> Cresson, 1864	30.vi.2016	F	467	http://osac.oregonstate.edu/SP/OSAC_0001226877
<i>Ceratina tejonensis</i> Cresson, 1864	30.vi.2016	F	468	http://osac.oregonstate.edu/SP/OSAC_0001226878
<i>Ceratina tejonensis</i> Cresson, 1864	23.vi.2017	M	4086	http://osac.oregonstate.edu/SP/OSAC_0001226879
<i>Eucera morphospecies</i> #1	19.v.2016	F	44	http://osac.oregonstate.edu/SP/OSAC_0001226906
<i>Eucera morphospecies</i> #2	18.v.2016	F	273	http://osac.oregonstate.edu/SP/OSAC_0001226907
<i>Eucera cordleyi</i> (Viereck, 1905)	19.v.2016	F	43	http://osac.oregonstate.edu/SP/OSAC_0001226898
<i>Eucera cordleyi</i> (Viereck, 1905)	19.v.2016	F	130	http://osac.oregonstate.edu/SP/OSAC_0001226897
<i>Eucera cordleyi</i> (Viereck, 1905)	18.v.2016	M	179	http://osac.oregonstate.edu/SP/OSAC_0001226902
<i>Eucera cordleyi</i> (Viereck, 1905)	17.v.2017	M	3648	http://osac.oregonstate.edu/SP/OSAC_0001226903
<i>Eucera cordleyi</i> (Viereck, 1905)	24.v.2017	M	3700	http://osac.oregonstate.edu/SP/OSAC_0001226904
<i>Eucera cordleyi</i> (Viereck, 1905)	17.v.2017	M	3786	http://osac.oregonstate.edu/SP/OSAC_0001226905
<i>Eucera cordleyi</i> (Viereck, 1905)	29.vi.2017	F	4436	http://osac.oregonstate.edu/SP/OSAC_0001226899
<i>Eucera cordleyi</i> (Viereck, 1905)	28.vi.2017	F	4506	http://osac.oregonstate.edu/SP/OSAC_0001226900
<i>Eucera cordleyi</i> (Viereck, 1905)	28.vi.2017	F	4507	http://osac.oregonstate.edu/SP/OSAC_0001226901
<i>Melecta pacifica</i> Cresson, 1878	19.v.2016	F	45	http://osac.oregonstate.edu/SP/OSAC_0001227202
<i>Melecta pacifica</i> Cresson, 1878	24.v.2017	F	3702	http://osac.oregonstate.edu/SP/OSAC_0001227201
<i>Melissodes communis</i> Cresson, 1878	04.viii.2016	F	1137	http://osac.oregonstate.edu/SP/OSAC_0001227203
<i>Melissodes communis</i> Cresson, 1878	04.viii.2016	F	1840	http://osac.oregonstate.edu/SP/OSAC_0001227204
<i>Melissodes communis</i> Cresson, 1878	04.viii.2016	F	2132	http://osac.oregonstate.edu/SP/OSAC_0001227205
<i>Melissodes communis</i> Cresson, 1878	04.viii.2016	F	2133	http://osac.oregonstate.edu/SP/OSAC_0001227206
<i>Melissodes communis</i> Cresson, 1878	04.viii.2016	F	2134	http://osac.oregonstate.edu/SP/OSAC_0001227207
<i>Melissodes communis</i> Cresson, 1878	02.viii.2017	M	4901	http://osac.oregonstate.edu/SP/OSAC_0001227208
<i>Melissodes communis</i> Cresson, 1878	03.viii.2017	M	4962	http://osac.oregonstate.edu/SP/OSAC_0001227209
<i>Melissodes communis</i> Cresson, 1878	03.viii.2017	M	4966	http://osac.oregonstate.edu/SP/OSAC_0001227210
<i>Melissodes communis</i> Cresson, 1878	03.viii.2017	M	4984	http://osac.oregonstate.edu/SP/OSAC_0001227211
<i>Melissodes communis</i> Cresson, 1878	03.viii.2017	M	4990	http://osac.oregonstate.edu/SP/OSAC_0001227212
<i>Melissodes lupina</i> Cresson, 1878	04.viii.2016	F	2140	http://osac.oregonstate.edu/SP/OSAC_0001227213
<i>Melissodes metenua</i> Cockerell, 1924	29.vi.2017	F	4468	http://osac.oregonstate.edu/SP/OSAC_0001227214
<i>Melissodes metenua</i> Cockerell, 1924	02.viii.2017	F	4900	http://osac.oregonstate.edu/SP/OSAC_0001227215
<i>Melissodes metenua</i> Cockerell, 1924	03.viii.2017	F	4938	http://osac.oregonstate.edu/SP/OSAC_0001227216
<i>Melissodes metenua</i> Cockerell, 1924	03.viii.2017	F	4939	http://osac.oregonstate.edu/SP/OSAC_0001227217

<i>Melissodes metenua</i> Cockerell, 1924	03.viii.2017	F	4999	http://osac.oregonstate.edu/SP/OSAC_0001227218
<i>Melissodes microsticta</i> Cockerell, 1905	04.viii.2016	F	1841	http://osac.oregonstate.edu/SP/OSAC_0001227219
<i>Melissodes microsticta</i> Cockerell, 1905	03.viii.2016	F	1858	http://osac.oregonstate.edu/SP/OSAC_0001227220
<i>Melissodes microsticta</i> Cockerell, 1905	04.viii.2016	F	2138	http://osac.oregonstate.edu/SP/OSAC_0001227221
<i>Melissodes microsticta</i> Cockerell, 1905	04.viii.2016	F	2193	http://osac.oregonstate.edu/SP/OSAC_0001227222
<i>Melissodes microsticta</i> Cockerell, 1905	03.viii.2016	F	2364	http://osac.oregonstate.edu/SP/OSAC_0001227223
<i>Melissodes microsticta</i> Cockerell, 1905	27.vii.2017	M	5392	http://osac.oregonstate.edu/SP/OSAC_0001227224
<i>Melissodes microsticta</i> Cockerell, 1905	26.vii.2017	M	5456	http://osac.oregonstate.edu/SP/OSAC_0001227225
