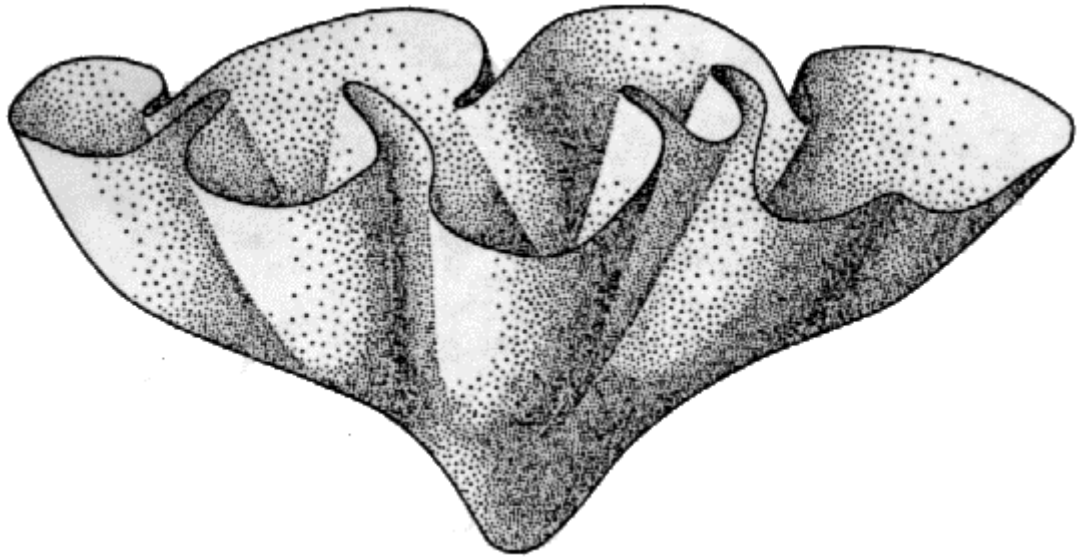
FRIENDS OF THE ALGAE

NEWSLETTER 11

APRIL 1993



Calcipatera, reconstructed from serial sections of a weathered-out specimen. Drawn by Ms. Jane Priesner, for Torres, West & Sawin 1992 (See contribution by Torres, herein)

Newsletter Editors

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TABLE OF CONTENTS

EDITORIAL

Here, at last, is Friends of the Algae Newsletter #11! We have been smitten by problems of time and finances with this issue, hence the delay. We don't have much of an editorial this time, so as not to delay the newsletter still further. However, we would like to thank all those who responded to our appeal for funds. Twenty-five of you very kindly sent us funds totaling $278, which has paid for our typist and some miscellaneous postage. Many, many thanks to these contributors! Your names are given in our honor roll, below. One of you gave us $50 - a special thanks to you!

However, we still have to pay for reproduction and mailing. These total around $1,000.00, and we really need your help with this. In fact, this one would not have been possible without the aid of Andrew Torres, who has joined the "editorial board" of the newsletter.

We are trying to standardize, so please use our Newsletter format in all future contributions. This will make life easier for our poor typist, Christa! You will also note some changes in newsletter format that have been made to save postage; in addition to these, some typing costs will be saved if you can provide your questionnaires on diskettes rather than on paper.

We regret that some contributions, not directly related to fossil algae, have been dropped to reduce postage costs; our apologies to the contributors affected.

Finally, we propose a name-change for the newsletter, in view of the research article by Andrew Torres, herein. Friends of the Algae is clearly not appropriate any longer; we suggest Phycophiliacs (those who are attracted to cyanobacterial and eucaryote algae), or Phycophile Newsletter. Comments will be gratefully accepted - and may be printed in the next newsletter!

The meeting "announcements" herein are provided for your information, but most are past and gone because of the delays to the Newsletter. Please forgive us - we have done our best! We hope to include reviews of these meetings in the next newsletter.

HONOR ROLL

Many thanks to those listed below, for their financial contributions.

Filippo Barattolo
Don Baars
Juan Braga
Kathleen Browne
Maria Carmela del Re
Piero de Castro
Russell Chapman
John Cys
Corinne Danielli
Anna-Stina Edhorn
Graham Elliott
Andre Freiwald
Robert Ginsburg
Larry Gore
Llewellya Hillis
Alan Horowitz
Maurice Kaasa
Brenda Kirkland-George
Carol Mankiewicz
Jose Martin
Michele Massieux
Gray Multer
Richard Rezak
Robert Sawin
Andrew Torres
Gregory Wahlman
Gregory Webb
Ron West
Brian Whitton
Garner Wilde

A SPECIAL NOTE TO EACH OF YOU
FROM CORINNE DANIELLI

Production of the newsletter involves the following:

1. keeping a regular check on newsletters and journals from other societies, for meeting information;
2. contacting colleagues for copy (very few of you send in unsolicited material!);
3. maintaining the address list;
4. keeping track of returned questionnaires;
5. layout design and typing;
6. proof-reading;
7. fund-raising;
8. reproduction;
9. purchase of envelopes, labels and other supplies;
10. envelope stuffing (including filling out around 100 customs labels) and mailing.

Currently I handle all of this, with help in proof-reading and fund-raising from Andy Torres and John Cys. If any of you can find some time to help with any of these items, then my joy will be advanced with laughing song and merry dance, with joyous shout and ringing cheer!

Seriously, while the entire load is a fair burden, the individual tasks, handled by an editorial committee of moderate size, will not be so very much. If the load can be split, the newsletter would have an opportunity to expand and improve sooner than it will if things remain as they are. If you can't spare time to help with newsletter production (and I know many of you can't), please send a financial contribution -- here I am, acting on item #8 above! This issue, short and compact as it is, has met the following costs:

typing	$300.00
reproduction	$320.00
envelopes, labels, etc.	$50.00
postage	$400.00
total	$1,070.00

Divided amongst us all, this amounts to around $14.00 a copy, which is really not very much. Your contributions are our ONLY source of funds.

I would like to offer my personal and sincere thanks to John Cys and Andy Torres, for their help and continual encouragement. My thanks are also extended to those of you who sent funds to support this issue, and to those who supplied copy for inclusion.

Finally, I am really sorry about the 3-year delay to this issue. Things are organized now, so get me your material and questionnaires by the end of October, and I'll get another one out early in 1994.

RESUME

LARRY GORE
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EDUCATION

Master of Science in Geology, May 1985, Texas A&M University. Thesis title: The Sedimentology, Paleontology, and Depositional Environment of the Precambrian Allamoore Formation, Culberson, County, Texas.

Bachelor of Science, major in Geology with minors in Biology and Mathematics, May 1981, Sul Ross State University.

PROFESSIONAL EXPERIENCE

U.S.D.A. Forest Service Resource Protection Technician (Mining and Minerals Administration) Custer Ranger District, Black Hills National Forest, Custer, South Dakota.

Petroleum Wellsite Sample Analyst employed by Exploration Services, Inc. (Midland, Texas) and Xco of Colorado (Denver, Colorado). Worked wells in the Permian Basin complex of Texas, the Powder River Basin of Wyoming, the Williston Basin of North Dakota, and the Hugoton Embayment of Kansas.

Graduate Assistant, Teaching, Dept. of Geology, Texas A&M University. Assisted with Physical Geology, Historical Geology, Invertebrate Paleontology, and Geology Field Camp.

Laboratory Assistant, Dept. of Geology, Sul Ross State University.

FIELD EXPERIENCE

Indiana University Geology Field Camp at Field station in the Bitterroot Mountains of Montana (student).

Sul Ross State University Geology Field Camp, western Texas and southern New Mexico (student).

Texas A&M University Geology Field Camp, Assistant Instructor, field work in western Texas, New Mexico, Colorado, and eastern Utah.

Thesis field work in Culberson and Hudspeth Counties, west Texas.

U.S.G.S./D.O.E. Trans-Alaskan Crustal Mapping Project in Brooks Range of Alaska. Worked as assistant to funded graduate student from Rice University.

U.S. Forest Service Resource Protection Technician administering mining and minerals program on the Custer Ranger District, Black Hills National Forest.

PROFESSIONAL AFFILIATIONS

American Association of Petroleum Geologists since 1977.

American Association for the Advancement of Science since 1984.

POSITION SOUGHT

Field geologist or assistant, seeking long term
would consider projects lasting 3 to 12 months, interested in
U.S. or foreign projects.

RESEARCH ARTICLES

Editor's Note: A more extensive version of this article has appeared in the Journal of Paleontology. The article is included here with the permission of the editor.

THE TERM ALGA--BOON OR BANE?

Andrew M. Torres
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Originally, the word 'alga' was no doubt descriptive and useful; it comes from the Latin for seaweed, more than likely macroscopic organisms, probably marine. However, during recent forays into the fossil algae literature, it has become frustratingly apparent that today the meaning being conveyed by the term is too often so disparate among botanists, paleontologists and geologists as to be nearly useless.

It is universally accepted among biologists that there are two basic kinds of cells comprising organisms, and that all organisms can be separated into two groups based on these cell types (Margulis & Schwartz, 1988). These are, of course, prokaryotes) pre- or proto- kernels--nuclei) and eukaryotes (true or real nuclei). The DNA of prokaryotes is naked (no associated protein) and not compartmented into a membrane-bound structure, the nucleus. There are neither plastids nor mitochondria in prokaryotes. Eukaryotes, on the other hand, have protein-associated DNA within a membrane-bound nucleus, have mitochondria, and plastids if phototropic. Any given cell is one type or the other and any organism is made up of only one cell type or the other.

Unfortunately, the term alga came into general fashion long before the distinction between cell types was widely recognized, and it came to be applied to members of both groups without the least attempt to apply adequate modifiers. The so-called blue-green algae are prokaryotes, but all other algae with color prefixes (green, red, brown, golden, etc.) are eukaryotes. Thus the word, without suitable context or modifier, is virtually worthless. Among uses of the word alga as modifiers are algal dust, algal balls, algal boundstone, algal stromatolites and algal biscuits.

Examples of the current misuse of the term among geologists and paleontologists may be seen in many contributions to recent volumes on fossil algae and in recent issues of several journals where the term includes organisms of both cell types. Citations are not given so as not to single out specific papers, but to verify this is so, just pick up a journal from the shelf and peruse a suitable paper.

There is no simple remedy for the many problems caused by the careless use of the term alga, but the situation can be alleviated if all writers and editors will exercise caution and consider the meaning conveyed or attached to it when employed. For example, as a start, we could entirely avoid using the phrase blue-green algae for the photosynthetic prokaryotes and utilize instead the terms cyanophyta (blue plants) or cyanobacteria (blue bacteria). Of these two, cyanobacteria is preferable because it connotes a more appropriate phylogenetic relationship to bacteria than does the word cyanophyta--bacteria vs plants (see also Babcock, 1986). Algal biscuits and modern stromatolites are generally structures built on or upon cyanobacterial mats, at least in part, and the term alga needn't be used at all. If this restriction were adopted, it would leave the word alga to be used for photosynthetic eukaryotes. Within this very large and diverse group, at least for now, we could use, if known, the color modifiers in their technical forms to distinguish the different sorts.

What about the term phylloid algae, my own special interest? Currently, it refers to any presumed photosynthetic eukaryotes with a leaf-like morphology, no matter what the taxonomic group. Certainly the term is descriptive in an ecological sense in connection with the baffling or sediment trapping effect of these important limestone-building organisms. The term is innocuous is it simply indicates a morphological form as originally intended (Konishi and Wray, 1961; Wray, 1977). The harm comes when its context implies a taxonomic group.

