



# LIFE LAB Science Program



*Life Lab Science Program  
is committed to  
garden-based learning  
that promotes stewardship  
of the environment  
to ensure  
a sustainable future.*



MONTEREY BAY SCIENCE  
PROJECT/ LASERS

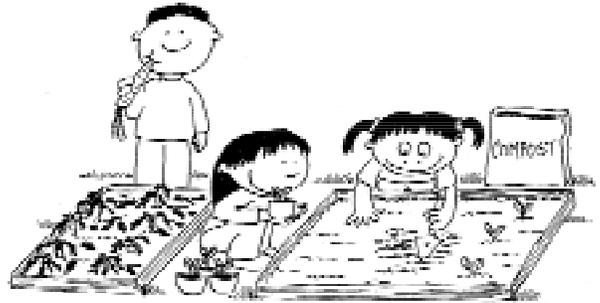
THE GARDEN CLASSROOM  
RESOURCE CONSERVATION  
PROGRAM



# THE GARDEN TIMES

Spring  
2002

## SUSTAINING YOUR SCHOOL GARDEN



Most people connected to schools realize that change is a given. Administrators, staff, teachers, parents and students eventually move on. This can be a challenge for maintaining and sustaining a school garden project over time, particularly if the garden is the special project of just a few people. At Life Lab, we have worked with many schools who have made the Life Lab garden a key part of the school over many years, and others where the gardens have come and gone. Generally, gardens that are successful involve the entire school community. Here are some tips to keep your garden program thriving for the long haul.

### **Form a steering committee for the garden program.**

This committee will help make short- and long-range plans for the garden, to ensure that it is properly funded, maintained and used by the school community. The steering committee should be made up of teachers, parents, administrators, students and staff. Getting the school custodian to join is a big plus. The steering committee should hold regular meetings throughout the year.

### **Develop a vision for your school garden.**

What ultimately do you want it to be? What is its purpose? How will it connect to curriculum? How will it be used daily by students and staff? What will it look like in 3-5 years? How will you get there? Share this vision with the school community and begin to plan out the steps for achieving it.

### **Encourage a team of parents to participate as volunteers.**

Recruit parents of younger children who will stay in the school for several years. Volunteers can help teachers gather materials and teach garden lessons in small groups. They can also assist with general garden maintenance, fundraising and ordering supplies.

### **Inform the school community about the value of the garden.**

Hold celebrations, volunteer recognition parties and other events in the garden frequently. This gives the teachers a valuable opportunity to showcase student work inspired by the living laboratory of the school garden. Be sure to invite school board members and local politicians.

**INSIDE...** GOOD BUGS IN THE GARDEN • FAREWELL TO LET'S GET GROWING  
• GROWING CLASSROOM ACTIVITY: MAGIC SPOTS • GARDEN CLASSROOM SPRING  
2002 FIELDTRIPS • MBSP REFLECTION: KEEPING WARM WITH FUR, FAT AND  
FEATHERS • LIFE LAB EVENTS CALENDAR

The Mission of the Life Lab Science Program is to be the leading developer and provider of garden-centered educational programs connecting science to all areas of learning.

### LIFE LAB STAFF

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Project Director Garden Classroom

**Adam Yablonski**

Garden Classroom Apprentice

## GOOD BUGS IN THE GARDEN

**“A good bug — is a dead bug,” is not true!**

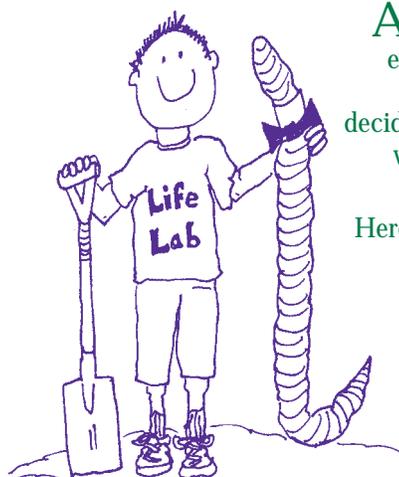
Many species of wasps, beetles, spiders, worms and flies benefit our garden as soil builders, pollinators and predators of plant eating insects. These helpful critters include *praying mantids*, *dragonflies*, *assassin bugs*, *robber flies*, *spined soldier bugs* and *antlions*. Sound scary? Don't fear! These predators are among a gardener's best defenses against pest infestation.

