

## EQIP - Honey Bee Pollinator Initiative (HBPI)

### General Information and MT State Guidance FY21

#### Summary

The Honey Bee Pollinator Initiative (HBPI) will provide floral forage habitats on private and Tribal lands through the Environmental Quality Incentives Program (EQIP) to benefit hive nutritional health as part of an overall effort to increase the health of honey bees. Feral honey bees and other pollinators will also benefit from the establishment of plant forage habitats high in nectar and pollen. A large percentage of the nation's commercial honey bee hives are brought to the upper Midwest for the bees to rest and feed upon quality forage in preparation for overwintering. The targeted HBPI states are home to 65 percent of the Nation's 2.5 million commercial colonies. Increased availability of forages that have low or no pesticide exposure should improve the condition and eventual survival of honey bees. This effort will leverage existing capabilities and resources, target assistance where it is most needed, cooperatively engage State and local partners, and facilitate collaboration with agricultural producers, Tribes, and others.

**Approved Land Use Types:** Crop, Farmsteads, Forest, Pasture, Range, and Associated Agriculture lands

**Approved Resource Concerns:** See National Instructions 440.307.24 with Exhibit CC for additional information.

- Livestock Production Limitation
- Fish and Wildlife – Inadequate Habitat
- Degraded Plant Condition

#### National Requirements

Eligible areas are located within a 3.5 mile radius of a registered apiary or a sufficiently documented apiary. An apiary is defined as five or more hives, or as being identified on the State apiary register. If not on the State register, the producer must provide documentation of apiary location. A copy of the 3.5 mile radius map needs to be included with the EQIP application materials. Before any payment is made, the contract holder must provide an identifiable and dated picture of the hives and their location. The exact hive location may vary from the Montana Department of Agriculture (MDA) registered sites since MDA coordinates are mapped at the center of a Section.

Eligible Applications are based on Applicability Questions in the CART Ranking Tool. All seedlings/plantings must meet the minimum width requirements. Are any planned plantings located adjacent to cropland fields (all cropland is assumed to be treated, **unless verified**) or pasture/ hayland treated with insecticides? If so, then the following are the minimum widths for **any** practice.

- If cropland or treated pasture/hayland is **located on only one side of the planting**, the minimum planting width is **125** feet.
- If cropland or treated pasture/hayland is **located immediately adjacent to both sides of the planting**, the minimum planting width is **250** feet.

All monitoring is scheduled under CP645. Please refer to the FY 2021 HBPI Monitoring Protocol Guidance on the Montana Sharepoint and referenced at the end of this document.

#### Conservation Practices

An HBPI contract must have at least one CORE practice scheduled. Supporting practices may be installed where needed to meet the identified resource concern.

Conservation Practice	Core Practices	Supporting Practices*
314 – Brush Management		X
315 – Herbaceous Weed Control		X
327 – Conservation Cover	X	
328 – Conservation Crop Rotation		X
338 – Prescribed Burning		X
340 – Cover Crop		X
380 – Windbreak/Shelterbelt Establishment		X
382 – Fence		X
386 – Field Border	X	
390 – Riparian Herbaceous Cover	X	
391 – Riparian Forest Buffer		X
420 – Wildlife Habitat Planting		X
484 – Mulching		X
490 – Tree/Shrub Site Preparation		X
511 – Forage Harvest Management	X	
512 – Forage and Biomass Plantings	X	
516 – Livestock Pipeline		X
528 – Prescribed Grazing	X	
533 – Pumping Plant		X
550 – Range Planting	X	
561 – Heavy Use Area Protection		X
574 – Spring Development		X
575 – Trails and Walkways		X
595 – Integrated Pest Management		X
612 – Tree/Shrub Establishment	X	
614 – Watering Facility		X
642 – Water Well		X
644 – Wetland Wildlife Habitat Management		X
645 – Upland Wildlife Habitat Management	X	
647 – Early Successional Habitat Development	X	
655 – Forest Trails and Landings		X
666 – Forest Stand Improvement		X

\*These practices are used only in support of the core practices used.

### Additional Montana Requirements

1. All honey bee forage species (i.e. flowering forbs) in an HBPI planting/seeding must be listed on [Biology Technical Note MT-20 \(rev 9\)](#). If a desired species is not on this resource, then the planner must request a waiver from the State Resource Conservationist.
2. Follow the standard seeding rates provided [Biology Technical Note MT-20 \(rev 9\)](#), and follow the recommended seeding depths provided in the [perennial species seed mix calculator](#) (Job Sheet 342, 512, and 550).
3. Foregone income (FI) is identified under each seeding practice where income is lost or foregone because of land use conversion due to honey bee activity. Foregone income is paid only in the first year, regardless of the practice, if the practice is on the same acres.
4. All seedings/plantings are to be established before they can be hayed or grazed. Follow the Conservation Practice Standard and Specification for any timing requirements for haying/grazing (e.g. after killing frost).
5. The Conservation Practice Standard (CPS) must be followed.
6. Guidance specific to each Core Conservation Practices is provided on the following pages.

