

WALNUT CREEK SUPPLY

THE COMPLETE CARE GUIDE

Fire-Bellied Toad

The cool-weather toad with a warning-color belly



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New owner? Go straight to Section 1. It is written so you can set up a safe, correct home and get through the first 48 hours without reading anything else first.

*Somewhere in a cold, mossy stream valley in northeast China, a small green toad is floating at the surface of a pool with its arms and legs spread wide, looking for all the world like a tiny, warty lily pad. That is the **Oriental fire-bellied toad**, and it is one of the friendliest introductions to the amphibian hobby you will find: hardy, bold, awake during the day, and out in the open where you can actually watch it. It is also a toad with a secret. Flip it over and the belly is a blaze of red-orange and black, and when something frightens it, it will arch its back and show you that warning on purpose. This guide is written for the keeper who wants to do right by one of these little animals for the next **10 to 15 years**. The big surprise for most new owners is that the number one danger isn't the cold. It's a room that is too warm, and a tank of water that looks clean but isn't. Read the Quick Start first, get your temperature and water right before the toad arrives, and you'll have a calm, colorful, long-lived pet that earns its place on the shelf.*

SECTION 1

Quick Start: Your First 48 Hours

1. **Set up the whole habitat before the toad arrives, and let it run for at least a week.** Fire-bellied toads live in an **aquaterrium** — a tank that is part water, part land, built so the animal can move freely between the two. A **10-gallon tank is the minimum for a pair**; a **20-gallon long is the right size for a group of three to five**. Floor space matters far more than height. Fill it, level it, and get the water and temperature stable now, because a toad dropped into a half-finished tank is a stressed toad.
2. **Dechlorinate every drop of water that touches the toad.** Tap water contains chlorine and often **chloramine** (chlorine bonded to ammonia), and both damage amphibian skin and gills. A **dechlorinator** is a liquid water conditioner that neutralizes both in seconds. Treat the water, then add it. Do not use untreated tap water, distilled water on its own, or anything that has touched soap or disinfectant.
3. **Build the water side shallow: about 1–3 inches deep.** Fire-bellied toads swim well but they are not deep-water animals, and every toad needs an easy way back out. Cover roughly **half the floor with water**, and build a gentle slope, flat stones or a cork bark ramp so the toad can walk out of the water at any point along the land edge.
4. **Build the land side with cover.** Add a damp substrate, a piece of curved cork bark or a half-log hide, smooth rocks, and live plants. A toad with nowhere to hide is a toad that sits frozen in the open and eventually stops eating.
5. **Put a thermometer and a hygrometer in the tank and confirm your numbers.** Target **70–75°F** in the daytime air (68–78°F is the safe range), water in the **upper 60s to low 70s**, and humidity of **60–80%**. Note the word **ceiling**: anything above **80°F is dangerous**. Most homes need no heater at all. **Do not install a heat lamp.**
6. **Install a low-level UVB light and set a day/night cycle.** Fire-bellied toads are shade-and-dappled-light animals, so a gentle UVB tube — over only part of the tank, with shaded retreats below — on a timer of about **10–12 hours on** and the rest dark is the goal. We explain exactly what "low" means in the lighting section.
7. **Set up gentle filtration, or commit to frequent water changes.** A small air-driven sponge filter keeps the water healthy without creating a current that tires the toad. If you skip the filter, plan on partial water changes every two to three days. Either way, clean water is the whole game.
8. **Prepare the first meals before the toad arrives.** Order live feeders (small crickets, dubia roach nymphs, earthworms, or blackworms), a calcium supplement without D3, and a reptile and amphibian multivitamin. Start your **gut-loading** now: feed the insects a nutritious diet for a day or two before they are eaten, so the toad gets that nutrition secondhand.
9. **Let the toad settle in for 48 hours before you do anything but look.** Release it onto the land side, turn the lights down to a normal cycle, and leave it alone apart from fresh water and quiet observation. Offer a small meal on day two. It is normal for a new toad to hide and skip the first day.

10. **Wash your hands every single time, and learn your vet's name before you need it.** Amphibians can carry **Salmonella**, and their skin secretions are mildly irritating. Wash with soap before and after you touch anything in the tank. Then find an **amphibian-experienced exotic vet** now, confirm they see frogs and toads, and tape the number to the stand.

First-Time Starter Bundle

What needs to be in the house before the toad comes home, and what to look for in each category.

Essentials

- **An aquaterrarium tank of the right footprint** — a glass or acrylic tank of at least 10 gallons for a pair, or a 20-gallon long for a group of three to five. Longer and wider beats taller; height is not needed, but the tank must come with a **tight, secure lid** because these toads are escape artists when they feel like it.
- **A screened or ventilated lid section** — fresh air matters for this species. A mesh top gives air exchange and passes light and UVB, while the rest of the cover holds humidity.
- **A dechlorinator / water conditioner** — one that neutralizes both chlorine and chloramine. This is not optional, and you will use it every time you add water.
- **A gentle air-driven sponge filter** — the sponge surface hosts the beneficial bacteria that break waste down, and the flow is soft enough not to push a small toad around.
- **A water test kit** — one that reads ammonia, nitrite, and nitrate (and ideally pH). Water that looks clear can still carry harmful levels of waste. Test kits make the invisible visible.
- **A waterproof digital thermometer with a probe, and a digital hygrometer** — one probe for the water, one reading at land level. A stick-on strip thermometer is not good enough for a species with a heat ceiling.
- **A land substrate that holds moisture safely** — coco fiber (coir), sphagnum moss, or large smooth stones, as described in the substrate section. Never small gravel, cedar, or sand.
- **A low-output UVB tube and fixture with a timer** — a lamp rated for shade-dwelling species, mounted so it only covers part of the tank, plus an inexpensive outlet timer for a consistent day/night cycle.
- **A shallow, wide feeding dish** — a low ceramic or smooth stone dish the toad can step into, for earthworms and blackworms and for easier cleanup.
- **Calcium powder without D3, and an amphibian-safe multivitamin** — dusting powders for the feeders, covered in the diet section.
- **Cork bark, a half-log hide, and smooth river stones** — cover on the land side, with at least one hiding place that stays humid.
- **Live feeders** — small crickets and dubia roach nymphs as the staple, with earthworms or blackworms as the favorite variety.
- **A soft net or clean plastic cup** — for the rare occasions you need to move the toad without touching it.

Ready to set up? Browse the essentials in our collections: [Reptile and Amphibian Enclosures](#) and [Reptile and Amphibian Terrarium Supplies & Accessories](#).

