

Guide to School Gardens In Wyoming



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Get Started: Creating School Gardens as Outdoor Classrooms

Why School Gardens?

Wyoming recognizes schools with a healthy nutrition environment can foster and improve student health. School gardens are recognized as a way to support this healthy environment.

A school garden puts the natural world at students' fingertips. This living laboratory—whether a planter box, an outdoor garden, or an indoor growing area—offers a rich context for exploring science, nutrition, social studies, math, art, language arts and more.

School gardens are encouraged by the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS). School Food Authorities (SFA) **CAN** purchase produce from school gardens or accept donations. Additionally, any SFA school garden plan, any statement of support, and/or garden to cafeteria guidelines may be made a part of any **SFA's Wellness Policy**.

The following tips will help you get started with your own project.

Getting Started

School gardens thrive everywhere—cold and warm climates, urban, suburban, and rural communities, in containers and schools with acres of land. All of these schools have adapted strategies to work for them, tailoring gardens to fit their schools' needs.

School gardens are effective learning tools creating opportunities for our children to discover fresh food, make healthier food choices and become better nourished. Gardens also offer dynamic, beautiful settings in which to integrate every discipline, including science, math, reading, environmental studies, nutrition and health. Many types of plants can be grown in a garden, including those producing edible fruits and vegetables.

Don't forget: School orchards look beautiful, and may be easier to maintain than school gardens or a great addition to a school garden and school grounds.





Remember: School gardens can take various forms and do not have to follow any one set pattern to be successful!

Planning Your Outdoor Classroom

DREAM BIG, BUT...

START WITH A PLAN THAT IS MANAGEABLE FOR YOUR SCHOOL.

Your first step should be to create a garden plan that works for your school, your teachers, and your students. With the support of your school community, you can take the next step—planning for the future. What do you want your outdoor classroom to look like? Let a vision guide you in making reasonable attainable goals. And remember, bigger is not necessarily better. Consider the purpose of the garden: Is it to teach science, social studies, math or another discipline? Many schools have taught all these disciplines successfully, by using indoor container gardens, planter boxes, rooftop gardens and patio plots.

Just remember your purpose should be well-defined. **Why do we want a school garden? We have the garden, why?**

School gardens involve growing fresh food on school grounds with students of all ages; therefore, different policies may need to be considered for a school garden project.



Policy

- ✖ Are there policies?
- ✖ What are the relevant school district, city and/or county policies concerning school gardens?
- ✖ What are the policies for growing and harvesting food?

Different levels of policies may affect school gardens in a number of different ways. Does the Facilities and Grounds Department have a policy on safe use of school grounds or types of materials in a garden? Does the meet the American Disability Act (ADA) standards for access to all students? What level will the Food and Nutrition Services Department be involved? Who will verify safe food handling protocols are being used for fresh produce from the garden?

Screening and Liability?

Will the school utilize volunteers for the school garden? What are the policies and issues for screening volunteers and conducting background checks? What other liability issues may arise from a school garden (volunteer injuries)? Are

these issues addressed in your district's or school's Risk Management Plan? Are there policies concerning volunteers in schools defining what kind of activities volunteers may be involved with students and school gardens?

USING GARDEN PRODUCE IN THE SCHOOL

For Food Service?
For Snacks?
For Classroom Lessons?
All of the Above?

What will happen to the harvest? Will students eat their harvest in the classrooms for a snack? Will the harvest be given to kitchen staff and prepared for school lunch? Will harvested goods be sent some home with students? Do you plan to sell at a farmers' market to make money for the garden program?

Do you want to donate a portion to a local non-profit agency?

Have a resolution for potential conflicts with the kitchen staff, school kitchen facilities or any prep issues with food service.

Partner with food and consumer science teachers/students to use classroom sinks, kitchens and food storage areas. However, always be mindful of safe food handling regulations and proper storage.