<i>Melissodes microsticta</i> Cockerell, 1905	03.viii.2017	M	5689	http://osac.oregonstate.edu/SP/OSAC_0001227226
<i>Melissodes rivalis</i> Cresson, 1872	08.vii.2016	M	383	http://osac.oregonstate.edu/SP/OSAC_0001227236
<i>Melissodes rivalis</i> Cresson, 1872	04.viii.2016	F	1141	http://osac.oregonstate.edu/SP/OSAC_0001227227
<i>Melissodes rivalis</i> Cresson, 1872	04.viii.2016	F	1587	http://osac.oregonstate.edu/SP/OSAC_0001227228
<i>Melissodes rivalis</i> Cresson, 1872	04.viii.2016	F	2139	http://osac.oregonstate.edu/SP/OSAC_0001227229
<i>Melissodes rivalis</i> Cresson, 1872	11.viii.2016	F	2926	http://osac.oregonstate.edu/SP/OSAC_0001227230
<i>Melissodes rivalis</i> Cresson, 1872	03.viii.2016	M	2950	http://osac.oregonstate.edu/SP/OSAC_0001227232
<i>Melissodes rivalis</i> Cresson, 1872	08.ix.2016	M	3621	http://osac.oregonstate.edu/SP/OSAC_0001227233
<i>Melissodes rivalis</i> Cresson, 1872	08.ix.2016	M	3622	http://osac.oregonstate.edu/SP/OSAC_0001227234
<i>Melissodes rivalis</i> Cresson, 1872	08.ix.2016	M	3623	http://osac.oregonstate.edu/SP/OSAC_0001227235
<i>Melissodes rivalis</i> Cresson, 1872	02.viii.2017	F	4854	http://osac.oregonstate.edu/SP/OSAC_0001227231
<i>Melissodes morphospecies</i> #1	02.viii.2017	M	4897	http://osac.oregonstate.edu/SP/OSAC_0001227237
<i>Melissodes morphospecies</i> #1	02.viii.2017	M	4898	http://osac.oregonstate.edu/SP/OSAC_0001227238
<i>Melissodes morphospecies</i> #1	03.viii.2017	M	4963	http://osac.oregonstate.edu/SP/OSAC_0001227239
<i>Melissodes morphospecies</i> #1	02.viii.2017	M	5213	http://osac.oregonstate.edu/SP/OSAC_0001227240
<i>Melissodes morphospecies</i> #1	27.vii.2017	M	5328	http://osac.oregonstate.edu/SP/OSAC_0001227241
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	F	10	http://osac.oregonstate.edu/SP/OSAC_0001227281
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	F	11	http://osac.oregonstate.edu/SP/OSAC_0001227282
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	M	109	http://osac.oregonstate.edu/SP/OSAC_0001227286
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	M	110	http://osac.oregonstate.edu/SP/OSAC_0001227287
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	M	111	http://osac.oregonstate.edu/SP/OSAC_0001227288
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	M	112	http://osac.oregonstate.edu/SP/OSAC_0001227289
<i>Xylocopa tabaniformis</i> Smith, 1854	19.v.2016	M	113	http://osac.oregonstate.edu/SP/OSAC_0001227290
<i>Xylocopa tabaniformis</i> Smith, 1854	11.viii.2016	F	1102	http://osac.oregonstate.edu/SP/OSAC_0001227283
<i>Xylocopa tabaniformis</i> Smith, 1854	11.viii.2016	F	1103	http://osac.oregonstate.edu/SP/OSAC_0001227284
<i>Xylocopa tabaniformis</i> Smith, 1854	11.viii.2016	F	1104	http://osac.oregonstate.edu/SP/OSAC_0001227285
COLLETIDAE				
<i>Colletes fulgidus</i> Swenk, 1904	11.viii.2016	F	954	http://osac.oregonstate.edu/SP/OSAC_0001226882
<i>Colletes fulgidus</i> Swenk, 1904	11.viii.2016	F	955	http://osac.oregonstate.edu/SP/OSAC_0001226883
<i>Colletes fulgidus</i> Swenk, 1904	11.viii.2016	F	1123	http://osac.oregonstate.edu/SP/OSAC_0001226880
<i>Colletes fulgidus</i> Swenk, 1904	11.viii.2016	M	2886	http://osac.oregonstate.edu/SP/OSAC_0001226884
<i>Colletes fulgidus</i> Swenk, 1904	10.viii.2016	F	2983	http://osac.oregonstate.edu/SP/OSAC_0001226881
<i>Colletes kincaidii</i> Cockerell, 1898	04.viii.2016	M	1924	http://osac.oregonstate.edu/SP/OSAC_0001226885
<i>Colletes kincaidii</i> Cockerell, 1898	03.viii.2016	M	2365	http://osac.oregonstate.edu/SP/OSAC_0001226886

<i>Colletes kincaidii</i> Cockerell, 1898	03.viii.2017	M	4844	http://osac.oregonstate.edu/SP/OSAC_0001226887
<i>Hylaeus affinis</i> (Smith, 1853)	07.vii.2016	F	616	http://osac.oregonstate.edu/SP/OSAC_0001226942
<i>Hylaeus affinis</i> (Smith, 1853)	07.vii.2016	F	634	http://osac.oregonstate.edu/SP/OSAC_0001226943
<i>Hylaeus affinis</i> (Smith, 1853)	11.viii.2016	F	957	http://osac.oregonstate.edu/SP/OSAC_0001226944
<i>Hylaeus affinis</i> (Smith, 1853)	10.viii.2016	F	2998	http://osac.oregonstate.edu/SP/OSAC_0001226940
<i>Hylaeus affinis</i> (Smith, 1853)	08.ix.2016	F	3400	http://osac.oregonstate.edu/SP/OSAC_0001226941
