



Upcoming Webinars

- **May 1 - Growing Produce Safely for Consumption, Sales or Donation**

- Londa Nwadike, Londa Nwadike, Associate Professor of Food Safety, Kansas State University and University of Missouri Extension

Zoom Webinar | You are viewing Scott Swanson's screen | view Options

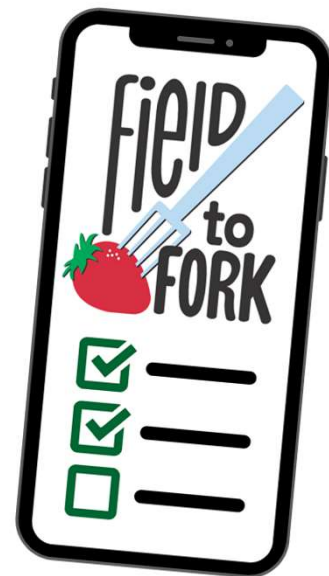
Presenter

Audio Settings ^ | Chat | Raise Hand | Q&A | Leave

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- **Please complete the short online survey** that will be emailed to you after today's webinar. It will take just a couple minutes!
- Be sure to sign up for an opportunity to win a prize in the drawing. After submitting the survey, a form to fill out with your name/address will appear.

Acknowledgement: This project was supported by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through 21SCBPND1069. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.



April 24

Making Nature at Home in Your Landscape

Carrie Knutson, Extension Agent, Agriculture & Natural Resources - Horticulture, NDSU



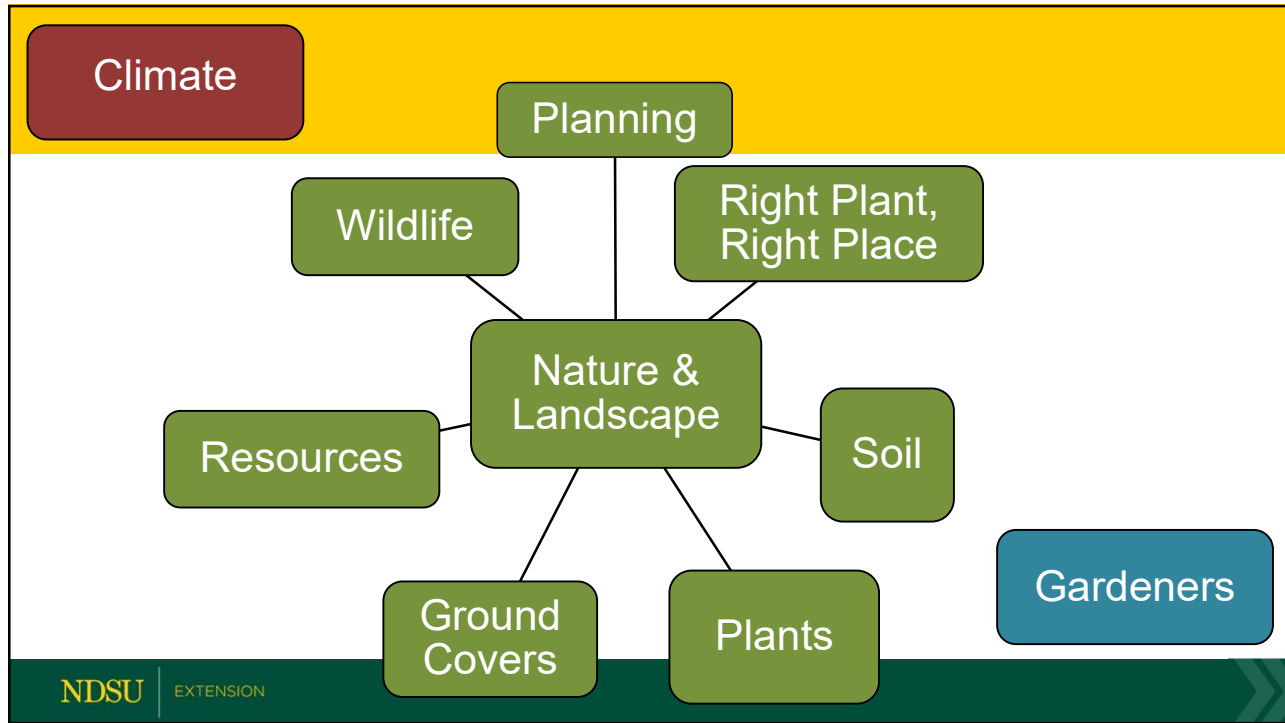
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Why should we care?



