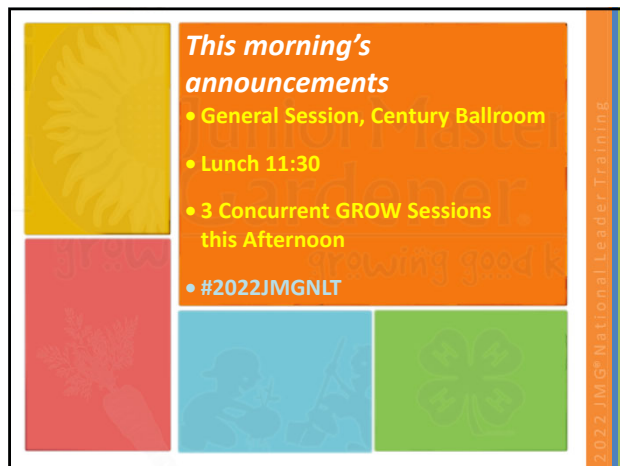




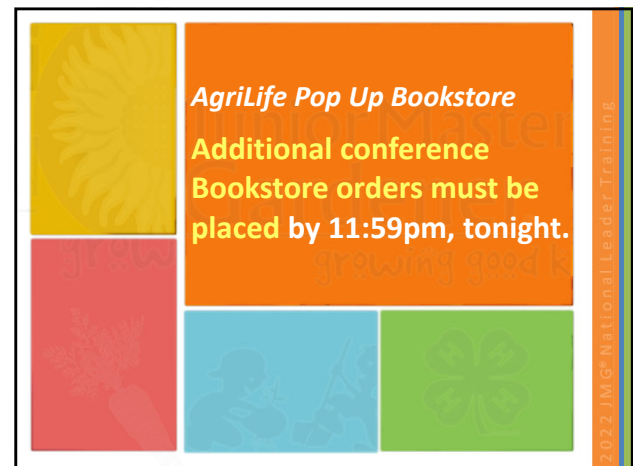
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2



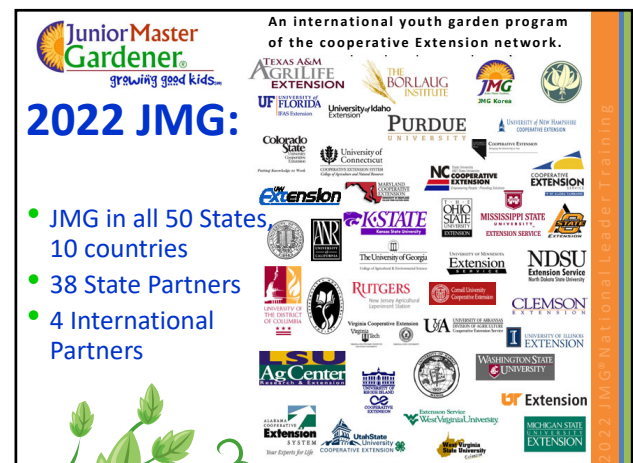
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4



5



6



7

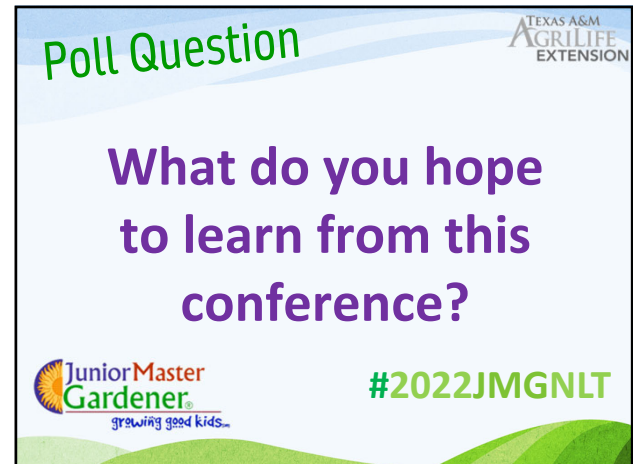
Partnerships:

- Borlaug Institute Intl. Agriculture
- American Horticultural Society
- Nursery/Landscape Associations
- Keep America Beautiful
- State Departments of Agriculture & USDA
- State Master Gardener Programs
- National 4-H Program

