

New World Tarantula Care Guide

A Beginner's Introduction to Keeping New World Tarantulas

Grim Serpents — May 2026

Quick Facts

| Attribute | Details |
|--------------------|--|
| Family | Theraphosidae |
| Origin | North, Central, and South America |
| Primary Defense | Urticating hairs (barbed setae on abdomen) |
| Venom Potency | Low to mild; not medically significant |
| Temperament | Generally docile, slow-moving, tolerant |
| Lifespan (Females) | 15–30+ years (species-dependent) |
| Lifespan (Males) | 3–12 years |
| Adult Size | 2–12+ inches DLS (species-dependent) |
| Experience Level | Beginner to Intermediate |
| Handling | Possible, but optional; carries fall risk |

Natural History

New World tarantulas are native to the Americas, occupying diverse habitats spanning tropical rainforests, cloud forests, semi-arid scrublands, deserts, and high-elevation mountainous regions up to 4,000 meters. Within the family Theraphosidae (comprising approximately 1,164 species across 186 genera), New World species represent a large and ecologically diverse subset.

The defining evolutionary adaptation of New World tarantulas is their possession of urticating hairs—specialized, barbed microscopic setae located on the dorsal and posterior surface of the abdomen. Found in approximately 90% of New World tarantula species and absent entirely in Old World tarantulas, these hairs provide a unique defense mechanism. When threatened, a tarantula rapidly rubs its back legs against its abdomen, 'flicking' or 'kicking' a cloud of these barbed hairs toward a perceived threat.

Housing

Enclosure Type & Size

Tarantulas are measured by their **Diagonal Leg Span (DLS)**—the distance from the tip of the front-left leg to the tip of the back-right leg, measured diagonally across an outstretched spider. Enclosure sizing is based on DLS and species type.

Terrestrial / Burrowing Species (Brachypelma, Grammostola, Aphonopelma):

- Floor space (length x width): 3–4x the spider's DLS
- Height: 1–1.5x the spider's DLS
- Substrate depth: 1.5–2x DLS

Arboreal Species (Avicularia):

- Height: 3–4x the spider's DLS
- Floor space: 2–3x DLS
- Substrate depth: 1–1.5x DLS

Substrate

Use a substrate that holds moisture without becoming waterlogged: **Coconut husk / Eco-Earth** (excellent for most terrestrial species), **Topsoil / Peat mix** (good for burrowers), or **Aspen** (only for arid species). For terrestrial species, fill the enclosure 1.5–2x the spider's body length with substrate, allowing room at the top for air circulation.

Temperature & Humidity

Temperature

Most New World tarantulas thrive at room temperature: 70–80°F (21–27°C). If you are comfortable in your home, your tarantula is comfortable. Avoid temperatures below 65°F (spider becomes sluggish) or above 85°F (can be fatal). No heat lamp or heat mat is necessary if your home maintains room temperature.

Humidity

The correct approach is to create a **moisture gradient**: one area of the enclosure slightly damp, most of the substrate and enclosure dry, with good airflow throughout. Provide a water dish (shallow, ~1/2 inch deep) in one corner and lightly mist one corner of the substrate 1–2x per week. Keep most of the substrate dry to prevent mold and respiratory issues.

| Species Type | Target RH | Notes |
|--------------|-----------|-----------------------------------|
| Arid/Desert | 40–60% | Keep drier; water dish sufficient |
| Temperate | 50–70% | Slight moisture, well-ventilated |
| Tropical | 70–80% | More moisture, excellent airflow |

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| Semi-Arboreal | 60-75% | Moderate moisture, good ventilation |
|---------------|--------|-------------------------------------|

Feeding

Prey Type & Size

Tarantulas are carnivorous and eat live insects: **Crickets** (most popular), **Roaches** (Dubia, Madagascar—nutritious), **Mealworms** (good size variety), and **Grasshoppers** (for larger adults). Prey size rule: Offer prey no larger than the tarantula's abdomen width.