## Guidance Specific to Core Conservation Practices

### **CPS Conservation Cover (327)** – *establishing and maintaining permanent cover.*

- **Scenarios 4 & 30** are limited to the Honey Bee Pollinator Initiative (HBPI).
- **HBPI scenarios.** At least 80% of the mix must contain honey bee forage species. There must be at least one flowering plant species per bloom period (early, mid, and late), with  $\leq 5\%$  non-native legumes. However, more diversity is strongly encouraged.
- **Scenario 4:** Permanent vegetation, including a mix of predominately native grasses, legumes, and forbs, established on any land needing permanent vegetative cover that provides habitat for pollinators. Mix may also include some non-native species. Seed is moderately easy to purchase commercially (e.g. blanketflower, prairie coneflower). This scenario does not include forgone income.
- **Scenario 30:** Permanent vegetation, including a mix of predominately native perennial grasses, legumes and/or forbs. Mix may also include some non-native species. Species typically are easy to purchase commercially (e.g. blue flax, non-native legumes). This scenario does include forgone income.
- CPS 327 does not apply to plantings for forage production and will not be hayed during the contract.
- CPS 327 is not applicable on native rangelands (shrub or grassland). Scenarios only apply to cropland, previously tilled land, associated agricultural land, and tame pastures.

### **CPS Field Border (386)** – *strip of permanent vegetation established at edge or perimeter of field.*

- **Scenarios 7 & 46 apply to HBPI.** At least 80% of the mix must contain honey bee forage species. Seedlings are required to have at least one flowering plant species per bloom period (early, mid, and late), with  $\leq 5\%$  non-native legumes. Mix includes native perennial grasses, legumes, and forbs.
- **Scenarios 7 & 46** must meet the minimum width requirements indicated in the HBPI Screening Criteria Worksheet for Priority Determinations which will exceed widths in the specification.
- **Scenarios 7 & 46.** Fall and winter grazing is allowed only after a killing frost.
- **Scenarios 46**
  - Forgone income is included.
  - Pollinator “Forgone Income” (FI), will be used when establishing permanent cover on previously tilled cropland.
- All scenarios include seedbed preparation, seed, and seeding.

### **CPS Riparian Herbaceous Cover (390)** – *species tolerant to intermittent flooding or saturated soils established and managed as the dominant vegetation in transitional zones between upland and aquatic habitats.*

- **Scenarios 49 and 50 apply to HBPI.**
- At least 80% of the mix must contain honey bee forage species. There must be at least one flowering plant species per bloom period (early, mid, and late), with  $\leq 5\%$  non-native legumes. Mix includes native perennial grasses, legumes, and forbs. Include 5 to 10 adapted forb species that bloom sequentially throughout the growing season, where feasible.
- **Scenario 49 and 50** must meet the minimum width requirements indicated in the HBPI Screening Criteria Worksheet. This may exceed planting widths in the CP specification.
- Grazing is allowed only after a killing frost.

**CPS Forage Harvest Management (511)** – *timely cutting and removal of forages*

- **Scenarios 3 applies to HBPI.**
- When CPS 328 or CPS 512 are chosen, then CPS 511, (scenario 3 - delayed haying), must be used for years 2 and 3 of the seeding.
- In order to receive payment, at least **50% of the acres must be delayed** until after the late bloom period (killing frost).
- The 50% that is delayed should be rotated throughout the field each year.
- Delayed haying is to coincide with the ranking points taken.

**CPS Forage and Biomass Planting (512)** – *establishing herbaceous species suitable for pasture, or hay production –*

- **Scenarios 2 and 3 apply to HBPI.** At least 80% of the mix must contain honey bee forage species. There must be at least one flowering plant species per bloom period (early, mid, and late), with ≤5% non- native legumes. All mixes are to be designed for the honey bee.
- Maximum of 20% legumes in mixes.
- Seed mix is predominately native perennial species with a minimum of three flowering plants (forb or legume) and one grass.
- 512 Forage may only be harvested under **Scenario 3** “Pollinator-Friendly Perennial species, without Foregone Income” (FI), scheduled for years two and three.
- 512 Forage may not be harvested until after the late bloom period.
- No grazing or haying will occur until the stand has matured beyond the seedling stage.
- If hayed, then CPS 511 (scenario 2-delayed haying) must be used after the seeding for the remainder of the contract.

**CPS Prescribed Grazing (528)** – *managing the harvest of vegetation with grazing animals*

- **Scenario 5 applies to HBPI.**
- Payment can only be made on acres that are deferred and not the entire system. Grazing can occur only after the late bloom period has past (killing frost).

**CPS Range Planting (550)** – *establishment of adapted vegetation (grasses, forbs, legumes, shrubs and trees)*

- **Scenario 3 applies to HBPI.**
- Seed mix includes native perennial grasses, legumes and/or forbs, no more than 50% grasses, and at least one flowering plant species per bloom period (early, mid, and late). Mix cannot exceed 5% non-native legumes. Mix includes a minimum of three flowering plants (forbs/legumes) and one grass. Increased diversity is strongly encouraged.
- Foregone Income (FI) is to be used when establishing permanent cover on previously tilled cropland. Establishment of a mixture of native perennial species on a cropland, pasture, hayland or rangeland field to improve wildlife habitat, benefit pollinators & beneficial insects, improve forage condition, and/or reduce erosion.
- The 550 specification has two-consecutive growing seasons (April 15 to October 1) of grazing deferment. A stand could be grazed during the dormant season to accomplish some stand management during establishment; however, planners need to be sure that if grazed, the stand is not negatively affected.