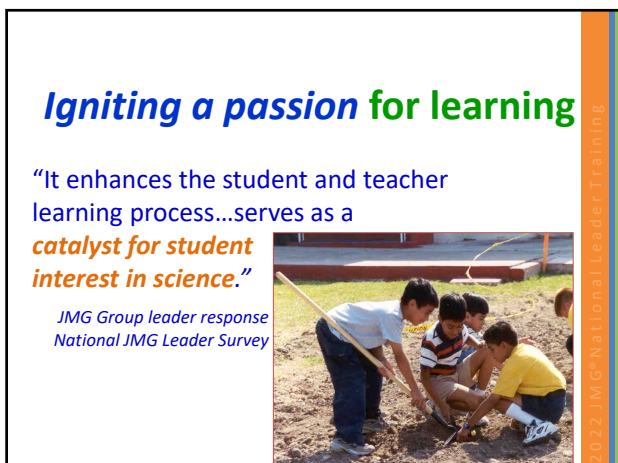
8



9



10



11



12

Igniting a passion for success

"The high school students gain a better understanding of the concept being taught...**they enjoy teaching horticulture and environmental science and have learned a greater respect for the teaching profession.**"

High School Teacher



2022 JMG® National Leader Training

13

Igniting a passion for success

Recognition certifications for kids



2022 JMG® National Leader Training

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Igniting a passion for service

The children are learning far more than what the ground can produce... **they are learning to be active participants in their community to help their fellow man.**



2022 JMG® National Leader Training

15



This training conference will equip you to:

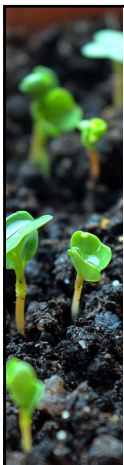
- effectively lead proven, research-based JMG lessons
- prepare JMG teacher/leader training events for their local communities
- enroll & register children in the JMG program
- organize and engage youth in career exploration and service-learning activities
- involve local schools, county Extension office, volunteers and parents with JMG programs
- Engage partners and cultivate collaborations

2022 JMG® National Leader Training

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National JMG Office:

- Assist states in starting JMG program
- Assist or conduct leader trainings
- Assist in pursuing financial support through sponsorships and grants
- Maintain national JMG database & website
- Publish and distribute curriculum
- Protect trademarks and program quality



2022 JMG® National Leader Training

17

Dream Big!

If you are not the lead dog, the scenery never changes!



Together, we can all make the commitment and leave a legacy growing good kids!

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The JMG group/class:

- Public school
- Private/charter schools/home schools
- 4-H Clubs, Boy/Girl Scouts
- after school programs, YMCA
- Public and botanical gardens



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JMG Registration:

- Minimum of 5 youths
- One or more adult teacher/leader(s)
- Suitable meeting facilities
- An official group name

Register
even if...



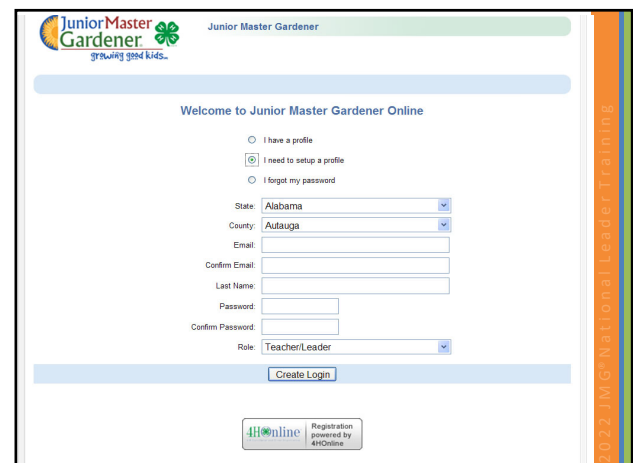
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23



24

Volunteer Screening Year: Not Screened

Gender

Female: ☒
Male: ☐

Ethnicity

Are you of Hispanic ethnicity? No: ☒ Yes: ☐

White: ☒
Black: ☐
American Indian or Alaskan Native: ☐
Native Hawaiian or Pacific Islander: ☐
Asian: ☐

Residence

Farm: ☐
Town under 10,000 and rural non-farm: ☐
Town/City 10,000 - 50,000 and its suburbs: ☐
Suburb of city more than 50,000: ☐
Central city more than 50,000: ☐

Delete Leader Return To Leader Summary Continue >>

4Honline Registration powered by 4HOnline

25

Add your group & print group registration certificate

Junior Master Gardener® growing good kids.

Logged in as Bryant: Patricia (Return to the home page)

Profile Leaders **Groups** Group Info

You may print group certificates once your registration is approved. You will receive an email upon approval.

Add a New Group

Add Group

Print Group Certificates

Select a group...
Select a certificate...
Print Certificate

GROUPS

Title	Edit
North Sumter Bugs & Dirt Club	Edit

4Honline Registration powered by 4HOnline

26

Why Should Groups Register?

- Get a cool registration certificate.
- Get updates on upcoming JMG news and events.
- Be eligible for give-aways
- It's free, doesn't obligate youth to complete program.
- Allows youths in your group to earn recognition certifications.



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Intro Song of the week!

