

**(Almost)
Everything You Need to
Know
About Growing Native
Plants**



“Nature is not a garden, but it’s too easy to see nature as something imperfect.

When we can take a step back and see a fallen tree as beautiful and purposeful or appreciate an assassin bug enjoying its moth dinner, we can see that the world doesn’t seem to need us in it, and we can start to become a more humble and rewarding part of it.

A garden can teach us how to interact with life and guide us into deeper self-discovery if we design with purpose, then let that design evolve with the species that come to call it home.”

- Benjamin Vogt



- **Priority on aesthetics**
- **Plants introduced from around the globe**
- **Most were highly cultivated / bred**
- **No (or little) foresight to potential problems**



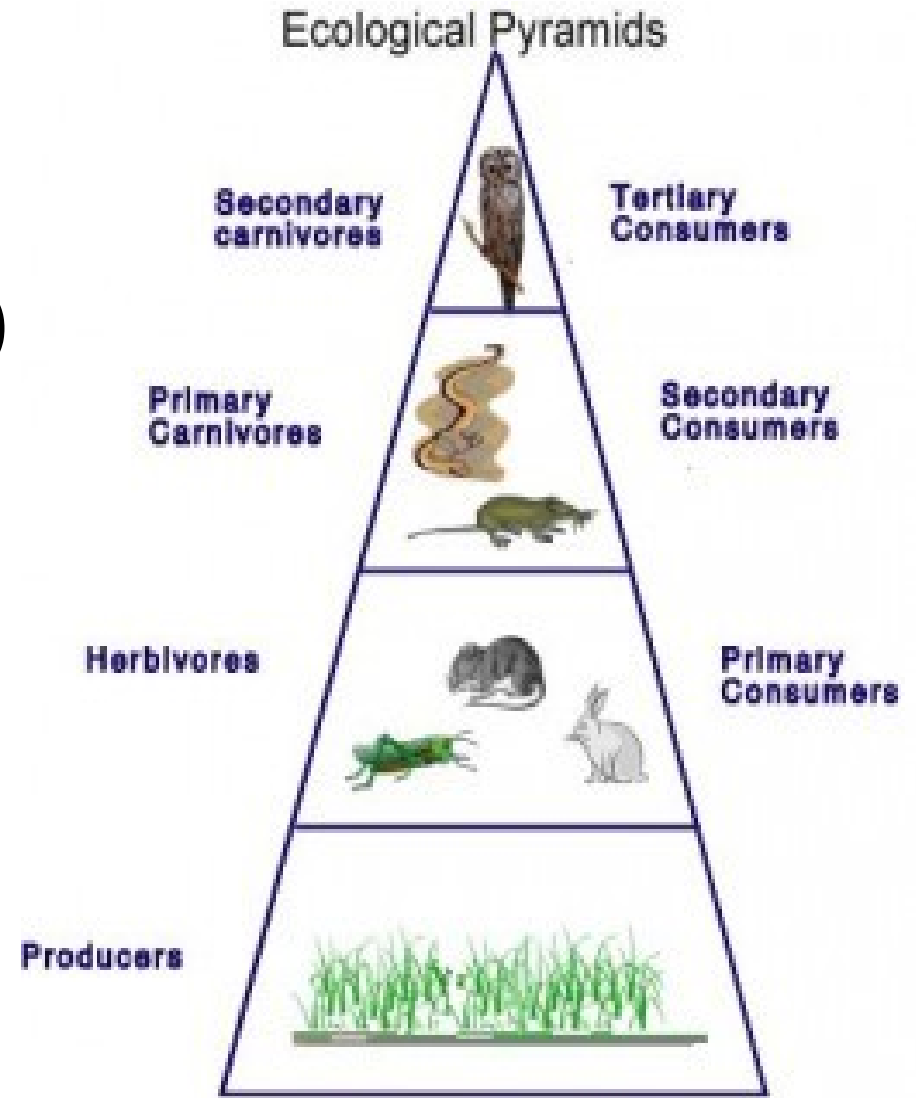
David Austin Rose "Grace"

Why Native Plants?

