

Who Shows Up? Wildlife in a Naturescape



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What is habitat?

The food,
water, cover,
and space that
an animal
needs to live
and
reproduce.



Native plants provide the highest quality habitat!



Let's explore why...

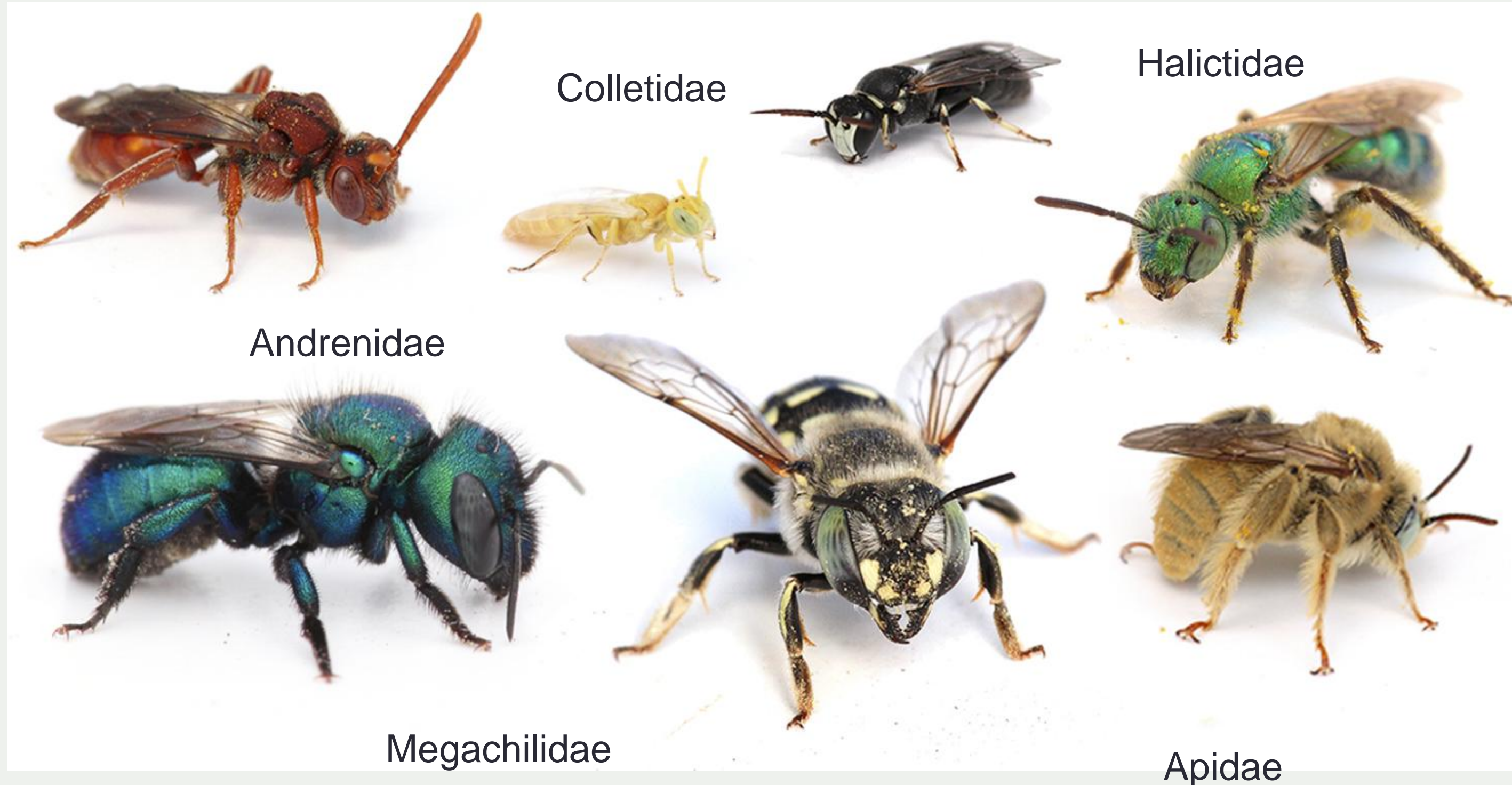
Native plants and insects



- 90% of the insects that eat plants can only eat the plants they have evolved with because they can tolerate the chemicals.
- If you introduce an invasive plant into the food web, most insects will not be able to eat it.

Won't you be my neighbor?

Native bees



Bees in St. Louis

Saint Louis has a rich diversity of native bees! Native bees need Native Plants!!

