

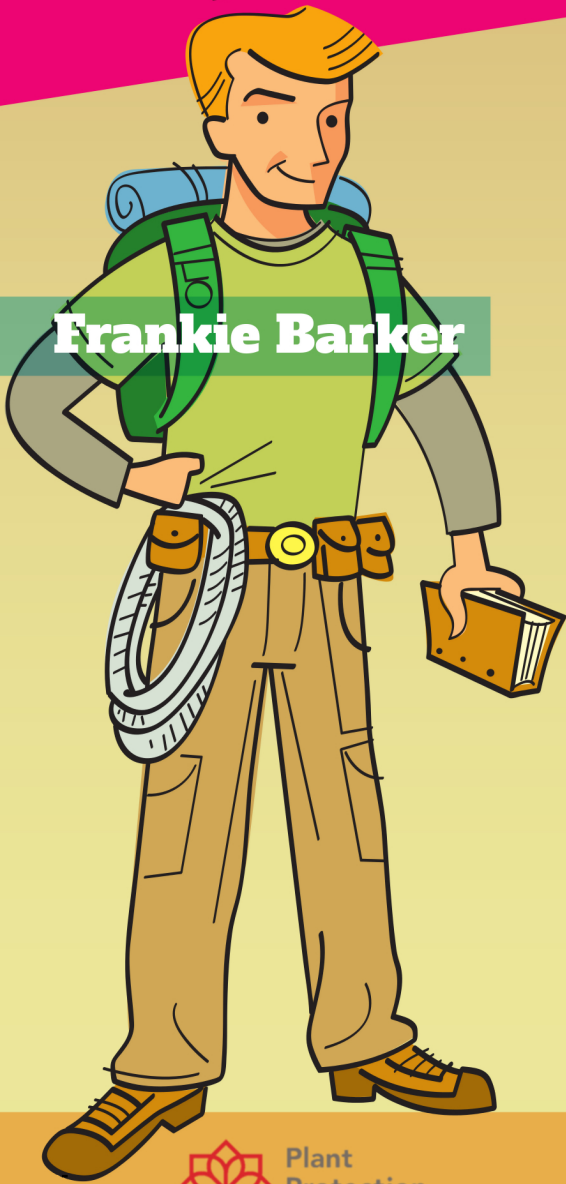


Help them do battle with invasive bugs and nasty fungi that threaten trees and plants.

PLANTHEROES.ORG
BEGINNER
ACTIVITY
BOOK

BAD BUG GYPSY MOTH

Frankie Barker



Be a Plant Hero!
Help Frankie stop the
Gypsy Moth from
attacking trees!