Enrichment

- **Live, non-toxic plants** — pothos cuttings, java fern, and moss-friendly tropicals root in the damp land section, add cover, and help hold humidity. Choose safe, rinsed plants only; never use anything treated with pesticide, fertilizer spikes, or leaf shine.

- **A cork bark ramp or floating cork island** — fire-bellied toads love to float at the surface or sit half in, half out of the water. An island or ramp gives them the choice.
- **Sphagnum moss patches** — a damp moss pile gives the toad a place to burrow in and keeps a humid micro-climate at the tank's cool end.
- **A background on three sides** — a plain or naturalistic backdrop makes the tank feel enclosed and secure and reduces reflection stress.
- **Leaf litter that is safe and dried** — a scatter of clean, dried leaves (from a trusted source, not the yard) gives foraging interest and cover.
- **A feeding tong or long tweezers** — for target feeding and for watching how well your toad is eating.
- **A quarantine tub** — a small, simple, plastic tub with moist paper towels for new arrivals or a sick toad, kept entirely separate from the main tank.

Enrichment, one click away. Shop Reptile and Amphibian Accessories.

SECTION 2

Meet Your Fire-Bellied Toad

Wild Oriental fire-bellied toads (*Bombina orientalis*) live across northeast China, the Korean peninsula, and the far southeast of Russia, in cool, wet habitats: slow streams, ponds, flooded meadows, damp forest edges, and mountain wetlands. They are **semi-aquatic**, which means they split their time between land and water, and they are active in daylight. In the wild they spend their days floating at the edge of the water, hunting insects along the bank, and hiding in moss and under stones when the weather turns hot or dry. That cool, damp background explains every number in this guide.

Trait	Detail
Common name	Oriental fire-bellied toad
Scientific name	<i>Bombina orientalis</i>
Native range	Northeast China, Korea, southeastern Russia
Wild habitat	Cool, wet streams, ponds, flooded meadows, and damp woodland edges
Adult size	About 2–2.5 inches (snout to rump)
Appearance	Bright green, warty back with black spots; vivid red or orange-and-black belly
Typical lifespan	10–15 years , sometimes 20 in captivity
Activity pattern	Diurnal — active during the day
Social structure	Groups of 3–5 of the same species do well
Temperament	Bold, active, and curious; a display animal, not a handling pet
Diet	Insectivore — live insects and worms
Care level	Beginner-friendly if temperature and water quality are right

The unken reflex, explained

Pick up a fire-bellied toad (or startle one) and you may see something startling: the toad stiffens, arches its back like a tiny bridge, tucks its chin, lifts its arms and legs, and sometimes flips so that its brilliant red-and-black belly faces whatever scared it. This is called the **unken reflex**, and it is a warning display, not a sign of distress that needs fixing and not a sign that the toad is dying. It is the same logic as the black-and-yellow stripes on a wasp: *I taste terrible, and I'm advertising it*. A predator that has tried a fire-bellied toad once will not forget.

Two things to know about the reflex. First, it means the toad feels threatened, so if you see it regularly, ask what is frightening the animal (a hand reaching in from above, a loud fan, a bright light, a cat on top of the tank?). Second, the **skin secretions** behind the warning are mildly irritating to human skin, eyes, and mouth, and more potent for other animals. They are not a reason to be afraid of the species. They are a reason to **wash your hands after contact and keep your fingers away from your eyes and mouth**.

Which "fire-belly" do you have?

The name "fire-bellied" gets stuck on several animals, and mixing them up can be a serious mistake.

- **Oriental fire-bellied toad (*Bombina orientalis*)** — the standard pet-trade species and the animal this guide is about. About 2–2.5 inches, bright green back with black markings, red or orange belly with black.

- **Chinese fire-bellied toad (*Bombina maxima*)** — a **larger** cousin, up to roughly 3–3.5 inches, with a duller, darker, more heavily warty brown-olive back, a more orange belly, and more potent skin secretions. Its care is similar, but it is bigger and more toxic, so it needs more space and more caution.
- **European fire-bellied toad (*Bombina bombina*)** — a related species from Europe, sometimes seen in the trade, with a darker, less green back.
- **Fire-bellied newts (*Cynops* species)** — **an entirely different animal that should never be confused with a fire-bellied toad.** Newts have a long, flattened tail, smoother skin, a slimmer body, and they are far more aquatic. They also carry a **potent neurotoxin (tetrodotoxin)** in their skin, which makes them a significantly more hazardous animal to keep than any fire-bellied toad. Their husbandry and handling needs are different, and the two should **never** share a tank.

A quick way to tell a toad from a newt: toads are squat, tailless, and warty with **heart-shaped pupils**; newts have a long tail and a streamlined body. If you aren't sure what you've been sold, ask the seller for the scientific name and write it down.

Temperament and personality

Fire-bellied toads are the extroverts of the amphibian world. They hunt in daylight, they will sit right at the front glass and watch you walk by, and in a group they float, wrestle, and chase food with surprising enthusiasm. Males also **call**: a soft, musical, repeated *oop, oop, oop* that sounds a bit like a distant bird or a quiet doorbell, most often on warm evenings or after a water change. It is a happy sound, not a distress call.

What surprises new owners

Three things catch most new keepers off guard. The first is the **floating**. A healthy fire-bellied toad will drift motionless at the surface with its limbs stretched out, and it looks alarmingly like a dead animal. Touch the glass; if the toad blinks, shifts, or paddles away, it is simply relaxing. The second is the **temperature**. People expect a tropical pet and reach for a heat lamp, and the lamp is what hurts them. These are **cool-weather animals** that do better in a comfortable room than a warm one. The third is the **lifespan**: a 2-inch toad that cost less than a pizza will often outlive a family dog. Buy it as a commitment for the next decade, not a weekend project.

SECTION 3

Aquaterrium Setup & Layout

How much tank do you actually need?

An **aquaterrium** is a tank built with a water area and a land area in one enclosure. For fire-bellied toads the useful measurement is **floor area**, not height. They are not climbers, so a tall tank wastes volume, while a long, wide tank gives you room for a real water side, a real land side, and a few feet of walking space between them. A tight, secure lid is the only "height" feature that matters.

Group size	Minimum tank	Notes
1–2 toads	10 gallon (about 20" × 10")	The absolute minimum for a pair; fine for a single toad, but a pair in a 10 is already tight on land
3–5 toads	20 gallon long (about 30" × 12")	The best value size; a long footprint gives each toad its own corner
6 or more toads	40 gallon breeder or larger	More animals means more waste, so go bigger on tank and filtration both
Quarantine or sick toad	Small plastic tub with ventilation	Moist paper towels, a hide, and a shallow dish; never the main tank

If you are choosing between two sizes, buy the bigger one. Water quality is more stable in a larger volume, and toads that have room to spread out are calmer and eat better.

