



**INTERNATIONAL UNION OF  
GEOLOGICAL SCIENCES  
COMMISSION ON STRATIGRAPHY**

**-S-D-S-**

**SUBCOMMISSION ON DEVONIAN  
STRATIGRAPHY**

**NEWSLETTER NO. 2**

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I.U.G.S. Subcommittee on Devonian Stratigraphy  
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Geology, University of Bristol, U.K.

EDITORIAL

The second edition of our NEWSLETTER goes to print shortly before the Business Meeting and Field Excursion of the Subcommittee in Czechoslovakia. Thus the formal business activity in Prague will be reported in issue No. 3. The present number contains further news from colleagues in North America and Europe. For the future I shall be asking other colleagues for news of activities connected with the Devonian system in their own countries, especially perhaps news from less familiar quarters.

A conference on early vertebrates is announced by the Institute of Vertebrate Palaeontology and Palaeoanthropology in Beijing for October 1987 with field excursion to the Silurian-Devonian of Yunnan and Wudin. The importance of Chinese field studies in regard to our interest in the correlation of the marine and non-marine facies is great, but, as Pan Jiang points out, nearly all the Silurian and Devonian vertebrate species there are endemic. Chinese studies in early vertebrates and in Devonian stratigraphy, as we know, are going along at a great rate. Meanwhile, in a report to be presented at the Business Meeting in Prague CM Alain Blicek suggests that the Baltic Silurian-Devonian sequence studied by Soviet colleagues is so complete and fossiliferous as to be a good reference succession of both marine and non-marine assemblages to which the Subcommittee should soon turn its attention. It is also good to note that our colleagues D.C. McGregor and J.B. Richardson have brought off a triumph in their recent "Silurian and Devonian spore zones of the Old Red Sandstone Continent and adjacent regions", Geological Survey of Canada, Bulletin 364, 1986.

In about a year's time we shall be making the pilgrimage to Calgary and the International Symposium on the Devonian System. No doubt there will be a good roster of titles and abstracts of papers from Subcommittee members. It should be a splendid occasion, not to be missed - but a year in which Calgary and Beijing both offer such delights is going to be rather hectic - and hard on the pocket!

David L. Dineley

BRITISH ISLES FRIENDS OF THE DEVONIAN  
ORCADIAN BASIN MEETING, 1985

Each May this group holds a 3-4 day field meeting, usually in the U.K. but sometimes in Ireland or on mainland Europe. This year the meeting was organised from Cambridge by David Rogers with Tim Astin (Reading), Steve Hillier and John Marshall (Southampton). The objective was to examine the lacustrine succession in coastal exposures and inland in Easter Ross and Caithness where the well-known successions are now interpreted as representing ephemeral lakes with wind-supplied sand and a subsidiary deep permanent lake with carbonate silt "non-glacially" varved "Jaminites". Ephemeral stream and alluvial fan sediments also of Middle Devonian age were visited near Thurso and Kinkell on Black Isle, Ross. Vertebrates and plants were collected. There is a growing interest in this area of Devonian in Britain and a recent publication dealing with one of the best known localities is:-

TREWIN, N.H., 1986. Palaeoecology and sedimentology of the Achanarras fishbed of the Middle Old Red Sandstone, Scotland. *Transactions of the Royal Society of Edinburgh*, vol. 77, pt. 1, 21-46.

## ON THE NEED FOR DEFINING

S.D.S. was organized in 1973, and held field and business meetings through 1976 with Professor H.K. Erben, Chairman, providing an organisational and intellectual link to the Committee on the Silurian-Devonian Boundary which had completed its work in 1972. Under Professor Erben, S.D.S. established the working pattern that it still follows, and visited the first two of the many key Devonian areas to be analysed by S.D.S. During the succeeding 8 years, with Professor Willi Ziegler as Chairman, the pattern of annual field and business meetings produced decisions on series boundaries (1979, 1981, 1982, 1985), the names to be used for the Devonian stages (1981, 1983), and the first of the needed stage decisions (1983). Additional stage decisions remain.