Fundraising

- Will we need to fundraise for a garden?
- Will we need to have donations?
- Grants?
- Support from local businesses?
- Support from Food Service, PTO?

Long-Term Sustainability of the Garden?

Once a garden has been built and is producing, the financial needs may not be as costly. Are there funds available to sustain the garden activity or will steady donations and fundraising need to continue? **Eventually, school garden programs may become self-sustaining or even be a profit center supporting the development of larger projects or more gardens.**

School Food Service and School Gardens



SFA funds from nonprofit school food service (SFS) accounts may be used to make purchases for a school garden (seeds, fertilizer, watering cans) with the understanding the garden is used within the context of the school nutrition program. However, Fresh Fruit and Vegetable Programs (FFVP) funds may **NOT** be used for the purchase of any materials (seeds, tools, etc.) for school gardens.

Schools may serve garden produce as part of a reimbursable meal, sold a la carte, to parents or Parent Teacher Association members. The SFA is allowed to sell food grown in the school garden funded with SFA funds as long as the revenue accrues back to the SFS account.

The SFA may purchase produce from other school organizations that maintain and manage gardens, such as FFA. Purchases such as these would need to follow small/informal purchase procurement rules.

It is important to ensure safe growing principles are used to grow produce from any source, including gardens. Before using any produce from a school garden, visit the garden and document the growing practices.

Allergies and Garden Activities

Gardens are not all the same and neither are the gardeners. Some gardeners have food allergies, which are considered to be a major food safety issue. As a general rule, any products with allergens in the garden should be restricted to prevent cross contamination and ensure good agricultural practices.



Keep activities with foods like peanut butter out of the garden. To be even safer and respectful of the fellow gardeners, do not grow crops of well-known allergens, such as peanuts or soybeans.

Select non-allergenic and non-toxic plants. Check with your local Cooperative Extension office if you need assistance determining plant safety or toxicity.

SELECTING THE SITE-

The following must be considered...

Sunlight
Location
Water
Accessibility
Visibility



Security: If possible, locate your garden within sight of classrooms and neighbors. **Make sure gardens don't obstruct visibility or hide intruders.** Create reasonable barriers to keep wild animals away from the garden.

Food Safety

All SFA's must have an implemented food safety program for preparation and service of school meals served to children. The program must be based on HACCP (Hazard Analysis and Critical Control Point) principles and conform to guidance issued by the USDA. Your local WY Department of Agriculture Consumer Health Services Inspector can help develop or revise your current HACCP plan.



If any garden produce is used in any of the USDA Food Programs the garden **MUST** be included in the SFAs HAACP plan

See Resource: Best Practices: Handling Fresh Produce in Schools.

There are health and safety issues involved with school gardens, thus, each SFA needs to be familiar with Federal, State and local requirements and policies regarding health and sanitation issues.

Special care should be taken in regard to food safety when working with children. They are more susceptible to food borne illness than healthy adults as their immune systems are still developing.

FOOD SAFETY RESOURCES

- ❖ “Wyoming Food, Drug and Cosmetic Safety Act” 35-7-109 through 35-7-127: <http://legisweb.state.wy.us/statutes/statutes.aspx?file=titles/Title35/T35CH7.htm>
- ❖ Wyoming Food Safety Rule, Chapter 3, Section 40 Washing Fruits and Vegetables. <http://wyagric.state.wy.us/divisions/chs/food-safety>
- ❖ Oregon Department of Education School Garden Food Safety Training & Documentation Manual: <http://www.ode.state.or.us/search/page/?id=2647>

Food Safety in the Garden:

There are four topics to think about as you design your safety procedures.

1. Soil
2. Water
3. Food Safety-Harvesting
4. Food Safety-Preparation
 - ⌚ Clean and sanitized hands.
 - ⌚ Clean and sanitized surfaces.



