

**Volunteer**

**Professional**

**Volunteer + Professional**

## **3 For 1 Groundcover**

Image Source: Philip Chapman-Bell, "Red Clover and Vetch." 03 June 2009 via Flickr, CC BY-NC-SA 2.0.



**working  
with lots**

**A FIELD GUIDE**

# HELLO

MY NAME IS

## 3 for 1 Groundcover

The 3 for 1 Groundcover offers residents a few alternative options to planting a traditional lawn.

This mix can be placed on a freshly demolished lot, a bald lot, or mixed with existing vegetation to create a healthy groundcover. The suggested plant species are drought-tolerant, so your lot will stay green all summer long without irrigation. The 3 for 1 Groundcover does not need fertilizers as the selected plants add nitrogen to the soil. Over time, the proposed groundcovers will make richer, healthier soil on your lot.

The 3 for 1 Groundcover offers additional alternatives to the City of Detroit’s current specification for post-demolition ‘greenscaping.’

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

### What is the lot design likely to cost?

The estimated cost of the 3 for 1 Groundcover 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?

The maintenance of this lot design is low. Mow selected groundcover once it reaches five inches or to height you wish to maintain. Groundcover will need to be watered during the first three weeks of germination and establishment.

### 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 would like to construct this lot design. Please 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, please 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 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.

<b>Cost</b>	\$50 - 1,000	\$1,000 - 2,500	\$2,500 - 5,500	\$5,500 +
<b>People</b>	Volunteer	Professional	Volunteer + Professional	
<b>Experience</b>	Beginner	Intermediate	Advanced	
<b>Upkeep</b>	Low	Medium	High	
<b>Stormwater</b>	Good	Better	Best	
<b>Location</b>	Residential Lot in Full Sun to Shade			