This record is familiar to readers of this Newsletter and is one of which S.D.S. can be very proud. However, it is not a reason to relax our efforts to complete our basic job. It is true that our responsibility is to promote Devonian research in the broadest sense, but we have agreed from the beginning that defining the basin time/stratigraphic terms was our first priority and this emphasis has recently been reinforced by the promulgation of the new I.C.S. "Guidelines and Statutes" and by I.C.S. Circular Newsletter 1.

As a member of the S.D.S. from the beginning, I have profited greatly from resulting contacts with both people and strata. Published biostratigraphic work is inevitably deficient in one respect: it cannot reveal the emotional tie between a stratigrapher and his rocks. By seeing an individual in his or her own field area, by asking questions and discussing merits *in situ*, by listening to, and participating in, debates between representatives of 'competing' areas or philosophies, one learns more about the relative merits of potential boundaries, stratotypes, and ideas than is possible from published studies alone.

This exposure, however, has only reinforced my basic feeling that we need to define our terms and that the need is immediate. As a stratigrapher whose region of principal interest is far from the European areas where the Devonian and its principal subdivisions were first named, I am conscious of the importance of defining boundaries so that correlation can begin. Until relatively recently, our intercontinental correlations were coarse and the lack of definitions was not strongly felt. This is certainly no longer true. Even in eastern North America, so provincial in Devonian time, our understanding of Devonian history is being held up while we await definitions.

All of this is to explain why I think that S.D.S.' goal should be to complete all stage definitions by 1989 (the next I.G.C.). We know what the problems are but have produced no satisfactory reason for their not being solved expeditiously. This August we expect to find potential stratotypes for the bases of the Pragian and Emsian, and I am soliciting formal proposals relative to these and the other stages for consideration at our 1987 meeting. We don't want to rush but it is neither necessary nor practical to see every possible section or area. Decisions must be made on the basis of thorough analysis of available information, and we will serve our colleagues best by completing our basic work with all deliberate speed.

William A. Oliver, Jr.  
Chairman SOS

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REPORT FROM THE NORTH AMERICAN STUDY GROUP ON  
MARINE-NONMARINE CORRELATIONS

Bill Oliver has asked that I Chair this group in place of Larry Rickard who is soon to retire from the New York Survey. I am happy to do so on the proviso that it not become a permanent arrangement.

As I understand it, I am to foster communication between workers in North America who are working on or who are interested in those vexing problems of marine-nonmarine correlation in the Devonian of this continent. To that end I offer the following items of information and requests.

Workers known to me as active (or workers with students who area active) on these problems include the 21 people on the enclosed list. But, who are the others? How about our other Canadian colleagues and what other federal or state survey people or industry people ought to know about this group? If you can add to the list or if you know of someone who can, let me know. We will later publish a list of workers and projects.

A field meeting on Devonian shoreline strata is under consideration for June, 1987. Two alternatives suggest themselves, both representing work underway but well advanced. A one- or two-day meeting might be held either on the rocks spanning the Givetian/Frasnian boundary in the Schoharie Valley, New York or on the rocks spanning the Frasnian-Famennian boundary in north-central Pennsylvania. The two might be combined. I would like to hear from interested parties about these possibilities (or others).

The status of marine-nonmarine correlations in the Devonian of eastern North America is a matter of concern to many of us. Now that we have COSUNA-charts, a correlation chart for the rocks of Pennsylvania and Rickard's correlation chart for the Devonian of New York, isn't it time to consider how they fit together? The comprehensive Devonian Correlation chart of Oliver and others provides a guide but much has happened in the 20 years since it was compiled. No analysis of methods of correlation has been reported although we know that these charts rest on various stratigraphic philosophies. The bases for correlation both within the nonmarine section and between it and the marine sections are often unclear. Perhaps it is time to become explicit about them through a critical review and update of Oliver and others.