<i>Hylaeus episcopalis</i> (Cockerell, 1896)	11.viii.2016	F	959	http://osac.oregonstate.edu/SP/OSAC_0001226945
<i>Hylaeus nevadensis</i> (Cockerell, 1896)	11.viii.2016	F	986	http://osac.oregonstate.edu/SP/OSAC_0001226948
<i>Hylaeus nevadensis</i> (Cockerell, 1896)	10.viii.2016	F	2991	http://osac.oregonstate.edu/SP/OSAC_0001226946
<i>Hylaeus nevadensis</i> (Cockerell, 1896)	27.vii.2017	F	5346	http://osac.oregonstate.edu/SP/OSAC_0001226947
<i>Hylaeus rugulosus</i> (Perkins, 1899)	03.viii.2016	F	2367	http://osac.oregonstate.edu/SP/OSAC_0001226949
<i>Hylaeus rugulosus</i> (Perkins, 1899)	11.viii.2016	F	2891	http://osac.oregonstate.edu/SP/OSAC_0001226950
<i>Hylaeus timberlakei</i> Snelling, 1970	04.viii.2016	M	1554	http://osac.oregonstate.edu/SP/OSAC_0001226951
<i>Hylaeus verticalis</i> (Cresson, 1869)	29.vi.2017	F	4571	http://osac.oregonstate.edu/SP/OSAC_0001226952
<i>Hylaeus wootoni</i> (Cockerell, 1896)	08.vii.2016	M	358	http://osac.oregonstate.edu/SP/OSAC_0001226954
<i>Hylaeus wootoni</i> (Cockerell, 1896)	28.vi.2017	F	4721	http://osac.oregonstate.edu/SP/OSAC_0001226953
<i>Hylaeus wootoni</i> (Cockerell, 1896)	03.viii.2017	M	4941	http://osac.oregonstate.edu/SP/OSAC_0001226955
<i>Hylaeus wootoni</i> (Cockerell, 1896)	27.vii.2017	M	5621	http://osac.oregonstate.edu/SP/OSAC_0001226956
<i>Hylaeus</i> morphospecies #1	11.viii.2016	F	963	http://osac.oregonstate.edu/SP/OSAC_0001226937
<i>Hylaeus</i> morphospecies #2	08.vii.2016	M	354	http://osac.oregonstate.edu/SP/OSAC_0001226938
<i>Hylaeus</i> morphospecies #2	29.vi.2017	M	4759	http://osac.oregonstate.edu/SP/OSAC_0001226939
HALICTIDAE				
<i>Dufourea calochorti</i> (Cockerell, 1924)	30.vi.2016	F	540	http://osac.oregonstate.edu/SP/OSAC_0001226896
<i>Halictus confusus</i> Smith, 1853	29.vi.2017	F	4652	http://osac.oregonstate.edu/SP/OSAC_0001226908
<i>Halictus farinosus</i> Smith, 1853	26.v.2016	F	169	http://osac.oregonstate.edu/SP/OSAC_0001226909
<i>Halictus farinosus</i> Smith, 1853	26.v.2016	F	170	http://osac.oregonstate.edu/SP/OSAC_0001226910
<i>Halictus farinosus</i> Smith, 1853	26.v.2016	F	171	http://osac.oregonstate.edu/SP/OSAC_0001226911
<i>Halictus farinosus</i> Smith, 1853	04.viii.2016	M	1138	http://osac.oregonstate.edu/SP/OSAC_0001226914
<i>Halictus farinosus</i> Smith, 1853	03.viii.2016	F	1859	http://osac.oregonstate.edu/SP/OSAC_0001226912
<i>Halictus farinosus</i> Smith, 1853	04.viii.2016	F	1922	http://osac.oregonstate.edu/SP/OSAC_0001226913
<i>Halictus farinosus</i> Smith, 1853	04.viii.2016	M	1923	http://osac.oregonstate.edu/SP/OSAC_0001226915
<i>Halictus farinosus</i> Smith, 1853	04.viii.2016	M	2297	http://osac.oregonstate.edu/SP/OSAC_0001226916
<i>Halictus farinosus</i> Smith, 1853	01.ix.2016	M	3515	http://osac.oregonstate.edu/SP/OSAC_0001226917
<i>Halictus farinosus</i> Smith, 1853	01.ix.2017	M	6107	http://osac.oregonstate.edu/SP/OSAC_0001226918
<i>Halictus ligatus</i> Say, 1837	01.ix.2017	F	6108	http://osac.oregonstate.edu/SP/OSAC_0001226919
<i>Halictus ligatus</i> Say, 1837	01.ix.2017	F	6359	http://osac.oregonstate.edu/SP/OSAC_0001226920
<i>Halictus rubicundus</i> (Christ, 1791)	07.vii.2016	F	633	http://osac.oregonstate.edu/SP/OSAC_0001226924
<i>Halictus rubicundus</i> (Christ, 1791)	08.ix.2016	F	3397	http://osac.oregonstate.edu/SP/OSAC_0001226921
<i>Halictus rubicundus</i> (Christ, 1791)	22.vi.2017	F	4377	http://osac.oregonstate.edu/SP/OSAC_0001226922
<i>Halictus rubicundus</i> (Christ, 1791)	02.viii.2017	F	5071	http://osac.oregonstate.edu/SP/OSAC_0001226923
<i>Halictus tripartitus</i> Cockerell, 1895	11.viii.2016	F	1124	http://osac.oregonstate.edu/SP/OSAC_0001226925
<i>Halictus tripartitus</i> Cockerell, 1895	11.viii.2016	F	1125	http://osac.oregonstate.edu/SP/OSAC_0001226926

<i>Halictus tripartitus</i> Cockerell, 1895	11.viii.2016	F	1126	http://osac.oregonstate.edu/SP/OSAC_0001226927
<i>Halictus tripartitus</i> Cockerell, 1895	11.viii.2016	F	1130	http://osac.oregonstate.edu/SP/OSAC_0001226928
<i>Halictus tripartitus</i> Cockerell, 1895	11.viii.2016	F	1131	http://osac.oregonstate.edu/SP/OSAC_0001226929
