



# **Gardening with Children and Youth**

## **Ohio Master Gardeners Resource Guide**

March, 2000

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status. Keith L. Smith, Associate Vice President for Ag. Admin. and Director, OSU Extension TDD No. 800-589-8292 (Ohio only) or 614-292-1868

# Comments from the Editor

This manual is intended to serve as a resource guide for Ohio Master Gardeners and others interested in beginning or expanding children's gardening programs. A multitude of options exist, ranging from short classroom presentations to outdoor gardens that youth participate in over the course of a season or longer. In some programs, Master Gardeners work directly with kids, while in others they provide teacher training. Many of the programs are directed to elementary-age children, but some are available for older youth.

The first section offers tips from two experts on designing gardens for kids and planning children's programs. The second section describes programs developed for children. Included are projects currently offered by Master Gardeners around the state, as well as programs conducted by other agencies and organizations. The final section of this manual is a reference list of books, suppliers, websites, and organizations that pertain to children's gardening. Many of the books can be borrowed from the State Master Gardener Office (please order books through your County Coordinator).

A recent study of Florida elementary school teachers found that teachers used school gardens infrequently. However, over 84% felt that garden-related activities did enhance student learning. One explanation given by the study's authors for the minimal use of school gardens is that teachers are unaware of educational resources to assist with garden learning. Hopefully, some of the resources listed in this manual will be of value.

One copy of the guide is available free of charge to each county office. Feel free to photocopy and distribute it as desired. The guide is also available on the Ohio Master Gardener web site: [www.hcs.ohio-state.edu/mg/mg.html](http://www.hcs.ohio-state.edu/mg/mg.html).

**Many thanks to all the Master Gardeners and Extension staff around the state who contributed materials for this guide.**

Kathy Burkholder, Program Assistant  
OSU Extension Master Gardener Program  
Department of Horticulture and Crop Science  
232 Howlett Hall, 2001 Fyffe Ct., Columbus, OH 43210  
phone: (614) 292 - 5205  
e-mail: [burkholder.2@osu.edu](mailto:burkholder.2@osu.edu)

# Index

Page

## Tips for Gardening with Children<sup>4</sup>

## Children's Gardening Projects

### Ohio Master Gardener Projects

- Allen County—The Children's Garden 9
- Cuyahoga County—A School Year of Gardening 10
- Delaware County—Londontown Community Garden 11
- Fairfield County—Salad in a Barrel 11
- Fayette County—Youth-At-Risk Gardening Program 12
- Franklin County—Budding Gardeners 13
- Franklin County—Maize Elementary School Garden 13
- Licking County—P.P.P. Ask Me 14
- Licking County—Newark Junior Garden Project 14
- Ross County—Children's Programs 15
- Trumbull County—Laird Avenue Teaching/Learning Garden 15

### Project Ideas from Other Sources

- Clark County—South Side Teen Farmer's Market 17
- Clark County—4-H Fairground Beautification Program 17
- Cleveland Botanic Garden Programs 18
- Indoor Plant Growing Units 19
- Michigan State University—4-H Children's Garden 19
- Missouri Botanical Gardens—Science in a Suitcase 20
- Ohio Division of Forestry—Project Learning Tree 20
- Ohio Division of Wildlife—Project WILD 21
- Project Food, Land & People 21
- Ohio State University—4-H Resources 22
- Texas Extension, Bexar County—Classroom Garden Program 24
- Texas A & M University—Junior Master Gardener Program 24
- Wildlife Habitat Certification Programs 25
- University of Wisconsin—Fast Plants Program 25
- Worm Composting 26

## Resource List

- Organizations 28
- Publications for Teachers. 30
- Publications for Children and Adults 34
- Publications about Poisonous Plants 40
- Publishers and Suppliers 41
- Internet Sites 42

# Tips for Gardening with Children



## **Tips from Denise Ellsworth Stark/Summit County Extension Agent**

Following are guidelines offered by Denise Ellsworth, an expert on gardening with children:

- Leave behind adult ideas about gardening. Straight rows of tomatoes, peppers and corn may be your idea of the perfect garden, but may be far from what a child finds inviting. Why not a circular garden, full of flowers in every hue of the rainbow, or popcorn and peanuts for a “Cracker Jack” garden?
- Give children a separate space to garden, and let them plant and tend it in their own way.
- Start small, so the garden isn’t overwhelming.
- Involve children in the planning, then follow the child. If she’d rather play in the dirt or look at bugs than pull weeds, it’s OK! She’s still learning.
- Help children to succeed by sharing your garden know-how. Test the soil, choose a well-drained, sunny site, add lots of soil amendments, and mulch to keep down weeds.
- Keep an emphasis on fun and creativity with kid-created art, water elements, journaling, cooking, crafts and more!
- When gardening with children, look for the “teachable moment.” You were planning to teach about plant parts, but the kids found a praying mantis? Don’t fight their enthusiasm for the moment. Instead, explore and learn together about the wonders you find.
- Keep chore sessions short. Make a game of weeding, or limit it to 5 minutes. Gardening should be fun!
- Plan a play area for younger children. A preschooler may want to plant and re-plant, dig and explore. Give him a space to do this, full of containers with pebbles, bark, seeds, small tools, and other garden-related items to explore.
- Use kid-sized tools for planting and digging. Even spoons will work well when held in small hands.
- Keep safety in mind: consider soil contaminants and poisonous plants before a problem arises.

## **Lilliputs and Pollywogs: Children in the Garden**

### **Catherine Eberbach, Longwood Graduate Program Fellow**

Catherine Eberbach researched the way children interact with ornamental gardens. The Children's Garden at the Longwood Gardens indoor conservatory is based on her research. Following is a list of design recommendations she developed:

- **Developmental Level:** children at different levels of development will experience environments differently. This should be considered in any design.
- **Scale:** children prefer small, cozy spaces where they can hide. Orient items of interest close to the ground, where their visual attention is normally focused.
- **Child Possession:** Children should feel free to touch and play with the elements in a garden. Minimize rules and regulations, and provide opportunities for kids to engage in activities unavailable to adults.
- **Aesthetics:** Children prefer gardens that are pretty. Incorporate garden features that are attractive to children.
- **Color:** Kids like lots of color, and especially bright colors. Red, orange, and yellow are among their favorites.
- **Landscape Elements:** elements such as animals and water appeal to children. All elements, including plants, should encourage activity and participation.
- **Privacy:** kids like garden spaces where they can do what they want apart from adults.
- **Accessibility:** the garden should maintain the least restrictive environment as possible. However, issues such as potential for vandalism by unsupervised children must be addressed.
- **Place for Adults:** Since adults are likely to accompany children to the garden, incorporate items of interest for adults. This may be as simple as providing a seating area where they can supervise children.

**Lilliputs and Pollywogs: Children in the Garden** is reference material from the 1987 Longwood Graduate Program Seminars. A copy of the article is available at the State Master Gardener Office.



# Ohio Master Gardener Projects



## **Allen County Master Gardeners** *The Children's Garden*

Contact: Kay Studer, Horticulture Program Assistant  
phone: (419) 222 - 9946  
e-mail: studer.26@osu.edu

The Children's Garden contains a variety of distinct, interconnected gardens that serve as educational tools which invite children of all ages to explore, discover, and investigate the natural world. The garden now includes a tall grass maze, prairie garden, oil derrick, Johnny Appleseed orchard, zoo garden, international smiles garden, pot lady, bean teepee, sunflower house, weather garden, farm garden, flag garden, herb garden, Lima bean sand pit (filled with buried treasure), vegetable garden, rabbit chow garden, ABC garden, school days garden, sensory garden, woodland garden, millstone fountain, and a birthday gazebo. Interspersed among the gardens are elements to engage and educate children, such as a historic stepping-stone maze and a solar system made from pavers and laid out to scale.

Forty Master Gardeners are involved with the project, and fill roles including educator, team leader, public relations, finances, builder, and developer. The garden is maintained by both adults and children. Adults meet one night a week to work in the garden. Older kids from Juvenile Court and the Apollo Career Center help provide some of the labor. Younger kids mainly attend classes, but have also contributed art work, and plant/maintain several "mini gardens." Kids are encouraged to suggest and help in any way they want. The plan is to keep the garden simple and childlike—lots of vivid color, hiding places, etc.

