POLLINATOR HABITAT MONITORING FORM

XERCES SOCIETY
for Invertebrate Conservation

STEP 1—Monitoring Record

1. **Photocopy or print a copy** of this form in advance (www.xerces.org/habitat-assessment-guides);
2. **Record all of the species** initially seeded into the site on your Pollinator Habitat Installation Plan BEFORE first monitoring (i.e., during or immediately after planting); AND
3. **Bring a copy** of your Pollinator Habitat Installation Plan to refer to during each monitoring.

STEP 2—Site Details

SITE NAME: _____ **CURRENT DATE:** _____

SEASON: ☐ Early *(Spring)* ☐ Middle *(Summer)* ☐ Late *(Late summer/fall)* ☐ Dormant *(Winter)*

DATE OF LAST MONITORING: _____

STEP 3—Survey Desirable Species

We recommend monitoring once a month during the dormant season and every two weeks once the meadow starts blooming in spring. On sites with low maintenance needs—typically perennial plantings on established sites—we recommend monitoring at least 2× a year (in spring and late summer). For more information on suggested regional monitoring schedules, see Table 2.1.

Desirable Species: Native Wildflowers & Grasses

SPECIES & NOTES (COMMON OR SCIENTIFIC NAME)	ABUNDANCE* (CIRCLE ONE)	BLOOMING?† (CIRCLE ONE)	SCORE‡ 0 OR 1
3.1: NATIVE WILDFLOWERS			
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
3.2: NATIVE GRASSES			
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	
	A / C / R / N	❀ / 🌿	

TOTAL Bloom Score _____

KEY	ABUNDANCE*							BLOOMING?†				SCORE‡			
	A	Abundant	**C**	Common	**R**	Rare	**N**	Not present	❀	Blooming	🌿	Vegetative	**1**	❀ + A *or* C *or* R	**0**	🌿 *or* N

STEP 4—Survey Unwanted Species

Unwanted Species: Native Forbs & Grasses

	SPECIES & NOTES (Common or Scientific Name)	ABUNDANCE* (Circle one)	BLOOMING?† (Circle one)	⚠
4.2: TREES/SHRUBS		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
4.1: WEEDY FORBS		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
4.3: WEEDY GRASSES		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	

KEY	ABUNDANCE*							BLOOMING?†				⚠ (Highly Problematic)	
	A	Abundant	C	Common	R	Rare	N	Not present	❀	Blooming	〰	Vegetative	✘	Mark if species is highly problematic

Notes:

* **Abundance:** Is the species Abundant (present in high numbers), Common (present and fairly abundant), Rare (present but in low numbers), or Not present?

† **Blooming:** Is the species CURRENTLY Blooming (❀) or Vegetative (〰)?

‡ **Score:** The Bloom Score of a DESIRABLE species is calculated based on its abundance and whether it is blooming:

0 = Any species that is 〰 (CURRENTLY vegetative) or Not present

1 = Any species that is ❀ (CURRENTLY blooming) AND Abundant, Common, or Rare

⚠ **Highly Problematic Weed:** The presence or status of an UNWANTED species that requires immediate management action.

STEP 5—Calculate Species Diversity & Abundance

Tracking the levels of the desirable and unwanted species on a site over time will help to decide when management is necessary.

Desirable Species Total

	STEP	A	C	R	TOTAL
1	**Tally present species by abundance** *(Calculate total number of species)*				
2	**Count the number of species that are currently not present** *(Compare with Pollinator Habitat Installation Plan)*				
3	**Calculate TOTAL Bloom Score (Step 3)** *(If the TOTAL Bloom Score is ≤2, record this date as a* **Gap in Bloom** *on the Pollinator Habitat Evaluation Form)* ☛				

Unwanted Species Total

	STEP	A	C	R	TOTAL
1	**Tally present species by abundance** *(Calculate total number of species)*				
2	**Count the number of species that are currently not present** *(Compare with previous Monitoring Forms)*				
3	**Calculate TOTAL Highly Problematic Weeds** *(Highly Problematic species require immediate action—track actions taken on the Pollinator Habitat Management Log)* ☛				

STEP 6—Repeat Monitoring

Regular monitoring is important during the establishment phase (years 1 – 5). Consistent data, collected every 2–4 weeks from spring through fall during the key establishment years (which varies regionally; see regional variation Table 2.1), provides the best foundation for formulating management decisions. After the establishment time period, monitoring intervals can be increased. We do recommend periodic intensive monitoring every third year to ensure the habitat maintains desired conditions. Monitoring in years following severe or unusual weather can also help detect novel conditions that respond to the changing environment.

Example

POLLINATOR HABITAT MONITORING FORM

XERCES SOCIETY for Invertebrate Conservation

STEP 1—Monitoring Record

1. **Photocopy or print a copy** of this form in advance (www.xerces.org/habitat-assessment-guides);
2. **Record all of the species** initially seeded into the site on your Pollinator Habitat Installation Plan BEFORE first monitoring (i.e., during or immediately after planting); AND
3. **Bring a copy** of your Pollinator Habitat Installation Plan to refer to during each monitoring.