<i>Lasioglossum (Dialictus)</i> morphospecies #1	30.vi.2016	M	648	http://osac.oregonstate.edu/SP/OSAC_0001226963
<i>Lasioglossum (Dialictus)</i> morphospecies #1	11.viii.2016	F	1127	http://osac.oregonstate.edu/SP/OSAC_0001226958
<i>Lasioglossum (Dialictus)</i> morphospecies #1	04.viii.2016	F	1555	http://osac.oregonstate.edu/SP/OSAC_0001226959
<i>Lasioglossum (Dialictus)</i> morphospecies #1	04.viii.2016	F	1556	http://osac.oregonstate.edu/SP/OSAC_0001226960
<i>Lasioglossum (Dialictus)</i> morphospecies #1	04.viii.2016	F	1557	http://osac.oregonstate.edu/SP/OSAC_0001226961
<i>Lasioglossum (Dialictus)</i> morphospecies #1	01.ix.2016	M	3154	http://osac.oregonstate.edu/SP/OSAC_0001226962
<i>Lasioglossum (Dialictus)</i> morphospecies #1	02.viii.2017	F	5225	http://osac.oregonstate.edu/SP/OSAC_0001226957
<i>Lasioglossum (Dialictus)</i> morphospecies #2	25.v.2016	F	150	http://osac.oregonstate.edu/SP/OSAC_0001226980
<i>Lasioglossum (Dialictus)</i> morphospecies #2	25.v.2016	F	151	http://osac.oregonstate.edu/SP/OSAC_0001226981
<i>Lasioglossum (Dialictus)</i> morphospecies #2	25.v.2016	F	153	http://osac.oregonstate.edu/SP/OSAC_0001226982
<i>Lasioglossum (Dialictus)</i> morphospecies #2	25.v.2016	F	154	http://osac.oregonstate.edu/SP/OSAC_0001226983
<i>Lasioglossum (Dialictus)</i> morphospecies #2	25.v.2016	F	155	http://osac.oregonstate.edu/SP/OSAC_0001226984
<i>Lasioglossum (Dialictus)</i> morphospecies #2	03.viii.2016	M	1678	http://osac.oregonstate.edu/SP/OSAC_0001226985
<i>Lasioglossum (Dialictus)</i> morphospecies #3	11.viii.2016	F	958	http://osac.oregonstate.edu/SP/OSAC_0001226994
<i>Lasioglossum (Dialictus)</i> morphospecies #3	04.viii.2016	F	2301	http://osac.oregonstate.edu/SP/OSAC_0001226991
<i>Lasioglossum (Dialictus)</i> morphospecies #3	03.viii.2016	F	2366	http://osac.oregonstate.edu/SP/OSAC_0001226992
<i>Lasioglossum (Dialictus)</i> morphospecies #3	10.viii.2016	F	2985	http://osac.oregonstate.edu/SP/OSAC_0001226993
<i>Lasioglossum (Dialictus)</i> morphospecies #5	25.v.2016	F	158	http://osac.oregonstate.edu/SP/OSAC_0001226995
<i>Lasioglossum (Dialictus)</i> morphospecies #5	04.viii.2016	F	1625	http://osac.oregonstate.edu/SP/OSAC_0001226996
<i>Lasioglossum (Dialictus)</i> morphospecies #5	03.viii.2016	F	1687	http://osac.oregonstate.edu/SP/OSAC_0001226997
<i>Lasioglossum (Dialictus)</i> morphospecies #5	03.viii.2016	F	1719	http://osac.oregonstate.edu/SP/OSAC_0001226998
<i>Lasioglossum (Dialictus)</i> morphospecies #5	04.viii.2016	F	1845	http://osac.oregonstate.edu/SP/OSAC_0001226999
<i>Lasioglossum (Dialictus)</i> morphospecies #6	04.viii.2016	F	1604	http://osac.oregonstate.edu/SP/OSAC_0001227000
<i>Lasioglossum (Dialictus)</i> morphospecies #6	04.viii.2016	F	1628	http://osac.oregonstate.edu/SP/OSAC_0001227001
<i>Lasioglossum (Dialictus)</i> morphospecies #6	04.viii.2016	F	1639	http://osac.oregonstate.edu/SP/OSAC_0001227002
<i>Lasioglossum (Dialictus)</i> morphospecies #6	04.viii.2016	F	1667	http://osac.oregonstate.edu/SP/OSAC_0001227003
<i>Lasioglossum (Dialictus)</i> morphospecies #6	03.viii.2016	F	1681	http://osac.oregonstate.edu/SP/OSAC_0001227004
<i>Lasioglossum (Dialictus)</i> morphospecies #7	04.viii.2016	F	1671	http://osac.oregonstate.edu/SP/OSAC_0001227005
<i>Lasioglossum (Dialictus)</i> morphospecies #7	03.viii.2016	F	1721	http://osac.oregonstate.edu/SP/OSAC_0001227006
<i>Lasioglossum (Dialictus)</i> morphospecies #7	03.viii.2016	F	1726	http://osac.oregonstate.edu/SP/OSAC_0001227007
<i>Lasioglossum (Dialictus)</i> morphospecies #7	03.viii.2016	F	1883	http://osac.oregonstate.edu/SP/OSAC_0001227008
<i>Lasioglossum (Dialictus)</i> morphospecies #7	03.viii.2016	F	2100	http://osac.oregonstate.edu/SP/OSAC_0001227009
<i>Lasioglossum (Dialictus)</i> morphospecies #9	31.viii.2017	F	6220	http://osac.oregonstate.edu/SP/OSAC_0001227010
<i>Lasioglossum (Dialictus)</i> morphospecies #10	31.viii.2016	F	3067	http://osac.oregonstate.edu/SP/OSAC_0001226964
<i>Lasioglossum (Dialictus)</i> morphospecies #11	08.ix.2016	F	3464	http://osac.oregonstate.edu/SP/OSAC_0001226965
<i>Lasioglossum (Dialictus)</i> morphospecies #12	07.ix.2016	M	3442	http://osac.oregonstate.edu/SP/OSAC_0001226966
