

Volunteer

Professional

Volunteer + Professional

Grassland Habitat Maker

Image Source: Nick O'doherty, "Pheasant in hay meadow 2." 23 May 2009 via Flickr CC BY 2.0.



HELLO

MY NAME IS

Grassland Habitat Maker

The Grassland Habitat Maker is a native meadow designed to provide habitat for birds including pheasants, bobolinks and lark sparrow. With a warm palette of late summer and fall bloom colors, the Grassland Habitat Maker offers Detroiters one way to create a habitat for migratory and local bird populations that are currently in decline. The full site planting with an optional mowing strip fits nicely on a single lot but accomplishes even more for the birds with two three touching lots.

For more information refer to [DFC-lots.com](https://dfc-lots.com)

What is the lot design likely to cost?

The estimated cost of the Grassland Habitat Maker is low (\$50 – \$1,000) and based on utilizing volunteer labor and the seed mix. The cost assumes that residents or volunteers have access to basic safety gear and garden tools.

How much upkeep will this lot design require?

This lot design requires a medium level of maintenance to thrive. Maintenance will include weeding and watering the meadow, particularly during the first two growing seasons while the meadow establishes itself. The meadow should be mowed once a year in the late fall or early spring.

Will the installation of this lot design require a professional?

The installation of this lot design should not require professional assistance if you, with the help and support of friends, family, or neighbors, are willing to construct this lot design. Refer to the Step-By-Step section for guidance. If you do not have the required support or feel unable to tackle this lot design, you can seek professional assistance.

How long will it take to install this lot design?

While people tackle projects in different ways and at different speeds, the Field Guide estimates the installation time of this lot design to be one full weekend with the help of at least three healthy adults or youth. The Field Guide assumes the lot is ‘construction ready,’ and all equipment and materials required for the lot design have been acquired and are ready to use.

Cost	\$50 - 1,000	\$1,000 - 2,500	\$2,500 - 5,500	\$5,500 +
People	Volunteer	Professional	Volunteer + Professional	
Experience	Beginner	Intermediate	Advanced	
Upkeep	Low	Medium	High	
Stormwater	Good	Better	Best	
Location	Single, Double, or Multiple Lots in Full Sun or Part Sun			

Grassland Habitat Maker

Examples of Grassland Animal Species



1 - Cottontail Rabbit



2 - Wild Pheasant



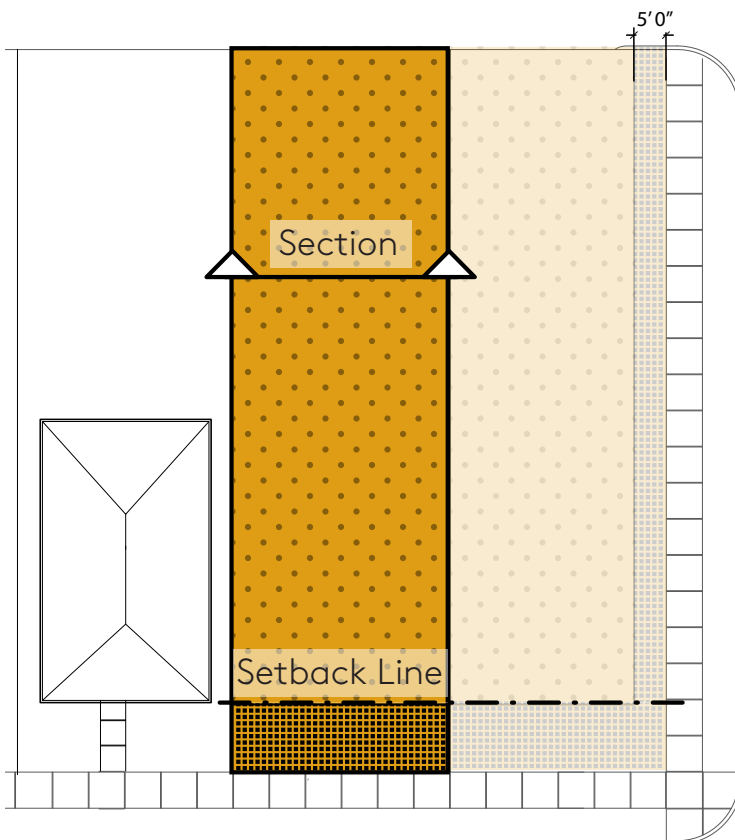
3 - Bobolink Bird

Section

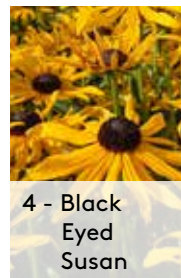


Native Grassland Meadow

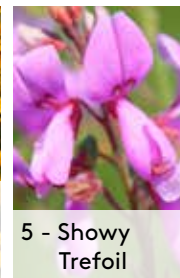
Where Do I Grow?



