ODONATOLOGICAL ABSTRACTS

1971

(15286) KUMAR MUKHERJEE, A., 1971. Food-habits of water-birds in the Sundarban, 24-Parganas District, West Bengal, India, 3. *J. Bombay nat. Hist. Soc.* 68(3): 691-716. – (Author's current address unknown).
Various Zygopt. and Anisopt. taxa are listed from stomach contents of 4 egret spp., viz. Bubulcus ibis coromandus, Egretta alba modesta, E. i. intermedia, and E. g. garzetta.

(15287) [SCHWAIGHOFER, A.] ŠEDIVÝ, J., 1971. Profesorji Klasične gimnazije v Mariboru, 2: Dr. Anton Schwaighofer. – [Teachers of the Maribor Grammar School, 2: Dr. Anton Schwaighofer]. *Čas. Zgod. Narodopis* (N.S.) 7[42]: 130-131. – (Slovene).
A biography of the renowned Austrian odonatologist (1855-1933), based mainly on the recollections of his colleagues and students during his Maribor years, Slovenia (1892-1901). – For another biography, appreciation of his odonatol. work and for his odonatol. bibliography, see M. Bedjanič, *Erjavecia* 12(2001): 1-4.

1972

(15288) [POLJANEC, L.] SEDIVY, J., 1972. Profesorji Klasične gimnazije v Mariboru, 3: Dr. Leopold Poljanec. – [Teachers of the Maribor Grammar School, 3: Dr. Leopold Poljanec]. *Čas. Zgod. Narodopis* (N.S.) 8[43]: 100-108, portrait incl. – (Slovene).
A comprehensive biography of the Nat. Hist. teacher, Geol. & Palaeontol. Reader at the Univ. of Ljubljana, and High School Inspector (1872-1944); Slovenia. His high school Zoology textbook (1910, revised 2nd edn 1929) was used nation-wide during several decades. In addition to the Slovenian and taxonomic names, the etymologies of the latter are also stated. Some of the odon. figs were apparently contributed by his brother, Jože Poljanec.

1980

(15289) ALSCHNER, G., 1980. *Klipp und klar hundertmal Tierwanderungen*. Bibliogr. Inst., Mannheim-Wien-Zürich. 210 pp. Hardcover (19.8×27.2 cm). ISBN 3-411-01717-1.
Some massive odon. migrations in Europe and elsewhere are briefly described and their possible causes are tentatively speculated upon. Notable is the Sept. 1947 Sympetrum danae migration in Ireland that may have originated in Spain or Portugal. In Argentina, Aeshna bonariensis appears in huge migrations across the Pampas, followed closely by the cold storm, "Pampero". – (*Abstractor's Note*: In the face of the oncoming monsoon, similar migrations of Pantala flavescens were recorded in India by F.C. Fraser, 1918, *J. Bombay nat. Hist. Soc.* 25: 511).

(15290) HÖHN-OCHSNER, W., 1980. *S'Puurebüebli vam Hüttnerseeli*. – [*A country lad from the Hüttner Lake*]. Heimatk. Sammlung, Richterswil. ii+64 pp. (Swiss [Zürich dialect], with editorial Preface & appreciation of Author's work in Germ.).
Author's youth reminiscences, written when he was aged 70, published on his 95th birthday. Born: 31-V-1885, "Seeli" am Hüttnersee, Samstagern/Richterswil, Switzerland; deceased: 7-VI-1981, Zürich; – secondary school teacher, splendid naturalist and a prolific writer; – Hon. Doctorate Univ. Zürich (1942). In many of his (over 60) publications he touched upon dragonflies, providing information on the occurrence of various less common spp., e.g., Epitheca bimaculata, etc. Many of his papers and monographs have appeared in local periodicals of limited circulation, therefore his odonatol. work remained largely unknown.

1985

(15291) BOINSKIY, V.S., 1985 Produktivnost'soobshchestv zoobentosa ozer basseyna r. Barguzin. – [Productivity of zoobenthos communities of the lakes in the Barguzin R. basin]. *In*: V.I. Kuz'mich et al., [Eds], *Gidrobiologiya i gidroparazitologiya Pribaykal'ya i Zabaykal'ya*, pp. 122-130, Nauka, Novosibirsk. ISBN none. (Russ.). – (Author's address not stated).
6 lakes were sampled. Some odon. larvae were found only in samples from Bol'shoy Tuluto lake; Baikal region, Russia. Spp. are not stated.

(15292) DUMONT, M.J., J.M.J. FARJON, H.C.N. VAN DER PUTTEN & R. REILING, 1985. *Milieu-inventarisaties in Nederland: inventarisaties op provinciale en nationale schaal van bodem, water, lucht, flora en fauna; onderzoeksverslag.* – [*Environment inventarisations in the Netherlands* ...]. Sticht. Toegepas. Landschapsecol., Nijmegen. Vol. 1: xxiii+88 pp. (text), Vol. 2: 8 fold. tabs. Softcover (17.0×24.0 cm). ISBN none. – (Dutch).
The odon. field work, by volunteers and since 1976 organised by the Europ. Invert. Surv. (Netherlands), is briefly mentioned (p. 42), and the potential value of the odon. for the general management policies is stated.

(15293) HALDAR, D.P., T. SENGUPTA & S. GHOSE, 1985. An annotated list of septate gregarines (Apicomplexa: Sporozoa) from insects in India. *Rec. zool. Surv. India* 7(2/3): 311-322. – (First Author's last known address: Protozool. Lab., Dept Zool., Univ. Kalyani, Kalyani-741235, India).
The bibliographically cross-referenced list includes 17 coenagrionid and libellulid spp., with 21 actinocephalid and dactylophorid gregarine spp. described from them.

(15294) LOOHUIS, J., 1985. Libel – [Dragonfly]. *Grasduinen* 1985(7): 4-11. (Dutch). – (c/o Eds: P.O. Box 6003, NL-2001 HA Haarlem).
A concise, high-quality presentation of dragonfly biology, by one of the Editors of this naturalists' monthly, with some selected top photographs reproduced from professional literature.

1987

(15295) CLAASSEN, T.H.L., 1987. The macroinvertebrate fauna of littoral and bottom substrata as a tool for biotypology of Frisian waters. *Hydrobiol. Bull.* 21(2): 181-191. – (Author's last known address: Dept Public Works & Envir., Prov. Friesland, P.O. Box 20120, NL-8900 HM Leeuwarden).
Species richness in the littoral samples exceeded that of the bottom samples, gathered at 60 (1981) and 55 (1982) stations in Friesland, the Netherlands. 5 clusters were the result of the TWINSPAN dendrogram. Either Enallagma cyathigerum, Erythromma najas or Ischnura elegans (always a single sp. of these) were among the characteristic taxa in 3 clusters.

(15296) SCHMIDT, E., 1987. Das Renaturierungsprojekt Regenrückhaltebecken Rodderfeld in der Kernstadt Rheibach. *In*: R. Erhard, E. Schmidt & K.-A. Schwarzlose, [Eds], *25 Jahre Arbeit für Natur- und Umweltschutz*, 1962-1987, pp. 41-56, Vogelfreunde Rheibach, Rheinbach. – (Coesfelder Str. 230, D-48249 Dülmen).
Includes references to several odon. spp.; – Rheinbach 15 km SW Bonn, Germany.

(15297) STORK, N.E., 1987. Guild structure of arthropods from Bornean rain forest trees. *Ecol. Ent.* 12: 69-80. – (Dept Ent., Nat. Hist. Mus., Cromwell Rd, London, SW7 5BD, UK).
Over 23000 arthropods, collected by insecticide fogging from the Bornean lowland rain forest trees, referable to approx. 3000 spp., were assigned to guilds. The odon. are mentioned, but no spp. list is provided.

1999

(15298) CIOS, S., 1999. Wedkowanie w Finlandii, 1: Lipienie z Merikarvianjoki, – [Fishing in Finland, 1: Graylings of the Merikarvian river]. *Pstrąg Lipień* 7(21): 10-12. (Polish). – (Annas Lindgrenin 12, FIN-00570 Helsinki).
6 Thymallus specimens were collected (VI-1998); a total of 14 Onychogomphus forcipatus larvae were found in their stomachs. These were the largest preys consumed. The high number is probably due to the swollen state of the river, causing high velocity, because of which the bottom-dwelling larvae were washed away and made easily available to the fish. Cf. *OA* 15299.

(15299) CIOS, S., 1999. Wedkowanie w Finlandii, 2: Lipienie z Iijoki i Oudonjoki, – [Fishing in Finland, 2: Graylings of the Ii and Oudon rivers]. *Pstrąg Lipień* 7(21): 12-16. (Polish). – (Annas Lindgrenin 12, FIN-00570 Helsinki).
6/12-VII-1998, 15 graylings and 1 river trout were collected from the Oudon, and 14 graylings from the Ii. In the stomach of only 1 grayling a single Somatochlora sp. larva was found. The record is not commented upon.

(15300) KHROKALO, L.A. & N.O. MATUSHKINA, 1999. Dragonflies (Insecta: Odonata) of Kaniv Dnieper district. *Izv. har'kov. ent. Obshch.* 7(2): 26-31. (Ukrain., with Engl. s.). – (Dept Zool., Fac. Biol., Kyiv Taras Shevchenko Univ., Volodymyrska 64, UKR-01033 Kyiv).
The 1999 records are presented for 30 spp., 8 spp. were not previously reported from the area of the Kaniv Reserve, the Ukraine. The information on larval habitats is supplied for 13 spp.

(15301) MUKUNDAN, M., 1999. *On the banks of the Mayyazhi*. East-West Books, Madras. iv+256 pp. Softcover (12.8×20.3 cm). ISBN 81-86852-29-8. Price (in India): RsIC 185.—net. – (Distributor: Rupa & Co., 7/16 Ansari Rd, Daryaganj, New Delhi-110 002, India).
A novel, framing the 1940s at Mayyazhi, Kerala, India, a mélange of native myth and legend: a wave of nationalism sweeps over the town and a group of dedicated young men is determined to liberate Mayyazhi from the French. The Author is one of Kerala's best known fiction writers, and the book is important ethno-odonatologically: the folklore says that souls hover as dragonflies over the Velliyan Rock in the sea.

2000

(15302) ANDOH, T., 2000. [Fluctuation in dragonfly population in the Kiso river oxbows, Gifu prefecture, during 17 years]. *Kakocho* 52(204): 53-63. (Jap., vernaclar nomenclature). – (Author's address not transliterated).
[Abstract not available.]

(15303) BAZZANTI, M., M. SEMINARA, S. BALDONI & A. STELLA, 2000. Macroinvertebrates and environmental factors of some temporary and permanent ponds in Italy. *Verh. int. Ver. Limnol.* 27(2): 936-941. – (Dipto Biol. Anim. & Uomo, Univ. Roma "La Sapienza", Viale dell'Università 32, I-00185 Roma).
The results of a study of 15 ponds in Nature Reserve "Castel Porziano" (ca 20 km S of Rome, central Italy) are reported. 10 odon. spp. were encountered, but they are not listed here. Some physico-chemical and community parameters of the ponds studied are presented. For an exhaustive list of spp., see G. Carchini et al., 2004, *Odonatologica* 33(2): 157-168.

(15304) KHROKALO, L.A., 2000. Babky (Insecta: Odonata) Syms'koi oblasti. – [Dragonflies (Insecta: Odonata) of the Sumy district]. *Tezy Dokl. respubl. ent. Konf. 50 Richn. ukrain. ent. Tov.*, Nizhyn, p. 134 [abstract only]. (Ukrain.). – (Dept. Zool., Fac. Biol. Kyiv Taras Shevchenko Univ., Volodymyrska 64, UKR-01033 Kyiv).
During 1995-1997 and 1999, 40 spp. were collected in the district, the Ukraine. 12 of these, new to the fauna of Sumy, are listed here (incl. e.g. Crocothemis erythraea). Since 1882, 44 spp. were recorded from the district.

(15305) NELSON, B., 2000. Aquatic insect communities of Northern Irish freshwaters. *Verh. int. Ver. Limnol.* 27(2): 891-894. – (Dept Zool., Ulster Mus., Bot. Gardens, Belfast, BT9 5AB, N. Ireland, UK).
Northern Irish data sets have been compiled for Odon., aquatic Heteroptera and aquatic Coleoptera. There are 24 spp. of resident Odon. in Ireland, 17 spp. were recorded from N Ireland. Records from 233 localities were available for analysis, and 5 end-groups were identified, viz. (1) rivers, (2) pools on cutover bogs and mesotrophic lakes, (3) eutrophic lakes and pools, (4) oligotrophic bog pools and small lakes, and (5) flushed heaths. Species assemblages of each of these are characterised and a dendrogram of the 5 groups, derived from TWINSPAN of 233 N Ireland Odon. site lists, with indicator species for each division, is provided.

(15306) SUGIURA, H. & M. YOSHIDA, 2000. [Odonate fauna of Taketoyo-cho, Aichi prefecture]. *Kakocho* 52(203): 49-51. (Jap.). – (Authors' addresses not transliterated).
[Abstract not available.]

