

Wild School Gardens Guide

Kids growing food with biodiversity, wildlife, & climate in mind.

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Wild school gardens are those where kids have the chance to observe and learn about biodiversity, both wild and domestic, and how it provides ecosystem services that healthy food production depends upon. Understanding of the interrelationships between our food choices, biodiversity, wildlife, and climate can be enhanced by these activities. In addition, sharing observations through Citizen Science projects can provide an opportunity to learn while contributing to scientific understanding of these issues.

Why School Gardens?

- Every school needs a food garden.
- Every child should learn how to grow food—it's a life skill as important as any other.
- School gardens are one of the best ways for kids to learn about and accept healthy foods.
- School gardens are at their best when fully integrated into the whole school and broader community.
- School gardens, well designed and used well, show kids how our food system depends on, and can support, healthy ecosystems.

Wild School Gardens: Paying attention to nature and how it is doing in school gardens and the surrounding foodshed.

Connecting Food Systems and Ecosystems:

1. How can our local food be healthy and abundant if not grown on healthy soils, with healthy water, and in healthy farm, garden, and ranch ecosystems?

2. How can the soils, water, and ecosystems where this food is grown be healthy if the surrounding lands are not healthy—in other words, without a healthy local foodshed? (and vice versa!)



3. How can we expect local growers to keep producing this healthy local food now and into the future without healthy local foodsheds with rich biodiversity and a reasonable climate?

Healthy Foodsheds → Healthy Food → Healthy Kids → Healthy Future

Endless Possibilities:

- Bird, bat, butterfly, pollinator houses
- Counting earthworms, birds, ladybugs
- Attracting pollinators, beneficial insects, raptors
- Recording rainfall, blossoming dates, first and last frosts
- and much, much more, so read on!



How to Use this Guide

- **The purpose of this guide** is to help educators and parents help children learn about healthy local food and those who grow it, local food systems, healthy local foodsheds, and sustainable food choices.
- See our [San Juan Mountain Watch Field Guide](#) for much more on exploring local foodsheds—gardens, farms, ranches, as well as the surrounding landscapes on which they depend. **Note: This guide uses SW Colorado as an example, but can be adapted anywhere.**
- Use the online version of this guide at www.HCFS.org/wild-school-gardens with all links enabled and updated as needed.
- See these sections of this guide:
 - [Core Topics with Quick Links](#) for key concepts and links to resources
 - [Suggestions for Educators](#) for startup tips and on-line learning resources
 - [Suggested Activities](#) to get started

Core Topics with Quick Links

—online learning, professional development, curriculum, & programming ideas

Gardening—why, how, and adapting for the future

- [How-To Garden Resources: HCFS](#)
- [School and Preschool Gardens and Edible Education: HCFS](#)
- [HCFS Native American Gardens](#)
- [Gardening for the Future](#)

Farm to School and Farm to Preschool—local foods, gardening, edible education

- [HCFS Farm to School page](#)
- [HCFS Farm to Preschool page](#)

Curriculum for Preschool and K-12—“edible education”

- [Edible Education Curriculum—HCFS](#)
- [Teaching in Nature’s Classroom garden activity book](#)



Kids Outdoors with Nature—less screen time, more nature, better development

- [Children and Nature Network](#)
- [Natural Start Alliance](#)
- [Benefits of Connecting Children with Nature](#)
- [NEEF Infographic](#)

Exploring, Observing, and Monitoring Local Foodsheds—including gardens

- [San Juan Mountain Watch Field Guide](#): monitor and learn about our local foodsheds
- [Observing Indicators of Foodshed Health](#): dozens of topics from HCFS
- [SciStarter](#): find Citizen Science projects
- [Cornell Lab of Ornithology](#): bird observations and Citizen Science



Connecting Food Systems and Ecosystems—food, biodiversity, and climate

- [Biodiverse Food Systems webpage](#): HCFS
- [Biodiverse and Wildlife-Friendly Food Systems](#): HCFS Tool Booklet
- [Climate-Friendly Food Systems](#): HCFS Tool Booklet
- [Wild Farm Alliance](#): wild farming, gardening, and ranching practices

Local Food, Local Food Systems, and Local Foodsheds—online learning/professional dev.

- [Finding Local Food](#): farmers market basics, CSAs, producer food hubs, etc
- [Choosing Local Food](#): how to select healthy, sustainable, and fair local food
- [Using Local Food](#): recipes and tips for using fresh local foods
- [Food System Booklets](#) on 16 topics from HCFS
- [Local Foodsheds](#): especially pages 1, 2, 4-6 of our [foodsheds field guide](#)

Sustainable Food Choices—for a better future for our kids

- [Sustainable vs Industrial Agriculture](#)
- [Real Food Encyclopedia](#): the ecological footprint of over 200 different foods

Justifications and Benefits of Farm to School and Gardens—for promotion and fundraising

- [Teaching in Nature's Classroom](#) garden activity book
- [Benefits Factsheet](#) from the National Farm to School Network
- [Benefits of Connecting Children with Nature](#)

