

ODONATOLOGICAL ABSTRACTS

1972

- (13633) KRAJEWSKI, S., 1972. Fauna Niebieskich Źródeł: larvy ważek (Odonata). — Fauna of Niebieskie Źródła: dragonfly larvae (Odonata). *Zesz. nauk. Univ. łódz.* (II) 46: 41-45. (Pol., with Engl. s.). — (Author's current address unknown).
12 spp. are reported from this Nature Reserve, central Poland and their abundance is commented upon. — For a current checklist, see OA 13732.

1987

- (13634) RESUMOS 14 CONGRESSO BRASILEIRO DE ZOOLOGIA, 1987. Depto Biol., ICBG, Univ. Fed. Juiz de Fora, MG, 281 pp. [Abstracts only].
[Odon. papers:] *Carvalho, A.L.*: Aspectos biológicos e taxonomicos de duas novas formas imaturas de Gynacanthini brasileiras (Insecta, Odonata, Aeshnidae) (p. 46); — *Santos, N.D., J.M. Costa & J.R. Pujol-Luz*: Predação de alevinos por larvas de odonatas em pisciculturas (p. 47); — *Machado, A.B.M.*: Sobre uma nova especie de Heteragrion do estado de Minas Gerais (Odonata: Megapodagrionidae) (p. 47: descriptive notes, without name).

1995

- (13635) VAN LIPPE-BIESTERFELD, I., 1995. *Dialog met de natuur: een weg naar een nieuw evenwicht.* — [Dialogue with nature: a way to a new balance]. Ankh-Hermes, Deventer. 183 pp. Paperback. ISBN 90-202-9085-1. (Dutch).
Irene Van Lippe-Biesterfeld, born Princess of Oranje-Nassau, is a sister of the Queen of the Netherlands. On pp. 99-100 of this autobiographic work, she is

giving, with much personal feeling, an outline of her metaphysical experience of the dragonfly, considering it as a symbol of breaching illusions and a symbol of change. She is also author of the dragonfly vignettes, appearing throughout the book.

1998

- (13636) DUCOMMUN, A., 1998. Etude des insectes aquatiques 1995-1996: Réserve naturelle du Marais des Pontins s/Saint-Imier. *Mitt. naturf. Ges. Bern* (N.F.) 55: 27-34. — (Author's address not stated).
8 odon. spp. are recorded from the Marais des Pontins Nature Reserve, canton Bern, Switzerland.
- (13637) XYLANDER, W.E.R. & R. STEPHAN, 1998. Die Libellen des Braunkohletagebaugebiets Berzdorf. *Abh. Ber. NaturkMus. Görlitz* 70(2): 65-80. (With Engl. s.). — (Staat. Mus. Naturk. Görlitz, Postfach 300154, D-02806 Görlitz).
The odon. fauna (48 spp.) of the open-cast coal mining area of Berzdorf nr Görlitz, Saxony, E Germany is described. 5 groups of ponds and a brook, significantly differing in age, structure and physico-chemical parameters, are discerned and their odon. communities are analysed.
- (13638) XYLANDER, W.E.R., R. STEPHAN & R. FRANKE, 1998. Erstnachweise und Wiedernachweise von Libellen (Odonata) für den Freistaat Sachsen und die Oberlausitz. *Abh. Ber. NaturkMus. Görlitz* 70(1): 37-46. (With Engl. s.). — (Staat. Mus. Naturk. Görlitz, Postfach 300154, D-02806 Görlitz).
Crocothemis erythraea is recorded for the first time from Saxony, and 6 other spp. are new for Upper Lusatia; E Germany.

1999

- (13639) BROCKHAUS, T., 1999. Die Libellenfauna des unteren Zschopautales. *Mitt. sächs. Ent.* 47: 26-28. — (An der Morgensonne 5, D-09387 Jahnsdorf/Erzdorf).
For the sake of drinking-water supply in the lower Zschopau Valley (Erzgebirge, E Germany), until 1996 the groundwater table has been kept high by pumping, hence various large ponds were created. These harboured (1994-1996) 21-22 odon. spp. (17 spp. breeding). When the system was changed, the ponds dried-up. In 1996 only 7 spp. were recorded, 6 of which breeding. — See also OA 8333.
- (13640) BROCKHAUS, T., 1999. Sächsische Libellentagung in Bad Schandau. *Mitt. sächs. Ent.* 48: 28-29. — (An der Morgensonne 5, D-09387 Jahnsdorf/Erzdorf).
A brief account of the proceedings of the 2nd meeting of Saxonian odonate workers, attended by 15 persons; 5/6-XI-1999. The progress on the "Entomofauna saxonica" project was the main topic.
- (13641) DE BRUYN, L., P. GROOTAERT, M. POLLET & G. DE KNIJF, 1999. Hebben ongewervelden een toekomst in onze tuinen? — [Is there a perspective for the invertebrates in our gardens?] *Ankora Jaarb.* 1999: 68-83. (Dutch). — (Last Author: Ploegstraat 33, B-9050 Gent).
The odon. fauna of 2 gardens in Flandres, Belgium is compared with that of 3 nature reserves. The garden assemblage appears very poor and it consists solely of ubiquitous, non-specialised spp.
- (13642) DE MARCO, P., Jr, A.O. LATINI & A.P. REIS, 1999. Environmental determination of dragonfly assemblage in aquaculture ponds. *Aquacult. Res.* 30: 357-364. — (Lab. Ecol. Quantitativa, Depto Biol. Geral, Univ. Fed. Viçosa, BR-36517-000 Viçosa, MG).
The patterns of larval odon. communities in aquaculture ponds in Viçosa, SE Brazil are described with the objective to determine the influence of environmental and bionomic parameters on their composition and species richness. Vegetation determines the occurrence of some spp., whose adults require certain plants for oviposition. The ponds where the vegetation is lacking have lower species richness. The large-size spp. (*Coryphaeschna adnexa*, *Brachymesia furcata*) have low abundance or occur accidentally. Spp. of intermediate size (*Tramea* cophysa, *Micrathyria* spp., *Orthemis discolor*, *Erythrodiplax fusca*) are more abundant and are considered as potential predators on fish fry.
- (13643) POPOVA, O.N. & A.Yu. HARITONOV, 1999. Geograficheskoe rasprostranenie strekoz roda *Sympetrum*. — [Biogeographical distribution of dragonfly genus *Sympetrum*]. *Vest. chelyabinsk. gos. pedagog. Univ.* (X) 1999(1): 7-15. (Russ.). — (Inst. Anim. Syst. & Ecol., Siber. Br., Russ. Acad. Sci., ul. Frunze 11, RUS-630091 Novosibirsk).
The biogeographic features of the genus are concisely outlined and some amendments in the subdivision of some holarctic biogeographic provinces are proposed. The genus is considered the youngest in the Odon., and is represented in all continents except Australia. Its primary centre of origin and speciation is in E Asia. the other centres of speciation are in southern North America and in the Mediterranean; the latter is the youngest of them. Though its members are structurally and ecologically fairly uniform, a pronounced diversity is apparent in species ranges. Due to interspecific competition, nowhere more than 5-7 spp. co-occur. — See also OA 12854.
- (13644) REINHARDT, R. & F. PIMPL, 1999. Beitrag zur Insektenfauna des Landkreises Mittweida. *Mitt. sächs. Ent.* 47: 8-17. — (First Author: Burgstädter Str. 80a, D-09684 Mittweida).
Includes a checklist of 11 odon. spp.; Mittweida distr., E Germany.
- (13645) SCHULZ, R., R.-U. MUHLE & T. WILKE, 1999. Zur Odonatenfauna des einstweilig gesicherten Teichgebietes Lakoma. *Beitr. Tierw. Mark* 14: 71-76. (With Engl. s.). — (First Author: Inst. Ökol. u. Naturschutz, Univ. Potsdam, Lennéstr. 7a, D-14471 Potsdam).
19 spp. are reported from the fishpond area of Lakoma, Lausitz, E Germany.
- (13646) SHESHURAK, P.N., 1999. K izucheniyu entomofauny Nacional'nogo parka "Pripyatskiy": strekozy (Odonatoptera). — [Contribution to the knowledge of insect fauna of the Pripyatskiy National Park: dragonflies (Odonatoptera)]. In: *Biologicheskoe raznoobrazie Nacional'nogo parka "Pripyatskiy" ...* [...], pp. 217-221, Nac. park "Pripyatskiy", Turov-Mozyr. (Russ.). — (St. Pedagog. Inst. "N. Gogol", Nezhin, Ukraine).
A commented list of 32 spp.; — Belarus.

