



FACTSHEET

TOKAY GECKO

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Of approximately 6,000 species of lizards found worldwide, India is inhabited by 231. The Tokay Gecko *Gekko gecko*, an arboreal and nocturnal reptile, is one of the largest gecko species found in India and the second-largest gecko species globally.

Tokay Geckos are characterised by their blue-grey skin, possessing spots ranging from light yellow to vibrant red and distinct vocalisations. Male Tokay Geckos utter a noisy, persistent mating call, "tokay-tokay," that gives rise to its common name. Taxonomically, Tokay Geckos are placed in the class Reptilia, order Squamata, and family Gekkonidae.

“The ears of Tokay Geckos are visible as a tiny hole on the side of the head. It is possible to see right through the head to the opposite side through the earholes.”

“Male Tokay Geckos are larger and more brightly coloured than the females.”

“Tokay Geckos are solitary, and males and females meet only during the breeding season, which continues for about six months.”

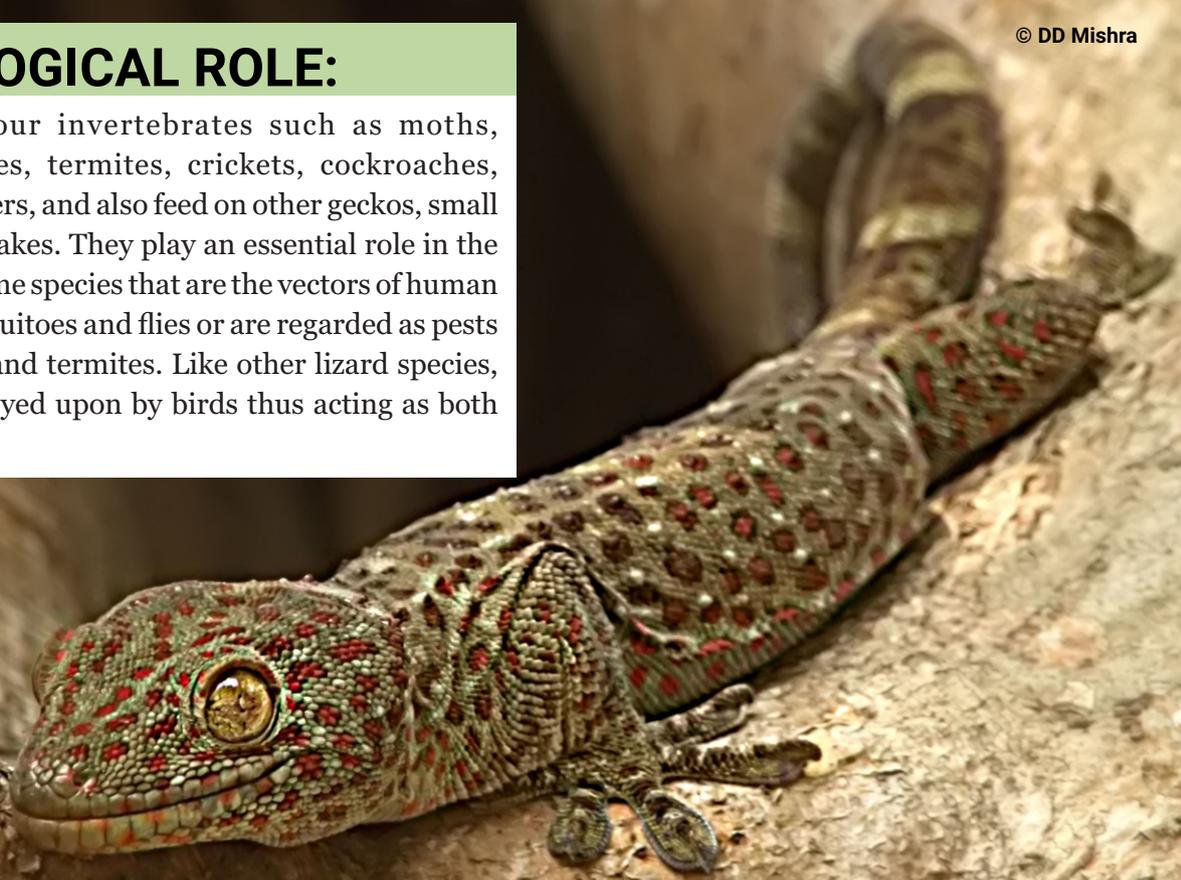
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“Females yield clutches of up to two eggs that are laid at periods of about 30 days apart. The eggs, generally placed on vertical exteriors, measure 16–20mm and are secured by both parents. They hatch after nearly 64 days.”

“The pupils of wide-eyed Tokay Geckos are vertically split; they also bear a dorsally placed pineal eye.”

ECOLOGICAL ROLE:

Tokay Geckos devour invertebrates such as moths, grasshoppers, beetles, termites, crickets, cockroaches, mosquitoes, and spiders, and also feed on other geckos, small rats and mice, and snakes. They play an essential role in the ecosystem and consume species that are the vectors of human diseases such as mosquitoes and flies or are regarded as pests such as cockroaches and termites. Like other lizard species, Tokay Geckos are preyed upon by birds thus acting as both prey and predator.