While implementation of these suggestions will not completely solve the problem of the term alga, it will reduce its magnitude and allow the reader to visualize more readily and more accurately the major traits of the organism or group of organisms being discussed or described.

References

Babcock, J.A. 1986: The puzzle of alga-like problematica, or rummaging around in the algal wastebasket. In: Hoffman, A. and Nitecki, M.H. (eds.): Problematic fossil taxa. Oxford University Press, New York. pp. 12-26.

Konishi, K., and J. Wray. 1961. Eugonophyllum, a new Pennsylvanian and Permian algal genus. Jour. Paleontol. 35:659-666.

Margulis, L. & Schwartz, K.V. 1988: Five kingdoms. 2 ed. W.H. Freeman and Co., New York. 376 pp.

Wray, J.L. 1977. Calcareous algae. Elsevier Sci. Publ. Co., N.Y. 185 p.

AN ANGLO SAXON SHIP, SOME PLIOCENE DINOFLAGELLATES, A MERMAN, AND OTHER TALES FROM SUFFOLK, EASTERN ENGLAND

by Martin J. Head (University of Toronto)

A collecting trip last summer took me to a part of East Anglia in eastern England that is steeped in history and legend. The main purpose was to sample the Coralline Crag, a fine sandy and shelly deposit locally rich in bryozoans once thought to be corals (or, at least were not differentiated from them in the early 1800's). The significance of these deposits to British geology is that they represent the only onshore record of marine early to early late Pliocene sedimentation in Britain. Together with some upper Pliocene marine deposits also in eastern England (known as the "Red Crag"), and one deposit in Cornwall (the St. Erth Beds), they constitute onshore Britain's only marine Neogene sedimentary heritage.

Today, the Coralline Crag has an onshore distribution more or less restricted to an oval outcrop 8 miles long by 2 miles wide (see Text Figure), in the vicinity of Orford, a small Suffolk town roughly 17 miles due east of Ipswich. The county of Suffolk is flat and mainly under the plow. Outcrop is illusive and restricted to the occasional river bank and to a number of small scattered quarries or pits, many of which were excavated in the nineteenth century. Much time in the field can be frittered away just looking for these pits, only to find them overgrown or partly infilled. Many roads follow a winding path despite the flat topography, and I am told by one local inhabitant that they evolved way back in time as the shortest apparent route between one mead watering-hole and the next. Vestiges of ancient culture abound rural Suffolk, and here is a good place to introduce some interesting historical sites and tales that are literally rooted in the Coralline Crag.

History of the Area

Dug into a low terrace of the River Debden, the Sutton Hoo burial ship is one of the most important and richest archaeological discoveries ever made in the British Isles. It was probably the funeral monument of Raedwald-the greatest King of the East Angles-who died in 625 AD, and is the first known monument to an English King. The discovery was first made in 1939 amongst a field of tumuli (low burial mounds) when archaeologists uncovered the outline of a rowing vessel nearly 90 ft long. Amidships there lay a spectacular collection of artifacts comprising gold jewelry, weaponry and armour, and domestic articles placed there for use in an afterlife. This exceptional treasure is now on display at the British Museum, London.

Orford (population of, I guess, less than 1,000) is one of the larger villages in the area and has picturesque white or pink-washed wood-framed buildings. It also has a castle built by King Henry II in 1165. The erection of such a large castle provided a considerable impetus for the growth of Orford during the late 1100's to late 1200's, and three Coralline Crag pits near the castle probably supplied some of the local building material. In 1256 King Henry III granted Orford a Royal Charter allowing it to have members of Parliament. Orford faced the open sea at this time and it was an important port until the sixteenth century when the encroachment of a spit (known as Orford Ness) blocked the entrance to the harbour. Orford today is a sleepy village who's main industry may well be the serving of high teas, jam and cream scones, and local oysters, all of which are most welcome after a day in the field or a few hours spent exploring the castle.

Orford has both ghost and merman (sic) stories and details of the latter are provided here for your interest (from Bacon and Bacon, 1978) [or go straight to "Paleontology" !]. The Orford Merman was recorded during the reign of King Henry II at a time when Orford faced the open sea. Orford fishermen apparently caught in their nets a wild man, very hairy and completely naked. He was taken to the custodian of the castle, Bartholemew de Glanville, who tried to get him to talk. He would not, however, despite being hung up by his feet and tortured. After several days, the merman was taken to the church in the hope that he would show some sign of reverence, but his captors saw no change and he was returned to the sea. He thenceforth entertained the many spectators on the shore by diving underwater. Mermen are not restricted to England: they frequently occur in Dutch legend which may account for the interest of Bert Van Helden (a colleague from Chevron Canada Resources Ltd.) in this story which I rendered to him over the phone. Bert wondered how, if the [critical] half of this creature was fish, they could tell it was a merman rather than a mermaid. Well Bert, since this one had feet (by which it was hung up) rather than a fishy tail one may guess that its lower part had other human "bits" that identified its gender. It all sounds like a fishy tale to me.

Paleontology

Of the several Coralline Crag localities that have been studied by geologists over the years, one of the most frequently cited is the Rockhall Wood (sometimes known as Sutton Knoll, grid ref. TM 305 441) locality (see Text Fig.). This is a low hill into which four quarries have been cut, and forms an outlier just south of the main Coralline Crag outcrop area. Approximately 4 m of Coralline Crag sediments are exposed in these quarries. The sections exposed in these quarries were first described by Charles Lyell in 1839 and later by Prestwich in 1871. Rockall Wood has been the focus of considerable paleontological interest since Wood produced a classic monograph of Coralline Crag mollusca (1848-1882) with many of Wood's holotypes coming from this site. In more recent times, bryozoans, molluscs, benthic and planktic foraminifers, ostracodes, and nannofossils have all been studied from this locality. These recent studies generally agree that the deposits are late early to early late Pliocene in age and were deposited in shallow waters no greater than about 20 m, having temperature of around 10-18°C, though possibly reaching around 20°C for three or four months of the year. Ostracode studies have indicated that salinities were normal. A few studies have been made of the spores and pollen. The presence of dinoflagellates has been acknowledged, but no details have been published.

Four samples that I collected at Rockhall Wood last summer have been analysed for palynology. The samples (each weighing 50 to 70 g, dry wt.) are all from the lower part of a shelly sand unit that has pronounced cross-stratification and which is loosely consolidated except near the top (Unit B in Gibbard and Zalasiewicz, 1988, fig. 24). All samples contain beautifully preserved dinocysts and spores and pollen. From a reconnaissance study (both LM and SEM) of the dinocyst assemblages, the following species have been provisionally identified:

Achornosphaera andalousiensis
Achomosphaera n. sp.
Achomosphaera spp.
Amiculosphaera umbracula
cf. *Bitectatodinium* spp.
Dapsilidinium sp.
Hystrichokolpoma rigaudiae (reworked?)
Invertocysta (?) sp.
Lingulodinium machaerophorum
Melitasphaeridium choanophorum
Nematosphaeropsis labyrinthea
Operculodinium cent rocarpum
O. cf. *israelianum*
Spiniferites mirabilis
Spiniferites spp.

Dinocysts make up a fair proportion of the total palynomorphs. Dominant species are *Spiniferites/Achomosphaera* spp. and *Operculodinium* spp. The fairly common presence of *O.* cf. *israelianum* (distinguished from *O. israelianum* by its slightly expanded process tips) may suggest warm surface waters if judged by the present distribution of *O. israelianum* (see Harland, 1983). Some less common components of the dinoflagellate assemblage (e.g., *Amiculosphaera umbracula, Nematosphaeropsis labyrinthea, Achomosphaera andalousiensis,* cf. *Bitectatodinium* spp.) are more typical of outer neritic to oceanic environments. Perhaps these cysts are an allochthonous component. Alternatively, the dinocyst assemblage may be taken to indicate an outer neritic environment, and perhaps deeper waters (?) than hitherto realised. This could make for a most interesting sea level/subsidence curve if these onshore deposits are late rather than early Pliocene in age. Final mention must be made of a new species of *Achoznosphaera* that occurs commonly in several of the samples. It is quite similar to *A. andalousiensis* but process terminations bear a larger number of perforations. I call it by the informal name *A. "insituensis"* n. sp. in defiance of recently cast aspersions (by a palynologist who shall not be named) that my new species may be reworked from the Paleogene. The above results are from ongoing research at the University of Toronto into dinocysts of the Coralline Crag.

Closing Remarks.

There is more to do in Suffolk than just collect fossils. Suffolk has many historic houses and over 500 medieval churches. Martello towers dot the shore and were built to yard off an invasion by Napoleon's armies. If castles and mermen are not to your liking, then try Havergate Island, a nature reserve just a few miles from Orford, and home to rare marsh harriers and the only breeding colony of avocets in Britain. The countryside has a rustic and tranquil beauty that inspired the celebrated English painter, John Constable.

The east coast is a haven for the Neogene-Quaternary geologist, with assorted "crag" deposits (shelly, sandy, marine sediments) including the Red Crag (latest Pliocene) and Norwich Crag (early Pleistocene) that may locally form thick and fossiliferous outcrop. Many of these deposits have not been explored for dinocysts. Certainly not all of the lithologies are promising, but possibly contain a sufficient number of productive horizons to piece together a very interesting research project.

Some Useful References:

Bacon, J., and Bacon, S., 1978. Orford, Suffolk. Segment Publications, Colchester, U.K., 38 pp.

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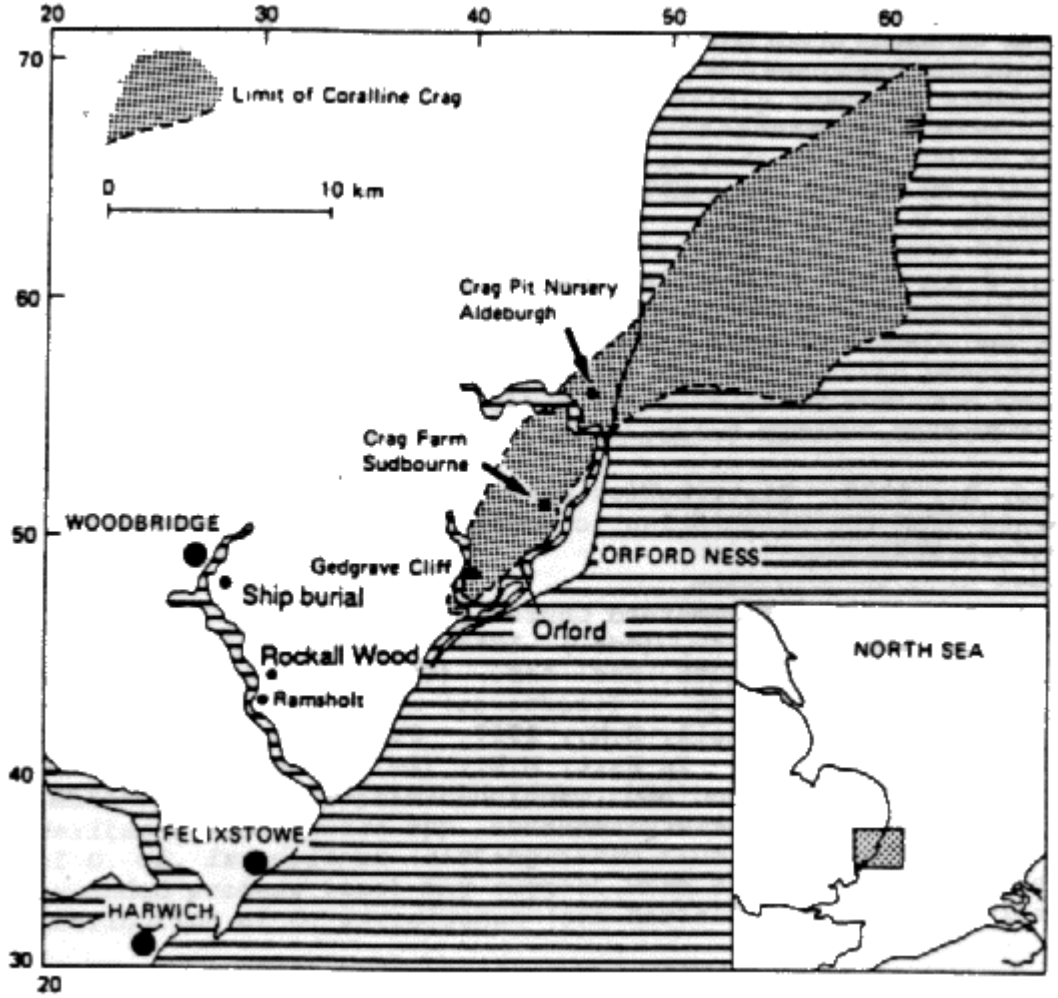
Wilkinson, I.P., 1980. Coralline Crag Ostracoda and their environmental and stratigraphical significance. Proc. Geol. Ass., 91(4): 291-306.

