

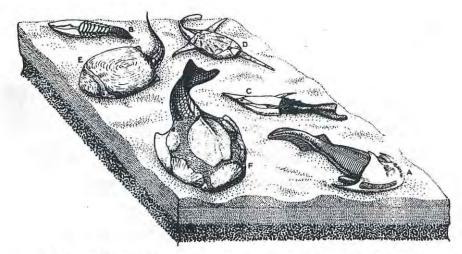
INTERNATIONAL UNION OF
GEOLOGICAL SCIENCES
COMMISSION ON STRATIGRAPHY

-s-D-sSUBCOMMISSION ON DEVONIAN
STRATIGRAPHY

NEWSLETTER NO. 1

January 1986





Siluro-Devonian agnatha from the Euramerican Province. Shown here are species that were not necessarily contemporaneous; some have been found in association with marine fossils but most are from freshwater deposits. A. Machairaspis. a cephalaspid from Spitsbergen, B. Poraspis, a cyathaspid from Spitsbergen, C. Pteraspis, a pteraspid from England and Wales, D. Doryaspis, a specialised form of pteraspid, Spitsbergen, E. Zascinaspis, another strange pteraspid, Spitsbergen, F. Psammolepis, a heavily built large pteraspidomorph, Baltic area. Scale ca. × 0.25

I.U.G.S. Subcommission on Devonian Stratigraphy
Newsletter No. 1., 1986. Editor D.L. Dineley,
Dept. of Geology, University of Bristol, U.K.

#### EDITORIAL

The first NEWSLETTER is a modest beginning to what we hope will become a lively and worthy annual publication by this Subcommission. There are already several other newsletters produced by sister subcommissions on stratigraphy. They have in the past been absisted by donations from interested or philanthropic parties beyond the membership and we should also be looking for whatever financial support we can to produce this little broadsheet. Financial times are hard but that's no reason for us not to try - any member or reader who can push a modicum of support into the editorial/production coffers will do us a signal service.

Well, I did not mean to begin on such a pecuniary note but there it is. Whatever our fortunes we will try to keep up an annual edition of our doings. After all, the Devonian Subcommission, I have it on good authority, is a very active offspring of the Stratigraphy Commission. Its membership must have the acquaintance of a very large number of workers on Devonian rocks in all parts of the world. We would welcome news of them either directly or through our members in touch with them.

As you will know from the minutes of the meeting held here in Bristol last August, we have enlarged the number of corresponding members to meet the needs of contact with workers on Old Red Sandstone stratigraphy and with those in areas of increasing interest in Devonian rocks. We shall look forward to hearing especially from them at future meetings and via this NEWSLETTER.

Last summer's SDS splendid but wet excursion to West Devon and North Cornwall was under the guidance of Brian Selwood and Mike Thomas of the University of Exeter in Devon. Their work is in truth upon Devonian home territory - tectonically, a complicated and perverse terrain in which they have been using fossils to unravel structural geology problems with great success. Macrofossils in Devonshire are not everywhere either abandant or well preserved, but in addition to new discoveries of them, conodonts have been recovered in sufficient numbers to help the Exeter team to unravel the stratigraphy. (See <a href="Proc. Geol. Assoc.">Proc. Ussher Soc.1984</a>).

Twenty-five years ago this month Brian Selwood and Mike Thomas together with Michael House, Scott Simpson and others active in Devonian geology were founder members of the Ussher Society. This body is concerned with the geology and geomorphology of the south west of England and its annual Proceedings (now in its sixth volume) contain many papers on the Devonian system. From merely listing titles and abstracts the Proceedings has become vehicle for original research papers and reviews, and is internationally recognised.

# INTERNATIONAL COMMISSION ON STRATIGRAPHY (ICS)

A Commission of the International Union of Geological Sciences (IUGS)

Chairman: Dr. J.W. Cowie, Department of Geology, University of Bristol, BS8 1RJ. England, U.K. Phone: Bristol (0272) 24161 (in 1985), 303030 (in 1986 on) and 506905 (at any time).