I hope to hear from you on any of the matters raised here of others you feel would be of interest to the Study Group.

Don Woodrow

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Geneva, NY 14456 (315) 789-5500 ext. 215

WORKERS WITH AN INTEREST IN DEVONIAN MARINE AND  
NONMARINE CORRELATIONS

HARLAN BANKS, Ithaca, New York; TON BERG, Pennsylvania Geological Survey; PATRICIA BONANO, SUNY Binghamton; CARLETON BRETT, University of Rochester; JOHN BRIDGE, SUNY Binghamton; JOHN DENNISON, University of North Carolina; ALAN DONALDSON, West Virginia University; GEORGE MCGHEE, Rutgers University; COLIN MCGREGOR, Geological Survey of Canada; NOLLY MILLER, Vanderbilt University; A.W. NORRIS, Geological Survey of Canada; DOUG PATCHEN, West Virginia Geological Survey; JOHN RICHARDSON, British Museum of Natural History; LARRY RICKARD, New York Geological Survey; STEPHEN SCHECKLER, VPI and State University; BILL SEYON, Pennsylvania State University; AL TRAPERSE, Pennsylvania State University; REED WICANDER, Central Michigan University; GORDON WOOD, Amoco Production Company; DON WOODROW, Hobart and William Smith Colleges.

BLESS, M.J.M. and STREEL, Maurice, eds., 1986. Late Devonian events around the Old Red Continent. Special Volume "Aachen, 1986", *Ann. Soc. géol. Belgique*, T. 109. approx. 300 p. Contents listed below.

**Biostratigraphy**

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**Introduction to field trips**

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BERDAN, Jean M. (U.S. Geological Survey)

Preliminary studies of Lower Devonian (lower Helderbergian) ostracodes from New York, New Jersey and Pennsylvania indicate that the ostracode communities proposed by Warshauer and Smosna (1977, p. 475-485, Proceedings of 6th International Symposium on Ostracods, Saalfelden) for the Upper Silurian (Pridolian) Tonoloway Limestone of Maryland may persist into the Lower Devonian. However, species and genera are progressively replaced in higher beds, making the ostracodes potentially useful for detailed correlations from New York to West Virginia.

Silicified Lower Devonian ostracodes from Nevada have been obtained from turbidite beds in the McMonnigal and Windmill Limestones, but because they were presumably transported they provide no information on possible communities. These ostracode assemblages differ from those of the central Appalachians of equivalent age and are considered to represent a different (Cordilleran) faunal province. Five new genera of these silicified ostracodes have been described (Berdan, 1986, p. 361-378, Journal of Palaeontology), of which two are confined to the Cordilleran Province. All are from the McMonnigal Limestone in the upper part of the *pesavis* and lower part of the *sulcatus* conodont zones and the *Quadrithyrus* brachiopod zone.

BLODGETT, Robert B. (Department of Geology, Oregon State University, Corvallis, OR 97331, U.S.A.)

Continues research on Devonian stratigraphy and brachiopod and gastropod faunas from Alaska. Particular attention is given to the documentation of Devonian carbonate build-ups within the State, especially in contrasting the primary biotic components responsible (stromatolitic algae in pre-Emsian; corals and stromatoporoids in Emsian-Frasnian). The Lower Devonian algal reefs of southwestern Alaska form spectacular "barrier reef" complexes, up to 1000 m thick in places and traceable along the outer margin of the carbonate platform for several hundred km laterally. Recently initiated study of global Early Devonian gastropod biogeography (in co-operation with D.M. Rohr and A.J. Boucot). During summer of 1986, I will be involved in a U.S.G.S. field mapping programme of the Livengood quadrangle, east-central Alaska, an area with abundant, but poorly studied Devonian stratal sequences.