Text Figure. Main outcrop of the Coralline Crag, also showing location of small outliers at Ramsholt and Rockall Wood, and other sites of interest mentioned in the text (adapted from Hodgeson and Funnell, 1987, fig. 3.1).



REQUESTS

Andrew M. Torres would greatly appreciate reprints of papers dealing with phylloid algae, as well as any references to same that have been compiled. They may be sent to him at the address given at the end of the newsletter.

Andrew M. Torres is also interested in the J. Harlan Johnson type specimens (thin sections and rocks) of several species of Anchicodium that were originally in the Johnson collection at the Colorado School of Mines, Golden, Colorado. If anyone has any information as to their whereabouts, please contact him.

MEETING ANNOUNCEMENTS

5th INTERNATIONAL SYMPOSIUM
ON FOSSIL ALGAE
Capri, 7 - 12 April 1991
The Most Important Conference of the Year

Naples, July 10, 1989

Dear Colleague,

I am very glad to inform you that the Fifth International Symposium on Fossil Algae will be held in Capri (Italy), on April 1991, from 7th to 12th. Post-symposium excursions are planned, Pre-symposium excursions are possible; further information will be given in the next circular.

The symposium is the successor of Erlangen, Paris, Denver and Cardiff meetings. It is organized by the Department of Paleontology, University of Naples Federico II.

Specialists and new students on fossil algae are invited. In particular will be discussed morphology, sistematics, palaeoecology, palaeobiogeography and ultrastructure of ancient and modern calcareous benthic algae, cyanobacteria and stromatolites.

I would be very pleased if you could attend our meeting.

Yours sincerely,

Prof. Filippo Barattolo
President of the International Fossil Algae Association

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Session: STABLE ISOTOPES IN FOSSIL ALGAE
Chairman: J. CASANOVA
Laboratoire de Geologie du Quaternaire - CNRS -
Case 907 - Luminy
13288 MARSEILLE Cedex 9 - France - 7 - 12 April 1991

Stable isotope geochemistry has come into its own in the last few years as our inventory of processes and materials has improved from the result of much basic research. Stable isotope techniques has nowadays become a standard application to most studies of sedimentary rocks and depositional environments. Moreover, increasing number of isotopic publications are devoted to modern and ancient calcareous algae, cyanobacteria and stromatolites. This session will be a good opportunity to present new results as well as review contributions. Talks will be 15 minutes with 5 minutes for discussion. If you wish to participate, then contact **J. CASANOVA** at once with an outline of your intended contribution. The closing date, format and length of abstracts will be outlined in the Second Circular.

A workshop will also be organized to discuss practical aspects such as the correct selection of samples, consideration of problems of interpretation and other type of data required to constrain interpretation of stable isotopic data.

INTERNATIONAL CONGRESS PERMIAN SYSTEM OF THE GLOBE

International congress PERMIAN SYSTEM OF THE GLOBE devoted to the 150th anniversary of the establishment of the Permian system in Priuralye will take place on August, 1991 in the city of Perm, the Urals, (USSR). Russian and English are official languages. Its program envisages a five day session with report covering the following topics:

1. Historic study of the Permian system in various regions of the world.
2. Stratigraphy, paleontology, evolution of the organic kingdoms and paleobiogeography.
3. Sedimentogenesis, paleogeography, mineral resources.
4. Magmatic processes.
5. Tectonic and paleotectonic reconstructions.

Geological field trips would accompany the Congress on the territory of the Urals and European part of the USSR. The excursions would include:

I. SOUTH URALIAN TRIP - STAGE BOUNDARIES OF THE LOWER DIVISION OF THE PERMIAN SYSTEM IN SOUTH URALS:

It is planned:

a/ to show paleontological-stratigraphical validation of the Carboniferous-Permian boundary in stratotypical locality and possibility to trace it in different regions of the earth;

b/ to discuss principles serving as a basis when dividing the lower part of the Permian system into stages and the possibility to trace stage boundaries in various facial zones and beyond the limits of stratotypical locality;

c/ to show stratotypical and parastratotypical sections of the Orenburgian, Asselian, Sakmarian and Kungurian stages in terrigenous and reefogenic facies. Total route is 600 km long; its duration is 12 days.

II. MIDDLE URALIAN TRIP-PERMIAN DEPOSITS OF PERMIAN PRIKAMYE AND PERMIAN PRIURALYE FORSEES:

a/ demonstration of sections of upper part of the Artinskian stage in reefogenic facies and of the classical Kungurian stage in carbonate-sulphate facies near Kungur town on the Silva River;

b/ demonstration of Upper Carboniferous and Lower Permian sections in carbonate facies on the Kosva River near town Gubakha;

c/ demonstration of Kungurian, Ufimian and Kazanian sections on the Kama River / between the Perm and Berezniki cities / as well as acquaintance with the well-known occurrence of Permian vertebrates on the Kama River near the town Ocher;

d/ demonstration of a salt-bearing section of the Kungurian stage in mines of the Berezniki potassium works.

III. POLAR-URALIAN TRIP - PERMIAN DEPOSITS OF PRIPOLAR URALS - aims to:

a/ demonstration of transition Carboniferous-Permian deposits in clay facies;

b/ demonstration of reefogenic asselian - Sakmarian section on the Kozhim River;

c/ demonstration of a complete Sakmarian, Artinskian and Kungurian succession in terrigenous facies, of the Ufimian stage - in coal-bearing facies.

IV. THE VOLGA TRIP - UPPER PERMIAN DEPOSITS OF POVOLZHYE - is planned to show stratotypical Kazanian and Tatarian sections in river - side exposures of the Volga River.

The Organizing Committee is planning to publish a volume of contributions.

Enquiries should be sent either:

to Dr. W. Kanes
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Columbia, S.C. USA 29208

or to Dr. Boris Chuvashov
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For information apply to
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DINOFLAGELLATE GENERIC NAMES: SOME IMPROBABLE VARIANTS

By William A.S. Sarjeant

-reprinted from
Round Brown Newsletter 1989

Errors of citation of dinoflagellate and acritarch generic names, published up to 1970, were carefully assembled and listed by Alfred R. Loeblich Jr. and Alfred R. Loeblich III in their indices to the genera, subgenera and sections of the Pirrhophyta (1966, 1968, 1970, 1970). No-one since has been nearly so meticulous as the Loebliches and the list that follows owes nothing to their studies--or, for that matter, to serious studies by anyone else.

Though since greatly supplemented, the list presented below is essentially a product of creative discussions with Robert Fensome, David Wharton, and Graham Williams whilst apartment-bound during a blizzard in Halifax, Nova Scotia early in 1987. To them, I am indebted. Whether they will be indebted to me, for publishing this expanded summation of our taxonomic "findings", is a question still to be answered!

The first twenty-eight names are all suited to fossil general (or, in a few instances, subgenera!):

i. Alterdinamium
ii. Bellowatudinium
iii. Beringyerumbrella
iv. Bitesticulodinium
v. Blackcattia
vi. Caoutchoucidinium
vii. Catalepsis
viii. Censusidinium
ix. Damsilidinium
x. Dininuendinium
xi. Elitosphaeridium
xii. Godawfuliella
xiii. Greatdanea
xiv. Halfeatonicysta
xv. Hashbrownia
xvi. Kipperdinium
xvii. Koffitupsis
xviii. Kumandwuia
xix. Muchtoolongia
xx. Oodundattia
xxi. Pervertosphaeridium
xxii. Poppycockia
xxiii. Sandshuia
xxiv. Skinniochassis
xxv. Spitoonia
xxvi. Squirmiodinium
xxvii. Sumsilisphaera
xxviii. Wotthehelliella

Students of modern dinoflagellates may wish also to proceed to consider the following baker's dozen of genera:--

xxix. Abstainia
xxx. Amyloudinium
xxxi. Cherubimskia
xxxii. Chippsiella
xxxiii. Gotoitus
xxxiv. Kofhardinium
xxxv. Oblivia
xxxvi. Osteoprosis
xxxvii. Parachutia
xxxviii. Tydabikidinium
xxxix. Traumatoddinium
xl. Trypanonionsium
xli. Zooanimalella

For those who do not immediately recognize the original generic names of which these are variants, a list of "solutions" follows.

Are we having fun now?

DINOFLAGELLATE GENERIC NAMES: THE ORIGINALS

by William A.S. Sarjeant

The earnest enthusiast for dinoflagellation will read this only after sedulously scourging him or herself with the test presented on the previous page.

i. Alterbidinium Lentin & Williams, 1985 [An appropriate variant of one of the most frequently altered generic names!]
ii. Bellatudinium Yu, Sun, Sun and Mao, 1981
iii. Beringiella Bujak, 1984
iv. Bitectatodinium Wilson, 1973
v. Balcattia Cookson and Eisenack, 1974
vi. Chicaouadinium Below, 1981 [A variant that is with an exceptionally flexible autophrahm!]
vii. Catillopsis Drug, 1970 [A variant in a resting stage?]
viii. Sentusidinium Sarjeant and Stover, 1978. A genus with countless representatives, each one subtly different from the next!
ix. Dapsilidinium Bujak, Downie, Eaton and Williams, [Yes, they're all equally responsible!]
x. Dimidiadinium Brideaux, 1977 [A genus whose significance has been dwindling.]
xi. A genus intermediate between Litosphaeridium Davey and Williams, 1966 and Melitasphaeridium Harland and Hill, 1979--proving that evolution is a reality!
xii. Godavariella Mehrotra and Sarjeant, 1982.
xiii. An exceptionally large subgenus of Danea Morgenroth, 1988
xiv. An abnormally small subgenus of Eatonicysta Stover and Evitt, 1978
xv. Hashenia Yu and Zhang, 1980
xvi. Cepadinium Duxbury, 1983
xvii. Kofoidopsis Tasch, 1963--since firmly ejected from dinoflagellate taxonomy!
xviii. Komewuia Cookson and Eisenack, 1960
xix. An abnormally elongate subgenus of Toolongia Cookson and Eisenack, 1970
xx. Oodnadattia Eisenack and Cookson, 1967
xxi. Pervosphaeridium Yun, 1981
xxii. Pocockia Lentin and Williams, 1973 [No Comment!]
xxiii. Sanshuia Yu, Sun, Sun and Mao, 1981
xxiv. Scriniocassis Gocht, 1964
xxv. Speetonia Duxbury, 1977 [Since the receptacle for a new name.]
xxvi. Sirmiodinium Alberti, 1961
xxvii. Subtilisphaera Jain and Millepied, 1973
xxviii. Wetzeliella Eisenack, 1938--and much altered since!

