Hey there TWA Pals!

I hope your summer was as fun filled as mine. I went on a couple camping trips with some friends, read some good books and watched my summer garden grow. With all the rain over the summer months, it gave my garden the boost it needed, but one thing I have noticed is that there are more aphids than normal in my garden. I have tried just about everything to get rid of these pesky pests. The time is near to start planting my winter garden, and I needed some help.

I went to the local nursery to ask for some advice on how to handle my gardening problem; the sweet old lady referred me to a pesticide, but I know that pesticides affect wildlife too. I bought a small container as a last resort but continued to try and remedy the problem myself. After a few days, I had no luck, so I reluctantly decided to try the pesticide. Just as I was about to spray, I heard a “Pssst” coming from my garden. I looked around but didn’t see anything. I started to pump the spray when all of a sudden I saw a ladybug fly up from the garden and land on my nose.

The little ladybug seemed bothered and told me, “My name is Lucy the Ladybug, and this is where I live. Please don’t spray my home with pesticides. “ She pointed to a leaf and said, “My babies are under that leaf, and they are just about to hatch. We can help you with your aphid problem because we feed on aphids. Just please don’t spray or it will make us sick.” I was surprised to see her there since I hadn’t seen any ladybugs around, but I took her word for it. Her eggs began to hatch into larvae a couple days later and ever since, my gardens’ pest problem has cleared up.

My new friend Lucy the Ladybug taught me that ladybugs and their offspring are really beneficial for combating aphids and other crop damaging insects since they are the number one food source for ladybugs. They have really helped my garden, and I will continue to use their help every time I garden. Not only are ladybugs cute but they are voracious when it comes to the killing of garden pests. ‘Ya learn something new everyday!

Adios amigos,
Ladybug Craft

Materials That You Will Need

- Two white paper plates
- Red and black paint
- Paintbrush
- Scissors
- Black construction paper
- Black pipe cleaner
- Googly Eyes
- Glue Stick
- Single hole punch
- One brad

Procedure

Step 1: Paint one paper plate red and one black.
Step 2: Once the red paper plate as dried, paint black spots onto it.
Step 3: Take the construction paper & cut out a black circle for the ladybug’s head. Add googly eyes and black antennae.
Step 4: Glue the head to the top of your black paper plate. Cut a circle out of a white piece of paper and glue it to the center of the black plate.
Step 5: Cut the red plate in half. Use a hole punch to punch a hole in the top of each half red.
Step 6: Poke a hole right through the bottom of the ladybug’s head and black plate. Use a brad to attach the two wings to the body.
Step 7: Draw two lines creating four sections on the white piece of paper. In each section write down and describe each section of the ladybug’s life cycle (egg, larvae, pupa, ladybug).

Ladybug 411

By Olivia Sanchez

Did you know that ladybugs are actually beetles? For centuries, we have been calling these beetles by the wrong name; they are in fact Lady Beetles. However, to keep it simple we will refer to them as ladybugs. All over the world, there are between 4,000 and 5,000 different species, and about 500 of these species have been identified here in the United States. Of those, approximately 135 occur in Texas including the nine-spotted, two-spotted and the traverse (pictured above), and only about 70 have the typical bright red color and black spots. Ladybugs belong to the order Coleoptera that contains more diversity in color, shape and size than any other order. Some ladybugs have nine spots, some have two, some have none and some are different colors.

Much like butterflies, ladybugs go through complete metamorphosis, meaning four stages in their life cycle. Between spring and early summer, the ladybug will mate and start laying her eggs. The female ladybug will find a plant that is infested with aphids and lay a cluster of 10-40 eggs (depending on the species) under the plant’s leaves. The eggs look like small little yellow-orange jellybeans stacked together. The female ladybug lays many eggs to ensure her young survive. If some do not hatch, the ones that do will feed on the unhatched eggs.

The eggs hatch between three and 10 days later and emerge as larvae. During this stage, they look like baby alligators. Their bodies are elongated and have little spines that protect them from predators, and some even have orange markings on their backs. They stay in this stage for about 15 days while they feed on as many aphids as they can. These little ladybugs still have a ways to go and need all the food they can get. With each larval stage, the ladybug goes through a process called exuviation, shedding the outgrown skin, sometimes several times in the larval stage.

