

## ODONATOLOGICAL ABSTRACTS

### 1975

- (13754) LYASHENKO, L.I. & L.V. KIRSTA, 1975. Nasekomye Belovezhskoy Puschi. — [Insects of the Belovezhskaya Forest]. *Belovezhskaya Pushcha*, Minsk 9: 156-164. (Russ.). — (Authors' addresses not stated). *Lestes dryas* and *Sympetrum vulgatum* are listed; — Belarus.

### 1979

- (13755) PAVLYUK, R.S., 1979. Fauna babok (Insecta, Odonata) pivnichno-zahidnoy chastini Volins'kogo Polissya. — [Dragonfly fauna (Insecta, Odonata) of northwestern Volynsko Polesye]. *Visn. Lviv. derzh. Univ. (Biol.)* 7: 79-84. (Ukr.). — (Zool. Mus., Fac. Biol., St. Univ. Lvov, Grushevskogo 4, UKR-290005 Lvov). 31 spp. are listed for the region, NW Ukraine, evidenced during 1965-1971, with locality data (no dates), habitat notes and a brief discussion.

### 1983

- (13756) JEŽ, M., 1983. Živalstvo na Slovenjebistriškem. — Tierarten auf dem Gebiet von Slovenska Bistrica. *Zb. Občine Slovenska Bistrica* 1: 479-482. (Slovene, with Germ. s.). — (ZVVKD Maribor, Slomškov trg 6, SI-2000 Maribor). *Aeshna juncea* is recorded from Črno jezero, Slovenska Bistrica distr., Slovenia.

- (13757) ZIMMERMANN, M.-L., 1983. [?; date not stated]. Wandern: *Tierbeobachtungen in der freien Natur*. Ringier, Zürich. 128 pp. Softcover (10.5×15.0 cm). ISBN none. Maps and descriptions are provided of 4 odonatol.

interesting wetlands in the cantons of Berne (Alte Aare), Valais (Pfynwald) and Zürich (Pfäffiker See, Kemptnertobel), Switzerland. *Cordulegaster* sp. is mentioned for the latter locality, but otherwise no taxa are stated.

### 1984

- (13758) REICHHOLF-RIEHM, H., 1984. *Insekten, mit Anhang Spinnentiere*. Mosaik Verlag, München. 288 pp., 524 col. phot. incl. Hardcover (12.5×19.5 cm), ISBN 3-570-01187-9.

A nice review of some European spp. (without Lepidopt.), with much biol. information. The Odon. part (40 spp.) was prepared in consultation with Dr G. Jurzitz, who also contributed 20 odon. portraits.

### 1986

- (13759) NACHTIGALL, W., 1986. *Konstruktionen: Biologie und Technik*. VDI-Verlag, Düsseldorf. 127 pp. Hardcover (31.0×29.5 cm). ISBN 3-18-400766-9. Structure and function of various insect organs (shown in SEM photographs) is compared with the corresponding human technical implements. In this way, the zygot. wing profile and vein crossing points are dealt with.

### 1990

- (13760) AWATER, R.H.C.M., [Ed.], 1990. *De meetlat: een biologisch beoordelingssysteem voor het oppervlaktewater in Gelderland*. — [A biological assessment system for the surface waters in the province of Gelderland]. Dienst Milieu en Water, Prov. Gelderland, Arnhem. 63 pp. + 10 appendages. ISBN

none (Dutch).

In the Appendages, the odon. are thoroughly considered;  
— the Netherlands.

- (13761) BERRY, C.E., [Ed.], 1990. *Kinder entdecken ... Die Welt der Insekten*. Time-Life Books, Amsterdam (7th German printing). 88 pp. Hardcover (21.5x30.0 cm). ISBN 90-6182-707-8.

This is an authorized German language edn of the original Japanese work (Gakken, 1983). Treatment of odon. morphology, biology and behaviour (pp. 10-15) is highly didactical. All illustrated spp. belong to the Japanese fauna. The German vernacular names of some adults and of most larvae are wrong.

### 1993

- (13762) WHITE, G., [1789], reprint 1993. *The natural history of Selborne*. Edited by Richard Mabey. J.M. Dent, London & C.E. Tuttle, Rutland/VT [Everyman Library]. xxviii + 259 pp. Pocket edn. ISBN 0-460-87266-9. — Price: £ 3.99 or US \$ 6.95. — (Orders to: Orion House, 5 Upper St Martin's Lane, London, WC2H 9EA, UK).

The text follows that of the first edn (T. Bensley, London, 1789), published under the title "*The natural history and antiquities of Selborne in the county of Southampton*". The odon. are mentioned at 2 places, viz. (p. 107): "In July I saw several cuckoos skimming over a large pond; and found, after some observation, that they were feeding on the libelluloe, or dragon-flies; some of which they caught as they settled on the weeds, and some as they were on the wing.", — and (p. 142): "At some certain times in the summer I had remarked that swifts [*Apus apus*] were hawking very low for hours together over pools and streams [...]. After some trouble, I found that they were taking phryganeae, ephemerae, and libelluloe [...] that were just emerged out of their aurelia state. [...]".

### 1994

- (13763) CENTER FOR INSECT SYSTEMATICS KOREA, 1994. Collection of papers on insect systematics in Korea, 2. Odonata. *Insecta koreana* (Suppl.) 4: 47-49. — (c/o Director: K.-T. Park, Kangwon National Univ., Chuncheon, 200-701, Korea). Lists 21 publications (1936-1990), with Engl. titles (where the orig. is in Jap. or Korean) and brief abstracts.

- (13764) ERWIN, K.L., C.M. SMITH, W.R. COX &

R.P. RUTTER, 1994. Successful construction of a freshwater herbaceous marsh in south Florida, SA. In: W.J. Mitsch, [Ed.], *Global wetlands, Old World and New*, pp. 493-508, Elsevier Science, Amsterdam. ISBN 0-444-81478-7. — (K.L. Erwin Consulting Ecologist Inc., 2077 Bayside Parkway, Ft Myers, FL 33901, USA).

23 ha of a herbaceous marsh were created in 1988 in Charlotte Co., Florida, to provide for an equal amount of marsh destroyed by development. Through 1988-1990, aquatic macroinvertebrates were monitored; by Sept. 1990 the fauna was similar to that in nearby undisturbed wetlands. Data on 9 odon. spp. (Coenagrionidae, Libellulidae) are presented.

- (13765) SHRESTHA, T.K., 1994. Habitat ecology of the Mai Pokhari wetlands in Nepal and management plan for survival of the Himalayan Newt, *Tylophorus verrucosus*. In: W.J. Mitsch, [Ed.], *Global wetlands, Old World and New*, pp. 867-862, Elsevier Science, Amsterdam. ISBN 0-444-81478-7. — (Dept Zool., Tribhuvan Univ., Kirtipur, Kathmandu, Nepal). *T. verrucosus* is the sole urodele representative in Nepal, living in the highland rock pools of Siwalik and Mahabharat Hills and the Trisla R. of E Nepal. It co-occurs with *Anax* sp., and the habitat is described.

### 1996

- (13766) SHESHURAK, P.M. & T.V. PADALKO, 1996. Ekologo-faunistichniy ogljad babok (Odonatoptera) Chernigivshchini. — [Eco-faunistic review of dragonflies (Odonatoptera) of the Chernigov region]. In: P.P. Borshchev's'kiy et al., [Eds], *Suchasnii stan ta shlyahi virishennya ekologichnih problem Chernigiv's'koi oblasti*, pp. 127-129, Nizhin. Derzh. Pedagog. Inst. "M.V. Gogol", Nizhin, (Ukr.). — (St. Pedag. Inst. "M.V. Gogol", Nizhin, Ukraine). 60 spp. are listed from the region, NE of Kiev, the Ukraine, and some general information is provided on their breeding habitats.

- (13767) VÁSQUES, C.A.D., 1996. *Bionomia de Odonata (Insecta) em dois igarapés da Reserva Florestal Adolfo Ducke (Manaus, AM, Brasil)*. Diss. Mestrado, Inst. Nac. Pesquisas da Amazônia. 84 pp. (Port.). — (Author's address unknown). [Not available for abstracting.]

- (13768) YANG, Z., 1996. A new species of the genus *Anisopleura* from Shaanxi, China (Odonata:

Euphaeidae). *J. Hanzhong Teachers Coll.* 14 (Suppl.): 143-144. (Chin., with Engl. s.). — (Dept Adult Educ., Hanzhong Teachers Coll., Hanzhong-723000, Shaanxi, PRC).

*A. zhengi* sp. n. is described, illustrated and compared with *A. qingyuensis*. Holotype ♂ and ♂ paratypes: Hongmiao Township, Nanzheng Co., Shaanxi prov., China, 1990-1994; deposited in Hanzhong Teachers Coll., Hanzhong. ♀ unknown.

### 1997

(13769) HENTSCHEL, P., 1997. *Biosphärenreservat Mittlere Elbe*. Ministerium f. Raumordnung Sachsen-Anhalt, Dessau. 24 pp. ISBN none. — (Biosphärenreservatsverwaltung Mittlere Elbe, Kapenmühle, Postfach 1382, D-06813 Dessau).

Out of ca 50 odon. spp. recorded from the Reserve (Sachsen-Anhalt, Germany), *Calopteryx virgo*, *Gomphus vulgatissimus*, *Ophiogomphus caecilia*, *Cordulegaster boltonii*, *Epitheca bimaculata* and *Libellula fulva* are mentioned as being of particular regional interest. German vernacular nomenclature is used only.

(13770) SCHMIDT-RHAESA, A., 1997. *Nematomorpha*. Gustav Fischer, Stuttgart-Jena-Lübeck-Ulm. xiv+128 pp. [Süsswasserfauna von Mitteleuropa 4/4]. ISBN 3-437-25428-5. (Engl.). — (Author: Dept Biol. Sci., Duquesne Univ., Pittsburgh, PA 15828-1502, USA; — Publishers: Wollgrasweg 49, D-70599 Stuttgart).

With 4 marine and ca 300 freshwater spp., the Nematomorpha are a small taxon within the Nemathelminthes. They are free-living as adults and parasitic as larvae. The Gordiida comprise the freshwater spp. and are divided in 20 genera, 12 of which occur in Europe. All are parasites in arthropods. *Euchordodes libellulovivens* H. Heinze, 1937 (*Z. Parasitenk.* 9: 263-344) was described from a libellulid larva. — The book provides an up-to-date account of the biology and taxonomy of the Gordiida.

(13771) TREVINO, J., 1997. Dragonfly naids as an indicator of pond water quality. *Watershed Prot. Techn.* 2(4): 533-535. — (Lower Colorado R. Authority, Land & Envir. Serv., P.O. Box 220, H219, Austin, TX 78767, USA).

In lotic (running water) systems, macroinvertebrates have been widely used as reliable water quality indicators. This is not true for lentic systems (ponds

and lakes). Here it is shown that *Celithemis*, *Dythemis* and *Tramea* spp. could be possible indicators for pond water quality, the confirmation of this suggestion should come from additional research, incl. long-term monitoring.

### 1998

(13772) GNELICYA, V.A. & L.A. HROKALO, 1998. Zamitki pro faunu babok okolic' Vakaliv'skogo zoostacionaru. — [Notes on dragonfly fauna of the Vakalivski Zoological Station area]. In: *Vakalivshchina*, pp. 37-39, Biostac. Sum'skogo Pedinst., Sumi. (Ukr.). — (Authors' addresses not stated). A commented checklist of 27 spp.; — the Ps'ol R. region, NE Ukraine.

### 1999

(13773) ALFRED, J.R.B. [Director], R.A. KHAN & M.Z. ANSARI, 1999. *Bibliography of Indian Zoology*, Vol. 29. Zool. Surv. India, Calcutta. vi+411 pp. — Price: US \$ 25.- net. The bibliography (1988-1990) covers India, Bangladesh, Bhutan, Burma, Nepal, Pakistan and Sri Lanka, and includes 9 odonatol. titles, some with abstracts. — For the previous vol., see OA 12489.

(13774) BURTON, T.M., D.G. UZARSKI, J.P. GATHMAN, J.A. GENET, B.E. KEAS & C.A. STRICKER, 1999. Development of a preliminary invertebrate index of biotic integrity for Lake Huron coastal wetlands. *Wetlands* 19(4): 869-882. — (First Author: Dept Zool., Michigan St. Univ., East Llansing, MI 48824, USA).

