



International Union of Geological Sciences
SUBCOMMISSION ON PERMIAN STRATIGRAPHY



COMPENDIUM OF PERMOPHILES

VOLUME 1

PERMOPHILES ISSUES 1-5

NEWSLETTERS

JULY 1978 - MAY 1981

Edited by
Bruce R. Wardlaw
Brian F. Glenister
and
Claude Spinosa

CONTENTS

ISSUE	PAGE
Current Information, July 1978	2
SCPS Newsletter 1, February 1979	4
SCPS Newsletter 2, October 1979	13
SCPS Newsletter 3, April 1980	21
Newsletter 4, October 1980	33
Newsletter 5, May 1981	49

IUGS Subcommittee on Permian Stratigraphy
Current Information
July 1978

Dear Permophiles,

Your secretary discussed (by correspondence) the situation in SCPS with Dr. Martinsson (Chairman of the Stratigraphical Commission) and Dr. Nassichuk. I quite agree with the following Dr. Nassichuk's statement:

'It is clear that the Subcommittee does not appear to be as active as some other subcommittees are but it was only born in 1972 and formally constituted in 1975; thus, it has been 'active' for only three years. In truth it is even more active than some subcommittees. It is true, however, that certain members appear to have contributed nothing to the Subcommittee and it is clearly written in Commission Statutes that these members should be obliged to step down as active members. Other members continue with various phases of Permian research but fail to advise the Subcommittee or its Working Group of progress that has been made. Similarly, various Subcommittee members have complained to me that they are not sufficiently informed of activities within the Subcommittee. Thus you see, it is a simple matter of communication.'

To stimulate the communication it is here proposed to organize a regular issue of an informal SCPS Newsletter. This Newsletter may include a current information on the following items:

- newly published books and more important papers (short reviews of them will be appreciated),
- Suggestions on the exchange of collections,
- proposals to organize joint study of certain material,
- various questionnaires,
- coming international and domestic meetings,
- suggestions on SCPS activity,
- preliminary results of common interest, etc.

Due to the absence of the technical aid I am unable to prepare more than 20 copies of each Newsletter. Therefore I suggest to send 1 copy to each titular member of SCPS with a request to multiply it further for a distribution among specialists of his regional responsibility. I am asking all the members of SCPS to inform me about their ability to do this.

* * *

I would like to inform my colleagues that they are invited to participate in two newly established international programs:

1. Working Group on Unified Stratigraphic Time-Scale (UTS).

The aim of the working Group, as was stated by its convener, Dr. J. E. van Hinte in his letter of June 6, 1978,

'Is to present an "informal work-model" of an UTS at the 1980 IGS Paris meeting, and to propose future action for its improvement. One of the goals of the ICS Subcommittees is to establish a formal "Standard Global Chronostratigraphic Scale: for their respective parts of the geologic column. The closer the UTS work model will be to that standard, the better the language of our profession will be served. It is, therefore, natural that the UTS Working Group will follow your recommendations for those intervals of time for which your subcommittees have reached

agreement on chronostratigraphic nomenclature and concept. Similarly, we will integrate results of the subcommissions on radiometrics and geomagnetics where they apply to our tasks.

In a letter to Dr. van Hinte I have expressed an opinion that presently it is absolutely impossible to suggest an unified Permian scale, even tentative. It seems reasonable to prepare, instead, (1) two or three independent (or partly integrated) zonal schemes of regional value based on conodonts, fusulinids or ammonoids, or (2) a number of parallel schemes each reflecting a major region (e.g. continental succession within Gondwana, or marine succession of Arctic area).

R. Kahler and H. Kozur are members of UTS WG responsible for the Carboniferous and Permian. The following persons are ex officio members: D. S. Stepanov (Per., P-T), S. V. Meyen (Per.), C. A. Ross (C-P), J. M., Dickins (Gondwana), A. Bouroz (Carbon).

For further information and suggestions please contact Drs. H. Kozur (Staatlich Mussen, Schloß Elisabethenburg, DDR-61 Meiningen) and Jan E. van Hinte (213 Cours Victor-Hugo, 33321 Bêgles, France).

2. IUGS Program of correlation of coal-bearing formations (CCF); convener: Prof. P. P. Timofeev (USSR).

I was asked by Timofeev to be a convener of the stratigraphical part of the program on the domestic scale. The details of the CCF program will be discussed in this fall. I am going to suggest that CCF must not duplicate IUGS Stratigraphical Subcommissions and should elaborate stratigraphical correlations charts as a part of activity within subcommissions. I would be grateful for any advice.

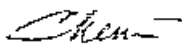
* * *

Dr. J. Vozar has informed me that the Geological Institute in Bratislava, CSSR, is organizing a symposium "The Permian of West Carpathian Mt." including field trips in the region and technical sessions. The symposium will be held on 26 August - 2 September, 1979. For further information please contact Dr. J. Vozar (Geologick& Ustav D. Stúra, Mlynská dolina 1. 809 40 Bratislava, CSSR).

* * *

Looking forward to hear from you soon

Yours sincerely



S. V. Meyen

S C P S NEWSLETTER 1

IUGS Subcommittee on Permian Stratigraphy

Chairman: Prof. D.L. Stepanov
USSR 199178 Leningrad B-178
16 Linia 29
Kafedra paleontologii
Leningrad :University

Secretary & Vice-Chairman: S.V. Meyen
USSR 109017 Moscow 17
Pyzhevsky per. 7
Geological Institute of the USSR
Acad. Sci.

February 1979

Two eminent Permian palaeontologists
died in 1978

Prof. V.E. Ruzhencev	Prof. T.G. Sarycheva
1899 - 1978	1901 - 1978

Sympathies are extended to their families and
many friends

It is a tragic loss to them and to this organization

C o n t e n t s

Editor's note	5
Response to "Current Information, July 1978"	5
Information on Permian non-fusulinid microfaunas I	9
Information on Permian palynology I	10
News from Poland	11
"L'Histoire du Gondwana vue de Madagascar"	12
Invitation of <u>Lethaia</u>	12

PLEASE MAIL NEWS AND CORRESPONDENCE TO YOUR SECRETARY FOR
INCLUSION IN THE NEXT SCPS NEWSLETTER
THE VIEWS EXPRESSED IN THE NEWSLETTER ARE THOSE OF ITS
CORRESPONDENTS

- o O o -

EDITOR'S NOTE

Dear Permophiles,

In my Current Information of July 1978 I suggested to issue regular SCPS Newsletters. It was my feeling that there is a need for a real international link among us. Some of SCPS members warmly supported the idea. Now the first Newsletter is in your hands. Do not judge it severely. I do hope that forthcoming issues will be more interesting.