(15307) YOSHIDA, M., Y. OHNO & S. UGAI, 2000. [Distribution table of dragonflies in the cities, towns and villages in Aichi prefecture]. *Kakocho* 52(201): 13-23. (Jap., vernacular nomenclature). – (Third Author: 1-5--19-403 Saiwai-cho, Kawaguchi, Saitama, 332-0016, JA).
[Abstract not available.]

2001

(15308) GENARO, J.A. & A.E. TEJUCA, 2001. Patterns of endemism and biogeography of Cuban insects. *In*: C.A. Woods & F.E. Sergile, [Eds], *Biogeography of the West Indies: patterns and perspectives* [2nd edn], pp. 77-83, CRC Press, Boca Raton-London-New York-Washington. ISBN 0-8493-2001-1. – (Mus. Nac. Hist. Nat., Havana, Cuba).
The status of the known odon. fauna of Cuba is given as 80 spp. in 41 gen. of 7 fam. The endemism is estimated at 62%, and a reference is made to the recent accidental introduction of Crocothemis servilia (cf. *OA* 11659).

(15309) NANDI, N.C., K. VENKATARAMAN, S.R. DAS & S. BHUINYA, 2001. Faunal diversity of wetlands in the Indian Botanical Garden, Haora, West Bengal. *Rec. zool. Surv. India* 99(1/4): 111-129. – (Second Author: Zool. Surv. India, Marine Biol. Stn, Chennai-600 028, India).
The Garden (surface 110 ha) is located at the northern flank of the Hugli R., at Sibpur, Haora distr., lower Ganga Plain, and includes a number of small ponds and 25 interconnected lakes. The fauna of 4 ponds and 4 lakes was investigated. "Ischnura sp." occurred in all of them, and "2 Brachythemis spp." in 3 ponds and in 3 lakes.

(15310) [PROVANCHER, L.] HUTCHINSON, R., 2001. L'abbé Léon Provancher (1820-1892): l'un de nos grands entomologistes. *Nouv'Ailes* 11(3): 2, portrait incl. – (13 ch. de la Savane, Gatineau, QC, J8T 1P7, CA).
A brief outline of the life and work of the father of Quebec (Canada) odonatology. He was an incredibly prolific writer: during 35 yr of his activities he published 12490 pp. In 1868 he founded the periodical, *Le Naturaliste canadien*, where has appeared (1876-1878) his (and the first) odon. fauna (43 spp.) of Quebec, with descritpions and keys. – See also R. Béique, 1963, *Carnets Soc. zool. Québ.* 23: 20-23.

2002

(15311) IWASAKI, I. et al. [15 joint authors], 2002. [Dragonfly records in Miyazaki prefecture]. *Tatehamodoki* 38: 1-14. (Jap.). (Authors' addresses not stated).
55 spp., with precise locality and collection data; – Japan.

(15312) KOVACS, T. & A. AMBRUS, 2002. Data of larvae to the mayfly, dragonfly and stonefly fauna of Örség and Kerka-vidék (Hetés) (Ephemeroptera, Odonata, Plecoptera) [sic!]. *Praenorica* 6: 23-40. (Hung., with Engl. s.). – (First Author: Mátra Muz., Kossuth u. 40, HU-3200 Debrecen).
Includes records for 34 odon. spp. Lestes sponsa, Sympecma fusca, Coenagrion scitulum and Crocothemis erythraea larvae were not previously reported from this region; – Hungary.

(15313) MALTCHIK, L. & M.I. SILVA FILHO, 2002. Succession of macroinvertebrates in a short-term aquatic habitat in the neotropical semi-arid region. *Verh. int. Ver. Limnol.* 28(3): 1482-1485. – (First Author: Ecol. & Cons. Aquatic Syst., UNISINOS, BR-93022-000 São Leopoldo, Rio Grande do Sul).
The study was conducted during March-Apr. 1997 at Lake João de Abreu (Cariris Velhos region, Paraiba, Brazil). The mean air temperature and total rainfall (Feb.-Sept. 1997) were 25.8°C and 224.8 mm, respectively. In 1997, the wet period of the Lake amounted to 17 days, the flooding period started on 25 March, following a dry period of 9 months, and lasted until 10 Apr. The macroinvertebrate samples were collected on 5 days, between 13 March and 18 Apr. Only on 5 Apr. a libellulid and 6 Anax sp. larvae were caught.

(15314) MELLADO, A., M.L. SUAREZ, J.L. MORENO & M.R. VIDAL-ABARCA, 2002. Aquatic macroinvertebrate biodiversity in the Segura River Basin (SE Spain). *Verh. int. Ver. Limnol.* 28(2): 1157-1162. – (Dept Ecol. & Hydrol., Univ. Murcia, Campus de Espinardo, CP, ES-30100 Murcia).
Macroinvertebrate sampling was carried out in summer 1998 at 60 sampling sites. The aim of the survey was to characterise the fauna of the Basin. 9 odon. fam. are listed, a species list is not provided.

(15315) OGLECKI, P., Z. POPEK & M. WASILEWICZ, 2002. Wystepowanie fauny bezkregowej i pierwotniaków w zróżnicowanych morfologicznie siedliskach rzeki Wkry. – [The invertebrate and protozoan occurrence in the morphologically differentiated habitats in the Wkry river]. *In*: S. Kozlowski et al., [Eds], *Bug, rzéka która laczy*, pp. 123-129, Ekol. Klub UNESCO, Piaski. (Pol.). – (Authors' postal addresses not stated).
The Wkra R. is a tributary of the Bug, NNW from Warszaw, Poland. Aeshna grandis, Anax imperator and "Agrion sp." are recorded from 2 sites in an oxbow that is periodically connected with the river.

2003

(15316) BEDJANIČ, M., 2003. Kačji pastirji-Odonata. *In*: B. Sket, M. Gogala & V. Kuštor, [Eds], *Živalstvo Slovenije*, pp. 281-289, Tehn. založba Slovenije, Ljubljana. ISBN 86-365-0410-4. (Slovene). Price of the book (664 pp., hardcover, 19.4×27.4 cm): SIT 25.000.- net). – (Publishers: P.O. Box 541, Lepi pot 6, SI-1000 Ljubljana).
A chapter in a handbook on the metazoan fauna of Slovenia. The morphology, biology, ecology, and conservation status are outlined, and a review of the regional spp. (73) is presented. – This is a standard work on the animal world of Slovenia, with a comprehensive Engl. general summary.

(15317) BEDJANIČ, M. & A. ŠALAMUN, 2003. Large golden-ringed dragonfly, Cordulegaster heros

Theischinger, 1979 new for the fauna of Italy (Odonata: Cordulegastridae). *Natura Sloveniae* 5(2): 19-29. (With Slovene s.). – (First Author: Kolodvorska 21/B, SI-2310 Slovenska Bistrica).
The sp. is recorded from 3 localities in the Gorizia area, E Friuli-Venezia Giulia, NE Italy. Its occurrence in Italy and Slovenia is mapped and discussed. Herewith, the status of the Italian odon. fauna stands at 89 spp. now. Both C. heros and the sympatric frog, Rana latastei, are listed in the Annexes II and IV of the European Union Habitat Directive, therefore the conservation of their habitats in Italy and W Slovenia, within the framework of the Europ. network of protected areas, NATURA 2000, is proposed.

(15318) BERRY, P.M., T.P. DAWSON, P.A. HARRISON, R. PEARSON & N. BUTT, 2003. The sensitivity and vulnerability of terrestrial habitats and species in Britain and Ireland to climate change. *J. Nat. Conserv.* 11(1): 15-23. – (First Author: Environ. Change Inst., 1A Mansfield Rd, Oxford, OX1 3SZ, UK).
Climate change is having an increasing impact on the distribution and functioning of spp. and habitats. This has important implications for conservation practice and policy. The aim of this study was to model the direct impacts of climate change on terrestrial environments in Britain and Ireland in order to understand the possible changes in distribution of spp. and the composition of habitats. A model, based on an artificial neural network, was used to predict changes in the bioclimate envelope of spp., under the UKCIP98 climate change scenarios. A total of 50 plant and animal spp., incl. Coenagrion puella, were modelled. The SPECIESv1 (Spatial Estimator of Climate Impacts on the Envelope of Species) was developed and is described by e.g. R.G. Pearson et al., 2002, *Ecol. Modelling* 154: 289-300. Many spp. demonstrated a consistent response to climate change, either increasing or losing suitable climate space, although some had a variable response, with losses starting to occur under the high scenarios. The SPECIESv1 model outputs only show changes in suitable climate space, they do not explicitly address how or whether this might be fulfilled. Where a sp. is shown to have an expansion in suitable climate space, the realisation of this will depend on its migration ability and on the availability of intervening habitat. C. puella could experience an increase in potentially suitable climate space and could start to realise this, given its potential mobility. In the paper listed in *OA* 13519 it is shown that C. puella is able to disperse at least 860 m in a season, but this would not be sufficient to fill its potentially suitable climate space in the time span predicted. It is concluded that the potential impacts of climate change should be taken into account when planning conservation measures for the sensitive and vulnerable spp. and habitats. This applies particularly to the montane spp. and habitats and to the spp. with northern distributions, which appear to be most sensitive to climate change, have limited adaptation possibilities and are, therefore, most vulnerable. The raised bog spp. also fall into this category.

(15319) BUDEN, D.W. & D.R. PAULSON, 2003. The Odonata of Kosrae, Eastern Caroline Islands, Micronesia. *Pacif. Sci.* 57(4): 399-407. – (First Author: Div. Sci. & Math., Coll. Micronesia, P.O. Box 159, Kolonia, Pohnpei-96941, Micronesia).
A recent collection of 69 specimens, survey counts and incidental observations during June-July 2002 provide new information on the odon. fauna of Kosrae. The fauna comprises the zygopt. Ischnura aurora and 6 anisopt. spp. It appears to have remained stable with no known extinctions or colonizations over the past half century. The fauna is nearly a subset of that of Pohnpei and the island to the W, and it comprises 6 widespread weedy spp. and 1 endemic, Hemicordulia erico. Upland aquatic habitats appear largely unexploited or underutilized by odon., and the absence of any Teinobasis sp. on Kosrae is in marked contrast to the presence of 6 spp. on the nearest high island, Pohnpei.

(15320) CHOVANEC, A. & F. SCHIEMER, 2003. Die Donauinsel in Wien als ökologischer Korridor? Untersuchung der Besiedlung neu geschaffener Uferstrukturen im Stauraum Freudenau: Hintergrund, Projektdesign und zusammenfassende Darstellung. *Denisia* 10: 27-51. (With Engl. s.). – (First Author: Guntramsdorferstrasse 41/24/1, A-2340 Mödling).
During construction of the hydroelectric power plant, Vienna-Freudenau (Austria), the previously straight shoreline of the 21 km long Danube Island was reconstructed by creating backwaters, coves, gravel banks and pools. The paper describes the design and the results of a 4-yr monitoring programme, investigating the colonisation and successional processes at the study sites. The results show that the sites isolated from the Danube serve as stepping stone biotopes and breeding ponds for odon., amphibians and reptiles. Rheophilic fish spp. colonise side channels connected with the Danube and indicate a longitudinal connectivity on a landscape scale, due to a corridor function of the Danube Island.

(15321) CLAUSNITZER, V., 2003. Flying jewels. *Swara* 26(3/4): 50-54. – (Liebenauer Str. 180, D-06110 Halle/Saale).

General: on the E African odon. world, with emphasis on biogeography, conservation, and on the importance of dragonflies as indicators of water quality. The excellent col. portraits of 8 spp. enhance the value of the paper.

(15322) [DUMONT, H.J.], 2003. Bibliography of Henri J. Dumont. *Hydrobiologia* 500: 1-21. – (Dept Anim. Ecol., Univ. Gent, Ledeganckstraat 35, B-9000 Gent).
349 titles, published 1960-2003 (partim).

(15323) FINCH, B.W., 2003. A gem of a book: East African dragonflies, by Peter and Kate Miller. *Swara* 26(3/4): 52. – (Author's address not stated).
A comprehensive description and an appreciative review of the volume described in *OA* 14672.

(15324) FINCH, B.W., 2003. Essential fare: A field guide to the dragonflies of South Africa, by Warwick and Michèle Tarboton. *Swara* 26(3/4): 54. – (Author's address not stated).
A comprehensive and very appreciative review of the volume described in *OA* 14744.

(15325) FINCH, B.W., 2003. Overlooked gems. *Swara* 26(3/4): 48-49. – (Author's address not stated).
A year ago, the Author discovered the joys of odon. observation and photography, and provides here high-quality photographs of 7 E African spp.