- (13647) SHESHURAK, P.N. & E.V. MISAN, 1999. Nasekomye (Insecta) Nacional'nogo parka "Pripyatskiy", zanesennyye v Krasnuyu knigu Respubliki Belarus, v Evropeyskiy krasnyy spisok, v Krasnuyu knigu MSOP. — [Pripyatskiy National Park insects listed in the Belarus Red Book, the European Red List and in the IUCN Red Book]. In: *Biologicheskoe raznoobrazie Nacional'nogo parka "Pripyatskiy" ...* [...], pp. 225-228. Nac. park "Pripyatskiy", Turov-Mozyr. (Russ.). — (St. Pedagog. Inst. "N. Gogol", Nezhin, Ukraine).
4 odon. spp. are redlisted in one or several of the said documents.
- (13648) WAKEHAM-DAWSON, A., T. BENTON & V. BARNHAM, 1999. Butterflies and dragonflies in northern Greece, 27 June-9 July 1997. *Ent. Rec. J. Var.* 111(3): 121-128. — (First Author: Mill Laine Farm, Offham, Lewes, East Sussex, BN7 3QB, UK).
5 odon. spp., incl. *Epallage fatime*, are listed from Mt Falakrón, NW of Dráma.
- (13649) YANIBAEVA, V.A., 1999. K karakteristike odonofauny Bashkirkogo zapovednika. — To the characteristics of the fauna of dragonflies in the Bashkir Reserve. *Izucheniye Prirody v Zapovednikakh Baskortostana* 1: 200-203. (Russ., with Engl. s.). — (Bashkir St. Nature Reserve, Russia).
A checklist of 24 spp., incl. *Somatochlora graeseri*, which is abundant in the Reserve and it is here for the first time recorded from South Ural.
- (13650) YANIBAEVA, V.A., 1999. O novykh nahodkakh strekoz na Yuzhnom Urale. — [New dragonfly records from South Ural]. In: *Fauna i flora respubliki Bashkortostan*, Ufa, pp. 65-69. (Russ.). — (Bashkir St. Nature Reserve, Russia).
40 spp., evidenced during 1996-1998 in the Bashkir State Nature Reserve and from the regional submontane lakes are listed. *Coenagrion ecornutum* is new to the fauna of South Ural, bringing its status to 54 spp. *Ischnura aralensis haritonovi* is synonymised with *I. aralensis f. aurantiaca*.
- (13651) ANAX, WIEN. Mitteilungsblatt der Österreichischen Arbeitsgemeinschaft Libellen (ÖAL) (ISSN 1023-0883), Vol. 2, No. 2 (not published), Vol. 3 (dated 15 Oct. 2000, received 14 Feb. 2001). (Germ., with Engl. s's). — (c/o Mag. R. Raab, Anton-Brucknergasse 2/2, A-2232 Deutsch-Wagram).
Ehmann, H.: Libellenfunde im Bundesland Salzburg 1990-1999 (Insecta: Odonata) (pp. 1-17); — *Müller, H.*: Untersuchungen zu *Cordulegaster heros* Theischinger, 1979 und *C. bidentata* Selys, 1843, 1: Imagines (pp. 19-22); — 2: Larven (pp. 23-27); — *Sonntag, H.*: Erster Bodenständigkeitsnachweis von *Aeshna mixta* Latreille, 1805 für das Bundesland Tirol (pp. 29-30); — *ÖAL-Nachrichten* (pp. 31-32).
- (13652) ANDRES, J.A., R.A. SANCHEZ-GUILLEN & A. CORDERO RIVERA, 2000. Molecular evidence for selection on female color polymorphism in the damselfly *Ischnura graellsii*. *Evolution* 54(6): 2156-2161. — (Third Author: Depto Ecol. & Biol. Animal, Univ. Vigo, E.U.E.T. Forestal, Campus Universitario, ES-36005 Pontevedra).
The signification of ♀ colour polymorphism in Odon. remains controversial despite many field studies. The importance of random factors (founder effects, genetic drift and migration) vs selective forces for the maintenance of this polymorphism is still under discussion. Here, it is specifically stated whether the ♀ colour polymorphism of *I. graellsii* is under selection in the wild. The degree of genetic differentiation based on RAPD markers (assumed to be neutral) is compared with the degree of differentiation based on colour alleles. Weir & Cockerham's θ values showed a significant degree of population differentiation for both sets of loci (RAPD and colour alleles), but the estimated degree of population differentiation (θ) was significantly greater for the set of RAPD loci. This shows that some kind of selection contributes to the maintenance of similar colour morph frequencies across the studied populations. These results, combined with those of previous field studies suggest that at least in some *I. graellsii* populations, density-dependent mechanisms might help to prevent the loss of this polymorphism, but cannot explain the similarity in morph frequencies among the populations.
- (13653) ARGIA. The news journal of the Dragonfly Society of the Americas (ISSN 1061-8503), Vol. 12, No. 4 (15 Dec. 2000). — (c/o Dr & Mrs T.W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13903, USA). [Signed articles:] *Baumann, R.W. & A.L. Huillet*: Odonata of Moapa Warm Springs, Clark county, Nevada (pp. 2-3); — *Paulson, D. & S. Potter*: Three dragonflies new to Nevada (p. 3); — *Danforth, D.*: First record of *Dythemis maya* for Arizona (p. 3); — *Flint, O.*: *Nehalennia pallidula* in Texas (pp. 3-4); —

2000

- Sibley, F.C.*: New records of *Sympetrum signiferum* from Arizona (pp. 4-5); — *Upson, S.*: Life history observations on *Sympetrum signiferum* in Arizona (pp. 5-6); — *Flint, O.*: *Sympetrum signiferum* at Leslie Canyon, Arizona (pp. 6-7); — *Moskowitz, D.*: A new county record for *Archilestes grandis* in New York, with notes on habitat and water quality (pp. 7-8); — *Donnelly, N.*: Hybrid *Enallagma anna* and *civile* from Ontario and Iowa (pp. 8-9); — A hybrid *Ophiogomphus* female again (p. 9); — *Duhé, R.*: Ant lion eats *Erythemis* (p. 9); — *Smith, B.*: *Cicindela* larva eats *Gomphus* (p. 9); — *Daigle, J.J.*: Sarasota surprise (pp. 9-10; Florida, records of exotic spp.); — *O'Brien, M.*: New additions to the University of Michigan Museum of Zoology Odonata library (p. 10; donation of L.K. Gloyd's library); — *Laudermilk, E.*: Carl Cook receives award (p. 11); — *Donnelly, N.*: Review: "Dragonflies of North America", by J.G. Needham, M.J. Westfall & M.L. May (pp. 11-13).
- (13654) **ARNOLD, A.**, 2000. Verbreitungsatlas der Libellen im Regierungsbezirk Leipzig. *Veröff. NaturMus. Leipzig* 19: 55-144. (With Engl. s.). — (Zur schönen Aussicht 25, D-04435 Schkeuditz). A monographic treatment of the odon. fauna (59 spp.) of the district of Leipzig, Germany, covering the period 1884-1996. 7 spp. are considered at present locally extinct. Of interest is the analysis of flight periods. In some spp., those of the 1884-1994 period deviate from the current observations (1981-1996). The possible causes are discussed.
- (13655) **BEDJANIČ, M., U. ČERVEK, D. GALJOT & N. KADENŠEK**, 2000. Poročilo skupine za kačje pastirje. — [Report of the dragonfly team]. In: M. Bogataj et al., [Eds], *Mladinski ekološko raziskovalni tabor Mura 2000*, pp. 16-18, Pomurski ekološki center, Murska Sobota. (Slovene). — (First Author: Fram 117/A, SI-2313 Fram). A checklist of 28 spp., evidenced along the Mura R., NE Slovenia, in July 2000.
- (13656) **BERNARDINI, V., A.G. SOLIMINI & G. CARCHINI**, 2000. Application of an image analysis system to the determination of biomass (ash free dry weight) of pond macroinvertebrates. *Hydrobiologia* 439: 179-182. — (Second Author: Lab. Exp. Ecol. & Aquaculture, Dept Biol., Univ. "Tor Vergata", Via della Ricerca Scientifica, I-00133 Roma). An inexpensive method for quick estimates of individual biomass from video-recorded images of pond invertebrates is proposed. The coenagrionid and libellulid larvae are used among the examples.
- (13657) **BERRADY, I., K. ESSAFI & J. MATHIEU**, 2000. Comparative physico-chemical and faunal studies of two thermal spring-brooks near Sidi Harazem (Morocco). *Annls Limnol.* 36(4): 261-274. (With Fr. s.). — (Third Author: Lab. Hydrobiol., Univ. Claude Bernard Lyon-I, 43 bd du 11-novembre-1918, F-69622 Villeurbanne). The interstitial fauna was collected by means of artificial substrates, the odon. were represented at 3 sampling stations. Species names are not stated. — See also OA 13709.
- (13658) **BOWLES, B.**, 2000. 2000 Pelee Island butterfly count. *Ontario Insects* 6(1): 4-6. — (374 Grenville, Orilla, ON, L3V 7P7, CA). Includes a checklist of 13 odon. spp., sighted on 5-VIII-2000; Ontario, Canada, — For the 1999 records see OA 13511.
- (13659) **BRACHYTRON** (ISSN none), Vol. 4, No. 2 (dated Dec. 2000; mailed 20 March 2001). (Dutch, with Engl. s's). — (c/o W.J.A. Hoeffnagel, Krekemeent 72, NL-1218 ED Hilversum). *Geraeds, R.P.G.*: Observations on the dragonfly *Ophiogomphus cecilia* (Fourcroy, 1785) along the river Roer (pp. 3-7); — *Ketelaar, R., W. Clausen, R. Busse & J.-L. van Eijk*: Coenagrion ornatum in Europe and its chances in the Netherlands (pp. 8-15); — *Van der Heijden, A.E.*: A population of Norfolk damselfly (*Coenagrion armatum*) in the Weerribben (pp. 16-19); — *Ketelaar, R. & G.-J. Pontenagel*: A roosting site of the Northern damselfly (*Coenagrion hastulatum*) (pp. 20-22); — *Faasen, T.*: *Onychogomphus forcipatus*, a native species in the Netherlands (pp. 23-25); — *Van Tol, J.*: The first correspondence between D.C. Geijskes and M.A. Lieftinck (pp. 26-28); — *Dijkstra, K.-D.B.*: Book reviews (pp. 29-30).
- (13660) **BREŠČAK, I.**, 2000. *Naravni spomenik Mlake*. — [Nature Reserve "Mlake"]. Društvo učiteljev biologije Slovenije & Občina Vipava, Vipava. 8 pp. [flyer]. — (Slovene). The biotic features of the Reserve (nr Vipava, W Slovenia) are briefly outlined. It harbours 27 odon. spp., and its biotic diversity is considered among the richest in the southern Alps. Cf. also OA 12031.
- (13661) **BUFFAGNI, A., G.A. CROSA, D.M. HARPER**

- & J.L. KEMP, 2000. Using macroinvertebrate species assemblages to identify river channel habitat units: an application of the functional habitats concept to a large, unpolluted Italian river (river Ticino, northern Italy). *Hydrobiologia* 435: 213-225. — (First Author: Water Res. Inst., Via della Mornera 25, I-20047 Brugherio, MI).
The odon. were identified to genus level, but no taxa are stated and no reference to the Order is made in the main text.
- (13662) BURKART, W. & W. LOPAU, 2000. *Libellen im Landkreis Rotenburg (Wümme)*. Stiftung Naturschutz, Rotenburg. 173 pp. ISBN 0943-352X (15.5×23.0 cm) softcover. — (Publishers: Postfach 1440, D-27344 Rotenburg/Wümme).
The odon. fauna (55 spp.) of the distr. of Rotenburg, Lower Saxony, Germany is described. The general part (pp. 11-27) presents a concise outline of geographic features and aquatic habitat types. The spp. are "monographed" on pp. 36-147: 2 opposite pp. per sp., with a field portrait, adult phenology graph and a grid distribution map. The local status of each sp. is emphasized and the required conservation measures are proposed. Detailed considerations and suggestions on conservation of the regional fauna are dealt with in the concluding chapter (pp. 153-166).
- (13663) CANNINGS, R., 2000. Dragonfly Society of the Americas Annual Field Meeting, 27 July-1 August 2000, Nanaimo and points East. *Boreus* 20(2): 7-8. — (Roy. Brit. Columbia Mus., P.O. Box 9815 Stn Prov. Govt, Victoria, BC, V8W 9W2, CA).
Includes numerous valuable records from Nanoose Bay, Nanaimo Lakes watershed, Hamilton Marsh nr Coombs, Cypress Prov. Park, the Okanagan R., etc.; all British Columbia, Canada.
- (13664) CANNINGS, R., 2000. Dragons and damselfly in the Columbia/Kootenay region. *Boreus* 20(2): 9-10. — (Roy. Brit. Columbia Mus., P.O. Box 9815 Stn Prov. Govt, Victoria, BC, V8W 9W2, CA).
Almost identical to the paper listed in OA 13560.
- (13665) CANNINGS, S., 2000. The Quebec Emerald out West. *Boreus* 20(2): 11. — (Brit. Columbia Conserv. Data Cent., 780 Blanshard St., Victoria, BC, V8V 1X5, CA).
Somatochlora brevicincta is reported from terraced fens nr timberline at McBride, from 2 other sites in the Rocky Mts N and E of McBride, and from the fens nr the headwaters of the Parsnip R. N of Arctic Lake; all in British Columbia, Canada. These are the first records of this eastern sp. in the West. So far it has never been reported from central Canada, between Alberta and Ontario.
- (13666) CORDOBA-AGUILAR, A., 2000. Evolution y diversidad de la morfología de los genitales masculinos en insectos. *Fol. ent. mex.* 110: 95-111. (With Engl. s.). — (Centro Invest. Biol., Univ. Hidalgo, Apdo Postal 69-1, Plaza Juárez, MX-42001 Pachuca, Hidalgo).
The hypotheses on the evolution of genital morphology are reviewed and, based on the literature, the situation in the odon. is thoroughly considered.
- (13667) CZACHOROWSKI, S., P. BUCZYŃSKI, U. WALCZAK & J. PAKULNICKA, 2000. Gatunki osłonowe (parasolowe) w ochronie owadów. — Cover species (umbrella species) in the protection of insects. *Przegl. przyrod.* 11(1/2): 139-148. (Pol., with Engl. s.). — (Second Author: Dept Zool., Inst. Biol., Maria Curie-Skłodowska Univ., Akademicka 19, PO-20-033 Lublin).
The current legislation in the field of nature conservation is critically commented upon from the point of view of entomology. The advantages of the application of the 'cover species' method are advocated, and the odon. 'cover species' for the various types of Polish aquatic habitats are identified.
- (13668) DE HEIJ, M., 2000. Productiviteit van een plas — [Productivity of a pond]. *Amoeba, Amst.* 74(4): 138-140. (Dutch). — (Oostslootstraat 79, NL-1781 KS Den Helder).
Based on 6-day enclosure observations (surface ca 1 m², date not stated) in a fen in the vicinity of Kotten, Dutch/German border area, the emergence of *Sympetrum danae* was estimated at 2 individuals m²/day.
- (13669) DE MARCO, P., Jr & K.S. FURIERI, 2000. Ecology of *Leptagrion perlongum* Calvert, 1909: a bromeliad-dweller odonate species. *Bolm Mus. Biol. Prof. Mello Leitão* (N.S.) 11/12: 135-148. (With Port. s.). — (First Author: Lab. Ecol. Quantitativa, Depto Biol. Geral, Univ. Fed. Viçosa, BR-36571-000 Viçosa, MG).
The general population ecology and some natural history aspects of this sp. in Santa Teresa ES, Brazil are presented, with special reference to its preference