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Climate

- Hardiness Zones
- Seasonality
- Microclimates
- Climate Journal

The map is titled "2023 USDA Plant Hardiness Zone Map" and is provided by the "USDA Agricultural Research Service U.S. DEPARTMENT OF AGRICULTURE". It shows the continental United States, Alaska, and Hawaii, with different colors representing various hardiness zones. A legend on the right side of the map provides the following data:

Temp. (F)	Zone	Temp. (C)
-40 to -40	1	-40 to -40.6
-35 to -30	2	-34.4 to -30.0
-30 to -20	3	-28.9 to -23.3
-10 to 0	4	-23.3 to -17.8
0 to 10	5	-17.8 to -12.2
10 to 20	6	-12.2 to -6.7
20 to 30	7	-6.7 to -1.1
30 to 40	8	-1.1 to 4.4
40 to 50	9	4.4 to 9.9
50 to 60	10	9.9 to 15.6
60 to 70	11	15.6 to 21.1

Logos for Oregon State University and a note "Map data by the Portland Climate Group, College of Engineering, Oregon State University" are also present.

Soil

- Soil Texture
 - Water and nutrient holding, organic matter accumulations, erosion and compaction
- Soil Test
- Soil pH

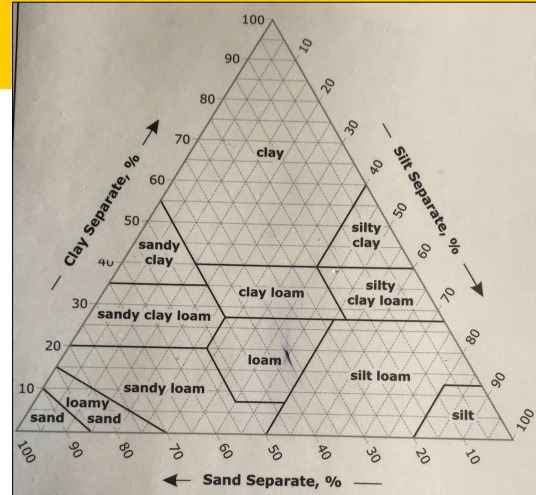
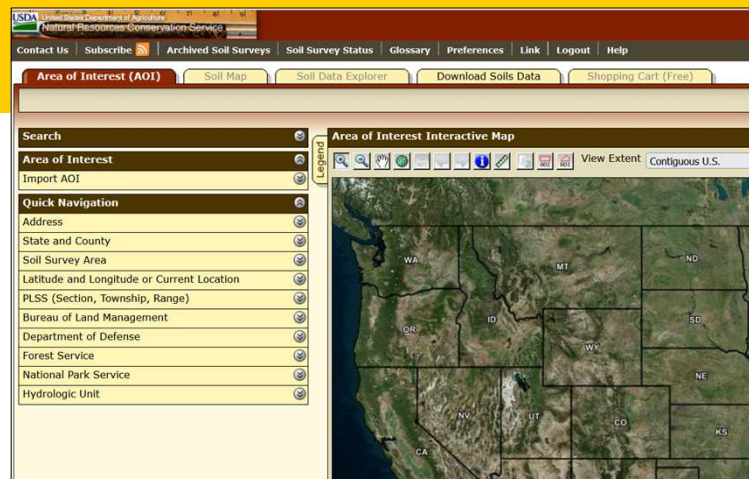


Photo Credit: NRCS Field Book For Describing and Sampling Soils, Version 3 2012.

Soil

- USDA NRCS Web Soil Survey
 - <https://websoilsurvey.nrcs.usda.gov/app/>
- Topography
 - Water Drainage



Plants

- Resources plants provide
 - Habitat
 - animals and insects
 - people
 - food, beauty, protection
- Plant needs
 - light, water, soil texture and soil pH

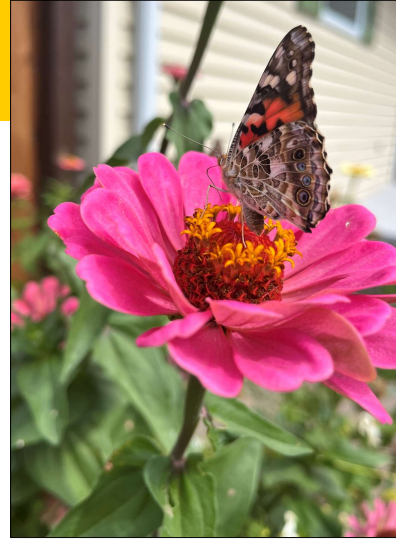


Photo Credit: Knutson 2023

Plants

- Mature plant size
 - Understand their habit, size and spreading ability
- Invasives plants
 - Non-native plants with a high ability to spread with few ecosystem benefits
- Native plants
 - Plants that evolved with ecosystem and provide benefits



