New England Pollinator WHEG

PURPOSE: This Wildlife Habitat Evaluation Guide (WHEG) is to be used for planning all New England Pollinator Partnership (NEPP) projects. Planners should use this WHEG to satisfy the NEPP requirement for a habitat assessment, and to assist in addressing the resource concern. The WHEG can also be used for non NEPP projects that are being planned to create or enhance pollinator habitat.

SCOPE: The area to be considered while using this WHEG is referred to the "assessment area." Commonly, the assessment area will follow the USDA Tract boundary, but not always. Delineating and determining the assessment area boundary is at the discretion of the conservation planner. The project area should include all portions of the Tract(s) where the landowner plans to implement conservation practices (e.g., 595), or consider making management changes (*e.g* ., stop using commercial bumble bee quads) that will benefit native pollinators. For example, if a landowner has 20 acres of fields and associated areas (homestead, waste areas, etc...), and 200 acres of forest, but has no interest in pursuing pollinator conservation activities in the forest, there is no need to assess the forest with this WHEG.

INSTRUCTIONS: The WHEG should to be completed in the field during the growing season when existing plants can be identified. **Complete the first 4 sections at all sites**. **The remaining sections should only be completed for existing habitat conditions in the planning unit**. Award points in the Baseline column for habitat assessment values that represent the site's current condition. The Planned column indicates the expected habitat value once management and/or practices are implemented. The **Post Monitoring column is optional**, and will be filled out by planners or NRCS affiliated biologists that may visit the site after practices and management changes are implemented. NOTE: States may modify forage plant list for regional differences. The Baseline Score is used to determine the existing habitat condition (within CART) of Excellent, Good, Fair, Poor, or Absent.

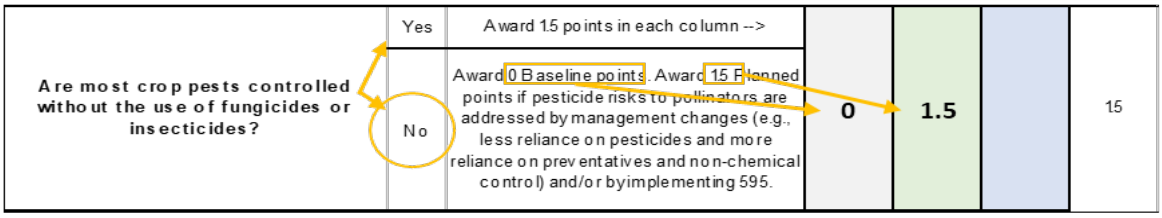
MINIMUM POINTS REQUIRED FOR NEPP: Sites must achieve a minimum "Planned" score of 0.5 or higher in order to participate in the the NEPP. Note that a score above 0.5 does not indicate that there is no resource concern. Considering the status of the target species (bumblee bees and monarch butterfly), all sites can be considered to have a resource concern for pollinators.

INSTRUCTION SCHEMATIC:

STEP 1: Determine the answer to the question during the site visit and through conversations with the producer and proceed to the row that corresponds with your answer.

STEP 2: Let's say that you determined that the grower does rely on pesticides to control most crop pests. So you award 0 Baseline points.

STEP 3: But the grower decides to use our IPPM (595) practice, or otherwise rely more heavily on non-chemical and preventative control strategies in the future. Award the appropriate points in the "Planned" column then proceed to the next question.



COMPLETE THE PESTICIDE USE, MANAGED BEES, AND FORAGE PLANT SECTIONS BELOW AT ALL SITES

Answer each question below	Yes/No	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
If no fungicides or insecticides are used on the property, ignore the remainder of the questions in this section and award 6 points in the Baseline and Planned columns.						6
Are most crop pests controlled without the use of fungicides or insecticides?	Yes	Award 1.5 points in each column -->				1.5
	No	Award 0 Baseline points. Award 1.5 Planned points if pesticide risks to pollinators are addressed by management changes (e.g., less reliance on pesticides and more reliance on preventatives and non-chemical control) and/or by implementing 595.				
Are fungicides and insecticide spray decisions based on pest monitoring and thresholds?	Yes	Award 1 point in each column -->				1
	No	Award 0 Baseline points. Award 1 Planned point if pesticide risks to pollinators are addressed by management changes and/or by implementing 595.				

