

Attractive Native and Drought Tolerant Landscaping

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Hosted by the Sherborn Energy and Sustainability Committee
February 8, 2024

DSC-TV video recording: <https://www.youtube.com/watch?v=hKBQv6Qr6y0>

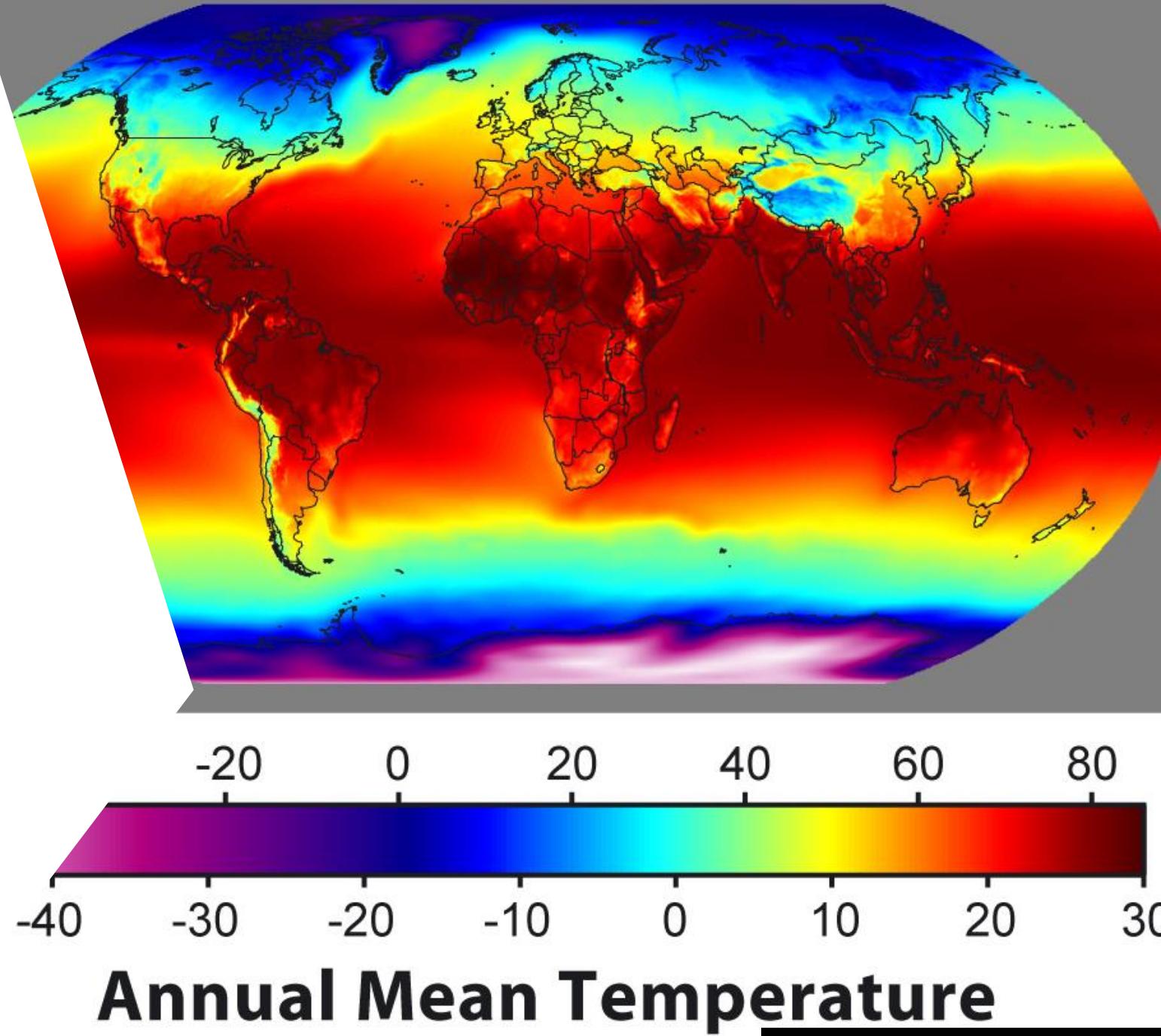


**I WAS JUST IN A
MEETING WITH PPL
WHO WERE RECENTLY
EVACUATED FROM
WILDFIRE AND PPL
RECENTLY EVACUATED
FROM FLOOD.
LET THAT
SINK IN.**

• September 3 2021

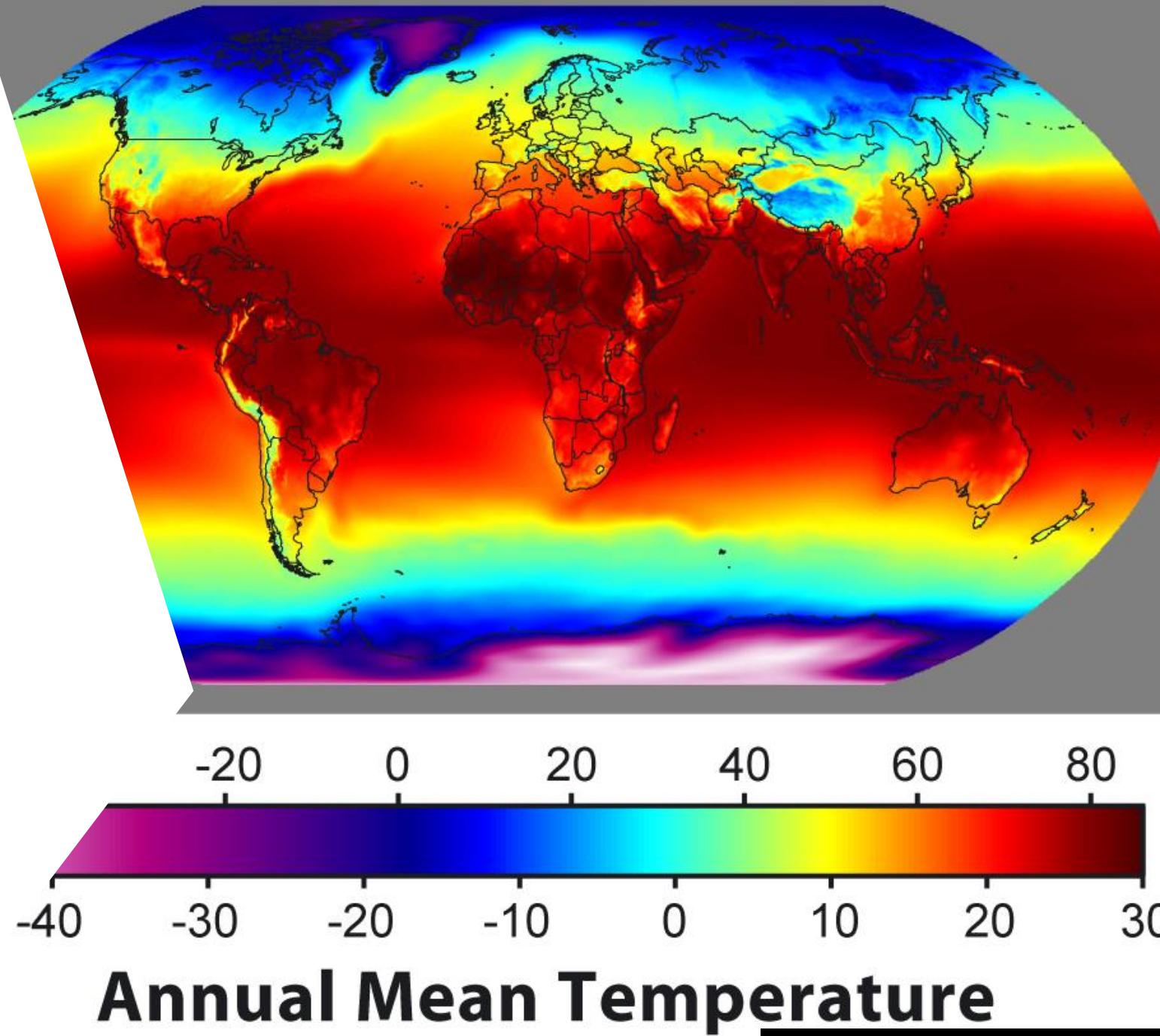
Temperatures in the New England region increased 3.29 degrees between 1900 and 2020. The rest of the planet warmed 2 degrees over that same time period.

-Stephen S. Young



Temperatures in New England will not return to where they were a century ago, or even stay where they are now. .

-Stephen S. Young



What Could This
Mean For Our
Native Plants?



Without Our Seasons....

