ODONATOLOGICAL ABSTRACTS

1972

(4807) DEJOUX, C. & L. SAINT-JEAN, 1972. Étude des communautés d'invertébrés d'herbiers du Lac Tchad: recherches préliminaires. Cah. O.R.S.T.O.M. (Hydrobiol.) 6(1): 67-83. (With Engl. s.). — (Lab. Hydrobiol., O.R.S.T.O.M., B.P. 1434, Bouaké, Ivory Coast).

A new device for the collecting of plant samples from a constant volume is described, and a preliminary characterization of the invertebrate fauna associated with aquatic vegetation in the Tchad Lake is presented. References are made to "Agrionidae" and Libellulidae.

1973

(4808) BRUNO, S., S. DOLCE, G. SAULI & M. VERBER, 1973. Introduzione ad uno studio sugli anfibi e rettili del Carso triestino. Atti Mus. civ. Stor. nat. Trieste 28(2): 485-576. (With Engl. s.). — (First Author: Direz. Parco Naz. d'Abruzzo, Centro Studi Ecologici Appenninici, 1-67032 Pescasseroli). Unidentified Odon. are reported from the stomachs of Rana esculenta (1.6%), Hyla arborea (4.7%) and Bufo viridis (1.6%), from the Karst of Triest, Italy.

1975

(4809) BOLTT, R.E., 1975. The benthos of some southern African lakes. Part V: The recovery of the benthic fauna of St. Lucia Lake following a period of excessively high salinity. Trans. roy. Soc. S. Afr. 41(3): 295-323. — (Inst. Freshw. Stud., Dept Zool. & Entomol., Rhodes Univ., Grahamstown, RSA). In Jan., 1972, using the Van Veen grab, not further identified gomphid larvae were collected. These were not earlier reported from the St Lucia Lake, Zululand, South Africa).

(4810) MOK, M., 1975. Biométrie et biologie des Schilbe (Pisces, Siluriformes) du bassin Tchadien. II. Biologie comparée des deux espèces. Cah. O.R.S.T.O.M. (Hydrobiol.) 9(1): 33-60. (With Engl. s.). — (Author's present address unknown). Unnamed odon. larvae are reported from

1976

stomachs of Schilbe fish in Lake Tchad.

(4811) VIDY, G., 1976. Étude du régime alimentaire de quelques poissons insectivores dans les rivières de Côte d'Ivoire. Recherche de l'influence des traitements insecticides effectués dans le cadre de la lutte contre l'onchocercose. Rapp. O.R.S.T.O.M., Bouaké 2: 1-36. — (Lab. Hydrobiol., O.R.S.T.O.M., B.P. 1434, Bouaké, Ivory Coast).

A small percentage of the odon. larvae is reported in the diets of Petrocephalus bovei, Eutropius mentalis. Alestes baremoze, A.

1977

locality data are supplied.

nurse and A. rutilus. Detailed quantitative and

(4812) DEJOUX, C. & J.-M. ÉLOUARD, 1977.
Action de l'abate sur les invertébres aquati-

ques. Cinétique de décrochement à court et moyen terme. Cah. O.R.S.T.O.M. (Hydrobiol.) 11(3): 217-230. (With Engl. s.). — (Lab. Hydrobiol., O.R.S.T.O.M., B.P. 1434, Bouaké, Ivory Coast).

Population control of Simulium damnosum in the Volta basin by weekly sprays of Abate 200 CE, induces the detachment of insect larvae from their substrates and an increase of the drift rate. The tendency is strong in some groups, e.g. Baetidae (Ephemeroptera), Trichoptera and in the "Agrionidae", while the rates are low in Libellulidae.

(4813) FORGE, P., C. DEJOUX & J.M. ÉLOU-ARD, 1977. Microdistribution des invertébrés d'un bief. I. Le N'zi. Rapp. O.R.S.T.O.M., Bouaké 11: 1-60. — (Lab. Hydrobiol., O.R.S.T.O.M., B.P. 1434, Bouaké, Ivory Coast).
Paragomphus hageni is reported from N'zi.

Paragomphus hageni is reported from N'zi, Ivory Coast.

(4814) STARMÜHLNER, F., 1977. Contribution to the knowledge of the freshwater fauna of La Réunion (Mascarene). Cah. O.R.S.T.O.M. (Hydrobiol.) 11(3): 239-250. (With Fr. s.). — (Author deceased). Pseudagrion punctum, Ceriagrion glabrum,

Pseudagrion punctum, Ceriagrion glabrum, Trithemis annulata and Anax imperator are listed from different altitude sections.

1978

(4815) MINELLI, A., 1978. La fauna di tre ambienti umidi nel Tarvisiano. Atti Ist. Veneto Sci. Lett. Arti (Sci. mat. nat.) 135: 203-231. (With Engl. s.). — (Ist. Biol. Anim., Univ. Padova, Via Loredan 10, I-35100 Padova).

The fauna of 3 wetland habitats in the Tarvisio area, Friuli, Italy is analyzed. Leucorrhinia dubia and Sympetrum danae are recorded from Friuli for the first time.

1979

(4816) [PARR, M.J.], 1979. Odonata. In: M. Kalk, C. Howard-Williams & A.J. McLachlan, [Eds], Lake Chilwa: studies of change in a tropical ecosystem, pp. 167, 438. Junk, The Hague-Boston-London. [Monogr. biol., Vol. 35; ISBN 90-6193-087-1]. — Price: Hfl. 150.-. — (Dept Biol., Sch. Educ., Univ. Bophuthatswana, P. Bag X 2046, Mafikeng-8670, Bophuthatswana).

The annual fluctuations in water level and composition of Lake Chilwa, Malawi, with recession of the lake approx. every 6 years and 2 periods of complete desiccation during the past century, have had exceptionally great ecological consequencies. A provisional list of Odon. (18 spp.) appears on p. 438.

1980

(4817) LANGHAM, N., 1980. Breeding biology of the Edible-nest Swiftlet Aerodramus fuciphagus. *Ibis* 122: 447-461. — (Sch. Nat. Resour., Univ. South Pacific, P.O. Box 1168, Suva, Fiji).
Along with 10 other insect orders, unnamed

Along with 10 other insect orders, unnamed Odon. are reported from the Edible-nest Swiftlet's foodballs, Penang, Malaysia (Sept-Apr.).

