

Summary: The Field Guide is tool to help students interact directly with the environment in meaningful citizen science activities.

The NCR Field Guide: Hands on Environmental Science

The Field Guide grew out of a need to have a tool to actively engage students in an environmental field experience. Because we believe in the importance of young people understanding their environment, Nebraskans for Civic Reform (NCR) looked for an idea to engage students in these habitats. We created tools that younger hands could use, added middle level reading levels, technology, and citizen science applications. During this period, NCR was writing field lessons, which on one hand gave students relevant information about what they might be looking at, native grasses for example, and on the other hand gave them instructions for an activity for identifing the grasses and collecting samples. A battery of 8-10 of these informative, hands-on lessons and associated activities are included.

The Field Guide is contained in an Avery "Protect and Store" binder, 8 ½ X 5 ½ " The binder has a storage envelope on the inside cover which holds all of the collection and evaluation tools (magnifying glass, scissors, viewing box, sample bags, digging tools, etc.)

In small groups, students take the Field Guide into the habitat and begin to collect samples and data. The lessons available include making observations on weather, examining bird presence, testing ground water, identifying plants and insects, and more. NCR has written the Field Guide on three reading levels to date.

The Field Guide is adaptable to any habitat. Many of the lessons can be applied to any environment, others can be written to accommodate mountains, oceans, forests, or prairies. Each activity is introduced by information at the appropriate reading level, followed by a hands-on, interactive activity.

Below is an exercise to introduce K-2 students to the habitat that they are about to explore.

Habitat

Ha – bi – tat

Information (this would appear on the left side of the open binder)

A habitat is a place where something lives

- Bugs live in a habitat
- > Flowers live in a habitat
- > Grass lives in a habitat
- Birds, bunnies, and bees all live in a habitat
- People live in a habitat to

Activity (this would appear on the right side of the open binder)

Get a partner

Stand facing your partner

Partner number 1

- ➤ Look over your partner's head
- > Tell your partner everything that you see
- Tell your partner everything that you hear
- ➤ Tell your partner everything that you feel

Now switch and partner number 2 will do the same thing

Materials Available from NCR

Observations, sampling, and testing topics include:

Habitat

Prairie flowering plants

Soils Weather

Landforms Prairie grasses

Classroom follow up lessons include:

Groundwater Cloud in a Bottle

Making Fog Pressure (suck an egg into a bottle