The material incorporated in this issue is rather scanty due to a limited response to my

initiative. Meanwhile some items may be interesting to all Permophiles. I invite all my colleagues to send me reviews of books and papers of general interest, organizational news requests for material in exchange, current project lists, forthcoming conferences. Letters to the editor, questionnaires, etc.

Please note, that this Newsletter is written and typed by your secretary himself, and kindly forgive omissions in style, grammar and quality of the typescript.

Looking forward to hearing from you

Sincerely

S.V. Meyen, Vice-Chairman & Secretary

RESPONSE OF SCPS MEMBERS TO "CURRENT INFORMATION, JULY 1978"

W.W. Nassichuk, Vice-Chairman, August 25, 1978

I think the idea of a newsletter is excellent and I shall be pleased to be responsible for reproduction and distribution of the newsletter for North American and South American scientists. I regret that interest in a planned meeting of the Subcommittee in Washington prior to the Carboniferous Congress as been minimal and only two members have indicated that they might attend. In view of this I am now very much of the opinion that the Subcommittee should concentrate its efforts on good and effective meeting in Paris in 1980 rather than an "exchange of pleasantries" in Washington. I will have more to say on this subject at a later date. I hope to visit Permian sections in China in October and hope to have some important data for the Subcommittee when I return.

J.M. Dickins (Australia), September 26, 1978

...I think the Newsletter is a good idea and will have copies made and sent to Permian workers in Australia and New Zealand if I can find active workers in the latter.

...With regard to a unified scale for the Permian, as I indicated in my letter of 7 July 1978 to you, I believe already a scale is shown to be useful for both the temperate regions (Boreal and Austral) and for the tropical regions (Tethyan). The scale I have suggested to the convener for the Unified Stratigraphical Time Scale is as follows:

	<u>Stage</u>	<u>Substage</u>
Upper Permian	Tatarian	
	Kazanian	
	Ufimian	
<hr/>		
Lower Permian	Kungurian	
	Artinskian	Baigendzhinian
		Aktastinian
	Sakmarian	Sterlitamakian
		Tastubian
	Asselian	

I assumed that there was agreement on this at our Moscow meeting but now it seems this is not the case. As far as the Lower Permian is concerned this is a satisfactory scale and I believe better than any available in any part of the world. I could amplify the reasons for this if you wished. The scale for the Upper Permian does have shortcomings, especially as a considerable part of it is non-marine. For the present, however, I cannot see a more useful scale for the world

as a whole. I believe however that the Caucasus section has considerable potential, and would feel it vital to emphasize the point I made at the Moscow meeting that a scale based only on ammonites and fusulinids will fail to meet the requirements for a world scale. Description of other groups of forms is absolutely essential for the Permian and in particular brachiopods and other molluscs be included or no world scale is possible, I believe.”

R.E. Grant (USA) has send a copy of his circular distributed in December 1978 among Permophiles in North America. The major part of the circular is given below:

“...If we want to realize the benefits of having a Permian Subcommittee, it seems we should utilize this mechanism.

In the Toronto discussions that ranged over the whole field, we decided that perhaps something on standard reference sections would be a good place to begin. Here I might point out a recent paper by Waterhouse (1978) in Cohee et al. eds., *The Geologic Times Scale*, A.A.P.G. Studies in geology no.6. Waterhouse says that local reference sections are a thing of the past, that we now know enough to correlate world-wide and since the Russians have priority the standard scale for the Permian should use Soviet names and have Soviet type sections....all stages and substages. He devotes a full paragraph to anticipated protest from Americans whose motivation is attributed either to pure chauvinism or the misguided notion that local reference sections are useful. We all know that the word Permian refers to a city in the Urals, but the argument that names or sections in the U.S.S.R. have priority is specious: hardly any of their formal names antedate Girty's 1909 Guadalupian, Udden's 1917 Wolfcamp, Leonard, Hess, and Word, or Richardson's 1904 Capitan. The earliest name in the scale that he proposes is Kungurian (1890); Kazanian is 1915 but all the rest date from the '20s, '30s and '50s. Nonetheless, he feels free to abandon Artinskian (1874) and Tatarian (1887) as essentially facies terms. So much for priority.

Waterhouse states on p. 310, “However there must be one world scheme, not two, and if the Russian names have priority they presumably may lay claim to the world standard sequences.” On p. 300 he presents a chart showing his proposed subdivisions of the world Permian including Punjabiian, Kalabaghian, and Chhidruan from Pakistan and Djulfian from Iran (Dzhulfian is the Russian). So much for consistency.

Having disposed of the notions that the world standard for the entire Permian must be in one region and that Russian names have priority we can turn to the less scholastic question of where the standard sections ought to be. My view is that we should choose sections that are the most complete and the best known, stratigraphically and biostratigraphically. Obviously, these criteria do not provide for stability because later another section may be found to be more complete and intense study may make another better known. Personally, I think such state of flux is scientifically proper; I do not presently see the value in “golden spikes.”

Before discussing localities the question of how many series to recognize needs answering. Detect a movement toward recognition of 3 series rather than the traditional 2, mostly because of discovery of increasingly late Permian strata. When the Guadalupian or Tatarian were considered Late the twofold scheme made sense, but now that we have the Dzhulfian and Changhsingian as fossiliferous units demonstrably younger it seems time to divide the Permian into three. This agrees with Waterhouse's treatment both in his A.A.P.G. paper and his 1976 book on world correlations. Now we can quibble over where to draw the boundaries. I should think we want 3 subdivisions of roughly equal duration or stratigraphic representation. Waterhouse puts the Middle-Upper boundary above the Dzhulfian providing us with a long Lower and long Middle and

very short Upper. It is uncomfortable for me to not think of the Dzhulfian as Upper Permian, so I propose that the subdivision be at the top of the "Punjabian" or Chhidruan. This fits well into the American scheme as I see it, because in my opinion the Chidru is Guadalupian, so our Guadalupian would constitute the Middle Permian here.

