



*

Death Feigning and Other Desert Beetles (Family Tenebrionidae)

Pop and Lock Desert Pretenders

Also known as the “Pop and Lock” beetles for their peculiar movements named after the popular dance, or the ironclad beetles for their heavy, thickened, or hardened smooth to spiny to knobby elytra (or hardened wing and abdomen covers), the death feigning and related species of beetles belong to the large, and diverse darkling beetle genus consisting of over 20,000 species found worldwide. They are well adapted for survival in their arid environments, usually requiring little moisture. Depending on the species, they may vary in color from slate gray, bluish, or bluish-gray, to blackish, or grayish. Most death feigning beetles and their related species, however, are indigenous to the southwestern United States and Mexico, where they most commonly occur in dry, arid to semi-arid environments. As their names may imply, these beetles are well-known for their death feigning, or playing dead defensive behavior by flipping themselves onto their backs when threatened by a potential predator. These beetles may also emit a distasteful, powdery or waxy substance when threatened or to prevent dehydration and overheating as well. Most species are secretive and nocturnal to crepuscular, and are also often colonial in nature. The Blue Death Feigning Beetle, *Asbolus verrucosus*, is perhaps the most widely kept and sought after species, although other species that are occasionally kept include the Smooth Death Feigning Beetles, *A. laevis* and *A. papillosus*, as well as the Black Death Feigning Beetle, *Cryptoglossa variolosa*, are also kept. Although fairly new to the pet trade, these beetles have recently become increasingly popular due to their ease of care and husbandry, variety of colors, and long lifespans for enthusiasts.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum: Arthropoda

Class: Insecta

Order: Coleoptera

Family: Tenebrionidae

Genus: *Asbolus* sp.

**Taxonomy subject to change and revision.*

Lifespan and Longevity

Being fairly new to the pet trade, maximum captive longevity of death feigning beetles bugs is uncertain, but these species can have the potential of reaching up to 8 years or more in captivity.

<http://www.madisonherps.org>

Distribution and Habitat

Darkling beetles are a cosmopolitan genus of beetles, being found throughout most of worldwide in a variety of natural and artificial environments. When it comes to the death feigning beetles, however, most species are indigenous to the arid to semi-arid deserts, scrublands, and grasslands of the Sonoran Desert, as well as other areas of the southwestern United States and Mexico. They live in moderately moistened soil and microenvironments with access to ample vegetation and other cover.

Conservation Status

Not Evaluated for the IUCN Red List (NE) or otherwise Data Deficient (DD).

Experience Level Required

Novice to Beginner to Intermediate/Moderate.

Size

Although darkling beetles in general can vary considerably in size depending upon the species, most death feigning beetles range in size from up to approximately 1/2 to 3/4 inches in size.

Housing and Enclosure

Death feigning beetles are fairly simple to house and accommodate, with groups or colonies of these insects of up to ten (10) or more being able to be housed together, even with other area indigenous invertebrate species provided the enclosure is of a reasonable size, food and other resources are provided, and the enclosure is sturdy, secure, and adequately ventilated.

Cannibalism is seldom a concern unless these other requirements are not met. Several different types of enclosures will work for housing these beetles, which should be at 5 to 10 gallons long in dimensions or appropriately larger, and can include adequately secured tubs or plastic containers, kritic keepers/faunariums, “bio-cube” or similar vivariums or terrariums. Several of the acrylic displays and enclosures that are now manufactured for housing arachnids, insects, and other invertebrates can also be used. A relatively dry bottom substrate of chemical and pesticide free play sand, or soil can be provided. They will also frequently burrow as well. These beetles will utilize many furnishings in the enclosure for hiding or climbing, including egg cartons, cork bark or rock slabs/hides, live or artificial vines, plants, or other foliage, paper towel rolls, or other similar hides. These beetles will derive much of their water and hydration from their food, but can also benefit from periodic misting or a large, shallow water dish provided in the enclosure as well.

Temperature, Lighting, and Humidity

Death feigning beetles are also quite simple to maintain as far as their temperature and humidity, usually requiring little to no additional lighting or heating, although UVA/UVB lighting can greatly benefit these beetles activity levels and exoskeleton health. A thermal gradient in the enclosure should be provided ranging from 70 to 75 degrees as ambient/cooler temperatures, and 80 to 85 degrees F towards the warmer end using a low wattage overhead incandescent bulb, ceramic or radiant heat emitter, or a UTH (under tank heating element) if necessary. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one’s needs, as well as those of one’s animals can be given as well. Maintain at relatively lower humidity at around 45 to 60%. Spot clean the enclosure for wastes, feces, or uneaten food at least once per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months.

Feeding, Diet, and Nutrition

<http://www.madisonherps.org>

Omnivorous to Detritivorous; In the wild, death feigning and other related desert beetles are opportunistic feeders, scavenging upon a variety of fresh to decaying fruit, vegetable, and other vegetative matter, as well as occasionally carrion. In captivity, these beetles are quite simple to feed, and can be given fresh, chopped up fruits and/or vegetables including, but not limited to apples, oranges, carrots, and other fruits or vegetables, potatoes or other grains, as well as dried crickets, mealworms, or many commercially available dog and cat foods or fish flakes/fish foods. No additional, or supplemental calcium, vitamin D3, or other additives are typically required when maintaining these beetles. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

As their common names, imply, death feigning beetles may flip themselves over and feign death on their backs as a defensive mechanism when threatened or handled. They may also secrete a potentially distasteful and/or irritating waxy substance when handled as well. Some species may also present other unusual defensive postures as well. While not typically aggressive or overly fast moving or prone to biting, and while they can be handled, death feigning beetles, as with most invertebrates, can be fragile and delicate, and should be handled carefully, as to prevent dropping or injuring/killing them.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact the Madison Area Herpetological Society at info@madisonherps.org

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility.

*Copyright Madison Area Herpetological Society, 2018