

## Land Steward Report – January-December, 2021

Color key: Black = Work performed in period. Red = Future plans.

*All seeds sowed this year are listed at the end of the report.*

**Woodlands between the Outlet and Thurston-Clague Trail Catch Basins:** The area was cleared to gain access to repair the collapsed drainage line between the two catch basins. Plants added in 2020 for a Girl Scout project were moved ahead of time to near Prairie Court Trail. Following the repair, the area was reseeded by AAPS contractors. *A list of requested shrubs and trees to be added to this area will be sent to the school district for spring planting.*

**Prairie:** A portion of the Prairie was cleared as a staging area for the drain repair equipment and materials. Some existing plants were moved further north prior to the clearing. It was reseeded by AAPS contractors after the repairs were finished. *We will try to burn the untouched portion of the Prairie in Spring 2022, since we did not burn this year.*

**North Prairie:** Trails were cleared of plant growth during the summer. *We will try to burn the area in Spring 2022.*

**South Entrance of Conboy Trail:** The following shrubs were added to extend the planted area further from the trail entrance: Five alternate leaf dogwood, 11 American hazelnut, 20 wild plum and 10 pussy willows. Seeds listed later were sowed. *Some seeds will be started indoors over the winter and the plugs planted in Spring 2022.*

**Hummingbird Rain Garden:** The area was weeded and mulched. A drainage path was added from the two original pools to the 2020 rain garden extension by Boy Scouts from Troop 1.

**Oak Savanna:** Removed several purple loosestrife plants in the south section. *We have not burned the savanna since its establishment (it is generally late to dry out), so we will try to burn in Spring 2022.*

**OHAC:** OHAC members weeded the pond buffer strip area this Summer. A small amount of wetland plant seeds was sowed along the shoreline in October. *We may need to add more Shrubby Cinquefoil or Shrubby St. John's Wort to get a better hedge against the geese.*

**Clearing at NE of Pond:** Sowed seeds between the trail and pond. *We expect to replace the bulbs on the other side of the trail with native plants in 2022.*

**Oak/Hickory Woods Rain Gardens:** A Boy Scout project in the Oak-Hickory Woods included extending the berm of each rain garden to one side in order to catch some water that was bypassing the gardens.

**Oak/Hickory Woods:** Boy Scout Troop 1 planted heart-leaved aster, zigzag and bluestem goldenrods, bottlebrush grass and Virginia wild rye. Patches of invasives (lily of the valley and creeping Jenny) were killed. *We will deal with the winter creeper, vinca major and minor, and English ivy near the Antietam entrance in Spring 2022, before the natives emerge. A burn will be planned after another growing season (Fall 2022 or Spring 2023).*

**North Central Pond Area:** Cut down 2020 phragmites stems last Feb, had Plantwise treat new growth this Fall.

**SE of Bridge:** Removed some invasives.

**The Hollow (low area west and south of the berm):** Lots of buckthorn and honeysuckle are growing back, and the weather again did not cooperate to allow a burn. *We will try to burn this area in Spring 2022, though it is often too damp to get a good burn.*

**Peninsula:** Purple loosestrife was removed along the eastern edge of the peninsula, and east of the outlet settling pool. The eastern portion of the peninsula was cleared of invasives, mainly buckthorn and honeysuckle, this Spring by an EMU student. Resprouts were treated in November. Several shrubs (blueberry, red and American elderberries, bladdernut, spicebush, blackhaw viburnum and meadowsweet) were planted and seeds listed below were sowed.

**Amphitheater:** In Spring, we burned the leaves, pine needles and brush piles in the area where the goats were in 2020, so we could sow native grass seeds. We followed up during Summer with spraying of poison ivy and buckthorn resprouts. Removed some phragmites, dame's rocket and purple loosestrife during Summer. Additional seeds were sowed in the area in Fall.

