

ODONATOLOGICAL ABSTRACTS

1973

- (4031) REICHEL-DOLMATOFF, G., 1973. *Desana. Le symbolisme universel des Indiens Tukano du Vaupés*. Gallimard, Paris [?]. 331 pp. — (Author's address not known).
In the chapter on religious symbolism, the following narrative appears on p. 252 [verbatim translation from French]: "Dragonflies are the guardians of water plants that grow in the places where the "Master of Fish" lives. They take care of the leaves and the flowers that float on the water and which "Wai-maxsé" keeps to offer shadow to the fishes". — (*Abstracter's Note*: Vaupés is a commissariat in southeastern Colombia, 90.000 km² between the Amazonas rain forest and the Llanos, bounded by Rio Guaviare, Rio Apaporis, and the Brazilian border).

1975

- (4032) N'SANDA, WAMENKA & A. TASHDJIAN, 1975. *Contes du Zaïre. contes des montagnes, de la savane et de la forêt au pays du fleuve Zaïre*. Edicef, Paris. XI+117 pp. — (First Author: Cent. Linguist. Théorique & Appliquée, Univ. Natn. Zaïre; — Publishers: 93, rue Jeanne d'Arc, F-75013 Paris).
A dragonfly fable, recorded in Zaïre (Congo), and titled "Pourquoi les libellules ont le ventre très mince" appears on pp. 78-79. The fairy-tale is explaining how a dragonfly has bitten a woman, was sent to prison, where it was chained, the chain squeezing its abdomen, which ever since has remained very thin.

1978

- (4033) ELDON, G.A., 1978. The life history of *Neochanna apoda* Günther (Pisces; Galaxiidae). *Fish. Res. Bull. Wellington* 19, 44 pp. — (Author's address not stated).
An account of the life history and ecology of the (New Zealand) Brown Mudfish is presented. The diet of adult fish mainly comprises small Crustacea and insects. Zygopteran larvae, present in some habitats, were not found in the stomachs, while they did occur in some fish from different habitats elsewhere.

1979

- (4034) DAVIDS, C., 1979. De watermijten (Hydrachnellae) van Nederland: levenswijze en voorkomen / The water mites of the Netherlands: life history and occurrence. *Wet. Meded. kon. ned. natuurh. Ver.* 132: 1-78. (Dutch, with Engl. s.). — (Pallietterstr. 23, 1183 LA Amstelveen, NL).
This is a commercially available monograph (price Hfl. 7.50), directed at the non-specialist with background knowledge in syst. entomology. In addition to the topics mentioned in the title, a key is provided to the genera and an annotated list is given of 213 spp., stating their regional distribution and hosts.
- (4035) RATCLIFFE, D., 1979. The end of the Large Blue Butterfly. *New Scientist* 84 (1180): 457-458. — (Nature Conserv. Council, 19/20 Belgrave Squ., London SW1X 8PY, UK).
The paper contains a passing reference to the

status of some odon. spp. in Britain. *Oxygastra curtisii* is believed to be extinct in its last known haunt, in Hampshire; and pollution of the river in which it bred is suspected as the cause. *Coenagrion armatum*, known only from the Norfolk Broads, has evidently been eliminated by the general decay afflicting this major wetland system, attributable largely to pollution. *Lestes dryas*, which was once found in 30 localities, is now down to a single site outside Ireland. Finally, while 26 odon. spp. were recorded in the Basingstoke Canal at Byfleet in the 1930s, only 4 spp. were noticed in 1974 on the same stretch of canal.

1980

- (4036) GRENAND, P., 1980. Introduction à l'étude de l'univers Wajapi. Ethnoécologie des Indiens de Haut-Oyapock (Guyane française). *Langues et Civilisations à Tradition orale* 40: 1-332. (With Span. s.). — (Author's address not stated).

The Wayapi, originating from the Lower Amazone, are one of the 6 Indian "tribes" living in French Guyana. A linguistic analysis is given of their "environmental" terminology. On p. 217, 3 dragonfly expressions are stated, viz. "yāšišōwī" (= "blue dragonfly" = Zygoptera), "yāšitawa" (= "yellow dragonfly" = Anisoptera), and "yemi'apuku" (= "long flute" = Anisoptera).

- (4037) KOLOMIEC, N.G., [Ed.], 1980. *Entomofagi Sibiri i Dal'nogo Vostoka. Ukazatel' literatury (1820-1975)*. — [*Entomophagous insects of Siberia and the Far East. A bibliography (1820-1975)*]. Nauka, Novosibirsk 188 pp. (Russ.). — (Inst. Biol., Siberian Sect. USSR Acad. Sci., Ul. Frunse II, USSR-630091 Novosibirsk).

The bibliography contains 1938 titles, incl. 159 papers, by 23 authors, dealing with the Odon. This includes 93 publications by B.F. Belyshev.

- (4038) LYBOMIRSKAYA O.D. & L.K. GALEEVA, 1980. K voprosu o specificnosti u metacerkarii trematod. — [On the specificity in the trematodan metacercariae] *Tezisy Dokl.*

IX. Konf. ukrain. parasitol. Obshch. 3: 3-41. Naukova Dumka, Kiev. (Russ.). — (Dept. Invert. Zool., Kasan Univ., Lenin Str. 18, USSR-420008 Kasan).

The authors dissected 948 odon. spec., pertaining to 28 spp., and originating from the surroundings of Kasan and from the Volzhsko-Kamsk Nature Reserve, European USSR. The metacercariae of 8 spp. were recorded, among these *Laterotrema* sp. is the most abundant. Its intermediate host is *Cordulia aenea*.

- (4039) MÜLLER, J., P. STROBL & K. LOTZING, 1980. Neue bemerkenswerte Libellenfunde (Insecta, Odonata) im Bezirk Magdeburg. *Abh. Ber. Naturf. Vorges. 12* (3): 75-80. — (Pablo-Neruda-Str. 9, DDR-3034 Magdeburg, GDR).

13 spp. from the Magdeburg District, Germ. Democr. Rep. are listed and discussed.

1981

- (4040) CASPERS H. & C.W. HECKMAN, 1981. Ecology of orchard drainage ditches along the freshwater section of the Elbe Estuary: biotic succession and influences of changing agricultural methods. *Arch. Hydrobiol. (Suppl.)* 43 (4): 347-486. — (Inst. Hydrobiol., Univ. Hamburg, Zeiseweg 9, D-2000 Hamburg-50, FRG).

The paper is based on the same work as that reported in *OA* No. 3952.

- (4041) COSTA, J.M., 1981. Contribuição ao estudo das formas larvárias do gênero *Oxyagrion* Selys, 1876, com a descrição de *Oxyagrion impunctatum* Calvert 1909 (Odonata-Coenagrionidae) — [Contribution to the knowledge of the larval stages of the genus *Oxyagrion* Selys, 1876, with a description of *Oxyagrion impunctatum* Calvert, 1909 (Odonata-Coenagrionidae)]. *Bol. Mus. nac. Rio de Janeiro (NS) (Zool.)* 301: 1-4. (Port., with Engl. s., without an Engl. title). — (Dept. Ent., Mus. Nac., Univ. Fed. Rio de Janeiro, Quinta da Boa Vista, BR-20970 Rio de Janeiro, RJ). The male larva of *O. impunctatum*, from São