1981

(4818) MAHON, T., 1981. Platycypha caligata caligata (Selys). A. Rep. natn. Mus. Monum. Zimbabwe 1980-81: back cover col. photograph. — (Author's address not stated). Large col. photograph (20x30 cm) of the male, published here as a tribute to Dr E. Pinhey, on the occasion of his retirement from the National Museum, Bulawayo, Zimbabwe.

(4819) RUSSELL-SMITH, A. & E. RUCKERT, 1981. The effects of aerial spraying of endosulfan for tsetse fly control on aquatic invertebrates in the Okavango Swamps, Botswana. Environm. Pollut. (A) 24: 57-73. — (First Author: Poplar Farm, Walpole, Halesworth, Suffolk, UK). Contains a reference to Ischnura sp.

1982

(4820) YODOE, K. & S. YABU, 1982. [Dragonflies of Shimane Prefecture in Japan]. Sukasiba 18: 1-26, 2 pls excl. (Jap.). — (First Author: Dept

Landscape Archit., Coll. Agric., Univ. Osaka Pref., Mozu-ume-machi, Sakai, Osaka Pref., 591. JA).

Annotated survey of the fauna (86 spp.), with distribution maps and detailed collection data. (For continuation of OA 4828).

1983

- (4821) ARANGO, M.C. & G. ROLDAN P., 1983.
 Odonatos inmaturos del Departamento de
 Antioquia en diferentes pisos altitudinales.
 Actualidades biol. 12(46): 91-105. (Apartado Aéreo 56771 Medellin, Colombia).
 The odon. larval material brought together during a systematic survey (Jan.-Nov., 1981) of various aquatic habitats in the Antioquia Department, Colombia, is discussed (936 spec., pertaining to 9 fam., 27 gen., 34 spp.).
 The ultimate instar of 32 spp. is figured, incl. Aeshna marchali and Dasythemis sp., the larval stage of which has been hitherto unknown. It is unfortunate that only 5 spp. could be identified to the species level.
- (4822) CHOWDHURY, S.H. & M. AKHTERUZ-ZAMAN, 1983. Some dragonflies (Odonata, Anisoptera) of Bangladesh. Chittagong Univ. Stud. (Sci.) 7(1): 39-48. (With Bengali s.). (Dept Zool., Univ. Chittagong, Chittagong, Bangladesh). Adult Odon. were collected from different parts of Chittagong, Kishtia and Sylhet. An annotated list is given of 22 spp., and several aspects of adult biology (incl. territoriality) are briefly discussed.
- (4823) MATTHIAS, U & H. MORENO, 1983. Estudio de algunos parametros fisicoquimicos y biologicos en el Rio Medellin y sus principales afluentes. Actualidades biol. 12 (46): 106-117. (First Author: Centro Invest., Fac. Cien. Exactas & Nat., Univ. Antioquia, Medellin, Colombia). The abiotic and biotic features of the Rio Medellin and its principal tributaries, Colombia, were studied. A brief reference is made to "Calopterygidae" and "Aeshna sp."
- (4824) NIRMALA KUMARI, K.R. & N.B. NAIR,

1983. Largest Odonata nymph Anax julius (Brauer) from Chackai canal, Trivandrum, Kerala, India. *Indian Zoologist* 7(1/2): 115-118.—(Second Author: Dept Aquatic Biol. & Fish., Univ: Kerala, Trivandrum-695007, India).

The ultimate instar is described and figured.

- (4825) PETROV, N.B. & V.V. ALESHIN, 1983.
 Molekulyarnaya kharakteristika DNK nekotoryh vidov strekoz [Molecular characteristics of the DNA of some dragonfly species]. Biol. Nauki 1983(10): 19-24. (Russ., with Engl. s.).
 (First Author: Belozersky Lab. Molec. Biol. & Bioorganic Chem., Lab. Bldg A, Lomonosov St. Univ., USSR-117234 Moscow).
 The organization of the repeated and single-copy DNA sequences in the genomes of 11 spp. was studied. The variation evidenced is discussed from the point of view of the genome evolution mechanisms in insects.
- (4826) SORSA, V., 1983. Sytogenetiikka 1960-luvulta nykypäivään. [Cytogenetics from the 1960's to the present]. In: Institutum geneticum, Universitas helsingiensis, 1923-1983, pp. 46-48. Inst. Genet., Univ. Helsinki [ISBN 951-45-3119-1] (Finnish). (Inst. Genet., Univ. Helsinki, Rautatiekatu 13, SF-00100 Helsinki-10, Finland).

 The paper contains references to T. Oksala's

The paper contains references to T. Oksala's work on odon. cytogenetics.

- (4827) SUKLA, G.S., P.K. MISRA & S.P. TRI-PATHI, 1983. Studies on in vivo cholinesterase inhibition in the nervous system of dragonfly naiads Brachythemis contaminata (Fabricius). J. adv. Zool. 4(1): 17-21. (Pollution Res. Lab., Dept Zool., Univ. Gorakhpur, Gorakhpur-273001, India). Various concentrations of diethyl-mercapto-succinate, S-ester with O, O-dimethyl-phosphorodithioate (malathion) were applied to the ultimate instar. The inhibition of cholinesterase with respect to different concentrations of malathion are discussed.
- (4828) YABU, S. & K. YODOE, 1983. [Dragonflies of Shimane Prefecture in Japan]. Sukasiba 20: 57-68. (Jap.). — (First Author: Dept

Landscape Archit., Coll. Agric., Univ. Osaka Pref., Mozu-ume-machi, Sakai, Osaka Pref., 591, JA).

This is the continuation of the paper listed in *OA* 4820, dealing with the ecology and behaviour.

(4829) ZAMMIT, R.C., L.F. CASSAR, E. CURMI, C.G. BONAVIA & R. TESTA, 1983. Notes and observations on the naturel history of Tunisia (North Africa), 1981-83. II+27 pp. (Second Author: Villino Fralimar, Nazju Ellul Rd, Msida, Malta).

This is a report on the main zoological results of 3 expeditions to Tunisia (1981-1983). It is mainly concerned with birds, but a number of odon. spp. are also brought on record (11 localities).

1984

(4830) BELLE, J., 1984. A synopsis of the South American species of Phyllogomphoides, with a key and descriptions of three new taxa (Odonata, Gomphidae). Tijdschr. Ent. 127(4): 79-100. — (Onder de Beumkes 35, 6883 HC Velp, NL).