**CPS Tree/Shrub Establishment (612)** – *establishing woody plants by seedings or natural regeneration.*

- **Scenarios 1 and 2 apply to HBPI.**

- Establishing woody vegetation for honey bee habitat using one- or two-year old containerized (8 or 10 cubic inch) or bare root seedlings.
- Select appropriate species to meet and enhance the food value of the plantings by including fruit and berry producing shrubs, trees, and vines.
- Consider establishing honey bee pollinator friendly plantings between tree rows to increase the seasons of use.
- If all or the combination of the three bloom periods, cannot be met with the 612 planting, another approved practice shall be scheduled to meet the absent bloom period.

**CPS Upland Wildlife Habitat Management (645)** – *provide and manage upland habitats and connectivity for wildlife.*

- **Scenarios 49, 62 and 303 apply to HBPI.**
- **Scenario 303 – “Honeybee Monitoring”**
  - Monitoring must be conducted for each contracted year.
  - This activity does not include forgone income.
  - This practice may be applied alone or in combination with another practice.
  - Monitoring will be used to determine if the goal of providing safe honey bee forage is being met.
  - Monitoring will involve measuring the use of different flowering species by honey bees and native pollinators per NRCS monitoring guidelines.
  - Monitoring results will be collected by NRCS Field Offices and sent to the State Office contact.
- **Scenario 49 - Honeybee Habitat Multi-Species Mix with Monitoring with Foregone Income**
  - A multi-species species mix of introduced annual grasses, legumes and/or forbs (native species are also acceptable). At least 80% of the cover crop mix must contain honey bee forage species. There must be at least one flowering plant species per bloom period (early, mid, and late), with ≤5% non-native legumes.
  - Foregone income is included.
  - No grazing is allowed with this scenario.
  - CPS 645 cannot be mechanically harvested for any reason.
  - Monitoring must be conducted for each year of the contract following the Montana Monitoring Protocol.
  - Monitoring will be used to determine if the goal of providing safe honey bee forage is being met.
  - Monitoring will involve measuring the use of different flowering species by honey bees and native pollinators per NRCS Montana monitoring guidelines.
  - Monitoring results will be collected by the NRCS Field Office and sent to the State Office contact.
- **Scenario 62 – Honey bee Habitat Multi-Species with Monitoring and **NO** Foregone Income**
  - A multi-species species mix of introduced annual grasses, legumes and/or forbs (native species are also acceptable). At least 80% of the cover crop mix must contain honey bee forage cover crop species. There must be at least one flowering plant species per bloom period (early, mid, and late), with ≤5% non-native legumes.
  - Foregone income is **NOT** included.
  - Grazing is allowed, but CPS 645 may **NOT** be grazed by livestock until after the late bloom period is completed (killing frost).

- Grazing cannot exceed 50% of the current year's growth and minimum stubble heights must be maintained.
- CPS 645 cannot be mechanically harvested for any reason.
- Monitoring must be conducted for each year of the contract following the Montana Monitoring Protocol.
- Monitoring will be used to determine if the goal of providing safe honey bee forage is being met.
- Monitoring will involve measuring the use of different flowering species by honey bees and native pollinators per NRCS Montana monitoring guidelines
- Monitoring results will be collected by NRCS Field Offices and sent to the State Office contact.

**Monitoring Information:** *(to be used for CPS645)*

The FY21 HBPI Monitoring Protocol is located on the Montana Sharepoint at: [NRCS Montana / 190 Ecological Sciences / Honey Bee Pollinator Initiative.](#)

The NRCS Honey Bee Monitoring Protocol explains why and how to complete monitoring. This protocol was developed in coordination with the Xerces Society. There is information on how to identify honey bee and other species. Contract participants can use the picture guide for honey bee identification. Also included in the Monitoring Protocol are three different monitoring data sheets. Use the data sheet that best fits the number of species planted or present in the field being monitored.

Contract participants must submit monitoring data sheets and pictures monthly to their local Field Office. Field Offices must send completed data sheets and pictures to Monica Pokorny, Plant Materials Specialist at [monica.pokorny@usda.gov](mailto:monica.pokorny@usda.gov). Monitoring forms will then be provided to the Xerces Society annually. By receiving these monitoring data sheets monthly, NRCS can ensure contract participants are completing the monitoring in a timely and correct manner. Monitoring data is required when certifying the practice for payment.

The contract participant or their representative that has a monitoring requirement in their contract, must take the honey bee monitoring training that was presented by webinar on May 29, 2014. The replay of this webinar can be found at [www.conservationwebinars.net](http://www.conservationwebinars.net) by typing "monitoring" in the search field.

It is encouraged that the landowner or NRCS contact hive owners and inquire about honey production for the year. There is reason to believe that these conservation practices are increasing honey production and quality.