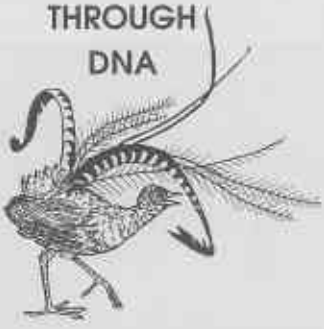
IN BRIEF

ORIGIN OF SONGBIRDS TRACED BACK TO AUSTRALIA THROUGH DNA



It was once thought that songbirds emerged in the northern hemisphere and then spread south, but now research by Dr Les Christidis, Head of Sciences at Museum Victoria, has proved that Australia was the cradle for half the world's songbirds. There are about 3000 species of songbirds in the rest of the world, including nightingales, canaries and birds of paradise, which have evolved from Australian ancestors. The 300 species of songbirds in Australia are characterised by the complex musculature in their voicebox. The oldest songbird has been identified as the Australian lyrebird, which is known as a brilliant mimic.

Dr Christidis, with help from scientists at the Swedish Museum of Natural History and the University of Stockholm, studied the DNA sequences of the world's modern songbirds, also known as passerines, tracing the evolutionary pathway back to common ancestors with Australian songbirds. Songbirds spread out around the globe when Gondwana broke up into Australasia, South America, Africa, Antarctica and India about 60 to 80 million years ago.

The research has been published as: Ericson PGP *et al.* "A Gondwanan origin of passerine birds supported by DNA sequences of the endemic New Zealand wrens" in: The Proceedings of the Royal Society of London, 269, 7th February 2002. A group of United States researchers found similar evidence to support the theory and have published in the same Journal.

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