



Photo: U.S. Fish and Wildlife Service



**The Climate
Reality Project[®]**

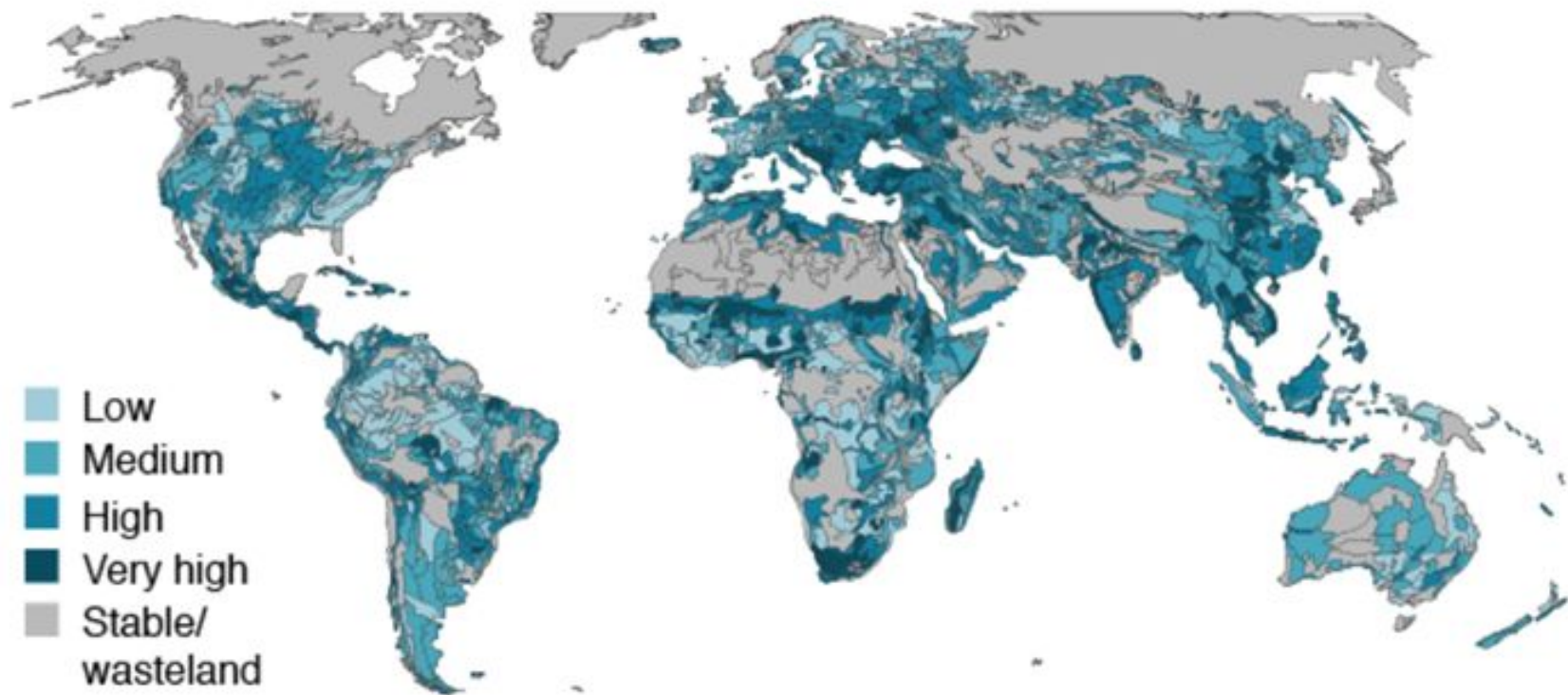
CHICAGO METRO CHAPTER

Native Landscaped Gardens

Patty Iverson

Human Induced Soil Degradation

Areas worst affected by soil erosion

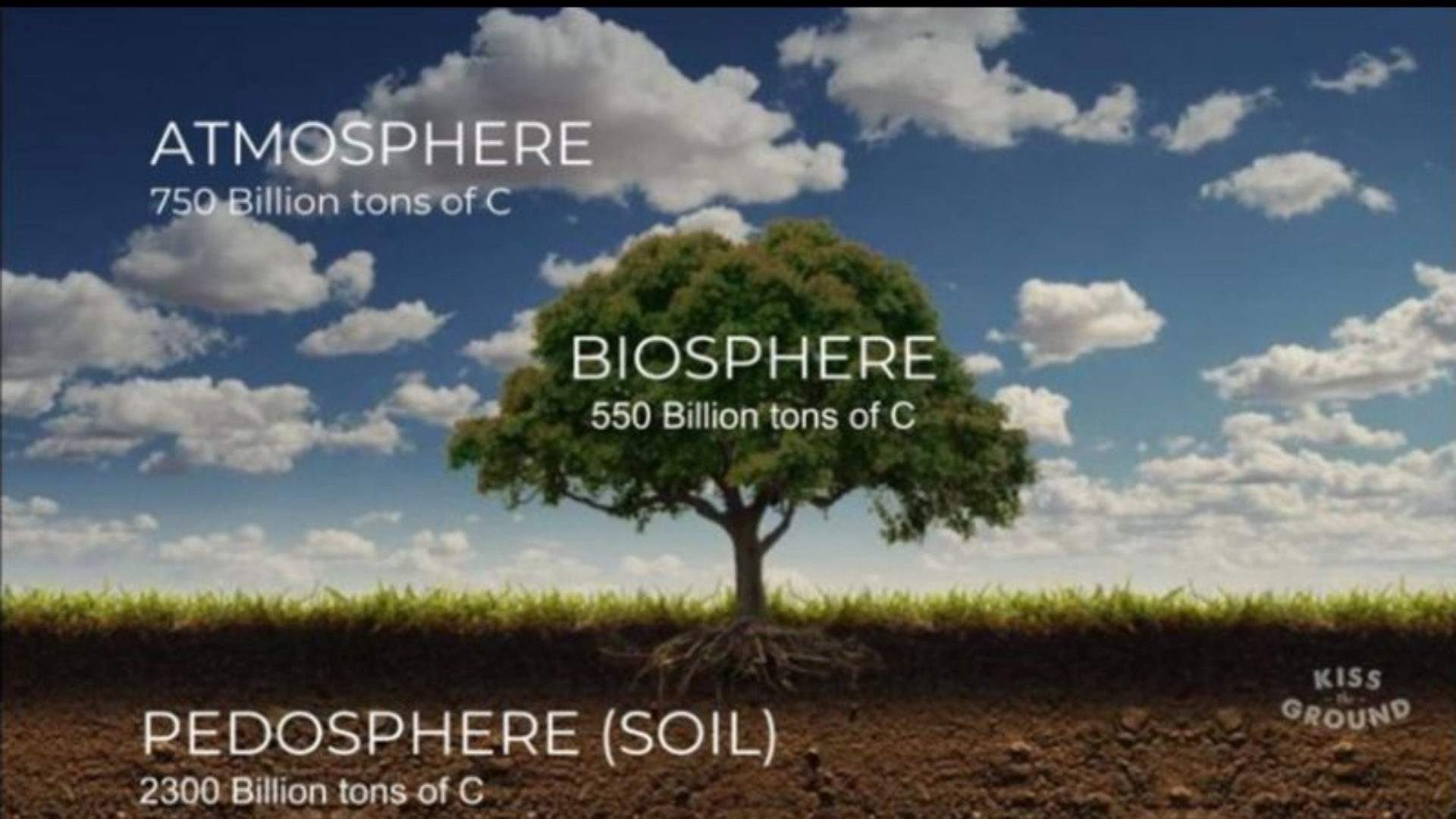


Source: ISRIC/GLASOD project

Carbon Sequestration

“Agriculture and the food system are key to global climate change responses.”

- IPCC Special Report on Land 2019

A large, leafy green tree stands in a field of tall grass. Below the ground line, its roots are exposed in dark brown soil. The background is a bright blue sky filled with scattered white clouds. Text is overlaid on the image, comparing carbon storage in the atmosphere, biosphere, and soil.

ATMOSPHERE

750 Billion tons of C

BIOSPHERE

550 Billion tons of C

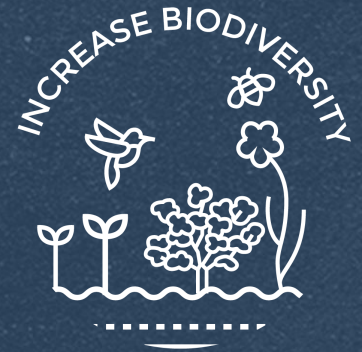
PEDOSPHERE (SOIL)