- for certain bromeliad spp. (*Vriesea jonghei*, *Neoregalia magdalenae* and *Nidularium procerum* are preferred, *V. ensiformis* is avoided) and to the pattern of population fluctuation during the yr. Adult abundance rises in the rainy season, and the duration of the dry season is considered the primary regulation factor acting on this population.
- (13670) DIJKSTRA, K.-D.B., 2000 Odonata (dragonflies). In: L. Nagorskaya et al., *Macrofauna in dead branches of the Pripyat river, Belarus*. The final report on Project 1R1-2692, pp. 61-66. Inst. Zool., NAS, Minsk. — (Gortestraat 11, NL-2311 MS Leiden). A list is presented of 34 spp., evidenced at 11 sampling sites on the river. Their status is stated, and their ecological grouping discussed. See also OA 13474.
- (13671) DRURY, D.M. & W.E. KELSO, 2000. Invertebrate colonization of woody debris in coastal plain streams. *Hydrobiologia* 434: 63-72. — (First Author: USM IMS Gulf Coast Res. Lab., P.O. Box 7000, Ocean Springs, MS 39566, USA). The colonization dynamics and habitat preferences of macroinvertebrates associated with submerged woody debris in Louisiana coastal plain streams (USA) were studied. In an in situ experiment, *Aphylla* sp. was collected from magnolia and water oak branches, anchored over sand and gravel substrate in the Bogue Falaya R., St Tammany Parish. *Erpetogomphus* sp. and *Progomphus* sp. were collected in stream survey on gravel and sand, resp.
- (13672) EISERMANN, K., U. SCHULZ & J. OEHLKE, 2000. Die Libellenfauna (Odonata) eines extensiv genutzten Schifffahrtkanals: der Finowkanal in Eberswalde. *Ent. Nachr. Ber.* 44(4): 253-258. (With Engl. s.). — (FB Landschaftsnutzung & Naturschutz, Fachhochschule Eberswalde, Schicklerstr. 3-5, D-16225 Eberswalde). 19 spp. (13 spp. exuviae) were recorded (IV-VIII 1996) from a section of the Finowkanal, Brandenburg, Germany. The community was dominated by *Platycnemis pennipes* and *Ischnura elegans*, but species composition varied at different stretches. The entomofaunistic importance of extensively used navigation canals is emphasized.
- (13673) GARCIA-BERTHOUS, E. & R. MORENO-AMICH, 2000. Rudd (*Scardinius erythrophthalmus*) introduced in the Iberian peninsula: feeding ecology in Lake Banyoles. *Hydrobiologia* 436: 159-164. — (Dept. Cien. Ambientale & Inst. Ecol. Aquat., Univ. Girona, ES-17071 Girona, Catalonia). Rudd are medium-sized cyprinid fish, in many European lakes they are associated with littoral vegetation. Abundant littoral macroinvertebrates, dominating diets of other littoral fish, were not present in rudd guts, save for some Ephemeropt., Heteropt. and a few *Pyrrhosoma* nymphula larvae.
- (13674) GERAEDS, R.P.G. & J.T. HERMANS, 2000. De gaffellibel (*Ophiogomphus cecilia* Fourcroy, 1785) langs de Roer. — Dragonfly *Ophiogomphus cecilia* (Fourcroy, 1785) along the river Roer. *Natuurh. Maandbl.* 89(12): 254-259. (Dutch, with Engl. s.). — (Second Author: Hertestraat 21, NL-6067 ER Linne). In Aug.-Sept 2000, the sp. was sighted in low densities along the Roer R. nr Melick. In 1995 and 1996 a few individuals were recorded at the Geleenbeek brook, but otherwise the sp. was considered since 1936 "extinct" in the Netherlands.
- (13675) GIBERSON, D. & M. DOBRIN, 2000. *Dragonflies and damselflies of Prince Edward Island National Park*. Dept Biol., Univ. Prince Edward Island, Charlottetown. iii+30 pp. ISBN none (14.5x21.5 cm), spring binding. — (Dept. Biol., Univ. Prince Edward Is., 550 University Ave, Charlottetown, PE, C1A 4P3, CA). A colour handbook, presenting concise descriptions and col. photographs of the 38 spp. hitherto recorded from the Park. The information on habitats, flight periods and general distribution are provided for each sp. — For the complete fauna of the province, see *Notul. odonatol.* 3(1990): 65-80.
- (13676) GÓMEZ-ANAYA, J.A., R. NOVELO-GUTIÉRREZ & R. ARCE-PÉREZ, 2000. Odonata de la zona de influencia de la central hidroeléctrica "Ing. Fernando Hiriart Balderrama" (PH Zimapan), Hidalgo, Mexico. *Fol. ent. mex.* 108: 1-34. (With Engl. s.). — (Depto Ent., Inst. Ecol., Apdo Postal 63, MX-9100 Xalapa, Veracruz). Information on ecology, distribution and phenology and a key to the larvae are provided for most of the 41 spp. that were evidenced in 5 water bodies, influenced by the Zimapan hydroelectric plant, on the border between the Hidalgo and Queretaro states, Mexico. Shannon diversity index and Hill's evenness index were used in the community structure descriptions. 14 spp. are new to the fauna of Hidalgo.

- (13677) *GOMPHUS*. Mededelingsblad van de belgische libellenonderzoekers – Bulletin de liaison des odonatologues belges (ISSN 0772-4691), Vol. 16, No. 2 (Dec. 2000). (Dutch & Fr., with Engl., Fr. & Dutch s's). – (c/o G. De Knijf, Ploegstraat 33, B-9050 Gent).
- Taily, N./Goffart, P.*: Editorial (pp. 113-114); – *De Knijf, G. & H. Demolder*: A population of *Coenagrion mercuriale* and *Libella fulva* in the Gaume (Belgium) (pp. 115-122); – *Titeux, H.*: Les odonates de la réserve de Ben-Ahin (vallée de la Meuse): bilan des relevés de 1993 à 2000 (pp. 123-130); – *Stoks, R. & G. De Knijf*: *Libella fulva* in Flanders in 2000: hope for a threatened outsider? (pp. 131-138); – *Goffart, P.*: Statut des espèces d'odonates du programme "Inventaire et Surveillance de la Biodiversité en Wallonie": bilan décennal (1990-1999) (pp. 139-149); – Compte-rendu de l'excursion aux étangs de Virelles et Roly ... (pp. 150-151); – Compte-rendu de l'excursion ... dans la région de Spa (pp. 151-153); – Annonces (pp. 154-160).
- (13678) GORB, S.N., A. KESEL & J. BERGER, 2000. Microsculpture of the wing surface in Odonata: evidence for cuticular wax covering. *Arthropod Structure & Development* 29(2): 129-135. – (First Author: Biochem. Dept, Max-Planck-Inst. Entwicklungsbiol., Spemannstr. 35, D-72076 Tübingen).
- The insect wing membrane is usually covered by scales, hairs and acanthae, which serve diverse functions, such as species-specific coloration pattern, decrease of wind resistance during flight or decrease of wing wettability. Representatives of Palaeoptera (Odon. and Ephemeroptera) have no hairy structures on the wing membrane, but both its sides are fine-sculptured. In this study, the nature of the wing covering was studied using acoustic microscopy, scanning- and transmission electron microscopy followed by a variety of chemical treatments. It was shown that wing microsculptures are not cuticular outgrowths, but a wax covering, which is similar to pruinosity, which has been previously described in several odonate taxa. Data from scanning acoustic microscopy revealed that scratches on the wax covering have material density different from the surrounding material. Various functions of the wax covering are discussed.
- (13679) GRABOW, K., 2000. *Farbatlas Süßwasserfauna: Wirbellose*. Ulmer, Stuttgart. 228 pp. ISBN 3-80001-3145-5. – (Publishers: Wollgrasweg 41, D-50599 Stuttgart/Hohenheim).
- The odon. are dealt with on pp. 160-190. Concise descriptions of the larva, adult, habitats and biology are provided for 28 German spp.
- (13680) HANCOCK, E.G., 2000. Scottish insect records for 1998 and 1999. *Glasgow Naturalist* 23(5): 48-52. – (Zool. Mus., Graham Kerr Bldg, Univ. Glasgow, Glasgow, G12 8QQ, Scotland, UK). Records are presented for *Libellula quadrimaculata*, *Sympetrum nigrescens* and *S. striolatum*.
- (13681) HOESS, R., 2000. Libelleninventar des Kantons Bern: Nachtrag. *Jb. naturh. Mus. Bern* 13[1996-1998]: 27-42. (With Engl. s.). – (Normannenstr. 35, CH-3018 Bern). 3833 new records from the known sites and 366 newly discovered localities are added to those listed in the original publications (OA 9865, 11581). These cover 55 spp. The Red List of canton Bern is updated; – Switzerland.
- (13682) HOLT, M. & B. LAKING, 2000. Odonata of Manitoulin district. *Ontario Insects* 6(1): 16-17. – (First Author: 68 Huron Woods Dr., RR4 Coldwater, ON, L0K 1E0, CA). A checklist of 49 spp. so far recorded for the district; – Ontario, Canada.
- (13683) HOSTETTLER, K., 2000. Neue Fundorte der Siberischen Winterlibelle und der Gemeinen Keiljungfer (Odonata) im Gottlieber Ried und am Seerhein (Thurgau). *Mitt. thurgau. naturf. Ges.* 56: 83-88. – (Schulstr. 7, CH-8590 Romanshorn). A small *Sympetma paedisca* population at Gottlieben and 2 *Gomphus vulgatissimus* exuviae from Tägerwilten Seerhein (both canton Thurgau, Switzerland) are brought on record. A note on oviposition habits of *S. paedisca* is included.
- (13684) HUTCHINSON, R., 2000. Identifier les larves de libellules du Québec. *Nouv'Ailes* 10(3): 12. – (12, chemin de la Savane, app. 12, Gatineau, QC, J8T 1P7, CA). Some suggestions on larvae identification, addressed to the young collectors in Quebec, Canada.
- (13685) HUTCHINSON, R., 2000. L'entomologie dans un camp de Jeunes Naturalistes. *Nouv'Ailes* 10(3): 11. – (12, chemin de la Savane, app. 12, Gatineau, QC,