PESTICIDE USE	**Not including practice footprints, are major flowering habitats protected from fungicide and insecticide drift in accordance with the New England Pollinator Partnership BMPs? Note: practice footprints must adhere to NEPP pesticide buffer BMPs in order to receive incidental take protection.**	Yes	Award 1 point in each column -->				1
		No	Award 0 Baseline points. Award 1 Planned point if BMPs are adopted.				
	Are crops sprayed with fungicides or insecticides during bloom?	Yes	Award 0 Baseline points. Award 1 Planned point if pesticide risks to pollinators are addressed by management changes and/or by implementing 595.				1
		No	Award 1 point in each column -->				
	Are fungicide and insecticides risks to pollinators minimized by other methods (mowing down orchard understory prior to spray applications)	Yes	Award 0.5 point in each column -->				0.5
		No	Award 0 Baseline points. Award 0.5 Planned points if pesticide risks to pollinators are addressed by management changes and/or by implementing 595.				
			SUBTOTALS --->	**0**	**0**	**0**	6
			SECTION AVERAGES = SUBTOTALS/6 --->	**0%**	**0%**	**0%**	1

	Answer each question below		Yes/No	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
MANAGED BEES	**Are managed bumble bees used in an open field setting (managed bumble bees can spread pathogens to wild bees)?**		Yes	Award 0 Baseline points. If client plans to no longer stock bumble bees on land unit, award 1 points in the Planned column.				1
			No	Award 1 points in each column.				
	Are honey bee hives located on the Land Unit(s)? Honey bees compete with and spread pathogens to wild bees.	No		Award 1 point in each column.				1
		Yes, but fewer than 0.5 hives per acre:		Award 0.5 points in each column.				
		Yes, but present less than 4 weeks each year:		Award 0.5 points in each column.				
		Yes, more than 0.5 hives per acre and longer than 4 weeks each year:		Award 0 Baseline points. If client decreases stocking density to less than 0.5/acre or will keep them on site for fewer than 4 weeks per year, award 0.5 points in Planned column				
				SUBTOTALS --->	**0**	**0**	**0**	2
				SECTION AVERAGES = SUBTOTALS/2 --->	**0%**	**0%**	**0%**	1

	Answer each question below	Yes/No	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
NESTING HABITAT	Is > 50% of the land unit tilled?	Yes	Award 0 Baseline points. If client plans to implement practices that significantly reduce tilled area, award 0.5				0.5
		No	Award 0.5 points in each column.				
	Are rock piles, edges, rock walls, dead wood, snags, and/or brush piles present?	Yes	Award 0.5 points in each column.				0.5
		No	Award 0 Baseline points. If client plans to implement practices that significantly increase these features (647, 386, 422, 649, 666) award 0.5 point in the Planned column.				
			SUBTOTALS --->	**0**	**0**	**0**	1
			SECTION AVERAGES = SUBTOTALS/1 --->	**0%**	**0%**	**0%**	1

FORAGE PLANTS: Check Present box if listed taxa is noted at the site during the site visit. Check Planned box if species will be installed as part of an NRCS practice. For use with the Forage Plants section below.