Other friends in the garden include the *bumble bee*, *ladybird beetle*, *hover flie* and the famous *honey bee*. Through their voracious appetites for nectar they are responsible for pollinating the majority of flowering plants in your garden. Hidden below the soil surface, the *earthworm* is responsible for aerating soils and improving soil structure.

To attract these friends to your garden provide an inviting and diverse habitat. Flowering herbs and wildflowers produce ample nectar to draw-in many of these species. The following is a list of suggested flowering plants.

Angelica • Baby's Breath • Buckwheat • Carrot • Coriander • Clover • Cosmos • Dill • Feverfew • Goldenrod • Lavender • Mustard • Queen Anne's Lace • Sunflower • Sweet Alyssum • Sweet Fennel • Thyme • White Sage

A beautifully illustrated and informative little book about beneficial insects is *Good Bugs for Your Garden* by Allison Mia Starcher.



## WANTED ALIVE!



SPINED SOLDIER BUG



LADYBIRD BEETLE



ANTLION

## A FOND FAREWELL...

After many years of providing quality resources for educators, *Let's Get Growing*, the all-encompassing catalog of environmental education supplies, has decided to close their doors. Life Lab Science Program wants to thank *Let's Get Growing* for their years of excellent service. We are sad to see them go.

Here are other companies that offer similar resources. View them online or call for a catalog.

**The National Gardening Association**  
www.kidsgardening.com (800) 538-7476

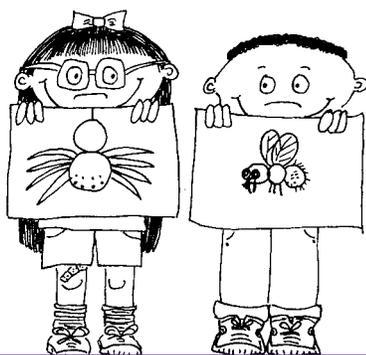
**Gardens for Growing People**  
www.svn.net/growpepl/ (415) 663-9433

**Acorn Naturalists**  
www.acornnaturalists.com (800) 422-8886

# MAGIC SPOTS

This 2nd-5th grade activity was adapted from the Garden Ecology section of the *Growing Classroom*.

Have your students choose their own magic spot in the garden and make observations until they discover at least three different types of insects. Students then draw their habitat and draw and describe at least one of the insects. *What does it look like? Where does it live? What does it eat?* Students periodically return back to their magic spot to observe and record changes.



## GARDEN CLASSROOM SPRING 2002 FIELDTRIPS

This spring Life Lab Science Program is offering new garden-based science programs for 2nd-5th grade students in the Garden Classroom on the UCSC Farm.

All programs include garden-based science exploration, a walking tour of the UCSC Farm, lunch time recycling and composting lessons and garden electives.

Please visit our website for more information at [www.lifelab.org](http://www.lifelab.org)

## KEEPING WARM WITH FUR, FAT AND FEATHERS!

**J**ames Smith, a 6<sup>th</sup> grade teacher at Westlake Elementary School in Santa Cruz, CA and a participant in the Monterey Bay Science Project, introduced the afternoon's science investigation to his students— *How does insulation enable animals to survive in extreme conditions?*

**T**o answer this question his students worked collaboratively to construct arctic "organisms" with insulation materials brought from home. Grass, mulch, Crisco and newspaper were some of the products they chose. There was a sense of competition in the air as students began construction, knowing that they would be measuring and recording "body" temperatures and then graphing their results to determine which organism conserved heat most efficiently. While waiting for the temperature readings, the students wrote in their journals using science vocabulary, reflecting on what they had learned about adaptations.

**T**he following week, James Smith was the feature teacher at the Monterey Bay Science Project teacher reflection meeting. He asked other teachers to review student work from his insulation lesson, brainstorm activity extensions and give feedback on the activity as a whole. The teachers left this meeting full of fresh, fun ideas on how to effectively implement strategies that promote student learning in science and literacy.