The Grassland Habitat Maker can be constructed on single, double, or multiple lots and is suitable for corner properties. Strengthen your block's identity by aligning the edge of your meadow with the front setback of the adjacent structures.



4 - Black Eyed Susan



5 - Showy Trefoil



6 - Coreopsis

Image Source: 1) Neil Jansen, "Bunnies vs. 100mm macro." 26 April 2010 via Flickr, CC BY-NC-SA 2.0; 2) Mark Lehigh, "Attention!" 17 March 2012 via Flickr, CC BY-NC-SA 2.0; 3) Brian Henderson, "Bobolinks." 18 June 2014 via Flickr, CC BY-NC 2.0; 4) Matt Lavin, "Rudbeckia hirta." 14 September 2010 via Flickr, CC BY-SA 2.0; 5) Dan Mullen, "Showy Tick-trefoil, Canadian Tick-trefoil." 17 August 2012 via Flickr, CC BY-NC-ND 2.0; 6) Bithead, "Wildflower." 24 June 2007 via Flickr, CC BY-NC-SA 2.0.

Before You Start

'Construction Ready'

This lot design assumes that you have prepared the lot to a 'construction ready' state.

'Construction Ready' refers to a lot that is clean and clear of trash, hazardous objects, unwanted trees, brush and vegetation, fences, and other unwanted structures.

It may be necessary to remove grass in preparation for your lot design. Refer to the Remove Your Grass box located on the right hand side of this page for more information.

Is there an available water source near your lot? Consider how and where you will access water during and after construction to ensure that your plants can establish.

If your lot is not ready for construction, refer to the [Clean + Green](#) lot design.

You can find the lot design at DFC-lots.com.

Call Before You Dig

Locate underground utilities before beginning your lot design. MISS DIG provides a free service to Michigan residents by locating and marking utilities on requested properties. Call (800) 482-7171 or 811 at least three days before you plan to start digging on your lot.

Test Your Soil

Harmful pollutants have made their way into many urban soils. To proceed with awareness, consider having your soil tested before construction. Two great options are available:

Soil testing is free to members of Keep Growing Detroit's Garden Resource Program. Call (313) 757-2635 for more information or visit detroitagriculture.net.

If you are not yet a member, you can work directly with Michigan State University's (MSU) Extension Program. They have a Home Lawn and Garden Soil Test Mailer for \$25. For more information call (888) 678-3464 or visit msusoiltest.com.

If you are concerned about the presence of lead or other contaminants in your soil, call the Michigan Department of Health and Human Services at (866) 691-5323 or (800) 424-LEAD.

Remove Your Grass

Need to remove grass in areas where you are constructing your lot design?

There are many ways to remove unwanted grass. The first is to remove the grass and its root system by digging up the grass. Another option is to cover your lot with cardboard or a plastic tarp to smother your grass in darkness. It will take several weeks, but after being covered, the dead grass will be easier to remove.

Till Safely

Before you till, inspect your lot for signs of buried concrete or rubble that was not removed during the cleanup stage. Large debris can ruin tiller blades.

When tilling, wear appropriate safety gear, such as covered boots with socks, long pants, safety glasses, dust mask, and ear protection. Make sure you understand the safe operating procedures of your tiller. Refer to the user's manual.

What You Need: Shopping List

Shopping List

The shopping list provides a breakdown of potential materials, tools, and resources required to construct this lot design.

This shopping list is designed for a single lot (30 by 100 feet).

Tools + Resources

Suggested Tools

- **Marking Paint and Tape Measure**
- **Safety Gear:** Gloves, heavy work boots, tall socks, pants, long sleeve shirts, dust masks, protective eye wear, ear plugs, and hard hats (if using heavy machinery)
- **Garden Tools:** Spades, shovels, rakes, trash bags, and wheelbarrows
- **Tiller,** 6 inch depth (optional)

Potential Water Sources

- Garden Hose with potential extension hose
- Sprinkler
- Rain Barrel in addition to other water source

Field Guide Resources

Resources are available on the Field Guide's web site.

- Clean + Green

Materials List

Materials

- **Germination Blankets,** 4 rolls (8 by 112.5 feet), used for the meadow area

Planting

- **Native Grassland Meadow seed mix,** 3 pounds of seed
- **Annual Cover Crop seed mix,** 3 pounds of seed

Grassland Habitat Maker Step-By-Step

Let's Start


Want to create the Grassland Habitat Maker but don't want to hire a professional? Here are a few guiding principles to help you construct your lot design.

 Check off tasks as you go along.