Secretary General: Prof. J. Remane, Universite de Neuchatel, Inst. de Geologie, 11 rue Émile Argand, CH 2000 Neuchatel 7, Switzerland. Phone: (038) 25 64 34.

To:- Professor D.L. Dindey, Searchary, Subcommission on Devonion Stratigraphy, ICS, Dept. of Geology, University of Bristol. 4 January 1986.

The Subcommission on Dermian Stratigraphy has long been the leader and front-run n of the Tuternational Commission on Strategrafoly's work on global stratigraphy. The base of the Dewnian System was fixed by a stratatype long ago in the 1970's; it was the first system to be so defined. In 1985 the boundaries within Devouian have been defined in some cises (Episodes & (2): 104-109) and further defuitions are being prepared. It was my pleasure to be present at the Subcommission's meetings in August 1985 and it was clear that much dynamic and forward-looking research is being stiemlated: this is what would be expected from the tradition long established. I offer my very best wisher to the Devonian Sub commission for a successful year in 1986 and in the years beyond. (J.w. Cowie) Holani (Chamian ICS)

## A Word or Two from the Chairman

The way to start a newsletter is to do it, with or without much news. We all have research to report (whether in this first number or not) and knowing that there is a vehicle for such news will, we hope, generate the impulse to write it down and send it in. Instructions for preparation of newsletter copy, and the next deadline, are elsewhere in this number. Let every SDS member distribute number 1 widely in his own country or area, and help arrange to make number 2 fat.

Officers of the Subcommission.

CHAIRMAN: William A. Oliver, Jr. U.S. Geological Survey E-305 Natural History Building Smithsonian Institution Washington, D.C. 20560 USA

VICE-CHAIRMAN: Ivo Chlupáč Ústřední Ústav Geologický Malostranské náměstí 19 118 21 Praha 1 Czechoslovakia

SECRETARY
David L. Dineley
Department of Geology
University of Bristol
Wills Memorial Building
Queen's Road
Bristol BS8 1RJ.

Some recent publications on the Devonian System in Devonshire and Cornwall, S.W. England.

As members will know from the last set of minutes, the 1985 field meeting was held in Devon and Cornwall, U.K. No specially prepared field guide was issued but reference was made to recent papers by Selwood and others for details of the geology. For those colleagues who could not attend the meeting the following list of recent publications on the Devonian system in South West England may be of use and interest.

- 1983 Coward, M.P. & McClay, K.R. Thrust Tectonics of South Devon. J. Geol. Soc. London, 140, 215-228.
- Durrance, E.M. & Laming, D.J.C. The Geology of Devon. Univ. of Exeter, 346 pp.
- 1975 Edmunds, E.A., McKeown, M.C. & Williams, M. <u>British Regional Geology</u>. South West England, 4th edition, 136 pp. H.M.S.O. London.
- 1977 House, M.R., Richardson, J.B., Chaloner, W.G., Allen, J.R.L., Holland, C.H., Westall, T.S. A Correlation of the Devonian Rocks in the British Isles. Geol. Soc. London. Special Report No. 8, 110 pp.
- 1985 Isaac, K.P. Thrust and nappe tectonics of West Devon. Proc. Geol. Assoc. 961, 109-127.
- 1982 Isaac, K.P., Turner, P.J. & Stewart, I. The Evolution of the Hercynides of Central SW England, J. Geol. Soc. London. 139, 521-531
- 1978 Scrutton, C.T. (ed.) A Field Guide to the Devonian of South West England: International Symposium on the Devonian System. (PADS 78) September 1978. Palaeontological Association, 73 pp.
- 1983 Selwood, E.B., Edwards, R.A. & Simpson, S. The Geology of the Country Around Newton Abbot. Mem. Geol. Surv. G.B.
- 1985 Selwood, E.B., Stewart, I.J. & Thomas, J.M. Upper Palaeozoic Sediments and Structure in North Cornwall - A Reinterpretation. Proc. Geol. Assoc. 96, 129-141.
- 1985 Austin, R.L. & Armstrong, H.A. (eds.) Fourth European Conodont Symposium (ECOS IV), Field Excursion. Devonian and Dinantian conodont localities in South West England, 20-25 July, Nottingham, U.K.