Invertebrate communities from 3 relatively pristine coastal wetlands located along the northern shore of Lake Huron were compared to those from 3 relatively impacted Saginaw Bay coastal wetlands (Michigan, USA) to identify community components that could ordinate wetlands according to anthropogenic disturbance. A total of 24 potential metrics were examined for each of 4 vegetation zones at the study sites. — "The number and relative abundance of odon. genera seem to be 2 of the most useful metrics, providing excellent separation between Saginaw Bay and northern Lake Huron across all of the vegetation zones. However, these metrics did not separate Wildfowl Bay from the other 2 Saginaw Bay sites, suggesting that the resolution of the metric is not necessarily very fine, or that these differences are due

- to ecoregion differences. Importantly, Odon. always decreased with impact."
- (13775) CLAUSNITZER, V., 1999. Dragonfly (Odonata) records of Kakamega Forest, western Kenya, with notes on the ecology of rain forest species. *Jl E. Afr. nat. Hist.* 88(1/2): 17-23. — (Liebenauer Str. 180, D-06110 Halle/Saale). 51 spp. are listed, of which 10 spp. are new for Kenya. Notes are presented on various adaptation strategies in rain forest dragonflies, focusing mainly on visibility and ♂ flight behaviour. Also described are seasonality patterns and distinct behavioural features in selected spp. (e.g. *Hadrothemis*, *Gynacantha*).
- (13776) GALDEAN, N., M. CALLISTO & F.A.R. BARBOSA, 1999. Benthic macroinvertebrates of the head-waters of river São Francisco (National Park of Serra da Canastra, Brazil). *Trav. Mus. Hist. nat. "Gr. Antipa"* 41: 455-464. (With Romanian s.). — (First Author: Muzeul National de Istorie naturală "Grigore Antipa", Soseaua Kiseleff 1, RO-79744 Bucuresti). The Park is situated in the state of Minas Gerais. The odon. were represented in samples at 2 (out of 6) stations, but a species list is not given.
- (13777) HOLUŠA, O., 1999. Vážky Poodří. — [Dragonflies of the Poodří area]. In: Š. Neischlová, [Ed.], *Poodří*, pp. 67-68, Spol. Přát. Poodří, Ostrava. (Czech). — (Bruzovská 420, CZ-73801 Frýdek-Místek). Brief considerations on the fauna (36 spp.), with annotations on some spp. of particular interest; — Czech Republic.
- (13778) KUKARNI, P.P., D.B. BASTAWADE & S.S. TALMALE, 1999. Predation of dragonflies, *Ictinogomphus rapax* (Rambur) and *Pantala flavescens* (Fabr.) (Odonata: Anisoptera), by the giant wood spider, *Nephila maculata* (Fabr.). *Bionotes* 1(4): 84. — (Western Regional Stn, Zool. Surv. India, Pune-400044, Maharashtra, India). *I. rapax* was seen trapped by a ♀ (Chandrapur distr.), and *P. flavescens* was probably consumed by a ♂ (Pench National Park, Nagpur distr.). The circumstantial evidence is presented in detail, and a brief review is given of the hitherto published records of spider predation on dragonflies in India.
- (13779) MOROZ, M.D., S. CZACHOROWSKI & K. LEWANDOWSKI, 1999. Water insects (Insecta: Ephemeroptera, Odonata, Plecoptera, Heteroptera, Trichoptera) of the projected Landscape Reserve "Olmany Wetlands". *Prirody Resursy / Natural Resources* 1999(3): 111-117. (Russ., with Engl. s.). — (Second Author: Katedra Ekologii, Univ. Warmińsko-Mazurski, Ul. Zolnierska 14, PO-10-561 Olsztyn). The Reserve is situated in the Polesia region, S Belarus, and covers 160 km<sup>2</sup>. An annotated checklist of 14 odon. spp. is presented and briefly discussed.
- (13780) PRAT, M., [Ed.], 1999. *Els macroinvertebrats dels rius catalans*. Departament de Medi Ambient, Generalitat de Catalunya. 251 pp., softcover (16.5x22.5 cm). — ISBN 84-393-4828-2. (Catalanian & Engl.). — (Publishers' address not stated). The odon. are dealt with on pp. 61-64 (Catal.) and 206-209 (Engl.). This is a review of the riverine odon. fauna of Catalonia (Spain). All spp. are mentioned, but a checklist and the locality data are not provided.
- (13781) UVIRA, V., P. JEZIORSKI, L. HANEL & O. HOLUŠA, 1999. Aquatic invertebrates of the Pálava Biosphere Reserve: Odonata. *Folia fac. Sci. nat. Univ. Masaryk. Brun. (Biol.)* 101: 173-180. — (Last Author: Bruzovská 420, CZ-73801 Frýdek-Místek). A commented list of 45 spp.; — Moravia, Czech Republic.
- (13782) ŽIVIĆ, I., Z. MARKOVIĆ & M. BRAJKOVIĆ, 1999 [received May 2001]. A contribution to the knowledge of Odonata (Insecta: Odonata) larvae of the Pusta Reka river. *Acta ent. serb.* 4(1/2): 1-10. (With Serbian s.). — (First Author: Fac. Biol., Univ. Belgrade, Studentski trg 16, YU-11000 Beograd, Serbia). The occurrence of larval *Calopteryx splendens*, *Gomphus vulgatissimus*, *Onychogomphus forcipatus*, *Ophiogomphus cecilia* and *Cordulegaster boltonii* in the Pusta R., Serbia is evidenced, and quantitative data from 8 sampling stations are presented.

## 2000

- (13783) BATZER, D.P., C.R. PUSATERI & R. VETTER, 2000. Impacts of fish predation on marsh invertebrates: direct and indirect effects. *Wetlands* 20(2): 307-312. — (First Author: Dept Ent., Univ Georgia, Athens, GA 30602, USA). Non-tanytropid chironomid midges were the numerically dominant group (followed by the Coenagrionidae) in the epiphytic invertebrate community of Mohawk Marsh (Iroquois National Wildlife Refuge), western New York, USA. Invertebrates appeared in the gut

contents of 38 out of 39 fish examined (*Lepomis gibbosus*, *Ictalurus nebulosus*, *Pomoxis nigromaculatus*, *Cyprinus carpio*). In terms of percent occurrence, epiphytic midge larvae were the most commonly consumed invertebrates (87%). Nevertheless, they showed a strong positive rather than negative response to fish presence; significantly more larvae occurred in habitats open to fish predation than in the fish-exclusion cages. However, when all of the potential invertebrate predators on non-tanypod midges (odon., hemipt., leeches, tanypod midges) were pooled, more non-tanypod midges occurred in habitats where fish were excluded. Apparently, non-tanypod midges that coexisted with fish benefited indirectly by fish predation on their potential invertebrate predators, such as e.g. the odon. larvae.

(13784) BECHLY, G., 2000. Two new fossil dragonfly species (Insecta: Odonata: Anisoptera: Araripogomphidae and Lindeniidae) from the Crato Limestone (Lower Cretaceous, Brazil). *Stuttg. Beitr. Naturk.* (B) 296: 1-16. — (Staatl. Mus. Naturk., Rosenstein 1, D-70191 Stuttgart).

*Araripogomphus hansegeri* sp. n. and *Cratolindenia knuepfae* gen. n., sp. n. are described. With at least 10 known spp., gomphids represent the most diverse and also the most abundant odon. group at this locality, which has to be considered as a strong evidence for the presence of rivers.

(13785) BEDJANIČ, M. & A. PIRNAT, 2000. Prispevek k poznavanju favne kačjih pastirjev (Insecta, Odonata) Vipavske doline (zahodna Slovenija). — A contribution to the knowledge of the dragonfly fauna (Insecta, Odonata) of the Vipava Valley, W Slovenia. *Natura Sloveniae* 2(2): 29-45. (Slovene, with Engl. s.). — (First Author: Fram 117/A, SI-2313 Fram).

The fauna (44 spp.) is reviewed; *Ceriagrion tenellum*, *Anax parthenope* and *Libellula fulva* were not previously reported from the region. History of odonatol. exploration of the Valley is traced from 1856, and a complete bibliography is presented. The records of 5 spp. that are of particular biogeographic or nature conservation interest are discussed in some detail.

(13786) BRAČKO, F., 2000. River Mura. In: S. Polak, [Ed.], *Important Bird Areas (IBA) in Slovenia*, pp. 161-171, DOPPS, Ljubljana (ISBN 961-90786-1-6). (Slovene, with Engl. s.). — (Author's address not stated).

48 odon. spp. are known from this area, NE Slovenia,

of which *Leucorrhinia caudalis* is mentioned.

(13787) DE JONG, T.H., 2000. *Soortenbeschermingsplan voor Krabbescheer en Groene glazenmaker*. — [*Species conservation schedule for *Stratiotes aloides* and *Aeshna viridis* in the Netherlands*]. Provincie Utrecht, Utrecht. 48 pp. (Dutch). — (Available from: Secretariaat Ecologisch Onderzoek, Provincie Utrecht, Postbus 80300, NL-3508 TH Utrecht).

The distribution, habitat ecology and biology of the plant and the dragonfly in the Netherlands are described and analysed in great detail, the reasons responsible for their decrease and the required management measures are outlined. No doubt, this is the most detailed and well-documented account on the ecology of *A. viridis* so far published.

(13788) DI GIOVANNI, M.V., E. GORETTI, G. LAPORTA & D. CECCAGNOLI, 2000. Larval development of *Libellula depressa* (Odonata, Libellulidae) from pools in central Italy. *Ital. J. Zool.* 67: 343-347. — (Dipto Biol. anim. & Ecol., Univ. Perugia, Via Elco di Sotto, I-06123 Perugia).

11 instars (polarva incl.) were identified by size and scatter plots. The latter were constructed using labium length, head width, metafemur length, forewing-pad length and the total larval body length. The population studied had a mainly semivoltine life history and, probably, a small proportion of the larvae had a univoltine cycle. Eggs showed direct development.

(13789) ELLENBROEK, F.M., J. VAN DER WINDEN, H. VAN DER KOOIJ & T.J. BOUDEWIJN, 2000. *Kansen voor de Purperreiger en het Woudaapje in de provincie Utrecht*. — [*Opportunities for Purple heron (*Ardea purpurea*) and Little bittern (*Ixobrychus minutus*) in the province of Utrecht, The Netherlands*]. Provincie Utrecht, Utrecht. 64 pp. (Dutch). — (Available from: Secretariaat Ecologisch Onderzoek, Provincie Utrecht, Postbus 80300, NL-3508 TH Utrecht).

Among the *A. purpurea* preys, *Libellula* sp. is listed, but the invertebrate items are considered of minor importance in the Netherlands. *Libellula* sp. and *Aeshna* sp. are among the *I. minutus* prey items.

(13790) EMILYAMMA, K.G. & C. RADHAKRISHNAN, 2000. Odonata (Insecta) of Parambikulam Wildlife Sanctuary, Kerala, India. *Rec. zool. Surv. India* 98(1): 157-167. — (Western Ghats Fld Res. Stn, Zool. Surv. India, Calicut-673002, India).

- 25 spp. are listed and keyed.
- (13791) FISCHER, U. & A. WEIGEL, 2000. Beitrag zur Fauna des geschützten Landschaftsbestandteiles "Wiese am Kirchsteig" und dessen Umfeld bei Niederböhmendorf (Thüringen: Landkreis Greiz). *Thür. faun. Abh.* 7: 21-44. (With Engl. s.). — (First Author: Büro f. Landschaftsökol., Anton-Günther-Str. 12, D-08340 Schwarzenberg).
- As part of a conservation value assessment study, the fauna of selected animal groups occurring in this Nature Reserve (distr. Greiz, Thuringia, Germany) is listed and discussed. It includes 27 odon. spp., some of which are of substantial interest.
- (13792) FISHER, S.J. & D.W. WILLIS, 2000. Seasonal dynamics of aquatic fauna and habitat parameters in a perched upper Missouri river wetland. *Wetlands* 20(3): 470-478. — (Dept Wildlife & Fish. Sci., South Dakota St. Univ., Brookings, SD 57007, USA).
- The objective was to survey aquatic fauna and basic habitat characteristics in a small perched wetland, 15 river km downstream from the Yellowstone R. and Missouri R. confluence, North Dakota, USA, before, during and after a connection period within a naturally functioning section of the Missouri R. Macro-invertebrates and habitat parameters were sampled during May, July and Sept. Odon. catch-per-unit-effort (number/trap night) is stated order-wise.
- (13793) FRIESS, T., 2000. Libellen (Odonata) und Wanzen (Heteroptera) aus dem Naturschutzgebiet "Gut Walterskirchen" am Wörthersee. *Carinthia* (II) 190/110: 517-530. (With Engl. s.). — (Inst. Zool., Univ. Graz, Universitätsplatz 2, A-8010 Graz).
- 14 odon. spp. are listed from the "Walterskirchen" property, W of Krumpendorf (Kriva Vrba), on the northern shore of Wörthersee (Vrbsko jezero), Carinthia, Austria. 4 of these are redlisted and their occurrence and biology are outlined in some detail.
- (13794) GARCIA, C.B. & I. MORENO, 2000. Primera lista de la composición macrofaunal de la parte baja del río Toribio, Departamento del Magdalena, y aproximación preliminar a su dinámica temporal de corto plazo. *Actualid. biol.* 22(73): 169-175. (With Engl. s.). — (First Author: Univ. Nacional/Invemar, Aptdo 1016, Santa Marta, Colombia).
- "Gomphidae" is the sole odon. taxon listed; — Toribio R., Colombia.
- (13795) GEMEINHARDT, M., 2000. Zur Fauna der Unstrutniederung bei Heldrungen (Kyffhäuserkreis, Thüringen). *Thür. faun. Abh.* 7: 45-64. (With Engl. s.). — (Rathenastr. 24, D-99085 Erfurt).
- Various animal groups were investigated in the Unstrut R. valley nr Heldrungen, Thuringia, Germany. 19 odon. spp. are checklist, their local status is indicated and the fauna is briefly discussed.
- (13796) GIBERSON, D. & M. DOBRIN, 2000. Species composition, distribution, and seasonal patterns of dragonflies and damselflies of Prince Edward Island National Park. *Pks Can. tech. Rep. Ecosyst. Sci.* 2000: 1-25. ISSN 1200-3298. — (First Author: Dept Biol., Univ. Prince Edward Island, 550 University Ave, Charlottetown, PE, C1A 4P3, CA).
- This is the original report, prepared for Parks Canada, on which the booklet described in OA 13675 is based.
- (13797) HANEL, L., [Ed.], 2000. *Vážky 2000: Sborník referátů z celostátního semináře*. — [Dragonflies 2000: proceedings of the national conference]. Ces. Svaz Ochr. Přírody, Vlašim. 192 pp. ISBN 80-86327-12-4. (Czech, with Engl. s.'s). — (Available from: ČSOP, Plátenikova 264, CZ-25801 Vlašim).
- [Titles slightly amended:] Zelený, J.: Foreword (pp. 5-7); — Dolný, A.: Dragonflies as biological indicators (pp. 8-23); — Cempirek, J.: A contribution on dragonfly marking (pp. 24-29); — Hanel, L.: The influence of the solar eclipse on dragonfly activities (pp. 30-33); — Rejl, J.: Findings of dragonflies in bird nests (pp. 34-35); — Tomáš, P.: Dragonflies as prey of the spider Araneus quadratus (p. 36); — Bezdečka, P.: Effect of the July 1997 extreme floods on dragonfly diversity in the middle section of the Morava R., Moravia, Czech Republic (pp. 37-51); — Hájek, J. & B. Mocek: The occurrence of *Sympetrum annulatum* (Selys, 1887) (Odonata: Lestidae) in the Czech Republic (pp. 52-59); — Fliček, J.: Current state of the knowledge on dragonflies in the peat bogs around the Lužnice R., southern Bohemia (pp. 60-65); — Hanel, L. et al.: Dragonflies found [...] in June 2000 in the Třeboňsko Protected Landscape Area, southern Bohemia (pp. 66-77); — Honcu, M. & J. Waldhauser: Dragonflies of the ponds, Hraniční rybník and Jedlovský rybníky, in the Lusatian Mts, northern Bohemia, Czech Republic (pp. 78-85); — Hanel, L.: Preliminary list of dragonflies in the Křivoklátsko Protected Landscape Area, central Bohemia (pp. 86-94); — Rus, I.: Current state of the knowledge on dragonflies in the vicinity of Kolin on the Labe, central Bohemia (pp. 95-101); — Hanel, L.:

