



master
conservationist

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Module 3

Conservation in Rural Areas



Conservation Practices on Agricultural Landscapes

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Today's Plan

- Why is conservation on agricultural land so important?
- 3 Farmer Case Studies
- 4 Conservation Principles



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Why is conservation on agricultural land so important?

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Iowa Land Use

- Open Water
- Developed
- Shrubland or Barren Land
- Forest
- Wetland
- Grassland/Herbaceous
- Pasture/Hay
- Cultivated Crops

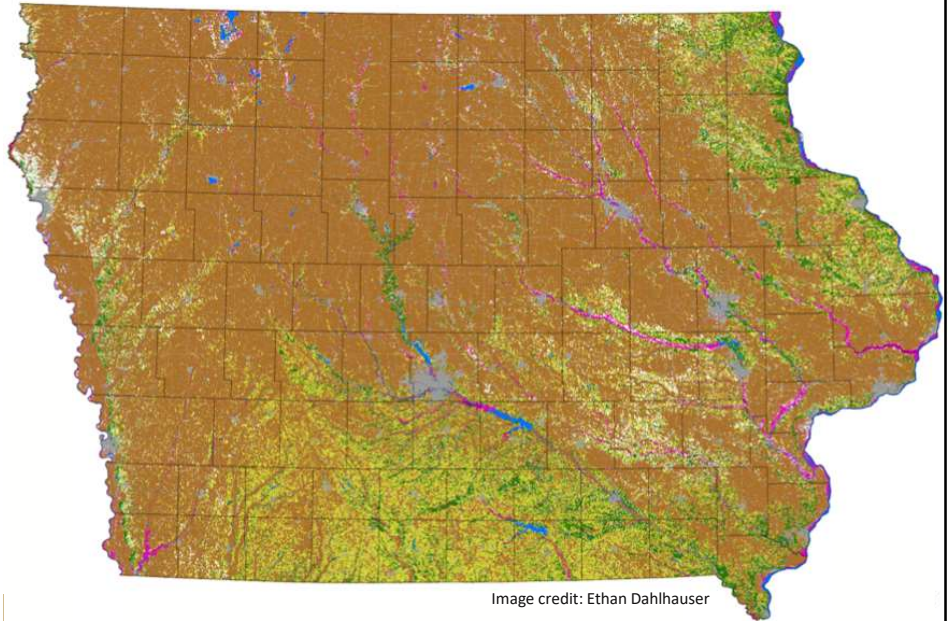
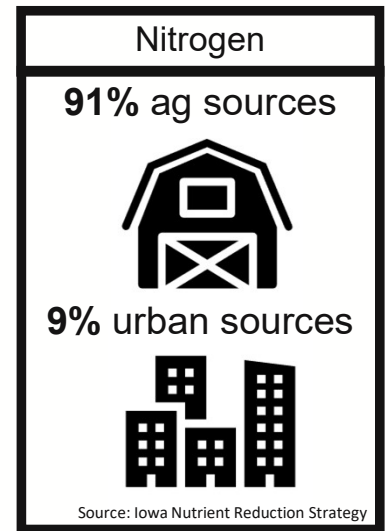
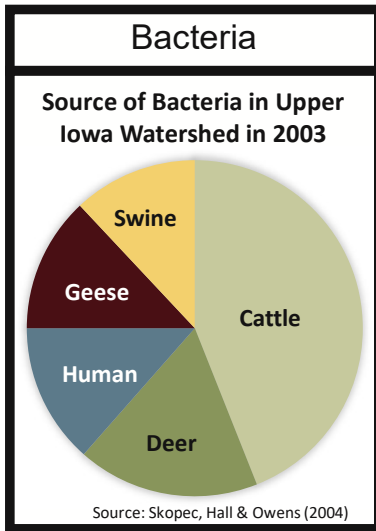