And the living genera (if you can call it living!)--

xxix. Apsteinia Abe, 1981
xxx. Amyloodinium Brown and Hovasse, 1946 [This variant at least, is likely enough!]
xxxi. Chalubinskia Woloszynska, 1916
xxxii. Scrippsiella Baleech, 1959
xxxiii. Gotoius Abe 1981 [Another that's quite likely!]
xxxiv. Kofoidinium Pavillard, 1928
xxxv. Oblea Balech ex Loeblich Jr. and Loeblich III, 1966 [Until then, a forgotten genus!]
xxxvi. A diseased verion of Osteopsis Schmidt, 1902
xxxvii. Paraschuettia Murray and Whitting, 1899 [A variant for use in emergency situations]
xxxviii. Zygabikodinium Loeblich Jr. and Loeblich III, 1966
xxxix. Thaumatodinium Bohm, 1933. [A bad dream, but also quite a possible variant.]
xl. A more appetizing variant of Trypanodinium Chatton, 1912
xli. Zooxanthella Brandt, 1881 [A variant with a very wide range of symbionts!]

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GIANT STROMATOLITES, CASTLES OF SAND

The film "Giant Stromatolites, Castles of Sand," shown at the GSA Annual Meeting Science Theater in 1986 and 1987 and the Tobin Theater at the Annual AAPG-SEPM Meeting in 1988, is now available in VHS video format, from SEPM (Society for Sedimentary Geology), 3530 East 31st Street, Suite 103, Tulsa OK 74135, U.S.A.

This fact-filled 12-minute presentation features underwater and aerial photographs, including macro- and micro-photography of internal structures of these newly discovered, 2-m-high, lithified stromatolites presently growing in tidal channels in the eastern Bahamas (1). The stromatolites grow in 5 to 8 m of water and are surrounded and frequently buried by cross-bedded oolitic sands with local concentrations and beds of flat pebble conglomerates. Shape, size, and their association with cross-bedded sand-size sediment and muddy, flat, pebble-breccias are similar to many examples found throughout the geologic column. Ideal for introducing students to the earliest life on earth.

(1) Dill, R.F., Shinn, E.A., Jones, A.T., Kelly, K., and Steinen, R.P., Giant sub-tidal stromatolites forming in normal salinity waters: Nature, v. 324, no. 6092, p. 1-3.

Travertine-marl: Stream deposits in Virginia, 1990, Janet S. Herman and David A. Hubbard, Jr., editors, Virginia Division of Mineral Resources Publication 101, 184 pp.

In case you are interested in purchasing a copy of this special volume of contributed papers on travertine-marl:

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CONTENTS

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PHYCOPHILE NEWS

These are the responses to the questionnaire in Newsletter #10, received mainly in 1990. Many papers marked "In Press" will already be in print.

BARATTOLO, PROF. FILIPPO -- Italy, 13th December 1990

A. Fossil Algal Research Topics:

Mesozoic and Cenozoic calcareous benthic algae, particularly dasycladales

B. Discussion of Research in Progress:

Revision of Linoporella capriotica (Oppenheim) from the Early Cretaceous of Capri.

Study on a species of Cymopolia (dasycladales) from the Late Miocene of Sicily.

C. Publications Since 1988:

Barattolo F., De Castro P. & Radoicic R. 1988. - Notes on the genus Selliporella Sartoni & Crescenti 1963 (Chlorophyta, Dasycladales). Atti 74 Congr.Soc.Geol.It; vol. A: 35-38.

Drobne K., Ogorelec B., Plenicar M., Barattolo F., Turnsek D. & Zucchi-Stolfa M.L. 1989. - The Dolenja vas section, a transition from Cretaceous to Paleocene in the NW Dinarides, Yugoslavia. Mem.Soc.Geol.It. vol. 40, 1987: 73-84, 2 fig., 6 tavv. (Roma).

Barattolo F. 1990. - Remarks on Neomeris cretacea STEINMANN (Chlorophyta, Dasycladales) from the Cretaceous of Orizaba (type-locality), Mexico. Boll.Soc.Paleont.Ital.; vol. 29 (2): 207-218, 4 tavv., 6 fig.

Barattolo F. & Carras N. 1990. - Pseudoclypeina distomensis n.sp. (green algae, Dasycladales) from the Malm of the Greece. Boll.Soc.Paleont.Ital.; vol. 29 (2): 145-162, 8 tavv., 6 fig.

Barattolo F. & D'Andrea M. 1990. - Pseudocymopolia parturloni n.sp. (Chlorophyta, Dasycladales) from Neocomian slope limestones of Colle della Croce (Marsica, Central Apennines). Boll.Mus. reg. Sc. nat. Torino, vol. spec. 1990, 27 pp., 5 fig., 7 tavv. (Torino).

BODEUR, YVES -- France, 9th October 1989

A. Fossil Algal Research Topics:

1) Jurassic and Cretaceous algae
2) Biosedimentation

B. Discussion of Research in Progress:

1) Biosedimentation of a reef-like barrier in the Upper Jurassic - Lower Cretaceous of the South of France
2) With P. Bernier: Systematics and Paleoecology of Portlandian Dasyclads in Languedoc (France).

BOICHARD, R.A. -- France, 16th October 1989

A. Fossil Algal Research Topics:

No active research on algae but interested in the sedimentological role of some types.

BOUREAU, PROF. EDOUARD -- France, 25th January 1989

A. Fossil Algal Research Topics:

Precambrian organisms

B. Discussion of Research in Progress:

Mauritanian and Malian fossils

C. Publications Since 1988:

Boureau, Edouard, Evolution of the First Forms of Life in the Precambrian. The Importance of Symbiosis.

Boureau, Edouard, In Press. Colloquium about Symbiosis.

BRAGA, DR. JUAN C. -- Spain, 9th June 1990

A. Fossil Algal Research Topics:

Neogene corallines

Stromatolites

B. Discussion of Research in Progress:

a) Corallines in Neogene reefs of S. Spain

b) Giant stromatolites (Messinian of S. Spain)

c) Rhodeliths in the Mediterranean coast of Spain

C. Publications Since 1988:

Braga, Juan C. 1988. Neogene Coralline - Algal Growth-Forms and Their Palaeoenvironments in the Almanzora River Valley (Almeria, S.E. Spain). Palaeo 3, 67:285-303.

Braga, Juan C. 1989. Coral Successions in Upper Tortonian Reefs in SE Spain, Lethaia, 22:271-286.

Braga, Juan C. 1989. Algae in Reefs. Field Trip Guidebook. Granada, 57 p.

Braga, Juan C. Coral Reefs in Coarse-Terrigenous Sedimentary Environments (Upper Tortonian, Granada Basin, Southern Spain). Sediment. Geol. 66:135-150.

BROWNE, KATHLEEN M -- U.S.A., 10th August 1990

B. Discussion of Research in Progress:

I am pursuing a dissertation project that involves determining the effects of physical processes ont he morphological features of the lithified and unlithified stromatolites. More to come in the next newsletter.

C. Publications Since 1988:

Reid, R.P. and Browne, K.M., 1990, Intertidal stromatolites in a fringing reef complex, Bahamas, Geology, in press.

CAO RUI-JI -- China, 8th August 1989

A. Fossil Algal Research Topics:

Precambrian stomatolites, thrombolites and microfossils.

B. Discussion of Research in Progress:

Presently looking into the microstructures of Proterozoic stromatolites.

C. Publications Since 1988:

Cao Rui-Ji. 1989. Arrangement pattern and degradation sequences of microorganisms within the stromatolites from the Tongying Formation (Upper Sinian). Acta Micropalaeontologica Sinica Mar. 6 (1):11-16.

Cao Rui-Ji. In Press. A study on the microstructures of Proterozoic stromatolites.

CONRAD, DR. MARC A. -- Switzerland, 30th October 1989

A. Fossil Algal Research Topics:

I continue developing a database and a knowledge-base expert system on the Dasycladales. Associated phycophiles: A. Roux (Paris) for the Paleozoic dasyclads, and P. Genot (Nantes) for the Cenozoic. Completion anticipated in December, 1989.

Other topics: taxonomy, habitats and distribution of the Mesozoic dasyclads.

B. Discussion of Research in Progress:

Cretaceous calcareous algae of NE Egypt, Sinai and Jordan. Collaboration with Dr. H.J. Kuss (Berlin). New species of dasyclad was found.

C. Publications Since 1988:

Conrad, M.A. & Beightol, D.S. 1988. Expert Systems Identify Fossils and Manage Large Paleontological Databases. Geobyte Feb. 1988: 42-46, 7 text-fig. Tulsa.

Conrad, M.A. & Masse, J.-P. 1988. Les Algues calcaires des formations carbonatees de l'Hauterivien Barremien pro parte du Jura Vaudois et Neuchatelois (Suisse). Memoires de la Societe Neuchateloise des Sciences Naturelles, Tome XI: 277-290, 1 fig., 1 tab., 2 pl. Neuchatel.

Peybernes, B., Fourcase, E., Kotetichvili, E. & Conrad, M.A. 1988. Orbitolinides et Dasycladales de l'Urgonien Sovietique (Carpathes, Caucase et Transcaspienne). Strata, Serie 1, vol. 4:149-151, 4 fig. Toulouse.

COSOVIC, VLASTA -- Yugoslavia, 3rd November 1989

A. Fossil Algal Research Topics:

Paleogene dasyclads

B. Discussion of Research in Progress:

Some buildups with algae in northwestern Yugoslavia.

CYS, J.M. -- U.S.A. 25th January 1993

A. Due to the depressed petroleum industry and accompanying lack of a geoscience job market, I am leaving geology to establish a second career. I will be completing a M.S. degree in library science in December, 1993. To make use of my professional experience and background I plan to work in a science and technology capacity for an academic or corporate library.

Still interested in Permian algae, their paleoecology and sedimentological roles.

DANIELLI, DR. H.M. CORINNE -- USA, 8th November 1992

A. Fossil Algal Research Topics:

None at present, working on carbonate reservoir modelling. Just moved from the oil industry to an academic post at Texas Tech University and planning fossil algal research efforts for the future. Interested in every aspect of fossil algal paleontology.

DE CASTRO, PROF. PIERO -- Italy, 13th December 1990

A. Fossil Algal Research Topics:

Mesozoic and Cenozoic calcareous benthic algae, particularly cyanophytes and chlorophytes.

B. Discussion of Research in Progress:

Probably revision of Campbelliella striata (Carozzi) (dasycladales).

C. Publications Since 1988:

Barattolo F., De Castro P. & Radoicic R. 1988. - Notes on the genus Selliporella Sartoni & Crescenti 1963 (Chlorophyta, Dasycladales. Atti 74 Congr.Soc.Geol.It.; vol. A: 35-38.

De. Castro P. 1988a. - Observations on Thaumotoporellaceans. Atti 74 Congr.Soc.Geol.It.; vol. A: 245-250, 1 fig. (Venevento).