- J8T 1P7, CA).
The larvae of 6 odon. spp. are recorded (5/13-VIII-2000) from Rawdon, Quebec, Canada.
- (13686) HUTCHINSON, R., 2000. Rayon entomologie. *Nouv'Ailes* 10(3): 9. — (12, chemin de la Savane, app. 12, Gatineau, QC, J8T 1P7, CA).
A comprehensive book review of S.W. Dunkle's volume, as listed in OA 13571.
- (13687) HUTCHINSON, R. & G. BÉLANGER, 2000. Récolte de libellules (Odonata) à la Réserve faunique de Port-Daniel (Gaspésie) en 2000. *Nouv'Ailes* 10(3): 11. — (First Author: 12, chemin de la Savane, app. 12, Gatineau, QC, J8T 1P7, CA).
10 spp. are recorded (18-VII-2000) from the Reserve; — Quebec, Canada.
- (13688) HUTCHINSON, R. & B. MENARD, 2000. La larve de *Somatochlora brevicincta* Robert (Anisoptera: Corduliidae). *Faberies* 25(4): 53-67. (With Engl. s.). — (First Author: 12, chemin de la Savane, app. 12, Gatineau, QC, J8T 1P7, CA).
The larva is described and illustrated from specimens collected in the boreal zone of Quebec, Canada. It is compared with those of *S. whitehousei* and *S. septentrionalis* (of the *alpestris*-group). The 3 spp. are keyed, and their geographical distribution, habitat features and biology are outlined.
- (13689) HYVONEN, T. & P. NUMMI, 2000. Activity traps and the corer: complementary methods for sampling aquatic invertebrates. *Hydrobiologia* 432: 121-125. — (First Author: Agric. Res. Cent., Plant Protection, FIN-316000 Jokioinen).
The devices are described and their catches compared. The percentage of odon. in the total samples caught by corer (2.1), bottom- (2.2) and mid-water activity traps (2.6) was similar. It is suggested that activity traps and the corer could be used as complementary methods in sampling aquatic invertebrate communities.
- (13690) KENNER, R.D., 2000. Annotated checklist of dragonflies (Odonata) of the Lower Mainland. *Discovery, Vancouver* 29(2): 53-59. — (Spencer Ent. Mus., Dept Zool., Univ. Brit. Columbia, Vancouver, BC, V6T 1Z4, CA).
A review is presented of the 55 spp. known to occur within the area that includes the Fraser Valley, the adjacent mountains from the Strait of Georgia to Hope and Bowen Island; British Columbia, Canada. It is based on the BC Database Odonata, covering the period from about 1900 to 2000. Statements are made on flight periods, abundance and the noteworthy localities for each sp. The locality and collection data are not catalogued and the regional bibliography is not provided.
- (13691) KENNER, R.D., 2000. Book reviews [...]. *Discovery, Vancouver* 29(2): 65-68. — (Spencer Ent. Mus., Dept Zool., Univ. Brit. Columbia, Vancouver, BC, V6T 1Z4, CA).
Comprehensive book reviews of 3 vols, as described in OA 12850 (D. Paulson), 13268 (K. Biggs) and 13571 (S.W. Dunkle), with personal suggestions for the BC readers.
- (13692) KENNER, R.D., 2000. *Somatochlora kennedyi* (Odonata: Corduliidae): a new species for British Columbia, with notes on geographic variation in size and wing venation. *J. ent. Soc. Br. Columb.* 97: 47-49. — (5560 Linscott Court, Richmond, BC, V7C 2W9, CA).
1 ♀, Andy Bailly Lake, S of Fort Nelson, 25-VI-1997. — Specimens from the northern Yukon are smaller than those from elsewhere in its range and have a reduced number of cells in R2 in fore- and hindwing.
- (13693) KENNER, R.D. & R.A. CANNINGS, 2000. Rediscovery of the Western Pondhawk in the Lower Mainland. *Discovery, Vancouver* 29(2): 50-52. — (Second Author: Roy. Brit. Columbia Mus., P.O. Box 9815 Stn Prov. Govt, Victoria, BC, V8W 9W2, CA).
After 58 yr, *Erythemis collocata* has been recorded again in 1999 and 2000 in the Lower Mainland of British Columbia, Canada (Cheam Lake Wetlands Regional Park nr Chilliwack). A review is presented of all since 1937 known and documented BC records, detailed circumstantial evidence of the present sightings is supplied, and a list of the Cheam Lake spp. is added.
- (13694) KORDGES, T. & P. KEIL, 2000. Erstnachweis der Frühen Heidelibelle *Sympetrum fonscolombii* (Selys) im Ruhrgebiet. *Dortmund. Beitr. Landesk. (Naturw.)* 34: 117-121. — (Ökoplan, Husmannshofstr. 10, D-45143 Essen).
In a pond N of Essen, several teneral adults were sighted on 7 & 26-IX-1999.
- (13695) KOTARAC, M., 2000. *Inventarizacija Škocjanskega zatoka: kačji pastirji (Odonata)*. — [In-

- ventarisation of Škocjan Bay: dragonflies (Odonata)]. CKFF, Miklavž-na-Dravskem-polju. 8 pp. (Slovene). — (CKFF, Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju).
- A commented list of 27 spp., with a complete bibliography. The area (nr Koper, NW Istria, Slovenia) is scheduled for a legal proclamation of the "Nature Reserve" status. — See also OA 11742.
- (13696) KOTARAC, M. & A. ŠALAMUN, 2000. Kačji pastirji (Odonata). — [Dragonflies (Odonata)]. In: K. Pobiljšaj, *Inventarizacija flore in vegetacije ter izbranih živalskih skupin za študijo variant 2. tira železniške proge Divača-Koper*, pp. 30-35, CKFF, Miklavž-na-Dravskem-polju. (Slovene). — (CKFF, Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju). 21 spp. (incl. 5 redlisted) that occur in various habitats along the projected 2nd railway line, Divača-Koper, SW Slovenia are listed and discussed. The expected railway impact on these is to be considered negligible.
- (13697) KOTARAC, M. & A. ŠALAMUN, 2000. Kačji pastirji (Odonata). — [Dragonflies (Odonata)]. In: K. Pobiljšaj, *Poročilo o vplivih na okolje za AZ priključek Ljubečna (Celje-vzhod) za področje favne, flore in vegetacije ter habitatov*, pp. 45-52, CKFF, Miklavž-na-Dravskem-polju. (Slovene). — (CKFF, Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju). 13 spp. are listed for an area nr Celje, E Slovenia, and the impact of a superhighway construction on the local habitats and odon. fauna is assessed.
- (13698) KUHN, K., 2000. Untersuchungen zum Vorkommen der Helm-Azurjungfer (Coenagrion mercuriale Charpentier, 1840) im mittleren Mindeltal (Insecta, Odonata). *Ber. naturf. Ges. Augsburg* 59: 39-50. — (Ravenspurgerstr. 7, D-86150 Augsburg). The habitats of 5 populations (Mindeltal, Bavaria, Germany) are meticulously described and habitat requirements are analysed. The velocity and aquatic and bank vegetation are of principal importance, while the quality of water is but rarely of any significance in habitat choice of *C. mercuriale* in this area.
- (13699) LANGE, L., 2000. Ein weiterer Beitrag zur Libellenfauna des Kreises Steinburg. *Bombus* 3(45/46): 177-179. — (Deichreihe 21, D-25599 Wewelsfleth). With reference to the paper listed in OA 13255, notes are presented on a few spp. of some selected types of habitats; — Schleswig Holstein, Germany.
- (13700) LASSIG, A., T. BROCKHAUS & R. KÜTTNER, 2000. Einige interessante Insektennachweise aus dem Raum Rochlitz und Colditz (Lepidoptera, Odonata, Ephemeroptera, Trichoptera). *Ent. Nachr. Ber.* 44(4): 279-283. — (Second Author: An der Morgensonne 5, D-09387 Jahnsdorf/Erzgebirge). A checklist of 18 odon. spp., with field notes and comments on *Sympecma fusca*, *Cordulegaster boltonii* and *Somatochlora flavomaculata*; — Leipzig area, E Germany.
- (13701) LINDENIA. Notiziario dell'Ufficio nazionale italiano della Società odonatologica internazionale, Napoli, No. 33 (21 Dec. 2000). — (c/o Dr C. D'Antonio, Via A. Falcone 386/b, I-80127 Napoli). In addition to some announcements, the issue includes 2 faunistic notes, viz.: *Anonymous*: Le libellule di Campo Imperatore (pp. 140-141; L'Aquila prov., with a distribution map of *Orthetrum albistylum* in Italy); — and 11 *Hemianax ephippiger* sightings in Italy, in 2000, reported by L. dell'Anna, R. Fabbri and A. Busetto (pp. 141-142).
- (13702) MACHADO, A.B.M., 2000. Studies on neotropical Protoneuridae, 10. Forcepsioneura lucia sp. n. from Parque Estadual Rola Moça, Minas Gerais, Brazil (Odonata, Zygoptera). *Bolm Mus. Biol. Prof. Mello-Leitão* (N.S.) 11/12: 127-134. (With Port. s.). — (Depto Zool.-Ent., Inst. Cienc. Biol., UEMG, Caixa Postal 256, BR-31270-901 Minas Gerais, MG). The new sp. is described, illustrated and compared with *F. garrisoni*, *F. itatiaiae* and *F. sancta*. Holotype ♂, allotype ♀, 7 paratypes: Brazil, Minas Gerais, Ibirité, alt. 1000 m, various dates: X/XII-1980/1984. Some notes on ecology and conservation are provided and ♂♂ of the genus are keyed (5 spp.).
- (13703) MANCS-JONES, M., 2000. *The spirit of butterflies: myth, magic and art*. H.N. Abrams, New York. 144 pp. ISBN 0-8109-4115-5. — (Publishers: 100 Fifth Ave, New York, NY 10011, USA). Includes passing references to dragonflies and illustrations of some art objects with dragonfly depictions.
- (13704) MARINOV, M., 2000. A contribution to the fauna of Srebarna Biosphere Reserve. *Acta zool. bulg.* 52(2): 37-42. (With Bulg. s.). — (P.O. Box 134, BG-1000 Sofia). *Enallagma cyathigerum* and *Anax parthenope* are

