

## Ackie Monitor (*Varanus acanthurus*)

**Difficulty:** Intermediate

Ackie monitors (also known as simply “ackies”) are 24” long lizards with a slender body, snakelike tongue, tapered snout, and a jagged, whiplike tail. Their coloring features a pale ocellated pattern on a darker red or brown background, with pale stripes on the head and neck.

These lizards are native to the northwest quadrant of Australia, where they prefer arid and seasonally dry habitats with lots of rocks, boulders, and often, spinifex grass. When they are not out basking or hunting, ackies prefer to shelter in burrows and crevices between rocks.

Ackies are gregarious little monitor lizards suitable for people who enjoy monitor lizards’ famous intelligence and activity, but prefer a smaller pet. They are known to live at least 15 years in captivity with good care.

### Shopping List

- 5’L x 2.5’W x 4’H enclosure (with 12-24” substrate dam)
- Dual dome heat lamp with ceramic sockets
- 100w PAR38 halogen flood bulb, x2
- Plug-in lamp dimmers, x2
- Retes Stack
  - Several large pieces of flagstone or slate tile
  - 2”W x 2”H wood spacers
  - Wood stilts
- Digital thermometer/hygrometer device with probes
- Infrared thermometer (“temp gun”)
- 34” T5 HO desert UVB bulb (Arcadia or Zoo Med brand)
- 36” T5 HO light fixture with reflector (Arcadia or Vivarium Electronics brand)
- 46-48” 6000-7000K LED or fluorescent plant light
- Surge protector with digital timer
- 12-24” clean sand substrate (see substrate section for details)
- Environmental enrichment items (hides, logs, branches, plants, rocks, etc.)
- Water dish
- Calcium powder supplement (low vitamin D3)
- Multivitamin powder supplement
- Soft-tipped feeding tweezers

### Housing

Ackie monitors are active lizards that need plenty of space for burrowing, which means that they should be kept in no smaller than a 5’L x 2.5’W x 4’H enclosure, including a 12-24” tall substrate dam. Larger is preferable. The enclosure should be front-opening for easy access, and should have good ventilation.

## Can multiple ackie monitors be housed together?

Yes, but it's not required for their wellbeing, and requires a larger enclosure to reduce the risk of fighting and injury. If you are not experienced with ackie monitors and/or not prepared to separate them into different enclosures in the event of conflict, it's best to keep only one ackie per enclosure.

## Lighting & UVB

Ackie monitors are *diurnal*, which means that they are more active during the day. This also means that they are stimulated by the presence of bright white light in their environment, and they require high-intensity UVB lighting for survival.

Lights should be kept on for 12 hours/day, or cycled seasonally from 13 hours/day during summer and 11 hours/day during winter.

### UVB Lighting

UVB lighting can be tricky, because in order to get the right strength of UVB (UV Index, or UVI), distance and potential mesh obstruction must be considered. To provide appropriate UVB in a single 60" x 30" x 48" ackie monitor enclosure, you will need a 34" Arcadia Dragon 12% bulb, placed on the warm side of the enclosure.

The basking platform should be placed as follows:

- UVB mounted over mesh: basking area 7-9" below UVB lamp
- UVB mounted under mesh: basking area 12-15" below UVB lamp

*(These recommendations are approximations based on available data. For best results, use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 4.0-6.0 in the basking area.)*

To create an appropriate gradient of temperatures and UVB, the basking platform should be the closest surface to the heat and UVB lamps in the enclosure. You will need to create a special type of basking platform called a Retes Stack for best results. For instructions, visit <https://reptifiles.com/ackie-monitor-care/ackie-monitor-temperatures-heating/>.

### Full-Spectrum Lighting

Bright light with a color temperature of 6000-7000K is suggested by experts to be important to keeping diurnal species active. Ackies with additional "daylight" lighting in their enclosure are likely to be more alert and active than those without, as well as demonstrating better appetite.

Full-spectrum lighting is not the same as reptile UVB lighting, so you will need two separate lamps. The Arcadia Jungle Dawn LED Bar and Bio Dude Glow & Grow are both excellent lamps for this purpose.

