

**Bee Better Certified™ Farm Plan (BBCFP) Template**

Version 1.5 (September 2022)

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| *►* Please complete this Plan for all operations seeking Bee Better Certification (BBC). This plan, along with any other forms required by the certifier, are required to begin the process of certification to the Bee Better Certified standards.  *►* Bee Better certification is valid for a period of three years, however, annual updates must be submitted to your certifier covering the following:   * Newly added or removed habitat, or when habitat value changes significantly (e.g., after the loss of numerous species from the initial planting) * New pest issues * New pesticide applications * Alterations to protective measures related to managed bumble bees   *►* Anupdated BBC Farm Plan (BBCFP) must be submitted to your certifier at least 3 months prior to your certification renewal due date.  *►*A farm entity does not need to certify entire holdings. A portion of the holdings can be certified as long as buffer and other requirements are met. Only those acres included will be certified and subject to the Bee Better Certified standards. |

Check box if you have worked with a consultant, including the Xerces Society, to complete this form

Name and contact information of consultant:

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**Contact Information**

|  |  |
| --- | --- |
| **Farm Operation Legal Name:** |  |
| **Primary Contact Person:**  **(name, title, phone number, and email)** |  |
| **Secondary Contact:**  **(name, title, phone number, and email)** |  |
| **Mailing/Billing Address:**  **(Street, City, State and Zip Code)** |  |

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###### 1. LOCATION AND DESCRIPTIONOF PRODCUTION PARCELS TO BE CERTIFIED

* Some habitat should be prioritized to be on the parcel or adjacent to crop fields or within 1 mile of the farm to be certified.
* If parcels are disconnected, habitat should be distributed throughout the properties, and the sum of the habitat established on all properties must meet the Bee Better Certified habitat requirements.
* As long as some permanent habitat is within 1 mile of a certified crop field, the remaining required permanent habitat may be situated up to 100 miles of at least 1 certified crop field.
* If no permanent habitat is situated within 1 mile of at least 1 certified crop field, habitat may be established farther away in conformance with the incremental increase in acreage outlined in Production Standard 1.1(a)(ix)

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| **Table 1. PARCEL INFORMATION** | | | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **County Assessor’s parcel number, Section/ Township/ Range, or other legal description:** | **Date parcel was bought, lease began, or became your responsibility:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **Legal description:** | **Date:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **Legal description:** | **Date:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **Legal description:** | **Date:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **Legal description:** | **Date:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **Legal description:** | **Date:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |
| **Parcel location name or code**: | **Parcel address (Street, City, Zip) or GPS coordinates:** | **Legal description:** | **Date:**  D  M  Y**\_\_\_\_\_\_** | |
| **Crop(s) grown:** | **Crop(s) bloom time:** | **Crops(s) harvest time:** | |
| **Crop acreage:** | **Permanent habitat acreage:** | **Temporary habitat acreage:** | |

**MAPS**  Attached or included in BBC Application Package

Please attach map(s) of the parcels listed above. At least one map must be an Assessor’s Parcel Map, an aerial photo, or other map that **clearly shows the boundaries of the parcel.** Please include the following information on your map(s):

1. Parcel name or code
2. Indication of north
3. Location of *temporary* habitat with identifiers
4. Location of *permanent* habitat with identifiers
5. Location of areas where nitroguanidine neonicotinoids were used in the past two years
6. Location of buffer areas
7. Neighboring land uses to habitat areas
8. Useful landmarks (e.g., other buildings on-site, distinctive features, roads, etc.)
9. Location of tillage practices as described in this plan
10. Location of known bee nesting areas or resources, as applicable.
11. Locations of greenhouses that commercial bumblebees are housed, as applicable.

###### 2. POLLINATOR HABITAT

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| Pollinator habitat is defined as areas containing flowering plants and/or nesting sites. Remnant natural habitat, mature created and newly created habitat are all considered pollinator habitat. New habitat is defined as habitat that is less than 3 years old or habitat created following initial certification.   * Areas dominated by invasive or noxious species cannot be considered pollinator habitat. * The Operation must have at least 5% of the farm in pollinator habitat at all times. Of the 5% required, at least 1/5 (equivalent to 1% of certified production acreage) must be in permanent habitat. * If mass-flowering, pollinator-attracting crops are identified as part of the temporary habitat, they may only account for 1/5 of the required acreage in habitat (equivalent to 1% of certified production acreage). * If certified parcels are disconnected, pollinator habitat should be distributed throughout the parcels, and the sum of the habitat established on all parcels must meet the Bee Better habitat requirements (as outlined in Production Standards 1.1(a)(vii-ix)). |

**2.1 TEMPORARY HABITAT**

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| *Temporary habitat* may die back annually or be moved around the certified parcels (as is the case with rotating cover crops). Examples of temporary habitat: Cover crops, insectary strips, mass-flowering crops. |

**INSTRUCTIONS**: Please fill out the table below to list each temporary habitat area. To add additional habitat areas, add more rows to the table below or attach additional tables.

