

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report



This confidential report was prepared for:

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Assessment Year: 2022

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 Stewardship Platform**. Once selected, most questions in Bee Forage and Habitat and the entire Integration Pest Management section are skipped.

Primary Production *

Almonds

Existing Certifications

California Almond Stewardship Platform

Recent audit information from other qualifying certifications your farm holds can be submitted in place of the rest of this form. Qualifying certifications are listed in the dropdown box above. If you hold a certification that is not listed above, please contact isaac@pollinator.org for assistance.

Existing Audit Files *

Browse Files

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](#)

Farm Map *

Browse Files

Upload a farm map file (PNG, PDF, shapefiles, KML/KMZ, etc.) that shows a clearly defined property line of the area being certified and draw and label each ecological infrastructure (temporary floral resources, permanent floral resources nesting habitat, water sources). Include acre counts for each delineated area.

Confirmation and Payment

- Number of distinct properties (follow the onscreen directions)
- How you heard about BFF
- Confirmations

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
Block 1	86	Eligible	Yes	Yes	Yes	Yes	Yes
Block 2	60	Eligible	Yes	Yes	Yes	Yes	Yes
Block 3	75	Eligible	Yes	Yes	Yes	Yes	Yes
Block 4	101	Eligible	Yes	Yes	Yes	Yes	Yes
Sum of Eligible Acres	322						

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 1

Assessment Year: **2022** 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 NS-30 regarding in orchard cover cropping or question BP-26 regarding adjacent vegetation/hedgerows or must be 'Yes' to meet BFF 1 (3% forage requirement).

CASP Questions	Response
BP-23. 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
BP-24. 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
BP-25. 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
BP-26. 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
NS-28. Was a cover crop (pre-existing or planted ground cover) intentionally grown between orchard rows?	Yes
NS-29. Was the ground cover purposely planted?	No
NS-30. Was the cover crop recommended for providing forage to pollinators (e.g., mustards, clovers, vetch and/or wildflowers)?	No Answer

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 2

Assessment Year: **2022** Status: **Eligible**

Criteria 2: Provide bloom from 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 BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 2 (bloom requirement)

CASP Questions	Response
BP-22. 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
BP-23. 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 BP-08 on available water and question BP-18 (if applicable) must be 'Yes' to meet BFF 3 (clean water for bees).

CASP Questions	Response
BP-08. Was abundant potable water, free from contamination, provided for bees?	Yes
BP-18. Were water sources for pollinator bees covered before or replaced after pesticide applications?	Yes

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

Evaluation: Yes

Question BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 4 (habitat requirement).

CASP Questions	Response
BP-22. 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
BP-23. 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

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 3

Assessment Year: **2022** 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 PM-13, PM-78, or PM-84 is answered as 'Yes,' then 5a, the IPM monitoring/identification requirement is met.

CASP Questions	Response
PM-10. 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.)	Yes
PM-13. Were scouting data, university guidelines, and practical experience used to design and implement management strategies for insects, mites, and diseases?	Yes
PM-78. 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
PM-84. 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).	Yes

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 4

Assessment Year: **2022** Status: **Eligible**

Criteria 5b: Decision Making

Evaluation: Yes

If one or more of CASP questions PM-49, PM-51, PM-54, PM-56, PM-57, PM-64 or PM-86 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 PM-47, PM-53, PM-55, PM-62 and PM-84 then 5b could also be met.)

CASP Questions	Response
PM-47. Was navel orangeworm (NOW) sprayed in the past year?	Yes
PM-49. Spring spray timing for NOW was based on egg traps and degree-day calculations.	Yes
PM-51. Hullsplit spray timing for NOW was based on egg traps and degree-day calculations.	No
PM-53. Was San Jose Scale (SJS) sprayed in the past year?	Yes
PM-54. Was San Jose Scale (SJS) monitored using pheromone traps and degree-day calculations?	Yes
PM-55. Was Peach Twig Borer (PTB) sprayed in the past year (dormant, bloom or spring sprays)?	Yes
PM-56. Did shoot strike monitoring begin in April to determine if the number of strikes reached a treatment threshold? (The threshold is generally four or more strikes per tree for mature orchards; threshold should be lower for second- and third-leaf orchards.)	Yes
PM-57. Was Peach Twig Borer (PTB) monitored using pheromone traps and degree-day calculations?	Yes
PM-62. Were mites sprayed in the past year?	Yes
PM-64. 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)?	Yes
PM-84. 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).	Yes
PM-86. Did monitoring records include growth stages (seedling or mature) and potential herbicide resistance issues?	No