Image credit: Ethan Dahlhauser

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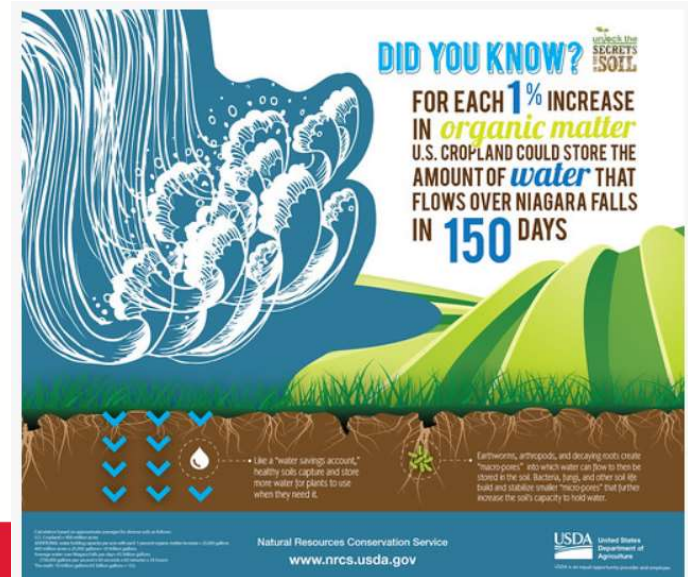
Common Water Pollutants



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The potential of soils

- Absorb and hold water
- Store carbon
- Provide nutrients/ food
- Diversity of soil microbiome



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HOW are farmers protecting our land & water resources?



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Case Study #1: Corn and Soybean Farmer



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Ground that is covered



Perennials



Pasture



Cover Crops



Extended Rotations



Buffers/Grassed
Waterways



Reduced Tillage



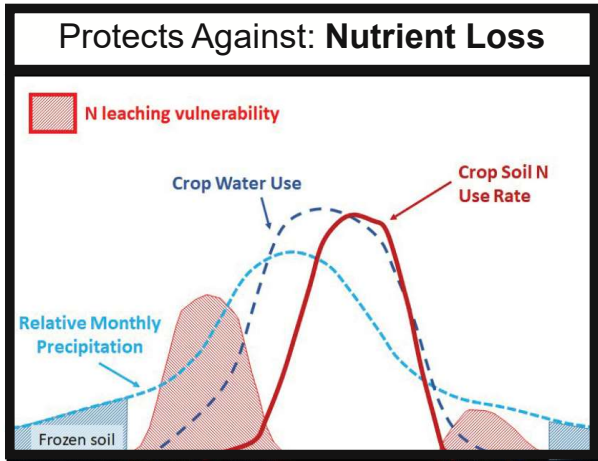
Trees

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Ground that is covered



Source: USDA NRCS

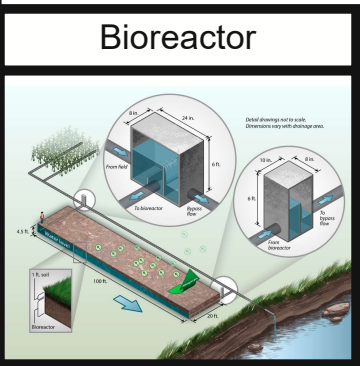
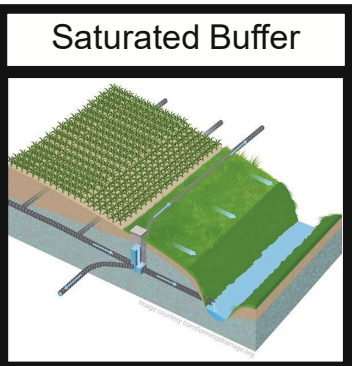
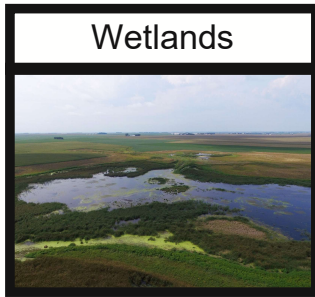