**PLEASE NOTE:** Your application package must also include a completed **BBCFP Plant List** or your own plant list with the required information for temporary habitat species (species, native status, and habitat location).

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| --- | --- | --- | --- | --- | --- |
| **Table 2.1. TEMPORARY HABITAT** | | | | | |
| **Temporary Habitat Location/Unique Identifier (must match the map legend and BBCP Plant List):** | **Date Planted:** | **Number of Acres:** | **Does it contain native species?** | **Is the temporary habitat planted within crop production boundaries?** | **Is the temporary habitat a mass-flowering, pollinator-attracting crop?** |
|  |  |  | **Yes  No** | **Yes- identify crop:**  **No** | **Yes- identify crop:**  **No** |
|  |  |  | **Yes  No** | **Yes- identify crop:**  **No** | **Yes- identify crop:**  **No** |
|  |  |  | **Yes  No** | **Yes- identify crop:**  **No** | **Yes- identify crop:**  **No** |
|  |  |  | **Yes  No** | **Yes- identify crop:**  **No** | **Yes- identify crop:**  **No** |
|  |  |  | **Yes  No** | **Yes- identify crop:**  **No** | **Yes- identify crop:**  **No** |

**2.2 PERMANENT HABITAT**

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| **General Requirements**  *Permanent habitat* is present year-round, although the plants may be in a vegetative or dormant state during the winter or naturally occurring dormant season. Examples of permanent habitat: Hedgerows, perennial or re-seeding wildflower strips, riparian forests, filter strips.  Permanent habitat areas must be situated in proximity to certified production acreage. Refer to the Production Standards 1.1(a)(vi-ix) for a full explanation.  **Buffer and Boundary Requirements**  All permanent habitat areas must be protected from chemical drift. The operation must establish pesticide-free spatial buffers around permanent pollinator habitat. Buffers must be established for the following:   * 40 foot buffer for most ground-based applications within your own property * 60 feet for air blast and aerial applications within your own property * Minimum 30-foot buffer must be set aside between the habitat and neighboring farms or land where *insecticides* are known or suspected to be applied not on your property (including insecticide treated seed).   When spatial buffers are not feasible, a vegetative buffer can be planted to capture chemical drift. See Appendix P for guidance.  **Plant Species Requirements**  For new permanent habitat, at least 70% of the vegetation established must be native to the region and preferably acquired from local sources. In natural or mature created permanent habitat, at least 35% of the species must be native.  A minimum 5% of new permanent pollinator habitat plantings must be comprised of pithy-stemmed plants and plants that are used for nest cell materials; some of each category must be included.  **Bloom Abundance Requirements**  In permanent habitat areas there must be at least three (3) flowering species in each part of the growing season (spring/early, summer/mid, fall/late). Flowering species can include trees, shrubs or forbs known to provide pollen and/or nectar to pollinators. The growing season is defined as the natural growth period of native vegetation in the area. Permanent habitat may be free of flowering species during natural, cyclical, locally-occurring dormant seasons  In temperate and tropical regions (receiving greater than 25 cm [10”] of precipitation a year on average), the combined vegetative cover of the plant species in bloom should be classified “abundant” or “common” in each season.  In desert regions (receiving fewer than 25 cm [10”] of precipitation a year on average), the combined vegetative cover of the plant species in bloom should be classified “common” or “sparse” in each season.  *Abundance categories*:   * *Abundant*: Numerous individuals of the flowering species are present (51 – 100%). * *Common*: Several individuals of the flowering species are present (11 – 50%). * *Sparse*: Only a few individuals of the flowering species are present (1 – 10%). * *Absent*: No flowering species are present (0%). |

**INSTRUCTIONS:** Complete one (1) table below for EACH permanent habitat area. If you have more than three (3) permanent habitat areas, copy and paste one of the blank tables below directly beneath the preceding table until you have the correct number of tables listed for the number of permanent habitat areas you wish to include in your certification.

**PLEASE NOTE:** Your application package must also include a completed **BBCFP Plant List** or your own plant list with the required information for each species in the permanent habitat area (species, species location, native status, bloom period, and pithy-stemmed and nest cell material status).