Notes on dragonflies in the pools along the Labe near Čelákovice, central Bohemia (pp. 102-113); — *Cempírek, J.*: A contribution to the knowledge of dragonflies of the Svárov Pond near Poříčí-nad-Sázavou, central Bohemia (pp. 114-117); — *Halačka, K. & L. Hanel*: Dragonflies of the lower Dyje R. alluvial area, southern Moravia, Czech Republic (pp. 118-129); — *Cempírek, J.*: Dragonflies of three peat bogs in the Šumava Mts, southern Bohemia (pp. 130-143); — *Zelený, J. & L. Hanel*: Comments on dragonflies of the Šumava Mts, southern Bohemia (pp. 144-153); — *Bezděčka, P.*: Dragonflies of the Chřiby Highlands, Moravia, Czech Republic (pp. 154-161); — *Hanel, L.*: The World Red List of Odonata, version 1996 (pp. 162-170); — *Dolný, A., K. Volná & M. Veselý*: On dragonfly occurrence in two nature reserves of South-East Asia (Thailand, Malaysia) (pp. 171-174); — *David, S.*: Dragonfly bibliography of Slovakia, 3 (1993-2000) (pp. 175-183); — *Krejčíř, M.*: Computer programme Fauna 2000 (pp. 184-188); — *Directory of participants* (pp. 189-192).

(13798) HANEL, L. & J. ZELENÝ, 2000. Vážky: výzkum a ochrana. — [Dragonflies: research and conservation]. ZO Čsp., Vlašim. 240 pp., 6 col. pls excl. Softcover (14.5×21.0 cm). ISBN 80-86327-09-4. (Czech, with Engl. s.). — (First Author: Kladruby 33, CZ-25762 Kladruby).

According to a statement in the Introduction, this is a revised and greatly enlarged edn of the vol. described in OA 10427. Actually, it is more than that; it is a complete handbook of the Odon. of the Czech Republic, with keys to the adults, descriptions of all spp., species-wise detailed information on biology, ecology, habitats, national status, and with a review of all known records. A chapter on research methodology and on the preparation of cabinet specimens is also provided. — This is an indispensable work for the workers on the fauna of that part of the world.

(13799) HANSON, M.A., C.C. ROY, N.H. EULISS, K.D. ZIMMER, M.R. RIGGS & M.G. BUTLER, 2000. A surface-associated activity trap for capturing water-surface and aquatic invertebrates in wetlands. *Wetlands* 20(1): 205-212. — (First Author: Minnesota Dept Nat. Resour., Wetland Wildlife Res. Gr., 102 23rd St NE, Bemidji, MN 56601, USA).

A surface-associated activity trap is described and its performance compared with that of a conventional activity trap. Quantitative data on the odon. are included.

(13800) HEDGE, T.A. & T.E. CROUCH, 2000. A catalogue of the dragonflies and damselflies (Odonata) of South Africa with nomenclatural clarification. *Durban Mus. Novit.* 25: 40-55. — (Second Author: Durban Nat. Sci. Mus., P.O. Box 4085, Durban-4000, SA).

This is a synopsis of current odon. literature, names in current usage, authors and dates at all cited taxonomic levels. The catalogue is taxonomic rather than systematic, with emphasis on clarification and correction of earlier nomenclatural irregularities appearing in literature. It covers 11 families, 59 genera, 147 spp. and 13 sspp.

(13801) HOLUŠA, O., 2000. Fauna vážek (Insecta: Odonata) Moravy a Slezska. — [Dragonfly fauna of Moravia and Silesia]. *Abstr. Ref. Zool. Dny*, Brno, pp. 28-29. (Czech). — (Bruzovská 420, Z-73801 Frýdek-Místek).

Brief considerations on the fauna (68 spp.), with annotations on some taxa of particular interest; — Czech Republic.

(13802) HOLUSA, O., 2000. Současný stav znalosti o výskytu vážek v Poodři (Insecta: Odonata). — [On the current state of knowledge on odonate distribution in the Odra R. floodplain]. *Sb. Abstr. Přir. Poodří*, pp. 30-31, Masaryk Univ., Brno. (Czech). — (Bruzovská 420, CZ-73801 Frýdek-Místek).

Since 1950, 42 spp. were recorded. Their importance in the assessment of environmental quality is emphasized.

(13803) HOLUSA, O., 2000. Vážky (Insecta: Odonata) ve sbírkách Muzea Beskyd Frýdek-Místek (Česká Republika). — The dragonflies (Insecta: Odonata) in the collections of the Museum of the Beskydy Mts, Frýdek-Místek (Czech Republic). *Klapalekiana* 36: 71-79. (Czech, with Engl. s.). — (Bruzovská 420, CZ-73801 Frýdek-Místek).

A catalogue of adult and larval material, referable to 37 spp., mostly from NE Moravia and Silesia, with precise localities and a brief discussion.

(13804) HOLUSA, O., 2000 Výsledky faunistického průzkumu vážek (Odonata) na území Šumavy. — The results of faunistic research of the dragonflies (Odonata) in the Bohemian Forest. *Silva Gabreta* 5: 149-166. (Czech, with Engl. s.). — (Bruzovská 420, CZ-73801 Frýdek-Místek).

31 spp. are listed from the Bohemian Forest, of which

*Aeshna caerulea* is new. The occurrence of *A. subarctica elisabethae* in the Czech Republic and in Slovakia is reviewed, and habitat features of *Somatochlora alpestris* and *S. arctica* are outlined.

(13805) HUTH, J., 2000. Die Tierwelt im Gebiet des ehemaligen Salzigen Sees: Libellen. *NatSchutz Sachsen-Anhalt* 37(Sonderh.): 37-40. — (Author's address not stated).

24 spp. are listed from the area of the former Salzige See, Sachsen-Anhalt, E Germany, and brief annotations on their occurrence and status are provided.

(13806) ISHIZAWA, N., 2000. Thermoregulation in calopterygid damselflies. *Nature & Insects* 35(11): 14-17. (Jap., with Engl. title). — (1644-15, Yamaguchi, Tokorozawa, Saitama, 359-1145, JA).

In orange-winged *Mnais pruinosa costalis* ♂♂ the mean body temperature is significantly higher than in hyaline ♂♂, while that in the ♀♀ does not differ from the latter. In *Calopteryx cornelia* the mean body temperature is unexpectedly low, in ♀♀ it seems higher than in the ♂♂. This evidence is explained in terms of the respective dragonfly morphology, habitats and behaviour. — An unabridged Engl. translation of the paper is available from the Author.

(13807) JANČAR, T., 2000. Triglav National Park. In: S. Polak, [Ed.], *Important Bird Areas (IBA) in Slovenia*, pp. 29-39, DOPPS, Ljubljana (ISBN 961-90786-1-6). (Slovene, with Engl. s.). — (Author's address not stated).

Out of the 33 odon. spp. known from the Park (Julian Alps, NW Slovenia), *Coenagrion hastulatum*, *Somatochlora alpestris*, *S. arctica* and *Leucorrhinia dubia* are listed.

(13808) KLINK, A.G. & M.A.A. DE LA HAYE, 2000. Inventarisatie van de macrofauna in de Limburgse Maasplassen, basis voor een typologie en toekomstvisie. — Survey of macroinvertebrates in the sand and gravel pits of the river Meuse in Limburg, basis for typology and vision for the future. *Rep. ecol. Rehabil. River Meuse* 34: xxix+74 pp. (Dutch, with Engl. & Fr. s's). — (Available from RIZA, P.O. Box 9072, NL-6800 ED Arnhem).

As part of the "Ecological Rehabilitation of the river Meuse" project, a survey of macroinvertebrate fauna (355 spp.) was conducted in 16 sand and gravel pits during 1997. The objective was to verify an earlier typology of these habitats, and to generate information

for the allocation of functions to the pits for a management plan. A checklist is not presented, but reference to diverse odon. spp. is made at various places; — the Netherlands.

(13809) KOTARAC, M. & A. ŠALAMUN, 2000. Kačji pastirji (Odonata). — [Dragonflies (Odonata)]. In: K. Poboljšaj et al., *Inventarizacija favne, flore, vegetacije in habitatov v Sračji dolini pri Črnučah*, pp. 36-42, CKFF, Miklavž-na-Dravskem polju. (Slovene). — (CKFF, Antoličičeva 1, SI-2204 Miklavž-na-Dravskem polju).

6 spp. are recorded from Sračja valley nr Črnuče, Ljubljana distr., Slovenia. The valley is considered odonatologically important and harbours a good population of the redlisted *Cordulegaster heros*.

(13810) KUHN, J., 2000. Libellen (Odonata) am Schmiechener See 1980-1999: Zwischenbilanz einer Langzeitstudie. *Verh. westdt. EntTag.*, Löbbecke-Mus. 1999: 185-190. (With Engl. s.). — (Max-Planck-Inst. Verhaltensphysiol., Abt. Wickler, D-82319 Seewiesen). "Schmiechener See" (SW Germany) is a shallow 50 ha lake, oscillating strongly and irregularly in water level. The composition and abundance of its odon. fauna (42 spp.) are subject to pronounced short-term fluctuations and long-term changes. Special attention is directed at the efficiency of conservation and management measures, particularly so with reference to the survival of the target spp., *Lestes dryas* and *Sympetrum flaveolum*.

(13811) LEMLY, A.D. & R.S. KING, 2000. An insect-bacteria bioindicator for assessing detrimental nutrient enrichment in wetlands. *Wetlands* 20(1): 91-100. — (First Author: Dept Fish. & Wildlife Sci., Virginia Tech. Univ., Blacksburg, VA 24061-0321, USA).

Field and laboratory studies were conducted to evaluate the use of bacterial growth in aquatic insects as a metric for determining the existence of nutrient impacts in wetlands. Results from field investigation in 2 North Carolina swamps (USA) indicated that elevated nitrate and phosphate concentrations were associated with growth of filamentous bacteriae, *Sphaerotilus* sp. and *Leptothrix* sp. Ephemeroptera had the highest percentage of heavily colonized individuals, followed by the Zygoptera. — The paper deals with Ephemeropt. and it is suggested the odon. should be investigated systematically for diagnostic nutrient impacts, since they occur more commonly in all wetlands than Ephemeropt.

(13812) La *LETTRE DES SOCIÉTAIRES*, Société française d'odonatologie (ISSN 1260-0857), No. 23 (20 Dec. 2000). — (c/o J.-L. Dommanget, 7 rue Lamartine, F-78390 Bois-d'Arcy).

In addition to various business notifications and a review of the 2001 activities, it includes a lay-in SFO 2001 calendar. 8 pp.

(13813) LOTZING, K., 2000. Untersuchungen zur aktuellen Libellen-Fauna (Odonata) in ausgewählten natürlichen Binnenland-Salzstellen am Südrand der Magdeburger Börde (Sachsen-Anhalt). *Ent. Nachr. Ber.* 44(3): 175-182. (With Engl. s.). — (Am Hollschen Bruch 4c, D-39435 Unseburg).

27 spp. are listed from various "natural inland saline habitats" at the southern margin of the Magdeburger Börde, E Germany. — (*Abstractor's Note*: No salinity data are presented, the compositions of odon. communities are not described, and the stenohaline general aspect of the species assemblage is apparent.)

(13814) MAUERSBERGER, R., 2000. Artenliste und Rote Liste der Libellen (Odonata) des Landes Brandenburg. *NatSchutz Landschaftspfl. Brandenburg* 9(4): 3-22. — (Waldstr. 4, D-16278 Steinhöfel).

An annotated list is presented of the 66 spp. known to occur in the federal state of Brandenburg (E Germany) and in Berlin. The environmental parameters are outlined and analysed, and a Brandenburg Red List is provided. The comprehensive regional bibliography will certainly facilitate the future work.

(13815) MEIER, C. & H. ZUCCHI, 2000. Zur Bedeutung von Regenwasserrückhaltebecken für Libellen (Odonata): ein Beitrag zum urbanen Arten-schutz. *Osnabrück. naturw. Mitt.* 26: 153-166. (With Engl. s.). — (First Author: Girardetstr. 71, D-45131 Essen).