The Friends of the Permian meeting at Toronto drew only 5 or 6 participants, but the discussion was friendly and fruitful. The consensus of this small and perhaps unrepresentative group was that the Lower Permian reference section could be in the Southern Urals or the Southwestern United States. Personally, I favor the So. Urals because the strata there are well exposed and well studied, and the names are fairly firmly fixed except for Baigendzinian, which has been resurrected by Waterhouse to substitute for Artinskian. If Artinskian is a time transgressive facies as contended, the substitution probably is advisable.

According to John Cys the Lower Permian in the Glass Mountains is too shot through with diastems to make a good reference section. The sequence is better in some of the other ranges in Texas and New Mexico, but those are not nearly so fossiliferous nor as well studied. This is another argument in favor of designating the So. Urals.

The Middle Permian should be the Guadalupian of the SW United States: The Word of the Glass Mountains and the Capitan-Bell Canyon of the Guadalupe Mountains. These sequences are thick, fossiliferous, and well studied both stratigraphically and faunally. According to Waterhouse (1978) there still is controversy over possible equivalence of the Kungurian with some part of the Baigendzinian. Waterhouse (1976) describes the Kazanian as thin, dominated by brachiopods at the base and bivalves higher up, and with no marine top. It lacks both ammonoids and fusulinids. The Kungurian and Kazanian, therefore, seem less satisfactory than the Guadalupian as standard sections for the Middle Permian. A strong objection to the Guadalupian may well be the fact that the Kungurian and Kazanian constitute Murchison's original Permian, so this would be tantamount to removing from the Urals the part that was the whole system then. Nevertheless, these two stages were not named in Murchison's time, but later and by others.

The Upper Permian seems to be developed best in the gorge of the Arax River, in both the U.S.S.R. and Iran. Since it is all one outcrop region and the same sequence on both sides perhaps the whole area could be declared the "standard," thus helping to solve problems of access that might arise on political grounds. The region is no larger than the Guadalupe Mountains, or the Southern Urals, so why not let it straddle an international boundary? The names, however, are already established and they are from the Soviet side of the river.

Apparently there are very young Permian beds in China, so perhaps the Changhsing Limestone will find a place in the standard section after it has been investigated more thoroughly and made more accessible to foreigners. I am currently studying the brachiopods from some very young Permian rocks in Greece, but this section probably will correlate to some level in the Arax Gorge rather than prove to be younger.

F. Kahler (Austria, September 9, 1978)

"We agree in your proposal to prepare short Newsletters.

Our work in Progress:

At the southern slope of the Carnic Alps near Forni Avoltri we have found a Middle Permian fusulinid fauna (E. Flügel, F.&G. Kahler, 1978, N. Jb. Geol. Paläont. Mh.)

Middle carboniferous and Permian fusulinids have been described from Anatolia together with Permian fusulinids from Iran (F.&G. Kahler, Mitt. Österr. Ges., in press)

Just now we are studying the “Troglkofel stage (Lower Permian) of the Carnic Alps”. We hope to complete the work in spring 1979. The paper will be a joint work of W. Buggisch (geochemistry), E. Flügel-Kahler (microfacies and calcareous algae and F.&G. Kahler (fusulinids).

Problems:

a) in our material from Iran the genus Yabeina (+Lepidolina) is lacking. We would be interested to get information about the occurrence of this genus in the Iranian area.

B) does somebody know a paper dealing with a detailed comparison between the American and eastern Asian species of Yabeina?”

H. Kozur (DDR), August 23, 1978

“...1) I have published the part II of my paper on the conodont chronology of the Permian. This paper is thought to be a discussion platform for the non-fusulinid micropalaeontological working group...

2) I have in press the part III of my Permian paper consisting of two parts... I have correlated the continental Permian deposits of Europe with the marine scale... I have definitions of different stratigraphic units of the continental Permian of Europe: Rotliegend, Lower and Upper Rotliegend - as lithostratigraphic units of different chronostratigraphic content, “Autunan”, “Saxonian” and “Thuringian” - as biostratigraphic units. The latter three should not be used because the difference in chronostratigraphic content is used by different workers and in different regions.

Most of the Lower Rotliegend belongs to the Carboniferous, in some regions (e.g. Saar-Nahe basin) it belongs to the Carboniferous entirely. This agrees well with the radiometric data of the Grenzlager Formation (basal Upper Rotliegend, ca. 280 m.y.). The Upper Rotliegend belongs to the Lower...and Middle Permian (up to the Wordian). Therefore the Rotliegend is...Upper Carboniferous to Middle Permian...The first appearance of Callipteris is Stephanian B (C. bilharzii, a form transitional to Callipteridium)...Callipteris association (still without C. conferta) begins in the Lower Stephanian C as well as in the Middle Gzhelian and upper Missourian (!). C. conferta begins in the Upper Gzhelian that can be correlated with the Stephanian D.

An international convention is necessary on the lower boundary of the Asselian: Asselian s.l. (=Schwagerina horizon) or Asselian s.s. (Sensu Ruzhencev as defined in the stratotype). The base of the Asselian s.l. (=base of the Upper Orenburgian) lies within the Manebach Formation of the Thuringian Forest. The base of the Asselian s.s. coincides with the base of the Lebach Formation of the Saar-Nahe basin) as well as with the base of Goldlauter Formation of the Thuringian forest.

D.B. Smith (UK), October 5, 1978

I agree entirely with Dr. Nassichuk's sentiments on our lack of progress as a team, but suspect it is much more difficult to agree on how we can solve the problem. The main difficulty of the UK participation in this programme is that there are no more than five workers in the field who are in a position to make any useful contribution, and at any one time most of these people are working on other things also, and so can only devote part of their time to matters Permian. With funds at the present low level, it is difficult to see how this rate of work can be increased, since all of us have to do our Permian research work when time and circumstances permit. In my case, this means doing it all outside the normal working hours at home, and the situation is only slightly better

for Pattison and Warrington. A major second problem with which we are beset, is, as I am sure you will realize, the unfortunate fact that the Zechstein sequences with which we work are almost devoid of fossils found outside the Zechstein Basin, and so correlation between the sequences with which we are familiar and those farther afield is for us extremely difficult. For one thing, there is still no agreed standard with which we can make our correlations! For these reasons therefore, and in the continued unlikelihood of extra funds becoming available, I see the main UK role as being one of collection, sorting and compilation of existing data from our area, which we continue to do, whilst awaiting the agreement of the other members of the committee on provision of a standard sequence of stages and zones in fully marine sequences elsewhere. Our role, therefore, necessarily is less active than perhaps you would wish, but I can't see how we can become more productive given present circumstances.