Learn, Grow, Eat & Go!
EARLY CHILDHOOD
week 1

Parts of the Plant

(Tune: Addams Family Song)

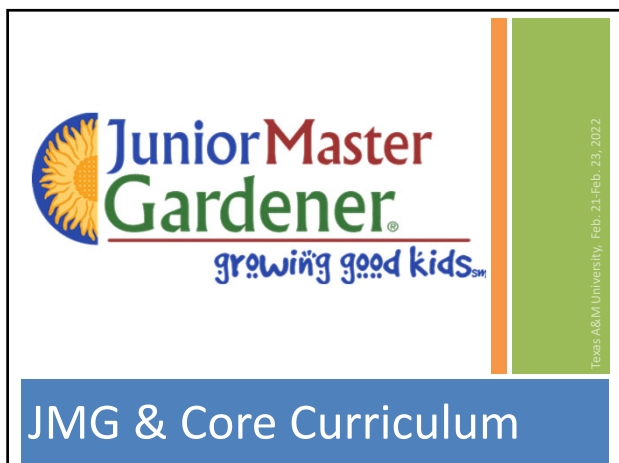
Parts of the plant (clap, clap)
Parts of the plant (clap, clap)
Parts of the plant, parts of the plant, parts of the plant (clap, clap)

There's roots (touch your toes)
and stems (slide your hands from your legs to your chest)
and leaves (extend arms and open hands)

Flowers, (spread fingers and hold them high)
fruits (form a ball with your hands)
and seeds. (wiggle your fingers)

You put them all together,
you have the parts of the plant.

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Junior Master Gardener® Program

Program Purpose:

- Develop leadership skills
- Identify community needs/volunteer opportunities
- Peer and cross generation mentoring
- Foster personal pride and responsibility
- Increase knowledge in environmental & horticulture education

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Junior Master Gardener® Program

Levels of Instruction

Currently available

Early Childhood (ages 4-5)

Level 1 – Elementary (grades 3-5)

Level 2 – Middle School (grades 6-8)

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Curriculum Design

- Hands-On and Project Based
- Integrated across all subject areas
- Flexibility of use
- Choices available in group and individual activities
- Community service and leadership incorporated in all units

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Junior Master Gardener® Level One Core Curriculum

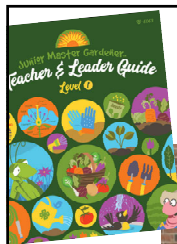


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CONTENTS	
Foreword.....	vii
Chapter 1. Plant Growth and Development.....	2
You'll learn how plants grow and make our world a better place.	
Chapter 2. Soils and Water.....	23
You'll get your hands dirty and learn how soil and water are important to plants and all living things.	
Chapter 3. Ecology and Environmental Horticulture.....	42
You'll get the big picture of how people, plants and animals all depend upon each other and how you can help to take care of our environment.	
Chapter 4. Insects and Diseases.....	64
You'll find out what's bugging you and your plants by exploring the world of insects and plant diseases.	
Chapter 5. Landscape Horticulture.....	98
You'll learn how to create and take care of beautiful gardens, and how to attract birds, insects and other creatures to your backyard or neighborhood.	
Chapter 6. Fruits and Nuts.....	124
You'll learn about many different kinds of fruits and nuts, and make fruit smoothies, salads, and even peanut butter!	
Chapter 7. Vegetables and Herbs.....	158
You'll learn to grow many different kinds of vegetables and herbs and how to cook them in some yummy dishes.	
Chapter 8. Life Skills and Career Exploration.....	158
You'll learn more about you, your friends and your school, and discover how to make plans for your future.	
Reflections.....	176
Appendix.....	185

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JMG Teacher/Leader Guide



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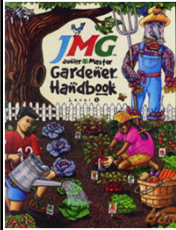
The JMG® Teacher/Leader's Guide

- Introduction and management guide
- Chapter group activities
- Community Service Projects/Leadership
- Helpful appendices



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JMG Youth Handbook

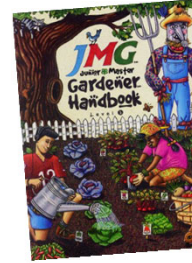


Making
your decision

2022 JMG National Leader Training

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Go and Do It !!!



2022 JMG National Leader Training

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Poll Question

Are you already
using Level 1 JMG
Core Curricula?



#2022JMGNLT

TEXAS A&M
AGRI LIFE
EXTENSION

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Service Learning & Leadership Development



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Certified Junior Master Gardeners®



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JMG® Certification for Youths

- *Certified Junior Master Gardener®*
- *Golden Ray Series Certification*

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Complete 1 group activity per teaching concept

Complete 1 individual activity per teaching concept

Complete 1 service learning/leadership project

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Junior Master Gardener

Logout

Log in

Recognizing your kids...

