

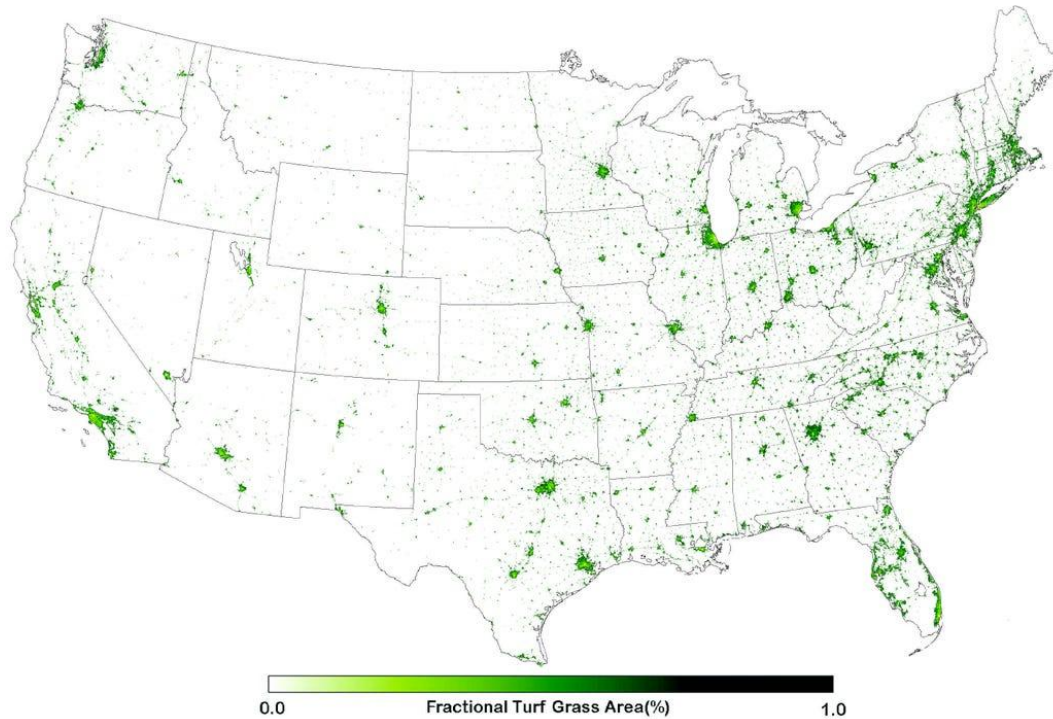
The #1 most irrigated and fertilized crop in the  
U.S. is....



## 10 major sod grass varieties used in the US:

- **Kentucky Bluegrass** - Native to Algeria and Morocco
  - **Bent** - Native to Europe and parts of Asia
    - **Bermuda** - Africa
  - **Dichondra** - South America
  - **Fine Fescue** - Europe
- **Ryegrass** - southern Europe, the Middle East, North Africa
- **St. Augustine/Floritam** - Gulf Caribbean and West Africa
  - **Tall Fescue** - Europe and Central Asia
  - **Zoysia** - South Eastern Asia and New Zealand
    - **Centipede** - China