- they co-evolved with our fauna
- Proper food and life cycle support for wildlife and pollinators (ex. bee adaption / obligates)
- Habitat destruction & degradation: urban gardens become safe havens

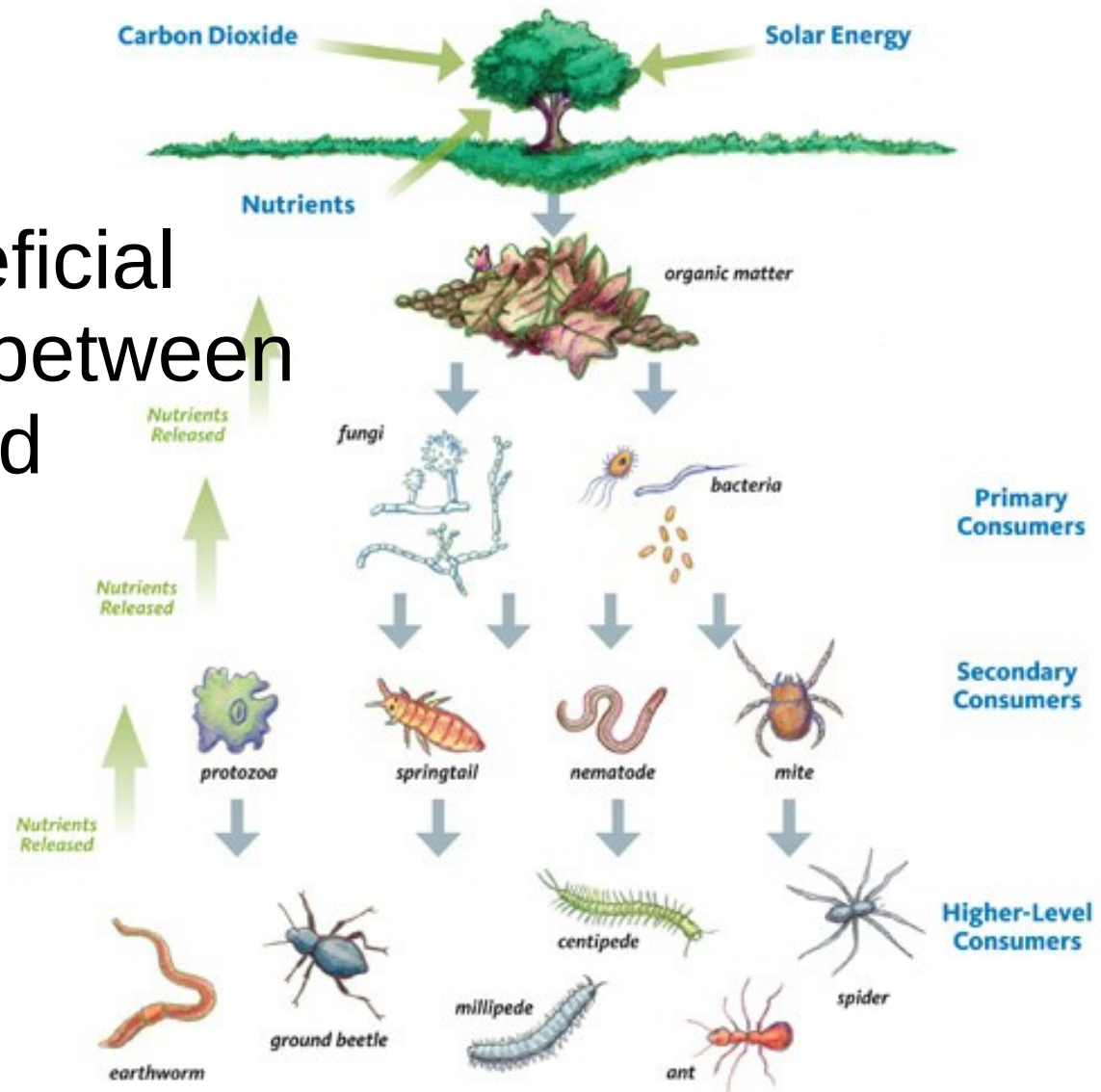
Everything is connected

- Trophic levels (food web) what creatures (large and microscopic) eat this plant?
- What creatures eat these creatures?
- No caterpillars, no birds!



Soil Food Web

- Soil is alive
- Mutually beneficial relationships between plant roots and bacteria



What this means...