Master Gardeners offer two to three classes a week, May - September, for children's groups from local organizations such as the YWCA, Head Start, Juvenile Court, and Lima City Schools. For the year 2000, 75 classes are scheduled. To date, over 1500 children have received education in horticultural-related topics.

In 1998, Master Gardener Sue Chambers was hired as a Program Assistant, and has since developed a curriculum for teaching kids in the garden. Following is a list of some of the programs offered. All classes include a lesson plan, a story, and a hands-on activity. Books and materials are selected according to the age of the group. A listing of some of the resource materials used for programming can be found in the publications section of this guide.

- **Dinosaurs in the Garden:** studied plant-eating dinosaurs, and identified plants in the garden that a dinosaur would eat
- **Rabbit Chow:** created a rabbit-friendly garden, discussed rabbit eating habits, and explored "Peter Rabbit's" world
- **Garden Creatures:** covered salamanders, spiders, worms, etc.
- **Fabulous Fowl Food:** studied feeding habits of birds
- **Bird Habitats:** learned about birds, nests, etc.
- **Weather Station:** discussed weather-related terms and old wives tales
- **The Good, The Bad, and the Ugly:** learned about good bugs and bad bugs

The Allen County Childrens' Garden was established in 1996 through innovative grants from OSU Extension. Additional funds have been obtained from sources such as corporations and charitable foundations, and through Master Gardener fund-raising activities. To date, approximately \$50,000 has been invested in the garden, the bulk of which was spent on hard features such as the gazebo, concrete walks, and stone pavers.

**Cuyahoga County Master Gardeners**  
*A School Year of Gardening*

Contact: Millie Pfaller, School Garden Coordinator  
phone: (216) 397 - 6000  
e-mail: pfaller2@postoffice.ag.ohio-state.edu

This program consists of both in-class teaching and a garden that is planted in the spring and maintained throughout the growing season. It was established in 1996 for fourth grade children in the Cleveland City Schools, and has since reached over 300 kids. Goals are to help children develop an understanding of life and living processes, experience the beauty and joy of growing and caring for plants, understand human dependence on plants, and improve science and social skills through garden-based learning.

Students meet once a week with ten to fourteen Master Gardeners for a well-planned lesson, which always includes hands-on projects. Forty Master Gardeners and five teachers at Benjamin Franklin School developed the curriculum. It is based on horticulture science, nature study, and environmental principles. The curriculum contains five sections with 22 lessons: Nutrition; Trees; Transfer of Energy (Photosynthesis); Plant Propagation; and Soil.

The program has received numerous accolades: teachers at the schools participating in the program report that it has helped improve science proficiency test scores and created student excitement for learning science and gardening. This project also received the 1999 Ohio Master Gardener Project of the Year Award. But perhaps the most rewarding recognition came from a fourth grade student who asked his teacher to fail him so that he could continue to come to the garden house and learn.

Funds for the program have come largely through grants from the Cleveland Education Fund.



**“Education makes people easy to lead, but difficult to drive; easy to govern. but impossible to enslave.”**  
**Henry Peter Brougham**



**Delaware County Master Gardeners**  
*Londontown Community Garden*

Contact: Nancy Bendle, Information Associate  
phone: (740) 368 - 1925  
e-mail: nbendle@postoffice.ag.ohio-state.edu

Londontown Apartments is a low-income complex whose residents are primarily seniors and single parent families. Delaware County Master Gardeners identified this location as a prime site for a community garden. Goals of the project include teaching gardening skills and vegetable nutrition.

Master Gardeners were able to secure \$3,465 in grant funds to construct twelve 4' x 12' raised beds and to purchase other garden-related materials.

The program also offers garden-related activities for the children twice a week during the growing season. In 1999, 33 kids participated in the program.

**Fairfield County Master Gardeners**  
*Salad in a Barrel, Secret Garden Project*

Contact: Connie Smith, Program Assistant  
phone: (740) 653 - 5419  
e-mail: smith.3204@osu.edu

The Secret Garden is an enclosed concrete courtyard located at the Berne Union Elementary School. High school art students painted perimeter wall space to resemble a "garden." At the request of the school principle, Fairfield County Master Gardeners became involved with the project to help make the Secret Garden a living-learning laboratory.

For the salad project, each grade level was assigned a planting barrel planted with different shapes, sizes, and colors of lettuce. Master Gardeners spent a day teaching the students proper soil preparation, watering, fertilizing, and seed planting. Approximately 60 days later the Master Gardeners and students celebrated the harvest with a salad day at school. Each student was served a colorful salad and a grilled cheese sandwich.

After harvest, barrels were replanted with annual flowers for a colorful display when students return to school in August.

**Fayette County Master Gardeners  
Youth-At-Risk Gardening Program**

Contact: Carol Sowers, Office Associate  
phone: (740) 335 - 1150  
e-mail: sowers.1@osu.edu

In 1998, the Fayette County Juvenile Court Judge approached Master Gardeners about working with local youth-at-risk to give them the opportunity to grow something. The judge wanted the 14 kids, ages 9 – 15, to have an opportunity to take some responsibility and see a project through from start to finish. However, being a brand new Master Gardener program, volunteers were small in number and still trying to figure out exactly what they were about. By 1999, they were more confident and willing to take on the project.

In the meantime, these same kids had formed a 4-H club with advisors from the courts. Fayette County Master Gardeners arranged a project working through the club that involved planting annuals at the fairgrounds. On the day of planting, the Master Gardener Coordinator taught a basic gardening class for the kids, and Master Gardeners made name tags using pictures of flowers. After the planting, the kids returned to the Extension Office where the Master Gardeners treated them to “build an ice cream sundae” refreshment time.

The kids were then responsible for watering, weeding, and mulching the planting. By fair time the planting looked great, and the kids were so proud of their accomplishments that they took their parents to see the flowers.

In return, the Master Gardeners were so impressed with the kids that they plan to do a similar project next year, plus expand the program to include a butterfly garden. Master Gardeners will prepare the bed for planting and will teach approximately 4 mini-gardening lessons at the 4-H club meetings.



**“A teacher affects eternity; he can never tell, where his influence stops.”  
Henry B. Adams**



**Franklin County Master Gardeners**  
*Budding Gardeners: How to's for Kids, Moms, and Dads, Too*

Contact: Tara Ciaciura, Program Assistant  
phone: (614) 462—6700, ext. 203  
e-mail: [ciaciura@postoffice.ag.ohio-state.edu](mailto:ciaciura@postoffice.ag.ohio-state.edu)

As part of community educational programming, Master Gardeners offer a series of gardening classes to the public. Budding Gardeners is one class in the series, and focuses on families gardening together. The three-hour course is designed for parents, kids, grandparents, and other family members. Kids make projects during the class, and receive a garden calendar and a copy of **The New Junior Garden Book** (see the reference section for information about this book). Parents receive handouts, fact sheets, and a list of recommended children's gardening books and web sites.

The reference list developed for the program is included in the reference section of this publication.

**Franklin County Master Gardeners**  
*Maize Elementary School Garden*

Contact: see above

Maize Elementary School teacher Gail Hall was interested in creating a garden that would give children with no gardening experience the opportunity to get their hands in the dirt, and also attract wildlife. What is unique about this garden, however, is that it is wheelchair-accessible for her orthopedically-challenged students.

In the spring of 1999, Franklin County Master Gardeners became involved with the project, providing information, labor to construct raised beds, and donating plants. Plans for future expansion include a sensory garden, a colonial/medicinal garden, and a meadowland.

The gardens are used for science classes in the Orthopedically Handicapped classrooms. Frequently these classrooms have teamed up with regular education classrooms for various projects, as well as sharing help in maintaining the garden and feeding birds. The school's art teacher has also included a gardening theme in many of his art lessons, including a garden journal covered with fabric dyed by pounding leaves into muslin with rocks. Parents have donated plants and made bird feeders, and will hopefully help with maintenance over the summer months.

**Accessible Gardening for People with Physical Disabilities: A Guide to Methods, Tools, and Plants** is recommended by the school's occupational therapist for working with disabled youth. See the Resource Section for details about this book.