# Grass Lawns in America

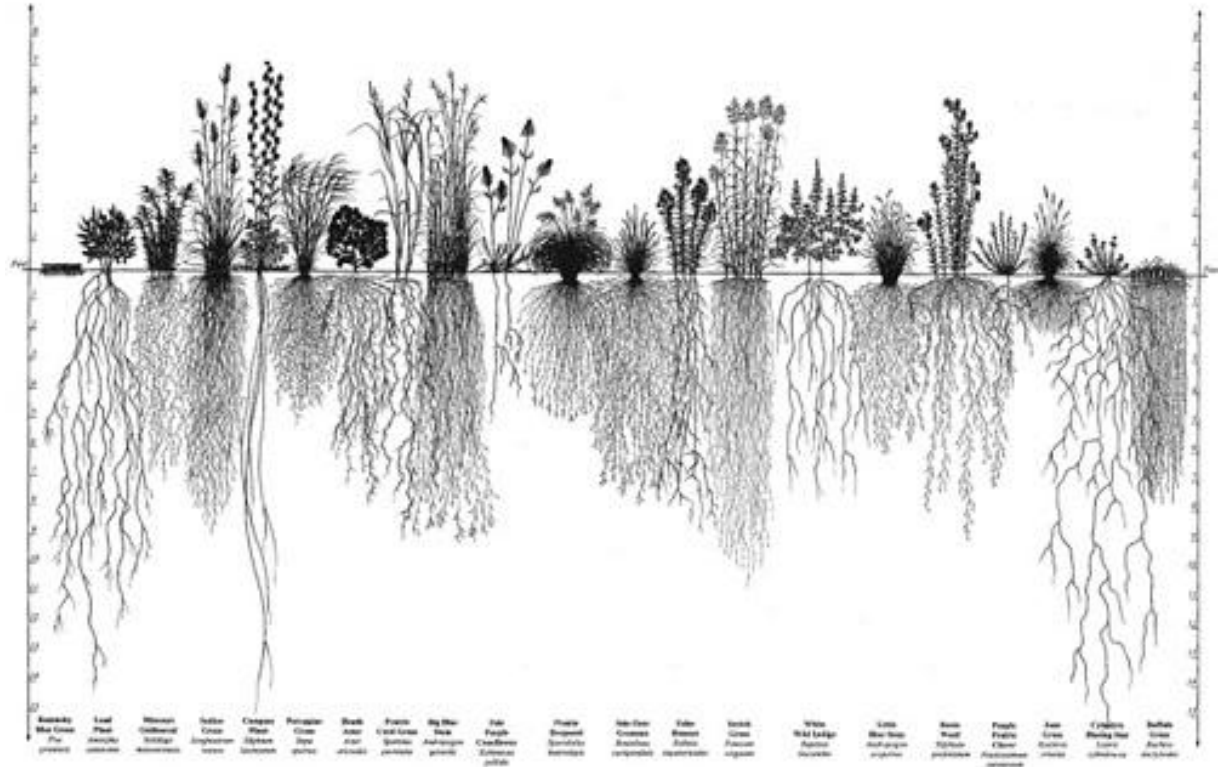


Over 40 million acres of land in the continental US has some form of lawn on it, making up 2% of continental land in the US - **more than corn.**

## Sod grass roots compared to North American native wildflowers/prairie grasses



# Restoration projects along the mississippi river^



See Kentucky bluegrass on the far far left...



It is so hard to find research *against* sod grass lawns...

It is deeply ingrained in american culture - associated with sports, home, affluence, american dream.

Turfgrass Producers International



University Turfgrass Management Degree Programs



Industry Giants

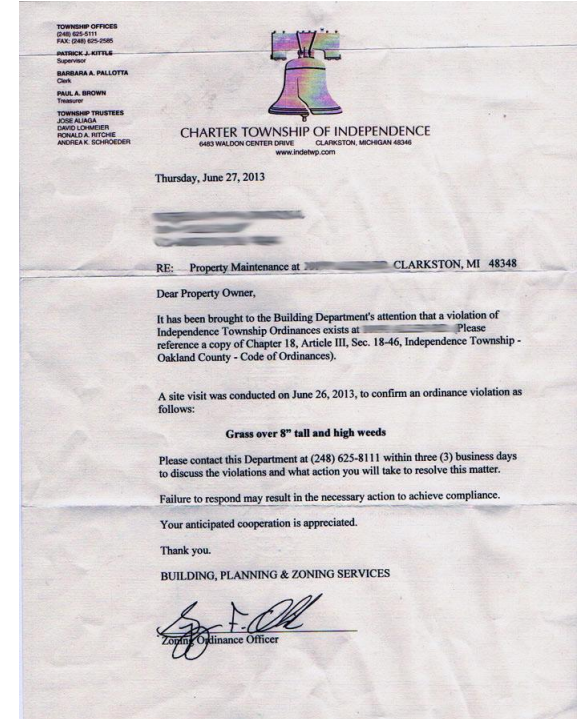


"It is estimated that in 2019, the industry generated a combined total revenue of just over 99 billion U.S. dollars, with an average spend of 503 U.S. dollars per household on lawn care and gardening activities."

# Social influence of lawns

Managing a lawn is written in city ordinances - take care of your grass, or you are fined

a form of Social Control?  
keeping those that can't afford to keep a lawn out...







*Lawn mowing luxury!*

NEW INVENTED PILOT WHEEL KEEPS LAWN-BOY LEVEL

No hand-trimming with LAWN-BOY. Trims to 5/8" of trees, walls, walks.

From LAWN-BOY! A new concept in lawn care — level-cut, smart-looking lawns . . . easily!