- José Mt, MG, Brazil, is described and illustrated.
- (4042) GALLETTI, P.A., 1981. Indagini idrobiologiche sul medio Po a Caorso: Odonata. *Riv. Idrobiol.* 20 (1): 205-215. (With Engl. s.). — (Via Monte Generoso 2, I-20155 Milano).
During 1974-1977, larval collections were made at regular intervals in the Po River at Caorso, Piacenza, Italy. Some observations on the imaginal populations were also carried out. In all, 22 spp. are listed and discussed, incl. the locally interesting *Erythromma viridulum*, *Gomphus flavipes*, *Ophiogomphus serpentinus*, and *Orthetrum albistylum*. For most spp. notes on the larval habitats are provided. (Cf. also *OA* No. 2428).
- (4043) KOBAYASHI, T., 1981. New records of 8 species of Odonata from Yamanshi Pref. *Nature & Insects* 16 (11): 38-39. (Jap., with Engl. title). — (4-3, Kitayama-cho, Fuchu, Tokyo, 183, JA).
Records are provided for *Lestes sponsa*, *Calopteryx atrata*, *Aeshna nigroflava*, *Sympetrum frequens*, *S. parvulum*, *S. r. risi*, *S. baccha matutinum* and *S. croceolum*.
- (4044) McCAFFERTY, W.P. (text) & A.W. PROVONSHA (illustr.), 1981. *Aquatic entomology. The fishermen's and ecologists' illustrated guide to insects and their relatives*. XVI+488 pp., 16 col. pls. excl. Sci. Books International, Boston. — Price: US \$ 50.-. — (First Author: c/o Dept Ent., Purdue Univ., West Lafayette, Indiana 47907, USA).
The Odon. are dealt with in considerable detail on pp. 125-147, pls 5-6. A general outline of the biology of the order is followed by a list of North American genera and their common names, a pictorial key to the larvae of the nearctic families, and by larval and adult diagnoses and discussions of the North American families. The black-and-white and the colour illustrations are excellent.
- (4045) MÜLLER, J., 1981. Die grüne Keiljungfer (*Ophiogomphus serpentinus* (Charp.) (Insecta, Odonata) im NSG Mahlpfuhler Fenn, Kreis Tangerhütte (Bez. Magdeburg). *Abh. Ber. Naturk. Vorgesch.* 12 (4): 85-86. — (Pablo-Neruda-Str. 9, DDR-3034 Magdeburg, GDR).
The occurrence of *O. serpentinus* in the Nature Reserve "Mahlpfuhler Fenn", Distr. Magdeburg, Germ. Democr. Rep. is discussed.
- (4046) MURTHY, E.S.N., 1981. Dragonfly — a useful insect. *Sci. Reporter, India* 18 (4): 240-241. — (Andhra Loyola Coll., Vijayawada-520008, Andhra Pradesh, India).
A general narrative on the biology of dragonflies.
- (4047) O'BRIEN, C., 1981. *Book of New Zealand wildlife. A guide to the native and introduced animals of New Zealand*. Landsdowne Press, Auckland-London-New York-Sydney. 161 pp.
A profusely illustrated book with superb colour photographs, prepared by a non-specialist. On p. 103 a photograph of a male *Hemicordulia australiae* is mistakenly identified as "the largest and most distinctive of N.Z.'s dragonflies (= *Uropetala carovei*)". There follows in the text a confused account of the dragonfly fauna and the life history of the species. In an index of scientific and common names *U. carovei* is included as the Giant dragonfly, Maori name *kapokapowai*, and *Xanthocnemis zelandica* (= *X. zelandica*) as the red damselfly, Maori name *kihitarā*.
- (4048) STACHOWIAK, G., J. MÜLLER, K. LOTZING & D. SPITZENBERG, 1981. Notizen zur Geschichte und Entomofauna des FND Bormholt-Teich bei Altmersleben, Kreis Kalbe/Milde (Altmark). *Abh. Ber. Naturk. Vorgesch.* 12 (4): 79-84. — (Second Author: Pablo-Neruda-Str. 9, DDR-3034 Magdeburg, GDR).
The succession of the odon. fauna in an artificial pond (Germ. Democratic Rep.) is traced during the first year of the existence of the habitat. Among the 21 spp., *Coenagrion lunulatum*, *Ischnura pumilio*, *Sympetrum fonscolombei* and *S. pedemontanum* were prevailing.
- (4049) VIELI, R. & A. DECURTINS, 1981.

Vocabulari romontsch sursilvan-tudestg. [Rhaeto-Romanic dictionary: Surselvanian-German]. Ligia Romontscha, Chur. XXXVIII+881 pp. — Price: sFr 25.-. — (Publishers: Obere Plessurstr. 47, CH-7000 Chur).

The following expressions are given for "dragonfly" in the Surselvanian dialect of Rhaeto-Romanic: "libella", "müstgacavagl", "mazzacavqls", and "catschegls"; the latter explicitly also for Zygoptera. "Cavagl" and "cavals" means "horse", "müstga" is a fly, used, in various combinations particularly for denomination of a number of dipteran families, e.g. "müstga tschocca" = Tabanidae, "m. da lidimer" = Scatophagidae, "m. da coss" = Gasterophilidae. "Egl" means "eye", but the term "catsch" has various meanings, most of which are related to "push", "power", etc. The said expression could be tentatively translated as "eye-driver". — (For the Surselvanian dialect cf. *OA* No. 3809).

- (4050) WEBB, D.W., 1981. The benthic macroinvertebrates from the cooling lake of a coal-fired electric generating station. *Bull. Illinois nat. Hist. Surv.* 32 (4): 358-377. — (c/o Nat. Hist. Surv. Div., Illinois Inst. Natur. Resour., Urbana, Ill., USA).
Among the 23 taxa collected in Lake Sangchris, central Illinois, USA, *Argia* sp., *Ischnura* sp. and *Somatochlora* sp. were represented. 98% of the total number of specimens gathered was referable to chaoborids and chironomids.

1982

- (4051) ABDURAHMANOVA, Z. Yu., 1982. Donnaya fauna makrozoobentosa Divichinskogo limana. — [The macrozoobenthos of the Divichinskiy estuary]. *Izv. Akad. Nauk azerbay. SSR (Biol.)* 1982 (3): 69-73. (Russ., with Azerbaijani s.). — (Author's address not stated).
During 1979-1980, at 10 stations, 8 odon. spp. were recorded. These are listed along with data on their seasonal occurrence.

- (4052) ANDOH, T., 1982. Notes on the dragonflies of Aichi Prefecture. *Nature & Insects* 17 (12): 17-19. (Jap., with Engl. title). — (5-24, Otowa 1-chome, Ichinomiya, Aichi-ken, 491, JA).
Notes on distribution and field observations on some spp. Japanese names only.

- (4053) ARNOLD, A., 1982. Wiederfang-Versuche und einige Bemerkungen zum Massenschlupf bei Libellen. *Ent. Nachr. Ber.* 26 (3): 130-132. (With Engl. & Russ. s's.). — (Wildenfesler Str. 34, DDR-9513 Langenbach/Erzg., GDR).
A new marking method is described, and the recapture results in *Lestes sponsa* and *Sympetrum danae* are discussed.

- (4054) BARTHEL, P.H. & M. MARCHAND, 1982. Anmerkungen zum Zielkonflikt zwischen Naturschutz und Vogelschutz am Beispiel einer faunistisch wertvollen Kiesgrube im südlichen Wesertal. *Faun. Mitt. SNiedersachs.* 4/5: 81-89. (With Engl. s.). — (First Author: Leibnitzstr. 12, D-3200 Hildesheim; — Second Author: Gartenstr. 1, D-3400 Göttingen, FRG).

Gravel-pits in the southern Weser valley, Fed. Rep. Germany, which have been populated by several threatened spp., are now to be recultivated. Alternative habitats are being planned to replace the pits, and this has led to a conflict between nature conservation and bird protection societies. While the original pits are of no ornithological importance, they harbour, among others, some of the largest populations of *Sympetrum pedemontanum* in Lower Saxony. The replacement habitats should therefore be planned with regard to the threatened spp. Suggestions are made for the formation of alternative habitats, and a technical documentation of the project is demanded.

- (4055) BELLE, J., 1982. Some new and interesting South American species of Phyllogomphoides in the Museum of Zoology, University of Michigan, Ann Arbor, Michigan (Insecta: Odonata: Gomphidae). *Occ. Pap. Mus. Zool. Univ. Mich.* 701: 1-14. — (Onder de Beumkes 35, 6883 HC Velp, NL).
The following new spp. are described and

illustrated: *P. praedatrix* sp. n. (holotype ♀: Abuná, Mato Grosso, Brazil, 8-III-1982; no other specimens known), *P. aculeus* sp. n. (holotype ♂: Iquitos, Peru, XI-1939; no other specimens known, and *P. angularis* sp. n. (holotype ♀: Porto Velho, Amazonas, Brazil, 5-V-1922; male paratypes from Porto Velho and Belém). The description of the first female of *P. semicircularis* (Sel.) is also provided.

- (4056) CARFI, S., P. DEL CENTINA & F. TERZANI, 1982. Contributo alla conoscenza della odonatofauna dell'Afghanistan. *Redia* 65: 207-214. (With Engl. s.). — (First author: Ist. Zool., Univ. Firenze, Via Romana 17, I-50125 Firenze).

A checklist is given of the Odon. so far known from Afghanistan (68 spp. and ssp.), and a small collection (spring-summer, 1977) is brought on record. The latter includes 3 taxa new to the regional fauna (*Ischnura e. elegans*, *Calopteryx o. orientalis*, *Cordulegaster brevistigma folia*), bringing the total number of the Afghan odon. spp. and ssp. up to 71.

- (4057) CARLE, F.L., 1982. Thoughts on the origin of insect flight. *Ent. News* 93 (5): 159-172. — (146 Mountain View Rd, Warren, NJ 07060, USA). It is suggested that early Paleozoic landscapes were characterized by extensive seepage areas which provided relatively stable environmental conditions for early apterygotes. Increased dependence on the aquatic environment is envisioned as directing the development of pleural respiratory folds which could be ventilated by subcoxo-coxal muscles: pleural folds are not considered to be derived from preexisting insect structures such as paranota or coxal styli. It is also suggested that wing development may have been influenced by a thermoregulatory or swimming function of wings or both. Flight is considered to have evolved in the reproductive adult stage in response to a continuous downstream displacement during the juvenile stage; flight eventually augmenting other forms of locomotion during the migration to upstream oviposition and nursery areas. The polyphyletic origin of wings is considered improbable, although the Protodonata and Odonata are

considered to be the sister group of remaining Pterygota. Further, it is suggested that if the small stream theory is similar to the actual course of events then it is probable that pertinent fossil evidence will be scarce due to the high energy nature of the small stream environment. (Author).

