

**SITE FIDELITY AND DISPERSAL OF
ADULT *NEUROBASIS AWAMENA* MICHALSKI IN
TROPICAL RAINFOREST STREAMS IN PAPUA NEW GUINEA
(ZYGOPTERA: CALOPTERYGIDAE)**

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The sp. inhabits swift mountain streams at montane elevations of southern Papua New Guinea. In this study the duration for which adult ♂♂ and ♀♀ remained at a given site in rainforest streams was determined, and the dispersal distance and direction of marked individuals leaving the site of initial observation was assessed. Territorial defence was non-exclusive and ♂♂ held territories for up to 45 days. On average, ♂♂ remained 9 days, ♀♀ 11 days at a given site. Both sexes stayed significantly longer at sites with suitable oviposition substrates than at a site without. Mating occurred only twice during the study period, and the scarcity of mating events might explain long territory holding times. On a daily basis ♂♂ moved larger distances than ♀♀, suggesting that ♀♀ remain at a site for a longer period before moving a long distance. Both sexes showed similar lifetime dispersal distances (1000-1300m), and dispersal was predominantly directed upstream. It is concluded that this unidirectional dispersal of adults may compensate for downstream drift of larvae in rapid flowing streams.

NATIONAL RED LIST OF SOUTH AFRICAN ODONATA*

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Using the IUCN categories and criteria, the conservation status of the South African dragonfly fauna has been assessed. IUCN recommendations for adjusting the global categories and criteria for national red listing have been taken into consideration. A total of 40 taxa are listed as threatened or near-threatened, which is 25% of the national total (160 sp. and ssp.). The precautionary rather than evidentiary approach is taken throughout, especially as many sp. are marginal and although not threatened globally are highly threatened locally. Nevertheless, it is clear that locally the South African odonate fauna is under severe threat, especially the stream sp. Many of the threats are synergistic, both with natural drought/flood cycles, and with other threats. Restoration of hydrological regimes and riparian conditions are promoting conservation of this odonate assemblage.

* The lay-out and presentation follow those traditionally used in the national Red Lists. – [Eds]

SHORT COMMUNICATIONS

***PROTONEURA ROMANAE* SPEC. NOV.
FROM GUADELOUPE, FRENCH WEST INDIES
(ZYGOPERA: PROTONEURIDAE)**

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The new sp. is described and compared with its closest relative, *P. ailsa* Donnelly. Holotype ♂ and allotype ♀: Guadeloupe, Basse-Terre, Rivière Salee, Source Sulfureuse de Sofaïa, 1-II-2006; both deposited in Museum of Natural History, Nantes, France.

**REDISCOVERY OF *METACNEMIS ANGUSTA* (SELYS)
IN THE WESTERN CAPE, SOUTH AFRICA, WITH
DESCRIPTION OF MALE AND REDESCRIPTION OF FEMALE
(ZYGOPTERA: PLATYCNEMIDIDAE)**

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M. angusta was described from a ♀ type in 1863, which has since been lost. The only other specimen is another ♀ taken in 1920 in the Western Cape, South Africa. The sp. was feared extinct, but a population was discovered in November 2003. The ♂ is described here as a neotype, along with a redescription of the ♀ as a paratype. Although the conservation status of the sp. has improved, it is still threatened, principally by invasive alien trees.

**DESCRIPTION OF THE LARVA
OF *SOMATOCHLORA INCURVATA* WALKER
(ANISOPTERA: CORDULIIDAE)**

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The last larval instar is described and illustrated from material collected in central and southeast Wisconsin, United States, and the larval habitat is described. The larva differs from related species in the *arctica* group of *Somatochlora* in having a greater head width and in the dorsolateral setal patterns on abdominal tergites VI-IX. Segment IX has distinct paired dorsolateral tufts, and VIII, VII, and VI have progressively less defined to absent paired tufts. These characters distinguish the species from the most similar species, *S. forcipata*, and all others of the *arctica* group.

***ARGIOLESTES INDENTATUS* SPEC. NOV.
FROM PAPUA NEW GUINEA
(ZYGOPTERA: MEGAPODAGRIONIDAE)**

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The new sp. is described, diagnostic characters of the adult ♂ are illustrated and the affinities of the sp. are discussed. Holotype ♂: Papua New Guinea, Golf prov., Lakekamu: lowland forest (120 m a.s.l.), 25-XI-1996; deposited in South Australian Museum, Adelaide.

PRELIMINARY RESEARCH NOTE

***MACROMIA ILLINOIENSIS* WALSH MALES
USE SHADE BOUNDARIES AS LANDMARKS
(ANISOPTERA: MACROMIIDAE)**

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M. illinoiensis ♂♂ were most actively engaged in territory patrolling during noon. They were observed to avoid areas on the water surface that were shaded. Areas on the water surface that were not avoided by ♂♂ were artificially shaded upon which such areas were avoided. It is concluded that ♂♂ of *M. illinoiensis* may use the shade-sun boundary on the water surface as a cue of its territory boundary.

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