Jim Vallem, 11/29/2021

**Native plant seeds sowed in the cleared woodland area between outlet catch basins (except the wettest section):**

**AnnArborSchool-ThurstonPond-SMW-2021  
Mesic Woodland Summary  
8/16/2021**

Grasses, Sedges, Rushes, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Seeds per sq. ft.	% by weight	% by native seeds
<i>Carex cnstatella</i>	Crested Sedge	0.50	0.09	0.68	0.54%	1.46%
<i>Carex grayi</i>	Common Bur Sedge	1.75	0.30	0.05	1.88%	0.10%
<i>Carex sprengei</i>	Long-beaked Sedge	0.50	0.09	0.11	0.54%	0.25%
<i>Elymus villosus</i>	Silky Wild Rye	6.00	1.02	0.76	6.45%	1.64%
<i>Elymus virginicus</i>	Virginia Wild Rye	40.00	6.80	3.86	43.01%	8.33%
<i>Glyceria striata</i>	Fowl Manna Grass	2.00	0.34	7.35	2.15%	15.87%
<i>Hystrix patula</i>	Bottlebrush Grass	6.00	1.02	1.05	6.45%	2.26%
<i>Juncus tenuis</i>	Path Rush	0.25	0.04	5.74	0.27%	12.40%
	Grasses Oz per Acre	57.00		Grasses sds/sq ft	Total	Total
	Grasses Lbs per Acre	3.56		19.59	61.29%	42.32%
Forbs, Shrubs, Vines, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Seeds per sq. ft.	% by weight	% by native seeds
<i>Allium tricoccum</i>	Wild Leek	2.00	0.34	0.06	2.15%	0.14%
<i>Anemone canadensis</i>	Canada Thimbleweed	1.00	0.17	0.18	1.08%	0.40%
<i>Aquilegia canadensis</i>	Wild Columbine	0.50	0.09	0.44	0.54%	0.94%
<i>Arisaema triphyllum</i>	Jack-in-the-Pulpit	1.00	0.17	0.01	1.08%	0.02%
<i>Aster cordifolius</i>	Heart-leaved Aster	0.25	0.04	0.80	0.27%	1.74%
<i>Blephilia hirsuta</i>	Hairy wood mint	0.25	0.04	1.38	0.27%	2.98%
<i>Campanula americana</i>	Tall Bellflower	0.25	0.04	0.98	0.27%	2.11%
<i>Caulophyllum thalictroides</i>	Blue Cohosh	4.00	0.68	0.01	4.30%	0.01%
<i>Eupatorium purpureum</i>	Sweet Joe Pye Weed	2.00	0.34	1.93	2.15%	4.17%
<i>Eupatorium rugosum</i>	White Snakeroot	0.25	0.04	0.86	0.27%	1.86%
<i>Geranium maculatum</i>	Wild Geranium	0.25	0.04	0.03	0.27%	0.06%
<i>Helianthus grosseserratus</i>	Saw-toothed Sunflower	1.00	0.17	0.34	1.08%	0.74%
<i>Impatiens capensis</i>	Spotted Touch-me-not	0.25	0.04	0.02	0.27%	0.05%
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.25	0.04	2.87	0.27%	6.20%
<i>Penstemon digitalis</i>	Foxglove Beardtongue	2.00	0.34	5.97	2.15%	12.90%
<i>Polygonatum canaliculatum</i>	Great Solomon's Seal	1.00	0.17	0.02	1.08%	0.04%
<i>Rudbeckia laciniata</i>	Golden Glow	5.00	0.85	1.61	5.38%	3.47%
<i>Rudbeckia triloba</i>	Brown-eyed Susan	5.00	0.85	3.90	5.38%	8.43%
<i>Smilacina racemosa</i>	False Solomon's Seal	4.00	0.68	0.04	4.30%	0.08%
<i>Solidago caesia</i>	Blue-stemmed Goldenrod	0.25	0.04	3.14	0.27%	6.78%
<i>Solidago flexicaulis</i>	Zigzag Goldenrod	0.10	0.02	0.19	0.11%	0.42%
<i>Solidago rugosa</i>	Rough Goldenrod	0.30	0.05	0.64	0.32%	1.38%
<i>Thalictrum dioicum</i>	Early Meadow Rue	0.10	0.02	0.02	0.11%	0.04%
<i>Zizia aurea</i>	Golden Alexander	5.00	0.85	1.26	5.38%	2.73%
	Forbs Oz per Acre	36.00		Forbs sds/sq ft	Total	Total
	Forbs Lbs per Acre	2.25		26.69	38.71%	57.68%
Annuals, Temp Nurse Crop, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Temp Seeds per sq. ft.		
<i>Lolium multiflorum</i>	Annual Rye	80.00	13.60	24.79		
<i>Avena sativa</i>	Seed Oats	320.00	54.40	7.35		
	Temp Oz per Acre	400.00		Temp sds/sq ft		
	Temp Lbs per Acre	25.00		32.14		