Profile > Leaders > Groups > **Completion**

Select a Group: Hot Hedgehogs

First Name:

Last Name:

Print: ☒

Add Attendee

Attendees			
	First Name	Last Name	Edit
+ Print -			

Certificates

Completion Certificates

Level 1 Certified Junior Master Gardener

A Level 1 Certified Junior Master Gardener

Print Certificate

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Logged in as Bryant (Return to the National account) Change Password

Profile > Leaders > Groups > **Completion**

Select a Group: North Sumter Bugs & Dirt Club

First Name:

Last Name:

Print: ☒

Add Attendee

Attendees			
	First Name	Last Name	Edit
+ Print -	Patricia	Bryant	Edit

Certificates

Completion Certificates

Golden Ray Series Certifications

Level 1 Certified Junior Master Gardener

Golden Ray Series Certifications

Level 2 Junior Master Gardener Certifications

Print Certificate

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How is the Program Used?

Pick and choose some JMG activities for your youth to try.

JMG Recognition Opportunities.

Recognition Medals

JMG Certifications




The collage features various JMG recognition items. At the top left is a yellow star. Below it are a globe and a compass. To the right is a red beetle. In the center are a red flower and a green leaf. Below these are a corn cob, a strawberry, a blue book, and another green leaf. To the right of these is a blue water drop. At the bottom left is a JMG Certified Junior Master Gardener certificate. At the bottom right is a JMG Certified logo. The entire collage is set against a background of a green field with a blue sky and a yellow sun.

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Activity Session

Secret Smells (pg. 79, *Teacher/Leader Guide*)



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Junior Master Gardener®
growing good kids.™

© Texas A&M University, Feb. 24-Feb. 26, 2020


Golden Ray Series

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Poll Question

Are you already
using Level 1 JMG
Core Curricula?



#2022JMGNLT

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JMG® Certification for Youths

- *Certified Junior Master Gardener®*
- *Golden Ray Series_{sm}* Certification

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**Junior Master Gardener®
Golden Ray Series**
thematic Level One Curricula

Golden Ray Series Certification

- A.** any combination of 12 activities
- B.** completing 1 Life Skills/Career Exploration activity
- C.** participating in 1 service project


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**Junior Master Gardener®
Golden Ray Series**
thematic Level One Curricula

teaching concepts:

- **Gardening Basics**



2019 JMG® National Leader Training

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Literature in the Garden

- Brings children's literature to life
- Integrates gardening across all subjects
- recognizes youths with certification



2022 JMG® National Leader Training

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Plantzilla
JERDINE NOLEN



58

Plantzilla



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Activity 6: Carnivorous Kid Plants

Objective: Create a model for understanding carnivorous plants and function of the systems of the Venus Flytrap.

Materials: Flytrap Translucent, paper plates, cotton, scissors, glue, rubber bands, Carnivorous Plant Soaker worksheet.

Time: 45 minutes

Activity 7: Monster Flowers

Objective: Build models for understanding the parts of a flower and its reproductive system.

Materials: Materials (provided for every group): small, colorful, craft sticks, flower paper, construction paper, and other materials.

Time: 30 minutes

Activity 8: Growing Clean Air Neck Pet

Objective: Germinate seeds in unconventional containers to better understand plant needs and to understand the benefit that plants provide.

Materials: Plastic film canisters (with lids that have a flat surface), soil, yarn, kitchen paper, seeds, and a growing Clean Air Neck Pet Observation page.

Time: 30 minutes

Activity 9: Sproutzilla

Objective: Germinate seeds in unconventional containers to better understand plant needs and to understand the benefit that plants provide.

Materials: Seeds for germinating (see below), glass 4-ounce or 6-ounce clear plastic jars (one for each child), brown paper lunch bags, cheesecloth (one 4 inch x 4 inch sheet for each child), rubber bands, scissors, one sheet of paper per student, permanent markers, colored bands and ribbons (optional).

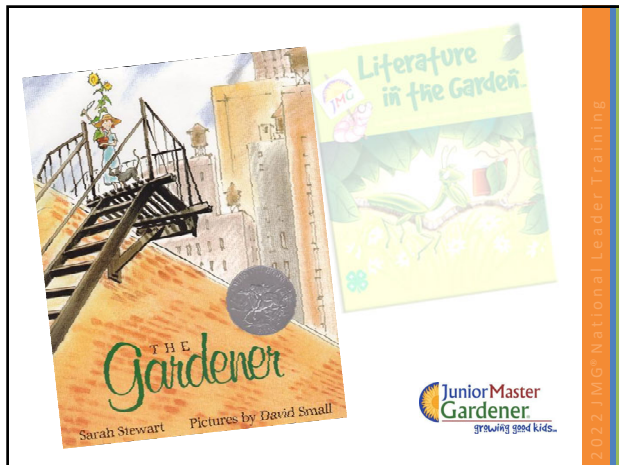
Time: 10 days. First day: 30 minutes each day for the next 4 days 5 minutes each.