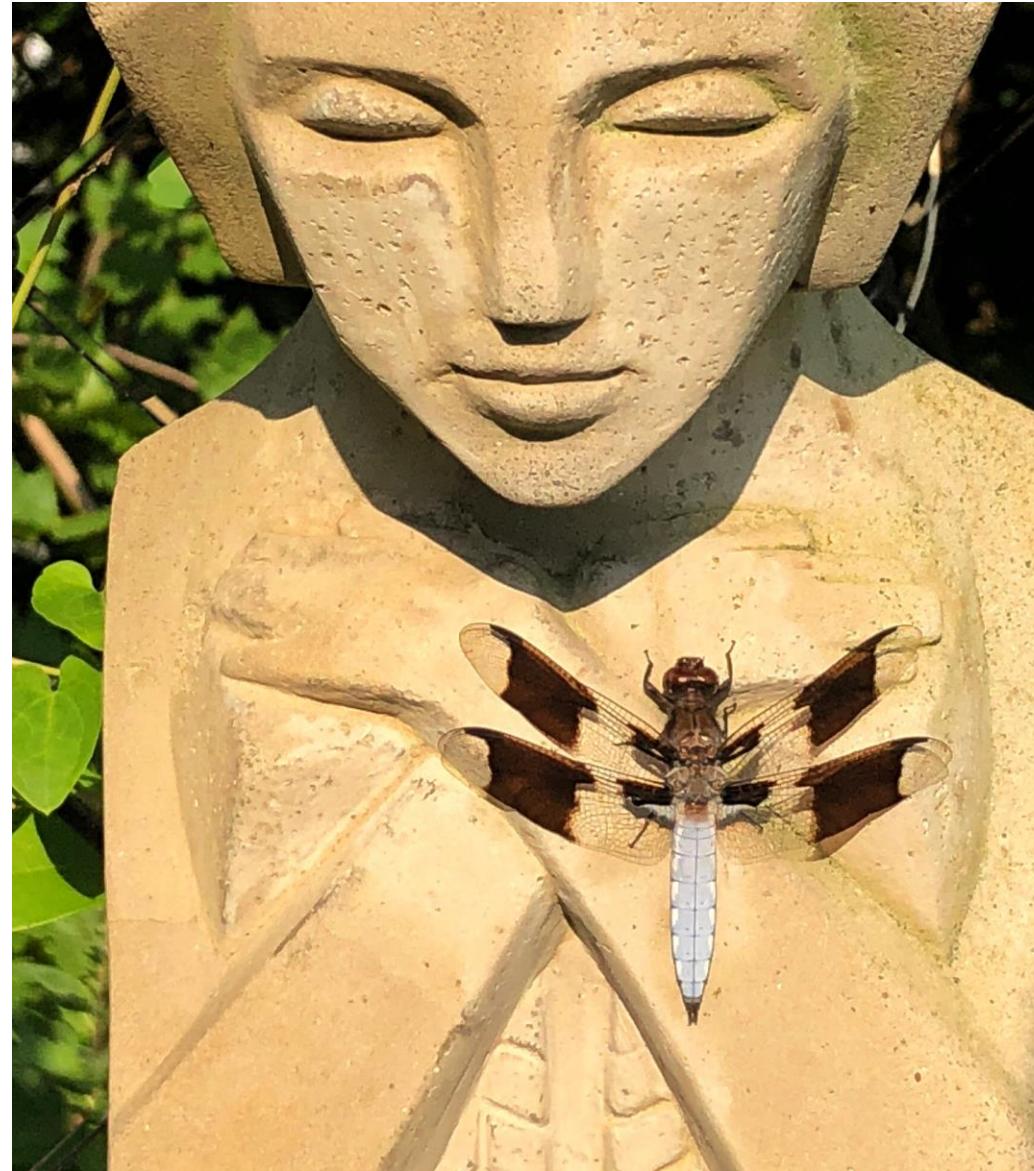
Native seeds won't undergo the required cold period to germinate.

The timing of blooms and their specialized pollinators, which have evolved over millennia may no longer coincide.

Southern invasive plants and insects will be able to move north.

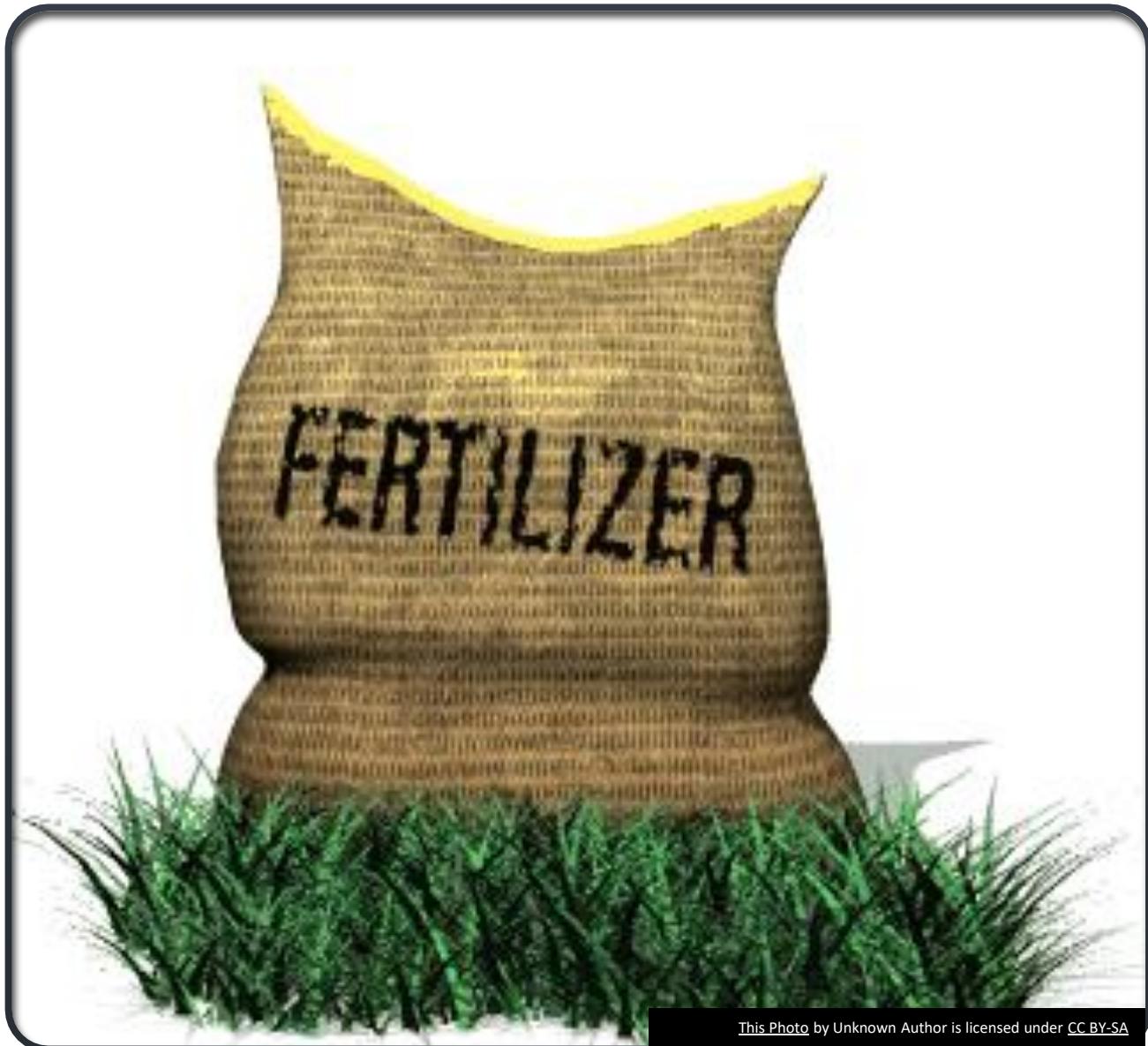
Longer hotter summer and fall seasons will lead to stressed trees, hurting the fall color and leaf peeping season.

Warmer winters will decrease maple syrup production.