The 25 spp. known from South America are classified into 8 groups. As new are described: P. major sp. n. (3 holotype and Q allotype: Surinam R., Surinam), P. pedunculus sp. n. (3 holotype: Rio Uaupés, Amazonas, Brazil), and P. pseudoundulatus sp. n. (3 holotype: Rio Tapajos, Cachoeira I, Pará, Brazil). Descriptive and corrective notes on some of the previously described spp. are offered. The holotypes of Gomphoides fuliginosa Hag. and G. audax Hag. have been restudied. A neotype is designated for G. selysi Navás and the Q is described for the first time.

(4831) BEUTLER, H., 1984. Die Libellen des NSG Teufelssee im Schlaubetal (Kreis Eisenhüttenstadt). NaturschutzArb. Berlin Brandenburg 1984(1): 21-26, figs 2-3 excl. — (Frankfurter Str. 23 b, DDR-1230 Beeskow, GDR). The odon. fauna of the Nature Reserve Teufelssee, Brandenburg, German Democratic Rep., is enumerated and analysed. The occurrence of Epitheca bimaculata, Libellula

fulva, Leucorrhinia albifrons and L. caudalis is discussed in detail.

- (4832) BEUTLER, H., 1984. Eine neue Unterart von Libellula depressa L., 1758 auf der Halbinsel Krim (UdSSR) (Insecta, Odonata, Libellulidae). Faun. Abh. Mus. Tierk. Dresden 12(6): 55-58. (With Engl. s.). (Frankfurter Str. 23 b, DDR-1230 Beeskow, GDR).

 L. depressa taurica ssp. n. (3 holotype: Lawrowoje Frunsenskoje, southern Crimea, USSR) is described and illustrated. It deviates from the nominate form in the shape of abdomen and hindwings, in abd. colour pattern, and in the membranula morphology.
- (4833) BRAUN, M., U. BRAUN & J. LANGE, 1984.
 Zwei Nachweise der Gestreiften Quelljungfer
 (Cordulegaster bidentatus, Odonata: Cordulegasteridae) im nördlichen Rheinland-Pfalz.
 Naturschutz & Ornithol. Rheinland-Pfalz
 3(3): 502-504. (Im Mühlbachtal 2, D-5408
 Nassau/Lahn, FRG).
 The 2 new Rhineland-Palatinate, FRG records are from Remelbachtal nr Mürlenbach (Eifel)
 (I-VII-1984; photographed), and from Höhr-Grenzhausen/Westerwald (21-VIII-1984; documentation not stated). The latter record is considered phenologically late.
- (4834) CANNINGS, R.A., 1984. Flying dragons. Wldl. Rev., Victoria, B.C. 10(10): 30-33. —
 (Dept Ent., British Columbia Prov. Mus., 601 Belleville Str., Victoria, B.C., V8V 1X4, CA). General article, with a British Columbia background. Col. phot. show Sympetrum obtrusum (mating) and Libellula forensis.
- (4835) CLASTRIER, J. & J. LEGRAND, 1984. Forcipomyia (Pterobosca) pinheyi nouvelle espèce de l'île Maurice parasite des ailes de libellules et nouvelles localisations du sousgenre (Diptera, Ceratopogonidae; Odonata). Revue fr. Ent. (N.S.) 6(4): 173-180. (With Engl. s.). (Lab. Ent., Mus. Natn. Hist. Nat., 45 rue de Buffon, F-75005 Paris). The new ceratopogonide is described (a single

Q) from Trithemis annulata haematina (taken in Mauritius). New records are reported for F.(P.) mollipes (Guinea, Ivory Coast), F.(P.)

(4839)

ed.

incubans (Guadeloupe), and F.(P.) fusicornis (Guadeloupe, Marie galante), all recovered from various odon spp.

- (4836) CORBET, P.S., C.M. SCRIMGEOUR, J.E. HOLMQUIST & B. KIAUTA, 1984. A topic index for Odonatological Abstracts 1--4225 from Odonatologica volumes 1-12. Soc. int. odonatol. rapid Comm. (Suppl.) 4(B), VIII+52 pp. — (Available, along with part A, at Hfl. 40.-, from the Editors of Odonatologica, Dept Anim. Cytogen. & Cytotaxon., Univ. Utrecht, Padualaan 8, Utrecht, NL). The booklet goes with that listed in OA 4837. Topics are classified under 10 major categories, most of which correspond to the chapters in Corbet's book, as listed in OA 4297, viz.: "General and miscellaneous" (with 26 specialized sections), "Habitat selection and oviposition" (11 sections), "The egg stage" (14), "The larval stage: general" (16), "Growth, metamorphosis and emergence" (26), "Adult life: general" (33), "Adult feeding behaviour" (7), "Reproductive behaviour" (48), "Dispersal" (12), "Evolutionary perspective" (9), "Physiology" (14). The index provides points of departure for workers interested in any field of odonatology.
- CORBET, P.S., C.M. SCRIMGEOUR & B. (4837)KIAUTA, 1984. Author index for Odonatological Abstracts 1-4225 from Odonatologica volumes 1-12. Soc. int. odonatol. rapid Comm. (Suppl.) 4(A), VIII+64 pp. -(Available, along with part B, at Hfl. 40.-, from the Editors of Odonatologica, Dept Anim. Cytogen. & Cytotaxon., Univ. Utrecht, Padualaan, 8, Utrecht, NL). In order to facilitate the use of the index listed in OA 4836, an Author Index has been issued separately. It contains some 3200 names of authors of odonatological publications published during 1971-1983, listing the resp. OA numbers under which the abstracts are published in Odonatologica.
- (4838) CROWLEY, P.H., 1984. Evolutionarily stable strategies for larval dragonflies. *In:* S.A. Levin & T.G. Hallam, [Eds] Lecture notes in biomathematics, Vol. 54, pp. 55-74. Springer,

- Berlin. (Morgan Sch. Biol. Sci., Univ. Kentucky, Lexington, KY 40506, USA). Many animals spend a considerable amount of time and effort watching stalking and attacking their neighbours even if it would seem to be mutually advantageous for them simply to ignore each other. A possible example of this paradoxical behaviour, interference among odon, larvae, is analyzed from a game-theoretic viewpoint to see if s ch "strategies" appear to be evolutionarily stal le. The results suggest that the ever present possibility of ambush, in which the attacker has a significant chance of seriously injuring the victim, can culminate in "wars of attrition" or pre-emptive aggression by one or both neighbours. Testable hypotheses are presented, and the means of obtaining quantitative predictions from the theory are indicated. (Author).
- logica italiana: 1956-1980. (Aggiornamento alla bibliografia del 1° volume della "Fauna d'Italia"). Mem. Soc. ent. ital. (A)61: 26-44. (With Engl. s.). (Via Fratelli Maristi 43, 1-00137 Roma).