**MBSP is a project of  
Life Lab Science Program.**



## THANKS TO OUR LIFE LAB FUNDERS

The David and Lucile Packard Foundation • Santa Cruz County Board of Supervisors • The Stocker Family Foundation • The Richard and Rhoda Goldman Foundation • UCSC Center for Agroecology and Sustainable Food Systems • Walter S. Johnson Foundation • The Gabilan Foundation • The Clarence E. Heller Charitable Foundation • The S. H. Cowell Foundation • California Science Project • The CPEC Eisenhower Professional Development State Grant Program • California Professional Development Institutes Program • Junior League of San Jose

## EDUCATIONAL RESOURCES

### Getting Started

A Guide for Creating School Gardens as Outdoor Classrooms

### The Growing Classroom

Garden-Based Science  
Activity Guide

### Life Lab Science

Grades K-5 Garden-Based  
Science Curricula

### Popcorn • Maize

Grades 1-5 and 6-8 Sustainable  
Agriculture Curricula.

### Life Lab Garden Calendar

Large wall calendar filled with  
educational activities and  
seasonal garden tips

### Singing In Our Garden

Banana Slug String Band Cassette

## WORKSHOPS

### Digging In

Creating and Tending Effective  
Garden Classrooms

### Cultivate, Germinate, Teach

An Introduction to  
Garden-Based Science

### Complete Garden Science

An Introduction to K-5 Life Lab  
Science Curricula

## MBSP/LASERS INSTITUTES

### Summer School Academy

Science Teaching for  
Academic Growth in English  
Supporting Science for English  
Language Learners

### Pre-Intern Academy

Professional development for  
teachers to promote literacy and  
language acquisition through  
standards-based science  
education.

Life Lab Science Program also  
offers customized workshops,  
consulting and coaching.  
Contact us for more information.

**Volunteer Work Day in the Garden Classroom**  
**Saturday, April 20 10 AM–12 PM • UCSC Farm**  
 Learn more about the educational opportunities in Life Lab's new Garden Classroom while you help prepare and plant out beds for spring.

**Compost & Vermicompost Workshop**  
**Saturday, April 20 1–3 PM • Garden Classroom**  
 Learn how to turn yard and kitchen wastes into soil building compost. Various composting and vermicomposting systems will be discussed and utilized. Come dressed in your garden clothes! \$10 *FREE for Garden Work Day Volunteers (see above)*

**Cultivate, Germinate, Teach:**  
**An introduction to Garden-Based Science**  
**May 2–May 3 • Garden Classroom, UCSC Farm**  
 Learn basic gardening skills and garden-based activities for home and school. Connections to the California Science Standards and garden activities will be highlighted. Participants will receive a copy of Life Lab's garden activity guide, *The Growing Classroom*.

**Art and Poetry in the Garden for Kids**  
**Saturday, June 15, 12–2 PM**  
**Alan Chadwick Garden, UCSC**  
 This workshop, for children ages 7-11, will focus on art projects in the garden. Workshop runs concurrently with the Friends of UCSC Farm & Garden's event "A Garden of Poetry & Music." \$5–10

**Monterey Bay Science Project Institute:**  
**Science Teaching for Academic Growth in English**  
**June 18–22 and July 8–12 • Salinas, CA**  
 Learn how to teach quality, hands-on, inquiry-based science while addressing California State Standards in Science and English Language Arts. Gain tools for planning integrated science units. Stipend and semester units available.

**Wildlands and Watering Cans Day Camp**  
**Monday–Friday June 24–28, July 8–12, July 15–19**  
**Garden Classroom, UCSC Farm**  
 Come explore the UCSC Farm and local wildlands during our week-long, garden-based summer camp for children ages 7-11. Registration begins in April.

**Life Lab's Family Science Day**  
**Sat., June 29 10 AM–12 PM • Garden Classroom**  
 Bring the whole family to explore the wonders of garden-based science. \$5–10 per child

**Cooking Fun in the Garden for Kids**  
**Sunday, Sept. 8, 12 PM–3 PM • Garden Classroom**  
 Children, ages 7-11, will make the "farm-to-fork" connection while learning about and eating the 6 plant parts. Workshop runs concurrently with the Friends of the UCSC Farm and Garden class, "Preparing the Winter Garden." \$5–10

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**YOU'RE INVITED TO...**

*• Picnic • Music • Stories • Science Activities • Scavenger Hunt • Kids Cooking Demos • Tastings • Art • Farm Tours*

**The Garden Classroom Grand Opening Celebration!**

June 1, 2002  
 10AM – 2PM  
 UCSC Farm  
 Free!