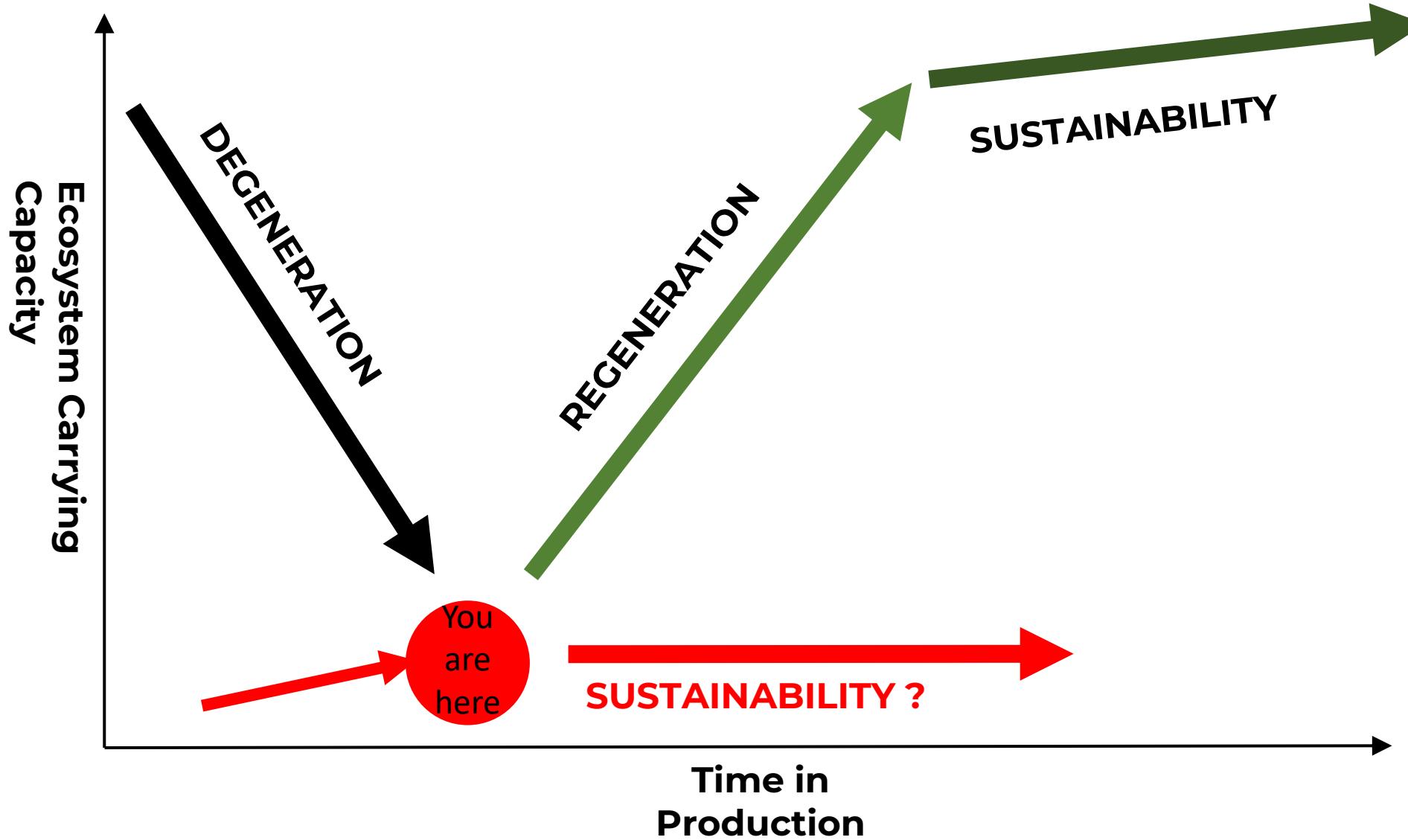


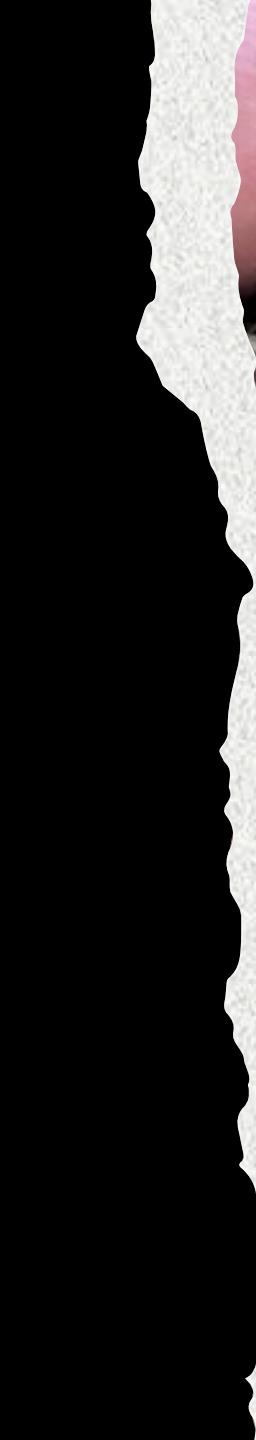
The Days of
Landscaping for Beauty
Alone Are Over.



Our current approach to land care is akin to sending plastic rubber and steel to factory, without even knowing who works there and what they need and hoping a car comes out.



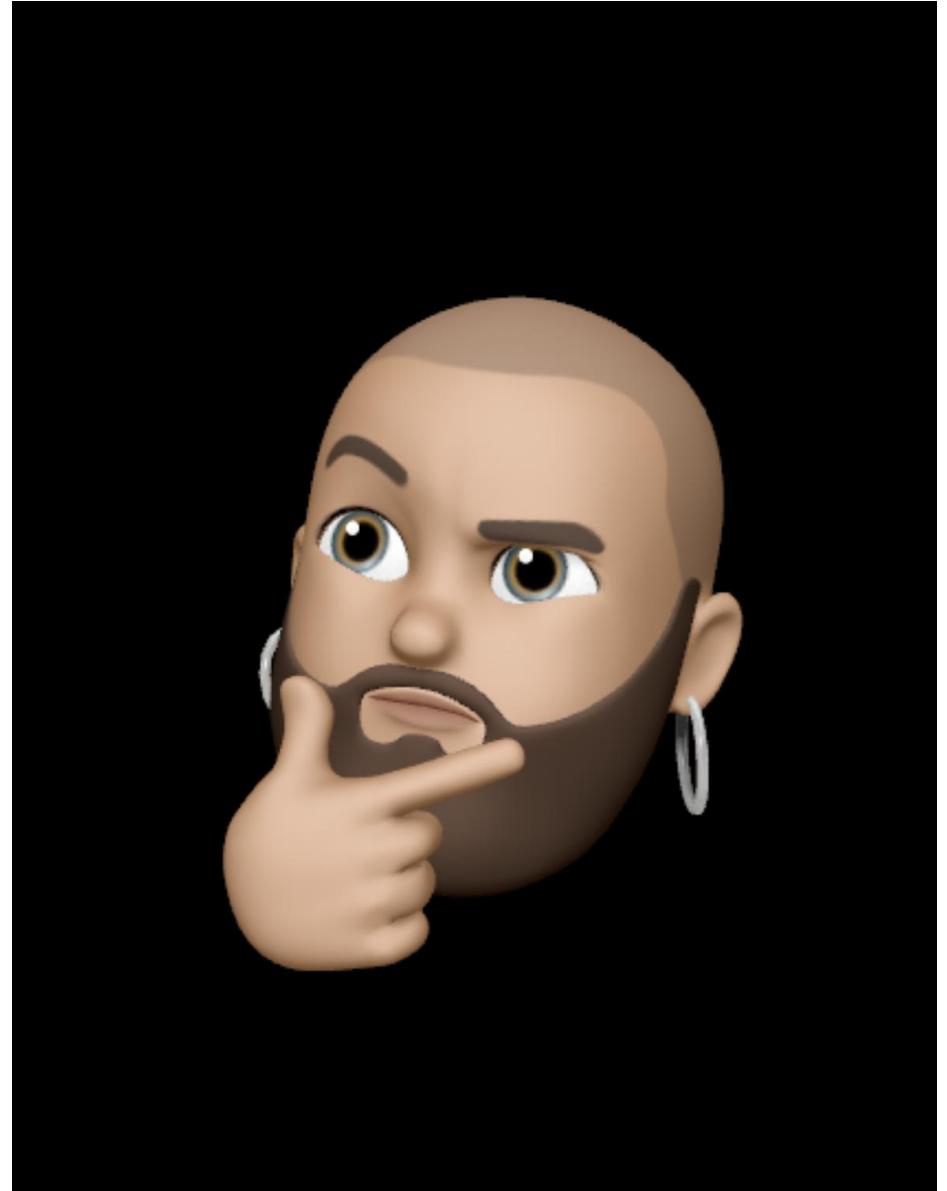




PLANT THE
CHANGE YOU
WISH TO SEE
IN THE WORLD.
TREVOR SMITH
FIELD NOTES



Sooooo? Natives?



Terms & Definitions



Image: Sean Cross

Native Plants

Native plants are plants indigenous to a given area in geologic time. This includes plants that have developed, occur naturally, or existed for many years in an area. Natives can be weeds or aggressive but not invasive.





Weeds

Weeds are any undesirable plant. Or a plant out of place. Weeds can be native, aggressive or invasive.



Aggressive Plants

Aggressive Plants are plants that spread through the garden or landscape faster than we would like. Aggressive plants may dominate but they are not invasive as they do not harm the ecosystem. Aggressive plants can be weeds or natives.



Invasive Plants

Invasive species are plants designated by state or national agricultural authorities as threatening to agricultural and/or horticultural crops and/or humans and livestock. Invasive plants are not native, but they can be considered weeds.

Straight Species

The original recipe. The original species of a plant as it evolved through natural selection.



Photo: Wildflower.org



Photo: Prairie Moon Nursery

Nativar

A cultivated variety of the species. These plants have been cultivated (grown) for specific characteristics such as shorter growth habit, double flowers or longer bloom time etc.