The investigations were carried out at 5 selected rainwater retention basins in the city of Osnabrück, Lower Saxony, Germany, where 22 out of the 27 regional spp. were evidenced. Though most of these were generalists, the results indicate the importance of city retention basins for the preservation of the fauna.

(13816) MIELEWCZYK, S., 2000. Wažki (Odonata). — [Dragonflies of Pieniny mountains]. *Monogr. pienin.* 1: 143-145. (Pol., with Engl. s.). — (Os. Wiczrowe Wzgórza 35/28, PO-61-699 Poznań).

The fauna of Pieniny Mts, Poland (38 spp.) is analyzed, *Sympetrum paedisca*, *Hemianax ephippiger*, *Cordule-*

*gaster bidentata* and *Sympetrum pedemontanum* are considered of particular regional interest.

(13817) MIHOVEC, J., 2000. Nebesno modri kačji pastir. — [*Coenagrion puella*]. *Moj mali Svet* 32(9): 35. (Slovene). — (Author's address not stated). A presentation of dragonfly life, exemplified on *C. puella*, directed at general readership.

(13818) NICK, A., L. BUTTSTEDT, M. JENTZSCH & J. PEITZSCH, 2000. Zur Tier- und Pflanzenwelt von Meliorationsgräben in der goldenen Aue und Hinweise zu Pflegemaßnahmen. *NatSchutz Sachsen-Anhalt* 37(2): 44-54. — (Third Author: Stollenweg 21, D-06179 Langenbogen).

The results of the 1995/1996 studies on various melioration ditches in the Sangerhausen area, Sachsen-Anhalt, E Germany are presented, 8 odon. spp. are listed and commented upon, and detailed management measures are outlined. — See also OA 6600.

(13819) PERUŠEK, M., 2000. Kočevsko-Kolpa. In: S. Polak, [Ed.], *Important Bird Areas (IBA) in Slovenia*, pp. 137-148, DOPPS, Ljubljana (ISBN 961-90786-1-6). (Slovene, with Engl. s.). — (Author's address not stated).

Out of the 28 odon. spp. recorded from this region in S Slovenia, *Lestes barbarus*, *Coenagrion pulchellum*, *Aeshna affinis*, *Somatochlora flavomaculata* and *Sympetrum fonscolombii* are redlisted.

(13820) PIBERNAT, J. & L. ABÓS, 2000. Aportacions odonatològiques a la província de Girona (Catalunya). *Ses. Ent. Inst. catalana Hist. nat. Soc. catalana Lepid.* 10: 31-49. (With Engl. & Catalan s's). — (First Author: Apartat de Correus 826, ES-17080 Girona).

Records of 53 spp. from the Girona prov., Spain are listed, and annotations on reproduction are provided. Also included is a map of geographic ranges of *Calopteryx h. haemorrhoidalis*, *C. h. occasi* and *C. h. asturica*. — (See also OA 11667).

(13821) PRASAD, M., P.P. KULKARNI & S.S. TALMALE, 2000. New record of andromorphic females in two species of *Neurothemis* dragonflies (Odonata: Libellulidae) from central India. *Bionotes* 2(3): 54. — (First Author: Zool. Surv. India, M-Block, New Alipore, Calcutta-700053, India).

1 specimen each is described of *N. i. intermedia* (Jogdalpur distr.) and *N. t. tullia* (Pench National Park, Nagpur distr.).

(13822) RAMAKRISHNA [no initials], 2000. Limnological investigation and distribution of micro and macro invertebrates and vertebrates of Fox Sagar Lake, Hyderabad. *Rec. zool. Surv. India* 98(1): 169-196. — (Zool. Surv. India, M-Block, New Alipore, Calcutta-700053, India).

Fox Sagar Lake (Jeedimetla tank) is an impoundment, 15 km off Hyderabad, India, constructed in 1897. Its limnology is described and 6 odon. spp. are listed (*Ischnura elegans*, *Ictinogomphus rapax*, *Brachythemis contaminata*, *Crocothemis s. servilia*, *Pantala flavescens*, *Trithemis pallidinervis*).

(13823) RASCH, P. & S. TRAPP, 2000. Ein Fließgewässer im urbanen Umfeld: Analyse des ökologischen Zustandes des unteren Belmer Baches (Osnabrück, Niedersachsen) anhand des Makrozoobenthos. *Osnabrück. naturw. Mitt.* 26: 167-190. (With Engl. s.). — (First Author: Fachgeb. Ökol., Fachber. Biol./Chem., Univ. Osnabrück, Barbarastr. 11, D-49069 Osnabrück).

Due to saprobic pollution and structural poverty, the macrozoobenthos assemblage of the Belmer Bach is poor; 4 odon. spp. (all larvae) were encountered only. The impact of hydrological conditions prevailing in a brook in the urbanized area on its fauna is outlined and discussed in detail.

(13824) REDER, G. & W. VOGEL, 2000. Wellenschlag als limitierender Faktor bei der Emergenz von Libellen? Beobachtungen beim Schlupf von *Gomphus flavipes* (Charpentier) (Anisoptera: Gomphidae). *Fauna Flora Rheinland Pfalz* 9(2): 681-685. — (First Author: Am Pfortengarten 37, D-67592 Flörsheim-Dalsheim).

The natural, weather-conditioned undulation does not represent any increased risk to emerging dragonflies, since the emergence takes place well outside its reach. On the other hand, the wash caused by moving boats does increase the risk significantly, as evidenced by observations on *G. flavipes* in the Rhine R. at Südhessen, Germany. — Cf. also OA 13721.

(13825) 3èmes RENCONTRES ODONATOLOGIQUES DE FRANCE à Saint-Beauzire (Haute-Loire) du 29 juin au 2 juillet 2000. *Quelques expériences du Groupe Sympetrum au sujet des 6 thèmes des Rencontres Odonatologiques: "partager & communiquer".* G.R.P.L. "Sympetrum", Morestel. 20 pp. — (c/o C. Deliry, "Sympetrum", 20 rue de la Manine, F-38510 Morestel).

Information and comments are presented on the

following subjects, discussed at the 3rd Conference of French Odonatologists: "Méthodes et outils" (pp. 3-5); incl. "Observatoire des libellules en Rhône-Alpes et Dauphiné et réflexion sur les articulations possibles avec d'autres observatoires"); — "Inventaire et cartographie" (pp. 6-7; incl. "Gestion de bases de données en Rhône-Alpes & Dauphiné et difficultés à passer à la cartographie"); — "Biologie et écologie des espèces" (pp. 8-11; incl. "Notion de Liste Verte et applications"); — "Suivi des populations" (pp. 12-14; incl. "Suivi des populations d'odonates en Rhône-Alpes & Dauphiné"); — "Gestion des habitats larvaires et imaginaires" (pp. 15-16); — "La libellule et l'homme" (pp. 17-19).

(13826) REPORT OF THE 10th DRAGONFLY CITIZEN SUMMIT, Nakamura, 1999. Issued by the Org. Committee, Nakamura, 2000. 122 pp. (Jap.). — (c/o K. Inoue, 5-9, Fuminosato 4-chome, Abeno-ku, Osaka, 545-0004, JA).

An exhaustive record of the proceedings and events in the framework of the Summit.

(13827) SCHLUPPMANN, M. & G. GRUNE, [Eds], 2000. *Beiträge zur Libellenfauna in Südwestfalen.* Naturw. Ver. Lüdenscheid, Lüdenscheid & NatSchutzzent. Märkischer Kreis, Werdohl. ii+134 pp. Softcover (20.8x29.5 cm), ISBN 3-931251-71-3. — Price: DEM 32.- net. — (Orders to: Naturw. Ver. Lüdenscheid, Wilhemstr. 47, D-58511 Lüdenscheid). This are the Proceedings of a meeting (22 Feb. 1998) on the odon. fauna of southern Westphalia, Germany. All papers are provided with Engl. summaries. — Content: Schlüpmann, M.: Libellen in Südwestfalen: Vorwort (pp. 3-4); — Die Libellen des Südwestfälischen Berglands (pp. 5-44); — Belz, A. & M. Fuhrmann: Die Libellen des Kreises Siegen-Wittgenstein (pp. 45-48); — Bussmann, M.: Libellenfunde im nordwestlichen Sauerland: eine vorläufige, kommentierte Artenliste (pp. 49-56); — Kordges, T.: Die Libellenfauna der Stadt Hattingen (pp. 57-66); — Kronshage, A.: Die Libellenfauna im Raum Schwelm (pp. 67-70); — Schlüpmann, M.: Die Libellen des Hagener Raumes: Verbreitung, Bestand, Habitate und Phänologie (pp. 71-114); — Greis-Harnischmacher, W.: Bemerkungen zum Vorkommen von Cordulegaster bidentata in Hagen (pp. 115-120); — Heimann, H.: Die Libellenfauna von Schwerte und Holzwickede (pp. 121-128); — Loos, G.H.: Libellen im Siedlungsbereich (pp. 129-133); — Hauck, S.: Die Ausbreitung der Gebänderten Prachtlibelle *Calopteryx splendens* im

mittleren Lennetal (p. 134).

- (13828) SCHMIDT, E.G., 2000. Emergenzuntersuchungen an *Gomphus vulgatissimus* und *G. pulchellus* (Odonata: Gomphidae) am Dortmund-Ems-Kanal bei Lüdinghausen (Westmünsterland). *Verh. westdt. EntTag.*, Löbbecke-Mus. 1999: 191-197. — (Biol. Didaktik, FB-9/SO5, Univ. Essen, D-45117 Essen).

Along a 200 m stretch of the Dortmund-Ems Channel, the emergence of 214 *G. pulchellus* and 66 *G. vulgatissimus* was evidenced during 3, resp. 4 weeks in the spring of 1999. In 2000, 111 *G. vulgatissimus* have emerged during 5 days. The co-occurrence of the 2 spp. in such high numbers has not been previously documented.

- (13829) SHARMA, R.M., S.S. TALMALE & P.P. KULKARNI, 2000. Odonates attracted to light at Tadoba-Andhari Tiger Reserve, Maharashtra. *Bionotes* 2(1): 13. — (Western Regn. Stn. Zool. Survey India, Vidyanagar, Sector 29, PCNT Post Office, Pune-411044, Maharashtra, India).

*Ceriagrion coromandelianum*, *Pseudagrion decorum*, *Ischnura senegalensis*, *Agriocnemis pygmaea*, *Ictinogomphus rapax*, *Anax immaculifrons*, *Brachydiplax sobrina*, *Orthetrum sabina*, *Brachythemis contaminata*, *Crocothemis servilia*, *Diplacodes trivialis*, *Pantala flavescens*, *Tholymis tillarga*, and *Zyxomma petiolatum* were attracted to light during the March, Sept.-Oct. and Dec. surveys in the Reserve, India. *A. pygmaea* and *D. trivialis* were the most common among the Zygopt. and Anisopt., resp.

- (13830) SYMPETRUM GRENOBLE, Revue d'odonatologie (ISSN 0999-7032), No. 15 (dated 2000, received Apr. 2001). — (c/o C. Deliry, "Sympetrum", 20 rue de la Manine, F-38510 Morestel).

*Grangier, C.:* Des araignées au menu de ces damoiselles (pp. 3-4); — *Juliland, C., P. Julian & A. Lader:* Bilan de neuf années de prospection odonatologique dans le département de l'Ardèche (pp. 5-18); — *Marigo, P.:* Étude de la faune des tourbières subalpines du plateau des lacs du Massif du Taillefer, Isère (pp. 19-37); — *Faton, J.-M.:* L'intérêt odonatologique du marais de Printegarde, au confluent de la Drôme et du Rhône (pp. 39-49); — *Gilard, B.:* Une visite au lac du Lauzon (Lus-la-Croix-Haute, Massif du Dévoluy, Drôme) (pp. 51-53); — *Grand, D.:* USA été 1979 (pp. 55-58); — Publications du G.R.P.L.S. depuis Sympetrum No. 11 (pp. 59-61). — (Abstractor's Note: Nos 12-14 are

"special issues", dated 1997, titled "Atlas des libellules de la région Rhône-Alpes"; not supplied for abstracting).

- (13831) SYMPETRUM PIEMONTAIS [Newsletter of the Groupe de Recherche et de Protection des Libellules "Sympetrum", Morestel] (ISSN none), No. 45 (July 2000). — (c/o C. Deliry, "Sympetrum", 20 rue de la Manine, F-38510 Morestel).

On 22 pp., and in addition to various management items, announcements and a report on the conclusions of the 1999 Plenary Meeting of the "Sympetrum" Group, the issue also contains various records from France.

- (13832) TOMOKUNI, M. & Y. SAITO, 2000. Dragonflies (Insecta, Odonata) of the garden of the Imperial Palace, Tokyo, Japan. *Mem. natn. Sci. Mus., Tokyo* 36: 7-18. (Jap., with Engl. s.). — (First Author: Dept Zool., Natn. Sci. Mus., 3-23-1 Hyakunincho, Shinjuku-ku, Tokyo, 169-0073, JA).

The Imperial Palace occupies an area of 115 ha in the centre of Tokyo, with a well-preserved vegetation and a variety of aquatic habitats. During 1987-1999, 27 spp. were evidenced. Their status and current condition of the respective habitats are described.

- (13833) TÓTH, S., 2000. A Balatonba torkolló kisviz-folyások szitakötő faunájának (Odonata) összehasonlító vizsgálata. — Comparative analysis of dragonfly (Odonata) fauna living in the streams flowing into shallow lake Balaton. *Folia Mus. hist.-nat. bakonyiensis* 15: 53-74. (Hung., with Engl. & Germ. s's). — (Széchenyi u. 2, HU-8420 Zirc).

29 spp. are listed from 6 tributaries of Lake Balaton, Hungary and the composition of the fauna is analysed.

