

**THE DRAGONFLIES (ODONATA) OF SINGAPORE
CURRENT STATUS RECORDS AND
COLLECTIONS OF THE
RAFFLES MUSEUM OF BIODIVERSITY RESEARCH**



Y. Norma-Rashid, L. F. Cheong, H. K. Lua and D. H. Murphy

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SUMMARY

To date, few publications have been solely devoted to the Singapore odonate fauna. This publication attempts to fill this gap and encourage in-depth studies into this remarkable fauna. To date, including 11 new records presented here, 117 species of odonates are known from Singapore. An annotated checklist of the Odonata specimens held in the Raffles Museum of Biodiversity Research, National University of Singapore, is presented. Historical records from museum collections are also discussed.

INTRODUCTION

Lieftinck (1954) summarised all previous work on odonates of this region in his *Handlist of Malaysian Odonata*, a catalogue listing the dragonflies of the area which at that time referred to the Malay Peninsula, Singapore Island, Sumatra, Java, Borneo and all adjacent small islands. A wealth of information is contained in this catalogue, including, besides a systematic list, distribution patterns, species status of endemism and comprehensive bibliographic references, references to all known species. It remains a valuable reference to serious students of oriental odonates. At that time the entire area, now known as Sundaland, was reported to have a total of 472 species with a level of endemism of 73% (Lieftinck, 1954). A more recent publication by Orr (2005) in the form of a pocket guide has been found to be useful to general public and enthusiasts.

This paper presents an updated checklist of dragonfly species known from Singapore together with an annotated checklist of specimens present in the Raffles Museum of Biodiversity Research, National University of Singapore. It is hoped that this book will be useful not only for scientists but also non-specialists, so they may be “bitten by the dragon-bug” and will be stimulated to embark on proper documentation of the fauna, notably by checking and confirming specimen identities against available museum specimens, and perhaps also recording:

1. Seasonal sightings
2. Distributional patterns
3. Early warning signs of threats to species survival.

MATERIAL AND METHODS

Apart from the collections made available and examined personally by the first author from the repositories of the following museums, other species records cited in this paper are from a search of literature and available databases that deal entirely with Singapore Odonata:

1. *Rijksmuseum van Natuurlijke Historie* (The National Museum of Natural History, Leiden) abbreviated as RMNHL (visited in 1994)
2. Raffles Museum of Biodiversity Research, Department of Biological Sciences, National University of Singapore abbreviated as RMBR (visited in 2006–2007).

It is imperative that museum collections with well-kept records are studied and referred to in order to gain a historical perspective to make observations or deductions on the current status of the species at hand. The significance can be appreciated from well-kept records and accessibility to the required specimens. The oldest odonate specimen from Singapore in the RMNHL is *Pseudagrion microcephalum* (Rambur, 1842) collected on 22 Dec.1938. In the RMBR, odonate voucher collections, date back to 1921. The current species inventory reported here is a working draft for local ongoing monitoring where sightings supported by photographic evidence are accounted for. Common English names are included here to encourage public or general interest. Where available they were obtained from standard reputable literature of the fauna group, while in cases where there is no standard common name they are coined to reflect descriptions and impressions by local communities (Norma-Rashid, 2005).

RESULTS AND DISCUSSION

Species Diversity. – According to the present knowledge altogether 117 species from 14 family groups occur in Singapore (Table 1) with a low level of endemism. Kalkman *et al.* (2008) claimed that the oriental region is the most species rich having high rates of endemism. Borneo topped the list with a total of 272 species of which 46% are endemics; the same percentage of endemics are also found in Sri Lanka although the species total is almost equivalent to Singapore (116 species). For an historical overview of the collections pertaining to Singapore dragonflies, readers are referred to Murphy (1997: 334–335). The paper documented 79 species caught in Nature Reserves of Singapore and verified the continued existence of Singapore dragonflies reported in Wallace's collection in 1856. Conversely, the true figure may have dropped since the report of Murphy (1997), with the alleged loss of several species, in particular those associated with habitats such as forested to open streams with fringing bank vegetation. The following species have apparently disappeared: *Dysphaea dimidiata* Selys, 1853; *Neurobasis chinensis* (Linnaeus, 1758); *Oligoaeschna amata* (Förster, 1903) and *Orolestes wallacei* (Kirby, 1889). Although these claims should be treated with caution, they are highlighted here as conspicuous species, which have not been seen in recent years and searching for them should be a priority of odonate surveys. The current status records of existing species reported here are indications only because many species are confined to small, unusual habitats that has always been the case (Norma-Rashid & Van Tol, 1995) and may have evaded discovery and thus still exist as undiscovered populations.

On the other hand, the good news is the presence of new additions to the list of Singapore odonate checklist, indicated as 'recent additions' in Table 1. In particular, the species *Aethriamanta brevipennis* (Rambur, 1842), *Ceriagrion ?chaoi* (Schmidt, 1964), *Copera vittata* (Selys, 1863), *Cratilla lineata* (Brauer, 1878), *Gynacantha dohrni* (Krüger, 1899), *Heliaeschna uninervulata* Martin, 1909, (Tang, 2008), *Leptogomphus risi* Laidlaw, 1932, *Merogomphus ?femoralis* Laidlaw, 1931, *Onychothemis testacea* Laidlaw, 1902, *Orchithemis pruinans* (Selys, 1878), and *Prodasineura verticalis humeralis* (Selys, 1860) are new records. For *Ceriagrion ?chaoi* and *Merogomphus ?femoralis*, specimens need to be collected to confirm the identification. The

RMNHL specimens that were recorded from Singapore included 9 species of common status, with the exception of *Agrionoptera sexlineata* Selys, 1879, which has now been classified as rare.

Perhaps worthy of mention here is the superb *Tetracanthagyna plagiata* (Waterhouse, 1877); three females in RMBR dated 1959 (wing span: 134 mm) and two rather recently caught, both in 1994 (wing span: 123 mm and 145 mm). Comparing these gigantic specimens, Corbet (1999) reported in his book a mature male *Tetracanthagyna plagiata* was caught in Singapore in Jun.1950 over forest streams of wingspan 144 mm.

ANNOTATED CHECKLIST OF SINGAPORE ODONATA HELD IN THE RAFFLES MUSEUM OF BIODIVERSITY RESEARCH

FAMILY: AMPHIPTERYGIDAE (Relict damsels)

***Devadatta argyroides* (Selys, 1859) (Bamboo relicts)**

Two males, 1 female, lower jungle fall valley streamside foliage, Bukit Timah Nature Reserve, 20 Apr.1985, coll. D. H. Murphy; 1 ex., Bukit Timah Nature Reserve, 10 Mar.1974, coll. D. H. Murphy; 1 ex., Bukit Timah Nature Reserve, 13 Feb.1976, coll. D. H. Murphy; 1 ex., Bukit Timah Nature Reserve, 10 Apr.1976, coll. D. H. Murphy; 1 ex., Bukit Timah Nature Reserve, 18 Jul.1979, coll. D. H. Murphy; 1 ex., Bukit Timah Nature Reserve, 12 Mar.1978, coll. D. H. Murphy.