- 2 years of monitoring in 77 StL yards, researchers found 124 species of bees, 1 of which has not been found anywhere else in Missouri except Webster Groves.
- Researchers have found that due to native plantings in yards, bee diversity is increasing in the urban core!



BILLIKEN
BEE LAB

Thanks to Nina Fogel,
SLU PhD.

Caterpillars and Host Plants

NATIVE PLANTS

Plant Species	Caterpillar Species
Oak trees	534
Black cherry trees	456
Maple trees	285
Hickory trees	200
Walnut trees	130
Goldenrod	115
Asters	112
Sunflowers	73
Violets	29
Milkweed	12

INVASIVE PLANTS

Plant Species	Caterpillar Species
Tree of Heaven	6
Butterfly Bush	1
Autumn Olive	9
Forsythia	1
English Ivy	3
Garlic Mustard	0
Pampas Grass	0
Teasel	1
Star of Bethlehem	0
Elephant Grass	3

Won't you be my neighbor?

Birds: Residents, breeding migratory birds, and migratory visitors



Missouri is a nesting place for 150 species of birds. Approximately 60 of those species migrate.

Why this matters for backyard wildlife: Baby wildlife get really hungry!

Until most songbirds learn to fly, they only eat insects brought to them by their parents.



A young Chickadee can eat about 95 caterpillars a day.



It takes 16 days for a Chickadee to fly out of the nest.



The Math:

$(95 \text{ caterpillars/day}) \times (16 \text{ days}) = 1,520 \text{ caterpillars/ chickadee}$



Chickadees can have as many as 6 young at a time.



The Math:

6 baby chickadees eating
1,520 caterpillars per day for
16 days caterpillars is **9,120**
CATERPILLARS needed for
1 clutch of birds!



WHOA MAMA!

