



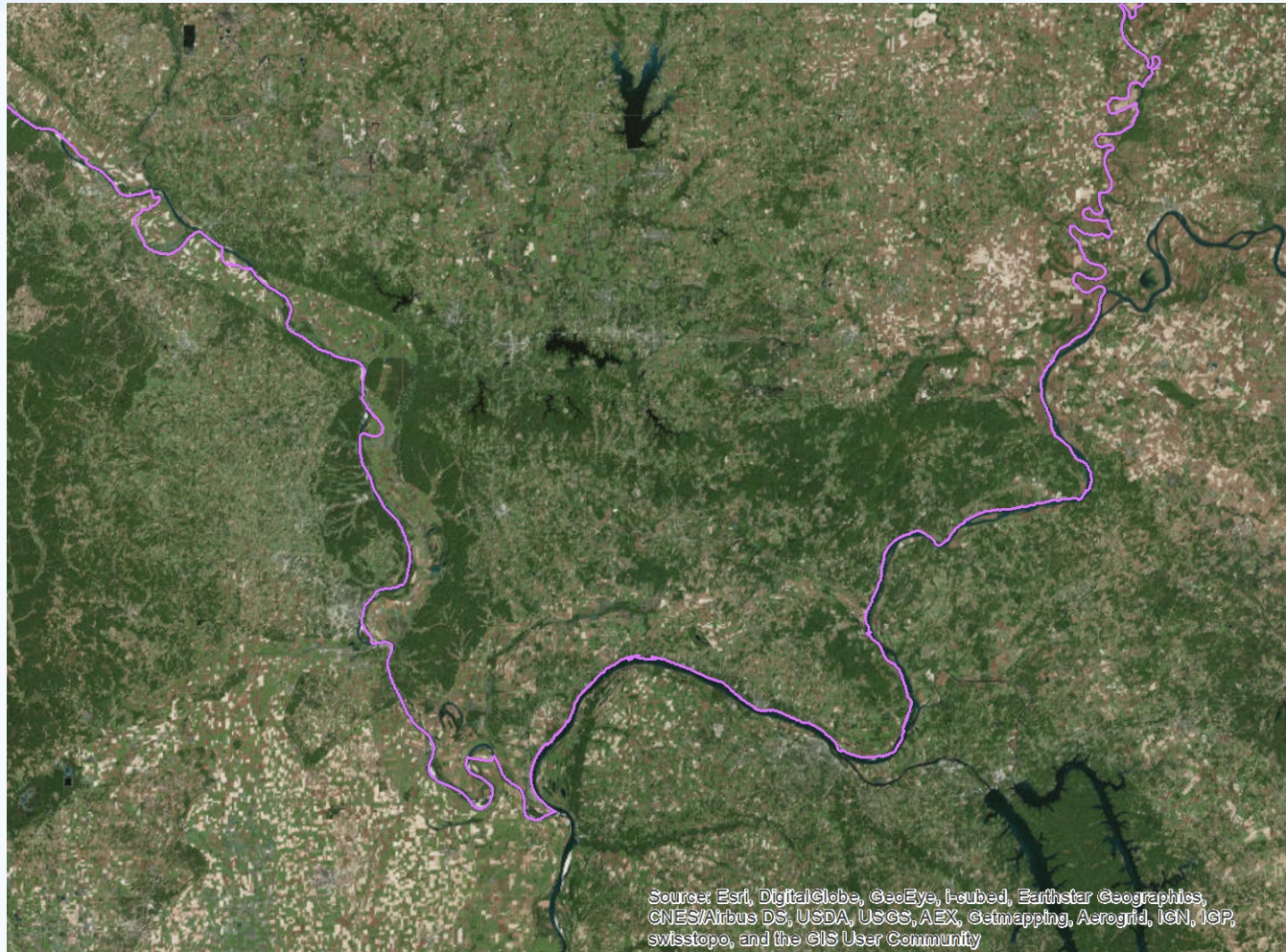
The Push to Save Southern Illinois' Forests

Let the Sun Shine In

Tracy
Fidler



Save our forests?

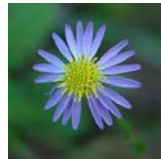


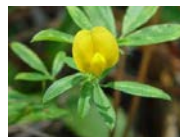
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





















1



1



1



3



1



3



3



Dry Upland – 7 out of 57

<i>Danthonia spicata</i>	poverty oatgrass
<i>Elymus hystrix</i>	bottlebrush grass
<i>Krigia biflora</i>	two-flower Cynthia
<i>Lespedeza violacea</i>	violet bush-clover
<i>Cunila origanoides</i>	stonemint
<i>Galium pilosum</i>	hairy bedstraw
<i>Helianthus divaricatus</i>	woodland sunflower