**Native plant seeds sowed in the wettest section of the cleared woodland area:**

**AnnArborSchool-ThurstonPond-SMW-2021  
ForestedWetland Summary  
8/16/2021**

Grasses,Sedges, Rushes, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Seeds per sq. ft.	% by weight	% by native seeds
-	-	-	0.00	0.00	-	-
<i>Calamagrostis canadensis</i>	Bluejoint Grass	0.50	0.02	3.21	0.57%	4.14%
<i>Carex comosa</i>	Bristly Sedge	2.00	0.08	1.38	2.27%	1.78%
<i>Carex frankii</i>	Frank's Sedge	2.00	0.08	0.78	2.27%	1.01%
<i>Carex stipata</i>	Awl-fruited Sedge	2.00	0.08	1.56	2.27%	2.01%
<i>Carex vulpinoidea</i>	Fox Sedge	2.00	0.08	4.59	2.27%	5.92%
<i>Elymus riparius</i>	Riverbank Wild Rye	4.00	0.16	0.64	4.55%	0.83%
<i>Elymus virginicus</i>	Virginia Wild Rye	50.00	2.00	4.82	56.82%	6.22%
<i>Glyceria striata</i>	Fowl Manna Grass	1.00	0.04	3.67	1.14%	4.74%
<i>Juncus effusus</i>	Soft Rush	0.30	0.01	6.89	0.34%	8.88%
<i>Scirpus cyperinus</i>	Wool Grass	0.20	0.01	7.81	0.23%	10.06%
	Grasses Oz per Acre	64.00		Grasses sds/sq ft	Total	Total
	Grasses Lbs per Acre	4.00		35.35	72.73%	45.58%

Forbs, Shrubs, Vines, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Seeds per sq. ft.	% by weight	% by native seeds
<i>Actinomeris alternifolia (Verbesina a.)</i>	Wingstem	1.75	0.07	0.36	1.99%	0.47%
<i>Angelica atropurpurea</i>	Angelica	2.25	0.09	0.28	2.56%	0.36%
<i>Aster novae-angliae</i>	New England Aster	0.25	0.01	0.38	0.28%	0.49%
<i>Aster puniceus</i>	Swamp Aster	0.25	0.01	0.46	0.28%	0.59%
<i>Bidens frondosa</i>	Devil's Beggarticks	0.25	0.01	0.03	0.28%	0.04%
<i>Boltonia asteroides</i>	False Aster	0.50	0.02	1.84	0.57%	2.37%
<i>Cassia hebecarpa</i>	Wild Senna	3.75	0.15	0.12	4.26%	0.16%
<i>Cephalanthus occidentalis</i>	Buttonbush	1.30	0.05	0.37	1.48%	0.48%
<i>Eupatorium perfoliatum</i>	Boneset	0.50	0.02	1.84	0.57%	2.37%
<i>Helenium autumnale</i>	Sneezeweed	3.00	0.12	8.95	3.41%	11.54%
<i>Iris virginica</i>	Southern Blue Flag Iris	0.75	0.03	0.02	0.85%	0.02%
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.25	0.01	2.87	0.28%	3.70%
<i>Ludwigia alternifolia</i>	Seedbox	0.25	0.01	1.61	0.28%	2.08%
<i>Mimulus ringens</i>	Monkey Flower	0.25	0.01	13.20	0.28%	17.02%
<i>Monarda fistulosa</i>	Wild Bergamot	1.50	0.06	2.41	1.70%	3.11%
<i>Penstemon digitalis</i>	Foxglove Beardtongue	1.20	0.05	3.58	1.36%	4.62%
<i>Physostegia virginiana</i>	Obedient Plant	1.00	0.04	0.25	1.14%	0.33%
<i>Rudbeckia laciniata</i>	Golden Glow	1.50	0.06	0.48	1.70%	0.62%
<i>Solidago ohioensis</i>	Ohio Goldenrod	1.00	0.04	2.53	1.14%	3.26%
<i>Zizia aurea</i>	Golden Alexander	2.50	0.10	0.63	2.84%	0.81%
	Forbs Oz per Acre	24.00		Forbs sds/sq ft	Total	Total
	Forbs Lbs per Acre	1.50		42.21	27.27%	54.42%

