

UPSC Daily Current Affairs | Prelim Bits 03-08-2024

Bent-toed geckos

Scientists from India and the UK have recently discovered 6 new species of bent-toed geckos in Northeast India.

- Bent-toed geckos are a diverse group of geckos known for their distinctive bent or curved toes.
- **Genus-** Cyrtodactylus.
- **Size-** Typically ***small to medium***-size.
- **Body-** Their toes are notably bent, which aids in their climbing abilities.
- **Habitat-** They inhabit a variety of environments including forests, rocky areas, and sometimes urban areas.
- **Diversity-** They are predominantly found in Southeast Asia, including countries like ***India, Sri Lanka, Thailand, and Malaysia.***
- **Behaviour-** Most are ***nocturnal***, meaning they are active during the night.
- **Diet-** They are ***insectivorous***, feeding on small insects and other invertebrates.
- **Reproduction-** Bent-toed geckos lay eggs, with the number and size of eggs varying by species.
- They typically lay them in hidden or secure locations.

Details of the discoveries	
Namdapha Bent-Toed Gecko (Arunachal Pradesh)	• Found in Namdapha and Kamlang Tiger Reserves, inhabit lowland evergreen forests and are seen near forest streams.
Siang Valley Bent-Toed Gecko (Arunachal Pradesh)	• Named after Siang Valley, this species is notable for its distinct biodiversity.
Nengpui Bent-Toed Gecko (Mizoram)	• Located in Ngengpui Wildlife Sanctuary, characterized by tropical semi-evergreen forests with Dipterocarpus spp. and palms.
Manipur Bent-Toed Gecko (Manipur)	• Found near Lamdan Kabui village, perched on shrubs, along the Leimatak-Charoikhullen road.
Barail Hills Bent-Toed Gecko (Nagaland)	• Known only from Peren District's Athibung Reserve Forest, in tropical to subtropical cloud forests.
Kiphire Bent-Toed Gecko (Nagaland)	• Discovered in subtropical regenerating jhum forest, with the holotype collected from a shrub 2 meters up at night.

Six New Species of Lizards from India



SYSTEMATIC ECOLOGY

Description of six new species of *Cyrtodactylus* Gray (Squamata: Gekkonidae) from northeastern India

Himant Boruah¹, Saurya Narayan², Neelratna Anandhan Aravam³, Samuel Lakromanga⁴, V. Deepak⁵, Abhijit Das⁶



भारतीय वन्यजीव संस्थान
Wildlife Institute of India



NATIONAL
GEOGRAPHIC
SOCIETY



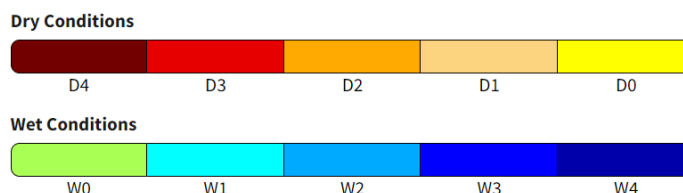
References

1. [Down to Earth | bent-toed geckos](#)
2. [Eastmojo | Bent-Toed Geckos](#)

Standardized Precipitation Index (SPI)

The India Meteorological Department (IMD) has used the Standardized Precipitation Index (SPI) to study trends in precipitation and drought conditions across India.

- **SPI** - It is a **drought index** that measures how observed precipitation compares to the long-term average over a given time (e.g. over the last 30 or 60 days).
- It can also be used to measure drought impacts on soil moisture, groundwater, streamflow, and reservoir storage.
- **Calculation** - It is calculated by dividing the difference between the observed precipitation and the long-term average by the long-term standard deviation of precipitation for that period.
- **Time Scales**- The SPI is calculated for a selection of time scales, including 1, 2, 3, 6, 9, and 12 months.
- **Developed by** - T. B. McKee, N.J. Doesken, and J. Kleist in 1993.
- It uses a legend to indicate drought conditions, with D4 representing **exceptional drought**, D3 representing extreme drought, D2 representing severe drought, and D1 representing moderate drought.