Lightweight LAWN-BOYS roll along . . . leaving behind the world's levellest-cut lawns. They're built to do just that . . . designed to make your lawn the beauty spot of the neighborhood. And the new LAWN-BOY AUTOMOWERS eliminate drudgery. They're self-propelled, start instantly and have the simplest, surest control. LAWN-BOY Automowers are available in 18" or 21" sizes. But pick any of the eight beautiful LAWN-BOY models. Your lawn will show the difference . . . for years! Ask your LAWN-BOY dealer for a free demonstration.

21" AUTOMOWER . . . IT'S SELF-PROPELLED!

**LAWN-BOY**  
LAWN-BOY, Lamar, Missouri • Division of Outboard Marine Corp., makers of *Evinrude* and *Johnson* Outboard Motors.  
In Canada: LAWN-BOY, Peterborough, Ontario

For the name of your LAWN-BOY dealer look in the Yellow Pages under "Lawn Mowers", or call Western Union, by number, and ask for Operator 25.



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Live life outside.®

For new lawn service call:  
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**Landscaping Made Easy.**

**ONLY \$29.95\***  
First Application

**Healthy Lawn Guarantee**  
We guarantee all of our services because your lawn means more to us.\*

Click here to learn more.

Advertisement examples targeting upperclass white families - historically not inclusive, and still the cornerstone of neighborhood life



**GREEN INDUSTRY Pros™**  
The Management Resource for Landscape Contractors

MAY/JUNE 2019

**DEALER SUCCESS GUIDE**

**THE TOOL SHACK:**  
Building a reputation on honesty, equipment, parts and customer service

**BATTERIES SPARK PRODUCT INNOVATION**  
Producing less noise and few emissions are among advantages to using battery-powered equipment to make companies "greener."

**BEYOND THE BLADE**  
**SPRING LAWN CARE TIPS TO HELP EXPAND SERVICES AND BUSINESS**  
Getting the new season off to a good start by implementing five best practices

**Full Line of Air Filters for 2019!**

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Brings up questions around control, attack against nature, power over nature.



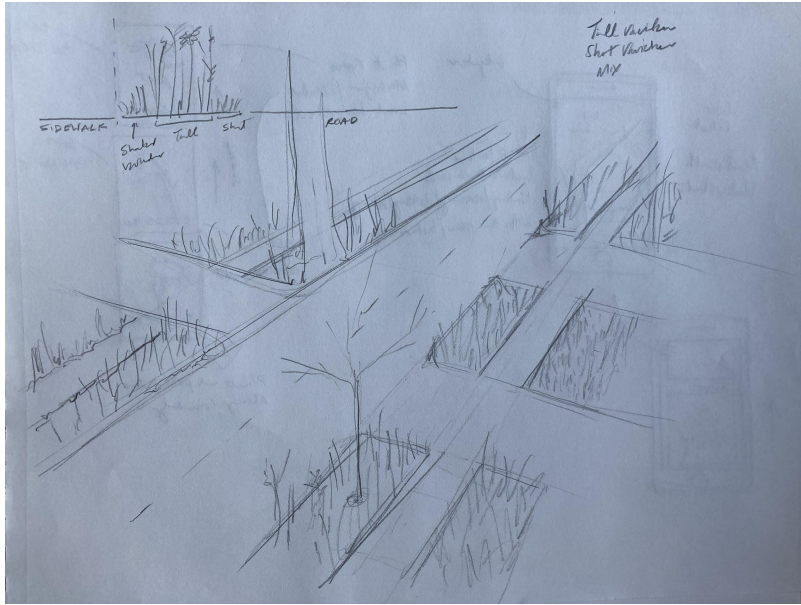
# The Pollinator Highway Project



Where it began...







Volunteers transform the first 5 feet lawn from the road into no-maintenance wildflower gardens with Native plants

Could expand further into lawns - what the homeowner feels is "nonessential"





