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
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
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

<table>
<thead>
<tr>
<th>Features</th>
<th>Beekeeper A</th>
<th>Beekeeper B</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beekeeper has enough colonies to pollinate all of your almonds:</td>
<td>No (will need additional beekeepers along with Beekeeper A)</td>
<td>Yes (you only need Beekeeper B)</td>
<td>You prefer to find a different beekeeper than either A or B.</td>
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<tr>
<td>Beekeeper's operation is located in your state:</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Beekeeper’s average frames per colony:</td>
<td>8</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Pollination fee per colony:</td>
<td>15% more than your average current rate</td>
<td>Same as your average current rate</td>
<td></td>
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</tbody>
</table>

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?