INFORMATION ON PERMAN NON-FUSULINID MICROFAUNAS I

Meiningen, December 4, 1978

Dear Colleagues,

Some time ago I sent you reprints of the paper: 'Beiträge zur Stratigraphie des Perms. Teil II: Die Conodonten-chronologie des Perms. - Freib. Forsch.-H., C334, Leipzig 1978'.

This paper is thought to be a basic one for a discussion with the micropalaeontological working group of the Permian Subcommittee. Above all the following points are to be discussed:

1. Taxonomy (including synonymy)
2. Stratigraphic ranges of taxa within both local lithostratigraphic and chronostratigraphic units (stages, substages)
3. Phylomorphogenetic lines
4. Correlation of ranges of conodonts with those of other microfossils and of ammonoids, brachiopods and fusulinids
5. Provincialism
6. Facially controlled changes in conodont faunas

The data provided by you will be published under the authorship of contributors.

Similar papers on ostracoda and other Permian microfossils as a basis for the discussion in the present working group will be prepared and published afterwards.

Kindly send me all kinds of Permian microfossils, excepting forams, for determination: ostracods, holothurian sclerites, scolecodonts, radiolarians, megaspores, charophytes. This will help me to prepare the basic papers for further discussions...

H. Kozur

Editor's remark: I have omitted Kozur's personal notes and supplements to the above mentioned paper.

INFORMATION ON PERMIAN PALYNOLOGY I

To the members of the IUGS Subcommittee on Permian Stratigraphy (Editor's remark: this information received from H. Visscher (State Univ. Of Utrecht, September 1978) is very interesting to many permophiles, but cannot be reproduced in full due to its length (16 pp.). Therefore the reader will find below only a part of the introduction to this information and the abstract of the paper. I presume that Visscher may provide the full text to those who interested to get it.)

"...From my experience in the Triassic Subcommittee, which is approximately of the

same age as the Permian Subcommittee, I have come to the conclusion that the best communication leading to collaboration is the personal contact. In this respect we are far behind in the Permian Subcommittee. I believe that it is time to try to arrange a subcommittee meeting... so that all members will be given an opportunity to meet each other.

In the meanwhile, I welcome the idea of a Newsletter as proposed by Dr. Meyen. In addition to this initiative, I want to separately distribute, at irregular times, relevant information on Permian palynology. The reason for doing this, is to clarify the status of both palynology and the palynologist in the activities of the Permian Subcommittee. ...

Within the Triassic Subcommittee the present possibilities and limitations of palynology are now becoming duly recognized. Among non-palynologists this has already resulted in an active collaborative engagement in the search for material, critical for the further perfection of a palynological characterization of standard stages.

I hope that a similar engagement can be developed among the 'permophiles'."

"Aspects of a Palynological Characterization of Late Permian and Early Triassic
'Standard' Units of Chronostratigraphical Classification in Europe

H. Visscher

A b s t r a c t

At present Late Permian palynology in Europe is successfully concerned with the study of the significance of palynological assemblages in biostratigraphical correlation. Moreover, palynology has greatly clarified the status of the Thuringian Stage in European chronostratigraphy. The relatively scarce Early Triassic assemblages, on the other hand, cannot yet be effectively applied in characterizing European units of chronostratigraphical classification.

Considerable difficulty also exists with respect to a correlation of the palynostratigraphical information available with the proposed world "standard" units as based on either the later Permian sequence of the European part of the U.S.S.R. or the isolated late Permian and Early Triassic ammonoid-bearing successions in various parts of the world.

A brief analysis of the present state of such correlation clearly indicates that the main obstacle blocking the route towards a satisfactory palynological solution to recognizing Late Permian and early Triassic "standard" stages in western Europe is still formed by the rarity of relevant palynological information from successions yielding marine faunas of presumed chronostratigraphical significance.

It is considered, however, that an intensive search for palynologically promising lithologies within such successions could well be one of the most rewarding projects in Later Permian and Early Triassic stratigraphy on the world-wide scale. If one looks towards a future integration of the West-European, Russian, ammonoid-based, and other chronostratigraphical units, there is every indication that palynology may provide a new basis for correlation between the different sets of units. Although long-range correlations may be complicated by the effects of geographical flora-differentiation, one may note striking compositional similarities between palynological assemblages from presumably different phytogeographical entities.

NEWS FROM POLAND

T.M. Peryt (Institute Geologiczny, Rakowiecka 4, 00-975 Warszawa, Poland) sent to the Editor a short report on the activity of the Permian Working group in the above mentioned Institute:

"1. From 27 to 29 April 1978 The International Symposium on Central European Permian was held in Warsaw. During the symposium which was attended by 121 workers from 16

countries, 56 papers were presented; these will be published in 1979 as a special publication of Institute Geologiczny, Warsaw. Before the Symposium the excursion presenting recent developments in the study of the Permian in the Polish Lowlands and the Holy Cross mts. Was organized.

2. As a result of many analytical studies conducted during the past years, in 1978 "Lithofacies - paleogeographical atlas of platform areas in Poland" (ed. S. Depowski) was published (in Polish, with English and Russian explanation and texts). It contains the following maps (8 maps are enumerated, -S. Meyen)... The textual part contains some correlation charts and a comprehensive literature on the Polish Permian.

3. The recently published synthetic papers on the Polish Permian in 'Przeład Geologiczny', No. 12 (1978) (in Polish, with English captions of figures and rather large abstract) can be of interest to Permianists: R. Wagner, T.S. Piatkowski & T.M. Peryt on the Zechstein; J. Pokorski on the Rotliegend; W. Ryka on the Rotliegend effusive rocks; S. Depowski, J. Pokorski & R. Wagner on the occurrence of mineral raw material in the Polish Permian.

4. The papers published by the present group are too numerous to be listed; they are given in the text of 'Atlas' and in the synthetic papers in 'Przeład Geologiczny'."