Feeding Frequency

| Life Stage | Frequency | Notes |
|-------------|--------------------|---|
| Spiderlings | Every 2–3 days | Small prey; stop when pre-molt signs appear |
| Juveniles | Every 3–5 days | Medium prey; transition to longer intervals |
| Sub-adults | Once per week | Larger prey; slower growth begins |
| Adults | Once per 1–2 weeks | Watch abdominal plumpness; adjust frequency |

Best Practices

- Drop prey into the enclosure close to the spider
- Remove uneaten prey after 24 hours
- Tarantulas can fast for weeks without harm
- Watch abdominal plumpness; adjust frequency to maintain a healthy, plump (not bloated) abdomen

Molting / Shedding

Molting occurs when a tarantula sheds its exoskeleton to grow. During a molt, the tarantula is extremely vulnerable—fangs are soft, the body is exposed, and it cannot defend itself. Proper molt care is critical.

Pre-Molt Signs: Refusal to eat (days or weeks before), lethargy, silk webbing, color changes, urticating hair loss, slower movement.

During the Molt: Do not feed; leave completely undisturbed. Molt typically lasts 1–6 hours, but exoskeleton hardens over days or weeks. Maintain stable humidity and moisture.

Post-Molt Feeding: Spiderlings—wait 5–7 days. Adults—wait 2–3 weeks. Start with small prey as a 'test' of hardened fangs.

Molt Emergencies: If a tarantula gets stuck in its exoskeleton (retained exuviae), cannot complete the molt, or shows distress, contact an exotic veterinarian immediately. Do not attempt to manually remove the exoskeleton.

Handling & Temperament

Most New World tarantulas are calm, slow-moving, and more tolerant of careful handling than Old World species. However, handling is always optional and carries risk. Falls from height can cause fatal abdominal rupture.

If you choose to handle:

- Start young—spiderlings acclimated to handling are more tolerant as adults
- Handle slowly and calmly; avoid sudden movements
- Keep sessions short (1–2 minutes maximum)
- Handle over a surface or cushion to break falls
- Never force handling if in threat posture
- Wash hands after handling to remove urticating hairs

Bottom line: New World tarantulas are not pets that require handling. They are fascinating to observe and enjoy as long-lived companions. Enjoying your tarantula without handling is equally rewarding and safer for both keeper and spider.

Health & Common Issues

Dehydration

Sunken abdomen, lethargy, odd positioning. Maintain water dish at all times; mist weekly. Increase water access; contact vet if no improvement in 24 hours.

Mold & Respiratory Issues

White/black fuzz, respiratory distress. Maintain good airflow, don't over-mist. Increase ventilation immediately; remove moldy substrate; contact vet.

Retained Exuviae (Stuck Molt)

Tarantula stuck in exoskeleton, extreme distress. Maintain humidity during molt; ensure water access. **VETERINARY EMERGENCY**—do not attempt manual removal.

Mites & Parasites

Visible mites, unusual behavior, lethargy. Use clean feeder insects; quarantine new tarantulas. Contact exotic vet; professional treatment required.

Trauma & Falls

Abdominal bleeding from fall. Use appropriate enclosure height (1–1.5× DLS). Minor leaks may clot; significant bleeding is a veterinary emergency.

When to Seek Veterinary Care: Find an exotic veterinarian before you need one. Seek care for prolonged appetite loss, dehydration, respiratory distress, visible injury, failed molts, or unusual behavior changes.

Sources

This guide was compiled using commonly accepted husbandry practices from experienced keepers and industry-standard tarantula care resources. Research sources include Paladin Exotics, The Bio Dude, SpectrumCare, The Tye-Dyed Iguana, Tom's Big Spiders, Furry Critter Network, Arachnboards community forums, Journal of Arachnology, World Spider Catalog (NMBE), and academic publications on tarantula biology and husbandry.