Iowa's Symbols, from the Iowa's Nature series

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The content included in these slides come from the Iowa State University Extension publications on Iowa's Nature, available online at <u>https://naturalresources.extension.iastate.edu/Iowas-Nature</u> and from the Iowa Chapter of the American Fisheries Society at <u>https://iowa.fisheries.org/state-fish/</u>.

Nationally, in terms of state symbols

- All 50 states have a state
 - Flag
 - Seal
 - Bird
 - Flower
 - Tree
 - Song



- Other common state symbols
 - Animal (48 states)
 - Fish (47 states)
 - Insect (45 states)
 - Reptile (29 states)
 - Gemstone (28 states)
 - Fossil (25 states)
 - Mineral (21 states)

State flag of Iowa.

Iowa's State Flower, Wild Rose

The Wild Rose became the State Flower in 1897



The Prairie Wild Rose is common plant in Iowa's Prairies

Beautiful in color and fragrance, ubiquitous across the state, and important in its uses by people and wildlife, the wild rose is a fitting choice as the state flower of lowa.

To learn more about lowa's Prairies, which originally covered over 75% of lowa, check out

https://store.extension.iastate.edu/product/ 16123-PDF





The Prairie Wild Rose is a part of prairie and woodland food webs

- Wild rose provides food for a variety of wildlife including insects and birds, who eat the seeds.
- Thorny rose thickets provide a safe escape for small animals and birds.



Producers

- 1. Big bluestem
- 2. Birdfoot violet
- 3. Purple coneflower 4. Rattlesnake master
- 5. Field thistle
- 6. Blazing star
- 7. Compass plant

Primary Consumers

- 8. Plains pocket gopher 9. Elk - extirpated 10. Bison - extirpated 11. American goldfinch 12. Prairie vole
- 13. Two-lined grasshopper

Secondary Consumers

14. Bobolink 15. Grasshopper mouse 16. American badger 17. Bullsnake

Tertiary Consumers

18. Wolf - extirpated 19. Northern Harrier 20. Covote

Detritivores/Decomposers 21. Earth boring dung beetle



Iowa's State Rock, Geode

The Geode became the State Rock in 1967



Keokuk geode inside and outside.

Geodes and Geology

- Geodes can occasionally be found throughout most of Iowa, but they are most common in the southeastern part of the state.
- The word geode is Latin for "earth-like," referring to the appearance of a geode.
- Geodes are a curiosity, with their crystals inside a seemingly rough exterior, hiding in plain sight.
- It is an amazing thing to discover one, and adds to the beauty and intrigue of our state.



Geodes and Geology

- Although the outside of a geode is hard and colorless, the inside is usually hollow and may be lined with exquisite crystals of white, gray, lavender, and brown colors.
- Geodes reveal their beauty when they are broken or cut open, perhaps a fitting metaphor for Iowa, a land so often portrayed as flat and mundane in national discourse, but known to its inhabitants to be richly diverse and beautiful.
- To learn more about Iowa's geology, check out <u>https://store.extension.iastate.edu/Product/16120-PDF</u>



Iowa's State Bird, American Goldfinch

The American Goldfinch became the State Bird in 1933

The goldfinch was nominated to be the state bird by the Iowa Ornithologists' Union because it is a year-round resident of Iowa that is easily recognizable.



Male American goldfinch



Female American goldfinch

Birds Galore and More!

- Goldfinches are small birds with a wingspan of less than nine inches.
- Goldfinches have a short, strong beak well-designed for breaking open seeds. Their favorite seed plants are thistles, but they will eat seeds from a variety of plants including asters, goldenrods, and dandelions.



Birds Galore and More!

- Goldfinches are lively, colorful creatures of open fields, woodland edges, and backyard gardens.
- They are a very charismatic bird, well-suited to the character of Iowa.
- To learn more about lowa's birds and other animals, check out <u>https://store.extension.iastate.edu/product/1</u> <u>6126-PDF</u>



Iowa's State Tree, Oak Tree

The Oak tree became the State Tree in 1961

There are many species of oak trees found throughout lowa. The legislature did not designate any single species as the state symbol and rather named the whole group of oaks as the state tree.



Oaks support an abundance of life.

IOWA'S NATIVE OAKS

lowa's 12 oak species are evenly divided between two groups:

White Oak Group

Members of the white oak family have rounded leaf lobes.

White oak (Quercus alba) Bur oak (Quercus macrocarpa) Swamp white oak (Quercus bicolor) Chinquapin oak (Quercus muehlenbergii) Dwarf chinquapin oak (Quercus prinoides) Post oak (Quercus stellata)



Red Oak Group

Members of the red oak family have pointed leaf lobes.

Red oak (Quercus rubra) Pin oak (Quercus palustris) Northern pin oak (Quercus ellipsoidalis) Black oak (Quercus velutina) Shingle oak (Quercus imbricaria) Blackjack oak (Quercus marilandica)



Oak trees are a vital part of woodland habitats and food webs

- Iowa's oak-dominated woodlands provide excellent habitat for a variety of wildlife. Among lowa's oak species, the bur oak (also spelled "burr") is the only species found in every county.
- Oaks are a group of trees that typify the strong, valuable, and fertile land of Iowa.
- To learn more about lowa's forests, check out https://store.extension.iastate.ed u/product/16122-PDF

Wildlife that use lowa oak trees.









Cooper's hawk



Scarlet tanager



White-tailed deer



White-breasted nuthatch







Black-capped chickadee



Eastern red bat







Fox squirrel









Gray fox

Iowa's State Fish,



Iowa is one of only three states without a state fish, 47 other states have adopted a state fish.

