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The Tasmanian Lake Shrimps, *Paranaspides* Smith, 1908 (Crustacea, Syncarida, Anaspidesidae)

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Abstract. The Tasmanian Lake Shrimps of the genus *Paranaspides* Smith, 1908 (Syncarida: Anaspidesidae) are endemic to lakes on the eastern Central Plateau, Tasmania, namely Great Lake, Shannon Lagoon, Penstock Lagoon, Arthurs Lake and Woods Lake. Prior to the present study, only the type species, *P. lacustris* Smith, 1908, was recognized. Reconsideration of *Paranaspides* from throughout its range, however, showed that *Paranaspides* from Arthurs Lake and Woods Lakes are referrable to a new species, *P. williamsi* sp. nov. Morphometric differences in the uropodal exopod and maxilliped, and subtle differences in the morphology of the male pleopods 1 and 2, and colour-in-life distinguish the two species. Genetic divergence (*p*-distance) between the two species exceeds 10% in mitochondrial COI and 3% in 16S. Both species are described and illustrated, and a lectotype fixed for *P. lacustris*. Although *P. lacustris* and *P. williamsi* occur in relatively close proximity, they occupy different drainages. The Great Lake-Shannon Lagoon-Penstock Lagoon system drains to the southeast, and the Arthurs Lake-Woods Lake system to the northeast. The distributions of *P. lacustris* and *P. williamsi* precisely parallel those of a cognate pair of galaxiid fishes, *Paragalaxias eleotroides* and *Paragalaxias mesotes*. Given the geological history of the Central Plateau and molecular divergence estimates for *Paragalaxias*, *Paranaspides* may also have diverged prior to the Pleistocene glaciations. Species of *Paranaspides* are dependent on their shallow water algal bed habitat, making them highly susceptible to sudden or significant fluctuations in lake water levels as a result of hydroelectric operations. Both species of *Paranaspides* have small areas of occupancy and are prone to the effects of hydroelectric activities on their lake habitats; under IUCN Red List criteria, their conservation status corresponds to Vulnerable (D2).

Keywords. Crustacea; Anaspidacea; *Paranaspides*; Tasmania; freshwater; shrimp.

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