#### Recent Publications

- Savage, N.M., Blodgett, R.B. & Jaeger, H. 1985. Conodonts and associated graptolites from the Early Devonian of east-central Alaska and western Yukon territory. *Can. J. Earth Sci.*, 22, p. 1880-1883.
- Clough, J.G. & Blodgett, R.B. 1985. Comparative study of the sedimentology and paleoecology of Middle Paleozoic algal and coral-stromatoporoid reefs in Alaska. *Proc. 5th Int. Coral Reef Congress, Tahiti, 1985*, 9, p. 593-598.
- Blodgett, R.B., Clough, J.G., Dutro, J.T., Jr., Dreiston, A.R., Palmer, A.R. & Taylor, M.E. 1986. Age revision of the Katakaturuk Dolomite and Nanook Limestone, northeastern Brooks Range, Alaska. *Geol. Soc. Am., Abstract with Programmes*, 18(2), p. 87 (full text article on same subject will appear in June, 1986 in U.S.G.S. circular entitled: U.S.G.S. Accomplishments in Alaska-1985).

*in press*

Boucot, A.J., Brett, C.E., Oliver, W.A., Jr. & Blodgett, R.B. The Devonian faunas of St. Helen's Island, Montreal, Quebec, Canada. *Can. J. Earth Sci.*

*Completed manuscripts to be submitted for publication*

Boucot, A.J., Rohr, D.N. & Blodgett, R.B. A marine invertebrate faunule from the Tawil Sandstone (basal Devonian) of Saudi Arabia and its biogeographic-paleographic consequences.

Poncet, J. & Blodgett, R.B. First recognition of the Devonian alga *Lancicula sergensis* Shuisky in North America (west-central Alaska).

BORKOWSKI, Rick (Pennsylvania State University, Sun E. and P. Co.): Depositional reservoir characteristics of the Lower Devonian Oriskany Sandstone (Appalachian Basin).

The Oriskany Sandstone "complex" represents storm-dominated sedimentation within a prograding clastic sequence resulting from progressive erosion of Lower Devonian and Silurian units (down to at least the Tuscarora) to the east. Influx of shield sediments is indicated by the occurrence of fine-grained arkosic sandstones interbedded with coarser calcareous sandstones and orthoquartzites in the western interior portion of the basin. The uppermost Oriskany is interpreted as being reworked during the final stages of transgression (Wallbridge discontinuity).

BRETSKY, Peter (SUNY, Stony Brook): Variation in the Middle Devonian bivalve *Eodon bellastratus* (Conrad).

The distribution of morphological variations within and among stratigraphically contiguous populations of *Eodon bellastratus* over a 4 m interval of Mahantango mudstones (mid-Devonian) in central Pennsylvania is being examined. The shallow infaunal *E. bellastratus* colonized muds near the initiation of three coarsening-upward cycles. Colonization was followed rapidly by influx of large numbers, and then decline as the physical regime changed.

HARPER, J.A. (Pennsylvania Geological Survey): Late Devonian transgressive cycles in Pennsylvania.

Will be a short, generalised discussion of transgressive-regressive cycles seen in Late Devonian reservoir rocks (the Venango Group) of western Pennsylvania, with speculation on mechanisms and durations. ACD: Summer 1986.



JOHNSON, J.G. (Oregon State University, Corvallis).

I am involved in the preparation of 3 papers for the 2nd International Symposium on the Devonian System, Calgary, 1987:

1. (with C.A. Sandberg and F.G. Poole) Lower and Middle Devonian of Western United States.
2. (with C.A. Sandberg and F.G. Poole) Upper Devonian of Western U.S.
3. (with G. Klapper and C.A. Sandberg) Devonian T-R cycle boundaries: their age and recognition.

It is my hope to distribute preprints of this last N/S to Symposium authors during the summer of 1986.

KIRCHGASSER, William (Department of Geology, State University College, Potsdam, N.Y. 13876).

