LESS WORK, MORE NATURE DESIGN AND BUILD A LOWER-MAINTENACE NATIVE GARDEN



✓ ECOLOGICAL BENEFICIAL





✓ ECOLOGICAL BENEFICIAL

• HOST SPECIFICITY







✓ ECOLOGICAL BENEFICIAL

• HOST SPECIFICITY





✓ ECOLOGICAL BENEFICIAL

• HOST SPECIFICITY







90% OF INSECT SPECIES THAT EAT PLANTS ARE SPECIALISTS

Bernays, Elizabeth, and Michelle Graham. "On the evolution of host specificity in phytophagous arthropods." *Ecology*, vol. 69, no. 4, Aug. 1988, pp. 886–892, https://doi.org/10.2307/1941237.

✓ ECOLOGICAL BENEFICIAL

• SUPPORT MORE INSECTS



BUTTERFLY BUSH

OF CATERPILLAR SPECIES THAT USE AS A HOST PLANT GOLDENROD

Garden for wildlife. National Wildlife Federation. Keystone Native Plants – Eastern Temperate Forests – Ecoregion 8





✓ ECOLOGICAL BENEFICIAL

• FOOD WEB



✓ ECOLOGICAL BENEFICIAL

• FOOD WEB





BETWEEN 1970 – 2019 WE HAVE LOST 2.9 BILLION OR 29%

OF ALL BIRDS IN NORTH AMERICA

✓ ECOLOGICAL BENEFICIAL

• FOOD WEB



✓ ECOLOGICAL BENEFICIAL

• BIODIVERSITY



✓ ECOLOGICAL BENEFICIAL

• BIODIVERSITY



✓ ECOLOGICAL BENEFICIAL

• BIODIVERSITY

INVASIVES!



✓ ECOLOGICAL BENEFICIAL

• BIODIVERSITY



✓ ECOLOGICAL BENEFICIAL

✓ LESS MAINTENANCE?

✓ ECOLOGICAL BENEFICIAL ✓ LESS MAINTENANCE?



✓ ECOLOGICAL BENEFICIAL ✓ LESS MAINTENANCE?



✓ ECOLOGICAL BENEFICIAL ✓ LESS MAINTENANCE?





✓ ECOLOGICAL BENEFICIAL

✓ LESS MAINTENANCE (SOMETIMES)













✓ ECOLOGICAL BENEFICIAL✓ LESS MAINTENANCE (SOMETIMES)

✓ BEAUTIFUL & INTENTIONAL

✓ ECOLOGICAL BENEFICIAL
✓ LESS MAINTENANCE (SOMETIMES)
✓ BEAUTIFUL & INTENTIONAL
✓ SENSE OF PLACE





✓ ECOLOGICAL BENEFICIAL

✓ LESS MAINTENANCE (SOMETIMES)

✓ BEAUTIFUL & INTENTIONAL

✓ SENSE OF PLACE



WHAT IS THE WORK?

- WEEDING
- WATERING
- MULCHING
- PRUNING
- FERTILIZING

WHAT IS THE WORK?

MAINTENANCE TASKS:

- WEEDING
- WATERING
- MULCHING
- PRUNING
- FERTILIZING

RESEARCH PLANNING/DESIGN SITE-PREP INSTALLATION MAINTENANCE:

- WEEDING
- WATERING
- MULCHING
- PRUNING
- FERTILIZING

WHAT IS THE WORK?



- WATERING
- MULCHING
- PRUNING
- FERTILIZING

WHAT IS THE WORK?


MISSOURI PRAIRIE FOUNDATION'S GROW NATIVE PROGRAM WWW.GROWNATIVE.ORG

NATIVE PLANTS WORK

ABOUT ~ EVENTS ~ LEARN ~ RESOURCE GUIDE MEMBERSHIP NATIVE PLANT DATABASE

Grow Native! is the native plant marketing and education program of the <u>Missouri</u> <u>Prairie Foundation</u>. Buy Native Plants and Services from our Members