- recorded from the Reserve; — Bulgaria.
- (13705) MARTINIA. *Revue scientifique de la Société Française d'Odonatologie* (ISSN 0297-0902), Vol. 16, No. 4 (Dec. 2000). (With Engl. s's). — (c/o J.-L. Dommanget, 7 rue Lamartine, F-78390 Bois-d'Arcy). Haffner, P.: [obituary] Hervé Maurin, 1949-2000 (pp. 151-152); — Cloupeau, R., F. Boudier, M. Levasseur & C. Cocquemont: Les odonates de Touraine (département d'Indre-et-Loire, France): bilan de l'inventaire en cours (pp. 153-170); — Maillet, G.: Note pratique sur l'observation des libellules et l'utilisation d'une pochette en plastique (pp. 171-173); — Gilard, B. & J.-L. Dommanget: 3^e Rencontres odonatologiques de France: Saint-Beauzire (Haute-Loire) ... [..]: bilan et perspectives (pp. 175-184); — D'Aguiar, J.: Les descriptions des odonates d'Europe. 6. Fonscolombe, Etienne Laurent Joseph Hyppolyte Boyer de (1775-1853) (pp. 185-208); — Chalmel, R. & J.-L. Dommanget: Rubrique bibliographique (pp. 209-212).
- (13706) McPEEK, M.A., 2000. Predisposed to adapt? Clade-level differences in characters affecting swimming performance in damselflies. *Evolution* 54(6): 2072-2080. — (Dept Biol. Sci., Dartmouth Coll., Hanover, NH 03755, USA).
Previous studies have shown that 2 or 3 lineages of Enallagma, which historically co-existed with fish, recently invaded and adapted to living with large odon. predators in fishless waters. In adapting to live with these, lineages shifted behaviourally to using swimming as an evasive tactic against attacking predators, evolved morphological features that make them faster swimmers, and evolved biochemical features to increase refueling strenuous activities like swimming. However, these habitat shifts have occurred in only 1 of the 2 primary clades within the genus in N America. Here, it is shown that clade-level differences exist among spp. in the ancestral, fish-lake habitat that should make habitat shifts easier to accomplish in the clade in which they have occurred. Specifically, fish-lake spp. in the clade in which shifts occurred have much higher propensities to swim in the laboratory, swim faster when they do swim, and have higher mass-specific activities for arginine kinase than do spp. in the other primary clade, in which no extant spp. are found in fishless waters. These results are discussed in the context of the dynamics of founder events and the potential implications for community structure.
- (13707) MEY, D., 2000. Vorkommen der Gestreiften Quelljungfer Cordulegaster bidentata (Insecta, Odonata, Anisoptera) an Kalksinterbächen in Nordwestthüringen. *Rudolstädter naturh. Schr.* 10: 33-46. (With Engl. s.). — (Karl-Hermann-Str. 3, D-99848 Wutha-Farnroda).
Systematic observations (1998-2000) on larval and adult ecology and behaviour in a calcareous stream nr Asbach (Eichsfeld distr.) are brought on record. This is the first known C. bidentata breeding site in Thuringia, Germany.
- (13708) MÜLLER, J.M., 2000. *Untersuchungen zur Ökologie und Verbreitung der Siberischen Azurjungfer (Coenagrion hylas) im Tiroler Lechtal (Odonata: Coenagrionidae)*. ZulassungsArb. z. wiss. Prüfung Lehramt Gymnasien. Inst. exp. Ökol. Tiere, Univ. Ulm. 118 pp. — Price: DEM 40.- net. — (Available from the Author: Goethestr. 25, D-89601 Schelklingen).
For the first time, the sp. is evidenced from oxbows (Tyrol, Austria; alt. 850-1100 m). The habitats, feeding territories, population biology and behaviour are described in great detail.
- (13709) NAAMANE, B., H. CHERGUI & E. PATTEE, 2000. Distribution de la matière organique particulaire (M.O.P.) et de la faune invertébrée au niveau des milieux aquatiques interstitiels du bassin du Sebou (Maroc central). *Bull. mens. Soc. linn. Lyon* 69(7): 157-180. (With Engl. s.). — (Third Author: CNRS Écol. Hydrosystèmes fluviaux, Univ. Claude Bernard Lyon-I, F-69622 Villeurbanne).
The macroinvertebrate interstitial populations were investigated in the underflow of 3 streams (Sebou, Sidi Harazem, Ain Chkef) nr Fes, Morocco. The fauna was sampled from artificial substrates, buried 10, 30 and 50 cm in the stream sediment. 4 gomphid and libellulid spp. were represented, species names are not stated. — See also OA 13657.
- (13710) NEEDHAM, J.G., M.J. WESTFALL, Jr & M.L. MAY, 2000. *Dragonflies of North America*. xvi+940 pp., 561 textfigs incl., 24 col. pls excl. Scient. Publishers, Gainesville/FL-Washington-Hamburg-Lima-Taipei-Tokyo. (19.0x25.8 cm; 2.2 kg), hardcover. ISBN 0-945417-94-2. — Price: US \$ 125.- net. — (Available at reduced price from IORI, DPI, P.O. Box 147100, Gainesville, FL 32614-7100, USA).
This is a completely revised and updated edn of the vol. described in OA 1266, covering the Anisoptera of the United States, Canada, the Greater Antilles and

- the Mexican states bordering the US, a total of 350 spp. The new taxa are: *Gomphus* (*Hylogomphus*) *Needham*, Westfall & May, sgen. n. (type sp.: *Gomphus adelphus* Selys, 1858), and *Erythrodiplax bromeliicola* Westfall, sp. n. (holotype ♂, allotype ♀: Jamaica; deposited at FSCA, Gainesville, FL). — A general introduction to the morphology and biology (pp. 3–48) is followed by detailed descriptions of all taxa, with keys to adults of both sexes and to the hitherto known last instar larvae. Illustrations are provided of wing venation and larval habitus of all genera, caudal appendages of adult ♂♂ and subgenital plates of ♀♀ for most spp., and numerous other details of morphology and coloration, where these are important for identification. The information on geographic range (usually at the state or province level) and on adult phenology is given for all spp. Glossary (pp. 855–868), Bibliography (pp. 869–896) and Index (pp. 897–939, incl. also synonyms and common names) conclude this monumental work.
- (13711) OOMEN, D., 2000. Beekjuffers in Twente. — [*Calopteryx damselflies* in Twente]. *Amoeba*, Amst. 74(4): 123–125. (Dutch). — (Bernhardstraat 3, NL-2641 JM Pijnacker).
During a 2-week survey in the district of Twente, the Netherlands, *C. splendens* was sighted at almost every brook visited, the occurrence of *C. virgo* was restricted to the habitats with permanent shadowy sections.
- (13712) OTT, J., 2000. Die Ausbreitung mediterraner Libellenarten in Deutschland und Europa: die Folge einer Klimaveränderung? *NNA-Berichte* 2000(2): 13–35. — (L.U.P.O., Friedhofstr. 28, D-67705 Trippstadt).
The records of the latest 2 decades clearly indicate an appreciable northward expansion of various Mediterranean odon. spp., their colonisation of habitats at higher altitudes, and the increase in population strength. This phenomenon is not to be considered as a temporary oscillation, it could rather be due to the recent climatic changes. A large number of selected spp. are analysed and regular monitoring is advocated.
- (13713) [PENA, M.A.], 2000. Esas beneficiosas libélulas. *Canarias Siete*, issue of 7 March.
A local daily's article on *Hemianax ephippiger* in the Canary Isls.
- (13714) PERRENOUD, A., 2000. [Naturschutz-inspektorat des Kantons Bern, Bericht 1999] 6. Artenschutz. *Mitt. naturf. Ges. Bern* (N.F.) 57: 34–44.
(Text in Fr.). — (Le Foyard, Rte de Port 29, CH-2503 Bienne).
The current state of fauna conservation in canton Berne, Switzerland is outlined. Priority habitat conservation measures for 11 odon. spp. are defined.
- (13715) PERRON, J.-M. & Y. RUEL, 2000. Extension de l'aire de répartition connue au Québec de *Libellula luctuosa* Burmeister (Odonata: Libellulidae). *Fabreria* 25(4): 77. — (First Author: 506-963, rue Grandjean, Sainte Foy, QC, G1S 1C3, CA).
With reference to the review presented in the paper listed in OA 13309, 2 recent records are given for this sp. in Quebec, Canada, viz. 1 teneral ♂ (close to Léon-Provancher Swamp, Portneuf, 26-VI-2000), and 1 ♂ (SE of Mt Shefford, l'Estrie, 3-VIII-2000).
- (13716) PIRES, A.M., I.G. COWX & M.M. COELHO, 2000. Benthic macroinvertebrate communities of intermittent streams in the middle reaches of the Guadiana Basin (Portugal). *Hydrobiologia* 435: 167–175. — (Third Author: Cent. Biol. Ambiental, Depto Zool., Fac. Cienc. Lisboa, Campo Grande Bloco C2-3' Piso, PT-749-016 Lisboa).
References to the odon. are solely made in graphs, viz. the order-wise abundance is shown per sample site, and an ordination diagram is presented for the Gomphidae, based on canonical correspondence analysis for the 7 sites.
- (13717) POBOLJŠAJ, K., 2000. *PVO za izgradnjo deponije v gramoznici Jezera-Rakičan za področje favne, flore in vegetacije*. — [Assessment of environmental impact on fauna, flora and vegetation by construction of a dump depository in the Jezera-Rakičan gravel pit]. CKFF, Miklavž-na-Dravskem-polju. 23 pp. (Slovene). — CKFF, Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju).
The locality is situated in NE Slovenia, the odon. aspects are analysed by M. Kotarac & A. Šalamun (pp. 8–9, 21) and 19 spp. are listed.
- (13718) POPOV, A., 2000. Opređelitel na vodnite koncheta (Odonata) v B'lgariya ot Milen Marinov. *Hist. nat. bulg.* 12: 32. (Bulg., with Engl. title in contents table). — (Author's address not stated).
A comprehensive book review of the vol. described in OA 13298.
- (13719) RAMIREZ, A., D.R. PAULSON & C. ESQUIVEL, 2000. Odonata of Costa Rica: diversity