2300 Billion tons of C

KISS
the
GROUND

SIX PRINCIPLES

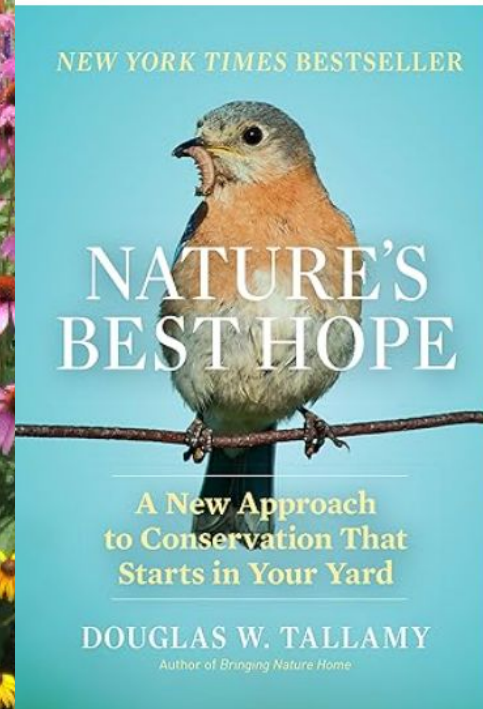
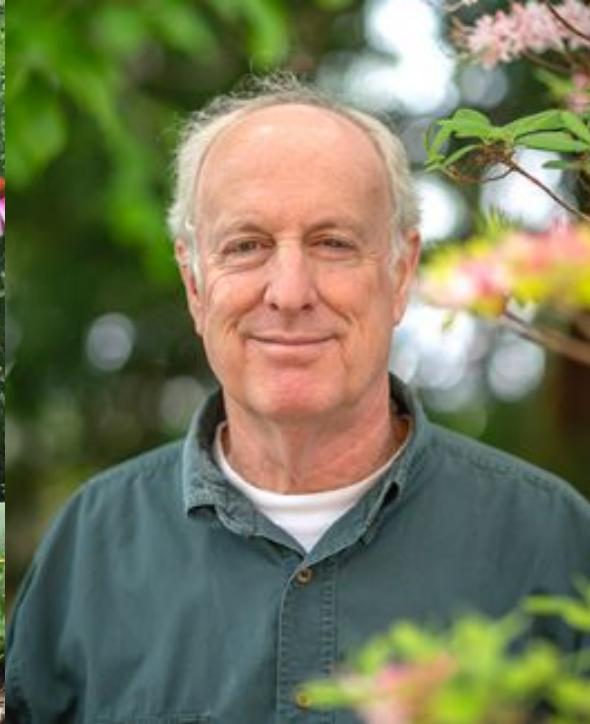
OF REGENERATIVE AGRICULTURE



Regenerative Agriculture: A Climate Change and Food System Solution



Why Garden With Native Plants at Home?



Douglas Tallamy, Nature's Best Hope, Homegrown National Park

Why Garden With Native Plants at Home?

- Native prairie, woodland and wetland plants have evolved to thrive in our natural conditions and, after the first two or three seasons of establishment in your yard, typically require less maintenance than a conventional lawn or garden.





Why Garden With Native Plants at Home?

- Native plants do not require chemical fertilizer or pesticides as they are less prone to disease and pests, and can save you money in the long-term, while helping the environment and creating a healthier place for yourself, your family, and your community.





Why Garden With Native Plants at Home?

- Native plants can be quite beautiful and lend your backyard a sense of place rooted in natural history, while providing food and shelter to support birds and beneficial insects, and keystone pollinators essential for healthy ecosystems.



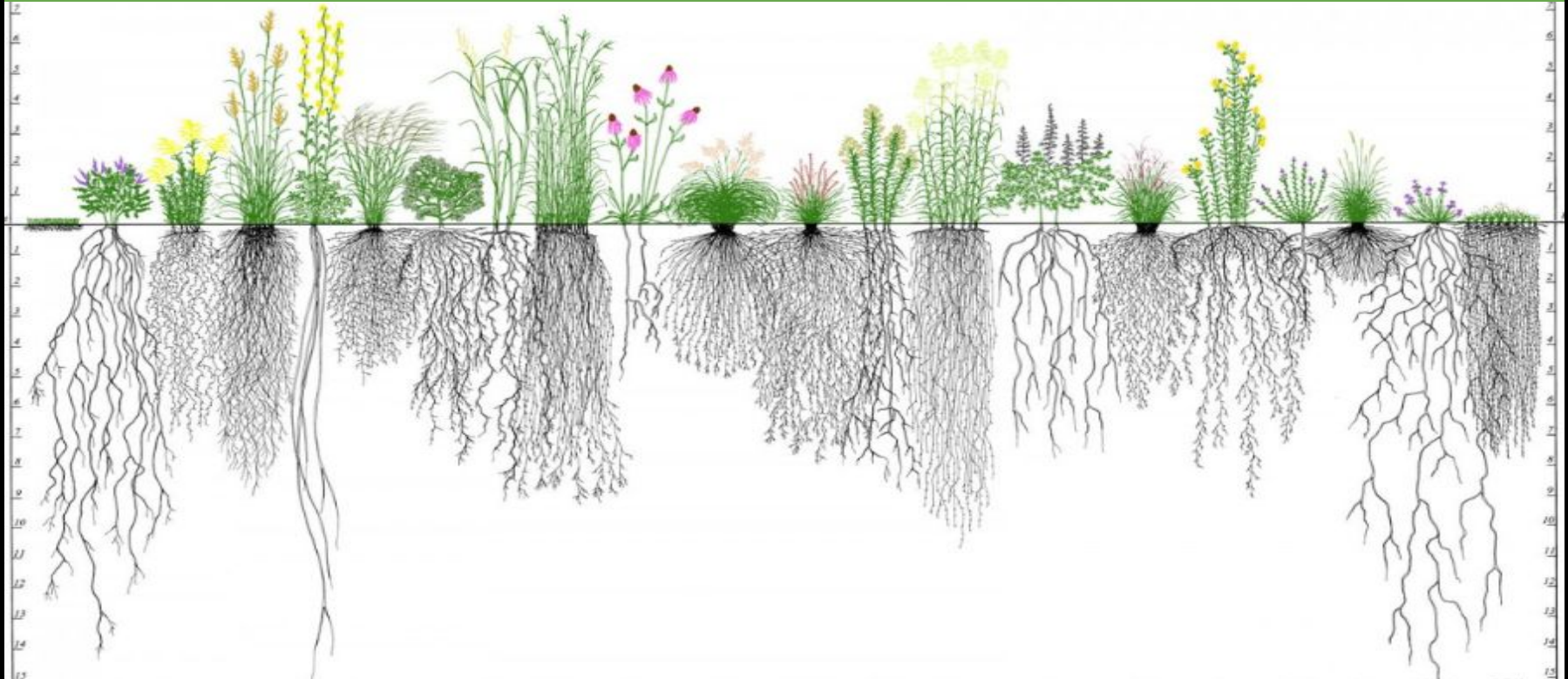
Why Garden With Native Plants at Home?