1



1



1



3



1



3



3



Dry Mesic Upland – 8 out of 59

Botrichium virginianum rattlesnake fern

Brachyelytrum aristosum north shorthusk

Bromus pubescens hairy woodland brome

Cynoglossum virginianum wild comfrey

Luzula multiflora heath wood-rush

Monarda bradburiana eastern beebalm

Muhlenbergia sobolifera rock muhly

Solidago caesia blue-stemmed goldenrod





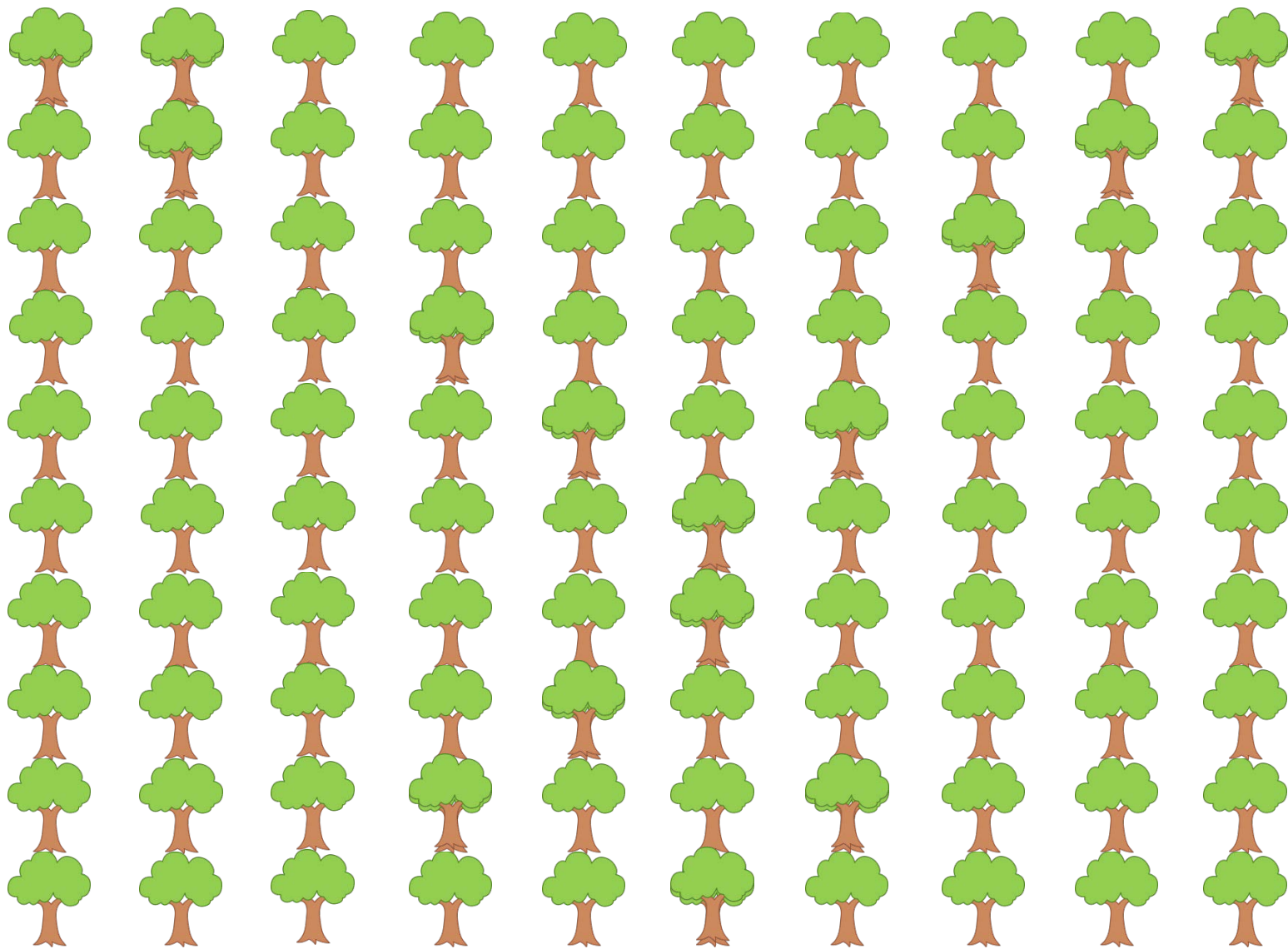


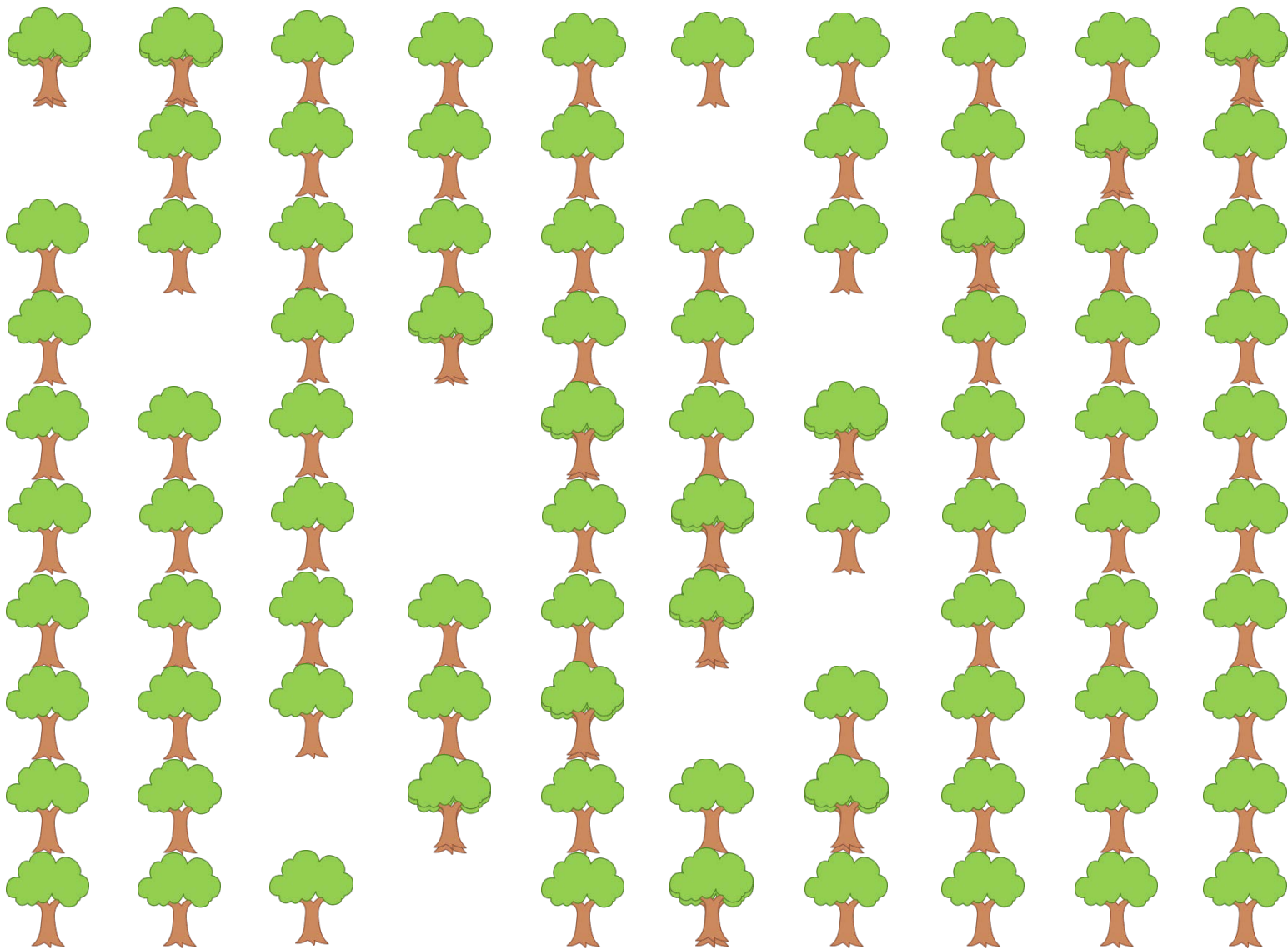
Parthenocissus quinquefolia
Virginia creeper
68