**Licking County Master Gardeners**  
***P.P.P. Ask Me***

Contact: Julie Huprich, Office Assistant  
phone: (740) 349 - 6907  
e-mail: huprich.1@osu.edu

At the request of the local Soil & Water Conservation Office, Master Gardeners offered a program to children ages 9 – 13 at a conservation day camp. The topic was beneficial insects, which then evolved to Pollinators (honeybees), Predators (praying mantids and ladybugs), and Plowers (earthworms/redworm composters); thus, the program title “P.P.P. Ask Me.” The information focused on the importance of bugs and worms in the garden.

Master Gardeners instructed approximately 120 youth in a presentation which lasted for 45 minutes. The children were divided into five groups of about 25 students each, and the presentation was given five separate times.

Plenty of visuals were available for the campers to see and touch, including an observation hive where they could watch bees at work. Live ladybugs, a redworm compost box with over 500 worms, and specimens of praying mantids—including egg cases—added further excitement to the day. The kids received a handout complete with pictures, plus honey sticks and a honey recipe book.

Bee hives were provided by local bee keepers, and insect specimens from the OSU Plant & Pest Diagnostic Clinic. Copies of the handouts are on file at the State Master Gardener office.

**Licking County Master Gardeners**  
***Newark Junior Garden Project***

Contact: See above

Initiated in 1998, this project has offered hands-on gardening experience to over 50 youths. Kids garden in their own individual plots, as well as maintain theme garden areas. At the end of each season, produce is shared with needy members of the community, which Master Gardeners believe helps to create feelings of goodwill and enhances self-worth.

Every Saturday from early May through late August, Master Gardeners come to the gardens to help teach, plant, or maintain the site. Teaching instruction utilizes 4-H books and curriculum developed by the Master Gardeners. Topics have included worm composting, beekeeping, garden maintenance, art in the garden, and care of tools.

The theme for 1999 was Native American gardening, with squash, beans, and corn filling the plots. Master Gardener Jean Rouse, who is knowledgeable in Native American culture, enriched and facilitated programming. The final night of the program consisted of a powwow, and each family was encouraged to bring a dish of corn, beans, or squash that they had grown.

Children pay \$10.00 for the entire summer program. The remaining funds for the garden have come from grants and from donations of plants and supplies by local businesses.

**Ross County Master Gardeners**  
***Ross County Programs***

Contact: Ray Wells, Extension Agent  
phone: (740) 702 - 3200  
e-mail: wells.1@osu.edu

Ross County Master Gardeners have recently sponsored several spring programs with children. In cooperation with a local pre-school, 18 kids planted wildflower and sunflower seeds in pots that they had decorated. Future plans include incorporating grow lights to make this a longer-term activity. In another spring activity, Master Gardeners helped a group of kids plant "fairy gardens" using hollowed out tree limbs.

During a fall bulb planting event, children helped plant 800 daffodil bulbs for "National Make a Difference Day." They got lessons on "bulb anatomy," and received temporary tattoos and coloring pages. Local businesses donated bulbs, a tree, and the tattoos.

**Trumbull County Master Gardeners**  
***Laird Avenue School Teaching/Learning Garden***

Contact: Anita Powell, Program Assistant  
phone: (330) 675 - 2595  
e-mail: powell270@postoffice.ag.ohio-state.edu

Master Gardeners, school staff, and volunteers installed raised bed gardens at a local elementary school during the spring of 1999. Three hundred and twenty kids, grades K – 5, planted the beds and learned about gardening. Master Gardener Margaret Emanuel, a retired science teacher, spearheaded the project. She designed the garden, coordinated installation, and developed curriculum for utilizing the garden in science, math, and language learning topics.

The summer program was filled to overflowing with kids who wanted to keep working in the garden.

The project was funded by donations from local businesses and organizations. Master Gardeners plan to start several new school gardens in 2000, thanks to a \$2,000 grant from the Youngstown-Warren Regional Chamber of Commerce.

# Project Ideas from Other Sources



**Clark County OSU Extension**  
***South Side Teen Farmer's Market***

Contact: Terry Smith, Office Assistant  
phone: (937) 328 - 4607  
e-mail: smith.3205@osu.edu

This outdoor gardening program serves 25 court-appointed youth and is part of the USDA Urban Gardening Program. Kids meet at the garden during the summer months to plant, maintain, harvest, and sell their vegetables.

They also complete craft projects, which are usually outdoor or garden-related. Crafts are sold at local festivals and markets, and the kids split the profits at the end of the year. Past craft projects have included stepping stones, flower arrangements, and pressed flowers.

The project is headed up by Terry Smith, who is an Extension employee and Master Gardener volunteer. Terry has several Master Gardeners working with her on the project.

**Clark County OSU Extension**  
***4-H Fairground Beautification Project***

Contact: see above

Terry Smith, Extension employee and Master Gardener volunteer, works with 4-H youth to plant and maintain flower beds at the fairgrounds. Each spring, Terry teaches a program for the kids about choosing plants, preparing the beds, and planting and maintaining the beds.

She judges the beds twice a year—once at fair time and again at the end of the season. The fair winner gets a pizza party. The overall winner receives a plaque with the club's name on it to put in the office.



**"No one has yet realized the wealth of sympathy, the kindness and generosity hidden in the soul of a child. The effort of every true education should be to unlock that treasure."**

**Emma Goldman**



## Cleveland Botanic Gardens

11030 East Boulevard  
Cleveland, OH 44106  
phone: (216) 721 - 1600

The Cleveland Botanic Garden offers a number of children's programs. For information on hours and months that the gardens are open, call the number listed above.

### Hershey Children's Garden

This recently opened children's garden offers both guided tours and self-guided tours. Groups must call ahead to schedule a guided tour. Guided tours include *Water and Prairie Habitats*, *Wonderful Wildlife Habitats*, *Energizing Plants*, and *Plants Around the World*.

### The Learning Garden

An urban teaching garden, this site provides students and teachers the opportunity for practical, hands-on gardening training all year long. Staff are dedicated to helping teachers develop, enrich, and sustain their outdoor classroom, and are available to serve as resources and consultants on school gardening. Programs for teachers and kids are offered regularly. The Learning Garden is at 6709 Euclid Avenue. Contact the Learning Garden Office for additional information:

The Learning Garden  
1945 East 66<sup>th</sup> St.  
phone: (216) 361 - 9200

### Green Corps

This teen training program employs high school students to grow and produce Ripe from Downtown Salsa. The goals of the program are to provide youth with training in basic work skills, horticulture, and business, as well as give teens a chance to make a difference to their community. In 1999, 10,000 jars of the salsa were produced.



**"No other job in the world could possibly dispossess one so completely as this job of teaching. You could stand all day in a laundry, for instance, still in possession of your mind. But this teaching utterly obliterates you. It cuts right into your fingering: essentially, it takes over your spirit. It drags it out from where it would hide."**  
**Sylvia Ashton-Warner, from *Spinster***



## Indoor Plant Growing Units

Self-contained units with fluorescent lights and plant growing trays are available for starting seeds and growing plants in the classroom. “GrowLabs,” offered by the National Gardening Association (NGA), are probably the best known models, but other companies sell similar products. For those on a limited budget, NGA sells plans to people interested in building their own units. Curriculum guides and teaching materials are also available from NGA and other suppliers. For more information, see the Resources Section—Publishers and Suppliers.

The Cleveland Botanic Garden offers workshops for teachers on using the GrowLab Program. Classes on building light stands are also provided. For contact information, see the listing for the Cleveland Botanic Garden in this section.

## Michigan State University *Michigan 4-H Children's Garden*

Michigan 4-H Foundation  
4700 South Hagadorn Road, Suite 220  
East Lansing, MI 48823-5399  
phone: (517) 353-6692  
e-mail: [4hgarden@msue.msu.edu](mailto:4hgarden@msue.msu.edu)  
web site: [www.4hgarden.msu.edu/](http://www.4hgarden.msu.edu/)

The web site will take you on a tour of all 56 theme gardens, and includes photos of the gardens and lists of plants used in each garden. The plant lists alone are an amazing resource.

