

Kabini – On Eight Legs

- by Pranad Patil



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Pic 1: Hamadruas Lynx Spider

While working as a naturalist for a resort in the famous Kabini area (straddled by Nagarhole and Bandipur Tiger Reserves) of Karnataka, I was fascinated by the vast diversity of spiders in the vicinity. One side of the resort was flanked by the Kabini reservoir while cotton fields dotted by constructions encompassed the other sides, which provided ample opportunities to explore the region for these interesting creatures.

As I had recently got a macro lens, I was more than happy to take images of the obliging arachnids. But what bothered me was that I knew next to nothing about the spiders that I was clicking images of. Spurred by a naturalist's innate curiosity, I set myself to the task of learning about their taxonomy, distribution and ecology. At first I blindly '*googled*' spiders in South India. Amused, and a little sorry at my predicament, a colleague offered me a field guide on South Indian spiders. It had succinct descriptions of several species, their English names, and some coloured

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photographs at the end. And thus began my short, albeit seven-month long journey of discovering spiders!

The most fascinating part about this exploration was that I was able to observe most of these spiders on a daily basis and make interesting observations about their ecology. Here are brief descriptions of some of the spiders that I got to see and capture on my camera.

Signature spiders (*Argiope* spp.)

Most wildlife enthusiasts in India are well aware of the signature spider. But few know that there are, in fact, several species in the genus *Argiope*, not just in India, but across the tropic and temperate regions of our planet. In India, *Argiope anasuja* is probably most commonly seen. Signature spiders are popular, especially amongst wildlife photographers, because of the decorative webs they construct. These spiders make zigzag patterns on their web called 'stabilimenta' (singular: stabilimentum). These stabilimenta are strikingly similar to a person's signature, thus giving the spider their English name.



Pic 2: Signature Spider

The signature spiders we usually see are females, which are larger than males. They usually rest smack in the center of the web, head pointing downwards with a

pair of legs stretched across the four corners of the web. This resting posture also lends these spiders an alternate name, ‘four-legged spiders’. While the exact function of the stabilimenta is debated, it is assumed to be useful in strengthening the web, scaring off predators, camouflaging the spider and attracting prey. Their function notwithstanding, the webs have a distinct visual appeal owing to the artistic spin that these spiders give them. Now, equipped with a macro lens, I was able to get close to the web and capture the intricacies of the stabilimenta, that had so fascinated me.

Wood spiders (*Nephila* sps.)



Pic 3: Giant Wood Spider, female

Giant Wood Spiders (*Nephila pillipes*) are commonly seen in several forests of Central and South India. They are also known as Golden Orb Spiders because of their bright yellow hue. These spiders build webs that are among the largest found in India, with some stretching over 20 feet in height. On an average, the females, which are more commonly seen, can grow to the size of the average human being’s palm. Big spiders have big appetites, which are satiated by building such large webs. Apart from preying upon their usual suspects, which include flying insects, they show no hesitation in extending their gastronomical choices to small birds and bats, which get entrapped in their huge webs. Although their

venom is potent enough to kill small vertebrates, these spiders are surprisingly docile. So far there have been no records of these spiders biting humans!

The Giant Wood Spider also displays one of the most dramatic sexual dimorphism across the order. The females, which grow to around 20 cm across (from toe to toe), dwarf the males, which are only about 1 cm long. The tiny, red males are usually seen lingering on the edges of the female's webs, waiting for her to get busy with her meal. When the perfect opportunity strikes, and the female is most busy, a male moves in, mates with the female and retreats to the edges of the web. There is a good reason for this furtiveness on the part of the males; female spiders are known to eat their mates!



Pic 4: Giant Wood Spider, male

During my days in Kabini, I happened to see a male on a tiny web of its own. What surprised me at first made sense when I considered the rationale behind this phenomenon. Males are mostly found on female webs, where they come to mate. However, anything that gets caught in the web belongs to the

female. But males also need to eat to survive and hence must to make the necessary arrangements. I

was also lucky to see a Black Wood Spider (*N. kuhlii*) during my duration in Kabini. This black-coloured and red-legged specimen is for some reason, rarer than its cousin, the Giant Wood Spider.

Lynx spiders (family Oxyopidae)

Lynx spiders are ambush predators, and make little or no use of pre-built webs in capturing their prey. Lynx spiders are characterized by spiny, hair-like bristles on their legs. These spiders enclose their prey within their legs and the large bristles form a basket-like structure, thus confining the quarry. The English name of these spiders may either be a result of a comparison between the hairy legs of the spiders and the tufts of lynxes, or may point out to the similar ambush-style hunting strategy of the two predators.

Lynx spiders hide among flowers, leaf stalks and on the bark of trees, waiting for prey to come within striking distance. Most spiders, thus, wear camouflaging colours, which aid in their concealment. They have excellent vision and depend on their eyesight to detect prey. A common sight in gardens and fields, lynx spiders are also counted among the best of biological pest controllers; although they lose

a few points, as they do not distinguish between pests and pollinators. The size of these spiders varies from small to medium and they rarely grow over 3 cm. During my several spider-trails in Kabini, I noticed that some species are diurnal and some others, nocturnal. When resting, lynx spiders will tuck themselves under leaves or within gaps in the bark.



Pic 5: Orange-backed Lynx Spider

Genus *Oxyopes* is the most well-represented genus in the family. But other genera are also present in our country. I was surprised to find one beautifully coloured lynx spider belonging to the genus, *Hamadruas*, which was described as recently as in 2009!

Spiders usually do not feature on most people's list of favourite animals. But if you attempt to get to know them better, you will realize that these 'horrible' creatures are in fact, among nature's most amazing creations!!

About the author:

Pranad is a Zoology graduate and currently works as a naturalist. He is an ardent nature lover, amateur wildlife photographer and loves to write about wildlife and ecology. Although he loves all forms of wildlife, but dragonflies hold a special place in his heart.