



## Honey Bee & Pollinator Habitat Enhancement Conservation Stewardship Program

**Proposal:** Create a CSP Enhancement to encourage the introduction or continuation of canola and/or sunflowers in a cropping rotation to provide habitat for honey bees and wild pollinators.

**Justification for Enhancement:** Lack of suitable habitat that provides forage and nutrition has been identified as a major contributing factor in the decline in both honey bee and wild pollinator health and numbers. The loss of habitat is due to declining wild spaces and increased agricultural monocultures. Increasing the acreage of cropland planted annually to canola or sunflowers would have an immediate positive impact on honey bee and wild pollinator health.

The proposed “Honey Bee & Pollinator Habit” enhancement (HBPH) would require producers who choose this enhancement to plant either canola or sunflowers:

- For a whole farm enhancement: At least once on 50% \* of the cropland acreage enrolled in the 5 year contract. Ideally, 10% of the enrolled cropland acreage would be planted annually to canola or sunflowers to provide a consistent annual source of forage and nutrition for honey bees and pollinators. However, an option could provide for allowing a larger percentage to be planted on any one year in order to meet the 50% total requirement as long as a minimum of 5% of the acreage is planted to either of the flowering crops each year.
- For tracts of land in a farm: At least once on 100% of the cropland acreage enrolled in the 5 year contract. Ideally, 20% of the enrolled cropland acreage would be planted annually to canola or sunflowers to provide a consistent annual source of forage and nutrition for honey bees and pollinators. However, an option could provide for allowing a larger percentage to be planted on any one year in order to meet the 100% total requirement as long as a minimum of 10% of the acreage is planted to either of the flowering crops each year. Consideration should also be given to single field tracts that could all be planted to canola and/or sunflowers in one year, but provisions would need to be included to waive the minimum acreage requirement for the following two years to meet agronomic and crop insurance rotational requirements that prevent disease buildup on the land.

Canola provides ideal habitat and forage for honey bees and pollinators.

- Canola flowers produce abundant nectar which has a good sugar profile for honey production. Canola pollen offers bees and pollinators a good nutritional balance of amino acids and protein.
- Plentiful canola blooms allow bees and pollinators to feed efficiently, without covering large distances. Canola fields bloom for relatively long periods; some fields can provide bees and pollinators with a good source of nectar for up to a month.

Sunflowers can provide late season supplemental habitat and forage for honey bees and pollinators.

- Sunflowers bloom in late summer, providing habitat and forage at a time when fewer plants are blossoming.

*\* Placing the requirement at 50% (rather than 100%) of the enrolled land on an entire farm may increase participation and ultimate acreage of these flowering crops for habitat because compliance would be easier.*

**Additional Enhancement:** Leave canola or sunflower undisturbed in fall after harvest to provide habitat for wild bee species (primarily targeted at the Northern Plains):

**Justification:** The US has roughly 4000 species of wild bees, consisting of bumble bees, leaf cutting bees, sweat bees and several other groups. These bees also provide a tremendous amount of pollination activity for crops and wild flowers; they are a critical aspect of the environment. The majority of these bees are solitary in nature (they live alone, not in hives). Roughly 70% of these bees nest and overwinter in small tunnels in the ground. Most of the remaining 30% either make mud nests or nest in hollow stems or twigs.

Canola and sunflowers provide suitable habitat and forage for wild bees. One of the more important cultural practices that could be implemented to increase wild bee populations is to not disturb the nests and overwintering sites of the wild bees. This means not tilling the ground after harvest. Land that has produced a canola or sunflower crop is ideally suited for no till or minimum till practices because the residue is easily seeded into the following spring.

**Additional Enhancement:** Allow Winter Canola plantings following spring crops to be eligible for a variation of a Plant Enhancement Activity – PLT20 type program, but remove the requirement for termination to allow the crop to flower and provide honey bee and pollinator habitat the following spring; and allow it to be harvested for grain in the May/June time-frame. This enhancement would be targeted for the mid-south, southeast, and Chesapeake Bay regions of the US where soybeans can be planted following harvest of the winter canola crop.