Dedicated in 1993 and the first of its kind in the nation, the 4-H Children's Garden draws between 150,000 – 200,000 visitors annually. The garden is part of the 7 ½ acre Horticultural Demonstration Gardens on the MSU campus. Theme gardens include:

- **ABC Kinder-Garten:** Contains 26 planting blocks for each letter of the alphabet.
- **Rainbow Garden:** Features collections of plants introduced or used by African-Americans, Hispanic-Americans, Asian-Americans, North American Indians, and early Michigan settlers.
- **Enchanted Gardens:** Contains plants associated with mythical creatures.
- **Performing Plants Garden:** Features plants that DO things, such as mimosa leaves folding when touched, and the burs of burdock which provided the inspiration for velcro.
- **Sundial Garden:** A child can use his/her shadow to tell the time.

Interspersed among plantings are features such as an observation tower, fountains, a pond, a world globe, a tree house, and a running train.

**Missouri Botanical Gardens**  
*Science in a Suitcase*

4344 Shaw Blvd.  
St. Louis, MO 63110  
phone: (314) 577 - 5100

When the Missouri Botanical Gardens found that classes and tours were not enough to keep up with demand for science education programs, they initiated the Suitcase Science Program. Twenty-one kits covering topics such as urban gardening, soils, and flowers/pollination were developed. Kits are available to local teachers on a two-week loan basis.

The kits include everything a teacher needs to teach a complete science unit: a curriculum guide containing lesson plans and background information; display items such as posters, touchable items, and plant samples; and student materials. Kits were designed to meet the Missouri state curriculum requirements so that they are easy to fit into the teacher's lesson plans.

Boxes are restocked and maintained by staff and volunteers. Teachers submit a refundable \$25 damage deposit, but the kits are provided free of charge

**Ohio Division of Forestry**  
*Project Learning Tree*

Ohio Department of Natural Resources  
1855 Fountain Square Court, H-1  
Columbus, OH 43224  
phone: (614) 265—6657  
e-mail: [plt@dnr.state.oh.us](mailto:plt@dnr.state.oh.us)  
web site: [www.hcs.ohio-state.edu/ODNR/Education/infoplt.htm](http://www.hcs.ohio-state.edu/ODNR/Education/infoplt.htm)

Project Learning Tree (PLT) is a national environmental education program for kids pre-school through grade 12. State coordinators offer workshops and in-service training for teachers and youth group leaders. PLT at the national level is a joint project of the American Forest Foundation and the Council for Environmental Education. To learn more about the national program, visit their web site at [www.plt.org/](http://www.plt.org/).

The program in Ohio began in 1981. Since that time over 8,000 teachers and youth group leaders have attended a workshop.

**Ohio Division of Wildlife**  
***Project WILD***

Ohio Department of Natural Resources  
Fountain Square, G-1, 1840 Belcher Dr.  
Columbus, OH 43224  
phone: (614) 265—6316  
e-mail: paul.schiff@dnr.state.oh.us  
web site (national organization): [www.projectwild.org](http://www.projectwild.org)

Similar to Project Learning Tree, Project WILD trains educators on conservation and environmental topics, focusing on wildlife. Since 1983, workshops and materials have been presented to over 600,000 educators nationally, who in turn have provided instruction using Project WILD to more than 35 million youth.

At the national level, Project WILD is sponsored by several public agencies, professional associations, and non-profit organizations. For Ohio programs, contact the above address.

***Project Food, Land & People***

John Davis, Ohio FLP State Coordinator  
65 Poinsettia Rd., SE  
Scio, OH 43988  
phone: (330) 627—5712

Project Food, Land & People (FLP) is a relatively new program designed to help educators and students in grades preschool through 12 better understand the interrelationships between agriculture, the environment, and people of the world. Like the other Projects, educational resources have been developed and workshops are conducted for educators.

Ohio is currently one of sixteen states offering the program, and is waiting for an organization or agency to step forward and provide leadership. Until this happens, John Davis, retired school teacher, is serving as the volunteer state FLP Coordinator. He may be contacted for upcoming workshops.

**Ohio State University Extension**  
***4-H Resources***

For information about 4-H programs and resources, contact your county 4-H agent, or:

Tina Milenovic, Extension Associate  
4-H Youth Development, Natural Resources and Horticulture and Crop Science  
210 Kottman Hall  
2021 Coffey Rd.  
Columbus, OH 43210  
phone: (614) 292—8894  
e-mail: milenovic.2@osu.edu

OSU Extension 4-H offers a number of programs, projects, and resources for youth gardening and plant sciences. Some materials are geared for adult leaders to teach to kids. Others are project books for kids to complete on their own. Following are resources currently available or soon to be published.

### **Go Plants!**

Go Plants! is a new 4-H Group Project Manual that can be used by teachers or adult leaders for groups of kids. The project is designed as an introductory plant science unit for grades 2 - 4. It incorporates activities from the National Gardening Association's Grow Lab program, the Wisconsin Fast Plants program, plus other activities.

The five-unit curriculum focuses on seeds, roots, stems, leaves, and flowers. It is intended to improve student comprehension and application of plant science concepts and build critical science thinking and process skills. Go Plants! will be available in the fall of 2000.

### **Growing Together**

#### **A Volunteer's Guidebook for Teaching Horticulture in Elementary Schools**

This guidebook was specifically prepared for OSU Master Gardeners to use in public schools. It was also designed to reinforce the State of Ohio science objectives for grades 3 & 4. However, the activities can be adapted to older or younger students.

Units include: Pollination Jubilation; Leaf Detectives; Treasure Trunk; Sensational Soil; Cycle of Life; Insect Tools; All About Bulbs; Earthwormology; Break it Down; Truly Insects.

The book is currently out of publication, but is scheduled for re-printing by October, 2000. One copy is available for loan through the State Master Gardener Office.

## **4-H Project Books**

### **From Seed to Flower (4-H 673)**

This new 48-page 4-H project book helps kids learn about growing annual flowers from seeds, and then growing them on in the garden or in containers. The book has 17 activities and several pages for record-keeping. The project is targeted to 9 – 13 year olds, and can be used over two seasons.

### **Vegetable Gardening (4-H 691)**

Designed to teach kids about raising their own vegetables, this project book covers topics such as planning, designing, light, temperature, soils, nutrients, planting, and composting. Each of the six units contain two or more activities.

### **Growing with the Seasons (4-H 692)**

A more advanced project book than Vegetable Gardening I, this book covers topics such as intensive gardening techniques and pest management. It is specifically designed to be used over the three growing seasons, and teaches kids about cool season, warm season, and cold-tolerant vegetables.

### **Indoor Gardening (4-H 674)**

Timothy J. Rollins et al., distributed by the Ohio State University.

Kids learn about keys to successful house plant culture and discover the pleasures of indoor gardening. The book includes many hands-on experiments to try.

### **Exploring our Insect World I (4-H 644)**

Kids collect, mount, and label 25 different insect species representing eight orders. The project also teaches how insects play an important role in ecology. The project book contains line drawings of insects which are useful for photocopying.

### **Exploring our Insect World II (4-H 645)**

Expands the insect collection initiated in the above project. Kids also study insects' helpful and harmful effects on the environment.

**Texas Agricultural Extension Service, Bexar County**  
***Classroom Garden Program***

3427 Northeast Parkway  
San Antonio, Texas 78218  
phone: (210) 467 – 6575

A project jointly supported by Bexar County Extension and Bexar County Master Gardeners, the goal is to expose youth to gardening instruction and give them the opportunity to garden during elementary school. Schools are provided with landscape timbers, nails and soil for two 4' x 8' raised bed gardens. Fertilizer, vegetable seeds, and transplants are provided every fall and spring. Teachers receive three hours of basic training and a packet of curriculum materials. An additional three hours of continuing education is available twice a year.

The program publishes a quarterly newsletter and provides opportunities for kids to participate in gardening fairs and shows. Master Gardeners are on call to provide advice.

Schools are required to pay a one-time fee of \$250 to cover training and supplies. They must also pick up supplies at the Extension office. To date, 212 schools have participated in the program.

**Texas A & M University**  
***Junior Master Gardener Program***

Junior Master Gardener Program  
225 Horticulture/Forestry Building  
Texas A&M University  
College Station, Texas 77843-2134  
phone: (409) 845 – 8565  
web site: <http://jmg.tamu.edu>

The JMG Program is a new 4-H youth gardening project of the Texas Agricultural Extension Service. It is modeled after the Master Gardener program and offers horticulture and environmental science concepts through activities targeted to three levels. Level 1 is designed for grades 3 – 5, level 2 for grades 6 – 8, and level 3 for grades 9 – 12. The program includes a youth handbook and a leader/teacher guide for each level, with both group and individual activities. Community and volunteer service are also emphasized.