SIZE, HABITAT, DISTRIBUTION AND POPULATION STATUS:

AVERAGE SIZE	HABITAT	DISTRIBUTION	POPULATION STATUS
Males: 28–51 cm (11–20 inches) Females: 18–48 cm (7–19 inches) Weight: 150–400 g	Commonly found in urban and rural regions and, in natural expanses, lowland, and hill dipterocarp forest and trees with large canopy cover. It is well-adapted in human-made environments and is seen in rock crevices, cracks in mud houses, holes, and fissures of trees.	Northeast India, including Assam, Mizoram, Tripura, Meghalaya; Bihar; West Bengal, and the Andaman archipelago.	Unknown

CONSERVATION STATUS:

Wildlife (Protection) Act, 1972	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	International Union for Conservation of Nature (IUCN) Red List
Schedule IV	Appendix II	Least Concern



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TOKAY GECKOS IN PERIL:

- **HABITAT DESTRUCTION AND DEFORESTATION:** Habitat loss and deforestation due to escalating urbanisation are pertinent issues for the species's survival in the wild. Cutting down of trees, especially with large canopy cover, is pushing the shift to human settlements making them more vulnerable to human exploitation.

TRAPPING AND HUNTING FOR ILLEGAL WILDLIFE TRADE: Illegal hunting to meet the demand for traditional Asian medicines and the international pet trade is a serious threat to the species in the wild.

TRAPPING AND HUNTING FOR ILLEGAL WILDLIFE TRADE:



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Tokay Geckos are heavily exploited for their use in traditional Asian medicines, especially to meet the demand for their internal organs, meat and tongues, used as a cure for various ailments including asthma, cancer, diabetes, impotence, and skin diseases. Reportedly, their remains are dried and crushed into powder before use.

Poaching and illegal trade of Tokay Geckos in northeast India is mainly to meet demand in East Asian markets for their alleged medicinal benefits and threatens the species in the wild. Assam, Manipur, Mizoram, Nagaland, and West Bengal are reported to be the most prevalent poaching and trade centres that smuggle Tokay Geckos from India to Asian countries including China, Myanmar and Peninsular Malaysia.

In 2009, poaching and illegal trade of Tokay Geckos rose sharply after the tongue and internal organs began to be targeted as a potential unproven remedy for Human Immunodeficiency Virus (HIV) and cancer.

Tokay Geckos are also popular in the global pet trade, especially in the European Union and North America.

In parts of Asia, Tokay Geckos are also consumed in wine or whisky to build strength and vitality. These tonics can include the entire animal, or an extract, together with a series of other ingredients such as ginseng *Panax* spp., goji berries *Lycium* spp., scorpions *Scorpiones* spp., seahorses *Hippocampus* spp. and snakes *Serpentes* spp. soaked in alcohol.



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RECENT CONSERVATION EFFORTS:



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- Tokay Geckos were included in Schedule IV of India's Wildlife (Protection) Act 1972 in 2014, which prohibits the poaching and illegal trade of listed species.
- During the 18th Conference of the Parties (CoP18) to CITES, held in 2019, India along with Philippines successfully proposed inclusion of the Tokay Gecko in Appendix II of the Convention due to the threats from rampant poaching for traditional medicines and the global illegal pet trade.

SECURING THE FUTURE OF TOKAY GECKOS IN INDIA:

- **Co-ordinated enforcement initiatives to curb illegal trade**—Law enforcement agencies such as the Forest Department, WCCB, Customs, Railways, Police, Border Security Forces, and others should undertake collaborative and immediate actions to stop trafficking of Tokay Geckos both within the country and to external markets.
- **Improving knowledge and understanding about the species**—There is very little awareness about the species in the wild among the conservation fraternity, policy makers and the general public. The species was only recently listed under the Wildlife (Protection) Act, 1972 and accorded international protection under CITES from over-exploitation for trade and consumption. The IUCN Red List of Threatened Species reports an unknown population trend for Tokay Geckos.



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More research needs to be undertaken on populations, habitats, ecology, poaching and trade trends to help devise national conservation and protection policies for Tokay Geckos in India. Awareness among the general public is also crucial for the survival of the species, especially due to the increasing illegal pet trade.

- **Restoration of habitats**—Encroachment of habitats for development and deforestation due to increasing urbanisation have affected the survival of many wildlife species including Tokay Geckos. It is imperative to establish robust habitat restoration programmes for a viable population of wild species.
- **Uplifting the protection status in the Wildlife (Protection) Act, 1972 of India**—Tokay Geckos are listed in Schedule IV of India's Wildlife (Protection) Act, 1972. However, considering the apparent scale of on-going poaching and illegal trade, the status of the species warrants reevaluation as it may merit inclusion in Schedule I of the Wildlife (Protection) Act and the enhanced legal protection that entails.



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