

MOSQUITOES AND YOU

(HINT – A MOSQUITO IS NOT YOUR FRIEND!)



WHAT YOU SHOULD KNOW ABOUT MOSQUITOES AND WHAT THEY KNOW ABOUT YOU!

A Mosquito Education Program Courtesy of Mosquito Control, Leon County, Florida

Monmouth County Mosquito Control Division



1901 Wayside Road, Tinton Falls, NJ 07724

732-542-3630

www.visitmonmouth.com/mosquito

The Mosquito

Mosquitoes are aquatic insects with a head, thorax, abdomen, two wings and six legs. They are called aquatic because they lay their eggs and grow up in water. The only time mosquitoes do not live in water is during the adult stage of their life cycle. The adult mosquitoes are the ones that cause all the problems because they bite!

Actually, only female mosquitoes bite. Both male and female adults feed on plant nectar, but the female also needs the protein in blood to develop her eggs. The mosquito uses her antennae to track down carbon dioxide that is expelled in a potential victim's breath. When she finds a victim, the mosquito pokes her proboscis, or mouth, under the skin and injects her own saliva into the victim to keep the blood from clotting. After the blood is flowing, she starts to drink. Mosquito bites itch because we are allergic to the saliva.

Many species of mosquitoes lay their eggs in containers of standing water, such as buckets or wading pools. You can reduce the risk of mosquito bites and disease by eliminating these habitats around your home. If you can reduce the number of larvae, there won't be as many mosquitoes to grow up and bite you!

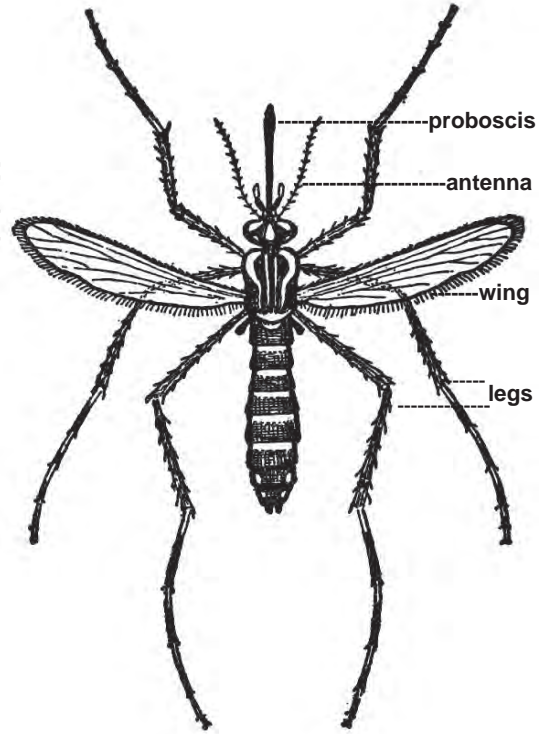
Mosquito Anatomy

BODY SEGMENTS:

HEAD

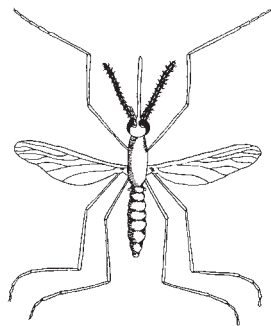
THORAX

ABDOMEN

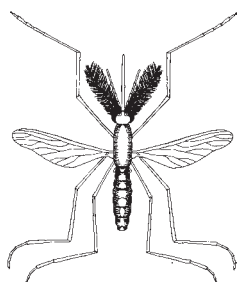


Metamorphosis:

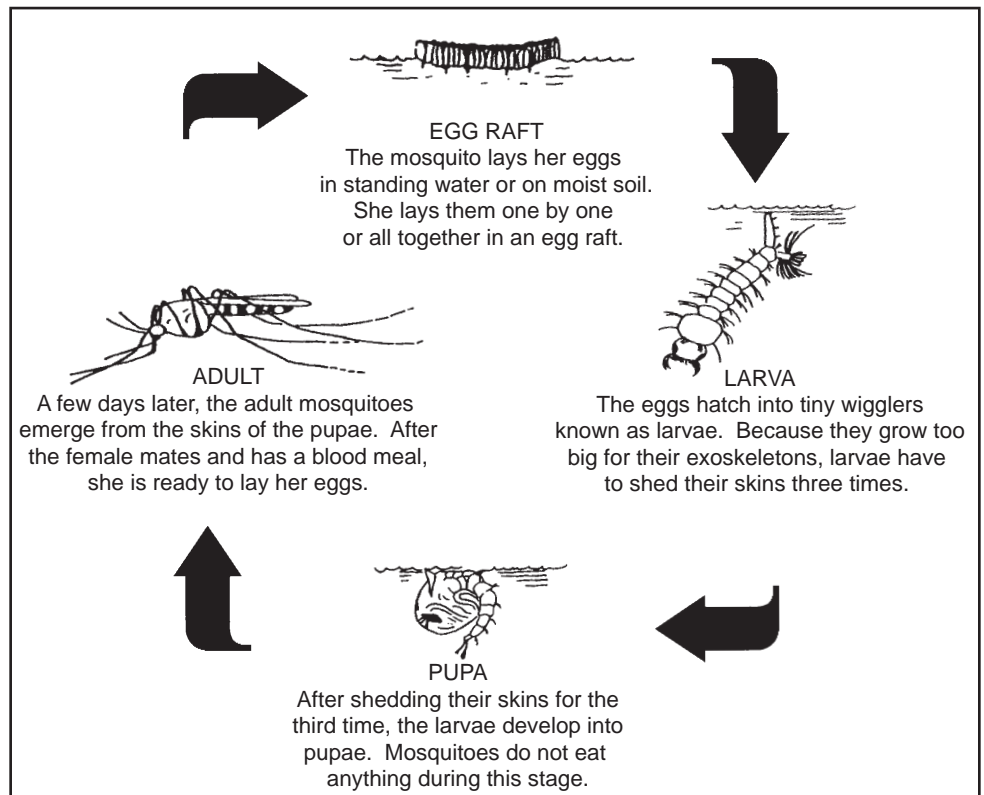
a developmental change in form or structure of an animal



Female Mosquito



Male Mosquito



See if you can unscramble these words about mosquitoes!

Hint: There is a picture of each word somewhere on this page.



□ □ □ □

adeh



□ □ □ □ □ □ □ □

mabnedo



□ □ □ □ □ □

tladu



□ □ □ □ □ □ □ □

grageft



□ □ □ □ □ □ □ □

toxhar



□ □ □ □ □ □ □ □

varla



□ □ □ □ □ □ □ □ □ □ □ □

crossobip



□ □ □ □ □ □

uapp

Mosquito-Borne Diseases

Mosquitoes are more than just a nuisance. They carry diseases as well. Some of the most common diseases borne by mosquitoes are the West Nile virus, Dengue, Malaria, Yellow Fever, St. Louis Encephalitis and Eastern Equine Encephalitis. Encephalitis is the swelling of the brain that is caused by some of these diseases. One of the most deadly mosquito-borne disease in the world is malaria, which kills up to three million people each year. Mosquitoes can also transmit heartworm to dogs and cats. Mosquitoes can spread these diseases when they feed on an infected animal or human, and then bite a healthy animal or human. For example, when a mosquito consumes the blood of a bird infected with the West Nile virus, the virus multiplies within the mosquito's stomach and moves throughout its body. Then, when the mosquito bites another animal or human, the disease is transmitted by the saliva the mosquito injects under the victim's skin.

Using the list below, find and circle all the names of mosquito-borne diseases hidden in the puzzle. The words can be forward, backward, up, down or diagonal.