### Publications of more general interest to beyonophiles

- Chaloner, W. G. and Lawson, J. D., eds. 1985. Evolution and environment in the Late Silurian and Early Devonian: Phil. Trans. R. Soc. Lond. B309, 1-342.
- Dineley, D. L., 1985. Aspects of a Stratigraphic System: the Devonian. Macmillan (London), 1-223.
- Rudwick, M. J., 1985. The Great Devonian Controversy: Univ. Chicago Press.

#### References of specific interest to SDS

- Bassett, M. G., 1985. Towards a "common language" in stratigraphy: Episodes 8(2)87-92 (Devonian on pp. 90-91).
- Chlupáč, Ivo, Lukeš, Pavel, Paris, Florentin, and Schönlaub, H. P., 1985. The Lochkovian-Pragian boundary in the Lower Devonian of the Barrandian area (Czechoslovakia): Jb. Geol. B.-A., Bd. 128 (1), S. 9-41.
- Feist, Raimund and Klapper, Gilbert, 1985. Stratigraphy and conodonts in pelagic sequences across the Middle-Upper Devonian boundary, Montagne Noire, France: Palaeontographica, Abt. A 188, p. 1-18.
- House, M. R., Kirchgasser, W. T., Price, J. D. and Wade, G., 1985 (in press). Goniatites from Frasnian (Upper Devonian) and adjacent strata of the Montagne Noire: Hercynica, 1, p. 1-19 (September 1985). Copies of page proof were distributed in Bristol to all attendees.
- Klapper, Gilbert, 1985. Sequence in conodont genus Ancyrodella in Lower assymmetricus Zone (earliest Frasnian, Upper Devonian) of the Montagne Noire, France: Palaeontographica, Abt. A 188, p. 19-34.
- Paproth, Eva and Streel, Maurice, eds., 1984. The Devonian-Carboniferous Boundary: Cour. Forsch.-Inst. Senckemberg, 67, 1-258, 85 figs., 40 pls.
- Ziegler, W. and Klapper, G., 1985. Stages of the Devonian System: Episodes 8(2)104-109.
- Ziegler, Willi and Werner, Rolf, in press. Devonian Series Boundaries -Results of Worldwide Studies: Cour. Forsch.-Inst. Senckemberg, 75.

#### The Subcommission's Business Meetings and Field Excursions

Field excursions and business meetings have been held almost every year since the Subcommission was set up in December, 1973. The constitutional meeting was organised by TM Professor Willi Ziegler, then head of the Geology Department at Marburg University, Lahn, W. Germany. At that meeting the elected officers were:— Chairman Professor H.K. Erben (Bonn); Vice-Chairman Professor D.L. Dineley (Bristol); Secretary Professor W. Ziegler (Marburg): 16 Titular Members were elected and 28 of the 32 places for Corresponding Members were filled. Subsequent meetings have been:—