- and checklist of species. *Revta Biol. trop.* 48(1): 247-254. (With Span. s.). — (First Author: Inst. Ecol., 711 BioSci. Bldg, Univ. Georgia, Athens, GA 30602-2602, USA).
268 spp. are listed, representing an increase for 41 spp. since 1982 (cf. OA 4073). About a fifth of the spp. appear to be endemic to the Costa Rica-Panama region.
- (13720) ŠALAMUN, A., 2000. Tabor v Rovinju. — [Field workshop in Rovinj]. *Temporaria* 4(2): 13-15. (Slovene). — (CKFF, Antoličičeva 1, SI-2204 Miklavž-na-Dravskem-polju).
Coenagrion puella and Libellula depressa are recorded from the ponds in the Rovinj area, Istria, Croatia (29-IX/4-X-2000).
- (13721) SCHORR, M., 2000. Störungsökologische Wirkungen von Bootsportaktivitäten auf Fließgewässer-Libellen, dargestellt am Beispiel der Wieslauter (Pfälzerwald, Rheinland-Pfalz). *Fauna Flora Rheinland-Pfalz* 9(2): 663-679. (With Engl. s.). — (Waldfrieden 25, D-54314 Zerf).
At the Wieslauter brook, SE Rhineland-Palatinate, Germany, the wash caused by moving canoes can seriously harm odon. individuals emerging nr the waterline and, in narrow brook sections, canoes cause ♂♂ to give up their territories and disturb oviposition.
- (13722) SCHWARZ-WAUBKE, M. & M. SCHWARZ, 2000. Die Libellenfauna im Stadtgebiet von Salzburg (Österreich): Ergebnisse einer Biotopkartierung aus den Jahren 1994 und 1995. *Linz. biol. Beitr.* 32(2): 1093-1162. (With Engl. s.). — (Eben 21, A-4202 Kirchschlag bei Linz).
46 spp. are known to occur within the city area of Salzburg, Austria. 41 spp. were recorded from 173 waterbodies during 1994-1995. The local occurrence of each sp. is meticulously recorded and city distribution maps are presented.
- (13723) ŠEGULA, B., 2000. Mlaka v "Gorci", izginjajoči dom hribskega urha. *Temporaria* 4(2): 22-23. (Slovene). — (Lepi pot 4, SI-1000 Ljubljana).
Incidental reference to the occurrence of 3 odon. spp. in the ponds of the Brežice-Bizeljsko region, Slovenia.
- (13724) SPIELES, D.J. & W.J. MITSCH, 2000. Macroinvertebrate community structure in high- and low-nutrient constructed wetlands. *Wetlands* 20(4): 716-729. — (First Author: Envir. Sci. Program, Southwest St. Univ., Marshall, MN 56258, USA).
The macroinvertebrate community structure is related to physical, chemical and biological gradients in flow-through constructed wetlands, receiving secondarily treated domestic wastewater and lower-nutrient river water in Ohio, USA. The fauna was collected with benthic colonization plates and emergence traps. All 7 odon. genera recorded occurred in the high-nutrient wetland, Enallagma, Lestes, Anax and Libellula also in the lower-nutrient habitats.
- (13725) STEVANI, C.V., D.L.A. DE FARIA, J.S. PORTO, D.J. TRINDADE & E.J.H. BECHARA, 2000. Mechanism of automotive clearcoat damage by dragonfly eggs investigated by surface enhanced Raman scattering. *Polymer Degrad. Stabil.* 68: 61-66. — (First Author: Inst. Química, Univ. São Paulo, D.P. 26077, BR-05599-970 São Paulo, SP).
Based on the work reported in OA 13726, confocal Raman spectroscopy revealed that the spectra obtained from damaged and intact portions of the clearcoat were similar and in agreement with infrared absorption spectroscopy data. This demonstrates that the attack by eggs, H₂SO₄ and cysteine/H₂O₂ only promotes stabilization of resin through acid hydrolysis of the resin ester and amide moieties. Surface enhanced Raman scattering spectra, obtained from odon. eggs and cysteine/H₂O₂ reaction products treated with a silver colloid, were very similar, thus confirming the presence of sulfinic and sulfonic acids.
- (13726) STEVANI, C.V., J.S. PORTO, D.J. TRINDADE & E.J.H. BECHARA, 2000. Automotive clearcoat damage due to oviposition of dragonflies. *J. appl. Polymer Sci.* 75: 1632-1639. — (First Author: Inst. Química, Univ. São Paulo, C.P. 26077, BR-05599-970 São Paulo, SP).
The chemical degradation of the automotive clearcoat caused in Brazil by oviposition of non-identified odon., is reported. These are attracted by the reflecting surface of cars exposed in the sun and lay eggs on them. The eggs, at the high temperatures (50-92°C) of the car surface, can cause damage similar to that by acid rain. In experiments on resin-coated plates, the involvement of H₂O₂ or hydroquinone-derived radicals of enzyme-catalyzed hydrolyses and of photosensitizer-induced damage were excluded. The damage was very similar to that produced at high temperature by the sulfur-containing amino acids, cysteine and cystine. Based on this, and because odon. eggs are rich in sulfur amino acids, a mechanism involving cysteine and cystine in

the clearcoat damage is proposed. — See also OA 13725 and 13750.

- (13727) STOKS, R. & F. JOHANSSON, 2000. Trading off mortality risk against foraging effort in damselflies that differ in life cycle length. *Oikos* 91(3): 559-567. — (Second Author: Dept Ecol. & Envir. Sci., Umea Univ., S-90187 Umea).

Life history theory predicts that size and age at emergence depend on the slope and shape of the relationship between mortality rate and foraging effort. Given the expected high foraging effort in obligate univoltine spp. compared with semivoltine spp., a low slope and an increase of foraging effort are expected in the presence of a predator in the former and the opposite pattern in the latter. This prediction was tested in the univoltine *Lestes sponsa* and *L. viridis* and in the semivoltine *Coenagrion puella* and *C. hastulatum* when confronted with perch. For each of the 4 spp. the relationship between mortality rate and foraging effort was determined at an individual level. As expected, by the different growth demands associated with differences in life cycle length, both *Lestes* spp. had in the presence and in the absence of perch a higher foraging effort than the 2 *Coenagrion* spp. As a result, lestids also suffered higher mortality. The slope of the regression between mortality rate and foraging effort was, as predicted, lower in lestids than in coenagrionids. Despite this, and contrary to the expectation, the lestids reduced foraging effort in the presence of perch even more than the coenagrionids. This evidence is discussed in the light of life history responses in spp. that differ in life cycle length.

- (13728) SUHLING, F., S. BEFELD, M. HÄUSLER, K. KATZUR & S. LEPKOJUS, 2000. Effects of insecticide applications on macroinvertebrate density and biomass in rice-fields in the Rhône-delta, France. *Hydrobiologia* 431: 69-79. — (First Author: Zool. Inst., Univ. Braunschweig, Fasanenstr. 3, D-38092 Braunschweig).

The densities of 5 odon. spp. are compared between rice-fields treated with lindane and diazinon in June and alaphmethine in Aug. and the untreated controls. In *Orthetrum albistylum* and *Crocothemis erythraea* no significant effects of insecticide application/non-application were found. In *O. cancellatum* and *Sympetrum fonscolombii* the densities were generally lower in the areas treated in June. *Ischnura elegans* was found in July, after the lindane application, in significantly higher numbers in the treated areas, but

in significantly lower numbers in August, after the application of alaphmethine.

- (13729) TACHET, H., P. RICHOUX, M. BOURNAUD & P. USSEGLIO-POLATERA, 2000. *Invertébrés d'eau douce: systématique, biologie, écologie*. CNRS, Paris, 588 pp. ISBN 2-271-05745-0.

The odon. are dealt with on pp. 243-275. The larvae of European families and genera are concisely diagnosed, and a pictorial species key is provided.

- (13730) TANNERT, R. & R. RUPPRECHT, 2000. Erfassung der Insektenfauna im Nürnberger Reichswald bei Fischbach-Brunn von 1978 bis 1999, insbesondere Macro-, Microlepidoptera und Coleoptera. *Galathea* 16(3): 75-108. (With Engl. s.). — (First Author: Josef-Simon-Str. 52, D-90473 Nürnberg).

Pyrrhosoma nymphula and *Aeshna cyanea* are listed from the spruce-pine woods, SE of Nürnberg, Bavaria, Germany.

- (13731) THEISCHINGER, G., 2000. A new species of *Nososticta* Hagen from Australia (Odonata: Protoneuridae). *Linz. biol. Beitr.* 32(2): 1175-1179. — (2A Hammersley Rd, Grays Point, NSW 2232, AU). *N. mouldsi* sp. n. is described, illustrated and compared with the Australian congeners. Holotype ♂, 2 ♀: Florence Falls, Northern Territory, 21-VI-yr not stated; all deposited in AMS, Sydney.

- (13732) TONCZYK, G., 2000. Dragonflies (Odonata) of the Niebieskie Źródła Nature Reserve near Tomaszów Mazowiecki (central Poland). *Acta Univ. lodz. (Limnol.)* 7: 79-85. (With Pol. s.). — (Inst. Invert. Zool. & Hydrobiol., Lodz Univ., ul. Banacha 12/16, PO-90237 Lodz).

21 spp. are listed, and the current assemblage is compared with the fauna identified during 1968-1970. The disappearance of floating vegetation was detrimental to *Erythronia najas*, the abundance of filamentous algae favours *Enallagma cyathigerum* against *Coenagrion pulchellum*, and the progressing eutrophication is indicated by the abundance of *Aeshna cyanea* and *A. grandis*. — See also OA 13633.

- (13733) VAN DE HATERD, R., 2000. Waterkwaliteit in the Sloveense karstgebied: heldere wateren, diepe grotten. — Water quality in the karst region of Slovenia: clear waters, deep caves. *Natura, Amst.* 97(5): 137-140. (Dutch, with Engl. s.). — (Binnen