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 5

Assessment Year: **2022** 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 Questions	Response
PM-42. 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).	Yes
PM-43. By March 1, were all mummy nuts on the ground destroyed (e.g., by mowing or discing)?	Yes
PM-45. Was a mating disruption program for navel orangeworm (NOW) used for this orchard?	Not applicable
PM-58. 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
PM-89. 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

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 6

Assessment Year: **2022** 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 BP-15 is 'Yes' then 5d could also be met.)

CASP Questions	Response
PM-22. 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
PM-36. 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
PM-37. 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
PM-06. 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?	Yes
BP-15. 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
BP-17. During bloom, were necessary fungicides (or <i>Bacillus thuringiensis</i>) applied in the late afternoon or evening when bees and pollen were not present?	Not applicable
BP-11. 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
BP-12. 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

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 1 (86 Acres Sacramento County) details part 7

Assessment Year: **2022** 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 Questions	Response
PM-10. 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.)	Yes
PM-11. Were written or electronic scouting reports kept by or provided to the farm owner or staff to inform decision making?	Yes
PM-12. Was a year-end review of pest levels and trends completed to improve future decision-making?	Yes
PM-14. Were scouting efforts continued after the use of each pest control tactic to verify efficacy and/or resistance issues?	Yes
PM-16. 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 Questions	Response
PM-08. 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
PM-80. 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
PM-89. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 1

Assessment Year: **2022** 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 NS-30 regarding in orchard cover cropping or question BP-26 regarding adjacent vegetation/hedgerows or must be 'Yes' to meet BFF 1 (3% forage requirement).

CASP Questions	Response
BP-23. 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
BP-24. 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
BP-25. 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
BP-26. 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
NS-28. Was a cover crop (pre-existing or planted ground cover) intentionally grown between orchard rows?	Yes
NS-29. Was the ground cover purposely planted?	No
NS-30. Was the cover crop recommended for providing forage to pollinators (e.g., mustards, clovers, vetch and/or wildflowers)?	No Answer

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 2

Assessment Year: **2022** Status: **Eligible**

Criteria 2: Provide bloom from 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 BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 2 (bloom requirement)

CASP Questions	Response
BP-22. 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
BP-23. 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 BP-08 on available water and question BP-18 (if applicable) must be 'Yes' to meet BFF 3 (clean water for bees).

CASP Questions	Response
BP-08. Was abundant potable water, free from contamination, provided for bees?	Yes
BP-18. Were water sources for pollinator bees covered before or replaced after pesticide applications?	Yes

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

Evaluation: Yes

Question BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 4 (habitat requirement).

CASP Questions	Response
BP-22. 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
BP-23. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

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Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 3

Assessment Year: **2022** 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 PM-13, PM-78, or PM-84 is answered as 'Yes,' then 5a, the IPM monitoring/identification requirement is met.

CASP Questions	Response
PM-10. 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.)	Yes
PM-13. Were scouting data, university guidelines, and practical experience used to design and implement management strategies for insects, mites, and diseases?	Yes
PM-78. 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
PM-84. 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).	Yes

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 4

Assessment Year: **2022** Status: **Eligible**

Criteria 5b: Decision Making

Evaluation: Yes

If one or more of CASP questions PM-49, PM-51, PM-54, PM-56, PM-57, PM-64 or PM-86 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 PM-47, PM-53, PM-55, PM-62 and PM-84 then 5b could also be met.)