ENCEPHALITIS
WEST NILE
ST LOUIS

DENGUE
MALARIA
YELLOW FEVER

EASTERN EQUINE
HEART WORM

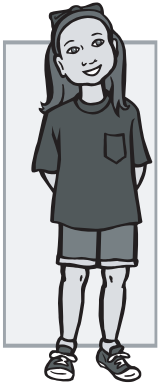
Mosquitoes Make Terrible Neighbors - Don't Invite Them Into Your Yard!

One of the best ways to reduce the number of mosquitoes around your house is to make sure they do not have any containers of standing water in which to lay their eggs and grow. There are all sorts of places in the picture below where mosquito larvae can live. Can you find and circle all 18 locations? Remember, mosquitoes can grow in *anything* that contains or collects standing water.



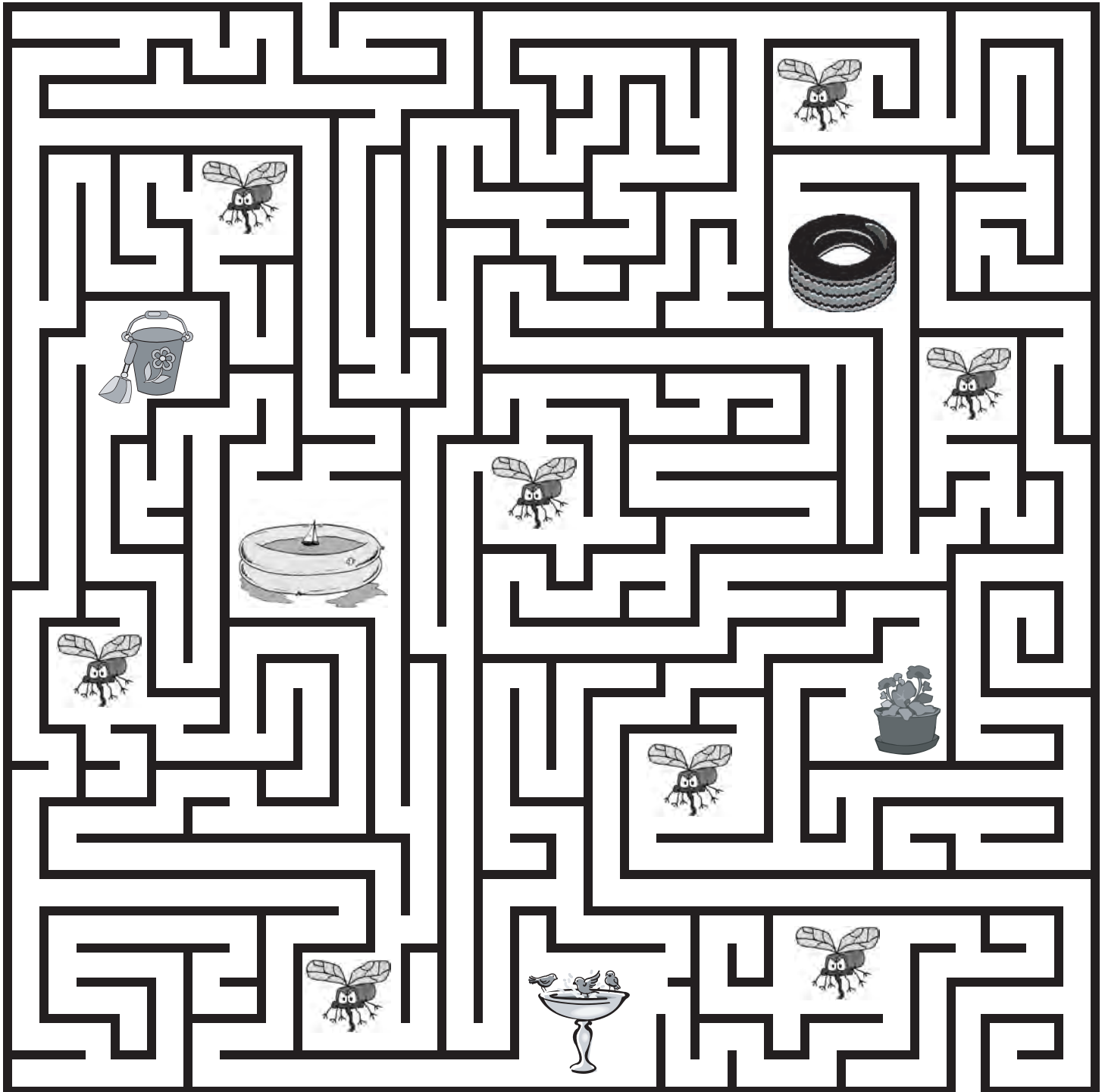
Answers: rain gutter, oil drum, bucket, puddle at the base of gutter, plant saucer, pond, watering can, holes in the brick, empty soda can, tree hole, wagon, water dish, bird bath, tarp over wood pile, wheel barrow, wading pool, canoe, tires.