- **Transformation**- Precipitation data is transformed using probability distributions like gamma or Pearson III to fit a normal distribution.
- **SPI Values**
 - **Positive SPI** - It indicates wet conditions (greater than median precipitation).

- **Negative SPI** - It indicates dry conditions (less than median precipitation).

References

1. [PIB | Environmental hazards in the North-Eastern States](#)
2. [NASA | Standardized Precipitation Index \(SPI\)](#)

Price Monitoring System (PMS) version 4.0

Union Food and Consumer Affairs Ministry has launched the Price Monitoring System (PMS) Version 4.0 and Mobile App.

- **Price Monitoring System** - The price Monitoring Division (PMD) in the monitors prices of selected essential commodities.
- **Ministry** - Consumer Affairs, Food and Public Distribution.
- It monitors retail and wholesale prices and spot and future prices of selected essential commodities daily.
- It also implements commodity-specific market intervention schemes in the event of shortage and to control prices.
- Civil Supplies Departments of **34 States/UTs** provide information on 550 market centers.
- **Monitored Commodities - 38**
 - **Earlier 22** - Rice, Wheat, Atta, Gram Dal, Tur (Arhar) Dal, Urad Dal , Moong Dal, Masur Dal, Sugar, Gur, Groundnut Oil, Mustard Oil, Vanaspati, Sunflower Oil, Soya Oil, Palm Oil, Tea, Milk, Potato, Onion, Tomato and Salt.
 - **16 new commodities under Version 4** - Bajra, Jowar, Ragi, Suji (wheat), Maida (wheat), Besan, Ghee, Butter, Brinjal, Egg, Black Pepper, Coriander, Cummin seed, Red chilies, Turmeric powder and Banana.
 - The new commodities will be monitored from 1st August 2024.
- The 38 commodities constitutes close to **31% of the total CPI** weights.
- **Benefit of Monitoring** - Facilitate policy interventions to stabilize price volatility in food items and to control the overall inflation.
- **Price Monitoring System (PMS) mobile app** - It is a tool designed to track and analyze pricing data for products across various retailers.
- It helps users to monitor price changes in real-time, compare prices, and receive alerts for price drops or promotions, making it easier to make informed purchasing decisions.

References

[PIB | Price Monitoring System version 4](#)

Maritime Partnership Exercise (MPX)

Recently, Indian Navy successfully conducted the Maritime Partnership Exercise (MPX) at Baltic Sea.

- **MPX** - A multilateral event conducted by Indian Navy in which naval forces of foreign countries participate.

- **Aim** - To enhance Indian Navy's operational capabilities and strengthen its partnerships with friendly nations.
- **Importance** - It enhances the ability of different naval forces to *operate together seamlessly*, which is crucial in times of crisis or conflict.
- It *strengthens diplomatic and military ties* between participating nations, fostering greater regional and global stability.
- It also allows participating navies to *train and refine their tactics*, techniques, and procedures, leading to improved operational effectiveness.
- **MPX 2024** - It is ***between India and Russia***, which involved naval ships from both nations
 - **India**- INS Tabar
 - **Russia**- Soobrazitelny

INS Tabar was built in Russia and was commissioned into the Indian Navy, on April 19, 2004.

- **Activities** - It involved a series of complex *naval manoeuvres*, including
 - Communication drills
 - Search-and-rescue tactics
 - Replenishment at sea procedures
- **Significance** - The Indian Navy's participation in the 328th Russian Navy Day Parade and MPX highlights a key step in maritime cooperation for regional peace and security.

In 2023, Indian Naval ships INS Rana and INS Sumedha undertook a Maritime Partnership Exercise (MPX) with French Navy ship FS Surcouf, in the Bay of Bengal on 30 June 2023.

Reference

1. [PIB | Maritime Partnership Exercise](#)

