Better photo to come
The Summer Shade emphasizes working with the resources at hand and on-site. This lot design is great for properties with an unruly woodland or a collection of small trees. The design pairs an investment of time and volunteer labor with a set of maintenance strategies to help you create a well-maintained forest patch.

The Summer Shade’s guiding principles will help you manage your existing woodland through the removal of dense understory growth and dying or diseased trees, as well as with the addition of a few new trees or wildflowers. This management plan has the potential to welcome habitat, biodiversity, shade, and a natural beauty to your neighborhood.

For more information, refer to UNI Vacant to Vibrant: A Guide to Working with Lots, www.uni-kc.org

What is the lot design likely to cost?
The estimated cost of the Summer Shade is low ($50 – $1,000) and based on using volunteer labor with possible professional assistance for tree removal. The number of trees you decide to remove or plant may impact cost. 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 watering plants and trees, particularly during times of drought and excess heat. The lot should be cleaned up once a year to remove any unwanted scrub plants or damaged trees.

Will installation of this lot design require a professional?
The installation of the Summer Shade lot design is unlikely to require professional assistance if you, with the help and support from friends, family, or neighbors, would like to construct it; however, if you decide to remove large trees or do not have experience in handling a chain saw, the UNI Guide recommends seeking professional assistance. Refer to the Construction Package—located in the UNI Vacant to Vibrant: A Guide to Working with Lots, www.uni-kc.org—for more details.

If you do not have the required support or feel unable to tackle this lot design, 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 UNI Vacant to Vibrant 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 Guide assumes the lot is ‘construction ready,’ and all equipment and materials required for lot design have been acquired and are ready to use.
The Summer Shade can be constructed on single or multiple lots and is suitable for properties with an existing woodland.

- **Existing Forest Patch**
- **Mulch**
- **Additional Trees (Optional)**
- **Mowed Grass Edge**
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**

**Suggested Tools**
- **Marking Paint**
- **Safety Gear:** Gloves, heavy work boots, tall socks, pants, long sleeve shirts, protective eye wear, dust masks, ear plugs, and hard hats. Additional safety gear, such as hard hat with attached face guard and leg protection/chaps, is recommended when using heavy machinery, such as a chainsaw.
- **Garden Tools:** Spades, Shovels, Rakes, Trashbags, and Wheelbarrows.
- **Woodland Management Tools:** Clippers, loppers, pruning saw, chainsaw, pick axe, knife, and ball cart (for moving heavy trees).

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

**Waste Removal**
- **Yard Waste Removal:** Contact your local refuse service to set-up yard waste removal. Refer to the UNI Vacant to Vibrant: A Guide to Working with Lots, www.uni-kc.org, for more information.

**Materials List**

**Materials**
- **Mulch or Wood Chips,** to cover the whole lot, except for the mowed border, 20 yards
- **Fescue Mix,** 1 pound of seed

**Planting Options**
The UNI Vacant to Vibrant Guide offers a variety of woodland plants for the three categories listed below. Decide if any of these planting options are right for your Summer Shade design:
- **Understory Trees**
- **Large Trees**
- **Groundcovers and Perennials**

**Resources**

**Field Guide Resources**
- **Resources are available in the UNI Vacant to Vibrant: A Guide to Working with Lots Reference Section, www.uni-kc.org**
- There are also numerous local resources and classes available to help guide you. The **Heartland Tree Alliance,** available on the Bridging the Gap website (bridgingthegap.org), offers classes, programs and events.
- You can also access the Arbor Day Foundation’s “Backyard Woods Guide” at www.arborday.org/programs/backyardwoods. The guide is full of useful information, including Working Safely with a Chain Saw, Identify and Manage Hazardous Defects in Your Trees, and Prune Your Trees to Keep Your Woods Healthy.
### Summer Shade Step-By-Step

#### Let’s Start

Want to create the Summer Shade? The UNI Vacant to Vibrant Guide recommends hiring a professional for some tasks. Here are a few guiding principles to help you understand the tasks involved in the lot design, and the steps volunteers can construct themselves.

- Check off tasks as you go along.

#### Lot Design Steps

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#### Assess Woodland Condition

Spend an afternoon assessing the existing trees and vegetation on your lot. Considering these questions will help you begin to develop a lot maintenance plan.

- What types of trees or plants are growing in your woodland? Can you name the species? Invite a plant professional to help identify invasive species.

- Are there any trees or vegetation that you would like to keep?

- Do you notice any trees or vegetation that should be removed? Do you notice any trees that are dead, have dead wood, cracks, disease, decay, are tilting, or have poor form, structural defects, or anything that looks dangerous?

- Does your woodland have scrub or unwanted brambles growing?

