Scientists Reveal New Picture in the Evolution of Flightless Birds

Because of their far-flung geography and colorful examples including the African ostrich, Australian emu, New Zealand kiwi, and long-lost giants such as Madagascar elephant birds and 12-foot-tall New Zealand moa, Baker et al. (2014) have examined a fascinating part in the story of the avian tree of life: Flightless birds, or ratites.

Straddling the middle ground and of great debate is the South American tinamou, which has a similar body, but can fly.

To help pin down the evolution debate, Baker’s research team were the first study to utilize ancient moa DNA (from the extinct bush moa) along with DNA from ostriches and other flightless birds to assemble the largest data set to date (almost 600 genes).

Their results, published in the advanced online edition of *Molecular Biology and Evolution*, found convincing evidence that tinamous are in fact, most closely related to the extinct moa, and represent evolutionary cousins that must be separated from the other ratites. The authors speculate on how tinamous may have regained flight during evolution to separate them from the moas and other ratites.

Reference


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