

Iterative evolution

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Why in news?

New research has found that once-extinct **white-throated Aldabra rail** has come back from the dead due to a rare process called “iterative evolution”.

More information:

- The white-throated rail is the **only flightless bird known in the Indian Ocean area.**
- It is a chicken-sized bird, **indigenous to Madagascar.**
- *Iterative evolution means the repeated evolution of similar or parallel structures from the same ancestor but at different times.*
- Recent study from the University of Portsmouth and the UK’s Natural History Museum found that on **two occasions, separated by tens of thousands of years, a rail species was able to colonise an island called Aldabra.**
- It **subsequently became flightless on both occasions.**
- The last surviving colony is still found on the island.
- However, **Aldabra disappeared under the sea during an inundation event around 136,000 years ago.**
- The researchers studied fossil evidence from 100,000 years ago when the island was recolonised by flightless rails, and compared with fossils from before the inundation event.
- They concluded that **one species from Madagascar gave rise to two different species of flightless rail on Aldabra** in the space of a few thousand years.