<i>Lasioglossum (Dialictus)</i> morphospecies #13	01.ix.2017	M	6109	http://osac.oregonstate.edu/SP/OSAC_0001226967
<i>Lasioglossum (Dialictus)</i> morphospecies #15	04.viii.2016	F	1632	http://osac.oregonstate.edu/SP/OSAC_0001226968
<i>Lasioglossum (Dialictus)</i> morphospecies #15	03.viii.2016	M	1682	http://osac.oregonstate.edu/SP/OSAC_0001226970

<i>Lasioglossum (Dialictus)</i> morphospecies #15	03.viii.2016	M	1702	http://osac.oregonstate.edu/SP/OSAC_0001226971
<i>Lasioglossum (Dialictus)</i> morphospecies #15	03.viii.2016	M	1710	http://osac.oregonstate.edu/SP/OSAC_0001226972
<i>Lasioglossum (Dialictus)</i> morphospecies #15	03.viii.2016	M	1722	http://osac.oregonstate.edu/SP/OSAC_0001226973
<i>Lasioglossum (Dialictus)</i> morphospecies #15	03.viii.2016	M	1727	http://osac.oregonstate.edu/SP/OSAC_0001226974
<i>Lasioglossum (Dialictus)</i> morphospecies #15	03.viii.2016	F	2078	http://osac.oregonstate.edu/SP/OSAC_0001226969
<i>Lasioglossum (Dialictus)</i> morphospecies #17	03.viii.2016	M	1716	http://osac.oregonstate.edu/SP/OSAC_0001226975
<i>Lasioglossum (Dialictus)</i> morphospecies #17	03.viii.2016	M	1730	http://osac.oregonstate.edu/SP/OSAC_0001226976
<i>Lasioglossum (Dialictus)</i> morphospecies #17	03.viii.2016	M	2112	http://osac.oregonstate.edu/SP/OSAC_0001226977
<i>Lasioglossum (Dialictus)</i> morphospecies #17	11.viii.2016	M	2766	http://osac.oregonstate.edu/SP/OSAC_0001226978
<i>Lasioglossum (Dialictus)</i> morphospecies #17	31.viii.2016	M	3228	http://osac.oregonstate.edu/SP/OSAC_0001226979
<i>Lasioglossum (Dialictus)</i> morphospecies #22	10.viii.2016	M	2995	http://osac.oregonstate.edu/SP/OSAC_0001226986
<i>Lasioglossum (Dialictus)</i> morphospecies #23	10.viii.2016	M	3016	http://osac.oregonstate.edu/SP/OSAC_0001226987
<i>Lasioglossum (Dialictus)</i> morphospecies #24	02.ix.2016	M	3089	http://osac.oregonstate.edu/SP/OSAC_0001226988
<i>Lasioglossum (Dialictus)</i> morphospecies #25	02.ix.2016	M	3132	http://osac.oregonstate.edu/SP/OSAC_0001226989
<i>Lasioglossum (Dialictus)</i> morphospecies #26	03.viii.2016	M	1709	http://osac.oregonstate.edu/SP/OSAC_0001226990
<i>Lasioglossum (Evylaeus)</i> morphospecies #1	30.vi.2016	F	536	http://osac.oregonstate.edu/SP/OSAC_0001227015
<i>Lasioglossum (Evylaeus)</i> morphospecies #1	03.viii.2016	F	1860	http://osac.oregonstate.edu/SP/OSAC_0001227011
<i>Lasioglossum (Evylaeus)</i> morphospecies #1	03.viii.2016	F	2433	http://osac.oregonstate.edu/SP/OSAC_0001227012
<i>Lasioglossum (Evylaeus)</i> morphospecies #1	11.viii.2016	M	2910	http://osac.oregonstate.edu/SP/OSAC_0001227016
<i>Lasioglossum (Evylaeus)</i> morphospecies #1	29.vi.2017	F	4669	http://osac.oregonstate.edu/SP/OSAC_0001227013
<i>Lasioglossum (Evylaeus)</i> morphospecies #1	27.vii.2017	F	5158	http://osac.oregonstate.edu/SP/OSAC_0001227014
<i>L. (Hemihalictus)</i> morphospecies #1	25.v.2017	F	3900	http://osac.oregonstate.edu/SP/OSAC_0001227017
<i>L. (Hemihalictus)</i> morphospecies #3	26.v.2016	F	254	http://osac.oregonstate.edu/SP/OSAC_0001227018
<i>L. (Lasioglossum) anhypops</i> McGinley, 1986	30.vi.2016	F	497	http://osac.oregonstate.edu/SP/OSAC_0001227020
<i>L. (Lasioglossum) anhypops</i> McGinley, 1986	23.vi.2017	F	4211	http://osac.oregonstate.edu/SP/OSAC_0001227019
<i>L. (Lasioglossum) egregium</i> (Vachal, 1904)	17.v.2017	F	3655	http://osac.oregonstate.edu/SP/OSAC_0001227021
<i>L. (Lasioglossum) egregium</i> (Vachal, 1904)	25.v.2017	F	3898	http://osac.oregonstate.edu/SP/OSAC_0001227022
<i>L. (Lasioglossum) egregium</i> (Vachal, 1904)	25.v.2017	F	3910	http://osac.oregonstate.edu/SP/OSAC_0001227023
<i>L. (Lasioglossum) egregium</i> (Vachal, 1904)	23.vi.2017	F	4108	http://osac.oregonstate.edu/SP/OSAC_0001227024
<i>L. (Lasioglossum) egregium</i> (Vachal, 1904)	29.vi.2017	F	4757	http://osac.oregonstate.edu/SP/OSAC_0001227025
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	18.v.2016	F	108	http://osac.oregonstate.edu/SP/OSAC_0001227026
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	18.v.2016	F	140	http://osac.oregonstate.edu/SP/OSAC_0001227027
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	25.v.2016	F	196	http://osac.oregonstate.edu/SP/OSAC_0001227028