FAMILY: CALOPTERYGIDAE (Demoiselles / Jewelwings)

***Neurobasis chinensis* (Linnaeus, 1758) (Green-winged demoiselle)**

Two ex., MacRitchie Reservoir, Jun.1962, Coll. D. H. Murphy.

***Vestalis amethystina* Lieftinck, 1965 (Common demoiselle)**

One female, swamp forest, Island Club, 20 May 1985, coll. D. H. Murphy; 1 ex., Island Club forest, 17 Jul.1977, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 28 May 1993, coll. C. M. Yang et al.; 2 ex., MacRitchie Reservoir, 14 Apr.1994, coll. K. L. Yeo et al; 2 ex., MacRitchie Reservoir, 21 Apr.1994; 2 ex., Sime Rd., 3–4 May 1993; 4 ex., Upper Pierce Reservoir, 25 May 1993, coll. C. Y. Chang et al.; 2 ex., Upper Pierce Reservoir, 28 May 1993, coll. C. M. Yang et al.; 3 ex., Rifle Range Rd., 28 Apr.1993, coll. K. K. P. Lim et al.; 2 ex., Rifle Range Rd., 27 May 1993, coll. C. M. Yang et al.; 1 ex., Rifle Range Rd., 3 Jun.1993, coll. Y. H. Lim; 1 ex., Nee Soon swamp forest, 23 Apr.1992, coll. C. Y. Chang; 1 ex., Nee Soon swamp forest, 25 Jun.1992.

***Vestalis amoena* Hagen in Selys, 1853 (Metallic green demoiselle)**

Two ex., Lorong Banir, 10 Jun.1994, coll. Y. H. Lim.

FAMILY: CHLOROCYPHIDAE (Jewels)

***Libellago aurantiaca* (Selys, 1859) (Red jewels)**

Three males, swamp forest, Nee Soon, 5 Jan.1986, coll. D. H. Murphy; 1 male, Lower Peirce Reservoir, 21 Apr.1993, coll. H. K. Lua et al.; 1 ex., Nee Soon swamp forest, 10 Apr.1992, coll. D. H. Murphy.

***Libellago hyalina* (Selys, 1859) (Hyaline jewels)**

One female, Nee Soon swamp forest, 9 May 1992, coll. C. Y. Chang; 1 female, Nee Soon swamp forest, 28 Apr.1994; coll. K. K. P. Lim et al.

FAMILY: LESTIDAE (Spreadwings)

***Lestes praemorsus decipiens* Kirby, 1893 (Scalloped spreadwings)**

One ex., MacRitchie Reservoir, 30 May 1993, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 7 Jun.1994, coll. Y. H. Lim.

FAMILY: COENAGRIONIDAE (Pond damsels / Bluets)

***Aciagrion hisopa* (Selys, 1876) (Slim blue)**

One female, shallow pond, Normanton Park, 11 Mar.1986, coll. D. H. Murphy.

***Agriocnemis femina* (Brauer, 1868) (Pinhead midget)**

One ex., Old Upper Thomson Rd., 14 Oct.1962, coll. O. Y. Kok; 1 ex., Jurong, Sep.1965; 8 ex., Lower Pierce Reservoir forest, 4 Jun.1992, coll. K. L. Yeo et al; 1 ex., MacRitchie Reservoir, 21 Apr.1994, coll. K. L. Yeo et al.; 1 ex., Nee Soon, 6 Jan.1990.

***Agriocnemis nana* (Laidlaw, 1914) (Nana midget)**

Two males, MacRitchie Reserve, Sime Road, 20 Mar.1981, coll. D. H. Murphy; 2 ex., MacRitchie Reservoir, 6 Oct.1997, coll. D. H. Murphy.

***Agriocnemis rubescens rubeola* Selys, 1877 (Tiny midget)**

Two females, swamp forest near leaf filled forest pond, Sime Road, 20 Mar.1981, coll D. H. Murphy; 1 ex., Mandai Rd. near. Ulu Sembawang, 14 Apr.1993, coll. H. K. Lua et al.

***Amphicnemis gracilis* Krüger, 1898 (Slender midget)**

Six males, one female, Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy; 1 male, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 6 males, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 1 ex., Pierce Reservoir, 4 Oct.1995, coll. D. H. Murphy.

***Archibasis melanocyana* (Selys, 1877) (Blue-nosed sprite)**

One ex., Lorong Banir, 24 Jun.1994, coll. D. H. Murphy.

***Archibasis viola* Lieftinck, 1949 (Oval-spotted sprite)**

One ex., MacRitchie reservoir, 21 Apr.1993, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 21 Apr.1994, coll. K. L. Yeo et al; 1 ex., Nee Soon, 1993/1994, coll. D. H. Murphy; 1 ex., Rifle Range Rd., 28 Apr.1993, coll. H. K. Lua; 1 ex., Rifle Range Rd., 3 Jun.1993, coll. Y. H. Lim.

***Ceriagrion cerinorubellum* (Brauer, 1865) (Bi-coloured damsel)**

Three males, 1 female, swamp forest near leaf filled forest pond, Sime Road, 20 Mar.1981, coll. D. H. Murphy; 2 males, 5 females, Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy; 2 ex., Pierce Reservoir, 1 May 1992, coll. J. W. H. Yong; 2 ex., Pierce Reservoir, 4 Oct.1995, coll. D. H. Murphy; 3 male, Chestnut Ave., 10 May 1994, coll. H. K. Lua et al.; 9 males, MacRitchie Reservoir, 11 May 1993, coll. Y. H. Lim; 3 males, MacRitchie Reservoir, 7 Jun.1994, coll. Y. H. Lim; 1 male, Nee Soon swamp forest, 9 May 1992, coll. C. Y. Chang; 1 male, Nee Soon swamp forest, Jun.1994.

***Ischnura senegalensis* (Rambur, 1842) (Common bluetail)**

Eleven males, 6 females, open pool on reclaimed land, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; a mating pair, weedy lake, Botanic Garden, 17 Jun.1981; 2 ex., Seletar Reservoir near Ulu Sembawang, 14 Apr.1993, coll. H. K. Lua et al.; 1 ex., Bukit Timah University Campus, 3 Nov.1981, coll. Y. F. Lim; 1 ex., Lower Pierce Reservoir, 28 Jul.1990, coll. H. K. Lua.

***Mortonagrion falcatum* Lieftinck, 1934 (Hooked midget)**

One female, Loyang mangrove, 15 Jun.1987, coll. D. H. Murphy. A male, Tuas wetland, 31 Mar.2007, coll. L. F. Cheong.