Continuing research on conodont and ammonoid sequences in the Genesee Formation of New York with current focus around the Middle/Upper Devonian boundary. The report of the S.D.S.-defined boundary near the base of the Penn Yan Member (Kirchgasser, Oliver and Rickard, 1985, C.F.S.-Courier 75) is confirmed by additional specimens of *Ancyrodella rotundiloba* (early form of Klapper, 1985).

A manuscript is in preparation on the ammonoid *Koenenites* in the Genesee Formation (L. *assy.* Zone) and work with Michael House continues on the ammonoid biostratigraphy of the Upper Devonian of New York.

KOCH, William F. (Department of Geology, Oregon State University, Corvallis, OR 97331).

Current interests are Devonian brachiopods of eastern North America, including community paleoecology, paleobiogeography, systematics, and biostratigraphy; Devonian stratigraphy and paleogeography of North America. Current research involves Old World Realm brachiopod migration into eastern North America during the Middle Devonian.

Koch, W.F. 1986. *Delthyris sculptilis* Hall, 1857. (Brachiopoda) from the Hamilton Group is a *Megakoziowskiella*. *Journal of Paleontology*, 60: in press-July.

Koch, W.F. 1986. Sawkill (Late Lower Devonian) paleogeography, depositional environments, and brachiopod community paleoecology of eastern North America. *Geological Society of America Abstracts*. 18:27.

Koch, W.F. 1986. Appalachian Basin Late Middle Devonian Brachiopod Communities. *Geological Society of America Abstracts*. 18:27.

MC GHEE, George R., Jr. (Department of Geological Sciences, Wright Geological Laboratory, Rutgers University, New Brunswick, New Jersey 08903).

Chair, U.S. Working Group for I.G.C.P. Project 216 ("Global biological events in earth history"; International Project-Leader: Professor O.H. Walliser).

The Late Devonian (Frasnian-Famennian) mass extinction event was the subject of several of the papers presented at the first international meeting of Project 216 of I.G.C.P. at Goettingen, F.R. Germany, 21-24 May, 1986. Abstracts of the proceedings of this meeting are planned for publication and will be of interest to Devonian workers. Details of publication can be had by contacting Professor O.H. Walliser at the University of Goettingen.

The Frasnian-Famennian extinction event will also be discussed at two upcoming meetings in the United States of America:

(1) 12-15 August 1986. Meeting of the U.S. Working Group for I.G.C.P. Project 216 at the Fourth Meeting of the North American Paleontological Convention to be held in Boulder, Colorado, U.S.A.

(2) 26-28 September 1986. Symposium on "Environmental Controls on Faunal Radiations and Mass Extinction" at the Third Annual Midyear meeting of S.E.P.M. in Raleigh, North Carolina, U.S.A. C.R. Newton and G.R. McGhee, conveners.

In my own research, I am active in a series of paleoecological analyses of marine ecosystems of the Frasnian Stage in the Appalachian Basin of North America. The goal of this research is to build up an ecological data base with detailed environmental control, which then could be analysed in terms of various models as to how "community evolution" operates (or doesn't operate, for that matter).

In addition to the evolution of Frasnian ecosystems, I am very interested in their destruction in the Frasnian-Famennian mass extinction event. I am conducting a series of geochemical analyses of strata which cross this horizon, with other colleagues, with the goal of testing the hypothesis that the mass extinction was triggered by an asteroidal impact. All of our evidence thus far has been negative: from field studies conducted in New York, Belgium, and the Federal Republic of Germany. I am also very interested in the *ecological* analysis of this extinction event, an approach which I feel has been rather neglected of late with all the interest in geochemical signatures.

McGhee, G.R., Gilmore, J.S., Orth, C.J. & Olsen, E. 1984. No geochemical evidence for an asteroidal impact at Late Devonian mass extinction horizon. *Nature* 308. 629-631.

MURPHY, Michael A. (University of California, Riverside).