- everything should decompose
- “damage” is simply sign of a healthy breakfast (change in aesthetic, acceptance)
- Ripple effect of pesticides and herbicides: feast/famine. Nature fills a void. Weeds are colonizers/cover soil
- wildlife life-cycle: need to consider not only pollen and nectar but also food (leaves) for larvae & host support (some species of butterfly obligate feeders)

What is a Native Plant?

- Kinda complicated...
- Doug Tallamy and Rick Darke's definition from their book "The Living Landscape"

"a plant or animal that has evolved in a given place over a period of time sufficient to develop complex and essential relationships with the physical environment and other organisms in a given ecological community."

CANADA'S FOREST REGIONS



-  BOREAL FOREST
-  GREAT LAKES-ST. LAWRENCE FOREST
-  ACADIAN FOREST
-  CAROLINIAN FOREST
-  SUBALPINE FOREST
-  COLUMBIA FOREST
-  MONTANE FOREST
-  COASTAL FOREST
- NONFOREST**
-  TUNDRA
-  GRASSLANDS



Straight Species vs. Cultivar



New England Aster



cv.

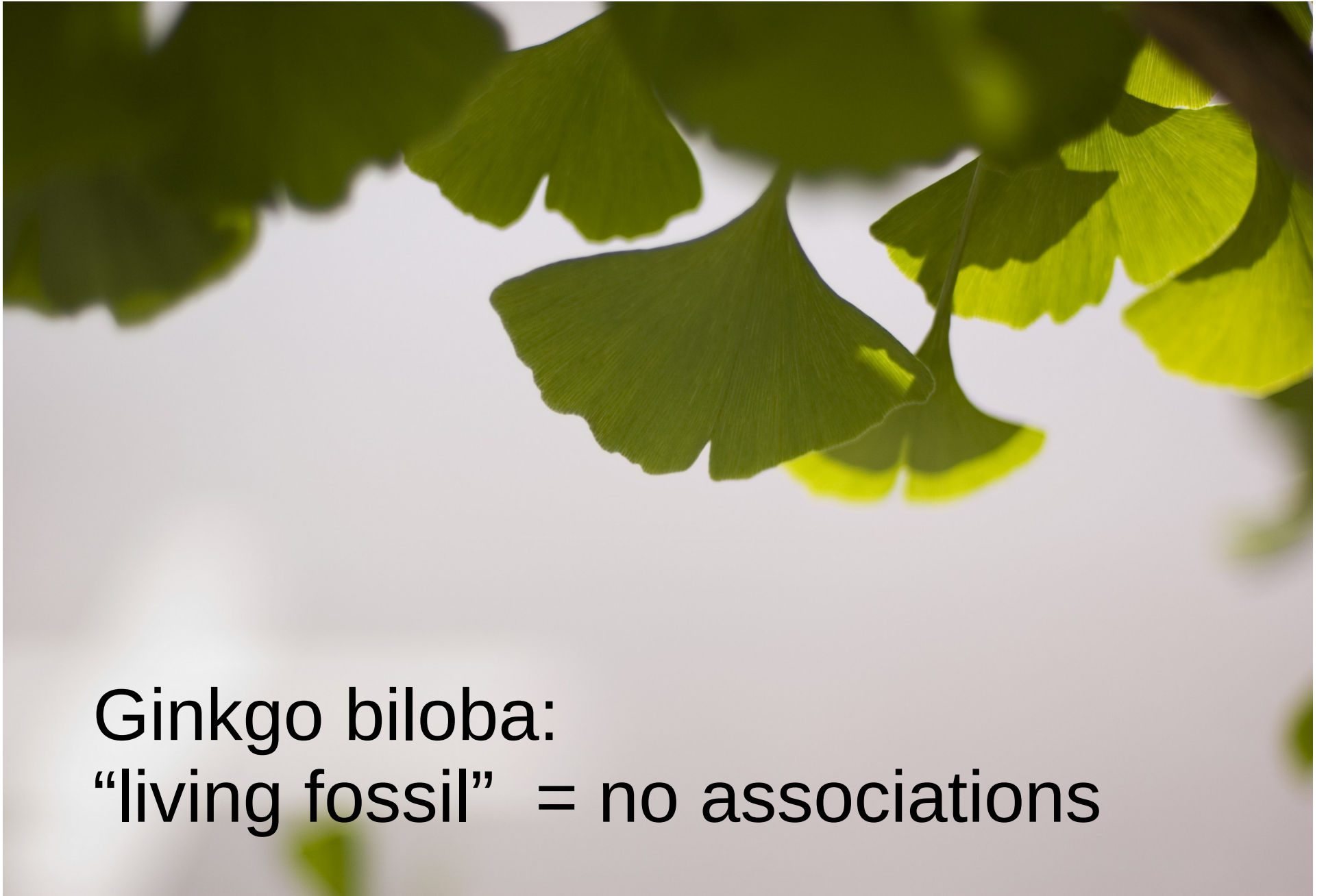
Urban Gardens are Havens

- **Ontario pesticide ban**
- **Urban areas: extended bloom times**
- **Bees evolving / adapting to urban materials and conditions**