Plant Name	Present	Planned	Plant Name	Present	Planned

Forbs

Asters (*Symphyotrichum* spp.)			Vetch (*Vicia* spp.)		
Boneset (*Eupatorium perfoliatum*)			White turtlehead (*Chelone glabra*)		
Butter-and-eggs (*Linaria vulgaris*)			Wild lupin (*Lupinus perennis*)		
Coneflowers (*Echinacea* spp.)			Sunflowers (*Helianthus annuus, decapetalus, divaricatus*)		
Fireweed (*Chamaenerion angustifolium*)			***Trees and Shrubs***		
Wild bergamot (*Monarda fistulosa*)			American basswood (*Tilia americana*)		
Goldenrods (*Solidago* spp.)			Apple (*Malus* spp.)		
Hyssop (*Agastache* spp.)			Blackberries (*Rubus allegheniensis*)		
Jewelweed (*Impatiens capensis*)			Blueberries/other (*Vaccinium* spp.)		
Joe pye weeds (*Eutrochium* spp.)			Buttonbush (*Cephalanthus occidentalis*)		
Meadowsweets (*Spiraea alba, tomentosa*			Native rhododendrons (*Rhododendron* spp.)		
Milkweed, common (*Asclepias syriaca*)			New Jersey Tea (Ceanothus americanus)		
Milkweed, other (*A. incarnata, tuberosa*)			North. bush honeysuckle (*Diervilla lonicera*)		
Mountain mint (*Pycnanthemum* spp.)			Plums and cherries (*Prunus* spp.)		
Native thistles (*Cirsium muticum, discolor*)			Raspberries (*Rubus* spp.)		
North. blazing star (*Liatris novae-angliae*)			Serviceberry (*Amelanchier* spp.)		
Pearly everlasting (*Anaphalis margaritaceae*)			Sumac (*Rhus* spp.)		
Penstemon (*Penstemon* spp.)			Summersweet (*Clethra alnifolia*)		
Red clover (*Trifolium pratense*)			Wild native roses (*Rosa* spp.)		
Sweet clover (*Melilotus* spp.)			Willows (Salix spp.)		

	Question	Answer	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
FORAGE PLANTS	**How many plant taxa from the table above were seen during the site visit?**	5 or fewer	Award 0 points in the Baseline column. If Conservation Practices are Planned to increase the number of the listed plant taxa, award points in the Planned column in accordance with the number of taxa Planned.				3
		6 to 11	Award 1 points in the Baseline column. If Conservation Practices are Planned to increase the number of the listed plant taxa, award points in the Planned column in accordance with the number of taxa Planned.				
		12 to 19	Award 2 points in the Baseline column. If Conservation Practices are Planned to increase the number of the listed plant taxa, award points in the Planned column in accordance with the number of taxa Planned.				
		20 or more	Award 3 point in the Baseline column. If Conservation Practices are Planned to increase the number of the listed plant taxa, award points in the Planned column in accordance with the number of taxa Planned.				
	Are milkweeds present and are abundant, and current management practices allow milkweeds to persist from at least June 1 to Oct. 31?	Yes	Award 2 points in the Baseline column and 2 points in the Planned column.				2
		No	Award 0 points in the Baseline column. If Conservation Practices are planned to increase the abundance of milkweed and allow milkweeds to persist from at least June 1 to Oct. 31, award 2 points in the Planned column.				
			SUBTOTALS --->	**0**	**0**	**0**	5
			SECTION AVERAGES = SUBTOTALS/5 --->	**0%**	**0%**	**0%**	1

HABITATS: ONLY COMPLETE SECTIONS BELOW THAT REPRESENT HABITAT TYPES FOUND IN THE ASSESSMENT AREA

CROPLAND: If cropland exists in the planning unit, complete this section. Examples of cropland include grain, corn, soybean, potato, broccoli, apples, blueberries, mixed vegetables, small fruit, and orchard fruit. For the purposes of this WHEG, cropland does not include hayland or forest.