STEP 2—Site Details

SITE NAME: Oregon Meadow

CURRENT DATE: June 20, 2016

SEASON: ☐ Early *(Spring)* ☑ Middle *(Summer)* ☐ Late *(Late summer/fall)* ☐ Dormant *(Winter)*

DATE OF LAST MONITORING: May 28, 2016

STEP 3—Survey Desirable Species

We recommend monitoring once a month during the dormant season and every two weeks once the meadow starts blooming in spring. On sites with low maintenance needs—typically perennial plantings on established sites—we recommend monitoring at least 2× a year (in spring and late summer). For more information on suggested regional monitoring schedules, see Table 2.1.

Desirable Species: Native Forbs & Grasses

	SPECIES & NOTES (COMMON OR SCIENTIFIC NAME)	ABUNDANCE* (CIRCLE ONE)	BLOOMING?† (CIRCLE ONE)	SCORE‡ 0 OR 1
3.1: NATIVE FORBS	1. California poppy (Eschscholzia californica)	A / (C) / R / N	(❀) / (🌿)	1
	2. Globe gilia (Gilia capitata)	A / C / R / (N)	❀ / 🌿	0
	3. Clarkia (Clarkia spp.)	(A) / C / R / N	(❀) / 🌿	1
	4. Western yarrow (Achillea millefolium)	(A) / C / R / N	(❀) / 🌿	1
	5. Bigleaf lupine (Lupinus polyphyllus)	A / C / (R) / N	(❀) / 🌿	1
	6. Oregon sunshine (Eriophyllum lanatum)	A / C / (R) / N	(❀) / 🌿	1
	7. Douglas aster (Symphyotrichum subspicatum)	A / C / (R) / N	❀ / (🌿)	0
	8. Western goldentop (Euthamia occidentalis)	(A) / C / R / N	❀ / (🌿)	0
		A / C / R / N	❀ / 🌿	
		A / C / R / N	❀ / 🌿	
		A / C / R / N	❀ / 🌿	
		A / C / R / N	❀ / 🌿	
3.2: NATIVE GRASSES	1. Roemer's fescue (Festuca roemeri)	A / C / (R) / N	❀ / (🌿)	0
		A / C / R / N	❀ / 🌿	
		A / C / R / N	❀ / 🌿	
		A / C / R / N	❀ / 🌿	

TOTAL Bloom Score: 5

KEY	ABUNDANCE*							BLOOMING?†				SCORE‡			
	A	Abundant	C	Common	R	Rare	N	Not present	❀	Blooming	🌿	Vegetative	1	❀ + A *or* C *or* R	0	🌿 *or* N

Example

STEP 4—Survey Unwanted Species

Unwanted Species: Native Forbs & Grasses

	SPECIES & NOTES (Common or Scientific Name)	ABUNDANCE* (Circle one)	BLOOMING?† (Circle one)	⚠
4.2: TREES/SHRUBS	1. Himalayan blackberry (Rubus armeniacus)	A / C / (R) / N	(❀) / 〰	✗
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
4.1: WEEDY FORBS	1. Bindweed (Convolvulus arvensis)	A / (C) / R / N	(❀) / 〰	✗
	2. English plaintain (Plantago lanceolata)	A / C / (R) / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	
4.3: WEEDY GRASSES	1. Giant foxtail (Setaria faberi)	A / C / (R) / N	❀ / (〰)	
	2. Wild oat (Avena fatua)	A / (C) / R / N	❀ / (〰)	✗
		A / C / R / N	❀ / 〰	
		A / C / R / N	❀ / 〰	

KEY	ABUNDANCE*							BLOOMING?†				⚠ (Highly Problematic)	
	A	Abundant	C	Common	R	Rare	N	Not present	❀	Blooming	〰	Vegetative	✗	Mark if species is highly problematic

Notes:

* **Abundance:** Is the species Abundant (present in high numbers), Common (present and fairly abundant), Rare (present but in low numbers), or Not present?

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STEP 5—Calculate Species Diversity & Abundance

Tracking the levels of the desirable and unwanted species on a site over time will help to decide when management is necessary.

Desirable Species Total

	STEP	A	C	R	TOTAL
1	**Tally present species by abundance** *(Calculate total number of species)*	3	1	5	9
2	**Count the number of species that are currently not present** *(Compare with Pollinator Habitat Installation Plan)*				1
3	**Calculate TOTAL Bloom Score (Step 3)** *(If the TOTAL Bloom Score is ≤2, record this date as a* **Gap in Bloom** *on the Pollinator Habitat Evaluation Form)* ☛				5

Unwanted Species Total

	STEP	A	C	R	TOTAL
1	**Tally present species by abundance** *(Calculate total number of species)*	0	2	3	5
2	**Count the number of species that are currently not present** *(Compare with previous Monitoring Forms)*				1
3	**Calculate TOTAL Highly Problematic Weeds** *(Highly Problematic species require immediate action—track actions taken on the Pollinator Habitat Management Log)* ☛				3

STEP 6—Repeat Monitoring

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