

Requirements for Vendors for OBA Certified Best Practices for Sustainable Orchard Bees

Introduction

OBA has provided certifiable best practices guidelines for sustainably sourcing and managing mason bees (OBA website - http://www.orchardbee.org), so if there are questions on how to comply specifically with these protocols, you should reference the documents found on the website. Since OBA is willing to certify the bees only or both the bees and the vendor (bee manger) operation, it is appropriate and possible to request certification for one or both. Any vendor desiring any certification must be a current member of OBA in good standing.

Requirements

- 1. **Keep records by population seasonally**: Originating location of current cocooned bees, number of cocoons from this location by bee species, origin of parent population if different than offspring location.
- 2. **Sustainable trap-nesting**: Document method of how bees were obtained (photos/description).
 - a. If the population is coming from wild trapping on 1.) **public or** 2.) **private open lands** (see guidelines on which lands apply), as well as meeting the other criteria, it must be demonstrated that: permission was granted by the landowner; nest block density was such that sustainable populations remain; bycatch is also cleaned of pests and then returned and released at original trapping location.
 - b. If bees are coming from more controlled environments, such as 3.) **orchard pollination**, 4.) **enclosures**, or 5.) **controlled rural/urban areas**, this qualifies them as sustainable as long as they meet the other criteria (see below).
 - c. If purchased from others, show sustainable trap-nesting documentation from supplier.

- 3. **Regional shipping**: It needs to be demonstrated that bees are being shipped regionally for use by where they originated.
 - a. For blue orchard bees (*Osmia lignaria*), ideally ship for use within state, but at a minimum, follow the state requirements for where they are being transported and at least ship within these state that represent three defined regions: 1.) the western region: CA, OR, WA, NV, UT, ID, WY, MT; 2.) the southwestern region: AZ, NM and TX; 3.) the rest of the US.
 - b. If populations of blue orchard bees or other species are obtained from outside the vendor's (i.e., bee manager's) region of operation for management, then demonstrate that they are cleaned, managed and isolated by region, and then returned to appropriate region.
 - c. Regions differ for other mason bees (see shipping best practices regarding *O. cornifrons* and/or *O. taurus*)
 - d. Regions for bycatch also vary by species (this will be provided as demand develops).
- 4. **Control of pests and chalkbrood:** Populations must be inspected and cleaned of internal and external pests.
 - a. Cleaned populations have less than 1% of pests, with chalkbrood less than 0.1%.
 - b. Vendor must demonstrate appropriate methodology.
 - c. If loose cocoons, demonstrate use of bleach bath or other appropriate process for cleaning external pests and spores from cocoons (i.e., mites, chalkbrood).
 - d. If whole nests, demonstrate appropriate methodology for identification and extraction of pests (i.e., X-ray identification).
 - e. If pest numbers are too high for acceptance the first try, vendor can re-submit once after properly cleaning.

5. Appropriate development/pre-wintering/wintering protocol:

- a. For **blue orchard bees**, the ratio of males to females from the general population needs to be better than 2.5:1 and 50 females and 100 males weigh at least 10 grams (0.35 oz)/1,000 cocoons, (late fall through early spring). This indicates a healthy population, considering #2 above is also followed.
- b. For other species, TBD.

Bee Batch Information

The Orchard Bee Association recommends that at least the following minimum production criteria be reported to purchaser. Supplying preferred batch information in addition might be a choice instead of OBA certification.

Minimum batch information:

- Location (state) where bees were originally collected
- Location (state) where bees were flown last and propagation method
- Dates of last flight (estimated)

- Crop/plants of last flight
- Date of start of winter storage (or natural)
- Temperature of winter storage (or natural)
- Processing method: all cocoons visually inspected? Mechanically stripped and tumbled? Washed?
- Approximate sex ratio and approximate weight (grams) of 50 females and 100 males

Preferred batch information (in addition to minimum):

- Total number of bees (based on physical count or sample weight)
- Percent females (based on physical count)
- Percent viability (based on visible movement)
- Average female weight (based on calculation on specific date should be in neighborhood of 0.1 grams)
- Percent non-O. lignaria
- Percent internal parasites
- Percent external parasites (mites)
- Parasite treatment

Pollinating Orchards Successfully

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