De. Castro P. 1988b. - Il Triassico delle croci d'Averno in provincia di Salerno. Atti 74 Congr.Soc.Geol.It.; vol. A: 239-244, 1 fig. (Benevento).

De. Castro P. 1989. - On some foraminifera and algae in Apennine Upper Cretaceous and Paleocene. Boll.Soc.Geol.It.; vol. 40, 1987. 109-124, 3fig. 2 tabb., 7 tavv. (Roma).

De Castro P. 1990a. - Thaumatoporelle: conoscenze attuali e approccio all'interpretazione. Boll.Soc.Paleont.Ital.; vol. 29(2), pp. 176-206, 11 tavv, 6 fig.

De Castro P. 1990b. - Studies on the Triassic carbonates of the Salerno province (Southern Italy): the Croci d'Acerno sequence. Boll.Soc.Geol.It.; vol. 109: 187-217, 2 figs, 2 tabb, 17 tavv.

DELOFFRE, DR. RAOUL -- France, 10th June 1989

A. Fossil Algal Research Topics:

Dasycladales, Udoteaceae and Gymnocodiaceae

B. Discussion of Research in Progress:

Revision of cretaceous dasycladales algae

C. Publications Since 1988:

Deloffre, R., Fleury, J.J., Fourcade, E. & Michaud, F. 1989. Dasycladales (Algues Vertes) du paleocene - Eocene Inferieur du Mexique. Rev. Micropal., Paris, vol. 32, no. 1, p. 3-15, 3 fig., 1 tab., 3 p.

Deloffre, R., Laadila, M. In Prep. Niveau Exceptionnel A Palaeodasycladus mediterraneus Dans le Lotharingien du Moyen-atlas (Maroc).

ELLIOTT, DR. GRAHAM F. -- Great Britain, 12th September 1989

A. Fossil Algal Research Topics:

Chlorophytes (Evolution, Paleogeography, Paleoecology)

B. Discussion of Research in Progress:

Collection, revision, correlation of data on above (A); Publications not yet finalized.

C. Publications Since 1988:

Elliott, G.F. 1989. The evidence of reproductive mechanisms in fossil Dasyclads (Algae: Chlorophyta). Biol. Rev., Cambridge Philosophical Soc. 64: 269-275.

FLUGEL, DR. ERIK -- Germany, 30th July 1989

A. Fossil Algal Research Topics:

Systematics and paleoecology of Paleozoic and Mesozoic calcareous algae

B. Discussion of Research in Progress:

Dasycladacean algae from the middle Triassic Muschelkalk of Germany

C. Publications Since 1988:

Stanton, R.J. 1989. Problems with reef models: the late Triassic Steinplatte "Reef" (Northern Alps, Salzurg/Tyrol, Austria). Facies 20: 1-138.

Flugel, E., Senowbari-Daryan, B., Stanley, G.D., 1989. Late Triassic dasycladacean alga from Northeastern Oregon: Significance of first reported occurrence in Western North America. Journal of Paleontology 63: 374-381.

FREIWALD, ANDRE -- Germany, 2nd July 1990

A. Fossil Algal Research Topics:

Recent and subfossil Corallinacea as sediment-producers in high-latitude environments.

B. Discussion of Research in Progress:

I am currently working with postglacial Corallinacea in the vicinity of Tromso (70 degrees N; northern Norway): rhodoliths, branched forms and encrusted debris are forming distinct types of sedimentary facies.

FRIEDMAN, PROF. GERALD M. -- U.S.A. 8th September 1989

A. Fossil Algal Research Topics:

Carbonate facies and ecology of algae

B. Discussion of Research in Progress:

Currently studying with graduate students and post-doctoral researchers carbonate facies with algal concentrations in Cambro-Ordovician strata in New York, Nevada, and Montana as well as modern carbonate sediments from around the world.

C. Publications Since 1988:

Friedman, G. In Press. Domed stromatolites from Saratoga, New York, U.S.A. In: Monty, Claude, ed., Phanerozoic Stromatolites, v. 2, Springer-Verlag.

GAZDZICKI, DR. ANRZEJ -- Poland, 18th October 1989

A. Fossil Algal Research Topics:

Paleoecology and biostratigraphy of Mesozoic - Cenozoic algae.

B. Discussion of Research in Progress:

Stromatolites from Tertiary glacio-marine sediments of King George Island, West Antarctica.

C. Publications Since 1988:

Gazdzicki, A. 1989. Microfossil Bolboforma (Chrysophyta) from Tertiary glacio-marine sediments of King George Island, West Antarctica. Pol. Polar Research, 10 (4).

GENOT, PATRICK -- France, 4th September 1990

A. Fossil Algal Research Topics:

Calcareous Chlorophyceae

B. Discussion of Research in Progress:

Dasycladales and Caulerpales of French and Belgian Cenozoic basins

C. Publications Since 1988:

Genot, Patrick. 1989. Les Algues Chlorophycees, Dasycladales et Caulerpales, du Lutetien superieur des bassins de Saffre et de Campbon, Loire-Atlantique. Geologie de la France, 1-2: 31-40, 1 fig.-text., 2pl.

Genot, Patrick. 1989. Etude des algues calcaires. In: Le couloir "le Maupas-les Etangs":aspects structurels, sedimentologiques et paleontologiques (La Limouziniere, Loire-Atlantique).Geologie de la France, 1-2: 94-95.

Genot, Patrick, In Press. Cenozoic and Recent Dasycladales. In: Calcareous Algae and Stromatolites, Riding ed., Springer-Verlag publ., 1990- (in press), 9 tabl., 3 pl.

Genot, Patrick. In Prep. Dasycladales. In: Riding, R. ed. Benthic calcareous algae. Treatise published by Geol. Soc. America and Univ. Kansas.

GEORGE, BRENDA KIRKLAND -- U.S.A., 27th August 1990

A. Fossil Algal Research Topics:

Paleoecology of Mizzia, well preserved, aragonitic Eugonophyllum and Anchicodium, Archeolithophyllum from Providence Limestone, Halimeda Bioherms from Java Sea.

B. Discussion of Research in Progress:

In studying thin sections from the Providence Limestone containing Archeolithophyllum, S.O. Moshier discovered that the internal structure of the algae was enhanced by cathode luminescence. Under plain light only fine (15-30 um) equant spar is visible in most samples. The internal structure is partially revealed using alizarine red-s and potassium ferricyanide stains (Dickson, 1966).

C. Publications Since 1988:

Moshier, S.O. and Kirkland, B.L. In prep.; Identification and diagenesis of a phylloid alga: Archeolithophyllum, from the Pennsylvanian Providence Limestone, Western Kentucky.

Kirkland, B.L. and Chapman, R.L. 1990. The fossil green alga Mizzia (Dasycladaceae): A tool for Eastern New Mexico. Jour. Phycol, Vol. 26: 569-576.

GINSBURG. PROF. R.N. -- U.S.A., 12th August 1990

A. Fossil Algal Research Topics:

Stromatolites, algal sediments

C. Publications Since 1988:

In Press: Controversies about stromatolites: vices and virtues. To appear in a Special Volume "CONTROVERSIES IN MODERN GEOLOGY" ACADEMIC PRESS.

GORE, LARRY -- U.S.A., 25th August 1990

B. Discussion of Research in Progress:

I am continuing exploration of the late Archaean/early proterozoic carbonates and iron formations of the Black Hills for stromatolites or other fossils.

GRANIER, DR. BRUNO -- France, 30th October 1989

A. Fossil Algal Research Topics:

Same as in last issue.

HOFMANN, DR. H.J. -- Canada, 20th October 1989

A. Fossil Algal Research Topics:

Precambrian stromatolites and microbes.

B. Discussion of Research in Progress:

1.Proterozoic microfossils of Bylot Supergroup, Baffin Island (with G.D. Jackson).

2. Ordovician stromatolites and thrombolites, Beekmantown Gp. (Ph.D. Thesis of Lawrence Bernstein).

C. Publications Since 1988:

Hofmann, H.J. 1988. Proterozoic fossils - types and distribution. In: A symposium: The Proterozoic Biosphere: a multidisciplinary study. University of California, Los Angeles, Center for the Study of Evolution and the Origin of Life. Abstracts, p. 20-21

Hofmann, H.J. and Pratt, B.R. 1989. Conference report: Stromato-Mauritania 1988. Geoscience Canada, v. 16(2): 93-94.

Bernstein, L. and Hofmann, H.J. 1989. Lower Ordovician stromatolites, oncolites, and thrombolites of the Beekmantown Group, Ottawa-St. Lawrence Lowland. Geological Association of Canada - Mineralogical Association of Canada. Joint Annual Meeting, Program with Abstracts, v. 14: A86.

KAASA, MAURICE E. JR. -- U.S.A., 4th December 1989

A. Fossil Algal Research Topics:

Pennsylvanian-Permian Algae.

B. Discussion of Research in Progress:

Analysis of lower Pennsylvanian domal stromatolites (Bird Spring Formation, California, U.S.A.)

KAESLER, PROF. ROGER L. -- U.S.A., 6th September 1989

A. Fossil Algal Research Topics:

Ostracoda associated with Permian Stromatolites. Midcontinent, U.S.A.

B. Discussion of Research in Progress:

My students and I have established structure of ostracode assemblages. We are now preparing to investigate morphological changes with environment of deposition and ontogeny of common ostracode species associated with stromatolites.

KALIA, DR. PRABHA -- India, 20th December 1989

A. Fossil Algal Research Topics:

Early Palaeozoic Cyanobacteria

B. Discussion of Research in Progress:

Busy at the moment (for all last one year) in trying to understand enigmatic body -- fossil-like structures in Asavalli Mt. (Delhi Supisame Mid. Proterozoic) near Delhi.

KAZMER, DR. MIKLOS -- Hungary, 2nd October 1989

B. Discussion of Research in Progress:

Cenozoic Dasycladacea.

KAZMIERCZAK, DR. JOZEF -- Poland, 13th October 1989

A. Fossil Algal Research Topics:

Modern and fossil cyanobacterial microbialites, affinities of acritarchs and calcisphaeric structures, biocalcification.

B. Discussion of Research in Progress:

Modern cyanobacterial analogs of Palaeozoic stromatoporoids from a sea-linked crater lake of Indonesia (with S. Kempe); Living deep-water megastromatolites from Van Lake, Turkey (with S. Kempe).

C. Publications Since 1988:

Kempe, S., Kazmierczak, J. and Degens, E.T. 1989. The soda ocean concept and its bearing on biotic evolution. In: Crick, R.E. ed. Origin, Evolution and Modern Aspects of Biomineralization in Plants and Animals. Plenum Press, New York: 29-43

Kempe, S., and Kazmierczak, J. 1989. Satonda Crater Lake and its stromatolites: a recent model of the early alkaline ocean? EUG V Strasbourg, 20-23 March 1989, Terra (Abstracts) vol. 1 (1).

Kempe, S., and Kazmierczak, J. In Press. Chemistry and stromatolites of the sea-linked Satonda Crater Lake, Indonesia: a recent model for the Precambrian sea? Chemical Geology.

Kempe, S., and Kazmierczak, J. In Press. Satonda Crater Lake, Indonesia: Hydrogeochemistry and Biocarbonates. Mitt. Geol.-Palaont. Inst. Univ. Hamburg.

KUNDAL, DR. PRADEEP KUNDAL -- India, 23rd July 1990

A. Fossil Algal Research Topics:

Mesozoic and Cenozoic fossil calcareous algae from Indian rocks.