CASP Questions	Response
PM-47. Was navel orangeworm (NOW) sprayed in the past year?	Yes
PM-49. Spring spray timing for NOW was based on egg traps and degree-day calculations.	Yes
PM-51. Hullsplit spray timing for NOW was based on egg traps and degree-day calculations.	No
PM-53. Was San Jose Scale (SJS) sprayed in the past year?	Yes
PM-54. Was San Jose Scale (SJS) monitored using pheromone traps and degree-day calculations?	Yes
PM-55. Was Peach Twig Borer (PTB) sprayed in the past year (dormant, bloom or spring sprays)?	Yes
PM-56. Did shoot strike monitoring being in April to determine if the number of strikes reached a treatment threshold? (The threshold is generally four or more strikes per tree for mature orchards; threshold should be lower for second- and third-leaf orchards.)	Yes
PM-57. Was Peach Twig Borer (PTB) monitored using pheromone traps and degree-day calculations?	Yes
PM-62. Were mites sprayed in the past year?	Yes
PM-64. 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)?	Yes
PM-84. 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).	Yes
PM-86. Did monitoring records include growth stages (seedling or mature) and potential herbicide resistance issues?	No

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 5

Assessment Year: **2022** 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 Questions	Response
PM-42. 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).	Yes
PM-43. By March 1, were all mummy nuts on the ground destroyed (e.g., by mowing or discing)?	Yes
PM-45. Was a mating disruption program for navel orangeworm (NOW) used for this orchard?	Not applicable
PM-58. 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
PM-89. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 6

Assessment Year: **2022** 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 BP-15 is 'Yes' then 5d could also be met.)

CASP Questions	Response
PM-22. 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
PM-36. 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
PM-37. 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
PM-06. 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?	Yes
BP-15. 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
BP-17. During bloom, were necessary fungicides (or <i>Bacillus thuringiensis</i>) applied in the late afternoon or evening when bees and pollen were not present?	Not applicable
BP-11. 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
BP-12. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 2 (60 Acres Sacramento County) details part 7

Assessment Year: **2022** 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 Questions	Response
PM-10. 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.)	Yes
PM-11. Were written or electronic scouting reports kept by or provided to the farm owner or staff to inform decision making?	Yes
PM-12. Was a year-end review of pest levels and trends completed to improve future decision-making?	Yes
PM-14. Were scouting efforts continued after the use of each pest control tactic to verify efficacy and/or resistance issues?	Yes
PM-16. 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 Questions	Response
PM-08. 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
PM-80. 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
PM-89. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 1

Assessment Year: **2022** 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 NS-30 regarding in orchard cover cropping or question BP-26 regarding adjacent vegetation/hedgerows or must be 'Yes' to meet BFF 1 (3% forage requirement).

CASP Questions	Response
BP-23. 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
BP-24. 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
BP-25. 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
BP-26. 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
NS-28. Was a cover crop (pre-existing or planted ground cover) intentionally grown between orchard rows?	Yes
NS-29. Was the ground cover purposely planted?	No
NS-30. Was the cover crop recommended for providing forage to pollinators (e.g., mustards, clovers, vetch and/or wildflowers)?	No Answer

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 2

Assessment Year: **2022** Status: **Eligible**

Criteria 2: Provide bloom from 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 BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 2 (bloom requirement)

CASP Questions	Response
BP-22. 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
BP-23. 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 BP-08 on available water and question BP-18 (if applicable) must be 'Yes' to meet BFF 3 (clean water for bees).

CASP Questions	Response
BP-08. Was abundant potable water, free from contamination, provided for bees?	Yes
BP-18. Were water sources for pollinator bees covered before or replaced after pesticide applications?	Yes

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

Evaluation: Yes

Question BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 4 (habitat requirement).

CASP Questions	Response
BP-22. 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
BP-23. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 3

Assessment Year: **2022** 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 PM-13, PM-78, or PM-84 is answered as 'Yes,' then 5a, the IPM monitoring/identification requirement is met.