Annuals, Temp Nurse Crop, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Temp Seeds per sq. ft.
<i>Lolium multiflorum</i>	Annual Rye	80.00	3.20	24.79
<i>Avena sativa</i>	Seed Oats	320.00	12.80	7.35
	Temp Oz per Acre	400.00		Temp sds/sq ft
	Temp Lbs per Acre	25.00		32.14

**Native plant seeds sowed in the cleared section of the Prairie:**

**AnnArborSchool-ThurstonPond-SMW-2021  
PrairieBlend Summary  
8/16/2021**

Grasses,Sedges, Rushes, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Seeds per sq. ft.	% by weight	% by native seeds
<i>Andropogon gerardii</i>	Big Bluestem	16.00	1.76	3.67	11.17%	5.04%
<i>Bouteloua curtipendula</i>	Side-oats Grama	8.00	0.88	1.10	5.59%	1.51%
<i>Carex bicknellii</i>	Bicknell's Sedge	0.30	0.03	0.12	0.21%	0.16%
<i>Elymus canadensis</i>	Canada Wild Rye	16.00	1.76	1.91	11.17%	2.62%
<i>Juncus tenuis</i>	Path Rush	0.10	0.01	2.30	0.07%	3.15%
<i>Koeleria cristata (K. macrantha, pyramida)</i>	June Grass	1.50	0.17	6.89	1.05%	9.44%
<i>Panicum virgatum</i>	Switchgrass	13.00	1.43	4.18	9.08%	5.73%
<i>Schizachyrium scoparium</i>	Little Bluestem	13.00	1.43	4.48	9.08%	6.14%
<i>Sorghastrum nutans</i>	Indian Grass	8.50	0.94	2.34	5.94%	3.21%
	Grasses Oz per Acre	76.40		Grasses sds/sq ft	Total	Total
	Grasses Lbs per Acre	4.78		26.98	53.35%	36.99%