LAPOINTE, DR. PHILIPPE -- France, 29th October 1989

A. Fossil Algal Research Topics:

Study of Holocene algal mat, Arabian Gulf, Abu Dhabi Coast

B. Discussion of Research in Progress:

Survey of outcrops, areal appraisal

C. Publications Since 1988:

-Sedimentology and Diagenesis: Basic keys to reservoir layering. Example of the UMM Shaif Arab Ame C. Reservoir. SPE paper #21322 first presented at ADNO/SPE Abu Dhabi meeting - March 1990.

-in Prep. Microbial corrosion and biologically induced new products. Example from a sea water injection system (UMM Snaif, UAE).

MANKIEWICZ, DR. CAROL -- U.S.A., 5th August 1990

A. Fossil Algal Research Topics:

Cambrian algae

Miocene red and green algae, southeastern Spain

C. Publications Since 1988:

Publications: Articles

Mankiewicz, C. 1988. Occurrence and paleoecologic significance of Halimeda in late Miocene reefs, southeastern Spain. Coral Reefs 6: 271-279.

Mankiewicz, C. [in press] Calcareous algae, in J.W. Schopf and C. Klein, eds., The Proterozoic biosphere: a multidisciplinary study. Cambridge University Press.

--[in press] Described taxa of Proterozoic and selected earliest Cambrian carbonaceous remains, trace and body fossils: calcareous algae, in J.W. Schopf and C. Klein, eds. The Proterozoic biosphere: a multidisciplinary study. Cambridge University Press.

Horodyski, R.J., and Mankiewicz, C. [in press]. Possible late Proterozoic calcareous algae from the Pahrump Group, Kingston Range, southeastern California.

Franseen, E.K., and Mankiewicz, C. [submitted to Sedimentology]. Depositional sequences and correlation of middle to upper Miocene carbonate complexes, Las Negras and Nijar areas, southeastern Spain.

Mankiewicz, C. [in preparation] Obruchevella in the Middle Cambrian Burgess Shale: Preservation and taxonomic affinity. [to be submitted to Journal of Paleontology].

Publications: Abstracts

Franseen, E.K., Mankiewicz, C. and Pray, L.C. 1988. Depositional sequences and correlation of middle to upper Miocene reef complexes, Nijar and Las Negras areas, southeastern Spain. [Abstract]. American Association of Petroleum Geologists, Bulletin 72: 186-187.

Mankiewicz, C. 1988. The record of early metaphytes: Vendian and Early Cambrian calcareous algae. [Abstract]. The Proterozoic biosphere: a multidisciplinary study, Symposium of the Precambrian Paleobiology Research Group-Proterozoic, August 1988, University of California, Los Angeles: 43-44.

--1988. Obruchevella in the Middle Cambrian Burgess Shale: preservation and taxonomic affinity. Geological Society of America Abstracts with Programs 20: A226.

MARTIN, DR. JOSE M. -- Spain, 6th September 1990

A. Fossil Algal Research Topics:

Stromatolites

Neogene Reefs

C. Publications Since 1988:

Same as Braga, J.C.

MASSIEUX, DR. MICHELE -- France, 13th October 1989

A. Fossil Algal Research Topics:

1. Tertiary calcareous algae.
2. Fossil Charophyta of the northern Pyrenees.

C. Publications Since 1988:

Massieux, M., Tambareau X. and Villatte J. (1989): Nouveaux gisements a Charophytes du Dano-Montien nord-pyreneen. Revue de Micropaleotologie, vol. 32 (2): 140-150, 2 pl.

MOUSSAVIAN, DR. ESMAIL -- Germany, 3rd December 1989

A. Fossil Algal Research Topics:

Fossil and living calcareous algae, especially red algae (Mesozoic - present)

B. Discussion of Research in Progress:

Different aspects of fossil and living marine benthic algae: systematics, phylogeny, stratigraphy and palaeoecology of predominantly red algae. Furthermore: development of algal dominated encrusting communities as framework builders, reef stabilizers or rhodolith builders.

C. Publications Since 1988:

Moussavian, E. (1987): Parakymalithon, a New Genus of the Coralline Algae (Rhodophyceae) from the Lower Cretaceous.- Facies, 16: 187-194, pl. 36, Erlangen.

Moussavian, E. (1988):Die Peyssonneliaceen (auct.: Squamariaceae, Rhodophyceae) der Kreide und des Palaogen der Ostalpen.-Mitt. Bayer. Staatsslg. Palaont. hist. Geol., 28: 89-124, fig., 1 tab., 5 pl., Munchen.

Moussavian, E. (1989a): Uber die sytematische Stellung und die Bestimmungskriterien der Solenoporaceen (Rhodophyceae).- Cour. Forsch.-Inst. Senckenberg, 109: 51-91, 6 pl., Frankfurt.

Moussavian, E. (1989b): Axiophyllum paraphylloides n.g., n.sp., eine neue weitere Corallinacee (Rhodophyceae) aus der hoheren Unterkreide der Nordlichen Kalkalpen.- Cour. Forsch.- Inst. Senckenberg, 109: 185-192, 1 pl., Frankfurt.

Moussavian, E. (1989c): Taxonomische Untersuchungen an "Amphiroa" propria LEMOINE (Corallinaceae/Rhodophyta; Maastricht-Thanet).- Munchner Geowiss. Abh., (A), 15: 41-54, 3 pl., Munchen.

Moussavian, E. (1990): Ubersicht uber die Taxonomie, Fazies und Palaobiogeographie der Kalkrotalgen der Kreide und des Palaogen der Ostalpen.-Munchner Geowiss. Abh. (A).- (In preparation).

Moussavian, E. (Palaeosporolithon n. gen. (Corallinaceae/Rhodophyta) aus dem Paleozan der Ostalpen.- (In preparation).

Moussavian, E. Coralline Algen des nordalpinen Helvetikum (Paleozan-Obereozan): Eine systematische, fazielle und palaobiogeographische Analyse.- (In preparation).

Moussavian, E. & Hofling, R. (1989): Distribution of calcareous algae in different Upper Cretaceous rudist dominated reef-complexes. Examples from the Northern Calcareous Alps.- In Algae in Reefs: Abstracts (edit.: BRAGA, J. & MARTIN, J.M.): 17, Dep. Strat. paleont. Univ. Granada, Granada.

Moussavian, E. & Jung, W. (1986): Korallenalgen aus Gegenwart und Vorzeit.- Jahresber. 1985 u. Mitt. Freunde Bayer. Staatsslg. Palaont. hist. Geol.: 20-44, 1 fig., 4 pl., Munchen.

Moussavian E. & Kuss, J. (1989): The neotypification and status of Lithothamnium aschersoni SCHWAGER 1883 (Corallinaceae/Rhodophyta) form Paleocene of Egypt.- Berliner geowiss. Abh. (in press).

Moussavian, E. & Kuss J. (1990): The calcareous red algae of Upper Cretaceous - Early Tertiary strata of egypt.- (in preparation).

Moussavian, E. & Senowbari-Daryan, B. (1988): Dendronella articulata n. gen., n. sp.: A new calcareous algae form the Cassian Formation (Upper Triassic/Carnian; Southern Alps).- Facies, 19: 251-258, pl. 41, Erlangen.

Dullo, W.-Ch., Moussavian, E. & Brachert, T. (1990): The foralgal crust facies of the deeper forereefs in the Red Sea: A deep diving survey by submersible. - Geobios (in press).

MULTER, DR. GRAY -- U.S.A., 6th September 1989

B. Discussion of Research in Progress:

Various aspects of Halimeda.

C. Publications Since 1988:

Multer, H.G. & Clavijo, I.E. 1989 Halimeda Investigations: Progress & Problems. In Terrestrial & Marine Geology of St. Croix, U.S.V.I. D.K. Hubbard, ed. Special Publ. No. 8, West Indies Laboratory, Christiansted, St. Croix USVI 00820: 117-127.

POIGNANT, A-F -- France, 2nd November 1989

A. Fossil Algal Research Topics:

Systematics, phylogeny and biostratigraphy of red algae.

B. Discussion of Research in Progress:

1.Cretaceous and Neogene red algae in Tethyan ore deposits

2.Classification/or articulated corallines.

C. Publications Since 1988:

Poignant, A.F. (In Prep.). The Solenoporaceae; a general point of view. Springer-Verlag.

Poignant, A.F. (In Prep.). Les algues cretacees. P.I.C.G. 262. Tethyan Cretaceous Correlation. Wien.

Poignant, A.F. (?). Les Solenoporacees: une revue generale. 113d Congres national des Societes Savantes Strasbourg. Sciences de la Terre: 143-149.

PONCET, DR. JACQUES -- France, 25th October 1989

A. Fossil Algal Research Topics:

Paleozoic calcareous algae - algal sedimentary fabrics

B. Discussion of Research in Progress:

Continuing to study algae from north Gondwana.

C. Publications Since 1988:

Poncet, J. 1989. Presence du genre Halimeda Lamouroux, 1812 (algue verte calcaire) dans le Permien superieur du Sud Tunisien. Revue de Micropaleontologie, Paris, 32, 1: 40-44.

Poncet, J. In press. Cheggatella denticula n. gen., n. sp. algue rouge calcaire du Carbonifere superieur du bassin de Bechar (Sahara algerien). Geobios.

PRATT, PROF. BRIAN R. -- Canada, 7th December 1989

A. Fossil Algal Research Topics:

Stromatolites and thrombolites, microbial microfossils in reefs, lower Paleozoic calcareous algae.

B. Discussion of Research in Progress:

1.Precambrian-Cambrian deep-water reefs and the evolution of mud-mound fabrics
2.Early Ordovician calcareous algae from western Newfoundland
3.The role of Girvanella in lime mud production in Paleozoic seas
4.The role of micro-organisms in ancient reef framework formation
5.Receptaculitids from the Ordovician and Devonian of western Canada
6.Lower Cambrian archaeocyathan reefs from the Canadian Rocky Mountains

C. Publications Since 1988:

Rees, M.N., B.R. Pratt and A.J. Rowell, 1989. Early Cambrian reefs and associated lithofacies of the Shackleton Limestone, Transantarctic Mountains, Sedimentology, 36: 341-361.

Pratt, B.R., 1989a. The only known Precambrian reef in the Canadian Appalachians: Proterozoic stromatolites at Saint John, New Brunswick. In: H.H.J. Geldsetzer et al. (eds.), Reefs, Canada and adjacent areas. Canadian Society of Petroleum Geologist, Memoir 13: 110-112.

Pratt, B.R., 1989b. Deep-water Girvanella-Epiphyton reef on a mid-Cambrian continental slope, Rockslide Formation, Mackenzie Mountains, Northwest Territories. Ibid, pp. 161-164.

Pratt, B.R., 1989c. Continental margin reef tract of Early Ordovician age, Broken Skull Formation, Mackenzie Mountains, Northwest Canada. Ibid: 208-212.

Pratt, B.R., 1989d. Early Ordovician cryptalgal-sponge reefs, Survey Peak Formation, Rocky Mountains, Alberta, Ibid: 213-217.

Pratt, B.R., 1989e. Early Middle Ordovician patch reefs, Laval Formation (Chazy Group), Caughnawaga, Montreal, Quebec. Ibid: 218-223.

Pratt, B.R., 1989f. Early Devonian stromatoporoid reefs, Formosa Reef Limestone (Detroit River Group) of southwestern Ontario. Ibid: 506-509.

Pratt, B.R. and N.P. James, 1988a. Coral - Renalcis - thrombolite reef complex of Early Ordovician age, St. George Group, western Newfoundland. Ibid: 224-230.