- Molenstraat 20, NL-4101 BA Culemborg).
Onychogomphus forcipatus, *Cordulegaster heros* and *Orthetrum brunneum* are considered the indicators of high water quality at the Plateau of Bloke, Slovenia.
 – For the complete fauna, see OA 10834.
- (13734) VAN TWEEL, N. & L. VAN TWEEL, 2000. Flora en fauna van het Sloveense karstlandschap. – Flora and fauna of the Slovene karst region. *Natura, Amst.* 97(5): 131-136. (Dutch, with Engl. s.). – (Kadeneterkamp 44, NL-8014 CA Zwolle).
 16 odon. spp. were evidenced in Inner Carniola (Notranjska), Slovenia by participants in the Roy. Neth. Nat. Hist. Soc. field trip, 30-V/6-VI-1998. 5 of these are listed here, without precise locality data.
- (13735) VEEN, P., 2000. Natuur- en cultuurbehoud in centraal- en oost-Europa. – New orientations towards nature conservation in central and eastern Europe. *Natura, Amst.* 97(4): 105-110. (Dutch, with Engl. s.). – (Den Bliklaan 82, NL-3766 AV Soest).
 Includes a checklist of 16 odon. spp. from the Ipoly R. basin, N Hungary.
- (13736) WENDZONKA, J., 2000. Nowe stanowiska niektórych rzadkich w środkowej i wschodniej Polsce gatunków ważek (Odonata). – New localities of some species of dragonflies (Odonata) rare in central and eastern Poland. *Wiad. ent.* 19(2): 124. (Pol., with Engl. title). – (Author's address not stated).
Aeshna affinis, *Sympetrum depressiusculum* and *S. pedemontanum* are listed. *A. affinis* from Gola nr Gostyń (24-VIII-1997) probably represents the latest seasonal record of the sp. in Poland.
- (13737) WESTERMANN, K., 2000. Die Eiablageplätze der Weidenjungfer (*Chalcolestes viridis*) in einem südbadischen Altrheingebiet. *NatSchutz südl. Oberrhein* 3(1): 93-107. (With Engl. s.). – (Buchenweg 2, D-79365 Rheinhausen).
 A survey for *C. viridis* clutches was conducted along the Old-Rhine nr Weisweil, co. Emmendingen, Baden-Württemberg, SW Germany. 37 tree and bush spp. with successfully hatched prolarvae were identified, 15 of them have not been previously mentioned in the literature. Young trees and bushes, such as *Viburnum opulus*, *Alnus glutinosa*, *A. incana*, *Fraxinus excelsior*, *Ligustrum vulgare*, *Salix alba*, some smaller willow spp. and *Prunus padus*, appear the preferred oviposition sites. The branches were selected from close above the water to an approx. height of 25 m, the number of clutches decreasing with the height. At some distance from the water, they were rarely seen.
- (13738) WITTE, R., 2000. Zuidelijke Glazenmaker (*Aeshna affinis*) ontdekt tijdens de excursie op de Schotsman. *Zeeuwse Prikkebeen* 8(3): 5-7. (Dutch). – (Author's address not stated).
A. affinis and 8 other odon. spp. are listed from the Schotsman, Zeeland prov., the Netherlands; 19-VIII-2000.
- (13739) YEH, W.C., 2000. [A note on *Ceriagrion nipponicum* Asahina, a recently discovered damselfly in Taiwan]. *Q. Nat. Cons.* 32: 38-40. (Chin.). – (Div. Forest Prot., Taiwan Forestry Res. Inst., 53 Nan-hai Rd, Taipei, Taiwan).
 In a mountain pool in Yuanshan, Ilen co., the sp. co-occurs with *C. aurantiacum* ryukyuanum. The ♂♂ of the 2 spp. are briefly compared. Due to the recent forest destruction around the pool, the fate of this small population is highly uncertain.

2001

- (13740) ARGIA. The news journal of the Dragonfly Society of the Americas (ISSN 1061-8503), Vol. 13, No. 1 (25 March 2001). – (c/o Dr & Mrs T.W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13903, USA).
 [Signed articles:] *Paulson, D.*: A Venezuelan odonate vacation (pp. 7-9; with records); – *Beckemeyer, R.*: Phop Gan Mai Tik Khrap, Thailand (pp. 9-12; records from Burma & Thailand); – *Garrison, R.*: Brazil 2000, or living it up (and collecting) in Rio (pp. 12-15); – *Donnelly, N.*: Watch out for warthogs! (pp. 15-17; Uganda records); – *Holder, M. & A. Kingsley*: Summer 2000 peatland odonate surveys in New Brunswick and Nova Scotia, Canada (pp. 17-19); – *Upson, S.*: A further *Argia lacrimans* population in southeast Arizona (p. 19); – *Paulson, D.*: *Sympetrum madidum* in Minnesota (pp. 19-20); – *Orr, R.*: Preliminary list of the dragonflies and damselflies of Washington D.C. (pp. 20-22); – *Silby, J.*: WDA: present status report (pp. 22-23); – *Tennessee, K./Garrison, R.*: Book reviews (pp. 23-25); – *Glover, K.*: Poem: "Flash and flicker" (p. 26); – *Kalko, E.*: Bats glean dragonflies (p. 27); – *Bree, D./White, H./Deliry, C.*: Mantids eating dragonflies (pp. 27-28); – *Belshe, J.*: Children's stories about dragonflies (p. 28); – *Beckemeyer, R.*: Biological diversity and politics: the impact of recent regulatory trends on

- scientists who study the taxonomy and distribution of organisms (pp. 28-29); — *Denson, D.*: Anax on ice (p. 29).
- (13741) *ATROPOS*, No. 12 (Jan. 2001), No. 13 (Apr. 2001). ISSN none. — (c/o M. Tunmore, 36 Tinker Lane, Meltham, Huddersfield, W Yorks, HD7 3EX, UK).
[Odon. articles:] [No. 12]: *Cham, S.*: The status of Small red-eyed damselfly *Erythromma viridulum* (Charpentier) in the British Isles (pp. 7-9); — *Parr, A.*: Migrant dragonflies in 2000, including recent decisions and comments by the Odonata Recorders Committee (pp. 16-19); — *Busuttil, S.*: Red-veined darters *Sympetrum fonscolombei* (Selys) at Dungeness RSPB Reserve (1993-2000) (pp. 24-27); — *Parr, A.*: Another record of Green darter *Anax junius* (Drury) (pp. 28-29); — *Brereton, T.*: Site guide: ferry trips through the Bay of Biscay to Los Llanos, Santurtzi (pp. 31-34; incl. odon. records from Los Llanos); — *Beynon, T.*: My best day (pp. 36-37; records from Coto Dognana, Spain); — *Dewick, S.*: Problems at Small red-eyed damselfly *Erythromma viridulum* site (p. 74); — *Busuttil, S.*: Lesser emperor *Anax parthenope* at Dungeness in 2000 (p. 77); — *Bowers, J.*: Identification of Southern darter *Sympetrum meridionale* (p. 79); — *Telfer, M.*: Insects at sea (pp. 81-82); — *Reports* from coastal stations, 2000: *Tunmore, M.*: The Lizard, Cornwall (pp. 46-48); — *Knill-Jones, S.*: Isle of Wight (pp. 49-50); — *Patton, S.*: Selsey Peninsular, West Sussex (pp. 50-51); — *Hunter, I.*: Elms Farm, Icklesham, East Sussex (pp. 53-54); — *Clanoy, S.*: Dungeness area, Kent (pp. 55-56); — *Dewick, S.*: Bradwell-on-Sea, Essex (pp. 56-58); — *Parfitt, A.*: Minsmere RSPB Nature Reserve, Suffolk (pp. 59-60); — *Bowman, N.*: Eccles-on-Sea, Norfolk (pp. 60-61); — *Wilson, K.*: Gibraltar Point NNR, Lincolnshire (pp. 61-62); — *Spence, B.*: Spurn NNR, East Yorkshire (pp. 62-63); — *Bagworth, T.*: Calf of Man Bird Observatory (pp. 66-67); — *Field, R.*: Skomer Island NNR, Pembrokeshire (pp. 67-68). — [No. 13]: *Predy, S.*: Identification workshop: the common Aeshna hawkers (pp. 44-48, col. pls 4-7 excl.).
- (13742) *BENZLER, A.*, 2001. Seltene, bedrohte und endemische Tier- und Pflanzenarten: Auswahl von Artengruppen und Arten für ein bundesweites Naturschutzmonitoring. *Natur Landschaft* 76(2): 70-86. (With Engl. s.). — (Ökol. Umweltbeobachtung u. NatSchutz Monit., Bundesamt NatSchutz, Konstantinstr. 110, D-53179 Bonn).
In framework of the 1999 nation-wide monitoring concept for nature conservation, 12 odon. spp. are included; Germany.
- (13743) *BRISCOE, A.D. & L. CHITTKA*, 2001. The evolution of color vision in insects. *Annu. Rev. Ent.* 46: 471-510, 1 col. pl. excl. — (First Author: Dept Molec. & Cell Biol., Univ. Arizona, Tucson, AZ 85721, USA).
The physiological, molecular and neural mechanisms of insect colour vision are reviewed. A review of spectral sensitivity data for 6 anisopt. spp. is included. Phylogenetic and molecular analyses reveal that the basic bauplan, UV-blue-green-trichomacy, appears to date back to the Devonian ancestor of all pterygote insects.
- (13744) *BURMEISTER, E.-G.*, 2001. Insekt des Jahres: der Plattbauch (*Libellula depressa* L., 1758). *NachrBl. bayer. Ent.* 50(1/2): 68. — (Zool. Staatssammlung, Münchhausenstr. 21, D-81247 München).
L. depressa was selected as "the insect of the year 2001" in Germany. This little article gives a good outline of its biology and conservational problem. — Similar articles have appeared in various local newspapers and other periodicals, e.g. *Hamburg. AbendBL.*, (issue of 2/3 Dec. 2000), *Weser-Kurier* (No. 288, 9 Dec. 2000), *Grüne Blätter* (7 [Feb. 2001]: 11-12), etc. Dt. Ent. Inst., Eberswalde issued a 6 p. flyer (2000), available free from the publisher (P.O. Box 100238, D-16202 Eberswalde).
- (13745) *GRAND, D.*, 2001. Quelques observations de libellules en Grèce et à Chypre (Odonata). *Opusc. zool. flumin.* 196: 1-10. (With Engl. s.). — (3 bis, Impasse de la Voûte, F-69270 St-Romain-au-Mont-d'Or).
A commented checklist is presented of 41 spp., evidenced at 30 localities during 5 visits (1978-1999) in Chalkidiki, Thessaloniki, and on the islands of Crete, Lesbos, Rhodos, Samos and Cyprus. Some of the noteworthy spp. are: *Boyeria cretensis* (Crete), *Lindenia tetraphylla* (Thessaloniki), *Orthetrum sabina* (Samos), *O. taeniolatum* (Rhodos), *Sympetrum meridionalis* (Chalkidiki) and *Trithemis festiva* (Rhodos, Cyprus).
- (13746) *HOOGWERF, H.W.M.*, 2001. Amfibiepoel. *Biltse & Bilthovense Courant*, issue of 15 March, p. 1 (Dutch). — (Gezichtslaan 115, NL-3723 GD Bilthoven).

A local newspaper's note on the system of 3 man-made ponds between De Leijen and Hollandsche Rading (Utrecht prov., the Netherlands), with a passing reference to the odon.

- (13747) KITCHING, R.L., 2001. Food web in phytotelmata: "bottom-up" and "top-down" explanations for community structure. *Annu. Rev. Ent.* 46: 729-760, 1 col. pl. excl. — (Aust. School Envir. Stud., Griffith Univ., Brisbane, Qld 4111, AU).

The field study of food webs and the processes maintaining them is hampered by the sheer complexity and unreplicated nature of natural systems. The animal communities in phytotelmata, plant-held waters, are a convenient exception to this generalization. Tree holes, bamboo internodes, pitcher plants, tank bromeliads, and water-retaining plant axils contain a rich fauna, principally of arthropods, which constitute more or less complex, highly discrete food webs. They are widespread and replicated. The explanations for the community structure observed in these systems may call on "bottom-up" mechanisms such as simple environmental limitations, competition, predation, and facilitation, or they may adduce grander "top-down" theories, which explore biogeographic, energetic, dynamic, or biodiversity-related constraints. The existence of the bottom-up mechanisms is well established in experimental systems, and their consequences may be apparent in naturally occurring food webs. Top-down mechanisms demand a more holistic approach and are more difficult to test either by pattern analysis or experimental manipulation. The synoptic explanation of community composition and structure demands a multidimensional approach best expressed as a heuristic "template". Phytotelmata represent nearly ideal natural instruments for further study of food web dynamics, and exciting opportunities exist for the development and testing of community theories through their manipulation.

