California Almond Sustainability Program (CASP)
Bee Friendly Farming Report

This confidential report was prepared for:
Name: Daniel Smith
Business: Michelle Smith Farms
Address: CA
Phone: (209) 756-0007
Email: Danbosmith@sbcglobal.net

Assessment Year: 2021

Follow these steps to apply for Bee Friendly Farming certification through Pollinator Partnership.

Generate and save this PDF report from CASP.

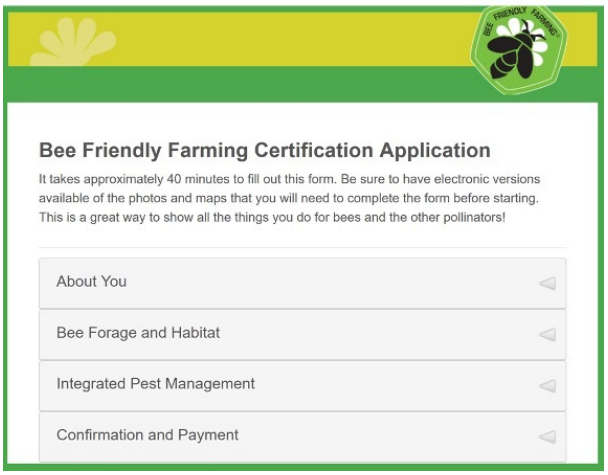
Open the BFF Application

The online application is managed by Pollinator Partnership and requires completion of the following sections:

About You

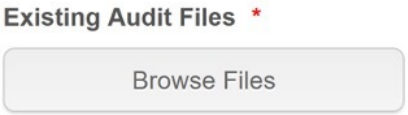
Bee Forage and Habitat

Confirmation and Payment



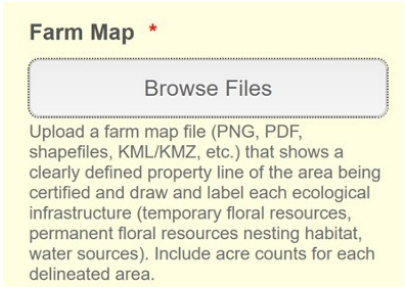
About You

- Your Name, Farm Name, Email and Phone Number
- Choose **Almonds** for Primary Production
- Under Existing Certifications, choose **California Almond Sustainability Program**. Once selected, most questions in Bee Forage and Habitat and the entire Integration Pest Management section are skipped.

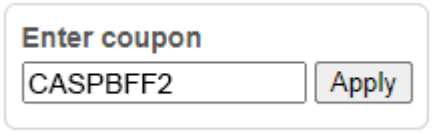


Bee Forage and Habitat

- Enter the Permanent and Total Habitat Acres
- Attach file that shows the farm map. If you use the CASP Map Center you can print to PDF from the Maps Center



Confirmation and Payment



- Number of distinct properties (follow the onscreen directions)
- How you heard about BFF
- Confirmations
- Coupon code (CASPBFF2) or other payment information

Bee Friendly Farming Certification has five requirements:

1. Offer forage providing good nutrition for bees on at least 3% of land. Forage can be temporary, including crops and cover crops.
2. Provide bloom of different flowering plants throughout the growing season, especially in early spring and late autumn. There is no minimum land coverage for seasonal bloom.
3. If not inhibited by government mandated water restrictions, offer clean water for bees.
4. Provide habitat for nesting through features such as hedgerows, natural brush, buffer strips, or bare ground.
5. Practice Integrated Pest Management (IPM); reduce or eliminate the use of chemicals.

Full confidentiality is maintained for all information provided and generated this report. Individual assessment results have not been shared with other individuals or organizations.

Go to https://www.pollinator.org/bff/bff-us to find out more about Pollinator Partnership.