- (4058) CHAO, H.-f., 1982. Classification of Chinese dragonflies of the family Gomphidae (Odonata), VI. *Entomotaxonomia* 4 (4): 287-298. (Chin., with Engl. s.). — (Dept Plant Prot., Inst. Biol. Control, Fujian Agric. Coll., Fuzhou, Fujian, P.R. China).

12 spp. of the genera *Stylurus*, *Trigomphus*, *Fukienogomphus*, *Anisogomphus*, *Leptogomphus*, *Onychogomphus*, *Nihonogomphus* and *Paragomphus* are dealt with. New are *Anisogomphus wuzhishanus* sp. n. (♀ holotype: Guangdong, Hainan Is., Wuzhishan; 25/26-IV-1932), *Leptogomphus celebratus* sp. n. (♀ holotype: Guangdong, Hainan Is., Jianfenling; 29-VI-1981), *L. intermedius* sp. n. (♂ holotype, ♀ allotype: Guangdong, Luofushan; 20-VII-1935) and *Onychogomphus flavicaudus* sp. n. (♂ holotype: Guangdong, Hainan Is., Ka-chek; 12-V-1932). Figures and English descriptions are provided. The types are deposited in the Dept Biol., Zhongshan.

- (4059) CSIBY, M., 1982. Neuere Ergebnisse der Libellen-Forschung im Bakony-Gebirge (Insecta: Odonata). *Fol. Mus. hist-nat. bako-nyien*. 1: 111-117. — (Author deceased; c/o Dr S. Tóth, Bakonyi Természet-Tudományi Muz., Postafiók 36, HU-8420 Zirc).

A list is given of the Odon. of the Bakony Mts, Hungary (54 spp.), and the biogeography, phenology and species abundance of the regional fauna are discussed. (For a monographic treatment of the Bakony odon. fauna cf. *OA* No. 3141).

- (4060) DE JESUS SORIA, S & A.B.M. MACHADO, 1982. *Gynacantha bifida* Rambur (Odonata, Aeshnidae), novo inimigo de *Xyleborus* spp. (Coleoptera, Scolytidae) praga do cacauero na Bahia, Brasil / *Gynacantha bifida* Rambur (Odonata, Aeshnidae), natural enemy of *Xyleborus* spp. (Coleoptera, Scoly-

tidae) a pest of cacao in Bahia, Brazil. *Revta theobroma* 12 (4): 257-259. (Port., with Engl. s.). — (First Author: Div. Zool., Centro Pesquisas do Cacao, C.P. 7, BR-45.600 Itabuna, Bahia).

The crepuscular *G. bifida* was frequently observed flying together with the wood-boring *Xyleborus* spp. during the crepuscular flight of the latter. Examination of the intestinal content of the dragonflies revealed a great number of *Xyleborus* thus demonstrating that they were being predated by the dragonfly. *Xyleborus* was the preferential prey since fragments of no other insect could be found in the intestines of the *Gynacantha* captured at that occasion. This is the first report of a massive dragonfly predation on Coleoptera. The fact has economic implications since *Xyleborus* is a very important enemy of cacao trees in the large plantations of the State of Bahia, Brazil. (Authors).

- (4061) DEMIRSOY, A., 1982. Odonata. *Türkiye Faunasi* (VIII) 4 (8): X + 156 pp., 118 figs incl. (Turkish, with Engl. s.). — Price: LT 150. — (Zooloji Bölümü, Fen Fakültesi, Hacettepe Üniversitesi, Beytepe-Ankara, Turkey).

This volume represents the first attempt ever made at summarizing all what is known on the odon. fauna of Turkey. A brief introductory chapter on morphology and general biology is followed by keys to and descriptions of all the regional taxa known to the author. Locality data are presented for all spp., and the biogeographic composition of the regional fauna is discussed. It is unfortunate that many of the recent works on the Turkish fauna and on the taxonomy of the regional taxa were not available to the author, but many of the distributional data are published here for the first time.

- (4062) EAK-AMNUAY, P., 1982. *Taxonomy of the family Libellulidae in the central area of Thailand*. M. Sc. thesis, Kasetsart Univ., Bangkok. IX+241 pp., 35 col. pls incl. (With Thai s.). — (Cotton & Fibre Br., Ent. & Zool. Div., Dept Agric., Bangkok, Bangkok-10900, Thailand).
26 genera, 40 spp., and 18 ssp. are record-

ed, described in detail and illustrated, viz. *Acisoma panorpoides panorpoides*, *Aethriamanta aethra*, *A. b. brevipennis*, *Brachydiplax c. chalybea*, *B. sobrina*, *Brachythemis contaminata*, *Camacinia gigantea*, *Cratilla l. lineata*, *Crocorthemis s. servilia*, *Diplacodes nebulosa*, *D. trivialis*, *Hydrobasileus croceus*, *Lathrecista a. asiatica*, *Macrodiplax cora*, *Neurothemis fluctuans*, *N. fulvia*, *N. intermedia atalanta*, *N. tullia feralis*, *Neurothemis t. tullia*, *Onychothemis t. testacea*, *Orthetrum chrysis*, *O. glaucum*, *O. pruinatum neglectum*, *O. s. sabina*, *O. triangulare*, *Palpopleura s. sexmaculata*, *Pantala flavescens*, *Potamarcha congener*, *Pseudothemis jorina*, *Rhodothemis rufa*, *Rhyothemis p. phyllis*, *R. plutonia*, *R. v. variegata*, *Tholymis tillarga*, *Tramea basilaris burmeisteri*, *Trithemis aurora*, *T. festiva*, *T. pallidinervis*, *Urothemis s. signata*, *Zygonyx iris malayana* and *Zyxomma petiolatum*. Among these, *T. basilaris burmeisteri* is reported as a new record to Thailand while *A. brevipennis*, *B. sobrina*, *C. gigantea*, *C. lineata*, *H. croceus*, *L. asiatica*, *O. chrysis*, *O. glaucum*, *O. triangulare*, *R. rufa*, *R. plutonia*, *Z. iris malayana* and *Z. petiolatum* are new records to the Central Area of Thailand. Keys to the genera, spp. and ssp. are provided, and the habitats are discussed. (Author).

- (4063) EDA, S., 1982. Chronicle of Japanese odonatology in 1981. *Nature & Insects* 17 (5): 14-20. (Jap., with engl. title). — (3-4-25 Sawamura, Matsumoto, Nagano, 390, JA).
Regular annual review of the main Japanese odonatalogical achievements and events, for 1981, with special emphasis on the published work.

- (4064) GARRISON, R.W., 1982. *Archilestes neblina*, a new damselfly from Costa Rica, with comments on the variability of *A. latalatus* Donnelly (Odonata: Lestidae). *Occ. Pap. Mus. Zool. Univ. Mich.* 702: 1-12. — (1030 Fondale Str., Azusa, CA 91702, USA).
A. neblina sp. n. (♂ holotype: stream nr Hacienda Zurqui, San José Prov., Costa Rica; deposited in U.S. Nat. Mus.) is described and illustrated. The ♀ is unknown. The males of the known members of the genus are keyed, and

the variability in *A. latialatus* is discussed.

