

We invite you to explore the
Goldsboro Discovery & Sensory Garden...



Goldsboro Elementary Magnet School
Seminole County, FL



2008 Florida School Garden Competition ENTRY FORM

School Goldsboro Elementary Magnet School

Teacher(s) & Grade(s) involved in garden program

This is an "entire school" garden (K-5). The lead teacher on the garden is Mary Lynn Hess, Primary Math/Science Specialist.

Contact Person Erin O'Donnell

Email address odfamily@cfl.rr.com

Time contact person can be reached any

Phone (407) 687-3543 Fax (407) 320-5896

Address (please include city and zip code) Goldsboro Elementary
1300 W. 20th St.
Sanford, FL 32771

CATEGORY (Please mark only one)

SINGLE CLASS GARDEN (Garden used by one class only)

Number of students in class _____

MULTIPLE CLASS GARDEN (Garden used by more than one class or grade, but not by the entire school)

Number of students involved in the garden _____

ENTIRE SCHOOL GARDEN (Garden that is used by all grade levels at the school)

Number of students involved in the garden over 620.

TYPE of school garden that you use with your students. (Please mark only one)

Vegetable

Flower

Combination vegetable/flower

Other, please specify Sensory + Discovery Garden includes flowers, vegetables and other elements such as water features, butterfly puddling areas and places where students can sit to observe and learn.

1. Please indicate the number of hours a week, on average, your students spend in the garden. 5-7 hours/week

2. Please mark all the activities that your students participate in prior to gardening.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Planning the garden | <input checked="" type="checkbox"/> Preparing the garden |
| <input type="checkbox"/> Designing the garden | <input checked="" type="checkbox"/> Choosing plants |
| Other, _____ | |
| _____ | |
| _____ | |

3. Please mark all the activities that your students participate in while in the garden.

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Planting | <input checked="" type="checkbox"/> Watering | <input checked="" type="checkbox"/> Weeding |
| <input checked="" type="checkbox"/> Observing | <input checked="" type="checkbox"/> Recording | <input checked="" type="checkbox"/> Harvesting |
| <input checked="" type="checkbox"/> Playing | <input checked="" type="checkbox"/> Sitting | <input type="checkbox"/> Fertilizing |
| <input checked="" type="checkbox"/> Experimenting | Other, <u>Creative writing, reading, doing artwork and using all five senses.</u> | |

4. Please indicate the percentage of time, on average, that you used the garden as an instructional tool in your classroom. Approx. 10-15% ** some teachers use it more than others.*

5. Please mark the subject area(s) into which you have incorporated school gardening. Check all that apply.

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Math | <input checked="" type="checkbox"/> Science | <input type="checkbox"/> Social Studies |
| <input type="checkbox"/> History | <input checked="" type="checkbox"/> Health/Nutrition | <input checked="" type="checkbox"/> Language Arts |
| <input checked="" type="checkbox"/> Music | <input checked="" type="checkbox"/> Physical Ed. | <input checked="" type="checkbox"/> Environmental Ed. |
| <input type="checkbox"/> Ethics (responsibility and nurturing) | | |
| <input checked="" type="checkbox"/> Other, please specify <u>Art</u> | | |

6. Please indicate the number of years that a school garden has been part of your curriculum. Almost 1.

7. Please indicate the types of volunteers that have helped you and your students with the garden.

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Master Gardeners | <input type="checkbox"/> Senior citizens | <input checked="" type="checkbox"/> Parents |
| <input type="checkbox"/> University students | <input checked="" type="checkbox"/> Garden club members | <input type="checkbox"/> 4-H members |
| <input type="checkbox"/> High school students | <input type="checkbox"/> FFA | |
| <input checked="" type="checkbox"/> Older students at your school | Other, please specify _____ | |

8. Please indicate the source(s) of information used to assist in the incorporation of school gardening into your school's curriculum. Check all that apply.

