Introduction to Water Dragon Care

Melissa Magnuson, DVM • Alexandra Kilgore, DVM

Water dragons are native to Southeast Asia and the Indo-Australian archipelago. They are accustomed to warm temperatures, high humidity, and environments that allow swimming, climbing, and basking. Water dragons are active, intelligent lizards that require significant space and environmental complexity to thrive.

In captivity, water dragons have been known to live 10–20 years when provided with appropriate husbandry and veterinary care.

Housing

A proper enclosure ensures your water dragon's safety while providing a clean, comfortable, and spacious environment.

Enclosure Size

Water dragons can grow up to 3 feet in length, including the tail. As a general rule, the enclosure should be at least twice the dragon's total length from nose to tail tip.

Asian water dragons are arboreal lizards, meaning they climb and prefer elevated spaces. Because of this, enclosure height is just as important as width.

For example:

- A 3-foot water dragon requires at least a 6-foot-wide enclosure
- Enclosure depth should be at least half the dragon's length
- Ideal enclosure height: 4–6 feet

An ideal enclosure for a full-grown adult is approximately 7 feet wide x 3 feet deep x 5 feet high.

Cohabitation

Water dragons may be housed together, but close monitoring is required. Males often tolerate other males better than females, but dominance behaviors can occur. Watch carefully to ensure one dragon is not guarding food, basking areas, or access to water.

Enclosure Furnishings and Enrichment

Provide ample enrichment, including:

- Branches, logs, and climbing structures
- Rocks and basking platforms
- Hiding areas
- Plants (real or artificial)

Live plants that are safe and enriching include:

- Dracaena
- Hibiscus
- Ficus bushes
- Pothos
- Philodendron
- Spider plants

Rearrange furnishings periodically to prevent boredom. Clean all props regularly.

⚠️ **Do not use heat rocks, as they can malfunction and cause severe burns.**

Water Area

Water dragons require access to a large pool of water covering at least half of the enclosure floor space. The water should be deep enough for the dragon to submerge and swim comfortably.

- Place branches over the pool to allow diving
- Change water frequently to maintain cleanliness
- If creating a naturalistic vivarium with a permanent pool, use an aquarium filter

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Substrate

The remaining half of the enclosure should be a ground area.

Acceptable substrates include:

- Indoor/outdoor carpeting
- Artificial turf-style reptile carpet
- Shredded paper
- Alfalfa pellets

Avoid:

- Sand
- Corn cob
- Wood shavings
- Bark mulch

These materials can cause impaction, which may require surgical treatment.

Remove uneaten food, fecal matter, and urates daily. Clean and disinfect the enclosure at least once weekly using mild soap followed by a reptile-safe disinfectant or a dilute bleach solution (1 capful bleach per gallon of water). Rinse and dry thoroughly before returning your dragon.

Snout Rubbing Warning

Water dragons do not understand glass and may rub their snouts against enclosure walls, potentially causing permanent damage to the nose and lower jaw.

To reduce this risk:

- Use a large enclosure
- Place a visual barrier around the lower outside portion of the enclosure

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Heat and Lighting

Temperature

Daytime temperatures:

- Warm side: mid–high 80s°F
- Basking area: mid–90s°F
- Cool side: mid–70s°F

Nighttime temperatures:

- 70s°F, mimicking natural conditions

UVB Lighting

Water dragons require UVA and UVB lighting year-round.

- Adults: 5.0 UVB
- Hatchlings and juveniles: 10.0 UVB

Higher UVB output supports rapid growth in younger dragons.

- UVB lights should be on 12 hours daily
- Replace UVB bulbs every 6 months, even if visible light is still produced
- Fluorescent UV bulbs do not provide heat and must be paired with a heat source

Ensure all lights are positioned so the dragon cannot touch or climb onto them.

Natural sunlight can be beneficial when safe and supervised, but glass filters UV rays, so it cannot replace UVB bulbs.

Diet

Water dragons are primarily carnivorous, though they also consume plant matter.