Summary

Location	Acres	Eligibility Status	BFF 1	BFF 2	BFF 3	BFF 4	BFF 5
36783-Michelle Smith Farms	48	Eligible	Yes	Yes	Yes	Yes	Yes
Sum of Eligible Acres	**48**						

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 1
Assessment Year: **2021** Status: **Eligible**

Criteria 1: Offer forage providing good nutrition for bees on at least 3% of land. Forage can be temporary, including crops and cover crops.
Evaluation: Yes

Question 51 on orchard cover crops or question 48 on adjacent vegetation/hedgerows must be 'Yes' to meet BFF 1 (3% forage requirement).

CASP Bee Health and Pollination Module Questions	Response
45. Was vegetation maintained on or adjacent to the farm that provided pollen and nectar sources for pollinator bees before and/or after almond bloom (includes nutritional ground cover)?	Yes
46. Have natural habitat areas or set aside plantings with flowering plants and/or nesting habitat for managed and native pollinators been established or maintained in unfarmed areas on or within 2 miles of the orchard?	Yes
47. Has cover crop recommended for providing forage to pollinators (e.g., mustards, clovers, vetch and/or wildflowers) been planted in an adjacent, neighboring field within 2 miles of the orchard?	Yes
48. Was the combined acreage of hedgerows and other vegetation types, such as natural habitat areas, set aside plantings, and/or adjacent cover crops, equivalent to at least 3% of the orchard planted area?	Yes
49. Was a cover crop (pre-existing or planted ground cover) intentionally grown between orchard rows?	Yes
50. Was the ground cover purposely planted?	No
51. Was the cover crop recommended for providing forage to pollinators (e.g., mustards, clovers, vetch and/or wildflowers)?	No Answer

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 2
Assessment Year: **2021** Status: **Eligible**

Criteria 2: Provide bloom Of different flowering plants throughout the growing season, especially in early spring and late autumn. There is no minimum land coverage for seasonal bloom.
Evaluation: Yes

Question 44 on hedgerows or question 45 on adjacent vegetation must be 'Yes' to meet BFF 2 (bloom requirement).

CASP Bee Health and Pollination Module Questions	Response
44. Were hedgerows of flowering shrubs, such as coyote brush, maintained along at least some edges of the farm to provide alternative nutrition sources for managed and native pollinators and pest natural enemies?	Yes
45. Was vegetation maintained on or adjacent to the farm that provided pollen and nectar sources for pollinator bees before and/or after almond bloom (includes nutritional ground cover)?	Yes

Criteria 3: If not inhibited by government mandated water restrictions, offer clean water for bees.
Evaluation: Yes

Question 09 on available water and question 26 (if applicable) must be 'Yes' to meet BFF 3 (clean water for bees).

CASP Bee Health and Pollination Module Questions	Response
09. Was abundant potable water, free from contamination, provided for bees?	Yes
26. Were water sources for pollinator bees covered before or replaced after pesticide applications?	Not applicable

Criteria 4: Provide habitat for nesting through features such as hedgerows, natural brush, or buffer strips.
Evaluation: Yes

Question 44 on hedgerows or question 45 on adjacent vegetation must be 'Yes' to meet BFF 4 (habitat requirement).

CASP Bee Health and Pollination Module Questions	Response
44. Were hedgerows of flowering shrubs, such as coyote brush, maintained along at least some edges of the farm to provide alternative nutrition sources for managed and native pollinators and pest natural enemies?	Yes
45. Was vegetation maintained on or adjacent to the farm that provided pollen and nectar sources for pollinator bees before and/or after almond bloom (includes nutritional ground cover)?	Yes

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 3
Assessment Year: **2021** Status: **Eligible**

Criteria 5: Practice Integrated Pest Management (IPM); reduce or eliminate the use of chemicals.
Evaluation: Yes

The Bee Friendly Farming IPM requirement is evaluated using 5 IPM areas and 34 unique CASP questions. Each area is evaluated separately and all IPM areas must be yes to meet BFF 5 (practice IPM; reduce or eliminate the use of chemicals.

Criteria 5a: Monitoring/Identification
Evaluation: Yes

If one or more of the CASP questions 22 ,111, or 125 is answered as 'Yes,' then 5a, the IPM monitoring/identification requirement is met.