Help Anna Through the Maze



Anna needs to dump out all the containers of standing water where mosquito larvae can grow. Can you help her to get to each container without getting bit by a mosquito?






Enter








Exit

Solve the Picture Puzzles to Complete Each Sentence

Example: Mosquitoes lay their eggs in water.

 -  = W +  = WANT - N = WAT +  = WATBOXER -  = WATER
 WEASELANTBOXER = WATER







1. Only the _____ mosquito bites.

 -  +  + i -  +  - r +  - 

2. When mosquitoes are in the second stage of their life cycle, they are called _____.

c +  -  + ne +  -  +  - s

3. Mosquitoes need _____ for protein to lay their eggs.

 -  + p +  -  + a +  - 

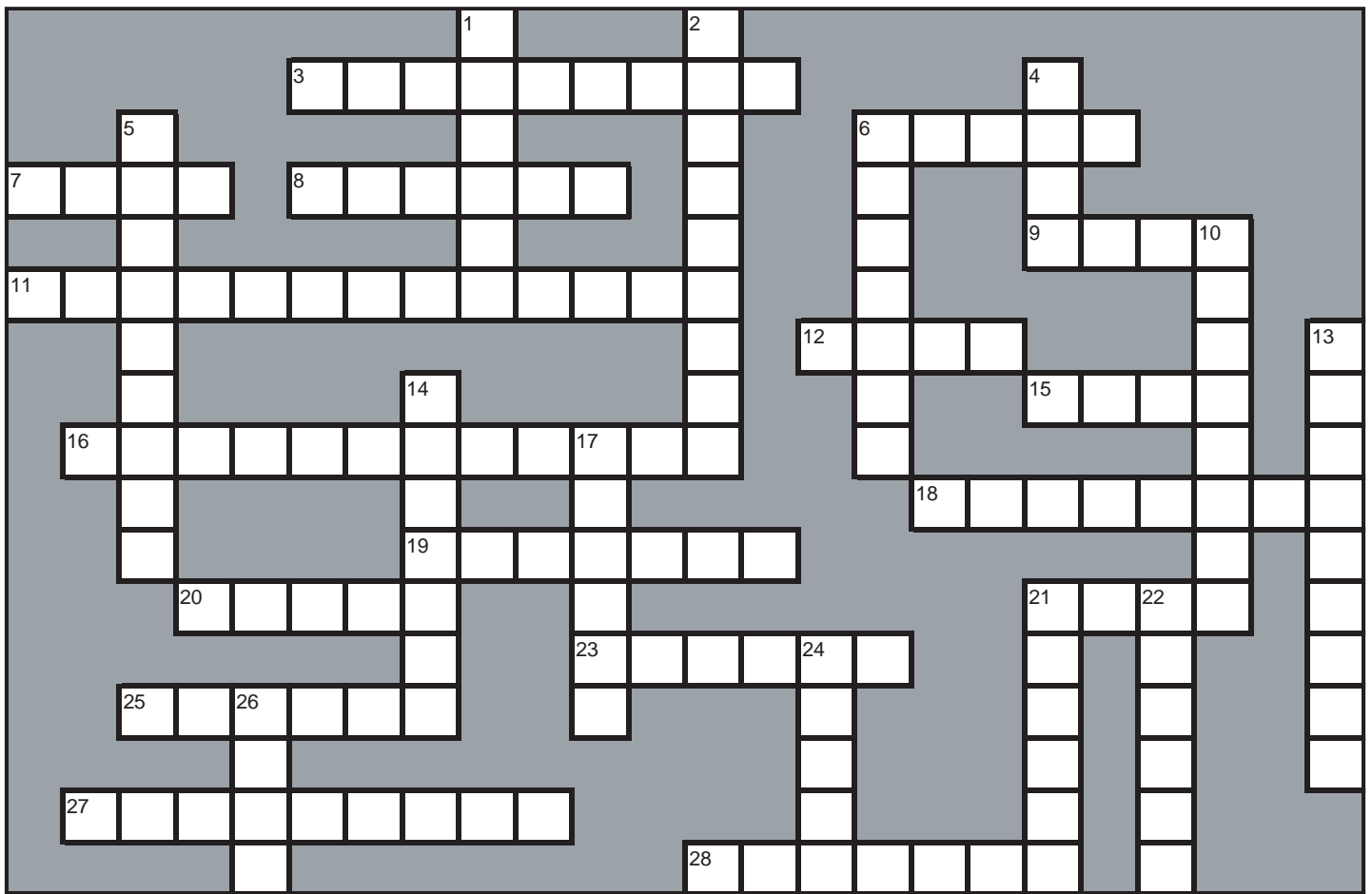
4. Mosquitoes are attracted by your _____, because they smell the carbon dioxide.