SHOP

DONATE

Attend an Event or Workshop

PLANT DATABASE TOP 10 LISTS DESIGNS RESOURCES

NATIVE PLANT DATABASE Search 369 native plants

PLANT DATABASE **ANSWER SERVICE**

MISSOURI BOTANICAL GARDEN

🐮 Missou	JRI BOTANICAL GARDEN	Search	
Visit Things To Do Gardens & Gardening > Your Garden	Learn & Discover Gardens & Gardening Sustainability Plant Conservation Plan > Plant Finder	nt Science About	
Gardening Help	Plant Finder	Like Plant Finder? Ensure its ongoing development	
Plant Finder Lawn, Landscape & Garden Design	Look up, view a photo and read about the over 7,500 plants which are growing or have been grown in the Kemper Center display gardens (plus selected additions) by scientific name, common name and/or selected plant characteristics.	Donate Now	
Edible Gardening Advice, Tips & Resources Plants of Merit	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z O Profile View O List View Basic Search		
Sustainable Gardening Gardening Education & Classes	Enter Common or Scientific Name or Kemper Code: Search • Profile View • List View		

Gardening Questions Contact Information Do you have a gardening question? Email it to plantinformation@mobot.org. Please allow up to 7 business days for a reply. Alternatively, you may call our Horticulture Answer Service at (314) 577-5143, Monday - Friday, General Garden: (314) 577-5100 9 a.m. to noon (CST). Toll free 1-800-642-8842 (314) 577-9473 Sassafras Cafe: **Green Resources** Daily, 9 a.m. to 4 p.m. (314) 577-5137 Garden Gate Shop: Whatever your guestion, the Garden's sustainable-living experts are at your service! Find green products and Daily, 9 a.m. to 5:30 p.m. services, evaluate green claims and plan your green home or lifestyle project by contacting us today Gardening Help (314) 577-5143 at greenresources@mobot.org or (314) 577-0246. (Answer Service):

x6595

SHAW NATURE RESERVE'S

NATIVE LANDSCAPING MANUAL



CHAPTER 4



Landscaping with Native Plants A Gardener's Guide for Missouri Landscaping with Native Plants is intended to provide gardeners with the tools they need to create and maintain successful native plant gardens. Whether you are establishing a new garden or expanding an existing one, the information included here provides practical tips and details to ensure successful lowmaintenance landscapes.

Chapter Four:

MISSOURI DEPARTMENT OF CONSERVATION

TREES & PLANTS



IN THIS SECTION			
Tree Seedlings	Identification: Field Guide	Forest Care	
Use native trees and shrubs to improve wildlife habitat and soil and water conservation on your land. Order seedlings from Missouri's state forest pursery and browse planting tins	Use MDC's field guide to identify trees and plants found in Missouri.	Read news on professional forest management and find professionals to help with your timber stand.	
insports state for eschargery, and provide planting ups	Tree Care	Fall Color Updates	
Diseases & Pests A variety of diseases and pests can affect the health of your trees. Learn about existing threats to your trees	From tree selection and planting to pruning guidelines, this section covers everything you need to know to take care of your backward trees.	Every fall MDC provides weekly status reports on fall foliage throughout the state.	
a cel cell have closing an each to your a cell.	surger a a con	Missouri State Champion Trees	
Timber Sales	Native Plants for Your Landscape	There is something about a big tree that commands interest,	
See the latest trends on timber sales.	Learn how to use native-plant landscaping to attract wildlife.	respect, and a certain amount of awe. Trees are the largest and oldest living organisms. This page details the requirements for a	
Trees Work	Invasive and Nuisance Species	Missouri State Champion Tree.	
Visit MDC's Trees Work website to learn how you benefit from having trees in your yard and community.	Learn about Missouri's most common invasive and nuisance species and how to manage them on your property.	Governor's Mansion Christmas Tree	
		Search	
		We're searching the state for a suitable everygen to light up th	

e searching the state for a suitable evergreen to light up the Governor's mansion lawn this holiday season. Send your entry by Oct. 10.

BOOKS







NATURE'S BEST HOPE BY DOUGLAS TALLAMY THE LIVING LANDSCAPE BY RICK DARKE & DOUG TALLAMY NATIVE PLANTS OF THE MIDWEST BY ALAN BRANHAGAN

PLANNING/DESIGN

MU ZU

START SMALL!





START SMALL!





