

# Biodiversity under alien attack

Scientists have identified 157 animal species that pose a threat to native fauna

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While invasive plant species have been written about widely, thanks to their economic impact, little is known about the prevalence of invasive fauna in India. Now the Zoological Survey of India (ZSI) has for the first time compiled a list of alien invasive animal species, totalling 157.

"This number excludes invasive microbe species," said Kailash Chandra, Director of the ZSI, adding that of the 157 species, 58 are found on land and in freshwater habitats, while 99 are in the marine ecosystem.

Just as alien plant species such as *Parthenium hysterophorus* (cotton grass) and *Lantana camara* (Lantana) are known to harm agriculture and biodiversity, invasive animal species pose a threat to biodiversity and human well-being.

According to experts, alien species become 'invasive' when they are introduced deliberately or accidentally outside their natural areas, where they out-compete the native species and upset the ecological balance. Of the 58 invasive species found on land and in freshwater, there were 31 species of arthropods, 19 of fish, three of molluscs and birds, one reptile and two mammals.



**A wide array:** Orange Cup-Coral, Amazon Sailfin catfish, African Apple Snail and Papaya Mealy Bug. •SPECIAL ARRANGEMENT

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Dr. Chandra gave the example of *Paracoccus marginatus* (Papaya Mealy Bug), which belongs to Mexico and Central America but is believed to have destroyed huge crops of papaya in Assam, West Bengal and Tamil Nadu. *Phenacoccus sole-nopsis* (Cotton Mealybug) is a native of North America but has severely affected cotton crops in the Deccan. Among the invasive fish species, *Pterygoplichthys pardalis* (Amazon sailfin catfish) has been destroying fish populations in the wetlands of Kolkata.

*Achatina fulica* (African apple snail) is said to be most invasive among all alien fauna. It is a mollusc and was first reported in the Andaman and Nicobar Islands. But today it is found

all across the country and is threatening the habitats of several native species.

Among the alien invasive marine species, the genus *Ascidia* accounts for the maximum number of species (31), followed by Arthropods (26), Annelids (16), Cnidarian (11), Bryzoans (6), Molluscs (5), Ctenophora (3), and Entoprocta (1).

Experts point to the example of *Tubastrea coccinea* (Orange Cup-Coral), which originated in Indo-East Pacific but has now been reported in the Andaman and Nicobar Islands, the Gulf of Kutch, Kerala and Lakshadweep.

This compilation was announced on the sidelines of the National Conference on the Status of Invasive Alien Species in India, organised by the ZSI and the Botanical Survey of India.