- 1975 Morocco: Field excursion to Draa Valley, Assa, Tafilalt and Erfoud areas.
  Business Meeting in Rabat. Organisers: H. Hollard & M. Bensaid.
- Australia: 25th International Geological Congress in Sydney, N.S.W.
  Field excursion to Bindi and Buchans (Victoria), Wellington (N.S.W.)
  Burdekin and Broken Rivers (Queensland). Business Meeting at North Ryde,
  Sydney. Organisers: J. Talent, Ruth Mawson.
- 1977 Czechoslovakia: Field excursion in the classical Prague region and Business Meeting in Prague. Organisers: I. Chlupáć, P. Lukes and J. Zikmundova.
- 1978 U.S.S.R.: Field excursion to the Zarafshan, Uzbekistan S.S.R. Business Meeting and conference in Samarkand. Organisers: M.A. Rzhonsnitskaya and A. Kim.
  - U.K.: Palaeontological Association's Devonian Symposium (PADS 78). Field excursions in South West England, South Wales and the Welsh Borderland and Scotland. Organisers: D.L. Dineley, M. House, P.F. Friend, C.T. Scrutton. Business Meeting in Bristol.
- 1979 Spain and France: Field meetings in the Cantabrian Mountains and the Therian Chain, Spain. Organisers: J. García Alcalde. Business Meeting in Sigüenza. Brittany organisers: H. Lardeux and P. Morzadec.
- 1980 France: Subcommission Members met informally at the 26th International Geological Congress.
- 1981 "U.S.A.: Field meeting in New York State and the Business Meeting, held at Binghamton, N.Y. Organisers: W.A. Oliver Jr., G. Klapper and J. Sorauf.
- Belgium and West Germany: Field meetings in the Franco-Belgian Ardenne and the Eifel areas. Organisers: P. Bultynck, P. Sartenaer, R. Werner and W. Ziegler. Business Meeting in Frankfurt on Main.
- 1983 France: Field meeting in the Montagne Noire and Business Meeting at Montpellier. Organised by R. Feist.
- 1984 U.S.S.R.: 27th International Geological Congress, Moscow. No formal Business Meeting was held but several Members attended the excursion to the Devonian of the Caucasus and Armenia led by M.A. Rzhonsnitskaya.
- 1985 U.K.: The Field Excursion to W. Devon and N. Cornwall followed the Fourth European Conodont Symposium (ECOS IV) held in Nottingham. Organiser: D.L. Dineley. The Business Meeting was held in Bristol.

## New Corresponding Members

Following the Business Meeting of last August, colleagues well known for their Devonian interest were invited to accept membership of the Subcommission.

We welcome to our number as Corresponding Members:

Dr. Alain Blieck Laboratoire de Paléobotanique, U.E.R. des Sciences de la Terre. Université des Sciences et Techniques

de Lille, B.P. 36. Villeneuve d'Asoq, F-59655, France.

Dr. Diane Edwards Dept of Plant Science, University College, Cathays

Park, Cardiff, U.K.

Dr. David K. Elliott Dept of Geology, N. Arizona University, Flagstaff,

Arizona 86001, U.S.A.

Professor Tong-Dzuy Thanh Dept of Historical Geology, Hanoi University, Hanoi,

S.R. Vietnam.

Dr. Elga Kurik Institute of Geology, 7 Estonia Pst., 200101 Tallinn,

Estonia, U.S.S.R.

Dr. Gavin Young Bureau of Mineral Resources, Dept of Geology &

Geophysics, Anzac East Bldg., Constitution Ave.,

Parkes, A.C.T. 2600, Australia.

Dr. Wang Shitao Institute of Geology, Chinese Academy of Geological

Sciences, Baiwanzhuang Road, Beijing, China.

Dr. Florentine Paris Laboratoire de Paléontologie et de Stratigraphic

Institute de Géologie, Université de Rennes, Avenue

du General Le-clerc, Campus de Beaulieu, 35042

Rennes, France.

Dr. Patrick Racheboeuf Laboratoire de Paléontologie et Stratigraphie du

Paléozoique, Université de Bretagne Occidentale,

U.E.R. Sciences, Avenue Le Gorgeu, 29283 Brest, France.

Mumbers of the Subcommission are invited to send to the editor a note of their current interests and work and to list some recent or forthcoming publications. Below are some examples.

DINELEY, D.L. (Secretary SDS) Department of Geology, University of Bristol, Wills Memorial Building, Queen's Road, Bristol BS8 1RJ, U.K.