Lot Design Steps

Volunteer Opportunities:

- Prepare Your Lot**
- Sow Meadow**
- Maintain Your Lot Design**

 **Annual Cover Crop is used to establish the Native Grassland Meadow and does not require annual re-seeding.**

Prepare Your Lot

Use marking paint and a tape measure to map out the size, shape, and dimensions of your design. The Field Guide recommends different design sizes for various applications:

Corner Lot: 25 by 90 foot grassland on corner lots with a recommended ten foot wide mowing strip that aligns with the front setback of neighboring houses. A five to ten foot wide mowing strip is recommended along the side of adjacent roads.

Residential Areas: 30 by 90 foot grassland on residential lots, allowing for an approximately ten foot wide mowing strip that aligns with the front setback of neighboring houses.

Conservation Area: 30 by 100 foot grassland across multiple lots in areas away from houses.

Sow Meadow

Soil should be prepared for seeding by scarifying, raking, or tilling the soil four to six inches deep to loosen any compaction, allowing for easier seed germination and better water infiltration. Tilling should not be done without an assessment of buried cement, debris, or large rocks. Be sure to select the correct size of machinery for the job.

Seeding should take place in either spring (mid-May to mid-June) or fall (mid October to end of November). Ernst Conservation Seed's Native Grassland Meadow seed mix and Annual Cover Crop seed mix are good options for the Grassland Habitat Maker; similar mixes are available from other suppliers.

Ernst Conservation Seed's Mix suggests one pound of Native Grassland Meadow seed mix with one pounds of Annual Cover Crop seed mix per 1,000 square feet. **The Field Guide recommends three pounds of Native Grassland Meadow seed mix and three pounds of Annual Cover Crop seed mix for the meadow area (30 by 100 feet).**

Grassland Habitat Maker Step-By-Step

Once seeds have been mixed, spread seed across entire meadow area. You can do this by hand or with a hand-cranked whirlwind seeder. You may need to do this several times to get even coverage. Gently water seedlings daily until they are four to six inches in height.

Placing a thin layer of straw or a germination blanket over seeded areas will help ensure that your seed establishes by keeping seeds from blowing away and protecting them from birds. **Four 8 by 112.5 foot single net germination blankets will cover the meadow area.** Germination blankets or straw can be purchased at most nurseries and garden stores, including Detroit Farm and Garden.

○ Maintain Your Lot Design

A meadow requires care and maintenance to thrive. The Grassland Habitat Maker will require weeding, watering, and mowing. **In the first year, cut your meadow back to four to six inches whenever it reaches above ten inches in height.**

After the first year, continue weeding, and mow your meadow in late fall or early spring to keep the meadow at its best. It will take about three years for the meadow to fully establish.

Meadows are a work in progress. If you feel your meadow needs more color, it is okay to add additional native seed mixes and plants. Be creative and make it your own!



Visit the Resources page on the Field Guide's web site (DFC-lots.com) to discover other vendors and places to purchase plants.

Average Height of Plants



Planting: Full Sun to Part Sun

Native Grassland Meadow (Eastern Native Habitat & CREP Mix, ERNMX - 173)

Mixing three pounds of Native Grassland Meadow seed mix with three pounds of Annual Cover Crop seed mix is recommended for the Grassland Habitat Maker lot design.

You can buy these seeds premixed at Ernst Conservation Seeds.

Big Bluestem 'Niagra', *Andropogon gerardii*, 'Niagra' (40% of mix)

Partridge Pea, *Chamaecrista fasciculata* (8% of mix)

Purple Coneflower, *Echinacea purpurea* (2% of mix)

Virginia Wildrye, *Elymus virginicus* (25% of mix)

Oxeye Sunflower, *Heliopsis helianthoides* (2% of mix)

Switchgrass 'Shelter', *Panicum virgatum* 'Shelter' (15% of mix)

Blackeyed Susan, *Rudbeckia hirta* (3% of mix)

Indiangrass, *Sorghastrum nutans* (5% of mix)

Plant Sizes



Seeds: All plants can be purchased in seed form.



Grassland Meadow with Pheasants

Did You Know?

Professionals Can Help!

The Field Guide to Working With Lots provides a Construction Package for each lot design. The Construction Package includes information and details required for a professional to construct this design. On the Field Guide web site, use the [Construction Package](#) link located near the top of this lot design page to download and print. Your selected professional will then be able to provide a cost estimate and schedule based on the condition of your lot and the design you select.

Want to Hire Locally?

DFC-lots.com has a growing list of Detroit-based professionals and suppliers of landscape materials and services.

Still unsure of where to start?

Call (313) 294-LOTS or email fieldguide@detroitfuturecity.com for assistance.

