

Prairie Strips Establishment

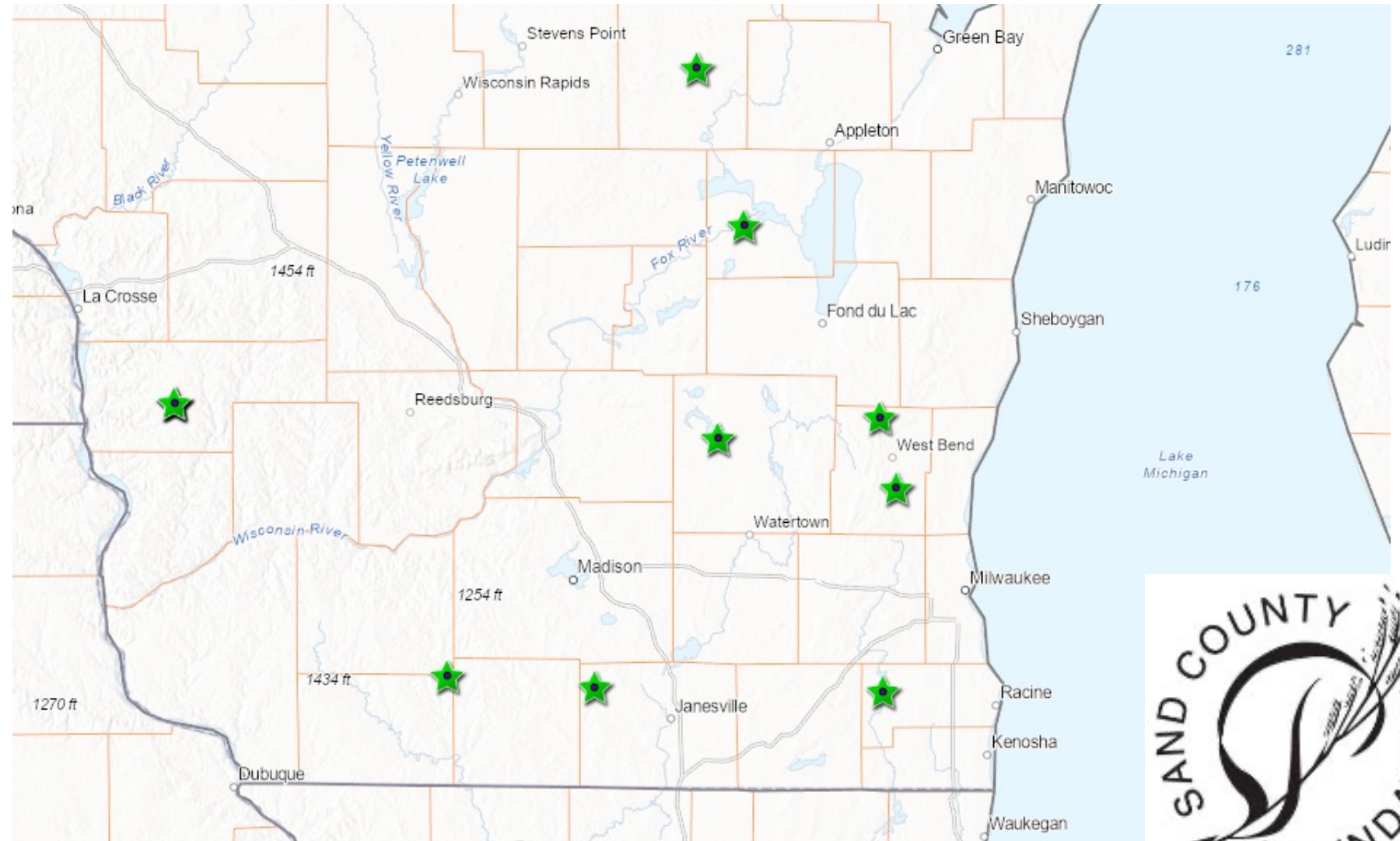


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Prairie STRIPS Adoption in WI

2017 – First 3 Sites installed in 3 counties

2021 – Total of 14 sites in 11 counties, two sites in Fond du Lac County and two sites in Green Lake County are not on the map.