(15326) *22. JAHRESTAGUNG GESELLSCHAFT DEUTSCHSPRACHIGER ODONATOLOGEN*, Dessau, 14.-16. März 2003: *PROGRAMM & ABSTRACTS. Pedemontanum* 4 (Sonderh.): 1-45. Ed.: Dr J. Müller (Frankefelde 3, D-39116 Magdeburg).
[Oral presentations & posters:] *Behrends, T.*: Libellen-Monitoring im Rahmen des E&E Projektes "Halboffene Weidelandschaft Höltigbaum" bei Hamburg (pp. 9-10); – *Brauner, O.*: Beobachtungen zum Vorkommen und zur Reproduktion von Aeshna affinis in Brandenburg (pp. 10-11); – *Brockhaus, T.*: Die Bestandsentwicklung ausgewählter Libellenarten in Sachsen während der vergangenen 200 Jahre (pp. 11-12); – *Bulánková, E.*: Distribution of "Annex species" of dragonflies (Odonata) in Slovakia (p. 12); – *Burkart, G. & W. Burkart*: Der Libellen wegen nach Norden? Ergebnisse langjähriger Libellenbeobachtungen auf der Ostseeinsel Gotland (pp. 13-14); – *Clausnitzer, H.-J.*: Ausbreitung von Ceriagrion tenellum und Orthetrum coerulescens in der Südheide (pp. 14-15); – Teichwirtschaft und Libellen (p. 15); – Aeshna viridis und Angelsport (p. 15); – *Donath, H.*: Veränderungen der Odonatenfauna der nordwestlichen Niederlausitz vor dem Hintergrund des Klimawandels (pp. 16-17); – *Fliedner, T.*: Entwicklung von Sympetrum pedemontanum vom Ei bis zum Imaginalschlupf am Sihlsee, Schweiz (p. 17); – *Jödicke, R.*: An welche Art dachte Linné, als er Libellula aenea beschrieb? (pp. 17-19); – *Keil, R.*: Der Einfluss traditioneller Nutzungsformen der Karpfenteichwirtschaft auf das Vorkommen und die Entwicklung von Libellen (pp. 19-20); – *Kipping, J.*: Zum derzeitigen Kenntnisstand der Libellenfauna Botswanas (p. 20-21); – *Kuhn, J.*: Nehalennia speciosa, eine Schlüsselart im Moor-Naturschutz (p. 21); – Thesen zum Workshop "Fische, Fischerei und Libellenschutz" (pp. 22-23); – *Kunz, B. & R. Jödicke*: Onychogomphus costae: Portrait eines Ibero-maghrebinischen Endemiten (pp. 23-24); – *Leipelt, K.G.*: Habitatspezifisches Driftverhalten der Larven von Cordulegaster-Arten: Erklärung für ihre Einnischung? (p. 24); – *Lohr, M.*: Der Untere Allier und seine Libellenfauna [...] (pp. 25-26); – Zur Ausbreitung von Crocothemis erythraea in der nordrhein-westfälischen und niedersächsischen Oberweserniederung (p. 26); – *Mauersberger, R.*: Erste Antworten auf die Frage, warum Anax parthenope im Norden Brandenburgs klare und im Süden trübe Seen besiedelt (p. 27); – Zur Kenntnis der potentiell natürlichen Fischfauna der Seentypen NO-Deutschlands als gedankliche Basis für den Libellenschutz (p. 28); – *Martens, A.*: Die Wüste lebt: Verbreitungsmuster der Libellen Namibias in Raum und Zeit (p. 29); – Koexistenz von Libellen und Fischen: die evolutionsökologische Perspektive (p. 29); – *Ott, J.*: Die Ausbreitung mediterraner Libellenarten nach Deutschland, Mittel- und Nordeuropa: eine Zusammenstellung aktueller Daten im Hinblick auf einen Klimawandel (p. 30); – Die ökologische Folgen von Fischbesatz auf Libellenzönosen von Kiesgruben (p. 30); – *Richter, M. & W.E.R. Xylander*: Untersuchungen zu Habitatansprüchen und der Morphometrie von Cercion lindenii (p. 31); – *Rüppell, G.*: Der Flug der Libellen und seine Bedeutung als Einnischungsmechanismus (p. 31); – *Schiel, F.-J.*: Die Libellenfauna der Oberrheinauen als Spiegelbild der historischen Verhältnisse und des rezenten Ausbauzustandes (pp. 31-32); – *Schmidt, E.G.*: Zur Habitat-Präferenz einiger Sommer-Libellenarten in den Elbauen im Raum Dessau im Hinblick auf den Einfluss der Beweidung mit Grossvieh (pp. 33-34); – 20 Jahre GdO: der offizielle Startpunkt am 4.9.1982 in Bonn (pp. 34-35); – *Schnabel, H.*: Quantitative Untersuchungen zum Schlupf von Libellen an Fischteichen (pp. 35-36); – *Serfling, C.*: Artenhilfsprogramm für Coenagrion mercuriale und C. ornatum in Thüringen (pp. 36-37); – *Weihrauch, F.*: Ein Baggersee mit reicher Libellenfauna trotz intensiver Angelfischerei (p. 38); – *Westermann,*

K.: Auswirkungen der Hochwasser 1995 und 1999 auf Libellenbestände von Fliessgewässern der südbadischen Rheinniederung (pp. 38-39); – *Wildermuth, H.*: Libellen in der Vorreiterrolle bei der Pflege und Gestaltung von Naturschutzgebieten: ein Beispiel aus der Schweiz (pp. 39-40); – Inwieweit beeinträchtigen Fische die Libellenfauna kleiner Moorgewässer? (p. 40); – *Zimmermann, W.*: Ökologische Beobachtungen an vergesellschafteten Subpopulationen von Coenagrion ornatum und C. mercuriale in der Helme-Unstrut-Aue (p. 41); – Anhang: Odonaten-Literatur zur Flusslandschaft Elbe/Sachsen-Anhalt (p. 42).

(15327) *LIBELLULA* (SUPPL.) (ISSN 0723-6514), Vol. 4 (Nov. 2003; received July 2004): *Studien zur Libellenfauna Bayerns*, 1-142 pp. – (c/o Ms I. Schrimpf, Heimbühlstr. 32, D-72768 Reutlingen).
Weihrauch, F.: Vorwort (p. 1); – Emergenzstudien an Cordulegaster b. boltonii von einem niederbayerischen Waldbach (Odonata: Cordulegastridae) (pp. 3-18); – *Messlinger, U. & I. Faltin*: Verbreitung und Ökologie von Coenagrion ornatum in Westmittenfranken (Odonata: Coenagrionidae) (pp. 19-42); – *Messlinger, U. & M. Winterholler*: Bestandssituation und Ökologie von Coenagrion lunulatum in Franken (Odonata: Coenagrionidae) (pp. 43-58); – *Weihrauch, F., K. Burbach, U. Hölken, H.J. Netz & C. Stettmer*: Neue Nachweise von Orthetrum albistylum aus Bayern (Odonata: Libellulidae) (pp. 59-70); – *Muth, M.*: Aeshna caerulea im Landkreis Oberallgäu: Bestandssituation, Entwicklungsgewässer und Gefährdung (Odonata: Aeshnidae) (pp. 71-97); – *Kämpf, H.*: Entwicklung von vier Gomphiden-Arten in einem Baggersee in Nordbayern (Odonata: Gomphidae) (pp. 99-104); – *Burbach, K.*: Verbreitung und Habitate von Leucorrhinia albifrons in Bayern (Odonata: Libellulidae) (pp. 105-132); – *Weihrauch, P. & M. Schorr*: Bibliographie der odonatologischen Literatur Bayerns 1996-2002 (Odonata) (pp. 133-142).

(15328) MARTENS, A., R. JÖDICKE & F. SUHLING, 2003. An annotated checklist of the Odonata of Namibia. *Cimbebasia* 18: 139-160. – (First Author: Bachstr. 10, D-76185 Karlsruhe).
This is an annotated catalogue rather than a mere checklist, covering 111 spp., and providing information on the previously published records and on distribution within Namibia, and including various annotations, where appropriate. Some general distribution patterns in Namibian Odon. are outlined, and a complete regional bibliography is appended.

(15329) MARTENS, A. & F. SUHLING, 2003. The barbed inflorescences of the grass Setaria verticilliata (L.) Palisot de Beauvois (Poaceae) as a lethal trap for dragonflies (Odonata). *Cimbebasia* 18: 243-246. – (First Author: Bachstr. 10, D-76185 Karlsruhe).
At a pond nr Okahandja, Namibia, Crocothemis erythraea and Diplacodes lefebvrii adults were observed trapped by S. verticilliata flowering stands. The spiny seeds offer a means of seed dispersal by animals. Since this grass grows next to water, it serves fortuitously as a trap for adult dragonflies, especially ♂♂, that often use the conspicuous, upright structures as perching sites. The published accounts on this phenomenon are summarised.

(15330) MARTYNOV, V.V. & A.V. MARTYNOV, 2003. Interesting finds of dragonflies (Odonata) in the Southeast of Ukraine. *Vest. Zool.* 37(2): 80. (Russ., with Engl. title). – (Authors' postal addresses not stated).
Records of Hemianax ephippiger, Onychogomphus forcipatus, Crocothemis erythraea and Sympetrum fonscolombei.

(15331) MIELEWCZYK, S., 2003. The study of entomofauna (Odonata, Hemiptera, Heteroptera, Coleoptera) of the "Niknaca Laka" peatbog in Stolowe Mountains National Park. *Szczeliniec* 7: 59-72. (Pol., with Engl. s.). – (Os. Wichrowe Wzgórza 35/28, PO-61-699 Poznan).
Deals with the fauna of the same site as *OA* 15145, where the odon. are represented by Aeshna cyanea and Somatochlora alpestris. For the latter sp., this is the lowest breeding site (alt. 716 m) in the Sudetes and in the entire southern part of its range.

(15332) NICOARĂ, M., A. VASILOIU-NICOARĂ & I. COJOCARU, 2003. Contributions to the knowledge of the macroinvertebrate fauna from the valley of river Ciric (Iaşi). *Anal. stiint. Univ. Al. I. Cuza* (Biol. anim.) 49: 171-176. – (Authors' postal address not stated).
Quantitative data are presented on the occurrence of some odon. genera and families in Dorobant and Venetia man-made lakes, N of Iaşi, Romania.

(15333) [PAVLYUK, R.S.] [Anonymous], 2003. Roman Semenovich Pavlyuk in memoriam (1926-2002). *Vest Zool.* 37(6): 89, with portrait. (Ukr., with Engl. title in contents table).
A brief biography and appreciation of his odonatol. work. Born in Bobulinci, Ternopil distr., the Ukraine, he graduated (1956) and was awarded the PhD degree (1975) from the University of Lvov. Dissertation title: "*Odonata of the western Ukraine, their parasites and enemies*". Since

1961 he held a position with the Mus. Zool., Univ. Lvov, and was working mainly on odon. fauna and ecology of W Ukraine, the Danube R. Delta, and central Asia. The odon. parasitology (Sporozoa, Trematoda, Cestoda, Nematoda, Acari) was his special field of research. His bibliography (over 100 papers) is not provided here, but some of his works are emphasized, incl. those listed in *OA* 12164 and 14160.

(15334) *PROCEEDINGS OF THE 1st PHAON MEETING, [...], Gällivare, Sweden, 26 July 2001*, 2003. *Cimbebasia* 18: 161-241. – (c/o Prof. Dr A. Martens, Bachstr. 10, D-76185 Karlsruhe).

Dijkstra, K.-D.B., A. Martens & M. Parr: Foreword: African odonatology: past, present and future (pp. 161-166); – *Corbet, P.S.*: Ecological perspectives of African Odonata (pp. 167-172); – *Clausnitzer, V.*: Odonata of African humid forests: a review (pp. 173-190); – *Dijkstra, K.-D.B.*: A review of the taxonomy of African Odonata: finding ways to better identification and biogeographic insight (pp. 191-206); – *Suhling, F., R. Jödicke & W. Schneider*: Odonata of African arid regions: are there desert species? (pp. 207-224); – *Martens, A.*: Reproductive behaviour of African Odonata: a review (pp. 225-241).

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(15335) *ABSTRACTS OF PAPERS presented at the 16th International Symposium of Odonatology, Banzkow, Mecklenburg-Vorpommern, Germany, 26 July-4 August 2004*. Edited by W. Zessin. Issued by Soc. Int. Odonatol., Schwerin. 48 pp. – (Available from: the Eds of *Odonatologica*, P.O. Box 256, NL-3720 AG Bilthoven; – price: 22.- net, incl. the *Field Trip* and the *Program & Generalities* booklets).