January -----> December

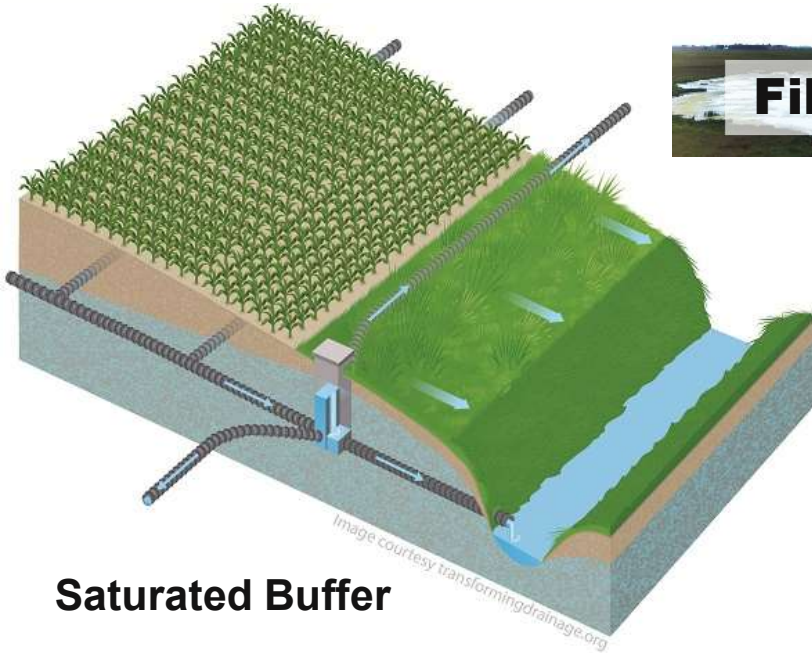
Source: ISU Extension Publication CROP3162

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Filtering Nitrates



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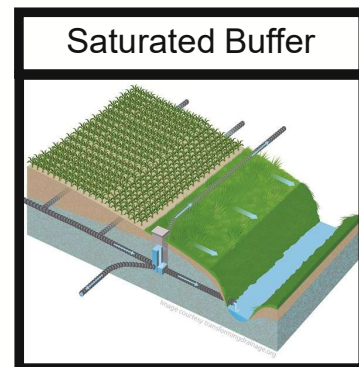


Drainage tile emptying into stream

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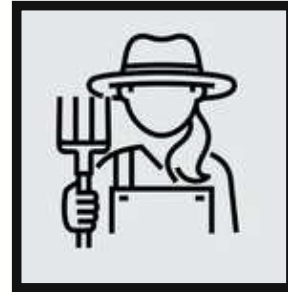
Corn and Soybean Farmer:

- Keep the ground covered & filter nitrates



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Case Study #2: Cattle Farmer/ Rancher



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Slowing water down



Perennials



Pasture



Cover Crops



Sedimentation Basins/Ponds



Extended Rotations



Buffers/Grassed Waterways



Wetlands



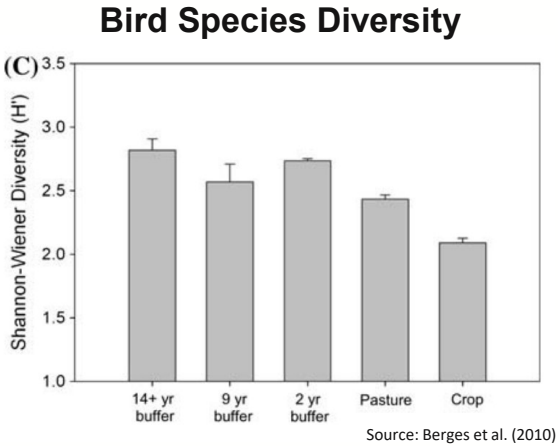
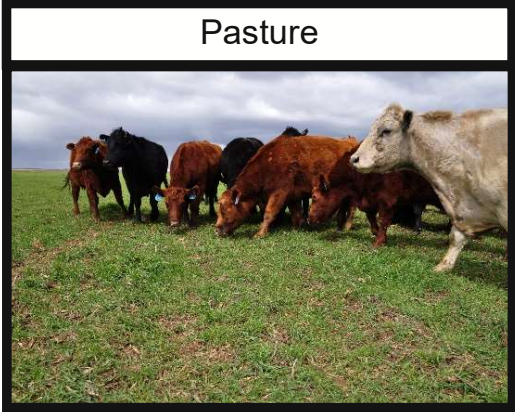
Reduced Tillage