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2023 IMG® N

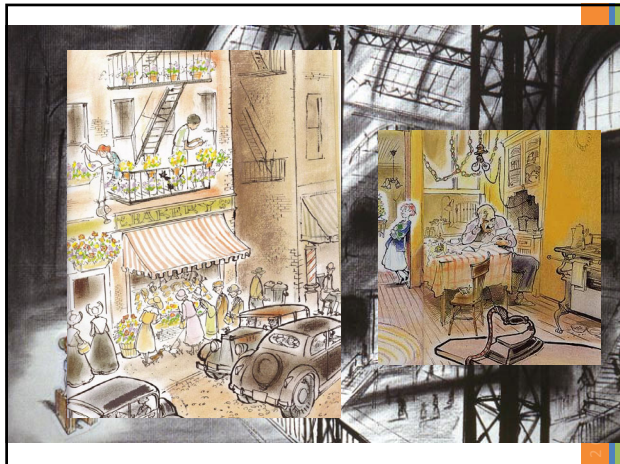




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69



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Grow or Buy?

Tomatoes - Cheaper to Grow or Buy?

Vegetables being investigated: Tomatoes

Cost of buying tomatoes: _____

Cost of buying one at a grocery store: \$ _____

Cost of growing tomatoes:

Total cost of plants: \$ _____

Cost of purchased soil: \$ _____

Cost of pots: \$ _____

Cost of fertilizer: \$ _____

Total: \$ _____

Number of tomatoes you could buy for the cost of growing them: _____

Total cost for growing: \$ _____

Cost of buying one: \$ _____

Vegetables that could be bought: _____

Number of tomatoes the garden must produce to equal buying them: _____

The garden would have to produce at least the same number that could be bought.

If the garden grows 12 tomatoes, would tomatoes be cheaper to grow or to buy? _____

Garden Math Challenge

Number of tomatoes each plant would have to produce: _____

Total number of tomatoes your garden must produce: _____

Number of plants in the garden: _____

Number of tomatoes each plant must produce: _____

The actual cost per tomato if even more of them are grown:

	10 tomatoes	30 tomatoes	50 tomatoes
Cost of garden	\$ _____	\$ _____	\$ _____
Number of tomatoes	10	30	50
Actual cost per tomato	\$ _____	\$ _____	\$ _____

Literature in the Garden

THE Gardener

Stacy Stewart Pictures by David Small

Junior Master Gardener
growing good kids.

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NATIONAL CHILDREN & YOUTH GARDEN SYMPOSIUM
AMERICAN HORTICULTURAL SOCIETY

GROWING GOOD KIDS™
Excellence in Children's Literature Book Awards Program

Recognize those children's books that are uniquely successful in promoting an understanding of and appreciation for plants, gardening and the environment.

Growing Good Kids Book Award
Junior Master Gardener and The American Horticultural Society

Junior Master Gardener
growing good kids.

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Growing Good Kids Book Award
Junior Master Gardener and The American Horticultural Society

GRC Excellence Book Award

Growing Good Kids - Excellence in Children's Literature Book Awards Program

The 2018 Growing Good Kids Excellence in Children's Literature Book Awards were announced at the National Children & Youth Garden Symposium on May 16, 2018 at the National Horticultural Society.

2018 Winners:

What Will Grow?
By: [Author]
Illustrated by: [Illustrator]

Plantill
By: [Author]
Illustrated by: [Illustrator]

Wesland
By: [Author]
Illustrated by: [Illustrator]

Bottoms
By: [Author]
Illustrated by: [Illustrator]

Fresh-Picked Poetry: A Day at the Farmer's Market
By: [Author]
Illustrated by: [Illustrator]

2017
2016
2015
2014

2022 JMG® National Leader Training

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Junior Master Gardener® Golden Ray Series
thematic Level One Curricula

Wildlife Gardener!
Laura Potter-Gardner, Olan Ray Series

NATIONAL WILDLIFE FEDERATION®
www.nwf.org®

Dig into to gardening for wildlife!

Identify local birds, mammals, insects, reptiles and amphibians.

Investigate life cycles and interrelatedness of wildlife/plants.

Discover how to attract desirable wildlife to your garden.

Establish a NWF® Certified Schoolyard Habitat®!

