

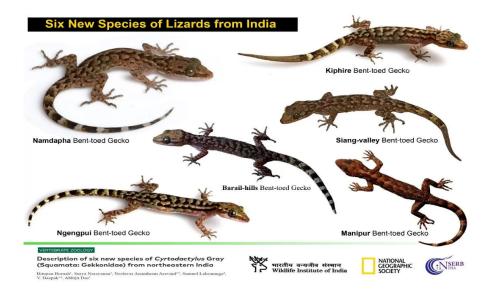
UPSC Daily Current Affairs | Prelim Bits 03-08-2024

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.



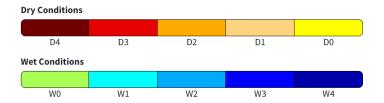
References

- 1. <u>Down to Earth | bent-toed geckos</u>
- 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 <u>34 States/UTs</u> 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 <u>conducted by Indian Navy</u> in which <u>naval forces of foreign</u> <u>countries</u> 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 <u>strengthens diplomatic and military ties</u> between participating nations, fostering greater regional and global stability.
- It also allows participating navies to <u>train and refine their tactics</u>, 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 <u>naval manoeuvres</u>, 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