# 3 for 1 Groundcover

## Examples of Groundcovers



1 - Grass with Clover



2 - Vetch

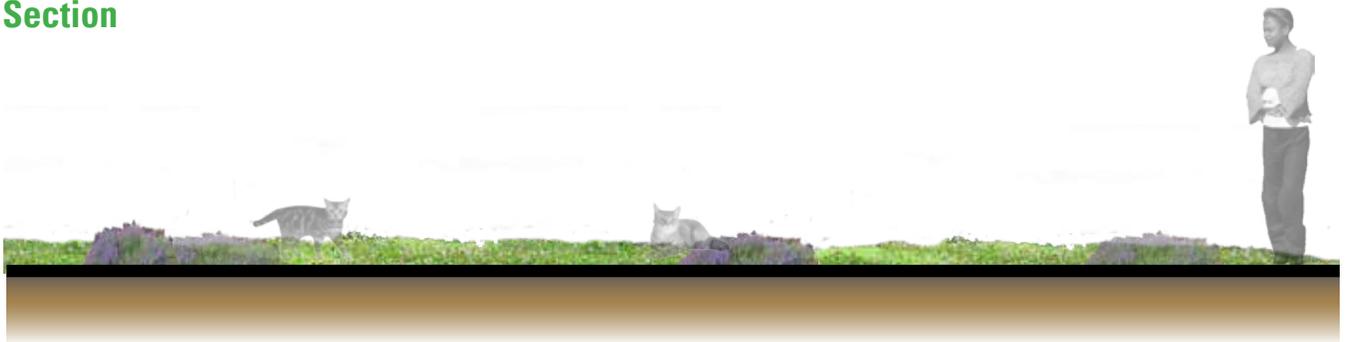


3 - Clover



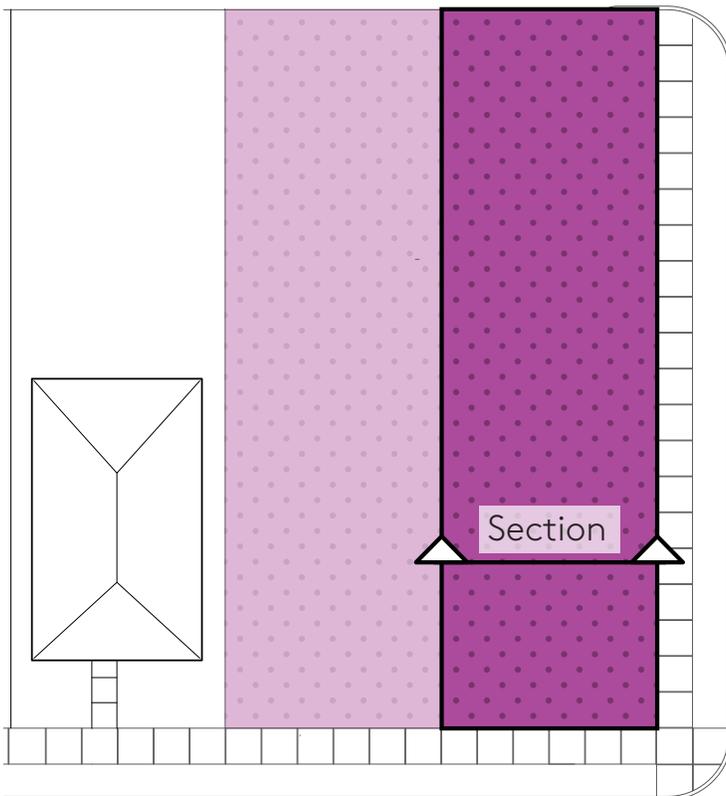
4 - Clover

## Section



Clover and Catnip Groundcover

## Where Do I Grow?



The 3 for 1 Groundcover can be constructed on single, double, or multiple lots and is suitable for a corner property. The image below shows white clover groundcover in a residential area.



5 - Field of White Clover



3 for 1 Groundcover

**Image Source:** 1) My Paw Print, "Clover Yard." 21 June 2009 via Flickr CC BY-NC 2.0; 2) Joana Roja, "Hillside of Crown Vetch." 09 June 2009 via Flickr CC BY-NC-2.0; 3) Julie Falk, "6 Field." 21 June 2006 via Flickr CC BY-NC 2.0; 4) Arthur Chapman, "Astragalus alpinus L. (Alpine Milk Vetch)." 21 June 2006 via Flickr CC BY-NC 2.0; 5) Benjamin S Tone, "Field of White Clover." 04 June 2013 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](http://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](http://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](http://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

- **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 Blanket,** 4 rolls (8 by 112.5 feet, used for any of the planting options)

### Planting Option 1: Clover Mix

- **Medium Red Clover,** 0.5 pounds of seed
- **New Zealand White Clover,** 0.5 pounds of seed
- **Crimson Clover,** 0.25 pounds of seed

### Planting Option 2: Clover + Catnip

- **Medium Red Clover,** 0.5 pounds of seed
- **New Zealand White Clover,** 0.5 pounds of seed
- **Catnip,** 1 ounce of seed

### Planting Option 3: Clover + Fescue

- **Medium Red Clover,** 1 pound of seed
- **Low-Maintenance Fescue Mix,** 5 pounds of seed

## 3 for 1 Groundcover Step-By-Step

### Let's Start

**Want to create the 3 for 1 Demolition Groundcover 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

### Prepare Your Lot

The Field Guide recommends a 30 by 100 foot (3000 square feet) groundcover.

The groundcover is to be maintained as an alternative lawn and mowed once it reaches five inches or to a height you wish to maintain.

If your lot is bald, you are ready to implement a lot design. Remove existing grass or vegetation if needed.

### Sow Meadow

The 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.

Seeding should take place in either spring (mid-May to mid-June) or fall (mid October to end of November). Johnny's Selected Seeds is a good option for purchasing clover seeds; similar seeds are available from other suppliers. Refer to the Field Guide's Supplier Directory for additional ideas.

Suggested groundcovers will tolerate poor soil conditions including poor drainage and heat. They grow in sun to shade. Select the combination of groundcovers for your design from the planting options and seed at the following rates:

**Planting Option 1 - Clover Mix:** A mix of three clover species designed to provide an alternative lawn cover. It can be mowed two to three inches in height and offers a durable, soft, and walkable lawn. Minimal mowing required (one to two times per year). Recommended seed mix:

- **Medium Red Clover**, 0.5 pounds of seed
- **New Zealand White Clover**, 0.5 pounds of seed
- **Crimson Clover**, 0.25 pounds of seed

## 3 for 1 Groundcover Step-By-Step

**Planting Option 2 - Clover + Catnip:** A mix of clover species and catnip designed to brighten your lot. Catnip will grow to a height of 12 inches with flowers extending to 16 inches.

The purple flowers emerge late spring to early fall. The mix of catnip and clover will provide a lot full of both white and purple clover flowers.