After about the 15-day mark, the ladybug sheds its skin one final time. The larval stage then attaches to the stem of a plant with its hind end and transforms into the pupae. The pupae look slightly round or oval shaped and are a dark brown/black color. They are the most vulnerable at this stage, and in an attempt to protect self, they shake violently to ward off any approaching predators. After about three days, the adult ladybug is ready to emerge, but it does not look like the ladybug you are used to seeing. Its shell looks soft and yellow and does not have spots. The ladybug will expand its wings to dry out and as the shell hardens it gains color, causing it to become bright red. This process usually takes a few hours. Now it’s eating time!

Ladybugs are known for their big appetite from the larval stage to their adulthood. At the larval stage, they can eat roughly up to 25 aphids a day, and adult ladybugs can eat around 50 aphids a day; this can vary among species. This is really important when it comes to the role they play in gardens and crop pest control. Ladybugs not only feast on aphids but other crop damaging pests like spider mites, leaf hoppers and other soft-bodied insects.

Sometime in the 1500s in England, farmers fought off swarms of aphids, and they could not find a way to get rid of them. They began to pray to Saint Mary to send them help to defeat their crop problems. Along came the ladybug to the rescue and saved their crops from devastation. Because they were the answer to many people’s prayers, the people named them “Our Lady’s Beetles.” The name stuck and that is one of the most popular theories as to how they received the name ladybug. Since then they have played a key role in helping maintain healthy gardens and crops. The best environment for ladybugs is an environment with plenty of aphids. Ladybugs need to eat, and they must provide a stable diet for their offspring. You can even buy them to aid your garden if none are present.

Ladybugs do their fair share of preying on crop pests, but they have their own problems to worry about when it comes to being eaten. They have a number of predators that would gladly eat them up despite the warnings they give. The first warning is the bright red (sometimes orange or yellow) color of the ladybug, which serves as a signal to any potential predator considering them for a quick snack that they are poisonous or would make the predator sick. The second defense is pretending to play dead. The second defense is pretending to play dead by immediately falling to the ground once they feel threatened and rolling onto their backs. Last but certainly not least, is their ability to secrete a foul-tasting substance from their joints, known as auto-bleeding. You may have experienced this yellow substance if you have ever captured a ladybug. However, these defenses do not always work, and ladybugs are still susceptible to being eaten by spiders, frogs and other predatory bugs.

Another thing they have to fight off is the cold. Ladybugs are cold blooded and rely on their environment to receive heat in order to survive. During the winter, ladybugs will huddle up in groups and hibernate for up to nine months at a time. It is common to see large groups of ladybugs using this method to keep warm. Sometimes you can find ladybugs in your home looking for a place to ride out the winter. An interesting fact about ladybugs is that they do not take flight unless their body temperature is at about 74-75 degrees Fahrenheit.

There are so many ladybug species it’s hard to recognize the difference at first glance. We, in Texas, have native ladybugs that are actually becoming harder to find and new non-native ladybugs that are becoming more widespread. Over the last couple of decades, several North American ladybug species have become very rare, including the nine-spotted ladybug, the two-spotted ladybug and the traverse ladybug.

No matter the color or number of spots, ladybugs play an important role. Some say they are good luck, others see them as a blessing from Saint Mary, and others see them as their gardening helper. The next time you see one be sure to take a picture and count how many dots you see. You will be surprised by how many you find that are unique and different, just like you.

Sources:
http://www.ladybug.org/
http://en.wikipedia.org/wiki/Ladybug
Did you know...
...that a ladybug only takes flight when it is 74 degrees out?
...that they are considered to be a sign of good luck?
...that some ladybugs practice cannibalism?
...that a ladybug beats its wings about 1000 times a minute or about 85 beats a second when it flies?
...that ladybugs smell with their feet and antennae?

Label & Color Me

Ladybug
(Coccinella quinquepunctata)

Directions:

Find and circle the words.