Bluestone Perennials



Bluestone Perennials



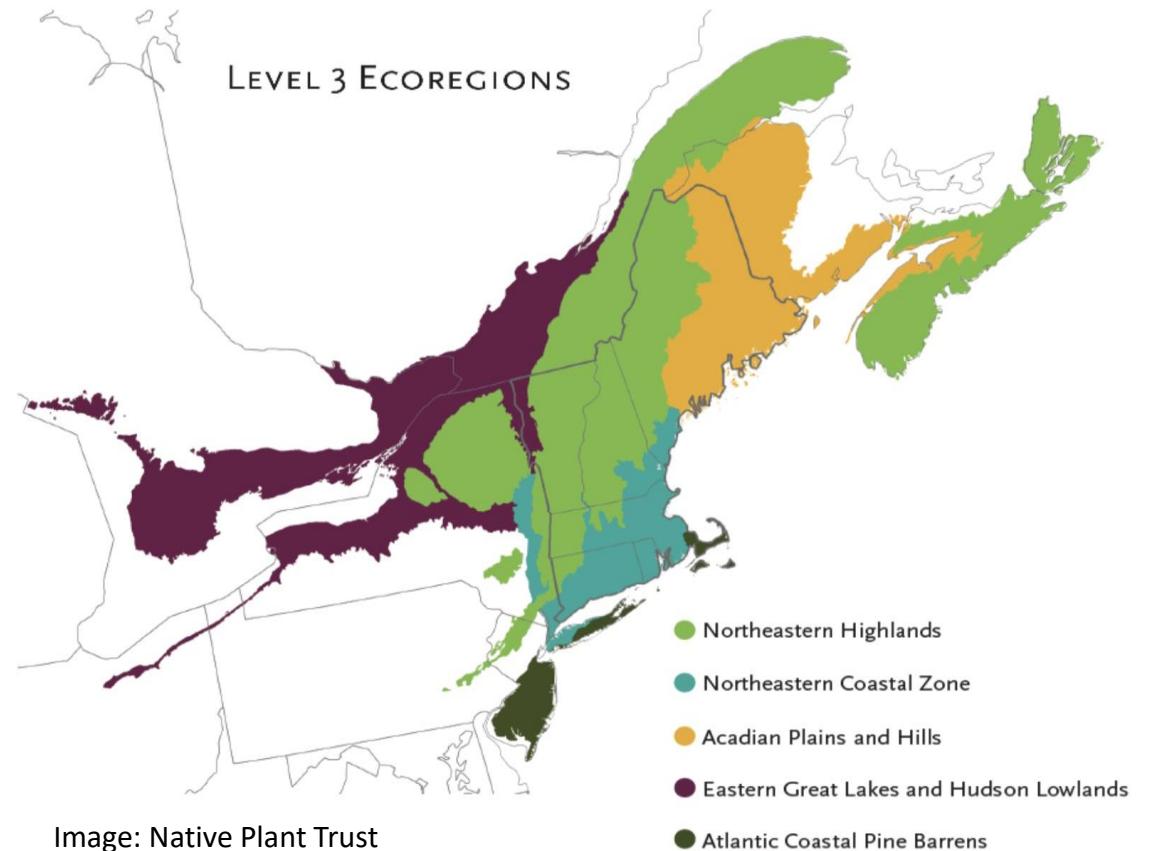
Gardenia.net



Gardenia.net

Ecoregion

Geographic areas determined by common geography, climate and plant communities. New England has 5 ecoregions. We are Ecoregion 59 (Northeastern Costal Zone)



EcoType

Locally adapted species growing in specific region. EcoType's are plants grown from seed. Native plant seeds gathered from local areas and grown from seed have the characteristics of that area imprinted on their genome. They are better adapted to the local conditions such as weather and soil than plants grown outside the region.

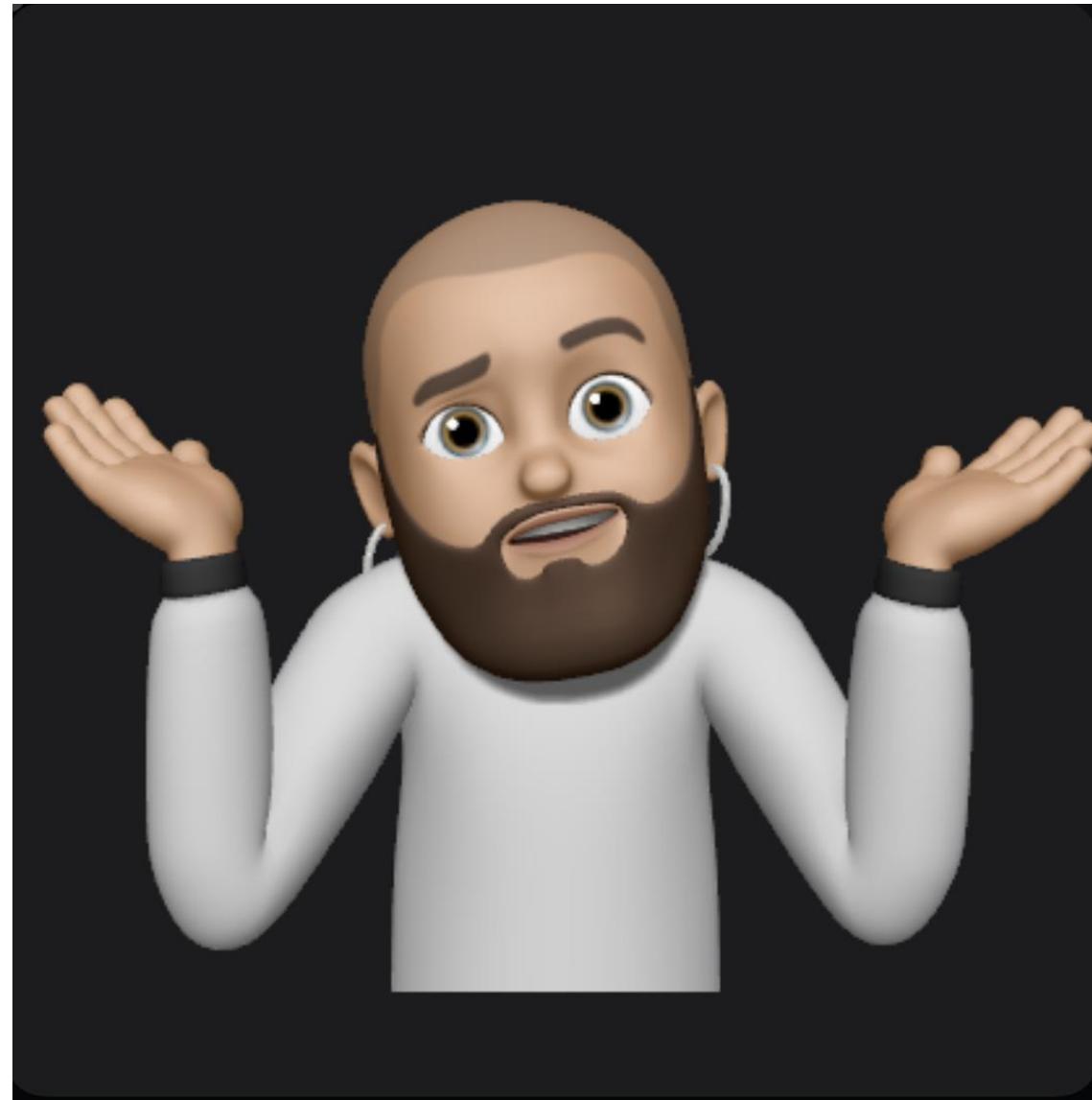


Biodiversity

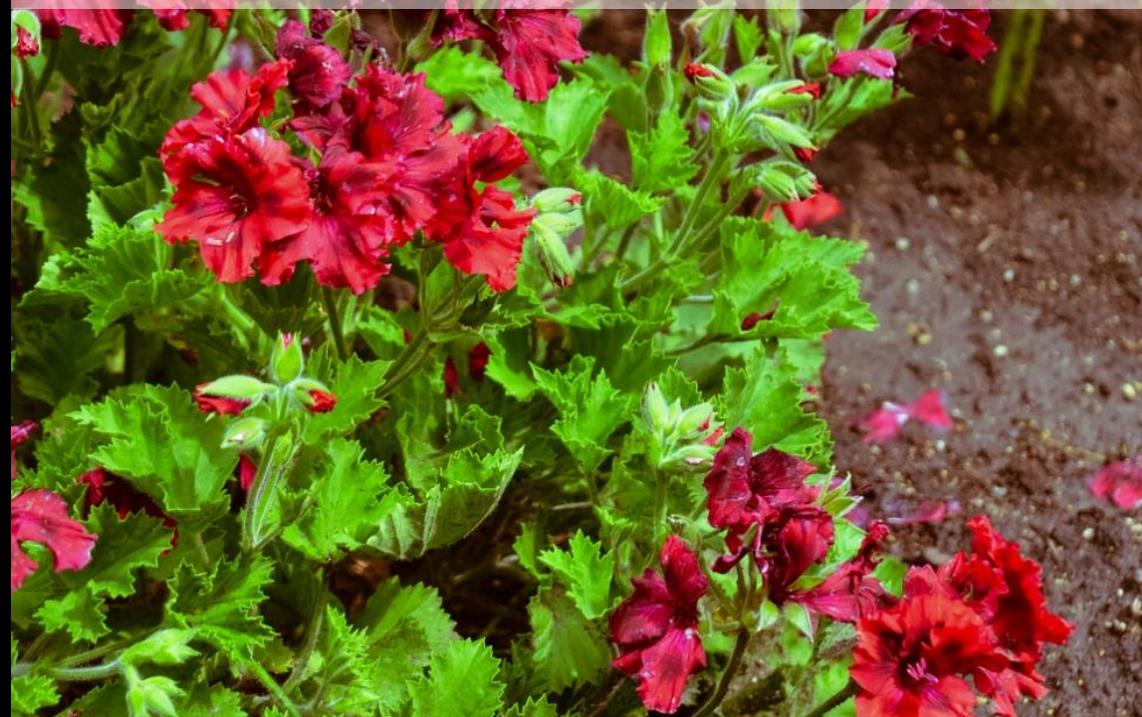
The variety of life in a particular habitat or ecosystem.



Why Natives???