- Fish commonly found in Iowa that are also state fish elsewhere include Brook Trout (10 states), Channel Catfish (4), Largemouth Bass (4), Walleye (3), Crappie (1), Bluegill (1), White Bass (1), Northern Pike (1), Muskellunge (1), Paddlefish (1)
- Iowan's most often go fishing for Largemouth Bass, Bluegills, Crappies, Channel Catfish and Walleyes
- The Iowa DNR lists all of Iowa's 148 fish species at: <u>https://www.iowadnr.gov/Fishing/Iowa-Fish-Species</u>

Let's not be a "copy-catfish" picking a state fish

- Many states have chosen to be unique and selected a fish with a tie to their state name or geography as their state fish, such as Florida Largemouth Bass, Kentucky Spotted Bass, Guadalupe Bass (Texas), Apache Trout (Arizona), Bonneville Cutthroat Trout (Utah), Lahontan Cutthroat Trout (Nevada)
- The states around lowa have the following state fish:
 - Missouri, Channel Catfish and Paddlefish
 - Kansas, Channel Catfish
 - Nebraska, Channel Catfish
 - South Dakota, Walleye
 - Minnesota, Walleye
 - Wisconsin, Muskellunge
 - Illinois, Bluegill



• Kansas (2018) and Arkansas (2019) were the two most recent states to identify a State Fish. Both of those efforts were led by students!

Iowa's State Fish, Iowa Darter?

 The Iowa Darter is being nominated to be the state fish by the Iowa Chapter of the American Fisheries Society because it is one of Iowa's most colorful native fish, it loves clean water, and was named for Iowa when it was initially discovered here.





Male Iowa Darter Image Credit Joe Tomelleri, copyright Joe Tomelleri Female Iowa Darter Image Credit Joe Tomelleri, copyright Joe Tomelleri

Why the Iowa Darter?



- The Iowa Darter is one of Iowa's most colorful and beautiful fish.
- Iowa Darters are most abundant in the natural lakes in Iowa, but can be found in rivers and streams in northern Iowa, as well as the Missouri and Mississippi Rivers.
- The Iowa Darter prefers clean water, just like many other residents of Iowa.
- The Iowa Darter is unique in that it is the only fish that is named after the State of Iowa.
- Want to know more about the Iowa Darter, check out this YouTube video: <u>https://www.youtube.com/watch?v=3sS8enX8nfc</u>
- Iowans <u>LOVE</u> all things Iowa, so what better for us than the Iowa Darter!

So what can you do? Something fishy!



- You can make a difference. Students led recent campaigns in Kansas (2018) and Arkansas (2019) to adopt state fish in those states. Check out this <u>article</u> to learn about Henry Foster and his work to make the Alligator Gar the Arkansas State Fish
- If you are interested in learning more about fisheries in Iowa, check out the <u>lowa Chapter of the American Fisheries Society</u>

Other Uniquely Iowan Entities (that are not official state symbols)

- Tama Soil Series
- Loess Hills
- Regal Fritillary Butterfly
- Pleistocene Snails
- Manson Impact Structure









Tama Soil Series



- The Tama Soil Series is a fitting choice for state soil because it's highly productive for agriculture and formed from a thick layer of loess and thousands of years of prairie roots.
- The soil has been described in 28 lowa counties and covers more than 930,000 acres of land in lowa.
- To learn more about Iowa's soils, check out <u>https://store.extension.iastate.edu/Product/16121-PDF</u>

Tama soil profile

Loess Hills



- Iowa's Loess Hills are the best example of this rare landform in the United States.
- Because of its topography, the Loess Hills also protect some of lowa's last remaining unplowed prairies and a diversity of plant and animal life dependent on them.
- This uniquely lowan landscape that welcomes visitors from the west or bids farewell to westward travelers is a thus a fitting icon of our state topographic and ecological diversity.

Regal Fritillary



Regal fritillary on aster species.

- The regal fritillary is a large orange and black butterfly native to Iowa.
- The regal fritillary is a fitting symbol of lowa because it is native to what was once lowa's largest native biome, the tallgrass prairie. Like lowans, the fritillary has the steadfastness to endure lowa's sometimes long and difficult winters
- To learn more about lowa's invertebrate animals, check out <u>https://store.extension.iastate.edu/product/161</u> <u>25-PDF</u>

Pleistocene Snails



Iowa Pleistocene snail. © Joel Sartore National Geographic Photo Ark. Learn more at natgeophotoark.org



Algific talus slopes, Driftless Area National Wildlife Refuge.

- The Iowa Pleistocene snail is a survivor from the last ice age, the Pleistocene era, that impacted lowa approximately 12,000 to 14,000 years ago.
- The small quarter-inch diameter snail can only survive in a very specific environment found in Northeast Iowa and Illinois
- Due to its rare and fragile ecosystem, the Iowa Pleistocene Snail has been on the federal government's list of endangered species since 1978.

Manson Asteroid Impact



- Seventy-four million years ago a 1.5-mile diameter asteroid struck the earth near what is now Manson, Iowa, a small town in the northwest part of the state.
- The Manson Impact Structure is the 15th largest crater on the earth, and one of the best studied complex craters on the planet.
- This unique feature of Iowa's landscape, hidden below the surface, is a reminder of the long and widely variable history of this land, and thus a fitting symbol.

Radii of impacts from the Manson Impact in northwestern Iowa.