 164 publications on the Italian Odon. and odonatologists (1956-1980) are listed along with concise abstracts or indicative statements on their contents. The coverage is not entirely

CRUCITTI, P., 1984. Bibliografia odonato-

complete, and publications of Italian workers related to non-Italian fauna are not consider-

- (4840) DEL CENTINA, P., S. CARFI & F. TERZANI, 1984. Odonata from Haut Zaire. Monit. zool. ital. (N.S.) Suppl. 19(6): 251-258. (With Ital. s.). (Mus. zool., Univ. Firenze, Via Romana 17, 1-50125 Firenze).
 - 30 spp., collected nr Kasangi and in the area between the Bomu and Uele Rivers (March-Apr., 1975) are listed. Pseudagrion commoniae and P. kibalense were not earlier reported from this region.
- (4841) DONATH, H., 1984. Der Gagelstrauch (Myrica gale L.) — eine neue Eiablagepflanze d. Weidenjunfer (Chalcolestes viridis V. d. Lind.). Biol. Stud. Luckau 13: 76-77. —

(4846)

(Jahnstr. 6, DDR-7960 Luckau, GDR). The oviposition of C. viridis in Myrica gale is reported.

- (4842) EDA, S., 1984. How to make good odonate specimens, with a review of the literatures. Nature & Insects 19(13): 12-15. (Jap. with Engl. title). (Dept Oral Pathol., Matsumoto Dental Coll., 1780 Gobara, Hirooka, Shiojiri-shi, 399-07, JA).
 [Engl. abstract not available]. The literature is
 - [Engl. abstract not available]. The literature is apparently traced from 1902 onwards, and covers almost exclusively Japanese works.
- (4843) FORSTER, A.P., 1984. Calopteryx splendens (Harris) (Odonata: Calopterygidae) recorded in central London. Ent. Rec. J. Var. 96(11/12): 286. — (Nature Conservancy Council, 19/20 Belgrave Square, London, SW1 8PY, UK). With reference to the note listed in OA 3967, a specimen of C. splendens is brought on record (West Halkin St., SW1, July 30, 1984).
- (4844) GOMPHUS. Mededelingblad van de belgische libellenonderzoekers Feuille de contact des odonatologues belges, Vol. 1, No. 5 (Nov., 1984). (Dutch & Fr.). For subscription cf. OA 4676. (c/o Editors, N. Michiels, Dep. Biol., U.I.A., Universiteitsplein 1, B-2610 Wilrijk).

The text of this issue is entirely in Dutch. In addition to various local organisation news items, there are 2 technical notes, both by N. Michiels, viz. a note on "Anax parthenope: een nieuwe waarneming" [= Anax parthenope: a new observation] (pp. 7-8), and a book review of the publication listed in OA 4581 (pp. 9-10).

Published by the Kansai Research Group of Odonatology, Osaka, No. 33 (Dec. 1, 1984). (Jap., with Engl. titles). — (c/o K. Tani, 129 Jizo-cho, Nara, JA).

Tsuda, S.: Notes on the names of some Japanese dragonflies, 3 (pp. 1-5); — A short record of Odonata taken in Hokkaido (5-7); — A regenerating method of silica gel (7); — Tabata O.: Report of the observation meeting of Davidius moiwanus taruii (8-9); — Record

(4845) GRACILE. [Newsletter of Odonatology].

of the survey trip for Kizugawa River (10-11); — Nagase, K.: Report of the odonatological survey of Yayayama Islands (12).

HÄMÄLÄINEN, M., 1984, Odonata of Inari

- Lapland. Kevo Notes 7: 31-38. (Tullilaboratorio, Tekniikantie 13, SF-02150 Espoo-15, Finland).

 Distribution of 15 spp. known to occur in the Inari Lapland, the northernmost biogeographical province of Finland (68° 20'-70° 05') is mapped, and notes on the habitat selection and
- phical province of Finland (68° 20'-70° 05') is mapped, and notes on the habitat selection and phenology are provided for each sp. Coenagrion armatum and C. lunulatum are listed from the province for the first time; the latter sp. is common in the Lake Inari area.

 (4847) HÄMÄLÄINEN, M., 1984. Sudenkorentojen
- suomenkieliset nimet. Vernacular names for Finnish dragonfly species. Luonnon Tutkija 88(5): 200-201. (Finn., with Engl. title). (Tullilaboratorio. Tekniikantie 13, SF-02150 Espoo-15, Finland). Finnish vernacular names are presented for the first time for all spp. known to occur in Finland, incl. Ischnura pumilio, discovered in Finland in 1984.
- (4848) HAURI, R., 1984. Naturschutzgebiet Schlossmatte-Schlegelholzmoos. Mitt. naturf. Ges. Bern (N.F.) 40: 32-35. (Author's address not stated).
 4 odon. spp. (incl. Somatochlora arctica) are listed from the said Nature Reserve, Zweisimmen, Switzerland (alt. 950 m).
- (4849) HUBER, W., 1984. Otto Paul Wenger 1919-1981. Jb. naturh. Mus. Bern 8: 99-101, 1 pl. (portrait) excl. (German). (Naturh. Mus., Bernastr. 15, CH-3005 Bern).

 Obituary, containing various details on odonatol. activities of the deceased. He donated his main odon. collection to the Nat. Hist. Mus. of Berne, Switzerland in 1971. The remainder was donated to the same institution upon his death by Mrs S. Wenger. Most of his material is of Swiss and S. European origin. (Cf. OA 4885, and the obituary in Odonatologica 11(1982): 153-156).

