

## S2 Table. List of bee species collected in this study.

### Urbanization-induced habitat fragmentation erodes multiple components of temporal diversity in a Southern California native bee assemblage

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S2 Table. Species list of bees collected in this study, with their classification as specialists (restricted to pollen on one plant family), generalists, or parasites. Asterisks following species names denote exotic species.

Family	Genus	Species	# in frag.	# in res.	Classification	
Andrenidae	<i>Ancylandrena</i>	<i>atoposoma</i>	0	4	Specialist	
		<i>Andrena</i>				
		<i>anatolis</i>	4	0	Specialist	
		<i>atypica</i>	0	2	Generalist	
		<i>auricoma</i>	9	3	Generalist	
		<i>candida</i>	2	0	Generalist	
		<i>cerasifolii</i>	1	19	Generalist	
		<i>gnaphalii</i>	1	7	Specialist	
		<i>oenotherae</i>	0	3	Specialist	
		<i>osmioides</i>	0	1	Specialist	
		<i>pallidifovea</i>	4	0	Specialist	
		<i>parachalybea</i>	1	0	Specialist	
		<i>piperi</i>	2	0	Generalist	
		<i>prunorum</i>	1	0	Generalist	
		<i>sola</i>	1	0	Generalist	
		<i>nr. knuthiana</i>	1	0	Generalist	
		<i>Calliopsis</i>				
			<i>mellipes</i>	0	2	Specialist
			<i>obscurella</i>	0	5	Specialist
			<i>pugionis</i>	4	31	Specialist
			<i>rhodophila</i>	44	91	Generalist
		<i>Macrotera</i>	<i>tristella</i>	95	65	Generalist
		<i>Panurginus</i>	sp. 1	0	2	Generalist
		<i>Perdita</i>				
			<i>californica</i>	0	10	Specialist
			<i>claypolei australior</i>	21	43	Specialist
			<i>eriastri</i>	8	0	Specialist
			<i>fieldi</i>	0	5	Specialist
			<i>hirticeps hirticeps</i>	1	0	Specialist
			<i>interrupta</i>	0	14	Specialist
		<i>minima</i>	2	0	Specialist	
		<i>rhois rhois</i>	105	112	Generalist	
		<i>tresignata</i>	0	7	Specialist	

Family	Genus	Species	# in frag.	# in res.	Classification
Apidae	<i>Anthophora</i>	<i>crotchii</i>	0	1	Generalist
		<i>curta</i>	22	9	Generalist
		<i>flavocincta</i>	0	6	Generalist
		<i>urbana</i>	4	5	Generalist
		<i>Anthophorula</i>	<i>albicans</i>	0	5
	<i>nitens</i>		87	143	Generalist
	<i>torticornis</i>		242	253	Generalist
	<i>Apis</i>	<i>mellifera*</i>	325	160	Generalist
	<i>Bombus</i>	<i>californicus</i>	8	34	Generalist
		<i>crotchii</i>	0	8	Generalist
		<i>melanopygus</i>	1	9	Generalist
		<i>vosnesenskii</i>	16	26	Generalist
	<i>Brachynomada</i>	<i>annectens</i>	11	15	Parasite
	<i>Ceratina</i>	<i>acantha</i>	156	58	Generalist
		<i>arizonensis</i>	498	212	Generalist
		<i>nanula</i>	15	35	Generalist
		<i>punctigena</i>	4	0	Generalist
	<i>Diadasia</i>	<i>australis californica</i>	45	8	Specialist
		<i>bituberculata</i>	32	50	Specialist
		<i>diminuta</i>	0	2	Specialist
		<i>laticauda</i>	2	41	Specialist
		<i>martialis</i>	1	2	Specialist
		<i>nitidifrons</i>	23	45	Specialist
		<i>ochracea</i>	47	49	Specialist
		<i>opuntiae</i>	22	1	Specialist
		<i>rinconis rinconis</i>	11	18	Specialist
		<i>Epeolus</i>	<i>compactus</i>	1	2
	<i>Eucera</i>	<i>dorsata</i>	0	13	Generalist
		<i>edwardsii</i>	0	1	Generalist
		<i>tricinctella</i>	1	361	Generalist
		<i>virgata</i>	0	1	Generalist
	<i>Habropoda</i>	<i>depressa</i>	3	0	Generalist
		<i>miserabilis</i>	0	1	Generalist
		<i>tristissima</i>	0	14	Generalist
	<i>Holcopasites</i>	<i>ruthae</i>	0	1	Parasite
	<i>Leiopodus</i>	<i>singularis</i>	0	15	Parasite
	<i>Melecta</i>	<i>edwardsii</i>	0	1	Parasite
	<i>Melissodes</i>	<i>communis alopex</i>	11	63	Generalist
		<i>lupina</i>	35	33	Specialist
		<i>montana</i>	13	8	Specialist
		<i>paroselae</i>	0	3	Generalist
<i>personatella</i>		0	6	Specialist	
<i>plumosa</i>		5	25	Specialist	