#### Create A Clean Edge

The UNI Vacant to Vibrant Guide recommends approximately 10 feet or the existing length from the front of the house to the sidewalk to be clean and clear of unwanted scrub, trees, and vegetation, helping to keep your neighborhood looking tidy. A five foot strip clear of vegetation is also recommended along your lot’s side property lines if your lot is adjacent to any houses. This will help keep branches from falling on neighboring houses or becoming a public nuisance.

It is okay to clear around a ‘feature’ tree (a tree you want to keep) if it is located within the front or side areas being cleared of other vegetation.

You should have a variety of tools on hand to assist you with removing scrub vegetation and removing roots from the property. Recommended tools and safety gear are listed in the UNI Vacant to Vibrant Guide.

Be careful when removing scrub to avoid poison ivy, beehives, or other hidden dangers. The UNI Vacant to Vibrant Guide recommends that two people work together to remove unwanted scrub and vegetation.
Summer Shade Step-By-Step

☐ Removing Understory Scrub

After creating the clean edge around your lot, you may need to remove additional scrub, smaller woody growth, or other grasses and brambles from your site. Removing this smaller, unwanted vegetation can enhance views through your woodland ("clearing the understory").

Clearing the understory will create open space and prepare your lot for planting new trees.

☐ Remove Dead or Dying Trees

Are there trees on your lot that should be removed? These might be trees that are unhealthy, unsafe, or are species you do not wish to have on your lot.

Removing trees can be dangerous to you and other volunteers as well as to adjacent properties and nearby trees. UNI Vacant to Vibrant: A Guide to Working with Lots recommends working with someone who has prior experience with tree removal. A great reference is Working Safely with a Chain Saw in the Backyard Woods Guide provided by the Arbor Day Foundation, www.arborday.org

If taking on the tree removal yourself, be sure to wear the suggested safety gear listed on page 5 of the Working Safety guide. This list includes additional safety gear that is especially important for operating a chain saw. When selecting a chain saw, make sure it has the proper safety features, including a chain brake, throttle safety latch, and chain with guard and links in good condition. If you are cutting a large tree, it will likely require guide ropes and one or two hired professionals.

Tree felling can be unpredictable. Before beginning to cut trees, make sure children and adults are a safe distance away and that trees are a safe distance from houses, roads, power lines, bodies of water, and cars. Also be sure to contact nearby neighbors before removing a large tree.

Experience in tree cutting and tree felling is required before removing large trees. The UNI Vacant to Vibrant Guide does not recommend the removal of trees larger than 6 inches in diameter without professional assistance or support.

☐ Add Trees

Does your forest patch have small clearings from removed trees or existing open space where you would like to plant a new tree? When adding trees, it is best if your new tree species adds diversity to your woodland and making sure the existing clearing is large enough for the tree you wish to plant. Consider the sun and shade tolerance of the tree species you are considering. Research tree spread to ensure it will have enough space to stay healthy as your tree grows. If your planting area is deep within your lot, consider if or how you will be able to bring the new tree to the selected site.

The UNI Vacant to Vibrant Guide recommends a variety of trees as potential additions to your Summer Shade woodland; however, each woodland is unique. You may want to discuss your woodland with an arborist or someone knowledgeable about trees.

Trees can be purchased in pots or balled and burlapped. Identify the location where you wish to plant the trees. Dig a hole three times the width of the root ball and equal to the depth.

Pots should be removed before placing the tree in the planting hole. Balled and burlapped root balls should remain wrapped until placed in hole. Unwrap the top on third of the root ball and peel back the burlap once planted. Remove any twine, nails, or stakes. The root flare should be level with the ground when you place the tree in the hole.

Water the root ball, then backfill the hole with the soil previously removed from planting. Add water to the tree every six inches as you backfill the hole. Compact the soil lightly after each watering until the hole is filled with soil and level with the adjacent ground.

Plant trees as soon as possible on lot. If you cannot plant them the same day, do not leave unplanted trees in direct sunlight. Keep them in shade and well-watered until you can plant them. (Trees dry out fast!)

For more guidance on tree planting, refer to the step-by-step planting instructions available in the UNI Vacant to Vibrant Reference Section, www.uni-kc.org.
Summer Shade Step-By-Step

☐ Call Before You Dig
Locate underground utilities before beginning your lot design. Call 1-800-DIG RITE (800-344-7483) or 811 at least three days before you plan to start digging on your lot.

☐ Add Perennials
Would you like to add additional or new planting to the forest floor? This lot design suggests a few shade-loving groundcovers and perennials for your forest patch. If your lot is in full sun, seek alternative planting options. The suggested plants are Missouri wildflowers and require moist soil and shade.

Woodland plants do not require mulch. Mix plants in with existing woodland plantings or scatter across the forest floor.

If you are looking for additional woodland plants, two good references are Missouri Wildflowers Nursery (www.mowildflowers.net) and Taylor Creek Restoration Nursery (www.restorationnurseries.com).