Examples of Wildflowers in relation to grass and roads

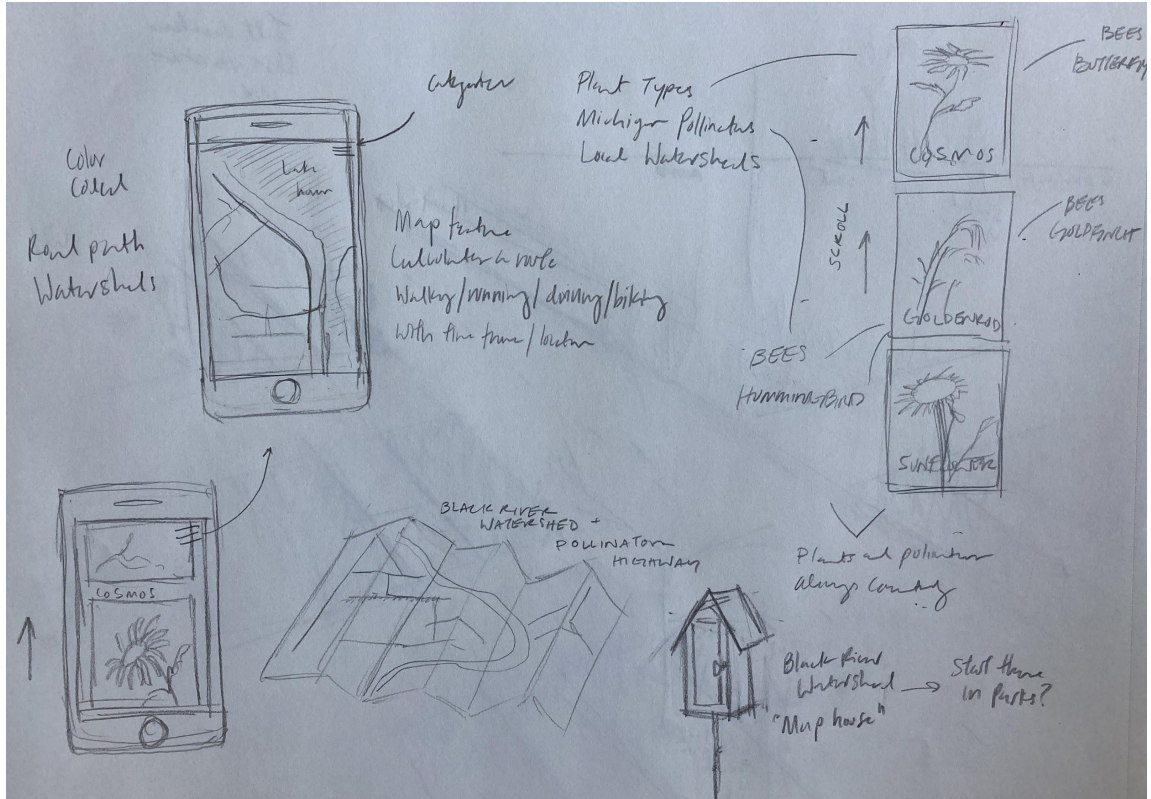


App to connect the city - guides people through the gardens and teaches about plants in bloom/pollinators -

Lots of opportunity to bring neighborhoods together around local plants and wildlife.