- **KEYSTONE SPECIES** are plants that are essential to the life of many species and are unique to local food webs within ecoregions.
 - Examples: Oaks, goldenrods, sunflowers, Black-eyed Susans, Joe Pye-Weed, Swamp Rose, Milkweeds.



Why Garden With Native Plants at Home?

- Once established, native plants develop extensive root systems, 5-14 feet deep, that absorb water & nutrients and mitigate flooding and drought.



Why Garden With Native Plants at Home?

- Native plants provide nature corridors enabling species to move between naturalized areas. Most native bees have a range of about 750 meters, so the goal is to connect properties that have established pollinator-friendly habitat and food sources for bees, butterflies, hummingbirds and other pollinating insects and wildlife.



Why Garden With Native Plants at Home?

- Native plant gardens prevent the spread of invasive plant species, which disrupt plant communities or ecosystems. Most invasive plant seeds love naked soil. Dense, native landscaping is the best protection against invasive plants taking hold.





The Challenge With Native Gardens and HOA's

- Traditionally, HOA communities enforce conventional landscape aesthetics - namely turf grass and other nonnative plants that do not support biodiversity and require chemical fertilizers and pesticides.

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- Get pictures of native gardens
 - Make a landscape plan
 - Phase in changes over time
 - Become a board member
 - Connect with other projects
 - Enlist experts to visit & weigh in
 - Know the land characteristics
 - Any Master Naturalists/Gardeners
 - Make room beloved exotics

How Do I Create a Native Garden?

1. Select a type of garden: rain garden, songbird, butterfly or pollinator garden



How Do I Create a Native Garden?

2. Choose native plants to fill your garden based on whether your garden gets full sun, partial shade, or complete shade.



How Do I Create a Native Garden?

3. Find plants uniquely suited to supporting wildlife in your region (Keystone plants).

Water Conservation: follow your water

It's easy to keep rainwater on your property so you can use it or let it soak into the ground by redirecting downspouts to gardens and plant sedges to sequester water.



Water Conservation: follow your water

- Water barrels and cisterns can be purchased through many city programs and allow you to capture rainwater for periods when water is in short supply





Water Conservation: follow your water

- Install native plants, especially where water collects or flows (many have deep roots and thus soak up tremendous amounts of rainwater). Some species work especially well in these locations.

Adding new native garden plots



Eco-friendly lawns and chemical use

“The positive effect of soil carbon sequestration on the climate footprint of intensively managed lawns was found to be negated by greenhouse gas emissions from management operations such as mowing, irrigation, and fertilization...The short uniform lawn through its monoculture and intensively managed lawnsapes has dislodged the majority of native zonal plant communities in urban environments.” Tidaker et al (2017)

”So...

- Reduce the size of your lawn
- Cutback on lawn chemicals
- Mow and water for healthy grass
- Aerate and add a thin layer of compost
- Treat problem areas, not the entire lawn
- Add bluebells or clover to deepen roots



The American Lawn



Will you create a native garden to help restore soil health, sequester carbon, and heal the Earth?



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