- (13748) [KURZFASSUNGEN DER VORTRÄGE] 20. JAHRESTAGUNG DER GESELLSCHAFT DEUTSCHSPRACHIGER ODONATOLOGEN [GdO], Görlitz, 16.-18. März 2001. Abh. Ber. NaturkMus. Görlitz 73(1): viii+100 pp. (Edited by Prof. Dr W. Xylander). — (Staat. Mus. Naturk., Görlitz, Postfach 300154, D-02806 Görlitz).
Behrends, T.: Libellen-Monitoring im Rahmen des E & E-Projektes "Halboffene Weidelandschaft Hölzigbaum" von 2000-2004 (pp. 1-2); — *Bender, J., W.E.R. Xylander & R. Stephan*: Lösungsansätze im

Zielkonflikt zwischen Rekultivierung und Naturschutz in der Bergbausanierung: Wiederherstellung eines Libellengewässers auf Halden des Braunkohletagebaus Berzdorf (pp. 3-8); — *Brockhaus, T. & U. Fischer*: Die Verbreitung von *Cordulegaster boltonii* und *Soma-tochlora arctica* in Sachsen: Ergebnisse aus dem Projekt "Entomofauna Saxonica" (p. 9); — *Clausnitzer, H.-J.*: Die Zwerglibelle (*Nehalennia speciosa*) in Niedersachsen (pp. 11-12); — *Conze, K.-J. & C. Göcking*: "FFH-Libellenarten" in Nordrhein-Westfalen (NRW) (pp. 13-15); — *Donath, H.*: Sukzessionsverlauf und Libellenzönosen an Tagebauen im Naturpark Niederlausitzer Landrücken (pp. 17-18); — *Ellwanger, G.*: Verbreitungskarten der Libellenarten der Anhänge II und IV der FFH-Richtlinie in Deutschland auf der Basis des Messtischblattrasters (pp. 19-21); — *Glatzle, B.*: Die Rolle der Libellen im Nahrungsspektrum der Gebirgsstelze *Motacilla cinerea* Tunstall, 1771 an einem Tieflandfluss (pp. 23-24); — *Günther, A.*: Differenzierung von Drohflügen und Balzverhalten verschiedener *Rhinocypha*-Formen Sulawesis (Indonesien) (pp. 25-26); — *Hardersen, S.*: "Fluctuating Asymmetry" als Instrument für die Bioindikation mit Libellen (pp. 27-28); — *Hartung, M.*: Bestimmung von isolierten Flügeln von Gomphiden am Ufer der Oder (pp. 29-31); — *Hünken, A. & C. Schütte*: Im Trüben fischen: Prädation von Flussbarschen auf *Calopteryx*-Larven (pp. 33-34); — *Huth, J.*: Libellen (Odonata) der Braunkohlen-Bergbaufolgelandschaft Sachsen-Anhalts (pp. 35-37); — *Jakab, T., Z. Müller & G. Dévai*: Quantitative survey of *Gomphus flavipes* (Charpentier, 1825) exuviae along river Tisza (p. 39); — *Keil, R.*: Die Rolle von Libellen in der historischen Karpfenteichwirtschaft (pp. 41-43); — *Krüner, U.*: *Orthetrum brunneum* (Fonscolombe, 1837), ein fester Bestandteil der Libellenfauna in NRW? (pp. 45-46); — *Kuhn, J.*: Prozessschutz versus Nutzung und Pflege: Probleme des Libellenschutzes in Mooren des süd-deutschen Alpenvorlandes (pp. 47-49); — *Martens, A.*: Experimente zur Sitzplatzwahl von *Onychogomphus f. forcipatus* (L., 1758) (p. 51); — *Mauersberger, R. & F. Petzold*: Seen als Habitate für *Onychogomphus f. forcipatus* (L.) im Jungpleistozän-gebiet Nordost-Deutschlands (pp. 53-55); — *Mikolajewski, D.-J.*: Dornenausbildung bei Larven der Gattung *Sympetrum* (Odonata: Anisoptera): Induzierbarer Schutz gegen Fischprädation (pp. 57-58); — *Müller, J. & R. Steglich*: Zur Indikation der "FFH-Tauglichkeit" der Elbe durch die Flussjungfer (Gomphidae) (pp. 59-61); — *Müller, O. & B. Müller*: Sand oder Algen? Habitatwahlverhalten der Larven

- von *Onychogomphus f. forcipatus* (L., 1758) (p. 63); — Müller, Z., T. Jakab, G. Dévai & N. Szállassy: The effect of habitat degradation on dragonfly assemblages on the floodplain of the river Tisza (pp. 65-66); — Orr, J.: Erfahrungen aus der Planungspraxis bei Monitoringstudien mit Libellen (pp. 67-68); — Schmidt, E.G.: Strittige systematische Fragen auf Gattungsniveau bei mitteleuropäischen Libellen (*Odonata*) (pp. 69-77); — Schnabel, H.: Untersuchungen zum Vorkommen larval überwinternder Libellenlarven in Karpfenteichen des Oberlausitzer Heide- und Teichgebietes (pp. 79-83); — Stephan, R. & W.E.R. Xyländer: Die Libellen der Umgebung von Görlitz, gestern und heute (pp. 85-89); — Szállassy, N., E. Bárdosi, Z. Szabó, Z. Müller & G. Dévai: Fluctuating asymmetry and mating success in males of *Libellula fulva* Müller, 1764 (pp. 91-92); — Xyländer, W.E.R. & R. Stephan: Libellenzönosen in Braunkohle-Tagebaufolgelandschaften als Reflexion von Rekultivierung und Sukzession (pp. 93-95); — Teilnehmerliste (pp. 97-99).
- (13749) **LIBELLENNACHRICHTEN**. Mitteilungsblatt der Gesellschaft deutschsprachiger Odonatologen (GdO) (ISSN 1437-5621), No. 5 (20 Feb. 2001). — (c/o Mrs U. Krüner, Gelderner Str. 39, D-41189 Mönchengladbach). 20 pp., organised under the traditional headings. Noteworthy are some comprehensive book reviews, incl. those of some not readily available German M.Sc. dissertations.
- (13750) OLMOS, M., 2001. Amor apressado de libélulas afeta indústria automotiva. *Valor econômico* (Empresas e economia), issue of 2 Jan., p. B1. (Port). A comprehensive newspaper article on the discovery reported in OA 13725 and 13726. Summaries of the article appeared also in *Hamburg. AbendBl.*, issue of 9 Jan., p. 3, and in *Saarbrück. Ztg.*, issue of 4 Jan.
- (13751) THEISCHINGER, G., 2001. *Preliminary keys for the identification of larvae of the Australian Synthemiidae, Gomphomacromiidae, Pseudocorduliidae, Macromiidae and Austrocorduliidae* (*Odonata*). Cooperative Res. Cent. Freshw. Ecol., Thurgoon/NSW. [Ident. Guide No. 24]. iv+88 pp. ISBN 1-876144-36-X. — (Orders to: Murray Darling Freshw. Res. Cent., P.O. Box 921, Albury, NSW 2640, AU). The aim of the publication is to facilitate the identification of all known larvae of this group of Australian dragonflies, and a strong emphasis is given on the still existing gaps in our knowledge. The work is organized as that described in OA 13028. The family key is followed, for each of the 5 families, by a taxonomic overview, a brief diagnosis and a key to gen. and spp., to which more detailed generic and specific treatments are added. 14 phot. (12 col.) and 315 figs of structural features enhance the value of the book.
- (13752) W.D.A.'s **AGRION**. Newsletter of the worldwide Dragonfly Association (ISSN 1462-8449), Vol. 5, No. 1 (Jan. 2001). — (c/o J. Silsby, 1 Haydn Ave, Purley, Surrey, CR8 4AG, UK). [Scientific notes:] Dunkle, S.: *Apache Spiketail, Cordulegaster diadema* Selys, 1868 (pp. 3-4); — Paulson, D.: *Zenithoptera americana* Linnaeus, 1758 (p. 4); — Wasscher, M.: A *Mecistogaster* smarter than me (p. 4); — Allen, P.: *Scapania frontalis* Burmeister, 1890 (p. 4); — Garrison, R.: Two beautiful odonates from Brazil (pp. 4-5); — Endersby, I.: *Cordulephya pygmaea* Selys, 1871 (p. 5); — Taylor, J.: The reed "butterfly", *Rhyothemis graphiptera* Rambur, 1842 (pp. 5-6); — Moore, N.: *Archipetalia auriculata* Tillyard, 1917 (p. 6); — Silsby, J.: *Cyrano unicolor* Selys, 1869 (pp. 6-7); — M. Härmäläinen: In search of beautiful wings: *Vestalis melania* Selys, 1873 (pp. 7-8); — Natsume, H.: *Globe Skimmer, Pantala flavescens* (Fab., 1798) & other favourites (p. 8); — Wilson, K.: *Chlorogomphus papilio* Ris, 1927 (p. 9); — Kalkman, V.: The Oriental Rock-dweller, *Bradinopyga geminata* (Rambur, 1842) (pp. 9-10); — Miller, K.: The Twister, *Tholymis tillarga* (Fabricius, 1798) (pp. 10-11); — Dijkstra, K.-D.B.: Sky-blue Skimmer, *Cyanothemis simpsoni* Ris, 1915 (pp. 11-12); — Clausnitzer, V.: Mock Emerald, *Olpogastra lugubris* (Karsch, 1895) (p. 12); — Corbet, P.S.: An abiding magical moment: *Rhyothemis fenestrina* Rambur, 1842 (p. 12); — Jödicke, R.: *Sympetrum sinaiticum* Dumont, 1977 (pp. 12-13); — Parr, M.: *Ischnura elegans* (Vander Linden, 1820) (p. 13); — Champion, M.H.: Notes on sighting of *Lindenia tetraphylla* (Vander Linden) by lake Volvi, Greece in July 2000 (p. 13; with a postscript by P.S. Corbet); — Beckemeyer, R.: Favorite dragonflies in Thailand and the USA (p. 14); — Orr, A.G.: *Rhinocypha aurofulgens* Laidlaw, 1931 & others from Australia, New Guinea, Africa & Sulawesi (pp. 14-15); — Corbet, P.S.: [book review] All about dragonflies, by K. Inoue & K. Tani (p. 16); — de Fonseca, N.: [obituary] Terence de Fonseca (p. 16).

- (13753) *WILLIAMSONIA*. A quarterly publication of the Michigan Odonata Survey. ISSN none. Vol. 5, No. 1 (March 2001) — (c/o Dr M.F. O'Brien, Insect Div., Mus. Zool., Univ. Michigan, 1109 Gaddes Ave, Ann Arbor, MI 48109-1079, USA).
In addition to the Editorial, various meeting announcements and a book review etc., the emphasis is on the "Summary of 2000 Odonata field season"

(pp. 3-4). Astonishing is a note of the confiscation of E.B. Williamson's 'dragonfly gun', deposited in the UMAA, which has not been used for at least 75 yr. The late EBW apparently modified it illegally and the weapon will be returned by police after it will have been made inoperable, whereupon it will be mounted on a plaque for display.