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| **Table 2.2 PERMANENT HABITAT \_\_\_\_ of \_\_\_\_** | | | | | | | | | | | | | | | | |
| **Habitat Location or Unique Identifier (must match the map legend and Plant List):** | | | | |  | | | | | | | | **Acres:** |  | | |
| How many miles from the nearest certified crop field? | | | | |  | | Which is the nearest certified crop field? (must match parcel location name or code in Section 1) | | | | | |  | | | |
| **Date Planted:** | | | |  | | | **Habitat area is:**  Remnant/Mature  New | | | | | | | | | |
| **Buffers and Boundaries of this Permanent Habitat Location:** | | | | | | | | | | | | | | | | |
| Type of Adjoining Land Use: | N |  | | | | | Width and description of buffer: | | N |  | | | | | |
| E |  | | | | | E |  | | | | | |
| S |  | | | | | S |  | | | | | |
| W |  | | | | | W |  | | | | | |
| Type of Pesticide Application on Adjoining Land: | N |  | | | | | Spatial buffers only/no vegetative buffers are used for this habitat area  One or more vegetative buffers are in use for this habitat area and I confirm the following:  The vegetative buffers are designed to maximize drift capture, including ensuring optimal airflow.  The vegetative buffers utilized on my property are comprised of densely planted, small-needled evergreen species. See Appendix P.  The vegetative buffers utilized are designed to grow above spray release height. | | | | | | | | | |
| E |  | | | | |
| S |  | | | | |
| W |  | | | | |
| **Plant Species and Bloom of this Permanent Habitat Location:** | | | | | | | | | | | | | | | | |
| Number of native plant species present: | | |  | | | Number of non-native plant species present: |  | | | | Total number of plant species present: | | | |  | |
| Percentage of native species: | | | | |  | | Percentage pithy-stemmed or nest cell material species: | | | | |  | | | | |
| Total Abundance of Blooming Species: *(Abundant, Common, or Sparse)* | | | | Early |  | | Number of species blooming: | Early | | | |  | | | | |
| Mid |  | | Mid | | | |  | | | | |
| Late |  | | Late | | | |  | | | | |

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| **Table 2.2 PERMANENT HABITAT \_\_\_\_ of \_\_\_\_** | | | | | | | | | | | | | | | | |
| **Habitat Location or Unique Identifier (must match the map legend and Plant List):** | | | | |  | | | | | | | | **Acres:** |  | | |
| How many miles from the nearest certified crop field? | | | | |  | | Which is the nearest certified crop field? (must match parcel location name or code in Section 1) | | | | | |  | | | |
| **Date Planted:** | | | |  | | | **Habitat area is:**  Remnant/Mature  New | | | | | | | | | |
| **Buffers and Boundaries of this Permanent Habitat Location:** | | | | | | | | | | | | | | | | |
| Type of Adjoining Land Use: | N |  | | | | | Width and description of buffer: | | N |  | | | | | |
| E |  | | | | | E |  | | | | | |
| S |  | | | | | S |  | | | | | |
| W |  | | | | | W |  | | | | | |
| Type of Pesticide Application on Adjoining Land: | N |  | | | | | Spatial buffers only/no vegetative buffers are used for this habitat area  One or more vegetative buffers are in use for this habitat area and I confirm the following:  The vegetative buffers are designed to maximize drift capture, including ensuring optimal airflow.  The vegetative buffers utilized on my property are comprised of densely planted, small-needled evergreen species. See Appendix P.  The vegetative buffers utilized are designed to grow above spray release height. | | | | | | | | | |
| E |  | | | | |
| S |  | | | | |
| W |  | | | | |
| **Plant Species and Bloom of this Permanent Habitat Location:** | | | | | | | | | | | | | | | | |
| Number of native plant species present: | | |  | | | Number of non-native plant species present: |  | | | | Total number of plant species present: | | | |  | |
| Percentage of native species: | | | | |  | | Percentage pithy-stemmed or nest cell material species: | | | | |  | | | | |
| Total Abundance of Blooming Species: *(Abundant, Common, or Sparse)* | | | | Early |  | | Number of species blooming: | Early | | | |  | | | | |
| Mid |  | | Mid | | | |  | | | | |
| Late |  | | Late | | | |  | | | | |