Forbs, Shrubs, Vines, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Seeds per sq. ft.	% by weight	% by native seeds
<i>Agastache scrophulariaefolia</i>	Purple Giant Hyssop	0.25	0.03	0.53	0.17%	0.73%
<i>Allium canadense</i>	Wild Garlic	1.00	0.11	0.01	0.70%	0.02%
<i>Amorpha canescens</i>	Leadplant	1.50	0.17	0.59	1.05%	0.80%
<i>Asclepias syriaca</i>	Common Milkweed	1.75	0.19	0.16	1.22%	0.22%
<i>Asclepias tuberosa</i>	Butterfly Milkweed	2.00	0.22	0.20	1.40%	0.27%
<i>Aster azureus (A. oolentangiensis)</i>	Sky Blue Aster	0.50	0.06	0.92	0.35%	1.26%
<i>Aster laevis</i>	Smooth Blue Aster	0.50	0.06	0.63	0.35%	0.87%
<i>Aster novae-angliae</i>	New England Aster	0.50	0.06	0.76	0.35%	1.04%
<i>Baptisia lactea (B. leucantha, B. alba)</i>	White Wild Indigo	1.75	0.19	0.07	1.22%	0.09%
<i>Cassia fasciculata (Chamaecrista f.)</i>	Partridge Pea	10.00	1.10	0.62	6.98%	0.85%
<i>Coreopsis lanceolata</i>	Lance-leaf Coreopsis	8.00	0.88	3.67	5.59%	5.04%
<i>Coreopsis tripteris</i>	Tall Coreopsis	0.50	0.06	0.16	0.35%	0.22%
<i>Desmodium canadense</i>	Showy Tick Trefoil	2.00	0.22	0.25	1.40%	0.35%
<i>Eryngium yuccifolium</i>	Rattlesnake Master	1.25	0.14	0.22	0.87%	0.30%
<i>Gentiana flavida</i>	Cream Gentian	0.30	0.03	0.96	0.21%	1.32%
<i>Heliopsis helianthoides</i>	False sunflower	4.50	0.50	0.65	3.14%	0.89%
<i>Liatris aspera</i>	Rough Blazingstar	0.50	0.06	0.18	0.35%	0.25%
<i>Liatris spicata</i>	Marsh Blazingstar	1.50	0.17	0.38	1.05%	0.52%
<i>Monarda fistulosa</i>	Wild Bergamot	2.00	0.22	3.21	1.40%	4.41%
<i>Oenothera biennis</i>	Common Evening Primrose	2.25	0.25	4.65	1.57%	6.37%
<i>Penstemon digitalis</i>	Foxglove Beardtongue	1.00	0.11	2.98	0.70%	4.09%
<i>Pycnanthemum tenuifolium</i>	Slender Mountain Mint	0.50	0.06	4.34	0.35%	5.95%
<i>Ratibida pinnata</i>	Yellow Coneflower	3.75	0.41	2.58	2.62%	3.54%
<i>Rudbeckia fulgida</i>	Orange Coneflower	1.50	0.17	1.07	1.05%	1.46%
<i>Rudbeckia hirta</i>	Black-eyed Susan	4.25	0.47	8.98	2.97%	12.31%
<i>Rudbeckia triloba</i>	Brown-eyed Susan	3.50	0.39	2.73	2.44%	3.75%
<i>Silphium integrifolium</i>	Rosinweed	1.50	0.17	0.04	1.05%	0.06%
<i>Silphium terebinthinaceum</i>	Prairie Dock	0.75	0.08	0.02	0.52%	0.02%
<i>Solidago rigida</i>	Stiff Goldenrod	0.75	0.08	0.71	0.52%	0.97%
<i>Verbena stricta</i>	Hoary Vervain	3.75	0.41	2.41	2.62%	3.31%
<i>Vernonia gigantea (V. altissima)</i>	Tall Ironweed	1.50	0.17	0.83	1.05%	1.13%
<i>Vernonia missurica</i>	Missouri Ironweed	0.25	0.03	0.13	0.17%	0.17%
<i>Zizia aurea</i>	Golden Alexander	1.25	0.14	0.32	0.87%	0.43%
	Forbs Oz per Acre	66.80		Forbs sds/sq ft	Total	Total
	Forbs Lbs per Acre	4.18		45.95	46.65%	63.01%

Annuals, Temp Nurse Crop, etc.	Common Name	PLS Oz/A	Total PLS Oz.	Temp Seeds per sq. ft.
<i>Lolium multiflorum</i>	Annual Rye	80.00	8.80	24.79
<i>Avena sativa</i>	Seed Oats	320.00	35.20	7.35
	Temp Oz per Acre	400.00		Temp sds/sq ft
	Temp Lbs per Acre	25.00		32.14