Pesticide, Herbicide and Fertilizer

School gardens often practice pesticide-free methods of gardening. USDA recommends and supports the practice of **little or no pesticide or herbicide use in school gardens due to potential health hazards to children.**

Water Safety

Use of safe water for washing, watering and irrigation reduces the potential of microbial contamination of fruits and vegetables.

Know the water source. Most public water systems provided by cities or other municipalities should be safe, but testing facilities provide the most accurate information on what is coming out of the spigot.

Uncontaminated water ensures a good quality harvest.

If you wouldn't drink the water, don't apply it to your edible plants!





HARVESTING

Growing and Harvesting Produce

A school garden provides opportunities for children and volunteers to learn how to handle food safely. The following are good food safety tips to follow when growing and harvesting produce.

- Ensure all persons, including staff, students and volunteers receive basic food and gardening safety training instructions according to local health regulations.
- Hand washing and personal hygiene.
- Clean and sanitize garden equipment and containers used to hold produce.
- Handling produce during harvest, washing and transportation.
- Proper glove use.
- Ensure volunteers are covered by the school district insurance policy in the event of accident or injury.
- Require signed permission slips for all student gardeners. Permission slips should list potential hazards of working in a school garden and identify any allergies the child may have.
- Do not allow anyone to work in the garden while sick, or until 24 hours after symptoms, such as vomiting or diarrhea, have subsided.
- Ensure all harvesters wash hands thoroughly in warm, soapy water for at least 10 to 15 seconds, rinse with potable water.
- Ensure all open cuts or wounds on hands, arms or legs are properly covered prior to participating in the harvest.
- Require harvesters to wear closed-toed shoes to prevent cuts, stings or other injuries.
- Consider using single-use disposable gloves when harvesting or handling fresh produce as an extra precaution.
- Harvest the garden regularly and remove any rotten produce.
- Use clean and sanitized food grade containers, such as plastic bins or buckets to hold harvested produce. Do **NOT** use garbage bags, garbage cans or any other container that originally containing chemicals. These types of containers are made from materials not intended for food use.
- Clean harvesting tools, such as knives, scissors, etc., with soap and potable water immediately before and after each gardening session.

The Tools

- Many gardeners use their hands for harvesting, while some use scissors, knives and other tools to remove fruits and vegetables from plants. If there happens to be a pathogen on the crops and the tools go unwashed, it will likely be passed onto the next plant it touches.
- Clean tools and containers should be stored in a place where animals cannot get to them such as a locked shed.
- Containers for harvesting should be regularly washed and sanitized. Use containers that will not cross-contaminate the fruits and vegetables. Do **NOT** re-use plastic bags or harvest into wooden boxes or unwashed buckets. The containers should be protected while in storage so that they cannot be contaminated in-between uses.
- Clean off as much dirt and debris as possible while produce is still in the field, so as to reduce the risk inside.
- For immediate consumption: It is common to eat fruits and vegetables right after they are harvested, however, all harvest should be washed and/or processed in a space with a clean and sanitized work surfaces, utensils and hands.
- The lowest risk “best practice” in terms of contamination is not to wash the harvest until it is time to be consumed. Harvested items should be stored in a cool, pest-free area in separate containers (or new plastic bags) for each crop, separate from any chemicals. However, produce **MUST** be washed before eating.



Remember



CLEAN HANDS.
CLEAN WATER.
CLEAN SOIL.
CLEAN SURFACES.



SCHOOL GARDEN PRODUCE IN YOUR SCHOOL MEAL PROGRAM

- ☛ If harvest from the school garden will be used in the school meals program, work cooperatively with the school nutrition director planning and implementing the garden.
- ☛ Accept produce harvested from school gardens only when school nutrition staff is present to receive it. All produce dropped off or left when staff is not present should not be used in the school meal programs.
- ☛ Reject produce not meeting school nutrition program standards.
- ☛ Receive and inspect produce harvested from school gardens using the same procedures used to inspect produce from the district's distributors.
- ☛ Do not use any produce noticeably contaminated by animals or insects.
- ☛ Refrigerate garden produce immediately, unless the particular item is normally held at room temperature.
- ☛ Store, prepare and serve school garden produce separately from other sources of produce to maintain **traceability**.
- ☛ Ensure liability for a potential food borne illness caused by produce grown in school gardens is covered by your school district.