Some Resources Specifically for Southwest Colorado

- Southwest Colorado Resource Groups including [The Garden Project](#), [Montezuma School to Farm](#), [Powerhouse Science Center](#), [Durango Nature Studies](#), [San Juan Mountains Association](#), [Mountain Studies Institute](#)
- [Local Food Groups Across Southwest Colorado](#)
- [Local Food Sources](#): selected products and sources for our local area
- [Colorado Alliance for Environmental Education](#)

Suggestions for Educators

The key to being a good local food and garden educator: The best way to use a school garden for helping kids learn about food, food systems, and foodsheds is for you as an educator to understand these topics well, and to **actually incorporate them into your life**—grow some food, always make informed sustainable food choices, and seek out and buy food from local growers for as much of your food as possible. We would suggest you check out these topics in the [Quick Links section](#) in particular:

- **Gardening**
- **Sustainable Food Choices**
- **Local Food, Local Food Systems, and Local Foodsheds**
- **Exploring, Observing, and Monitoring Local Foodsheds**

Check out the free download of [Teaching in Nature’s Classroom](#) for guidance on teaching in the garden and justifications for grants, etc.

Review our [San Juan Mountain Watch Field Guide](#) and the many observing tips and programs and adapt to your age group. See pages 7-9 for tips on observing for all ages.

Ensure your garden is friendly for observing—benches, tree stumps, shade, wildlife blinds for observing unnoticed, paths, etc.

Use the garden as an engaging spot for teaching a variety of topics—math, science of all sorts, social studies, writing and reading, etc.

Suggest foodshed-related topics for student projects—see Part 3 of our [Field Guide](#) for 17 different targets to observe and Citizen Science projects to join.



Recommended Reading—both practical and beautiful:

[The Wildlife-Friendly Vegetable Gardener](#) by Tammi Hartung

A Few Suggested Activities to Get Started

Start with unstructured observations: Experiment with garden locations, times, and gentle suggestions to let your children just watch what is happening in and around the garden. Be ready to respond to what they see and think is important. Review our list of [17 Observation Topics](#) for a wealth of ideas to lightly prompt your kids as needed as appropriate for their age-level.

Then, you can start structuring observing on selected topics, followed by monitoring things over time, and then look at what Citizen Science activities you can participate in where you submit observations to scientists (see more on Citizen Science below).

Provide habitat for beneficial wildlife:

- Plant a diversity of crops and native plants to encourage beneficial organisms: [pollinator plantings](#), [native bees](#), [birds](#), and more.
- Build homes: for [birds](#), [native bees](#), and more. See our [HCFS flyer on “Bee Boards”](#).

Connect with neighboring farms and ranches: [Visit a farm or ranch](#) or invite the producer to your school and garden to discuss how wildlife and biodiversity help them grow healthy sustainable food. Seek out especially those local growers who supply food for your school meals.

Watch the wild around your garden as well—the whole “foodshed”: Most species need room to roam. Protecting and restoring wildlife and biodiversity extends beyond your school garden—to the neighborhood, to other gardens, farms and ranches, and to wild areas in your region. See pages 1, 2, 4-6 of our [foodsheds field guide](#) to understand local foodsheds better. You can join or simply monitor Citizen Science projects that track species and happenings that extend well beyond your garden—to the entire foodshed—such as: [Journey North](#), [Project BudBurst](#), [Monarch Butterfly Migrations](#), [PikaNet](#), and our own [San Juan Mountain Watch](#).

Pay attention to the weather: As you watch birds, pollinators, and plants through the seasons, it is clear that weather patterns affect them and their timing (or phenology). We know that the climate is changing, so watching the weather that affects what happens in and around the garden can help in understanding climate changes in a very constructive and positive way. Citizen Science monitoring of weather can help scientists as well. [Watch clouds](#), install a rain gage and maximum-minimum thermometer, or install a weather station at your school. [Check with us](#) if you want more information on watching the weather — that’s one of our specialties.



Help out as “Citizen Scientists”: Citizen Scientists are members of the public of any age who share observations through established projects with scientists. There are many excellent Citizen Science programs that you can participate in to submit your observations of what is happening in and around your garden to help scientists study our earth. [See our 17 suggested observing topics](#) that are especially suited to gardens, foodsheds, and growing healthy sustainable food. See the [SciStarter](#) website for even more projects. Here are some of our favorites for young garden naturalists:



- [The Great Sunflower Project](#): Watch and submit simple counts of pollinators (especially bees) visiting flowers (especially sunflowers) to help scientists study and protect these diverse pollinators.
- [Cornell Bird Monitoring Projects](#): Several great options from NestWatch to BirdSleuth to eBird.
- [Lost Ladybug Project](#): Help scientists track and help save many different types of ladybugs that you can identify by the different spots on their backs. Learn how ladybugs help gardeners and farmers in growing food.
- [Nature’s Notebook](#): Observe and send in reports of seasonal changes in plants and animals in and around your garden such as blossoming times, arrival of beneficial birds and insects, and more. Very comprehensive and well researched.
- [Vegetable Varieties Investigation](#): A group project mainly for middle and high school students who interview area gardeners and submit results to aid scientists.
- More projects at [Observing Indicators of Foodshed Health](#).

If encouraged to pay attention to nature, a child’s time in the garden can nurture curiosity, appreciation of science, connections to nature, and life skills around healthy sustainable food choices and growing food with nature.

