Ball Python Bioactive Setup & Maintenance Checklist

A practical guide to choosing materials, establishing your cleanup crew, and keeping your enclosure healthy long-term.

Snake's Name: _____

Setup Date: _____

Last Inspection: _____

1. Material Selection Checklist

Choose safe, suitable materials before building your enclosure.

Enclosure & Structure

- ☐ The enclosure provides adequate space for the snake to stretch out and move naturally.
- ☐ The enclosure has secure doors, ventilation, and escape-proof openings.
- ☐ Heating equipment is suitable for the enclosure and controlled by an appropriate thermostat.
- ☐ Heat sources are guarded or otherwise inaccessible to prevent burns.
- ☐ Hides, branches, rocks, and decorations are stable and cannot collapse or trap the snake.
- ☐ Heavy furnishings have secure support and will not sink into loose substrate.

Substrate Selection

- ☐ The substrate is free from pesticides, fertilizers, chemical treatments, and unsuitable additives.
- ☐ The substrate is appropriate for ball pythons and compatible with the intended plants and cleanup crew.
- ☐ The substrate mix retains some moisture without becoming persistently saturated.
- ☐ The mix has sufficient structure to resist excessive compaction.
- ☐ Fine, dusty, sharp, or easily ingested loose materials have been avoided where inappropriate.
- ☐ The substrate depth suits the enclosure design, plant roots, and maintenance requirements.
- ☐ A small sample has been checked for drainage, moisture retention, and structural stability.

Leaf Litter, Moss & Decorations

- ☐ Leaf litter is clean, pesticide-free, and suitable for terrarium use.
- ☐ Bark and wood are safe, clean, and free from pests or chemical treatments.
- ☐ Sphagnum moss is used selectively where moisture retention is needed.
- ☐ Loose moss cannot easily become entangled with prey or be accidentally ingested.
- ☐ Plants are correctly identified and suitable for reptile enclosures.
- ☐ Plants have not been treated with pesticides or systemic chemicals of concern.
- ☐ Plant roots and pots do not introduce unsuitable fertilizers or contaminated materials.

Drainage & Water Management

- ☐ I have decided whether this enclosure actually needs a drainage layer.
- ☐ If used, the drainage layer has an appropriate separation barrier.
- ☐ The mesh is durable, suitable for enclosure use, and prevents substrate migration.
- ☐ Drainage materials cannot be accessed or swallowed by the snake.
- ☐ The drainage reservoir, if present, can be inspected and safely emptied.

☐ I understand that a drainage layer stores excess water; it does not automatically remove it.

2. Bioactive Ecosystem Setup Checklist

Build a functional ecosystem instead of simply adding plants and bugs.

Establish the Environment

☐ The enclosure's temperature gradient has been tested.

☐ Warm-side and cool-side temperatures have been measured using reliable instruments.

☐ Humidity is monitored at the snake's level.

☐ Humidity readings are checked in more than one location when practical.

☐ The enclosure maintains an appropriate humidity range without leaving the main surface persistently wet.

☐ A suitable humid hide is available when needed.

☐ Water bowls are stable, accessible, and unlikely to flood the substrate.

☐ Ventilation is adequate without causing excessive drying.

Build the Moisture Gradient

☐ The main travel surface is generally dry to the touch.

☐ The substrate beneath leaf litter is checked for excessive wetness.

☐ Suitable damp refuges are available for the cleanup crew.

☐ The substrate is not uniformly soaked.

☐ There are no persistent puddles or uncontrolled wet pockets.

☐ Watering is measured and adjusted according to actual conditions.

☐ I have checked moisture beneath hides and around water bowls.

Establish the Cleanup Crew (CUC)

☐ I selected isopods suitable for the enclosure's temperature and moisture conditions.

☐ I selected compatible springtails where appropriate.

☐ The cleanup crew comes from a reputable source.

☐ The colony is introduced only after the habitat conditions are suitable.

☐ There are protected refuges beneath cork bark, leaf litter, or other suitable cover.

☐ The cleanup crew has access to appropriate food resources.

☐ Supplemental food is offered conservatively when necessary.

☐ Uneaten food is removed before it becomes a sanitation problem.

☐ I understand that isopods and springtails cannot replace manual waste removal.

☐ I have a backup plan if the cleanup crew declines.

Plant & Habitat Placement

☐ Plants are positioned without blocking access to hides.

☐ Plant placement does not create inaccessible waste traps.

☐ There are open areas for movement and observation.

☐ The snake has secure, appropriately sized hides.

☐ Plants and decorations cannot injure the snake.

☐ The enclosure can be cleaned without dismantling the entire habitat.

3. Before Introducing the Ball Python

Do not use a fixed number of days as the only readiness test.

☐ Heating and temperature control have been tested.

☐ Humidity remains reasonably stable under normal operating conditions.

☐ The substrate drains and behaves as expected after watering.

☐ No persistent waterlogging or foul odors are present.

☐ Plants are stable and loose materials are secured.

☐ The cleanup crew has suitable habitat and food.

☐ The enclosure is free from visible chemical contamination.

☐ The snake's hides, water bowl, and movement areas are ready.

☐ I have a clean backup enclosure available.

☐ I have a plan for daily inspections and spot-cleaning.

☐ I have identified a reptile-experienced veterinarian.

Ready for introduction?

☐ Yes — all critical husbandry and safety checks are satisfactory.

☐ No — outstanding problems need to be corrected first.

4. Daily Maintenance Checklist

Complete daily, and whenever waste or a problem is discovered.