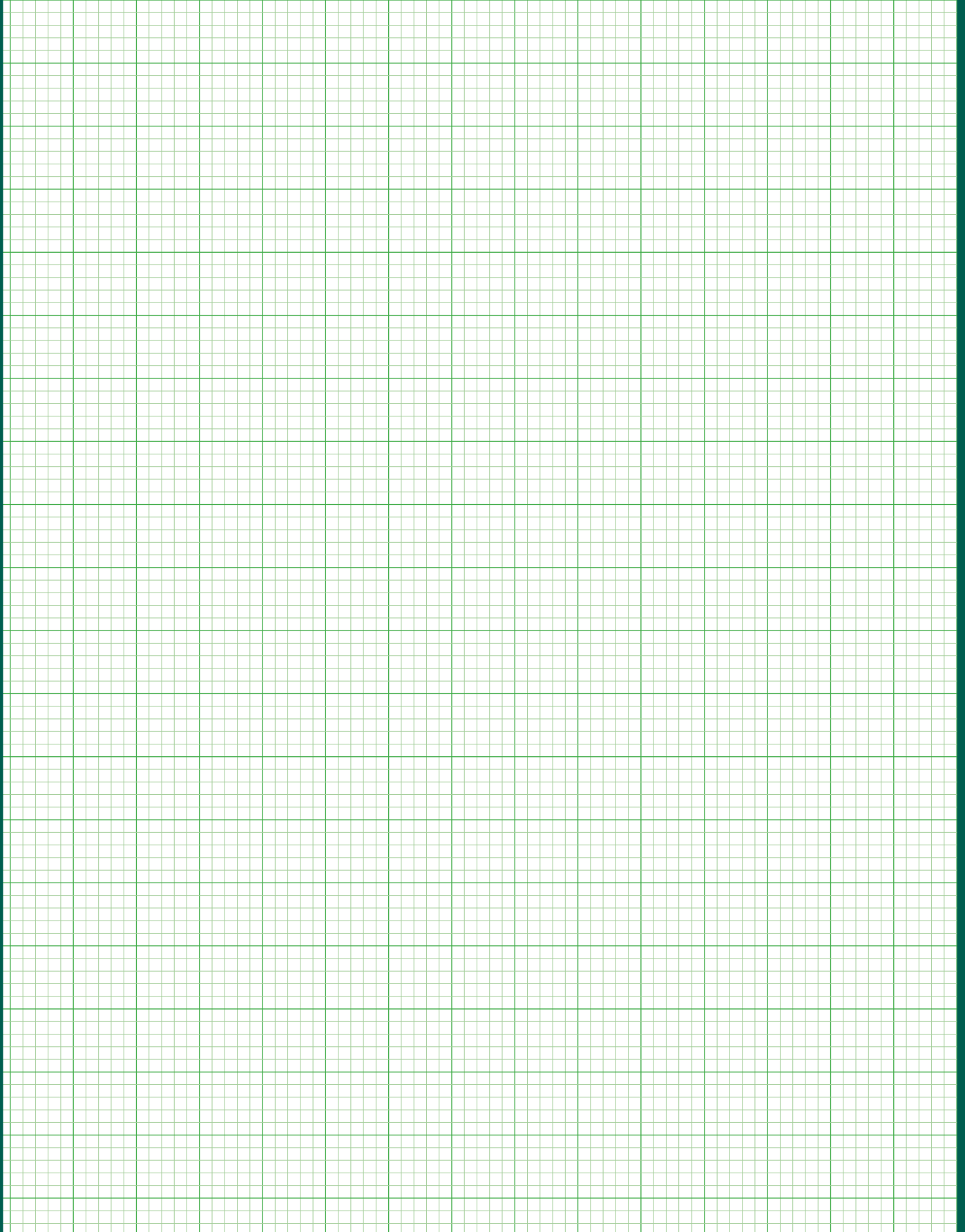
Helpful Facts

- Native plants have deep roots that help capture, hold, and slowly release stormwater.
- Grasslands provide habitat to pheasants, bobolinks, lark sparrow, and other birds.
- The Grassland Habitat Maker offers the opportunity to help endangered wildlife such as the lark sparrow. Create a habitat type that is currently in decline!
- Birdhouses are a welcome addition to this lot design.
- You can learn more about birds that live or migrate through Southeast Michigan through Cornell's Ornithology Lab.

Planting Tips

- The best time to plant is spring or fall.
- Do not plant in extreme heat.
- Water after planting and as needed.
- Weed weekly or as needed.
- Hydroseeding is a great way to seed large areas rapidly.
- Do not mow grassland during critical breeding or nesting periods. The Field Guide recommends mowing between July 15 and August 31 to reduce the chance of destroying bird nests.

Draw Your Lot



Grassland Habitat Maker Field Notes



**DETROIT
FUTURE
CITY**

**working
with lots**
A FIELD GUIDE

**Visit DFC-lots.com
#DFClots**

Image Source: Neil Jansen., "Bunnies vs. 100mm macro" 26 April 2010 via Flickr, CC-BY-NC-SA