



\*Zac Herr/ZTH Photography

## Fire Salamander *(Salamandra salamandra)*

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### The Legend of “Fire Lizards”

Fire salamanders are a large, stocky bodied caudate belonging to the family “Salamandridae” or the “true” salamanders, which consist of the newts. It is sometimes believed that fire salamanders earned their names from accounts of them emerging or retreating by the numbers from collected firewood once it is burned. This lent to the erroneous legend that the salamanders, or “lizards” were derived from the wood itself. Fire salamanders are a large, stocky salamander with a broad, rounded head and pair of paratoid glands behind each eye. They may range in color from dark brown to glossy black with brightly colored yellow, orange, to yellowish orange spots, dashes, and/or stripes, and two or more linear rows of poison glands running from the paratoid glands behind the eyes, along their dorsum and sides.

### Taxonomy

**Life:** All living, physical, and animate entities

**Domain:** Eukaryota

**Kingdom:** Animalia

**Phylum/Sub Phylum:** Chordata/Vertebrata

**Class:** Amphibia

**Order:** Caudata/Urodela

**Suborder:** Salamandroidea

**Family:** Salamandridae

**Genus:** Salamandra

**Species:** *Salamandra salamandra*\*

*\*Taxonomy subject to change and revision.*

### Lifespan and Longevity

If provided the proper care, fire salamanders can be quite long lived and attain longevity of 10 to 15 years or more, with 30 years not being uncommon for these species.

### Distribution and Habitat

These caudate species are widely ranging over much of mainland Europe, as well as portions of north western Africa and other areas of the eastern Mediterranean depending on the exact species and subspecies. These species inhabit the high altitude alpine and lowland forests and woodlands within their range, where they may be found under rocks, logs, and other forest floor debris near breeding ponds, streams, or other wetlands.

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### **Conservation Status**

IUCN Red List Least Concern (LC).

### **Experience Level Required**

Intermediate/Moderate.

### **Size**

Fire salamanders are a large caudate species, with adults reaching anywhere from 5 to 12 inches in length.

### **Housing and Enclosure**

Housing must be sealed and escape proof with a secured lid or aquarium hood. Fire salamanders are predominately terrestrial, and will burrow, but are not overly fossorial species. A single adult fire salamander can be housed in a 10 to 20 gallon aquarium with coconut husk, chemical free potting soil, or cypress mulch substrate. Alternatively, a more simplistic substrate and setup can also be provided using paper towel. Provide a large, shallow water dish and change frequently or when dirtied. Due to their sensitive skin, water with heavy metals, chlorines, or contaminants should \*not\* be used. Artificial plants, cork bark hides, and driftwood can also be included as cage furnishings. They can also be misted every few days, but conditions should also not be overly wet. Floor space is more important than height for these salamanders.

### **Temperature, Lighting, and Humidity**

Fire salamanders do not require any special UVA/UVB lighting. Being species found naturally at higher altitudes and elevations, they are more tolerant of cooler temperatures. This is an important husbandry consideration when maintaining fire salamanders in captivity. Maintain these salamanders within a temperature range of ideally under 68 degrees F. While fire salamanders can tolerate temperatures in the low 70's, they should not be exposed to these ranges for prolonged periods of time and regular temperatures certainly should not exceed this range. 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.

### **Feeding, Diet, and Nutrition**

***Insectivorous to Carnivorous***; Fire salamanders are insectivorous, and in the wild they will feed on a variety of insects, worms, and other invertebrates. They will also occasionally consume smaller vertebrates as well, and can also be cannibalistic under certain circumstances.

In captivity, fire salamanders have voracious appetites, but should not be overfed in order to prevent obesity and other health related concerns. Providing variety is important, and fire salamanders can be fed chemical and pesticide free earthworms, waxworms, silkworms, crickets, or roaches. Small, pre-killed rodents can also be given on occasion, but give these sparingly, if at all. No additional vitamin, mineral, or nutrient supplements are required to maintain fire salamanders if the above varied diet is followed, although gutloading or supplementing with calcium and vitamin D3 can still be beneficial for their optimal 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**

Fire salamanders are delicate, soft bodied amphibians with sensitive, permeable skin as with most amphibians. Wash hands thoroughly before and after handling them, and avoid wearing any lotions, creams, or oils before handling any amphibian. Fire salamanders can also excrete

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salamandrin toxins when physically attacked or mishandled, which can be toxic or irritating to other animals that may try to eat them or otherwise come into direct or indirect contact with the toxins. Fire salamanders should therefore be handled carefully using common sense practices to prevent their toxins from entering any mucous membranes of the body. Handling these salamanders should be minimized whenever possible and only when absolutely necessary.

**\*\*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**

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact the Madison Area Herpetological Society at [info@madisonherps.org](mailto:info@madisonherps.org)

*Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility.*

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