



Hunt Institute for Botanical Documentation
5th Floor, Hunt Library
Carnegie Mellon University
4909 Frew Street
Pittsburgh, PA 15213-3890
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org

The Hunt Institute is committed to making its collections accessible for research. We are pleased to offer this digitized item.

Usage guidelines

We have provided this low-resolution, digitized version for research purposes. To inquire about publishing any images from this item, please contact the Institute.

Statement on harmful and offensive content

The Hunt Institute Archives contains hundreds of thousands of pages of historical content, writing and images, created by thousands of individuals connected to the botanical sciences. Due to the wide range of time and social context in which these materials were created, some of the collections contain material that reflect outdated, biased, offensive and possibly violent views, opinions and actions. The Hunt Institute for Botanical Documentation does not endorse the views expressed in these materials, which are inconsistent with our dedication to creating an inclusive, accessible and anti-discriminatory research environment. Archival records are historical documents, and the Hunt Institute keeps such records unaltered to maintain their integrity and to foster accountability for the actions and views of the collections' creators.

Many of the historical collections in the Hunt Institute Archives contain personal correspondence, notes, recollections and opinions, which may contain language, ideas or stereotypes that are offensive or harmful to others. These collections are maintained as records of the individuals involved and do not reflect the views or values of the Hunt Institute for Botanical Documentation or those of Carnegie Mellon University.

About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Northeastern Science Foundation, Inc.

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

15 Third Street
Post Office Box 746
Troy, N.Y. 12181
Tel: (518) 273-3247

30 October, 1987

Dr. Alfred Traverse
Palynological Laboratories
435 Deike Building
University Park, PA 16802

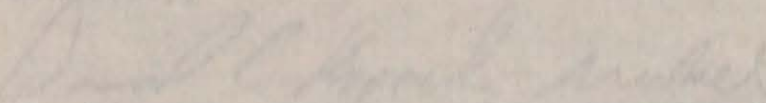
Dr. David C. Kopaska-Merkel
Northeastern Science Foundation
P.O. Box 746
Troy, NY 12181-0746

Dear Dr. Kopaska-Merkel:

The enclosed copy of a letter to Dr. Friedman can also be regarded as to you--Andy Schuyler and I appreciate the samples you both sent us, though we were hoping for an "anthracite" lens.

Best wishes.

Sincerely,



Yours very truly,

Alfred Traverse

AT/et
cc: G. M. Friedman
A. Schuyler

Northeastern Science Foundation, Inc.

A Not-For-Profit Corporation

**Rensselaer Center of Applied Geology
Affiliated with Brooklyn College - CUNY**

Gerald M. Friedman, Ph.D., D.Sc.
President
Peter J. R. Buttner, Ph.D.
Vice President
John E. Sanders, Ph.D., D.Sc.
Secretary
Sue Friedman
Treasurer
Directors
Mordecai Gabriel, Ph.D.
Kenneth G. Johnson, Ph.D.

15 Third Street
Post Office Box 746
Troy, N.Y. 12181-0746
Tel: (518) 273-3247

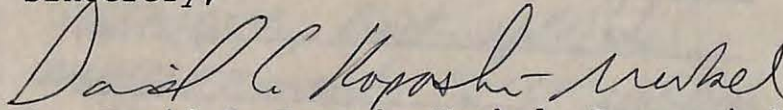
October 11, 1987

Dr. Alfred Traverse
Palynological Laboratories
Deike 435
University Park PA 16802

Dear Dr. Traverse,

This letter concerns a package of Devonian plant material which I have just shipped to you. You should receive it in a few days. The material was collected by me on a field trip led by Dr. Gerald M. Friedman, from the same locality as the plant material Dr. Friedman sent to you on September 28th. We felt that the amount of material he was able to send to you last month might have been insufficient for your purposes, and so took the opportunity to collect some more when we were in the Catskills last week. I hope that this shipment is of value to you. If you require more material, it will be possible to collect more.

Sincerely,



Dr. David C. Kopaska-Merkel, Research Associate

TO AT
DATE 17-VIII-87 TIME 10 A.M.

WHILE YOU WERE OUT

M. Cd ("Tedious") Koppe
Of _____
Phone _____

TELEPHONED PLEASE RETURN CALL
CALLED TO SEE YOU WILL CALL AGAIN
RETURNED YOUR CALL RUSH

MESSAGE Has been carefully
sampled, labelled coal samples
from a Lower Kittanning cor-
relative, but upland
environment, low sulfur
→

Signed _____

The Standard Register Company

October 4, 1967

Mr. Edward F. Koppe
Department of Internal Affairs
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania 17120

Dear Ed:

Thanks for the informative letter of 2 Oct. I met Dr. Cameron--at least, I guess that must be who it was--last spring at Commencement. She had come up to see her field assistant get his degree, and I think his name was Dave, so the whole thing fits together. I'll write her as soon as possible.

Many thanks for the contact and the sundry pieces of information.

I look forward to seeing you when you come.

Yours very truly,

Alfred Traverse
Associate Professor of Geology

AT:kwc

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF INTERNAL AFFAIRS
HARRISBURG 17120

October 2, 1967

Doctor Alfred Traverse
Organic Sediments Laboratory
Deike Building
University Park, Pennsylvania

Dear Al,

Thanks for your letter of September 29, 1967 concerning peat deposits in Pennsylvania. To my knowledge there are no published works covering the aspects of peat you mentioned. However, in the past few years, Dr. Cornelia Cameron, Resources Research Branch, U.S. Geological Survey, Washington, D.C. 20242, has been conducting resource studies on peat covering much of the state.

An initial study of peat throughout the Appalachia area is now in the editorial mill. This study includes the nature; size of bogs, samples, and analyses primarily of existing operations and a few other places in Pa. She has included 12-14 peat deposits from all sections of the state. I have a copy of her rough draft.

Her second study is now nearing completion. This is a very detailed work on 96 deposits in northeastern Pennsylvania. I suspect that several papers will result. Besides her very vigorous and enthusiastic research, she has succeeded in getting cooperation for analyses, borings (from the U.S.B.M.) etc., etc. You really must get to know her.

Her assistant was David E. Schieck who graduated from PSU this spring. (He wrote a paper on peat that must be around the M.I. Dept. someplace.)

I have some available scraps of data on a few bogs which might contain about three million tons in northeastern Pa. These were developed in the course of my duties and, though useful to some

extent, they are not really quotable.

Hope that the above information is useful to you. If you do get in contact with Miss Cameron, you can indicate that I feel she knows more than anyone else about Pennsylvania peat.

Before my next visit to Happy Valley, I'll call ahead in the hope that we can plan to spend some time together. In fact, I've been thinking of making a trip with just that purpose in mind.

Cordially,

Ed

Edwin F. Koppe

September 29, 1967

Mr. E.F. Koppe
Pennsylvania Geological Survey
Harrisburg, Pennsylvania 17120

Dear Ed:

Do you know of any published work (or unpublished but available) on the peat deposits of Pennsylvania? I am especially interested in finding out what are thought to be the reserves and whatever studies there might be of the economic exploitation of the stuff in the state.

I have looked through the Annotated Bibliography already, and it has practically nothing. I thought you might have something yourself or that in your prowling around in the state you might have come across information about this. I suppose that the sort of study I have in mind might be too un-geological to make it into the Annotated Bibliography.

Looking forward to hearing from you and hoping that you can spend a little time with me when you are next in this area, I am

Yours very truly,

Alfred Traverse
Associate Professor of Geology

AT/pk

10-I-76

Поздравлю Вас
и Ваю семью
с Новым годом!

Dear prof. Traverse!
I receive just today the
samples from you and I thank
you very, very much!
Now I am studying samples
from sites 380 - 380A cc. The
results are very interesting, but
I seen only a few samples till
now.

I hope to see you in Moscow
soon. What shall I do to
make your visit to Moscow
possible? Please write.

Sincerely yours

E. Kupina

Koteneva

Поздравляю Вас
и Ваших семью
с Новым годом!

Dear prof. Traverse!
I receive just today the
samples from you and I thank
you very, very much!
Now I am studying samples
from sites 380 & 380A cc. The
results are very interesting, but
I seen only a few samples till
now.

I hope to see you in Moscow
soon. What shall I do to
make your visit to Moscow
possible? Please whright.

Sincerely yours

E. Rejzinger
Korenova
1975—

November 25, 1975

Dr. E. Koreneva
Geol. Inst.
Academy of Sciences, USSR
Pyzhensky Per. d. 7
Moscow Zh-17, USSR 109017

Dear Dr. Koreneva:

The package of samples from the Deep Sea Drilling Project, Leg 42B, is on its way to you air parcel post. Included is a list identifying the samples. The only numbers on the samples themselves are the numbers which appear in the first column on the list.

You will note that the designation "sample too small to sand" appears with a few samples. Because the initial samples given me by the project were so small, we felt that dividing these would result in neither of us getting any results. All other samples were divided exactly in half.

Also please note that these samples do not include those I processed on the ship--the so-called core-catcher samples. There isn't enough left. However, I could (later on) send you slides of most of these samples. Dr. Neprochnov can explain the meaning of the "core", "section", etc.

As I have written Dr. Zaklinskaya, it is very probable that the post-cruise conference will take place in Moscow. If so, I simply must have some time with you. Will you and Dr. Zaklinskaya please let me know what I must do to apply for permission for such a visit. I wrote for permission to visit the VNIGRI labs a full year ahead and still almost didn't get in, so I want to be sure I have done all that is required.

Best wishes for the holiday season ahead.