This groundcover should not be mowed. Use a trimmer to keep groundcover tidy. Recommended seed mix:

- **Medium Red Clover**, 0.5 pounds of seed
- **New Zealand White Clover**, 0.5 pounds of seed
- **Catnip**, 1 ounce of seed

**Planting Option 3 - Clover + Fescue:** A mix of two clover species designed to provide an alternative lawn cover combined with fescue grass will help create a lawn that looks similar to a standard lawn although grasses tend to be slightly longer.

The lawn can be mowed two to three inches in height and is durable and walkable. Minimal mowing is required (e.g., one to two times per year). Recommended seed mix:

- **Medium Red Clover**, 1 pounds of seed
- **Low Maintenance Fescue Mix**, 5 pounds of seed

Once seeds have been selected and mixed, spread seed across entire lot. You can do this by hand or with a hand-cranked whirlwind seeder. You will 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 rolls of 8 by 112.5 foot single net germination blankets will cover the meadow area.** Germination blankets or straw can be purchased at nurseries and garden stores, including Detroit Farm and Garden.

You can seed 100% Low Maintenance Fescue Mix at 15 pounds per 30 by 100 lot or 100% Medium Red Clover at 1.5 pounds per 30 by 100 lot.

### ○ Maintain Your Lot Design

Groundcover will need to be watered during the first three weeks of germination and establishment period. Once groundcover begin growing, it requires minimal maintenance.

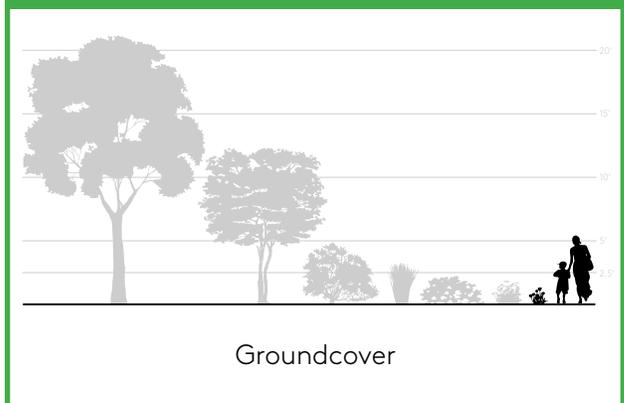
**Mow groundcover once it reaches five inches or to a height you wish to maintain.**

Let groundcover grow six to eight inches in the fall to help it through winter.



**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 Options: Full Sun to Shade

### Groundcover Options

Refer to the options listed below for seed mixes and amounts when selecting your 3 for 1 Groundcover planting option.

You can buy these seeds at Johnny's Selected Seeds.