Andjus, L. & M. Jović: Odonata checklist of Montenegro (p. 6); – *Bollow, K.*: Die Libellentagung (pp. 6-10; poem); – *Bedê, L.C. & W. Piper*: Outstanding dragonfly richness in small areas: the case of the Environmental Protection Area of São José in Minas Gerais state, southeastern Brazil (pp. 11-12); – *Brockhaus, T.*: Three hundred years of odonatological research and faunistics in Saxony, eastern Germany (pp. 13-14); – *Clausnitzer, V.*: The IUCN Red List: goals, objectives and advantages (pp. 14-15); – *David, S. & E. Bulánkova*: Threatened species of dragonflies (Insecta: Odonata) of the Slovak Republic (pp. 15-17); – Occurrence of the "annex" dragonfly species in Slovakia (pp. 17-18); – *Dolný, A. & E. Bulánkova*: Odonata of the peat bogs of Czech and Slovak Republics (pp. 19-20); – *Goto, A. & I. Wishitani*: Conservation learning with "dragonfly ponds" (p. 21); – *Gröning, E. & C. Brauckmann*: New reconstructions of selected Late Palaeozoic arthropods (pterygote insects, arachnids and Arthropleura) (pp. 22-23); – *Günther, A.*: Territorial and reproductive behaviour of Neurobasis kaupi (pp. 23-24); – *Holuša, O.*: Brachythemis leucosticta (Odonata: Libellulidae): observations on hunting, a case of commensalism? (pp. 24-25); – *Inoue, K.*: Conservation of dragonflies in Japan, pt 4 (pp. 26-27); – *Jović, M. & L. Andjus*: Survey of Odonata investigations in Serbia (pp. 27-28); – *Kadoya, T., S. Suda & I. Washitani*: Effects of habitat selection on species richness of adult dragonfly assemblages established on newly created "dragonfly ponds" in Japan (pp. 28-29); – *Malikova, E.I.*: On the taxonomic status of Far Eastern Leucorrhinia (pp. 29-30); – *Matsu'ura, S. & M. Watanabe*: Egg load in females of three damselfly species coexisting with brackish water damselfly Mortonagrion hirosei in reed communities (pp. 30-31); – *Richter, O., E. Braune, H. Hadrys, C. Schütte & F. Suhling*: From country to gene: dragonfly diversity on different scales (pp. 31-32); – *Riservato, E.*: Research and education on Ticino Valley Park's Odonata (pp. 32-33); – Transect census of Odonata in the Ticino Park, Italy (p. 33); – *Schmidt, E.G.*: Sympetrum depressiusculum depending on carp breeding ponds in Atlantic NW Germany (pp. 34-36); – Climate change and dragonfly fauna in the Atlantic NW Germany (pp. 36-38); – *Suhling, F.*: Habitat selection, ecological traits and regional distribution patterns of dragonflies in arid Namibia (pp. 39-40); – *Susa, K. & M. Watanabe*: Body temperature and thermal environment of shady forest gaps as perching site and openrice fi elds as reproduction site for Sympetrum infuscatum (pp. 40-41); – *Tyagi, B.K. & J. Hiriyan*: Control of dengue vector mosquito, Aedes aegyti, by dragonflies (Odonata) (pp. 41-42); – *Watanabe, M., S. Iwata & Y. Mimura*: Evaluation of line transect method for estimating the endangered brackish water damselfly (Mortonagrion hirosei) abundance in a dense reed community (pp. 42-43); – *Yagi, T. & I. Adachi*: Program design for the public research and education: a case study with the Japanese dragonfly Sympetrum pedemontanum (pp. 43-44); – *Zessin, W.*: Die Libellenfauna des Flusses Warnow in Mecklenburg (pp. 44-45); – Pictures of the 15th International Symposium of Odonatology in Novosibirsk, Russia, 2001 (pp. 46-47); – Some remarkable steps of the origin of Odonata wings and wing venation (pp. 47-48). – For a regional newspaper article on the Symposium, see *OA* 15378; 2 other articles on particular program items have appeared in *Schwerin. VolksZtg* of 3 Aug., p. 14 and 5 Aug., p. 26.

(15336) *AGRION, PURLEY*. Newsletter of the Worldwide

Dragonfly Association (ISSN 1476-2552), Vol. 8, No. 2 (July 2004). – (c/o J. Silsby, 38 Astoria House, 116 High Str., Purley, Surrey, CR8 2XT, UK).
[Selected articles:] *Corbet, P.*: The WDA Archive (pp. 13-14); – *Orr, B.*: Four days in Kanchanaburi (pp. 15--17; Thailand, with records); – *Paulson, D.*: A peninsula with its toe in the tropics: Baja California, Mexico (pp. 17-18; odon. fauna features); – *Silsby, J.*: Grand places (pp. 18-19; reminiscences from odonatol. oversea trips); – *Corbet, P./ Silsby, J./ Moore, N.*: Book reviews (pp. 20-22); – *Dijkstra, K.-D.B., M. Hämäläinen & V.J. Kalkman*: PHAON and ECHO: communicating about Odonata of the Old World tropics (pp. 22-28); incl. long list of records from Peninsular Malaysia).

(15337) *AOHADA*, Kyoto. (ISSN none), No. 3 (1 May 2004). (Jap., with Engl. titles). – (c/o A. Sasamoto, 61--204 Jodoji-Ishibashi-cho, Sakyo-ku, Kyoto, 606-8406, JA).
Hisamatsu, S.: Notes on the dragonflies of Kyoto city in 2003 (pp. 2-5, figs 1-2 excl.); – *Honda, T.*: A record of Epiophlebia superstes from the river in Iwakura, Kyoto city (pp. 5-6); – *Sasamoto, A.*: Recent records of Platycnemis foliacea sasakii in Kyoto city (pp. 7-12); – *Kiyoshi, T.*: A brief trip to watch White-faced Darters, Leucorrhinia dubia orientalis, in Nagano prefecture (pp. 13-14); – *Sato, M.*: A diary of dragonflies and damselflies in Mallorca, Spain (pp. 15-20, figs 3-6 excl.); – *Kiyoshi, T. & S. Hisamatsu*: A predation on an immature female of Nihonogomphus viridis by a female of Gomphus (= Shaogomphus) postocularis (p. 21, fig. 7 excl.); – *Sasamoto, A.*: Introduction of interesting articles on Odonata (2): The dragonflies in "The natural history of the insects of China, India, and New Holland ...", by Edward Donovan (pp. 22-25); – *Sasamoto, A./Kiyoshi, T./Honda, T./Sato M.*: At the critical moment (pp. 26-27, figs 7, 10--11 excl.).

(15338) ARAI, Y., [Ed.], 2004. [*A countrywide survey of Red Dragonflies in 2004*]. Musashino Satoyama Research Group & Institute of Agriculture and Natural Environments, Yorii-cho, Saitama. 62 pp. (Jap.). – (c/o Dr R. Futahashi, 6-1-35-301, Nishihara, Kashiwa, Chiba, 277--0885, JA).
This is a follow-up of the work described in *OA* 15093. – [Contents:] *Arai, Y.*: Introduction (p. 1); – Aim and methods of the survey (pp. 2-4); – Results of the survey (pp. 5-12); – Research Meeting report (pp. 13-17); – *Matsuzaki, Y.*: Red dragonflies in the western districts of Saitama pref. (pp. 19-22); – *Arai, Y.*: Occurrence of Sympetrum frequens around Yorii-cho, Saitama pref. (pp. 23--27); – *Kita, H. & F. Kobayashi*: Large-scale emergence of Sympetrum frequens from running water (p. 28); – *Ishizawa, N.*: Population dynamics and maturity degree of Sympetrum frequens in the Okumusashi Hills (pp. 29-41); – *Futahashi, R. & F. Hayashi*: Genetic analysis of Sympetrum frequens based on DNA sequences (pp. 42-46); – *Hayashi, F. & Y. Arai*: Studies on the dispersal pattern and population genetics of Pantala flavescens (pp. 47-58); – *Okazaki, M.*: Flight period of Pantala flavescens in Daitojima and Tokunoshima islands (pp. 59-62).

(15339) *ARGIA*. The news journal of the Dragonfly Society of the Americas (ISSN 1061-8503), Vol. 16, No. 2 (15 Aug. 2004). – (c/o Dr & Mrs T.W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13903, USA).
[Scientific articles:] *White, H. & S. Hummel*: 2004 Annual DSA Meeting in Iowa (pp. 2-5; incl. new state record for Iowa: Libellula vibrans, Lucas Co., 14-VII-2004); – *Behrstock, R.A., D. Danforth & S. Upson*: Yaqui Dancer (Argia carlcooki Daigle, 1995), new distributional records for northern Mexico and the US (pp. 11-16; col. figs 1-7 on cover p. 4); – *Trapero-Q., A.D., Y. Torres Campos, C. Naranjo López & O.C. Bello González*: Annotated list of the odonates in the Alexander Humboldt National Park, Guantanamo prov., Cuba (pp. 16-19); – *Wren Briggs, M.*: Dragonfly lampshades by Louis Comfort Tiffany (pp. 20-22); – *Meurgey, F.*: New record for Argia cuprea and Lestes secula: results of the 2003 collecting trip to Nicaragua (p. 22); – *Manolis, T.*: Occipital spines on male Ophiogomphus morrisoni (pp. 23-24); – *O'Brien, M.*: An unusual mode of contraception (p. 24; Gomphus quadricolor); – *Ellzey, K.D.*: First state record of Gomphus militaris in Louisiana (pp. 24-25); – *Meurgey, F.*: Erythrodiplax berenice (Drury, 1770) and Tramea calverti Muttkowski, 1910, new species for Guadeloupe, Lesser Antilles (p. 25); – *Daigle, J.J.*: Original members of DSA (pp. 25-26); – *Small, D.*: Operation Rubyspot 2004 (p. 26; Hetaerina americana); – *Donnelly, N./Bailowitz, R.*: Book reviews (pp. 26-27); – *Beckemeyer, R.*: Japan odonatist's web site on egg-parasitoids of dragonflies (pp. 27-28).

(15340) ARTISS, T., 2004. Phylogeography of a facultatively migratory dragonfly, Libellula quadrimaculata (Odonata: Anisoptera). *Hydrobiologia* 515: 225-234. – (Lakeside School, 14050 1st Ave NE, Seattle, WA 98125, USA).
The biogeography was examined via a phylogenetic analysis of 416 bp of the mitochondrial cytochrome oxidase I subunit (COI). Phylogenetic analyses under parsimony and minimum evolution produced trees with similar

topologies, and revealed strong support for 3 clades corresponding to populations in Asia, Europe and N America. However, resolution was poor within clades, and genetic distances between populations within continents was quite low (1-2%). Several populations are known to engage in periodic mass migrations, and it is possible that introgression from gene flow due to the mobility of this sp. has obscured phylogenetic patterns within continents. It was not possible to test for phylogenetic patterns coincident with historical glacial refugia given the lack of phylogenetic patterns within continents. However, given that some sequence divergence was observed between populations within continents, it is possible that phylogentic patterns exist, and subsequent studies should make use of larger data sets, and molecular data from faster evolving genes. Despite the propensity for periodic, short distance migrations in L. quadrimaculata, gene flow appears to be limited and does not influence the phylogenetic relationships of populations between continents.

(15341) ASKEW, R.R., 2004. *The dragonflies of Europe*. [Revised edn]. Harley Books, Colchester. 308 pp., 32 col. pls, 513 textfigs, 114 maps incl. Softcover (16.8×23.2 cm). ISBN 0-946589-75-5. Price UK£ 30.- net. – (Publishers: Martins, Great Horkesley, Colchester, Essex, CO6 4AH, UK).

A revised and updated paperback edn of the work described in *OA* 6357. – Since the appearance of the 1st edn (1988), the knowledge on the European Odon. has considerably increased; much of it is incorporated into the present edn, which remains the finest and the most influential reference work yet published on this subject. While, in 1988, 114 spp. were known to breed in Europe, the census of the fauna stands at 124 recorded spp. now, all concisely covered here. While some corrections could be made to the original text, a new Preface, an updating Supplement (pp. 213-222, col. pl. 30) and additional bibliographic references (pp. 234-238; listing the works published up to 2002) are bringing the information somewhat up to-date. Next to the descriptions of the additional spp., the Supplement also includes a chapter on nomenclature, a review of 20 exotic spp. introduced incidentally with aquatic plants in nursery tanks (Finland, Great Britain, the Netherlands), chapters on expansion and retraction of the recorded ranges within Europe, and an appreciable list of other new records. In the (previously published) distribution maps, the post-1990 changes of the national boundaries could not be introduced, but these are recognized in the Supplement. – This book is a cornerstone of European odonatology. No doubt, through the new edn it will continue to facilitate importantly and decisively the current and the forthcoming work in most fields, not least also the steadily increasing efforts in various areas of conservation.

(15342) BAKER, D.B., 2004. Winkler, Wien: die Geschichte einer entomologischen Handelshauses. *Ent. Bl.* 100(1): 9-12. – (Correspondence to: Dr H. Winkler, Dittesgasse 11, A-1180 Wien).

The history of the well-known Viennese entomology trading house, Winkler, is briefly outlined. It was founded in 1906 by Albert Winkler Sr and Fritz Wagner, and it is currently managed by Dr Hildegard Winkler. By providing equipment and (also secondhand) literature, the House was/is rendering appreciable services to several generations of Austrian and other odonatologists. Also the substantial St. Quentin odon. library was recycled in the market through this company.

(15343) BARANOWSKA, A. & A. ZAWAL, 2004. Dragonflies (Odonata) of the Binowskie Lake in the Szczeciński Landscape Park. *Parki nar. Rez. Przyr.* 23(1): 111-120. (Pol., with Engl. s.). – (Dept Invert. Zool. & Limnol., Univ. Szczecin, Waska 13, PO-71-415 Szczecin).

34 mostly eurytopic spp. from 10 localities are listed; 3 of these are considered as immigrants. Lestes sponsa, L. virens, Coenagrion hastulatum, Aeshna juncea, Somatochlora flavomaculata and Libellula fulva are associated with peat bog and/or dystrophic habitats; – Poland.