Red Oak: Hundreds of faunal associations





Ginkgo biloba:
“living fossil” = no associations

Larval hosts

(if you want butterflies, provide food for the babies)

Butterfly	Host Plants
Black Swallowtail	Carrots, Dills, Parsnips
Mourning Cloak	Aspen, Ash, Elm, Willow
Spicebush Swallowtail	Sassafras and Spice bush
Spring Azure	Dogwood, Sumac, New Jersey Tea
Fritillaries	Violets
Buckeye	Blue vervain
Hairstreaks	Willow, Oak, Aspen, Cherry

TRUTH

OR

MYTH

?



TRUTHS

- Native plants ARE better for pollinators
- they ARE hardier (adapted to this region's soil & climate) although... climate change
- there is lots to choose from-- variety in bloom colour, bloom time, mature height, form, light and soil preferences
- a native plant garden can look beautiful and organized/planned (but maybe not “tidy”)

MYTHS

- They're drought tolerant
- They're “weedy”
- They're aggressive or “invasive”
- They're low (no?) maintenance (spreading, seeding, weeding
- more native plants=more bees= danger

GALLERY OF GARDENS





Toronto garden landscaped by Sean James



Monarch Award finalist 2016



Bev Wagar's garden 2017
about 50% natives



Another front border
Monarch Awards finalist 2017



Monarch Awards
semi-finalist 2017



100% native
Monarch Awards
finalist 2017

Before Starting a New Garden

- Observe sun / shade patterns
- Determine (map) wet and dry areas
- Know the open and protected areas
- Note various soil textures (sand, silt, clay)
- Your needs: views from indoors, patio
- Your interests: what plants do you love?