- (4850) HÜBNER, T., 1984. Bemerkenswerte Libellenfunde im Neusiedler See-Gebiet. Burgenländ. Heimat Bl. 46(2): 89-91. (Kirschbaum 10, D-4018 Langenfeld, FRG). The records of 6 spp. are discussed. Cercion lindeni and Nehalennia speciosa were not previously recorded from Burgenland, Austria. The observation of adult Lestes dryas and L. sponsa at the end of May is particularly interesting.
- (4851) HUGGINS, D.G., 1984. Description of the nymph of Enallagma daecki (Calvert) (Odonata: Coenagrionidae). J. Kansas ent. Soc. 57(2): 190-196. (St. Biol. Surv. Kansas, 2291 Irving Hill Drive, Campus West, Lawrence, Kansas 66045, USA). The larva is described from specimens collected at Highlands Hammock State Park, Florida. It differs from all other described North American Enallagma spp. in the general morphology of the caudal gills and the absence of coarse setae on the posterior lobes of the head.
- (4852) INOUE, K., 1984. [Dragonflies and I]. Japan Chemical Fibres Monthly 1984(437): 44-45, author's portrait incl. (Jap.). (5-9 Fuminosato 4-chome, Abeno-ku, Osaka, 545, JA). The author is on the Executive of the "Unitika" chemical fibres company, Osaka. He joined the company in 1957, working initially at their Uji Plant. The article dwells on the Uji R. dragonfly fauna, which used to be a "paradise" then, but which was greatly affected by the recent construction of a dam. Some significant spp. are listed, and a brief statement is made on the influence of the environmental quality upon the composition of the local odon. fauna.
- Naturschutzgebietes "Elmpter Bruch" und seiner geplanten Erweiterungsflächen. Niederrh. Jb. 15: 97-100. (Happelter 15, D-4054 Nettetal-1, FRG).

 The odon. fauna (38 spp.) of the "Elmpter Bruch" Nature Reserve, District Viersen, Lower Rhine, Germany is enumerated, and the

local status of each sp. is evidenced.

(4853) JÖDICKE, R., 1984. Die Libellen des

(4854) KAISER, H., 1984. Analyse und Simulation des sozialen Interaktionssystems von Libellen und der Evolution stabiler Paarungsstrategien. Ref. IX. Ethologentreffen, Göttingen, p. 30 [Abstract]. — (Lehrstuhl Oekologie, Technische Hochschule Aachen, Kopernikusstr. 16, D-5100 Aachen, FRG). The social system of Aeshna cyanea is described and, in general terms, briefly

(4855) KOWSCHAR, A.F. & B.P. SHUJKO, 1984.

Biologische Daten zur Verstädterung der

"Myriapoda") represent but 2.8% in the bird

KREBS, J.R. & M.L. AVERY, 1984. Chick

discussed.

diet.

(4856)

- Amsel (Turdus merula) in Alma-Ata, Kasakhstan, UdSSR. Mitt. zool. Mus. Berlin 60(Suppl.): 97-105. (With Engl. s.) (Inst. Zool., Akademgorodok, USSR-480032 Alma-Ata).

 The strong increase of the T. merula population in Alma-Ata, Kazakhstan, USSR suggested a comparison of the biology of blackbirds living in the city with those inhabiting mountainous regions. In the coniferous forests of Transill Alatau (alt. 2500 m), the Odon. (along with Dermaptera and
 - growth and prey quality in the European bee--eater. (Merops apiaster). Oecologia 64: 363--368. (Edward Grey Inst. Fld Ornithol., Dept Zool., Univ. Oxford, South Parks Rd, Oxford OXI 3PS, UK). In 4 replicate experiments, 3 groups of bee--eater chicks were fed for 24 h on different diets: bees, dragonflies, and a mixture of the 2. Mean growth efficiency (wt gain/intake) was highest in chicks fed on the mixed diet. The birds and dragonflies originated from Arles Port-de--Bouc canal, Camargue, France (Sympetrum striolatum, Crocothemis erythraea, Orthetrum cancellatum). In Camargue, the bee-eater feeds its chicks mostly on Odon. and Hymenoptera. The odon, prey are made up of a small number of genera, primarily Anax, Aeshna, Orthetrum, Sympetrum and Brachytron.
- (4857) KRISHNASWAMY, N., O.P. CHAUHAN

& R.K. DAS, 1984. Some common predators of rice insect pests in Assam, India. *Int. Rice Res. Newsl.* 9(2): 15-16. — (Central Plant Prot. Stn., Gauhati-3, Assam, India).

À list is given of 24 spp. of arthropod predators, incl. 8 Odon., collected on the monsoon crop in Assam. Their abundance and prey spp. are also stated.

(4858) KUKULIES, J. & H. KOMNICK, 1984. The terminal bar in the larval midgut epithelium of Aeshna cvanea: fine structure and effects of calcium and lanthanum. Protoplasma 121: 214-227. - (Inst. Cytol., Univ. Bonn, Ulrich--Haberland-Str. 61a, D-5300 Bonn-1, FRG). Thin section and freeze-fracture electron microscopy revealed that the terminal bars of the larval midgut epithelium of A. cyanea consisted of extended smooth septate junctions (SSJ), multiple adhesive junctions and rare gap junctions. Freeze-fractures of native tissue suggested that the septal building units were anchored only in the external membrane leaflet by partially integrated proteins while the interseptal pcgs were anchored partly in both leaflets by completely integrated proteins and partly by presumed peripheral proteins. — Reversible depletion of the physiological Ca ++ concentration had no apparent structural effect on the SSJ of the terminal bars, but led to a reversible formation of junctional septa between the foot processes concomitant with a rearrangement of IMPs in the basolateral plasma membranes. The basolateral SSJ assembly and disassembly induced by reversible Ca ++ deprivation was interpreted as exaggerated response of an intrinsic capability normally related to the apical growth of regenerative cells and to the extrusion of degenerating cells. Lanthanum tracer ingested with hyperosmotic drinking solution was always found excluded from the basolateral intercellular spaces underneath the terminal bar, but there was a dual effect on the SSJ structure. Part of the junctions remained structurally intact, part were dissociated in the apical portion and invaded by tracer.

(4859) KUKULIES, J., W. NAIB-MAJANT & H. KOMNICK, 1984. Coincident filament distri-

bution and histochemical localization of F-actin in the enterocytes of the larval dragonfly Aeshna cyanea. *Protoplasma* 121: 157-162. — (Inst. Cytol., Univ. Bonn, Ulrich-Haberland-Str.61a. D-5300 Bonn-I, FRG).