Yours very truly,

Alfred Traverse
Professor of Palynology

at/et

Hunt Institute for Botanical Documentation

Deep Sea Drilling Project, Leg 42B, May-June, 1975
 Samples collected for palynological studies

file Korshneva

Hole 379A

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
1	1	1	100-102	23 May	
2	1	2	134-136	"	
3	1	4	70-72	"	
4	4	3	54-56	"	
5	4	4	140-142	"	
6	4	5	84-86	"	
7	6	1	69-71	"	
8	6	2	73-75	"	
9	6	6	46-48	"	
10	7	3	17-19	24 May	
11	8	1	20-22	"	
12	8	3	30-32	"	
13	8	4	34-36	"	
14	8	5	38-40	"	
15	8	6	144-146	"	
16	9	3(4?)*	84-86	"	
17	9	3(4?)*	95-97	"	
18	9	1	110-112	"	
19	9	2	87-89	"	
20	9	5	105-107	"	
21	10	1	133-135	"	
22	10	4	90-92	"	
23	10	5	96-98	"	
24	10	6	70-72	"	
25	11	2	93-95	"	
26	11	3	50-52	"	
27	11	4	72-74	"	
28	11	5	15-16	"	sample too small to send
29	11	5	40-41	"	"
30	11	5	50	"	"
31	11	5	56-57	"	
32	11	5	75-76	"	sample too small to send
33	11	5	103-104	"	"

*numbers unclear on original samples

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
34	11	5	123-124	24 May	sample too small to send
35	12	1	65-67	"	
36	12	2	60-62	"	
37	12	3	75-77	"	
38	13	1	98-100	"	
39	13	3	70-72	"	
40	13	4	36-38	"	
41	13	5	70-72	"	
42	13	6	75-77	"	
43	14	1	30-32	"	
44	14	2	90-92	"	
45	14	4	24-26	"	
46	14	5	18-20	"	
47	14	6	18-20	"	
48	15	2	20-22	"	
49	15	3	91-93	"	
50	15	4	48-50	"	
51	15	5	20-22	"	
52	16	1	52-54	"	
53	16	2	95-97	"	
54	16	3	33-34	"	
55	16	4	130-132	"	
56	17	1	80-82	"	
57	18	2	80-82	"	
58	19	1	62-64	"	
59	19	2	108-110	"	
60	19	3	100-102	"	
61	19	4	104-106	"	
62	19	5	95-97	"	
63	19	6	56-58	"	
64	20	3	98-100	"	
65	21	2	60-62	24 May	
66	21	4	17-19	"	
67	21	6	27-29	"	
68	22	2	20-22	"	
69	22	4	72-74	"	

Leg 42B paly. samples, Hole 379A

-3-

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
70	22	6	36-38	24 May	
71	23	2	30-32	"	
72	23	6	23-25	"	
73	24	2	26-28	25 May	
74	24	4	109-110	"	sample too small to send
75	24	6	51-53	"	
76	25	1	138-139	"	sample too small to send
77	25	3	135-136	"	"
78	25	5	85-87	"	
79	25	7	38-40	"	
80	26	2	60-62	"	
81	26	4	74-76	"	
82	27	3	10-12	"	
83	28	2	65-67	"	
84	28	4	78-80	"	
85	28	6	121-123	"	
86	29	1	56-58	"	
87	29	3	142-144	"	
88	30	2	30-32	"	
89	31	1	86-88	"	
90	31	3	88-90	"	
91	31	5	70-72	"	
92	34	2	64-66	"	
93	34	4	97-99	"	
94	34	6	87-89	"	
95	35	1	117-119	"	
96	35	3	112-114	"	
97	35	5	119-121	"	
98	36	2	35-37	"	
99	36	4	86-88	"	
100	37	1	68-70	"	
101	37	3	84-86	"	
102	38	2	15-17	"	
103	38	4	100-102	"	

Traverse #	sample #	core #	section #	depth of sample in cm.	collection date	notes
104	38	6	53-55	25 May		
105	39	3	95-97			
106	39	5	88-90			
107	40	2	116-118			
108	40	4	8-10			
109	40	6	102-104			
110	42	3	134-136			
111	42	5	41-43			
112	43	1	50-52			
113	43	3	112-114			
114	43	5	8-10			
115	45	2	84-86	26 May		
116	45	4	81-83			
117	45	6	31-33			
118	46	2	9-11			
119	46	4	80-82			
120	46	6	6-8			
121	47	2	40-42			
122	47	4	122-124			
123	47	6	96-98			
124	48	2	88-90			
125	48	4	59-61			
126	48	6	91-93			
127	49	1	65-67			
128	49	5	73-75			
129	50	3	95-97	26 May		
130	50	5	52-54			
131	51	2	9-11			
132	51	6	80-82			
133	52	1	76-78			
134	54	2	35-37			
134a	54	4	33-35			
135	54	6	69-71			
136	55	2	82-84			
137	56	1	42-44			
138	57	5	136-138			

Leg 42B paly. samples, Hole 379A

-5-

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
139	58	2	81-83	26 May	
140	58	4	23-25	"	
141	59	1	102-104	"	
142	59	3	83-95*	"	
143	59	5	60-62	"	
144	60	2	31-33	"	
145	60	4	32-34	"	
146	60	4	92-94	"	
147	62	4	31-33	"	
148	64	1	95-97	27 May	
149	64	3	65-67	"	
150	65	2	104-106	"	
151	65	4	94-96	"	
152	65	6	104-106	"	
153	66	2	60-62	"	
154	66	4	128-130	"	
155	67	4	50-52	"	
156	68	3	107-109	"	
157	68	5	107-109	"	

*Obvious mistake on original sample. Must be either 83-85 or 93-95.

Leg 42B paly. samples, Hole 379B

158	6	4	76-78	27 May	
159	6	5	81-83	28 May	
160	42	1	96-98	27 May	

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
161	1	1	140-142	30 May	
162	1	2	7-8	"	sample too small to send
163	1	2	31-32	"	"
164	1	2	38-39	"	"
165	1	2	48-49	"	"
166	1	2	105-106	"	"
167	1	2	20-21	"	"
168	1	3	88-90	"	
169	1	5	67-69	"	
170	1	6	50-52	"	
171	2	1	104-106	"	
172	2	2	75-77	"	
173	4	1	9-11	"	
174	4	2	87-89	"	
175	4	3	48-50	"	
176	4	4	67-69	"	
177	5	1	82-84	"	
178	5	2	96-98	"	
179	5	3	86-89	"	
180	5	4	55-56	"	sample too small to send
181	5	4	72-73	"	"
182	6	1	130-132	"	
183	6	4	120-122	"	
184	7	2	58-59	"	
185	7	3	88-90	"	
186	8	1	76-78	"	
187	9	1	55-56	"	
188	10	2	23-25	"	
189	10	4	94-96	"	
190	12	1	133-135	"	
191	13	1	31-33	"	
192	13	3	39-40	"	
193	13	5	67-69	"	
194	13	6	87-89	"	
195	15	1	80-82	31 May	
196	15	4	2-4	"	

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
197	16	1	96-98	31 May	
198	17	2	74-76	"	
199	17	4	103-105	"	
200	18	4	103-105	"	
201	18	5	128-130	"	
202	18	6	61-63	"	
203	19	1	129-131	"	
204	19	2	58-60	"	
205	19	6	142-144	"	
206	20	1	108-110	"	
207	20	2	76-78	"	
208	21	3	113-115	"	
209	21	4	75-77	"	
210	21	5	55-57	"	
211	21	6	72-74	"	sample too small to send
212	23	2	30-32	"	
213	22*	3	60-62	"	
214	23	6	18-20	"	
215	24	1	112-114	"	
216	24	2	89-91	"	
217	24	3	40-42	"	
218	24	4	30-32	"	
219	24	5	31-32	"	
220	24	6	30-32	"	
221	27	3	32-34	"	
222	28	1	72-74	"	
223	30	1	75-77	"	
224	30	2	100-102	"	
225	32	3	94-96	"	
226	32	4	101-103	"	
226a	32	5	62-64	"	
227	33	3	103-105	"	

*To maintain correct core sequence, this sample should appear before sample #212.

Leg 42B paly. samples, Hole 380

-8-

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
228	35	1	126-128	31 May	
229	35	2	28-30	"	
230	35	3	45-47	"	
231	35	4	64-66	"	
232	36	2	48-50	"	
233	36	3	78-80	"	
234	37	1	88-90	1 June	
235	37	2	42-44	"	
236	38	2	54-56	"	
237	39	1	108-110	"	
238	39	2	45-47	"	
239	39	3	39-41	"	
240	39	5	96-98	"	
241	39	6	93-94	"	sample too small to send
242	40	1	105-107	"	

Leg 42B paly. samples, Hole 380A

243	2	6	90-92	2 June	
244	3	2	99-101	"	
245	3	4	71-73	"	
246	4	2	68-70	"	sample too small to send
247	4	3	121-123	"	
248	4	4	70-72	"	
249	4	5	78-80	"	
250	5	1	47-48	"	
251	5	3	87-89	"	
252	5	4	77-79	"	
253	5	5	33-35	"	
254	6	3	84-86	"	
255	6	4	51-53	"	
256	8	3	57-58	"	
257	8	4	45-47	"	
258	9	2	79-81	"	

Leg 42B paly. samples, Hole 380A

-9-

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
259	9	3	96-98	2 June	
260	9	5	98-100	"	
261	9	6	52-53	"	
262	10	2	37-39	"	
263	11	2	33-35	"	
264	11	3	55-57	"	
265	11	6	65-67	"	
266	12	2	49-51	"	
267	12	4	31-33	"	
268	12	6	65-67	"	
269	13	1	71-73	"	
270	14	2	95-97	"	
271	14	3	80-82	"	
272	14	6	90-92	"	
273	15	2	93-95	"	
274	15	3	62-64	"	
275	17	1	28-30	3 June	
276	17	3	72-74	"	
277	18	2	78-80	"	
278	18	3	69-70	"	
279	19	3	40-42	"	
280	19	4	64-66	"	sample too small to send
281	20	2	58-60	"	
282	20	4	44-46	"	
283	20	5	47-49	"	
284	22	3	19-21	"	
285	23	1	44-46	"	
286	23	3	39-41	"	
287	23	4	61-63	"	
288	23	5	40-42	"	
289	25	2	138-140	"	
290	25	3	49-50	"	
291	26	2	93-94	"	
292	27	6	44-46	"	
293	29	6	37-39	"	

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
294	30	1	114-115	3 June	
295	30	2	63-65	"	
296	31	1	120-122	"	
297	32	6	31-32	"	
298	34	3	44-46	"	
299	35	1	124-125	"	
300	35	4	52-54	"	
301	36	2	55-57	"	
302	37	3	92-94	4 June	
303	37	5	51-53	"	
304	37	6	50-52	"	
305	38	3	58-60	"	
306	38	5	42-44	"	
307	38	6	53-55	"	
308	40	4	35-37	"	
309	40	5	52-53	"	
310	41	6	88-90	"	sample too small to send
311	41	4	95-97	"	
312	41	6	41-43	"	
313	42	4	49-51	"	
314	43	1	72-73	"	
315	43	3	102-104	"	
316	44	2	64-66	"	
317	44	4	79-81	"	sample too small to send
318	45	1	58-60	"	
319	45	3	77-79	"	
320	45	5	60-62	"	
321	46	2	70-72	"	
322	46	3	70-72	"	
323	46	4	70-72	"	
324	46	5	70-72	"	
325	47	1	108-110	"	sample too small to send
326	47	2	108-110	"	
327	47	3	108-110	"	
328	48	4	15-17	"	
329	48	5	94-96	"	