- Honey bee
- Bumble bees

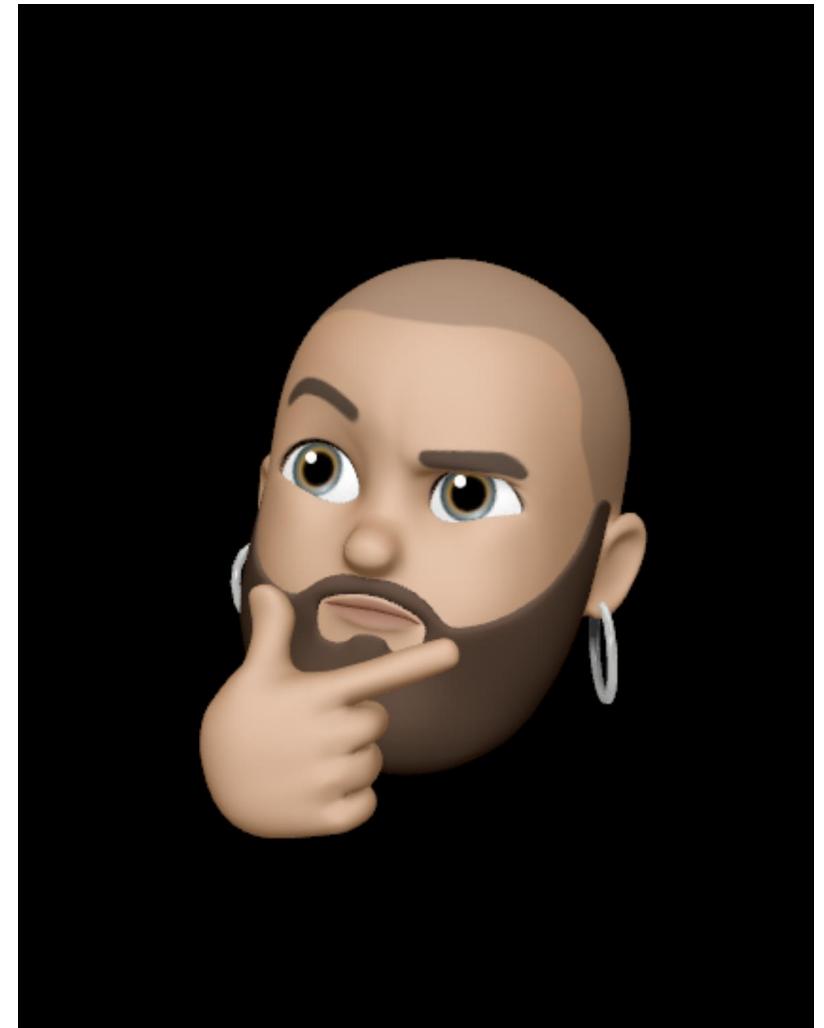


- Honey bee
- Bumble bees
- Mining bees
- Carpenter bees
- Sweat bees
- Mason bees
- Mining Bee, *Andrena* *distans*
- Cuckoo bees
- Syrphid flies
- Thick-headed flies
- Fruit beetles
- 27 different species of butterflies and moths



Photo: Dan Wilder

Why Does This Matter?



Sometimes It's Obvious



Photo: Dan Wilder

Others Are More Subtle...





Dan Jaffe



Photo: Dan Wilder

30-40 Million Hectares (74-98million Acres) of native vegetation has been replaced by managed landscapes and non-native ornamental plants.

This equals all the land for our National Parks (40m) and ALL the land used for corn production in 2014 (37) COMBINED

Studies have shown the use of non-native plants is linked to decline in the abundance and diversity of insects.

The decline of insects has resulted in a decline in bird populations.

It takes 6,000-9,000 caterpillars to raise a brood of 5 Chickadees

The Plants You Choose Could Save A Species...



Bombus Vagans



© Public Domain - Ilona L

fieldguide.mt.gov/



Bombus Fervidus



wisconsinbumblebees.entomology.wisc.edu

Bombus Terricola



gbbr.ca



15 Highly Effective Native Plants



Page Photo Credit Dan Wilder

Penstemon digitalis foxglove beardtongue
Steeplebush

Spiraea tomentosa

Penstemon hirsutus Northeastern beardtongue
Carolina rose

Rosa Carolina

Physostegia virginiana Obedient plant

Rosa nitida Shining rose

Prunella vulgaris Common selfheal
Swamp rose

Rosa palustris

Scutellaria galericulata Hooded skullcap
Virginia rose

Rosa virginiana

Mimulus ringens Allegheny monkeyflower
White meadowsweet
Monarda fistulosa Wild bergamot

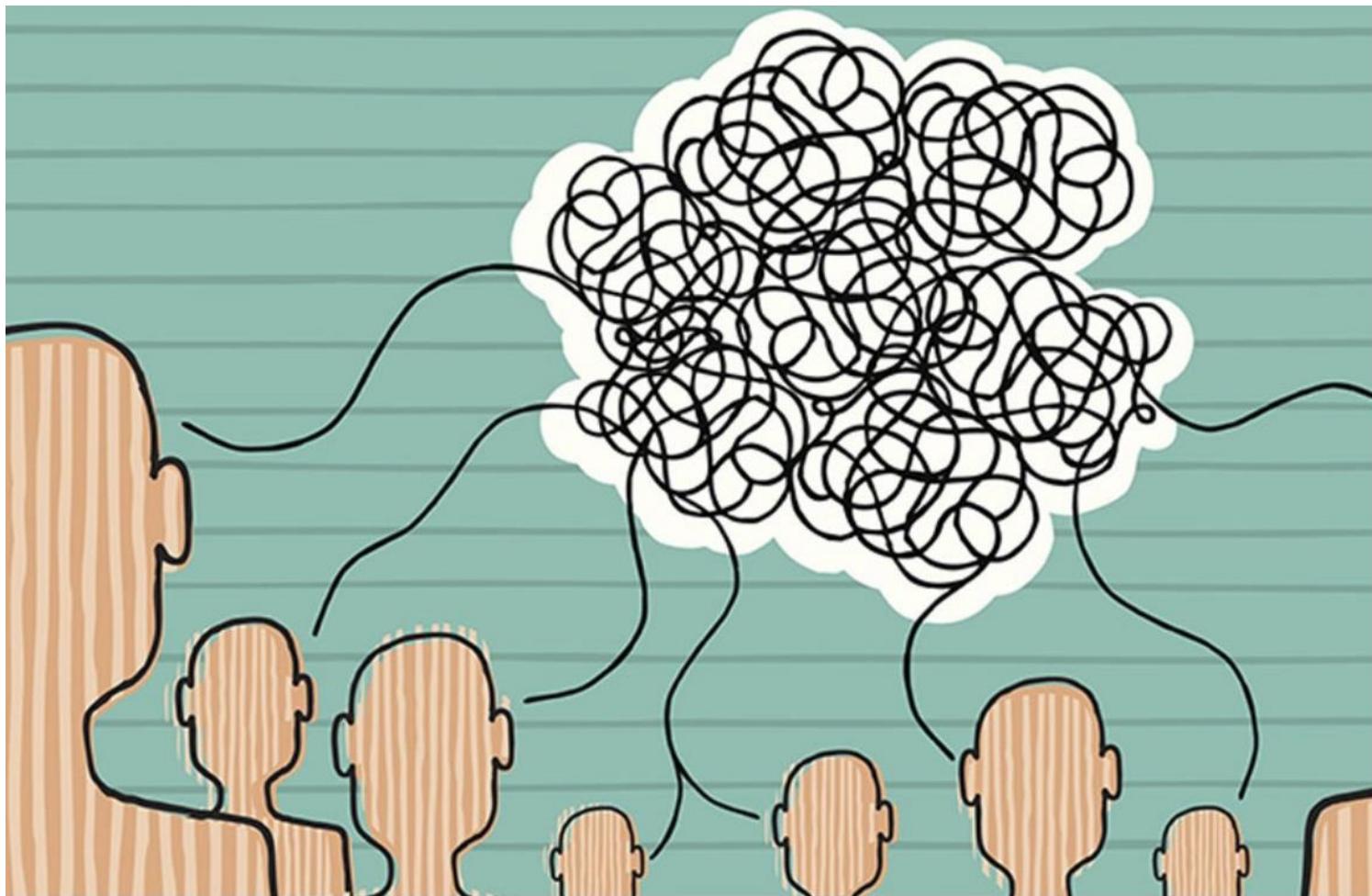
Spiraea alba

Monarda didyma Scarlet bee balm

GEGEAR LAB AT UMASS DARTMOUTH

Agastache scrophulariaefolia Purple giant hyssop

Common Misconceptions





**Aha! Just as I suspected! She's
nothing but a common mobile
vulgaris!!! –Iris
Disney's Alice In Wonderland**

The Truth



The Bloom Time Is Often Shorter

Some Varieties Seed About

They Need Water To Get Established

Once Established They Need Less Water

They Require Fewer Inputs If Any



They Don't Look Messy

They Will Attract Wildlife

There Is A Native Plant For Every
Situation. Sun, Shade, Lawn
Alternative, Wet or Dry

Nibbling is OK. If Nothing is Eating Your Garden,
Something is Wrong.

Nom



Nom



Where to Start?



Why are You Planting Natives?