The following eight units are featured in the program: Plant Growth and Development; Environmental Horticulture and Ecology; Fruits and Nuts; Landscape Design; Soils and Water; Insects and Diseases; Vegetables and Herbs; and Life Skills and Career Exploration.

Some of the program materials are available for loan from the State Master Gardener Office.

## *Wildlife Habitat Certification Programs*

Backyards for Wildlife Schoolyard Wildlife Habitats Program  
Ohio Division of Wildlife National Wildlife Federation  
1840 Belcher Drive 8925 Leesburg Pike  
Columbus, OH 43224 Vienna, VA 22184  
phone: (614) 265—1015 phone: (703) 790—4434  
web site: [www.nwf/org/habitats](http://www.nwf/org/habitats)

Both of these organizations offer certification programs for schools, residences, work places, and public areas that have successfully developed habitats for wildlife. They also provide information on how to create wildlife habitats.

The Ohio Division of Wildlife publishes the **Backyards for Wildlife Binder** containing information on Ohio wildlife and attracting wildlife. It is available for \$20.00. A free, quarterly magazine, **Wild Ohio**, is also published by the Division of Wildlife.

The National Wildlife Federation offers the Schoolyard Habitats program, which focuses on the special needs of developing, using, and maintaining habitat-based learning sites on school grounds. A **Schoolyard Habitats** information packet is available for \$14.95. The organization also offers information and certification for backyard wildlife habitats.

## **University of Wisconsin—Madison** *Wisconsin Fast Plants Program*

Department of Plant Pathology  
1630 Linden Drive  
Madison, WI 53706  
Phone: 1 - 800 - 462 - 7417  
e-mail: [wfp@fastplants.cals.wisc.edu](mailto:wfp@fastplants.cals.wisc.edu)  
web site: <http://fastplants.cals.wisc.edu/>

(the web site contains considerable information about the program)

This program specializes in plant science topics for grades K - college. It offers teacher training, instructional materials, and seeds for growing Fast Plants.

Fast Plants are rapid cycling brassicas that are members of the cabbage or mustard family. Originally bred for research purposes, *Brassica rapa* (a variant of wild mustard) completes its life cycle in one fifth the time of its ancestors. This short life cycle (35 - 40 days when grown indoors under continuous fluorescent light) makes these plants well suited for classroom use. Topics ranging from germination to seed production can be covered in a short period of time. Fast Plants are also small in size, hardy, easy to grow, and available in a variety of easily recognized genetic traits.

In 1998, approximately 5 million US school children were exposed to Fast Plants in the classroom.

## *Worm Composting*

Composting with worms is a popular kid's gardening project. Worm composting bins, worms for stocking them, curriculum guides, and teaching materials are available through the **Gardening with Kids** catalog from the National Gardening Association, and the **Let's Get Growing catalog**. See the Resource List — Publishers and Suppliers, page 41, for details. Also, see page 42 for a listing of web sites dedicated to worm composting.

One county Master Gardener Coordinator reported that worm composting initially was not a success, as the kids didn't want to touch the worms. Eventually this resistance was overcome.

Smith County Master Gardeners of Tyler, Texas, train local teachers on the art of composting with worms through the **"Squirmy Worm Program."** The project provides teacher training, a curriculum, and worm supplies for teachers to use in the classroom.

Smith County Master Gardeners  
1517 West Front Street, Suite 116  
Tyler, TX 75702  
phone: (903) 535 - 0885



**"Education's purpose is to replace an empty mind with an open one."  
Malcolm S. Forbes**





# ► **Resource List** ◀

## **Organizations**

### **American Community Gardening Association**

100 N. 20th St., 5th Floor  
Philadelphia, PA 19103-1495  
phone: (215) 988—8785  
web site: [www.communitygarden.org/index.html](http://www.communitygarden.org/index.html)

This organization is a national, nonprofit group of professionals, volunteers, and supporters of community gardens in urban and rural communities. Although not geared specifically for youth gardening, the organization can provide information on starting and maintaining a community gardening program.

### **American Horticultural Society**

7931 East Boulevard Drive  
Alexandria, VA 22308  
phone: (703) 768 – 5700  
web site: [www.ahs.org](http://www.ahs.org)

AHS sponsors the Annual National Youth Garden symposium, held at different sites around the country each year.

### **American Horticultural Therapy Association**

909 York St.  
Denver, CO 80206-3799  
phone: (301) 948 - 3010  
web site: <http://www.ahta.org/info.html>

Offers low-cost handouts for gardening with disabled people, including children. Also sponsors grants.

### **National Arbor Day Foundation**

100 Arbor Avenue  
Nebraska City, NE 68410  
phone: (402) 474 – 5655  
web site: [www.arborday.org](http://www.arborday.org)

Sells curriculum kits, booklets, newsletters, and posters on tree-related topics.

## **National Gardening Association (NGA)**

180 Flynn Avenue  
Burlington, VT 05401  
phone: (800) 538 – 7476  
web site: [www.garden.org](http://www.garden.org)

**Growing Ideas: A Journal of Garden Based Learning:** this 12-page teachers' newsletter is issued three times a year. Most articles can be read from their Internet site. The newsletter is also available through subscription for \$9.00 per year.

**Gardening with Kids** catalog: sells indoor plant growing units (GroLabs), worm composting bins, books, and curriculum guides.

**Youth Garden Grants Program:** 300 grants are awarded each year, valued at \$750 each. Grants consist of an assortment of tools, seeds, and garden products.

**[www.kidsgardening.com](http://www.kidsgardening.com):** a new, interactive web site for people gardening with kids.

**KidsGarden E-News:** a free on-line newsletter published monthly. To subscribe, visit the web site above.



**“Nature fits all her children with something to do.”  
James Russell Lowell**



# ► Resource List ◀

## Publications for Teachers

- Many books are available about gardening with children. The ones listed in these sections have been recommended by Master Gardeners or Extension staff.
- Additional information about many of the books can be found at [www.amazon.com](http://www.amazon.com). The listed book price is from [amazon.com](http://amazon.com) and does not include shipping and handling charges. You may also find or order these resources from a local book store, gardening store, or library.
- Unless otherwise noted, all book descriptions and reviews were taken from [amazon.com](http://amazon.com), many of them verbatim.
- Books recommended by Tara Ciaciura, Franklin County Program Assistant, were taken from a list Tara compiled for the Budding Gardeners program.
- Books designated with a \* after the title are available for loan from the State Master Gardener office.

### **Accessible Gardening for People with Physical Disabilities: A Guide to Methods, Tools, and Plants \***

Janeen R. Adil. Woodbine House, 1995. \$13.56

Contains general guidelines, ideas for plants and projects, and listings of catalogs which supply adaptive equipment.

Recommended by the occupational therapist at Maize Elementary.

### **A Child's Garden: Enchanting Outdoor Spaces for Kids and Parents \***

Molly Dannenmaier. Simon & Schuster, 1998. \$24.50

This full-color exploration of the family garden--stuffed with resourceful ideas and easy-to-complete projects--shows how to create thriving gardens that serve both the child's need for creative play and the adult's yearning for beauty and serenity.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

### **Digging Deeper**

#### **Integrating Youth Gardens into Schools & Communities \***

Martin Kemple and Joseph Kiefer. FOOD WORKS, 1998. \$19.95

An illustrated step-by-step guide for organizing, designing, and constructing children's gardens. Focuses on nutrition and food production. Includes hands-on activities, charts, and projects.

Recommended by Andrea Lapp, Greene County Master Gardener Coordinator.

## **50 Gardening Projects for Kids (Step-By-Step Series)**

Clare Bradley

After an opening section introducing basic gardening concepts, such as equipment, soil amendments, beneficial and harmful insects, etc., the projects are organized by season of the year. Thus "Spring" includes growing flowers in a boot and planting vegetables like cherry tomatoes in a window box, while "Winter" includes propagating a piggy-back plant and making and growing a "Crazy Grass-head." Attractively illustrated with color photographs.