***Onychargia atrocyana* Selys, 1865 (Marsh dancer)**

Two ex., Chestnut Ave., 10 May 1994, coll. H. K. Lua et al; 1 ex., Hindhede Dr., 3 Sep.1990, coll. H. K. Lua; 2 ex., Sime Rd., 3 Jun.1989, coll. Y. H. Koo et al.; 1 ex., Seletar Reservoir, 7 Feb.1983, coll. Y. H. Koo.

***Pericnemis stictica* Selys, 1863 (Stick damsel)**

One ex., Pierce Reservoir, 1 May 1992, coll. J. W. H. Yong; 1 ex., Nee Soon swamp forest, 22 Dec.1994, coll. D. H. Murphy.

***Pseudagrion australasiae* Selys, 1876 (Blue-headed sprite)**

Two ex., Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 6 Oct.1997, coll. D. H. Murphy; 1 ex., Sime Rd., 20 Mar.1981, coll. D. H. Murphy.

***Pseudagrion microcephalum* (Rambur, 1842) (Small-headed sprite)**

One ex., Central Catchment, 1997, coll. D. H. Murphy; 7 ex., East Coast Park, 21 Apr.1986, coll. D. H. Murphy.

***Pseudagrion rubriceps* Selys, 1876 (Red-headed sprite)**

One ex., Nee Soon swamp forest near. Seletar Reservoir Pk., 19 May 1993, coll. H. K. Lua et al.

***Teinobasis ruficollis* (Selys, 1877) (Orange sprite)**

Three males, leaffilled swamp, Sime Road, 20 Mar.1981, coll. D. H. Murphy.

FAMILY: EUPHAEIDAE (Gossamerwings)

***Euphaea impar* Selys, 1859 (Blue gossamerwings)**

One male, swamp forest, Nee Soon, 15 Apr.1992.; 1 ex., Sime Rd., 3 May 1993, coll. C. Y. Chang et al.; 1 ex., Upper Pierce Reservoir, 19 Apr.1993, coll. C. M. Yang et al.; 2 ex., Rifle Range Rd., 28 Apr.1993, coll. H. K. Lua et al.; 2 ex., MacRitchie Reservoir, 14 Apr.1994, coll. Y. H. Lim; 1 ex., Nee Soon swamp forest, 25 Jun.1992, coll. V. Ong; 1 ex., Lorong Banir, 10 Jun.1994, coll. T. B. Lim et al.

FAMILY: PLATYCNEMIDIDAE (Featherlegs)

***Coelliccia albicauda* (Förster, 1907) (Yellow-tailed forest damsel)**

One ex., Chestnut Ave., 9 Jun.1994, coll. H. K. Lua et al.

***Coelliccia octogesima* (Selys, 1863) (Telephoned forest damsel)**

One female, Nee Soon swamp forest, 30 Aug.1970, coll. D. H. Murphy; 6 ex., Nee Soon swamp forest, 19 May 1993, coll. H. K. Lua et al; 1 ex., MacRitchie Reservoir, 22 Jun.1993, coll. D. H. Murphy; 3 ex., Upper Pierce Reservoir, 17 May 1993, coll. Y. H. Lim; 2 ex., Bukit Kallang, coll. Y. H. Lim; 4nos, Chestnut Ave. forest, 22 Apr.1993, coll. H. K. Lua et al.

***Copera marginipes* (Rambur, 1842) (Yellow featherleg)**

Eleven males 1female, Chestnut Ave., 10 May 1994, coll. Y. H. Lim.; 1 male, Chestnut Ave., 9 Jun.1994, coll. Y. H. Lim.

FAMILY: PLATYSTICTIDAE (Forest goblins / forest damsels)

***Drepanosticta quadrata* (Selys, 1860) (Quadratus shadowdamsels)**

One pair and 4 males, lower jungle fall valley streamside foliage, Bukit Timah Nature Reserve, 20 Apr.1985, coll. D. H. Murphy; 1 ex., Bukit Timah Nature Reserve, 10 Mar.1974, coll. D. H. Murphy; 2 ex., MacRitchie Reservoir, 21 Jun.1993, coll. D. H. Murphy; 6 males, Nee Soon swamp forest, 19 May 1993, coll. H. K. Lua et al.; 1 male, Upper Pierce Reservoir, 17 May 1993, coll. Y. H. Lim; 2 males, Rifle Range Rd., 27 May 1993, coll. Y. H. Lim.

FAMILY: PROTONEURIDAE (Pinflies / Threadtails)

***Prodasineura collaris* (Selys, 1860) (Collared threadtails)**

One male, Nee Soon, 29 May 1999; 2 ex., Nee Soon swamp forest, 1 Apr.1994, coll. D. H. Murphy; 1 male, Pierce catchment near Island Club, 12 Feb.1981, coll. D. H. Murphy; 2 ex., Lower Pierce Reservoir, 14 Feb.1993, coll. D. H. Murphy; 1 ex., Upper Pierce Reservoir, 19 Apr.1993, coll. C. M. Yang et al.; 1 ex., MacRitchie Reservoir, 29 Apr.1994, coll. C. M. Yang et al.; 12 ex., Seletar Reservoir, 26 Apr.1993, coll. D. H. Murphy.

***Prodasineura interrupta* (Selys, 1860) (Interrupted threadtails)**

Two ex., Nee Soon swamp forest, 10 Jan.1993, coll. D. H. Murphy; 7 ex., Nee Soon, 13 Jun.1994, coll. D. H. Murphy; 6 ex., Lorong Banir, 16 May 1994, coll. D. H. Murphy; 1 ex., Upper Pierce Reservoir, 21 Apr.1993, coll. H. K. Lua et al.

***Prodasineura notostigma* (Selys, 1860) (Crescent threadtails)**

One teneral male, Sime Road, 20 Mar.1981, coll. D. H. Murphy; a male, Pierce catchment forest, Island Club, 12 Feb.1981, coll. D. H. Murphy; 2 ex., MacRitchie Reservoir, 21 Jun.1993, coll. D. H. Murphy; 3 ex., Nee Soon , 6 Jun.1994, coll. D. H. Murphy;

FAMILY: MEGAPODAGRIONIDAE (Spreadwing stout damsels)

***Podolestes orientalis* Selys, 1862 (Oriental spreadwing)**

Two males, swamp forest, Sime Road, 20 Mar.1981, coll. D. H. Murphy; 2 ex., Sime Road forest, 5 Jun.1977, coll. D. H. Murphy.

FAMILY: GOMPHIDAE (Clubtails)

***Ictinogomphus decoratus melaenops* (Selys, 1858) (Common clubtails)**

One male, Mandai Lake Road, 1 May 1987, coll. C. M. Yang; 1 male, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 1 female, library building, Jurong Campus, 27 May 1985, coll. K. L. Yeo; 4 males, forest, Island Club, 20 May 1985, coll. D. H. Murphy; 1 male, Mandai arm, Seletar Reservoir, 7 Feb.1983, coll. Y. H. Koo; 1 male, Seletar Reservoir, 16 Mar.1981, coll. D. H. Murphy; 1 male, Lower Pierce Reservoir, 13 May 1992, coll. V. Ong; 1 male 1 female, Nee Soon swamp forest, 20 May 1992, coll. S. K. Yeo; 1 male, Rifle Range Road, 27 May 1993, coll. C. M. Yang et al.; 1 male, Chestnut Ave. forest, 22 Apr.1993, coll. H. K. Lua et al.