2020 JMG® National Leader Training

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Junior Master Gardener® Golden Ray Series
thematic Level One Curricula

Wildlife Gardener!
Laura Potter-Gardner, Olan Ray Series

teaching concepts:

- Habitat Gardening Basics
- Essential Elements
- Birds
- Mammals
- Insects
- Reptiles and Amphibians
- Wildlife Habitat Sites

2019 JMG® National Leader Training

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Wildlife Gardener!
Laura Potter-Gardner, Olan Ray Series

A la Carte Garden, pg. 137

2022 JMG® National Leader Training

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Teaching Concept 5

Activity 22: Cookie Key

Objective: Identify and classify insects using a cookie key flow chart

Cookie Key Flow Chart

```

graph TD
    Q1[?] --> A1[This cookie is soft]
    Q1 --> A2[This cookie is hard]
    A1 --> B1[This cookie has chocolate pieces]
    A1 --> B2[This cookie does not have chocolate in or on it]
    A2 --> B3[This cookie has chocolate in or on it]
    A2 --> B4[This cookie does not have chocolate in or on it]
    B1 --> C1[This cookie is shaped like an animal]
    B1 --> C2[This cookie is not shaped like an animal]
    B2 --> C3[This cookie has a hole in the middle]
    B2 --> C4[This cookie does not have a hole in the middle]
    B3 --> C5[This cookie tastes like lemon]
    B3 --> C6[This cookie tastes like butter]
    C1 --> D1[Animal Cookie]
    C2 --> D2[Chocolate Chip Cookie]
    C3 --> D3[Ginger Snap]
    C4 --> D4[Butter Cookie]
    C5 --> D5[Lemon Cookie]
    C6 --> D6[Butter Cookie]
  
```

1. This cookie is soft..... flig bar
 1. This cookie is hard..... Go to 2
 2. This cookie has chocolate in or on it..... Go to 3
 2. This cookie does not have chocolate in or on it..... Go to 4

cookie has chocolate pieces..... chocolate chip cookie
 cookie has filling..... chocolate sandwich cookie
 cookie is shaped like an animal..... animal cookie
 cookie is not shaped like an animal..... Go to 5
 cookie has a hole in the middle..... Go to 6
 cookie does not have a hole in the middle..... ginger snap
 cookie tastes like lemon..... lemon cookie
 cookie tastes like butter..... butter cookie

Groups to share and eat the cookies when they are finished! Groups that insects can be using a key, too. Pass out an insect key and challenge them to identify it.

The following are easy to "key out":
 Ladybugs Ants
 Grasshoppers Butterflies
 Crickets Flies
 Aphids Stink bugs

Take home a copy of this key to show a family member to identify an insect that they find around their home.

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TEXAS A&M AGRILIFE EXTENSION

Poll Question

Are you already using Level 1 JMG Golden Ray Series?

#2022JMG NLT

Junior Master Gardener®
growing good kids™

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Wildlife Gardener®

Far Out Feeder, p55

Activity 15: Far-out Feeders

Objective: Use various household materials to create bird feeders, utilize various types of bird feeder types and determine their effectiveness

Time: Variable

Materials: Depends on Project Objectives (see instructions on pages 54-55)

NOTE: Since all these feeders will require adult help and supervision, CAUTION! Be sure to explain and model safe and responsible bird feeding.

Ask the children to tell you where they usually see birds. Explain that not all birds prefer to eat in a kitchen. Some birds prefer to eat in a kitchen, others where they eat. Some birds like to eat from a feeder, some like to eat from the ground. Some birds like to eat from a feeder attached to a tree, some like to eat from a feeder attached to a pole. Some birds like to eat from a feeder attached to a pole, some like to eat from a feeder attached to a pole.

Tell the group that they are going to build a feeder. If they have a bird feeder and bird seed, they may also discover that birds prefer to eat from a feeder.

Have the group make at least two of the feeders listed on the next page. You may decide to assign one feeder type per group. Or, if you permit, let the group decide which feeder they want to make.

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Wildlife Gardener®

Ties that Coil, pg. 106

Activity 16: Ties that Coil

Objective: Use various household materials to create bird feeders, utilize various types of bird feeder types and determine their effectiveness

Time: Variable

Materials: Depends on Project Objectives (see instructions on pages 105-106)

NOTE: Since all these feeders will require adult help and supervision, CAUTION! Be sure to explain and model safe and responsible bird feeding.

Ask the children to tell you where they usually see birds. Explain that not all birds prefer to eat in a kitchen. Some birds prefer to eat in a kitchen, others where they eat. Some birds like to eat from a feeder, some like to eat from the ground. Some birds like to eat from a feeder attached to a tree, some like to eat from a feeder attached to a pole. Some birds like to eat from a feeder attached to a pole, some like to eat from a feeder attached to a pole.

Tell the group that they are going to build a feeder. If they have a bird feeder and bird seed, they may also discover that birds prefer to eat from a feeder.

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82

How do my kids become Certified Wildlife Gardenerssm?

