



Gynandromorphism

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Why in News

Recently, a rare **biological phenomenon i.e. Gynandromorphism** has been spotted in a **dragonfly**, the **Scarlet Skimmer (*Crocothemis servilia*)**, which is found in the Kole wetlands, Kerala.

The dragonfly had both male and female characteristics.

Key Points

- Gynandromorphism is a characteristic of an organism that **contains both male and female tissues and characteristics**. Such organisms are also called **gynandromorphs**.
- The term is derived from the Greek words (gyne = woman; aner = man and morphe = form).
- The phenomenon has been documented in birds, crustaceans and butterflies.
- **Reason:**
 - Gynandromorphs are usually born due **genetic aberration**.
 - Genetic aberrations are **chromosomal disorder or mutation** which is due to a missing, extra, or irregular portion of chromosomal DNA.
- **Importance of the Study of gynandromorphism:**
 - It helps in finding the genetic diversity in related species which further contributes to the conservation and preservation.
 - It also aids in discovery of disease and other changes in the specific species due to factors like climate change and ecological evolutions.
 - Further, the study of gynandromorphs could offer clues as to why some human diseases strike one gender more than the other.

Kole Wetlands

- Kole Wetlands is a wetland lying in Thrissur District in Kerala.
- It gives 40% of Kerala's rice requirement and acts as a natural drainage system.
- It is a part of Vembanad-Kole **wetlands**, a Ramsar site and has been colonised by **invasive species**.
- The **Society for Odonate Studies** (Kerala) has been conducting Odonate surveys at the Kole wetlands since 2018, and 37 species of dragonflies and damselflies have been reported from the wetlands so far.

Dragonfly

- A dragonfly is an insect belonging to the order Odonata, class Insecta.
- Adult dragonflies are characterized by large, multifaceted eyes, two pairs of strong, transparent wings, sometimes with coloured patches, and an elongated body.
- They are ecologically significant as they act as bioindicators.
Bioindicators are living organisms such as plants, plankton, animals, and microbes, which are used to **assess the health of the natural ecosystem** in the environment.

Source: TH