- (13834) WALLASCHEK, M., 2000. Zur Libellen-, Ohrwurm- und Heuschreckenfauna (Odonata, Dermaptera, Saltatoria: Ensifera et Caelifera) des Sonnensteins, des Ohmberges und des Speichers Teistungen im Landkreis Eichsfeld (Thüringen). *Thür. faun. Abh.* 7: 113-135. (With Engl. s.). — (Agnes-Gosche-Str. 43, D-06120 Halle/Saale).

11 odon. spp. are listed, *Calopteryx splendens* and *Cordulia aenea* are considered locally endangered.

- (13835) WALLASCHEK, M., 2000. Zur Libellenfauna (Odonata) des Grossen Otterbaches (Saale-Orla-Kreis, Thüringen). *Thür. faun. Abh.* 7: 137-152. (With Engl. s.). — (Agnes-Gosche-Str. 43, D-06120 Halle/Saale). 26 spp. are listed from the Grosser Otterbach valley,

Thuringia, Germany. Biogeographic composition and ecological structure of the fauna are outlined, and some conservation management measures are advocated.

- (13836) ZIMMERMANN, W., 2000. Erfassung der Libellenfauna Thüringens. *Thür. faun. Abh.* 7: 287-288.  
— (Thomas-Müntzer-Str. 5, D-99423 Weimar).  
A progress report on the Thuringia odon. mapping scheme (so far ca 20.000 records), with a call for collaboration.

## 2001

- (13837) ABSTRACTS OF PAPERS AND POSTERS presented at the 15th International Symposium of Odonatology, Novosibirsk, Russia, 9-19 July 2001. Edited by A.Yu Haritonov, O.E. Kosterin & O.N. Popova. Issued by the SIO Russian Branch, Novosibirsk. 24 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; cf. OA 13853 and 13873, resp.)  
*Beketov, M.:* Control of ammonia toxicity to Erythromma najas (Odonata) by pH and ionic composition of water (p. 1); — *Brockhaus, T.H.:* The Globe Skimmer, *Pantala flavescens* (Fabricius), in the Khumbu Himal, Nepal (Anisoptera: Libellulidae) (pp. 1-2); — *Carchini, G., M. Di Domenico, T. Pacione, A.G. Solimini & C. Tanzilli:* Temporal variations of Odonata species assemblages (pp. 2-3); — *Chaplina, I.A.:* Odonate fauna of the Kazakhstan (pp. 3-4); — *Günther, A.:* Variation in threatening flights of different Rhinocypha species from Sulawesi (Zygoptera: Chlorocyphidae) (pp. 4-5); — *Haritonov, A.Yu.:* The Russian odonate fauna and conservation of rare dragonflies in Russia (p. 5); — *Inoue, K.:* Conservation of dragonflies in Japan, pt 3 (pp. 5-6); — A tentative approach to the environment indices based on the odonate fauna (p. 6); — *Ivanov, P.Y.:* Odonate fauna of the Khanka Lake basin, the Russian Far East (pp. 6-8); — *Kagimoto, B.:* The present state and the protection of the dragonfly *Orthetrum poculipes miyajimae* (p. 8); — *Ketenchiev, H.A.:* Zoogeographical subdivision of the Mediterranean and adjacent territories into regions (p. 8); — Zoogeographical status and boundaries of Mediterranean faunistic subregions (p. 9); — *Kosterin, O.E. & V.V. Zaika:* Odonate fauna of the Tyva Republic or Tuva, central Siberia (pp. 10-11); — *Kozminov, S.G. & H.A. Ketenchiev:* Adaptation of dragonfly larvae to mountainous conditions of Kabardino-Balkaria (p. 11); — *Kozminov, S.G.:* The

stages of development in selected dragonfly larvae under laboratory conditions (pp. 11-12); — *Lee, S.-M.:* Overview of the odonate fauna of the Korean peninsula (p. 12); — *Mitra, T.R.:* Remarks on peculiarities in odonate fauna of the Andaman Islands (pp. 12-13); — *Moshkina, M.A.:* Main aspects of the behavior of dragonfly larvae in heterospecific and conspecific communities (p. 13); — *Perepelov, E., A.G. Bugrov & E. Warchałowska-Sliwa:* New approaches and techniques in Odonata cytogenetics (pp. 13-14); — *Popova, O.N.:* Infraspecific taxonomy of the dragonfly *Sympetrum pedemontanum* (Allioni, 1766) (pp. 14-15); — *Van Tol, J.:* Biogeography of Sulawesi, based on Odonata and other aquatic insects (p. 15); — The collection of Odonata of the National Museum of Natural History / Naturalis at Leiden (p. 16); — *Watanabe, Y.:* A contribution to the morphology of odonate eggs, with special reference to some specialized processes (p. 16); — On the remarkable processes found in early instar larvae of Odonata (p. 17); — *Yanybaeva, V.A.:* Fauna and ecology of dragonflies of South Ural (pp. 17-18); — *Zessin, W., G. Bechly, C. Brauckmann & E. Groning:* Some new results concerning the morphology of the oldest dragonflies (Insecta: Odonatoptera) from the Namurian of Hagen-Vorhalle, Germany (pp. 18-19); — *Borisov, S.N.:* Ethological adaptations in desert dragonflies, induced by climatic conditions (p. 21); — The dragonflies of Middle Asia (p. 21); — *Malikova, E.I.:* The dragonflies of Amur Basin and the types of their ranges (pp. 21-22); — *Piper, W.:* Observations on primary dragonflies communities in the Brazilian Amazon region (pp. 22-23).

- (13838) ARGIA. The news journal of the Dragonfly Society of the Americas (ISSN 1061-8503), Vol. 13, No. 2 (5 June 2001). — (c/o Dr & Mrs T.W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13903, USA). [Signed articles:] *Bedell, P.:* Some recent odonate records for Nebraska (p. 2); — *Harding, R.W.:* *Enallagma aspersum* in Prince Edward Island (pp. 2-3); — *Trápero Quintana, A. & C. Narango López:* New locality reports for *Crocothemis servilia* (Drury, 1773) (Odonata: Libellulidae) in Cuba (p. 3); — *Donnelly, N.:* History of Odonata study in America: Donald J. Borror, 1909-1988 (pp. 4-5); — Taxonomic problems with North American Odonata species: last appeal for information (pp. 5-10); — *Tennessean, K.:* Color pattern in immature *Coryphaeschna adnexa* (pp. 10-11); — *Donnelly, N.:* Rediscovery of *Orthemis sulphurata* (pp. 11-12). — The "Tramea" web review was provided by *N. Donnelly* (pp. 12-13).

- (13839) The *ASHTON SKIMMER*. The newsletter of the National Dragonfly Biomuseum. Not numbered; dated Apr. 2001. — (c/o Natn. Dragonfly Biomus. at Ashton Mill, nr Oundle, Petersborough, PE8 5LZ, UK). The 4-page issue presents a brief report on the 2000 achievements, information on the Biomuseum's web site, and an outline of the 2001 projects. Various construction works continue receiving much attention by the Management, and a review of dragonfly recording procedures, and the appointment of a full-time collaborator are among the projects for the near future.
- (13840) BELLMANN, H., 2001. *Tirion Insectengids*. — [Tirion Insect field guide]. Tirion, Baarn. 446 pp., col. pls incl. ISBN 90-5210-1329. (Dutch). — (Author: Jahnstr. 4, D-89173 Lonsse). This is a Dutch adaptation of the original German work ("Der Neue Kosmos Insektenführer", Franckh-Kosmos, Stuttgart, 1999), translated and adapted by W.R.B. Heitmans. It covers (pp. 42-60) 43 odon. spp., with col. portraits, brief descriptions, information on biology and behaviour, and with statements on their occurrence in the Netherlands and Belgium.
- (13841) *BELYSHEVIA*. Zhurnal Roossiyskogo otdeleniya Mezhdunarodnogo obshchestva odonatologii — Journal of the Russian Branch of the Societas internationalis odonatologica, S.I.O., Vol. 1, No. 1 (June 2001). Edited by A.Yu. Haritonov [Editor-in-Chief], S.N. Borisov, O.E. Kosterin, O.N. Popova & I.A. Chaplina. (Russ., with Engl. s's). — (Standing Orders to: Eds of *Odonatologica*, P.O. Box 256, NL-3720 AG Bilthoven; — Price per issue: • 12.- net). The journal is named in memory of the great Siberian odonatologist, Dr B.F. Belyshev (1910-1993), and it is scheduled to appear semiannually. The first issue was published on the occasion of the 15th Int. Symp. Odonatol., and it was provided free to the holders of Standing Orders of publications of the Int. Symp. Odonatol. — Contents: Haritonov, A.Yu.: Editorial (p. 1); — Borisov, S.N. & A.Yu. Haritonov: On the dragonfly exploration of Central Asian nature reserves (pp. 2-5; 7 Reserves, with annotated checklist of the recorded spp.); — Dronzikova, M.V.: Life cycles of selected dragonfly species in the Kuznetskoy Valley (pp. 6-9); — Perepelov, E.A. & A.G. Bugrov: The constituent heterochromatin in dragonfly karyotypes (pp. 10-13; review of C-banding results with 35 spp.); — Popova, O.N.: Dependence of *Sympetrum* species distribution on the larval habitat features (pp. 14-17); — Serbina, E.A. & A.Yu. Haritonov: Dragonfly role in the Prosthogonimidae trematode life cycles in the West-Siberian forest-steppe water bodies (pp. 18-20).
- (13842) BOWLES, B., 2001. Results of the Carden Alvar odonate count, July 8, 2000. *Ontario Insects* 6(3): 50. — (374 Grenville, Orilla, ON, L3V 7P7, CA). A checklist of 32 spp., 6 of which are new to the Carden list, Ontario, Canada. See OA 13510.
- (13843) BRAUNE, P. & J. ROLFF, 2001. Parasitism and survival in a damselfly: does host sex matter? *Proc. R. Soc. Lond. (B)* 268: 1133-1137. — (Second Author: Dept Anim. & Plant Sci., Univ. Sheffield, Sheffield, S10 2TN, Scotland, UK). Experimental data are presented on the survivorship of *Coenagrion puella* infested by *Arrenurus cuspidator* from a population in field cages. In addition, correlative laboratory data under simulated severe weather conditions are shown. In the manipulative experiment, parasitized ♀ ♀ individual condition, which was measured as weight at emergence, was an important determinant of survival under field conditions. In contrast, such a relationship did not occur in ♂ ♂ and unparasitized ♀ ♀. It was found in the laboratory experiment that water mites as well as weight at emergence both contributed significantly to the reduced survivorship of ♂ and ♀ damselflies. It was concluded that the impact of parasitism depends on environmental conditions and that host sexes differ in their responses to parasitism. This is discussed in the light of invertebrate immunocompetence.
- (13844) CARCHINI, G., F. CHIAROTTI, M. DE DOMENICO, M. MATTOCCIA & G. PAGANOTTI, 2001. Fluctuating asymmetry, mating success, body size and heterozygosity in *Coenagrion scitulum* (Rambur) (Odonata: Coenagrionidae). *Anim. Behav.* 61(3): 661-669. — (First Author: Dipto Biol., Univ. "Tor Vergata", Via della Ricerca Scientifica, I-00133 Roma). For decades fluctuating asymmetry (FA) has been considered a good descriptor of developmental stability. Correlations have been shown between FA and several fitness components, including mating success and heterozygosity level. However, some doubts have been expressed about the generalization of these results, perhaps because of bias towards positive results and a poor critical approach in the first phase of FA studies. Studies on Odon. are scarce and are concentrated on the Coenagrionidae, with contrasting results in the

relationships between FA and mating success, size and other fitness components. The Authors investigated the relationships between FA expressed as right-left wing length (R-L), body size expressed as (R+L)/2, multilocus and single locus heterozygosity assessed by allozyme electrophoresis and short-term mating success (SMS) assessed from the status (mated or not) of the males at the moment of collection. 260 ♂ were collected from a breeding population. The data were analysed by both univariate and multifactorial statistical methods. After excluding a correlation between FA and body size, the presence of a true FA was checked by using tests for normality, directional asymmetry, antisymmetry and difference from the interindividual variations. The results showed no correlation between FA (either signed or absolute) and heterozygosity, body size and SMS, while heterozygosity was clearly positively correlated with body size and with SMS. These data suggest an effect of the presence of some particular alleles on SMS, instead of an effect of the multilocus heterozygosity, even if the presence of only three polymorphic loci weakens the conclusions. Finally, no correlation was found between body size and SMS.

(13845) *CATALOGUE OF THE COLLECTIONS OF THE LAKE BIWA MUSEUM*, No. 4 (March 2001): *Odonata*. Lake Biwa Mus., Kusatsu. 78 pp., 2 col. pls excl. Edited by K. Yahiro. (Jap., with Engl. titles & taxon. nomencl.). — (Publishers: 1091 Oroshimo, Kusatsu, Shiga Pref., 525-0001, JA).

*Yahiro, K.*: Significance of the Odonatological Society of Osaka's collection of Odonata (pp. 3-4); — *Sugino, Y., T. Tanaka & K. Yahiro*: Catalogue of Odonata collected by the Odonatological Society of Osaka, 1 (pp. 5-69, col. pls 1-2 excl.); — *K. Yahiro, Y. Yamaguchi, Y. Sugino & T. Tanaka*: Procedures for specimen registration and management of the dry insect collection in the Lake Biwa Museum (pp. 70-77).

(13846) CATLING, P.M., C.D. JONES & P. PRATT, [Eds], 2001. *Ontario Odonata*, Vol. 2 (including observations for the year 2000). Toronto Entomologists' Assoc., Toronto. iv+186 pp. ISBN 0-921631-22-7. (21.4×27.6 cm), softcover. — Price: Can \$ 30.- net. — (Orders to: A.J. Hanks, 34 Seaton Dr., Aurora, ON, L4G 2K1, CA).