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
330	48	6	56-58	4 June	
331	49	4	72-74	"	
332	49	5	22-24	"	
333	50	2	48-50	"	
334	51	3	60-62	"	
335	51	4	62-64	"	
336	51	6	62-64	"	
337	52	2	76-78	5 June	
338	52	4	38-40	"	
339	52	6	88-90	"	
340	53	2	62-64	"	
341	53	3	73-75	"	
342	54	1	52-54	"	
343	54	2	114-116	"	
344	55	3	64-66	"	
345	55	4	68-70	"	
346	56	1	70-72	"	sample too small to send
347	56	3	50-52	"	
348	56	4	132-134	"	
349	57	1	22-24	"	
350	57	2	112-114	"	
351	57	3	75-77	"	
352	60	1	90-92	"	
353	60	1	96-98	"	sample too small to send
354	60	4	55-57	"	
355	60	3	72-74	"	
356	62	2	112-114	"	
357	63	3	40-42	"	
358	64	2	90-92	"	
359	64	4	110-112	"	
360	65	1	63-65	"	
361	65	2	38-40	"	
362	66	1	50-52	"	
363	67	1	75-77	6 June	
364	69	3	60-62	"	
365	69	4	46-48	"	

Leg 42B paly. samples, Hole 380A

-12-

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
366	70	2	100-102	6 June	
367	70	5	100-102	"	
368	71	2	24-26	"	
369	71	3	68-70	"	
370	73	1	92-94	"	
371	73	2	50-52	"	
372	74	2	50-52	"	
373	75	2	50-52	"	
374	76	2	70-72	"	
375	76	4	98-100	"	
376	77	2	50-52	"	
377	79	1	70-72	"	
378	79	2	60-62	"	
379	80	1	135-137	7 June	

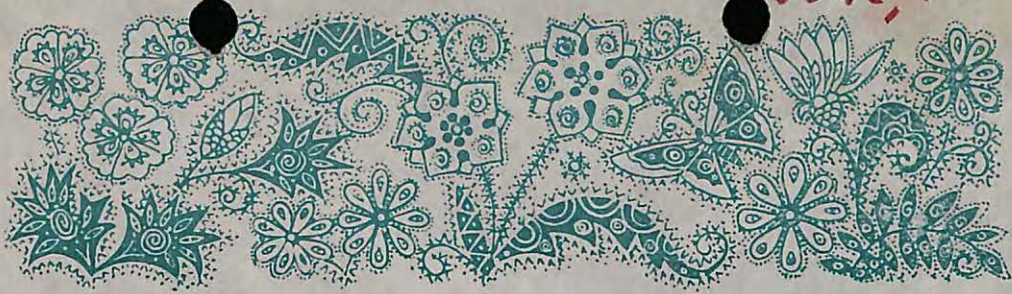
Leg 42B paly. samples, Hole 381

380	1	1	60-62	8 June	
381	1	2	70-72	"	
382	1	3	70-72	"	
383	2	1	70-72	"	
384	2	2	70-72	"	
385	3	1	70-72	"	
386	3	3	70-72	"	
387	4	2	80-82	"	
388	4	3	70-72	"	
389	5	2	80-82	"	
390	5	3	70-72	"	
391	5	4	70-72	"	
392	6	2	70-72	"	
393	6	3	70-72	"	
394	6	5	82-84	"	
395	7	3	70-72	"	
396	7	4	70-72	"	
397	8	1	70-72	"	
398	8	3	70-72	"	

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
399	8	5	80-82	8 June	
400	9	1	90-92	"	
401	9	3	80-82	"	
402	9	5	75-77	"	
403	10	1	70-72	"	
404	10	4	80-82	"	
405	10	6	70-72	"	
406	11	2	70-72	"	
407	12	1	70-72	"	
408	12	2	70-72	"	
409	12	5	70-72	"	
410	13	3	70-72	"	
411	14	1	72-74	"	
412	14	3	70-72	"	
413	14	5	70-72	"	
414	15	5	70-72	"	
415	15	6	90-92	"	
416	16	4	70-72	"	
417	16	5	70-72	"	
418	16	6	110-112	"	
419	17	3	70-72	"	
420	17	6	70-72	"	
421	18	2	50-52	"	
422	18	5	70-72	"	
423	19	1	70-72	"	
424	19	2	105-107	"	
425	19	3	62-64	"	
426	19	5	78-80	"	
427	19	6	80-82	"	
428	22	1	70-72	9 June	
429	22	3	70-72	"	
430	23	3	70-72	"	
431	23	4	70-72	"	
432	24	1	70-72	"	
433	25	2	70-72	"	
434	25	4	80-82	"	

Traverse sample #	core #	section #	depth of sample in cm.	collection date	notes
435	26	3	100-102	9 June	
436	26	5	80-82	"	
437	27	3	102-104	"	
438	28	3	35-37	"	Traverse
439	28	5	52-54	"	
440	29	1	114-116	"	
441	29	2	28-30	"	
442	29	4	60-62	"	
443	29	5	26-28	"	
444	29	6	50-52	"	
445	30	2	132-134	"	
446	30	3	42-44	"	
447	31	2	80-82	"	
448	31	3	38-40	"	
449	32	1	55-57	"	
450	32	2	68-70	"	
451	33	2	70-72	"	
452	33	4	78-80	"	
453	34	3	68-70	"	
454	34	5	79-81	"	
455	35	2	70-72	"	
456	35	5	57-59	"	
457	36	2	50-52	"	
458	37	2	112-114	"	
459	37	5	110-112	"	
460	48	2	30-32	10 June	
461	48	4	20-22	"	
462	48	6	122-124	"	
463	49	1	70-72	"	
464	49	3	128-130	"	
465	49	5	97-99	"	
466	51	3	90-92	"	
467	51	5	82-84	"	
468	52	2	70-72	"	
469	53	3	108-110	"	
470	54	2	55-57	"	
471	54	6	113-115	"	

5 June, 75



Dear prof. Traverso,

I got your letter
of 15 May, thank you!
on 15 May, sincerely!

I certainly will meet you
at the airport on 9 June. Can I
bring you a flower? How will
you know me before meeting?

In Leningrad at the Botanical
Congress will be Prof.
Kornilov's congress of
Zaklinskaya, I will be there
to see you and to see
you will be there to see
you will be there to see

Know me by the name of
Kornilov's congress of
Zaklinskaya, I will be there
to see you and to see
you will be there to see

in which you meet with
Kornilov's congress of
Zaklinskaya, I will be there
to see you and to see
you will be there to see

Until early meeting in
Moscow & Korotkova
Korenova
1975.30.30. Your permission and mine in Russian.

May 13, 1975

Dr. E. Koreneva
Geological Institute
Academy of Science of the USSR
Pyzhevskii Per., D.7
109017, Moscow, zh-17, USSR

Dear Dr. Koreneva:

Thankyou so much for yours of 23 April. I wonder what took mine of 4 February so long--it must have been surface mail by mistake, I suppose. I really was beginning to worry whether I would hear from you before I left for the Black Sea--I leave a week from this coming Sunday to be gone a month on the coring trip about which you know.

I am very glad that you are willing to see me following the International Botanical Congress in July. I have not planned to attend one of the field trips after the Congress because I would rather spend the time available to visit your laboratory and also possibly to visit a colleague or two in Prague and other places on the way home. I have not received any formal permission to visit you, whereas the people at VNIGRI in Leningrad provided me with a rather formal invitation; not that I need it as long as I am welcome, it makes no difference to me. I do plan to arrive in Moscow on July 9 at 10:00 a.m. from Leningrad on Aeroflot 2432. I have a reservation at a Moscow hotel, but I cannot find the exact information at the place where I am as I dictate this letter. Should I attempt to contact you through the Geological Institute after my arrival in Moscow?--or will somebody from your lab be willing to meet me at the airport, or how should we arrange it? I will return here from the Black Sea for about a week in late June before leaving for Leningrad, so there would be time for a message from you to reach me before I leave.

I also look forward to cooperative work on material from the Black Sea and think our visit in July should be interesting, useful, and mutually enjoyable! I do appreciate your expression of sympathy for the idea.

Page 2

sympaIhamflookingforward to hearing from you about the exact
arrangements for July 9 and also very much anticipating our getting
together at your labofatory, I am

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/vsi

Fidelity Orion Skin
100% Cotton
Gibbs



109017, Москва, Ж-17
 Пыжевский пер., д. 7
 ОРДЕНА ТРУДОВОГО
 КРАСНОГО ЗНАМЕНИ
 ГЕОЛОГИЧЕСКИЙ ИНСТИТУТ
 АКАДЕМИИ НАУК СССР



23 April 1975.

Dear prof. Traverse,

I have received a few yours letters
 from 4 February and 4 April in the same
 day, 22 April.

I hope to see you in July in Moscow.

I think that our discuss have to be
 very useful.

I want very much to get some
 samples from sites in Black Sea, and
 I think that our joint investigation
 would give many interesting for
 stratigraphy, paleogeography and history
 of plants this region.

Write me, please, when do you
 think to be in Moscow? Would you
 take part in excursion after congress
 or not?

yours sincerely

E. Kopeckiy

July 9
 am m.
 10 00 a.m.
 Aerodrom
 2432

April 4, 1975

Dr. Helen Koreneva
Geological Institute
Academy of Sciences of USSR
Pyzevsky 7
Moscow, USSR

Dear Dr. Koreneva:

I have been in the hospital for a couple of weeks with knee surgery (not serious, just time-consuming). I believe I acknowledged your manuscript materials, etc., from the hospital-- I intended to. I also had in mind mentioning that after the International Botanical Congress in Leningrad in July I would like to visit your laboratory in Moscow--possible? I am going to be on the Glomar Challenger in the Black Sea in May-June, and we would perhaps have things to discuss. I would, of course, also enjoy seeing the famous "Geol. Inst."--could you get me permission or tell me how to do so?

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/vsi

February 4, 1975

Dr. E.V. Koreneva
Geol. Inst.
Academy of Sciences of USSR
Pyzevsky 7
Moscow, USSR

Dear Dr. Koreneva:

Thankyou so much for your nice New Year's greeting and the enclosed material from your Black Sea work. You need not apologize for writing in;Russian--I have been studying the language for several years and can read it without difficulty (with some use of a dictionary!). Speaking is another story--I have had no opportunity to practice!

I am hoping to attend the International Botanical Congress in Leningrad in July. Perhaps I should plan to visit your laboratory in Moscow while in the USSR?--whom should I write for permission? We could discuss "where we go from here" in Black Sea palynology.

Your plates were of special interest--many of some old friends I had from my core, some different things. I have a dozen other cores processed but must find time to do the microscopy!

Looking forward to hearing from you and with best wishes, I am

Yours veeey truly,

Alfred Traverse
Professor of Palynology

AT/vsi

THE PENNSYLVANIA STATE UNIVERSITY

513 DEIKE BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Earth and Mineral Sciences
Coal Research Section

Area Code 814
865-6544

August 8, 1974

Dr. Helen Koreneva
Geological Institute
Academy of Sciences of USSR
Pyzevsky 7
Moscow, USSR

Dear Dr. Koreneva:

Thank you so much for the book on the palynology of the Holocene, from the proceedings of the Third International Palynological Conference. I am really delighted to have this very useful book. I now read Russian reasonably well and hence will be able to make full use of the publication. It was of course no surprise to me to hear of your interest in the Black Sea from our mutual friend, Dave Ross, and I am grateful to both of you for seeing to it that I got a copy of this book and for hearing about your work. I of course followed your previous publications on marine sediments and have often quoted them in my lectures. I do hope it will be possible for us to meet one day and to cooperate on Black Sea investigations. Perhaps I can meet you in connection with the International Botanical Conference in Leningrad next year, if I should be so fortunate as to secure funding for this trip.