The fluorescence pattern of the enterocytes of larval A. cyanea obtained by the incubation of cryosections with rhodamine-phalloidin, a histochemical probe for F-actin, exactly coincides with the distribution of 6 nm filaments. These prevail as (1) core bundles in the microvilli; (2) terminal web including the rootlets of the core bundles and filaments associated with the adhesive junctions; (3) intercisternal arrays in the subapical stacks of smooth endoplasmic reticulum, and; (4) cortical web underneath the basolateral plasma membranes.

(4860) KUMAR, A., 1984. Studies on the life history of Indian dragonfly Anax immaculifrons (Rambur) (Aeshnidae: Odonata). *Entomon* 9(2): 127-133. — (Envir. Monit. Wing, Zool. Surv. India, 111 Santhome High Rd, Madras-600028, India).

A. immaculifrons was reared from egg to adult. All instars are described and figured.

- (4861) LAM, E., 1984. Beekjuffers in de Ardennen. [Calopterygids in the Ardennes]. Amoeba, Amst. 1984(8): 16-17. (Dutch, with Engl. s.). — (Van Lenneplaan 6, 1217 NC Hilversum, NL). The population densities of Calopteryx virgo and C. splendens in the Ardennes, Belgium, are discussed. It is argued that virgo shows a higher tolerance for water pollution than splendens.
- (4862) LEGRAND, J., 1984. Odonates. In: P.-C. Rougeot, [Ed.], Missions entomologiques en Ethiopie 1976-1982, Fasc. 2. Mém. Mus. natn. Hist. nat., Paris (N.S.) (A) 128: 83-86.

 (Lab. Ent., Mus. Natn. Hist. Nat., 45 rue de Buffon, F-75005 Paris).
 20 spp. are listed from the Republic of Djibouti. Agriocnemis inversa and Ischnura evansi are recorded from this region for the first time. (For another paper in this series cf. OA 1909).

(4863) LEHMANN, T., 1984. 1982-1984 Libellen im NSG Trunnenmoor. Privately published by the Author, Burgwedel. 32 pp. — Price: DM 3.40. — (Ackerrain 21, D-3006 Burgwedel-1, FRG).

The odon. fauna (26 spp.) of the Nature Reserve "Trunnenmoor"nr Burgwedel, Lower Saxony, Fed. Rep. Germany, is described. Black-and-white phot, are shown of 5 Zygoptera, 3 of which are misidentified, viz. Coenagrion "lunulatum" = C. hastulatum, C. "lunulatum" = C. pulchellum, C. "pulchellum" = Ischnura elegans. — (Abstracter's Note: This paper demonstrates again that faunistic recording should be solely based on actual specimens. Photographic and sight recording, as recently widely practised in the Benelux countries, Germany, Switzerland, etc., is often unreliable, the more so as it is usually conducted by young and inexperienced naturalists, refraining from collecting on "moral" and misplaced "species conservation" grounds, and who have, therefore, never had the chance to get acquainted with morphological details and their variation. The credebility of many faunal surveys in these countries is below any standard: there are no reference specimens and, in some cases, even the locality data (of all spp.!) are under the "embargo" of certain nature conservation institutions and/ or activist groups, making therewith the monitoring of the development of local faunas in critical areas virtually impossible. The damage inflicted in this way to the habitatand species conservation threatens to become irreparable. This has been emphasized ad infinitum by numerous invertebrate specialists, entomologists, their professional organisations and institutions, but a serious discussion seems to be at the moment impossible, since certain activist groups and/or individuals tend to carry it from the area of biological argumentation into that of polarized politics. As far as the Odon, are concerned, the problem has been emphasized by the Odonata Specialist Group of the IUCN Species Survival Commission (Meeting of Aug. 16, 1981) In accordance with a Recommendation of the VIth Int. Symp. Odonatol., the International Odonatological Society does not recognize any undocumented records (cf. *Notul. odonatol.* 1(1981): 125-126).

- (4864) LORENZI, K., R. RAFFI, G. GIANAN-DREA, G. SORCE & C. UTZERI, 1984. Accoppiamento e ovideposizione in Crocothemis erythraea (Brullé) (Anisoptera, Libellulidae). [Abstract]. Boll. Zool. 51 (Suppl.): 65. - (Dipt. Biol. Anim. & Uomo, Univ. Roma, Viale dell'Università 32, I-00185 Roma). Females make short visits to the waterside, where copulation takes place (65% in flight, 35% perched, N=284; duration 3-20 sec, N=134); max. between 11.00-13.00 h. Subsequently to copulation, 65% of females oviposited immediately, 22.4% rested for a short time before ovipositing, and 12.6% left the water without ovipositing (N=245). Duration of oviposition was 1.5-123 sec (N=56).
- (4865) MAUERSBERGER, G., 1984. Ornithologen und Libellen. Falke 31(12): 402-404. — (Zool. Mus., Mus. Naturk., Invalidenstr. 43, DDR--1040 Berlin, GDR). The common features of ornithological and odonatological research are discussed.
- (4866) MOORE, L., 1984. Dragonflies at Annfield Plain. Vasculum 69(4): 119. (Author's address not stated).
 4 common spp. are listed (GR NZ 166 509), without any reference to the county or region, United Kingdom.
- (4867) NARAOKA, H., 1984. [Longevity of Cercion sieboldii as evidenced by the caging method (Coenagrionidae)]. Celastrina 14: 4-6. (Jap.). (36-71, Aza Motoizumi, Oaza Fukunoda, Itayanagi-cho, Kita-gun, Aomori, 038-36, JA). Freshly emerged individuals were marked and kept in large cages (270 X 290 cm, height: 120 cm), which also were furnished with artificial ponds (1-10-X 200 cm, depth: 50 cm). Their condition was checked twice daily, during the seasons 1981-1984. The observations revealed the mean age for males 15.2 days (max. 52 days), and 13.09 (44) for females. The survivorship curve was of a concave type.
- (4868) OHSAWA, N. & M. WATANABE, 1984.

Comparative ecological studies in woodlands. I. Diurnal activity of Platycnemis echigoana Asahina. *Bull. Fac. Educ. Mie Univ.* (nat. Sci.) 35: 61-68. (Jap. with Engl. title). — (Toda Municipal Native Mus., 1707 Niizo, Toda-shi, Saitama 335, JA).

[Engl. abstract not available].