***Macrogomphus quadratus* Selys, 1878 (Quadrated forktail)**

One ex., Bukit Timah Nature Reserve, 6 Feb.1976, coll. D. H. Murphy; 1 ex., Nee Soon, 13 Jun.1994, coll. D. H. Murphy

***Paragomphus capricornis* (Förster, 1914) (Yellow-banded hooktail)**

One newly emerged female, swamp forest, Nee Soon, 30 Dec.1985, coll. D. H. Murphy.

FAMILY: AESHNIDAE (Darners)

***Anax guttatus* (Burmeister, 1839) (Hairy Emperor)**

One female, Kent Ridge, 15 Feb.1990, coll. D. H. Murphy; 1 female, to light, Kent Ridge, 10 Feb.1987, coll. D. H. Murphy; 1 male, Depot Road, Singapore, 17 Oct.1982, coll. Y. H. Koo; 1 female, Ayer Rajah, Singapore, 8 Oct.1977, coll. H. P. Wong; 1 female, garden, National Museum, Singapore, 20 Nov.1968; 1 male, Singapore, 10 Nov.1922; 2 ex., Jurong, Nanyang University Campus, 1980; 1 ex., Nee Soon swamp forest, 23 May 1973, coll. D. H. Murphy; 1 ex., Bukit Timah University Campus, 6 Mar.1977, coll. D. H. Murphy; 1 ex., Hillview Ave, 28 Aug.2001, coll. T. H. T. Tan.

***Gynacantha basiguttata* Selys, 1882 (Banded duskhawker)**

One ex., Bukit Timah University Campus, 15 Dec.1977, coll. D. H. Murphy; 1 ex., Kent Ridge, 8 Jan.2007, coll. H. K. Lua.

***Gynacantha bayadera* Selys, 1891 (Common duskhawker)**

One female, beaten from foliage at streamside, Rifle Range Forest, 21 Oct.1983, coll. D. H. Murphy; 1 ex., Tampines, 6 Aug.1979, coll. D. H. Murphy.

***Gynacantha subinterrupta* Rambur, 1842 (Dingy duskhawker)**

One ex., Namly Ave. forest, 1 May 1976, coll. D. H. Murphy.

***Heliaeschna idea* (Brauer, 1865) (Ponded hawker)**

One ex., Kent Ridge, Mar.1986, coll. K. Lim.; 1 ex., Bukit Timah University Campus, 1 Aug.1964, coll. O. Y. Kok.

***Tetracanthagyna plagiata* (Waterhouse, 1877) (Giant hawker)**

One female, swamp forest, Nee Soon, 21 Jan.1994, det. D. H. Murphy, coll. T. H. T. Tan, wingspan 124.6; 1 female, Singapore, Jun.1959, wingspan 134 cm; 1 female, Nee Soon, 15 Jun.1994, coll. D. H. Murphy, wingspan 145mm.

FAMILY: CORDULIIDAE (Emeralds)

***Epophthalmia vittigera* (Rambur, 1842) (Metallic pondcruiser)**

One ex., Nee Soon swamp forest, 30 Apr.1992, coll. V. Ong; 1 ex., Nee Soon swamp forest, 18 May 1993, coll. C. M. Yang et al.; 1 ex., Nee Soon, 16 Apr.1994, coll. D. H. Murphy.

***Idionyx yolanda* Selys, 1871 (Angle-tailed shadow emerald)**

One ex., Murnane Reservoir, 8 Apr.1971, coll. D. H. Murphy.

FAMILY: LIBELLULIDAE (Skimmers)

***Acisoma panorpoides* Rambur, 1842 (Asian pintail)**

One male, Normanton, 11 Mar.1986, coll. D. H. Murphy; 1 male, Bukit Timah, 20 Jul.1981, coll. G. K. Tay; 3 males, 2 females, Bukit Timah University Campus pond, 3 Oct.1980, coll. D. H. Murphy; 1 male, drain, Mandai, 1 Oct.1980, coll. J. Lim.

***Aethriamanta aethra* (Ris, 1912) (Tanned aethria)**

One male, Lim Chu Kang, 26 Aug.1987, coll. D. H. Murphy; 1 female, Nee Soon swamp forest, 10 Jan.1993, coll. D. H. Murphy.

***Aethriamanta gracilis* (Brauer, 1878) (Blue lucida)**

Six males, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 1 male, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 6 males, 1 female, Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy; 1 ex., Pierce Reservoir, 4 Oct.1995, coll. D. H. Murphy.

***Agrionoptera insignis* (Rambur, 1842) (Slim metallica)**

One male, nypa mangroves, Pasir Ris, 13 Feb.1987, coll. D. H. Murphy; 1 male, Pulau Ubin, 26 Sep.1921, coll. F. N. Chasen; 1 ex., Mandai mangrove, 10 Sep.1977, coll. D. H. Murphy; 1 ex., Nee Soon, 23 Jun.1994, coll. D. H. Murphy;

***Agrionoptera sexlineata* Selys, 1879 (Banded metallica)**

One male, Botanic Garden, 9 Feb.1923; 1 ex., Swiss Club forest, 2 Mar.1980, coll. D. H. Murphy; 1 ex., Pierce Reservoir, 4 Oct.1995, coll. D. H. Murphy; 1 ex., Nee Soon swamp forest, 6 Jun.1994, coll. D. H. Murphy.

***Brachydiplax chalybea* Brauer, 1868 (Yellow patched lieutenant)**

One male, Tampines, 7 Aug.1983; 6 females, Bukit Timah University Campus pond, 3 Oct.1980, coll. D. H. Murphy; 1 ex., Nee Soon swamp forest, 30 Aug.1970, coll. D. H. Murphy; 1 ex., Murnane Reservoir, 10 Sep.1969, coll. D. H. Murphy.

***Brachydiplax farinosa* Krüger, 1902 (Hyaline lieutenant)**

One male, Sime Road, 3 Jun.1989, coll. Y. H. Koo & K. L. Yeo; 1 ex., Near Murnane Reservoir, 8 Apr.1971, coll. D. H. Murphy.

***Brachythemis contaminata* (Fabricius, 1793) (Asian amberwing)**

One male, East Coast Park, open pool on reclaimed land, 21 Apr.1986, coll. D. H. Murphy; 1 male, East Coast Park, 1 Sep.1985, coll. D. H. Murphy; 1 female, East Coast Park, 5 Sep.1985, coll. D. H. Murphy.