Low Maintenance

Reduce Lawn

Habitat

Cover Septic

Pollinators

Birds

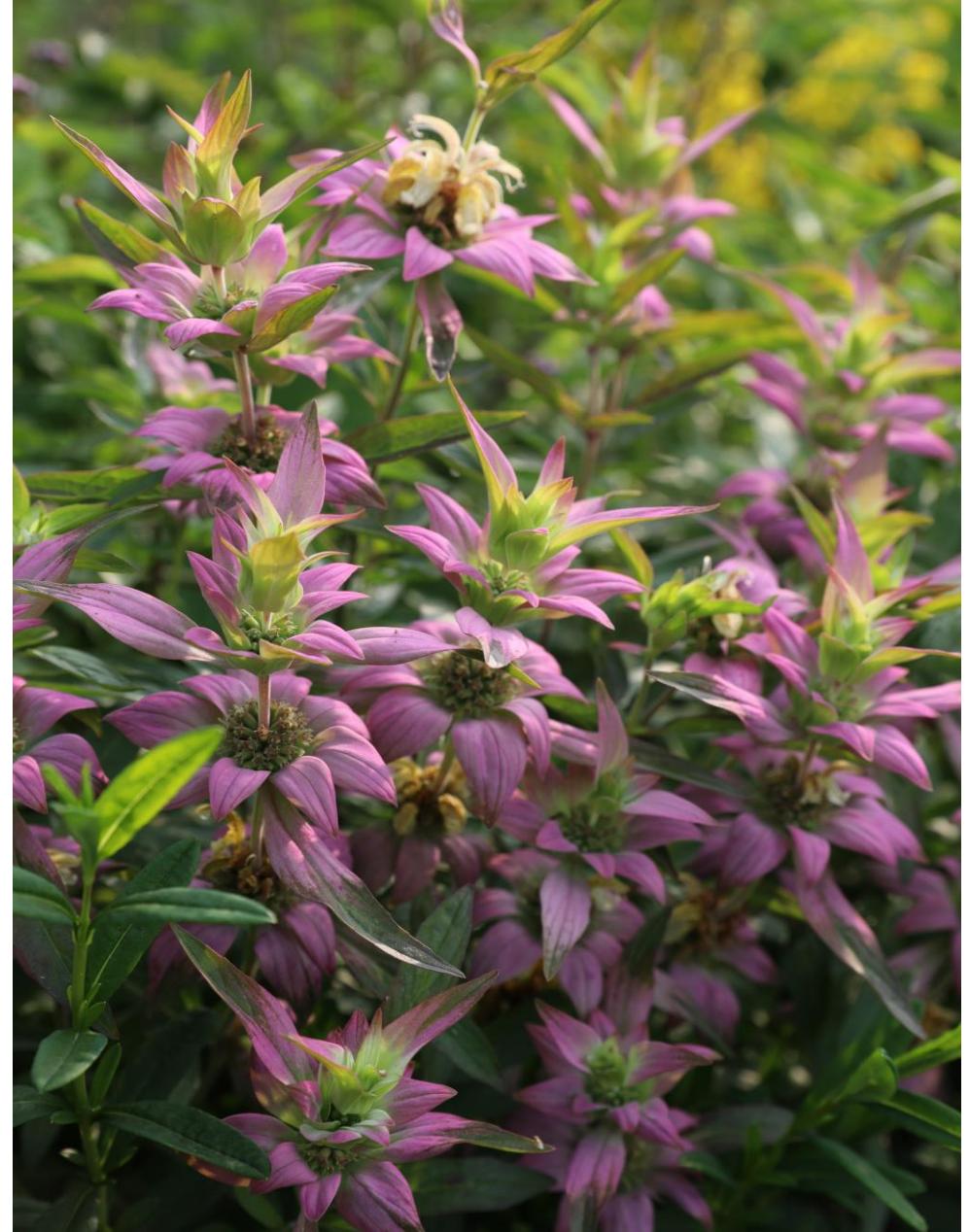


Photo: Dan Wilder

Understand

Natives and Exotic or Cultivars are NOT The Same

Native Does NOT Mean NO Maintenance

Having Bees is a GOOD Thing. Happy Bees DON'T Sting.

Native Gardens Look BEAUTIFUL!



Photo: Dan Wilder

A wide, green lawn under a cloudy sky, with a line of trees in the background.

Lawns cover 32 million acres
of the United States



Sources Of Pollution

A photograph of a wooden garden bench with a slatted backrest and seat, positioned in the center of a lush, green lawn. The bench is surrounded by dense, low-growing ground cover plants. The background is filled with more greenery and foliage.

Lawn Alternatives

Photo Native Plant Trust



Pennsylvania Sedge



Photo Native Plant Trust

SUN: FULL-SHADE

SOIL: AVERAGE – DRY

HEIGHT: 6"-10""

SPREAD: MODERATE

POLLINATORS: YES

A photograph of a field of tall grass with purple flowers. In the foreground, a single, bright yellow-green plant stands out against the green and purple tones of the surrounding vegetation.

Purple Love Grass

Photo Native Plant Trust



PHOTO COURTESY OF PRAIRIE MOON NURSERY

SUN: FULL

SOIL: AVERAGE – DRY

HEIGHT: 8"-14""

SPREAD: SLOW-MODERATE

POLLINATORS: YES

A close-up photograph of a dense, textured field of Prairie Dropseed grass. The grass has a fine, wiry texture with many thin, light green blades that curve and twist in various directions, creating a complex, organic pattern.

Prairie Dropseed



SUN: FULL-PART

SOIL: AVERAGE – DRY

HEIGHT: 12-36"

SPREAD: SLOW TO START,
VIGOROUS ONCE
ESTABLISHED

POLLINATORS: Host Plant,
Song Birds

A dense ground cover of Woodland Strawberry plants, showing a vibrant mix of green, yellow, orange, and red leaves. The leaves are trifoliate and have a distinctively serrated edge. The plants are growing in a shaded, moist environment, likely a forest floor, with some fallen brown leaves visible among the greenery.

Woodland Strawberry



SUN: FULL-PART

SOIL: AVERAGE – DRY

HEIGHT: 3"

SPREAD: SLOW TO START,
VIGOROUS ONCE ESTABLISHED

POLLINATORS: YES

A photograph of a lawn with a large, light-colored rock in the foreground. Behind the rock is a flower bed filled with green hydrangea bushes and blue flowers. A wooden structure is visible in the background. The word "Clover" is overlaid in the center of the image.

Clover

Photo American Meadows



Photo Conngardener.com

SUN: FULL-PART

SOIL: AVERAGE – DRY

HEIGHT: 4"-8"

SPREAD: MODERATE

POLLINATORS: YES

A wide-angle photograph of a residential lawn. The lawn is a vibrant green and appears to be a low-mow mix. In the background, there is a two-story house with light-colored siding. A stone chimney is visible on the right side of the house. A white wooden deck with a white railing is attached to the left side of the house. There are several small flower beds with various colored flowers (yellow, red, purple) in front of the house. The sky is clear and blue.

