

Darwin's Bark Spider

Prelims: Current events of national and international importance | Species

Why in News?

Darwin's bark spider has drawn scientific attention as studies explain why only adult females produce the toughest spider silk ever recorded.

- Darwin's Bark Spider is a **large orb-weaving spider**.
- **Scientific name** - Caerostris darwini.
- **Family** - Araneidae (orb-weaver spiders).
- **Related species** - Caerostris kuntneri.
- **Habitat** - Forests and wetlands in Madagascar.
- They build orb webs directly above rivers or lakes, a habitat other spiders can't access.
- **Distribution** - **Endemic to Madagascar**.
- **Characteristics** - Females are largely black in colour, with white hairs, and Males are redder and lighter brown in colour.
- Adult females are significantly larger than males.
- **Behaviour** - Largest orb webs ever recorded, reaching up to 25 metres in width.
- Only large adult females produce exceptionally tough silk, that outperforms steel and most human-made fibres in both strength and toughness.
- Used as safety lines, anchor threads, and escape ropes by the spider.
- **Threats** - Habitat disturbance from river/wetland degradation and infrastructure projects (e.g., hydroelectric dams).
- Water pollution reduces prey availability and impacts silk quality.
- **Ecological Significance** - Large river-spanning webs help control insect populations, especially flying insects.



References

1. [The Hindu | Darwin's Bark Spider](#)
2. [iNaturalist | Darwin's Bark Spider \(Caerostris darwini\)](#)