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| **Table 2.2 PERMANENT HABITAT \_\_\_\_ of \_\_\_\_** | | | | | | | | | | | | | | | | |
| **Habitat Location or Unique Identifier (must match the map legend and Plant List):** | | | | |  | | | | | | | | **Acres:** |  | | |
| How many miles from the nearest certified crop field? | | | | |  | | Which is the nearest certified crop field? (must match parcel location name or code in Section 1) | | | | | |  | | | |
| **Date Planted:** | | | |  | | | **Habitat area is:**  Remnant/Mature  New | | | | | | | | | |
| **Buffers and Boundaries of this Permanent Habitat Location:** | | | | | | | | | | | | | | | | |
| Type of Adjoining Land Use: | N |  | | | | | Width and description of buffer: | | N |  | | | | | |
| E |  | | | | | E |  | | | | | |
| S |  | | | | | S |  | | | | | |
| W |  | | | | | W |  | | | | | |
| Type of Pesticide Application on Adjoining Land: | N |  | | | | | Spatial buffers only/no vegetative buffers are used for this habitat area  One or more vegetative buffers are in use for this habitat area and I confirm the following:  The vegetative buffers are designed to maximize drift capture, including ensuring optimal airflow.  The vegetative buffers utilized on my property are comprised of densely planted, small-needled evergreen species. See Appendix P.  The vegetative buffers utilized are designed to grow above spray release height. | | | | | | | | | |
| E |  | | | | |
| S |  | | | | |
| W |  | | | | |
| **Plant Species and Bloom of this Permanent Habitat Location:** | | | | | | | | | | | | | | | | |
| Number of native plant species present: | | |  | | | Number of non-native plant species present: |  | | | | Total number of plant species present: | | | |  | |
| Percentage of native species: | | | | |  | | Percentage pithy-stemmed or nest cell material species: | | | | |  | | | | |
| Total Abundance of Blooming Species: *(Abundant, Common, or Sparse)* | | | | Early |  | | Number of species blooming: | Early | | | |  | | | | |
| Mid |  | | Mid | | | |  | | | | |
| Late |  | | Late | | | |  | | | | |

**2.3 LAND HISTORY OF PERMANENT HABITAT**

Have you used any nitroguanidine neonicotinoids (clothianidin, dinotefuran, imidacloprid, or thiamethoxam) or seeds treated with nitroguanidine neonicotinoids within areas now identified as permanent pollinator habitat in the last 24 months?  **Yes, fill out table below  No - If No, skip to the next Section**

Please provide land history for all **new permanent habitat areas** that have been exposed to nitroguanidine neonicotinoids (clothianidin, dinotefuran, imidacloprid, or thiamethoxam) or seeds treated with nitroguanidine neonicotinoids in the 24 months prior to application for certification. Permanent habitat on exposed sites cannot be counted towards habitat total until 2 full years after last application.

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| **Table 2.3. NITROGUANIDINE NEONICOTINOIDS** | | | |
| **Year** | **Habitat Location or Unique Identifier (must match the map legend and Plant List):** | **Material Information** | |
| **Nitroguanidine Neonicotinoid Name/ Manufacturer.** | **Date Materials Applied** |
| Current year:  20\_\_ |  |  |  |
| Previous year:  20\_\_ |  |  |  |
| 2 years ago:  20\_\_ |  |  |  |

**2.4 POLLINATOR HABITAT PLANTINGS AND STOCK AND SEED**

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| *Native plants* are defined as species that are indigenous—and occurred historically in the area without human intervention—to a region. Please review the [USDA PLANTS database](https://plants.usda.gov/java/) for information on native plants in North America. |

In each new permanent habitat plantings, at least 70% of the species present are native

and/or

In each mature created or remnant permanent habitat area, at least 35% of the species present are native

1) Native plant materials should be prioritized over non-native materials. If you utilize non-native materials please provide justification for the use over native species.

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2) Plants should be ecologically appropriate for your site, meaning seeds or other materials were collected from similar climate/ecological region to your property. What characteristics do you look for when purchasing planting materials or what information do the nurseries provide you with about where the seeds were collected?

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**2.5** **TOTAL HABITAT ACREAGE**

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| Habitat calculations must follow the guidelines in Appendix B: Habitat Measurement Guidelines.  Permanent habitat that is **outside** the one-mile radius must conform to Production Standard 1.1(a)(viii-ix). |

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| **Table 2.5. ACREAGE** | | |
| **Temporary habitat** | | |
| 1.Total temporary habitat acreage not within crop production boundaries: | 2.Total temporary habitat within crop production boundaries: | 3.Total temporary habitat acreage that is mass flowering crops: |
| **Total habitat percentages** | | |
| 4.Total crop production acreage of farm for certification: | | |
| 5.Total acreage of temporary habitat (add boxes 1, 2 and 3 together): | 6.Percentage of production acreage in temporary habitat: | |
| 7.Total acreage of permanent habitat: | 8.Percentage of production acreage in permanent habitat: | |
| 9.Total percentage of production acreage in habitat: | | |
| **Total certified acreage** | | |
| 10.Actual acreage area for certification\* (add boxes 1,4 and 7 together): | | |