The layout, end to end

The most reliable layout is a **side-by-side design**: water at one end, land at the other, with a gradual transition in the middle. Picture the tank from above, as in a field-guide diagram. The description below is for a 20-gallon long (about 30 inches left to right and 12 inches front to back). Treat it as a drawing you could label.

Left end: the land section (about 14–16 inches of the floor). A damp substrate base 2–3 inches deep, sloped gently toward the water. A curved piece of cork bark makes a roof over a cool, humid hide at the far-left back corner. A cluster of live plants (pothos or a fern) is rooted along the back wall. A pad of damp sphagnum moss near the front gives a second humid retreat. **Air temperature here: 70–75°F during the day. Humidity at substrate level: 60–80%.**

Middle: the transition (about 4–6 inches). Smooth, flat river stones stacked as steps, or a gentle slope of substrate held in place by a stone wall, leading from the land into the water. The edge must be a **walk-in ramp**, never a sheer drop. Every toad should be able to leave the water from any point along this edge in a single step.

Right end: the water section (about 10–12 inches of the floor). **Water depth 1–3 inches**, deepest at the far-right end and shallowing toward the ramp. A small sponge filter sits in the back right corner, its air line running up and out of the lid. A shallow rock or a floating cork island sits near the center of the water so the toad can float, sit half-submerged, or climb out. **Water temperature: 65–75°F, with 78°F as the hard ceiling.**

Lid and lighting. The top is a secure lid with a screened section at least over the land end. The low-output UVB tube sits above that screen, covering **only part of the tank** (roughly the middle third), so the far-left hide and the far-right corner stay in shade.

Background and sides. A plain, dark or naturalistic backing on three sides. The front stays clear for viewing.

Zone	What goes there	Target numbers
Land end (left)	Damp coco fiber or sphagnum, cork bark hide, live plants	Air 70–75°F, humidity 60–80%
Transition (middle)	Smooth stone steps or gentle slope	Under the UVB tube; this is the sun-dappled zone
Water end (right)	1–3" of dechlorinated water, sponge filter, rock or cork island	Water 65–75°F; never above 78°F
Whole tank	Secure lid with fresh-air screening	Daytime air 68–78°F; above 80°F is dangerous

Why half water, half land?

Fire-bellied toads move between the two constantly. They hunt on the bank and in shallow water, they soak to keep their skin moist and to cool down, and they rest at the surface. A tank that is nearly all land dries them out. A tank that is nearly all deep water is a drowning risk and gives them no place to digest in peace. Think of it as a shoreline, not a lake and not a desert.

Water depth and drowning safety

Keep the water shallow enough that the toad can always put its feet on the bottom or reach the surface with ease, and make sure **there is always an easy exit**. Young toads and weak or sick toads are the ones at risk. Never use tall, smooth-sided water dishes that a small toad can slide into but not climb out of.

Plants, cover, and decor

Live plants are the single best addition to a fire-bellied toad tank. They soak up waste, add humidity, and give the toad things to sit on and hide behind. Choose safe, amphibian-friendly plants (pothos, java fern, and moss are classic choices), rinse them well, and keep them in pots or root them directly in the substrate. Add a hide on the land side that stays damp, cork bark pieces for cover, and smooth rocks. Arrange everything so nothing can shift and crush a toad; the rocks should sit on the tank floor, not on top of the substrate.

SECTION 4

Substrate & Water Care

The land-side substrate

The goal is a substrate that stays damp (not soaking), drains a little, is soft underfoot, and cannot be swallowed in a harmful way. Toads catch food with a sticky tongue, and anything small and hard that sticks to prey can go down with it.

Substrate	Best for	Performance	Notes
Coconut fiber (coir)	The main land substrate	Holds moisture well; soft; plants root in it	Rinse before use; keep damp, not waterlogged; spot-clean waste and replace every few months
Sphagnum moss	Humid hides and patches	Excellent moisture retention; naturally airy	Use plain, additive-free moss; replace when it turns slimy or smelly
Large smooth stones	The transition zone and water edge	Easy to clean; impossible to swallow if big enough	Stones must be larger than the toad's head; stack them so nothing can shift or fall
Dried leaf litter	Cover and foraging	Natural look; shelter for feeders	Use only clean, pesticide-free leaves; replace regularly
Paper towel	Quarantine and sick animals	Zero ingestion risk; easy to inspect droppings	Keep damp; replace daily
Small gravel or pebbles	Avoid	Easily swallowed with food; can cause impaction	If a pebble can fit in a toad's mouth, it should not be in the tank
Sand (fine or calcium sand)	Avoid	Swallowed with prey; abrasive on moist skin	No safe use case for this species
Cedar or aromatic pine shavings	Never	Oils are toxic to amphibians	Do not use for any amphibian, at any age
Potting soil with fertilizer, perlite, or vermiculite	Avoid outright	Fertilizers and additives can poison; perlite is swallowed with food	Only use plain, additive-free products labeled safe for amphibians
Soil, moss, or rocks from the yard	Avoid	Pesticides, parasites, and disease risk	If it came from outdoors, it does not go in the tank

What to avoid outright

- Small gravel or any loose stone smaller than the toad's head
- Cedar, aromatic pine, and any scented shavings
- Fine sand and calcium sand
- Potting mixes with fertilizer, wetting agents, or perlite
- Wild-collected soil, moss, bark, or rocks
- Cleaning products, soaps, and disinfectant residue on anything inside the tank
- Painted, sharp-edged, or metal decor that can leach or scratch

- Any plant treated with pesticide or leaf shine

Why water care is the whole game

Toads breathe partly through their skin, and **their skin absorbs whatever is in the water**. That is why a tank that looks perfectly clear can still make a toad sick. Fire-bellied toads also urinate and defecate in the water, which releases **ammonia**. In a healthy tank, beneficial bacteria convert ammonia to nitrite, then to nitrate, which is far less harmful. This process is called **cycling**, and a sponge filter gives those bacteria a home. Without it, ammonia builds up and burns the skin.

Dechlorinating, step by step

1. **Fill a clean, dedicated container** (a bucket that has never held soap or cleaning products) with tap water.
2. **Add dechlorinator** according to the label for that volume. Choose a product that neutralizes **both chlorine and chloramine**.
3. **Let it sit for a few minutes** (and match the temperature to the tank: cool-to-room-temperature, in the upper 60s to low 70s).
4. **Pour it in gently** along the side of the tank, not on top of the toad.