ANTENNAE
APHID
BEETLE
COLEOPTERA
EGG
HATCH
LADYBUG
LARVAE
LEAVES
LUCKY
METAMORPHOSIS
NATIVE
NONNATIVE
PUPA
SPECIES
SPOTS
WINGS
AUTOBLEEDING

Conservation Action Items

• Plant a garden
• Switch to re-fillable bottles for drinking water.
• Take part in a local river/water source cleanup day
• Research what kinds of animals live in your urban or rural environment. Share the types of habitats these animals need to survive.
• Minimize the use of insecticides.
• Switch to reusable bags and containers.
• Respect nature and its wildlife by not disturbing its habitat.
• Plant a tree for the benefit of wildlife at your school.
Did you know...
...that a ladybug only takes flight when it is 74 degrees out?
...that they are considered to be a sign of good luck?
...that some ladybugs practice cannibalism?
...that a ladybug beats its wings about 500 times a minute or about 85 beats a second when it flies?
...that ladybugs smell with their feet and antennae?

**Label & Color Me**

*Ladybug*  
*(Coccinella quinquepunctata)*

**Conservation Action Items**

- Plant a garden
- Switch to re-fillable bottles for drinking water.
- Take part in a local river/water source cleanup day
- Research what kinds of animals live in your urban or rural environment. Share the types of habitats these animals need to survive.
- Minimize the use of insecticides.
- Switch to reusable bags and containers.
- Respect nature and its wildlife by not disturbing its habitat.
- Plant a tree for the benefit of wildlife at your school.
Ladybug Craft

Materials That You Will Need

- Two white paper plates
- Red and black paint
- Paintbrush
- Scissors
- Black construction paper
- Googly Eyes
- Black pipe cleaner
- Glue Stick
- One brad
- Single hole punch

Procedure

Step 1: Paint one paper plate red and one black.
Step 2: Once the red paper plate as dried, paint black spots onto it.
Step 3: Take the construction paper & cut out a black circle for the ladybug's head. Add googley eyes and black antennae.
Step 4: Glue the head to the top of your black paper plate. Cut a circle out of a white piece of paper and glue it to the center of the black plate.
Step 5: Cut the red plate in half. Use a hole punch to punch a hole in the top of each red half.
Step 6: Poke a hole right through the bottom of the ladybug's head
Step 7: Draw two lines creating four sections on the white piece of paper. In each section write down and describe each section of the ladybug's life cycle (egg, larvae, pupa, ladybug).

Critter Connections is made possible by a grant from the San Antonio Livestock Exposition.

The little ladybug seemed bothered and told me, “My name is Lucy the Ladybug, and this is where I live. Please don’t spray my home with pesticides.” She pointed to a leaf and said, “My babies are just about to hatch. We can help you with your aphid problem because we feed on aphids. Just please don’t spray or it will make us sick.” I was surprised to see her there since I hadn’t seen any ladybugs around, but I took her word for it. Her eggs began to hatch into larvae a couple days later and ever since, my gardens’ pest problem has cleared up.

My new friend Lucy the Ladybug taught me that ladybugs and their offspring are really beneficial for combating aphids and other crop damaging insects since they are the number one food source for ladybugs. They have really helped my garden, and I will continue to use their help every time I garden. Not only are ladybugs cute but they are voracious when it comes to the killing of garden pests. ‘Ya learn something new everyday!

Adios amigos,

Nancy
Nine-band

Hey there TWA Pals!

I hope your summer was as fun filled as mine. I went on a couple camping trips with some friends, read some good books and watched my summer garden grow. With all the rain over the summer months, it gave my garden the boost it needed, but one thing I have noticed is that there are more aphids than normal in my garden. I have tried just about everything to get rid of these pesky pests. The time is near to start planting my winter garden, and I needed some help.

I went to the local nursery to ask for some advice on how to handle my gardening problem; the sweet old lady referred me to a pesticide, but I know that pesticides affect wildlife too. I thought a small container as a last resort but continued to try and remedy the problem myself. After a few days, I had no luck, so I reluctantly decided to try the pesticide. Just as I was about to spray, I heard a “Pssst” coming from my garden. I looked around but didn’t see anything. I started to pump the spray when all of a sudden I saw a ladybug fly up from the garden and land on my nose.