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	18.v.2016	F	276	http://osac.oregonstate.edu/SP/OSAC_0001227029
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	04.viii.2016	M	1140	http://osac.oregonstate.edu/SP/OSAC_0001227031
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	08.ix.2016	M	3456	http://osac.oregonstate.edu/SP/OSAC_0001227032
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	08.ix.2016	M	3463	http://osac.oregonstate.edu/SP/OSAC_0001227033
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	18.v.2017	F	3696	http://osac.oregonstate.edu/SP/OSAC_0001227030
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	27.vii.2017	M	5543	http://osac.oregonstate.edu/SP/OSAC_0001227034
<i>L. (Lasioglossum) mellipes</i> (Crawford, 1907)	01.ix.2017	M	6094	http://osac.oregonstate.edu/SP/OSAC_0001227035
<i>L. (Lasioglossum) pacificum</i> (Cockerell, 1898)	26.v.2016	F	252	http://osac.oregonstate.edu/SP/OSAC_0001227036
<i>L. (Lasioglossum) pacificum</i> (Cockerell, 1898)	08.ix.2016	M	3628	http://osac.oregonstate.edu/SP/OSAC_0001227134

<i>L. (Lasioglossum) pacificum</i> (Cockerell, 1898)	17.v.2017	F	3649	http://osac.oregonstate.edu/SP/OSAC_0001227133
<i>L. (Lasioglossum) sisymbrii</i> (Cockerell, 1895)	27.v.2016	F	339	http://osac.oregonstate.edu/SP/OSAC_0001227135
<i>L. (Lasioglossum) sisymbrii</i> (Cockerell, 1895)	07.ix.2016	F	3452	http://osac.oregonstate.edu/SP/OSAC_0001227136
<i>L. (Lasioglossum) sisymbrii</i> (Cockerell, 1895)	23.vi.2017	F	4214	http://osac.oregonstate.edu/SP/OSAC_0001227137
<i>L. (Lasioglossum) sisymbrii</i> (Cockerell, 1895)	02.viii.2017	F	5214	http://osac.oregonstate.edu/SP/OSAC_0001227138
<i>L. (Lasioglossum) titusi</i> (Crawford, 1902)	04.viii.2016	M	1842	http://osac.oregonstate.edu/SP/OSAC_0001227139
<i>L. (Lasioglossum) titusi</i> (Crawford, 1902)	28.vi.2017	M	4508	http://osac.oregonstate.edu/SP/OSAC_0001227140
<i>L. (Sphecodogastra) morphospecies #1</i>	19.v.2016	F	121	http://osac.oregonstate.edu/SP/OSAC_0001227141
<i>L. (Sphecodogastra) morphospecies #1</i>	04.viii.2016	F	1598	http://osac.oregonstate.edu/SP/OSAC_0001227165
<i>L. (Sphecodogastra) morphospecies #1</i>	04.viii.2016	M	1843	http://osac.oregonstate.edu/SP/OSAC_0001227169
<i>L. (Sphecodogastra) morphospecies #1</i>	11.viii.2016	F	2668	http://osac.oregonstate.edu/SP/OSAC_0001227166
<i>L. (Sphecodogastra) morphospecies #1</i>	11.viii.2016	F	2972	http://osac.oregonstate.edu/SP/OSAC_0001227167
<i>L. (Sphecodogastra) morphospecies #1</i>	01.ix.2016	F	3346	http://osac.oregonstate.edu/SP/OSAC_0001227168
<i>L. (Sphecodogastra) morphospecies #1</i>	07.ix.2016	M	3465	http://osac.oregonstate.edu/SP/OSAC_0001227170
<i>L. (Sphecodogastra) morphospecies #1</i>	29.vi.2017	M	4635	http://osac.oregonstate.edu/SP/OSAC_0001227171
<i>L. (Sphecodogastra) morphospecies #1</i>	02.viii.2017	M	5215	http://osac.oregonstate.edu/SP/OSAC_0001227172
<i>L. (Sphecodogastra) morphospecies #2</i>	11.viii.2016	F	1128	http://osac.oregonstate.edu/SP/OSAC_0001227173
<i>L. (Sphecodogastra) morphospecies #2</i>	11.viii.2016	F	1129	http://osac.oregonstate.edu/SP/OSAC_0001227174
<i>L. (Sphecodogastra) morphospecies #2</i>	04.viii.2016	M	1151	http://osac.oregonstate.edu/SP/OSAC_0001227178
<i>L. (Sphecodogastra) morphospecies #2</i>	04.viii.2016	F	1601	http://osac.oregonstate.edu/SP/OSAC_0001227175
<i>L. (Sphecodogastra) morphospecies #2</i>	04.viii.2016	M	1602	http://osac.oregonstate.edu/SP/OSAC_0001227179
<i>L. (Sphecodogastra) morphospecies #2</i>	04.viii.2016	F	1605	http://osac.oregonstate.edu/SP/OSAC_0001227176
<i>L. (Sphecodogastra) morphospecies #2</i>	04.viii.2016	F	1627	http://osac.oregonstate.edu/SP/OSAC_0001227177
<i>L. (Sphecodogastra) morphospecies #2</i>	04.viii.2016	M	1669	http://osac.oregonstate.edu/SP/OSAC_0001227180
<i>L. (Sphecodogastra) morphospecies #2</i>	03.viii.2016	M	1881	http://osac.oregonstate.edu/SP/OSAC_0001227181
<i>L. (Sphecodogastra) morphospecies #2</i>	03.viii.2016	M	1886	http://osac.oregonstate.edu/SP/OSAC_0001227182
<i>L. (Sphecodogastra) morphospecies #3</i>	25.v.2016	F	224	http://osac.oregonstate.edu/SP/OSAC_0001227183
