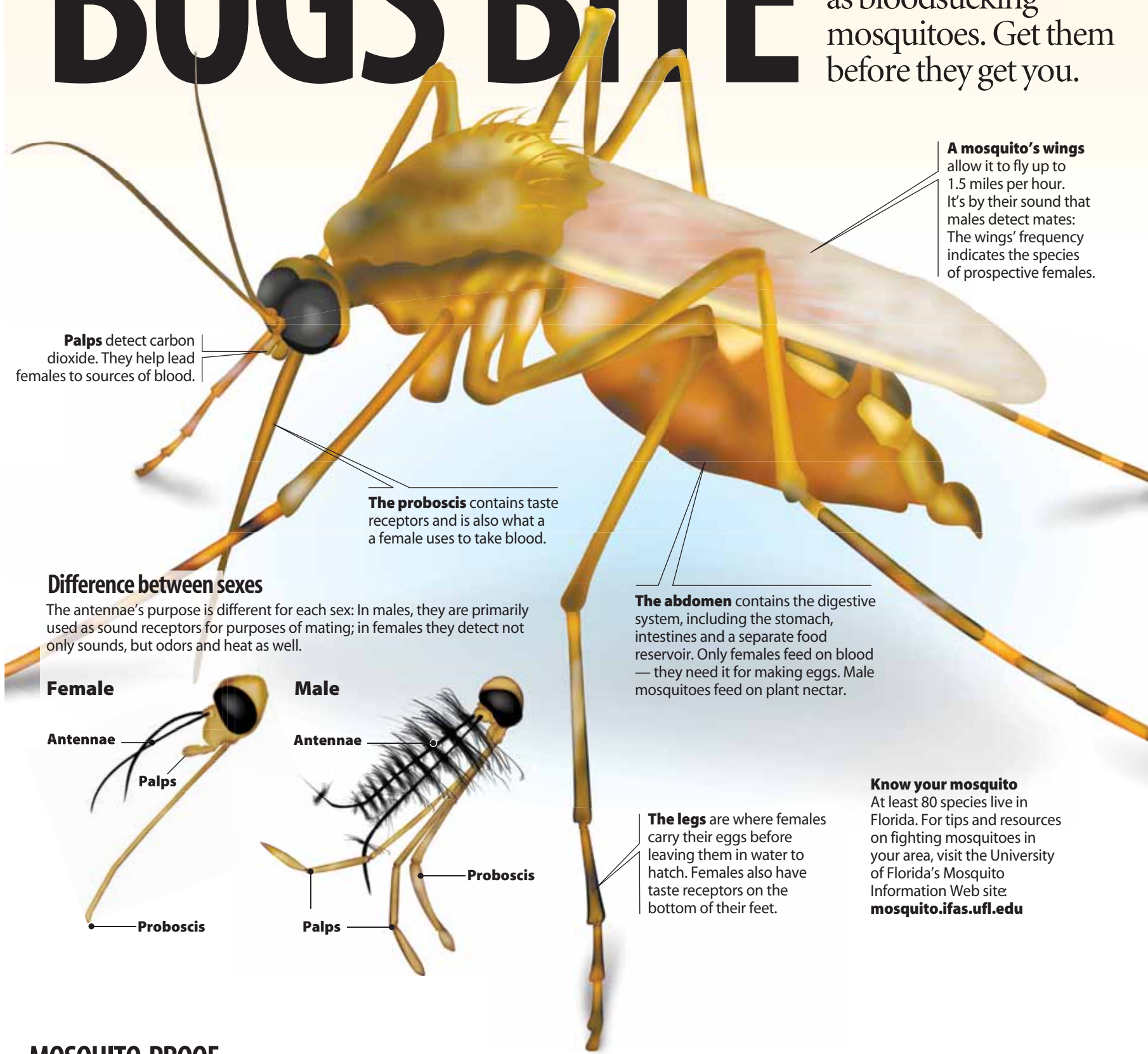


# DON'T LET THE BAD BUGS BITE

Few summertime pests are as relentless as bloodsucking mosquitoes. Get them before they get you.



## Difference between sexes

The antennae's purpose is different for each sex: In males, they are primarily used as sound receptors for purposes of mating; in females they detect not only sounds, but odors and heat as well.

