

# 'Maveli' Frog

Researchers have found that the **Purple frog (Nasikabatrachus sahyadrensis)**, lives almost its entire life in underground tunnels, comes out to the surface for a single day in a year to breed and lays its eggs,



and returns to the earth's deepest layers. //

- The bloated frog is characterised by a protruding snout and powerful hind legs.
- Mahabali, or Maveli, was a mythological king who ruled over the region of Kerala. The frog is compared with the Maveli due to their similar characteristics thats why given the name "Maveli".
- It is listed as endangered on the red list of the International Union for Conservation of Nature (IUCN).
- It could soon be designated as Kerala's state amphibian.

## **Significance**

- It's a unique species and endemic to this part of the southern Western Ghats and cannot be found anywhere else.
- Discovered for the first time in 2003 in the jungles of Kerala, the species sparks feverish imagination among herpetologists worldwide for a number of reasons:
  - They believe that the species should be rightly called a 'living fossil' as it's evolutionary roots suggest it could have shared space with dinosaurs going back almost 70 million years ago.
  - It was able to survive such a long period in time, points to its tenacity and could help scientists understand how it's population may have evolved and learned to overcome the challenges of shifting land masses.

#### **Problems**

- The fragile **Western Ghats**, classified as a **biodiversity hotspot** and a UNESCO World Heritage Site, is home to thousands of flora and fauna species that are not found anywhere else.
- **Rapid deforestation** and conversion of forest land into cropland and human settlements intruding deeper and deeper into animal habitats, the incidence of man-animal conflict especially with regards to elephants and tigers is increasing across the region.
- Over 50 per cent of pink frog habitats lies outside the protected areas. The rampant
  construction of unauthorised check dams leads to submerging of the perennial breeding grounds
  of the frogs. Additionally, road networks lie close to their breeding grounds and hundreds of cases

## Conservation

Efforts are made to pronounce the Purple frog as an 'umbrella species' much like the tiger so that the habitat as well as other species, living in the same diversity, can be indirectly protected.

### **Umbrella Species**

Umbrella species are species that are selected for conservation-related decisions because the conservation and protection of these species indirectly affect the conservation and protection of other species within their ecosystem. Umbrella species help in the selection of potential reserve locations, as well as the determination of the composition of the reserve.