Photo Credit: Knutson 2020

Ecoregions

- EPA
 - Areas where ecosystems are similar

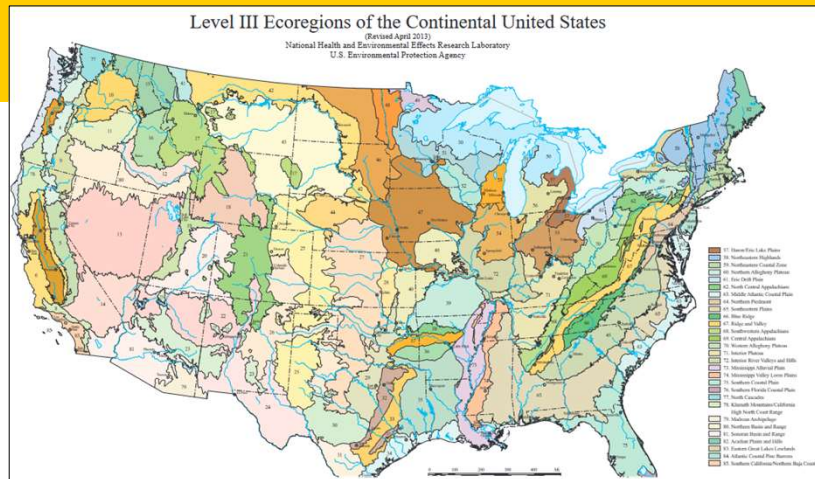


Photo Credit: <https://www.epa.gov/eco-research/ecoregions>

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Plants

- What's Native?
 - Extension Resources
 - North Dakota Game and Fish
 - <https://gf.nd.gov/pollinators/gardens>
 - Xerces Society
 - <https://xerces.org/pollinator-resource-center/north-central>
 - USDA PLANTS database
 - <https://plants.usda.gov/home>
 - HomeGrown National Park
 - <https://homegrownnationalpark.org/keystone-trees-and-shrubs/>

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Wildlife

- Animals
 - Birds, squirrels, rabbits, deer, skunks, raccoons
- Insects
 - Predators, detritivores, food sources
- Basic needs
 - Food, shelter and water



Photo Credit: Knutson 2023

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Plants for Wildlife

- Create Diversity
 - Use a mixture of plants
 - Native species are the majority
 - Plan for blooms all season
 - Grasses for shelter
- Trees and shrubs
- Mix ornamentals and edibles
 - Herbs
 - Annuals



Photo Credit: Knutson 2022

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Plants for Wildlife

- Garden Clean-up
 - Let leaves lay where they fall
 - Last year's growth is important habitat
 - Wait until temperatures are consistently above 50°F



Photo Credit: Knutson 2024

Example: Monarch Butterflies

- Adult
 - Lay eggs exclusively on milkweed (*Asclepias sp.*)
 - Feed on nectar
- Larvae
 - Feed exclusively on milkweed (*Asclepias sp.*)



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Water for Wildlife

- Birdbath or anything that will hold water
 - Keep full
 - Fresh water daily and clean weekly
 - Add a fountain
- Puddling dish
- Ponds



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Ground Covers

- Rocks
- Turfgrass
- Mulch
- Plants



Photo Credit: Knutson 2020

Resources

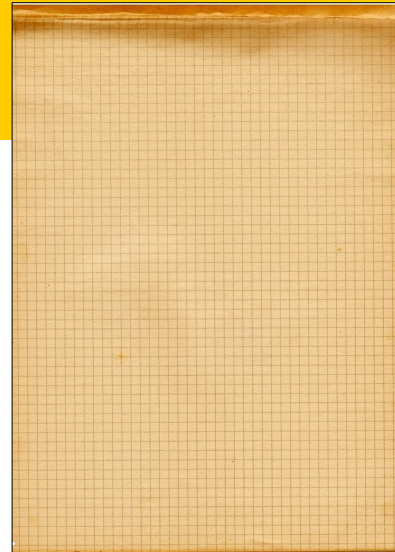
- Water
 - Irrigation Practices
 - Rain gardens
 - Rain water collection
- Fertilizer
- Pesticides



Photo Credit: Knutson 2020

Plan

- Purpose or goals
 - children, pets, production
 - Wildlife
- Theme or structure
- Draw it out!



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The End Result?



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Questions

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The poster features a central grid of 12 images showcasing various fresh foods: broccoli, red onions, apples, asparagus, lettuce, squash, watermelon, honey, berries, grapes, and cucumbers. The text 'NDSU EXTENSION' is written vertically on the left, and '2024 Field to Fork' is prominently displayed in the center. Below the year, the website 'www.ag.ndsu.edu/food' and the tagline 'EXTENDING KNOWLEDGE >> CHANGING LIVES' are included. The NDSU logo and 'EXTENSION' are at the bottom left of a dark green footer.

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2024
Field to Fork

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