



**Photo Credit: Poyink Carl*

Sailfin Dragons (*Hydrosaurus* spp.)

Real Life Dragons with a Sail

The Sailfin Lizards, also known as the Sailfin Dragons (*Hydrosaurus* spp.), are a genus of large, arboreal and semi-aquatic agamid lizards indigenous to Indonesia and to the Philippines, consisting of about 4 or 5 species in total. The Philippine Sailfin Dragon (*Hydrosaurus pustulatus*) and the Moluccan or Amboian Sailfin Dragon (*Hydrosaurus amboinensis*) tend to be the most commonly seen species in captivity.

Named "sailfin" dragons owing to their large, fin-like sails at the bases of their tails, these unique semi-aquatic lizards are usually found in or immediately near bodies of water such as mangrove swamps or rivers, where they, like the basilisks, are able to run short distances over water to escape potential threats. These lizards are also strong swimmers and divers as well.

In captivity, these lizards require very large quarters or enclosures, with plenty of access to large bodies of clean, fresh water. While occasionally captive bred, many that are available still are wild-caught. All of these factors make these lizards perhaps best suited for the more advanced keeper. Learn more about keeping the Sailfin Dragons in this latest care guide!

Sailfin dragons can be quite variable in color and appearance depending on the species, as well as age and sex of the animal. In general, these lizards can range from a solid to mottled light to dark brown, olive, dark greenish, or olive brown, blackish, to yellowish in color with a low dorsal ridge or row of spines present. Male Philippines sailfin dragons will often develop darker blackish, purplish, to deep indigo blue jaws, limbs, and pelvic/pectoral regions. The most prominent identifying feature of sailfin dragons of all species are their large, upright cartilaginous "fins" or "sails" beginning at the bases of their tails and spanning to about halfway down the tail.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Squamata

Suborder: Lacertilia

Infraorder: Iguania

Family: Agamidae

Subfamily: Hydrosaurinae

Genus: Hydrosaurus

Species: *Hydrosaurus* spp.*

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the proper care, sailfin dragons can attain longevity of at least 15 to 20 years or more in captivity.

Species

Five (5) species of sailfin dragons are currently recognized: the Amboina Sailfin Dragon (*Hydrosaurus amboinensis*), Indonesian Giant Sailfin Dragon (*Hydrosaurus microlophus*), Philippines Sailfin Dragon (*Hydrosaurus pustulatus*), Sulawesi Black Sailfin Dragon (*Hydrosaurus celebensis*), and the Barbour's or Weber's Sailfin Dragon (*Hydrosaurus weberi*). Of these species, the Philippines sailfin dragon and the Amboina or Moluccan Sailfin Dragons are perhaps the most commonly kept and seen species in the reptile industry.

Distribution and Habitat

Sailfin dragons are relatively large, semi-aquatic agamid lizards indigenous to southern to southeastern Asia, namely the Philippines, Indonesia, and Papua New Guinea. This range is furthermore dependent upon the species, with individual species often having even more limited ranges within this distribution. Within their range, these unique lizards occur in humid, lowland tropical to sub-tropical rainforests, forests, and woodlands, often near rivers and riverbanks, rice paddies and irrigated croplands and agricultural areas, swamplands, and other bodies of water and ample overhanging or nearby basking locations, which allow for these lizards to retreat across when threatened by would be predators.

Origin/History

Hydrosaurus spp. Kaup, 1828. Specific species would have other authors first describing them during other years.

Sailfin dragons have never been common in the pet trade. They were more available in the late 1980s and early 1990s when the Philippines exported them, but the country has since protected the lizards and stopped their export. Now, Indonesia is the primary source of sailfin dragons (Scott Corning Feb. 13 2023).

Experience Level Required

Intermediate/Moderate to Advanced.

Size

Young sailfin dragons range from 7.0 to 12.0 inches in total snout-to-tail length as hatchlings. They are sexually dimorphic, with males reaching 1/3rd larger sizes than females. Total snout-to-vent (SVL) lengths for sailfin dragons may vary somewhat depending on the species, although typically approximately 12.7 inches. Adult, total snout-to-tail lengths of adult sailfin dragons may vary somewhat depending on the species, as follows:

Philippine Sailfin Dragon (*Hydrosaurus pustulatus*): Total snout-to-tail length of about 2 to 2 ½ feet, or 24.0 to 30.0 inches, although some males can become larger at up to 3 ½ to 4 feet, or 42.0 to 48.0 inches total snout-to-tail length.

