

Red Bulbs and Reptiles



Written by The Bio Dude

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Plain and simple, reptiles' health revolves around having proper lighting, heating, and enriching their captive environment as much as possible. Being ectothermic they use color for a large amount of physiological, behavioral and environmental operations, such as finding food, mates and adequate basking areas for basic homeostasis. Although it is common to hear that they cannot see color, there is ample evidence that reptiles' visual color receptors CAN see a variety of colors, including red.

In this blog we will discuss why red bulbs are not the best and why there are better options for your pets.

<https://www.thebiodude.com/blogs/helpful-husbandry-faqs/photoperiod-is-important-to-your-pet-reptile-here-s-why>

Red bulbs were designed with the thought they would produce nighttime heat without producing a bright light. In actuality, this disrupts the reptile's photoperiod, affecting their sleep, eating, behavior and overall health due to the stress it can cause. Think of this this way, if you were trapped in a room each night at bedtime, and the whole room was illuminated a bright red, how well would you sleep? The answer is simple, NO! In a

captive environment it is our responsibility to replicate nature as accurately as possible. This gives them the ability to thrive, not just survive. In the wild, their environment will not be illuminated completely red or yellow during the nighttime. Usually, a darker bulb that emits no light or very minimal light is recommended, especially for crepuscular reptiles. When using LEDs and other plant lights, as long as the color of the light does not have the color "shade" the keeper should not have any issues with it, pending they are maintaining a proper schedule.

A photoperiod is the amount of time between sunrise and sunset, basically a day and night schedule. Having extremely sensitive eyes, diurnal reptiles use the sun rising as a sign to bask and obtain UVB, where nocturnal reptiles use the sun setting as a sign it's time to be active for hunting, foraging, and hydrating.

<https://www.youtube.com/watch?v=1q3P8T49NTA&t=375s>

There are many options when finding better lighting for heat than red bulbs. **(Bulb wattage depends on researching the specific animals' husbandry requirements and enclosure sizing)**

- **Day time** - Diurnal reptiles like [Bearded dragons](#) need a daytime light other than [UVB](#) and *will* utilize a [basking](#) area. As the goal is heat and light, Flood lamps are directional, making them perfect for basking. White incandescent bulbs are great, taking into consideration that halogen bulbs are the more enhanced version of incandescent, allowing them to be longer lasting and produce more efficient heat saving energy in the process.

It's important to note that a [UVB bulb](#) is different than a [heating bulb](#)

For the reptiles that need a lower temperature for basking such as [Crested geckos](#) or [Jacksons chameleons](#), you can use a [nano heating element](#).

<https://www.youtube.com/watch?v=fBQduMAZKPYP>

- **Ambient** - for the reptiles that may be crepuscular or just for extra heating purposes, a [ceramic heat emitter](#) and the usage of a lower wattage nano element to help produce enough heat.
- **Nighttime** - The best option seems to be a [ceramic heat emitter](#), as they are readily available in most retail outlets and online. Depending on enclosure size there are nano ceramic emitters as well. Some keepers use radiant heat panels, [heating pads](#) or heat tape. *Heat rocks cannot be properly used, even with a thermostat and will cause burns to your reptile, do not use them*

Regardless of what heating element you choose, safety measures need to be taken for the bulb or CHE, so it also has a healthy life span. Using a [timer](#), a [thermostat](#), [proper bulb fixtures](#) and monitoring daily will keep issues from happening, such as overheating and burning the animal, the animal getting to the

bulb and burning themselves, melting the fixture the bulb is plugged into, or the enclosure the fixture is on and fires being the most common.

The Dude Abides.

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