- | | |
|--|--|
| <input type="checkbox"/> County Extension service | <input type="checkbox"/> 4-H education materials |
| <input type="checkbox"/> Teacher in-service training | <input type="checkbox"/> Lifelab |
| <input checked="" type="checkbox"/> Personal knowledge | <input checked="" type="checkbox"/> Master Gardener training |
| <input checked="" type="checkbox"/> Educational journals/publications | <input checked="" type="checkbox"/> Friends/volunteers |
| <input type="checkbox"/> National Gardening Association's Growlab/Growing ideas newsletter | |
| <input type="checkbox"/> Other, please specify _____ | |
| _____ | |
| _____ | |

9. Please indicate the types of educational material(s) used in the classroom to support the use of school gardening in the curriculum.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Library books | <input type="checkbox"/> Computer software |
| <input checked="" type="checkbox"/> Internet | <input type="checkbox"/> Videos |
| <input type="checkbox"/> Filmstrips | <input type="checkbox"/> Personal books |
| <input type="checkbox"/> Textbooks | <input checked="" type="checkbox"/> Experiments |
| <input checked="" type="checkbox"/> Trade books | <input type="checkbox"/> Gardening magazines and catalogs |
| <input checked="" type="checkbox"/> Newspapers | |
| <input checked="" type="checkbox"/> Other, please specify <u>Observation Logs</u> | |
| _____ | |
| _____ | |

Please read and sign below

By submitting the same you acknowledge and agree that the University of Florida (and Walt Disney World Co.) may reproduce the same, and all materials may be displayed (in part or in whole) at the 2008 Epcot® International Flower and Garden Festival and for other promotional materials. Such presentation materials (and School Garden packets) will NOT be returned to you (they will become the property of the University of Florida and Walt Disney World Co.) Finally, you acknowledge and agree that should your school be selected as a winner under the competition, then to the extent any of the photographs or materials submitted contain the names of likeness of students, teachers and/or others, you will be required to have adult individuals sign (and the parents/guardians of such students) sign consent/release forms provided by us so that we can display those photographs or materials concerning your winning garden. Such requirement would be a condition of your accepting the award.

I have read and understand the above.

Erin O'Donnell

Signature

3/20/08

Date

Goldsboro Discovery & Sensory Garden

Overview

The Goldsboro Discovery & Sensory Garden is a teaching tool used throughout the school year for all grades (K-5). Students explore their five senses, discover life cycles for plants/insects and learn how to maintain an inviting outdoor habitat. As a science/technology magnet school, our teachers are always looking for ways to enrich our curriculum with hands-on opportunities. This discovery garden is a natural fit for our elementary school.

Parents and teachers collaborated with Master Gardeners to create the original plan for the Goldsboro Discovery & Sensory Garden during spring 2007. Features such as a solar-powered water cascade, colorful wind chimes, bird baths and park benches allowed us to transform a weed-ridden field into a new place to learn and a point of pride for the school. Bird feeders, fragrant plants, native nectar plants like salvia or pentas and local larval plants like milkweed, helped us to create an environment brimming with life.

Goldsboro is located in one of the lowest income areas of Seminole County. With 55% of our students on free or reduced lunch, the PTA depended on a grant from Lowes Toolbox for Education to completely fund the garden. Support from garden-department employees from the local Lowes store was instrumental in the selection and placement of plants.

Educational Relevance

The garden is open for use by all teachers and students at Goldsboro Elementary Magnet School. Since its official grand opening in August 2007, teachers have brought their students to the garden to learn, explore and reinforce lessons taught in the classroom. As the elementary magnet for math, science and technology, students and teachers enjoy the added variety the garden offers when it comes to learning.

Many of the Florida Sunshine State Standards for math and science are easily taught and reinforced in the garden.

Science is the most obvious subject featured in the garden. The Butterfly Zone is a big hit with students of all grades. There is always something new happening in this area allowing frequent visitors to hone their observation and prediction skills.

In addition to basic observing, the kindergarten team uses the garden as a place for students to explore their senses (i.e. hear the wind chime, taste the fruit on the strawberry plant, smell the herbs, touch the succulents, see the caterpillars eat the milkweed.) Third grade classes study plant life by growing vegetables from a seed in their classroom. They then replant into the garden and harvest the vegetables. They have had success growing corn, cucumbers, beans, eggplants and tomatoes. First graders talk about camouflage and learn how caterpillars as

well as other insects blend into their surroundings. Second graders use the solar powered fountain as a way to demonstrate an energy source and energy conversion. New ways for us to relate the science strands to the garden become apparent nearly every day.

The Sunshine State Standards serve as the guidelines for teachers' lessons in the garden. New ways to integrate the garden into regular lessons are constantly being shared. For math, primary teachers use the garden to reinforce concepts such as shape recognition and data collection. They also use the area to teach ways to estimate measurement. Intermediate teachers let their students calculate perimeter and area.

Other teachers use the garden as a place where students can write, read or draw. The art teacher encourages students to free draw in the garden. The calm, natural surroundings inspire the students in ways that their regular classroom can not. The music teacher is considering a lesson for third graders to make wind chimes. She said it would tie in nicely with teaching tones, vibrations and sounds.