☐ Check the snake's behavior and general condition.

☐ Check temperature readings and thermostat operation.

☐ Check humidity readings.

☐ Check water quality and refill or replace water as needed.

☐ Inspect visible substrate surfaces for wet patches.

☐ Check accessible hides and common waste locations.

☐ Remove feces and urates promptly when found.

☐ Remove visibly contaminated substrate or leaf litter as needed.

☐ Check for spills, flooding, or unusual odors.

☐ Confirm that the snake has access to clean, dry resting areas.

Important: Do not wait for the cleanup crew to consume feces or urates.

5. Weekly Maintenance Checklist

☐ Inspect beneath accessible hides and leaf litter.

☐ Check the substrate around the water bowl.

☐ Look for compacted or persistently wet areas.

☐ Check drainage accumulation, if a drainage layer is installed.

- ☐ Inspect plant health and remove unsuitable decaying plant material.
- ☐ Replenish clean leaf litter when necessary.
- ☐ Check whether the cleanup crew has suitable refuges and food.
- ☐ Observe the colony without unnecessarily disturbing it.
- ☐ Inspect furnishings for movement, damage, or instability.
- ☐ Check the snake's skin for unusual discoloration, blisters, sores, or damaged scales.
- ☐ Clean contaminated equipment and wash hands after handling waste.

6. Monthly Bioactive Health Check

Substrate Condition

- ☐ The substrate still has a suitable structure.
- ☐ There is no extensive compaction.
- ☐ The substrate does not remain excessively wet.
- ☐ No persistent rotten or sewage-like odor is present.
- ☐ There are no widespread slimy or deteriorating areas.
- ☐ The surface remains suitable for normal snake movement.
- ☐ The substrate has not settled in a way that compromises hide stability.

Cleanup Crew Condition

- ☐ Isopods or other cleanup crew organisms are observed in suitable refuges, if visible.
- ☐ I checked appropriate refuges before assuming the colony has declined.
- ☐ There are no obvious widespread unexplained die-offs.
- ☐ Suitable food and moisture remain available.
- ☐ I have investigated possible pesticide exposure or other contamination if mortality occurs.

Snake Health

- ☐ The snake's body condition is monitored over time.
- ☐ Feeding and shedding records are updated.
- ☐ The belly and scales are checked during appropriate handling.
- ☐ There are no suspicious lesions or persistent abnormal discoloration.
- ☐ Weight is recorded periodically using a consistent method.
- ☐ Any concerning changes are documented and discussed with a veterinarian.

7. Troubleshooting & Corrective Action Checklist

If Isopods or Springtails Seem to Disappear

- ☐ Inspect their normal refuges.
- ☐ Check moisture levels and temperature.
- ☐ Check food availability.
- ☐ Check for excessive disturbance or compaction.
- ☐ Investigate possible pesticide or chemical exposure.

☐ Correct the underlying issue before introducing replacements.

If the Substrate Becomes Waterlogged

☐ Stop unnecessary watering.

☐ Check for water bowl leaks or spills.

☐ Inspect the substrate beneath hides.

☐ Check the drainage reservoir, if present.

☐ Remove accumulated water safely.

☐ Remove contaminated or unsuitable substrate.

☐ Reassess ventilation and substrate composition.

☐ Confirm that the snake has appropriate resting surfaces.

If the Substrate Smells Rotten

☐ Inspect the source of the odor.

☐ Check for hidden feces, urates, decaying food, or plant material.

☐ Inspect saturated or compacted areas.

☐ Remove contaminated material.

☐ Investigate whether partial replacement or a complete rebuild is needed.

☐ Do not cover the odor with fragrances or chemical products.

If the Snake Develops Suspicious Skin Changes

☐ Prioritize the snake's health over preserving the bioactive ecosystem.

☐ Arrange assessment by a reptile-experienced veterinarian.

☐ Use a clean, appropriate temporary enclosure if advised or needed.

☐ Document the appearance and progression of lesions.

☐ Review moisture, sanitation, and potential injury sources.

☐ Follow veterinary guidance on cleaning and disinfection.

8. Long-Term Maintenance Review

Every 3–6 Months:

☐ Review substrate structure and moisture distribution.

☐ Inspect hidden areas and drainage.

☐ Review the cleanup crew's condition.

☐ Assess whether plants or decorations need adjustment.

☐ Review waste-removal consistency.

☐ Decide whether localized substrate replacement is needed.

Annually:

☐ Conduct a comprehensive enclosure review.

☐ Assess whether the current setup still meets the snake's needs.

☐ Review equipment condition and safety.

☐ Replace substrate based on condition, contamination, and suitability—not simply age.

☐ Consider whether bioactive remains practical for this individual snake.

9. Monthly Inspection Log

Date	Humidity	Warm / Cool Temps	Substrate Condition	CUC Observations	Action Taken
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Final Keeper Self-Assessment

☐ I can maintain the enclosure without relying on the cleanup crew to remove snake waste.

☐ I can identify early signs of waterlogging and substrate deterioration.

☐ I can monitor my snake's health without compromising the ecosystem.

☐ I understand that bioactive is not maintenance-free.

☐ I am prepared to simplify or rebuild the enclosure if necessary.

My next maintenance priority:

_____

Notes:

_____

_____

Husbandry reminder: This checklist is a practical management aid, not a veterinary diagnostic tool. Environmental requirements vary by animal, enclosure, and husbandry method. Seek reptile veterinary advice for suspected disease or persistent health concerns.