

Earth BOX

Youth Garden Guide

Horticulture Fitness & Nutrition

# Instructional School Garden Plan



Chinese cabbage 'michihli' in an EarthBox ®Garden Stand <sub>Cool-season / 90 days</sub>



The scientifically engineered EarthBox® Container Garden System is made from a #5 polypropylene, UV protected, recyclable, food-grade high quality plastic. The environmental friendly, easy-to-use EarthBox saves resources, money and time! Students of every age can learn gardening and applied science with EarthBox Instructional School Gardens and its customized accessories as they do at the Interlachen Elementary School:

#### IT TAKES A "VILLAGE" TO FIGHT OBESITY

I installed an EarthBox® Instructional School Garden at our school to combat childhood obesity and diabetes. In my 25 years working in school cafeterias, I have seen children get heavier and heavier. I wanted to introduce them to healthy eating habits early. I decided to use EarthBoxes after a neighbor showed me how easy they are to use, and how highly productive they are. The kids light up when they talk about the EarthBox. They want to show everyone what they are growing. The principal, assistant principal, teacher's aides, teachers, cafeteria aides and parents all work with the children in the EarthBox garden to grow bell peppers, broccoli, cauliflower, cabbage, cucumbers, collard geens, lettuce, squash, tomatoes, zipper peas and blue lake green beans. I am not going to say that I am going to cure the world's problems, but I am watching children learn about, grow and eat healthy food! Jean Robberson, Interlachen Elementary Cafeteria Manager.

## EarthBox® Instructional Garden



Components

#### EarthBox® Youth Garden Guide

The Youth Garden Guide provides 25 (45) minute garden activities, teaches Horticulture, Fitness & Nutrition, Workforce Development, Data Collection & Analysis. The preparatory activities in the Guide facilitate **year-round gardening** instruction while reinforcing standards-based curricula instruction. The new edition includes a Get Fit in the Garden section. We strongly recommend the purchase of the appropriate grade level curricula along with the guide.



#### The EarthBox® Ready-to-Grow Kit

Everything you need for an ideal container garden. Take the "guessing" out of planting vegetables and herbs! Plants not included.

Includes: 1 EarthBox container 1 aeration screen 1 watering tube 2.0 Cubic ft. reusable potting mix 16-ounce bag of fertilizer 16-ounce bag of dolomite 2 mulch covers 4 casters



EarthBox® Garden Stand

When teaching a group of students the stand is the perfect height for instruction whether planting new EarthBoxes or replanting the following years. Recommended for smaller plants, this stand includes inserts compatible with your included EarthBox casters!

#### EarthBox® Staking System

Forget about awkward cages or trellises. This convenient, hassle-free attachable customized staking system can be added even if your plants are fully grown. A Staking System Extension Kit is also available to support those extremely tall plants.



#### **12 EarthBox® Watering System Kit**

Eliminate the chore of watering your garden! This ideal watering system is designed to water 12 EarthBoxes using a drip irrigation system without wasting a drop of water! System can be extended. Includes:

> 12 sensors 12 watering tubes 12 connectors 1 regulator 1⁄8" tubing 1/8" tubing

## EarthBox<sub>®</sub> Container Introduces Applied Science & Sustainable Agriculture

Plant & Fertilizer Placement Chart Included in Instruction Manual





## Planning Stages of an EarthBox<sub>®</sub> Instructional School Garden



Begin with the Youth Garden Guide. Select the *When Are Mission Statements Effective Activity*? The development of this statement will guarantee the buy-in of students, and will influence the further selection of activities.

Contact your County's Cooperative Extension to seek advice on garden placement and crop selection. Seeking this professional advice at the planning stage increases the probability of great success and connects the students to a resource that builds community connectivity.

Consider all locations. Gravel, blacktop, concrete or mulch, make for the perfect EarthBox garden setting. Some EarthBox gardens are actually set-up on roof-tops where the total weight of a filled Earthbox, which weighs up to 70-80 pounds, must be considered. Remember, EarthBoxes placed on grass will be an inconvenience when it is time to mow the lawn. Many vegetables such as squash are vine-like and may travel beyond the box. Easy water access and the availability of sunlight should also be considered as indicated in the Youth Garden Guide's activity: Does Teamwork Lead to Great Design?