Teachers and students bring various tools with them when working in the garden. Depending on the lesson, some bring magnifying glasses, rulers, notebooks and pencils. Observation logs or journals are also popular must-haves in the garden.

In addition to having the Sunshine State Standards as a guide for lesson ideas, a parent volunteer writes a weekly garden tip which the principal distributes along with her newsletter to staff members each Friday. The garden tip highlights an item or process for teachers to point out to their classes. One week it may point out the location of a new chrysalis, another week may highlight new buds on a flowering plant. The one-fact-a-week is a manageable way to spoon feed all the information the garden has to offer. A copy of the weekly newsletter with a Garden Tip is enclosed. The tips from throughout the year are also available to teachers on the school's computer network.

Also on the school's network is a Power Point presentation which provides photos and details about every plant in the garden. The presentation contains nearly 200 photos and facts, including vivid pictures of cardinals, robins, and butterflies to the garden. Teachers may access any part of the presentation for use with a lesson in class or they may have it loop continuously on their closed-circuit classroom TV.

Level of Involvement

The student garden club meets every Wednesday morning for up to 30 minutes prior to the morning bell. Under the guidance of one teacher and one parent volunteer, the Club works to weed, prune, trim and plant as necessary. Occasionally teachers will use their class's fitness time (used to be recess, now is ten minutes a day of structured activity) to work in the garden weeding or removing dead leaves that have fallen off a nearby Sycamore tree.

Administrators and teachers are very supportive of the garden program. The principal installed security cameras aimed at the garden to deter vandalism and she facilitates the distribution of the weekly Garden Tips. A recent survey of the school's classroom teachers indicated that 47% visit the garden with their class at least once a week. Forty-one percent indicated that they use the garden to supplement in-class lessons.

Beyond the teachers, several parents have taken a strong interest in the ongoing success of the garden. Parents have donated light blankets to protect the plants during frosts, painted pots and benches, helped spread mulch and fertilizer. In addition, PTA allocates a small budget to buy supplies needed for garden maintenance.

Also valuable, has been the ongoing contact with a Master Gardener from Lowes. He answers questions when a plant is not doing well, guides us regarding the best time and place to add new flowers and so on. The school community is very proud of the garden. Students, teachers, staff and parents came together to make this garden a reality and everyone is vested in its ongoing success.

Garden Quality

Mike Mangan, a Master Gardener and nursery specialist at Lowes Home Improvement, worked with last year's PTA President, Erin O'Donnell, and the school's Math/Science Specialist, Mary Lynn Hess, to design the garden. The three worked together to create a garden that would be aesthetically pleasing, practical to maintain, welcoming to students/ teachers, and workable as a habitat for butterflies, birds and various plants.

Mike selected plants that would attract specific birds and four species of butterflies. He took into consideration the need for monarch way stations in this part of the state. He also picked varieties which students could use to experience unique smells and touches. Every item placed in the garden is there for a stated purpose. Sometimes that purpose is to add a bright red color to attract hummingbirds. Sometimes the purpose is to serve as a nectar plant for Swallowtail butterflies. Whatever the reason, each living and non-living feature of our garden has a role to fill.

Our garden is unique for several reasons. First, every student in the school had a hand in its creation. We let each child (over 600!) make a unique stepping stone and then place it along the garden's border. Second, because the garden is located near the center of the campus, all grades take advantage of easy access in and out of the garden. Third, the diversity of plants makes our garden full of life and colorful year round. And fourth, there are countless ways for teachers to make use of the garden. It is not just a place to grow flowers or vegetables. It is not only for observing butterflies and caterpillars. It is a large outdoor, living classroom... a place to learn, play, eat lunch, relax or explore something new.

Sensory Zone 1

Jade, Gardenia
Yellow Anise
Arabian Jasmine
Cinnamon Basil, Dahlias
Carolina Yellow Jasmine
Lakeview Jasmine
Pinwheel Jasmine
Confederate Jasmine
Greek Oregano
Peppermint, Spearmint
Almond Plant, Rosemary
Lavender
Bulb Plants in pots (Tulips, Iris, Daffadils)
Raspberry Tree
Wind Chimes
Student-Made Mosaic Tiles

Garden Path
Entrance

Bird Zone

Burfodi Holly
Gold Mound Duranta
Viburnum
Ilex Shilling
Asiatic Jasmine
Crape Myrtle
Duranta Erecta
Firecracker Plant
Hibiscus
Canna Lilly
Water Lilly
Regular Bird Feeder
Hummingbird Feeder
Bird Bath
Very Small Pond for water plants

