

Amazing SPIDER Facts

Arachnids are found wherever from blasting deserts to solidifying climes, displaying outrageous strength, adaptability and has unique survival mechanisms. Broadly, spiders are divided into two categories: **Mygalomorphs or big spiders and Arnaeomorphs or small spiders**. There are two main types of spiders, **hunting spiders** that don't build webs and **web weaving spiders**. Depending on how they feed, their bodies and their eyes are different shapes and sizes.

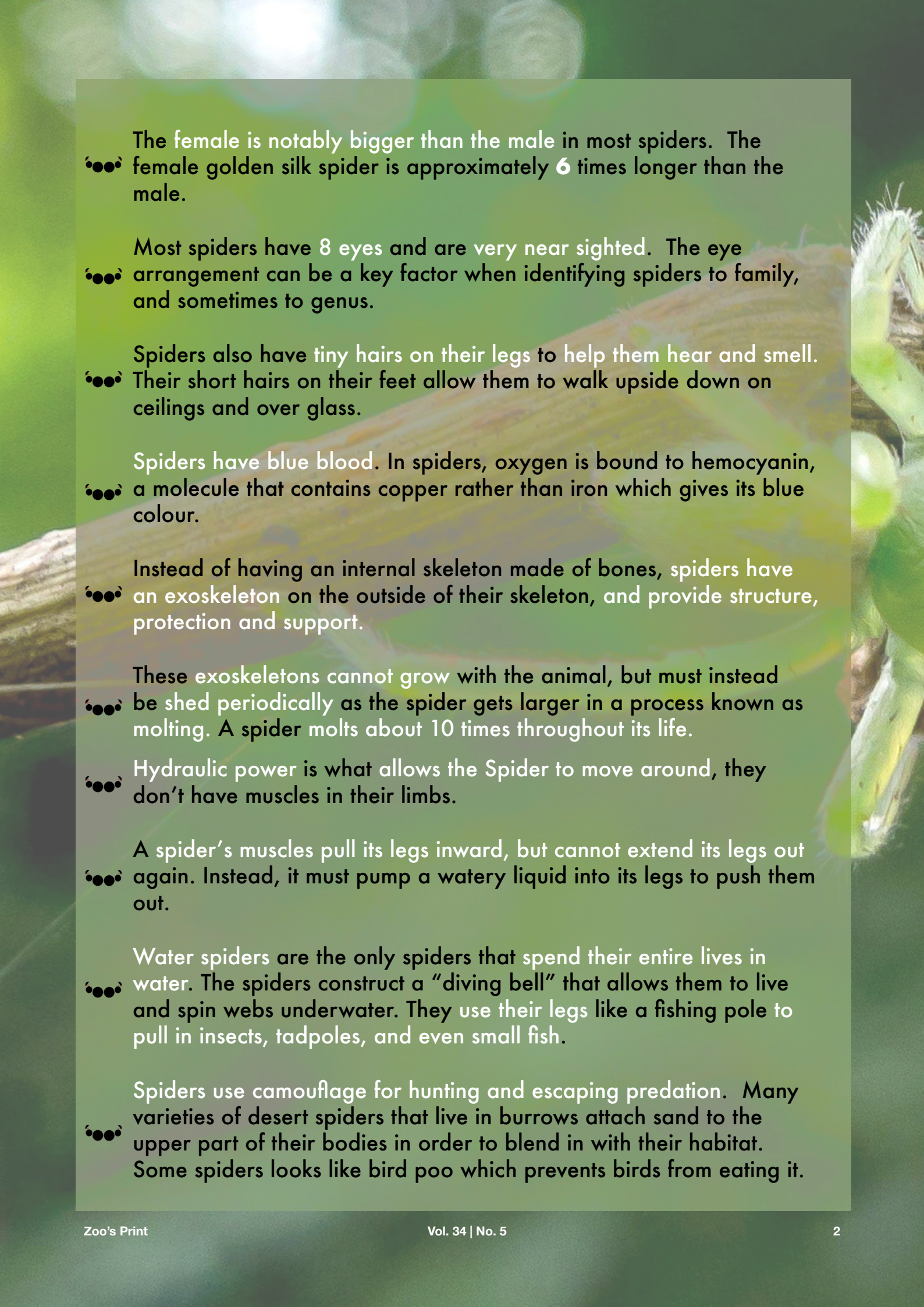
There are about **48,000** different species of spiders and there are probably many more to be discovered. India is home to about **1685** spiders from **438** genus and many yet to be discovered.

Spiders are not insects. Spiders are known as arachnids because they only have two body segments instead of three. Other arachnids are scorpions, mites, and ticks. Spiders have **8 legs** while insects have 6. They don't have antennae.

Spiders usually **found in plants, shrubs, grasses, flowering plants, leaf litter and sometimes under stones**. Most spiders live on land, but a few, like the raft spiders, live in and on water. These spiders can "run" across the water's surface.