Youths can earn certification as a Wildlife Gardenersm by completing:

- A. at least 12 activities
- B. 1 Life Skills/Career Exploration activity
- C. establish a Certified Schoolyard Habitat or other service-learning project

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Wildlife Gardenersm Golden Ray Series

Wildlife Gardenersm Golden Ray Series

Wildlife Gardenersm Golden Ray Series

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Junior Master Gardener® Golden Ray Series

thematic Level One Curricula

stand-alone curriculum:




chapters/themes:

- Plant Growth & Development
- Soils & Water
- Insects & Plant Diseases
- Ecology & Environmental Hort
- Landscape Horticulture
- Fruit & Nutrition
- Vegetables & Herbs
- Life Skills & Career Exploration
- **multi:** Growing a Vegetable Garden

Teacher & Leader Guide
2022 JMG® National Leader Training

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Ladybug Lunchline

Activity 27: Determine the valuable effect of ladybugs to the garden.

Time: 30-40 minutes

Materials: 1 clear film canister (with plastic museum taking flexible drinking straws, hand-drawn ladybug puncher, green modeling clay)

NOTE: Before beginning, do a little bit of research to find the three most common garden insects in your area. Use one that has information by contacting your Extension office, a local garden center, or speaking with a neighborhood garden enthusiast. Materials, online sources and resource links at: www.jmgd.org

Bug Suckers
The white, translucent film canister fits activity and can be obtained from processing office.

Have each person make a following these steps:



1. Punch one hole about down the side of a film canister hole puncher hole across from the bottom.
2. There is a 1 inch piece of green over the top of the holes and insert a 3-4 inch piece of tubing in the hole. The gauge acts as a very important filter.

Learning Concept 5
Explain that an insect aspirator is used to remove insects from plants. Explain that everyone that they are going to try to be beneficial to plants like a ladybug. They should try to "suck" the insects out of the plants.

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Wildlife GardenerSM

A collaborative effort of the National Junior Master Gardener® Program and the National Wildlife Federation.

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Activity Session

Lady Bug Lunchline Wildlife Gardener (pg. 82)

2020 JMG® National Leader Training

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Mini Insect collection

Use your insect aspirator to collect small insects found in common plants or other outdoor areas. The specimens you collect should be no larger than 1/2 centimeter or 1/2 inch. Collect as many as 12 specimens from different plants to observe and record each one to a collection club table.





Instructions:

1. Seal your aspirator and place it in a bucket overnight. This will prepare the specimens to be mounted in the collection circles above.
2. The next day, place a small dot of glue in the middle of each circle. On another sheet of paper, fill the lines A through J in a column.
3. Measure the length of each specimen. Carefully place one specimen in each glue dot. Write the length (and other observations) about each specimen on the paper next to the circle.

You may find that many of the specimens you collected were not insects. Use resources like a magnifying glass or a magnifying glass to identify some of your specimens in your collection. Between insects and other creatures you might find in support.

www.jmgd.org

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JMG Level 2

91

OPERATION THISTLE: *Seeds of Despair*

Beyond the buckling cement of a
long-forgotten industrial park, in the deep
shadows of a polluted swamp, *a weed grew.*

92

A mutating, prickly, twisted little thistle
with a twisted plan...

Almost no light penetrated this place and
everything grew black, cold and slimy...

93

cold and slimy,

except the thistle.

He grew more intelligent,
more cunning.

94

No longer content to go unnoticed,
the time had come
for Dr. Thistle's plan to grow...

95



96

Operation Thistle: Seeds of Despair Plant Growth and Development



teaching concepts:

Importance and Uses of Plants
Plant Classification
Plant Parts
Plant Needs
Plant Processes
Plant Growth
Seed Propagation
Vegetative Propagation

97

Operation Thistle: STUDENT PAGES

MISSION BRIEF MISSION OPTIONS



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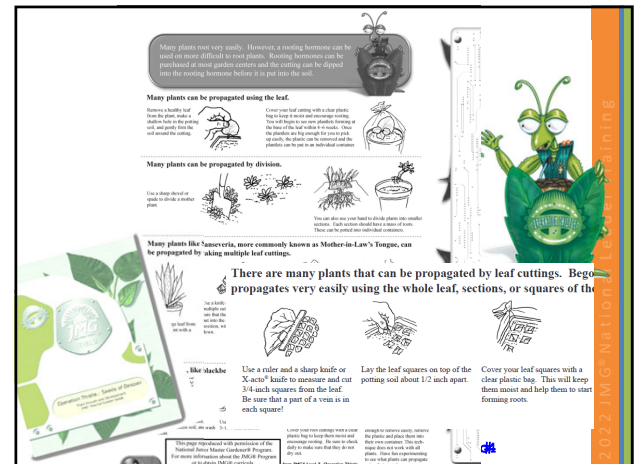
Operation WATER: Thistle Goes Underground Plant Growth and Development



teaching concepts:

Soil Color, Texture, & Structure
Nutrients
Soil Improvement
Soil Conservation
Water Cycle and You
Water Movement
Watersheds, Wetlands & Aquifers
Water Conservation