CASP Questions	Response
PM-10. 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.)	Yes
PM-13. Were scouting data, university guidelines, and practical experience used to design and implement management strategies for insects, mites, and diseases?	Yes
PM-78. 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
PM-84. 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).	Yes

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 4

Assessment Year: **2022** Status: **Eligible**

Criteria 5b: Decision Making

Evaluation: Yes

If one or more of CASP questions PM-49, PM-51, PM-54, PM-56, PM-57, PM-64 or PM-86 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 PM-47, PM-53, PM-55, PM-62 and PM-84 then 5b could also be met.)

CASP Questions	Response
PM-47. Was navel orangeworm (NOW) sprayed in the past year?	Yes
PM-49. Spring spray timing for NOW was based on egg traps and degree-day calculations.	Yes
PM-51. Hullsplit spray timing for NOW was based on egg traps and degree-day calculations.	No
PM-53. Was San Jose Scale (SJS) sprayed in the past year?	Yes
PM-54. Was San Jose Scale (SJS) monitored using pheromone traps and degree-day calculations?	Yes
PM-55. Was Peach Twig Borer (PTB) sprayed in the past year (dormant, bloom or spring sprays)?	Yes
PM-56. Did shoot strike monitoring being in April to determine if the number of strikes reached a treatment threshold? (The threshold is generally four or more strikes per tree for mature orchards; threshold should be lower for second- and third-leaf orchards.)	Yes
PM-57. Was Peach Twig Borer (PTB) monitored using pheromone traps and degree-day calculations?	Yes
PM-62. Were mites sprayed in the past year?	Yes
PM-64. 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)?	Yes
PM-84. 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).	Yes
PM-86. Did monitoring records include growth stages (seedling or mature) and potential herbicide resistance issues?	No

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 5

Assessment Year: **2022** 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 Questions	Response
PM-42. 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).	Yes
PM-43. By March 1, were all mummy nuts on the ground destroyed (e.g., by mowing or discing)?	Yes
PM-45. Was a mating disruption program for navel orangeworm (NOW) used for this orchard?	Not applicable
PM-58. 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
PM-89. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 6

Assessment Year: **2022** 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 BP-15 is 'Yes' then 5d could also be met.)

CASP Questions	Response
PM-22. 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
PM-36. 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
PM-37. 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
PM-06. 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?	Yes
BP-15. 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
BP-17. During bloom, were necessary fungicides (or Bacillus thuringiensis) applied in the late afternoon or evening when bees and pollen were not present?	Not applicable
BP-11. 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
BP-12. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 3 (75 Acres Sacramento County) details part 7

Assessment Year: **2022** 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 Questions	Response
PM-10. 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.)	Yes
PM-11. Were written or electronic scouting reports kept by or provided to the farm owner or staff to inform decision making?	Yes
PM-12. Was a year-end review of pest levels and trends completed to improve future decision-making?	Yes
PM-14. Were scouting efforts continued after the use of each pest control tactic to verify efficacy and/or resistance issues?	Yes
PM-16. 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 Questions	Response
PM-08. 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
PM-80. 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
PM-89. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 1

Assessment Year: **2022** 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 NS-30 regarding in orchard cover cropping or question BP-26 regarding adjacent vegetation/hedgerows or must be 'Yes' to meet BFF 1 (3% forage requirement).

CASP Questions	Response
BP-23. 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
BP-24. 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
BP-25. 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
BP-26. 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
NS-28. Was a cover crop (pre-existing or planted ground cover) intentionally grown between orchard rows?	Yes
NS-29. Was the ground cover purposely planted?	No
NS-30. Was the cover crop recommended for providing forage to pollinators (e.g., mustards, clovers, vetch and/or wildflowers)?	No Answer

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 2

Assessment Year: **2022** Status: **Eligible**

Criteria 2: Provide bloom from 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 BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 2 (bloom requirement)

CASP Questions	Response
BP-22. 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
BP-23. 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 BP-08 on available water and question BP-18 (if applicable) must be 'Yes' to meet BFF 3 (clean water for bees).