As for my work in progress:

1. Devonian formations in the Roberts Mountains, both petrology and fossils with E.H. McKee (U.S.G.S.).
2. Lower Devonian conodont and graptolite lineages with my students.
3. Silurian-Devonian Acrotretids with Brian Chatterton (University of Alberta, Edmonton).
4. Lower Devonian ostracode biostratigraphy with Jean Berdan (U.S.G.S.).
5. The Tor, McMonnigal, Bastille formations in the Toquima Range

6. The Roberts Mountains and Windmill Limestones in the Monitor, Simpson Park and Cortez Ranges.
7. The Lone Mountain Dolomite in the Sulphur Springs Range.

*Papers in press include:*

1. Statistical study of *Ozarkodina excavata* (Branson & Mehl) and *O. tuma* Murphy & Matti (Lower Devonian delta zone, conodonts, Nevada). *J. Paleont.* w/M.K. Cebeçioğlu.
2. Morphometric study of the genus *Ancyrodelloides*, (Lower Devonian conodonts), central Nevada w/M.K. Cebeçioğlu.
3. The possibility of a Lower Devonian equal-increment time scale based on lineages in Lower Devonian conodonts. ECOS IV Symposium Volume.
4. Devonian Series Boundaries in central Nevada and neighbouring regions. Western North America Sp. Volume of the Senckenberg Museum. w/J.G. Johnson, G. Klapper & W. Trojan.

OLIVER, William A., Jr. (U.S. Geological Survey, Washington, D.C. 20560) is engaged in two major projects:

1. Corals and biostratigraphy of the Pridolian-Lochkovian stromatoporoid facies limestones of the Appalachians from New York to central Virginia. Rugose corals are being described and their stratigraphic and geographic distribution analysed. Among the dominant ptenophyllids, there is a region-wide shift from *Embolophyllum*-like to *Spongophylloides*-like corals at approximately the Silurian-Devonian boundary (as loosely defined by conodonts).

2. Givetian rugose corals from New York and adjacent areas. The purpose is to describe the corals, their lithologic associations, and their vertical range, in order to determine the "fate" of this highly endemic assemblage that became extinct before the end of the Middle Devonian.

ORMISTON, Allen R. (Amoco Production Company, Tulsa, Oklahoma).

B.B. Nazarov of the Geological Institute of the Soviet Academy of Sciences in Moscow and I have been working jointly for sometime on Paleozoic radiolaria. Gradually accumulating information on Paleozoic radiolarian ranges and compositions of assemblages, these showing the changes in Paleozoic radiolaria were not always synchronous with major transformations among shelf benthos. In particular, with regard to the Devonian, one sees a rather important structural change in radiolaria at sometime between the Mid-Early Devonian and the Middle Devonian. It is hoped that with further recovery of well preserved material, the timing of this change can be defined more accurately. In this regard, it is encouraging that Petr Cejchan of the Czechoslovakian Geological Survey in Prague reports recovery of Eifelian radiolaria from the Barrandian

By contrast, changes in radiolarian assemblages across the Frasnian/Famennian boundary among radiolaria appear to be very modest, and not at all comparable with the kinds of changes which affected particularly the shelf benthos at this time. This information is compatible with Pedder's report that deepwater corals are less affected than are shelf corals at this boundary, both lines of evidence suggesting that the maximal effect was concentrated in shallower water marginal areas. Inconsistencies of comparative extinction patterns between Paleozoic plankton, especially radiolaria, and the shelf benthos need explanation and cases of discrepant response such as at the Frasnian-Famennian boundary may help us better evaluate and choose among the many possible causative mechanisms which have been advanced to explain the marked changes at that time (McLaren, 1982).

*Reference:*

Nazarov, B. & Ormiston, A. 1985. "Evolution of Radiolaria in the Paleozoic and its Correlation with the Development of other Marine Fossil Groups", *Senckenbergiana lethaea*, 66(3/5): 203-215.