- (4065) HIRUKAWA, N. & K KINOSITA, 1982. New localities of a dragonfly, *Nannophya pygmaea* in Nagano Prefecture (III). *New Entomologist* 31 (1): 15-16. (Jap., with Engl. title). — (First Author: 6161 Tamoto, Yasuoka-mura, Shimoina-gun, Nagano Pref., 399-18, JA).
2 localities are added to the list of known habitats of this sp. in Nagano, Japan (cf. *OA* Nos 2464, 3636). Both are classified as "temporarily uncultivated rice fields" (Jap.: "kyuko-den"). — (*Abstracter's Note*: During the past 2 decades the Japanese Government is endeavouring to shift the staple-food habits of the population from rice to bread. Consequently, many old rice fields are deserted. These turn into paddy marshes, "kyuko-den", offering favourable breeding conditions for this sp. The "kyuko-den" stage lasts but a few years; it is followed by vegetational succession, leading to the drying up of the wetland. The "kyuko-den", thus, represent only temporary localities of this sp.).
- (4066) [KOYAMA, N., S. EDA, T. ANDO, S. FUJISAWA, F. ITO, M. KURATA, D. KURIBAYASHI, W. MIYATA, I. SONEHARA & T. TAKIZAWA], 1982. [Additions to the "Dragonflies of Nagano Prefecture"(3)]. *New Entomologist* 31 (1): 22-23. (Jap.). — (First Author: Fac. Textile Sci. & Technol., Shinshu Univ., 3-15-1 Tokida, Ueda, Nagano Pref., 386, JA).
Supplementary distributional data on *Calopteryx virgo japonica*, *Anisogomphus maaeki*, *Lanthus fujiacus*, *Planaeschna milnei* and *Sympetrum s. speciosum*, to be added to those given in the book listed in *OA* No. 2072, and in the first 2 supplements (*OA* Nos 3638, 3639).
- (4067) KUKASHEV, D. Sh., 1982. K fauna i biologii strekoz (Odonata, Insecta) basseyna ozera Kurgal'dzhin. — [On the fauna and biology of dragonflies (Odonata, Insecta) of the Kurgal'dzhin Lake]. *Izv. Akad. Nauk kazakh. SSR (Biol.)* 1982 (6): 46-49. (Russ., with Kazakh s.). — (Inst. Zool., Kazakh SSR Acad. Sci., Akademgorodok, USSR-480032 Alma-Ata).
The paper is based on collections of larvae and adults (1977-1978; 29 spp.), furnishing data on their local ecology and phenology. The said figure covers the earlier literature records from this Kazakh (USSR) locality as well.
- (4068) ŁABEDZKI, A., 1982. Badania nad rozproszaniem w terenie i długością życia niektórych gatunków ważek (Odonata) — Researches concerning the dispersion in terrain and the life length of some species of dragonflies (Odonata). *Roczn. Akad. roln. Poznan.* 140: 77-90. (Pol., with Engl. & Russ. s's.). — (Katedra Entomologii Leśnej, Akad. roln., ul. Wojska Polskiego 71 c, PO-60-625 Poznań).
The maximal (and average) longevity in days was identified in the surroundings of Poznan, Poland, in the following spp.: *Calopteryx splendens* 27 (20), *Lestes dryas* 25 (18), *L. sponsa* 23 (18), *Coenagrion puella* 24 (19), *C. pulchellum* 29 (21), *Aeschna cyanea* 53 (30), *A. grandis* 64 (35), *Libellula quadrimaculata* 52 (35), *L. depressa* 44 (33), *Sympetrum flaveolum* 38 (30), *S. vulgatum* 34 (27), and *S. sanguineum* 36 (28) days.
- (4069) LABEDZKI, A., 1982. Masowy pojaw ważki *Libellula quadrimaculata* L. w Świętokrzyskim Parku Narodowym — The mass appearance of dragonfly *Libellula quadrimaculata* L. in Świętokrzyski National Park. *Parki nar. Rezerw. Przyr.* 3 (1): 19-22. (Pol., with Engl. s.). — (Katedra Entomologii Leśnej, Akad. Roln., ul. Wojska Polskiego 71 c, PO-60-625 Poznań).
A migratory flight (W-E direction, 42,000 specimens approx.) of this sp. (and a few *L. depressa*) was noticed in the territory of the said National park, Poland, on May 30, 1981. The migration is described, mapped and discussed.
- (4070) MARTENS, K., 1982. *Onychogomphus uncatatus* (Charpentier, 1840) (Odonata, Gomphidae), a new species for the Belgian fauna. *Bull. Anns Soc. r. belge Ent.* 118: 193-194. — (Inst. Zool., Univ. Gent, Ledeganckstr. 35, B-9000 Gent).
A male is reported from Roisin, June 20, 1979,

bringing the status of the Belgian odon. fauna up to 68 known spp.

- (4071) [MILIČ LOHMAN, J., R. RITSEMA, H. MISLIN & M. THÜRKAUF], 1982. *Gedenkfeier für Herrn Prof. Dr. Adolf Portmann. Freitag, den 9. Juli 1982, in der Peterskirche Basel*. Privately published. 24 pp., portrait incl. — (Limited stock, available from: Mrs M. Kottmann-Nadolny. In den Vogelgärten 9, CH-4123 Allschwil).

The booklet contains 4 addresses, given at the solemn commemoration for the late A. Portmann. — [Abstracter's Note: Dr Portmann (born May 27, 1897 in Basel; deceased June 28, 1982; Professor of Zoology, Univ. Basel) was an outstanding Swiss zoologist, and one of the greatest modern European biological philosophers. His Ph.D. dissertation (1921), "Die Odonaten der Umgebung von Basel. Beitrag zur biologischen Systematik der mitteleuropäischen Libellen" exercised a considerable influence on European odonatological research between the two World Wars. He was a Member of the Committee of Honour of the Sixth Int. Symp. Odonatol., Chur, 1981. — The following major obituaries have appeared in the German-language daily press: "Adolf Portmann zum Gedenken" (*Basler Ztg*, June 29; by G.A.W.), "Ein Unzeitgemässer der Wissenschaft" (*Frankfurt. allg. Ztg*, June 30; by J. Busche), "Adolf Portmann zum Gedächtnis" (*Basler Ztg*, July 1; by M. Thürkauf), "Zum Tode von Professor Adolf Portmann" (*Tages Anz., Zürich*, July 1, with portrait; by R. Waldner), and "Ehrfurcht von dem Geheimnis des Lebens. Zum Tode von Adolf Portmann" (*Neue Zürcher Ztg*, July 3/4, with portrait; by H. Hediger)].

- (4072) MOHSEN, Z.H. & M.S. MULA, 1982. Field evaluation of *Simulium* larvicides: effects on target and nontarget insects. *Environ. Ent.* 11 (2): 390-398. — Dept Ent., Univ. Calif., Riverside, Cal. 92521, USA). The effectiveness of 3 blackfly larvicides, (IRS-cis)-cypermethrin (FMC 45497) (10% e.c.), temephos (Abate) (50% e.c.) and diflubenzuron (Dimilin) (25% w.p.), was studied in the field against target *Simulium*

and their impact on selected aquatic non-target insects was determined in field tests in California. Effectiveness and impact were assessed by 3 sampling techniques: drift net, Surber sampler and polyethylene strips. Interval drift samples gave rapid evaluation of the effectiveness of the fast-acting larvicides FMC 45497 and temephos. For diflubenzuron, which is slow-acting, Surber sampler and polyethylene strips were more suitable because drift among aquatic organisms was not induced when diflubenzuron was applied at 0.1 p.p.m./15 min. After the application of FMC 45497 at the rate of 0.01 p.p.m./15 min, catastrophic drift was noted among *Baetis*, Chironomidae, Hydropsyche and Odonata. *Baetis* larvae constituted over 85% of the drifting organisms in number. Temephos applied at 0.1 p.p.m./15 min was selective, producing drift in *Simulium* larvae only, and diflubenzuron at 0.1 p.p.m./15 min caused moderate decline in *Simulium* larvae and *Baetis* and Hydropsyche.

- (4073) PAULSON, D.R., 1982. Odonata. In: S. Hurlbert & A. Villalobos-Figueroa, [Eds], Aquatic biota of Mexico, Central America and West Indies, pp. 249-277. San Diego St. Univ., San Diego. (Engl. & Span.). — (Washington St. Mus., Univ. Washington, Seattle Wash. 98195, USA).

This is the same type of paper as those listed in OA Nos 2342, 3728, giving detailed checklists of spp. known from the area covered, viz. Mexico (286), Guatemala (197), Belize (44), El Salvador (41), Honduras (94), Nicaragua (51), Costa Rica (228), Panama (169), West Indies (101), Bahamas (31), Cuba (77), Cayman Islands (17), Jamaica (57), Hispaniola (54), Puerto Rico and Virgin Islands (42), Lesser Antilles (41). The regional biogeography is discussed, and the bibliography contains close to 250 references.

- (4074) REHFELDT, G., 1982. Rasterkartierung von Libellen zur ökologischen Bewertung von Flussauen. *Beitr. Naturk. Niedersachs.* 35 (4): 209-225. (With Engl. s.).