(15344) BEDJANIČ, M., 2004. *Inventarizacija favne kačjih pastirjev (Odonata) na območju načrtovane HE Blanca na Savi, z oceno ogroženosti in predlogi omilitvenih ukrepov.* – [*Inventarisation of the odonate fauna in the area of the projected hydroelectric works, Blanca na Savi, with an assessment of the menace and suggestions of mitigating measures*]. Bedjanič, Slovenska Bistrica. 26 pp. (Slovene). – [Document prepared for the Natn. Inst. Biol., Ljubljana]. – (Author: Kolodvorska 21/B, SI-2310 Slovenska Bistrica).

22 spp. were recorded from 27 localities along the Sava R., between the towns of Brestanica and Sevnica, Slovenia. The impact of the project on 5 of these is discussed in detail, and the construction of alternative biotopes for Erythromma ("Cercion") lindenii is advocated.

(15345) BEDJANIČ, M., 2004. *Smernice za ureditev in upravljanje bodočega ornitološkega rezervata "Vrbovski tali" na Ljubljanskem Barju s stališča favne kačjih pastirjev (Odonata).* – [*Directives for construction and management of the projected Bird Reserve, "Vr-*

bovski tali", in the Ljubljana Moor from the point of view of the odonate fauna]. Bedjanič, Slovenska Bistrica. 24 pp. (Slovene). – [Document prepared for the Ornithol. Soc. of Slovenia]. – (Author: Kolodvorska 21/B, SI-2310 Slovenska Bistrica).
Ljubljana Moor (= Ljubljansko Barje) is considered the "cradle" of odonatology in Slovenia. Its odonatol. exploration is traced from 1763, and a commented list of the 43 recorded spp. is provided. Dragonflies appear a particularly suitable animal group for the demonstration of biotic diversity in the Moor. Due to their easy observation, they are likely to attract much attention of the visitors, particularly so during June-Sept., when bird life is of a lesser general interest. Detailed suggestions are presented for the construction of an adequate dragonfly pond, and for the management of the existing water bodies in the Reserve.

(15346) BEKETOV, M.A., 2004. Harakteristika katchestva vod po pokazatelyam makrozoobentosa. – [Water quality features as reflected by macrozoobenthos]. *Ezheg. Kach. poverh. Vod zap.-sib. terr. Upravl. Gidrometerorol. Monit. okruzhayu Sredi* (2003) 1: 47-63. (Russ.). – (P.O. Box 156, RUS-630048 Novosibirsk).
34 odon. spp. were assessed as indicators of total anthropogenic pressure on river catchment areas at 10 localities on the Inya, Berd', Tula and Ob' rivers in the Novosibirsk region, Russia. The biomonitoring studies indicate that the contamination by nitrite, ammonia, etc. triggers the decrease in odon. species richness and diversity, depending on the concentrations of pollutants. Qualitative and quantitative data are provided for each sampling site and sp.

(15347) BIGGS, K., 2004. *Common dragonflies of the Southwest: a beginner's pocket guide*. Azalea Creek Publishing, Sebastopol/CA. 160 pp. (14.5x11.5 cm), softcover. ISBN 0-9677934-1-6. Price: US$ 10.95 net. – (Publishers: 308 Bloomfield Rd, Sebastopol, CA 95472, USA).
A follow-up of the similar California field guide (as described in *OA* 13268), the present work deals with the better-known odon. of 6 SW states. For Nevada, Utah, Colorado, Arizona and New Mexico this is the first commercially available treatment. The titles of the sections are: "Preface" (p. 5), "How to use this book" (pp. 6-7), "Viewing dragonflies" (p. 8), "Life of the dragonfly" (p. 9), [Species acounts] (pp. 10-137), "Credits" (pp. 138--139), "Glossary" (140-141), "Bibliography and references" (pp. 142-143), "Index" (pp. 144-151), "Checklist of the dragonflies and damselflies of the South West" (pp. 152-158), "Frequently asked questions" (p. 159), and "Websites and discussion groups" (p. 160). In species accounts, a page is allotted to each sp., providing the taxonomic and Engl. name, information on its size, adult morphology, habitat, flight period and distribution, and 2 col. photographs, supplied by 43 authors. The identification of Argia, Enallagma and Ischnura spp. is facilitated by line drawings of their ♂ terminalia. The complete checklist of the regional spp. (showing state-wise their distribution), and the website directory will be likewise useful. Though directed at the "beginner", the book will be of much interest to the experienced dragonfly watcher as well as to the professional.

(15348) BOUMANS, L., 2004. Insecten in het Universiteitsmuseum Utrecht. – [Insects in the Utrecht University Museum]. *Veelpoot* 15(2): 13-15. (Dutch). – (Author's address not stated).
Most of the collections were transferred (in the 1990s ?) to the Nat. Hist. Museums of Amsterdam and Leiden. The remaining material is considered to be associated with the history of the University of Utrecht. There are ca 70 cabinets, a single one of these contains a small odon. collection. The provenance is not stated and a species list is not provided.

(15349) BUDEN, D.W. & D.R. PAULSON, 2004. The Odonata of Chuuk, eastern Caroline Islands, Micronesia. *Opusc. zool. flumin.* 217: 1-11. – (Second Author: Slater Mus. Nat. Hist., Univ. Puget Sound, 1500 N. Warner, No. 1088, Tacoma, WA 98416-1088, USA).
Nine spp. of adult Odon. were collected from among 5 volcanic lagoon islands and 3 atolls in Chuuk, Micronesia, during Dec. 2002-July 2003. Anax guttatus, Macrodiplax cora, and Tramea transmarina are reported from Chuuk for the first time, and the first odon. records are presented for Namonuito, Houk, and Satawan atolls. Teinobasis carolinensis is the only sp. endemic to these islands, but Agrionoptera sanguinolenta, resident also in Pohnpei, is represented in Chuuk by the endemic A. s. pusilla.

(15350) CAMMAERTS, R., 2004. Taxonomic studies on African Gomphidae (Odonata, Anisoptera). 2. A revision of the genus Neurogomphus Karsch, with the description of some larvae. *Belg. J. Ent.* 6(1): 91-239. – (Serv. Syst. & Ecol. Anim., Univ. Libre Bruxelles, CP 160/13, 50 av. F.D. Roosevelt, B-1050 Bruxelles).
17 spp. and 2 sspp. are recognized, described and keyed. The new taxa are: N. alius sp. n. (holotype: Congo Brazzaville), N. paenenuelensis sp. n. (Congo-Kinshasa), N. cocytius sp. n. (Zambia), N. zambeziensis sp. n. (Zambia),

N. carlcooki sp. n. (Ivory Coast), N. chapini lamtoensis ssp. n. (Ivory Coast), N. dissimilis sp. n. (Zambia), and N. d. malawiensis ssp. n. (Malawi). The genus is divided into 2 subgenera, of which Mastigogomphus is new (type sp.: Oxygomphus chapini Klots). Of the formerly described spp., all but Karschiogomphus ghesquierei Schouteden remain valid, though their names were often erroneously applied to unrelated taxa. Generic larval characters are specified for the first time, and the larvae of some spp. are described and illustrated.

(15351) CHAPLINA, I.A., 2004. *Fauna i ekologiya strekoz Kazakhstana.* – [*Fauna and ecology of dragonflies of Kazakhstan*]. Autoref. Diss. Kand. Biol. Nauk, Inst. Anim. Syst. & Ecol., Russ. Acad. Sci., Novosibirsk. 23 pp. (Russ.). – (For copies apply to: Dr A.Yu. Haritonov, Inst. Anim. Syst. & Ecol., Ul. Frunze 11, RUS-630091 Novosibirsk).
The history of odonatol. investigations in Kazakhstan is traced from 1906. Currently, 87 spp. are known from the state; a checklist with annotations on their regional occurrence is included. 8 spp. are here recorded for the first time. Ecology of larval and adult stages is outlined. In eutrophic ponds and lakes, larval biomass could make up to 50% of the total arthropod biomass. The highest abundance of larvae takes place at the end of May, the highest biomass early in June. In adults, 5 phenological groups are distinguished. Biogeographical composition of the fauna is analysed, and the border-line between the holarctic and subholarctic regions in Kazakhstan is determined. – This is merely a printed summary of the original dissertation (256 pp., 101 figs, 37 tabs incl.), which is not available for abstracting.

(15352) CORBET, P.S., 2004. Foreword. *In*: R.R. Askew, *The dragonflies of Europe*, p. 6, Harley Books, Colchester, ISBN 0-946589-75-5. – (Crean Mill, St Buryan, Cornwall, TR19 6HA, UK).
Cf. *OA* 15341.

(15353) CORDERO RIVERA, A., J.A. ANDRES, A. CORDOBA-AGUILAR & C. UTZERI, 2004. Postmating sexual selection: allopatric evolution of sperm competition mechanisms and genital morphology in calopterygid damselflies (Insecta: Odonata). *Evolution* 58(2): 349-359. – (First Author: Depto Ecol. & Biol. Anim., Univ. de Vigo, EUET Forestal, Campus Universitario, ES-36005 Pontevedra).
Postmating sexual selection theory predicts that in allopatry reproductive traits diverge rapidly and that the resulting differentiation in these traits may lead to restrictions in gene flow between populations and, eventually, to reproductive isolation. Here, the potential for this premise was explored in 4 spp., in which postmating sexual mechanisms are especially well understood. Particularly, it was tested if in allopatric populations the sperm competition mechanisms and genitalic traits involved have indeed diverged. This was done in 2 steps. First, the sperm competition mechanism of 2 allopatric Calopteryx haemorrhoidalis populations (Italy, Spain) were compared. The results indicate that in both populations ♂♂ are able to displace spermathecal sperm, but the mechanism used for sperm removal between both populations is strikingly different. In the Spanish population ♂♂ seem to empty the spermathecae by stimulating ♀♀, whereas in the Italian population ♂♂ physically remove sperm from the spermatecae. Both populations also exhibit differences in genital morphometry that explain the use of different mechanisms: the ♂ lateral processes are narrower than the spermathecal ducts in the Italian population, which is the reverse in the Spanish population. The estimated degree of phenotypic differentiation between these populations, based on the genitalic traits involved in sperm removal, was much greater than the differentiation based on a set of other 7 morphological variables, suggesting that strong directional postmating sexual selection is indeed the main evolutionary force behind the reproductive differentiation between the studied populations. In a second step, it was examined if a similar pattern in genital morphometry emerges in allopatric populations of C. splendens, C. virgo and Hetaerina cruentata. The results suggest that there is geographic variation in the sperm competition mechanisms in all 4 spp. studied. Furthermore, genitalic morphology was significantly divergent between populations within spp., even when different populations were using the same copulatory mechanism. This can be explained by probable local coadaptation processes that have given rise to an ability or inability to reach and displace spermathecal sperm in different populations. This set of results provides the first direct evidence of intraspecific evolution of genitalic traits shaped by postmating sexual selection.

(15354) DANWALL, W. & T. LOWE, 2004. [Programme updates] Freshwater biodiversity. *Species* 41: 23. – (Authors' addresses not stated).
The first regional freshwater biodiversity assessment was completed for E Africa in Dec. 2003. The odon. (304 spp.) were among the taxa assessed. A workshop was also held to fill a regional gap in expertise through provision of training in field survey and odon. taxonomy; 16 scientists received training from members of the IUCN/

SSC Odonata Specialist Group. Pilot criteria will now be developed and evaluated for selecting Key Biodiversity Areas for Odon. In addition, the main focus now is on rising funds to expand the assessment to other regions and continents. Regional assessments are planned for the La Plata River System in S America, for Europe and for the Mekong River Basin. Funding opportunities for single taxon global assessments are also being investigated.

(15355) DE ARMAS, L.F., 2004. Nuevo registro de Celithemis eponina (Drury, 1773) para Cuba (Odonata: Libellulidae). *Boln Soc. ent. aragon.* 34: 228-229. (With Engl. s.). – (P.O. Box 4327, San Antonio de los Baños, La Habana-32500, Cuba).
1 ♂, Bacunayagua, Matanzas prov., 9-III-2004. This is the 7th record of the N. American C. eponina for Cuba, and the 2nd for the province.

(15356) DIJKSTRA, K.-D.B., 2004. Comment on the proposed conservation of usage of the specific name of Libellula aenea Linnaeus, 1758 (currently Cordulia aenea) and L. flavomaculata Vander Linden, 1825 (currently Somatochlora flavomaculata; Insecta, Odonata) by the replacement of the lectotype of L. aenea with a newly designated lectotype. *Bull. zool. Nomencl.* 61(2): 110. – (Gortestraat 11, NL-2311 MS Leiden).
The Author agrees with the proposal as outlined in *OA* 15129. For another agreement, see *OA* 15254.

(15357) DONNELLY, T.W. & M.J. PARR, 2004. Odonata: dragonflies and damselflies. *In*: S.M. Goodman & J.P. Benstead, [Eds], *The natural history of Madagascar*, pp. 645-654, Univ. Chicago Press, Chicago-London. ISBN 0-226-30306-3. – (First Author: 2091 Partridge Lane, Binghamton, NY 13903, USA).
A checklist is presented of the 181 named spp. and sspp. currently known from Madagascar; 132 of these are endemic. The Malagasy fauna is family-wise briefly characterized, its affinities are stated, and the origin and significance of Odon. endemic radiation in Madagascar are outlined.