A reason to get outside after a year of isolation

City support of neighborhood environmental stewardship and engagement

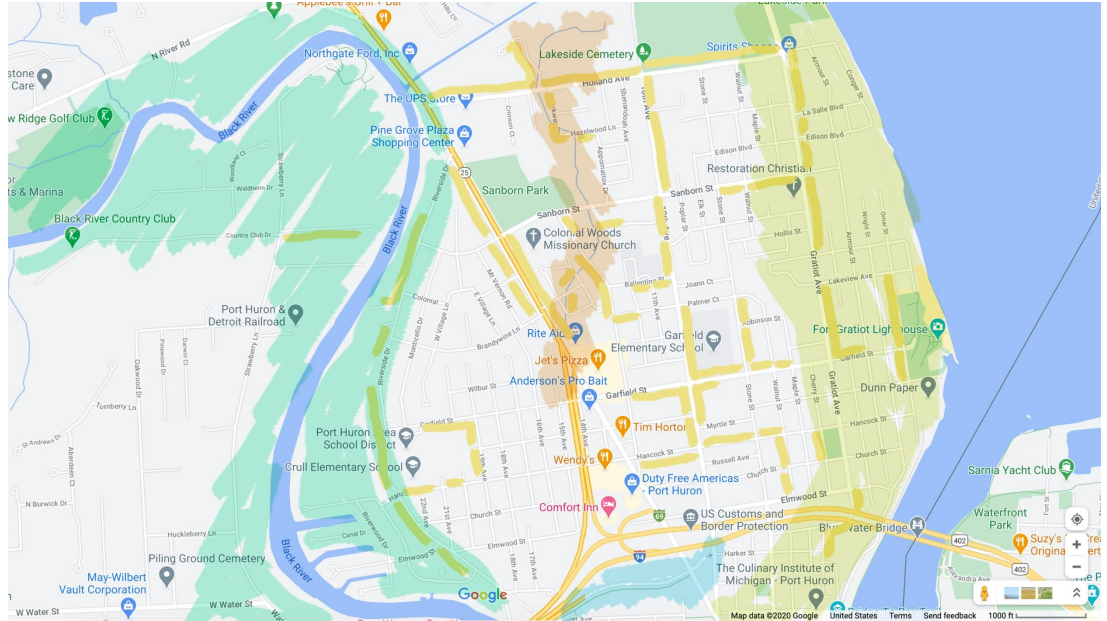


Local community volunteers, Friends of the St. Clair river, etc

Goals: surveying interest - will people be willing to participate in allowing their lawns to be altered? What about volunteer interest?

How can this transform ideas about the lawn as part of a larger ecosystem -

Lawns as a choice! Not forced





# Port huron 2013 lawn ordinances

The language says: to maintain "Community Standards"

(5) Landscaping. Landscaping not meeting the following:

"Noxious Weeds"

Shrubs must not block view of house

Lawn maintained to prevent "weeds"

Lawn mowed regularly

Grass cannot exceed 8" in height

- a. Does not create a visual barrier, safety or environmental hazard, contribute to conditions of erosion or blight or is a violation of city codes.
- b. Ground surfaces covered with a lawn, as defined in Sec. 22-33, except a paved or graveled driveway, approved parking area (in accordance with city codes), or garden area.
- c. Shrubs trimmed in a manner that provides a clear view of the front entrance and does not create a visual barrier or hazard.
- d. Lawn maintained to prevent the establishment of noxious or poisonous weeds and vegetation with no accumulation of dead grasses, weeds, brush, underbrush, or similar vegetation. If a weed barrier material is used, it must be a product normally sold for that intended use, such as landscape fabric.
- e. Lawn mowed regularly so as to not exceed eight inches in height.
- f. Maintaining that portion of land adjacent to the property between the city sidewalk and curblines or edge of the roadway and the right-of-way areas, including lawn extensions and public alleyways.

This is all a cultural a mindset about how homes and cities should look.

# Port huron 2013 lawn ordinances



nox·ious

/ˈnäkSHəs/

*adjective*

harmful, poisonous, or very unpleasant.

"they were overcome by the noxious fumes"

Similar:

poisonous

toxic

deadly

virulent

harmful

dangerous



*"Lawn"* means grass or sod to hold the earth and to prevent dust and/or the establishment of noxious weeds.

*"Noxious or poisonous weeds"* includes Canada thistles, milkweed, wild carrots, oxeye daisies, ragweed, goldenrod, burdock dodders, mustards, poison sumac, hoary alyssum and poison ivy.

Noxious to who? Lawn care companies?

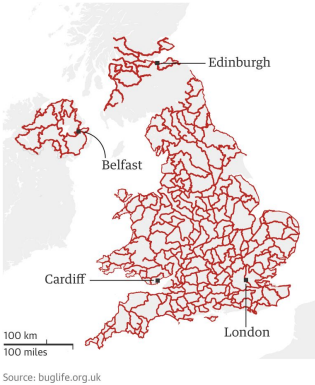
Thistles, milkweed, wild carrot are all very important for birds and pollinators!

# Case Studies

## UK "Beelines"

## Memphis TN - wolf river greenway

### Wildflower corridors

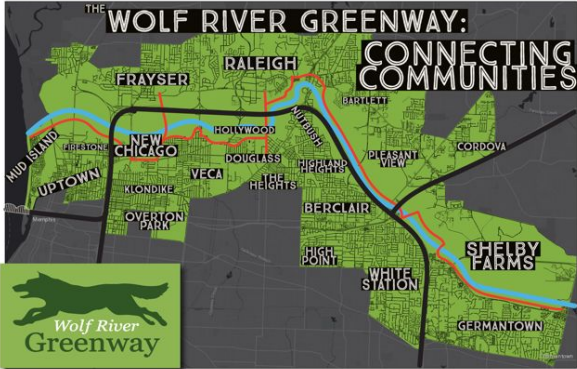


Catherine Jones, pollinator officer and B-Lines lead at Buglife, says: "A complete England B-Lines network is a landmark step in our mission to reverse insect declines and lend a hand to our struggling pollinators." B-Lines will cover the whole of the UK when maps for Scotland, Wales and Northern Ireland are completed later this year.