	Question	Answer	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
CROPLAND	**Does insecticide or fungicide use (including drift) on crops pose a risk to pollinators?**	Yes?:	Award 0 baseline points. If risk is addressed through buffers, windbreaks, or other practices, award 1 point in the Planned column.				1
		No?:	Award 1 point in each column.				
	Not including pesticide use, do management activities (e.g., tillage, mowing down milkweed, enroachment of swallow wort, boom and bust phenology) pose risks to pollinators in the crop field or in adjacent habitats?	Yes?:	Award 0 Baseline points. Award 0.5 in Planned columm if implementing practices or otherwise changing management to address this concern in all areas where this management is currently used; Award 0.4 if addressing most of the concern; Award 0.25 if addressing 50% or less of the concern; Award no points if concern is not addressed.				0.5
		No?:	Award 0.5 point in each column -->				
	What is the forage quality in the cropped area?	Either crop or non-crop flowers within the cropped area provide significant forage during the spring, summer, and fall.	Award 1.5 points in the Baseline column and 1.5 points in the Planned column				1.5
		Crop or non-crop flowers within the cropped area provide significant forage in two of three seasons.	Award 1 point in the Baseline column and 1 points in the Planned column unless practices (327, 422, 386, 328, 340, 512) used within the crop field will increase forage availability to 3 seasons, in which case award 1.5 points in the Planned column.				
		Crop or non-crop flowers within the cropped area provide significant forage in one of three seasons.	Award 0.5 points in the Baseline column and 0.5 points in the Planned column unless practices (327, 422, 386, 328, 340, 512) used within the crop field will increase forage availability, in which case award 1-1.5 points in the Planned column, depending on forage phenology.				
		Neither the crop itself, nor non-crop flowers within the cropped area provide significant forage in any season.	Award 0 points in the Baseline column. Award the appropriate number of points (0.5-1.5) in the Planned column if practices (327, 422, 386, 328, 340, 512) will increase forage availability.				
	What is the abundance of forage in the cropped area?	Considering crop and non-crop flowers, when in bloom, the entire cropped area contains pollinator attractive flowers.	Award 2 points in the Baseline column and 2 points in the Planned column				2
		Considering crop and non-crop flowers, when in bloom, approximately 2/3 of the cropped area contains pollinator attractive flowers.	Award 1.5 points in the Baseline column. If NRCS practices (327, 422, 386, 328, 340, 512) will increase forage abundance award 2 points in the Planned column.				
		Considering crop and non-crop flowers, when in bloom, approximately 1/3 of the cropped area contains pollinator attractive flowers.	Award 1 point in the Baseline column. If NRCS practices (327, 422, 386, 328, 340, 512) will increase forage abundance award points to reflect the abundance of forage predicted in agreement with point values described above.				

	Considering crop and non-crop flowers, the cropped area offers very little forage for pollinators.	Award 0 points in the Baseline column. If NRCS practices (327, 422, 386, 328, 340, 512) will increase forage abundance, award at least 1 point, and otherwise award points to reflect the abundance of forage in agreement with point values described above.				
		SUBTOTALS --->	**0**	**0**	**0**	5
		SECTION AVERAGES = SUBTOTALS/5 --->	**0%**	**0%**	**0%**	1

FOREST: If forest exists in the assessment area, complete this section.

	Question	Answer	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
FOREST	**Does insecticide or fungicide use (including drift) pose a risk to pollinators in the forest?**	Yes	Award 0 baseline points. If risk is addressed through buffers, windbreaks, or other practices, award 0.25 points in the Planned column.				0.25
		No	Award 0.25 point in each column.				
	Is the forest continguous without significant openings? Networks of skid trails, old log landings, natural blowdowns, and similar are all considered forest openings. If these openings are present, select "No."	Yes	Award 0 baseline points. Award 0.75 in Planned column in implementing 647 or 666 to open the forest and create pollinator habitat.				0.75
		No	Award 0.75 point in each column -->				
	Are invasive species (especially buckthorn, bittersweet, black swallowwort, phragmites, or reed canary grass) present in the forest understory or forest openings?	Yes	Award 0 baseline points. Award 1 planned point if practices are planned to remove these invasives (314, 315).				1
		No	Award 1 point in each column				
		SUBTOTALS --->		**0**	**0**	**0**	2
		SECTION AVERAGES = SUBTOTALS/2 --->		**0%**	**0%**	**0%**	1

MONOTYPIC GRASSES: Field is dominated by grasses and other monocots, but may include some flowering forbs. Can include well-managed active hayfields and pastures, and some old fields.

	Question	Answer	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
MONOTYPIC GRASSES	**Does insecticide or fungicide use (including drift) pose a risk to pollinators in the habitat?**	Yes	Award 0 baseline points. If risk is addressed through buffers, windbreaks, or other practices, award 1 point in the Planned column.				1
		No	Award 1 point in each column.				
	If mowing or haying occurs, is cutting done rotationally (1/2 or less of the area mowed each year), mowed > 6" high, and/or delayed until after fall frost? NOTE: Any mowing regime changes (e.g., delayed mow) that increase habitat for pollinators, even if improvements do not fully meet requirements (ex. grassland bird conservation), should at least be awarded 0.5 points in the Planned column.	Yes	Award 2 baseline points. If this management will contine, award 2 point in the Planned column.				2
		Somewhat	Award 1 baseline points. If addressing this through changes in management or contracted practices (see next row), award 2 points in the Planned column. If management will remain the same, award 1 points in the Planned column. If changes are an improvement, but far from ideal, award 0.5 points.				
		No	Award 0 baseline points. If management will change through planting (327) or a prescribed pollinator mowing regime (647), award 2 points in the Planned column. If only a portion of this habitat will be managed for pollinators, award 1 point in the Planned column.				
	If site is grazed, then a conservation grazing plan is in	Yes	Award 1 point in each column.				