Ambon or Moluccan Sailfin Dragon (*Hydrosaurus amboinensis*): Total snout-to-tail length of

about 3.3 feet, or 39.6 inches.

Housing and Enclosure

Enclosure System: Primarily Arboreal to Semi-Aquatic. Sailfin dragons are both quite semi arboreal and semi aquatic lizards, and housing and enclosures must allow for and reflect their natural history and habits as closely as possible. Housing must be sealed and escape proof, as well as be adequately ventilated. Hatchling to young sailfin dragons up to 15 to 16 inches can be housed in a 40 gallon terrarium or other glass or plastic enclosure. Depending on the size of adult specimens of each species, a minimum of a small room-sized custom enclosure should be provided for housing an adult sailfin dragon. Sailfin dragons can also be housed in pairs in appropriately larger housing, but do not house males together as they are territorial. Visual barriers of adequate height roughly 5 to 6 inches for hatchlings and juveniles, and approximately 12 inches for adults for housing any age or size sailfin should also be utilized to increase security as well as humidity that these active lizards require. For substrate, sailfins dragons will do best on organic substrates that retain humidity well on a substrate such as pesticide free potting soil, cypress mulch, coconut fibers, or peat/sphagnum moss as well as mixtures thereof. Being largely semi aquatic lizards, providing the correct amount of water and hydration is also a very important component to maintaining sailfin dragons in captivity. Daily or regular misting should be utilized to ensure proper hydration and shedding, and a large, sturdy enough water dish or pan for the animal to readily enter and be able to completely submerge itself are also important components to provide. Water should be cleaned, filtered, and replaced regularly at minimum two to three times weekly, especially whenever fouled. Sailfin dragons are arboreal lizards, and should be given adequate climbing, hiding, and basking opportunities in the enclosure as well. Several large, horizontal, diagonal, and vertical branches, logs, securely fastened and installed bamboo or other rods or dowels, or even built in shelves of the walls inside the enclosure as well as other live or artificial foliage should be features provided in any sailfin dragon enclosure or setup for added safety and security, as well as aesthetic appeal.

Temperature, Lighting, and Humidity

Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of sailfin dragons in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Also be sure to spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months.

A thermal gradient (or a warm side) in the cage/enclosure should be created. Ideal ambient and cool side temperatures for sailfins range from 85 to 90 degrees F on the cool and ambient temperatures and around 115 to 120 degrees F on the warm, basking side. Nighttime temperatures can be allowed to drop to between 75 and 80 degrees F. Undertank heating pads and ceramic and radiant heat emitters can also be used as supplemental heating devices as well if needed. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. Sailfin dragons require high relative humidity in order to thrive, and levels should be maintain at, or around 75 to 80%.

Feeding, Diet, and Nutrition

Herbivorous to Omnivorous; In the wild, sailfins are omnivorous, meaning they will eat both plant and animal matter. They will eat an assortment of insects and other invertebrates, fruit and vegetable material, and even other small vertebrates on occasion. Feed sailfin dragons in captivity a small amount or assortment of chopped up fruits and vegetables including bananas, cantaloupe, berries, carrots, peas, collard and dandelion greens, other edible and non-toxic

flowers, and beans. Feed green leaf lettuce sparingly if at all. Sailfin dragons will also readily accept a variety of appropriately sized feeder insects including crickets, mealworms, superworms, super worms, feeder roaches, and waxworms. Gut load these prey items by feeding them commercially available diets for added nutritional value. As they grow and become older, sailfin dragons can also be given further diversity in their diets to include occasional small pre-killed rodents, ground beef or turkey, shrimp, and other edible crustaceans as well, but feed them any of these items sparingly, if at all. Some forms of commercially available omnivore diets for other more commonly kept lizard species can also be acceptable for sailfin dragons. Food for sailfin dragons can be offered or provided in a bowl or dish daily to every other day. Providing calcium and vitamin D3 supplements in their diets at least 2 to 3 times weekly is essential for their overall health and well-being. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

As with many reptiles, hatchling and juvenile sailfins often tend to be initially more nervous and defensive. Handle your sailfin gently and deliberately, but do not drop or injure the animal. They are not overly defensive lizards, but overall, sailfins tend to be somewhat more skittish and flighty lizards than many other popular species in captivity when it comes to handling, but they can become accustomed to and tolerate some levels of gentle handling by the more intermediate enthusiast or pet owner. Adult sailfins can become impressive and attractive medium sized display animals as well that are often coveted.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

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