- (4869) PAWLOWSKY, E., 1984. Limnologische Untersuchung von Fliessgewässern des Siebengebirges. Decheniana 137: 186-202. (With Engl. s.). — (Inst. Landwirt. Zool., Univ. Bonn, Melbweg 42, D-5300 Bonn-1, FRG). Cordulegaster boltoni is recorded from 12 localities in the Siebengebirge, Rheinland, F.R. Germany.
- (4870) PECILE, I., 1984. Libellule. Lorenzini, Udine. 136 pp., 144 figs (incl. numerous col. phot.). [Vol. 2 in the series "Natura intorno a noi"; no ISBN No.].(It., with Engl. translation of fig. captions). Size: 29 X 21 cm; hard cover; author's portrait and a brief biographic note on the jacket. Price: Lit 30500.-. (Author: Museo Friulano di Storia Naturale, Via Grazzano 1, 1-33100 Udine; Publishers: Carlo Lorenzini, Via Graonet 24, 1-33100 Udine).

This typographically excellently produced volume is directed at the general reader and deals with the fauna of the Autonomous Region Friuli-Venezia Giulia, northern Italy, The first part relates a brief outline of dragonfly morphology and biology, with special chapters on collecting and photography. The second part presents identification keys and descriptions of Friulian spp., with information on habitats, ecology, behaviour and regional occurrence. Dragonflies do not have any vernacular names in Italian, but the Engl., Germ. and French vernacular names are stated, where available. The work is richly illustrated, and col. phot. of most spp. are also included. It is unfortunate that some of the latter show immobilized individuals, in unnatural positions. The spelling "Aeschna" should be replaced by the correct "Aeshna". -(Abstracter's Note: After J. Rostand & G. Colosi's work, 1946. Vita anfibia: i rospi e le libellule, La Nuova Italia, Firenze, this is the

first dragonfly book in Italian, directed at the general reader. The author did a very nice job, and the volume should be certainly not missed in any odonatol. library).

- (4871) POETHKE, H.J., 1984. Ist das Temporalverhalten der Libelle Aeschna cyanea eine evolutionsstabile Paarungsstrategie? Ref. IX. Ethologentreffen, Göttingen, p. 40 [Abstract]. (Lehrstuhl Oekologie, Technische Hochschule Aachen, Kopernikusstr. 16, D-5100 Aachen, FRG).
 It is demonstrated that the temporal behaviour of A. cyanea represents an evolutionarily stable pairing strategy.
- (4872) PRASAD, M. & S.K. GHOSH, 1984. Studies on the intraspecific variations in Brachythemis contaminata (Fabricius) (Odonata: Libellulidae). J. Bombay nat. Hist. Soc. 80(2): 341-348.

 (Zool. Survey India, 14 Madan Str., Calcutta-700072, India).
 A detailed biometric analysis of the intraspecific variation in various Indian populations of B. contaminata is provided along with some field ecology notes.
- (4873) PRASAD, M. & S.K., GHOSH, 1984. A note on the Odonata (Insecta) from Sikkim, India. J. Bombay nat. Hist. Soc. 80(2) 435-439. —
 (Zool. Surv. India, 14 Madan Str., Calcutta-700072, India).
 7 spp. and sspp. are reported for the first time from (the former Kingdom of) Sikkim, India. Intraspecific variation in some of these is described and figured.
- (4874) RETZLAFF, H., 1984. Mitteilungen zur Insektenfauna in Ostwestfalen-Lippe. Mitt. ArbGem. ostwestf.-lipp. Entomol. 30: 77-79.

 (Nordstr. 5, D-4815 Schloss Holts-Stukenbrock, FRG).
 The population decrease of Calopteryx virgo and C. splendens in the Eastern Westfalia-Lippe area, Fed. Rep. Germany is evidenced, and Cordulegaster bidentatus is recorded for the first time from this region.
- (4875) REZBANYAI-RESER, L., 1984. Die Gesellschaft für Libellenkunde und ihre Zeitschrift.

Ent. Ber. Luzern 11: 115. — (Natur-Mus., Kasernenplatz 6, CH-6003 Luzern).

The main objectives of the Gesellschaft deutschsprachiger Odonatologen (GdO) are outlined.

(4876) ROY, S.P., 1984. Studies on gut content analysis of odonate nymphs in a freshwater fish pond at Bhangalpur (Bihar). Entomon 9(1): 25-29. — (Dept. Zool., Marwari Coll., Bhagalpur-812007, India).

A number of Zygoptera and Anisoptera genera was studied. A quantitative analysis of various diet items is presented, and the selective nature of feeding is discussed. It is interesting that a small percentage of the diet is constituted by various Algae.

(4877) RUNDSCHREIBEN [DER] GESELL-SCHAFT DEUTSCHSPRACHIGER ODONATOLOGEN, Münster, No. 2 (Nov. 19, 1984). — (c/o Prof. Dr R. Rudolph, Biol. Didaktik, Univ. Münster, Fliednerstr. 21, D-4400 Münster, FRG).

List of available issues of Libellula, announcements of forthcoming national and international odonatol. meetings and Symposia, abstracts of some recent German odonatol. publications, mutations in the GdO membership list. The 6th Colloquium of German odonatologists is to be convened at Forbach, Black Forest, March 16-17, 1985.

(4878) RÜPPELL, G., 1984. Sympetrum spec. (Libellulidae). Eiablageverhalten. - Egg laying behaviour. Dragonfly. Inst. Wiss. Film, Göttingen. — Reference No: E-2740. (Order address: Inst. Wiss. Film, Nonnenstieg 72, D-3400 Göttingen, FRG).
Colour movie, without sound, duration 8.5

min, available also in video version.

(4879) SIOJA. [Information Bulletin of the SIO National Office in Japan], Osaka, 1984, No. 3 (Dec. 5). (Jap.). — (c/o K. Inoue, 5-9, Fuminosato 4-chome, Abeno-ku, Osaka, 545, JA).
Various internal SIO communications. An inlay sheet, by the Editor of Odonatological

Abstracts, requesting the cooperation from the Japanese membership.

(4880) [SPINKS, J.L.], [Ed.], 1984. Endangered and threatened wildlife and plants; review of invertebrate wildlife for listing as endangered or threatened species. Odonata. Federal Register, US Dept Interior 49(100): 21664--21667. — (Office, Endangered Species, Fish & Wildlife Service, Washington, D.C. 20240, USA).