### Female

Antennae

Palps

Proboscis

### Male

Antennae

Proboscis

Palps

## Know your mosquito

At least 80 species live in Florida. For tips and resources on fighting mosquitoes in your area, visit the University of Florida's Mosquito Information Web site: [mosquito.ifas.ufl.edu](http://mosquito.ifas.ufl.edu)

## HOW MOSQUITOS ARE MADE

Mosquitos hatch in water; puddles, birdbaths and other sources of stagnant water are ideal places for eggs. This is how a typical mosquito is born:



### 1 Egg

In some species, eggs are laid on standing water and together in rafts of 200 or more. The eggs float on the water and usually hatch within 48 hours.



### Breathing tube

### 2 Larva

A larva can live in the water for up to two weeks and sheds its skin four times. The larva breathes through a small tube when it rises to the water's surface.



### 3 Pupa

The pupa can take several days to develop into an adult. It does not eat during this time and continues breathing through tubes. When the adult emerges from the pupal shell, it rests to allow its body parts to harden.



### 4 Adult

The female mosquito's life span is anywhere from three weeks to several months. In that time, she'll lay as many as 500 eggs.

## MOSQUITO-PROOF YOUR HOME

There are several devices on the market that claim to either repel or kill mosquitos. How effective are they, and how much do they cost? If you're shopping around, here are five devices you may encounter:



### Powered bug trap (\$300-\$1,500)

**What it does:** A propane tank (1) supplies gas for the heater (2) that vents carbon dioxide to attract mosquitoes. Light and heat radiate from the dome (3), where insects land. They are sucked into a vacuum (4) and trapped in a container (5) where they die.

**Does it work?** It kills plenty of mosquitoes, but it's less effective on windy days, and works only within a certain radius.



### Foggers & sprayers (\$60-\$450)

**What they do:** Deliver insecticide in either a plume of fog or spray. More expensive versions are generator-powered or full installations that work like a lawn sprinkler system.

**Do they work?** The chemicals will curtail mosquito populations, but only if you know where and when to spray. Knowledge of mosquito species and behavior is essential for effective use.



### Insect zapper (\$20-\$80)

**What it does:** Attracts bugs with ultraviolet light; insects are electrocuted on contact.

**Does it work?** Zappers are unproven to reduce mosquito populations. They often kill far more insects of other types, partly because many mosquito species aren't attracted to UV light.



### Ultrasound device (\$10-\$20)

**What it does:** Worn around wrist or waist, it mimics sounds of mosquito predators to scare away biting females.

**Does it work?** No evidence shows that any of these devices work.



### Citronella candle (\$3-\$7)

**What it does:** Emits smoke and fragrance to repel mosquitoes.

**Does it work?** Yes, but it is most effective in enclosed spaces with little wind.

## MOSQUITO-PROOF YOURSELF

**Night biters**  
Dusk to dawn is peak biting time. Take precautions.

**Use repellent**  
Types containing DEET, picaridin or oil of lemon eucalyptus are best.

**Watch what you wear**  
Mosquitoes are attracted to dark colors. Wearing loose, long sleeves in light colors and long pants help protect against bites.

## TAKE CONTROL OF YOUR SURROUNDINGS

Most mosquitoes live their short lives within 100 feet of where they are born. That makes it easier to keep bug populations down simply by controlling your immediate outdoor environment. Here's how:



**1. Drain standing water**  
Clear your yard of items that collect water. Planters, open bottles, pails, watering cans, tires, even something as shallow as a bottle cap can be breeding places for mosquitoes. Also make sure rain gutters are clear of debris.



**2. Calibrate sprinklers**  
Ten minutes per watering should be enough. Any longer and you may be creating mosquito breeding areas. If your yard needs more water, allow time between cycles for the ground to absorb the excess.



**3. Don't let them hatch**  
Spray larvicide in problem puddles or areas of standing water that you can't drain. For bird baths and garden ponds, mosquito "donuts," shown floating in the bath above, can be effective at killing mosquito larvae.



**4. Repair screens**  
They can't bite you if they can't get in. Replace torn window and door screens and install screen doors on entrances without them. And don't forget to check enclosed porches and patios.



**5. Spread the word**  
Offer to help neighbors take similar precautions. If you live in an apartment or condominium, ask your homeowner association to work diligently to keep populations down.