"Co-ordinator of SDS Group of Marine-Continental Facies Correlation.
Continuing interest in Lower Devonian vertebrates of S. Wales and S.W. England, Canada and China, in co-operation with Dr. Elizabeth J. Loeffler and Liu Yuhai of the Institute of Vertebrate Palaeontology and Palaeoanthropology, Beijing, China.

1983 Elliott, D.K. & Dineley, D.L. New Species of Protopteraspis (Agnatha, Heterostraci) from the Upper Silurian and Lower Devonian of Northwest Territories, Canada. J. Vertebrate Paleont., 3, 474-494.

1983 Dineley, D.L. & Liu Yuhai. A new actinolepid arthrodire from the Lower Devonian of Arctic Canada. Palaeontology, 27, 875-888.

1984 Dineley, D.L. Aspects of a Stratigraphic system: the Devonian. Macmillan. 201pp. London.

1984 Dineley, D.L. Devonian Vertebrates in Biostratgraphy. Proc. Linnean Soc. N.S.W., 107, 185-196.

1984 Dineley, D.L. & Elliott, D.K. A new heterostracan from the Upper Silurian of Northwest Territories, Canada. J. Vertebrate Paleont, 5, 103-110.

1985 Dineley, D.L. Palaeozoic Fishing. Proceedings of the Royal Institution, 57, 123-142.

KLAPPER, Gilbert (Department of Geology, University of Iowa, Iowa City, IA 52242, USA) is continuing research on the Middle and Upper Devonian (Frasnian and early Famennian) conodont sequence in the Montagne Noire, southern France. Present emphasis is on the multielement taxonomy and shape analysis of Frasnian species of Palmatolepis. A manuscript with C.T. Foster, Jr., on the qualification of outlines in Palmatolepis platform elements has been completed recently. Research with H.R. Lane on the Frasnian conodont sequence in Alberta, Canada is also continuing.

1985 Feist,R. & Klapper, G. Stratigraphy and conodonts in pelagic sequences across the Middle-Upper Devonian boundary, Montagne Noire, France. Palaeontographica, Abt. A. Bd. 188: 1-18.

1985 Klapper, G. Sequence in conodont genus Ancyrodella in Lower asymmetricus Zone (earliest Frasnian, Upper Devonian) of the Montagne Noire, France. Palaeontographica, Abt. A., Bd. 188: 19-34,

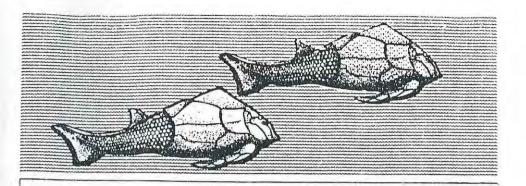
1985 Klapper, G & Lane, H.R. Upper Devonian (Frasnian) conodonts of the Polygnathus biofacies, N.W.T., Canada. Jour. Paleontology, 59(4): 904-951.

1985 Johnson, J.G., Klapper, G. & Sandberg, C.A. Devonian eustatic fluctuations in Euramerica. Geol. Soc. America Bull., 96: 567-587.

1985 Witzke, B.J., Bunker, B.J. & Klapper, G., Devonian stratigraphy in the Quad Cities area, eastern Iowa-northwestern Illinois. S.E.P.M. Great Lakes section, 15th Ann. Field Conf. Guidebook, 19-64.

1985 Klapper, G. & Foster, C.T., Jr. Quantification of outlines in platform conodonts. In: Aldridge, R.J. (Austin, R.L. & Smith, M.P. (eds.) Fourth European conodont symposium (ECOS IV) Abstracts, 15.

1985 Johnson, J.G., Klapper, G., Murphy, M.A. & Trojan, W.R. (in press). Devonian series boundaries in central Nevada and neighboring regions, western North America Courier Forschungsinstitut Senckenberg, 75.



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