The results of the 1980 grid mapping in the river plains of the Innerste and Oker, Lower

- Saxony, Fed. Rep. Germany are reported. The census evaluation methods are discussed and a tentative scale is proposed. A list of the recorded spp. (32) is given in the Appendix.
- (4075) RETTIG, K., 1982. Bemerkenswertes aus der Insektenwelt Ostfrieslands im Jahre 1982. *Beitr. Naturk. Niedersachs.* 35: 226-233. — (Danziger Str. 11, D-2970 Emden, FRG). Annotations on 11 odon. spp. from Ostfriesland (= East Friesland), Fed. Rep. Germany.
- (4076) SATO, M., 1982. Vanishing aquatic insects in Japan. *Nature & Insects* 17 (7): 2-6. (Jap., with Engl. title). — (Author's address not stated). The Odon. referred to are: *Platycnemis foliacea sasakii*, *Aeschnophlebia anisoptera*, *Oligoaeschna pryeri*, *Macromia daimoji*, *Libellula angelina*, *Nannophya pygmaea*, and *Sympetrum maculatum*.
- (4077) SATO, Y., 1982. Reactions of male *Mnais pruinosa* to acrylic resin wing models. *Insectarium, Tokyo* 19 (10): 252-256. (Jap., with Engl. title). — (3-17-16, Narita-nishi, Suginami-ku, Tokyo, 166, JA). Report on experimental field work. — (*Abstracter's Note*: According to a personal information from the Author, he is extending the project, covering *Calopteryx cornelia* as well).
- (4078) SAVARD, M., 1982. Extension de la période de vol chez *Enallagma carunculatum* et présence de femelles homochromatiques chez *Ischnura verticalis*. *Faberies* 8 (5): 84-86. — (184, ave. Eymard-Nord, Alma, Que. G8B 5H9, CA). The 2 spp. were taken Sept. 7, 1980 at Boucherville, Chambly Co., Montreal region. The latest previously known seasonal record of *E. carunculatum* in Quebec was Aug. 21 (cf. *OA* No. 1901).
- (4079) SCHNELL, W. & P. SCHNELL, 1982. Die Tierwelt des Naturlehrparks. In: U. Kisker, [Ed.], *Erforschung des Naturlehrparks Haus Wildenrath*, Bd. 1, pp. 38-43. Rheinland-Verlag, Köln. — (Authors' address not stated). 5 odon. spp. are reported from the Naturlehrpark Haus Wildenrath, Distr. Erkelenz, Rheinland, Fed. Rep. Germany, viz. *Platycnemis pennipes*, *Coenagrion puella*, *Calopteryx splendens*, *Gomphus vulgatissimus*, and *Cordulegaster boltoni*.
- (4080) TEMBHARE, D.B. & V.K. THAKARE, 1982. Some histophysiological studies on the male reproductive system of the dragonfly, *Ictinogomphus rapax* (Rambur) (Odonata: Gomphidae). *J. adv. Zool.* 3 (2): 95-100, figs 1-18 excl. — (P.-G. Dept Zool., Nagpur Univ., Univ. Campus, Nagpur-440010, India). Studies were carried out with special reference to mechanisms of sperm bundle formation, their transport and encapsulation in the spermatophores. As soon as the spermiogenesis is over the sperm bundles are formed by binding of sperm heads in distinct caps in the lobules of the testis by virtue of the secretory droplets of unknown origin. They migrate to the seminal vesicle after bypassing the vas efferens, common duct and vas deferens, respectively. In the seminal vesicle, the caps of the sperm bundles dissolve and spermatozoa become free from one other. The spermatozoa are finally enclosed in the spermatophores which are formed from the seminal fluid. The spermatophores are stored in the sperm-sac till copulation takes place. (Authors).
- (4081) THIERY, A., 1982. Hydrobiologie d'un complexe palustre de Crau; les marais du Plan du Bourg (Bouches-du-Rhône, France). Structure dynamique des communautés d'invertébrés aquatiques. *Annls Limnol.* 18 (2): 151-171. (With Engl. s.). — (Lab. Biol. Anim.-Ecol., Fac. Sci. Saint-Jérôme, F-13397 Marseille-4). The aquatic invertebrate communities of the temporary pools in the Plan du Bourg, France were studied and their dynamics is analyzed. The paper is reporting on the same project as that listed in *OA* No. 3824, and contains a few references to the Odon.
- (4082) TÓTH, S., 1982. Emlékezés Csiby Máriaára 1951-1981 / Erinnerung an Mária Csiby (1951-1981). *Folia Mus. hist.-nat. bakonyien.* 1: 9-15. (Hung., with Germ. s.). — (Bakonyi

- Termézet-Tudományi Muz., Postafiók 36, HU-8420 Zirc).
 Obituary for M. Csiby, with a portrait and complete bibliography. (For another obituary cf. *Notul. odonatol.* 1 (1982): 155-156).
- (4083) TSONIDES, L., K.E. GIBBS & D.T. JENNINGS, 1982. Species of Odonata feeding on Lepidoptera in spruce-fir forests of Maine. *Res. Life Sci. Univ. Maine* 30 (1): 1-12. — (Dept Ent., Univ. Maine, Orondo, Maine, USA).
 39 of 127 spp. known to occur in Maine, USA were collected in forested habitats. Of the 350 specimens dissected, 163 (= 47%) had fed on lepidopterans, i.e. the scales were found in their guts. The distribution per families was as follows: Coenagrionidae 8%, Lestidae 0%, Calopterygidae 43%, Gomphidae 35%, Aeshnidae 0%, Cordulegasteridae 92%, Macromiidae 58%, Corduliidae 30%, and Libellulidae 58%. In all, 47% of dissected zygopterans and 50% of anisopterans contained lepidopteran scales. It is emphasized that special collecting methods are needed to collect dragonflies alighting on tree crowns. Most of the material examined came from the zone near the ground, therefore the results may not be representative for species patrolling and hawking moths near tree crowns. A list of spp. and their gut contents is provided.
- (4084) VON HAGEN, H., 1982 Libellen im Bereich Bochum/Witten (Odonata), II. *Mitt. westf. Ent.* 6 (2/3): 13-17. — (Akazienweg 28, D-5810 Mitten, FRG).
 Annotated list of 20 spp. (For pt I cf. *OA* No. 3799).
- (4085) WAGNER, R., 1982. Libellen (Insecta, Odonata) aus der Wetterau und angrenzenden Gebieten. *Hess. faun. Briefe* 2 (1): 13-16. — (Limnol. Flusst. Max-Planck-Inst. Limnol., Schlitz, FRG).
 23 spp. from Wetterau, Hessen, Fed. Rep. Germany are listed and briefly discussed.
- (4086) WATSON, J.A.L., 1982. A truly terrestrial dragonfly larva from Australia (Odonata: Corduliidae). *J. Aust. ent. Soc.* 21 (4): 309-311.
 — (Div. Ent., C.S.I.R.O., P.O. Box 1700, Canberra City, A.C.T. 2601, AU).
 Terrestrial larvae of various instars, apparently belonging to the gomphomacromiine genus *Pseudocordulia*, have been found amongst leaf litter far from water in rain forests in northern Queensland. The larva will be described in detail elsewhere, but a photograph and a discussion of its general morphological features are given here.
- (4087) ZEPP, H., 1982. *Naturpark Siebengebirge: Inhalte vorliegender natur- und landschaftskundlicher Grundlagen*. 45 pp. Rheinland-Verlag Köln. — (Lohmüllerstr. 32, D-5000 Köln, FRG).
Calopteryx splendens, *C. virgo*, *Cordulegaster bidentatus*, and *C. boltoni* are listed, without any further data.

1983

- (4088) (Anonymous), 1983. "Musée Robert" — ein Kunstmuseum in Biel. Un musée des beaux-arts à Bienne. *Schweiz* 56 (2): 56. (Bilingual: Fr. & Germ.).
 Report on the same subject as in *OA* No. 4013. The Germ. and the Fr. texts are not identical; the Fr. is correct.
- (4089) (Anonymous), 1983. Noted entomologist Basil Montgomery dies. *Lafayette Journal Courier, Lafayette, USA*, issue of Jan. 20.
 A detailed general obituary for Prof. Dr. B. Elwood Montgomery (Oct. 10, 1899 — Jan. 19, 1983), with a portrait. An outline of his biography and a list of his memberships are provided.
- (4090) ANSELIN, A., 1983. Medewerking voor aanvullingen Libellen-verspreiding in België — [An appeal for collaboration in the mapping scheme of Belgian dragonflies]. *Phegea* 11 (1) 12. (Dutch). — (Lab. Anim. Ecol., Univ. Gent, Ledeganckstr. 35, B-9000 Gent).
 The work reported in *OA* No. 2622, is to be updated; the workers willing to collaborate in the scheme are requested to take up contact

with the Author.