Low Mow Mixes

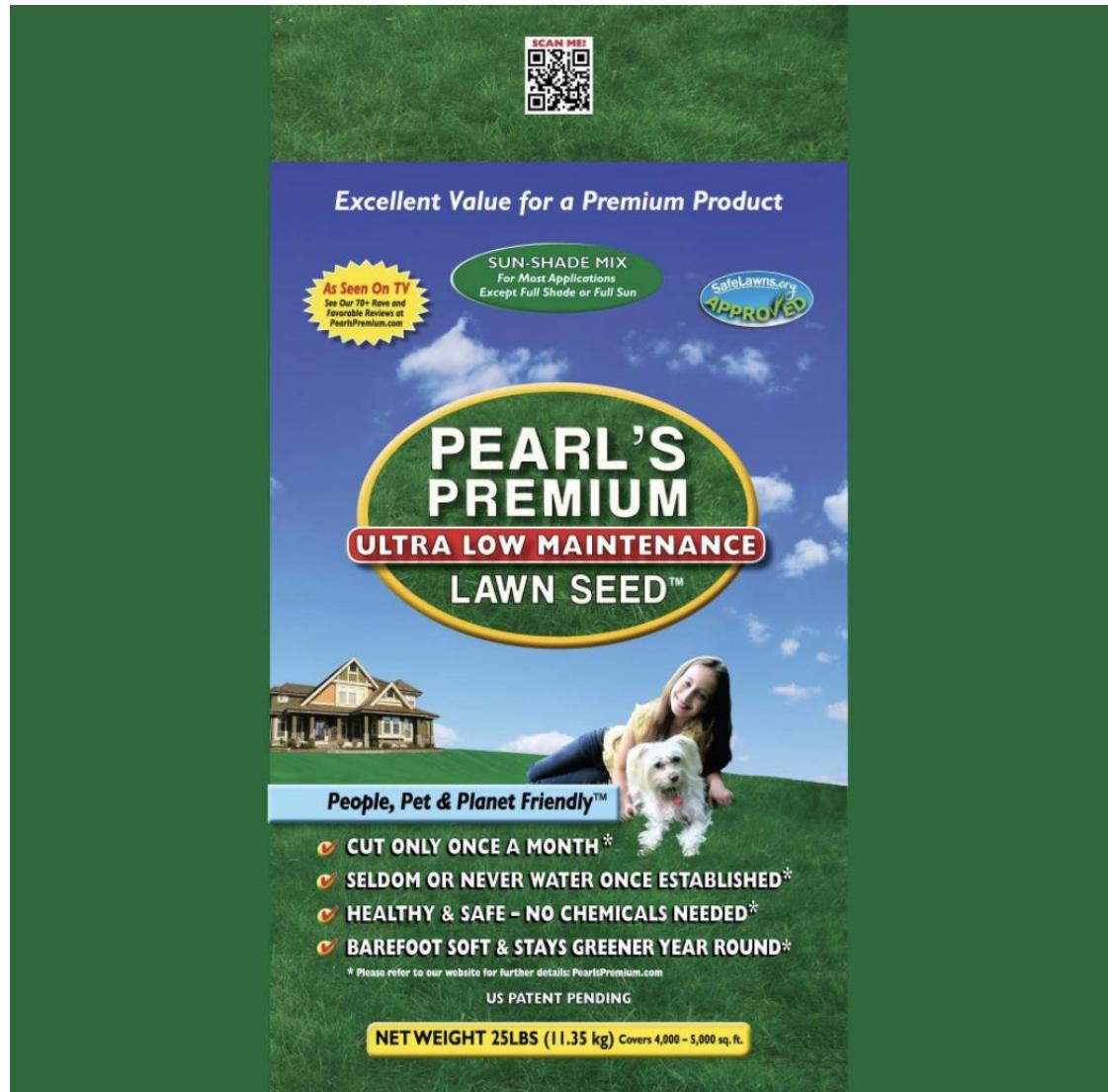
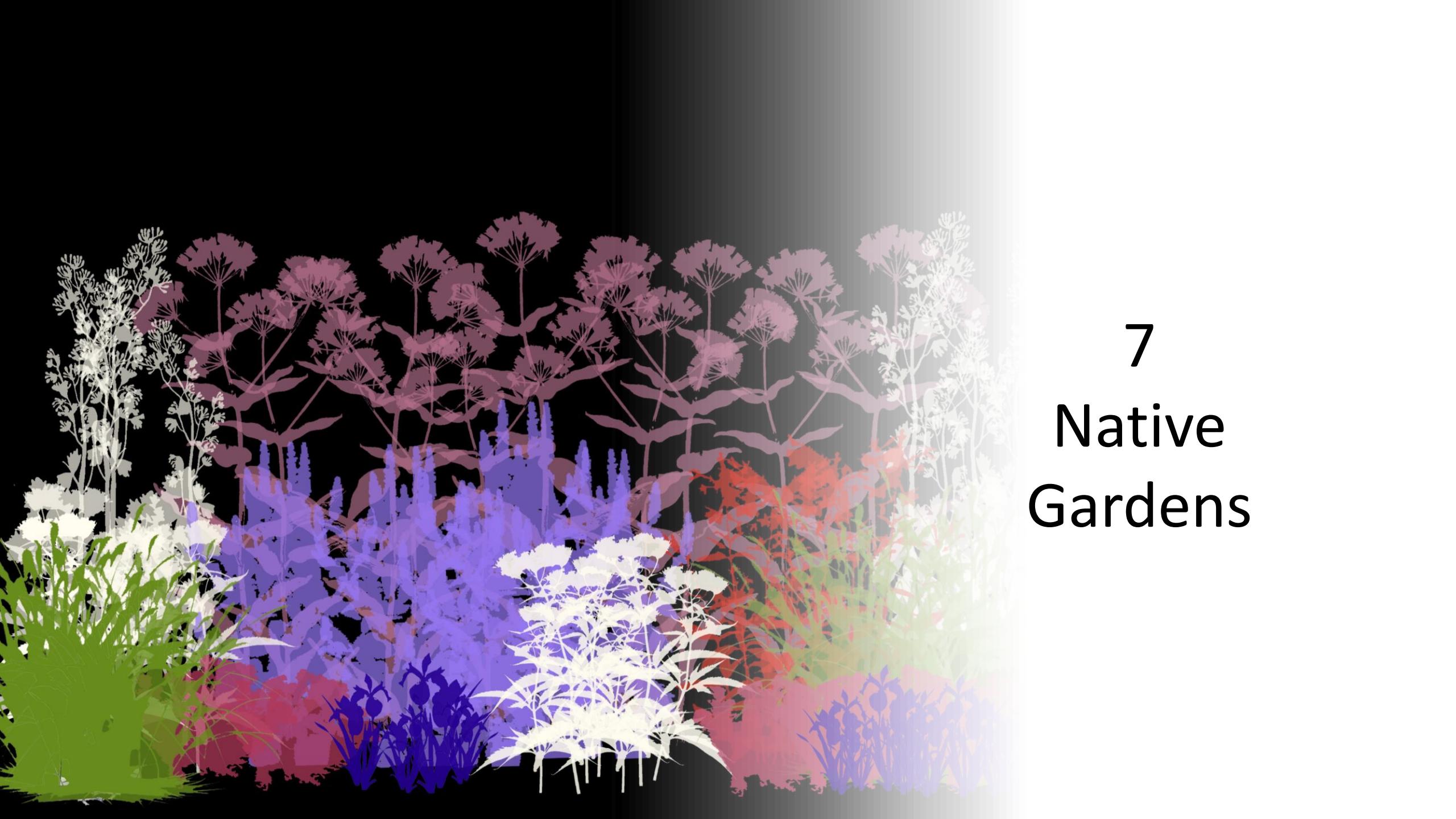
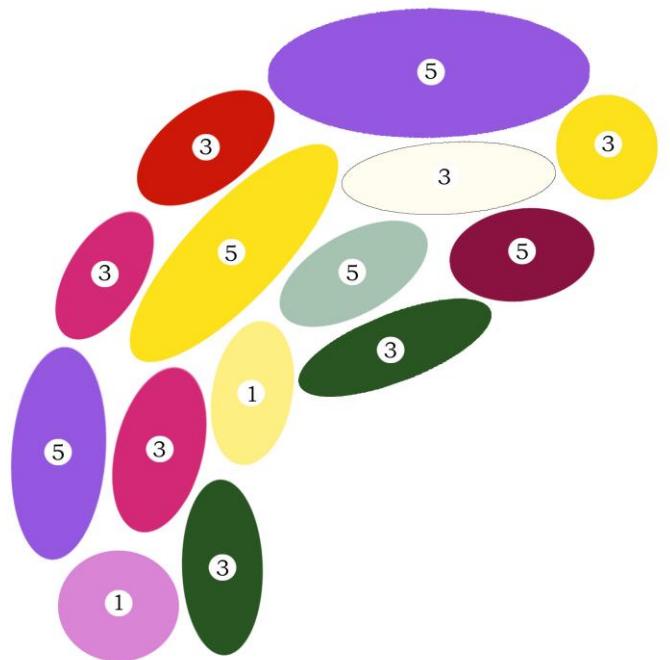