CASP Module Questions	Response
019. Was the orchard monitored by a licensed PCA for insects, mites, diseases and pest natural enemies (i.e., beneficials) at least once every two weeks during the growing season? (Diseases should be monitored weekly during bloom and spring.)	No
022. Were scouting data, university guidelines, and practical experience used to design and implement management strategies for insects, mites, and diseases?	No Answer
111. To determine necessary fungicides, rates and timings, were disease symptoms monitored weekly prior to and during bloom, throughout spring, and until the weather was no longer conducive for disease development?	Yes
125. Were weeds monitored at least twice a year and was monitoring information used for management decisions? Preferably, monitoring would occur during the fall after harvest and first rains (for winter annuals and perennials) and during late spring (summer annuals and perennials).	No

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 4
Assessment Year: **2021** Status: **Eligible**

Criteria 5b: Decision Making
Evaluation: Yes

If one or more of CASP questions 76.01, 76.03, 78.02, 80.02, 80.03, 84 or 127 is answered as 'Yes' then 5b, the IPM decision making requirement is met.

(If nothing was sprayed or required monitoring, demonstrated by responding 'No' to CASP questions 74, 77, 79, 83 and 125 then 5b could also be met.)

CASP Module Questions	Response
074. Was navel orangeworm (NOW) sprayed in the past year?	Yes
076.01. Spring spray timing for NOW was based on egg traps and degree-day calculations.	Yes
076.03. Hullsplit spray timing for NOW was based on egg traps and degree-day calculations.	Yes
077. Was San Jose Scale (SJS) sprayed in the past year?	No
078.02. Monitoring SJS using pheromone traps and degree-day calculations.	No Answer
079. Was Peach Twig Borer (PTB) sprayed in the past year (dormant, bloom or spring sprays)?	No
080.02. Shoot strike monitoring began in April to determine if the number of strikes reached a treatment threshold (generally four or more strikes per tree for mature orchards; threshold should be lower for second- and third-leaf orchards).	No Answer
080.03. Monitoring PTB using pheromone traps and degree-day calculations.	No Answer
083. Were mites sprayed in the past year?	No
084. Were miticides only applied after mite populations exceeded an established threshold of 25 percent of leaves infested (if there were no natural enemies), or 40 percent of leaves infested (if natural enemies were present)?	No Answer
125. Were weeds monitored at least twice a year and was monitoring information used for management decisions? Preferably, monitoring would occur during the fall after harvest and first rains (for winter annuals and perennials) and during late spring (summer annuals and perennials).	No
127. Did monitoring records include growth stages (seedling or mature) and potential herbicide resistance issues?	No Answer

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 5
Assessment Year: **2021** Status: **Eligible**

Criteria 5c: Prevention
Evaluation: Yes

If two or more questions listed are answered 'Yes' then 5c, the IPM prevention requirement is met. (If all questions are 'Not Applicable,' then 5c could also be met.)

CASP Module Questions	Response
064. To reduce outbreaks of NOW, were mummy nuts counted and removed, as needed, during the winter, so that less than two mummies per tree remained by February 1? (For the southern San Joaquin Valley and any almond orchard within 3 miles of pistachio orchards, this rate must be less than one mummy nut per tree).	No
065. By March 1, were all mummy nuts on the ground destroyed (e.g., by mowing or discing)?	Yes
068. Was a mating disruption program for navel orangeworm (NOW) used for this orchard?	No
070. To reduce outbreaks of mites, was dust reduced on orchard roadways (e.g., via dust suppressants, oiling, watering, mulching, vegetative cover and/or driving slowly)?	Yes
130. Was an integrated weed management strategy developed (e.g., involving multiple control tactics, and rotation of herbicides with different modes of action) that considered monitoring results, past treatments, herbicide resistance, regulations and physical characteristics of the orchard, and surrounding sensitive areas?	Yes

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 6
Assessment Year: **2021** Status: **Eligible**

Criteria 5d: Intervention
Evaluation: Yes

If five or more questions listed are answered 'Yes' then 5d, the IPM prevention requirement is met. (If all questions listed are 'Not Applicable' and question 95 is 'Yes' then 5d could also be met.)