Thanks again for the book!

Yours very truly,

Alfred Traverse
Professor of Palynology

AT:1sw



PLANT PATHOLOGY HERBARIUM
CORNELL UNIVERSITY
ITHACA, NEW YORK 14850

Xerox 20X
NEW YORK STATE COLLEGE OF AGRICULTURE
A CONTRACT COLLEGE OF THE STATE UNIVERSITY

16 March 1971

Dr. E. C. Voss
Secretary, Editorial Committee
Nomenclature Section
International Botanical Congress
University Herbarium
University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Voss:

One of the members of the Mycological Society of America has referred to me, as Chairman of the Society's Committee on Nomenclature, a question as to whether two similar names are sufficiently alike to be considered homonyms or not.

It seems to me that though both names are of fungi, and that the question might well be referred to the Committee on Fungi and Lichens, the problem is one that goes beyond the general competence of the members of that committee (of which I am a member) as well as of the Mycological Society's committee, and thus I would like to refer it to the Editorial Committee of the Congress for their opinion.

The names involved are:

Stypella Möller, Protobasidiomyceten p. 75, 1895.

Typus: *Stypella minor* Möller, Protobasidiomyceten p. 77, 1895.

Stipella Léger & Gauthier, C. R. Acad. Sci. Paris 194: 2263. 1932.

Typus: *Stipella vigilans* Léger & Gauthier, C.R.Acad. Sci. Paris 194: 2263. 1932.

Stypella is a genus of the Tremellales (Basidiomycetes), and *Stipella* a genus of the Trichomycetes.

Any help your Committee can offer us on this point will be deeply appreciated.

Sincerely,

Richard P. Korf
Professor of Mycology

rpk/me

cc: R. W. Lichtwardt

File!
Int. Comm. Fossil
Plant Nomenclature

To the members of the General Committee:

In the attached communication, Dr. R. P. Korf requests an opinion (which the General Committee -- not the Editorial Committee -- is authorized to give) as to whether the generic names Stypella and Stipella, applied to two very different groups of fungi, are sufficiently alike to be considered homonyms.

I have examined the original publication of both names and find no statements as to their derivation. One is presumably derived through the Greek and the other through the Latin. Stipella is an intestinal parasite in insect larvae; Stypella is a "jelly fungus".

Please return to me the extra copy of this letter with an indication of your opinion by June 15, 1971.

Sincerely yours,

Edward G. Voss,
Secretary, General Committee

Herbarium, North University Bldg.
The University of Michigan
Ann Arbor, Michigan 48104
U.S.A.

April 1, 1971

- ✓ a. The names Stypella and Stipella are sufficiently alike to be confused and should be treated as variants under Art. 75.
- b. The names Stypella and Stipella should not be treated as variants under Art. 75.

Reynold Trower

AT

DATE Mar. 1 TIME 11:30
1985

WHILE YOU WERE OUT

M. Kornfeld Sty

of Texaco - New Orleans

Phone 504-595-1044

400 Poydras St. New Orleans 70121

TELEPHONED PLEASE RETURN CALL

Mail: P.O. Box 60252, N.O. LA, 70160

CALLED TO SEE YOU WILL CALL AGAIN

RETURNED YOUR CALL RUSH

MESSAGE Re: trip to

New Orleans

Holiday Inn Loop Plaza

Poydras St. (Across from

Texaco)
Orleans Business Service

Signed Judith

The Standard Register Company

MESSAGE

Galatris - Sanford

Breunars

"Court of the Two Sisters"

April 17.

Signed _____

The Standard Register Company

February 19, 1959

Dr. Louis S. Kornicker
Institute of Marine Science
Port Aransas, Texas

Dear Lou:

In going through my notes on the visit I made to Port Aransas, I came across a rather cryptic bit with reference to you. One item seems to be to send you a reference to the comparison between copepod eggs and the so-called hystrichosphaerids. This is: Deflandre, G., Le Probleme des Hystrichospheres, Bulletin de l'Institut Oceanographique (Monaca), No. 918, 1 October, 1947. Pages 8-9 give the previous history of the suggestion that hystrichosphaerids are copepod eggs.

You asked me about Shell fellowships. I find that the best information I can give you is to write to Shell Companies Foundation, Inc., 50 West 50th Street, New York 20, New York, and ask them directly whatever it is that you would like to know about fellowships. I have no influence with them and chances are you would get as much information as fast by dealing directly with them as by having me act as intermediary.

I have the feeling there was something else. If you still are interested in whatever it was, will you elucidate?

Good to meet you in Port Aransas. See you later. Best wishes!

Very truly yours,


Alfred Traverse

AT:mpd

Shell Development Company
Exploration and Production Research Division

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

I N T E R O F F I C E C O R R E S P O N D E N C E

Date: 23 May, 1988

From: A. Traverse, Professor of Palynology, 435 Deike

To: D. A. Koss, Professor of Metallurgy, 208 Steidle

Re: new plus-minus grading standards

John Cahir tells me that you are the Graduate Council person to whom I should address a complaint I took to him. I object very strenuously that the plus-minus grades do not apply to graduate students. In 400-level courses this results in graduate students being awarded an "A" for a numerical grade that gets an undergrad an "A-", a "B" instead of "B-". (This happened in my 400 class last semester.) This is not equitable, is not a day's wages for a day's work, etc. Indeed, I suspect a litigation-minded undergrad could get relief in a court of law, which is a matter worth thinking about!

I also object that the plus-minus system is not across-the-board (A+, C-, etc.), but that is another matter.

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802
Phone: (814)863-3419; Fax: 814-863-7823

30 December, 1992

Dr. Warren L. Kovach
Kovach Computing Services
85 Nant-y-Felin
Pentraeth, Anglesey
LL75 8UY Wales, UK

Dear Warren:

Thanks for yours of 9 December, and Happy 1993!

In answer to your question about the book, I can only say that we keep trying to light some fires in Cambridge. The responsible woman called the other day to say that they really ARE getting down to cases. We have been getting one completed chapter after their work about every two-three weeks, much too slow. They promise to get on with it, and I note when I came in today that there is indeed a largish package from them that must have come in when this place shut down on 23 Dec. We'll get at that as soon as our holiday guests have all left (tomorrow). That's all I can tell you. Woe!

I hope your new venture goes well. Must be pretty scary. On the basis of how well your multivariate package worked for my students, you would certainly get my business, if I ever had any money for such.

All the best.

Yours very truly,

Alfred Traverse



Kovach Computing Services/
C/wasanaethau Cyfrifiadureg Kovach

09 December 1992

Dr. Al Traverse
Dept. of Geosciences
Penn. State University
University Park, PA 16802 USA

Dear Al,

I hope things are going well for you. I also hope that things are coming along well with the sedimentation of organic particles volume! Any idea of when we will see page proofs?

I'm writing to let you know about my new address, which is listed below. All future correspondence about our paper should be sent to me at this address.

My contract at Aber runs out at the end of this month, and since there is no sign of the once promised permanent position here, I have decided to go off in a new direction and set up my own computer company. I'll be further developing my *MVSP* program as well as working on some new programs. I'll also be doing consulting, particularly in numerical methods for the oil companies and conservation organisations, as well as training and writing for computer magazines. I'm still planning on keeping in touch with what is going on in palaeobotany, however, and keeping involved with projects in which I can offer the data analysis and interpretation side of things.

If you ever have any needs for computer programming or data analysis be sure to keep me in mind!

Best wishes,

Dr. Warren L. Kovach

Professor Alfred Traverse
The Pennsylvania State University
Department of Geosciences
Palynological Laboratories
435 Deike Building
University Park, PA 16802
USA

D. J. Batten
Institute of Earth Studies
UCW - Aberystwyth
University of Wales
Aberystwyth SY23 3DB, UK
Telephone: (0970) 622573
Fax: (0970) 622659

12.3.92

Dear Alfred,

Both Warren and I are getting somewhat concerned that we have still not received proofs of our paper intended for THE BOOK. They were supposed to have been sent to authors last August, with publication expected before then and of 1991!

I would be grateful if you could let me know when our work is going to appear in print. I hope it will be soon. Many thanks.

Best wishes

DJB

DJB

FAX: 814-863-7823

*Answered by
general letter to
author of 20.11.92*

TO: Al Traverse
Palynological Laboratory
Department of Geosciences
Pennsylvania State University

FROM: Warren Kovach
Institute of Earth Studies
University College of Wales
FAX: (0970) 622659

DATE: 3 September 1991

Dear Al,

I just received your fax yesterday (I've been away doing field work in Scotland). The second problem with MVSP, regarding the installation program not working, was reported to me just after I sent you your copy and has been fixed. I have just discovered the cause of the problem with the "heap overflow error" (it is due to a change in the latest version of the software I use to produce MVSP; this is why it hasn't appeared earlier) and hope to be able to fix it within the next day or so.

I haven't been able to repeat the first problem, where the program "hangs" when running the similarities and distances on FOOD.MVS. These problems are often obscure and related to the actual hardware or software installed. Does this problem occur on the other two machines you have tried the program on?

Once I have fixed these bugs I will send you disks with the working versions of the program.

Best wishes,

Warren

TO: >FAX: 8148637823

Al Traverse
Palynological Laboratory
Department of Geosciences
Pennsylvania State University

The Pennsylvania State University
Department of Geosciences
503 Deike Building
(814) 863-7823 (FAX)
Date: 9 Sept. 91

FROM: Warren Kovach
Institute of Earth Studies
University College of Wales
FAX: (0970) 622659

DATE: 9 September 1991

Dear Al,

The fixed version of MVSP is now in the post to you. As I mentioned before, the "heap overflow error" that you reported, along with some other problems, were caused by a change in the new version of the software I use to create MVSP that affected how MVSP uses the computer memory. It should be completely fixed now (I hope!). Thanks for reporting these problems.

Has the Sedimentation of Organic Particles book gone to the printers yet? We are looking forward to seeing that out.

Best wishes,

Warren

Message:

Dear Warren: Thank you for your prompt response to our MVSP "bug" query. A graduate student of mine, Dale Lewis, encountered the MVSP "heap overflow error" before using it on some of his sedimentation data. He told me the "bug" of the program was related to the installation problem, and we discussed it in detail. I am glad you were able to work with the program. The "bug" was particularly "funny" with only the name of the installation procedure (i.e., "INSTALL") appearing at the top of the screen. I am glad to hear that you were able to solve the problem and that the program is working for you.

