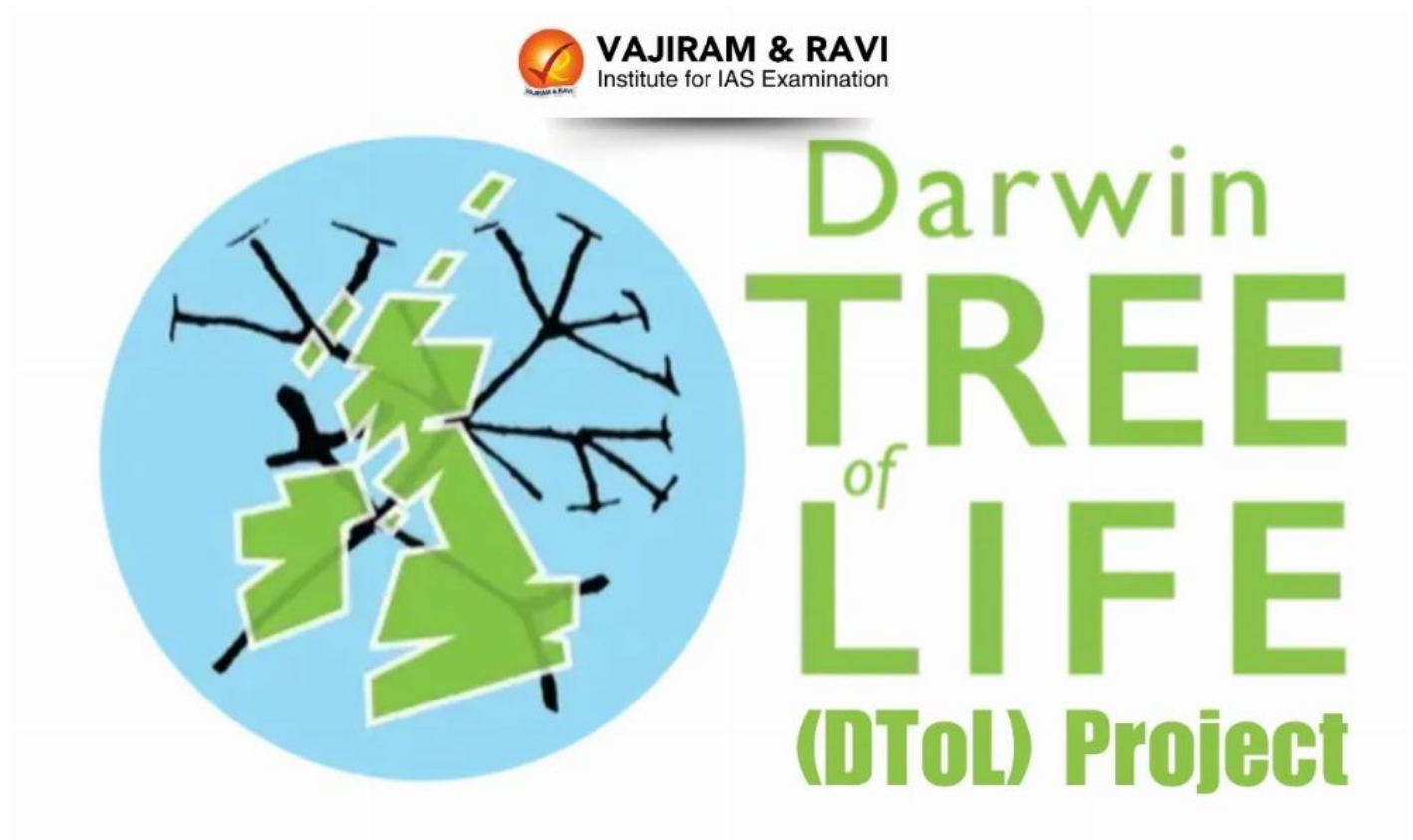


Darwin Tree of Life (DToL) Project

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Darwin Tree of Life (DToL) Project Latest News

The first phase of the Darwin Tree of Life (DToL) project is almost complete.

About Darwin Tree of Life (DToL) Project

- It aims to **sequence** the genomes of 70,000 species of **eukaryotic organisms** in **Britain and Ireland**.
- It is one of several initiatives across the globe working towards the ultimate goal of **sequencing all complex life on Earth**, in a venture known as the **Earth BioGenome Project**.
- It will carefully collect representatives of each species, and use **advanced DNA sequencing technologies** to generate high quality genome sequences.
- It also uses **cutting edge computational tools** to understand how the DNA sequence translates into the diversity of life.
- It is a collaborative project between ten biodiversity, genomics and analysis partners.

What are Eukaryotes?

- Eukaryotic cells are **found in multi-cellular organisms** such as protists, plants, animals, and fungi. They are more complex as compared to prokaryotic cells.
- These are any **cell or organism that** possesses a **clearly defined nucleus**.
- The eukaryotic cell has a **nuclear membrane** that surrounds the nucleus, in which the well-defined chromosomes are located.
- Eukaryotic cells also **contain organelles**, including mitochondria (cellular energy exchangers), a Golgi apparatus.
- **Reproduction:** Eukaryotes can reproduce asexually through mitosis and sexually through meiosis and gamete fusion.

Source: <https://vajiramandravi.com/current-affairs/darwin-tree-of-life-dtol-project/>

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