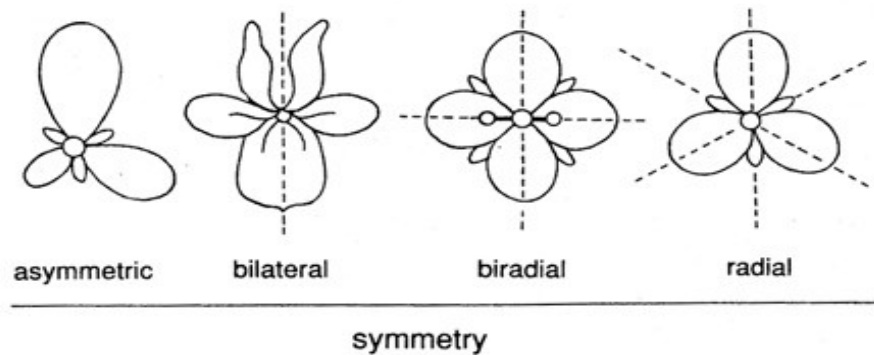
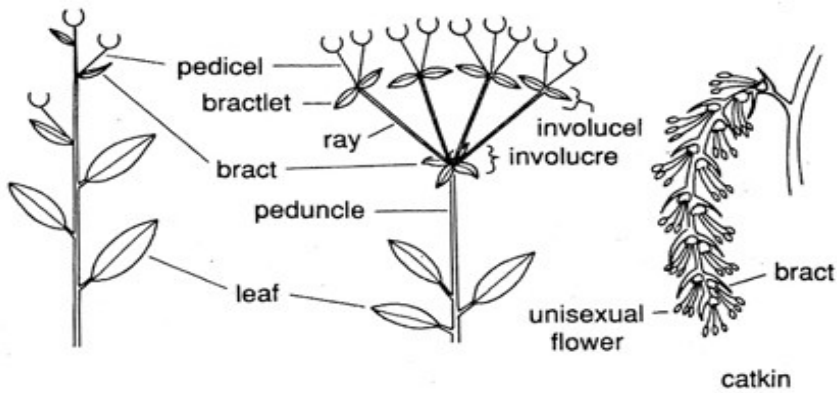
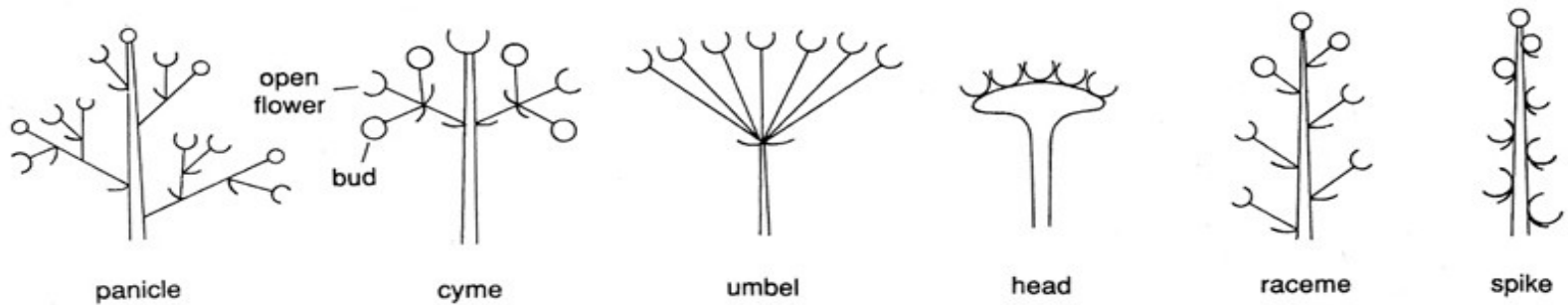
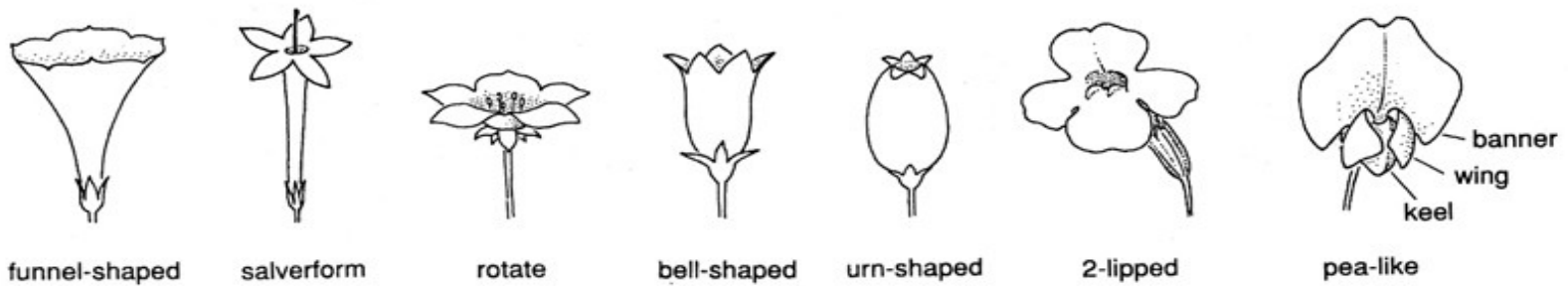
Design Basics

- Deep borders, at least 4 feet
- Access for weeding (paths or stepping stones)
- Start with the architecture, then fill in the “pretties”.
- Take photos, esp. “big picture”
- Minimize turfgrass
- Plant in curves, create destinations
- Gardens are never “finished”. Plan for change
- Have fun! Don't be intimidated by rules. Plants can be moved