Supplements

- Calcium without phosphorus or vitamin D3: every meal
- Multivitamin with vitamin D3 and vitamin A: once weekly

Feeding Schedule

- Hatchlings and juveniles: feed every 1–2 days
- Adults: feed every 3–4 days

Insect and Protein Options

Insects should be no larger than the distance between the dragon's eyes.

Appropriate prey includes:

- Crickets (gut-loaded)
- Dubia roaches
- Earthworms
- Locusts
- Silkworms
- Hornworms (occasionally)
- Mealworms and waxworms (limited)

Whole prey items such as:

- Pinkie mice
- Fuzzies
- Feeder fish

These should be offered 2–3 times weekly for juveniles and adults and are valuable sources of calcium and nutrients.

Dust insects with calcium without phosphorus and without vitamin D3 before feeding.

Plant Matter

Offer finely chopped leafy greens daily, including:

- Romaine lettuce
- Spring mix
- Red or green leaf lettuce
- Dandelion greens
- Mustard greens
- Collard greens

Vegetables (smaller amounts):

- Squash
- Carrots
- Brussels sprouts

- Sweet potato
- Cauliflower
- Broccoli
- Green, yellow, or wax beans
- Radish
- Bell peppers

Fruit should be offered sparingly as treats, such as apples, bananas, berries, grapes, or melon.

Outdoor Time

Outdoor exposure can be beneficial when done safely:

- Only when temperatures are 70–90°F
- Provide access to shade
- Use a harness and leash
- Supervise at all times
- Protect from predators

Salmonella

All reptiles may carry salmonella, even when healthy.

- Wash hands after handling
- Supervise children closely
- Immunocompromised individuals should use extra caution

Medical Problems

Most health issues in water dragons stem from:

- Improper enclosure hygiene
- Poor diet or supplementation
- Inadequate heat
- Lack of UVB exposure

Learn what is normal for your dragon, including appetite, behavior, and waste production. If changes persist beyond 1–2 days, seek veterinary care.

Emergency signs include:

- Bloody stool or urates
- Heavy breathing or panting
- Seizures
- Bloody discharge
- Lameness
- Facial trauma

Preventive Care

- Juveniles: twice-yearly exams
- Adults: annual exams
- Twice yearly fecal exams

Regular veterinary visits allow early detection of problems and ensure care recommendations remain current as reptile medicine evolves.

Ferguson Zones:
Matching UVB to Your Reptile

Melissa Magnuson, DVM • Alexandra Kilgore, DVM

Zone 1: Crepuscular or Shade Dwellers

Very low UVB exposure

These species spend most of their time in shade, dense cover, or are active at dawn and dusk. They receive little direct sunlight in the wild.

Examples:

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- Crested geckos
- Gargoyle geckos
- African fat-tailed geckos
- Corn snakes
- Ball pythons

Key point for owners:
These species still benefit from **low-level UVB**, but excessive UVB can be harmful.

Zone 2: Partial Sun or Occasional Baskers

Low to moderate UVB exposure

These reptiles move between shade and sunlight and bask intermittently rather than continuously.

Examples:

- (juveniles and non-dominant adults often fall here)
- Blue-tongue skinks
- Uromastyx (when not actively basking)
- Green anoles
- Some box turtles

Key point for owners:
UVB should be available, but animals must always have shaded areas to self-regulate exposure.

Zone 3: Open or Partial Sun Baskers

Moderate to high UVB exposure

These reptiles bask regularly and are adapted to brighter environments, but still retreat to shade.

Examples:

- Adult bearded dragons
- Veiled chameleons
- Panther chameleons
- Red-eared sliders and other basking aquatic turtles
- Spiny-tailed lizards

Key point for owners:
These species **require reliable UVB** to remain healthy and are at high risk for metabolic bone disease without it.

Zone 4: Full Sun Baskers

High UVB exposure

These reptiles live in very bright, open environments and bask for prolonged periods under intense sunlight.

Examples:

- Uromastyx species
- Desert tortoises
- Sulcata tortoises
- Rock agamas

Key point for owners:
Strong UVB is essential, but enclosure setup must still allow distance and shade to prevent overexposure.