CASP Questions	Response
BP-08. Was abundant potable water, free from contamination, provided for bees?	Yes
BP-18. Were water sources for pollinator bees covered before or replaced after pesticide applications?	Yes

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

Evaluation: Yes

Question BP-22 on hedgerows or question BP-23 on adjacent vegetation must be 'Yes' to meet BFF 4 (habitat requirement).

CASP Questions	Response
BP-22. 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
BP-23. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 3

Assessment Year: **2022** 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 PM-13, PM-78, or PM-84 is answered as 'Yes,' then 5a, the IPM monitoring/identification requirement is met.

CASP Questions	Response
PM-10. 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.)	Yes
PM-13. Were scouting data, university guidelines, and practical experience used to design and implement management strategies for insects, mites, and diseases?	Yes
PM-78. 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
PM-84. 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).	Yes

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 4

Assessment Year: **2022** Status: **Eligible**

Criteria 5b: Decision Making

Evaluation: Yes

If one or more of CASP questions PM-49, PM-51, PM-54, PM-56, PM-57, PM-64 or PM-86 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 PM-47, PM-53, PM-55, PM-62 and PM-84 then 5b could also be met.)

CASP Questions	Response
PM-47. Was navel orangeworm (NOW) sprayed in the past year?	Yes
PM-49. Spring spray timing for NOW was based on egg traps and degree-day calculations.	Yes
PM-51. Hullsplit spray timing for NOW was based on egg traps and degree-day calculations.	No
PM-53. Was San Jose Scale (SJS) sprayed in the past year?	Yes
PM-54. Was San Jose Scale (SJS) monitored using pheromone traps and degree-day calculations?	Yes
PM-55. Was Peach Twig Borer (PTB) sprayed in the past year (dormant, bloom or spring sprays)?	Yes
PM-56. Did shoot strike monitoring being in April to determine if the number of strikes reached a treatment threshold? (The threshold is generally four or more strikes per tree for mature orchards; threshold should be lower for second- and third-leaf orchards.)	Yes
PM-57. Was Peach Twig Borer (PTB) monitored using pheromone traps and degree-day calculations?	Yes
PM-62. Were mites sprayed in the past year?	Yes
PM-64. 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)?	Yes
PM-84. 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).	Yes
PM-86. Did monitoring records include growth stages (seedling or mature) and potential herbicide resistance issues?	No

California Almond Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 5

Assessment Year: **2022** 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 Questions	Response
PM-42. 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).	Yes
PM-43. By March 1, were all mummy nuts on the ground destroyed (e.g., by mowing or discing)?	Yes
PM-45. Was a mating disruption program for navel orangeworm (NOW) used for this orchard?	Not applicable
PM-58. 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
PM-89. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 6

Assessment Year: **2022** 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 BP-15 is 'Yes' then 5d could also be met.)

CASP Questions	Response
PM-22. 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
PM-36. 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
PM-37. 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
PM-06. 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?	Yes
BP-15. 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
BP-17. During bloom, were necessary fungicides (or <i>Bacillus thuringiensis</i>) applied in the late afternoon or evening when bees and pollen were not present?	Not applicable
BP-11. 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
BP-12. 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 Stewardship Platform (CASP) Bee Friendly Farming Report

William Wohle harbinsonranch@gmail.com

Business Name: **Harbinson Ranch, LLC** Business Unit Name: **Harbinson Ranch, LLC**

Block 4 (101 Acres Sacramento County) details part 7

Assessment Year: **2022** 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 Questions	Response
PM-10. 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.)	Yes
PM-11. Were written or electronic scouting reports kept by or provided to the farm owner or staff to inform decision making?	Yes
PM-12. Was a year-end review of pest levels and trends completed to improve future decision-making?	Yes
PM-14. Were scouting efforts continued after the use of each pest control tactic to verify efficacy and/or resistance issues?	Yes
PM-16. 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 Questions	Response
PM-08. 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
PM-80. 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
PM-89. 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