

# Lizards Beware: Things that Go Flash in the Night

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Summer has (unofficially) arrived. But along with summer comes bugs. Many, many bugs. From the numerous 13-year Periodic Cicadas (one or two), to the annual pests like ticks and heartworm-disease-carrying mosquitoes, to the mesmerizing fireflies, the summer season is loaded with insects. Although that often means even more vigilance for our dogs and cats (keep up with those monthly heartworm and flea and tick preventatives, watch out for eating too many cicadas or other bugs), the large number of insects of summer make an attractive and inexpensive source of food for insect-eating reptile pets as well as amphibians.



But lizards beware. Not all insects are created equal. While it may be tempting to catch a few bugs from the yard for a special treat or diet supplement for insectivorous pets, hazards abound. One of the most tempting insects of summer is the all-too-easy to spot firefly, or lightning bug (insect). Their telltale yellow flashing abdomen is synonymous with our summers. But that same yellow flashing abdomen might as well be a flashing warning sign to pet reptiles:

“Danger....Danger...Do Not... Eat...Me”

In fact, for Bearded Dragons, one of the most popular pet lizards, eating as little as one firefly is fatal. The toxins contained in fireflies, called lucibufagins (which actually have nothing to do with the flashing glow), cause severe heart toxicity. Bearded Dragons that have eaten fireflies have show symptoms ranging from regurgitation, color change, trouble breathing, and mouth gaping to sudden death. Most, if not all, will die from the toxicity.

But unless you keep your Bearded Dragons outside in the open air in the summers, you can avoid this tragedy by simply not feeding fireflies to Bearded Dragons; even better- do not feed fireflies to any pet reptiles, especially non-native lizards. African Chameleon species, for example, are also known to have been affected by fireflies. The safest rule of thumb is: don't use fireflies as feeder insects.

Forget forbidden fireflies, there is an abundance of bugs out there. Many, probably most, insects are non-toxic and safe for most reptiles to eat. But consider these things: Can you identify milkweed eating insects like monarch and queen butterflies or lygaeid bugs (milkweed contains a similar toxin)? Or wasps, or bees? Asian ladybugs? Do you know that insects in your house/yard/neighborhood park/field/wherever have not been exposed to or treated with insecticides that could be potentially harmful?

Feeding “wild” insects can be a potential source of nutrition and enrichment for insectivorous pet reptiles, but extreme caution must be used when selecting potential insects for food. With time and experience, and immense care to avoid hazards and toxins, your pet bearded dragon, chameleon or other insect-eating reptile or amphibian can enjoy the many fruits, er, bugs of summer. Including an occasional cicada.

Dont's	Do's
Any Insect you don't know/ Can't identify	Commercial Feeder Insects
Fireflies	Crickets/Roaches/Meal worms/waxworms/Silk worms/etc.
Milkweed Eating Insects	<b>Check with an expert before feeding any wild caught insects until you are sure what is safe.</b>
Monarch/Queen Butterflies and caterpillars, Lygnaeid bugs	
Brightly Colored Insects/Larvae/Caterpillars	
Non-insects	
Spiders/Ticks/Scorpions/Arachnids Slugs/Snails Centipedes	
Anything with venomous sting or bite	
Wasps/Bees/Fire Ants/Velvet ants	

You can see a case report of firefly ingestion in Bearded Dragons here:

<http://www.nbb.cornell.edu/neurobio/eisner/pogona.html>