Developing Site Specific Seed Mix

Things to consider:

- **Goals and Objectives for the site** (are you looking to address runoff, do you want to promote pollinators, do you want both, etc.)
- **Use local examples/experts as a guide** (Find remnant or well established prairie examples as a guide and/or local experts)
- **Soil Texture of the site** (some prairie plants can do well in sand, others will not and vice versa)
- **Moisture Regime of the Site** (same goes here as with the soil texture)
- **Nurse crops can help prairie** (spring plantings will benefit greatly from the weed suppression and soil stabilization of a nurse crop in its early stage)

Acquiring Seed

Things to consider:

- **Local Eco-types** (individual prairie species can have sub-species that are more area specific, best to find seed harvested from within 200 miles)
- **Watch Pure Live Seed (PLS) content** (This is based on germination tests and is what should be used to determine if you are meeting the rate)
- **Watch for contamination** (check the seed bags for additional seed/materials content, I have seen invasive seed listed on bags!)
- **Use proven/trusted seed sources** (this is the best way to deal with the considerations listed above)
- **Be ready to adjust your seed mix** (seed availability/cost may require adjustments in rates of species and/or addition of other species)

Seeding Site Conditions

Things to look at:

- **Prior Crop or Plant community** (avoid sod forming plants or stiff stemmed crop residue, if possible) (Personal opinion – I will push to wait a year to seed into soybeans instead of corn)
- **Can we get good seed to soil contact** (prairie plants do not like to be planted deep, but they do require soil contact to grow) (why it can be good to avoid areas with an established sod forming community)
- **Past & Future Management** (in season mowing access, adjacent herbicide use considerations, etc.) (understanding the past and future plans for the area around the seeding can be invaluable in determining success)

Seeding Method and Timing

Drill or Broadcast/Fall or Spring?:

- **Site conditions may dictate which method** (to steep may require broadcasting or high runoff may warrant seed being placed in the ground)
- **Prairie consists primarily of warm season species** (this means seeding needs to happen before June 30th or after October 15th in WI as an example)
- **Farming activities and timing of said may dictate a spring or fall seeding** (early crop planting around the site may limit access for seeding)
- **Equipment and seed variety can dictate method and timing** (native seed drill availability and the seed size variation can effect seeding method)
- **Personal preference of the designer and/or farmer** (some folks have preferences to method and timing for a successful planting)
- **EVERONE NEEDS TO BE COMFORTABLE WITH ALL THAT IS HAPPENING!**



- Counties
- Township/Range
- Soils
- Not farmed
- Grass filter area
- Vegetated buffer
- Non-metallic mine
- Water
- Sinkhole/other karst feature
- Other
- Fields

STRIP 3570-1 Seeding Criteria

- ✓ Bee Keeper – Pollinator Species
- ✓ Loam Soils
- ✓ DC - Well Drained
- ✓ Mesic or Dry Mesic Species

STRIP 1115-5 Seeding Criteria

- ✓ Bee Keeper – Pollinator Species
- ✓ Loam Soils
- ✓ DC - Well Drained
- ✓ Mesic or Dry Mesic Species

STRIP 1115-3 Seeding Criteria

- ✓ Bee Keeper – Pollinator Species
- ✓ Silt Loam Soils
- ✓ DC - Well Drained
- ✓ Mesic or Dry Mesic Species

9 Grasses, Sedges & Rushes

GRASSES, SEDGES & RUSHES	COMMON NAME	OZ/ACRE	COLOR	HT	BLOOM	MOISTURE	SUN	SEEDS/OZ	SEEDS/SF	% OF MIX
<i>Bromus kalmii</i>	Prairie Brome	1.36	Green	1-3'	June-July	WM-DM	FP	10000	0.31	0.8%
<i>Elymus canadensis</i>	Canada Wild Rye	7.03	Green	3-5'	June-Oct	WM-Dry	FP	6000	0.97	2.6%
<i>Carex bicknellii</i>	Copper-Shouldered Oval Sedge	0.64	Green	1-3'	June-July	WM-DM	F	27000	0.40	1.1%
<i>Andropogon gerardii</i>	Big Bluestem	13.07	Green	4-7'	Aug-Sep	WM-Dry	FP	12000	3.60	9.7%
<i>Bouteloua curtipendula</i>	Side Oats Grama	15.11	Green	1-3'	July-Aug	Mesic-Dry	FP	12500	4.34	11.7%
<i>Panicum virgatum</i>	Switchgrass	5.45	Green	4-6'	May-Sep	WM-Dry	FP	25000	3.13	8.5%
<i>Schizachyrium scoparium</i>	Little Bluestem	8.54	Green	2-3'	June-Aug	Mesic-Dry	FP	20000	3.92	10.6%
<i>Sorghastrum nutans</i>	Indian Grass	11.36	Green	4-6'	Aug-Sep	Mesic-Dry	FP	12500	3.26	8.8%
<i>Sporobolus heterolepis</i>	Prairie Dropseed	1.45	Green	2-3'	July-Aug	Mesic-Dry	FP	16000	0.53	1.4%
GRASSES, SEDGES & RUSHES TOTAL		64.01							20.46	55.4%