Plant
Protection
Program

AMERICAN PUBLIC GARDENS ASSOCIATION



Gypsy-Moth-Mashin' Frankie Barker

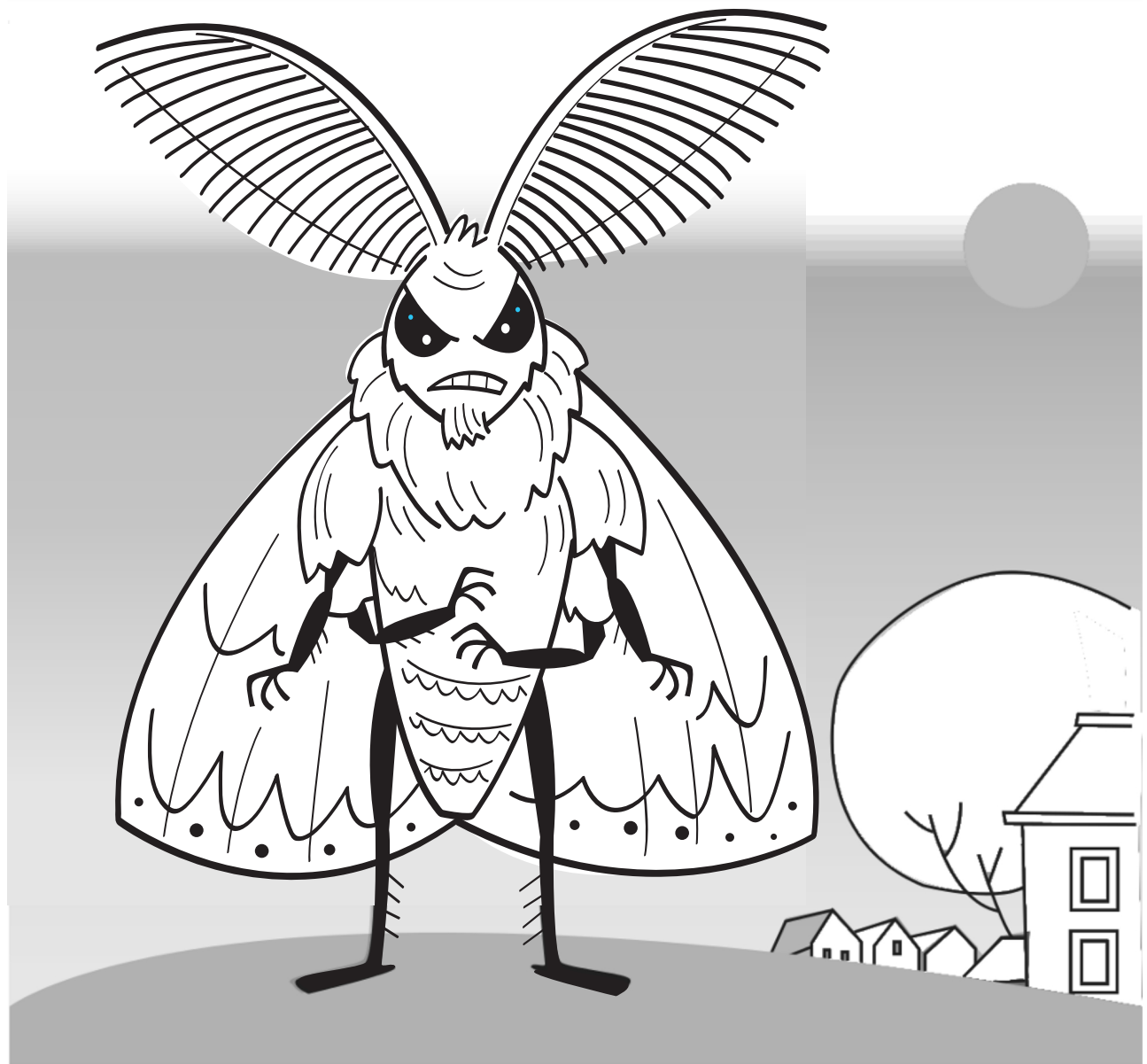
Frankie spends a lot of time hanging out in his treehouse so he knows when something starts eating all the tree leaves! He's gonna track down this hungry caterpillar and stop it in its tracks before it eats the whole forest!



The Gypsy Moth

Gypsy moths can really hurt our forests because their larvae feed on a wide variety of trees – they really like oak, aspen, birch, sweetgum and willow

Learn more at plantheroes.org



Feeding gypsy moth larvae can eat all the leaves on a tree, which is 'defoliating'.



Frankie wants everyone to learn what gypsy moth egg masses look like so you can be on the lookout - if you find some report it to your extension office and help stop the SPREAD!



Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

Be sure to check for eggs to stop the Gypsy Moth spread!

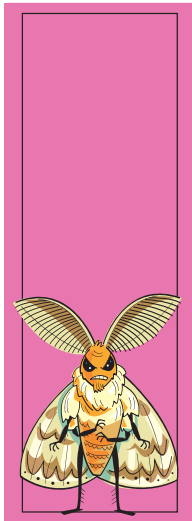


STOPPING THE SPREAD WITH FRED

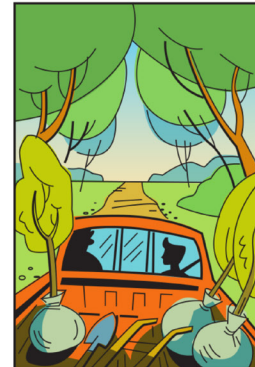
Before heading back to school in late August, Frankie pays a visit to his Uncle Fred in Cleveland to help him with a big landscaping job on the other side of Ohio, in Columbus.



Planting trees, hanging out with family and hard work? Check! Frankie is all in on this venture!



Frankie checks the equipment list and helps load the wheel hoe and other landscaping equipment onto the flatbed and drives down the long, narrow, tree-lined road out to the highway for the big job.

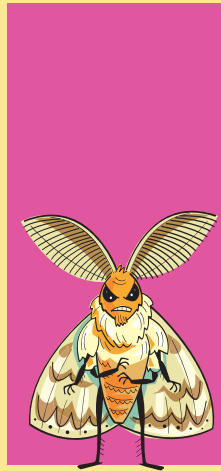


As Frankie and Fred leave Fred's Landscaping, Frankie notices a triangular box hanging in a tree. "Hey Uncle Fred, I think I just saw some debris in a tree on your property!" "No Frankie, that is a pheromone trap for the Gypsy Moth. I just found out that I live in a GM Transition Zone. I gave the Dept. of Agriculture permission to place the trap to keep track of progress." Oh, OK just a pheromone trap you say..."



STOP THE FLATBED!

Frankie tells Uncle Fred that Columbus is a GM free zone, and that they should check all the equipment to see if there are any GM egg clusters.



After a careful check, Fred finds an egg cluster on the side wheel of the wheel hoe. Frankie and Fred work to get rid of the cluster and dispose of it properly.