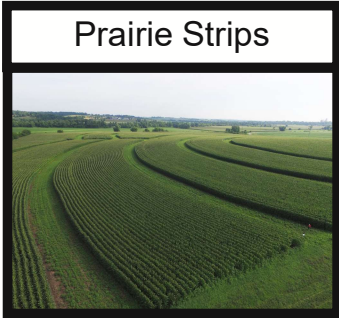
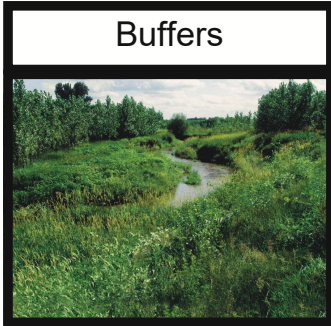
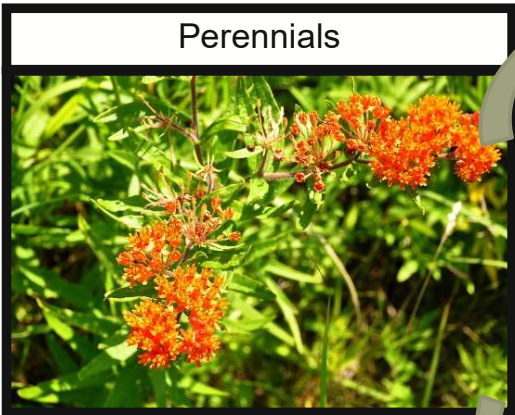
Terraces

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Slowing water down

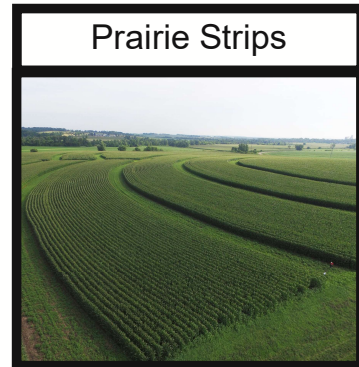
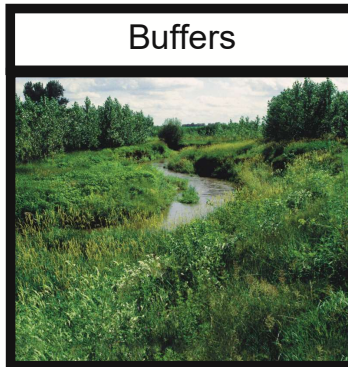


Slowing water down



Cattle Farmer/ Rancher:

- Slow water down



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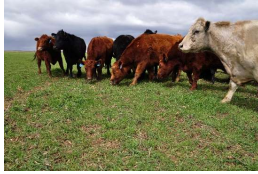
Case Study #3: Vegetable Farmer



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Perennials



Pasture



Cover Crops



Trees



Extended Rotations



Buffers/Grassed Waterways



Wetlands

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Trees

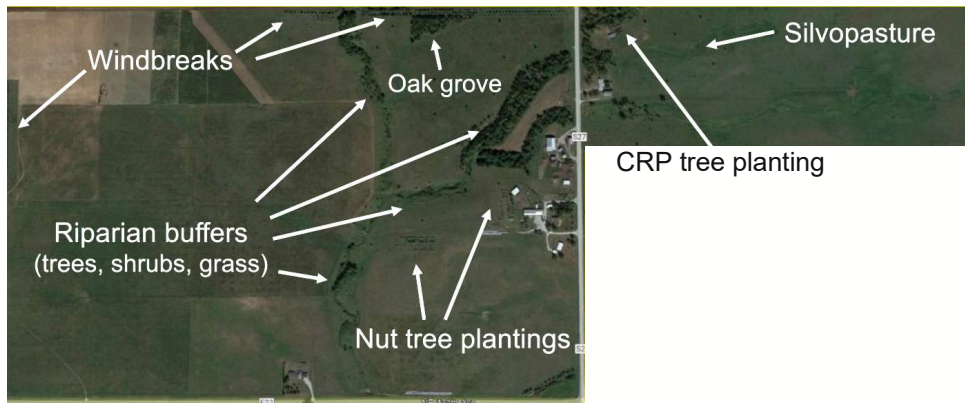


Image source: Billy Beck

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Trees/ Wild Spaces Help People, too!

“The grove has become a haven for the soul as well, a sort of solemn place of refuge for when I need to pray or sort things out in my mind.”

“As a kid, the grove was a place full of wonder and adventure. It was the sort of “wild” place on the farm...” “Maybe we all need a place where we can safely go back in time for a little while and look at the world again in the way we perceived it as a child. The farm grove is that place of sanctuary.”

- Ron Rosmann



Takeaways

- There are lots of different approaches to conservation on agricultural land
 - Keeping the ground covered
 - Filtering nitrates
 - Slowing water down
 - Adding diversity



Thank you

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All photos from the Conservation Media Library unless otherwise noted