Bioactivity and Ball Pythons

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From the Desk of the Dude

Ball pythons (*Python regius*) may be the most common snake in captivity, but their true natures are often poorly understood. They are often dismissed as "pet rocks," barely moving and boring. At TheBioDude, I believe that this is not the case. In a natural, BioActive environment, ball pythons thrive as active hunters. You may be surprised by how inquisitive and brave your snake becomes in the evening!



The care norm for this species is often sterile, even bare tubs. While this may provide the basic elements for their survival, these animals thrive in a more enriched setup. Ball pythons that do not eat in bare tubs often become ravenous in a bioactive setup. Their activity levels increase, making for a better-toned snake fit for breeding and a longer life. Kept in a natural bioactive enclosure, their true personalities can come to light.

This ball python enjoys her BioActive home, with ample cover, cork log burrows, and natural enrichment. After making the switch, she became a ravenous eater. (Photo credit: Iris Yoon)



A few misconceptions about ball pythons:

They are inactive. False. Though they sleep during daylight hours, ball pythons become active hunters at night. They climb, hunt, and cruise throughout their enclosures, using every available inch of habitat. Natural enclosures with lots of cover encourage these animals to exhibit their natural behaviors. Leaf litter and bioactive soil let them experience a multitude of natural smells, and wood and plants provide interesting smells and textures.

They won't climb. False. In one survey, the majority of wild male and juvenile ball pythons were actually found in trees! Ball pythons are all-terrain vehicles, traveling below and above ground. Their adaptability to different situations makes them hardy and wide-spread in their natural range. Captive ball pythons enjoy wood and rock ledges as part of their habitats.



They don't appreciate a rich, natural environment. False. Ball pythons in naturalistic cages have been observed to become more active and toned. Picky eaters often become reliable. Raised in varied, enriched environments, snakes become less susceptible to stress, which makes them better captives. BioActive habitats make ball pythons healthy, happy snakes!

Here at TheBioDude, I built our Ball Python BioActive Kit with the natural traits of your animal in mind. It starts with the Dude's Terra Firma bioactive soil. Terra Firma replicates the nutrient-filled substrates that ball pythons experience in the wild. For ease of the keeper, it's designed to support natural cleaning microfauna (springtails and isopods) without a drainage layer. With occasional watering, our Terra Firma soil provides necessary humidity levels even in

glass tanks. Biodegradables return nutrients to the soil, keeping your snake's microenvironment healthy. As they are broken down, natural chemicals and smells are released. Their scents and textures are fascinating to ball pythons, helping to exercise your animal's brain!



Terra Firma soil also supports plant life. Plants are particularly beneficial for ball pythons because they provide security and cover, natural textures, and exercise opportunities. Ball pythons seem to recognize and respond well to live plants. I recommend heavy-duty plants to hold up to the snake's weight and activity level. Our ball python kit includes an LED light suitable for growing terrarium plants that can deal with your snakes weight and tendencies.

As mentioned above, ball pythons appreciate both burrows and heights. In the kit, I also include cork flats that can satisfy these needs. Cork is a versatile, hardy wood resistant to mold. Cork flats can be partially buried, with a small area excavated in the soil, to make a secure natural burrow. They also can be propped against each other and secured in substrate to create ledges and areas of greater height in the cage. The natural textures and smells of cork stimulate exercise and investigation in ball pythons. Better muscle tone and less susceptibility to stress is the result!

All of the soils at TheBioDude support bioactivity, which means fewer cleaning chores. However, some spot-cleaning of feces may be necessary for ball pythons because of their large meals and fast metabolism. Any particles left behind will quickly be taken care of by the clean-up crew. The BioActive soil rejuvenates itself and does not need to be replaced.

Finally, I recommend a radiant heat source (such as a ceramic heat emitter or radiant heat panel) when using keeping ball pythons bioactive. The reason is that a thicker layer of substrate reduces the effectiveness of belly heat. Ball pythons do not often burrow by themselves, so they may be less able to contact any belly heat. One advantage to using radiant

heat is that it provides a much better temperature gradient - your snake will have more choice in their body temperature besides just hot and cool. This is more natural for the snake, and the greater choice can provide health benefits.

When their needs are considered, ball pythons become fascinating captives. We hope this article inspires you to create an amazing habitat for your animal! Email the Dude at joshthebiodude@gmail.com if you have more questions, and share your current bioactive enclosures for your ball pythons. Happy keeping!



In a naturalistic habitat, the ball python truly becomes a living jewel.

(Photo credit: snakejudy.tumblr.com)

The Dude would like to thank Iris Yoon for taking the time to find great research articles and putting together such a great tidbit about these beautiful snakes.

The Dude Abides

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