

S3.1- Austin, J.J.; Joseph, L.; Toon, A.; White, L.C. and Burbidge, A.H.

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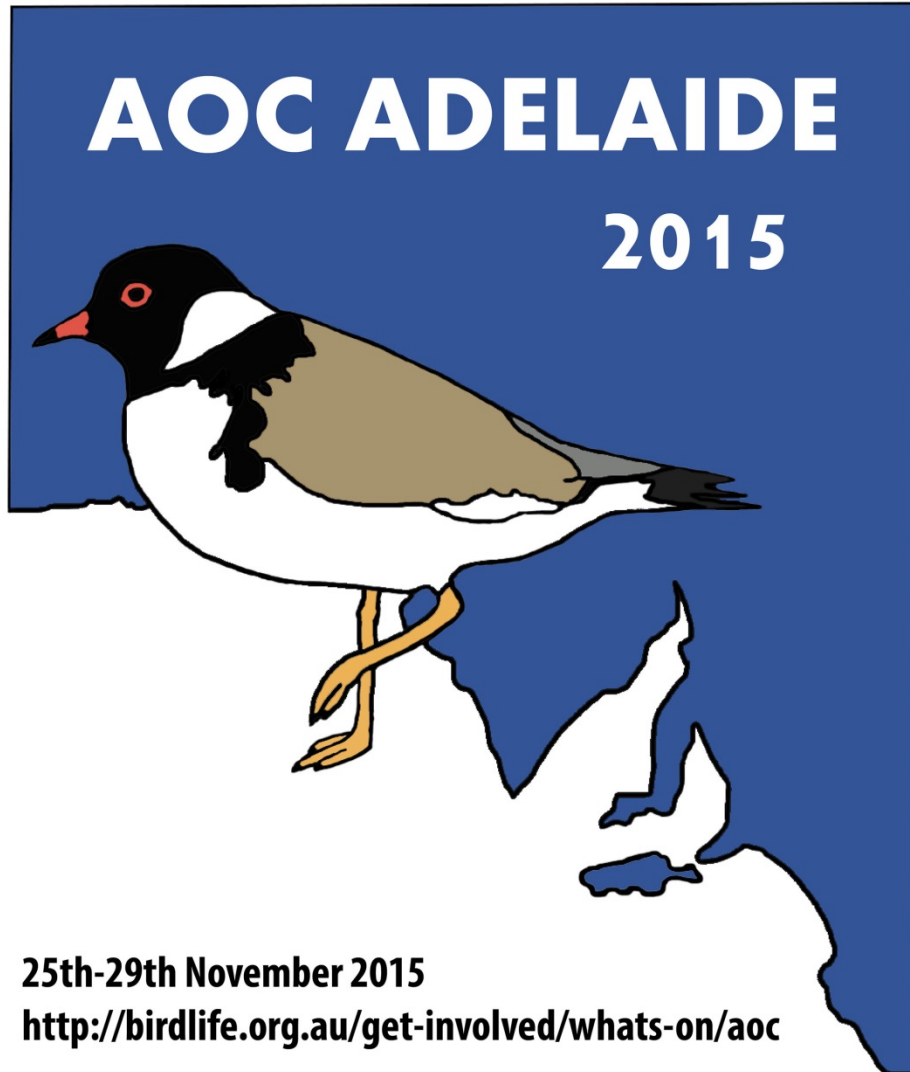
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Speciation or subspeciation in the southern Australian whipbirds long recognized as the Western Whipbird *Psophodes nigrogularis*?

The Western Whipbird, *Psophodes nigrogularis*, has a highly disjunct west-east distribution across southern Australia (SW Western Australia in the west and the Eyre Peninsula-Kangaroo Island-Yorke Peninsula-Murray Mallee region of South Australia and western Victoria in the east). Morphological analyses have recognised two subspecies in SW WA, *P. n. nigrogularis* and *P. n. oberon*, and two subspecies in eastern Australia, *P. n. leucogaster* of the Eyre and Yorke Peninsulas and the Murray Mallee, and *P. n. lashmari*, restricted to Kangaroo Island. These four forms fall into two groups. One is represented only by nominotypical *P. n. nigrogularis*. The second comprises all eastern forms and the western *P. n. oberon* and has been separated as a second species *P. leucogaster*. Subsequent mtDNA analysis has raised questions about this arrangement. We used mtDNA sequence data derived from the few available cryo-preserved samples as well as from DNA extracted from toe-pads and feathers of specimens representing all four taxa in an attempt to derive a more stable view of species limits within the *P. nigrogularis sensu lato* group. The samples fell into two strongly divergent geographically structured groups, completely reflecting the eastern and western components of the distribution. Thus we see merit in treating the two geographical groupings as two species, *P. nigrogularis* in the west and *P. leucogaster* in the east, each having two subspecies. The new data shift the balance in favour of this hypothesis. Nuclear data could test whether the two western subspecies in particular are genetically isolated or currently exchanging genes.

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