(15358) DUMONT, H.J., 2004. Dragonflies from Azerbaijan. *Zool. Middle East* 31: 87-92. (With Germ. s.). – (Dept Anim. Ecol., Univ. Gent, Ledeganckstraat 35, B-9000 Gent).
32 spp. were recorded in late spring 2002. Several of these are first records for the Caucasus region or E Caucasus subregion. Calopteryx splendens intermedius occurs in the lower Kura Valley, C. s. orientalis occurs on rivers that drain the Talysh Hills directly to the Caspian, but there is some phenotypic evidence of hybridization with intermedia SW of the Kura. Of interest are the records of Coenagrion ponticum and C. australocaspicum, and a blue Aeshna cyanea ♂ (Talysh Hills). The specimen may represent a rare point mutation (known in e.g. carabid beetles and the tree frog Hyla) where the yellow component, one of the 2 components of the green colour, is knocked out and the resulting animal is bright blue.

(15359) ELOUARD, J.-M. & F.J. GIBON, 2004. Ecology of aquatic invertebrates. *In*: S.M. Goodman & J.P. Benstead, [Eds], *The natural history of Madagascar*, pp. 511-517, Univ. Chicago Press, Chicago-London. ISBN 0--226-30306-3. – (Inst. Rech. pour Dévelopg., B.P. 5045, F-34032 Montpellier Cedex 1).
With reference to the Malagasy Odon., the importance of evolutionary age and that of flight abilities are discussed.

(15360) FINCKE, O.M., 2004. Polymorphic signals of harassed female odonates and the males that learn them support a novel frequency-dependent model. *Anim. Behav.* 67(5): 833-843. – (Dept Zool., Univ. Oklahoma, Norman, OK 73019, USA).
For mate-searching sp. the learned mate recognition (LMR) hypothesis assumes that sexual harassment favours signal variation among ♀♀, which exploits the receiver ability of ♂♂. The model predicts that coevolving ♂♂ have responded to the ♀ sexual foil by learning to recognize ♀ variants as potential mates. The LMR hypothesis is translated into the language of signal detection theory to explain its novelty as a dynamic, coevolutionary, negative frequency-dependent selection model. Due to gene-environment interactions, ♂♂ cueing to the morph detected most often should generate positive but often asymmetrical, detection-dependent harassment towards ♀♀ that are expected to sort to an ideal free distribution where harassment costs are equal. At equilibrium, morph fitness, but not necessarily morph frequency, is predicted to be equal. The LMR hypothesis is consistent with recent experimental data and the distribution of colour polymorphisms in the Odon., predicts general conditions favouring variation in sexual signals, and provides a novel mechanism for speciation via sexual signalling.

(15361) [FINNISH MUSEUM OF NATURAL HISTORY], 2004. Idänkirsikorento Suomessa. – [Sympecma paedisca recorded in Finland]. *Helsingin Sanomat*, issue of 8 June, p. D1. (Finn.). – (P.O. Box 17, FIN-00014 University of Helsinki).
A newspaper article, based on the press notice of the Mu-

seum (dated 27 May 2004), reporting on the discovery of S. paedisca at 3 sites (Örö Isl., Virolahti, Pellinge) on the S coast of Finland in May 2004. The insects had arrived to Finland by the exceptionally warm air currents, from SE, early in May. – The same information was published also in several other Finnish newspapers.

(15362) FUTAHASHI, R., H. FUTAHASHI, Y. ARAKI & H. NEGORO, 2004. The dragonflies and damselflies of Toyama prefecture, central Honshu, Japan. *Spec. Publs Toyama Sci. Mus.* 17: ii+220 pp. (Jap., with Engl.s.). – (First Author: 6-1-35-301, Nishihara, Kashiwa, Chiba, 277-0885, JA).
A monographic treatment of the prefectural odon. fauna, largely based on systematic surveys and collections of the last decade. 86 spp. are known to occur in this territory, incl. Gomphus postocularis and Onychogomphus viridicostus that were not seen since 1972 and 1959, respectively. In all, 9671 specimens are listed with precise locality data. Also included are the following, repeatedly found hybrids: Anax n. nigrofasciatus × A. parthenope julius, Sympetrum baccha mutatinum × S. e. eroticum, S. depressiusculum × S. frequens, S. e. eroticum × S. kunckeli, and S. e. eroticum × S. parvulum. For each sp., the information is provided on its habitat and behaviour, and a distribution map and a phenology graph are supplied. A comprehensive bibliography (403 titles) is appended. – A brief book review, by T. Inomata, appeared in *Gekkan-Mushi* 405(2004): 50, in Jap.

(15363) HIROI, S., 2004. [First record of Anaciaeschna martini from Fukushima pref.]. *Gekkan-Mushi* 403: 47-48. (Jap.). – (Author's address not transliterated).
1 ♂: Onahama, Iwaki city, 14-X-2002.

(15364) HOSPERS, A. & V. KALKMAN, 2004. [Werkgroepen]: Libellen (Odonata). *NieuwsBr. europ. Invert. Surv. Nederland* 38: 5 (Dutch). – (First Author: P.O. Box 1706, NL-9701 BS Groningen).
A brief outline of the major 2004 projects of the Odon. Study Group of the Netherlands section of the European Invertebrate Survey (cf. also *OA* 15128). The continuous alterations in species ranges are emphasized; the occurrence of most spp. is currently in the rise.

(15365) *INTERNATIONAL JOURNAL OF ODONATOLOGY* (ISSN 1388-7890), Vol. 7, No. 2 (1 July 2004). Special issue: *Guardians of the watershed. Global status of dragon ies: critical species, threat and conservation.* Edited by V. Clausnitzer & R. Jödicke.
The issue contains the IUCN regional reports. – *Clausnitzer, V.*: Guardians of the watershed (p. 111); – *Corbet, P.S.*: Global protection of Odonata and their habitats: a tribute to Norman W. Moore (p. 112); – *Hawking, J.H. & G. Theischinger*: Critical species of Odonata in Australia (pp. 113-132); – *Polhemus, D.A.*: Critical species of Odonata in the Hawaiian Islands (pp. 133-138); – *Rowe, R.J.*: Conservation of Odonata in the South Pacific and Australasia (pp. 139-147); – *Dunkle, S.W.*: Critical species of Odonata in North America (pp. 149-162); – *Paulson, D.R.*: Critical species of Odonata in the Neotropics (pp. 163-188); – *Clausnitzer, V.*: Critical species of Odonata in eastern Africa (pp. 189-206); – *Clausnitzer, V. & A. Martens*: Critical species of Odonata in the Comoros, Seychelles, Mascarenes and other small western Indian Ocean islands (pp. 207-218); – *Dijkstra, K.-D.B. & V. Clausnitzer*: Critical species of Odonata in Madagascar (pp. 219-228); – *Dijkstra, K.-D.B. & G.S. Vick*: Critical species of Odonata in western Africa (pp. 229-238); – *Jödicke, R., J.-P. Boudot, G. Jacquemin, B. Samraoui & W. Schneider*: Critical species of Odonata in northern Africa and the Arabian Peninsula (pp. 239-253); – *Samways, M.J.*: Critical species of Odonata in southern Africa (pp. 255-262); – *Suhling, F., A. Martens & E. Marais*: Critical species of Odonata in southwestern Africa (pp. 263-277); – *Bedjanič, M.*: Odonata fauna of Sri Lanka: research and threat status (pp. 279-294); – *Hämäläinen, M.*: Critical species of Odonata in the Philippines (pp. 295-304); – Critical species of Odonata in Thailand and Indochina (pp. 305-310); – *Inoue, K.*: Critical species of Odonata in Japan (pp. 311-324); – *Kalkman, V.J., G.J. van Pelt, H.J. Dumont, A.Yu. Haritonov & M. Tailly*: Critical species of Odonata in Turkey, Iran and the Caucasus (pp. 325-339); – *Kosterin, O.E., E.I. Malikova & A.Yu. Haritonov*: Critical species of Odonata in the Asian part of the former USSR and the Republic of Mongolia (pp. 341-370); – *Orr, A.G.*: Critical species of Odonata in Malaysia, Indonesia, Singapore and Brunei (pp. 371-384); – *Sahlén, G., R. Bernard, A. Cordero Rivera, R. Ketelaar & F. Suhling*: Critical species of Odonata in Europe (pp. 385-398); – *Schneider, W.*: Critical species of Odonata in the Levant (pp. 399-407); – *Wilson, K.D.P.*: Critical species of Odonata in China (pp. 409-422); – *Photographs of some rare and threatened species* (pp. 423-428).

(15366) *23. JAHRESTAGUNG DER GESELLSCHAFT DEUTSCHSPRACHIGER ODONATOLOGEN (GdO)*, Oldenburg, 19.-21.03.2004: *TAGUNGSBAND*. Inst. Naturschutz, Hochschule Vechta, Vechta. 44 pp. ISBN none. Ed.: Prof.Dr R. Buchwald (Inst. NatSchutz, Hochschule Vechta, Driverstr. 22, D-49377 Vechta).

lenparadies am südöstlichen Rand Mitteleuropas (p. 9); – *Günther, A.*: Die Wiederbesiedlung des Flusssystems der oberen Freiberger Mulde durch Libellen (p. 10); – *Schlumprecht, H. & C. Strätz*: Die Libellenfauna im Obermaintal: Vergleich zwischen 1994 und 2003 (p. 11); – *Ewers, M. & R. Buchwald*: Orthetrum coerulescens zwischen Weser und Ems: Bestandssituation, Ökologie und Schutzmöglichkeiten (p. 12); – *Schmidt, E.G.*: Zur Odonatenfauna von Freizeit-Angelteichen im Westmünsterland (p. 13); – *Westermann, K.*: Zur Mortalität von Lestes viridis während der Emergenz (p. 14); – *Martens, A.*: Paarungssysteme bei Libellen: Aktueller Kenntnisstand und offene Fragen (p. 15); – *Wildermuth, H.*: Sequenzielle Mehrfachpaarung beim gleichen Vierfleckpaar (Libellula quadrimaculata): Zufall oder Gesetzmässigkeit? (p. 16); – *Fliedner, T. & H. Fliedner*: Repetitive Kopula bei Sympetrum pedemontanum am Sihlsee bei Einsiedeln (Schweiz) im Sommer 2003 (p. 17); – *Schenk, K.*: Fortpflanzungsstrategien bei Libellen (Odonata): Risikostreuung, Habitatwahl und Qualität der Nachkommen (p. 18); – *Sternberg, K.*: Stammesgeschichtliche Aspekte der Habitatselektion bei Libellen (p. 18); – *Buchwald, R., A. Manzi & H. Hunger*: Habitatwahl von Lestes dryas und Sympetrum flaveolum in mittelitalienischen Karst-Hochebenen (p. 20); – *Trockur, B.*: Aspekte der Habitatwahl bei Epitheca bimaculata: Analyse der Eiablage und Exuvien-Fundstellen (p. 21); – *Zschunke, R.*: Untersuchungen zu Abhängigkeit der Habitatnutzung und der Flugaktivität von mikrometeorologischen Bedingungen bei Calopteryx splendens (p. 22); – *Bönsel, A.*: Erste Ergebnisse von Kartierung und Monitoring der "FF14-Libellenarten" in Mecklenburg-Vorpommern (p. 23); – *Schiel, F.-J.*: Bilanz des Artenschutzprojekts Leucorrhinia pectoralis in Baden-Württemberg (p. 24); – *Mauersberger, R., F.-J. Schiel & K. Burbach*: Verbreitung und Bestandssituation von Leucorrhinia caudalis in Deutschland (p. 25); – *Stephan, R., W. Bena & W.E.R. Xylander*: Untersuchungen zu Leucorrhinia albifrons in der Görlitzer Heide/Westpolen (p. 26); – *Röske, W.*: Artenschutz mit Tradition: Coenagrion mercuriale in Baden-Württemberg (p. 27); – *Burbach, K.*: Schutzkonzeption für Coenagrion ornatum und C. mercuriale in Bayern (p. 28); – *Schorr, M.*: Anmerkungen zum Vorkommen von Oxygastra curtisii in Deutschland und Luxemburg (p. 29); – *Wildermuth, H.*: Nehalennia speciosa in der Schweiz ausgestorben – und in Europa? (p. 30); – *Binot-Hafke, M. & H. Haupt*: Weiterentwicklung bundesweiter Roter Listen: Diskussionsstand zum Kriteriensystem (p. 31); – *Conze, K.-J.*: Der aktuelle Kenntnisstand zu den vom Aussterben bedrohten Libellenarten in NRW (pp. 32-33); – *Sohni, V. & O.-D. Finch*: Bedeutung eines renaturierten Hochmoor-Restes bei Oldenburg (Oldb.) für die Libellenfauna (p. 34); – *Arit, J. & J. Ruddek*: Libellenbeobachtungen während der Trockenzeit in Gambia (p. 35); – *Gärtner, E., U. Karsch, K.-P. Pryswitt & H. Scherzer*: Libellenfauna im NSG Helstorfer Moor (Hannoversche Moorgeest), Lebensraum von Nehalennia speciosa (pp. 36-37).