Warren Kovach
Sept. 9, 1991

PENNSTATE



The Pennsylvania State University
Department of Geosciences
503 Deike Building
(814) 863-7823 [FAX]
Date: 3 Sept., '91

Marked here if urgent reply is requested.

Fax Transmission to:

Name: Dr. Warren Kovach
Company/Institution: University College of Wales
Department: Institute of Earth Studies
Fax Number: 44-0970 622659
Phone Number: _____

Transmission from:

Name: Dr. Alfred Traverse
Phone Number: 814-863-3419

Total Number of Pages (Including Cover Page): 1

Message:

Dear Warren: Thank you for your prompt response to our MVSP "bugs" query. A graduate student of mine, Dale Beeson, encountered the software roadblocks while testing MVSP before using it on some of his own palynological data. He believes that the "hanging up" of the program may be related to the installation problem. This particular problem was encountered on 2 of 4 machines tested, both with 386 processors. The video monitor essentially "freezes" with only the name of the analytical procedure (i.e. distances and similarities) displayed at the top of the monitor. Please let us know if there is additional information we can provide you to expedite correction of the software problem.

All the best.

AL (Dale actually wrote this.)

*If any portion of this transmission is unclear, please call 814-863-3419.



A MultiVariate Statistical Package

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, SY23 3DB
GREAT BRITAIN

State University
Department of Geosciences
503 Deike Building
(814) 863-7823 (FAX)

Date: 26 July 1991

I N V O I C E

FAX TRANSMISSION

Date: 27 July 1991

Program User:

Dr. A. Traverse
Department of Geosciences
Pennsylvania State University
University Park, PA 16802 USA

Quantity	Description	Unit	Total
1	MVSP Plus 2.0 computer program	75.00	75.00
		Total:	US\$75.00

Please submit payment to above address
Make cheques payable to "Warren Kovach"

TRAVSPORE, INC.
R.D. 2, BOX 390
HUNTINGDON, PA 16652-9209

371

4 Sept. 1991 60-617/313

PAY TO THE ORDER OF Warren Kovach \$ 75.00

Seventy-five and no/100 DOLLARS

Unitas National Bank
501 PENN STREET
HUNTINGDON, PENNSYLVANIA 16652

MEMO MVSP prog. Alexander Traverse

⑆031306171⑆ 05923074⑆03 0371

SAFETY PAPER

PENNSTATE



The Pennsylvania State University
Department of Geosciences
503 Deike Building
(814) 863-7823 [FAX]

Date: 26 July 1991

FAX TRANSMISSION

Marked here if urgent reply is requested.

Transmission to:

Name: B. Warren L. Kovach

Company/Institution: University College of Wales

Department: Institute of Earth Studies

Fax Number: 0970 622659

Phone Number: 0970 623111

Transmission from:

(AC want 44 prof., and left
off 0)

Name: Alfred Traverse

Phone Number: 814-863-3419

Total Number of Pages (Including Cover Page): 1

Message:

Could you send me airmail one of the
MVSP Plus[•] packages, with the manual
etc.? We use 3 1/2 inch disks on
our PC (a 386/25 hardware). Let me
know if the hangup involves more \$. I'll
pay from the bill you enclose. Best,
AL

*If any portion of this transmission is unclear, please call _____.

ORDER FORM

Name: _____
Address: _____

City: _____
State/Province: _____
Country: _____
Postcode: _____
Tel. _____
Email: _____

Please check version required:

- MVSP Shareware*¹ (£5 or \$10)
 *MVSP Plus*² (£40 or \$75)

Please check disk format desired:

- 5 ¼ in. (360k)
 3 ½ in. (720k)

¹Limited to 100x100 matrices, abbreviated manual on disk

²750x750 matrices, printed manual, 80x87 math chip support

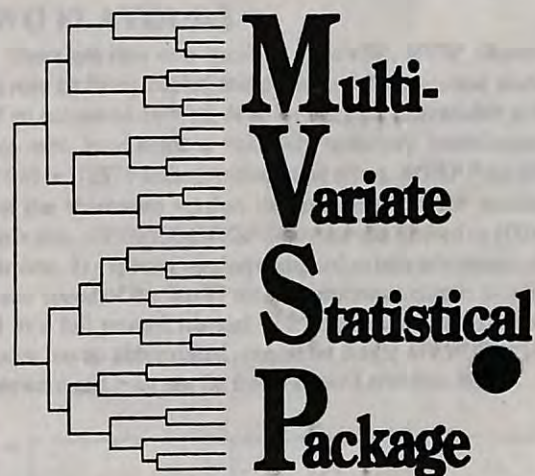
Payment may be made in the form of a personal cheque/money order payable to Warren L. Kovach. Purchase orders will only be accepted for *MVSP Plus*. Payment must be in British pounds or U.S. dollars. Prices listed above include shipping and handling.

Please return order form to:

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales SY23 3DB, U.K.

FEATURES OF MVSP Plus 2.0

- o Menu-driven, easy to use
- o Numerous default values that can be changed and saved, to be reinstated in future analysis sessions
- o Virtual memory scheme that allows large data matrices to be analysed, limited only by the amount of disk space (*MVSP Shareware* limited to 100x100)
- o Built in spreadsheet-like data editor; makes entering and editing *MVSP* data files a breeze
- o Data matrix manipulation: data may be transposed, transformed (transformations available include logarithms to base 10, e, and 2, square root, and Aitchison's logratio for percentage data), converted to percentages, proportions, octave class scale, or range through format for stratigraphic studies, and rows and columns may be selected for deletion
- o Default values may be defined and saved for the following features: screen colors, file extensions, default data file directory, output format, including column width and decimal places of results, page width, printer setup codes, and format of ordination scatterplots, either text or graphic based (CGA, EGA, VGA, Hercules, and AT&T/Compaq 640x400 modes supported)
- o Principal Components Analysis, with the following options: correlation or covariance matrix, centered or uncentered analysis, user defined minimum eigenvalues, including Kaiser's and Jolliffe's rules for average eigenvalues, user defined accuracy level
- o Principal Coordinates Analysis, performed with the following options: use any type of input similarity matrix, user defined minimum eigenvalues and accuracy level
- o Correspondence Analysis, with the following options: weighting of rare or common taxa and scaling to percentages, user defined minimum eigenvalues and accuracy level
- o Eighteen different similarity and distance measures, including Euclidean, squared Euclidean, standardized Euclidean, cosine theta (or normalized Euclidean), Manhattan metric, Canaberra metric, chord, chi-square, average, and mean character difference distances; Pearson product moment correlation and Spearman rank order correlation coefficients; percent similarity and Gower's general similarity coefficient; Sorensen's, Jaccard's, simple matching, and Yule binary coefficients
- o Cluster analysis, with the following options: seven strategies (UPGMA, WPGMA, median, centroid, nearest and farthest neighbor, and minimum variance), constrained clustering in which the input order is maintained (e.g. stratigraphic studies), randomized input order, drawing of dendrograms on plotters, dot matrix and Postscript laser printers using Chris Meachem's PLOTGRAM
- o Diversity indices, with the following options: Simpson's, Shannon's, or Brillouin's indices, choice of log base, evenness and number of species also calculated



Version 2.0

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales
SY23 3DB, U.K.

Bitnet/Janet: WLK@ABERYSTWYTH.AC.UK
CompuServe: 100016,2265
CIX: warrenk

IT'S HERE!

MVSP Ver. 2.0 is now available. MVSP (A MultiVariate Statistical Package) is a program for the IBM-PC and compatibles that performs a variety of ordination and cluster analyses. It was written with the basic premise in mind that multivariate methods are useful in many areas of scientific research and that, to promote their use, there should be a program that is readily available and simple to use. MVSP is all menu-driven, allowing for the easiest possible use. It also contains many user-defined settings that allows for the most flexible use.

MVSP performs three basic types of eigenanalysis ordinations: principal components (PCA), principal coordinates (PCO), and correspondence analyses (CA). It can also perform cluster analysis, using eighteen different distance or similarity measures and seven clustering strategies. Diversity indices may be calculated on ecological data; these include Simpson's, Shannon's, and Brillouin's indices.

LARGER DATA MATRICES

The most important of the improvements in MVSP Ver. 2.0 is the increased size of the data matrices that can be analysed. The new version uses a virtual memory scheme so that any data that can't fit in memory are temporarily dumped to disk. Thus the size of matrices are limited only by available disk space (up to a maximum of 750x750).

MANIPULATE YOUR DATA

There are a number of options for data manipulation. MVSP now includes a spreadsheet-like data editor for ease of data entry and editing. Data may be transformed and saved to a new file; available transformations are logarithms (base 10, e , and 2), square roots, and Aitchison's logratio formula for proportional data. The data may also be transposed, converted to percentage or proportional scale, to the 10-point octave class scale, or to range-through format for stratigraphic studies, and rows and columns may be deleted. A separate utility program allows data to be converted between MVSP format and that used by the Cornell Ecology Programs and their kin.

ANALYTICAL OPTIONS

The user interface has been improved to allow for even easier running of analyses. When an analysis such as PCA is chosen and an input file selected, a menu with all possible options and their default values is presented. These can easily be changed if necessary and then saved to a configuration file, so that next time you run the program those new default options will be reinstated. In this way an analysis can be run with as few as a half dozen keystrokes. The user may also define a number of defaults relating to the output format, such as column width and the number of decimal places to display on the printouts.

In the eigenanalysis ordinations, the trade-off between accuracy and speed may now be controlled by the user, and other options let the user tailor the analyses to their needs (standardization and centring of the PCA, different weighting in the CA, etc.). There are eighteen different distance or similarity measures available, including four binary coefficients and Gower's general similarity measure for mixing quantitative and qualitative variables. Seven clustering strategies, including minimum variance, are included and the option to perform stratigraphically constrained clustering on any of these is provided.

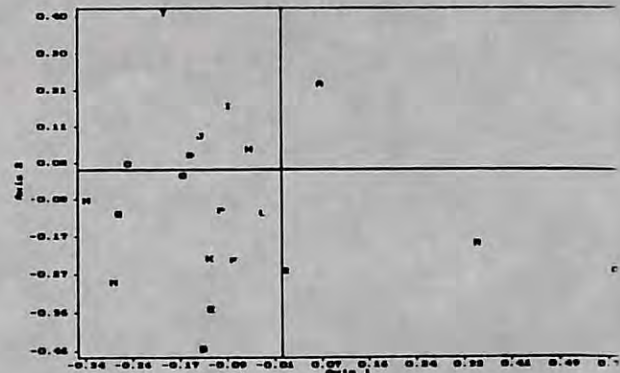
MVSP now has a context-sensitive help system so that pressing F1 will provide a help screen on the currently highlighted menu option.

GRAPHICS

There is now the option to have scattergrams of the ordination results either plotted using text characters or drawn on the screen in graphics mode (see example on next panel), with CGA, EGA, VGA, Hercules, and AT&T 6300/Compaq Portable III graphics modes supported. Dendrograms may now be plotted using Chris Meachem's excellent PLOTGRAM program, which is distributed with MVSP. These can be plotted on the screen, pen plotters, laser printers, or dot matrix printers (the latter thanks to improvements by Joe Felsenstein).