Think about purchasing the EarthBox Watering System. It is a convenience and doesn't waste a drop of water! To the left is a basic diagram of how the EarthBox Watering System is connected. This system is easily modified to practically any EarthBox Garden. Animals as well as people will be tempted to pick your vegetables. Consider a chainlink fence with a double gate for protection and easy access to and from your EarthBox garden if this is within your budget.

Space the containers appropriately. We recommend a 3-4' space between boxes to provide room for walking. If wheel-chair access is a consideration, consider 5' aisles.

#### Sample Earthbox® Garden

COOL SEASON CROPS & WARM SEASON CROPS

 The following items are recommended to start a school garden consisting of 12 EarthBox Ready to Grow Kits.
One Youth Garden Guide

- 12 EarthBox Ready-to-Grow Kits
- 1 Mobile Garden Stand for each herb
- 6 Staking Systems
- 12 EarthBox Watering System Kit

Start seeds early, or purchase seedlings for the garden on the internet or in a store when planting time is near. Use the following charts to guide the start up of an EarthBox Instructional School Garden. The charts include popular Cool and Warm-season crops traditionally grown by schools using the EarthBox system. The Youth Garden Guide provides information about proper planting times, garden insects, diseases and possible solutions associated with vegetable gardening. You can also contact the local county cooperative extension.

**Cool-season** crops should be planted so that they mature when the weather is cool, either in spring, early summer, in autumn or early winter to harvest in the cool temperatures of spring fall or winter. They can be planted when the soil and air temperatures are as low as 40°F (5°C). Mature cool-season crops can survive in temperatures near freezing without protection. Cool-season crops do not do well in warm summer temperatures.

Cool- Season Crop	Days to Harvest	Garden Stand	Staking System	Estimated Yield of lbs per box per season	Minimum # EarthBoxes per crop	Total # of plants
Lettuce	30-45 days	optional	no	8-10 lbs	4	32
Spinach	25-40 days	optional	no	10-12 lbs	4	40
Snow Pea	60	no	yes	8-10 lbs	2	32
Cauliflower						
romanesco	85	optional	no	12 lbs	2	12

• Cauliflower romanesco 'veronica' hybrid is a popular, unique cool-season crop that will not only attract people to the garden but to the table as well! The seeds can be purchased at <u>www.parkseed.com</u>



Cauliflower romanesco

**Warm-season** crops should be planted to mature when the soil and air temperatures are above 50° (10°C). They will grow best when the temperature is 75°F (24°C, or warmer. Warm-season vegetables can be grown out of their season if they are protected from temperatures below 50°F (10°C).

Warm- Season Crop	Days to Harvest	Garden Stand	Staking System	Estimated Yield in Ibs per box per season	Minimum #EarthBoxes per crop	Total # of plants
Tomato						
(Early)	50-65	No	Yes	30	2	4
Tomato						
(Late)	80-90	No	Yes	30	2	4
Tomato						
(Cherry)	60	No	Yes	30	1	2
Eggplant						
	80-90	No	Yes	30	2	4
Bell Peppers	70	No	Yes	30	1	6
Derby Bush						
Beans	53	No	No	15	1	6
Herb of						
Choice	30-40	Optional	No	4-5	1	6
Zucchini	4					
rampicante	70-80	No	Yes	15	2	4

• Zucchini rampicante is a wonderful unique warm-season crop that, unlike traditional squash, grows upward by means of tendrils. This unique squash (average 2-3 lbs) native to the Mediterranean will not only draw people to the garden but will delight the pallet when fried, steamed or sautéed. These fast growing seeds can be purchased at <u>www.rareseeds.com</u>





Zucchini rampicante



### EarthBox programs teach kids where their food comes from!



W B S

120 EarthBox® Container Garden Systems comfortably fit this 30' x 90' asphalt lot arranged with a southern exposure with a minimum of 8 hours of sunlight for all crops.

A water source located near the garden facilitated the use of the Earthbox Automated Watering System. An EarthBox Garden of this dimension yields high quantities of produce to share with families, the community, or school cafeteria personnel. Often, the local Cooperative Extension will provide canning and freezing training. Using a Rain Barrel Collection system with a garden this size can ease storm water management issues.



Happy Gardening!

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