- (4091) ARAI, Y., 1983. [Observations on *Lyriothe mis pachygaster*, with special reference to the mature adults]. *Gekkan-Mushi* 1983 (143): 17-22. (Jap.). — (2-3-27, Sakura-cho, Kumagaya, Saitama Pref., 360, JA).
The observations were made in a swampy field and in an abandoned paddyfield in Orniya, Chichibu, Saitama Pref., Japan (1981-1982). In winter the swamp dried up, and the larvae were found hibernating under dead leaves, on dry land rather than in the remaining water. Their stages varied from very young (6 mm length) to the ultimate instar. — The adult season lasts from April to August. The adults do not move far from the swamp; 40-68% of the marked males remained within the same area during 1 week. The males defend territories, chasing the invaders by horizontal and by perpendicular chase. Mating is affected by the weather, the frequency decreasing in cloudy days. Mating display involves bending upwards of the abdomen. Copulating takes 1-3 min. Oviposition is guarded, but occasionally interrupted by other males. It is effected by striking the water surface (up to 42 times/min), and the eggs appear to be thrown forward, included in a water drop.
- (4092) BALESTRAZZI, E., P.A. GALLETTI & M. PAVESI, 1983. Sulla presenza in Italia di *Cordulegaster boltoni immaculifrons* Selys, 1850 e considerazioni sulle specie italiane congeneri (Odonata Cordulegasteridae). *G. ital. Ent.* 1: 153-168. (With Engl. s.). — (Second Author: Via Monte Generoso 2, I-20155 Milano).
The occurrence of *C. boltoni immaculifrons* in western Liguria, Italy is ascertained on the basis of 50 ♂ and 6 ♀ from the district of Imperia. All the other Ligurian specimens are referable to the nominate (?) form. Figures and description of the structural features are provided, the literature on the occurrence of *C. b. immaculifrons* in Italy is critically reviewed, and *C. b. bidentatus* from Lazio is placed on record. In addition, the Italian *Cordulegaster* taxa are keyed.
- (4093) BANSE, C. & H. SCHWAIGER, 1983. Ergebnisse über markierte *Aeshna cyanea* ♂♂ (Odonata, Aeshnidae). *Nachrbl. bayer. Ent.* 32 (1): 9-14. (With Engl. s.). — (First Author: Rabenweg 6, D-8050 Freising, FRG; — Second Author: Krumbachstr. 14, D-8050 Freising, FRG).
On the basis of a mark-recapture study the odon. oviposition habitats are discussed in terms of the Island Theory (cf. R.H. MacArthur & E.O. Wilson, 1967, *Biogeographie der Inseln*, Goldmann, München).
- (4094) bpk, 1983. Rheinische Libellen. *Kosmos* 79 (4): 88.
Book review of the volume listed in *OA* No. 3307.
- (4095) CARLE, F.L., 1983. A new *Zoraena* (Odonata: Cordulegasteridae) from eastern North America, with a key to the adult Cordulegasteridae of America. *Ann. ent. Soc. Am.* 76 (1): 61-68. — (146 Mountain View Rd, Warren, NJ 07060, USA).
Z. bilineata sp. n. (holotype ♂: a tributary of Cove Cr. Tazewell Co., Va, USA, 10-VI-1978, deposited in FSCA, Gainesville; ♀ allotype, numerous paratypes) is described and illustrated. A key to adult American cordulegasterids is provided, and the taxonomic position of *Zoraena* and related genera is discussed. The *Kuldanagasterinae* Yousuf & Yunus (cf. *OA* No. 1496) is synonymised with the *Cordulegasterinae*.
- (4096) CLAUSNITZER, H.-J., 1983. Der Einfluss unterschiedlicher Bewirtschaftungsmassnahmen auf den Artenbestand eines Teiches. *Natur & Landschaft, Stuttgart* 58 (4): 129-133. — (Südstr. 6, D-3105 Eschede, FRG).
The faunal succession of the Odon. (and other animal and plant communities), studied during a 12-yr period in an unnamed pond in Lower Saxony, Germany, is analyzed. The pond has been used for commercial fish culture (1971-1975), as feeding grounds for water fowl (1976-1979), and as an amphibian and aquatic insect sanctuary (1980-1982). The quantitative and qualitative development of the odon. fauna is recorded and discussed.

- (4097) DOMMANGET, J-L., 1983. Inventaire des odonates (libellules) de France. *Entomologiste* 39 (1): 6. — (7 rue Lamartine, F-78390 Bois d'Arcy).
An appeal for collaboration in the mapping and inventory survey of the Odon. of France (1982-1985), operated by the Mus. Natn. Hist. Nat., Paris, and the organizer of which is the author.
- (4098) DONATH, H., 1983. Libellenforschung und Naturschutz. *Bombina* 1983 (1): 13-16. — (Jahnstr. 6, DDR-7960 Luckau, GDR).
Some tentative conservation measures for the Central European odon. fauna are briefly discussed.
- (4099) EDA, S., 1983. Chronicle of Japanese odonatology in 1982. *Nature & Insects* 18 (3): 17-24. (Jap., with Engl. title). — (3-4-25 Sawamura, Matsumoto, Nagano, 390, JA).
Regular annual review of the main Japanese odonatological achievements and events. In 1982, close to 100 papers and books were published by Japanese authors.
- (4100) FITZPATRICK, S.M. & W.G. WELLINGTON, 1983. Insect territoriality. *Can. J. Zool.* 61 (3): 471-486. (With Fr. s.). — (Inst. Anim. Resour. Ecol., Univ. Br. Columbia, Vancouver, B.C., V6T 1W5, CA).
The territorial behaviour in Odon., Orthoptera, Hemiptera, Coleoptera, Lepidoptera, Hymenoptera, and Diptera is briefly reviewed.
- (4101) GEIJSKES, D.C. & J. VAN TOL, 1983. *De libellen van Nederland (Odonata) - The dragonflies of the Netherlands (Odonata)*. Kon. Ned. Natuurhist. Ver., Hoogwood. 368 pp., 8 col. pls incl. (Dutch, with Engl. s. and bilingual fig. captions and tab. titles). — Price: Hfl. 50.-. — (Rijksmus. Nat. Hist. Raamsteeg 2, Leiden, NL).
The main objective of this volume (17 x 25 cm, bound) is a critical review of the Netherlands odon. fauna, based on the evidence available up to and incl. 1980. — In Chapters 1-5 an introduction is presented, dealing with phylogenetic, structural, behavioural, synecological, biogeographical and conservational aspects.
Chapters 6 and 7 comprise a checklist of the 69 spp. recorded from the Netherlands, with some nomenclatural annotations. For the adults, keys are provided to families, genera and species; larvae are keyed on the generic level. — In Chapter 8 full descriptions of the regional spp. are given, incl. the subadult morphological peculiarities. Notes on aquatic and adult habitats, on autecology and on adult behaviour (e.g. territoriality, reproductive behaviour) are given whenever possible. Data on flight periods, incl. the earliest and the latest seasonal records in the Netherlands, are also stated. — The species distributions are mapped, using the 10 x 10 km square UTM grid. On the maps, a graphic distinction is made between the pre- and post-1950 records. In this way the difference in frequency and range of each sp. between the 2 periods is apparent. In most cases there is a decrease, but some eurytopic spp. show a relative increase in range and numbers in recent times. — Graphs of the relative abundance (as compared with all spp.) per decade, the number of records per decade, and the number of records per month are presented for most spp. For the scarcer taxa, a list of all specimens on record is given. — The text is illustrated with 539 textfigs and 8 col. pls. and the bibliographic list contains some 400 references, those dealing with the Dutch fauna are asterisked. (Authors).
— [Abstracter's Note: The depth of treatment per sp., and the range of subjects dealt with, considerably exceed the scope of a national fauna. In various aspects, the monograph is a rounded off handbook of the Odon. of northern Central Europe rather than a mere account of a biogeographically comparatively insignificant national fauna. In its scope, style, and textual and graphic presentation (all figs are either originals or modified from earlier publications, produced and reproduced superbly) the book has no equal in this kind of odonatol. literature. It is inevitably to become the Dutch odonatol. classic. The Authors, very fittingly, dedicated their work to Dr M.A. Liefstinck, the "Father of Dutch Odonatology"].
- (4102) GRACILE [Newsletter of Odonatology].
Published by the Kansai Research Group of

