



# Overcoming Honey Bee Pollination Market Information Deficiencies in the Intermountain West and Pacific Coast

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# Lack of Pollination Market Information



- ❖ Beekeepers need market information to make efficient decisions
- ❖ Pricing information is lacking, especially in the Intermountain West
- ❖ No information on the attributes of beekeepers, their operations, or their bees that growers value most
- ❖ This information will help improve beekeepers' supply-side responses

# Research Objectives



- ❖ The objective of this research is to determine growers' value for specific honey bee and beekeeper attributes for almond pollination
- ❖ Identify attributes of managed honey bees and beekeepers that growers value when negotiating pollination contracts
- ❖ Estimate the value of these attributes through determining grower's WTP for such attributes in pollination contracts



# Attributes of Interest



- ❖ Attributes were determined from current and ongoing research and interviews with Wyoming beekeepers
- ❖ Almond growers seem to prefer:
  - ❖ long, established relationships with a beekeeper
  - ❖ contracting with one beekeeper to pollinate all almonds over many beekeepers
  - ❖ California beekeepers over beekeepers located in other states



# Survey



- ❖ A pollinator use survey was sent to 3,000 almond growers in California
- ❖ 676 responded, with 599 reporting using a beekeeper to pollinate almonds
- ❖ Survey asked about preferences related to beekeepers, their current pollination contract, their operation, and demographic

# Choice Experiment to Measure WTP for these Attributes



Features	Beekeeper A	Beekeeper B	Neither
Beekeeper has enough colonies to pollinate all of your almonds:	No (will need additional beekeepers along with Beekeeper A)	Yes (you only need Beekeeper B)	You prefer to find a different beekeeper than either A or B.
Beekeeper's operation is located in your state:	Yes	Yes	
Beekeeper's average frames per colony:	8	12	
Pollination fee per colony:	15% more than your average current rate	Same as your average current rate	
Given the above attributes which beekeeper would you prefer?	___ I prefer Beekeeper A	___ I prefer Beekeeper B	___ I prefer neither A nor B



# Preliminary Results



- ❖ Over 65% contract with beekeepers from California
- ❖ Nearly 85% use only one beekeeper
- ❖ Averaged 13 years in relationship with a particular beekeeper
- ❖ Mean pollination fee per colony was \$171
- ❖ Average size of operation was 618 acres, with 32 years in operation, and over \$1 million in annual sales
- ❖ Average age of growers was 59 and over 90% male
- ❖ WTP estimates...in process



Questions?