SCHOOL GARDEN PRODUCE IN YOUR FRESH FRUIT AND VEGETABLE PROGRAM

The FFVP is an effective and creative way of introducing fresh fruits and vegetables to elementary school children. The goal of the FFVP is to create healthier school environments by providing:

- ☛ Healthier food choices.
- ☛ Expand the variety of fruits and vegetables children experience.
- ☛ Increase children's fruit and vegetable consumption.
- ☛ Make a difference in children's diets to impact their present and future health.

Fresh Fruit and Vegetable Program (FFVP) funds may **NOT** be used for the purchase of any materials (seeds, tools, etc.) for school gardens. However, schools may purchase fresh fruits and veggies from their own school garden or other school gardens using FFVP funds.

While, the FFVP is about establishing partnerships and nutrition education; the FFVP may **NOT** be part of summer school sessions or served to children other than elementary school children. School gardens may be able to fill in for these program limitations. Keep in mind, FFVP funds are to be used for FFVP only and other funding may be used.

Fresh Produce Safety for Schools

Train everyone preparing or serving food how to properly wash and store fresh fruits and vegetables.

Receiving

Established procedures for receiving and storing fresh produce.

Check produce for freshness by randomly examining the entire contents of a box rather than just the items on the top. If a product does not meet your standards of freshness, refuse to accept it.

Accept only produce not bruised or damaged.

Clean Produce

Wash all fresh fruits and vegetables thoroughly with cold running water—never in standing water—before serving.

Scrub firm produce, such as melons and cucumbers, with a clean produce brush.

Clean Equipment and Hands

Wash, rinse, sanitize and air dry all food-contact surfaces, equipment and utensils including cutting boards, knives, countertops and sinks before and after use.

Wash hands thoroughly for at least 20 seconds with soap and warm running water before and after handling fresh produce.

Storage

Separate fresh produce from other refrigerated foods in refrigeration units. Cover and store washed cut produce above unwashed, uncut fresh produce. Store all produce off the floor.

Mark each item with the date it was received and practice First-In, First-Out inventory management methods.

Discard wilted or discolored products immediately.

Always store cut fruits and vegetables in the refrigerator. Refrigerate cut melons immediately.

A Few Resources

Attachments:

- ❖ SP-32-2009 USDA Memo School Garden Q & A
- ❖ Best Practices: Handling Fresh Produce in Schools
- ❖ Food Safety Tips for School Gardens

Slow Food USA: <http://www.slowfoodusa.org/#>

Best Practices: Handling Fresh Produce in Schools:
<http://www.nfsmi.org/documentlibraryfiles/pdf/20100414060724.pdf>

The Edible Schoolyard Project: <http://edibleschoolyard.org/>

FNS School Gardens and Garden Curriculum:
<http://www.fns.usda.gov/farmtoschool/school-gardens-and-garden-curriculum>

Farm to School and School Gardening: A Resource List for Educators:
<http://pubs.nal.usda.gov/farm-school-and-school-gardening-resource-list-educators>

My Garden School Meals Resource, Michigan Department of Education:
http://www.michigan.gov/documents/mde/My_Garden_FSM_master_copyfinal_313190_7.pdf

Food Safety Tips for School Gardens:
<http://nfsmi.org/documentlibraryfiles/PDF/20110822025700.pdf>

Oregon Department of Education School Garden page:
<http://www.ode.state.or.us/search/page/?id=2647>

Kids Gardening (The National Gardening Association): <http://www.kidsgardening.org/>

Many, many more! With just a little research you will find many school garden resources from all over the United States.