CASP Module Questions	Response
033. To minimize drift from inversions and wind, were air blast and/or aerial applications made only when winds were between 2 and 8 mph?	Yes
049. Was spraying discontinued when winds blew in the direction of nearby waterways (e.g., creeks or irrigation canals) or other sensitive sites (e.g., residences, schools, pollinator and pest natural enemy habitat)?	Yes
050. When operating air blast sprayers next to open or sensitive sites (e.g., aquatic areas, residences, schools, pollinator and pest natural enemy habitat), were the two rows directly adjacent to these sites sprayed on the outer side only (i.e., to direct spray into the orchard)?	Yes
093. If effective alternatives existed, were broad-spectrum insecticides and acaricides (e.g., pyrethroids, organophosphates and carbamates), not used because of their potential negative effects on beneficial and non-target organisms?	Not applicable
095. Did the operation ensure that pesticides with label cautions "highly toxic to bees," "toxic to bees," "residual times," or "extended residual toxicity" were not used during bloom?	Yes
114. During bloom, were necessary fungicides (or Bacillus thuringiensis) applied in the late afternoon or evening when bees and pollen were not present?	Yes
115. Were arrangements made with the beekeeper about which pesticides could be applied if daytime applications were necessary while hives were present, and, if an application(s) was necessary, was the beekeeper provided with 48-hour advance notice?	Yes
116. Was notification given to the person responsible for pesticide recommendations, as well as the applicator, which and when during the day, pesticides could be applied while hives were present?	Yes

California Almond Sustainability Program (CASP) Bee Friendly Farming Report

Daniel Smith Danbosmith@sbcglobal.net
Business Name: **Michelle Smith Farms** Business Unit Name: **Michelle Smith Farms**
36783-Michelle Smith Farms (48 Acres Merced County) details part 7
Assessment Year: **2021** Status: **Eligible**

Criteria 5e: IPM Evaluation
Evaluation: Yes

If one or more questions listed are answered 'Yes' then 5e, the IPM evaluation requirement is met.

CASP Module Questions	Response
019. Was the orchard monitored by a licensed PCA for insects, mites, diseases and pest natural enemies (i.e., beneficials) at least once every two weeks during the growing season? (Diseases should be monitored weekly during bloom and spring.)	No
020. Were written or electronic scouting reports kept by or provided to the farm owner or staff to inform decision making?	No Answer
021. Was a year-end review of pest levels and trends completed to improve future decision-making?	No Answer
023. Were scouting efforts continued after the use of each pest control tactic to verify efficacy and/or resistance issues?	No Answer
073. At harvest, did farm staff or a PCA sample and analyze the nuts for types of nut rejects to determine the pest(s) causing the damage, the efficacy of the year's pest management program, and the plan for the next year?	Yes

Criteria 5f: Resistance Management
Evaluation: Yes

If one or more questions listed are answered 'Yes' then 5f, the IPM resistance management requirement is met. (If all questions are 'Not Applicable,' then 5f could also be met.)

CASP Module Questions	Response
096. In addition to following required practices on product labels, were mode-of-action group numbers for insecticides and acaricides (on labels or in UC Pest Management Guidelines) recorded and used to guide pesticide rotation/resistance decisions?	Yes
113. In addition to required practices on product labels, was the most recent fungicide efficacy and resistance management information reviewed (e.g., UC Fungicide Efficacy and Treatment Timing tables) to guide active ingredient rotation/resistance management decisions?	Yes
130. Was an integrated weed management strategy developed (e.g., involving multiple control tactics, and rotation of herbicides with different modes of action) that considered monitoring results, past treatments, herbicide resistance, regulations and physical characteristics of the orchard, and surrounding sensitive areas?	Yes