Photo Pearl's Premium & North Country Organics

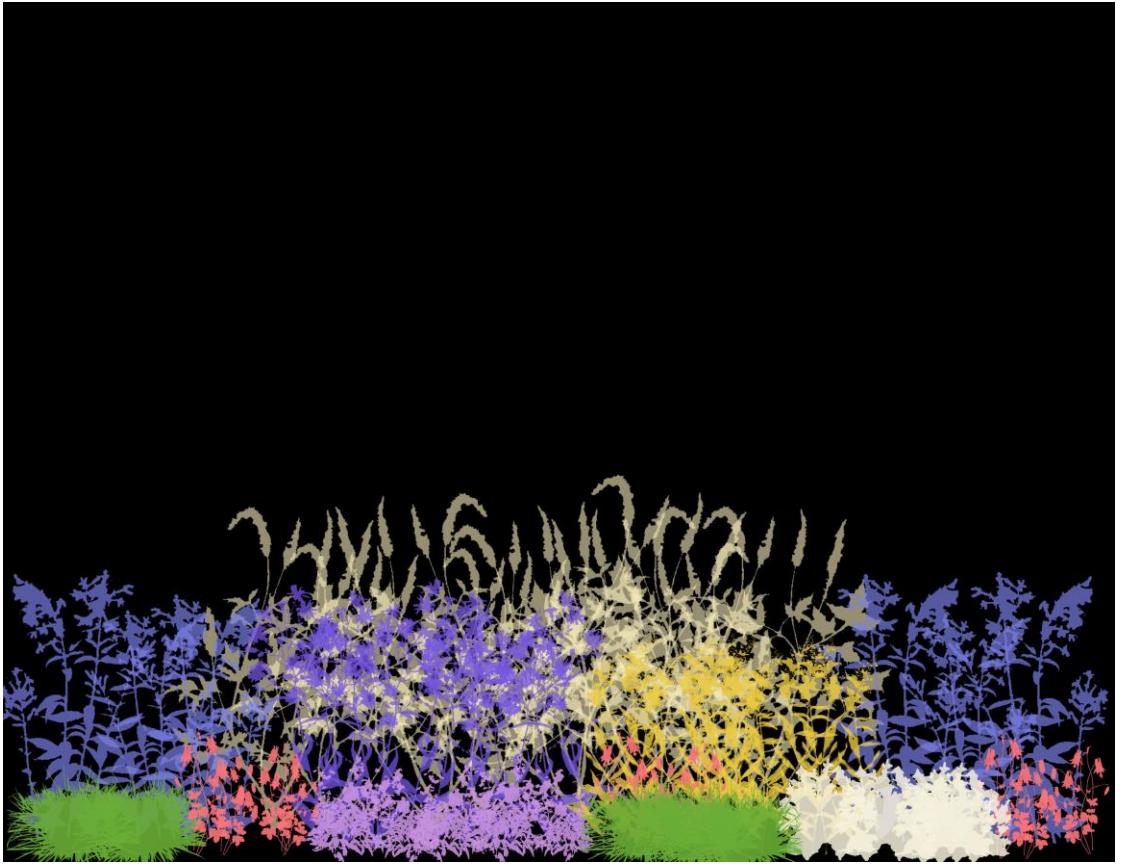


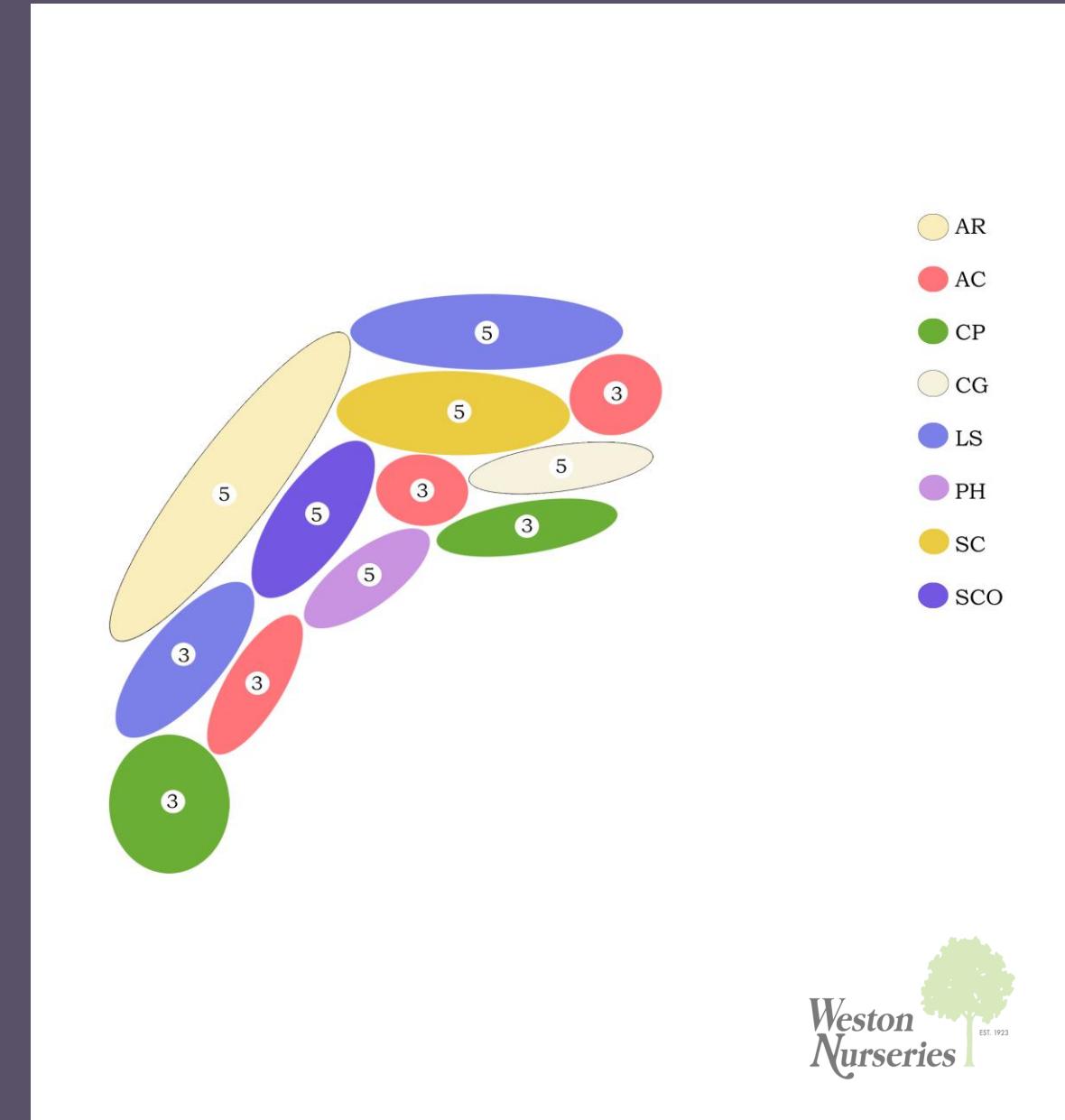
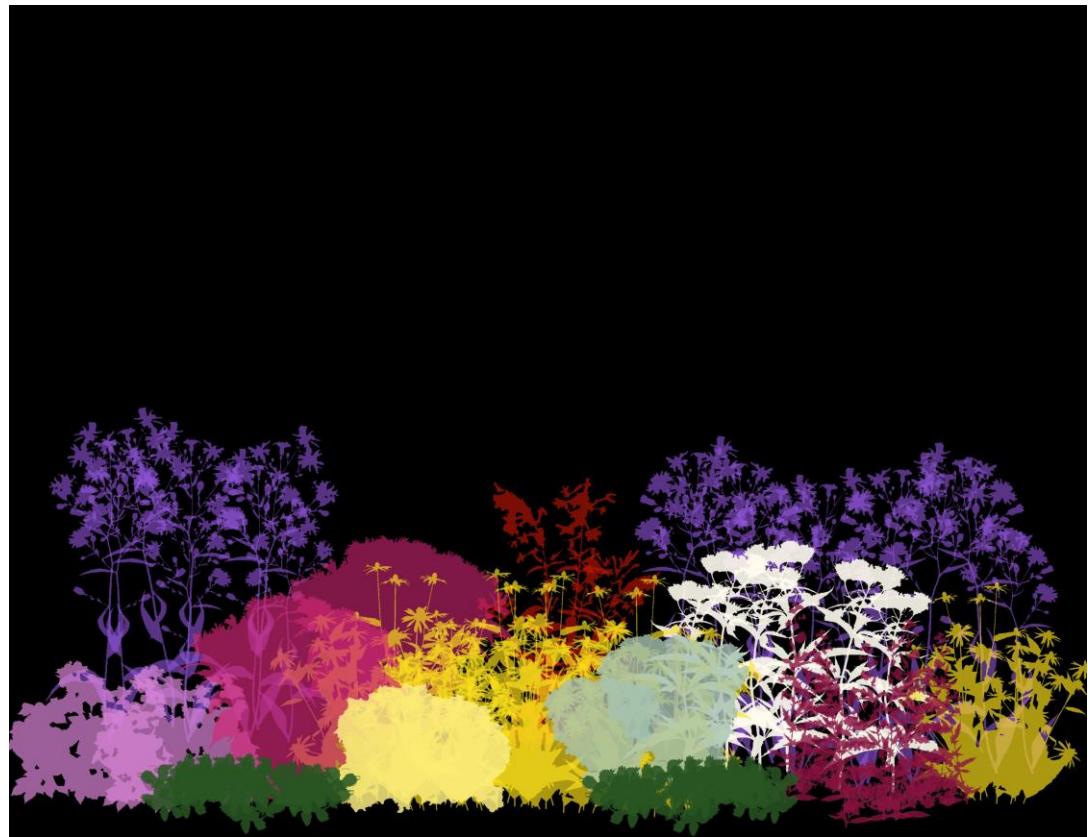
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Native Gardens



EP
FV
HP
LC
MF
PM
RO
RH
SN
SL

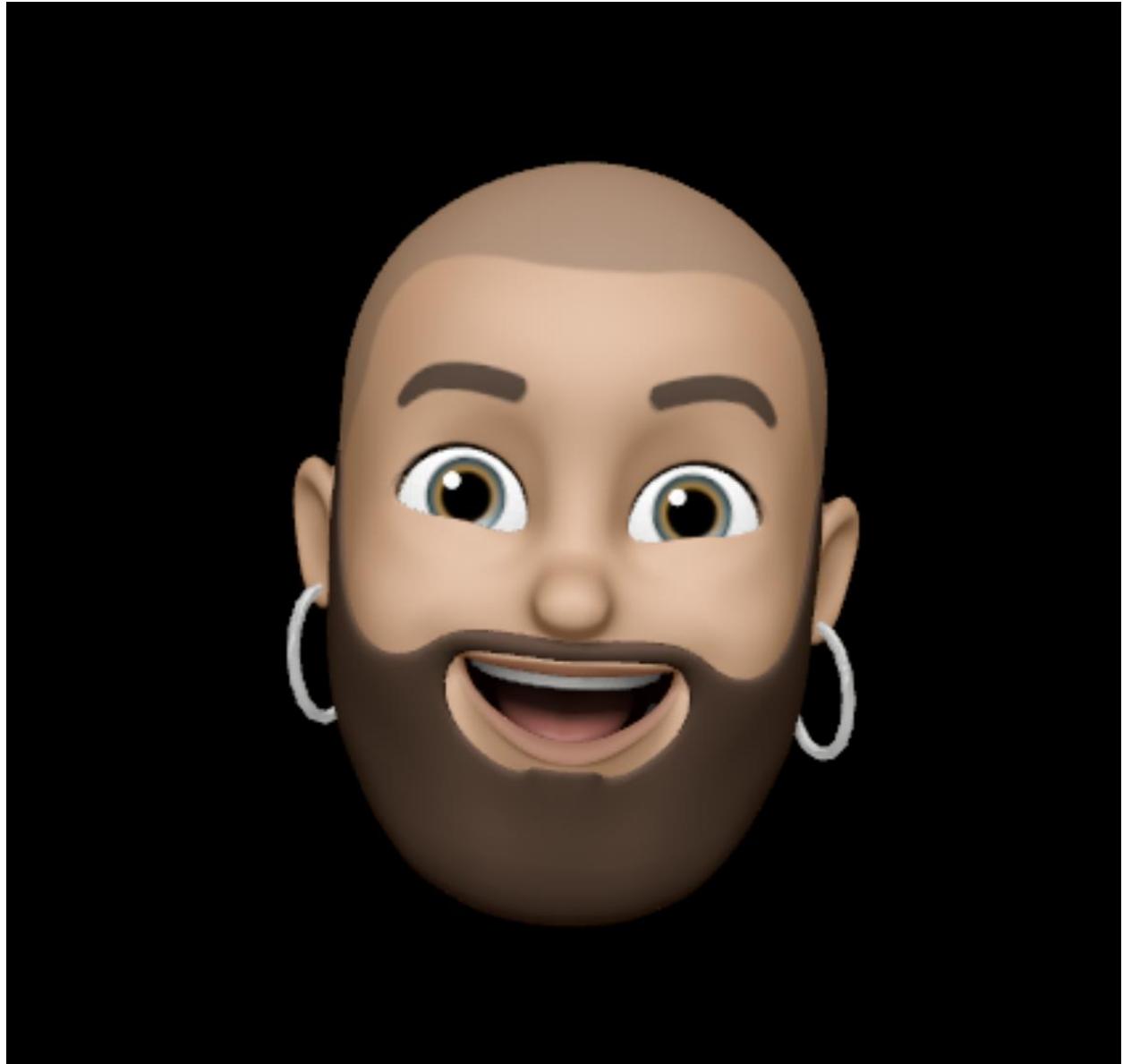




**There Is NO Shame
In Liking Exotics**



**There Is NO Shame
In Liking Exotics**



70/30



Thank You





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