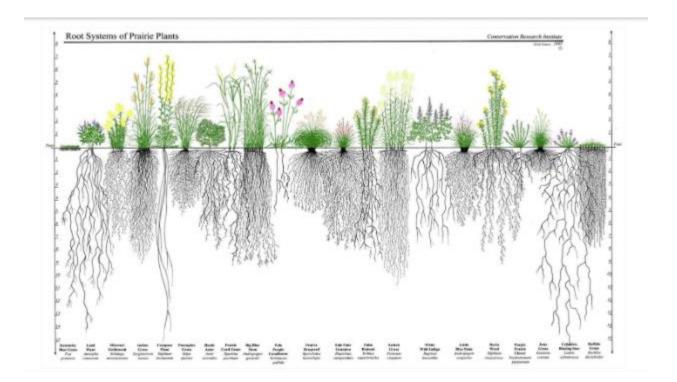


## Background on Native Plant Ecosystem Services & Demand for Local Ecotype Native Seed

## Supporting Clean Water, Increasingly Intense Stormwater Infiltration and Natural Filtration

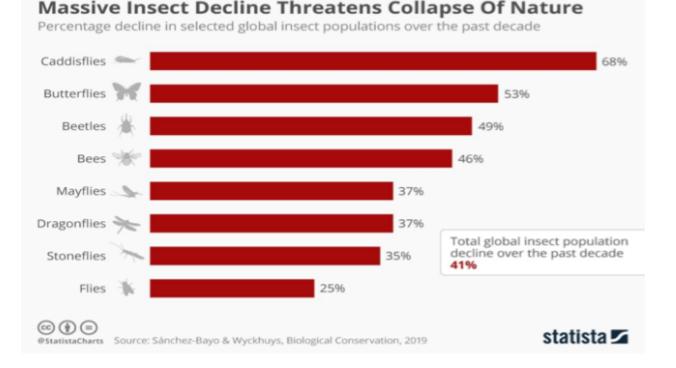
• Native plants have long and robust root systems, essential for absorbing water, reducing stormwater runoff, purifying water and for recharging groundwater. Far left on the image below shows turf/lawn grass (1 " roots) vs native plant roots. Lawns are compact surfaces that let <u>little</u> water percolate, whereas deep rooted perennials create root holes in the soil that loosens soil and makes fissures and holes for water to percolate downward - minimizing impact of intense rainfall.



- In the USA we convert 500 mi2/day to turf. This is land that once was thicket, meadow, grassland, trees, shrubs, understory with deep rooted native vegetation.
- Short grass does not sequester carbon like deep rooted perennials.

## Pollinator and Wildlife Decline

- In 2022 the NYS Department of Environmental Conservation's Empire State Native Pollinator Survey (2017-2021) published sobering data - that 38% of NYS's native pollinators are in danger of becoming locally extinct, with some estimates reaching as high as 60%. These are alarming statistics for agricultural producers, or for anyone.
- In 2023 Richard Ball, Commissioner of Agriculture for the New York State Department of Agriculture and Markets, said "Pollinators play a critical role in our agricultural industries statewide. We depend on our pollinating populations like birds, bees, butterflies, and other insects to help our crops grow and support the agricultural economy. Together with our fellow agencies, our partners at Cornell University, and our hard working farmers, we are committed to conserving and growing our pollinator populations to ensure a strong future for agriculture and our environment in New York. "
- We can **only** increase our pollinator populations if we give them (the pollinators) the habitat and food they need (- before it is too late and we don't have the populations to grow from). *Passing A9043 is imperative if NYS is to honor Commissioner Ball's and Ag and Market's commitment to increasing our pollinator populations in support of the NYS agricultural community.*





- Pollinator decline is risking loss of well over \$575 billion in global crops.
- Non native plants do not feed or provide habitat for our pollinators.
- Native plant species provide local pollinators, birds, and other wildlife with food and vital habitat resources. Many local wildlife species rely directly on native plants and cannot survive without them.
- Why is "local" important when it comes to native plants? Plants and wildlife began to evolve together when the glaciers began to recede. Plants that are locally adapted will better withstand climatic changes, increased rainfall and will serve the local/native insect and bird populations. For example: plants that are native to the Midwest USA may not be native to NYS and may not serve as food and habitat for local native insects and other wildlife. Plants from other continents most certainly do not service local wildlife and offer either very little or no ecological service.
- This <u>Capitol Pressroom radio segment</u> explains the importance of this bill.
- Today the bill sits on Governor Hochul's desk for her to sign. Read this plea.

## Demand for Local Ecotype Native Seed

- We (Go Native! perennials) get calls to convert acres to native herbaceous plants and grasses, which is great for water quality and biodiversity...but where do we get the seed and plants in sufficient quantities? We are growing them and trying to expand, but what we do is nowhere near the scale that is required to address the biodiversity and water quality crises. Currently I find seeds in ditches and on private land -- this is NOT scalable. As more land is converted, ditches mowed or sprayed, and native vegetation crowded out by invasive species - seeds are quasi-impossible to find. We are unable to control development, spraying or invasive species - but we CAN control production of and more access to local (and appropriate) native seeds and plants if there were a supply chain.
- 9 Element Plans are almost completed for the Finger Lakes. They are the ticket to funding support for "creating sponges" (absorptive capacity to address polluted stormwater surges into creeks, streams and lakes) using large plantings of deep rooted native perennial plants to protect drinking water resources. Where will we get all the seeds and plants that are needed?
- There is growing interest in planting native wildflowers, grasses and sedges in ditches to help slow and filter polluted water. Ditches are essentially pollution delivery systems to streams and lakes so creating a filtering system is fundamental. There does not exist a source for the seed that is necessary to either plant or to grow plugs for ditch restoration.
- Residential rain gardens are in demand, and the gardens need native plants.
- One might wonder why we don't buy from large nurseries that advertise "native plants" for sale. If there are any "native species" they are more often than not cultivars of native species, and not the true straight species. Cultivars are genetically modified plants to favor (human interest in) bloom color or timing, often at the expense of nectar and pollen for wildlife. Truly not optimal if we are trying to feed and house pollinating insects so that they reproduce.