Never use untreated tap water, hot water, or water that has been through a softener. Bottled spring water is a decent backup if you can't treat tap water.

The water change routine

Situation	Schedule	How much
Tank with a working sponge filter	Weekly partial change	Replace about 25–50% of the water
Tank without a filter	Every 2–3 days	Replace most of the water; rinse the dish
After illness, a new toad, or a cloudy tank	Extra partial change, as needed	Test ammonia and nitrite first
Deep clean	Monthly (see the care calendar)	Remove decor, scrub with hot water and a dedicated brush, rinse thoroughly

Use a **dedicated brush and bucket** that never touch soap, and rinse everything with plain hot water. If you disinfect decor, rinse until no smell remains, let it air dry fully, and give it a final rinse in dechlorinated water. **There should be no disinfectant residue on anything that touches the water or the toad.**

The numbers to test for

- **Ammonia:** 0 ppm (parts per million) at all times
- **Nitrite:** 0 ppm
- **Nitrate:** under about 20 ppm is good; test weekly and change water if it climbs
- **pH:** roughly 6.5–7.5

If your ammonia or nitrite reads above zero, do a large water change straight away, check for a dead animal, a rotting food item, or an overfed tank, and retest in 24 hours.

SECTION 5

Temperature, Light & Humidity — The 3 Numbers

Fire-bellied toads are one of the easiest amphibians to keep, and one of the easiest to overheat. They come from **cool, damp northern habitats** where water temperatures stay low and the days are mild. Getting these numbers right means getting the **temperature ceiling** right. The three numbers are temperature, lighting (day/night and UVB), and humidity.

Parameter	Target value	How to measure it	What goes wrong when it's off
Daytime air temperature	70–75°F ideal; safe range 68–78°F	Digital probe thermometer at land level, away from lights	Above 80°F is dangerous: heat stress, refusal to eat, bacterial infection, and death. Below 65°F in the daytime: slowed digestion and appetite
Nighttime air temperature	Mid-60s°F is fine	Min/max thermometer, checked each morning	Below about 60°F for long periods: sluggishness and reduced appetite
Water temperature	65–75°F ; never above 78°F	Waterproof probe thermometer in the water	Warm water holds less oxygen and grows bacteria and fungus faster; one of the most common causes of illness
Humidity	60–80%	Digital hygrometer at land level	Below 55%: dry skin, shedding trouble, dehydration. Above 85% with poor airflow: mold, bacteria, and fungus
Light cycle	About 10–12 hours on, then dark	Outlet timer	No cycle or constant light: stress and appetite loss; constant darkness: poor calcium use
UVB (Ferguson zone 1)	Low-level, partial coverage, with shade	UV index meter (optional) or manufacturer distance chart	Too high: eye and skin damage; none: slower calcium metabolism and weaker bones over time

Temperature: think "comfortable room," not "tropical"

The **daytime ideal is 70–75°F**, and a normal house in spring and fall is usually perfect with no added heat at all. A cooler night, into the **mid-60s**, is fine and even helpful. What you are guarding against is heat.

Above 80°F is dangerous. A tank sitting in a sunny window, on top of a warm appliance, or in an upstairs room during a heat wave can climb past that in an hour. A heat lamp, heat mat, or heated rock is never the answer for this species, and they cause far more harm than good.

Summer plan. If your home runs warm, move the tank to the coolest room (a basement is ideal), keep it out of direct sun, and add a small fan blowing across the screen top to create airflow and evaporative cooling. A fan dries the tank, so check humidity and mist as needed. If the temperature spikes, do a partial water change with cool (not cold) dechlorinated water. Heat stress is a true emergency: see the Common Challenges section.

Winter plan. An ordinary heated home is fine. Keep the tank away from drafts, vents, and radiators.

Lighting and the Ferguson zone

The **Ferguson zone** system sorts animals by how much natural UVB (ultraviolet B light, which lets the body make vitamin D3) their wild habitat provides. **Zone 1** animals live in deep shade or are active in the dark; they need very little. Fire-bellied toads live in damp, shaded, often wooded wetlands and fall in the low zone. They don't need much, but a **low-level UVB** is recommended: it supports calcium metabolism and bone health and costs little.

- Use a **low-output UVB tube** rated for shade-dwelling species, mounted above a mesh screen (glass and plastic block UVB).
- Cover **only part of the tank**, so the toad can retreat to full shade.
- Run a **10–12 hour** day and a full dark night on a timer; shorten the day slightly in winter if you like.
- Replace the tube according to the manufacturer's schedule, since output fades before the light does.
- Keep the fixture from heating the tank. Fluorescent and LED fixtures run cool; avoid incandescent bulbs entirely.