(15367) JERGENTZ, S., H. MUGNI, C. BONETTO & R. SCHULZ, 2004. Runoff-related endosulfan contamination and aquatic macroinvertebrate response in rural basins near Buenos Aires, Argentina. *Archs envir. Contam. Toxicol.* 46(3): 345-352. – (First Author: Inst. Zool., Techn. Univ., Fasanenstr. 3, D-38092 Braunschweig).
The pesticide contamination and its potential biological effects in basins that have undergone intense agricultural activity were studied in 3 streams (the Maguire, Helves and Horqueta) close to the city of Arrecifes. The suspended-particle samples were analyzed for the insecticides endosulfan (END), chlorpyrifos, and cypermethrin. Ephemeroptera and Odon. comprised 19, 35 and 33% of the individuals at the Maguire, Horqueta and Helves, respectively. Hetaerina rosea, Oxyagrion terminale and Ischnura fluviatilis were the most abundant odon. spp. in the 3 streams. A significant decrease in species density and odon. abundance was observed in the Helves and Horqueta following a heavy rainfall associated with END contamination. In contrast, END was not detected in the Maguire and the site showed no decline in species density. It is likely, the phenomenon is linked to the differences in pesticide contamination, as indicated by the END records.

(15368) KALKMAN, V., 2004. Inhaalslag Habitatrichtlijnsoorten van start. – [The catch-up project on the Habitat Directive species has started]. *NieuwsBr. europ. Invert. Surv. Nederland* 30: 11. (Dutch). – (Naturalis, P.O. Box 9517, NL-2300 RA Leiden).
The highlights of the project are briefly stated. In 2004, the work on Sympecma paedisca, Aeshna viridis, Gomphus flavipes, Ophiogomphus cecilia, and Leucorrhinia pectoralis is scheduled.

(15369) [KARJALAINEN, S.], 2004. *Suomen sudenkorennot. Finlands trolsländor.* – [*Dragon ies of Finland*]. UPM Metsä, Valkeakoski. 24 pp. Softcover (10.4×20.7 cm). ISBN none (Finn.) & Poster (100.0×70.0 cm) (Finn. & Swed.). – (Available free from: UPM Metsä, P.O. Box 32, FIN-37601 Valkeakoski).
The phot. (all from the work described in *OA* 14380) of 53 Finnish spp. (Sympecma paedisca not incl.) are pre-

sented with some adjoining text in the booklet, and the phot. only in the poster. An updated edn is expected later in 2004; it is going to include also the recently discovered S. paedisca (cf. *OA* 15361)

(15370) KARUBE, H., 2004. [Visiting endemic dragonflies in Sydney, in late autumn]. *Gekkan-Mushi* 403: 30-33. (Jap.). – (Kanagawa Pref. Mus. Nat. Hist., 499 Iryuda, Odawara, Kanagawa, 250-0031, JA).
Field notes on Cordulephya pygmaea and Dendroaeschna conspersa, from 2 localities nr Sydney, Australia; in April 2003.

(15371) KARUBE, H., R. FUTAHASHI & F. HAYASHI, 2004. A preliminary report on DNA analysis of the endemic dragonflies in the Ogasawara Islands. *Res. Rep. Kanagawa prefect. Mus. nat. Hist.* 12: 55-57. (Jap., with Engl. title). – (Second Author: Fujiwara Lab., Univ. Tokyo, Biosci. Bldg 501, Kashiwa, Chiba, 377-8562, JA).
Deals with Rhinocypha ogasawarensis, Indolestes boninensis, Boninagrion ezoin and Hemicordulia ogasawarensis.

(15372) KERY, M. & L. JUILLERAT, 2004. Sex ratio estimation and survival analysis for Orthetrum coerulescens (Odonata, Libellulidae). *Can J. Zool.* 82(3): 399-406. (With Fr. s.). – (First Author: Schweizerische Vogelwarte / Swiss Ornithol. Inst., CH-6204 Sempach).
There is controversy over whether uneven sex ratio observed in mature odon. populations are a mere artifact resulting from the higher observability of ♂♂. Previous studies have at best made indirect inference about sex ratios by analysis of survival or recapture rates. Here, direct estimates of sex ratio are obtained from capture-recapture data based on the Cormack-Jolly-Seber model. O. coerulescens was studied at 3 sites in the Swiss Jura Mts over an entire activity period. Recapture dates per 5-day interval were 3.5 times higher for ♂♂ (0.67, SE 0.02) than for ♀♀ (0.19, SE 0.02). At 2 sites, recapture rate increased over the season for ♂♂ and was constant for ♀♀, and at 1 site it decreased with precipitation for both sexes. In addition, recapture rate was higher with higher temperature for ♂♂ only. No evidence was found for higher ♂ survival rates in any population. Survival per 5-day interval for both sexes was estimated to be 0.77 (95% CI 0.75-079) without significant site- or time specific variation. There were clear effects of temperature (positive) and precipitation (negative) on survival rate at 2 sites. Direct estimates of sex ratio were not significantly different from 1 for any interval. Hence, the observed ♂-biased sex ration in adult O. coerulescens was an artifact resulting from the better observability of ♂♂. The present method is applicable to sex ratio estimates in any kind of animal.

(15373) KIAUTA, B., 2004. In the margin of the monograph, "Fauna of Slovenia", 2003. *Proteus*, Ljubljana 66(8): 374-377, 384. (Slovene, with Engl. title). – (P.O. Box 256, NL-3720 AG Bilthoven).
A mainly indicative review, with comments and some personal notes on the monumental work, "Živalstvo Slovenije" (B. Sket, M. Gogala & V. Kuštor; Eds), Tehniška založba, Ljubljana, 2003. ISBN 86-365-0410-4). In addition to an autobiographic odonatological note, the Author also dwells briefly on human attitudes towards our fellow creatures in the animal world. The latter are not to be treated as common property and something for us to control and exploit, but rather as individuals in their own right, for whose well-being the authorities and individual citizens share responsibility. – For the Odon. treatment, see *OA* 15316.

(15374) KONING, M. & F. KONING, 2004. *KNNV Libellenwerkgroep Zuid-Kennemerland, Haarlem: waarnemingenoverzicht 2003.* – [*Report of the 2003 observations of the Zuid-Kennemerland Dragonfly Group of the Royal Netherlands Natural History Society*]. KNNV-LWZK, Heemstede. 51 pp. (Dutch). – Hobbemastraat 37, NL-2102 BJ Heemstede).
A continuation of the annual report series for the area as outlined in *OA* 14382, the Netherlands. Detailed information is presented on 33 spp. encountered during the monitoring along 27 routes, of which Hemianax ephippiger, Cordulia aenea and Libellula fulva are of particular regional interest. In the Appendix, the occurrence of Sympecma fusca is discussed, and *W. Kuiper* (pp. 43-44) provides a commented review of the exuviae from a locality in the Amsterdamse Waterleidingduinen (cf. also *OA* 14781).

(15375) KUCHLING, G. & G. GARCIA, 2004. Pelomedusidae, freshwater turtles. *In*: M. Goodman & J.P. Benstead, [Eds], *The natural history of Madagascar*, pp. 956-960, Univ. Chicago Press, Chicago-London. ISBN 0-226-30306-3. – (First Author: Dept Zool., Univ. W Australia, Crawley, WA 6009, AU).
Pelomedusa subrufa is carnivorous, consuming aquatic invertebrates (incl. Odon. larvae), tadpoles and terrestrial insects. Erymnochelis madagascariensis is omnivorous: smaller juveniles (< 100 mm carapacs length) feed mainly on Ephemeroptera and Odon. larvae and on aquatic Coleoptera, but the larger individuals consume also fish, leaves, seeds etc.

(15376) KUDELA, M., A. DOLNY, D. BARTA, T. BLAŠKOVIČ & E. BULÁNKOVÁ, 2004. First records of Leucorrhinia caudalis (Odonata) in Slovakia. *Biologia*, Bratislava 59(2): 152. – (First Author: Dept Zool., Comenius Univ., Mlynská dolina B-1, SK-84215 Bratislava).
The sp. is recorded (V/VI-2003) from Čičov and Medvedov. Herewith, 74 odon. spp. are now known from Slovakia.

(15377) *LIBELLULA*. Zeitschrift der Gesellschaft deutschsprachiger Odonatologen (GdO) (ISSN 0723-6514), Vol. 22, No. 3/4 (March 2004). (With Engl. s's). – (c/o Ms I. Schrimpf, Heimböhlstr. 32, D-72768 Reutlingen).
Westermann, K.: Ausbreitungsversuche von Lestes viridis in den Schwarzwald: ein Beitrag zur Arealausweitung und Höhenverbreitung (Odonata: Lestidae) (pp. 87-105); – *Krüner, U.*: Die Häufigkeitsverteilung der Weibchenfarben von Ceriagrion tenellum an drei Gewässern im Naturpark Schwalm-Nette (Odonata: Coenagrionidae) (pp. 107-117); – *Rychla, A. & P. Buczyński*: Wiederfund von Leucorrhinia caudalis in Sachsen (Odonata: Libellulidae) (pp. 119-125); – *Bulánková, E. & S. David*: Die Verbreitung der in den Anhängen II und IV der FFH-Richtlinie aufgeführten Libellen in der Slowakei und ihr ökologischer Status (Odonata) (pp. 127-138); – *Horn, R.*: Eine zweite Jahresgeneration bei Crocothemis erythraea in Deutschland während der extrem heissen Sommers 2003 (Odonata: Libellulidae)? (pp. 139-142); – *Mauersberger, R., F.-J. Schiel & K. Burbach*: Zur Verbreitung und aktuellen Bestandssituation von Leucorrhinia caudalis in Deutschland (Odonata: Libellulidae) (pp. 143-182).

(15378) LOSER, F., 2004. Libellen-Forscher tauschen sich aus. Internationales Symposium in Banzkow: Vorträge und Exkursionen. *Schwerin. VolksZtg*, issue of 29 July, p. 23. – (c/o Dr W. Zessin, Zool. Garten Schwerin, Waldschulweg 1, D-19061 Schwerin).
A regional daily's concise description of the objectives and proceedings of the 16th Int. Symp. Odonatol., Schwerin, Germany (26 July-4 Aug. 2004), with a phot. of Dr W. Zessin (organiser), K. Inoue (President SIO) and B. Kiauta (initiator of the int. symp. odonatol.). – For abstracts of the presented papers, see *OA* 15335.

(15379) MORRIS, B., 2004. *Insects and human life*. Berg, Oxford-New York. xvi+317 pp. (22.0×14.5 cm). ISBN 1-85973.847.8 (cloth), 1-84520-075-6 (paper).
A comprehensive and innovative account of the connections between culturally embedded insect knowledge in Malawi and the role which insects play in local human ecology in its widest sense. Dragonflies (*tombolombo*), though attracting attention, they are never eaten and have little cultural significance in Malawi. 4 appellations, in Lomwe (2), Yao (1), and Tumbuka (1) are listed.

(15380) NARAOKA, H., 2004. [Sympetrum vulgatum imitans also found in 2003, in Aomori pref.] *Gekkan-Mushi* 403: 44-45. (Jap.). – (36-71 Aza Motoizumi, Oaza Fukunoda, Itayanaga-machi, Kita-gun, Aomori, 038-3661, JA).
S. v. imitans was discovered in Japan in 2002 (Toyama, Ishikawa and Aomori pref.). Here, a ♂ from Henashi, Fukaura-cho (Aomori pref.), 12-X-2003, is brought on record. S. cordulegaster, S. depressiusculum and Tramea virginia were also recorded from Aomori, in autumn 2003.

(15381) *ODONATOLOGICAL ABSTRACT SERVICE* (ISSN 1438-0269), No, 14 (July 2004). Compiled by M. Lindeboom (Landhausstr. 10, D-72074 Tübingen) & M. Schorr (Schulstr. 7B, D-54314 Zerf).
Abstracts Nos 3804-4180, on 57 pp., of the works published in 1997-2004.

(15382) POBOLJŠAJ, K., M. GOVEDIČ, J. KUS, F. REBEUŠEK, B. ROZMAN, A. ŠALAMUN & B. TERČAK, 2004. *Poročilo o vplivih na okolje za gramoznico Pšičina za habitatne tipe, rastlinstvo in živalstvo.* – *[Assessment of the environmental impact by the projected gravel-pit, Pšičina, with reference to habitat types, flora and fauna]*. Center kartogr. favne & flore, Miklavž-na-Dravskem-polju. 39 pp. (Slovene). – (First Author: CKFF, Zemljemerska 10, SI-1000 Ljubljana).
The features of the odon. fauna (incl. 4 red-listed spp.) of the broader Drau R. region, NE Slovenia are outlined. Due to the local plant associations (listed also in the Berne Convention) and characteristic fauna (etc.), the environmental impact of the projected gravel exploitation is considered unacceptable, therefore the project is rejected.

(15383) POBOLJSAJ, K., J. KUS, B. ROZMAN, A. ŠALAMUN & R. VEROVNIK, 2004. *Poročilo o vplivih na okolje za Golf igrišče Smlednik za habitatne tipe, rastlinstvo in živalstvo.* – *[Assessment of the environmental impact by the Golf Play-ground Smlednik, with reference to habitat types, flora and fauna]*. Center kartogr. favne & flore, Miklavž-na-Dravskem-polju. 36 pp. (Slovene). – (First Author: CKFF, Zemljemerska 10, SI-1000 Ljubljana).
Includes a commented list of 7 recorded odon. spp.; – Smlednik, central Slovenia.