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Apidae	<i>Melissodes</i>	<i>stearnsi</i>	0	4	Specialist	
		<i>tepida</i>	0	1	Generalist	
		<i>tessellata</i>	5	17	Generalist	
		<i>tribas</i>	0	3	Specialist	
		<i>velutina</i>	1	11	Generalist	
		sp. nov. 1	0	6	Specialist	
	<i>Neopasites</i>	sp. 1	0	6	Parasite	
		sp. 2	0	3	Parasite	
		<i>Nomada</i>	sp. 1	1	0	Parasite
	sp. 2		0	1	Parasite	
	sp. 3		0	3	Parasite	
	sp. 4		9	5	Parasite	
	<i>Peponapis</i>	<i>pruinosa</i>	3	1	Specialist	
	<i>Tetraloniella</i>	<i>davidsoni</i>	9	9	Specialist	
		<i>pomona</i>	38	2	Specialist	
		sp. nov. 1	0	1	Specialist	
	<i>Triepeolus</i>	<i>californicus</i>	3	4	Parasite	
		<i>matildae</i>	0	5	Parasite	
		<i>melanarius</i>	4	7	Parasite	
		<i>utahensis</i>	5	2	Parasite	
		<i>simplex</i> grp. sp. 1	1	0	Parasite	
	<i>Triopasites</i>	<i>penniger</i>	0	4	Parasite	
	<i>Xeromelecta</i>	<i>californica</i>	0	1	Parasite	
	<i>Xylocopa</i>	<i>varipuncta</i>	2	1	Generalist	
	Colletidae	<i>Colletes</i>	<i>intermixtus</i>	1	0	Generalist
			<i>louisae</i>	0	1	Generalist
			<i>slevini</i>	5	17	Generalist
			<i>wootoni</i>	15	9	Generalist
			aff. <i>deserticola</i>	10	11	Specialist
			<i>Hylaeus</i>	<i>episcopalis metzi</i>	4	8
<i>Leptocephalus</i> *				0	1	Generalist
<i>mesillae cressoni</i>				40	17	Generalist
<i>polifolii</i>		46		19	Generalist	
<i>rudbeckiae</i>		4		1	Generalist	
<i>verticalis</i>		0		1	Generalist	
Halictidae		<i>Agapostemon</i>		<i>femoratus</i>	0	19
			<i>melliventris</i>	0	1	Generalist
			<i>texanus</i>	926	499	Generalist
		<i>Augochlorella</i>	<i>pomoniella</i>	10	151	Generalist
	<i>Conanthalictus</i>	<i>bakeri</i>	0	3	Specialist	
	<i>Dieunomia</i>	<i>nevadensis angelesia</i>	0	4	Generalist	
	<i>Dufourea</i>	<i>australis</i>	23	20	Specialist	
		<i>brevicornis</i>	0	2	Specialist	