Pratt, B.R. and N.P. James, 1988b. Early Ordovician thrombolite reefs, St. George Group, western Newfoundland. Ibid: 231-240.

Pratt, B.R. and J. Weissenberger, 1988. Fore-slope receptaculitid mounds from the Frasnian of the Rocky Mountains. Ibid: 510-513.

Pratt, B.R. and L.F. Jansa, 1988. Upper Jurassic shallow-water reefs of offshore Nova Scotia. Ibid: 741-747.

Jansa, L.F., B.R. Pratt and G. Dromart, 1988. Deep-water thrombolite reefs from the Upper Jurassic of offshore Nova Scotia. Ibid: 725-735.

RACKI, DR. GRZEGORZ -- Poland, 20th October 1989

A. Fossil Algal Research Topics:

Devonian algae as environmental indicators

B. Discussion of Research in Progress:

Calcareous microfossils in the Givetion to Frasnian carbonate complex of southern Poland (jointly with J. Sobon - Podgorska and M. Paszkowski).

C. Publications Since 1988:

Racki, G. 1989. Charophyte ecology of the Devonian carbonate complexes.-1st Intern. symp. on Extant and Fossil Charophytes, Abstr.: 46.

RADOICIC, RAJKA -- Yugoslavia, 1990

C. Publications Since 1988:

Radoicic, R. Paleogene Dasycladacean algae from the subsurface of the western Iraqi desert. Bull Acad. Serbe. Sc. Art., CII, Cl, Sc. nat. math., Sc. nat. 32, Beograd. (Three new Paleocene species: Clypeina haglani, Thyrsoporella longa, T. turgidipora, and a new Oligocene species, Clypeina hadithae are described.

Radoicic, R. Acicularia tavnae sp. nov. and other Acetabulariaceae from the Paleocene of eastern Majevica (NE Bosnia, Dinarides). Razprave in porocila 33, Ljubljana.

Radoicic, R. 1991. Neomereae (Dasycladales, Green Algae) in the Paleocene of Majevica Mountain (NE Bosnia, Dinarides). Geol. Anali. Balk. Pol., vol 55.

Carras, N. & Radoicic, R. 1991. Salpingoporella Pirinіae n. sp. from the Barremian of the Parnas Carbonate Platform (continental Grace). Geol. Anali. Balk. Pol., vol 55.

Farinacci & Radoicic, R. Late Jurassic - early Cretaceous Dasycladales (Green Algae) from the western Pontides, Turkey.

RIDING, DR. ROBERT -- Great Britain, 30th January 1990

A. Fossil Algal Research Topics:

Calcified cyanobacteria

Classification of calcareous algae and cyanobacteria

B. Discussion of Research in Progress:

1.Coordinating preparation of the Treatise on Benthic Calcareous Algae

2.Microbial carbonates in Permian reefs, China (with Li Guo, cardiff)

3.Micritic crusts in Miocene reefs, Spain (with J.M. Braga and J.M. Martin, Granada)

C. Publications Since 1988:

Riding, R. 1989. Early history of calcification in prokaryotes and algae. Terra abstracts 1 (1): 198-199.

Latham, A. & Riding, R. 1989. Origin and significance of thrombolites in the Lie de Vin Series, Morocco. Terra abstracts 1 (1): 199.

Riding, R. 1989. Reef construction by calcified algae and cyanobacteria. Algae in Reefs Symposium, Granada, 1989, abstracts: 1-2.

Riding, R. 1989. Calcified cyanobacteria in Phanerozoic reefs. Algae in Reefs Symposium, Granada, 1989, abstracts: 3-4.

Guo, L. & Riding, R. 1989. Problematic Permian reef algae. Algae in Reefs Symposium, Granada, 1989, abstracts: 9-10.

Edwards, D. and Riding, R. 1989. Microskeletal-microbial fenestral reef framework, Lower Permian Trogkofel Formation, Carnic Alps, Austria. Algae in Reefs Symposium, Granada, 1989, abstracts: 11-12.

Riding, R. Martin, J. & Braga, J.C. 1989. Coral-microbial reef framework, Upper Miocene, SE Spain. Colloque "Biologie et Geologie des Recifs Coralliens", ISRS Meeting, Marseille, 1989, abstracts: 133.

Riding, R. Calcified cyanobacteria.*

Riding, R. Cambrian calcareous cyanobacteria and algae.*

Riding, R. & Guo, L. Permian marine calcareous algae.*

Riding, R. Classification of microbial carbonates.*

* All in press in: Riding, R. (Ed.). Calcareous algae and stromatolites. Springer, Berlin.

REIDEL, PETER -- Germany, 15th November 1989

A. Fossil Algal Research Topics:

No active research.

B. Discussion of Research in Progress:

Reef development during the Triassic. Role of algae within the reefs.

C. Publications Since 1988:

Flugel, E., Senowbari-Daryan, B. & Reidel, P. (1988). Pantokratoria n.g. aus dem Karn (Obertrias) von Hydra (Greichenland) und der Dolomiten (Sudalpen)--eine Schlerospongie?--Geologia et Palaeontologia 22: 73-79.

Reidel, P., Senowbari-Daryan, B., Kovacs, S. & Pelikan, P. 1986. The age of the banya-hegy reef limestone (Bukk Mts., NE Hungary). M.A.F.I. Evi Jelentese, 1981: 105-115.

Reidel, P. & Senowbari-Daryan, B. (In Press). The role of sponges in Triassic Reefs. In: Fossil and Recent Sponges. Springer-Verlag.

ROUX, DR. ALAIN -- France, 21st August 1990

A. Fossil Algal Research Topics:

1) Paleozoic calcareous algae: taxonomy, classification, stratigraphy and distribution, sedimentology.

2) Use of fossil algae in paleobiogeographic reconstructions

B. Discussion of Research in Progress:

General revision of the Paleozoic dasyclads.

Revision of the Palaeozoic algal problematica for the Treatise on Invertebrate.

Paleontology part B: Calcareous algae.

Palaeobiogeography of the Tethyan Upper Permian.

Distribution of calcareous algae according to the fluctuations of the sea level.

C. Publications Since 1988:

Roux A. 1989. Study of a Paraepimastopora kansasensis (Dasyclad alga) topotypical material from the Upper Pennsylvanian of Kansas, USA. Revue de Paleobiologie 8(2): 323-333.

Roux A. 1990. Ordovician Algae and Global Tectonics. In: Riding R.E., ed. Calcareous algae and stromatolites: 335-348. Springer-Verlag.

Roux A. 1990. Ordovician to Devonian marine calcareous algae. In: Riding R.E., ed. Calcareous algae and stromatolites: 349-369. Springer-Verlag.

In press

Poncet J. & Roux A. Palaeobiogeography of Ordovician Algae. Palaeo 3.

Roux A. & Deloffre R. Revision des Gymnocodiacees (Algues rouges, Permien-Cretace). Taxonomie, Biostratigraphie, Paleobiogeographie. lere partie: Generalites sur la Famille. Revue de Micropaleontologie.

Roux A. Revision des bymnocodiacees. 2eme partie. Inventaire taxonomique critique des especes de bymnocodiacees du Permien et du Trias. Revue de Micropaleontologie.

SCOFFIN, DR. TERENCE P. -- Great Britain, 19th August 1990

A. Fossil Algal Research Topics:

Reef algae, Silurian of UK

Reef algae, Miocene of Mediterranean

Rhodoliths, Miocene of Mediterranean

B. Discussion of Research in Progress:

Contribution by calcareous algae to reef development in the Maldives.

C. Publications Since 1988:

Scoffin, Terence P., 1989. Fluorescent and skeletal density banding in Porites intea from Papua New Guinea Y Indonesia, Coral Reefs 7:169-178 (with A.W. Tudhope & B.E. Brown).

Scoffin, Terence P., 1988. Shallowing - upwards sequences in reef lagoon sediments: examples from the Holocene of the Great Barrier Reef of Australia and the Silurian of Much Wenlock Shropshire, England. Proc. GH Int. Coral Reef Symp. 1988, vol. 3 479-484.

Scoffin, Terence P., Corals as environmental indicators: Terra Nova 1:559-563 (with A.W. Tudhope & B.E. Brown).

SCUDELER BACCELLE, PROF LUCIA -- Italy, 6th November 1989

A. Fossil Algal Research Topics:

1. Rhodolith-bearing Cenozoic biostromes of eastern Veneto and Northern Appenni (Northern Italy).

2.Stromatolites of the Rosso Amonitico Veronese", Jurassic of Veneto (N. Italy)

B. Discussion of Research in Progress:

Sedimentological, geochemical and diagenetic aspects.

C. Publications Since 1988:

Scudeler, Baccelle L. 1987. Distribuzione del Mn in biostromi algali aquitaniani della fascia pedemontana tra Paderno del Grappa e Vittorio Veneto (Treviso). Cong. Simp. Catania 1986, Rend. Simp. 42(2): 295.

Scudeler, Baccelle L. & Reato S. 1988. Cenozoic algal biostromes in the eastern Veneto (northern Italy): a possible example of non-tropical carbonate sedimentation. Sedim. Geol. 60: 197-206.

Ballarin L., Massari F., Nardi S. & Scudeler Baccelle L. 1988. Biomineralization and dissolution caused by organic substances in the Rosso Ammonitico Veronese of S. Ambrogio di Valpolicella (Verona, northern Italy). Ninth European Regional Meeting of the I.A.S., Leuven, 11-14 September 1988.

Scudeler, Baccelle L. and Grandesso M. 1989 Pisoidi della Dolomia di Durrenstein (Carnico Superiore) in Valparola-Dolomiti Centrali Italia Settentrinale. Mem. di sc. Geol. Vol.XLI: 37-49.

Ballarini L., Massari F., Nardi S., Scudeler Baccelle L. In press. Aminoacidi nel Rosso Ammonitico Veronese di S. Ambrogio di Valpolicella (Vr) Boll. Soc. Geol.

Ballarini L., Massari F., Nardi S., Scudeler Baccelle L. Aminoacids in the pelagic stromatolites of the Rosso Ammonitico Veronese Formation (Middle Upper Jurassic, Southern Alps, Italy) in "Phanerozoic Stromatolites" II. CL. Monty ed., Elsevier. In Press.

SENOWBARI-DARYAN, DR. BABA -- Germany, 18th October 1989

A. Fossil Algal Research Topics:

Palaeozoic and Mesozoic algae

B. Discussion of Research in Progress:

1.We are going to work with the problem of systematic position and distribution as well as importance of Tubiphytes through time.

2.Permian algae in Sicily

C. Publications Since 1988:

Flugel, E.; Senowbari-Daryan, B. and Stanley, G.D. 1989. Late Triassic dasydadacean algae from Northeastern Oregon: significance of first reported occurrence in western North America.- J. Paleont. 63: 374-381.

SIMMONS, DR. M.D. -- Great Britain, 2nd January 1990

A. Fossil Algal Research Topics:

1.Cretaceous calcareous algae from the Middle East

2.Oligo-Miocene algae from Papua, New Guinea

B. Discussion of Research in Progress:

1.Description of calcareous algal floras from the Cretaceous of the Middle East.

2.Description of red algae from the Oligo-Miocene of Papua, New Guinea. Applications for palaeo water depth estimation and palaeoenvironmental analysis.

3. Originally calcitic dasyclads.

C. Publications Since 1988:

Banner F.T., Finch, E.M. & Simmons, M.D. 1990. On Lithocodium Elliott. J. Micropaleont., 8(1).