WILDFLOWERS	COMMON NAME	OZ/ACRE	COLOR	HT	BLOOM	MOISTURE	SUN	SEEDS/OZ	SEEDS/SF	% OF MIX
<i>Amorpha canescens</i>	Leadplant	0.61	Purple	1-3'	June-Aug	Mesic-Dry	FP	24000	0.34	0.9%
<i>Astragalus canadensis</i>	Canada Milk Vetch	2.56	Cream	1-3'	Aug-Oct	WM-DM	FP	15000	0.88	2.4%
<i>Baptisia leucantha</i> (alba)	White Wild Indigo	0.77	White	3-5'	May-June	WM-Dry	FP	2200	0.04	0.1%
<i>Chamaecrista fasciculata</i>	Partridge Pea	4.03	Yellow	1-3'	June-Aug	Mesic-Dry	F	2700	0.25	0.7%
<i>Dalea purpurea</i>	Purple Prairie Clover	5.81	Purple	1-2'	June-Aug	Mesic-Dry	F	23000	3.07	8.3%
<i>Asclepias incarnata</i>	Marsh (Red) Milkweed	0.91	Red	3-5'	June-Aug	Wet-Mesic	F	5500	0.11	0.3%
<i>Asclepias syriaca</i>	Common Milkweed	1.09	Lavender	2-4'	June-Aug	Mesic-Dry	FP	6300	0.16	0.4%
<i>Asclepias tuberosa</i>	Butterfly Weed	0.30	Orange	2-3'	June-Sep	Mesic-Dry	FP	4375	0.03	0.1%
<i>Echinacea pallida</i>	Pale Purple Coneflower	2.05	Purple	3-5'	June-July	Mesic-Dry	FP	5500	0.26	0.7%
<i>Eryngium yuccifolium</i>	Rattlesnake Master	1.16	White	3-4'	July-Aug	WM-DM	F	12000	0.32	0.9%
<i>Heliopsis helianthoides</i>	Early Sunflower	3.46	Yellow	3-5'	June-Oct	WM-DM	FP	6500	0.52	1.4%
<i>Liatris pycnostachya</i>	Prairie Blazing Star	0.59	Purple	2-4'	July-Sep	Mesic-DM	FP	15000	0.20	0.5%
<i>Monarda fistulosa</i>	Wild Bergamot	0.62	Lavender	2-4'	June-Aug	WM-Dry	FP	100000	1.42	3.9%
<i>Solidago rigida</i>	Stiff Goldenrod	0.80	Yellow	3-5'	July-Sep	WM-Dry	F	50000	0.92	2.5%
<i>Ratibida pinnata</i>	Yellow Coneflower	2.90	Yellow	4-5'	July-Aug	Mesic-DM	FP	30000	2.00	5.4%
<i>Rudbeckia hirta</i>	Black-Eyed Susan	0.47	Yellow	1-3'	June-Sep	WM-Dry	FP	130000	1.40	3.8%
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	1.01	Yellow	4-5'	July-Sep	WM-DM	FP	65000	1.51	4.1%
<i>Silphium integrifolium</i>	Rosin Weed	1.09	Yellow	4-6'	July-Sep	WM-Dry	F	2900	0.07	0.2%
<i>Silphium laciniatum</i>	Compass Plant	1.32	Yellow	4-9'	June-Sep	WM-Dry	FP	1000	0.03	0.1%
<i>Solidago speciosa</i>	Showy Goldenrod	0.46	Yellow	3-5'	July-Oct	Mesic-Dry	FP	95000	1.00	2.7%
<i>Aster novae-angliae</i>	New England Aster	0.50	Purple	1-2'	Sep-Oct	Wet-DM	FP	100000	1.15	3.1%
<i>Tradescantia ohiensis</i>	Ohio Spiderwort	1.09	Blue	2-4'	May-July	WM-Dry	FP	8000	0.20	0.5%
<i>Vernonia fasciculata</i>	Ironweed	0.45	Purple	4-6'	July-Sep	WM-Mesic	FP	35000	0.36	1.0%
<i>Zizia aurea</i>	Golden Alexanders	0.99	Yellow	2-4'	May-July	WM-DM	FP	11000	0.25	0.7%
WILDFLOWERS TOTAL		35.04							16.49	44.6%

24 Forbs – including legumes and Monarch Species

Stoffel 3570-1 Strip Seeding

Kewaskum, WI

June 2017



Stoffel 3570-1 Strip Seeding

Kewaskum, WI

June 2017



Bishop Strip Through Time

Pre-plant conditions 5/22/2018



Bishop Strip Through Time

Seeding 6/5/2018



Bishop Strip Through Time

Site Check 6/21/2018



Bishop Strip Through Time

July 2020



Picture courtesy of Stephanie Egner, Washington County Land and Water Conservation Department

IMPORTANT: No one practice can solve all issues. A systems approach needs to be adopted to create a synergy between farm economic viability and watershed environmental health!



Thank You!

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“That the situation
appears hopeless
should not prevent us
from doing our best.”

Aldo Leopold