## Heating

Humans are *warm-blooded*, which means that our body temperature is automatically regulated. Ackie monitors, however, are *cold-blooded*, which means that they have to move between areas of different temperatures in order to regulate their body temperature. Ackies warm up by basking under the sun in the wild. In captivity, they do best with a couple of halogen heat lamps.

- **Basking surface temperature:** 158-172°F / 70-78°C
- **Warm side air temperature:** 84-100°F / 29-38°C
- **Cool side temperature:** 75-82°F / 24-28°C

Generally speaking, 100w PAR38 halogen flood bulbs should be plenty to achieve those basking temperatures. However, if you notice that they're getting too hot, dial it down with a plug-in lamp dimmer. If your basking area is too cool, you will need higher wattage bulbs.

You will need to construct a special type of basking platform for your ackie called a **Retes stack**. This is a stack of flat wood or stone pieces with spacers in between to create secure crevices where your ackie can feel secure while also choosing the exact temperature it wants to bask at.

To measure the basking surface temperature, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe placed on the basking surface under the heat source. The Etekcity 774 is a good infrared thermometer, and most reptile-brand digital probe thermometers function well.

## Humidity

Ackie monitors should have a range of humidity levels available in their enclosure, from an **average air humidity of 20-50%, to upwards of 80% underground**. Humidity levels should be measured by digital probe hygrometers, one with the probe placed on the ground in the middle of the enclosure, and the other with the probe placed inside the main burrow. Pour water into the substrate to raise humidity.

Low humidity (particularly in the burrow) is likely to cause dehydration and stuck shed for your ackie.

## Substrate

Ackie monitors are healthiest and happiest when they are housed on a substrate (a.k.a. "bedding") that imitates the conditions of their natural habitat: sand and very sandy soil. So the substrate in your ackie's enclosure should be fine sand or sandy soil, packed 12-18" deep — preferably deeper, if possible.

Due to egg cycling-related needs, males can be housed on a minimum of 12" of substrate, but females require 18" or deeper.

Jurassic Natural Australian Desert Dragon Habitat, Jurassic Reptile Substrate, Zoo Med ReptiSand, and The Bio Dude Terra Sahara are all suitable ackie monitor substrate options. Play sand is also a good budget option, although it may not hold burrows as well.

Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 6-12 months, depending on your needs.

## Décor

Decorations play an important role in your ackie's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing.

And, of course, they make the enclosure look nice! Here are some ideas:

- Cork logs

- Cork flats
- Sturdy branches
- Live or artificial plants
- Ledges
- 3D backgrounds

## Food

Ackie monitors are insectivores, which means they need to eat primarily insects to get the nutrition that their bodies need. How often they need to eat depends on age:

- **Hatchlings and juveniles (0-6 months) — daily**
- **Subadults and adults (>6 months) — every other day**
- **Reproductive females — daily**

Hatchlings and juveniles should be fed as much as they can eat, as they need the energy and nutrients to support growth. For subadults and adults, offer roughly as much as they are capable of eating within a 5-10 minute period. Reproductive (pregnant) females should be allowed to eat as much as they want.

The key to providing a healthy, balanced diet for your pet ackie is VARIETY. Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier pet that always looks forward to mealtime.

Feeder insects: crickets, dubia roaches, discoid roaches, red runner roaches, black soldier fly larvae, mealworms, superworms, darkling beetles, hornworms, silkworms, grasshoppers, centipedes, scorpions, isopods

Vertebrate prey, such as small feeder anoles/geckos, can also be occasionally offered.

## Supplements

To ensure that your ackie is getting all of the vitamins and minerals that they need, you will need a calcium powder and a multivitamin powder — or a good all-in-one.

There are many options, but Arcadia Earthpro A or Repashy Calcium Plus LoD are both solid all-in-one reptile supplements. For best results, use as directed by the manufacturer.

## Water

All living things on this planet need water, including the ones that live in the desert. Ackie monitors are no exception, and should have free access to a shallow bowl of fresh, clean water daily.

For more information about ackie monitor care, read the full-length [Ackie Monitor Care Guide](#) at [ReptiFiles.com](#).