*\*Actual acreage area for certification does not include temporary habitat acreage that is mass flowering crops or located within crop production boundaries, since that area is already accounted for in the production acreage area.*

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| **Minimum acreage of permanent habitat needed based on production acreage requested:** | **Minimum acreage of temporary habitat needed based on production acreage requested:** | **Maximum number of acres allowed to be counted as temporary habitat based on production acreage requested:** | | **Maximum number of acres allowed to be counted as mass-flowering temporary habitat:** |
|  |  |  | |  |
| **Percentage of production acreage in total habitat (must be more than 5%) :** | **Percentage of total permanent habitat plantings comprised of pithy-stemmed, nest cell or butterfly host plants.**  **(Must be at least 5% of the total permanent habitat)** | | **Percentage of production acreage in mass-flowering pollinator attracting crops (must be ≤1%)** | |
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###### 3. NESTING FEATURES

Pollinator nesting site must be identified and protected and known nesting areas outside crop fields must be left undisturbed.

Plants that provide nest sites or nesting materials for native bees must be incorporated into habitat plantings. It is also recommended that host plants for butterflies be included. See Appendices D- G for more information on nesting.

1) If known, please describe pollinator nesting areas and how they are protected and identified to workers. (Note: please ensure that these areas are identified on your submitted maps)

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2) Describe how your farm provides nest cell plant materials for above-ground nesting bees.

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3) If they have been prioritized describe how your farm provides host plants for butterflies in permanent habitats.

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###### 4. TILLAGE

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| A tillage standard operating procedure must be in place to reduce the impact of tillage activities in cropped areas on ground-nesting bees nesting areas.  Examples of Standard Operating Procedures (SOP):   * *Row crop: (1) Crop fields containing crops known to be attractive to bees will only be disked at 4” depth 1 -2 x per year for the year following planting. Fallow fields will be mowed instead of tilled. (2) Field edges will be mowed instead of cultivated.* * *Perennial crop: (1) Every other alley between rows will be scraped annually instead of tilled. (2) Use chemical fallow in field edges.* * *Example if already using no-till system: No till will continue to be practiced throughout the farm.* |

1) Do you use tillage practices on your farm?☐ Yes, describe below ☐ No - If No, skip to the next Section

## 2) What is the total area\* of your farm covered by the practices described in this section? \_\_\_\_\_\_

\*Total area managed under the Tillage SOP must encompass at least 1/3 of the total farm acreage, and include cropped and non-crop areas. Please note that the tilled area can rotate each year.

3) Your tillage practices plan described below must include at least two (2) of the following. Please check the applicable practices:

Tillage depth

Timing of tillage

Frequency of tillage

Equipment type

Location of tillage

4) Outline your Standard Operating Procedure (SOP) by describing the tillage practices employed to reduce the impact of tillage on ground-nesting bees nesting (see above for examples):

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###### 5. PREVENTATIVE NON-PESTICIDE MANAGEMENT

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| Practices that can help prevent the use of pesticides, including scouting and monitoring of pests and diseases to help inform pesticide application decisions, are required on all certified farms. |

## List the pests/diseases (or potential pests/diseases) that threaten your crops. Add more rows or attach additional documentation if needed.

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| **Table 5.1. PEST OR DISEASES** | | |
| **Crop(s) affected:** | **Pest or disease:** | **Do you intend to use pesticides (including organic pesticides) to treat for this pest/disease?** |
|  |  | Yes No |
|  |  | Yes No |
|  |  | Yes No |
|  |  | Yes No |
|  |  | Yes No |
|  |  | Yes No |
|  |  | Yes No |
|  |  | Yes No |

1. Do you monitor for presence and pressure for each of the pests/diseases listed above that you intend to treat for? Yes No

**If yes, please describe your monitoring protocols and method of recordkeeping, for each pest/disease in the table below.** Add more rows or attach additional documentation if needed.