RICKARD, L.V. (New York State Geological Survey).

Stratigraphy and Structure of the Subsurface Lower and Middle Devonian, New York State and adjacent areas. A detailed study of the stratigraphy and lithofacies of the subsurface Lower and Middle Devonian of New York State, northern Pennsylvania, and parts of Ohio and Ontario has been completed. Gamma-ray and lithic logs of over 1000 wells have been examined and correlated, fourteen cross sections have been drawn, and seventeen isopach-lithofacies maps have been compiled. Subdivisions of the Lower Devonian, the Onondaga Limestone, the Hamilton Group, and the Tully Limestone have been recognized and traced throughout the study area. This work will appear as a Map and Chart Series publication of the New York State Museum.

SANDBERG, Charles A. (U.S. Geological Survey, Denver, Colorado).

Nearing completion of second-year G.K. Gilbert Fellowship on Late Devonian event stratigraphy of Western Europe and Western United States. In connection with this study, have published or am working on the following papers:

1. Co-authored 3 papers in recently published symposium volume on Late Devonian events around the Old Red continent. (Title page and contents are enclosed in case you haven't received a copy yet: many papers of interest to S.D.S. and study group members).
2. With Willi Ziegler, well along on a revised standard Frasnian conodont zonation for pelagic or offshore biofacies. This will be based strictly on the *Palmatolepis* lineage and will rename all but one of the existing Frasnian zones. Plan to publish this prior to Calgary symposium in 1987, so that new zonal nomenclature will be available for the several regional papers on which I am collaborating for that volume.
3. With Roland Dreesen and Willi Ziegler, preparing an alternate shallow-water Frasnian zonation for nearshore biofacies based strictly on the *Ancyrognathus* and *Ancyrodella* lineages. This

will parallel both the revised standard zonation and the alternate Icriodid zonation of Sandberg and Dreesen.

4. With Roland Dreesen, preparing conodont biofacies models for Upper Devonian reefs and mudmounds in Belgium. These will show the vastly different faunas encountered on different sides of organic buildups and explain the mixing that occurs in the original standard zonation.
5. With Willi Ziegler, preparing a proposal for the Frasnian-Famennian boundary stratotype at Devils Gate, Nevada. This study includes our finding that, as in the case of the Devonian-Carboniferous boundary, an eustatic shallowing event heralded the final biotic extinction event.
6. With Roland Dreesen and Willi Ziegler, a possible joint proposal (with which Willi Ziegler may not now or ever be in agreement) to overturn the S.D.S. decision and relocate the Frasnian-Famennian boundary at the BASE of the Lower *triangularis* Zone. This will depend on changes in conodont species concepts being made in connection with the revised standard zonation. Personally, I find the decision for placing the P/F stage boundary at the base of the Middle *triangularis* Zone to have little scientific merit and to be inconsistent with my observations of the passage beds at many sections in Belgium, West Germany, and the Western United States.
7. With Barney Poole and Jess Johnson, two regional papers on the Devonian of the entire Western United States. These papers will revise and expand on the coverages of Sandberg and Mapel (1967), Poole and others (1967), Johnson and Sandberg (1977), and Sandberg and Poole (1977).
8. With Digby McLaren, Willi Ziegler and Roland Dreesen, searching in basinal, slope, and shelf sequences for geochemical data connected with the observed extinction event below the Lower *triangularis* Zone.

SMITH, R.C., II & WAY, J.H. (Pennsylvania Geological Survey): Tioga ash zone in the Valley and Ridge of Pennsylvania.

Ten relatively complete and five partial sections of the Tioga Ash Zone have been measured, described and sampled. At least seven beds are recognizable, several with distinctive characteristics. Precise correlations across the province are possible. The Onondaga-Marcellus contact is time transgressive.

SORAUF, Jim (Department of Geological Sciences, Graduate Center, St. Univ. of New York, Binghamton, New York 13901) continues his research on Upper Devonian rugose corals.