Family	Genus	Species	# in frag.	# in res.	Classification
Halictidae	<i>Dufourea</i>	<i>mulleri</i>	0	1	Specialist
		<i>rhamni</i>	9	31	Specialist
		<i>scintilla</i>	8	0	Specialist
		aff. <i>sandhouseae</i>	0	25	Specialist
		cf. <i>saundersi</i>	0	1	Specialist
	<i>Halictus</i>	<i>farinosus</i>	101	161	Generalist
		<i>ligatus</i>	30	105	Generalist
		<i>rubicundus</i>	0	1	Generalist
	<i>Lasioglossum</i>	<i>tripartitus</i>	1649	639	Generalist
		<i>albohirtum</i>	2	0	Generalist
		<i>argemonis</i>	3	17	Generalist
		<i>brunneiventre</i>	241	11	Generalist
		<i>imbrex</i>	26	26	Generalist
		<i>incompletum</i>	643	359	Generalist
		<i>knereri</i>	5	4	Generalist
		<i>mellipes</i>	1	1	Generalist
		<i>microlepoides</i>	83	56	Generalist
		<i>nevadense</i>	58	43	Generalist
		<i>nigrescens</i>	94	42	Generalist
		<i>ovaliceps</i>	2	4	Generalist
		<i>pacificum</i>	1	2	Generalist
		<i>petrellum</i>	6	1	Generalist
		<i>punctatoventre</i>	33	41	Generalist
		<i>sisymbrii</i>	53	55	Generalist
		<i>titusi</i>	0	9	Generalist
		aff. <i>nevadense</i>	25	16	Generalist
		cf. <i>macroprosopum</i>	60	9	Generalist
		cf. <i>perparvum</i>	4	0	Generalist
		cf. <i>robustum</i>	4	45	Generalist
		( <i>Dialictus</i> ) sp. 1	103	0	Generalist
		( <i>Dialictus</i> ) sp. 2	1	0	Generalist
		( <i>Dialictus</i> ) sp. 3	1	0	Generalist
		( <i>Dialictus</i> ) sp. 4	0	3	Generalist
		( <i>Dialictus</i> ) sp. 5	0	3	Generalist
		( <i>Evylaeus</i> s. l.) sp. 1	1	0	Generalist
	( <i>Evylaeus</i> s. l.) sp. 2	1	0	Generalist	
	( <i>Evylaeus</i> s. l.) sp. 3	0	5	Generalist	
	<i>Micralictoides</i>	<i>altadenae</i>	1	0	Specialist
		<i>chaenactidis</i>	8	0	Specialist
		<i>ruficaudus</i>	2	46	Specialist
	<i>Sphecodes</i>	<i>arvensiformis</i>	7	4	Parasite
		sp. 1	3	9	Parasite
		sp. 2	9	4	Parasite