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| **Table 5.2. MONITORING PROTOCOLS** | | |
| **Pest(s) or disease(s):** | **Monitoring Protocols:** | **Method of Record Keeping:** |
|  |  |  |
|  |  |  |
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## List the preventative management practices you intend to use in the upcoming season in the following table:

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| Implement and maintain at least two (2) preventive non-chemical pest management strategies, and one (1) more if fungicides are used during pre-bloom and/or bloom time of the certified crop(s). Fungicides may only be used on a crop during its prebloom or bloom-time if at least one non-chemical pest management strategy is used to directly address the fungal concern prompting the application(s). |

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| **Table 5.3 NON-PESTICIDE PEST MANAGEMENT PRACTICES** | | | | |
| **Additional Preventive Practices (Physical, Cultural, Mechanical, or Biological)** | | | | |
| **Practice** | **Currently used?** | **Description of how practice *is* applied (where/when) including area affected (acres)** | **Target Pest(s)/Disease(s)** | **Description of how the practices *will be* applied (when/where) if not already** |
| Conservation cover (in perennial crop systems, maintain permanent ground covers of native grasses and forbs for weed control and natural enemy refuge) |  |  |  |  |
| Beetle banks (establish bunch grasses to promote predatory ground beetles) |  |  |  |  |
| Companion planting (plant species next to one another that enhance one another’s growth and protect on another from pests) |  |  |  |  |
| Intercropping (with crops that are attractive or useful to beneficial insects) |  |  |  |  |
| Timing of planting or harvest to avoid pest damage (including choice of crop maturity date)\* |  |  |  |  |
| Physical barriers (e.g., floating row covers, fruit bagging) |  |  |  |  |
| Mechanical pest removal (e.g., hand picking, vacuuming, or pure water sprays to remove pests) |  |  |  |  |
| Cultural practices to improve air flow (e.g., plant spacing, row orientation, pruning) \* |  |  |  |  |
| Trap cropping (note that flowering trap crops are not permitted to be sprayed during bloom) |  |  |  |  |
| Crop rotation \* |  |  |  |  |
| Use of resistant varieties (for insect pest and disease control)†\* |  |  |  |  |
| Use of cover crops, green manures, and composts (for improved soil fertility) |  |  |  |  |
| Mating disruption (including use of pheromone traps for pest reduction) |  |  |  |  |
| Mulching, hand weeding, mechanical weeding, or grazing (for weed control) |  |  |  |  |
| Mulching plant material (for disease control) \* |  |  |  |  |
| Sanitation – removal of debris/infested plant material \* |  |  |  |  |
| Sanitation - equipment \* |  |  |  |  |
| Eliminate alternate hosts or sites for pests and disease \* |  |  |  |  |
| Soil solarization (for nematodes, soil borne diseases, or weed seeds) |  |  |  |  |
| Strip cropping (to disrupt pest movement) |  |  |  |  |
| Late water (cranberries) \* |  |  |  |  |
| Other (please describe) |  |  |  |  |
| **Additional Preventive Practices (Physical, Cultural, Mechanical, or Biological)** |  |  |  |  |

† Cannot be genetically modified crops that express pesticides or are resistant to herbicides.

\*Denotes fungal preventative non-chemical pest management strategies.

###### 6. PESTICIDE MITIGATION

**JUSTIFIED USE OF PESTICIDES**

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| Use of pesticides must be justified and be supported by evidence that a severe pest or disease outbreak exists or has strong potential to exist. Farm-specific monitoring records can be used to demonstrate an outbreak. Additional documentation (e.g., extension publications, newspaper articles) that supports the severity of the issue may also be submitted.  Monitoring documentation should provide evidence that an economic threshold has been exceeded. If no threshold is available, provide an expert opinion. Experts may include a certified pest control adviser, accredited crop consultant, extension agent, or other approved credentialed independent pest management specialist. Advice or recommendations from pesticide or seed company representatives is not considered sufficient evidence to justify pesticide use.  Prior to using a new pesticide, check that it is not rated as Level I under the Bee Precaution system maintained by the University of California Statewide Agricultural and Natural Resources IPM Program (see Bee Better Appendix K). To ensure pesticides don’t synergize to increase toxicity to pollinators, screen the proposed application through the University of California Integrated Pest Management Bee Precaution tool. Pesticides that are flagged by Bee Precaution as interacting may not be applied in the same tank mix or within 3 days of one another. See Appendix N for instructions on how to use Bee Precaution. Other limitations are placed on the type or locations of pesticide applications; see Production Standard 2 for details.  *Pesticides*are any substance or mixture of substances intended for preventing, destroying, repelling or mitigating a pest or disease. Pesticides can also be plant regulators, defoliants, desiccants or nitrogen stabilizers. The term pesticide includes bactericides, fungicides, herbicides, insecticides, miticides, molluscicides, nematicides, avicides, repellents and piscicides. Pesticides may be conventional, biopesticides, or antimicrobials.  *Pesticide applications* include any activity that introduces a pesticide into the environment for purposes of controlling pests, including but not limited to spraying, dusting, and chemigation. We also consider the planting of pesticide-coated seed a pesticide application. |

1. Do you use pesticides (including organic pesticides)?  Yes No

If yes, please select the evidence used to justify use:

Scouting and monitoring records.  Documented damage exceeding pre-determined thresholds

Degree day models  Moisture and temperature records.  Spore counts

Other, please describe:

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1. Provide the contact information of any professional crop consultants or crop advisors that provide pest scouting and monitoring services and/or pest control recommendations.