"L'HISTOIRE DU GONDWANA VUE DE MADAGASCAR"

Colloque Scientifique International

Madagascar 02 au 12 Septembre 1979

The First Circular of the Colloquium was distributed at the beginning of 1978. The deadline for returning the registration form was 15th December 1978. Meanwhile a short information on the colloquium may be reasonable.

The principal topics of the colloquium are (1) Precambrian crystalline basement, (2) sedimentation, particularly of Karroo, (3) global geology and tectonics, (4) stratigraphy, palaeontology, geochronology, (5) geophysics, incl. Palaeomagnetism, (6) economic geology and metallogenic areas, (6) fauna and flora.

Field excursions are planned.

For further information you may apply to

Secrétariat Général

Josoa Rasoamahanina-Andriamozoto
Direction de l'Industrie et des Mines
Ministère de l'Economie et du Commerce
B.P. 322 Tananarive (MADAGASCAR)
Téléphone 403.51

Bureau de liaison extérieur

Pierre Boiteau
Résidence d'Orsay
79, rue A. Briand
91400 Orsay (FRANCE)
Téléphone 010.40.42

INVITATION OF LETHAIA

Your secretary received from Stefan Bengtson (Uppsala Univ., Paleobiol. Avdelingen, Box 564, S-75122 Uppsala, Sweden) the following letter:

"Invitation of Organization or Project Presentation"

Lethaia has for a number of years been running columns called Project Presentation and Organization Presentations, now appearing under the joint heading Lethaia Forum. A considerable number of projects (among them most of the relevant IGCP projects) and organizations have been introduced to the wider palaeontological and stratigraphical community in this way.

You are kindly invited to contribute such a presentation for Lethaia. The text should have the form of a verso page filler, which means that its length (title and author's name and address not included) should be as close as possible to 6000 characters and spaces. There is virtually no

flexibility upwards, and contribution should preferably not be much shorter than indicated. As a rule, these fillers will be published immediately, in the next number to go to press after submission (proof-reading only in-house).

The contents should contain as much permanent scientific substance as possible, including main resolutions, proposals or items put up for discussion, as well as the general structure and activity pattern of the organization. Avoid ephemeral material, such as details of meeting announcements, listing of participants in ad hoc arrangements, etc. We are not going to be extremely dogmatic about the contents, however. A logotype or corresponding ornament may be added. These printed presentation have turned out to be very attractive publicity material for the organizations, and you may reprint from freely for your own use.

This is also a standing invitation for further verso page packages when you have accumulated more material or an old presentation has been outdated. Note that we also accept presentations of your Newsletter series, if you have a well established arrangement.

S C P S NEWSLETTER 2

IUGS Subcommittee on Permian Stratigraphy

Chairman: Prof. D.L. Stepanov
USSR 199178 Leningrad B-178
16 Linia 29
Kafedra paleontologii
Leningrad :University

Secretary & Vice-Chairman: S.V. Meyen
USSR 109017 Moscow 17
Pyzhevsky per. 7
Geological Institute of the USSR
Acad. Sci.

October 1979

Contents

Editorial.....	13
Election of new officers 1980-1984.....	14
Stratigraphical Standards.....	14
Information: SCPS meetings held in Washington.....	15
Permian subdivisions and correlations.....	16
Why am I a lazy permophile?.....	18
Genus <u>Callipteris</u> revisited.....	19
SCPS Directory.....	20

PLEASE MAIL NEWS AND CORRESPONDENCE TO YOUR SECRETARY
FOR INCLUSION IN THE NEXT SCPS NEWSLETTER
THE VIEWS EXPRESSED IN THE NEWSLETTER
ARE THOSE OF ITS CORRESPONDENTS

- : o : -

Editorial

Dear Permophiles,

I am glad that our newsletter was not still-born. Although the response of the SCPC people was not overwhelmingly active, certain material for No. 2 are in my hand and are resented below. Some of the letters included in te issue invite further discussion which, I hope, will follow in

subsequent numbers of the newsletter.

The reader will find here a full list of SCPC members and corresponding members. I cannot say that all of them were equally active in SCPS life. Some of them never replied to my letters and requests. I am reminding about this because in 1980 the 26th International Geological Congress will be held in Paris. It seems that the membership of SCPS should be revised at the Subcommittee meeting there. It may well be that some titular members feel their inability or unwillingness (or both) to participate in SCPS work after the Congress. In such case they are kindly invited to notify without delay.

Again ask permophiles to send me materials for subsequent issues of the newsletter - reviews of books and papers, provocative letters, current information, etc. Any suggestions regarding SCPS activity would be particularly appreciated.

Election of new officers 1980-1984

International Commission on Stratigraphy (Prof. A. Martinsson, chairman; Dr. M.G. Basset, secretary general) distributed a circular the text of which is given below:

“All terms of office in Commission bodies expire at the end of the Commission meeting in Paris in July, 1980. Officers and members are eligible for reelection for an unlimited number of terms. ‘Each Subcommittee shall present to the Commission in advance of its quadrennial meeting nominations for such officers as it wishes to have’ (Statutes, Article 12.) For all Commission bodies; the Statutes (q.v.) Prescribe approval or confirmation at the Commission level of additions to the membership and election of officers.

Different Commission bodies have developed different procedures of election, and the Commission will not interfere with them, except in one respect::

Officers and membership in Commission bodies are not nominal positions but are intended for completion of specific and administrative tasks in stratigraphical standard-making and in the coordinate research that is always associated with international standardization in science. ‘A member may be dropped if he fails to participate in the work of the Subcommittee’ (Statutes, Article 7.1).

Looking back through the history of the Commission (and the IUGS in general), some bodies have elected officers mainly with a view to letting them figure as deans or Altmeister of their branch of science, or geographical area, for a term, disregarding their ability to run an international office. The Commission cannot afford such a system.

The main working-form in the Commission remains correspondence by circulars and letters. Meetings are important, but for economic reasons and because of restrictions in travel in some parts of the world, they practically never attain a satisfactory coverage of the membership. Hence, swiftness in correspondence is a prerequisite for work in Commission bodies. Members which fail to reply to correspondence for a disturbingly long period of their term of office should not be proposed for reelection, and persons known to be poor correspondents should not be launched as new candidates.

Subcommittees are kindly asked to present to the Commission their nominations of officers before 1st May, 1980. Offices and memberships subject to the Commission’s confirmation or the Chairman’s approval according to the Statutes should be proposed via the appropriate application within a month of the election. This election may take place as late as during the Commission meetings at the IGC sessions in Paris in July, 1980.