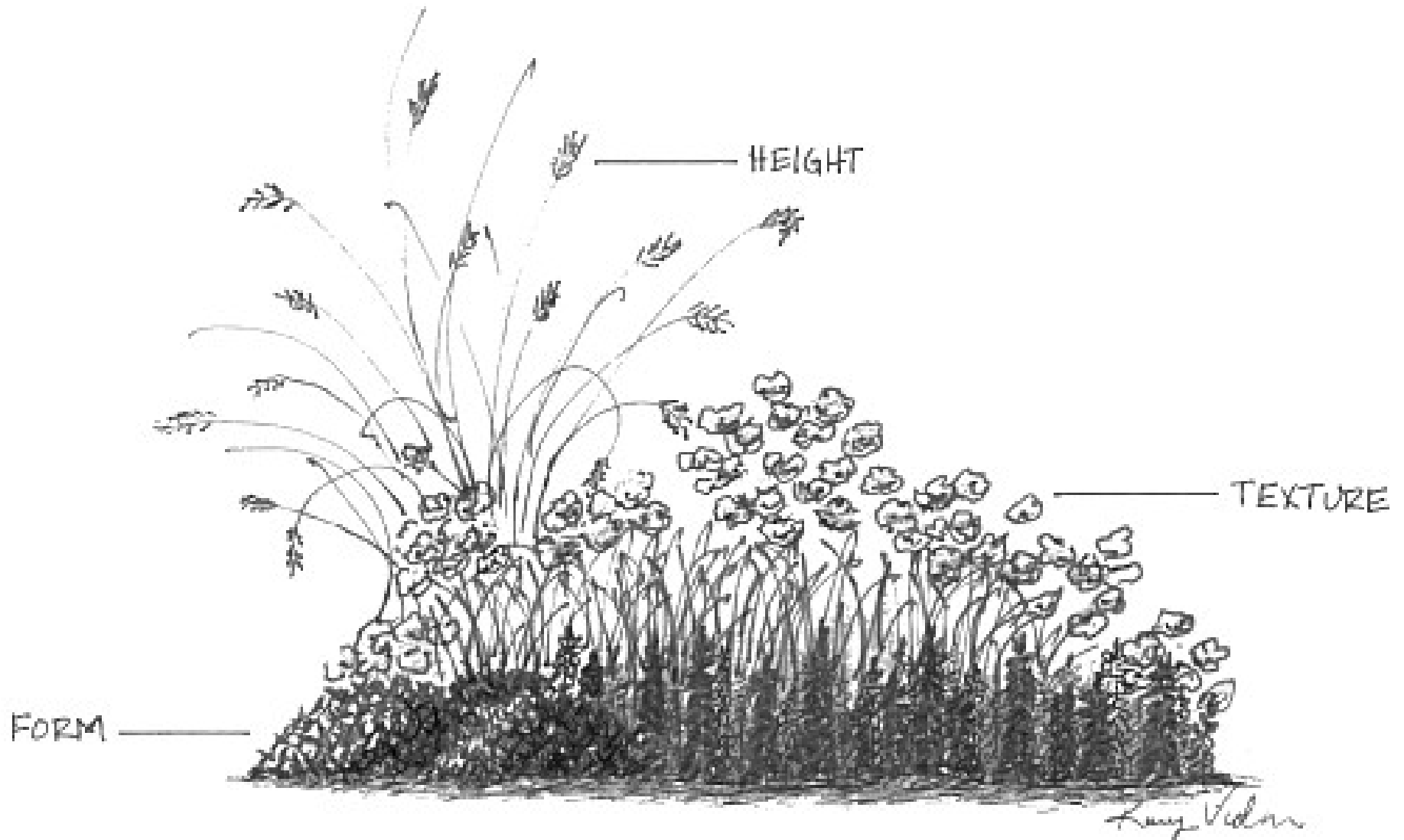
Depth / Tiers



Diversity in Flower Forms



Diversity in Texture/Form



Choosing Plants

- Something blooming all the time
- Mix of herbaceous & woody plants incl. evergreens
- Diversity: at least 8 species with several plants of each
- Diversity in flower form
- Varying heights and shapes/form
- Right plant—right place
- Prefer species to cultivars

Basic Design Chart

	short	med.	tall
early			
mid-season			
late			

- Choose at least 8 plants you really like
- Plot them on the chart, add colour and form info
- Make sure there is something in each space
- Check for diversity of bloom time
- Make sure everything works with your soil type and sun patterns

And now... THE PLANTS!