Like songbirds, many animals rely on insects for protein & fat



Mammals



Reptiles and Amphibians



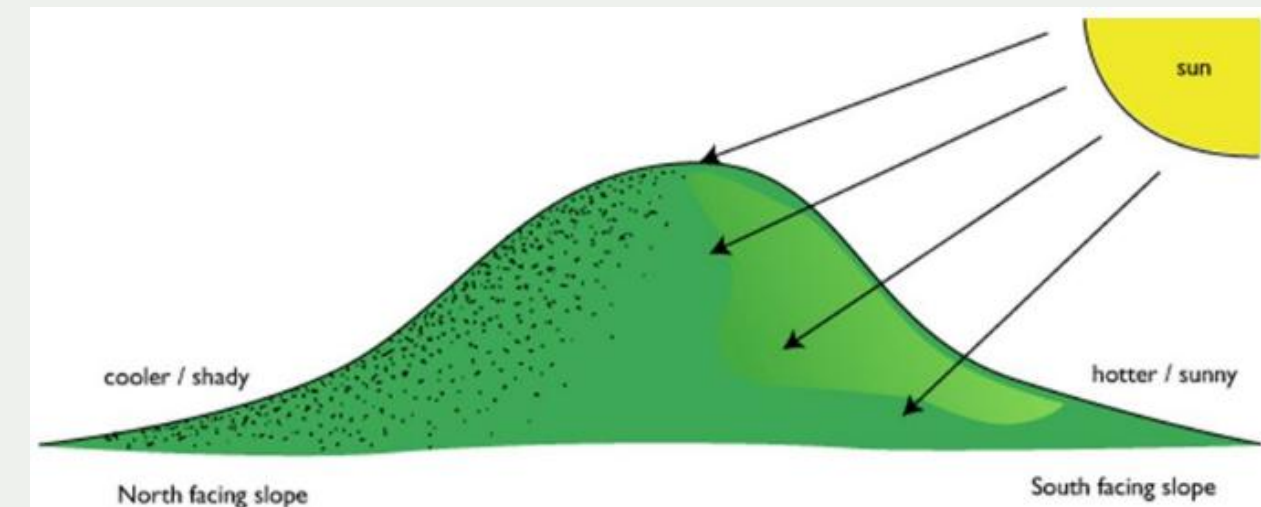
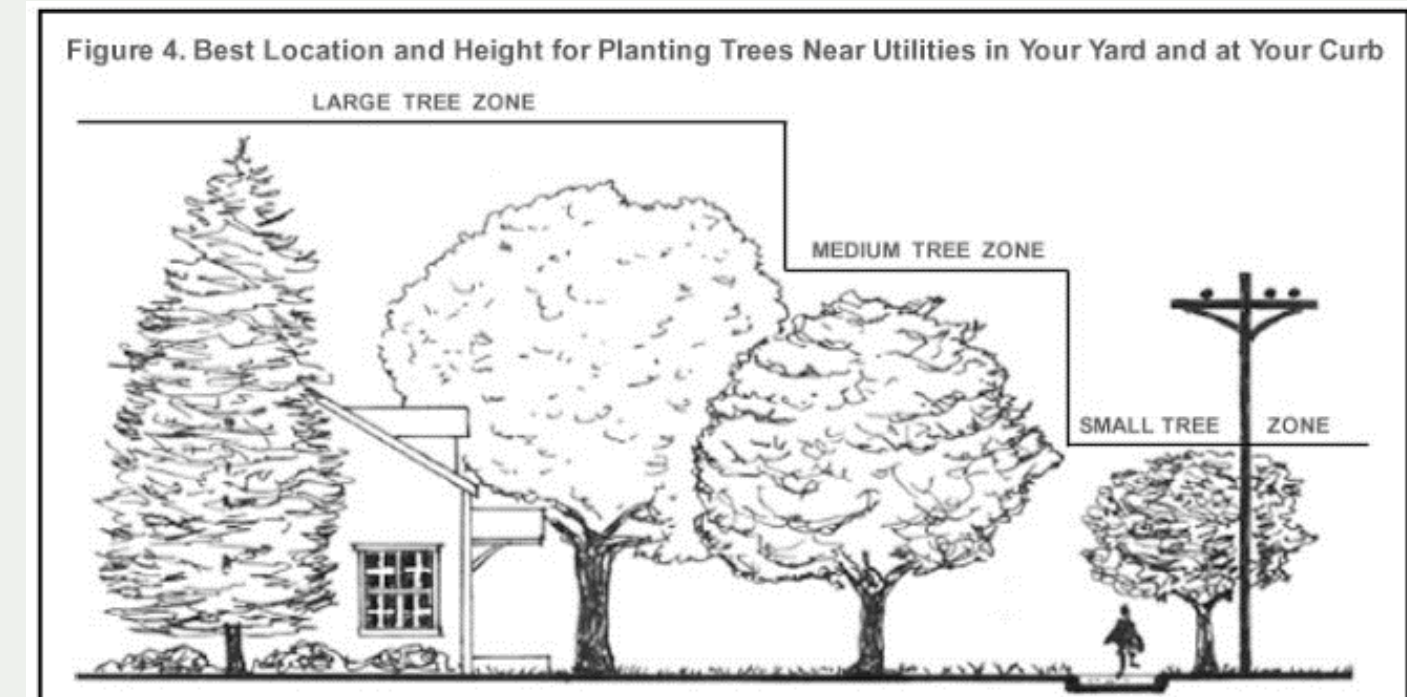
Invertebrates Beyond Bees



Planning and designing for backyard wildlife

Right plant, Right place

- Powerlines
- Underground utilities
- 1-800-Dig-Rite
- Site conditions
- Bloom time
- Structure



Rethink what makes a healthy lawn



Leave the weeds.
Don't spray pesticides.
Minimize fertilizers.
Slow your mow.

Attracting backyard pollinators

Companion plant natives with your vegetable garden



Garden Maintenance for Wildlife



Leave bare ground, reduce mulching.
Try to leave tree leaves where they fall.
Cut stems in spring, leave 10- 14" standing.

Artificial nesting structures



Cover for the birds

- Brush piles
- Xmas tree after season
- Leave standing veg after growing season
- Native shrubs
- Place near feeders for escape



Avoid pesticides and broadcast herbicide use

- Avoid any use of insect-killing pesticides!
- Invasive species WILL present a challenge to you at some point.
- Distinguish between broadcast spraying/spreading of herbicides and spot spraying problematic species.



Online resources:

- Grow Native! grownative.org
- St. Louis Audubon Society/Bring Conservation Home Program stlouisaudubon.org
- National Wildlife Federation www.nwf.org/backyard
- Shaw Nature Reserve Native Plant School and Landscape Guides (just google it, the link is too long)
- Forest Releaf of Missouri moreleaf.org
- Ebird and the Merlin Bird ID app
- iNaturalist app
- Seek app (especially great for kids!)

Questions?



Urban gardens are not isolated decorative spaces—they are habitat islands that collectively shape the future of biodiversity in St. Louis