Important Reminder for Clients

These zones are **general guidelines**, not rigid rules.
Factors that influence UVB needs include:

- Species
- Age
- Behavior
- Enclosure design
- Distance from the bulb
- Screen tops and materials

Always research species-specific needs before acquiring a reptile, and consult a veterinarian experienced in reptile medicine to confirm proper lighting for your individual pet.

Reptile Lighting: Why It Matters

Melissa Magnuson, DVM • Alexandra Kilgore, DVM

Proper lighting is one of the most important parts of reptile care, yet it is also one of the most misunderstood. Inadequate lighting is a leading cause of metabolic bone disease and other serious health problems in reptiles.

This handout explains what ultraviolet (UV) lighting is, why reptiles need it, and how to choose and maintain the correct lighting for your pet.

Understanding UV Light

Ultraviolet (UV) light is radiation that exists beyond the visible light spectrum. It comes in three forms:

- **UVA**
- **UVB**
- **UVC**

Only UVA and UVB are relevant and safe for reptiles.

UVA

- Helps regulate daily biological rhythms and behavior
- Important for normal activity, appetite, and reproduction

UVB (Most Critical)

- Essential for calcium metabolism
- Allows reptiles to properly absorb calcium from their diet
- Prevents metabolic bone disease, a painful and often fatal condition

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How UVB Works in the Body

UVB light activates vitamin D precursors in the skin, allowing reptiles to produce vitamin D3 naturally. Vitamin D3 is required for calcium to move from the gut into the bloodstream and into bones.

Research shows that:

- **Naturally produced vitamin D3** (via UVB exposure) is safer and more effective than oral supplementation in diurnal (day-active) reptiles
- **Some nocturnal species**, such as leopard geckos and corn snakes, can also benefit from low-level UVB exposure

Sunlight vs Indoor Lighting

Reptiles living outdoors receive UVB directly from the sun.

However:

- UVB does NOT pass through glass
- Placing a reptile near a window does not provide UVB

Indoor reptiles must be provided with artificial UVB lighting using bulbs specifically designed for reptiles.

Choosing the Right UVB Bulb

High-quality reptile UVB bulbs are essential. Brands commonly recommended include:

- Zoo Med
- Arcadia
- Reptisun

The type and strength of bulb needed depends on the species and natural habitat of your reptile.

Ferguson Zones: Matching UVB to Your Reptile

Reptiles are grouped into **Ferguson Zones** based on how much sunlight they naturally receive in the wild:

- **Zone 1:** Crepuscular or shade dwellers
- **Zone 2:** Partial sun or occasional baskers
- **Zone 3:** Open or partial sun baskers
- **Zone 4:** Full sun baskers

Knowing your reptile's Ferguson Zone helps determine:

- UVB intensity
- Bulb type
- Distance from the basking area

Ask your veterinarian if you are unsure which zone your reptile falls into.

Proper Placement of UVB Lighting

Correct placement is just as important as the bulb itself.

Fluorescent UVB Bulbs

- Reptile should be able to get within 12–18 inches of the bulb
- Use branches or logs to allow climbing closer if needed

Mercury Vapor Bulbs

- Must be placed at least 12 inches from the basking area
- These bulbs produce both heat and UVB and can overheat reptiles if too close

Screen Tops Matter

- Dense screen lids can block up to 50% of UVB
- Enclosures with heavy screening may require stronger bulbs or multiple fixtures

Measuring UVB

- Solar meters can be used to accurately measure UVB output and ensure proper exposure

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Bulb Replacement Schedule

UVB bulbs must be replaced regularly, even if they still look bright.

- Replace every 6–12 months, depending on the bulb model
- UVB output declines long before visible light burns out
- Date bulbs when installed to track replacement timing

Key Takeaways for Reptile Owners

- UVB lighting is essential for bone health and calcium metabolism
- Windows do not provide usable UVB
- Proper bulb type, placement, and replacement are critical
- UVB needs vary by species and natural habitat
- When in doubt, ask your veterinarian for guidance

If you need help selecting the correct lighting for your reptile or want your setup reviewed, please contact your veterinary team. Proper lighting is one of the most powerful tools you have to keep your reptile healthy.