This book is out of print, but may be available at libraries.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

## **Gardens for Growing People**

Ruth Lopez

Gives justification for gardening with a child and some of the basic information about designing a garden, preparing the ground, planting vegetables and some flowers, and dealing with insects and diseases. Good material for a one-on-one real gardening situation, rather than for classroom instruction. Illustrated with line drawings.

This book is out of print, but may be available in libraries.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

## **Go Plants!**

Distributed by The Ohio State University

Go Plants! is a new 4-H Group Project Manual that can be used by teachers or adult leaders for groups of kids. The project is designed as an introductory plant science unit for grades 2 - 4. It incorporates activities from the National Gardening Association's Grow Lab program, the Wisconsin Fast Plants program, plus other activities. The five-unit curriculum focuses on seeds, roots, stems, leaves, and flowers. It is intended to improve student comprehension and application of plant science concepts and build critical science thinking and process skills.

Go Plants! will be available in the fall of 2000.

## **The Gray Gardener's Notebook \***

### **Creative Curriculum Materials for Community Gardens**

Vernon Mullens. Bexar County Extension Service.

Vernon Mullens, a Bexar County Master Gardener, coordinates a community garden in a low-income, racially diverse neighborhood in San Antonio, Texas. Some of the theme gardens he has developed include "ethnic gardens," the "Dietcise Garden" program for people with diabetes, and the "Athlete's Garden," which focuses on kids with athletic interests.

To order a copy, contact the Bexar County Extension Service at (210) 467 - 6575. Price is \$10.00 plus shipping and handling.

## **Growing Together**

### **A Volunteer's Guidebook for Teaching Horticulture in Elementary Schools \***

Angela Boeker Eckert. The Ohio State University, 1996.

This guidebook was specifically prepared for OSU Master Gardeners to use in public schools. It was also designed to reinforce the State of Ohio science objectives for grades 3 & 4. However, the activities can be adapted to older or younger students.

Units include: Pollination Jubilation; Leaf Detectives; Treasure Trunk; Sensational Soil; Cycle of Life; Insect Tools; All About Bulbs; Earthwormology; Break it Down; Truly Insects.

The book is currently out of publication, but is scheduled for re-printing by October, 2000. One copy is available for loan through the State Master Gardener Office.

### **Hollyhock Days: Garden Adventures for the Young at Heart \***

Sharon Lovejoy. Interweave Press, 1994. \$8.50

Introduces kids and grown-ups to the joys of nature through facts, memories, stories, garden plans and projects. Contains watercolor illustrations.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

### **I Can Grow Things: How-To-Grow Activity Projects for the Very Young (Show-Me-How)**

Sally Walton, Stephanie Donaldson.

Sixteen projects, many with a whimsical turn like: "Coconut Head," "Birdseed Surprises," "Sunflower Race," and "Vegetable-Top Forest." Step-by-step color photographs featuring children working on the projects.

This book is out of print, but may be available in libraries.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

### **The Kid's Nature Book: 365 Indoor/Outdoor Activities and Experiences**

Susan Milord. Gareth Stevens, 1997. \$23.93

Suggests activities, poems, and stories to explore nature throughout the year.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

### **Nature Crafts for Kids**

Gwen Diehn. Sterling Publications, 1992. \$11.96

Provides instructions for using leaves, flowers, twigs, and shells to make fifty craft projects, including kites, kaleidoscopes, and clocks.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **Ready, Set, Grow! A Guide to Gardening with Children**

Suzanne Frutig Bales. IDG Books Worldwide, 1996.

Imaginative sections, some quite offbeat, on gardening topics such as planning and planting a garden. Projects include specialized gardens such as a teepee garden, butterfly and hummingbird garden, sunflower house, etc. Also included are crafts and activities relating to gardens, such as making a scarecrow, drying everlasting flowers, beneficial insects, and pages on specific "fun and funny plants." Attractively illustrated with color photographs and colored drawings.

This book is currently out of stock, but may be available in libraries.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

**Roots, Shoots, Buckets and Boots: Gardening Together with Children \***

Sharon Lovejoy. Workman Publishing Company, 1999. \$11.16

Features 12 easy-to-implement ideas for kids' theme gardens. Plans, a list of needed supplies, and growing instructions for each garden are included.

Recommended by Andrea Lapp, Greene County MG Coordinator, and Denise Ellsworth, Stark/Summit County Extension Agent.

**Theme Gardens**

Barbara Damrosch. Workman Publishing Company, 1982.

Contains garden plans and plant lists.

The publisher is currently out of stock of this item but it may be available in libraries.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

**Victory Garden Kids' Book \***

Marjorie Waters. Globe Pequot Pr., 1994. \$12.76

A guide to growing vegetables, fruits, and flowers with children.

Resource material used for Allen County Children's Garden programming.



# ► Resource List ◀

## Publications for Children and Adults

### **All About Seeds (Do-It-Yourself Science Series)**

Melvin Berger. Reading level: Grades 2–3

Simple text, basic experiments, and colored illustrations teach what seeds need to grow.

This book is currently out of print, but may be available in libraries.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

### **All About Seeds**

Susan Kuchalla. Troll Associates, 1982. \$10.55 Reading level: Ages 4-8

Brief text and pictures present several kinds of seeds and show how they grow into plants.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **The Big Bug Book**

Margery Facklam. Little Brown & Co, 1994. \$5.06 Reading level: Ages 4-8

Describes thirteen of the world's largest insects, including the birdwing butterfly and the Goliath beetle.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **The Blossom on the Bough: A Book of Trees**

Anne Ophelia Dowden. Ticknor & Fields, 1994. **\$16.95** Reading level: Ages 9-12

A Notable Book of 1975 is made available once again, to introduce young readers to the often unfamiliar flowers and fruit of trees in the seven major forest regions of the United States.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **Blue Potatoes, Orange Tomatoes**

Rosalind Creasy. Little Brown & Co, 1997. \$5.91 Reading level: Ages 4-8

Describes how to plant and grow a variety of colorful vegetables, including red corn, yellow watermelons, and multicolored radishes.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **Bugs and Other Insects (Crabapples)**

Bobbie Kalman and Tammy Everts. Crabtree Pub., 1994. \$5.06 Reading level: Ages 4-8

Simple, informative text describing the biology of various insects is illustrated with color drawings and photographs of the insects in their natural habitats.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

**Bugs, Beetles, and Butterflies (Puffin Science Easy-To-Read, Level 1)**

Harriet Ziefert. Puffin, 1998. \$2.79 Reading level: Ages 4 - 8

From bugs that swim to beetles that eat mice to butterflies of many colors, beginning readers will learn about the exciting world of bugs, beetles, and butterflies in the Science Easy-to-Read book.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

**Bugs! Bugs! Bugs! (Eyewitness Readers, Level 2 [Paper])**

Jennifer Dussling. Dk Pub Merchandise, 1998. \$3.16 Reading level: Ages 4-8

Describes the hunting activities of various bugs, including the praying mantis, wood ant, and dragonfly.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

**The Carrot Seed**

Ruth Krauss. Harper Trophy, 1989. \$3.96 Reading level: Ages 4 – 8

A reissued “classic” from 1945, this book’s simple text and pictures clearly illustrate what a child needs to do to get a plant to grow from seed. (However, the sudden emergence of a full-grown plant is a distortion that will need some explaining.)

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

**Compost: Growing Gardens from Your Garbage**

Linda Glaser. Millbrook, 1996. \$7.16 Reading level: Ages 4 – 8

Striking illustrations show the basics of composting and how compost is used. Intended to present “composting as an entertaining family activity.”

Recommended/reviewed by MG Marjorie Kinney, ABE Center. Recommended by Tara Ciaciura, Franklin County Program Assistant.

**Crinkleroot’s Guide to Knowing the Trees**

Jim Arnosky. Simon & Schuster, 1992. \$11.25 Reading level: Ages 4 - 8

Crinkleroot invites youngsters to come along as he walks through hard and softwood forests. How do you tell the difference? Crinkleroot knows: it’s the light and the air. His charts show the leaves, stems, and seeds that help young readers identify trees.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

**Down to Earth : Garden Secrets! Garden Stories! Garden Projects You Can Do!**

Michael J. Rosen. Harcourt Brace, 1998. \$13.50 Reading level: Ages 9-12

The variety of ideas, stories, styles, and illustrations makes the book a wonderful resource for gardening projects, class lessons, and story hours, as well as just plain reading enjoyment, and each page is uniquely illustrated by a contributor or with Rosen's own artwork.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

#### **4-H Project Books**

Available from your County Coordinator for \$1.00 each before July 1, 2000. Cost will increase to \$2.00 per copy after July 1.