<i>L. (Sphecodogastra) morphospecies #3</i>	30.vi.2016	M	550	http://osac.oregonstate.edu/SP/OSAC_0001227184
MEGACHILIDAE				
<i>Anthidium illustre</i> Cresson, 1879	08.vii.2016	F	382	http://osac.oregonstate.edu/SP/OSAC_0001226792
<i>Anthidium illustre</i> Cresson, 1879	23.vi.2017	F	4003	http://osac.oregonstate.edu/SP/OSAC_0001226793
<i>Anthidium illustre</i> Cresson, 1879	23.vi.2017	F	4105	http://osac.oregonstate.edu/SP/OSAC_0001226794
<i>Anthidium illustre</i> Cresson, 1879	29.vi.2017	F	4630	http://osac.oregonstate.edu/SP/OSAC_0001226795
<i>Anthidium illustre</i> Cresson, 1879	02.viii.2017	M	5091	http://osac.oregonstate.edu/SP/OSAC_0001226796
<i>Anthidium</i> morphospecies #1	11.viii.2016	M	1122	http://osac.oregonstate.edu/SP/OSAC_0001226797
<i>Anthidium</i> morphospecies #1	29.vi.2017	M	4752	http://osac.oregonstate.edu/SP/OSAC_0001226798
<i>Ashmeadiella cactorum</i> (Cockerell, 1897)	02.viii.2017	F	5115	http://osac.oregonstate.edu/SP/OSAC_0001226815
<i>Ashmeadiella cactorum</i> (Cockerell, 1897)	27.vii.2017	M	5507	http://osac.oregonstate.edu/SP/OSAC_0001226816
<i>Dianthidium parvum</i> (Cresson, 1878)	26.vii.2017	F	6059	http://osac.oregonstate.edu/SP/OSAC_0001226888
<i>Dianthidium pudicum</i> (Cresson, 1879)	11.viii.2016	F	2909	http://osac.oregonstate.edu/SP/OSAC_0001226889
<i>Dianthidium pudicum</i> (Cresson, 1879)	29.vi.2017	M	4602	http://osac.oregonstate.edu/SP/OSAC_0001226891
<i>Dianthidium pudicum</i> (Cresson, 1879)	31.viii.2017	F	6165	http://osac.oregonstate.edu/SP/OSAC_0001226890

<i>Dianthidium singulare</i> (Cresson, 1879)	02.viii.2017	M	5211	http://osac.oregonstate.edu/SP/OSAC_0001226892
<i>Dianthidium ulkei</i> (Cresson, 1878)	10.viii.2016	F	3012	http://osac.oregonstate.edu/SP/OSAC_0001226893
<i>Dianthidium ulkei</i> (Cresson, 1878)	31.viii.2016	F	3223	http://osac.oregonstate.edu/SP/OSAC_0001226894
<i>Dianthidium ulkei</i> (Cresson, 1878)	03.viii.2017	M	4940	http://osac.oregonstate.edu/SP/OSAC_0001226895
<i>Hoplitis albifrons</i> (Kirby, 1837)	18.v.2016	F	274	http://osac.oregonstate.edu/SP/OSAC_0001226930
<i>Hoplitis albifrons</i> (Kirby, 1837)	11.viii.2016	F	2742	http://osac.oregonstate.edu/SP/OSAC_0001226931
<i>Hoplitis albifrons</i> (Kirby, 1837)	23.vi.2017	F	3936	http://osac.oregonstate.edu/SP/OSAC_0001226932
<i>Hoplitis albifrons</i> (Kirby, 1837)	23.vi.2017	F	3949	http://osac.oregonstate.edu/SP/OSAC_0001226933
<i>Hoplitis albifrons</i> (Kirby, 1837)	23.vi.2017	F	3971	http://osac.oregonstate.edu/SP/OSAC_0001226934
<i>Hoplitis albifrons</i> (Kirby, 1837)	23.vi.2017	M	4082	http://osac.oregonstate.edu/SP/OSAC_0001226935
<i>Hoplitis albifrons</i> (Kirby, 1837)	29.vi.2017	M	4755	http://osac.oregonstate.edu/SP/OSAC_0001226936
<i>Megachile angularum</i> Cockerell, 1902	01.ix.2017	F	6070	http://osac.oregonstate.edu/SP/OSAC_0001227185
<i>Megachile angularum</i> Cockerell, 1902	01.ix.2017	F	6358	http://osac.oregonstate.edu/SP/OSAC_0001227186
<i>Megachile fidelis</i> Cresson, 1878	02.viii.2017	M	5093	http://osac.oregonstate.edu/SP/OSAC_0001227187
<i>Megachile melanophaea</i> Smith, 1853	29.vi.2017	M	4649	http://osac.oregonstate.edu/SP/OSAC_0001227188
<i>Megachile montivaga</i> Cresson, 1878	30.vi.2016	F	461	http://osac.oregonstate.edu/SP/OSAC_0001227192
<i>Megachile montivaga</i> Cresson, 1878	04.viii.2016	F	2131	http://osac.oregonstate.edu/SP/OSAC_0001227189
<i>Megachile montivaga</i> Cresson, 1878	11.viii.2016	F	2908	http://osac.oregonstate.edu/SP/OSAC_0001227190
<i>Megachile montivaga</i> Cresson, 1878	07.ix.2016	F	3436	http://osac.oregonstate.edu/SP/OSAC_0001227191
<i>Megachile montivaga</i> Cresson, 1878	03.viii.2017	F	4843	http://osac.oregonstate.edu/SP/OSAC_0001227193
<i>Megachile perihirta</i> Cockerell, 1898	04.viii.2016	F	2130	http://osac.oregonstate.edu/SP/OSAC_0001227194
<i>Megachile perihirta</i> Cockerell, 1898	04.viii.2016	F	2184	http://osac.oregonstate.edu/SP/OSAC_0001227195
<i>Megachile perihirta</i> Cockerell, 1898	31.viii.2016	F	3213	http://osac.oregonstate.edu/SP/OSAC_0001227196
<i>Megachile perihirta</i> Cockerell, 1898	08.ix.2016	F	3393	http://osac.oregonstate.edu/SP/OSAC_0001227197