(15384) RAMIREZ, A. & C.M. PRINGLE, 2004. Do macroconsumers affect insect responses to a natural stream phosphorus gradient? *Hydrobiologia* 515: 235-246. – (First Author: Inst. Ecol., Univ. Georgia, Athens, GA 30602, USA).
The inquire was conducted at 6 streams in La Selva, Caribbean slope of Costa Rica. Ariga sp. (occurring in all of them) is the sole odon. taxon mentioned. Apparently it was represented in too low numbers, hence the odon. are not considered in the text, but macroconsumers (fish) did not have significant effect on insects, while there was a significant phosphorus effect.

(15385) SADEGHI, S. & H.J. DUMONT, 2004. First record of Libellula fulva pontica Selys, 1887 (Odonata, Anisoptera) from Iran. *Zool. Middle East* 32: 116-117. – (Second Author: Dept Anim. Ecol., Univ. Gent, Ledeganckstraat 35, B-9000 Gent).
2 ♂: Hafar-e-Sharghi, Khoozestan prov., SW Iran; 4-IX-2001. Descriptive notes are provided, and some speculations are given on the likely range of this taxon, the status of which is still unsettled.

(15386) SAMWAYS, M., 2004. [Specialist Group updates] Southern African Invertebrate. *Species* 41: 21-22. – (Dept Ent., Fac. Agric. & Forest. Sci., Univ. Stellenbosch, Private Bag X1, Matieland-7602, SA).
Pseudagrion newtoni, Enallagma polychromaticum and Metacnemis angusta, that have not been seen for decades and were thought to be extinct, have recently reappeared. They must have had remnant populations in remote localities, which have been source populations to colonize areas cleared of invasive aliens. This bodes extremely positive for the invasive alien clearing programme.

(15387) SAMWAYS, M. & S. TAYLOR, 2004. Removal of invasive alien trees gives damselflies a reprieve. *Colophon* 4: 17-18. – (Dept Ent., Fac. Agric. & Forest. Sci., Univ. Stellenbosch, Private Bag X1, Matieland-7602, SA).
Under the auspices of the Working for Water Programme, invasive alien vegetation is being removed in some places in Sth Africa. This is having an enormously positive impact on certain spp. that were feared extinct. In the Northern Prov. Pseudagrion newtoni has returned to restored sites, while in the Western Cape several spp. are recovering, e.g. Metacnemis angusta, Proischnura polychromaticum and Chlorolestes umbratus. Some of these very rare and threatened spp. are now able to expand back to their former geographical extent.

(15388) SCHMIDT, E.G., 2004. Der Zweifleck Epitheca bimaculata fliegt wieder an der Mittelelbe (Odonata). *Ent. Nachr. Ber.* 48(1): 51-52. – (Coesfelder Str. 230, D-48249 Dülmen/Westf.).
An appreciable E. bimaculata population was discovered on the Kliekener Alte Elbe, nr Coswig, Sachsen-Anhalt, E Germany (28/29.V.2003). Notes are provided on the habitat and habits of the sp., and the associated odon. assemblage is listed.

(15389) SCHROER, A.F.W., J.D.M. BELGERS, T.C.M. BROCK, A.M. MATSER, S.J. MAUND & P.J. VAN DEN BRINK, 2004. Comparison of laboratory single species and field-population level effects of the pyrethroid insecticide λ-cyhalothrin on freshwater invertebrates. *Envir. Contam. Toxicol.* 46(3): 324-335. – (Third Author: Alterra Green World Res., P.O. Box 47, NL-6700 AA Wageningen).
The toxicity to freshwater invertebrates has been investigated using short term laboratory toxicity tests and in situ bioassays and population-level effects in field microcosms. The midge Chaoborus obcuripes was most sensitive, Hemiptera and Ephemeroptera larvae were relatively sensitive, and the chironomid and Erythromma viridulum larvae were less sensitive. – (*Abstractor's note*: The methodology and the details cannot be briefly outlined at this place.)

(15390) SOARIMALALA, V. & S.M. GOODMAN, 2004. The food habits of Lipotyphla. *In*: S.M. Goodman & J.P. Benstead, [Eds], *The natural history of Madagascar*, pp. 1203-1205, Univ. Chicago Press, Chicago-London. ISBN 0-226-30306-3. – (Second Author: Field Mus. Nat. Hist., 1400 South Lake Shore Dr., Chicago, IL 60605, USA).
In fecal samples of the Malagasy tenrec, Limnogale mergulus (Mammalia), larval Ephemeroptera, Odon., Trichoptera, Coleoptera, crabs and crayfish, and tadpoles were found; – Parc National de Ranomafana, Madagascar.

(15391) TAILLY, M., V. ANANIAN & H.J. DUMONT, 2004. Recent dragonfly obsei vations in Armenia, with an updated checklist. *Zool. Middle East* 31: 93-102. (With Germ. s.). – (First Author: Hoonakkerdreef 35, B-8791 Waregem).
A revised and updated checklist (56 spp.) of Armenia is presented. Erythromma lindenii, Coenagrion scitulum and Orthetrum sabina are new to the national fauna. The previously listed "Coenagrion ornatum" is actually referable to C. vanbrinkae. Comments are provided on selected spp. In most of Armenia, hybrid populations of Calopteryx

splendens are found, but in the S only the genuine C. s. intermedia occurs.

(15392) TAKETO, A., 2004. Observations on odonates of Ishikawa and neighbouring prefectures in 2003. *Tokkuribachi* 71: 1-5. (Jap., with Engl. s.). – (Author's address not stated).
Notes on the distribution and behaviour of 17 spp. from Ishikawa pref. are presented. Due to habitat deterioration, only 14 spp. were encountered in Yuhidera Sanctuary. Some records from Fukui, Niigata and Gifu prefectures are supplied.

(15393) TAKETO, A., 2004. On behaviors of five insect species. *Tokkuribachi* 71: 8-9. (Jap., with Engl. s.). – (Author's address not stated).
An interspecific mating between Sympetrum darwinianum (♂) and S. frequens (♀) is reported, larval habits of Macromia daimoji are described, and a note is presented on the occurrence of Colpodes hakonus takachihoi (Coleoptera) in an Aeshna juncea exuviae.

(15394) WATANABE, M., 2004. [*Mortonagrion hirosei, an endangered damselfly*]. Soc. Nat. Hist. & Educ., Mie. 8 pp. ISBN none. (Jap.). – (Author: Inst. Biol. Sci., Univ. Tsukuba, Tsukuba, Ibaraki, 305-8572, JA).
A brief outline of the biology of this brackish water sp. in reed communities, scattered in rice fields nr the sea in Mie pref., Japan.

(15395) WATTS, P.C., J.R. ROUQUETTE, I.J. SACCHERI, S.J. KEMP & D.J. THOMPSON, 2004. Molecular and ecological evidence for small-scale isolation by distance in an endangered damselfly, Coenagrion mercuriale. *Mol. Ecol.* 13: 2931-2943. – (Sch. Biol. Sci., Biosciences Bldg, Univ. Liverpool, Crown St., Liverpool, L69 7ZB, UK).
An intensive mark-release-recapture (MRR) study is combined with a microsatellite-based genetic analysis for C. mercuriale from the Itchen Valley, UK, as part of an effort to understand the dispersal characteristics of this protected sp. MRR data indicate that adult damselflies are highly sedentary, with only a low frequency of interpatch movement that is predominantly to neighbouring sites. This restricted dispersal leads to significant genetic differentiation throughout most of the Itchen Valley, except between areas of continuous habitat and isolation by distance (IBD), even though the core populations are separated by less than 10 km. An urban area separating some sites had a strong effect on the spatial genetic structure. Average pairwise relatedness between individual damselflies is positive at short distances, reflecting fine-scale genetic clustering and IBD both within- and between-habitat patches. Damselflies from a fragmented habitat have higher average kinship than those from a large continuous population, probably because of poorer dispersal and localized breeding in the former. Although indirect estimates of gene flow must be interpreted with caution, it is encouraging that our results indicate that the spatial pattern of genetic variation matches closely with that expected from direct observations of movement. These data are further discussed with respect to possible barriers to dispersal within the study site and the ecology and conservation of C. mercuriale. This is probably the first of fine-scale genetic structuring in any zygopt. sp.

(15396) WATTS, P.C., J.H. WU, C. WESTGARTH, D.J. THOMPSON, & S.J. KEMP, 2004. A panel of microsatellite loci for the Southern Damselfly, Coenagrion mercuriale (Odonata: Coenagrionidae). *Conserv. Genet.* 5: 117-119. – (Sch. Biol. Sci., Biosciences Bldg, Univ. Liverpool, Crown St., Liverpool, L69 7ZB, UK).
Specimens from the Itchen R., Hampshire, UK were used. Of the 40 loci tested, 11 loci amplified spurious bands and 14 loci were monomorphic. The Authors were able to develop, therefore, 15 polymorphic loci that resolved distinct alleles within the expected size range. Numbers of alleles varied between 2 and 7 at the dinucleotide microsatellites, and 2 and 6 at the trinucleotide loci. Presently, these loci are being used to examine C. mercuriale genetic structure in the UK.

(15397) *WILLIAMSONIA*. Newsletter of the Michigan Odonata Survey (ISSN none), Vol. 8, No. 3 (Aug. 2004). – (c/o Dr M.F. O'Brien, Insect Div., Mus. Zool., Univ. Michigan, Ann Arbor, MI 48109-1079, USA).
O'Brien, M.: Epitheca costalis in Michigan: update (pp. 1-2); – Aeshna subarctica, a historical oddity? (pp. 1-3); – *Anonymous*: Tricks of the trade (pp. 4-5); – *O'Brien, M.*: An unusual mode of contraception [Gomphus quadricolor] (p. 5); – *O'Brien, M. / O'Brien, D.*: Publication reviews (pp. 6-7); – *Recent Odonata literature* (p. 8). – A p p e n d i x: Dragonflies and damselflies of greatest conservation need (1 p.).

(15398) WILSON, K.D.P., 2004. *Field guide to the dragonflies of Hong Kong* [2nd, updated edn]. Agric., Fish. & Conserv. Dept, Hong Kong. 383 pp. Softcover (11.0×19.5 cm). ISBN 988-201-614-6. Price: HK $ 80.- net. (Bilingual: Chin./Engl.). – (Publishers: 5/F, Cheung Sha Wan Government Offices, 303 Cheung Sha Wan Rd, Kowloon, HKSAR, Hong Kong).

A high quality work, excelling by the inclusion of easy-to-use keys for all taxa, and by the non-standardized style of the main text of each sp., which, aside of being highly informative, makes the book a delightful and exciting reading also when the reader is not merely interested in taxonomic identification. – At present, 112 spp. (incl. 3 endemic spp.) are known from Hong Kong. For each of these information is provided on its habitats and habits, adult and larval measurements, on its status and distribution in Hong Kong and on its general range. Field portraits of both sexes are also included, and Engl. vernacular names for all spp. are stated. Extralimital infraspecific taxa are mentioned, where appropriate. Into the keys are incorporated (and illustrated) also 12 spp., which were not yet recorded, but are (potentially) likely to be encountered in Hong Kong. The appended regional bibliography is fairly exhaustive. – The 1st edn has appeared in Oct. 2003.

(15399) YURCHENKO, Yu.A., 2004. *Sistematika i ekologiya palearkticheskih strekoz roda Enallagma (Odonata, Zygoptera).* – [*Systematics and ecology of palaearctic Enallagma dragonflies (Odonata, Zygoptera)*]. Autoref. Diss. Kand. Biol. Nauk, Inst. Anim. Syst. & Ecol., Russ Acad. Sci., Novosibirsk, 23 pp. (Russ.). – (For copies apply to: Dr A.Yu. Haritonov, Inst. Anim. Syst. & Ecol., Ul. Frunze 11, RUS-630091 Novosibirsk). E. nigrolineata, E. risi, E. strouhali and E. deserti are synonymized with E. cyathigerum. E. circulatum is considered a ssp. of E. boreale. Population structure and seasonal dynamics of E. cyathigerum are outlined. In southern W Siberia, the sp. is semivoltine (hibernation at egg stage), or univoltine. It appears in large numbers; in appropriate habitats, its larvae may account for up to ca 50% of the total odon. biomass. – This is merely a printed summary of the original dissertation (246 pp., 72 figs, 3 tabs incl.), which is not available for abstracting.

(15400) ZESSIN, W., 2004. Wie ich die Urlibelle Stephanotypus schneideri fand. *Virgo* 7(1): 12-19. – (Lange Str. 9, D-19230 Jasnitz).

An exhaustive and very legible narrative on the discovery of S. schneideri in Plötz, Germany, 29-X-1981, with photographs of the fossil and of the persons involved (Author's portrait incl.), based on Author's diary. The bibliography of Author's publications on the subject (1983-2001; 9 titles) is appended. – For the original description of the sp., see *OA* 5349.