***Chalybeothemis fluviatilis* Lieftinck, 1933 (Dark skimmer)**

One ex., MacRitchie Reservoir, 30 May 1993, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 2 Jun.1994, coll. D. H. Murphy.

***Cratilla metallica* (Brauer, 1878) (Blackish chasers)**

One male, Hindhede Drive, Bukit Timah, 27 Jun.1989, coll. H. K. Lua; 1 female, Botanic Garden, 30 Jan.1923; 1 male, Botanic Garden, 4 May 1921; 1 ex., Bukit Timah Nature Reserve, 17 Mar.1974, coll. D. H. Murphy; 1 ex., Sime Road forest, 18 Jan.1976, coll. D. H. Murphy; 1 ex., Sime Road forest, 12 Jun.1977, coll. D. H. Murphy; 1 ex., Sime Road, 14 May 1996, coll. Y. H. Lim; 1 ex., Nee Soon swamp forest, 18 May 1993, coll. C. M. Yang et al.

***Crocothemis servilia* (Drury, 1770) (Eastern scarlet darter)**

Two females, fish pond in old mangrove, Sembawang, 21 May 1986, coll. D. H. Murphy; 2 males (1 teneral), East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 1 male, shallow pool scrubland, Normanton Park, 11 Mar.1986, D. H. Murphy; 1 male, mangrove, Changi, 20 Jan.1981, coll. D. H. Murphy; 1 ex., Mandai, 11 Sep.1980, coll. J. Lim; 1 ex., Bukit Timah University Campus, Jun.1962, coll. D. H. Murphy; 1 ex., Lim Chu Kang, 1 Oct.1969, coll. D. H. Murphy.

***Diplocodes nebulosa* (Fabricius, 1793) (Little cloudy darter)**

Four males (1 juvenile), 1 female, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 6 males (3 juveniles), 2 females, log and streamside, Sime Road, MacRitchie Reservoir, 20 Mar.1981, coll. D. H. Murphy; 1 male, 1 female, Normanton, 11 Mar.1986, coll. D. H. Murphy

***Diplocodes trivialis* (Rambur, 1842) (Little blue darter)**

One female, pool, Bedok, 11 May 1986, coll. D. H. Murphy; 1 female, mangrove, Changi, 20 Jan.1981, coll. D. H. Murphy; 1 ex., Lim Chu Kang, 1 Oct.1969, coll. D. H. Murphy; 2 ex., Mandai mangroves, 17 Jan.1978, coll. D. H. Murphy.

***Hydrobasileus croceus* (Brauer, 1867) (Zig-zag glider)**

One male, East Coast Parkway, 9 Sep.1985, coll. C. J. Chen.

***Indothemis limbata* (Selys, 1891) (Restless demon)**

One male, shallow pool scrubland, Normanton Park, 11 Mar.1986, coll. D. H. Murphy; 1 male, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 1 male, Bukit Timah University Campus pond, 16 Mar.1981, coll. D. H. Murphy.

***Lathrecista asiatica* (Fabricius, 1798) (Longwinged skimmer)**

Three males, ditches on reclaimed land, Tanah Merah, 20 Jan.1984, coll. D. H. Murphy; 1 ex., Mandai mangroves, 16 Aug.1992, coll. D. H. Murphy.

***Lyriothemis cleis* Brauer, 1868 (Yellow-striped chaser)**

One ex., Bukit Timah Nature Reserve, 19 Aug.1975, coll. D. H. Murphy.

***Macrodiplax cora* (Brauer, 1867) (Crimson basker)**

One female, fish pond in old mangrove, Sembawang, 21 May 1986, coll. D. H. Murphy; 1 male, Tuas edge Poyan Reservoir, 23 Apr.1986, coll. D. H. Murphy.

***Nannophya pygmaea* Rambur, 1842 (Pygmy percher)**

Two females, Sime Road, 3 Jun.1989, coll. Y. H. Koo & K. L. Yeo; 2 males, Sime Road, MacRitchie Reserve, 20 Mar.1981, coll. D. H. Murphy; 1 ex., Sime Road forest, 18 Jan.1976, coll. D. H. Murphy; 1 ex., Nee Soon, 15 Jun.1994, coll. D. H. Murphy; 2 ex., Nee Soon swamp forest, 13 Jun.1994, coll. H. K. Lua et al.; 4 ex., MacRitchie reservoir, 13 Apr.1993, coll. C. M. Yang et al.; 4 ex., Rifle Range Road, 3 Jun.1993, coll. Y. H. Kim.

***Nesoxenia lineata* (Selys, 1879) (Shaply percher)**

One male, one female, Kent Ridge, 2006, coll. L. F. Cheong.

***Neurothemis fluctuans* (Fabricius, 1793) (Coppertone velvetwing)**

Two males, Normanton, 11 Mar.1986, coll. D. H. Murphy; 2 males, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; a female, Sime Road, 20 Mar.1981, coll. D. H. Murphy; a male, 2 females, mangroves, Changi, 20 Jan.1981, coll. D. H. Murphy; 1 male, 3 females, forest top of MacRitchie Reserve, Sime Road, 29 Aug.1980, coll. D. H. Murphy; 1 male,

Bukit Timah nature reserve, Nov.1980, coll. D. H. Murphy; 1 ex., Ayer Rajah Road, Z.R.C. compound, 2 Jan.1977, coll. H.P. Wang;

***Orchithemis pulcherrima* Brauer, 1878 (Broad red skimmer)**

One pair, Nee Soon, 29 May 1999, coll. D. H. Murphy; 2 males, swamp forest, Island Club, 20 May 1985, coll. D. H. Murphy; 2 ex., Nee Soon swamp forest, 27 Jun.1970, coll. D. H. Murphy; 1 ex., Sime Road forest, 12 Jun.1977, coll. D. H. Murphy; 2 ex., MacRitchie Reservoir, 28 May 1993, coll. C. M. Yang et al.; 4 ex., Upper Pierce Reservoir, 17 May 1993, coll. Y. H. Lim; 3 ex., Seletar Reservoir Park, 12 May 1994, coll. K. L. Yeo et al.; 1 ex., Bukit Kallang, 6 May 1994, coll. T. B. Lim.

***Orthetrum chrysis* (Selys, 1891) (Redfaced skimmer)**

One male, Nee Soon, 1 Jan.1986, coll. D. H. Murphy; 1 male, swamp forest stream, Island Club, 20 May 1985, coll. D. H. Murphy; 1 female, forest, Sime Road, 12 Sep.1983, coll. D. H. Murphy; 1 ex., Fort Canning, May 1910; 2 ex., Bukit Timah Nature Reserve, 2 Oct.1997, coll. D. H. Murphy.

***Orthetrum glaucum* (Brauer, 1865) (Common blue skimmer)**

One female, Nee Soon, 1 Jan.1986, coll. D. H. Murphy; 4 males, railway line, Bukit Timah, Nov.1980, coll. D. H. Murphy.