Yours sincerely,

Anders Martinsson

Michael G. Bassett”

STRATIGRAPHICAL STANDARDS

The following circular distributed by Prof. A.Martinsson, chairman, International Commission on Stratigraphy, may be of interest for permophiles:

Submission of standard proposals and implementation of stratigraphical standards

Several bodies of the Subcommittee are expected to conclude their work on major boundaries and subdivisions in the near future. At present there are no rules of procedure for the formal submission and adoption of stratigraphical standards. Revised statutes for the Commission will be prepared when the IUGS has adopted new statutes in 1980. Rules of procedures will be appended to the new statutes of the Commission. Until then, however, the following guide-lines will be valid:

(1) At the present stage of development, standard proposals should concern either the boundaries of systems or full set of subdivisions (series, stages) within a system, or at least a major part of a system. Proposals regarding, e.g., single stages or boundaries within a system should be made only when a previously adopted standard has to be revised in some detail and in particularly urgent and strongly motivated cases.

(2) The Commission will evaluate proposed standards particularly with regard to compatibility with the developing Standard Stratigraphical Scale and with ISSC regulations for definitions and nomenclature.

(3) Stratigraphical standards are valid from the time of circulation of the minutes of the Commission meeting at which the standards have been approved. The submitting body is responsible for the wider promulgation of the standard among its members and to the public. Publication of the standard in an internationally distributed journal (journals) is strongly recommended.

(4) Proposed standard boundaries and subdivisions may be used in publications even before approval by the Commission, as found practical or strategic by authors who follow the work in the bodies of the Commission. At this stage, editors should give equal and ample opportunity for alternative classifications and dissenting opinions to appear.

(5) When stratigraphical standards have been approved, governmental agencies, academic institutions and commercial companies can be expected to implement or enforce them. The editors of geological publication play a key role in these processes and at this stage should not accept deviations with valid justification.

Subcommittees for the impending meeting of the Commission in 1980 should reach the Secretary General (copy to the Chairman) before 1st May, 1980.

INFORMATION

From: W. W. Nassichuk, vice-Chairman
Subcommittee on Permian Stratigraphy
Subject: Subcommittee meetings held in Washington
- May 1979

The Subcommittee on Permian Stratigraphy held meetings in Washington, D. C. On May 17, 18, 1979 and discussed activities that are being planned by the Subcommittee for the International Geological Congress to be held in Paris in 1980. Dr. Dickens, Bureau of Mineral Resources, Australia, is coordinating Subcommittee activities for the Congress which will include a field trip and a series of lectures on the Permian. Members who are anticipating attending the Congress are invited to contact Dr. Dickens regarding details of the proposed field

trip and presentation of Permian papers.

The Subcommittee has been advised that a delegation of geologists from the Peoples Republic of China plans to attend the Congress in Paris and papers dealing with the Permian of China and particularly the Permian-Triassic boundary may be presented. AT the Washington meeting the writer (W. W. Nassichuk) presented a summary paper on the Permian of China based on a visit that he made to China in 1978.

In accordance with the Statutes of the Commission on Stratigraphy which suggest that Chairmen of Subcommittees should preferably serve for only four years, a nominating committee has been appointed so that a new slate of Subcommittee officers can be installed in Paris in 1980. The nominating committee includes Drs. R. E. Grant (Titular member), J. M. Dickens (Titular member) and N. Newell (Corresponding Member); Dr. Grant will serve as Chairman of the nominating committee. Members are hereby invited to submit nominations for Subcommittee Chairman, Vice-Chairman and Secretary to Dr. Grant before October 1, 1979. A slate or slates of candidates agreed upon by the nominating committee will be presented to the Subcommittee members for a vote after October 1st.

Symposium on Permian Stratigraphy and a Meeting of the Subcommittee

A meeting of the Subcommittee on Permian Stratigraphy was held in Washington at the Ninth Carboniferous Congress on 22nd May 1979. This meeting confirmed that a symposium on Permian Stratigraphy and a Business meeting of the Subcommittee would be held at the 26th International Geological Congress to be held in Paris in July 1980.

At the meeting I was commissioned to organize these meetings. The subject of the symposium is to be "Subdivision of the Permian and its boundaries with the Carboniferous and Triassic". It is hoped that some emphasis can be given under this title to relationships of marine and non-marine sequences. This subject is of great interest at the moment and it seems important that Permian workers should attempt to resolve some of the existing problems which hinder the development of international understanding of the Permian system.

I have asked the organizers of the Congress to allow for a day for the symposium and you are invited to submit proposals for papers for this symposium.

It was also suggested at the meeting in Washington that an independent excursion might be organized, perhaps in the Carnic Alps. If such a proposal is possible you will be informed directly.

J.M. Dickens

PERMIAN SUBDIVISIONS AND CORRELATIONS

It is kind of Dr. R. E. Grant to draw attention in the first SCPS newsletter to some of my proposals for subdividing the Permian Period (in Cohee et al., eds., The Geologic Time Scale, AAPG Studies in Geology no. 6) and I will send a copy of the paper to any member who indicates interest. Dr. Grant further obliged by fulfilling my prophecy that some citizens of the United States wouldn't like my suggestion that the Soviet Union should be repository for the world standard sequences for stages and series. Dr. Grant made his points rather forcefully, a little too forcefully perhaps for the good of his own argument. Rather than rebut his points, I would prefer to seek out the real strength that lies in views opposing my own suggestions, in the hope that we can all arrive at a mutually agreeable consensus on Permian subdivisions.

Priority of names

I have pointed out that for the most part priority is important, and most of the stages have been named first on the basis of rocks and faunas in the Soviet Union. To a large extent, the very period was conceived, and certainly finalized, from rocks and faunas of Russia and the Urals. The one dubious suggestion of mine, really made to fit in with recent proposals by students of Ammonoidea is that Artinskian should be abandoned in favour of Baigendzinian. Dr. Grant of course exaggerates his case a little, to pretend that the United States names Wolfcamp, Leonard, Hess and Word were proposed as time-rock units by Udden (1917). They were not. Udden used them as formation names, and referred to Russian stage nomenclature. It is my impression, without any exhaustive research, that the names came to be used as Series in 1939 (Bull. Am. Ass. Pet. Geol. V. 23, p. 1673) with a heavy emphasis on rock, rather than fossils. For instance, Miller and Furnish in their famous ammonoid study of 1940 (Geol. Soc. Amer. Mem.) very properly used Zones, not stages from the Texan and nearby faunas. In another very significant and profound study, P.B. King (1942 Amer. Assoc. Petrol. Geol.) Used the names "as provincial terms applying only to the west Texas region rather than to North America as a whole". King perceived, even then, that the west Texan faunas might be somewhat peculiar.