*Oldham, M.J., D.A. Sutherland & C.D. Jones*: Additions to the Odonata of Sudbury district and regional municipality, Ontario (pp. 1-4); — *Catling, M.P., V.R. Brownell & P. Pratt*: Extension of the known

range of *Argia tibialis* in Ontario beyond the Carolinian zone (pp. 4-8); — *Catling, P.M., V.R. Brownell, C.D. Jones & D. Sutherland*: Further northeastern expansion of the range of River Bluet, *Enallagma anna* (pp. 8-10); — *Catling, P.M., V.R. Brownell & P. Pratt*: Range expansion of Double striped Bluet, *Enallagma basidens*, in Ontario (pp. 10-13); — *Catling, P.M., V.R. Brownell, R. Hutchinson & B. Ménard*: A preliminary annotated list of the Odonata of Lanark county, Ontario (pp. 13-23); — *Catling, P.M.*: Odonata associated with temporary pools on the Burnt Lands Alvar, Ontario (pp. 23-24); — *Bree, D.*: Further notes on the Odonata of Sandbanks Provincial Park (pp. 24-26); — Odonates of the Sandbanks Pannes during 2000 (pp. 27-30); — *Catling, P.M.*: Odonata in the University of Western Ontario insect collection (pp. 30-36); — Streams and rivers highlighted as major natural area protection priorities in Ontario, based on damselfly and dragonfly indicators (pp. 36-43); — Emergence of Odonata in southern Ontario during cool and wet weather (p. 44); — *Jones, C.D., P.S. Burke, J.B. Falls, M.J. Oldham & D.A. Sutherland*: Additions to the Odonata list of Peterborough county, Ontario (pp. 44-47); — *Jones, C.D.*: *Somatochlora incurvata*, Incurvate Emerald, new to Algonquin Provincial Park, Ontario (pp. 47-48); — *Bree, D.*: European Praying Mantid, *Mantis religiosa*, feeding on a Common Green Darner (p. 49); — *Jones, C.D.*: Book review of "Dragonflies through binoculars: a field guide to dragonflies of North America" (p. 49-52); — *Catling, P.M.*: Review of "Distribution of damselflies and dragonflies (Odonata) of Cape Breton Island, Nova Scotia, Canada (p. 53); — *Catling, P.M., C.D. Jones & P. Pratt*: Introduction to the 2000 Ontario Odonata summary records (pp. 53-55; list of contributors and records, pp. 55-170). — The book includes also *Corrections to Vol. 1* (p. 171), a list of *Ontario Odonata projects* (p. 171), *News and comments* (pp. 171-173, by P.M. Catling); recent regional *Bibliography* (pp. 173-175), and a *Notice to contributors* of the Ontario recording scheme (pp. 175-183).

(13847) [CHAO, H.-f.], 2001. In memory of Prof. Chao Hsiu-fu. *Entomotaxonomia* 23(2): cover p. 3 (Chin., with Engl. title). An obituary for the doyen of Chinese odonatology (born 17 May 1917; deceased 2 May 2001), with brief biographic information and appreciation of his work.

(13848) CLAUSNITZER, H.-J., 2001. Auswirkung von Naturschutzmaßnahmen auf Libellen und Lurche: ökologische Verbesserung an Bächen durch Rückbau

- von Teichen. *Natur Landschaft* 76(4): 145-151. (With Engl. s.). — (Eichenstr. 11, D-29348 Eschede). In the basin of the Lutter (Lower Saxony, Germany), 3 large fishpond areas, through which flows the river, were converted with the objective of ecological restoration of the river. 2 of these are developing into oligotrophic spring fens, the removal of the dams in the third one resulted into a wetland with small pools, ponds and ephemeral waters. In the oligotrophic fens, 7 widespread odon. spp. have decreased or disappeared, while 7 stenoecious spp. of swamps and springs have settled. In the pond area, only 2 new spp. have settled, whereas 4 of the previous, euryoecious, therefore widespread spp. have disappeared.
- (13849) DE ALMEIDA SPINDOLA, L., L.O. IRINEU DE SOUZA & J. MARTINS COSTA, 2001. Descrição da larva de *Perithemis thais* Kirby, 1889, com chave para identificação das larvas das espécies conhecidas do gênero citadas para o Brasil (Odonata: Libellulidae). *Bolm Mus. nac. Rio de J.* (N.S.) Zool. 442: 1-8. (Port., with Engl. s.). — (Third Author: Depto Ent., Mus. Nac., UFRJ, Quinta da Boa Vista, São Cristóvão, BR-20940-040 Rio de Janeiro, RJ). The final instar larva is described and illustrated and the known Brazilian *Perithemis* larvae are keyed.
- (13850) DE KNIJF, G., 2001. Libellen en bosbeheer: graag wat meer licht en structuur in het bos! — Dragonflies and forest management: some more light and structure in the forest! *Boskrant* 31(2): 22-25. (Dutch). — (Instituut voor Natuurbehoud, Kliniekstraat 25, B-1070 Brussel). In Flanders (Belgium), *Calopteryx virgo* and *Cordulegaster boltonii* are mainly associated with the woods. Their habitats are described and a "dragonfly-friendly" forest management is advocated.
- (13851) DRAGONFLY NEWS. The newsletter of the British Dragonfly Society (ISSN none), No. 39 (Spring 2001). — (c/o S. Henson, 10 Shotesham Rd, Poringland, Norwich, NR14 7LE, UK). *Henson, S.*: From the Editor (p. 1); — *Beynon, T.*: From the President (pp. 2-3); — *Mill, P.*: 2000 Members' Day (pp. 3-6); — *Mahoney, G.*: Dragonflies on the Web (pp. 6-9); — *Warrillor, S.*: 2000 Field meetings round-up (p. 9); — *Averill, M.*: BDS field meetings & courses for 2001 (pp. 10-13); — *Parr, A.*: Dragonfly news for 2000: migrants & vagrants (pp. 13-15); — *Smallshire, D.*: Surveillance monitoring of Southern Damselfly (pp. 15-17); — Threat to prime dragonfly site in Devon (p. 17); — Criteria for proof of breeding in dragonflies (pp. 17-18); — *Clarke, D.*: Resilience of Azure Hawker larvae: an unintended 'experiment' (pp. 18-19); — *Mackenzie Dodds, R.*: How a dream came true: ten years of dragonflies and the public at Ashton Water (pp. 19-22); — *Brooks, L.*: Dragonflies aplenty at Pleasley (p. 22); — *Graham-Hunt, R.*: New BDS Local Group (pp. 22-23); — *Wain, B.*: BDS business (pp. 25-26); — *Wain, C.*: 2000 Annual General Meeting (pp. 26-27); — *Silsby, J.*: Worldwide Dragonfly Association (pp. 27-28). The issue also contains a few anonymous notes and announcements, and a Checklist of the Odon. of Britain & Ireland appears on cover p. 3.
- (13852) [DUNN, R.], 2001. Dragonflies of Derbyshire. *Newsl. Derbys. Nottinghams. ent. Soc.* 1: 2. — (4 Peakland View, Darley Dale, Matlock, Derbys., DE4 2GF, UK). A notification on the completion of the "Dragonflies of Derbyshire", with the Derbys. map for all odon. spp. records to date.
- (13853) FIELD TRIP HANDBOOK [of] the 15th International Symposium of Odonatology, Novosibirsk, Russia, 9-19 July 2001. Compiled by A.Yu. Haritonov, O.E. Kosterin & O.N. Popova. Issued by the S.I.O. Russian Branch, Novosibirsk. 12 pp. — (For order address see OA 13837). Schematic map of Siberia (p. 2); — Introduction (pp. 3-4); — Mid-Symposium Trip (Kolivan' Trip) (p. 5); — Post-Symposium Tour (Altai Tour) (pp. 6-9); — List of species to be observed at the Trip and Tour (pp. 10-11).
- (13854) FRUMEN, A. & U. ČERVEK, 2001. *Meritve ličink sredozemskega lesketnika Somatochlora meridionalis Nielsen, 1935* (Odonata, Corduliidae). — [*Biometry of Somatochlora meridionalis Nielsen, 1935 larvae* (Odonata, Corduliidae)]. Individualna nalogja (Animal Ecology), Dept Biol., Univ. Ljubljana. 8 pp. (Slovene). — (Second Author: V. Vlahoviča 35, SI-2000 Maribor). Based on head width and left hind tibia measurements in 100 individuals from the Negota R., NE of Brežice, Slovenia (May, June, Sept.), it is suggested life history development occurs in cohorts and lasts several yr. — See also OA 11988.
- (13855) GREENEY, H.D., 2001. The insects of plant-held waters: a review and bibliography. *J. trop. Ecol.* 17(2): 241-260. — (Yanayacu Biol. Stn & Cent.

Creative Stud., Cosanga, Ecuador; c/o Director, FEPIN, Carrion No. 21-01 y Juan Leon Mera, Quito, Ecuador). Some members of the Pseudostigmatidae, Protoneuridae, Coenagrionidae, Megapodagrionidae, Aeshnidae and Libellulidae are associated with the phytotelmata habitats. A reassessment of previous phytotelmata classification schemes and a family cross-referenced bibliography are provided. The latter includes 28 titles related to the Odon.

- (13856) HASEGAWA, M., 2001. Catalogue of the Japanese species of dragonflies in Toyohashi Museum of Natural History. *Misc. Rep. Toyohashi Mus. nat. Hist.* 10: 1-47, pls 1-2 incl. (Jap., with Engl. title & taxon. nomencl.). — (Toyohashi Mus. Nat. Hist., 1-238 Oana, Oiwa-cho, Toyohashi, 441-3147, JA).
- A catalogue of almost 200 spp., with precise collection data of all specimens.

- (13857) HOSTETTLER, K., 2001. Libellen (Odonata) in Vorarlberg (Österreich). *Vorarlberg. Naturschau* 9: 9-134. (With Engl. s.). — (Schulstr. 7, CH-8590 Romanshorn).
- A monograph on the fauna of Vorarlberg (55 spp.), W Austria, with brief species descriptions, information on habitats, biology, adult phenology and status, and with distribution maps. For some spp., annotations are included on their occurrence (etc.) in Switzerland, mostly in canton Thurgau.

- (13858) JARZEMBOWSKI, E.A., 2001. Review of early insects and palaeocommunities. *Annls Soc. ent. Fr.* (N.S.) 37(1/2): 11-19. (With Fr. s.). — (Maidstone Mus. & Bentlif Art Gallery, St Faith's St., Maidstone, Kent, ME14 1LH, UK).
- The evidence derived from the Writhlington shale on the ancient Hercynian (Variscan) foreland of southern Britain indicates that dragonflies (Odonata/Protodonata/Meganisoptera) were rare in the familiar delta plain settings, i.e. forested floodplain with freshwater wetland and waterways, of the Euramerican (Laurussian) Upper Carboniferous.

- (13859) *JOURNAL OF THE BRITISH DRAGONFLY SOCIETY*, Vol. 17, No. 1 (Apr. 2001). (c/o Dr W.H. Wain, Haywain, Hollywater Rd, Bordon, Hants, GU35 0AD, UK).

*Smith, P.H.*: Diversity of dragonflies in dune ponds at Birkdale Sandhills, Sefton Coast, Merseyside (pp. 1-12); — *Jenkins, D.K.*: Population studies of the Southern Damselfly *Coenagrion mercuriale* (Charpen-

tier) in the New Forest, 8: short range dispersal (pp. 13-19); — *Beynon, T.G.*: Colonization by White-faced Darter *Leucorrhinia dubia* (Vander Linden) of the East-West Ditch at Chartley Moss NNR, Staffordshire, with notes on its status at other pools (pp. 20-30); — *Pellow, K.*: Observations of the Red-veined Darter *Sympetrum fonscolombei* (Sélys) at Bake Lakes in Cornwall during 2000 (pp. 31-32).

- (13860) [KOTARAC, M.] PUHAR, A., 2001. Zdravo, modroriti drobiž! *Delo*, Ljubljana 43(31): 25; issue of 7 Feb. (Slovene). — (Ms A. Puhar, Dunajska 5, SI-1509 Ljubljana).
- A literary presentation (rather than a traditional book review!) of the work described in OA 11587.

- (13861) KUIPER, J., 2001. *De zonsverduistering van 11 augustus 1999, 1: De waarnemingen van het gedrag van flora en fauna*. — [*The solar eclipse of 11 August 1999, 1: Observations on plant and animal behaviour*]. KNMI-Publ. 194/1, De Bilt. 56 pp. (Dutch). — (Orders to: KNMI Library, Postbus 201, NL-3730 AE De Bilt). The booklet provides a review of observations on plant and animal behaviour, made in het Netherlands during the eclipse by 105 incidental observers. The paper, listed in OA 12835, is briefly summarized (p. 48), and notes on Odon. are presented from 't Gooi (p. 11), Hengelo/Ov. (p. 33), Almere (p. 40) and De Ellerslenk/Dronten (p. 45).

- (13862) LEGRAND, J. & M. LACHAISE, 2001. Un nouveau Gomphidae afrotropical, *Lestinogomphus matilei* n. sp. (Odonata, Anisoptera). *Revue fr. Ent.* (N.S.) 23(1): 1-8. (With Engl. s.). — (Lab. Ent., Mus. Natn. Hist. Nat., 45 rue Buffon, F-75005 Paris).
- The new sp. is described and illustrated from a single ♂ (Meru Nat. Park, Mina R., Kenya, 25-XI-1972; deposited in MNHN, Paris). A diagnosis of this genus and an illustrated redescription of its type sp., *L. angustus* Martin, are also provided.