place and includes prescribed grazing practices that encourage wilflower diversity/abundace, such as short duration grazing with long recover periods (e.g. 45 days). NOTE: If site is not grazed, award 1 point in each column.	No	Award 0 baseline points. If grazing plan is created and followed, or practices are implemented that improve overall pasture quality for pollinators, award 1 point in the Planned column.				1
		SUBTOTALS --->	**0**	**0**	**0**	4
		SECTION AVERAGES = SUBTOTALS/4 --->	**0%**	**0%**	**0%**	1

OTHER OPEN HABITATS: Open areas are not forested, are typically not cropped (forb rich hayfields and pastures can be exceptions), and are not monotypic grasses. Wetland, scrub/shrub, fields with a high forb component, pasture, and large forest openings all can fit this category.

OTHER OPEN HABITATS

Question	Answer	Instructions for awarding points	Baseline	Planned	*Post Monitoring*	Points Possible
Does insecticide or fungicide use (including drift) pose a risk to pollinators in the habitat?	Yes	Award 0 baseline points. If risk is addressed through buffers, windbreaks, or other practices, award 1 point in the Planned column.				1
	No	Award 1 point in each column.				
Pollinator habitat is of poor quality (very little forage and nesting habitat)?	Yes	Award 0 baseline points. If quality concerns are addressed through practices or changes in management, award 0.5 points in the Planned column.				0.5
	No	Award 0.5 points in each column.				
Is the open habitat at-risk of forest regrowth (loss of high quality pollinator habitat)?	Yes	Award 0 baseline points. If 647 or other practice is prescribed to reclaim area as high quality pollinator habitat, award 1 point in the Planned column.				1
	No	Award 1 point in each column.				
If mowing or haying occurs, is cutting done rotationally (1/2 or less of the area mowed each year), mowed > 6" high, and/or delayed until after fall frost? (NOTE: If habitat does not require human disturbance to be maintained as pollinator habitat, award 2 points in each column.)	Yes	Award 2 baseline points. If this management will contine, award 2 point in the Planned column.				2
	Somewhat	Award 1 baseline points. If addressing this through changes in management or contracted practices (see next row), award 2 points in the Planned column. If management will remain the same, award 1 points in the Planned column.				
	No	Award 0 baseline points. If management will change through planting (327) or a prescribed pollinator mowing regime (647), award 2 points in the Planned column. If only a portion of this habitat will be managed for pollinators, award 1 point in the Planned column.				
If site is grazed, do the prescribed grazing activities encourage wilflower diversity/abundace, such as short duration grazing with long recover periods (e.g. delayed grazing). (NOTE: If site is not grazed, award 0.5 points in each column.)	Yes	Award 0.5 points in each column.				0.5
	No	Award 0 baseline points. If grazing plan is created and followed, or practices are implemented that improve overall pasture quality for pollinators, award 0.5 points in the Planned column.				
		SUBTOTALS --->	**0**	**0**	**0**	5
		SECTION AVERAGES = SUBTOTALS/5 --->	**0%**	**0%**	**0%**	1

BASELINE POINTS: Add together all baseline points awarded. →	0
Planned POINTS: Add together all Planned points awarded. →	0
TOTAL POSSIBLE: Add together the total number of points possible for this site. All sites will have the 14 points possible in the first 3 required sections, plus the possible points from all habitat categories that were present on the site. If all habitat types are present, there are 30 possible points. →	

BASELINE SCORE: Divide Baseline Points into the Total Possible points. **The Baseline Score is the existing habitat condition score that can be used in CART**.

Planned SCORE: Divide Planned Points into the Total Possible points. If this score is greater than 50%, the project is eligible for incidental take coverage under the New England Pollinator Partnership.

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