Girty (1902) did propose Guadalupian as a time-rock-fauna name for the Texas sequence, as the local follow-on for the Mississippian and Pennsylvanian, that is, as a local period, not a series or stage.

Boundaries for a three-fold division

There is merit in the suggestion that the base of the late Permian be placed at the base of the Djulfian Stage, rather than at its top. (Dr. Grant gravely informed us that the Iranians spell the word Djulfa and the Russians spell it Dzhulfa; but of course the Armenian and Iranian scripts look nothing like romanized words, and the early work and much subsequent work spelled the word Djoulfa or Djulfa, including the proposal of the Djulfian term (from Armenian rocks and faunas) as the time-rock unit in Schenck *et al.*, Bull. Geol. Soc. Amer. 1941, p. 2197.) A Djulfian base would indeed help make the divisions of more even length. If this seems to be a rather superficial reason, it might also be pointed out that the Otoceratacea started (I think) in the Djulfian, and that the Chinese group their Wuchiaping and Changsing beds into the Upper Permian. I propose a start above the Djulfian because that boundary fails as discussed in my aforementioned paper, at a 30 million year interval, the early and middle Permian in my scheme are each 30 million years long. That provides a very sort late Permian division, and its shortness indicates severe perturbation, as must have occurred to dispose of so much Permian life. There are some distinctive brachiopod genera. Stratigraphically, the Dorashamian (post-Djulfian) starts as an emphasize new sedimentary cycle in the Himalayas and New Zealand, and marks a boundary in Armenia and parts of southern Europe, but this of course may not be very significant except to those actually concerned with geological mapping.

Type Middle Permian in North America

Although there is little historical support for placing the type Middle Permian in west Texas etc., for Udden did not propose stages for these regions, a good case can certainly be made. The sequences there are well displayed, and the faunas substantially covered by fine monographs, and the region is very accessible. The equivalent Kungurian and Kazanian sequences are less diversely fossiliferous and the question of their accessibility is yet to be clarified. On the other hand, the Kungurian and Kazanian lie at the very heart of the Permian Period as first conceived and it has certainly proved possible to correlate other world faunas with them; indeed, the extensive

Permian faunas of Canada and Gondwana are more readily correlated with the typical Kungurian-Kazanian than with what is supposed to be their Texan equivalents. New work by Kozur on conodonts of course throws a real problem up for consideration, when he proposes that the Cathedral Mountain beds of Texas, long considered to be upper Artinskian are, in fact, Kungurian.

TWO PROPOSALS FOR CONSIDERATION BY THE PERMIAN IUGS SUBCOMMISSION ON PERMIAN STRATIGRAPHY

In the light of the preceding discussion, I suggest it would be useful if the Subcommittee would undertake two allied tasks as part of its duties in fulfilling its roles:

1. that delegates or those interested undertake a brief summary of the history of proposed time-rock subdivisions within the Permian Period, in their country or sphere of interest.
2. that field trips to relevant regions, held to be contention for world stratotypes, or of world significance, be organized over a programme of a few years.

If the Subcommittee is agreeable, I will undertake to provide summaries of historical value on some local stage proposals, i.e. for New Zealand, and arrange for colleagues to cover the Australian divisions now in use. And, through colleagues, it would be possible to arrange relevant field excursions to classic and important regions of the Himalayas and New Zealand.

J.B. WATERHOUSE

WHY AM I A LAZY PERMIOPHILE?

“Dear Dr. Meyen,

... I received your circular of July 1978 and I also received your newsletter of Feb. 1979. I thank you very much for both of them. The newsletter is a wonderful idea and I hope you will be able to propagate it.

... Regarding your circular of July 1978 and referring to Dr. Nassichuk's statement (2nd paragraph), I feel that I have been a very inactive and lazy member. The reason is that I am not a paleontologist and I wonder if only a group of paleontologists would be able to solve Permian problems. First of all, let me ask you a few questions. Suppose that we find a continuous marine fossiliferous rock sequence which contains the upper Eocene fossils in the lower part and the lower Miocene fossils in the upper part. Is it logic to consider the middle part of this sequence as a complete Oligocene sequence or not? I think the answer is (Yes). In such case, do we restudy the evolution of the Oligocene fossils by studying the changes which occur in this rock sequence or we discuss the age of this (definitely complete Oligocene) sequence by occurrences of Oligocene fossils the range, evolution and exact age of which may be rather unknown and uncertain? I think in such a case, we have to test and check the age, evolution and exact range of previously known fossils according to occurrences in such a complete rock sequence. Regarding Middle and Upper Permian fossils, nobody knows exact range and age of Cyclobus, Paleofusulina, Tyloplecta, Leptodus, Pleramplexus, Orthotetina and many others. Paleontologists rely mostly on relative position of these fossils. Is this enough for determination of exact age of rock sequences? The exact position of these fossils have never been checked in a Permian continuous rock sequence and hypothetical evolution and relative occurrences have been the base of endless discussion among paleontologists. Why don't we invite field-geologists to participate in the Subcommittee and present characteristics of the Permian sections which they have seen? Isn't it the time to let some field geologists to find a continuous Permian marine rock sequence somewhere to restudy the range, age and evolution of the Permian fossils? Do you believe that without such a section,

paleontologists can solve so many complicated problems which exist in it. How do you look at the case that a rock sequence is considered as Guadalupian by some brachiopod specialists and the same sequence is considered as Upper Dzhulfian by some ammonoid specialists!?