Park Bench

Solar-Powered
Water Cascade
Pansies

Park Bench

Sensory Zone 2

Festina Grass, Red Fountain Grass
Bottle Brush
Assorted in-season vegetables
Pineapple, Straw Flower
False Holly, Salvia
Cassia Tree, Trumpet Flower
Tibouchina Grandifolia
Persian Shield, Amethystina Fescue
Bronco Leatherleaf Sedge
Flax Lily, Croton
Succulents in pots
Strawberry plants in pots
Avacado Tree, Assorted small palms
Storage tub for gardening supplies
Bird Feeder

Butterfly Zone

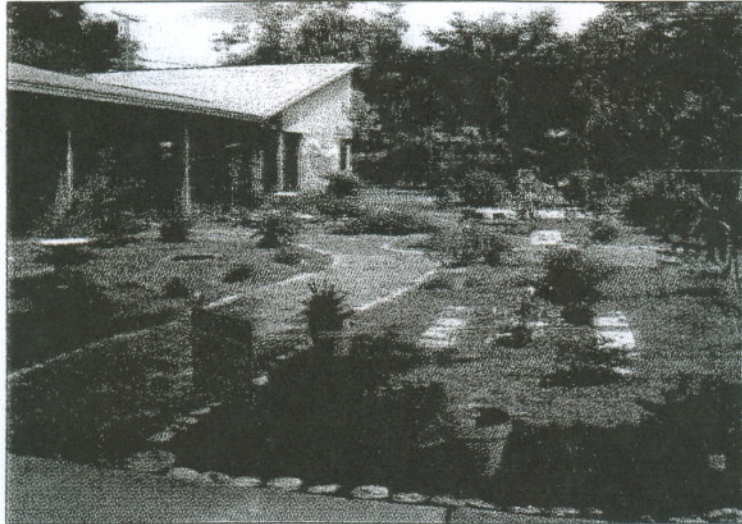
Lantana, Parsley
Rubeckia, Plumbago
Milk Weed, Dianthus-Firewitch
Gaura, Bush Daisy
Cats Whiskers, Coreopsis
Duchman's Pipe Vine
Panama Rose, Porter Weed
Mexican Blue Bell, Zinnia
Penta, Lantana
Passion Vine
Puddling Area (sand, shells, rocks)
Bird Bath, Wind Chimes

Park Bench & Sitting Pad for Students

Garden Path Exit

* The paths and outer edge of the garden are bordered with stepping stones. Every student made one!

Schools | *In Brief*



SEMINOLE COUNTY PUBLIC SCHOOLS

Goldsboro Elementary Magnet School in Sanford opened its Discovery Garden with a ribbon-cutting ceremony and butterfly release Tuesday.

Goldsboro Discovery Garden

Goldsboro Elementary Magnet School christened its recently completed Discovery Garden by releasing butterflies during a ribbon-cutting ceremony Tuesday.

Work on the garden began in late April after the school's PTA received a Lowe's Toolbox for Education grant.

Teachers, students, parents and community partners teamed up to transform a dusty, weed-covered plot into a colorful and inviting learning environment.

Mike Mangan, a nursery specialist from Lowe's Home Improvement in Sanford, helped design and set up the garden, which will be used as a teaching tool for all grades.

"Our new garden lets students explore their five senses, discover life cycles for plants/insects and learn how to maintain an outdoor habitat," said Mary Lynn Hess, a math and science specialist at Goldsboro. "As a magnet school for math, science and technology, many teachers are ready to integrate the garden into their lesson plans."

Send information about school events and programs to Tammie Wersinger by fax at 407-418-5222 or by e-mail at twersinger@orlandosentinel.com.



THE EAGLE NEWS



Goldsboro Elementary Magnet School
Seminole County Public Schools

Volume III Number 27

March 10, 2008

THIS WEEK!

March 11-20 FCAT

Monday, March 10

**Tuesday, March 11
FCAT**

report cards go home
Report Cards go home in new
jackets, keep old ones.

Wednesday, March 12
team leaders, team planning
FCAT

**Thursday, March 13
FCAT**

**Friday, March 14
FCAT 5th grade only**

Spirit Day- Wear a Goldsboro
T-shirt.