 - 1 +  -  +  - r

5. Mosquitoes are not only a nuisance, but they also spread _____.

 - me +  -  + s +  - 

CROSSWORD PUZZLE



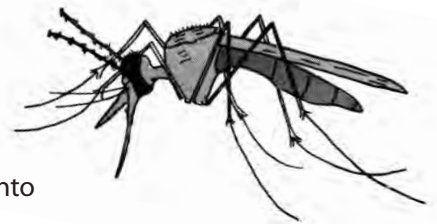
ACROSS

3. Mosquitoes can give dogs _____ disease.
6. Mosquitoes are called _____ during the third stage of their development.
7. To keep mosquitoes from growing in your _____, you should replace the water weekly.
8. Only _____ mosquitoes drink blood in order to reproduce.
9. Mosquitoes start their lives as _____.
11. The process of the pupa turning into an adult mosquito is called _____.
12. The first segment of the mosquito's body is called the _____.
15. Mosquitoes are most active during dusk and _____.
16. Many mosquito borne diseases cause a swelling of the brain called _____.
18. Mosquitoes can transmit the _____ virus by feeding on an infected bird and then biting a human.
19. The third segment of a mosquito's body is called the _____.
20. Mosquito larvae and pupae live in _____.
21. To protect yourself from mosquito bites, you should wear _____ sleeves and pants.
23. Mosquitoes are called _____ during the fourth and final stage of their development.
25. Mosquitoes inject you with their _____ so your blood will not clot while they feed.

27. The _____ is a natural predator of the mosquito.
28. A mosquito bite not only makes you itch, but it could also give you a _____.

DOWN

1. Mosquitoes are attracted to the carbon dioxide in your _____.
2. The part of the mosquito that it pokes into your skin is called the _____.
4. The _____ mosquito does not bite.
5. Mosquitoes can grow in any kind of _____ that holds water.
6. Mosquitoes need the _____ in your blood to develop their eggs.
10. Mosquitoes lay their eggs in _____ water.
14. Each year, _____ causes up to three million deaths worldwide.
13. Wearing mosquito _____ can keep the mosquitoes from landing on you.
17. The second segment of the mosquito's body is called the _____.
21. Mosquitoes are called _____ during the second stage of their life cycle.
22. Male mosquitoes feed on plant _____.
24. Mosquitoes can grow in old _____ that have been left out in the rain.
26. Mosquitoes have six _____.