Geological evidences in Central Iran show that this area had been covered by small shallow sedimentary basins during Permian time. This may be the case in many other places all over the world. So, Tethys geosyncline (sea or ocean) looks like a hypothetical geosyncline the exact location of which is unknown. Consequently the world-wide distribution of fossils, at least in this part of the world is uncertain and doubtful; specially distribution of species and subspecies. Some of our paleontologist friends are wondering why Oterceras woodwardi, Paleofusulina and Yabeina have not been found in Iran and they have tendency to believe that equivalent formations are missing in Iran. They highly believe that these fossils had been spread all over the world (world-wide distribution of fossils) and they must occur in all the Permian and Triassic basins. Field evidences oppose this idea. This is one of the reasons that I feel paleontologist may not be able to solve the Permian problems. Look at the fact that even right now, species and subspecies of some creatures in the eastern part of the Mediterranean sea are different from those in western part of the same sea. So, how do we want to correlate the neritic formations of Middle and Upper Permian age which are deposited in different basins and far away from each other, by subspecies of fossils which have not world-wide distribution.

Dear Dr. Meyen,

I feel tired of these useless and endless discussions, discussions, discussions and disagreements among Permian paleontologists. I believe that the general policy of SCPC (to solve the Permian problems only by paleontologists) has to be revised and Permophiles should study the Permian sections in field and their judgements should be based on the new concepts in structural geology and upper mantle studies. I also strongly believe that the range, age and evolution of the Middle and Upper Permian fossils must be revised.

I hope you understand why I am a lazy Permophile.

Best wishes, sincerely yours,

Hooshang Taraz, D.Sc.”

GENUS CALLIPTERIS REVISITED

(A letter received from H. Visscher)

Last year, the Laboratory of Palaeobotany and Palynology at Utrecht has initiated a combined taxonomic study / stratigraphical evaluation of the west- and central-European species of the formgenus Callipteris.

This work is supervised by Dr. M. Boersma and myself.

From the literature as well as from our rich collection from the German locality of Soberheim, we had the feeling that the number of described species can be drastically diminished.

Because of the classic importance of Callipteris in Permian chrono-stratigraphy of Europe, a re-evaluation of the species is highly desirable as a basis for modern stratigraphical considerations. Because of the present evidences that Callipteris, as a genus, is by no means restricted to the Permian, any new stratigraphical concepts (such as those proposed by Dr. Kozur) and dependent on clear description and delimitation of the individual species.

Therefore we want to concentrate in the coming years on a res-study of callipteris material, including of course type material, present in various west- and central-European palaeobotanical collections (France, GFR, GDR, CSSR).

We have a very good candidate for this work; Mr. J. Kerp who had a combined training in palaeobotany and stratigraphy has started the investigation.

We have asked the Dutch Organization for the Advancement of Pure Research (Z.W.O.) For financial aid...

...Personally, I believe that the work well fits within the activities of the Permian Subcommittee. I should also like to know your view with regard to including Calipteris material from the Donets basin in the project. Would it be possible to re-study this material, either by us or in collaboration with a Soviet palaeobotanist?

Our work in the Upper Permian of Italy is still in progress. A manuscript on the coniferalean genus Ortiseia Florin is nearly finished, providing new insight in the structure of the female cone within the Lebachiaceae. Revisions of other Late Permian conifers will follow...

IUGS Subcommittee on Permian Stratigraphy (SCPS)

DIRECTORY

- Prof. Dr. D.L. STEPANOV (chairman). USSR 199178 Leningrad B-178, 16 Linia 29, Kafedra paleontologii Leningr. University.
- Dr. W.W. NASSICHUK (vice-chairman). Inst. of Sedimentary a. Petroleum Geology, 3303 - 33rd St., N.W. Calgary, Alberta T2L 2A7 Canada.
- Dr. S.V. MEYEN (vice-chairman and secretary). USSR 109017 Moscow 17, Pyzhevsky per., 7, Geological Inst. USSR Acad. Sci.
- Dr. B.E. BALME. University of Western Australia, Department of Geology, Nedlands, W.A. 6009, Australia.
- Dr. J.M. DICKINS. Bureau of Mineral Resources, Geology a. Geophysics, Box 378, P.O., Canberra City, Australia.
- Dr. J.B. WATERHOUSE. University of Queensland, Department of Geology a. Mineralogy, St. Lucia, Queensland 4067, Australia.
- Dr. R.E. GRANT. National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, USA.
- Dr. Ch.A. ROSS. Dept. of Geology, Western Washington University, Bellingham, Washington 98225, USA.
- Dr. H. VISSCHER. Lab. Of Palaeobotany a. Palynology, State Univ. Of Utrecht, Heidelberglaan 2, De Uithof, Utrecht, Netherlands.
- Dr. F. KAHLER. A-9020 Klagenfurt, Linsengasse 29, Austria.
- Dr. H. KOZUR. Staatliche Museen, Schloss Elisabethenburg, DDR-61 Meiningen.
- Dr. V.I. USTRITSKY. USSR 190121 Leningrad 121, naber. Moiki, m 120, Sevmorgeo.
- Dr. E. Ya. LEVEN. USSR, Moscow K-9, prosp. Marksa, 18, MGRI, kafedra regionaln. geologii.
- Dr. M. MINATO. Department of Geology a. Mineralogy, Hokkaido Univ., Sapporo, Japan.
- Dr. A.C. ROCHA-CAMPOS. Department of Geology a. Palaeontology, University of Saõ Paulo, C.P. Saõ Paulo, Brazil.
- Prof. Dr. H. FALKE. Geologisches Institute Johannes-Gutenberg-Universität, 6500 Mainz, Saarstrasse 21, BRD.
- (Corresponding members)
- Dr. N.E. NEWELL. American Museum of Natural History, Central Park West at 79th Str., New York, N.Y. 10024, USA.
- Prof. K. NAKAZAWA. Department of Geology a. Mineralogy, Faculty of Science, Kyoto

University, Sakyo Ward, Kyoto, Japan.
Dr. D.B. SMITH. Institute of Geological Sciences. Ring Road Halton, Leeds. LS15 8TO,
Yorkshire, UK.
Dr. H. TARAZ. c/o Mrs. A. Fozi, 5851 Highplace Drive, San Diego, Calif. 92120 USA.
Dr. S. NASTASEANU. Departmentul Geologiei, Institutul de Geologie si Geofizica, St.
Caransebles m. 1, Bucuresti, Romania.
Dr. H.M. KAPOOR. Geological Survey of India, 84 B Nirala Nagar, Lucknow 226007, India.
Dr. T.W. PERYT. Institut Geologiczny, Rakowiecka 4, 00975 Warszawa, Poland.