Since the charity began mapping B-Lines six years ago, with financial support from the Department for Environment, Food and Rural Affairs (Defra), it has worked with a range of partners, including local wildlife trusts and their volunteers, councils, highways agencies and landowners. Together, they have created hundreds of hectares of wildflower between fragmented sites.

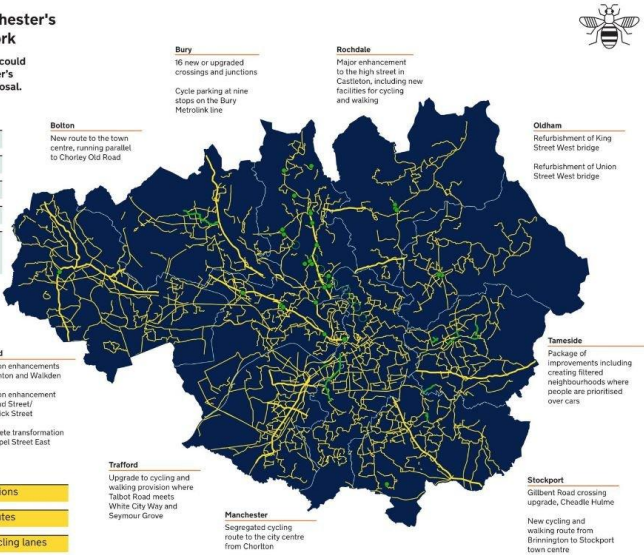
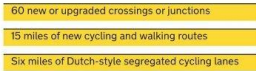
Just south of Bristol on a long-term partnership with Herring, Buglife's conservationists recorded another increase in the number of carrot-mining bees, on that hadn't been seen since 2012. The wildflower-rich habitat, umbellifer flowers on which are restored by volunteers.

"It was very exciting to find this small black will encourage local communities and develop



### The plan for Greater Manchester's cycling and walking network

The first 15 infrastructure projects that could be funded as part of Greater Manchester's cycling and walking infrastructure proposal.



For detailed plans visit [mappinggm.org.uk/beelines](https://mappinggm.org.uk/beelines)

## THE LAKE EFFECT

ART

## ENVIRONMENTAL SENTINEL

## A CLIMATE MONITORING ARTWORK

PLANT

Why does the Serviceberry reveal the Lake Effect?



Serviceberry's temperature sensitivity will visualize the cold spring air with a 5 day bloom spread.

LAKE

Why is The LDB important for Chicago?



The orientation and proximity to the Lake provide an unparalleled opportunity for climate observations.

CLIMATE

What is phenology and how does it monitor the climate?



Phenology is the ancient science of observing nature's calendar and the cycle of biologic events, helping us understand our climate over long periods of time.

CITIZEN

How can I get involved?



Citizen Scientists + Citizen Artists come together to understand the climate of Chicago and our collective future.



Chicago Corridor -  
emphasis on  
engagement through  
citizen science



Detroit Cultural Center  
design competition to  
connect all of the  
institutions in this square

Idea of better connecting a  
community/making  
connection for a more  
fun/engaging/enriching  
downtown experience





# Michigan Avenue Rain Gardens

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c/o Tetra Tech



# Why now? In the face of Covid, Political division

- Living in a disconnected time
- Giving people a reason to go on a walk around their community
- In the face of environmental issues a role as a steward
- Rebuilding a connection to the environment and each other
- **Mental Health** - *Environ 360 Behavior and Environment* informs this aspect of the project. Directed Attention Fatigue (DAF) will affect people as we move further into the issue of climate change and urbanization of populations to cities.
  - Creating more sustainable, liveable, beautiful cities. (redefining what beautiful means)
- **Education** about native wildflowers and grasses - learning what varieties are which, their benefits, endangered status, and what pollinators rely on them.
  - Different uses from these flowers as well - herbs, etc.
  - endangered species specific to localized regions - both plants and animals.
- Discussions:
  - the role of sod, and how much we really need.
  - how we view land, and what we see as beautiful.
  - what sustainable lawns will look like in the future.
  - The history of sod! A symbol for affluence, control, and attack against the environment.
  - History of sod as a form of colonialism.
  - Where is sod from? Education about Sod.
  - Local Politics! Land Ordinances!
- Bring volunteers and organizations together. (Remotely and Covid Permitting)
- Create a connected system of organizations across the US together in a commitment to sustainability

# International Significance and Scalability

Port Huron is an international border! Situated on a major freshwater delta.

Especially Key: Goal #11 Sustainable Cities - has a very global take