<i>Megachile perihirta</i> Cockerell, 1898	08.ix.2016	F	3630	http://osac.oregonstate.edu/SP/OSAC_0001227198
<i>Megachile perihirta</i> Cockerell, 1898	03.viii.2017	M	5680	http://osac.oregonstate.edu/SP/OSAC_0001227199
<i>Megachile pugnata</i> Say, 1837	03.viii.2017	F	4961	http://osac.oregonstate.edu/SP/OSAC_0001227200
<i>Osmia atrocyanea</i> Cockerell, 1897	30.vi.2016	F	575	http://osac.oregonstate.edu/SP/OSAC_0001227247
<i>Osmia atrocyanea</i> Cockerell, 1897	17.v.2017	F	3640	http://osac.oregonstate.edu/SP/OSAC_0001227242
<i>Osmia atrocyanea</i> Cockerell, 1897	24.v.2017	F	3716	http://osac.oregonstate.edu/SP/OSAC_0001227243
<i>Osmia atrocyanea</i> Cockerell, 1897	24.v.2017	F	3840	http://osac.oregonstate.edu/SP/OSAC_0001227244
<i>Osmia atrocyanea</i> Cockerell, 1897	23.vi.2017	F	4000	http://osac.oregonstate.edu/SP/OSAC_0001227245
<i>Osmia atrocyanea</i> Cockerell, 1897	23.vi.2017	F	4014	http://osac.oregonstate.edu/SP/OSAC_0001227246
<i>Osmia bruneri</i> Cockerell, 1897	18.v.2017	M	3746	http://osac.oregonstate.edu/SP/OSAC_0001227248
<i>Osmia cara</i> Cockerell, 1910	30.vi.2016	F	574	http://osac.oregonstate.edu/SP/OSAC_0001227249
<i>Osmia cobaltina</i> Cresson, 1878	30.vi.2016	F	493	http://osac.oregonstate.edu/SP/OSAC_0001227252
<i>Osmia cobaltina</i> Cresson, 1878	30.vi.2016	F	576	http://osac.oregonstate.edu/SP/OSAC_0001227253
<i>Osmia cobaltina</i> Cresson, 1878	30.vi.2016	F	646	http://osac.oregonstate.edu/SP/OSAC_0001227254
<i>Osmia cobaltina</i> Cresson, 1878	18.v.2017	M	3744	http://osac.oregonstate.edu/SP/OSAC_0001227255
<i>Osmia cobaltina</i> Cresson, 1878	18.v.2017	M	3745	http://osac.oregonstate.edu/SP/OSAC_0001227256
<i>Osmia cobaltina</i> Cresson, 1878	23.vi.2017	F	3937	http://osac.oregonstate.edu/SP/OSAC_0001227250
<i>Osmia cobaltina</i> Cresson, 1878	23.vi.2017	F	4005	http://osac.oregonstate.edu/SP/OSAC_0001227251

<i>Osmia gabrielis</i> Cockerell, 1910	27.v.2016	F	302	http://osac.oregonstate.edu/SP/OSAC_0001227257
<i>Osmia gabrielis</i> Cockerell, 1910	29.vi.2016	F	653	http://osac.oregonstate.edu/SP/OSAC_0001227260
<i>Osmia gabrielis</i> Cockerell, 1910	29.vi.2016	F	654	http://osac.oregonstate.edu/SP/OSAC_0001227261
<i>Osmia gabrielis</i> Cockerell, 1910	24.v.2017	F	3701	http://osac.oregonstate.edu/SP/OSAC_0001227258
<i>Osmia gabrielis</i> Cockerell, 1910	22.vi.2017	F	4311	http://osac.oregonstate.edu/SP/OSAC_0001227259
<i>Osmia montana</i> Cresson, 1864	30.vi.2016	F	562	http://osac.oregonstate.edu/SP/OSAC_0001227262
<i>Osmia visenda</i> Sandhouse 1924	23.vi.2017	F	3969	http://osac.oregonstate.edu/SP/OSAC_0001227276
<i>Osmia</i> morphospecies #1	30.vi.2016	F	543	http://osac.oregonstate.edu/SP/OSAC_0001227263
<i>Osmia</i> morphospecies #2	29.vi.2017	F	4634	http://osac.oregonstate.edu/SP/OSAC_0001227267
<i>Osmia</i> morphospecies #2	29.vi.2017	F	4648	http://osac.oregonstate.edu/SP/OSAC_0001227268
<i>Osmia</i> morphospecies #2	29.vi.2017	F	4664	http://osac.oregonstate.edu/SP/OSAC_0001227269
<i>Osmia</i> morphospecies #3	30.vi.2016	F	519	http://osac.oregonstate.edu/SP/OSAC_0001227270
<i>Osmia</i> morphospecies #4	29.vi.2017	F	4601	http://osac.oregonstate.edu/SP/OSAC_0001227271
<i>Osmia</i> morphospecies #5	26.v.2016	F	241	http://osac.oregonstate.edu/SP/OSAC_0001227272
<i>Osmia</i> morphospecies #7	18.v.2017	M	3747	http://osac.oregonstate.edu/SP/OSAC_0001227273
<i>Osmia</i> morphospecies #8	27.v.2016	M	338	http://osac.oregonstate.edu/SP/OSAC_0001227274
<i>Osmia</i> morphospecies #9	27.v.2016	M	304	http://osac.oregonstate.edu/SP/OSAC_0001227275
<i>Osmia</i> morphospecies #10	26.v.2016	M	293	http://osac.oregonstate.edu/SP/OSAC_0001227264
<i>Osmia</i> morphospecies #11	19.v.2016	M	84	http://osac.oregonstate.edu/SP/OSAC_0001227266
<i>Osmia</i> morphospecies #11	26.v.2016	M	253	http://osac.oregonstate.edu/SP/OSAC_0001227265

Acknowledgments

Funding provided by the U.S. Bureau of Land Management (Grant #L16AC00229) as well as the Oregon State University College of Forestry's Mealey/Boise Cascade/Boone and Crockett/Noble Endowment Fund and the Fish and Wildlife Habitat in Managed Forests Research Program.

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