# Alien species in India

***Prelims : Current events of National and International Importance***

**Why in News?**

*The number of alien species rose 20x by the early 19th century.*

- Invasive alien species are introduced by increased human activity around the globe.
- The introduction of these exotic species can be deliberate or accidental.
- For example, the introduction of cane toads (Bufo marinus) in Australia, Gambusia in India, and Poecilia reticulata in Japan are examples of deliberate biocontrol initiatives gone wrong.
- For Example, the giant African snail (Lissachatina fulica) entered India without fanfare, admired at first for its size and shell.
- But what seemed ornamental soon revealed itself to be the country's most persistent invasive alien species.
- Thriving in the region's warm, humid climate and free from natural predators, the snail spread rapidly with human help, from Bengal's gardens to the farmlands of the Western Ghats.
- By the mid-20$^{th}$ century, crops and ornamental plants had been ravaged, native snails displaced, and soil ecosystems altered.
- Worse, the snail had become a carrier for parasites like the rat lungworm, threatening humans and wildlife.
- On the other hand, accidental introductions often happen via the export and import of biological goods, such as timber, plant products, vegetables, fruits, and grains.
- **Biofouling -** It is one such introduction scenario. When ships travel between countries without cargo, they are filled with ballast water to help the ship stay stable on the high seas.
- Biofouling, the undesirable accumulation of plants, animals, and algae on surfaces, sometimes occurs during the filling and flushing of ballast water, transporting exotic species from one region to another.
- The Asian paddle crab was introduced from the Northwest Pacific and East Asian waters to New Zealand, where it carries the white-spot syndrome virus, in this way.
- To reduce the risk of importing invasive alien species, India needs to strengthen its national policy.
- Specifically, it means enforcing stricter biosecurity at ports and other entry points and developing real-time species-tracking and early-warning systems that can catch invasion events before they get out of control.
- The country also needs greater collaboration between government departments and researchers to maximise knowledge generation about potentially invasive species and their spread, given various climate change scenarios and shifting trade routes.
- Finally, India must implement mandatory post-trade biological impact assessments,

typically in quarantine facilities managed by the respective department.

**Reference**

The Hindu | Invasive alien species