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| Name: | Company (if applicable): |
| Email: | Phone number: |

1. If you use pre-determined thresholds to justify the use of pesticides, please describe the thresholds identified for each pest in the table below. Add more rows if necessary. See Appendix I for guidance.

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| **Table 6.1. PESTICIDE JUSTIFICATION THRESHOLDS** | | | | |
| **Crop(s) affected** | **Pest or disease** | **Action threshold (e.g. # eggs/plant)** | **Threshold source (example: State Extension)** | **Monitoring Time of Year and Frequency (e.g. daily, weekly, etc.)** |
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1. How often do you calibrate your application equipment? Must be at least once annually.

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1. Do you foresee the need to apply fungicides using aerial methods in the coming year?  Yes No

\*\*If answer is yes, please submit a justification and application/drift prevention plan to comply with Production Standard 2.3(a), including all the components discussed in Appendix O.\*\*

1. Do you foresee the need to apply pesticides to crops that contain blooming temporary in-field habitat (e.g., understory plantings)?  **Yes- answer #7 & #8 below No- skip to next section**
2. What conditions must exist for you to apply pesticides to crops that contain blooming temporary in-field habitat (e.g., understory plantings)? See Production Standard 2.4(b)

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1. Please confirm that blooms from temporary in-field habitat will be removed at least 24 hours prior to the application of pesticides to crops that contain blooming temporary in-field habitat (e.g., understory plantings):

**Yes- blooms from temporary in-field habitat will be removed at least 24 hours prior to the application of pesticides to crops that contain blooming temporary in-field habitat AND records of bloom removal will be maintained to document compliance with this requirement**

**PROHIBITED ACTIONS**

The following actions are prohibited. Please check each box demonstrating your understanding of these requirements:

I will not apply pesticides without a justified use.

I will not apply any pesticides rated as Level I under the UC IPM Bee Precaution during bloom for crops that are visited by or pollinated by insects.

I will not apply pesticides that jointly may increase toxicity to bees within three days of one another.

I will not use nitroguanidine neonicotinoids (clothianidin, dinotefuran, imidacloprid and thiamethoxam), including the planting of treated seeds.

I will not use genetically modified crops that express pesticides or are resistant to herbicides.

I will not apply pesticides aerially (the only exception being fungicides under conditions listed in 2.3 a. of the standards).

I will not use soil fumigants.

I will not use paraquat dichloride within permanent pollinator habitat areas or within spatial buffers around permanent pollinator areas.

I will not use pesticides other than herbicides within designated permanent pollinator habitat.

I will not apply herbicides to plants in bloom, including weeds, in designated permanent pollinator habitat.

I will not apply any herbicide nor pesticides rated as Level I under the UC IPM Bee Precaution to temporary blooming in-field habitat (e.g., cover crops, in-field insectary strips) or to crops with temporary in-field blooming habitat growing beneath or adjacent. Except that, if pesticide applications need to occur during habitat bloom, mow or otherwise remove blooms at least 24 hours prior to any pesticide applications.

###### 7. MANAGED BUMBLEBEES

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| Commercial bumblebees cannot be used for open field pollination. Commercial bumblebees may only be used in secure indoor facilities, such as screened greenhouses, in which they are not able to interact with wild bumblebees. Managed bumblebees may only be used within their native ranges.  Records must be maintained of all colony purchases, steps taken to secure greenhouses and disposal dates/procedures.  Note: This does not apply to managed honey bees |

**COMMERCIAL BUMBLEBEE MANAGEMENT**

1) Do you use commercial bumblebees on your farm? Yes, describe below  No - If No, skip to next section.

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a) Do you use native species within their native ranges?  Yes  No - If No, see above requirements

b) Describe the location of your indoor facility and how entrances are screened or sealed to prevent individual bumblebees from entering or exiting the facility.

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Please confirm the following required actions are maintained:

Queen excluders are used on all colonies.

Individuals are not released from commercially acquired bumble bee colonies into the wild.

Individuals are properly disposed of through incineration, freezing or hot soapy water (complete submersion for at least two minutes).

Materials (pollen, nectar, bedding and cardboard) are disposed of through incineration.