Mulching: Spread your lot with newsprint or cardboard and cover with mulch.

☐ Maintain Your Lot Design
This lot design requires an ongoing series of maintenance strategies. Over time and through the seasons, your ‘maintenance’ will be to continually evaluate the condition of your woodland, remove any unwanted species, manicure the edges, and add new species as desired. Monitoring your woodland will help keep it healthy and enjoyable throughout the year.

The UNI Vacant to Vibrant Guide recommends connecting with an arborist or taking a workshop on tree health and maintenance if you need more information on woodland management.

☐ Sow Clean Edge
After removing scrub and unwanted vegetation from the edges of your property, do you need a new groundcover? If you are seeking a lower maintenance alternative to a traditional lawn, the UNI Vacant to Vibrant Guide recommends a fescue seed mix. You will need approximately 7.5 pounds of fescue seed mix for urban edge areas (refer to plan on page 10) and 20 yards of mulch or wood chips.

This family of floppy grasses is very drought-resistant and requires one cutting (in August or September) per year. Fescue can be established in full sun to shade and should be seeded in spring (mid-March to mid-May) or fall (August to September).

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. Apply seed mix to a damp lot.

Sow seed across the remaining lot by using a seed spreader or by hand. A seed rate of five pounds per 1,000 square feet is recommended. 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. Germination blankets or straw can be purchased at most nurseries and garden stores.

Once established, grass will not require supplemental watering except during unusually dry periods.

Other UNI Vacant to Vibrant Guide lot designs can be used as groundcovers. Check out www.uni-kc.org for additional options and ideas.

Next Level: If you would like to bring additional color to your grass, you can plant bluebells, crocuses and/or daffodils to create a decorative show in spring. Bulbs should be planted in the fall.

For more guidance on bulb planting, refer to the step-by-step planting instructions available in the UNI Vacant to Vibrant Reference Section, www.uni-kc.org.
Strengthen your neighborhood’s identity! Align your “clean edge” with the front setback of adjacent houses.

## Plant Options

Select the trees, perennials, and groundcovers that best suit your lot’s site conditions and space requirements.

### Understory Trees
- **Serviceberry**  
  *Amelanchier arborea*  
  20’ Height x 20’ Width
- **Pawpaw**  
  *Asimina triloba*  
  30’ Height x 10’ Width
- **Redbud**  
  *Cercis canadensis*  
  25’ Height x 25’ Width
- **Pagoda**  
  *Cornus florida*  
  15’ Height x 20’ Width

### Larger Trees
- **Black Gum**  
  *Nyssa sylvatica*  
  40’ Height x 30’ Width
- **Red Oak**  
  *Quercus rubra*  
  60’ Height x 60’ Width
- **American Sycamore**  
  *Platanus occidentalis*  
  75’ Height x 75’ Width

### Perennials
Some species available at Missouri Wildflowers Nursery ([www.mowildflowers.net](http://www.mowildflowers.net)).
- **Bluebells**  
  *Mertensia virginica*
- **Jacob’s Ladder**  
  *Polemonium reptans*
- **Squaw Weed**  
  *Packera obovata*
- **Wild Ginger**  
  *Aserum canadense*
- **Wild Columbine**  
  *Aquilegia canadensis*
- **Wild Sweet William**  
  *Phlox divaricata*

### Plant Sizes

- **Pots:** 1.5 inch diameter trees are available at commercial landscape supply stores in pots or balled and burlapped (B & B).

  Perennials can be purchased in one to five gallon pots or bulbs. Size of pots can change based on availability.
### Did You Know?

<table>
<thead>
<tr>
<th>Helpful Facts</th>
<th>Planting Tips</th>
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<tbody>
<tr>
<td>• The United States has the same acreage of woodland area today as in the year 1920. (Arbor Day Foundation fact.)</td>
<td>• Call ahead to make sure the nursery or garden store has the plants you need for your lot design.</td>
</tr>
<tr>
<td>• Woodlands make and conserve fertile topsoil.</td>
<td>• Water after planting and as needed.</td>
</tr>
<tr>
<td>• Woodlands provide habitat and can increase wildlife population.</td>
<td>• The best time to plant trees and shrubs is in the spring or fall.</td>
</tr>
<tr>
<td>• If you plant Trillium, do not pick it as it can weaken the whole patch.</td>
<td>• Do not plant in extreme heat.</td>
</tr>
<tr>
<td>• Use extreme caution when operating a chain saw. Each year in the United States, 40,000 injuries or deaths are caused by chain saw use. (Arbor Day Foundation fact.)</td>
<td>• Make sure the open space within your woodland is large enough for any new trees you wish to add.</td>
</tr>
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Image Source: "A view of two flowers on a branch of a pawpaw tree asimina triloba" by Ryan Hagerty, U.S. Fish and Wildlife Service.
Draw Your Lot: Summer Shade