##### **From Seed to Flower (4-H 673)**

Jane C. Martin et al. Distributed by The Ohio State University.

##### **Vegetable Gardening (4-H 691)**

Timothy J. Rollins et al. Distributed by The Ohio State University.

##### **Growing with the Seasons (4-H 692)**

Jane C. Martin and Robert L. Horton. Distributed by The Ohio State University.

##### **Indoor Gardening (4-H 674)**

Timothy J. Rollins et al.. Distributed by the Ohio State University.

##### **Exploring our Insect World I (4-H 644)**

Distributed by The Ohio State University.

##### **Exploring our Insect World II (4-H 645)**

Distributed by The Ohio State University

Expands the insect collection initiated in the above project. Kids also study insects' helpful and harmful effects on the environment.

##### **From Flower to Fruit**

Anne O. Dowden. Ticknor & Fields, 1994. \$15.95 Reading level: Ages 9 - 12

A new edition of the critically praised 1984 book once again offers young readers a thoughtful, illustrated examination of the reproductive cycle of various flowering plants, tracing all steps in the process.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

##### **From Seed to Plant**

Gail Gibbons. Holiday House, 1991. \$12.71 Reading level: Ages 4-8

Explores the intricate relationship between seeds and the plants which they produce.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

##### **Garden Crafts for Kids: 50 Great Reasons to Get Your Hands Dirty \***

Diane Rhoades. Sterling Publications, 1998. \$11.96 Reading level: Ages 9 – 12

Over 50 projects for kids of nearly all ages, including: growing potatoes in tires, building a gardening tool station, making a purple martin house from a gourd, and discovering the joys of composting. Contains simple explanations of plant physiology and discussion of garden-relevant wildlife, such as birds and bugs.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

### **Gardening Wizardry for Kids**

L Patricia Kite. Barrons Juveniles, 1995 \$12.71 Reading level: Ages 4 - 8

Containing over 300 projects, this book focuses on kitchen and windowsill gardening projects. The author includes science experiments, craft projects, and historical information.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent, and Tara Ciaciura, Franklin County Program Assistant.

### **Green Thumbs: A Kid's Activity Guide to Indoor and Outdoor Gardening \***

Laurie Carlson. Chicago Review Pr., 1995. \$10.36 Reading level: Ages 4 – 8

Kids' gardening projects such as raising praying mantids from egg cases and growing a mold garden.

Resource material used for Allen County Children's Garden programming. Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **Growing Things; Things to Make, Facts, Activities**

Ting Morris and Neil Morris. Franklin Watts, 1994. \$20.00 Reading level: Ages 4-8

Part of the Sticky Fingers series, this activity book for budding gardeners features simple instructions and calls for materials that are, for the most part, readily available.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **Growing Vegetable Soup**

Lois Ehlert. Harcourt Brace, 1990. \$4.80 Reading level: Ages 4 – 8

Ehlert's typically bright, bold pictures trace plant growth from seed to soup. Includes recipe.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

### **How Does Your Garden Grow? : Be Your Own Plant Expert**

Dominique and Philippe Joly. Sterling Publications, 1996. \$14.95 Reading level: Ages 9-12

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **How a Seed Grows (Let's-Read-And-Find-Out Books)**

Helene J. Jordan. Harper Collins, 1992. \$3.96 Reading level: Ages 4-8

Explains how a seed gets water, nutrients, and sunlight. Detailed, full-color illustrations dramatize how a small seed may become a flower, a vegetable, or even a huge oak tree.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **Kids Garden!: The Anytime, Anyplace Guide to Sowing & Growing Fun \***

Avery Hart and Paul Mantell. Williamson Publishing, 1996. \$11.01

Reading level: Ages 4 – 8

Plant a sidewalk-crack garden, grow a broom, and discover bug remedies and composting with this book which involves kids ages four and older and their families in the gardening process. The attention to urban as well as outdoor gardens makes for a lively and fun focus.

Resource material used for Allen County Children's Garden programming.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent, and Tara Ciaciura, Franklin County Program Assistant.

### **Learn and Play in the Garden**

Meg Herd. Barrons Juveniles, 1997. \$7.96 Reading level: Ages 9 – 12

It's hands-on activity fun and natural science all in one bright, profusely illustrated book of garden projects for boys and girls of early school age. Children can learn how to make a scarecrow, grow strawberries, make a worm farm--and even create art out of leaves collected in autumn.

Resource material used for Allen County Children's Garden programming. Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **The Magic School Bus Plants Seeds: A Book About How Things Grow**

Joanna Cole. Scholastic Trade, 1995. \$2.80 Reading level: Ages 4 – 8

After helping the children plant a successful garden, Ms. Frizzle takes them off in a ladybug bus to another garden where the gang learns about bees and pollination.

Recommended/reviewed by MG Marjorie Kinney, ABE Center. Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **More Than Just a Flower Garden**

Dwight Kuhn. Silver Press, 1990. \$15.98 Reading level: Ages 9 - 12

Describes the living things in a flower garden, focusing on the dynamic variety of plants and the creatures that depend on them. Includes tips for starting your own flower garden.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **My Backyard Garden**

Carol Lerner. Morrow Junior Books, 1998. \$12.00 Reading level: Ages 4-8

This easy-to-follow, fully illustrated handbook helps youngsters enjoy the pleasures of gardening, whether they have a green thumb or not. Carol Lerner covers everything from planting the seeds to harvesting the crops.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **New Junior Garden Book (Better Homes and Gardens) \***

Felder Rushing. Better Homes and Gardens Books, 1999. \$11.17 Reading level: Ages 9 – 12

Written for kids and not parents, this book contains 38 kid-tested gardening projects and over 50 illustrations.

Resource material used for Allen County Children's Garden programming.

A copy of this book is given to Franklin County's Budding Gardeners class participants.

### **Our Endangered Planet : Soil**

Suzanne Winckler and Mary M. Rodgers. Lerner Publications, 1994. \$22.60

Reading level: Ages 9-12

Discusses the formation and the role of different types of soils and how they have been endangered through unwise farming, mining, and grazing.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

### **The Plant-and-Grow Project Book**

Ulla Dietl. Sterling Publications, 1993. \$14.95 Reading level: Ages 9 – 12

Twenty-six projects for growing plants from seeds, cuttings and sprouts. Color photographs. Green thumb and fingers indicate the difficulty and length of time a project takes.

Recommended/reviewed by MG Marjorie Kinney, ABE Center.

**Plants Are People Too! \***

Jana Paulson. Berry Books, 1999.

This 16 page, full color cartoon book is available through the Ohio Nursery & Landscape Association.

Contact ONLA at (800) 825 – 5062 for pricing and ordering information.

**Simple Nature Experiments with Everyday Materials**

Anthony Fredericks and Frances Zweifel. \$4.76 Reading level: Ages 9 – 12

Contains over 100 discoveries, investigations, and experiments about the natural world.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

**Soil (See for Yourself)**

Karen Bryant-Mole. Raintree/Steck Vaughn, 1996. \$21.40 Reading level: Ages 4-8

An introduction to the composition and uses of soil presents one topic on each double-page spread, using straightforward but sometimes sketchy text and clear full-page color photographs.

Recommended by Tara Ciaciura, Franklin County Program Assistant.

**Starting Gardening (First Skills Series)**

by Sue Johnson, Cheryl Evans. EDC Publishing, 1997. \$4.95 Reading level: Ages 4-8

Recommended by Tara Ciaciura, Franklin County Program Assistant.

**Sunflower Houses: Garden Discoveries for Children of All Ages**

Sharon Lovejoy. Interweave Press, 1995. Reading level: Ages 4 - 8

A collection of gardening projects, stories, and poems.