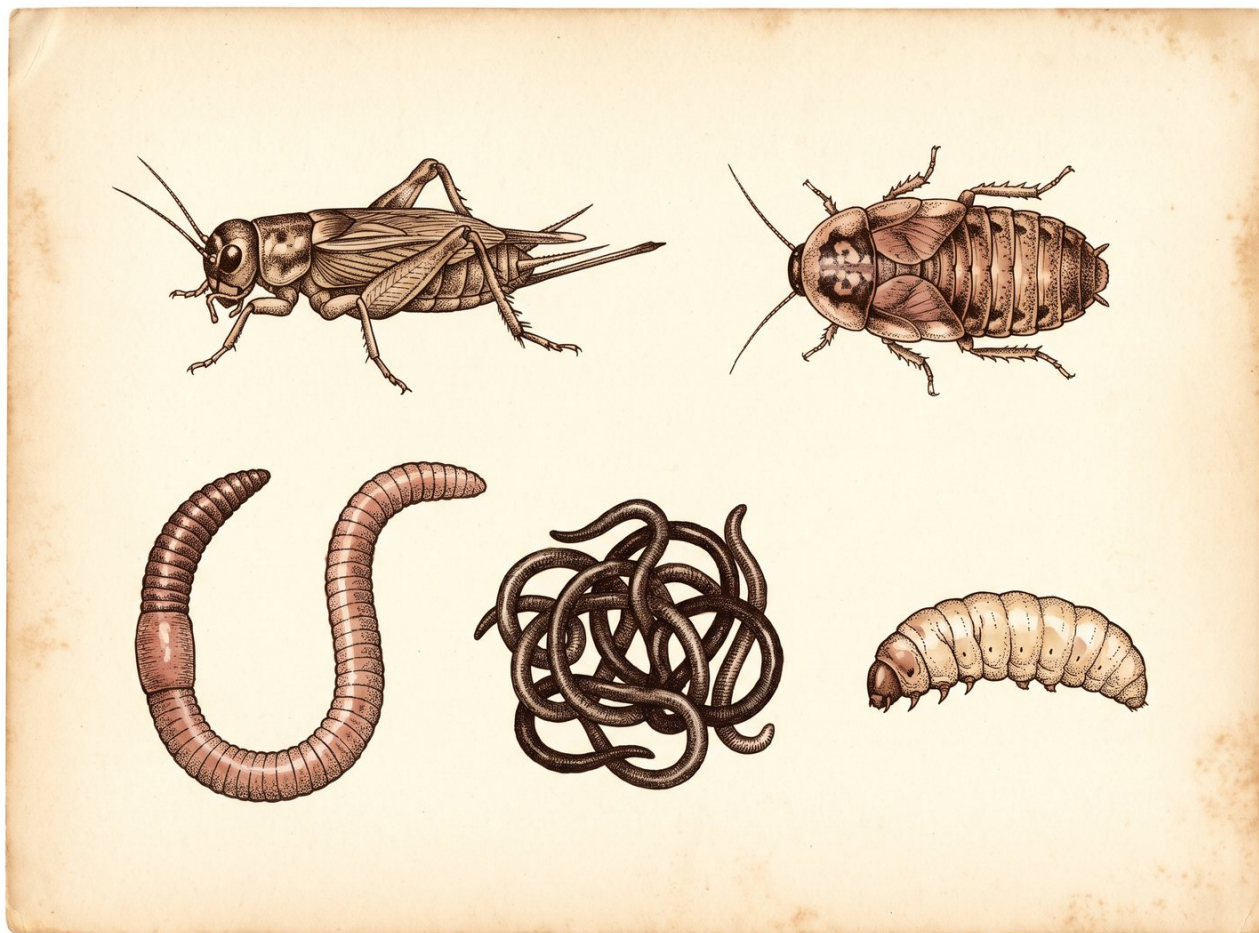
Live plants love the light and make the tank greener, and a bright, full-spectrum white light also helps the toad's color.

Humidity and ventilation

Aim for **60–80%** humidity at land level. A damp substrate, a water surface, live plants, and a light daily mist from a spray bottle (filled with dechlorinated water) will do it. Humidity alone is not enough, though. **Fresh air matters.** A tank sealed tight with stagnant, warm, wet air is a breeding ground for bacteria and fungus. Keep a screened section for ventilation, and if the glass is constantly dripping, increase airflow.

SECTION 6

Diet & Nutrition



Small live insects and worms, no larger than the gap between the toad's eyes. They feed on land and in the water.

Fire-bellied toads are **insectivores**: in the wild they eat small insects, worms, spiders, and aquatic invertebrates they find along the water's edge. In your tank, the goal is variety, correct sizing, and properly loaded feeders. A healthy toad is not fed *all it will eat*; it is fed *the right amount of the right things*. That means **no mystery ingredients** in what goes into the feeders, either: the quality of what the insects eat becomes the quality of what your toad eats.

A fun fact worth knowing: fire-bellied toads hunt on land **and** in the water. You will often see one stalk a cricket on the bank, then pounce on a worm wriggling in a shallow dish, and sometimes catch food while floating. Offer both.

The feeder table

Feeder	Role	Size / prep	Notes
Crickets	Staple	Pinhead to small (match the toad); gut-load 24–48 hours	Easy to find; watch for escapees; remove uneaten crickets so they don't chew on the toad
Dubia roach nymphs	Staple	Small nymphs only; gut-load	Quiet, don't climb glass, high in protein; check local rules before buying

Feeder	Role	Size / prep	Notes
Earthworms	Staple / favorite	Chopped to size or small whole worms	Loved by toads; rinse and offer in a shallow dish; excellent for water-edge feeding
Blackworms	Staple for water-edge feeding	Small clumps in a shallow dish	Rinse; keep cool and refresh daily until fed
Small mealworms	Occasional variety	Freshly molted or small only	Hard shell and fat; not a staple
Waxworms	Treat only	One or two at a time, rarely	Very fatty; offer as a reward or to fatten a thin toad, not as a regular food
Flightless fruit flies, springtails, pinhead crickets	Juveniles	Tiny; dust lightly	Right-sized for toadlets under an inch

Prey sizing: the space between the eyes

The safe rule is simple: **no prey item should be bigger than the space between the toad's eyes**. Anything larger risks choking, gut blockage, or regurgitation. A juvenile needs very small feeders; an adult fire-bellied toad (about 2–2.5 inches) does well on small crickets and chopped earthworms. When in doubt, go smaller and offer twice.

Gut-loading and dusting

Gut-loading means feeding the insects a nutritious diet (fresh greens, a quality insect diet, a little carrot) for 24–48 hours before they are fed to the toad, so the toad gets a more complete meal secondhand. It's one of the best things you can do for any insect eater. Never feed insects straight out of the box.

Dusting adds the nutrients a captive diet still lacks.

- **Calcium powder without D3** is used at most feedings. Calcium supports bones, muscles, and nerves.
- **A reptile or amphibian multivitamin** is used less often; many keepers favor products that use beta-carotene instead of preformed vitamin A. Ask your vet which they prefer.
- **Calcium with D3** is an option for toads under low UVB; your vet can advise.
- **To dust**, place the insects in a small cup with a pinch of powder and shake gently until lightly coated. A light coat is better than a thick one.

Because toads eat in the water too, dust on land and feed quickly. Powder washes off in water.

Schedule

Life stage	Feeding frequency	Supplements
Juveniles (under about 1")	Daily , small amounts they finish in about 15 minutes	Calcium most feedings; multivitamin once weekly
Sub-adults	Every other day	Calcium at most feedings; multivitamin weekly
Adults	2–3 times a week	Calcium at about every other feeding; multivitamin every one to two weeks

Offer a few appropriately sized items at a time and watch the toad eat. Remove any uneaten live feeders after an hour. Adults gain weight quickly, so err on the lean side.

Note that supplement frequency varies between keepers and vets. The schedule above is a safe range, and your vet can tune it.

Hydration

Fire-bellied toads absorb water through their skin, so they drink by sitting in clean water. Always keep fresh, dechlorinated water in the water section.

The never-feed list

- **Wild-caught insects** (pesticides, parasites, and chemicals), including fireflies, which are toxic
- **Any prey bigger than the space between the toad's eyes**
- **Raw or cooked meat, dog or cat food, fish flakes, and human food**
- **Fruit, vegetables, and bread** — these toads cannot digest them
- **Large, hard-shelled beetles and giant mealworms**
- **Wild-caught worms from lawns or gardens**
- **Anything dead and old** — only feed freshly killed or live prey
- **Feeders from a tank that holds sick animals**

Shop the food and supplies: Browse Reptile & Amphibian Food and Live Feed Delivered!.