> LOCATION LOCATION LOCATION USE EXISTING

> > BEDS



> LOCATION LOCATION LOCATION USE EXISTING BEDS



> LOCATION LOCATION LOCATION

> > PLANT IN SHADE





> LOCATION LOCATION LOCATION

> > USE HARD EDGES



> LOCATION LOCATION LOCATION

> > USE HARD EDGES



LOCATION LOCATION LOCATION

USE HARD EDGES



LOCATION LOCATION LOCATION

PLANT SOMEWHERE YOU WILL REGULARLY SEE





SITE ANALYSIS

LIGHT SOIL MOISTURE DRAINAGE

> SITE ANALYSIS

LIGHT SOIL MOISTURE DRAINAGE



SITE ANALYSIS

LIGHT SOIL MOISTURE DRAINAGE



54

SITE ANALYSIS

LIGHT SOIL MOISTURE DRAINAGE

POOR DRAINAGE



FORMS "RIBBONS

GOOD DRAINAGE



CRUMBLES



PLANT SELECTION

RIGHT PLANT RIGHT PLACE

PLANT SELECTION

RIGHT PLANT RIGHT PLACE



PLAN **SELECTIO**

IING/DESIGN	ABOUT ~ E	VENTS - LEARN - RESOURCE C	GUIDE MEMBE	RSHIP NATIVE PLANT I	DATABASE	SHOP	
TE-PREP	□ Trees (59) □ Vines (14)	morgreuo miginico Herbaceous Perennials Her Herb	שכוום uchera richardsonii baceous Perennials	Heuchera americana Herbaceous Perennials	Centaurea americana Annuals	Dasswood Tilia americana Trees	GROW NATIVE
TALLATION NTENANCE	SUN EXPOSURE Full Sun (299) Medium Sun/Average Shade (226)				A State		
	Soil Moisture	American Beakgrain B Diarrheno obovata Cal	American leautyberry Micorpa americana	Gardenin Help	g Pla	nt Finder	bout the game 7 500 plants which are growing or have
PLANT	□ Aquatic (5) □ Dry (220) □ High (146) □ Moderate (310)	Grasses / Sedges / Rushes	Shrubs	Plant Finder Lawn, Landscape & Garden Design Edible Gardening	Scienti	which a photo and read a which the Kemper Center mmon name and/or sele fic Name List	c display gardens (plus selected additions) by scientific cted plant characteristics.
ECTION	 □ Wet (26) HEIGHT □ Under 6 inches (21) □ 6 inches-1 foot (43) 	American Holly Hex opaco Trees Ca	American Hornbeam Irpinus caroliniano Trees	Advice, Tips & Resour Plants of Merit Sustainable Gardenin Gardening Education Classes Visit the Center for H Gardening	Basic S Basic S Enter Co	O Profile View () earch mmon or Scientific Nam Search	e or Kemper Code:
RIGHT PLANT				Gardening Help Site I	Advand Enter Co	eed Search mmon or Scientific Nan	ne or Kemper Code:
RIGHT PLACE	МО	вот		Gardening Help Se Search Join our Horticulture Sta Determine Your	arch Family: Genus: Genus: Plant Ty Sun: Full sun	pe: Zone: V Wate V Dry t	c: o medium V
				Growing Zone Plant Finder	Spread F	rom (feet): Heigf rom (feet): Sprea Bloor	d To (feet): n Time: 5 8

PLANT SELECTION

RIGHT PLANT RIGHT PLACE

MISSOURI WILDFLOWER — NURSERY	PF	RAIRIE MOON NURSERY		
Pink (2)Purple (2)White/cream (2)	Wild Flower	PRAIRIE MOON NURSERY	Seeds 🗸	Seed Mixes 🗸
Yellow (1)	ants Bring Natur	SUN EXPOSURE	_	12
	~	Full	(9)	
BLOOM PERIOD	+ SEED	Partial	(8)	6741
SUNLIGHT PREFERENCE	lear – Dry Shallow Soil Seed Mix	Shade	(2)	
🗹 Full sun (8)		SOIL MOISTURE	_	Alliu
Full sun to light shade (5)		Wet	(7)	w
		Medium-Wet	(15)	\$3.0
MAXIMUM HEIGHT	+	Medium	(18)	\$ 0.0
MOISTURE <u>c</u>	lear -	Medium-DryDry	(15)	(
Average (7)				
Average, moist (1)		NATIVE RANGE		The second second
🗸 Dry (8)	Jon 2 Car	MIDWEST	_	
Dry, average (39)			(8)	
Dry, average, moist (4)			(8)	C.C.A.
Wet (1)			(7)	100
			(6)	A Des
FORMAL LANDSCAPING	-	(1)·	(6)	
3-Star (2)	POTTED PLANT	MO	(9)	entrand.
4-Star (5)	Opuntia humifusa (Eastern Prickly Pear)	ОН	(5)	
	ELILALY FEEL			