WORD BANK

ABDOMEN	MALARIA
ADULTS	MALE
BREATH	METAMORPHOSIS
CONTAINER	NECTAR
DAWN	POOL
DISEASE	PROBOSCIS
DRAGONFLY	PROTEIN
EGGS	PUPAE
ENCEPHALITIS	REPELLENT
FEMALE	SALIVA
HEAD	STANDING
HEARTWORM	THORAX
LARVAE	TIRES
LEGS	WATER
LONG	WEST NILE

Home Checklist

Listed below are some places where you might find mosquitoes growing in your yard. Look for each item in the list and check it for water.

If you find any water, dump it out so larvae cannot grow there. Put a check in the correct box for each item.

Be a Mosquito Inspector Find Them Before They Find You!



I found these: I found water in and emptied these: I did not find any of these:

	I found these:	I found water in and emptied these:	I did not find any of these:
bird baths			
boats			
buckets			
cans, bottles or jars			
flower pots and saucers			
ornamental ponds			
pet water dishes			
rain barrels			
tarps			
tires			
toys			
tree holes			
wading pools			
wheel barrows			
other			
other			



Mosquitoes have been around for millions of years. Scientists call mosquitoes “exquisite survivors,” because of their ability to live in many different places and climates. Right here in Monmouth County where you live, there are more than 40 different kinds of mosquitoes. Some mosquitoes can make people or animals sick. Because mosquitoes have been around for so long, many myths – or beliefs that aren’t true – have been told about them. Here are the REAL facts about mosquitoes.

Myths and Facts About Mosquitoes

Myth: Both female and male mosquitoes bite

Fact: Only the female mosquito bites. She uses the protein from your blood to develop her eggs. The male mosquito feeds on nectar from flowers.

Myth: All mosquitoes carry disease.

Fact: Only a few species of mosquitoes pose a health threat in O qpo qwj County.

Myth: The mosquito dies after she bites you.

Fact: Mosquitoes are capable of biting more than once. After the female mosquito takes a blood meal and completes the development of her eggs, numbering up; to 250, she may then seek another blood meal to develop more eggs.

Myths: Mosquitoes can transmit HIV/AIDS.

Facts: There is no scientific evidence to support the theory that mosquitoes can transmit the HIV virus.

Myth: Only the female mosquito makes a buzzing sound.

Fact: The buzzing sound you hear is from the beating of the wings of either the male or female. Most people don’t hear the male mosquito because it doesn’t bite.

Myth: Bats and Purple Martin birds are very effective at controlling mosquitoes.

Fact: Bats and Purple Martins are indiscriminate feeders and will eat any sort of insect that flies by. Since they don’t concentrate on mosquitoes, they rarely have any substantial effect on the mosquito populations.

Myth: Bug zappers are good for controlling mosquitoes.

Fact: Bug zappers kill many kinds of insects, including beneficial ones. Bug zappers do more harm than good.

**YOU CAN FIND MOSQUITOES BEFORE THEY
FIND YOU!**

***FIND ALL SOURCES OF STANDING WATER. YOU
MIGHT BE SURPRISED WHERE THEY WANT TO
LIVE!***

CHECK:

***PET DISHES
PLANTS AND PLANT SAUCERS
BIRDBATHS
REFLECTING PONDS
OLD TIRES
LAWN CHAIRS
PAIS
PUDDLES THAT NEVER DRY UP***

***MOSQUITOES ARE TERRIBLE NEIGHBORS. LET
THEM KNOW, "WE DON'T WANT YOU IN OUR
NEIGHBORHOOD!"***

**Monmouth County
Mosquito Control Division**



Printing provided by the Monmouth County Board of Chosen Freeholders

**Lillian G. Burry, Director
John P. Curley, Deputy Director
Thomas A. Arnone
Gary J. Rich, Sr.
Serena DiMaso**