SECTION 7

Shedding & Skin Health

Fire-bellied toads shed their skin, and it is one of the strangest things you'll see them do. A toad shedding ("sloughing") will arch, wriggle, stretch its limbs, and peel off a thin, translucent layer of skin in a sheet, **then eat it**. It usually takes only a few minutes, often happens at night or in the early morning, and you may never see it. A healthy adult typically sheds every week or two, and more often when growing.

Signs a shed is coming: dull, cloudy-gray skin, more time spent in the water, and a slightly tense posture.

What healthy skin looks like: moist, smooth under the warts, bright and richly colored, with no fuzzy patches, reddened areas, or open sores.

What to watch:

- **Retained shed:** stuck patches on the toes or around the eyes are rare in a properly humid tank.
- **Dry, dull, or flaky skin:** usually low humidity or a dry substrate.
- **White, cottony or gray fuzzy patches, red streaks on the belly or thighs, or sores:** infection. See the Common Challenges section.
- **Excess mucus or a slimy, cloudy coating:** poor water quality or stress.

What to do: increase humidity, provide a gentle misting, check the water, and never pull skin off. Do not use salt baths, soaps, antiseptics, or medications without veterinary guidance; amphibian skin is extremely permeable.

Skin and water quality are one thing. If a toad's skin looks wrong, test the water first.

SECTION 8

Common Challenges & Solutions

Amphibians hide illness well, and their skin tells you a lot. Most problems in fire-bellied toads trace back to one of three things: **too much heat, poor water quality, or bad diet**. Fix those and most health issues never appear.

Heat stress

What you see: a toad that sits in the water and won't leave, lethargy, refusal to eat, pale or washed-out color, rapid breathing, excess mucus, or red skin. In severe cases, loss of coordination or inability to right itself. **Why:** temperatures above 80°F. Warm water also holds less oxygen. This is the single biggest risk to the species. **What to do:** cool the tank immediately: move it to a cooler room, remove or reduce lights, aim a fan across the screen, and do a partial water change with cool (not cold) dechlorinated water. Do not use ice or sudden cold shocks. **When to call a vet:** if the toad is unresponsive, loses coordination, or hasn't recovered within hours of cooling. Heat stress can be fatal.

Water-quality problems (ammonia and nitrite burns)

What you see: cloudy water, a foul smell, red or irritated skin, excess mucus, lethargy, lack of appetite, or toads that crowd the land section. **Why:** waste has accumulated faster than the filter or water changes can handle, or the tank hasn't cycled. **What to do:** test ammonia, nitrite, and nitrate, do a large water change with dechlorinated water, clean the filter in tank water (never under the tap), and reduce feeding. **When to call a vet:** if skin lesions appear or the toad doesn't improve within a day or two of clean water.

Red-leg (bacterial infection)

What you see: red patches or streaks on the belly, inner thighs, or toes; swelling; lethargy; sores; refusal to eat. **Why:** red-leg is a general term for bacterial infection of the blood or skin (often *Aeromonas*), typically triggered by poor water, heat, stress, or injury. **What to do:** correct the water and temperature right away, and move the toad to a clean quarantine tub with damp paper towels. **When to call a vet:** immediately. Red-leg needs prescription antibiotics and can kill quickly.

Fungal skin infections

What you see: white or gray cottony patches, fuzzy growth, dull, raised, or peeling skin, especially after an injury. **Why:** fungus thrives in dirty, warm, stagnant conditions and in stressed or injured animals. **What to do:** fix water quality and temperature, improve ventilation, and isolate the affected toad. Do not apply human antifungals or salt baths without veterinary instruction. **When to call a vet:** at the first sign. Early treatment is simple; delayed treatment is not.

Bloat and edema

What you see: a puffy, swollen body, tight, shiny skin, a toad that floats high and can't dive, loss of appetite. **Why:** edema is fluid retention from kidney or heart trouble, infection, or poor water; gas bloat can follow overeating or swallowed air. **What to do:** check the water and temperature, move the toad to a clean, shallow quarantine tub, and call your vet. **When to call a vet:** today. Bloat can be a symptom of serious disease.

Metabolic bone disease (MBD)

What you see: a soft or swollen lower jaw, bent or weak limbs, difficulty jumping, tremors, a rounded or deformed spine. **Why:** lack of calcium, imbalanced supplementation, or insufficient UVB over time. **What to do:** correct the diet, dust feeders with calcium without D3, review multivitamin use, and check the UVB lamp. **When to call a vet:** at the first signs. Early MBD can be reversed; late MBD often cannot.

Chytrid fungus

What you see: lethargy, reddened or sloughing skin, excess shedding, loss of appetite, abnormal posture, and sudden death. Sometimes no signs at all. **Why:** **chytrid** (*Batrachochytrium dendrobatidis*) is a fungal disease that has devastated wild amphibians worldwide and can be carried by apparently healthy pets. **What to do:** quarantine new animals for at least six to eight weeks, never mix animals from different sources, never house wild-caught amphibians with captives, and **never release a pet outdoors**. **When to call a vet:** if you suspect it; a skin swab test can confirm.

Parasites

What you see: weight loss despite eating, loose or abnormal stool, a swollen or thin body, lethargy. **Why:** wild-caught animals, contaminated feeders, or a dirty tank. **What to do:** bring a fresh fecal sample in a sealed container to an amphibian vet; do not dose with over-the-counter dewormers. **When to call a vet:** within a week of seeing signs.

Obesity

What you see: a round, fat-padded body, folds above the legs, a wide belly, reduced activity. **Why:** too many fatty feeders (waxworms and mealworms) or overfeeding. **What to do:** return to staple feeders, cut feeding frequency, and offer smaller portions. **When to call a vet:** if the toad is also lethargic or you suspect liver disease.

Skin sloughing problems

What you see: stuck shed, dull patches, tight skin around the toes or eyes, or a toad that keeps trying to shed without success. **Why:** low humidity, dehydration, or an underlying skin infection. **What to do:** raise humidity, offer a shallow, clean water soak, and avoid pulling any skin. **When to call a vet:** if shed is stuck on the eyes or toes, or if skin is red or raw.

Not eating

What you see: a toad that ignores food for several days. **Why:** the most common cause is that the tank is **too warm**. Others include stress, water-quality problems, illness, or new surroundings. **What to do:** check the temperature first, then water quality, then hiding places; reduce disturbance. **When to call a vet:** if the toad refuses food for more than a week, loses visible weight, or shows other symptoms.