Plan

Allium canade

Wild Garlie \$3.00 - \$150

0

PLANT SELECTION

LIMIT THE NUMBER OF SPECIES



PLANT SELECTION

CHOOSE NON-AGGRESSIVE SPECIES



PLANT SELECTION

CHOOSE NON-AGGRESSIVE SPECIES



PLANT SELECTION

CHOOSE NON-AGGRESSIVE SPECIES

PRAIRIE NURSER	MOON Seeds ~	Seed Mixes 🗸 🛛 Plant
	(2)	
		Desmanthus illinoe
BLOOM COLOR	-	Illinois Bundle Fl
ADVANTAGES	Recommended for home landso otentially aggressive; could over landscapes	\$3.00 - \$21.0 caping but whelm small
GERMINATION CODE		36
A	(8)	
C(30)	(2)	
C(60)	(13)	
C(90)	(2)	TATA
D	(5)	IN THE DAY &
н	(1)	19 5 X 6
	(1)	

USDA Z Zone

Zone

Zone

Easily grown in average, medium to wet, well-drained soil in full sun to part shade. Tolerant of poor soils, but prefers moist, fertile soils. One of the more shade tolerant of the ornamental grasses. Self-seeds and may spread aggressively. Leaving foliage in place over winter adds interest to the landscape and helps protect crowns from the cold. Cut back to the ground in early spring.

PLANT SELECTION

USE GROUNDCOVERS

PLANT SELECTION

USE GROUNDCOVERS





PLANT SELECTION

USE GROUNDCOVERS



SELECTION



USE SEDGES & GRASSES

PLANT

PLANT SELECTION

USE SEDGES & GRASSES



PLANT SELECTION

USE SEDGES & GRASSES



PLANT SELECTION

USE SEDGES & GRASSES



PLANT SELECTION

PLANT SHRUBS & TREES



PLANT SELECTION

PLANT SHRUBS & TREES


PLANT SELECTION

PLANT SHRUBS & TREES



> PLANT LAYOUT PLANT

CLOSELY!







PLANT LAYOUT

TALL PLANTS IN MIDDLE OR BACK



PLANT LAYOUT

INTERMINGLE PLANTS



PLANT LAYOUT

OR GROUP PLANTS TOGETHER

SITE-PREP

METHODS TO PREPARE NEW SITE

REMOVE SOD





METHODS TO PREPARE NEW SITE

SHEET MULCH



METHODS TO PREPARE NEW SITE

SOLARIZE



> DO NOT TILL!





DO NOT TILL!







NO MOISTURE AND NO AIR • WEEDS



USE PLANTS NOT SEEDS





PLANT SMALL



NO LANDSCAPE FABRIC



NO LANDSCAPE FABRIC OR STONES!







MULCHING

NATURAL MATERIAL 1-3 INCHES AWAY FROM BASE OF PLANT

MULCHING

NATURAL MATERIAL 1-3 INCHES AWAY FROM BASE OF PLANT





MULCHING

NATURAL MATERIAL 1-3 INCHES AWAY FROM BASE OF PLANT



HOW MUCH: 1 INCH OF WATER

WATERING

HOW OFTEN: 1st WEEK: ONCE A DAY 1ST MONTH: ONCE A WEEK 1ST YEAR: ONCE A MONTH

PATIENCE







GET OUT IN THE GARDEN & OBSERVE





WEEDING

PLANT CLOSELY!



WEEDING

PLANT CLOSELY!



WATERING

RIGHT PLANT RIGHT PLACE



MULCHING

PLANT CLOSELY!



PRUNING & CUTTING BACK



PRUNING & CUTTING BACK







WATCH YOUR EDGES







HAVE FUN!