TWO FLAVOURS

There are now two versions of MVSP, *MVSP Shareware* that may be freely copied and given to colleagues and students and an enhanced version, *MVSP Plus*, that is available only to those who have made a voluntary monetary contribution of UK£40 or US\$75 to the programming effort. *MVSP Plus* differs from the shareware version in three ways: 1) the maximum matrix size is 750x750 (*MVSP Shareware* is limited to 100x100 matrices), 2) a special version compiled to take advantage of the greater speed of the 80x87 math coprocessor chip is available and 3) a full printed manual will be provided (the shareware version has an abbreviated manual on disk). *MVSP Plus* is not shareware and may not be freely copied and distributed.



ORDER NOW!

An order form is provided on the reverse side of this pamphlet. Simply fill in your address, check which version and disk size you want, tear off this panel and return the form with your payment. Your new version of MVSP will soon be winging its way to you.

SYSTEM REQUIREMENTS

- IBM-PC or compatible computer
- DOS 2.x (ver. 3.x recommended)
- 512K RAM memory
- Two floppy disk drives (hard disk recommended)

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419
fax: 814-865-3191

18 March, 1991

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

Yours of 28 February came, with the replacement diskette in great shape. We converted it to WordPerfect 5.1 with no problem. So, I guess the E-mail bit isn't necessary, thank goodness! It is available in this college, but not too convenient (I don't have the capability in my office).

We're getting toward the bottom of this whole book problem.

Best.

Yours very truly,

Alfred Traverse

AT/et

ATHROFA ASTUDIAETHAU DAEAR
COLEG PRIFYSGOL CYMRU

Dr. Warren L. Kovach
Palynological Research Centre
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales SY23 3DB
GREAT BRITAIN

Tel. (0970) 622626
Fax (0970) 622659
Telex 35181 ABYUCWG
Email WLK @ ABERYSTWYTH.AC.UK

28 February 1991

Dr. A. Traverse
Palynological Laboratories
Department of Geosciences
The Pennsylvania State University
University Park, PA 16802 USA

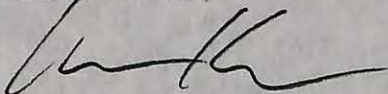
Dear Al,

Here is the replacement disk with our MS in Wordstar format. The problem with the other disk wasn't magnetic detectors, it was simple rough handling by the postal service! The disk had been slightly crushed so that it wouldn't spin around within its cover. A few sharp raps on each edge against a table top brought it back to life. I've sent a new disk that will hopefully survive the trip.

Do you know of anyone there who has an E-mail account on your local mainframe computer? It would be very simple to send the text of an MS via E-mail, then download it to your PC. That way it would only take a couple of hours to get it to you, not a month like this disk exchange!

I'm hoping to make it to BSA this year. Perhaps I'll see you there.

Best wishes,



Warren L. Kovach

Kovach & Batten disk
came - fine -
converted to WP 5.1

E-mail is building
but our PC not
connected.

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

15 25 February, 1991

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

Just a note, while we are awaiting a new diskette from you.

Re question in yours of 21 Jan 91--the table was already
with the "final revised MS." No harm in being extra safe,
though!

Best.

Yours very truly,

Alfred Traverse

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

15 February, 1991

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

Apparently we spoke too soon about your disk with the book MS. Although it is relatively simple to convert WordStar to WordPerfect, we were unable to read your disk, although we tried it on five different machines. It is possible that during shipment it was passed through a magnetic detector of some sort which destroyed the information(?) In any case, I am returning it to you in the hope that you can re-copy your material so we can try again. Sorry to bother you!

Best wishes.

Yours very truly,

Yours very truly,

Alfred Traverse

AT/et
encl: computer disk

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

11 February, 1991

29 January, 1991
Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

Your package of 28 January came in apple-pie order. We can easily convert your WordStar files to WordPerfect. I really appreciate your getting this to us!

Best to David.

Regarding the present situation, there has been a recent surge of activity, and I now have only three really desperately delinquent authors. They must soon "fish or cut bait." I am now awaiting completion of the whole mess. The publication time that point should be... I terribly regret that it's been such a protracted process.

Yours very truly,

Alfred Traverse

AT/et

The University College of Wales, Aberystwyth
University of Wales
Institute of
Aberystwyth, SY23 3DB

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

Professors: M. J. C. Jones, P. S. ...
Professors: J. A. Taylor, ...
Professors: R. G. Whalley, ...
Professors: J. ...
Professors: J. ...

29 January, 1991

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

Thanks for the MS, new table, and letter. How to go! Re use of old AASP padded envelope: big improvement over the one that caused us problems with figures a while back. (I'm going to use the envelope yet again!)

Regarding the present situation: there has been a recent surge of activity, and I now have only three really desperately delinquent authors. They must soon "fish or cut bait." I am now estimating completion of the whole thing by end summer. The publication from that point shouldn't take too long. I terribly regret that it's been such a protracted process.

Yours very truly,

Alfred Traverse

AT/et



The University College of Wales, Aberystwyth

University of Wales

Institute of Earth Studies

Aberystwyth, SY23 3DB, UK

Director: Professor D Q Bowen

Head of Geography: Dr C R Lewis

Head of Geology: Dr M R Dobson

Professor J W Aitchison

Professor R A Dodgshon

Professor J R Haynes D.Sc

Professor J A Jacobs

Professor J Lewin

Professor M J O'Hara FRS

Professor J A Taylor

Professor R C Whatley

Professor Dennis Wood

Tel: (0970) 623111

Direct line:

Fax: 0970 622659

Telex: 35181 ABYUCWG

Dear Al,

28 Jan. 91

I remembered over the weekend that you wanted MS' for the ^{book} Gods on disk. I don't have WordPerfect Available, but I have translated it from my Word Processor (PC-Write) to WordStar. Hopefully you can transfer it to WP.

Best wishes,

Warren Koutos



The University College of Wales, Aberystwyth

University of Wales

Institute of Earth Studies

Aberystwyth, SY23 3DB, UK

Director: Professor D Q Bowen

Head of Geography: Dr C R Lewis

Head of Geology: Dr M R Dobson

Professor J W Aitchison

Professor R A Dodgshon

Professor J R Haynes D.Sc

Professor J A Jacobs

Professor J Lewin

Professor M J O'Hara FRS

Professor J A Taylor

Professor R C Whatley

Professor Dennis Wood

Tel: (0970) 623111

Direct line:

Fax: 0970 622659

Telex: 35181 ABYUCWG

21 Jan. 91

Dear Al,

I think I may have left out this table from our revised MS for the book, which I posted to you on Friday.

Best Wishes,

Warren Kewick

No - it was already
in the MS.

AK

Dupl.
Kovach
&
Batten

TABLE 1

Summary of selected publications demonstrating the use of quantitative methods in palynofacies studies. The publications are listed in the same order as discussed in the text.

Publication	Type of data	Analyses	Results/comments
Lenoir & Hart, 1988	Counts/300 grains, no transformation	Regression analysis; PCA (matrix type unspecified) with subsequent factor analysis; discriminant function analysis	Seven palynomorph zones distinguished
Boulter & Riddick, 1986	Percentages, no transformation	Average linkage cluster analysis (strategy and distance measure unspecified; PCA (matrix type unspecified)	Identification of types of palynodebris having strong association with certain depositional environments
Lorente, 1986	Shape and size parameters, percentages of palynodebris based on point counting; both forms of data standardized	Minimum variance (Ward's) cluster analysis	Different depositional environments characterized by distribution of palynodebris particles of certain shapes and sizes, and by taxonomic and morphological content
Kovach, 1988	Counts per standard sized sediment sample; data ranked for analysis	UPGMA clustering and non-metric multidimensional scaling; both based on Spearman's Rank Order Correlation Coefficient	Depositional environments characterized by content of megaspores and other plant fragments; hypotheses of habitats of parent plants developed
Farley & Dilcher, 1986	Counts/750 grains; data ranked for clustering	Multinomial homogeneity test; UPGMA clustering based on Spearman's Rank Order Correlation Coefficient; species richness and Simpson's diversity index.	Depositional environments characterised by miospore content.
Medus et al., 1988	Percentages, log transformed	PCA using centered covariance matrix	Trend identified in miospore distribution in relation to water level fluctuation (may be misinterpreted; see text)
Tyson, 1989	Counts/500 particles or grains, no transformation	Data plotted on scattergrams and ternary diagrams	Environmentally distinct palynofacies identified; hypotheses of sediment transport pathways developed

ATHROFA ASTUDIAETHAU DAEAR
COLEG PRIFYSGOL CYMRU

Dr. Warren L. Kovach
Palynological Research Centre
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales SY23 3DB
GREAT BRITAIN

Tel. (0970) 622626
Fax (0970) 622659
Telex 35181 ABYUCWG
Email WLK @ ABERYSTWYTH.AC.UK

18 January 1991

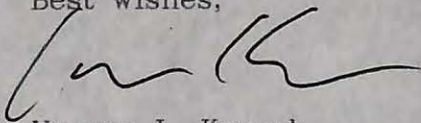
Dr. A. Traverse
Palynological Laboratories
Department of Geosciences
The Pennsylvania State University
University Park, PA 16802 USA

Dear Al,

Please find enclosed the revised manuscript, *Association of palynomorphs and palynodebris with depositional environments: quantitative approaches*, by David Batten and myself. I've enclosed a new table as you suggested; you should already have all the figures.

We've finally come out from under the storm of setting up the new M.Sc. course and have time to do some real research! From your letter to David it sounds like there are still quite a few manuscripts out. Any idea when the book might actually see the light of day!

Best wishes,



Warren L. Kovach

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

16 August, 1990

Dr. Warren L. Kovach
Dr. D. J. Batten
Institute of Earth Studies
UCW University of Wales
Aberystwyth SY23 3DB, U.K.

Dear Warren (and David):

Your paper's review process got caught up in a series of personal problems relating mostly to getting my mother into a nursing home, closing her home, distributing the contents, getting the home on the market, etc. I am just now getting partially back to normal!

I enclose all of the pages of your MS for "the book," on which either Farley ("the reviewer") or I had scribbled.

I agree with Martin that your paper is in very good shape technically and stylistically. However, I am wondering if there isn't a problem caused by the fact that MBF eats, drinks, and sleeps PCA, CA, etc. I think that for a chapter in a book to be read not only by the mathematical whizzes such as Martin and yourselves, but also by some klutzes such as yours truly, a little more needs to be done to make the chapter not only admirably clear and all that, but also readable. To that end I have noted a few places where it would help me as a typical reader if you could add some more explanation and clarification. Without such, some parts are pretty dry going. For example, on p. 13 this sort of addition is especially important in my view. With Stone's data, wouldn't it help for the reader to know what Stone's data were like--are we talking about counts, %, presence-absence or what? We are told "proportions."