Family	Genus	Species	# in frag.	# in res.	Classification		
Halictidae	<i>Sphecodes</i>	sp. 3	0	2	Parasite		
		sp. 4	4	3	Parasite		
		sp. 5	2	2	Parasite		
		sp. 6	0	1	Parasite		
		sp. 7	0	1	Parasite		
		sp. 8	1	0	Parasite		
		sp. 9	1	0	Parasite		
		sp. 10	1	0	Parasite		
		sp. 11	1	0	Parasite		
		Megachilidae	<i>Anthidiellum</i>	<i>notatum robertsoni</i>	1	0	Generalist
			<i>Anthidium</i>	<i>collectum</i>	2	16	Generalist
<i>edwardsii</i>	0			5	Generalist		
<i>illustre</i>	0			4	Generalist		
<i>jocosum</i>	1			112	Generalist		
<i>mormonum</i>	0			1	Generalist		
<i>palliventre</i>	0			9	Generalist		
<i>utahense</i>	0			1	Generalist		
<i>Ashmeadiella</i>	<i>bucconis denticulata</i>			1	10	Specialist	
	<i>californica californica</i>			10	53	Generalist	
	<i>cubiceps</i>		0	2	Generalist		
	<i>foveata</i>		4	10	Generalist		
	<i>meliloti meliloti</i>		2	1	Generalist		
	<i>rufipes</i>		0	12	Generalist		
	<i>rufitarsis</i>		1	2	Specialist		
	<i>salviae</i>		3	10	Generalist		
	<i>titusi</i>		0	5	Specialist		
	<i>Atoposmia</i>		<i>copelandica arefacta</i>	0	1	Specialist	
<i>hemizoniae</i>			1	1	Specialist		
<i>Chelostoma</i>	<i>californicum</i>		0	1	Specialist		
	<i>phaceliae</i>		0	10	Specialist		
<i>Coelioxys</i>	sp. 1		0	2	Parasite		
	sp. 2		0	1	Parasite		
	sp. 3		0	1	Parasite		
<i>Dianthidium</i>	<i>dubium dilectum</i>		1	22	Generalist		
	<i>pudicum consimile</i>		10	43	Generalist		
<i>Dioxys</i>	<i>productus cismontanicus</i>		0	10	Parasite		
<i>Heriades</i>	<i>occidentalis</i>		4	2	Generalist		
<i>Hoplitis</i>	<i>albifrons maura</i>		0	7	Generalist		
	<i>cryptanthae</i>		0	1	Specialist		
	<i>fulgida platyura</i>		1	0	Generalist		
	<i>grinnelli</i>		1	31	Generalist		
	<i>howardi</i>	0	2	Specialist			
	<i>hypocrita</i>	1	0	Generalist			

Family	Genus	Species	# in frag.	# in res.	Classification	
Megachilidae	<i>Hoplitis</i>	<i>remotula</i>	0	2	Specialist	
		<i>seminigra</i>	0	2	Specialist	
		<i>semirubra</i>	1	5	Specialist	
	<i>Megachile</i>	<i>coquilletti</i>	2	8	Generalist	
		<i>fidelis</i>	9	19	Generalist	
		<i>frugalis pseudofrugalis</i>	2	1	Generalist	
		<i>lippiae</i>	0	2	Generalist	
		<i>montivaga</i>	2	4	Generalist	
		<i>onobrychidis</i>	0	7	Generalist	
		<i>parallela</i>	1	11	Specialist	
		<i>rotundata*</i>	1	0	Generalist	
		<i>subnigra angelica</i>	4	1	Specialist	
		<i>cf. seducta</i>	0	7	Specialist	
		<i>Osmia</i>	<i>albolateralis</i>	0	1	Generalist
			<i>californica</i>	0	1	Specialist
			<i>clarescens</i>	15	17	Generalist
			<i>coloradensis</i>	22	7	Specialist
			<i>gabrielis</i>	1	4	Generalist
	<i>granulosa</i>		1	13	Generalist	
	<i>grinnelli</i>		0	1	Specialist	
	<i>kincaidii</i>		0	2	Generalist	
	<i>mixta</i>		1	0	Generalist	
	<i>montana quadriceps</i>		0	4	Specialist	
	<i>nemoris</i>		2	4	Generalist	
	<i>sp. 1</i>		0	1	Generalist	
	<i>Protosmia</i>	<i>rubifloris</i>	1	0	Generalist	
	<i>Stelis</i>	<i>micheneri</i>	0	1	Parasite	
		<i>montana</i>	0	4	Parasite	
		<i>trichopyga</i>	0	1	Parasite	
		<i>cf. hurdi</i>	0	1	Parasite	
<i>ilicifoliae</i>		0	6	Specialist		
Melittidae	<i>Hesperapis</i>	<i>ilicifoliae</i>	0	6	Specialist	