Simmons, M.D. and Johnston, M.J. In Press. Permocalculus iagifuersis, a new gymnocodiacean alga from the Miocene of Papua, New Guinea. Submitted to *J. Micropaleont.*

Simmons, M.D. In Prep. Cretaceous calcareous algae from early Cretaceous carbonates, Oman.

Emery, D. and Simmons, M.D. In prep. Hensonella dinarica - A 'dasycladacean' alga with an originally calcitic wall..

Smith, P.B. Simmons, M.D. and Racey, A. 1990. Cenomanian echinoids, larger foraminifera and calcareous algae from the North Formation, Oman. Cretaceous Research, 11(1).

SKOMPSKI, DR. STANISLAW -- Poland, 31st October 1989

A. Fossil Algal Research Topics:

Carboniferous calcareous algae: sedimentological and paleontological studies.

B. Discussion of Research in Progress:

Namurian calcareous algae; Morphology of Authracopore uopsis urachaevi Maslov

C. Publications Since 1988:

Skompski, S., Conil R., Laloux M., Lys M. & Sobon-Podgorska. In Press. Micropaleontological characteristic of the Visean and Namurian limestones from the Lublin Carboniferous basin.

TOOMEY, DR. DONALD F. -- U.S.A., 9th January 1990

A. Fossil Algal Research Topics:

Retired as of 1st February, 1990. No news as to current work.

TORRES, DR. ANDREW M. -- U.S.A., 3rd October 1989

A. Fossil Algal Research Topics:

Phylloid Algae of the Pennsylvanian and Permian in Kansas

B. Discussion of Research in Progress:

Three dimensional reconstruction of Phylloid Algae

C. Publications Since 1988:

Torres, A.M. 1991. Using the term alga. Journal of Paleontology. 65: 882-883.

Baars, D.L. and A.M. Torres. 1991. Late Paleozoic phylloid algae--a pragmatic review. Palaios. 6: 513-515.

Torres, A.M. and D.L. Baars. 1992. Using the term utricle. Journal of Paleontology. 66: 688.

Torres, A.M., R.R. West and R.S. Sawin. 1992. Calcipatera cottonwoodensis, a new membranous Late Paleozoic calcareous alga. Journal of Paleontology. 66: 678-681.

Torres, A.M. and D.L. Baars. 1992. Anchicodium Johnson: Branched or phylloid? Journal of Paleontology. 66: 675-677.

Torres, A.M. 1992. Book Review of: "Biogeochemistry: An analysis of global change" by W.H. Schlesinger, Academic Press. For: Geotimes. 37(2):48.

WAHLMAN, DR. GREGORY P. -- U.S.A., 18th September 1990

A. Fossil Algal Research Topics:

Paleozoic and Mesozoic calcareous algae.

B. Discussion of Research in Progress:

1. Algae in Paleozoic reefs and mounds.
2. Evolution of the Permian Reef Community.
3. Various other projects concerning calcareous algae in the Cambrian and Silurian.

C. Publications Since 1988:

No algal publications since 1988, but two forthcoming papers on lower Ordovician echinoderms from Texas, and U.S.G.S. Prof. paper on Ordovician Monoplacophora and Bellerophontida due to be published in 1991.

WALTER, DR. MALCOLM -- Australia, 28th August 1990

A. Fossil Algal Research Topics:

Stromatolites - paleobiology and biostratigraphy,
Acritarchs - biostratigraphy, Proterozoic and Cambrian.

B. Discussion of Research in Progress:

My former student Zang Wenlong and I are preparing for publication a set papers on Proterozoic and Cambrian acritarchs of China and Australia.

C. Publications Since 1988:

Walter, M.R., Krylov, I.N. & Muir, M.D., 1988. Stromatolites from Middle and Late Proterozoic sequences in the McArthur and Georgina Basins and the Mount Isa Province, Australia. Alcheringa 12(2): 79-106.

Awramik, S.M., Schopf, J.W. & Walter, M.R., 1988. Carbonaceous filaments from North Pole, Western Australia: are there fossil bacteria in Archean stromatolites? A discussion. Precamb. Res. 39: 303-309.

Zang, W. & Walter M.R. 1989. Latest Proterozoic plankton from the Amadeus Basin in central Australia. Nature 337: 642-645.

Walter, M.R., Grotzinger, J.P., Hofmann, H.J. & Schopf, J.W. (in press). Proterozoic stromatolites. In: J.W. Schopf & C. Klein, eds. The Proterozoic Biosphere: A Multidisciplinary Study. Oxford Uni. Press.

Walter, M.R. Bauld, J., Desmarais, D., Farmer, J., Pierson, B. & Schopf, J.W. (in press). Comparison of microbial mats and microbial stromatolites: Bridging the gap between the modern and the fossil. In: J.W. Schopf & C. Klein, eds. The Proterozoic Biosphere: A Multidisciplinary Study. Oxford Uni. Press.

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Walter, M.R., Du Rulin & Horodyski, R.J. (in press). Spiral carbonaceous megafossils from the Middle Proterozoic of Jixian (Tianjin) and Montana. American Journal of Science.

Summons, R.E. & Walter, M.R. (in press). Molecular fossils and microfossils of procaryotes and protists from Proterozoic sediments. American Journal of Science.

Zang, W. & Walter, M.R. (in press). Late Proterozoic and Cambrian microfossils from the Amadeus Basin, central Australia. Special Publication of the Association of Australasian Palaeontologists.

WEBB, DR. GREGORY E. -- U.S.A., 18th September 1990

A. Fossil Algal Research Topics:

Mississippian algae, cryptalgal deposits/biolites

B. Discussion of Research in Progress:

Mississippian reefs and bioherms.

C. Publications Since 1988:

None specifically on algae.

Some algae:

Webb, G.E. 1987. Late Mississippian Thrombolite bioherms from the Pitkin Formation of norther Arkansas. G.S.A. Bull. 99: 686-698.

In press. Late Visean coral-algal bioherms from the Lion Creek Formation of Queensland, Australia. Proc. 11th Int. Congress Carbonif. Strat. & Geol. Beijing, China, 1987. (expected 1991).

WEST, PROF. R.R. -- U.S.A., 29th October 1991

A. Fossil Algal Research Topics:

See previous newsletter.

B. Discussion of Research in Progress:

Nothing "up front" currently. Concentrating on the coralline demosponge Chaetetes for Treatise revision.

C. Publications Since 1988:

Calcipatera cottonwoodensis, a new membranous Late Paleozoic calcareous alga. in press, Journal of Paleontology, with A.M. Torres and R.S. Sawin.

WIESLAW, DR. STUDENCKI -- Poland, 20th October 1989

A. Fossil Algal Research Topics:

Cenozoic red-algal taxonomy and paleoecology.

B. Discussion of Research in Progress:

1. Overburdened with enormous quantities of fossil red-algal species. I'd like to try to introduce some order and simplicity to this oversplitted domain. I hope to give some proposals in the forthcoming Fossil Algal Symposium.
2. A review of rhodolithic beds in the European Neogene is being prepared to propose explanation for their widespread occurrence and to show their importance in many environments of both Mediterranean and Paratethys bioprovinces.

C. Publications Since 1988:

A. Pisera and W. Studencki. In Press. Middle Miocene rhodoliths from the Korytnica Basin, Southern Poland; paleoenvironmental significance and paleoecology. - Acta Palaeont. Polon., v. 34.

W. Studencki. In Prep. Taxonomy of fossil red algae: abandon or continue.

W. Studencki. In Prep. Rhodolithic beds in the European Neogene: Why so extensive?

XI-NAN, ASSOC. PROF. MU -- China, 12th February 1990

A. Fossil Algal Research Topics:

Phanerozoic calcareous algae

B. Discussion of Research in Progress:

Upper Cretaceous and Eogene calcareous algae from Xinjiang, NW China.

Calcareous algae from Upper Permian reef of Sichuan, SW China.

C. Publications Since 1988:

Xi-nan Mu & Riding R., 1988. Silicification of Permian calcareous algae from Nanjing, China. Geol. Mag. 125:123-139.

Xi-nan Mu & Zhang Yue-e, 1988. Calcareous algae and microproblematica. In: Yu C.M., ed. Devonian and Carboniferous boundary in Nanhiancup, Guilin, China---Aspects and Records: 149-158.

Xi-nan Mu. In press. Fossil Udoteaceae and Gymnocodiaceae. In: Riding, R., ed. Calcareous Algae and Stromatolites. Springer-Verlag.

YIN, PROF. LEIMING -- China, 15th July 1990

A. Fossil Algal Research Topics:

1. Precambrian microfossils

2. Precambrian and early Paleozoic acritarchs

B. Discussion of Research in Progress:

1. Terminal Proterozoic microfossils of the Yangtze platform in China.
2. Terminal Proterozoic large complex acritarchs in China and their ecosystem.
3. Early Paleozoic acritarch assemblages in China.

C. Publications Since 1988:

Yin Leiming, 1990: Microfossils from late Proterozoic manganese ore deposits in western Hunan Province and Eastern Guizhou Province, South China. Science in China, 33:726-733.

Yin Leiming (in martin and Yin Leiming, 1988): Early Ordovician acritarchs from Southern Jilin Province, northeast China. Palaeontology 31:109-127.

Yin Leiming (in Chen Junyun et al., 1988): The recommended Cambrian-Ordovician global boundary stratotype of the Xiaoyangqiao section (Dayangcha, Jilin Province), China. Geol. Mag. 125:415-444.

ZHANG, PROF. ZHONGYING -- China, 27th August 1990

A. Fossil Algal Research Topics:

Blue-green algae, green algae, stromatolites, and Precambrian and Lower Paleozoic acritarchs.

B. Discussion of Research in Progress:

I continue to work on Precambrian microfossils of China and ecological and sedimentary implications of the noctidiurnal growth rhythm of filamentous cyanophytes from the Gaoyuzhuang Formation of Hubei, Province, China. I have recently initiated a study of Lower Ordovician acritarchs of South China, in particular close to the Tremadoc-Arenig Series boundary, and abundant and well-preserved acritarchs have been detected.

C. Publications Since 1988:

Zhang Zhongying. 1988. Longfengshania Du emend.: An earliest record of bryophyte-like fossils. Acta Palaeont. Sin. 27(4): 316-384. (In Chinese, with English abstract)

Zhang Zhongying, Zhao Yinsheng and Li Jinhua. 1988. Micro-fossils from the slightly metamorphic strata of the "Yingshan Group", Dahongshan Mountains, Hubei Province. Acta Micropalaeont. Sin. 5(4): 379-384. (In Chinese, with English abstract.)

Zhang Zhongying and Zhao Yinsheng. 1989. Microfossils from the Gagishi Group, Dahongshan region, northern Hubei Province. Geol. Rev. 35(1): 84-89. (In Chinese, with English abstract).

Wang Rujian and Zhang Zhongying. 1989. Microflora from the Ganjingzhi Formation (Late Precambrian) of southern Liaoning Province. J. Nanjing Univ. 1-2: 180-198 (In Chinese, with English abstract).

Zhang Zhongying. 1989. Yellow rain in China. Sci. Prog., Oxf. 73(3): 301-316.

Zhang Zhongying. Post-burial contraction cracks in Precambrian acritarchs. Kexue Tongbao, 35(20): 1580-1582. (In Chinese).

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Help us keep the address list up to date and accurate! Check your entry for typos, and let us know of any changes in your address or title as soon as you can.

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