- We will focus on herbaceous plants, some shrubs
- No need for radical overhaul: gradual change
- You can still have your favourites! Just ADD natives.
- Fill in your young perennials with “grandmother” plants: easy, casual annuals that play nice: Cosmos, Calendula, Foxgloves, Nicotiana, Zinnia, Salvia, Mirabilis
- spreadsheet of ~150 plants including height, colour, and bloom season:
<http://monarchawardshamilton.org/native-plant-spreadsheet/>

SHORT

Early & Short

- *Allium cernuum* / Nodding Onion
- *Phlox divaricata* / Woodland Phlox
- *Mertensia virginiana* (ephemeral) / Virginia Bluebell
- *Geranium maculatum* / wild cranesbill
- *Asarum canadense* / Canadian Wild Ginger

SHORT

Mid-season & Short

- *Hypericum pyramidatum* (St. John's Wort)
- *Campanula rotundifolia* (Harebell)
- *Penstemon hirsutus* (Hairy Beardtongue)
- *Geum triflorum* (Prairie Smoke)
- *Ruellia humilis* (Wild Petunia)

SHORT

Late-season & Short

- *Verbena stricta*
- “all season” foliage plants: sedges, grasses, ferns,

MEDIUM

Early-season & Medium-height

- *Penstemon digitalis*
- *Zizia aurea* (Golden Alexanders)
- *Lupin perenne* (Wild Lupin)

MEDIUM

Mid-season & Medium-height

- Many many choices here
- Mountain mint, liatris, rudbeckia, coreopsis, asclepias, monarda, agastache

MEDIUM

Late-season & medium-height

- Solidago (goldenrod)
- Asters

TALL

Early-season & Tall

- Look for shrubs to fill this category

TALL

Mid-season & Tall

- *Cimicifuga racemosa* (Black Cohosh)
- *Cephalanthus* (Buttonbush)
- *Chelone* (Turtlehead)
- Tall Sunflower
- *Heliopsis helianthoides* (Sweet Ox-eye)
- *Veronicastrum* (Culvers Root)

TALL

Late-season & Tall

- Very many choices in this category
- Vernonia (Ironweed)
- Vervain (Tall verbena)
- Switchgrass
- Ratibida
- Tall Coreopsis

Plant Profiles



Charlie's Faves

- *Asclepias tuberosa* (Butterfly Milkweed)
- *Mertensia virginica* (Virginia Bluebells)
- *Agastache foeniculum* (Anise Hyssop)
- *Lobelia siphilitica* (Great Blue Lobelia)
- *Aquilegia canadensis* (Wild Columbine)

Agastache foeniculum (center)



Asclepias tuberosa (Butterfly Weed)



Photo: Mark Levisay



Mertensia (Virginia Bluebells)



Aquilegia canadensis (Wild Columbine)



WILD COLUMBINE
ANCOLIE DU CANADA
Aquilegia canadensis

North America
Family: Ranunculaceae

20160281A

Lobelia siphilitica (Great Blue Lobelia)



Bev's Faves

- *Penstemon digitalis* (Foxglove beardtongue)
- *Campanula rotundifolia* (Harebell)
- *Solidago rugosa* “Fireworks” (Goldenrod)
- *Asarum canadense* (Wild Ginger)
- *Phlox divaricata* (Woodland Phlox)
- *Gillenia* / *Porteranthus trifoliatus* (Bowman's Root)

photo: Kerry Woods



Penstemon
digitalis



Penstemon tubaeformis
flopping over- a prairie
species growing in rich
moist garden soil

Campanula rotundifolia (Harebell)



Solidago rugosa from “Fireworks”



Phlox divaricata (Woodland Phlox) with
Zizia aptera (Alexanders) June 4, 2017



Gillenia trifoliata aka Porteranthus
photo: Melinda Stuart



Where to Buy

- St. Williams (open house or local plant sales)
- Verbinnens (Brock Road) online sales and pre-orders for pickup (no “drop in” retail) online sales through <https://www.onplants.ca/>
- <https://kayanase.weebly.com/> In Oshweken
- Plant sales organized by HNC
- Local garden club / hort society sales
- SEEDS! Online retailers, NANPS, ORGS friends

Challenge!



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BEES

BUTTERFLIES

MOTHS



POLLINATORS OF NATIVE PLANTS

Attract, Observe and Identify
Pollinators and Beneficial Insects
with Native Plants



WASPS

FLIES

BEETLES

Heather Holm

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"If you have a backyard, this book is for you."
—Richard Louv, author of *Last Child in the Woods*

Bringing Nature Home

UPDATED AND EXPANDED

How You Can
Sustain Wildlife
with Native Plants

Douglas W. Tallamy

With a Foreword by Rick Darke



Pollinator Paradise Project

<https://www.hamiltonpollinatorparadise.org/>

**WE'RE FEEDING
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