99



100

Operation Thistle Six Week Propagation Production Venture(pg 106)



Plants *grow* funds with a class run business

101

Operation W.A.T.E.R. Dirty Scavengers (p2)



students get dirty learning soil is more than just dirt

102

103

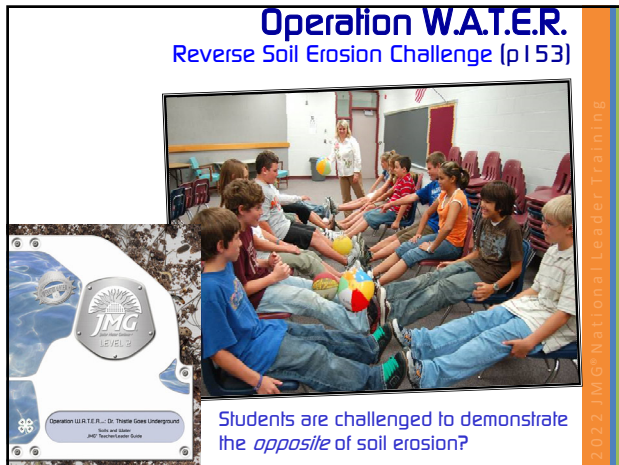
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105

106

107

108



109



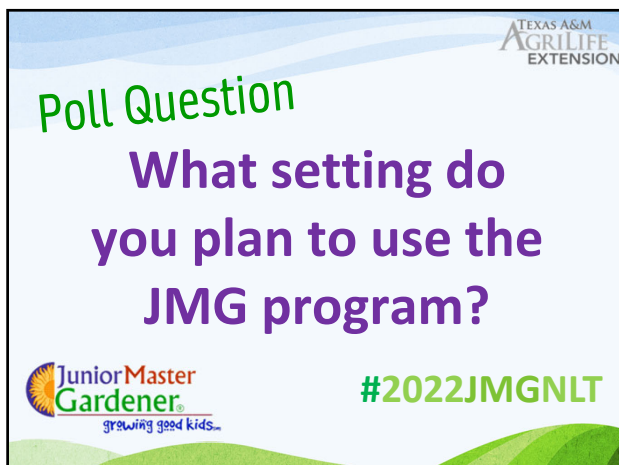
110



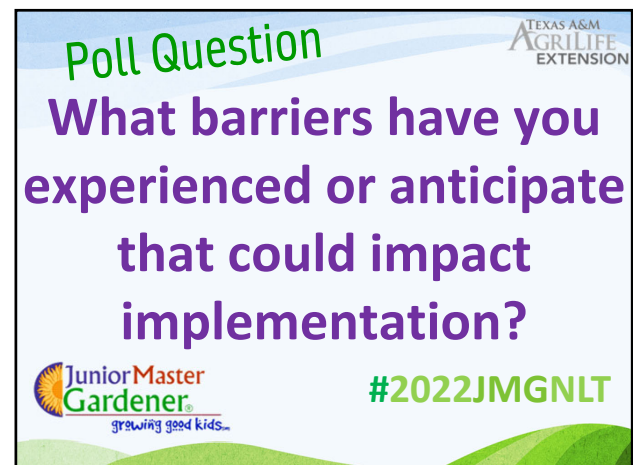
111



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Poll Question

What specific resources could help you be more effective during implementation?

 **#2022JMGnLT**

 **growing good kids...**

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 www.twitter.com/jmgkids

 www.facebook.com/jmgkids

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 www.JMGkids.us



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This Afternoon:

3 concurrent options each SESSION:

GROW SESSION A (1:00-2:10)

GROW SESSION B (2:25-3:35)

GROW SESSION C (3:50-5:00)



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Tonight

Reception & Happy Hour

- 5:00-6:30
- Drink ticket
- & passport door prize!

Dinner on your own or sign up for Dinner Groups:

www.JMGkids.us/2022NLTresources

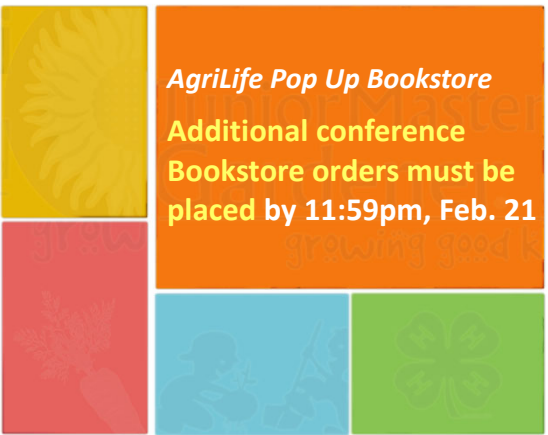


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AgriLife Pop Up Bookstore

Additional conference Bookstore orders must be placed by 11:59pm, Feb. 21



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