***Orthetrum luzonicum* (Brauer, 1868) (Luzon skimmer)**

Two males, Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy.

***Orthetrum sabina* (Drury, 1770) (Sober skimmer)**

One pair, fish pond in old mangrove, Sembawang, 21 May 1986, coll. D. H. Murphy; 1 male, Normanton, 11 Mar.1986, coll. D. H. Murphy; 1 ex., Bukit Timah University Campus, Jun.1962, coll. D. H. Murphy; tandem pair, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 1 female, Island Club forest, 18 Feb.1981, coll. D. H. Murphy; 1 male, mangrove, Changi, 20 Jan.1981, coll. D. H. Murphy; 2 ex., MacRitchie Reservoir, 25 Sep.1961, coll. D. H. Murphy; 4 males, Upper Pierce Reservoir, 26 May 1993, coll. T. W. Koh; 2 males, 1 female, Mandai near Ulu Sembawang, 14 Apr.1993, coll. H. K. Lua et al., 1 female, Chestnut Ave. forest, 22 Apr.1993, coll. Y. H. Lim.

***Orthetrum testaceum* (Burmeister, 1839) (Orange skimmer)**

One male, drain, Namly Avenue, 24 May 1986, coll. D. H. Murphy; 1 male, mangrove, Changi, 20 Jan.1981, coll. D. H. Murphy; 1 male, railway line, Bukit Timah, Nov.1980, coll. D. H. Murphy; 1 ex., Lorong Banir, 16 May 1994, coll. D. H. Murphy; 1 ex., Nee Soon, 10 May 1999, coll. D. H. Murphy; 1 ex., Kent Ridge, 10 Jan.1986, coll. D. H. Murphy; 1 male, 1 female, Bedok, 15 Jan.1922, coll. F. N. Chasen.

***Pantala flavescens* (Fabricius, 1798) (Globe skimmer)**

One female, Poyan Reservoir, Tuas, 23 Apr.1986, coll. D. H. Murphy; 1 ex., Nee Soon swamp forest, 9 May 1992, coll. C. Y. Chang et al.; 1 ex., Nee Soon swamp forest, Jun.1992; 4 ex., Mandai mangroves, 17 Jan.1978, coll. D. H. Murphy.

***Pornothemis serrata* Krüger, 1902 (Green-spotted skimmer)**

One male, light trap, Mandai mangroves, 11 Oct.1980, coll. D. H. Murphy; 1 female, Pulau Ubin, 24 Sep.1921, coll. F. N. Chasen.

***Potomarcha congener* (Rambur, 1842) (Blue chaser)**

One ex., Mandai, 17 Jun.1978, coll. D. H. Murphy.

***Pseudothemis jorina* Förster, 1904 (Yellow-banded skimmer)**

Three ex., Kent Ridge Pk., 30 Sep.1997, coll. D. H. Murphy.

***Raphismia bispina* (Hagen, 1867) (Bispina skimmer)**

One male, 4 females (3 juveniles), mangrove, Changi, 20 Jan.1981, coll. and det. D. H. Murphy; 1 ex., Changi mangroves, 6 Aug.1979, coll. D. H. Murphy; 3 ex., Mandai mangroves, 17 Oct.1978, coll. D. H. Murphy.

***Rhodothemis rufa* (Rambur, 1842) (Spine-legged redbolt)**

One pair, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 1 male, Lower Pierce Reservoir, 13 May 1992, coll. S. K. Yeo; 2 males, Nee Soon swamp forest, 16 Apr.1992, coll. D. H. Murphy et al.; 1 male, Upper Pierce Reservoir, 25 May 1993, coll. C. Y. Chang; 4 males, Seletar Reservoir, near. Ulu Sembawang, 14 Apr.1993, coll. H. K. Lua et al.; 2 males, Rifle Range Road, 18 Apr.1993, coll. H. K. Lua et al.

***Rhyothemis obsolescens* Kirby, 1889 (Dusky flutterer)**

Two ex., Nee Soon swamp forest, 16 Apr.1992, coll. D. H. Murphy et al.

***Rhyothemis phyllis* (Sulzer, 1776) (Batik glider)**

Two males, Bukit Timah road, 10 Apr.1981; 1 ex., Hindhede Dr., 1 Jan.1976, coll. H. K. Lua; 1 female, Pierce Reservoir, 22 Jun.1985, coll. C. J. Chen; 3 ex., Upper Pierce Reservoir, 26 May 1993, coll. T. W. Koh; 1 ex., Rifle Range Road, 3 Jun.1993, coll. Y. H. Lim; 1 ex., Chestnut Ave. forest, 22 Apr.1993, coll. Y. H. Lim; 1 ex., Nee Soon swamp forest, 20 Apr.1993; 3 ex., Sime Road, coll. C. M. Yang et al.

***Rhyothemis triangularis* Kirby, 1889 (Triangle glider)**

One male, Normanton, 11 Mar.1986, coll. D. H. Murphy; 3 males, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 4 males, 2 females, Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy; 1 male, 4 females, Bukit Timah University Campus pond, 31 Aug.1980, coll. D. H. Murphy; 1 ex. MacRitchie Reservoir, 6 Jun.1994, coll. D. H. Murphy.

***Risiophlebia dohrni* (Krüger, 1902) (Triangled small percher)**

Two ex., Nee Soon swamp forest, 15 May 1992, coll. C. Y. Chang et al.

***Tholymis tillarga* (Fabricius, 1798) (Evening skimmer/Foggy-winged twister)**

One male, forest, Sime Road, 20 Mar.1981, coll. D. H. Murphy; 1 male, 1 female, mangrove, Changi, 20 Jan.1981, coll. D. H. Murphy; 1 male, Clementi rubbish dump, 5 Dec.1980; 1 male, Geylang, Nov.1980, coll. L. H. Lim; 1 male, Botanic garden, 22 Feb.1923; 1 ex., Bukit Timah forest, 13 Jan.1974, coll. D. H. Murphy.

***Tramea transmarina euryale* Selys, 1878 (Ocean glider)**

One male, Lim Chu Kang mangroves, 2 Nov.1989, coll. D. H. Murphy; 1 female, Pasir Ris, 19 Jan.1970, coll. D. H. Murphy.

***Trithemis aurora* (Burmeister, 1839) (Down dropwing)**

One male, fish pond in old mangrove, Sembawang, 21 May 1986, coll. D. H. Murphy; 1 male, stream, MacRitchie Reserve, 20 Mar.1981, coll. D. H. Murphy; 7 males, Bukit Timah railway line, Nov.1980, coll. D. H. Murphy; 1 male, Mandai, 11 Sep.1980, coll. C. H. Ong.

***Trithemis festiva* (Rambur, 1842) (Indigo dropwing)**

Two males, drain, Namly Avenue, 24 May 1981, coll. D. H. Murphy; 4 males, railway line, Bukit Timah, Nov.1980, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 20 Jun.1993, coll. D. H. Murphy.