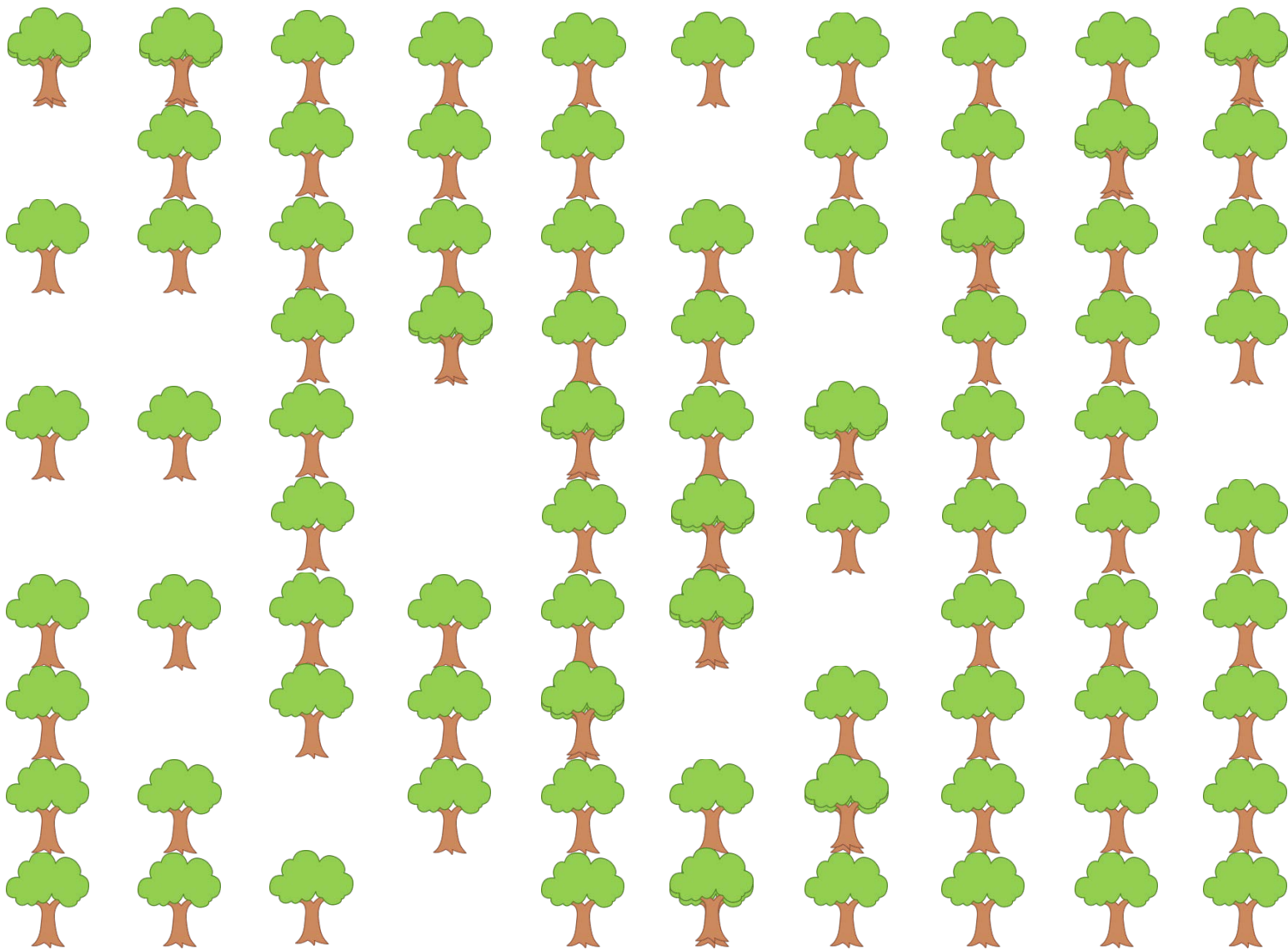


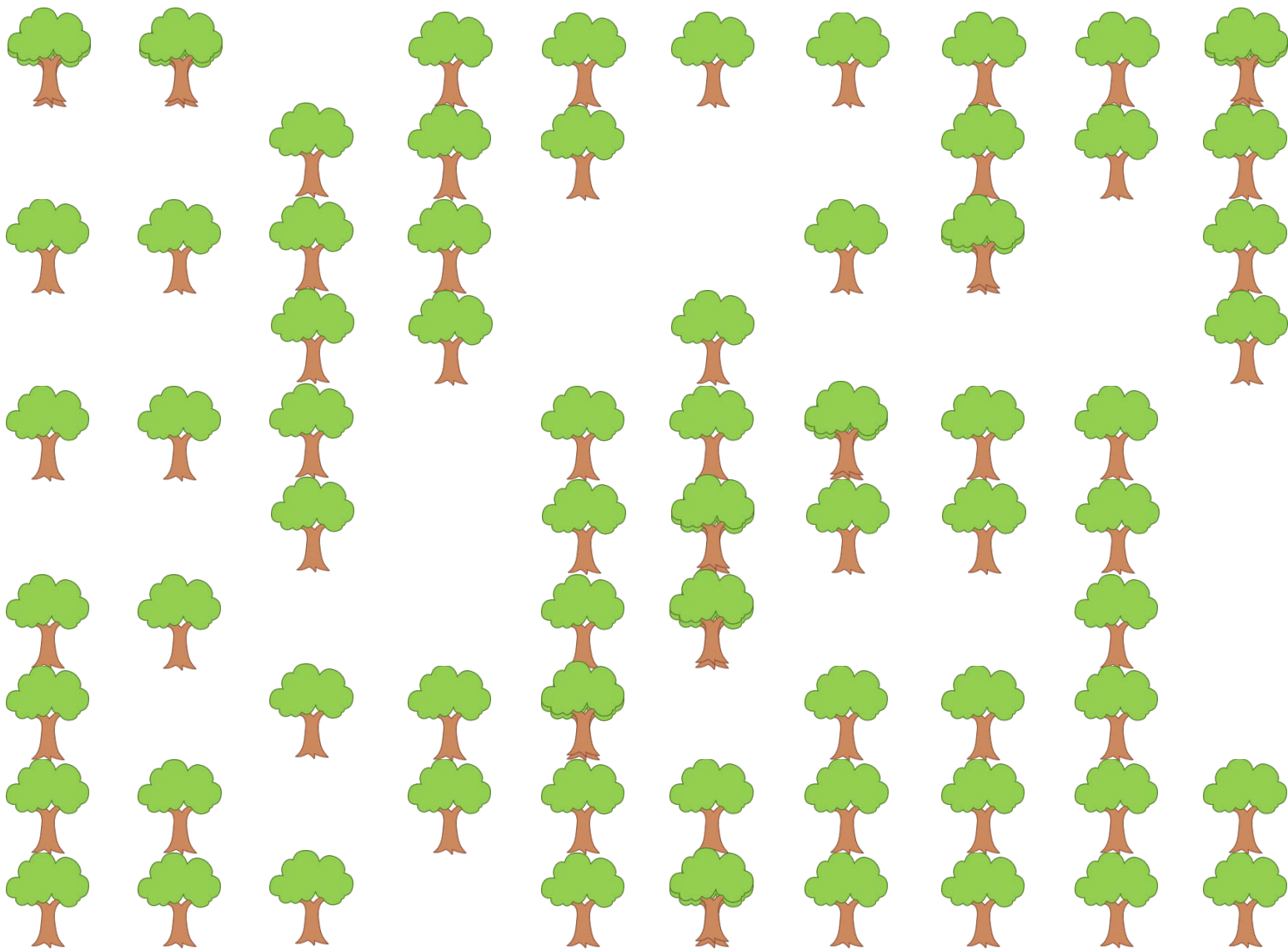
Toxicodendron radicans
poison ivy
73

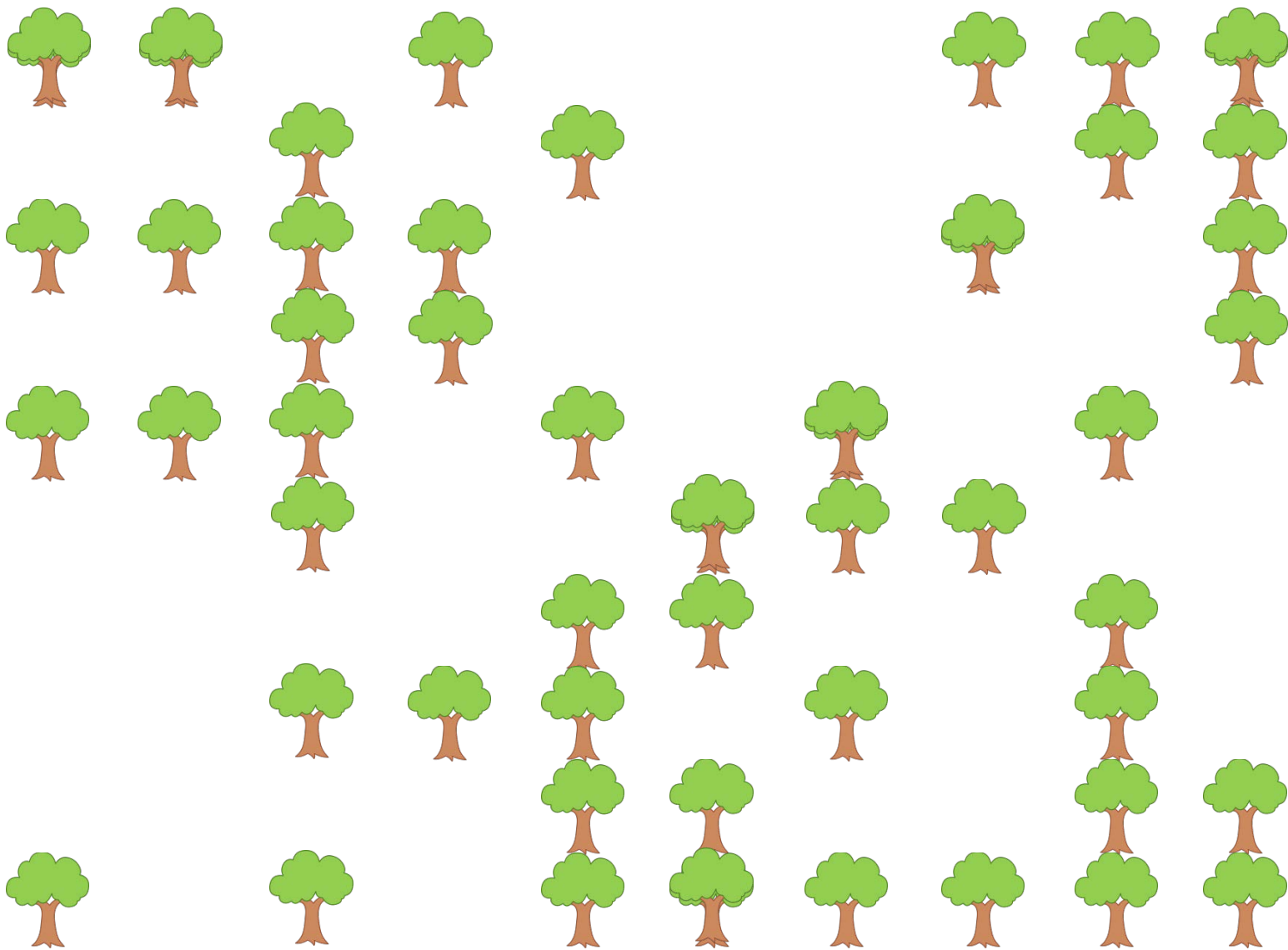


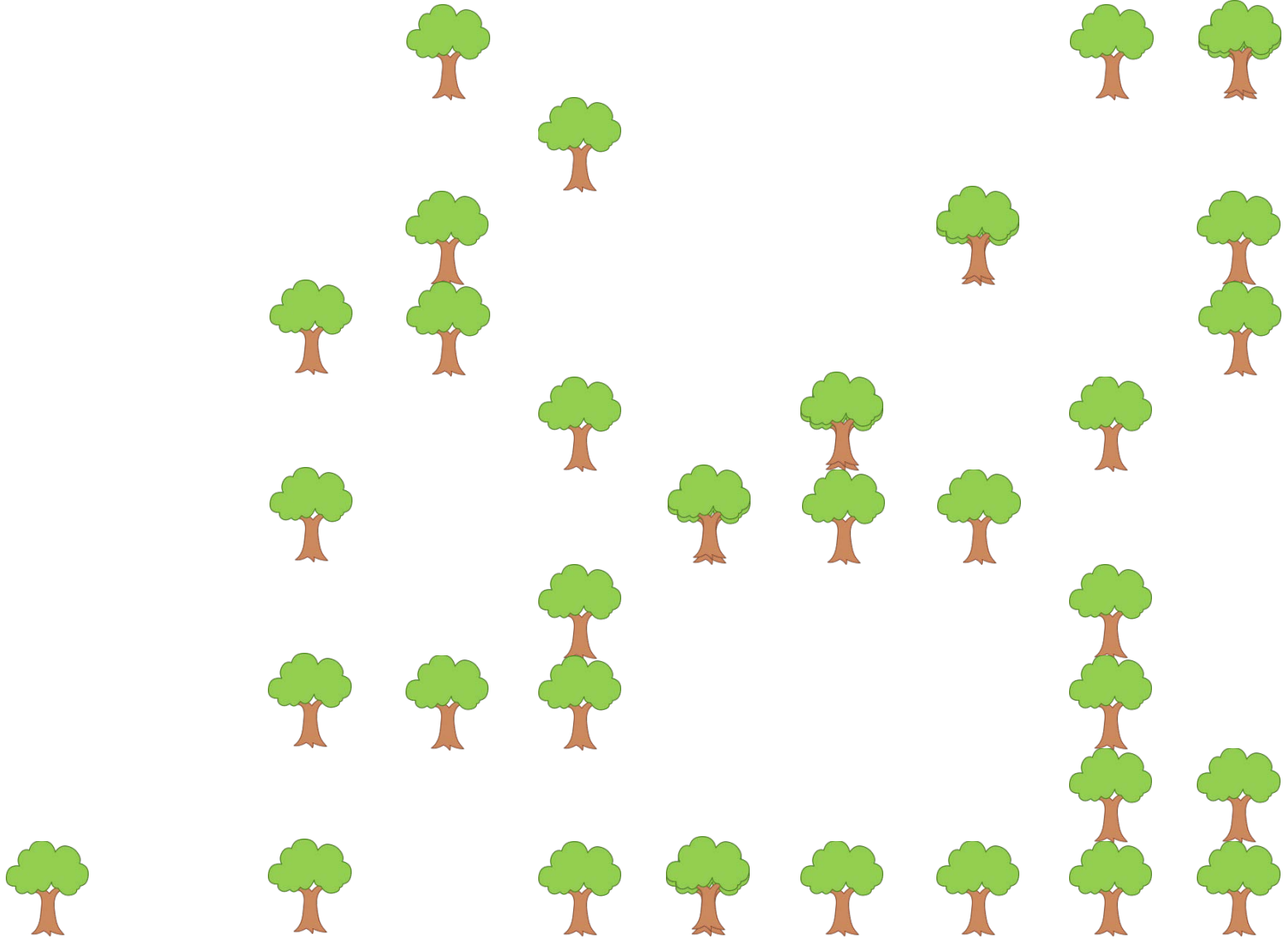