- Odonatology, Osaka, No 31 (March 1, 1983). (Jap., with Engl. titles). — Annual subscription/membership for 1983: ¥ 3000.-. — (c/o K. Tani, 129 Jizo-cho, Nara, 630 JA).
- Obana* S. (Kinryo-cho 3-4-10, Sakai, Osaka Pref., 590, JA): A tentative consideration on Japanese *Mnais* evolution (Part 1) (1-9); — Larval breeding memo (Sequel 2) (10-12); — *Tabata*, O. (79-18, Kamo Shobuen-cho, Kitaku, Kyoto, 603, JA): Reproductive behaviour of *Davidius moiwanus taruii* (12); — *Hiura*, I. (Osaka Mus. Nat. Hist., 1-23 Nagai park, Higashisumiyoshioku, Osaka, 546, JA): On the phenology of *Pantala flavescens* and the migration of *Parnara guttata* observed at Kashiwara, Nara Prefecture (13-15); — *Obana*, S. (address above): Survey trip records for *Mnais pruinosa pruinosa* ♂♀ — f. *shirozui* with some considerations (16-17); — *Tabata*, O. (address above): A case of "fake death" of *Stylogomphus suzukii* (17); — *Nagase*, K. (205, 4-11, Abiko 2-chome, Sumiyoshi-ku, Osaka, 558, JA): Report of the survey trip of *Mnais pruinosa nawai* ♂ — f. *kanowakii* and *Trigomphus citimus tabei* (18-19); — A male *Sympetrum* presumably a hybrid among *S. bacca matutinum* and *S. e. eroticum* (19); — The disappearance of *Pantala flavescens* at the year end (20-22); — *Inoue*, K. & *S. Obana* (First Author: 5-9, Fuminosato 4-chome, Abeno-ku, Osaka, 545, JA): A collection record of *Coenagrion hylas* (22-24). — (*Abstracter's Note*: Engl. abstracts of all papers are available from the Editors of Odonatologica).
- (4103) ISHIKAWA, H., 1983. Ovipositing behavior of some species of genus *Sympetrum*. *Nature & Insects* 18 (4): 10-16, 2 pls (figs 1-19) excl. (Jap., with Engl. title). — (Author's address not stated).
[Abstract not available; taxonomic names not stated in the paper.]
- (4104) KOBAYASHI, T., 1983. Odonate fauna of Yamanashi Prefecture, 1st report. *Nature & Insects* 18 (1): 10-17. (Jap., with Engl. title). — (4-3, Kitayama-cho, Fuchu, Tokyo, 183, JA). Annotated list of 59 spp.
- (4105) *LIBELLULA. Mitteilungsblatt der Gesellschaft deutschsprachiger Odonatologen (GdO)*. Vol. 2 No. 1/2 (Jan., 1983). Edited by E. Schmidt, R. Rudolph, B. Gerken & H. Heidemann. — Price per volume: DM 25.-, representing the 1983 GdO Membership Fee; DM 10.- for senior citizens, students and unemployed persons. Orders/Membership Applications to: Prof. Dr R. Rudolph, Biologie Didaktik, Univ. Münster, Fließnerstr. 21, D-4400 Münster, FRG, or to any of the joint editors (for the addresses cf. below).
Schmidt, E. (Biol. Didaktik, Univ. Bonn, Römerstr. 164, D-5300 Bonn, FRG): Drittes Arbeitstreffen mitteleuropäischer Odonatologen/Libellenfreunde in Bonn am 4. u. 5.9.1982 (1-2), — 100 Jahre Libellenforschung in Bonn (3-10), — *Heidemann*, H. (Au in den Buchen 66, D-7520 Bruchsal-5, FRG): Ein Werk zur Bestimmung aller europäischer Libellenarten (11-12), — *Jödicke*, R., *U. Krüner* & *G. Sennert* (First Author: Happelter 15, D-4054 Nettetal-1, FRG): Libellenbestandsaufnahmen aus den 60er und 80er Jahren im südwestlichen niederrheinischen Tiefland — Versuch einer Analyse zur Bestandsentwicklung (13-20), — *Meijer*, C. (Zürcherstr. 120, CH-8620 Wetzikon): Libellen-Inventar in der Nordostschweiz: Ziele - Methodik - Ergebnisse (21-24), — *Schmidt*, E. (address above): Erfassung der Odonaten-fauna von Schleswig-Holstein mit Hilfe von Randlochkarten bei Darstellung auf UTM-5-km-Rasterkarten (25-31), — *Gerken*, B. (Columbastr. 3a, D-7801 Pfaffenweiler, FRG): Gründung der Schutzgemeinschaft Libellen in Baden-Württemberg (32-34), — *Anselin*, A. (Diksmuide Heirweg 114, B-8200 Brugge-2): Neufunde von *Somatochlora arctica* (Zetterstedt, 1840) in Belgien (35-36), — *Wasscher*, M. (I.B. Bakkerlaan 117-11, Utrecht, NL): Zahlreiches Auftreten von *Coenagrion lunulatum* in den Südniederlanden im Jahr 1982 (37-41), — *Gerken*, G. (address above): [Privatmitteilung]: Exuvien europäischer Libellen gesucht (42), — *Busse*, R. (Gartenstr. 26, D-4515 Bad Essen, FRG): *Coenagrion ornatum* an einem Wiesengraben bei Osna-brück (43-48), — *Schmidt*, E. (address above): Zur Odonatenfauna des Wollerscheider Venns bei Lammersdorf (49-70), —

- Sternberg, K.* (Zool. Inst. Univ. Freiburg, Albertstr. 21A, D-7800 Freiburg/Br.): Kurzer Bericht zur Situation der Libellen in Mooren des Südschwarzwaldes (71-76). — *Lehmann, G.* (Stimmerfeldstr. 17, A-6330 Kufstein): Die Libellen zweier montaner Sphagnum-Moore und ihrer Randbereiche im Bezirk Kufstein/Tirol (77-83). — *Clausnitzer, H.-J.* (Südstr. 6, D-3106 Eschede, FRG): Auswirkungen unterschiedlicher Bewirtschaftungsmassnahmen auf den Libellenbestand eines Teiches (84-86). — *Kull, R.* (Giersteinstrasse, D-7564 Forbach-3, FRG): Beispiele zum praktischen Artenschutz an Libellen (87-89). — *Hübner, T.* (Kirschbaum 10, D-4018 Langenfeld, FRG): Totstellen bei *Sympetrum vulgatum* (90). — *Schorr, M.* (Varrelmannstr. 3, D-3000 Hannover-91, FRG): Rote Listen — ein Instrument des Libellenschutzes? Eine kritische Wertung von Roten Listen (91-103). — *Gerken, B.* (address above): Kiesgruben als Ersatzstandorte für Libellen der Flussauen — wertvoller Lebensraum aus zweiter Hand verschleudert? (104). — (*Anonymous*): Kurzprotokoll zur Gründungsversammlung der Gesellschaft deutschsprachiger Odonatologen (GdO) (105-106).
- (4106) MACHADO, A.B.M., 1983. Novos achados de libélulas cujas larvas criam em buracos de arvores. — [New records of dragonflies breeding in tree holes]. *Resum. 10 Congr. brasil. Zool., Belo Horizonte*, pp. 196-197. (Port.). — (Dept. Morfol., Inst. Cien. Biol., Univ. Fed. Minas Gerais, C.P. 2486, BR-30.000 Belo Horizonte). *Triacanthagyna caribbea* and *Libellula herculea* are brought on record from Rio Trombetas, Cachoeira Porteira, Pará, Brazil (July, 1982).
- (4107) MÖLLER, K.-H., 1983. Die Odonatenfauna des Roten Moores. In: W. Nentwig & M. Droste, [Eds & Publ.]. Die Fauna des Roten Moores in der Rhön, pp. 38-45, Marburg/Lahn. — (Georg-Voigt-Str. 67, D-3550 Marburg/Lahn, FRG). The odon. fauna (17 spp.) of the Nature Reserve "Rotes Moor" nr Fulda, Fed. Rep Germany is discussed in considerable detail. *Coenagrion hastulatum*, *Lestes barbarus*, *Aeshna juncea*, *Somatochlora arctica* and *Leucorrhinia pectoralis* are among the locally interesting spp. Figures are given of the pattern variation in the 2nd abd. tergite of *C. hastulatum*, and autecology of each sp. is briefly discussed.
- (4108) NEWSLETTER [of the] BRITISH DRAGONFLY SOCIETY, No. 1 (April, 1983) Edited by R. Merritt (48 Somersby Ave., Walton, Chesterfield, Derbyshire S42 7LY, UK). Annual subscription: £ 3.- net. — (Treasurer: R. Dunn, Northwood Social Club, Darley Dale, Matlock, Derbyshire DE4 2HQ, UK). This is a semiannual bulletin, published by the British Dragonfly Society, affiliated to the International Odonatological Society (S.I.O.). The first issue contains some general notes on the activities of the Society, and the following papers: *Holland, S.* (64 All Saint's Rd, Cheltenham, Gloucs. GL52 2HA, UK): Dragonfly survey reports — 1. Gloucestershire (3-5); — *Butler, S.* ("Red Willows", All Stretton, Shropshire, UK): Notes on finding larvae of *Somatochlora arctica* (Zetterstedt) in N.W. Scotland (5-6); — *Winsland, D.* ("School House", Emery Down, Lyndhurst, Hants., UK): Some observations on *Erythromma najas* (Hansemann) (7); — *Merritt, R. & G.S. Vick* (First Author: cf. above; Second Author: "Crossfields", Little London, Basingstoke, Hants., UK): Is *Sympetrum nigrescens* Lucas a good species? (8-9); — *Merritt, R.* (address above): The New Forest field meeting [containing a list of spp.] (10-11); — *Collier, R.* (Chief Warden, Nature Conservancy Council, Fraser Darling House, 9 Culduthel Rd, Inverness, UK): A notice to odonatists visiting N.W. Scotland in 1983 (11); — *Mill, P.* (Dept. Pure & Appl. Zool., Univ. Leeds, Leeds LS2 9JT, UK): S.I.O. news (12-13); — *Merritt, R.* (address above): The Odonata Recording Scheme (13-14); — Scarce species status report. 1. *Coenagrion mercuriale* (Charpentier) with notes on habitat (15-17).
- (4109) POSEY, D.A., 1983. Ethnomethodology as an emic guide to cultural systems: the case of the insects and the Kayapó Indians of Amazonia.

