

Mudumalai Tiger Reserve and Odonata Species

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For the **first** time an **Odonota** survey has recently been conducted in **Mudumalai Tiger Reserve** (MTR).

- Earlier, survey on **birds**, **vulture** and **elephant** population was also conducted in MTR.



[ref-world atlas]

About the Mudumalai Tiger Reserve (MTR):

- The MTR is a protected area located in the **Nilgiri Mountains** of Tamil Nadu.
- It shares boundaries with the states of **Karnataka** and **Kerala**.
- It has been part of **Nilgiri Biosphere Reserve** since **1986**.
- It was declared as a tiger reserve in **2007**.
- It is a type of **tropical** and **subtropical moist broadleaf forest**.
- The term **Mudumalai** is a **Tamil** word, where 'mudu' means old, ancient, original, whereas 'malai' means hill or mountain.

Geographical features of MTR:

- It is **bordered** by the **Wayanad Wildlife Sanctuary** (west), the **Bandipur National Park** (north), the **Sigur Reserve Forest** (east) and the **Singara Reserve Forest** (south).
- It is drained by the **Moyar River** and several tributaries.
- The MTR along with the adjacent **Sigur Reserve Forest** provide the **highest landscape connectivity** for the **Asian elephant** in the region.

Flora and Fauna of MTR:

- **Flora:** Teak, flame-of-the-forest, Indian laurel, kusum tree, weaver's beam tree, Malabar kino tree, Malabar plum, silk-cotton tree, and Indian beech.
- **Lantana camara** is an **invasive** species that **negatively** affects the dispersal of the native **Indian gooseberry**.
- **Fauna:** Indian leopards, Bengal tigers, Jungle cat, Rusty-spotted cat, Golden jackal, Nilgiri marten, Small Indian civet, Sambar deer, Gaur, Chital, Indian spotted chevrotain etc.
- **Avifauna:** Malabar grey hornbill, Indian grey hornbill, Indian peafowl, Crested goshawk, White-

rumped shama, Black eagle, Indian pond heron etc.

About the Odonata Species:

- The Odonata is an **order** of **flying insect** that also includes **dragonflies** and **damselflies**.
- Both **dragonflies** and **damselflies** undergo incomplete **metamorphosis**.
- All Odonata have **aquatic larvae** called **naiads** (nymphs or aquatic juvenile).
- At its very **stage** of life whether being **larvae** or **nymph** or **adults**, they are **carnivorous**.
- They have 2 pairs of **narrow**, transparent **wings**, sloping **thorax**, and **long**.

2 suborders of Odonata:

- **Anisoptera (Dragonflies):** These are generally larger with wider wings and eyes that are positioned farther apart.
- **Zygoptera (Damselflies):** These are usually smaller with slimmer bodies, narrower wings, and eyes that are closer together.

About the survey:

- The survey aims to reveal the **population** of **dragonflies** and **damselflies**, as well as other Odonata species.
- Some Odonata species are only found in **polluted water**, and identifying these species will help provide information about the **water quality** in MTR.