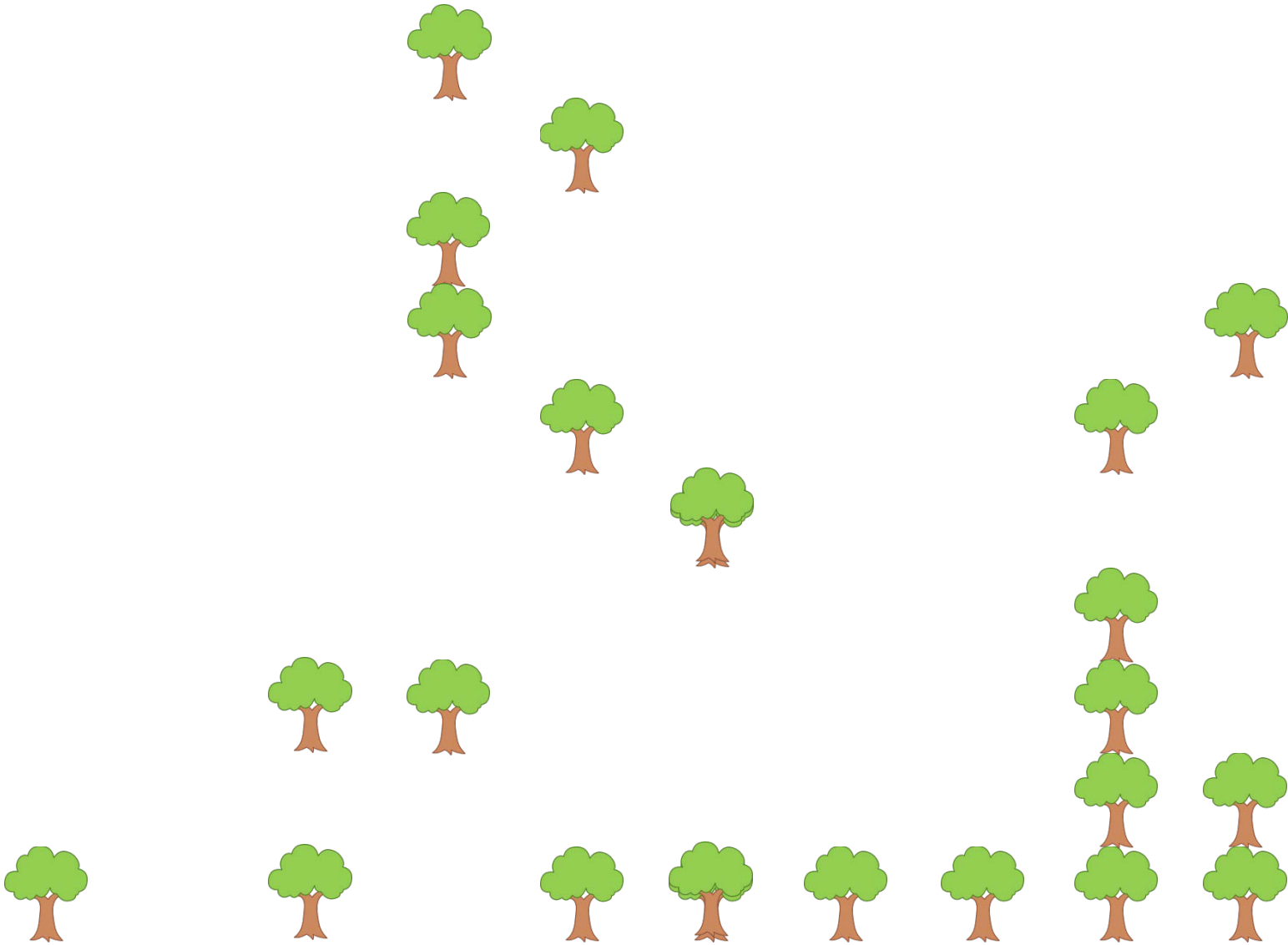














1 out of 100
saplings is an oak.



1980
Today

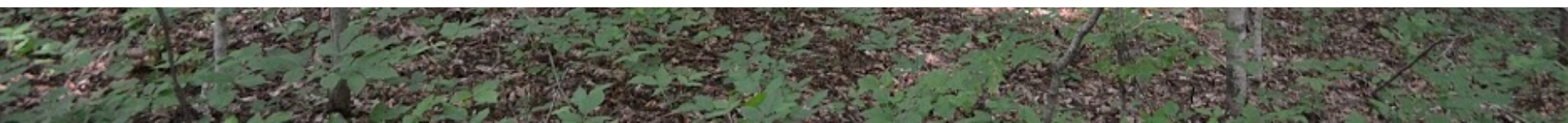
1 in 3

1 in 5

Canopy



So, why do we have this forest?



95 percent



65 percent







Benefits of this Forest

Flowers provide nectar for pollinators, seeds and other food sources.

Ground cover provides cover and places for brood rearing.

Down, dead wood provides cover, nesting sites and produces invertebrates.

Snags provide nesting sites, cover and produce invertebrates.

Trees provide food, nesting sites, dens, etc.