32 spp. are listed in the following categories: 2 for which substantial information is on hand to propose threatened or endangered status, 27 for which the current information indicates that threatened or endangered status is possibly appropriate but for which conclusive data are not available, 2 Megalagrion spp. for which there is evidence of extinction, and 1 sp. (Gomphus adelphus) which does not meet the definition of species under the Endangered Species Act. Comments should be sent to the Editor of this list. — (For the list of taxa cf. G.H. Bick, 1984, Selysia 13: 21).

- (4881) STEINMANN, H., 1984. Szitakötök Odonata. Fauna Hung. 160: 112 pp., Index excl. (Hungarian). ISBN 963 05 3872 5. (Author's address not stated).

 Technical treatment of the Hungarian fauna, with descriptions and keys. (The immature stages were dealt with, by the same author, in Fauna Hung. 69 [1964]).
- (4882) TAGUCHI, M. & M. WATANABE, 1984. Ecological studies of dragonflies in paddy fields surrounded by hills. I. Seasonal fluctuations of adult populations. Bull. Fac. Educ. Mie Univ. (nat. Sci.) 35: 69-76. (Jap., with Engl. title). — (Second Author: Dept Biol., Fac. Educ., Mie Univ., Kamihama, Tsushi, Mie 514, JA). [Engl. abstract not available].
- (4883) TOMBO. ACTA ODONATOLOGICA. Published by the Society of Odonatology, Tokyo, Vol. 27, Nos 1/4 (Dec. 25, 1984). For data on subscription and membership cf. OA 3563. (Mostly Engl., Jap. papers with Engl. ss). (c/o Editor: Dr S. Asahina, Takadanobaba 4-

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-4-24, Shinjuku-ku, Tokyo, 160, JA). — (Contact the Editor for the addresses of the authors).

Eda, S.: A male of Aeschna juncea making his territory above a marsh at Hakuba, Nagano Pref. (col. frontispiece); - Asahina, S.: A list of the Odonata recorded from Thailand. Part VI. Genus Coeliccia [new taxa described are: C. doisuthepensis sp. n., C. yamasakii sp. n., C. megumii sp. n., and C. kazukoae sp. n.] (2--20); - Matsuki, K & J.C. Lien: Descriptions of the larvae of two species of the genus Coeliccia in Taiwan (Odonata, Platycnemididae) (21--22); - Svihla, A.: Notes on the habits of Tanyptervx hageni Selvs in the Olympic Mountains, Washington, U.S.A. (23-26); -Tabaru, N.: Larval development of Epiophlebia superstes in Kyushu (27-31); — Arai, Y.: Notes on the survival of dragonfly larvae in dried up swamps (32-34); — Rai, T.: Further observations on adult hibernation of Indolestes peregrinus Ris (35-36); — Inoue, K.: Pruinescent females of Orthetrum j. japonicum (37-38); - Recent informations on S.I.O. (38); -Watanabe, K.: Description of the larval stage of Psolodesmus mandarinus kuroiwae and Gomphus yayeyamensis (39-41); — Kohama, T.: Record of larval Anotogaster sieboldii from Okinawa Island, Ryukyus (41); — Eda, S.: Annual meeting of the Society of Odonatology [Tokyo] 1984 (42): — Asahina, S.: A preliminary list of non-indigenous dragonfly species of Japan (43); — Hamada, K.: A very late occurrence of Gomphus melaenops (43).

UTZERI, C., 1984. L'esibizione "di minaccia" (4884)del maschio e "di rifiuto sessuale" della femina negli zigotteri. Un caso di imitazione intraspecifica? [Abstract]. Boll. Zool. 51 (Suppl.): 109. - (Dipt. Biol. Anim. & Uomo, Univ. Roma, Viale dell'Università 32, I-00185 Roma). Both male "threat" (aggressive) and female "refusal" (sexual) displays in Zygoptera (i.e. opening the wings) induce approaching individuals to retreat. It is argued that the male wing display is the result of a ritualization of the original take-off for the attack, and serves as a warning signal. In females, the wing display developed from the preparation for an escape flight. It is interpreted in terms of

intraspecific [i.e. intersexual] behavioural imitation.

(4885) VOLKART, H.D., 1984. Berichte der Abteilungen. 2. Abteilung Wirbellose Tiere. Jb. naturh. Mus. Bern 8: 61-73. — (Abt. Wirbellose Tiere, Naturh. Mus., Bernastr. 15, CH-3005 Bern).
From the legacy of O.-P. Wenger (1919-1981), the Nat. Hist. Mus. of Berne, Switzerland received 700 odon. specimens, most of which are of Swiss and French provenance. The main odon. collection of the late Wenger is in the Museum's possession since 1971. (Cf. also OA 4849).

(4886) WATANABE, M., 1984. [Diurnal activity of Sympetrum frequens in a high mountain area]. Mie Dobutsugakkai Kaiho 7: 14-15. (Jap.). — (Dept Biol., Fac. Educ., Mie Univ., Kamihama, Tsu-shi, Mie 514, JA). Detailed observations on territorial and reproductive behaviour are presented (Goshikiga-hara in Mt Tatayema, Toyama Pref., Japan, alt. 2500 m; Aug. 1981).

1985

BELLE, J., 1985. Gomphus vulgatissimus

(Linnaeus) new to the fauna of Spain, with records of other interesting Odonata Anisoptera. Ent. Ber., Amst. 45(2): 14-15. — (Onder de Beumkes 35, 6883 HC Velp, NL).

G. vulgatissimus, G. pulchellus, G. simillimus, Onychogomphus forcipatus, O. uncatus and Cordulegaster boltoni are recorded from Rio Cea, NW Spain. The occurrence of G. graslini, Brachythemis leucosticta and Trithemis annulata in the Jaén province is also mentioned. Vulvar lamina and the thoracic colour pattern of G. vulgatissimus are figured.

(4888) LINDENIA. Notiziario dell'Ufficio Nazionale Italiano della Società Odonatologica Internazionale, Roma, No. 3 (Jan. 1, 1985). — (c/o Prof. Dr C. Utzeri, Dipt. Biol. Anim. & Uomo, Univ. Roma, Viale dell'Università 32, I-00185 Roma). Analysis of the results of a questionnaire distributed among 47 Italian odonatologists, and various notes of particular interest to the Italian workers.

(4889) RETTIG, K., 1985. Neues aus der Insekten-

welt Ostfrieslands. Beitr. Vogel- Insektenwelt Ostfrieslands 18: 14-19. — (Danzigerstr. 11, D-2970 Emden, FRG).

Records of 21 odon spp. (Cf. also OA 4700).