***Trithemis pallidinervis* (Kirby, 1889) (Dancing dropwing)**

Two males, 1 female, pool in reclaimed pond behind resthouse, Bedok, 11 May 1986, coll. D. H. Murphy; 1 male, reclaimed land, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 3 males, 1 female, edge of Poyan Reservoir; Tuas, 23 Apr.1986, coll. D. H. Murphy.

***Tyriobapta torrida* Kirby, 1889 (Shaded basker)**

One pair, swamp forest, Island Club, 20 May 1985, coll. D. H. Murphy; 2 males, forest, Sime Road, 20 Mar.1981, coll. D. H. Murphy; 2 ex., Sime Road, 23 Apr.1974, coll. D. H. Murphy; 2 ex., Nee Soon swamp forest, 23 May 1973, coll. D. H. Murphy; 1 ex., MacRitchie Reservoir, 10 Apr.1994, coll. D. H. Murphy; 2 male, Rifle Range Road, 28 Apr.1993, coll. H. K. Lua et al.; 2 ex., Upper Pierce Reservoir, 21 Apr.1993, coll. H. K. Lua et al.; 1 male, Lower Pierce Reservoir, 13 May 1992, coll. S. G. Chua et al.; 2 ex., Racecourse forest, 27 Mar.1977, coll. D. H. Murphy.

***Urothemis signata* Selys, 1872 (Brown-patched basker)**

One male, open reclaimed pond, East Coast Park, 21 Apr.1986, coll. D. H. Murphy; 1 male, swamp forest stream, Island Club, 21 May 1985, coll. D. H. Murphy; 2 males, Bukit Timah University Campus pond, 10 Apr.1981, coll. D. H. Murphy; 1 male, Bukit Timah University Campus pond, 16 Mar.1981, coll. D. H. Murphy; 1 ex., 1 ex., Lim Chu Kang, 1 Oct.1980.

***Zygomma petiolatum* Rambur, 1842 (Dingy duskdarter)**

Two ex., Serangoon Gardens Estate, 18 Dec.1962; 1 ex.; 1 ex., Kent Ridge, 4 Nov.1988, coll. K.S. Lee.

CONCLUSIONS

The current checklist for Singapore Odonata stands at 117 species. Admittedly this list will be subjected to frequent updating, and this should be applauded and encouraged. Proactive monitoring would permit potential threats to species survival to be detected early and concerted efforts should be channeled into appropriate action plans. Monitoring records can be in the form of non-captures, or through the capture, photographic documentation, and release of specimens. However if a species is a new record for Singapore, it is strongly suggested to collect representative voucher specimens and deposit them in a museum to enable confirmed identification and facilitate future studies.

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ANNEX 1. HISTORICAL, CURRENT AND UPDATED RECORDS FOR ODONATE SPECIES OF SINGAPORE

The symbols indicate: SP = locality of collection indicating generally Singapore with no definite named site, m = male, f = female, X = presence of species. The historical records are in reference to the open collection of odonates in the National Museum of Natural History, Leiden (studied by the first author, 1994) abbreviated as RMNHL, for this, dates of collection for the specific species were noted indicating the presence. A detailed description on the RMBR-NUS collection is reported as “Annotated checklist” within the text.

Species List	Historical – RMNHL (1994)	RMBR – NUS (2007)	Current National Status of Species	Remarks
Zygotera				
AMPHIPTERYGIDAE				
<i>Devadatta argyroides</i> (Selys)		+	Common	Type specimen
PROTONEURIDAE				
<i>Prodasineura collaris</i> (Selys)		+	Uncommon	
<i>Prodasineura interrupta</i> (Selys)	1 m, Forest Reserve, 17 Apr.1963	+	Uncommon	Type specimen
<i>Prodasineura notostigma</i> (Selys)	2 m, Forest Reserve, 17 Apr.1963	+	Common	Type specimen
<i>Prodasineura verticalis humeralis</i> (Selys)		–	Rare	Recent photographic evidence
COENAGRIONIDAE				
<i>Aciagrion hisopa</i> (Selys)		+	Very rare	
<i>Agriocnemis femina</i> (Brauer)	SP, 22 Aug.1960	+	Common	
<i>Agriocnemis nana</i> (Laidlaw)		+	Very rare	
<i>Agriocnemis pygmaea</i> (Rambur)		–	Very rare	
<i>Agriocnemis rubescens rubeola</i> Selys		+	Uncommon	
<i>Amphicnemis gracilis</i> Krüger		+	Common	
<i>Archibasis melanocyana</i> (Selys)		+	Rare	
<i>Archibasis viola</i> Lieftinck		+	Uncommon	
<i>Ceriagrion ?chaoi</i> Schmidt		–	Very rare	Recent photographic evidence
<i>Ceriagrion cerinorubellum</i> (Brauer)	Botanic Gardens, Sep.1947	+	Common	
<i>Ischnura senegalensis</i> (Rambur)	SP, 25 Dec.1938	+	Common	
<i>Mortonagrion falcatum</i> Lieftinck		+	Rare	
<i>Onychargia atrocyana</i> Selys		+	Uncommon	
<i>Pericnemis stictica</i> Selys		+	Uncommon	
<i>Pseudagrion australasiae</i> Selys		+	Uncommon	
<i>Pseudagrion microcephalum</i> (Rambur)	1 m, Botanic Gardens, 2 Sep.1947; SP, 22 Dec.1938	+	Common	
<i>Pseudagrion pruinsum</i> (Burmeister)		+	Rare	
<i>Pseudagrion rubriceps</i> Selys		+	Very rare	
<i>Teinobasis ruficollis</i> (Selys)		+	Rare	Type specimen

