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Engineers in the Community

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Engineers in the Community: Homegrown National Park

David Zhang
zhang.david@wustl.edu

Hernan Perez
Washington University in St. Louis

Simran Ajwani
Washington University in St. Louis, asimran@wustl.edu

Carolyn Duncan
Washington University in St. Louis, duncan.c@wustl.edu

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Homegrown National Park (HNP)



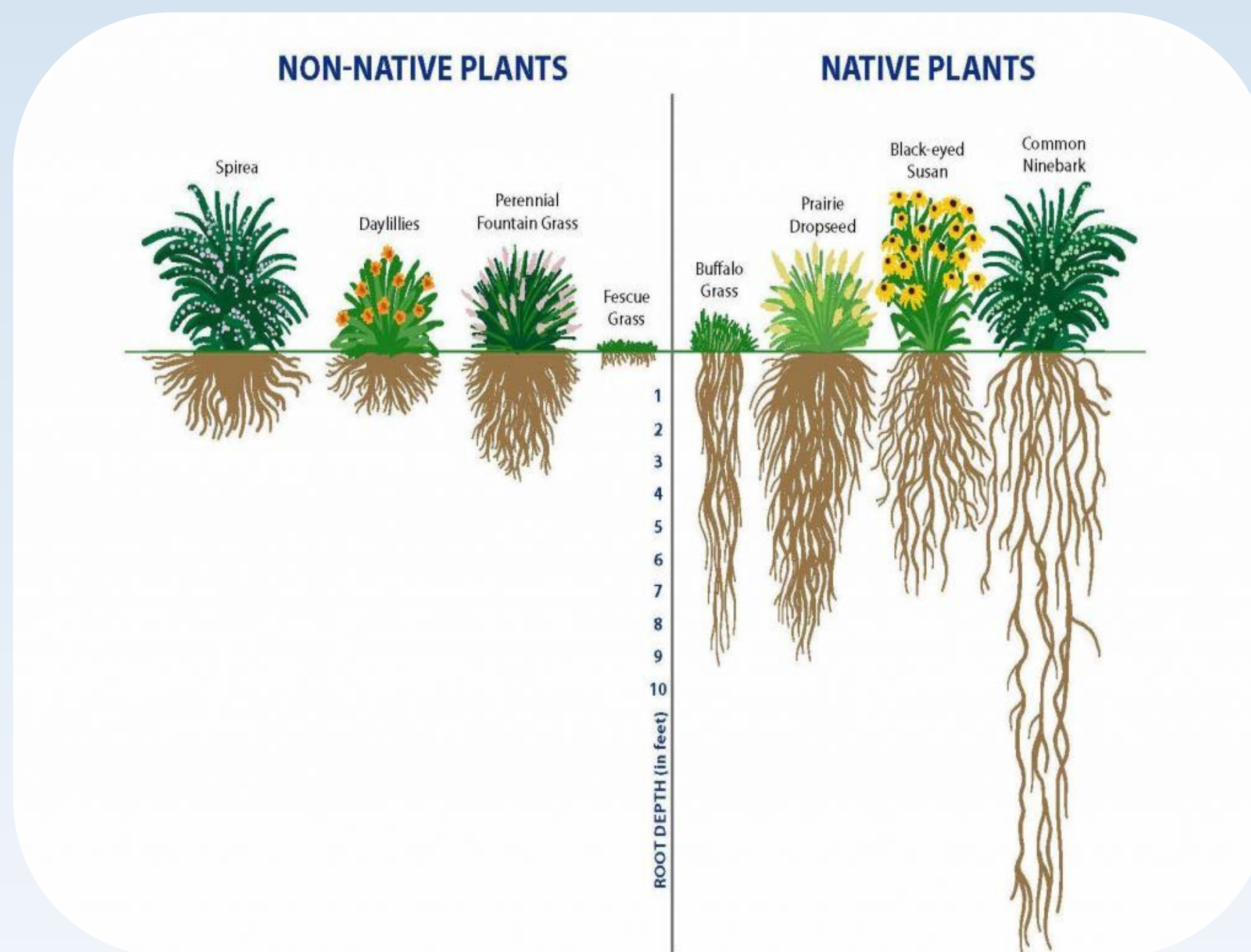
Simran, Hernan, Carolyn, David

Homegrown National Park

Homegrown National Park is a call-to-action to improve biodiversity and redevelop ecosystem function by planting native plants. This is a collective effort by anyone with soil - farmers, land managers, property owners, individual homeowners, and more. It is the largest conservation project attempted in the US.

Aims to:

- create new networks between species in the ecosystem.
- enlarge large populations of plants and animals to withstand population fluctuations indefinitely
- have 20 million acres of native plantings across the US which is roughly half of privately-owned properties' green lawns.
- decrease homeowners lawn by 50% in area and increase native plants by 70% in volume

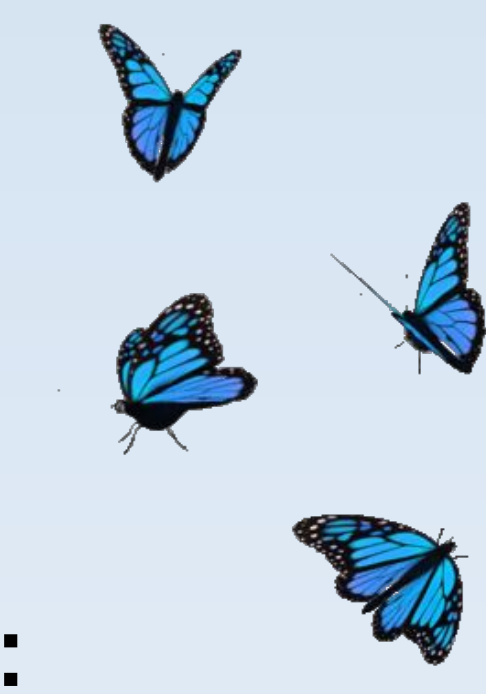


Why are Native Plants Important?

Native plants are species that have grown in a particular area since before human settlement. These plants have formed symbiotic relationships with local fauna over thousands of years, and therefore provide the most suitable habitat for these creatures.



- Some native plants in Missouri include:
 - Baja Burgundy
 - Rudbeckia Fulgida
 - Purple beardtongue
 - Cardinal flower
- Native plants benefit all ecosystems by:
 - Stabilizing the **soil**
 - Filtering, increasing infiltration of, and helping to retain ground **water**
 - Purifying the **air**
 - And providing **food** and **shelter** to local wildlife



Our Project Scope and Goals

This semester, we plan to create an online calculator that integrates with ArcGIS for users to be a member of the HNP. The criteria for membership are decreasing the lawn size by 50% in area and increase native plants by 70% in volume.

Potential Team Visits

- **Donald Danforth Plant Sciences Center:** A plant center whose mission is to improve human condition through plant science.
- **Brightside St. Louis:** A nonprofit organization that educates local people to make the St. Louis region green and environmentally sustainable.
- **Missouri Botanical Garden:** A botanical garden for people to discover more about plants and how they are connected to our lives.
- **Cortex Innovation Community:** An innovation community to create knowledge and strategic partnerships across St. Louis.