Compiled and
designed by Latha
G. Ravikumar, ZOO

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A green spider is perched on a brown, textured leaf. The spider's body is a vibrant green, and its legs are also green, with some lighter green segments. The background is a soft-focus green, suggesting a natural outdoor environment.

‘●●●’ The female is notably bigger than the male in most spiders. The female golden silk spider is approximately **6** times longer than the male.

‘●●●’ Most spiders have **8 eyes** and are **very near sighted**. The eye arrangement can be a key factor when identifying spiders to family, and sometimes to genus.

‘●●●’ Spiders also have **tiny hairs on their legs** to help them hear and smell. Their short hairs on their feet allow them to walk upside down on ceilings and over glass.

‘●●●’ Spiders have **blue blood**. In spiders, oxygen is bound to hemocyanin, a molecule that contains copper rather than iron which gives its blue colour.

‘●●●’ Instead of having an internal skeleton made of bones, spiders have an **exoskeleton on the outside of their skeleton**, and provide structure, protection and support.

‘●●●’ These **exoskeletons cannot grow with the animal**, but must instead be shed periodically as the spider gets larger in a process known as molting. A spider molts about **10 times** throughout its life.

‘●●●’ **Hydraulic power** is what allows the Spider to move around, they don't have muscles in their limbs.

‘●●●’ A spider's muscles pull its legs inward, but cannot extend its legs out again. Instead, it must pump a watery liquid into its legs to push them out.

‘●●●’ **Water spiders** are the only spiders that spend their entire lives in water. The spiders construct a "diving bell" that allows them to live and spin webs underwater. They use their legs like a fishing pole to pull in insects, tadpoles, and even small fish.

‘●●●’ Spiders use **camouflage** for hunting and escaping predation. Many varieties of desert spiders that live in burrows attach sand to the upper part of their bodies in order to blend in with their habitat. Some spiders look like bird poo which prevents birds from eating it.



‘●●●’ The average life of a spider is one to 2 years. Although the female tarantula may live up to 20 years!

‘●●●’ Mother spiders can lay as many as 3,000 eggs at one time. Baby spiders are called spiderlings. While most mother spiders do not stay with their babies, the wolf spiders carry their babies on their backs.

‘●●●’ Jumping Spiders are able to jump up to 50 times their own length. This is possible due to increasing the amount of blood pressure found in the back limbs.

‘●●●’ Spider silk covering the egg sacs of spider reflects UV rays that protects the tiny delicate eggs.

‘●●●’ An abnormal fear of spiders is called ‘arachnophobia’.

What do Spiders eat?

‘●●●’ Spiders are voracious eaters. They are capable of preying on insects many times their size. In addition to eating insects (ants, flies, mosquitoes, and bees, some spiders) will also eat very small animals like birds, frogs, lizards, and centipedes. Some male spiders give dead flies to the females as presents.

‘●●●’ In many spider species, females eat the males. This spider cannibalism is known as araneophagy.

‘●●●’ The hair on a spider’s first pair of legs are sensitive to taste. The spider “tastes” its prey by touching it.

‘●●●’ Web weaving spiders are agile and patient. They wait for their food by hanging on the webs they build, and they don’t rely on eyesight to find their prey. Hunting spiders have good eyesight, strong muscular legs and they have modified and padded feet that allow them to climb walls, run quickly, and jump on prey.

Spiders do not have teeth, so they cannot chew their food, instead they have fangs which inject venom. Their venom contains many chemicals that helps to immobilise insects by attacking their nervous systems and break down the tissue so they can ingest a liquefied meal.

Spiders do not eat plants as they are not able to digest the cellulose. A species of jumping spider, Bagheera kiplingi, seems to be the world's only known plant-eating spider.

Spider Silk (a fibre secreted by spiders)

All spiders spin silk, but not all spiders spin webs. They have between two and six spinnerets at the back of their abdomen. Each one is like a tiny showerhead that has hundreds of holes, all producing liquid silk. Spiders are the only group of animals to build webs.

Spider silk is lighter than cotton but 4 times stronger than steel. Thinner than a human hair, but handles loads 100s of time its size. Additionally, a spider's body has a special oily substance that keeps it from getting stuck in its web.

Spiders spin webs to catch other bugs to eat. On average, it takes about 60 minutes to spin a web. Some spiders eat their webs and some use their web to resting ground to revisit.

Spider silk has a unique combination of both strength and elasticity. A vast group of scientists found a method to mimic spider silk into artificial or synthetic spider silk to make fiber.

When the spider releases their silk, it becomes solid and forms a thread. Web-weaving spiders have 2 or 3 claws at the tip of each leg that they use to swing from strand to strand without getting stuck in the sticky part of their web actively hunt their prey and pounce.

Grass spiders build a web on top of the grass. Their webs form a funnel shape, which is not sticky.

While most spiders build a new web every day, the web of the gold orb can last several years and can even catch birds.