- (13863) La *LETTRE DES SOCIÉTAIRES*, Société française d'odonatologie (ISSN 1260-0857), No. 24 (March 2001), — (c/o J.-L. Dommangelet, 7 rue Lamartine, F-78390 Bois d'Arcy).
- 16 spp., incl. an Editorial on the occasion of the 10th anniversary (1991-2001) of the SFO, outlining its origin, objectives and the past work.

- (13864) MARCONI, A., F. TERZANI & B. CARLETTI, 2001. Descrizione di *Phyllogomphus*

- bartolozzii spec. nov. della Sierra Leone (Odonata: Gomphidae). *Opusc. zool. flumin.* 199: 1-5. (With Engl. s.). — (Mus. Zool. "La Specola", Univ. Firenze, Via Romana 17, I-50125 Firenze).
- The new sp. is described and illustrated, and its affinities with *P. montanus* Fraser and *P. corbetae* Vick are discussed. Holotype ♂: Sierra Leone, Northern prov.: Bumbuna, 4/5-VI-1994; deposited at MZUF, Firenze.
- (13865) MARINOV, M., 2001. Vodni koncheta (Odonata) ot Kresnenkiya prolov. — Dragonflies (Odonata) of Kresna Gorge, SW Bulgaria. In: P. Beron, [Ed.], *Biodiversity of Kresna Gorge*, pp. 109-113, Natn. Mus. Nat. Hist., Sofia. ISBN 954-8828-02-2. (Bulg., with Engl. s.). — (P.O. Box 134, BG-1000 Sofia). An annotated list of 21 spp., with a brief discussion on their ecological features and on biogeographic composition of the fauna.
- (13866) MARTENS, A., 2001. Initial preference of oviposition sites: discrimination between living and dead plant material in *Sympetrum fonscolombii* (Odonata: Lestidae) and *Coenagrion caerulescens* (Odonata: Coenagrionidae). *Eur. J. Ent.* 98(1): 121-123. — (Zool. Inst., Techn. Univ., Fasanenstr. 3, D-38092 Braunschweig). The 2 spp. mainly oviposit into floating dead parts of emergent plants. In their initial choice of oviposition site, *S. fonscolombii* does not distinguish between fresh and dead plant material, whereas *C. caerulescens* significantly prefers dead material. In *S. fonscolombii*, the missing discrimination of the plant condition in the choice of the landing site is explained by its oviposition period, in the beginning of the vegetation period, when the green plant material is rare. *C. caerulescens* reproduces in summer and finds dead and living plants side by side. It is suggested that in the latter sp. an early recognition of dead material is advantageous in terms of the reduction of the expense in searching.
- (13867) MARTINIA. Revue scientifique de la Société française d'odonatologie (ISSN 0297-0902), Vol. 17, No. 1 (March 2001), No. 2 (June 2001), Suppl. 1 (June 2001). — (c/o J.-L. Dommange, 7 rue Lamartine, F-78390 Bois-d'Arcy). [No. 1:] *Boudot, J.-P.*: Les Cordulegaster du Paléarctique occidental: identification et répartition (Odonata, Anisoptera, Cordulegastridae) (pp. 1-34). — [No. 2:] *Leroy, T.*: Les odonates des lacs-tourbières de l'Artense en Auvergne (département du Puy-de-Dôme et du Cantal) (pp. 37-50); — *Couteyen, S. & M. Papazian*: Contribution à la connaissance des odonates de l'île de la Réunion, 4: *Sympetrum fonscolombii* (Sélys, 1840), une espèce nouvelle pour l'île (Odonata, Libellulidae) (pp. 51-53); — *Meurgey, F.*: Donnée nouvelle pour *Paragomphus genei* (Sélys, 1841): contribution à la faune des odonates de Corse (p. 54); — Les collections d'odonates du Muséum d'Histoire Naturelle de Nantes, 1: collection H. et T. Piel de Churcheville: inventaire et révision (pp. 55-56); — *Vacher, J.-P.*: Nouvelles observations d'*Oxygastra curtisii* (Dale, 1834) dans le département de la Haute-Garonne (Odonata, Corduliidae) (pp. 67-68); — *d'Aguilar, J.*: Les descriptions originales des odonates d'Europe, 7: Sulzer Johan Heinrich (1735-1813) (pp. 69-74). — [Suppl. 1:] *Levasseur, M. & J.-L. Dommange*: Martinia Index 1985-2000 (pp. 1-44).
- (13868) NIEUWSBRIEF VAN DE NEDERLANDSE VERENIGING VOOR LIBELLENSTUDIE (ISSN 1387-4470), Vol. 5, No. 1 (dated Febr. 2001, received 1 June 2001) (Dutch, 1 note Engl.). — (c/o M. Wasscher, Minstraat 15 bis, NL-3582 CA Utrecht). Includes Balance Account (2000) and Estimates (2001) of the Netherlands Odonatological Society, the addresses of the 12 current odonat. regional groups in the Netherlands, and 4 scientific notes, viz.: *Bernard, R.*: The exact reproduction locality of *Nehalemma speciosa* near Nijmegen (p. 9; with postscript by *M. Wasscher & R. Ketelaar*); — *Scheffers, J.*: [Celtithemis eponina] in a greenhouse in Honselaarsdijk (pp. 9-10); — *Wasscher, M.*: [Trithemis annulata] in the Netherlands? (p. 10); — *Van der Meulen, H.*: Native and outlandish dragonflies in Beekvliet nr Lochem (pp. 10-11).
- (13869) NYSTRÖM, P., O. SVENSSON, B. LARDNER, C. BRÖNMARK & W. GRANELI, 2001. The influence of multiple introduced predators on a littoral pond community. *Ecology* 82(4): 1023-1039. (Dept Ecol., Ecology Bldg, Lund Univ., S-22362 Lund). Contains passing references to the Odon.
- (13870) ODONATOLOGICAL ABSTRACT SERVICE (ISSN 1438-0269), No. 8 (July 2001). — (c/o Dr M. Lindeboom, Landhausstr. 10, D-72074 Tübingen & M. Schorr, Waldfrieden 25, D-54314 Serf). Abstracts Nos 1983-2517, on 44 pp., related to the works published in 1997-2001.
- (13871) PANTALA. International Journal of Odonatology (ISSN 1388-7890), Vol. 4, No. 1 (3 Apr. 2001). *Bang, C.*: Constructed wetlands: high-quality habitats

for Odonata in cultivated landscapes (pp. 1-15); — *Dijkstra, K.-D.B., A. Cordero Rivera & J.A. Andrés*: Repeated predation of Odonata by the hornet Vespa crabro (Hymenoptera: Vespidae) (pp. 17-21); — *Leipelt, K.G. & F. Suhling*: Habitat selection of larval Gomphus graslinii and Oxygastra curtisii (Odonata: Gomphidae, Corduliidae) (pp. 23-34); — *Marinov, M.*: The Orthetrum coerulescens complex in Bulgaria (Odonata: Libellulidae) (pp. 35-40); — *May, M.L. & P.S. Corbet*: Occurrence and taxonomic significance of a palpal spine in larvae of Enallagma and other genera (Odonata: Coenagrionidae) (pp. 41-49); — *Orr, A.G. & J. van Tol*: Pseudagrion lalakense spec. nov. from Borneo with notes on its ecology (Odonata: Coenagrionidae) (pp. 51-56); — *Paulson, D.R.*: Recent Odonata records from southern Florida — Effects of global warming? (pp. 57-69); — *Tennessean, K.J.*: Coryphaeschna huaorania spec. nov. from central Ecuador with keys to all species in the genus (pp. 71-81); — *Van Gossum, H., R. Stoks & L. De Bruyn*: Discriminative mate choice in relation with female maturation in Ischnura elegans (Odonata: Coenagrionidae) (pp. 83-91).

(13872) PINRATANA, A., 2001. *Autobiography*. Chokchai Creation Printing, Bangkok. iv+92 pp. Softcover (14.5×21 cm), with numerous phot. — (Publishers: 45 Salaphee 1, Itsalaphap, Somdey Chaophraya, Klongsan, Bangkok-10600, Thailand). A fascinating account of professional life and work of Dr A. Pinratana (Father Philip), born 18 Dec. 1929, doyen of Thai odonatology, and the author of 30 works on botany, lepidopterology, odonatology and ornithology of Thailand (1971-1996).

(13873) PROGRAM AND GENERALITIES [of] the 15th International Symposium of Odonatology, Novosibirsk, Russia, 9-19 July 2001. Compiled by A.Yu. Haritonov, O.E. Kosterin & O.N. Popova. Issued by the SIO Russian Branch, Novosibirsk. 12 pp. — Available along with the *Abstract* and *Field Trip* booklets; for order address see OA 13837.

Committee of Honour (p. 2; B. Kiauta & K. Inoue); — Organizing Committee (p. 2; A.Yu. Haritonov, O.V. Golovacheva, O.E. Kosterin, O.N. Popova); — Host (p. 2; Inst. Anim. Syst. & Ecol., Siberian Br., Russ. Acad. Sci., Novosibirsk); — General information (p. 3); — Program (pp. 4-9); — List of participants (pp. 10-12).

(13874) PTEROBOSCA. Newsletter of the Japanese

Society for Odonatology (ISSN none), No. 7A (31 May 2001). (Jap., with Engl. journal title). — (Orders to: Prof. Dr S. Eda, Dept Oral Pathol., Matsumoto Dental Univ., 1780 Gobara, Hirooka, Shiojiri, Nagano, 399-0781, JA).

[Abstract not available].

(13875) ROBILLER, F.C., 2001. Naturerlebnis Gartenteich: Insekten und andere Kleintiere. *Datz* 54(4): 12-15. — (Author's address not stated).

Includes a review of observations on 14 odon. spp. in Author's garden pond. Remarkable is a 4-day visit by 2 ♂ and 1 ♀ Leucorrhinia dubia (incl. oviposition).

(13876) SCHMIDT, Eb., 2001. Der Plattbauch Platetrum depressum (L., 1758) (Odonata), das Insekt des Jahres 2001. *Ent. Nachr. Ber.* 45(1): 1-8. (With Engl. s.). — (Biol. Didaktik, FB-9/S05, Univ. Essen, D-45117 Essen).

On structural grounds, *Libellula depressa* L. is considered the type sp. of *Platetrum* Newman, 1833. The taxonomy and biogeography, and the biology/ecology of the sp. in central Europe are summarized.

(13877) STOKS, R., 2001. Male-biased sex ratios in mature damselfly populations: real or artefact? *Ecol. Ent.* 26(2): 181-187. — (Lab. Aquat. Ecol., K. Univ. Leuven, De Bérotstraat 32, Leuven, Belgium).

There is ongoing controversy about whether biased sex ratios in diploid insect populations are real or an artefact caused by different behaviours and/or different catchability of the sexes. This was tested by monitoring 2 field and 3 semi-natural populations of *Lestes sponsa*. — Capture-mark-recapture data showed that population size estimates were about twice as large for ♂♂ as for ♀♀ at both field sites. Independent estimates of the sex ratios based on total numbers of ♂♂ and ♀♀ captured supported the ♂-bias. — ♂♂ had higher recapture probabilities than ♀♀ due to longer times between successive visits in ♀♀. Because the same pattern was found in the semi-natural populations, the longer intervals in ♀♀ are no artefact due to their lower detectability. — Theoretical models show that the strong temporary emigration of ♀♀ tends, if anything, to overestimate ♀ population sizes and that the heterogeneity of recapture probabilities observed in ♂♂ tends to underestimate ♂ population sizes. Hence, behavioural differences between the sexes do not cause an artificially ♂-biased sex ratio. — Spatial data show that operational sex ratios are ♂-biased at the pond but become ♀-biased in the plots further away from the

shoreline; however, because of the decrease in densities away from the shoreline, this does not result in a global even sex ratio. — Spatial data, temporary emigration patterns, and independent estimates suggest strongly that the ♂-biased sex ratios in mature damselfly populations are real.

- (13878) STOKS, R., 2001. What caused male-biased sex ratios in mature damselfly populations? *Ecol. Ent.* 26(2): 188-197. — (Lab. Aquat. Ecol., K. Univ. Leuven, De Bérotstraat 32, Leuven, Belgium).

Several hypotheses to account for biased sex ratios in mature insect populations were tested by monitoring 2 field populations of *Lestes sponsa* and by performing experiments in field cages. The population sex ratios are heavily ♂-biased in this sp. — The observed sex ratio at emergence was even and both sexes emerged synchronously. ♀♀ had longer maturation times but these were insufficient to explain the observed sex ratio shift. — Mass increases during maturation were consistently larger in ♀♀. In agreement with this, immature ♀♀ made more flights per unit of time, which should make them more vulnerable to predation, however, maturation probabilities were lower in ♀♀ only in 1 field cage experiment. This inconsistency may be due to long bad weather conditions. Interestingly, predators reduced mass increase and this reduction was larger in ♀♀ than in ♂♂. — Calculations based on the sex specific maturation times show that only slightly lower daily survival probabilities during maturation in ♀♀ are enough to generate the observed sex ratio shift. — Mature survival was higher in ♂♂ than in ♀♀ in 1 field population but not in another, indicating that this cannot be a general mechanism causing the sex ratio. A higher maturation probability in ♂♂ is, therefore, the most plausible mechanism causing the sex-ratio shift in damselfly populations.

- (13879) SUGIMURA, M., S. ISHIDA, K. KOJIMA, K. ISHIDA & T. AOKI, 2001. *Dragonflies of the Japanese archipelago in color*. Hokkaido Univ. Press, Sapporo. xxvi + 641 pp., 350 col. pls incl. (30.0×21.5 cm; 2.7 kg), slip case. ISBN 4-8329.0292-X. — Price: ¥ 63.000.- net; postage & overhead costs excl. — Published in 100 copies only. — (Orders accepted by the Editors of *Odonatologica*, P.O. Box 256, NL-3720 AG Bilthoven).