A paper is in press, Upper Devonian (Frasnian) rugose corals from New York State (*Journal of Paleontology*). Another report, titled Rugose corals from the Frasnian (Upper Devonian) Sly Gap and Contadero Formations of the San Andres Mountains, South-central New Mexico, is in the editorial process, and will be published as Bulletin 117 by the New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico. Present research is focusing on completion of study and writing a monographic report on the Frasnian rugose corals of Iowa, from the Lime Creek and Shell Rock Formations.

It is anticipated that the main thrust of my efforts during the next several years will be the study of Frasnian and Famennian rugosans in the western United States. I have large collections of Famennian ("Strunjan") corals from the Percha Formation of New Mexico, and larger collections of Frasnian corals from the Guillette Limestone of eastern Nevada.

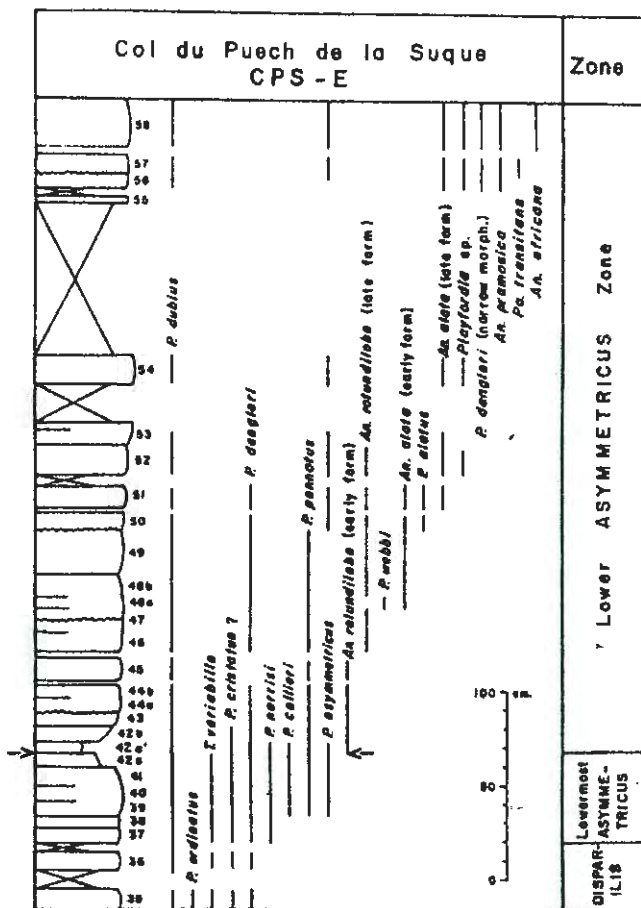
SDS POSTAL BALLOT ON THE MIDDLE/UPPER DEVONIAN  
SERIES BOUNDARY

To ensure that the full titular membership of the Subcommittee recorded a formal vote on the proposal to accept Section E at the Col du Puech de la Suque in the Montagne Noire area, France, a ballot paper was circulated to all there on September 5th, 1985.

The vote recorded in this exercise was  
for - 16     abstaining 1  
against 3     not responding 1

The submission to ICS/IUGS on this stratotype, accompanied by our earlier submission on the position of the boundary\* was prepared by Gil Klapper. It was sent to ICS by the Chairman with his covering report in May this year. It has now been circulated to all Commission members prior to the meeting of the Commission this year. See figure on page opposite.

\* Base of the Lower *asymmetricus* zone.



Ranges of conodont species from the *disparilis* Zone to a position near the top of the Lower *asymmetricus* Zone at Col du Puech de la Suque section E. Generic abbreviations are as follows: P. = *Polygnathus*, T. = *Tortodus*, An. = *Ancyrodella*, and Pa. = *Palmatolepis*. From Klapper (1965).