

POLLINATING GREAT BASIN FORBS



- Breeding biology of *Lomatium dissectum*
- Progress in developing bees to pollinate farmed *Hedysarum boreale*

Lomatium dissectum



Fruits per umbel		
	<i>OpenVisit</i>	<i>NoVisit</i>
Mean	32	0.5
Variance	1065	1.5
Observations	35	20



Lomatium dissectum is self-fertile



	<u>Average</u>		
<u>Trtmt</u>	<u>Flowers</u>	<u>Seeds</u>	<u>n flowers</u>
self-pollinated	12	20	546
outcrossed	12	20	733

Micrandrena



Bee fauna at *L. dissectum*



Genus	species	UT-04 GreenCyn	UT-04 Richmond	UT-07 Maughan Hollow	WY-04 Lander	WY-05 SnakeR	NV-06 EAngelLk	NV-06 E Kingston	ID-06 ene Boise	ID-06 N Shoshone	ID-06 ELavaLk
Andrena		6	10	14	16	7	3		12	12	
Andrena	microchlora/?						20	2		5	(N)
<i>Dialictus</i>				2							
<i>Evylaeus</i>							1				
<i>Osmia</i>	<i>kincaidii</i>	1									
Sum Bees		7	10	16	16	7	24	2	12	17	0
Count Bees		2	1	2	1	1	3	1	1	2	0

		Sum
Andrena		80
Andrena	microchlora/?	27
<i>Dialictus</i>		2
<i>Evylaeus</i>		1
<i>Osmia</i>	<i>kincaidii</i>	1
Sum Bees		111



Halictus



Lomatium conclusions



- Honey bees unlikely (early, cold, yuck?)
- Tiny specialist *Andrena* ubiquitous where wild pops grow...absent ag areas
- Tiny *Halictus* likely in some ag areas
- Start small, transplant trial taproots, see what comes

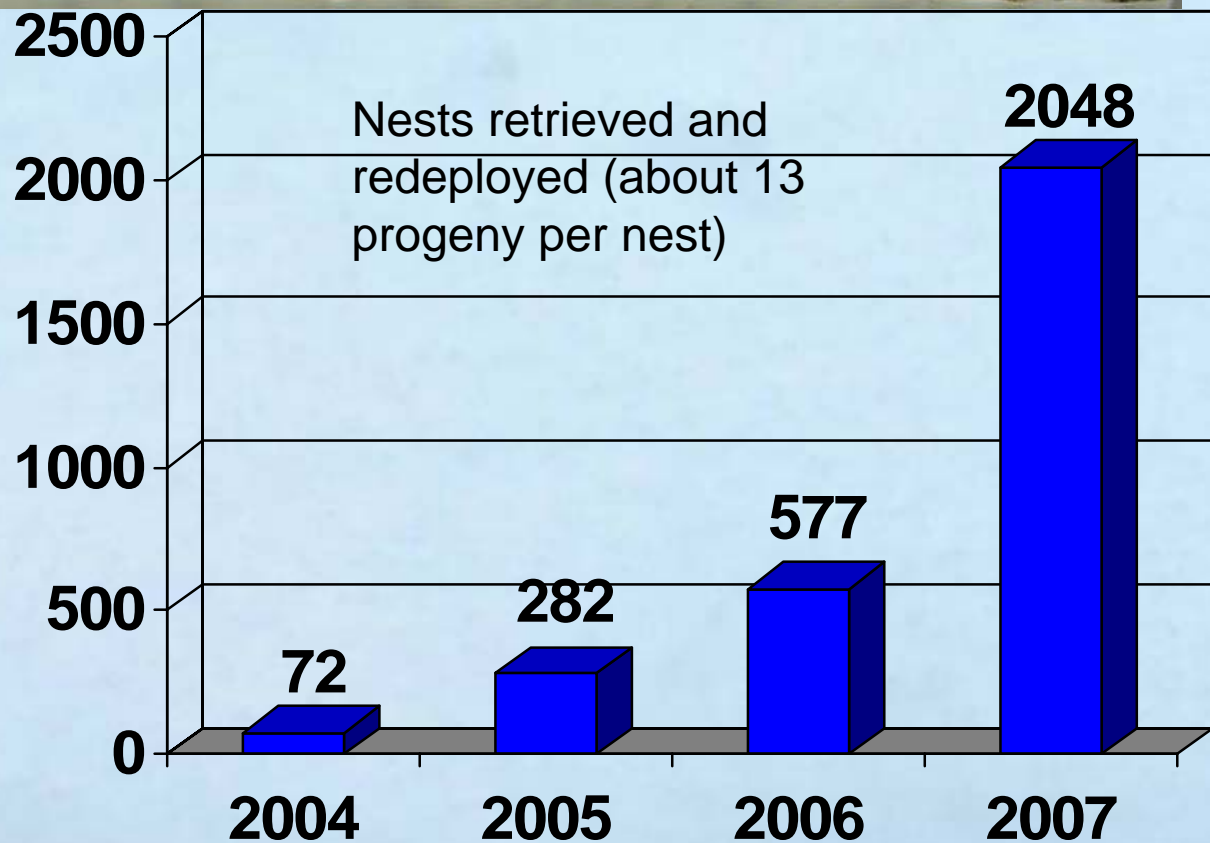
Managing bees to pollinate farmed *Hedysarum boreale*







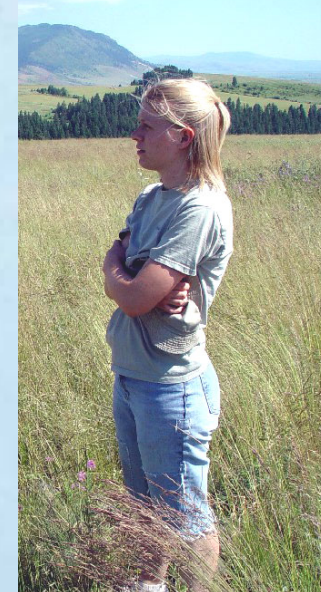
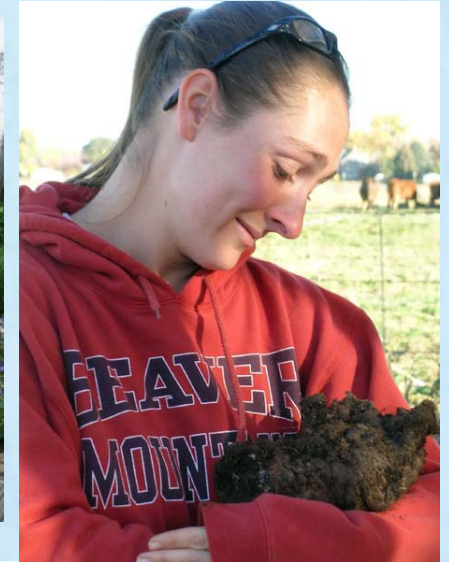
Osmia
sanrafaelae



Indispensable Worker Bees



- Stephanie Miller
- Melissa Weber
- Glen Trostle
- Katie Swoboda (*Hedysarum*)
- Summer students





Fire and Bees

The Bees Giveth and the Seed Predators Taketh Away



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