

DNA uncovers one of the world's rarest birds

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An adult Western ground parrot photographed in Fitzgerald River National Park, Western Australia. Credit: Photo by Brent Barrett, WA Department of Environment and Conservation.

(PhysOrg.com) -- A team of Australian researchers involving DNA experts from the University of Adelaide has identified a new, critically endangered species of ground parrot in Western Australia.

The team, led by Australian Wildlife Conservancy's Dr Stephen Murphy, used DNA from museum specimens up to 160 years old to reveal that populations of ground parrots in eastern and western Australia are highly distinct from each other and that the western populations should be recognised as a new species, *Pezoporus flaviventris*.

"The discovery has major conservation implications," said Dr Murphy. "The Western Ground parrot has declined rapidly in the last 20 years, there are now only about 110 birds surviving

in the wild and most of these are confined to a single national park. It is now one of the world's rarest birds."

WA Department of Environment and Conservation's Dr Allan Burbidge said: "A single wildfire through the national park or an influx of introduced predators, such as cats, could rapidly push the species to extinction. There is now an urgent need to prevent further population declines and to establish insurance populations into parts of the former range."

"Our findings demonstrate that museum collections, some going back more than 150 years, continue to be relevant and can provide critical information for understanding and conserving the world's biodiversity into the future," said team member Dr Jeremy Austin, Deputy Director of the Australian Centre for [Ancient DNA](#) at the University of Adelaide.

Director of CSIRO's Australian National Wildlife Collection, Dr Leo Joseph, said: "Even after 200 years of study, we are still recognising new [species](#) of [birds](#) in Australia. This finding highlights the need for further research on Australia's unique, and sometimes cryptic, biodiversity."

The team's findings have been published this month in the international conservation research journal *Conservation Genetics*.

More information:

www.springer.com/life+sciences+ecology/journal/10592

Provided by University of Adelaide

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