Fire suppression;
canopy closure;
increased shade

Dramatic increase
of shade-tolerant,
mesophytic trees

Decreased flammability
due to mesophytic litter and
cool, humid microclimate



Pre-1900

Mid-1900s

Early 2000s

Foreseeable
future





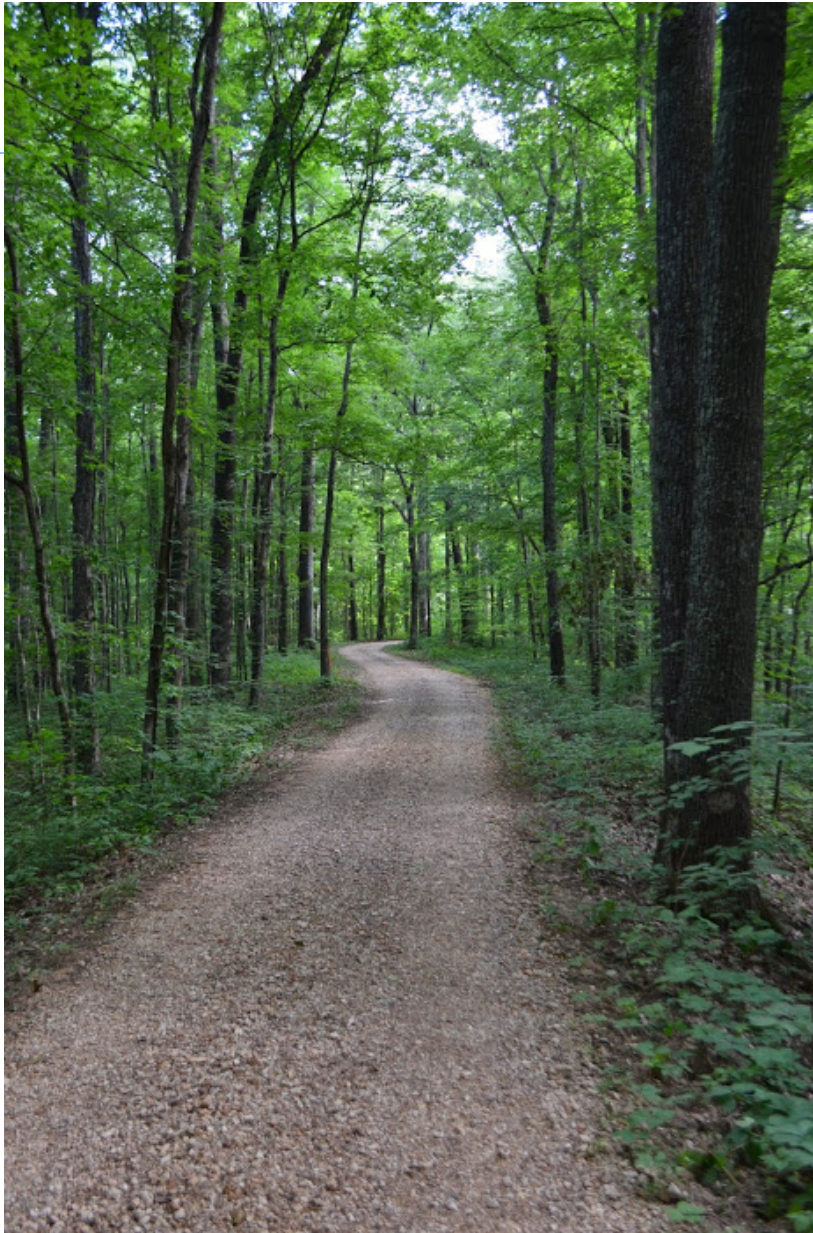
The Illinois Ozarks may be the first forest in central North America to completely convert from oak-hickory to maple-beech.

— Fralish & McArdle (2009)



The potential for a trophic cascade ... is real. The loss of these early-successional mast-producing species and the decline in the volume of nuts and large buds will likely reduce the populations of larger wildlife species. There also will be a major negative impact on herbaceous stratum richness. The loss of green herbaceous foliage and fruits will impact insects, as well as Neotropical migrant birds, a portion of which feed in the understory.

— Fralish & McArdle (2009)



Restoration opportunities are rapidly waning as (a) fire-adaptive floras are progressively lost to shading, competition, and preferential herbivory; (b) older seed-bearing individuals succumb to old age and existing seed banks lose viability over time; and (c) understory and forest floor conditions become increasingly mesophytic. — Nowacki and Abrams (2008)



Lisa Helmig (1997)
predicted the Illinois
Ozarks' conversion could
be complete by 2050.





Oak forests are more diverse than maple forests.





Oaktober



You can be part of the solution.

But how?

- ▶ Role of fire in forest management
 - Charles Ruffner, SIU Forestry
- ▶ Role of invasive species control
 - Kevin Rohling, River to River CWMA
- ▶ Role of thinning and harvesting
 - Ben Snyder, IDNR Forest Resources



A stylized, colorful illustration of a landscape. The foreground features rolling green hills with a dark brown path winding through them. On the left, there is a green tree, a purple flower, and a small orange bush. A red bird is flying in the sky above the tree. The background consists of a white sky with blue, wavy, horizontal bands at the top.

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