#### Planting Option 1: Clover Mix

**Medium Red Clover** (0.5 pounds)

**New Zealand White Clover** (0.5 pounds)

**Crimson Clover** (0.25 pounds)

#### Planting Option 2: Clover + Catnip

**Medium Red Clover** (0.5 pounds)

**New Zealand White Clover** (0.5 pounds)

**Catnip** (1 package or 1 ounce)

#### Planting Option 3: Clover + Fescue

**Medium Red Clover** (1 pound)

**Low Maintenance Fescue Mix** (5 pounds)



**Medium Red Clover<sup>1</sup>**  
*Trifolium pratense*



**New Zealand White Clover<sup>2</sup>**  
*Trifolium repens*



**Crimson Clover<sup>3</sup>**  
*Trifolium incarnatum*



**Catnip<sup>4</sup>**  
*Nepeta cataria*



**Low Maintenance Fescue Mix<sup>5</sup>**

### Plant Sizes



**Seeds:** All plants can be purchased in seed form.

## 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](mailto:fieldguide@detroitfuturecity.com) for assistance.

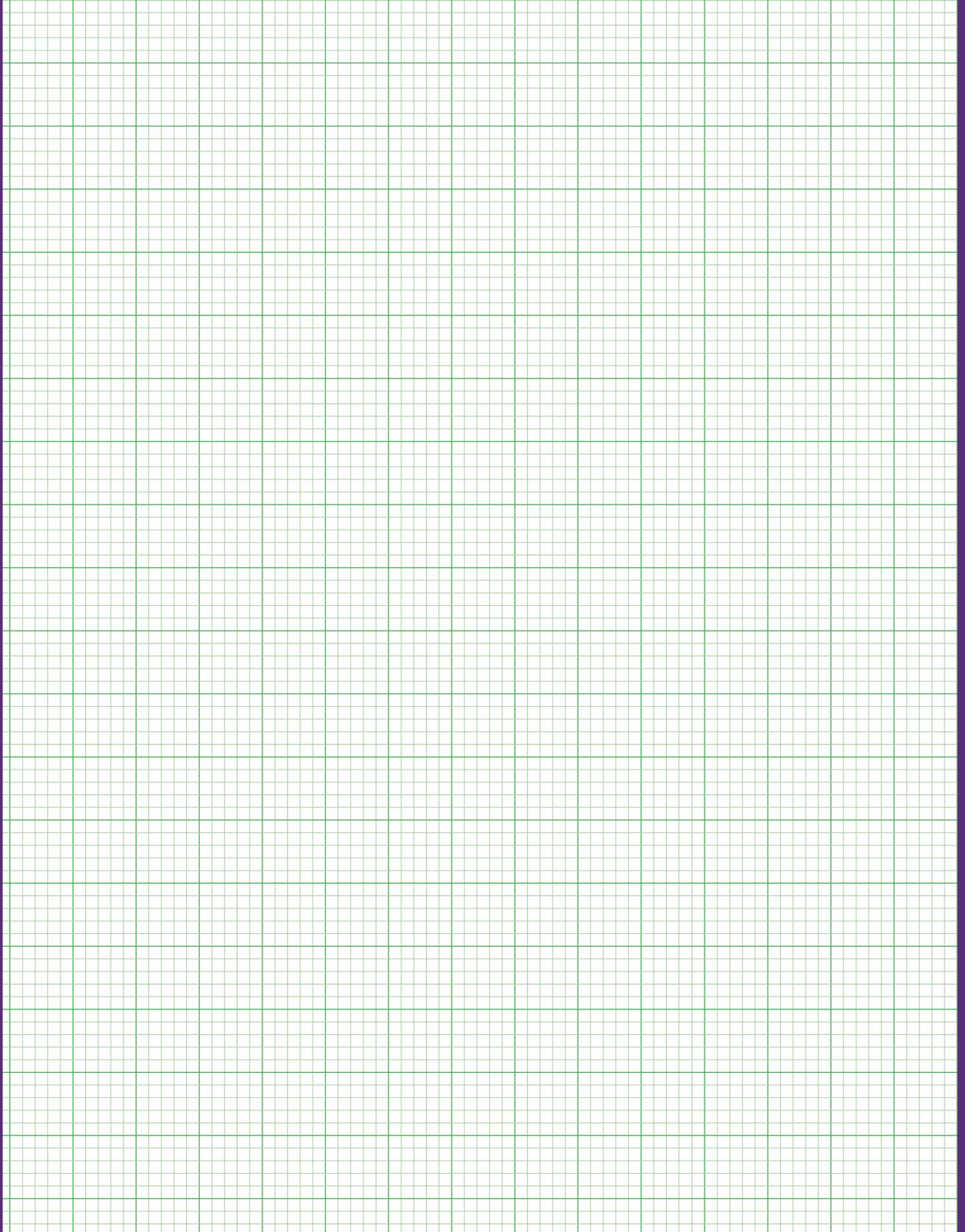
### Helpful Facts

- The clover and seed mixes recommended for this lot design do not need to be fertilized.
- Clover mixes are durable yet soft to walk and play on.
- Clover mixes do not suffer from dog spots (dog urine) and are perfect for residents with pets.
- Clover adds nitrogen to the soil, improving its fertility.
- Clover can be used as green manure.
- Clover has a fibrous root system typically found within the top eight inches of soil. This root system keeps the soil loose and helps stormwater infiltrate the ground.
- Honey bees like clover. If you are interested in harvesting honey, this is the ideal groundcover as you get started with bee keeping.
- Cats love catnip. It can be dried to make cat treats.

### Planting Tips

- Call ahead to make sure the nursery or garden store has the plants you need for your lot design.
- Clover can produce 130 to 200 pounds of nitrogen per acre and is great for short- or long-term groundcover.
- If using as green manure, be sure to till clover when blooming.
- Crimson clover is an annual. If you enjoy the beautiful red colors, re-seed your lot the following year.
- Clover tolerates poor soil conditions including minor flooding and heat, so it can be planted almost anywhere.

## Draw Your Lot



## 3 for 1 Groundcover Field Notes



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**Visit [DFC-lots.com](http://DFC-lots.com)  
#DFClots**

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