Regarding the material on pp. 17 ff.: could you produce perhaps some sort of a summary "visual"--maybe a chart showing what the various authors did and what it yielded? I think that would make for a much more readable chapter.

It seems to me that "all of the above" would not be a very big job. I certainly would appreciate your trying! I surely can't do it by myself--I can just barely understand!

One last thing. Can you provide the MS on a 5.25" (130 mm) diskette, preferably using WordPerfect or compatible software (although we can deal with others if we must)? This would help us in our final editing a great deal.

All the best to you both. My apologies for the long delay, but I am "rolling" now.

Dr. James L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, SY23 3DA

Yours very truly,

Alfred Traverse

Since of 14 June (11) came this a.m., safe and sound, marked "airmail", but apparently went surface (because of envelope with the destination "airmail" not very obvious?--who knows). It's a good idea to stamp "airmail" all over the place or use red-white-blue stickers, I guess.

Thanks so much for the displacement figures. The beautiful projection blurbs for your palynology progress are posted on my "Palynofata Board" in the hall.

So, I haven't got into "airmail" yet--in fact, although the office is computerized, I personally still do a pencil-pushing holdover (helps works upotot). However, I am a big convert to fax! As you well

AT/et
encl

Can't be in back from the reviewer. You'll be hearing in a little while about that. I am full back living a week in Satou Bonga at George Hart's house--we worked 3 days on his (2, maybe 3) MS. What I could visit Sharpen with easy it would only take one day, probably, but the trip would be long. I was there there in 1977.

Sent to David and you.

Alfred Traverse

PENNSSTATE



Department of Geosciences

(814) 865-6711

503 Deike Building
The Pennsylvania State University
University Park, PA 16802

25 July, 1990

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, SY23 3DB

faxed to: (0970) 622659

Dear Warren:

Yours of 14 June (!!) came this a.m. , safe and sound, marked "airmail", but apparently sent surface (because you used recycled envelope with the designation "airmail" not very obvious?--who knows). It's a good idea to stamp "airmail" all over the place or use red-white-blue stickers, I guess.

Thanks so much for the replacement figures. The beautiful promotion blurbs for your palynology program are posted on my "Palynoinfo Board" in the hall.

No, I haven't got into "Bitnet" yet--in fact, although the office is computerized*, I personally still am a pencil-pushing holdout (Betty works the computer). However, I am a big convert to fax! As you see!

Your MS is back from the reviewer. You'll be hearing in a little while about that. I am just back from a week in Baton Rouge at George Hart's home--we worked 5 days on his (2, maybe 3) MSS. Wish I could visit Aberystwyth too; it would only take one day, probably, but the trip would be fun. I was last there in 1947.

Best to David and you.

Yours very truly,

Alfred Traverse

AT/et

*computer down today--had to type this! et

ATHROFA ASTUDIAETHAU DAEAR
COLEG PRIFYSGOL CYMRU

Dr. Warren L. Kovach
Palynological Research Centre
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales SY23 3DB
GREAT BRITAIN

Tel. (0970) 622626
Fax (0970) 622659
Telex 35181 ABYUCWG
Email WLK @ ABERYSTWYTH.AC.UK

14 June 1990

Dr. A. Traverse
Palynological Laboratories
Department of Geosciences
The Pennsylvania State University
University Park, PA 16802 USA

Dear Al,

Enclosed at long last are new prints of the figures that were lost for mine and David's MS on quantitative methods for your sedimentation of organic particles volume.

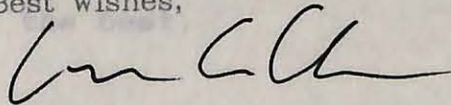
Is there any news on reviews of our MS? It has been quite a while since we submitted it.

I've enclosed a brochure and poster of the new palynology program here at Aberystwyth. It will be a busy summer preparing everything for the M.Sc. course starting next autumn.

Are you using Bitnet electronic mail? I find it much more efficient for contacting people and have been trying to encourage others to take it up. It is particularly nice for trans-Atlantic messages as I can get a reply in hours rather than a fortnight! My e-mail address is on the letterhead.

Hope to see you at Banff.

Best wishes,



Warren L. Kovach

Yours very truly,

Alfred Traverse
Professor of Palynology

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419
fax: 814-865-3191

12 February, 1990

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, SY23 3DB
U.K.

faxed to: 44-0970-622659

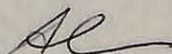
Dear Warren:

You will have heard from David that there was problem about your MS--the envelope was too flimsy, and the MS arrived disarranged, with only fragments of the envelope, and a U.S. Post Office envelope and explanation. I checked at the time and thought all was in order--pp. 1-33 of MS, plus captions were there. However, I discover now that I'm working on it that the originals of Figs. 6, 7, and 8 are not present, although the photocopies of these figures in copy 2 were there, so I xeroxed them for the review copy. I suppose originals of 6-8 were small slick paper such as Fig. 2, and they slipped out when the envelope fell apart. *

Thanks to you and David for the review of the Farley contribution, which is very useful. perhaps you would like to know that the envelope containing it was also in ruinous condition, but managed to hang together. (This sort of shoddy manufacture is not unique to UK--last April I worked all day in a hotel in NYC while waiting to go to the airport enroute to Europe. I mailed the results in four big brown envelopes to PSU--1 envelope arrived empty. From now on, let's use the padded or the indestructible plastic kind.)

All the best.

Yours very truly,



Alfred Traverse
Professor of Palynology

AT/et

* what should
we do?

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419
fax: 814-865-3191

15 January, 1990

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

Just received a package from the U.S. Postal Service at JFK airport: "Contents received in damaged condition." Inside was a very ruinous remnant of your mailing envelope sent from Aberystwyth with your and David's MS. It was considerably rearranged, but as far as I have so far been able to determine is all there and not significantly damaged. I note that the package was posted on 27 Nov. 89. Sure am glad to get it! More about it later.

It would be good to alert everybody at your end that a much sturdier (padded is best) envelope for MS-mailing is strongly advisable.

All the best, and thanks so much for the MS, for whose safe arrival we should do a novena or something.

Yours very truly,

Alfred Traverse

AT/et

INSTITUTE OF
UNIVERSITY COLLEGE

THE PENNSYLVANIA STATE UNIVERSITY

DEPARTMENT OF GEOSCIENCES

PALYNOLOGICAL LABORATORIES

435 Deike Building

University Park, PA 16802

phone: 814-863-3419

fax: 814-865-3191

Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales SY23 3DB
GREAT BRITAIN

TEL: (0770) 420111

Fax: (0770) 420179

Telex: 5181 ABYUON

EMail: W.L.KOVACH@PSU.EDU

10 November, 1989

5 December, 1989

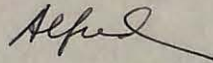
Dr. Warren L. Kovach
Institute of Earth Studies
University College of Wales
Aberystwyth, Wales, U.K. SY23 3DB

Dear Warren:

It was good for several reasons to get yours of 18 November. I didn't know you were going to accompany David to Aberystwyth (which I remember from my student days at Cambridge as an agricultural college). So, when I sent out my seasonal greetings to the book authors, I didn't know where to send yours. I'm glad to have the whole address now. Also, of course, it is delightful to know the MS is on the way! (As of today, it hasn't arrived.)

All the best to you.

Yours very truly,



Alfred Traverse

AT/et

INSTITUTE OF EARTH STUDIES
UNIVERSITY COLLEGE OF WALES

Dr. Warren L. Kovach
Institute of Earth Studies
Univeristy College of Wales
Aberystwyth, Wales SY23 3DB
GREAT BRITAIN

Tel. (0970) 623111
Fax (0970) 622659
Telex 35181 ABYUCWG
Email WLK @ UK.AC.ABERYSTWYTH

18 November, 1989

Dr. Alfred Traverse
Palynological Laboratories
Department of Geosciences
The Pennsylvania State University
University Park, PA 16802 USA

Dear Al,

Please find ^{*}enclosed the manuscript by David Batten and myself for the Sedimentation of Palynomorphs volume. Many apologies for this being so late. As you can see from the letterhead, I have recently moved to Wales from Scotland and David will be moving here in the new year. Correspondence about this MS can be sent to this address.

I've also enclosed a set of my recent reprints for you. Any exchange of reprints would be greatly appreciated.

Best wishes,



Warren L. Kovach

mailed under separate
air mail cover

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

9 May, 1988

13 June, 1988

Dr. Warren L. Kovach
Department of Geology, Marischal College
The University
Aberdeen AB9 1AS, Scotland, U.K.

Dear Warren:

Thanks for yours of 2 June. I have already written David embracing the idea of your joint paper. The only thing I would like to stress in addition is that a volume such as I am working on does not have the same constraints as a journal does vis à vis 100% previously-unpublished. It's quite o.k. to use stuff from your work published elsewhere, within the limits of copyright requirements (in my experience even Elsevier does not prevent an author from re-publishing his own work!).

I look forward greatly to the Batten & Kovach (or Kovach & Batten?) chapter. All the best to you both.

I passed on your regards to Carmen (who seems to have the largest extant "collection" of palynologists/paleobotanists). Martin is in DC getting housing for his post-doc at the Smithsonian (with Scott Wing et al.).

Yours very truly,

All the best.

Alfred Traverse

Alfred Traverse

AT/et

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

9 May, 1988

Dr. Warren Kovach
Marischal College
Department of Geology
Aberdeen, Scotland AB9 1AS, U.K.

Dear Warren:

When I wrote the original batch of people about taking part in Symposium 12 at IPC-Brisbane I encouraged them to get their platform manuscripts ready for the Proceedings volume (Elizabeth Truswell, editor). That paper must perforce be quite short.

However, I am working on the idea of having some of the IPC participants, and some non-participants (Such as David B., I hope very much) produce with me a volume on palynodebris, palynofacies, palynomorph-sedimentation, etc. Columbia University Press has expressed a strong interest in publishing the book if I can put one together. Would you be willing to prepare as a chapter for the volume an expanded version of your IPC paper that would deal with as many aspects of megaspore sedimentation as you feel inclined to touch upon? I hope you can do it! Let me hear a yes/no as soon as possible, so I can move on to stage II in the planning. (If the project goes, Martin Farley and I will produce an introductory chapter on palynomorph sedimentation in general, and I'll have a chapter on palynomorphs in rivers, lakes, oceans and in water generally.)

All the best.

Yours very truly,

Alfred Traverse

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

25 May, 1988

Dr. Warren L. Kovach
Dept. of Geology, Marischal College
The University
Aberdeen AB9 1AS, Scotland, U.K.

Dear Warren:

Got yours of 29 April when I returned today from a 2-week absence.

Sorry you can't make it to Brisbane. You could get one of us to read your paper if you wanted to, but we must be guided by your wishes.