NEXT WEEK

March 17-18 FCAT

March 19 –Behavioral Leadership

March 21 –School closed

LOOKING AHEAD

March 26- team leaders',
Reciprocal Teaching K-5 Staff
Development 3:00-4:30 points will
be given

March 28 Teacher workday

March 31-April 4 Spring Break

Reminders

Personal Leave Not Permitted
March 20
March 24
March 27

Extended PE activities are 15
minutes in length before or after
lunch. (not both) Please instruct
your students to put all equipment
back on the ball rack. Too many
balls are left on the field and many
have been lost.

Supervision is the key and
proximity to the students being
supervised is a must.

Gardening Tip

Going Organic

Check out the eight strawberry
plants that Mrs. Evan's
kindergarten class planted this
week. They are in rectangular pots
by the paved sitting area. Some
strawberries (not yet ripe) are
already on several of the plants. In
addition to the initial planting, her
class is watering, weeding and
harvesting the strawberries.

Another newcomer to the garden is
a small raspberry tree. Several fifth
graders planted it behind the park
bench closest to the Admin. Bldg.
This tree will grow to about 6 feet
and will eventually provide some
shade for that bench in the
afternoons. We can expect it to
produce raspberries in late May.

A good lesson to go along with the
introduction of these plants is to
explain what it means to consume
something that is organic.
Raspberries and strawberries are
both fruits that, when purchased in
a store, are hard to clean. The
average non organic fruit
contains more than 20 pesticides.
Organic food is much richer in
vitamins, minerals and fiber and
retains the levels of nutrients for
much longer. Our garden has
produced delicious eggplants, a
pineapple, tomatoes, cucumbers
and more. The cafeteria staff has
even used the garden for herbs to
add to some of school lunch
recipes. Growing our own food is a
good thing!



THE EAGLE NEWS



Goldsboro Elementary Magnet School
Seminole County Public Schools

Volume III Number 6

September 24, 2007

THIS WEEK!

Monday, September 24

Tuesday, September 25

Technology Meeting 8:30am
Media Center
Book Fair Night,
Parent Bullying Workshop
Parent Night, Boy Scout Night

Wednesday, September 26

Data Meetings during Planning
Planning for Progress Reports
A+Meeting

Thursday, September 27

Friday, September 28

Spirit Day Wear a Goldsboro Tshirt

**Sept. 29 Classroom Management
with Dr. Randall Sprick-**

a full day staff development on
Behavioral Leadership.

8:30-3:30 Gateway high School
93 Panther Paws Trail

Kissimmee, Fl 34744

Call FDLRS 407-317-3667 or 404-
317-3668 to sign up.

Online registration is required

<http://fdlrs.gosignmeup.com>

NEXT WEEK

Tuesday Oct. 2- Progress Reports
go home

Wednesday, Oct.3-Team Leaders

LOOKING AHEAD

Oct. 9

8:30 Media Center Medication
Workshop for Field Trips

Oct. 10

Data Meetings,
Behavioral Leadership, United
Way

Oct. 17

Write Score
Team Leaders

Planning PMP development

Oct. 23 Pumpkin Patch
Skate Night

Oct. 24

School Pictures
Data Meetings

Team Planning-Media Center

Oct. 25, 26 Teacher Workdays

Oct. 31- planning

Up Coming Staff Development

September 26 Planning for
Progress Reports
10/2

October 3 Writing Introduction
October 10 Behavioral
Leadership United
Way

October 17 Planning PMP
Development

October 24 Team Planning
Media Center 45
minutes

October 31 Planning

We would like for each team to select a technology committee member to represent their team and to be the technology contact for their team. The first technology meeting will be Tuesday at 8:30 in the media center. Please send a representative.

Teaching Opportunity - Sept. 21

Here's something you might not know about a plant in Sensory Zone 1. Look for a small bushy, green plant along the back border -- it is to the right and back of the Sensory Zone 1 sign. This plant is labeled Yellow Anise. Encourage a few students to pull off a leaf, crumple the leaf and then smell it. Ask them to share their crumpled leaf so we don't end the week with a leaf-less plant. The crushed leaf produces a strong licorice smell. Don't eat the leaf. It does not taste good. Anise oils and flavorings are used around the world to make cookies, bread, candy, tea and more. This plant is also has several medicinal uses including a possible remedy for bird flu. Fishermen cover their lures with the Anise scent to catch certain fish. Talk to your class about how scientists often discover many uses for each plant.

Before (March 2007) and After (August 2007)



**Before (March 2007) and After (August 2007)
*Alternative Angle**



Volunteers Get the Job Started



New Friends Move In!



Monarchs are ever-present.