This is an Engl. edn of the monumental & standard work on the Japanese fauna, as described in OA 12862, covering 197 spp. and 17 sspp., with detailed descriptions, structural figs, more than 3600 col. phot.

of adults, larvae and their habitats, pictorial keys to all spp., chapters on phylogeny, biology, behaviour, biogeography, regional distribution, etc. — A reprint of this limited luxury edn is at present not considered.

- (13880) SUHLING, F., 2001. Intraguild predation, activity patterns, growth and longitudinal distribution in running water odonate larvae. *Arch. Hydrobiol.* 151(1): 1-15. — (Zool. Inst., Techn. Univ. Braunschweig, Fasanenstr. 3, D-38092 Braunschweig). In a laboratory artificial stream, predation by *Cordulegaster boltonii* larvae on those of *Onychogomphus forcipatus unguiculatus* and *O. uncatus* was studied. *O. f. unguiculatus* suffered significantly higher predation losses than *O. uncatus*. In the latter, activity was much lower, which is interpreted as an anti-predation trait against the sit-and-wait *C. boltonii*. Hearing of both *Onychogomphus* spp. in field cages under equal conditions revealed lower growth rates in *O. uncatus*, to be interpreted as a cost of its antipredation behaviour. Based on field samples from various river systems in S France where the 2 spp. co-occur, *O. f. unguiculatus* does not coexist with *C. boltonii* at sites where the latter occurs in high numbers, while *C. uncatus* is established even at high density of *C. boltonii*.

- (13881) SYMPETRUM, HYOGO, Vol. 7/8 (18 Feb. 2001). ISSN none. (Jap., with Engl. s's). — (c/o S. Nishu, 247 Gunge Shonomoto, Migake-cho, Higashinada-ku, Kobe, Hyogo, 658-0057, JA). *Inoue, K.*: Non-contact sitting oviposition of *Sympetrum maculatum* (pp. 1-2, cover phot. incl.); — *Sogame, S.*: Odonate fauna of Takarazuka city, Hyogo pref., pt 2: in 2000 (p. 3); — *Azuma, T.*: Distribution of *Trigomphus melampus* in Hyogo pref. (pp. 4-5); — *Aoki, T.*: Odonata fauna of Kobe city, pt 9: Corduliidae and Suppl. 2 (pp. 6-8); — *Kamigaki, K.*: Intergeneric tandem of *Sympetrum frequens* ♂ and *Pantala flavescens* ♀ (p. 9); — *Tabata, O.*: Odonate fauna of Hongo, Sasayama city, Hyogo pref. (pp. 10-12); — *Aoki, T.*: 3 males of *Sympetrum depressiusculum* were caught in Ibogawa-cho, Hyogo pref. (p. 13); — *Azuma, T.*: Odonate fauna of Sanda city, Hyogo pref. (pp. 14-20); — *Nishu, S.*: *Tramea virginia* observed at the Expo site of Japan Flora 2000 (p. 21); — *Nishu, S. & T. Azuma*: Northern record of *Ictinogomphus pertinax* in the southern part of Hyogo pref. (pp. 22-23); — *Nishu, S.*: *Aeshna mixta sonorensis* caught in Toyano-gata Pond, Niigata pref. (p. 23); — *Kosterin, O.E. & Yu. Haritonov & K. Inoue*: Dragonflies of the part of

Novosibirsk prov. East of the Ob' river, Russia (pp. 24-49; bilingual: Jap./Engl.); — *Oka, I.*: Some observations on the behaviour of *Sympetrum frequens* (pp. 50-53); — *Nishu, S.*: Report of the survey trips of the Hyogo Society of Odonatology in 1999, pt 1, focussed to *Libellula angelina* (pp. 53-56); — [...], pt 2, focussed to *Mortonagrion hirosei* and *Stylurus nagoyanus* (pp. 57-61); — Report of the survey trips of the Hyogo Society of Odonatology in 2000, pt 1, focussed to *Libellula angelina* (pp. 62-66); — [...], pt 2, focussed to *Chlorogomphus brunneus costalis* (pp. 67-69); — [...], pt 3, focussed to *Mortonagrion hirosei* and *Stylurus nagoyanus* (pp. 71-73); — *Aoki, T.*: Active flights of *Chlorogomphus brunneus costalis* in late evening (p. 70); — *Nishu, S.*: Record of the odonate fauna of Dragonfly Pond in Kyoto Gyo-en, Kyoto pref. (pp. 74-75).

(13882) TERZANI, F., 2001. Odonati. In: A. Sforzi & L. Bartolozzi, [Eds], *Libro Rosso degli insetti della Toscana*, pp. 49-70, Arisia, Firenze. — (Mus. Zool. "La Specola", Univ. Firenze, Via Romana 17, I-50125 Firenze).

20 out of the 55 spp. known to occur in the province of Toscana, Italy are redlisted. Col. portraits, provincial distribution maps, and statements on their habitat, biology, ecology, distribution and status are provided.

(13883) TERZANI, F. & B. CARLETTI, 2001. Descrizione di *Pseudagrion bernardi* spec. nov. della Repubblica del Congo (Odonata: Coenagrionidae). *Opusc. zool. flumin.* 199: 7-12. (With Engl. s.). — (Mus. Zool. "La Specola", Univ. Firenze, Via Romana 17, I-50125 Firenze).

The new sp. is described and illustrated, and its affinities with *P. kibalense* Longf., *P. symoensii* Pinhey and *P. fisheri* Pinhey are discussed. Holotype ♂, allotype ♀: Republic of Congo: Kintele, 6-XI-1978; deposited at MZUF, Firenze.

(13884) TOMBO. ACTA ODONATOLOGICA JAPONICA (ISSN 0496-8314), Vol. 43, No. 1/4 (31 May 2001) (Jap. & Engl., with Engl. titles & s's). — (c/o Prof. Dr S. Eda, Dept Oral Pathol., Matsumoto Dental Univ., Gobara, Hirooka, Shiojiri, Nagano, 399-0781, JA).

*Kano, K.*: Copulation of *Epiophlebia superstes* (Selys) at Shiroyama in Kanagawa pref. on May 19, 2000 (cover phot.); — *Karube, H. & W.-C. Yeh*: *Sarasaeschna* gen. nov., with descriptions of female *S. minuta* (Asahina) and male penile structures of *Linaeschna*

(Anisoptera: Aeshnidae) (pp. 1-8); — *Karube, H.*: New species of the genus *Chlorogomphus* from Yunnan, China (Cordulegastridae: Chlorogomphinae) (pp. 9-11); *C. daviesi* sp. n.); — *Ohshima, Y. & H. Karube*: Discovery of *Davidius moiwanus sawanoi* from Okayama prefecture (pp. 12-13); — *Sasamoto, A.*: Description of a new subspecies of *Stylogomphus lawrenceae* Yang & Davies, 1996 from the Malay peninsula (Anisoptera: Gomphidae) (pp. 14-18; *S. l. malayanus* ssp. n.); — *Kawashima, I.*: Description of the female adult of *Oligoaeschna niisatoi* Karube, 1998 (Aeshnidae) (pp. 18-20); — *Malikova, E.I. & R. Seidenbusch*: Description of a female *Macromia manchurica* Asahina, 1964 (Macromiidae) (pp. 21-22); — *Matsuki, K.*: Description of the last instar larva of *Euphaea ochracea* Selys, 1859 from Thailand (Euphaeidae) (pp. 23-24); — *Eda, S.*: A riverine species, *Anisogomphus maacki* Selys, is able to live in a large Lake Suwa-ko in Nagano prefecture (p. 24); — *Yokoi, N.*: Nine species of dragonflies recorded for the first time in Laos (pp. 25-28); — *Kita, H.*: *Rhyothemis fuliginosa* Selys carrying her exuviae on the tip of abdomen (p. 28); — *Naraoka, H.*: Discovery of *Ischnura e. elegans* (Vander Linden) in Aomori prefecture (Coenagrionidae) (pp. 29-30); — *Futahashi, R., H. Futahashi & Y. Araki*: Recent findings concerning Odonata in Hokuriku district (pp. 31-36); — *Wada, S.*: The first records of *Macromia daimoji* from Fukui prefecture (pp. 37-38); — *Futahashi, R.*: A new record of *Sympetrum maculatum* from Shizuoka prefecture (pp. 38-39); — *Fukui, M. & S. Ena*: New records of *Anaciaeschna jaspidea* from Shizuoka prefecture (p. 40); — *Fukui, M.*: Annual fluctuation of the population of *Libellula angelina* at Okegayanuma, Iwata, Shizuoka prefecture (pp. 41-44); — *Kagimoto, B.*: The historical background of the discovery of *Orthetrum poecilops miyajimaense* Yuki & Doi, 1938 (pp. 45-50); — *Sugimura, M. & R. Futahashi*: Second record of an interspecific hybrid between *Sympetrum e. eroticum* (Selys, 1883) and *S. parvulum* (Bartenef, 1912) (Libellulidae) (pp. 51-54); — *Kita, H. & R. Futahashi*: A female hybrid between *Anax n. nigrofasciatus* Oguma, 1915 and *A. parthenope julius* Brauer, 1865 (Aeshnidae) from Miyagi prefecture (pp. 54-55); — *Kojo, T.*: An observation of a long roosting time in *Pantala flavescens* Fabricius (p. 56); — *Kano, K.*: A cleaning behavior of *Davidius m. moiwanus* (Okumura) after oviposition (pp. 57-58); — *Yokoyama, T.*: Larval growth of some dragonflies at the veranda of a condominium in Sapporo (pp. 58-59); — *Eda, S.*: Annual meeting of the Japanese Society for

Odonatology in 2000 (p. 60); — Obituary of Imato Sonehara (p. 60).

(13885) TONN, M., 2001. Herzchen unterwegs. *Berlin. Ztg*, issue of 15 May. — (Author's address unknown). A national daily's article on dragonflies, at the outset of the adult season.

(13886) UEDA, K. & Y. YOSHIYASU, 2001. A list of Japanese insect collection by P.F. von Siebold and H. Bürger preserved in Nationaal Natuurhistorisch Museum, Leiden, the Netherlands. 3: other orders. *Bull. Kitakyushu Mus. nat. Hist.* 20: 81-143, col. pls 3-9 excl. — (First Author: Kitakyushu Mus. & Inst. Nat. Hist., 3-6-1 Nishihonmachi, Yahatahigashi-ku, Kitakyushu, 805-0061, JA). A descriptive catalogue, with annotations and comments, and with photographs of specimens and the respective labels. The Odon. listed are: Calopteryx atrata, C. cornelia, Mnais pruinosa (lectotype designated by M.A. Lieftinck), Sieboldius albardae, Anotogaster sieboldii (holotype?), and Rhyothemis fuliginosa.

(13887) VAN DEN BRAND, S., 2001. Terug naar ons Krijtland. *Natura, Amst.* 2001(2): 50-54. (Dutch). — (Postbus 92, NL-7103 BS Winterswijk). Includes a passing reference to Calopteryx splendens on the Geul R., Zuid Limburg prov., the Netherlands.

(13888) VAN VELZEN, J.-W., 2001. *Waarnemingen-overzicht 2000*. — [Report on the observations in the 2000 season]. KNNV Libellenwerkgroep Zuid-Kennemerland, Heemstede. 47 pp. (Dutch). — (Hobbemastraat 37, NL-2102 BJ Heemstede). A thoroughly prepared annual review of odon. survey work in Zuid-Kennemerland, Noord Holland prov., the Netherlands. 29 spp. were recorded along 31 monitoring routes. Comprehensive annotations are presented for each sp., species lists are given for each locality and

some protective measures are advocated.

(13889) WILLIAMSONIA. A newsletter of the Michigan Odonata Survey. ISSN none. Vol. 5, No. 2/3 (June 2001). — (c/o Dr M.F. O'Brien, Insect Div., Mus. Zool., Univ. Michigan, 1109 Gaddes Ave, Ann Arbor, MI 48109-1079, USA).

*Anonymous*: Year 2001 goals (pp. 1-2); — Spring sightings (p. 2); — New Michigan county record for the Ringed Boghaunter (pp. 2-3; Williamsonia lintneri); — Ross, S.B.: More Bog-Haunters from Mecosta Co. (p. 3; Williamsonia lintneri); — *Anonymous*: MOS at the Blue Bird Festival (pp. 3-4); — O'Brien, M.F.: Hine's Emerald Dragonfly: a federally-endangered species Somatochlora hineana Williamson (pp. 5-6); — *Anonymous*: June 10 field trip (p. 7; Crystal R., records for 15 spp.); — Exuviae collection containers (p. 9); — O'Brien, M.: Zebra mussels and Odonata larvae (p. 9). — Some announcements and book reviews are also included.

(13890) YEH, W.-C. & Y.-M. CHEN, 2001. *Taiwan dragonflies postage stamps pictorial: stream dragonflies*. Directorate General of Posts, Taipei. 20 pp., hardcover (25.5x18.5 cm). ISBN none. — Price: NT\$ 180.- net. (Bilingual: Chin. & Engl.). An exceptionally attractive book, on an unusual subject. A brief characterisation of the order is followed by chapters on "Dragonfly and humans", "The life of a dragonfly", and "Home in the streams", whereafter the biology of Anotogaster sieboldii, Lamelligomphus formosanus, Neurothemis ramburii, and Trithemis festiva is described. A chapter on dragonfly conservation concludes the volume, which is beautifully illustrated throughout. The peculiarity are the original postage stamps, mounted in protective cellophane at the appropriate places. — The book is a little "jewel" for an odontological library.