Quick reference

What you see	Likely cause	What to do	Vet urgency
Sits in water, pale, lethargic, rapid breathing	Heat stress	Cool the tank now; partial cool water change	Same day if not recovering
Cloudy water, red skin, excess mucus	Ammonia / nitrite burn	Test water; large water change	Within a day or two if skin worsens
Red streaks on belly or thighs	Red-leg	Quarantine; fix water and heat	Same day
White, cottony patches	Fungal infection	Fix water; isolate	At first sign
Swollen, shiny body; floats high	Bloat / edema	Quarantine; check water	Same day
Soft jaw, weak limbs	Metabolic bone disease	Correct diet and UVB	At first sign
Sudden lethargy, sloughing, death	Possible chytrid	Quarantine; do not release	Immediately
Weight loss, abnormal stool	Parasites	Fecal exam	Within a week
Rounded body, folds at limbs	Obesity	Reduce fatty feeders	Check-up if lethargic

What you see	Likely cause	What to do	Vet urgency
Stuck shed, dull or dry skin	Skin sloughing problem	Raise humidity; never pull skin	If on eyes or toes, or skin is raw
Won't eat	Too warm; stress	Check temperature first	If more than a week

SECTION 9

Handling & Toxin Safety

Minimal handling is the rule

Fire-bellied toads are a **display animal, not a cuddly one**. They are lively, colorful, and wonderful to watch, but their skin is thin and permeable, which means it absorbs oils, soap, lotion, sanitizer, and anything else on your hands, and it is easily damaged by dry skin contact. Every time you pick one up you stress the animal, and you expose yourself to its skin secretions. The best handling plan is almost no handling.

If you do need to move a toad (to clean the tank, or a trip to the vet), here is how:

- **Use a clean, damp container or soft net** whenever you can. Scoop gently and move.
- **If you must use your hands**, rinse them thoroughly in dechlorinated water first, with no soap, lotion, or sanitizer residue, and keep them wet. Hold the toad lightly and briefly over the tank or a soft surface, since it may jump.
- **Never handle a toad with dry hands, or with hands that have just touched food, sunscreen, or insect repellent.**
- **Never pick up a toad to show it off.** Let guests look through the glass.

Skin secretions: the safety rules

When threatened, fire-bellied toads release secretions from their warty skin that are mildly irritating. For most healthy people, the worst outcome is a stinging or itchy feeling if it touches the eyes, lips, or a cut. The rules are simple.

- **Wash your hands with soap and water** after any contact with the toad, the water, the decor, or anything from inside the tank, even if you used a net.
- **Keep fingers away from your eyes, nose, and mouth** while working in the tank.
- **Cover any cuts** on your hands before doing tank maintenance, or wear clean, rinsed gloves.
- **Don't eat, drink, or prepare food** in the same space as the tank, and **don't clean tank items in the kitchen sink**. Use a dedicated tub.
- **If secretions get in your eyes**, rinse with plenty of clean water for several minutes and call a doctor if irritation persists.

Salmonella and hygiene

Amphibians, like reptiles, can carry **Salmonella** bacteria without looking sick. The rules are the same as for any pet: wash hands every time, keep the tank away from kitchens and food areas, and take extra care around anyone who is very young, elderly, pregnant, or has a weakened immune system. Hand sanitizer is no substitute for soap and water. It's a simple habit, and millions of amphibian keepers do it every day.

Children and the fire-bellied toad

Fire-bellied toads are a great "look, don't touch" pet for kids. Children can help with feeding, watching, and learning, but all tank work and any handling should be done by an adult. Teach children to watch for the unken reflex and to wash up after any contact with the tank, even just touching the glass. Children under five, and anyone likely to put hands in their mouth, should not handle the animal at all.

Dogs, cats, and other pets in the home

The same secretions that deter a predator in the wild can make a dog or cat drool, foam, vomit, or pull back with irritated eyes or mouth. **Keep the tank on a stable stand out of reach**, with a **secure, latched lid**, and never let a pet mouth or lick a toad or its water. If your dog or cat does bite or mouth a toad, rinse the pet's mouth with clean water and call your vet. Also, never house a fire-bellied toad with fish, other amphibians, or reptiles: their toxins can harm the others, and diseases pass easily between species.

SECTION 10

Routine Care Calendar

How often	What to do
Daily	Check daytime air and water temperature; confirm they are below 78°F and the air is within 68–78°F
Daily	Check the hygrometer (60–80%) and lightly mist the land side with dechlorinated water
Daily	Confirm the lights are on their timer
Daily	Observe each toad: eyes bright, skin moist and clear, belly not swollen, moving normally
Daily	Remove uneaten food, droppings, and any dead insects
Daily (juveniles)	Offer small, correctly sized feeders
Every 2–3 days (adults)	Offer a few appropriately sized feeders; dust with calcium as scheduled
Every 2–3 days (no filter)	Partial water change with dechlorinated water
Weekly	Partial water change (25–50%) with dechlorinated, temperature-matched water
Weekly	Test ammonia, nitrite, and nitrate
Weekly	Multivitamin dusting at one feeding, per the supplement schedule (adjust per vet)
Weekly	Check substrate for mold, sour smell, or soggy patches; spot-clean
Weekly	Rinse the sponge filter in used tank water (never under the tap)
Monthly	Deep clean: scrub decor in hot water with a dedicated brush, rinse thoroughly, and let air dry
Monthly	Replace sour sphagnum, refresh dried leaves, and inspect rocks and cork for stability
Monthly	Check the lid and latches for gaps
Monthly	Weigh or photograph each toad to track body condition
Monthly	Review supplement stock and expiry dates
Every 6–12 months	Replace the UVB tube according to the manufacturer's schedule
Annually	Replace most of the substrate and clean the whole tank
Annually	Amphibian-experienced vet check, including a fecal exam

SECTION 11

When to See a Vet

Amphibians hide illness well, and they decline fast. Because they are small and their skin is permeable, a problem that looks minor can become serious in a day or two. **When you're uncertain, call.** A short phone conversation with an experienced vet can save an animal's life. Not every vet treats amphibians, so look for an **amphibian-experienced exotic vet** and confirm that they see frogs and toads before you need one.