###### 8. RECORDKEEPING

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| Required forms and records must be made available to the certifier upon request and to farm inspectors. Farmers may submit their own plans and forms, or they can use Bee Better Certified plans and forms as listed below each record. If their own forms are used, they must include all the information required in the Bee Better forms. |

1) Submit the following forms and records as part of your Bee Better Certified Plan submission:

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| **Attached** | **Description** | **Forms/Examples Reference** |
|  | List of planned pesticides to be used in the first year of the certification period. The list must include active ingredient names. | Bee Better pesticide application record form (Appendix I to the Production Standards). |
|  | Pesticide use records for the past 2 years.  You may submit pesticide use forms required by your state, the Bee Better pesticide use record (Link/Appendix I), a form containing all the same information as the Bee Better form, or similar documents required by an organic inspector. Pesticide use records must include active ingredient names. | Bee Better pesticide application record form (Appendix I to the Production Standards). |
|  | Plant list record identifying all plant species within permanent habitat areas. | Bee Better Certified Plant List Record form *(https://beebettercertified.org/docs/).* |
|  | Pest/disease scouting and monitoring protocols you intend to use. | *Bee Better Certified scouting and monitoring guidance (Appendix I to the Production Standards).* |
|  | Pest/disease scouting and monitoring record keeping form you intend to use. | *Bee Better pest monitoring and scouting guidance (Appendix I to the Production Standards).* |
|  | Non-pesticide management records or the form/template you plan to use to maintain these records. | *Bee Better Certified non-pesticide management record (Appendix J to the Production Standards).* |

2) The following forms and records must be maintained on-site and accessible for the inspector to review during the inspection (digital records are okay). They must also be made available to the certifier upon request. Note that photos may be requested by your certifier to confirm habitat characteristics that cannot be observed during the on-site inspection. Please confirm that they are being maintained and available.

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| **Are they Maintained?** | **Description** |
| Yes  No  NA | Pesticide use records. Operations may use their own forms or the Bee Better Pesticide Application Record form. If using your own forms, you must ensure that forms contain all the same information as that within the Bee Better Pesticide Application Record form and include the active ingredient for all pesticides. |
| Yes  No  NA | Records of all commercial bumblebee colony purchases, steps taken to secure greenhouses and disposal dates/procedures, as applicable. |
| Yes  No  NA | Records of non-GMO status of seeds. |
| Yes  No  NA | Non-Pesticide Management Records |
| Yes  No  NA | Evidence justifying pesticide use: Evidence should demonstrate that conditions on the farm are conducive to the targeted disease and or pest. Examples of acceptable evidence include scouting and monitoring records, documented damage exceeding pre-determined thresholds, degree day models, moisture and temperate records, or spore counts. |
| Yes  No  NA | Additional evidence that can help verify compliance includes but is not limited to: photo verification of habitat establishment and habitat bloom abundance across the various growing seasons, photo verification of vegetative buffers or spatial buffers around permanent habitat, etc. |

###### 9. LABELING

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| Before the Bee Better Certified Product Seal, Ingredient Seal or Program Mark may be used on products or to represent a farm operation in marketing and sales information, a farm must be certified by an approved Certification Agent. All uses of the Bee Better Certified Product Seal, bee Better Certified Ingredient Seal, and Bee Better Certified Program Mark are trademarked by The Xerces Society and may only be used in accordance with the labeling standards as specified by the Branding and Trademark Guidelines. All packaging and promotional materials that use the Bee Better Certified Product Seal and Ingredient Seal must be submitted to a licensing agent for licensing and approval prior to use.  For more information on allowable uses of the Seals and Program Mark, consult the Bee Better Labeling Standards.  For more information about the Licensing Application and accredited licensing agents please send questions to Bee Better Certified (info@beebettercertified.org). |

1) Do you plan to use the Bee Better Product Seal, Bee Better Ingredient Seal, or Bee Better Program Mark to represent crops as Bee Better certified?

Please see the Bee Better Certified Labeling Standards ([www.beebettercertified.org/docs](http://www.beebettercertified.org/docs)) for definitions and guidelines

**No**

**Yes- indicate below which seal or mark will be used:**

Product Seal Ingredient Seal  Program Mark

A license for the use of the Bee Better Program Mark is granted upon certification of a farm through an approved certification body. Please refer to the [labeling standards](https://beebettercertified.org/wp-content/uploads/2021/10/docs_BBC-2017_07-Labeling-Standards_10.11.pdf) document for guidance on correct use of the Bee Better Program Mark.  For information about using the Bee Better Product Seal or Bee Better Ingredient Seal please contact Bee Better Certified (info@beebettercertified.org).