The publisher is currently out-of-stock of this book, but it may be available in libraries.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

**Wild Weather – Lightning!**

Lorraine Jean Hopping. Cartwheel Books, 1999. \$3.19 Reading level: Ages 4 – 8

Describes the incredible power of lightning and its positive and negative effects on living things.

Resource material for Allen County Children's Garden programming.

# ► Resource List ◀

## Publications about Poisonous Plants

### **Common Poisonous Plants and Mushrooms of North America \***

Nancy J. Turner and Adam F. Szczawinski. Lubrecht & Cramer Ltd, 1995. \$21.21  
Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

### **A Field Guide to Venomous Animals and Poisonous Plants: North America, North of Mexico (Peterson Field Guide, No. 46)**

Steven Foster and Rojer A. Caras

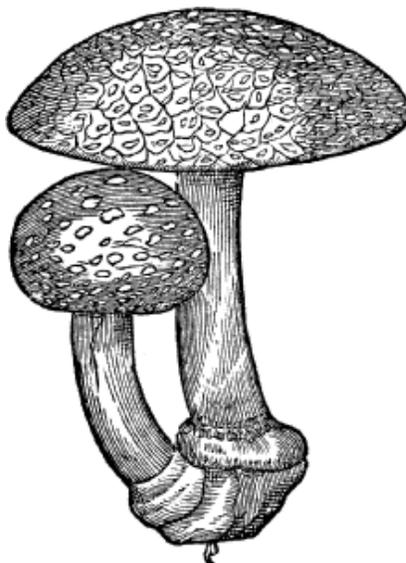
This field guide is currently out of print, but may be available in libraries.

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.

### **Plants for Play: A Plant Selection Guide for Children's Outdoor Environments \***

Robin C. Moore. MIG Communications, 1993. \$16.95

Recommended by Denise Ellsworth, Stark/Summit County Extension Agent.



# ► **Resource List** ◀

## **Publishers and Suppliers**

### **Gardening with Kids**

A supply catalog available through the National Gardening Association. See page 29 for additional information.

### **Let's Get Growing!**

1900 Commercial Way, Santa Cruz, CA 95065

phone: (800) 408 – 1868

web site: [www.letsgetgrowing.com](http://www.letsgetgrowing.com)

This company offers a catalog of environmental science and nature supplies, including books, curriculum guides, butterfly larvae, indoor plant growing units and worm composters.

### **Magic Worm Ranch**

3163 Roadrunner Rd., San Marcos, CA 92069

phone: (760) 598 - 0607

web site: [www.magicworms.com](http://www.magicworms.com)

Sells worm composting units, redworms, and books on vermiculture. Supplies can be ordered on-line. The web site also contains information on worm composting, as well as links to other web sites on the topic. The organization is sponsored by the Maximum Achievement Center, a nonprofit corporation benefiting children and adults with learning disabilities.

### **Flowerfield Enterprises**

Mary Appelhof, WormWoman

10332 Shaver Rd., Kalamazoo, MI 49024

phone: (616) 327 - 0108

web site: [www.wormwoman.com](http://www.wormwoman.com)

Sells worm composting supplies and educational resources. An order form is available on-line. The web site also contains information on worm composting, and links to other web sites.

### **NK Lawn & Garden Kidseeds Product Line**

A part of their Kidseeds product line, NK Lawn and Garden offers seed packets with colorful cartoon characters on the front. Cartoons feature names such as “Hairy Carrot,” “Luke the Cuke,” and “Be Cool Coleus.” Currently these seed packets are not readily available, but can be ordered from NK Lawn & Garden through local retailers or garden centers. The Andersons, Target, and ACE Hardware are retailers that carry the NK line. The minimum order is 20 packs of seeds, but can be a mix of varieties.

# ► Resource List ◀

## Internet Sites

### **[www.kidsgardening.com](http://www.kidsgardening.com)**

Sponsor: National Gardening Association

A new, interactive web site for people gardening with kids.

### **<http://aggie-horticulture.tamu.edu/kindergarden/kinder.htm>**

Sponsor: Department of Horticulture Sciences, Texas A & M University

Contains information on topics such as school gardens, plant activities for kids, research on children's gardening, and tips for gardening with kids.

### **<http://.ag.arizona.edu/maricopa/garden/garden/>**

Sponsor: Maricopa County Home Horticulture, The University of Arizona Cooperative Extension

Click on the "Youth Gardens Link" for a variety of information. Perhaps most useful is a reference list of funding sources for children's gardens. The web site also contains descriptions of youth gardens in Maricopa County. The "Specialty Gardens" link gives brief information on various types of theme gardens for kids, such as bat gardens, pizza gardens, sunflower houses, etc. (although the horticultural information is geared to the low desert, it still provides helpful ideas).

### **[www.empnet.com/worms/welcome.htm](http://www.empnet.com/worms/welcome.htm)**

Sponsor: Recycleit Corporation

The web site contains useful, basic information on how to compost with worms, including a resources link to other articles on vermiculture.

### **[www.magicworms.com](http://www.magicworms.com)**

Sponsor: Maximum Achievement Center

Sells worm composting supplies, which may be ordered on-line. Also contains information on worm composting, as well as links to other web sites on the topic.

### **[www.wormwoman.com](http://www.wormwoman.com)**

Sponsor: Mary Appelhof, WormWoman, Flowerfield Enterprises

Information on worm composting, with links to other web sites. An order form for purchasing supplies is available at the site.

**[www.nj.com/yucky/worm](http://www.nj.com/yucky/worm)**

Sponsor: New Jersey Online

Claiming to be “the yuckiest site on the Internet,” this site covers worms and composting. It is mostly geared for kids, although a link to the “teachers center” gives classroom activities and resources for teaching with worms.

**[www.ex.ac.uk/bugclub](http://www.ex.ac.uk/bugclub)**

Sponsor: Amateur Entomologists’ Society

Features the “bug club” for young people interested in insects. Most of the web page contains info about the Society, and how to join. Based in England.

**[www.mobot.org/welcome.htm](http://www.mobot.org/welcome.htm)**

Sponsor: Missouri Botanical Gardens

For teachers: sells lesson plans, videos, and web CDs for various plant-related topics.

For kids: Internet-accessible units on biomes of the world, freshwater ecosystems, and marine ecosystems.

**[www.vg.com](http://www.vg.com)**

Sponsor: Virtual Gardening, in association with familyeducation.com

Click the “Gardening with Kids” link for project ideas and tips for gardening with kids.

**[www.umn.edu/bellmuse/mnideals/prairie](http://www.umn.edu/bellmuse/mnideals/prairie)**

**Build-A-Prairie**

Sponsor: University of Minnesota

Kids learn about prairies while building one on-line. They choose grasses and wildflowers to plant, and watch them sprout on the screen. Then, they add birds, mammals, reptiles, amphibians, and insects to the prairie, and see them fly, hop, run, and slither across the screen. If a species selected is not appropriate, the program will tell you why. To learn more about a species before selecting it, just click on “Read more.” Geared for grades 4—8.

**[www.dnr.state.wi.us/org/caer/ce/eeek/](http://www.dnr.state.wi.us/org/caer/ce/eeek/)**

**Environmental Education for Kids! (EEK!)**

Sponsor: Wisconsin Department of Natural Resources

An electronic magazine for kids grades 4 - 8. Although some of the articles are specific to Wisconsin plants and animals, others are more widely adaptable. The “Teacher Pages” are designed for teachers to help students use the web site.

[www.usda.gov/news/usdakids/index.html](http://www.usda.gov/news/usdakids/index.html)

### **USDA for Kids**

Sponsor: U.S. Department of Agriculture

This web site contains links to government organizations that provide educational activities for kids. Some sites are directed at kids, while others offer teaching ideas and curriculum. Some to check out include:

### **Smart Stuff with Twig Walkingstick**

Sponsored by Ohio State University Extension

Features a short question-and-answer format on various topics, including insects and plants. Geared for children.

### **S.K. Worm**

Sponsored by the National Resources Conservation Service

S.K. Worm answers questions about soil. Geared for kids.

### **Natural Resource Conservation Education**

Sponsored by the Conservation Education Program

Features the **Treetures**, which are cartoon characters that help kids learn about trees, plant life, and animals. The web link contains stories for kids to read, and provides ordering information for Treeture coloring books and activity guides.



**Twig  
Walkingstick**