Go today (same day or emergency):

- Red streaks or patches on the belly, thighs, or toes (possible red-leg)
- A toad lying on its back, unable to right itself, or twitching or convulsing
- A heat-stressed toad that doesn't improve within an hour or two of cooling the tank
- Severe swelling, a body that is tight and shiny, or a toad floating that cannot dive
- Open sores, bleeding, or raw, peeling skin
- Open-mouth breathing, gasping, or labored respiration
- Sudden unresponsiveness, collapse, or loss of coordination
- A toad that has been dropped, crushed, or injured
- Sudden death of a tank mate, especially with sloughing skin (possible chytrid)

Book within a few days:

- A toad refusing food for more than a week, or visible weight loss
- Soft jaw, bowed limbs, weakness, or difficulty jumping
- Persistent loose, abnormal, or bloody stool
- White, fuzzy, or cottony patches on the skin
- Cloudy eyes, swollen eyelids, or an eye that won't open
- New lumps, bumps, or sores
- Repeated trouble with shedding
- A long-term pattern of lethargy or hiding

Bring a written log of temperatures and humidity, details about your water and dechlorinator, your feeder and supplement routine, a photo of the setup, and, if possible, a fresh fecal sample in a sealed container. If the toad is in distress, transport it in a small, ventilated container lined with damp (dechlorinated) paper towels, kept cool, out of the sun, and out of a hot car.

SECTION 12

FAQ

What do fire-bellied toads eat?

Fire-bellied toads are insectivores, meaning they eat live insects and worms. A good staple diet is small crickets and dubia roach nymphs, with earthworms and blackworms for variety and waxworms only as a rare treat. Feeders should be gut-loaded (fed a nutritious diet for a day or two beforehand) and lightly dusted with calcium and a multivitamin on a schedule. Each prey item should be no larger than the space between the toad's eyes. Juveniles are fed daily and adults two to three times a week. They hunt on land and in shallow water, so a shallow dish of worms near the water's edge often works well. Never feed wild-caught insects, fireflies, meat, or human food.

How big do fire-bellied toads get?

Oriental fire-bellied toads (*Bombina orientalis*) reach about 2 to 2.5 inches as adults, measured from snout to rump, and females are often slightly larger than males. They grow quickly in their first year and slow down after that. The related Chinese fire-bellied toad (*Bombina maxima*) is larger, reaching around 3 to 3.5 inches. Even at full size they remain small, which is one reason they fit nicely in a 10-gallon or 20-gallon long aquaterrarium, though a group of them needs more floor space than their size suggests.

How long do fire-bellied toads live?

With good care, fire-bellied toads live 10 to 15 years in captivity, and some reach 20. This is a long commitment for such a small animal, and lifespan depends mostly on the basics: keeping the tank cool, keeping the water clean, feeding a varied and properly supplemented diet, and avoiding handling. Heat stress and poor water quality are the most common reasons these toads die young, so getting temperature and water right at the start is the best investment you can make in a long life.

What size tank do fire-bellied toads need?

A 10-gallon tank is the minimum for a pair, and a 20-gallon long is a better choice for a group of three to five. Floor area matters more than height, because these toads don't climb, but the lid must be secure. The tank should be roughly half water and half land, with shallow water about 1 to 3 inches deep at one end, a gentle slope or platform leading to a land area, and cork bark, rocks, and live plants for cover. When in doubt, go larger; more space improves water stability and reduces stress.

Do fire-bellied toads need heat?

Usually not. Fire-bellied toads are cool-weather animals from northeast Asia, and the ideal daytime temperature is 70 to 75 degrees Fahrenheit, with a safe range of 68 to 78 degrees and nights in the mid-60s being perfectly fine. A normal house typically provides this with no added heat at all. The real danger is overheating: anything above 80 degrees is dangerous, and a heat lamp, heat mat, or sunny windowsill can quickly push a tank past that. If your home runs warm, move the tank to a cooler room, use a fan across the screen top, and monitor water temperature closely.

Are fire-bellied toads poisonous?

They are mildly toxic rather than deadly. Their warty skin produces secretions that irritate the skin, eyes, and mouth, which is why the toad shows its bright red belly in the unken reflex, a warning display that tells predators it tastes bad. For people, the practical risk is low: wash your hands with soap after any contact, keep your fingers away from your eyes and mouth, and avoid handling when you have cuts. The secretions can be more harmful to other animals, so keep dogs, cats, fish, and other amphibians away. Fire-bellied newts (*Cynops*) are a different and more dangerous animal and should never be confused with them.

Do fire-bellied toads need water?

Yes, absolutely. Fire-bellied toads are semi-aquatic and need both water and land in the same tank. They soak, swim, float, hunt, and absorb moisture through their skin in shallow, clean, dechlorinated water that is about 1 to 3 inches deep, and they need an easy way to climb out at any point. Water quality is critical, because their permeable skin absorbs whatever is in the water. Use a dechlorinator for every refill, change a portion of the water weekly (more often without a filter), and never leave soap or disinfectant residue on anything that touches the tank.

Can fire-bellied toads live together?

Yes, with their own kind. A group of three to five fire-bellied toads of the same species does well in a 20-gallon long, and they often seem more active and confident in company. Do not mix them with other species, though, including other frogs, toads, newts, fish, or reptiles, because their skin secretions can harm tank mates and diseases such as chytrid fungus pass easily between animals. Always quarantine new arrivals for several weeks before introducing them, and never house wild-caught amphibians with captive-bred ones.

Can you handle a fire-bellied toad?

You can, but you should avoid it. Their skin is thin and permeable, so it absorbs oils, soap, lotions, and sanitizers from your hands, and their secretions can irritate your skin and eyes. They are a display animal, best enjoyed through the glass. If you must move one, use a clean damp container or soft net, or rinse your hands in dechlorinated water so they are clean and wet, and keep the contact brief. Always wash your hands with soap afterward, and keep children from handling them.

Do fire-bellied toads need UVB?

Low-level UVB is recommended. Fire-bellied toads come from shaded, damp habitats and fall into Ferguson zone 1, meaning they need only a little UVB, but a low-output UVB tube over part of the tank supports calcium metabolism and bone health. Cover only a portion of the tank so the toad can retreat to shade, run it on a 10 to 12 hour day and night cycle, mount it above a mesh screen because glass blocks UVB, and replace the tube on the manufacturer's schedule. Combined with a calcium-supplemented diet, it helps prevent metabolic bone disease.

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SECTION 13

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For fire-bellied toad keepers, that promise comes with a second one. Please **never take amphibians from the wild, and never release a pet outdoors**, no matter how healthy or how tempting. Captive animals can carry chytrid and other diseases that devastate wild frogs, toads, and salamanders. If you can no longer care for your toad, reach out to the seller, a local herpetological society, or an amphibian rescue instead. Those groups would much rather hear from you than find a toad in a creek.

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Welcome to a decade or more with one of the most colorful little animals in the hobby.

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