- Revta bras. Zool.* 1 (3): 135-144. — (Dept Antropol., Univ. Pittsburgh, Pittsburgh, Penn. 15260, USA).
An attempt is made to briefly summarize the taxonomic features of the folk entomological classification system of the Kayapó Indians of central Brazil. It is suggested that taxonomic systems are guides to culturally significant domains and point to underlying social and cultural patterns. The Kayapó term for "dragonfly" is "kañeñet".
- (4110) RASPER, M., 1983. Libellenbeobachtungen im Schutzgebiet "Mengesche Gruben". *Bombina* 1983 (1): 9-12. — (Alt Vinnhorst 49, D-3000 Hannover-21, FRG).
16 spp. are listed and discussed. The exact position of the Nature Reserve (nr Hohenbüchen, Fed. Rep. Germany) is not stated.
- (4111) ROBINSON, J.V., 1983. Effects of water mite parasitism on the demographics of an adult population of *Ischnura posita* (Hagen) (Odonata: Coenagrionidae). *Am. Midl. Nat.* 109 (1): 169-174. — (Biol. Dept., Univ. Texas, Arlington, Texas 76019, USA).
The demographics of an adult population of *I. posita* at a N Texas pond were studied using mark-recapture techniques. 23% of marked females were recaptured vs. 20% of the males; the highest recapture rate was for mature females not parasitized by water mites. The average daily probability of survivorship ranged from 0.73 for mite-free mature females to 0.61 for mite-parasitized mature females. Water mites were present on one-half the population and were more frequent on males than females. The number of individuals displayed a marked peak during the study. This peak was coincident with the only observed cases of adult cannibalism. (Author).
- (4112) ROY, S.P., 1983. Studies on the seasonality of odonate nymphs in a fresh water pond at Bhagalpur (Bihar). *Proc. 70th Ind. Sci. Congr.* 3: 44 [Abstract]. — (P.-G. Dept Zool., Bhagalpur Univ., Bhagalpur-81200, Bihar, India).
The seasonality and population dynamics were studied in a eutrophic pond. The maximum population densities occurred in August and September. (The text is largely indicative, a list of taxa is not given).
- (4113) SAHLEN, G., 1983. Tva för Västmanland nya trollsländor/Two dragonflies new to the province of Västmanland (Odonata). *Ent. Tidskr.* 104(1): 38. (Swed., with Engl. title). — (Krongjutarvägen 3 C, S-730 50 Skultuna).
Aeshna serrata and *Epitheca bimaculata* are recorded from the said province, Sweden (resp. July 11 and June 23, 1981).
- (4114) SCHNEIDER, W., 1983. Désignation de lectotypes d'odonates levantines des collections du M.N.H.N., Paris, et description de la femelle de *Platycnemis kervillei* (Martin, 1909) (Odonata). *Revue fr. Ent.* (NS) 5 (1): 3-6. (With Engl. s.). — (Inst. Zool., Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG).
Lectotypes and lectoparatypes of *Calopteryx hyalina* Martin, 1909 and *Platycnemis kervillei* (Martin, 1909) are designated, and the hitherto unknown female of the latter sp. is described and figured.
- (4115) SCHNEIDER, W., 1983. The larva of *Gomphus davidi* Selys, 1887. *Hydrobiologia* 98: 245-248. — (Inst. Zool., Univ. Mainz, Saarstr. 21, D-6500 Mainz, FRG).
The female exuvia and the ultimate instar larva of *G. davidi* from Orontes Riv. (Syria, Turkey) are described, figured, and compared with those of *G. schneideri* and *G. flavipes lineatus*.
- (4116) SELYSIA. *A newsletter of odonatology*. Vol. 12, No. 1 (March 1, 1983). Compiled by M.J. Westfall & M.S. Westfall, Dept Zool., Univ. Florida, Gainesville, Fla. — Sent free of charge to all members of the International Odonatological Society and to anybody else expressing to the Editors the desire to receive it. — (c/o Dr M.J. Westfall, Jr, Dept Zool., Univ. Florida, Gainesville, Fla 32611, USA).
Westfall, M.J. (address above): B. Elwood Montgomery dies (1-3). — *Dunkle, S.W.* (Bureau Ent., Div. Plant Industry, Box 1269, Gainesville, Fla 32602, USA): Polychromatism in female Aeshnidae (3-4). — [Abstracts

- of Doctoral Dissertations by S.I.O. members]: Sherman, K.J. ("The evolution of reproductive strategies in a dragonfly, *Pachydiplax longipennis*", pp. 4-5), Waringer, J. ("The effect of water temperature on embryonic and larval development of *Coenagrion puella* L. from a pond at Herzogenburg (Lower Austria)", pp. 5-6), Halverson, T.G. ("The evolution of dragonfly life histories in heterogeneous environments", pp. 6-7), Robertson, R.M. ("Studies on the mating behaviour of some species of Zygoptera (Odonata) and Drosophila (Diptera)", p. 7, title only), — Kiauta, B. (Dept Animal Cytogen. & Cytotaxon., Univ. Utrecht, Padualaan 8, Utrecht, NL): The SIO Library and Archives (7-10), — Calabrese, D.M. (Dept Biol., Dickinson Coll., Carlisle, PA 17013, USA): Women in entomology (10), — (Anonymous): Robert Gambles honoured (10), — Frasieria. Newsletter of the Indian National Office of SIO (10), — Davies, D.A.L. (Crofton Lodge, 8 Drury Lane, Mortimer, Reading, Berks. RJ7 2JL, UK): Generic synopsis (10-11), — (Anonymous): Note from Philip Corbet (11), — Additions and changes to List of SIO members (11-13), — Westfall, M.J. (address above): International symposia (13), — Appeal from Hal White (13), — New items requested (13), — Constitution of the International Odonatological Society, Societas Internationalis Odonatologica (S.I.O.) (14-16), — By-Laws of the International Odonatological Society, Societas Internationalis Odonatologica (S.I.O.) (16-19).
- (4117) SURI BABU, B., 1983. The oviposition behaviour of *Ceragrion coromandelianum* (Fabr.) (Odonata: Coenagriidae). *Proc. 70th ind. Sci. Congr.* 3: 62. [Abstract only]. — (Dept. Zool., Univ. Saugar, Sagar-470003, M.P., India).
The oviposition occurs either in tandem or unattended, it is endophytic (in *Salvinia cucullata*), and it takes place at the water surface. The egg (mean length 0.85 mm, diameter 0.20 mm) lacks a gelatinous investment. The field observations were made in the Sagar District, Madhya Pradesh, India.
- (4118) TYAGI, B.K., 1983. Some interesting dragonflies from Dehra Dun Valley. *Geobios new Rep., India* 2: 63-65. — (Malaria Res. Cent., UGH 61-70/Sector VI, Ukai-394380, Distr. Surat, Gujarat, India).
Notes are presented on the behaviour and ecology of 8 spp. from Dehra Dun, Uttar Pradesh, India.
- (4119) TYAGI, B.K., 1983. On a small collection of Odonata of Kanpur District (Uttar Pradesh India). *Geobios new Rep., India* 2: 70. — (Malaria Res. Cent., UGH 61-70/Sector VI, Ukai-394380, Distr. Surat, Gujarat, India).
A checklist of 15 spp.
- (4120) WASSCHER, M., 1983. Libellen op Nederlandse beken. — [Dragonflies in the Dutch brooks]. *Natura, Netherlands* 80 (2): 127-132. (Dutch). — (I.B. Bakkerlaan 117-II, 3582 XP Utrecht, NL).
The odon. fauna of the lotic habitats in the Netherlands is discussed, and *Sympetrum pedemontanum* is recorded for the Netherlands for the first time (Luyksgestel and Soerendonk).
- (4121) WILDERMUTH, H., 1983. *Odonata - Begegnung zwischen Naturwissenschaft und Aesthetik*. Kantonsschule Zürcher Oberland, Wetzikon. 20 pp., numerous figs incl. — (Author: Mythenweg 20, CH-8620 Wetzikon).
This is an attractive book edition of the text listed in OA No 3907.
- (4122) WILDERMUTH, H. & A. KREBS, 1983. Sekundäre Kleingewässer als Libellenbiotope. *Vjschr. naturf. Ges. Zürich* 128 (1): 21-42. (With Engl. s.) — (First Author: Mythenweg 20, CH-8620 Wetzikon; — Second Author: Ankerstr. 3, CH-8406 Winterthur).
In Switzerland, 58% of odon. spp. are considered being at risk. Investigations in the Swiss midlands show that spp. using anthropogenic wetlands (gravel pits, nature conservancy ponds, factory ponds, peat-diggings) for their propagation seem to have a better chance for survival, since these habitats are continuously reproduced. In all, 43 spp. were recorded in the 4 types of man-made habitats (27

breeding and 10 probably so). Among these, 16 spp. are referable to the category of nationally endangered taxa (11 spp. certainly or probably breeding). The conservation of the populations in the man-made habitats is advocated, and some appropriate management measures are suggested.

- (4123) WYSS, M., 1983. Vom Wasser- zum Landbewohner. *Vögel d. Heimat, Zofingen* 53 (7): 164-165. — (Grauholzstr. 66, CH-3063 Ittigen).
A general note on dragonfly ecdysis.