Later that day, Frankie and Fred join the Plant Heroes team to confidently plant new trees in Columbus Park, while knowing the threat of spreading GM is no longer present!

Name _____



Date _____



GYPSY MOTH

**INSECT
EGGS
DAMAGE**

**CATERPILLAR
COCOON
LEAVES**

**MOTH
SPREAD
BUFF**

J **D A M A G E** L M M A P E A

O I W T O E T M O T H H H R

C A T E R P I L L A R E E L

Q U E N B B W F B U F F B U

O Q I T C E C O C O O N M O

L E X G P V H Z G N E G G S

T E S O I N S E C T Q E U V

P A D S P R E A D M N T D R

G S L E A V E S L A O S E J

Name _____



Date _____



**Leaves
Defoliation
Eggs**

**Quarantine
Cocoon
Caterpillar**

**Buff
Vulnerable
Infestation**

A L e a v e s e a e e L P K

s E Q E g g s g g L g X C s

H K o B c I C o c o o n Y G

t f I n f e s t a t i o n K

n D e f o l i a t i o n t T

B A B u f f C P B M B D H X

J i r C a t e r p i l l a r

e a Z n Q u a r a n t i n e

V u l n e r a b l e F V Y l



GAMES!

Learn more and test your knowledge with interactive games on plantheroes.org

© 2015 American Public Gardens Association

Name _____



Date _____



GYPSY MOTH

Find and circle the following words:

EGGS
BIRCH
OAK

TREES
BUFF
PROTECT

WILLOW
FORESTS
ASPEN

STAGES
TRAVEL
INVASIVE

Complete the maze, and then find the words. The words can only be found along your maze path.

K Y M N W I L L O W K O A T R E E S N D O B S O T R A V E L O Q K H L L E H Y Y T

O E I O H

E Y O Q C

B I R C

← START

L R S F O R E S T S E P H Y B U F F A

L J A D

P Q V A A E

A S O G

END ←

X O C R Q J S P M Q A S P E N P S E K E I U O A S

O U O P K I

O W K R N N

E N V O N V

E E E T X A

E U I N K K O X N N U E F D J K L U E D S

Q R C I

V H T V

S B J E

S E B E

L M J S T D J A G X R D U J Q D A Q W Y P U V U G D N B C P A T R S T A G E S H M



GAMES!

Learn more and test your knowledge with interactive games on plantheroes.org

© 2015 American Public Gardens Association

Plant Heroes Pledge

This Certifies That

is an Official Member of the Plant Heroes Team and pledges to:

- **Learn about the pests and diseases that affect the plants in my region**
- **Be on the lookout for symptoms of pests and diseases on trees in my neighborhood**
- **Report any suspicious findings to an adult who can notify the local extension agent**
- **Refrain from moving firewood**

Awarded by the
American Public
Gardens Association





Help them do battle with invasive bugs and nasty fungi that threaten trees and plants.

PLANTHEROES.ORG

Why Do Plants Need Heroes?

Every year, plant pests and diseases damage and kill millions of trees, both in our neighborhoods and in natural areas. This damage has a negative impact on vital ecosystem services like air and water purification and costs billions of dollars in cleanup and lost revenue.

Who are the Plant Heroes?

The Plant Heroes are four young adults who share a love of nature and interest in science. A non-governmental organization (NGO) has heard about their passion and invited them to join together as a "super team" to detect and combat bugs and diseases that harm plants and ecosystem health. The Plant Heroes scout for these threats and report suspicious sightings to their county extension or local forester, who contacts officials and provides mission details and scientific supplies in order to defeat the bad bugs and diseases.

How can you be a Plant Hero?

Help neutralize the threat of plant pests and diseases by becoming a part of the Plant Hero team. Take the Plant Hero Pledge and explore the website to learn more about what to look for and how to report suspicious plant pests and diseases. The more you know, the more you can protect the plants in your own yard, neighborhood and community!

Plant Heroes is brought to you by the American Public Gardens Association.

Founded in 1940 as the American Association of Botanical Gardens and Arboreta, the American Public Gardens Association adopted its new name in 2006. Over the last seven decades, it has emerged as the premiere association for public gardens in North America.

Today, the Association's 590 member institutions are located throughout the United States, the District of Columbia, Canada, and seven other countries. Our vision is "A World Where Public Gardens Are Indispensable" as they provide botanic, conservation, community, education, and economic resources to their community.

The Association is committed to increasing the knowledge of public garden professionals throughout North America—through information sharing, professional development, networking, public awareness, and research—so that they have the tools to effectively serve visitors and members.



**American
Public Gardens
Association**



This publication was developed with financial support from
USDA - Animal and Plant Health Inspection Service (APHIS)
and reproduced with financial support from
USDA - Forest Service.