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Species List	Historical – RMNHL (1994)	RMBR – NUS (2007)	Current National Status of Species	Remarks
PLATYCNEMIDIDAE				
<i>Coeliccia albicauda</i> (Förster)		+	Very rare	
<i>Coeliccia octogesima</i> (Selys)		+	Uncommon	Type specimen
<i>Copera marginipes</i> (Rambur)	3m + 5f, SP, 25 Dec.1958	+	Common	
<i>Copera vittata</i> (Selys)		–	Very rare	Recent photographic evidence
LESTIDAE				
<i>Lestes praemorsus decipiens</i> Kirby		+	Uncommon	
<i>Orolestes wallacei</i> (Kirby)		–	Probably extinct	
<i>Platylestes heterostylus</i> Lieftinck		–	Very rare	
PLATYSTICTIDAE				
<i>Drepanosticta quadrata</i> (Selys)		+	Common	Type specimen
CHLOROCYPHIDAE				
<i>Libellago aurantiaca</i> (Selys)		+	Uncommon	Type specimen
<i>Libellago hyalina</i> (Selys)		+	Rare	Type specimen
<i>Libellago stigmatizans</i> (Selys)		–	Probably extinct	
EUPHAEIDAE				
<i>Dysphaea dimidiata</i> Selys		–	Probably extinct	
<i>Euphaea impar</i> Selys		+	Common	
MEGAPODAGRONIDAE				
<i>Podolestes orientalis</i> Selys		+	Rare	
CALOPTERYGIDAE				
<i>Neurobasis chinensis</i> (Linnaeus)		+	Probably extinct	
<i>Vestalis amethystina</i> Lieftinck		+	Common	
<i>Vestalis amoena</i> Selys		+	Common	
Anisoptera				
GOMPHIDAE				
<i>Burmagomphus divaricatus</i> Lieftinck		–	Uncommon	
<i>Burmagomphus plagiatus</i> Lieftinck		–	Uncommon	
<i>Heliogomphus kelantanensis</i> (Laidlaw)		–	Very rare	
<i>Ictinogomphus decoratus melaenops</i> (Selys)	Botanical garden, 9 Mar.1962	+	Common	
<i>Leptogomphus risi</i> Laidlaw		–	Very rare	Recent photographic evidence
<i>Macrogomphus quadratus</i> Selys		+	Uncommon	
<i>Merogomphus ?femorialis</i> Laidlaw		–	Rare	Recent photographic evidence
<i>Microgomphus chelifera</i> Selys		–	Very rare	
<i>Paragomphus capricornis</i> (Förster)		+	Very rare	
AESHNIDAE				
<i>Anax guttatus</i> (Burmeister)		+	Uncommon	
<i>Gynacantha basiguttata</i> Selys		+	Uncommon	
<i>Gynacantha bayadera</i> Selys		+	Uncommon	

Species List	Historical – RMNHL (1994)	RMBR – NUS (2007)	Current National Status of Species	Remarks
<i>Gynacantha dohrni</i> Krüger		–	Rare	
<i>Gynacantha subinterrupta</i> Rambur		+	Uncommon	
<i>Heliaeschna idea</i> (Brauer)		+	Uncommon	
<i>Heliaeschna uninervulata</i> Martin		–	rare	Recent photographic evidence
<i>Oligoaeschna amata</i> (Förster)		–	Probably extinct	
<i>Tetracanthagyna plagiata</i> (Waterhouse)		+	Rare	
CORDULIIDAE				
<i>Epophthalmia vittigera</i> (Rambur)		+	Common	
<i>Hemicordulia tenera</i> Lieftinck		+	Very rare	
<i>Idionyx yolanda</i> Selys		+	Very rare	Type specimen
LIBELLULIDAE				
<i>Acisoma panorpoides</i> Rambur		+	Common	
<i>Aethriamanta aethra</i> Ris		+	Very rare	
<i>Aethriamanta brevipennis</i> (Rambur)		–	Uncommon	Recent photographic evidence
<i>Aethriamanta gracilis</i> (Brauer)		+	Common	
<i>Agrionoptera insignis</i> (Rambur)		+	Uncommon	
<i>Agrionoptera sexlineata</i> Selys	Pulau Ubin, 14 May 1949	+	Rare	
<i>Brachydiplax chalybea</i> Brauer		+	Common	
<i>Brachydiplax farinosa</i> Krüger		+	Very rare	
<i>Brachygonia oculata</i> (Brauer)		–	Rare	
<i>Brachythemis contaminata</i> (Fabricius)		+	Common	
<i>Camacinia gigantea</i> (Brauer)		–	Rare	
<i>Chalybeothemis fluviatilis</i> Lieftinck		+	Uncommon	
<i>Cratilla lineata</i> (Brauer)		–	Rare	Recent photographic evidence
<i>Cratilla metallica</i> (Brauer)		+	Common	
<i>Crocothemis servilia</i> (Drury)		+	Common	
<i>Diplocodes nebulosa</i> (Fabricius)		+	Uncommon	
<i>Diplocodes trivialis</i> (Rambur)		+	Common	
<i>Hydrobasileus croceus</i> (Brauer)		+	Common	
<i>Indothemis limbata</i> (Selys)		+	Rare	
<i>Lathrecista asiatica</i> (Fabricius)		+	Common	
<i>Lyriothemis cleis</i> Brauer		+	Uncommon	
<i>Macrodiplax cora</i> (Brauer)		+	Common	
<i>Nannophya pygmaea</i> Rambur		+	Common	
<i>Nesoxenia lineate</i> (Selys, 1879)		+	Uncommon	
<i>Neurothemis disparilis</i> Kirby		–	Probably extinct	
<i>Neurothemis fluctuans</i> (Fabricius)		+	Common	
<i>Onychothemis testacea</i> Laidlaw		–	Rare	Recent photographic evidence
<i>Orchithemis pruinans</i> (Selys)		–	Rare	Recent photographic evidence
<i>Orchithemis pulcherrima</i> Brauer		+	Common	
<i>Orthetrum chrysis</i> (Selys)		+	Common	
<i>Orthetrum glaucum</i> (Brauer)		+	Common	
<i>Orthetrum luzonicum</i> (Brauer)		+	Common	
<i>Orthetrum sabina</i> (Drury)		+	Common	
<i>Orthetrum testaceum</i> (Burmeister)		+	Common	
<i>Pantala flavescens</i> (Fabricius)		+	Common	
<i>Pornothemis serrata</i> Krüger		+	Very rare	
<i>Potamarcha congener</i> (Rambur)		+	Common	
<i>Pseudothemis jorina</i> Förster		+	Uncommon	

The Dragonflies (Odonata) of Singapore

Species List	Historical – RMNHL (1994)	RMBR – NUS (2007)	Current National Status of Species	Remarks
<i>Raphismia bispina</i> (Hagen)		+	Uncommon	
<i>Rhodothemis rufa</i> (Rambur)		+	Common	
<i>Rhyothemis obsolescens</i> Kirby		+	Uncommon	
<i>Rhyothemis phyllis</i> (Sulzer)		+	Common	
<i>Rhyothemis pygmaea</i> (Brauer)		–	Probably extinct	
<i>Rhyothemis triangularis</i> Kirby		+	Uncommon	
<i>Risiophlebia dohrni</i> (Krüger)		+	Highly rare	
<i>Tetrathemis irregularis</i> Kirby		–	Rare	
<i>Tholymis tillarga</i> (Fabricius)		+	Common	
<i>Tramea transmarina euryale</i> Selys		+	Common	
<i>Trithemis aurora</i> (Burmeister)		+	Common	
<i>Trithemis festiva</i> (Rambur)		+	Common	
<i>Trithemis pallidinervis</i> (Kirby)		+	Uncommon	
<i>Tyriobapta torrida</i> Kirby		+	Common	
<i>Urothemis abbotti</i> Laidlaw		+	Very rare	
<i>Urothemis signata insignata</i> (Selys)		+	Common	
<i>Zyxomma petiolatum</i> Rambur		+	Common	
Species Totals	9	91	117	

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