However, that leaves open the completely separate question ~~X~~I raised in my letter to you of 9 May. I would still like a chapter from you for the Columbia Univ. Press volume, as I outlined in that letter. How about it?

Yours very truly,

Alfred Traverse

AT/et

MARISCHAL COLLEGE
UNIVERSITY OF ABERDEEN

Warren L. Kovach
Dept. of Geology & Mineralogy
Marischal College
Aberdeen, Scotland AB9 1AS
UNITED KINGDOM

Tel. (0224) 273073

June 2, 1988

Dr. Alfred Traverse
Palynological Laboratories
Department of Geosciences
The Pennsylvania State University
University Park, PA 16802 U.S.A.

Dear Al,

Many thanks for your letter of 25 May. Our letters seem to be crossing in the trans-Atlantic post; one of the disadvantages of living overseas!

You should by now have gotten a letter from David Batten about our idea of doing a joint paper for your volume. The manuscript on which I was going to base my talk in Australia is going to be published in Cretaceous Research in the autumn, so I will not be able to contribute that to your volume, but David and I are doing a number of numerical analyses of some palynofacies data from the Wealden, and we thought that your volume would be an ideal place to publish a full account of our analyses and approaches to dealing with quantitative data in palynology. Hopefully you will agree.

Looking forward to hearing from you again. Please give my regards to Martin and Carmen.

Best Wishes,



Warren L. Kovach
Research Fellow

14 August, 1986

Warren L. Kovach
Department of Biology
Indiana University
Bloomington, IN 47405

Dear Warren:

I've forgotten where I left the question of "MVSP." So, I enclose a formatted double-sided disk, with a stamped, self-addressed return envelope, per your instructions in Plant Science Bulletin 32:2.

It was good to see you in Amherst.

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
encl: disk & envelope

Feb. 1967

Dear Dr. Traverse:

We received this letter today. Perhaps you may be interested in reading it and commenting upon it. Is there anything that we could do?

Then, there is the question about the price of the laboratory on which you may have some information.

Please let me know if you are going to answer this letter or if we should.

A. J. Kovar

File

P.S. In case we should answer, would you please return this letter.

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802
Phone: (814)863-3419; Fax: 814-863-7823

Dr. Johanna Kovar-Eder
Naturhistorisches Museum (Eder)
Burgring 7
A-1014 Wien

den 22. Dezember 1992

Sehr geehrte Frau Dr. Kovar-Eder!

Haben Sie besten Dank für die Übersendung Ihrer drei Publikationen (Faziesentwicklung und Florenabfolge....usw), die ich mit großem Interesse gelesen habe. Es erinnert mich auch an meinen schönen Besuch bei Ihnen im Museum.

Es wäre sehr interessant, Ihre Faziesinterpretationen mit der Palynologie zu vervollständigen. Ich lege Publikationen von Schuyler und T. und Farley und T. bei, die dieses Thema behandeln.

Ich wünsche Ihnen alles Gute zum neuen Jahr 1993.

Ihr

Alfred Traverse

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419

Frau Dr. Johanna Kovar (Eder)
Naturhistorisches Museum
Burgring 7
A-1014 Wien, Österreich

den 23. August 1989

Sehr geehrte Frau Dr. Kovar,

ich sitze in der öffentlichen Bibliothek in St. Joseph, Michigan, und arbeite. Ich habe Ihr "350 Million Jahre Wald" eben gerade zu Ende gelesen. Es ist wunderbar--sehr klar, sehr interessant und sehr genau. Die Bilder sind ausgezeichnet! Ich habe es sehr gern, daß Sie Paläophytikum usw. betont haben!

Falls Sie kleine Fehler für eine zweite Ausgabe sammeln, möchte ich Sie auf diese aufmerksam machen:

- S. 16: (Trigonocarpus seeds) Farnsamer.
- S. 24: Ich glaube, daß eine enge Verwandtschaft zwischen Cycadales und Bennetítales nicht sehr wahrscheinlich ist.
- S. 32: Florida Sumpfgebiet: Appalachicola (Rechtschreibung)
- S. 33: Ilex-Bild ist ein Rastermikroskop Photo. Der Leser soll das wissen.

Sie werden Fehler auch in Paleopalynology finden. Ich möchte Ihre Liste auch haben!

mit besten Grüßen verbleibe ich

Ihr

Alfred Traverse
Professor für Palynologie

- P.S. 1. "Nonnenfraß" war ein neues Wort für mich!
- 2. Ich habe auch heute Ihren (1987) Artikel über Pannonian...vegetational character mit großem Interesse gelesen.

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419

Frau Dr. Johanna Kovar (Eder)
Naturhistorisches Museum
Burgring 7
1014 Wien

den 19. Juli 1989

Sehr geehrte Frau Dr. Kovar,

haben Sie vielen Dank für die Publikationen, die Sie mir in Wien gegeben haben und dann mir per Post geschickt haben. Ich habe sie in letzter Zeit im Pittsburger Flughafen gelesen. (Ich bin nämlich unterwegs nach Michigan gewesen, um meine alte Mutter zu besuchen und ihr zu helfen.) Die Auskunft über Hipparion kann ich für meine geologischen Vorlesungen benutzen. Die Unter-Rudling Flora hat mich sehr beeindruckt, eine sehr schöne Arbeit! Natürlich ist das "blaue Buch" über Pannone-Floren sehr wichtig. (Ich möchte eines Tages 1-2 Proben für die Palynologie haben, bitte. Es wäre für die Studenten interessant.) Die "3-dimensional maps" ist eine sehr gute Erfindung, die ich für meine paläobotanischen Vorlesungen benutzen werde.

mit besten Grüßen, auch an Ihren Mann,
~~ich~~ verbleibe *ich*

Ihr

Alfred Traverse

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419

Frau Dr. Johanna Kovar (Eder)
Naturhistorisches Museum
Burgring 7
A-1014 Wien

den 13. Juni, 1989

Sehr geehrte Frau Dr. Kovar,

Wir sind wieder zu Hause. Die Reise ist 99% sehr gut und erfolgreich gegangen. Ich möchte mich bedanken, daß Sie mir so freundlich geholfen haben. Ich weiß, daß es für Sie eine sehr schwierige Zeit gewesen ist. Es war sehr interessant auch Ihren Mann kennenzulernen, und von ihm ein bißchen um die Viehzucht in Österreich zu lernen. Haben Sie auch vielen Dank für die Publikationen und für die Einführung in die wunderbaren öffentlichen Sammlungen, usw. Meine Frau und ich haben Samstag morgen dort verbracht (wir haben im nachmittag Schönbrunn besucht).

Ich habe Ihnen ein paar Veröffentlichungen per Post geschickt. "Brandon Lignite" ist jetzt meistens vom historischen Interesse!

Leider sind wir im New York in der Nähe des Bahnhofs, ^{zum Opfer} einem Diebstahl gefallen. Mein Photoapparat und zwei Filme sind in meiner Aktentasche gewesen und sie wurden gestohlen. Leider habe ich daher die Photos von der paläobotanischen Sammlung verloren. Jetzt muß ich wieder Wien besuchen! Ich hoffe, daß mein Photo von der schönen österreichischen Tracht am Ende des früheren Films ist! Innerhalb zwei Tage haben zwei Personen angerufen, daß sie irgendeine Inhalte der Tasche gefunden haben, auch die Tasche selbst (ohne Photoapparat, Bargeld, usw. natürlich). Komischerweise hat der zweite Mann auch den berühmten alten Regenschirm wieder geborgen! Er wurde daher zweimal auf dieser Reise gerettet.

mit besten Grüßen

Ihr

Alfred Traverse
Professor für Palynologie

AT/et

March 12, 1973

Dr. Stephen Krajewski
Department of Geology
Washington & Jefferson College
Washington, Pennsylvania 15301

Dear Steve:

Thanks for yours of 15 February, which it has taken me too long to get around to. I am enclosing a xerox copy of the most recent brochure about the Catalog of Fossil Spores and Pollen (we are in the process of revising the brochure). I believe you can answer your own questions from this brochure, especially with reference to page 5. I hadn't realized that you were at Washington and Jefferson. I have a good friend who is currently a student there--Drew Ferrier, and I would appreciate being remembered to him if you should happen to see him.

Best wishes as always.

Yours very truly,

Alfred Traverse
Professor of Geology & Biology

AT/vsi

Enclosure: xerox copy of brochure

P.S. Come and see us when you are in State College!

WASHINGTON AND JEFFERSON COLLEGE
WASHINGTON, PENNSYLVANIA
15301

2-15-1973

Dr. Traverse:

I have some students interested in doing some palynologic work on the rocks in the Washington, Pennsylvania area. I would like to know if there is a volume in the Catalogue of Fossil Spores and Pollen dealing with the Upper Pennsylvanian and Lower Permian. (Specifically the Dunkard Group and the Uniontown and Washington Formations.)

I would also appreciate any other references to articles covering this area.

Thank you.

Sincerely,

Stephen Krajewski

Stephen Krajewski

Gillex Bond
25% COTTON FIBER

A. Traverse

February 6, 1959

Box 481
Houston 1, Texas

✓ Dr. Karl Krames
Deutsche Schachtbau und Tiefbohr
Dalum Ems
Western Germany

Dear Dr. Krames:

As Dr. Alfred Traverse may have told you, the Society of Economic Paleontologists and Mineralogists is planning a symposium entitled "Relation of Paleontology and Mineralogy to Polar Wandering and Continental Drift" in the spring of 1960 (probably March or April) at Atlantic City, New Jersey.

We should like very much to have a contribution on paleobotany as related to polar position, and wonder whether you might make such a contribution. In such a paper a summary of your previous work on the brown coal stumps as related to polar position and new evidence you may have accumulated might be a major or at least an important part. Even a summary of your work would be of great interest since your work has appeared principally in German journals and is comparatively little known in this country.

If your institution could arrange for you to make this trip we should very much like to have you come to the United States to present your paper. The Society is not able to make financial grants for the purpose of defraying travel expenses, but it seems possible that aid might be obtained from UNESCO or some other governmental agency, particularly if arrangements could be made for you to visit and lecture at some of our universities. You would have to apply for this aid yourself, but we should be delighted for you to use our names for references if required in establishing the legitimacy of your application.

If you cannot arrange to present the paper, but would still like to submit one, perhaps you would be willing to have someone such as Dr. Traverse read your paper to the symposium. However, we would consider it much more desirable if you could come to this country in person.

Very truly yours,

Gordon Rittenhouse
President, S.E.P.M.

GR:mpd

November 19, 1956

Dr. Karl Krames
Dalum Bas
Deutsche Schachtbau und Tiefbohr
Western Germany

Dear Karl:

Thanks for the copy of Braunkohle, Wärme und Energie, with your most interesting paper, which I hope to be able to tell some of my American paleobotanical colleagues about. It would surely be interesting if we could check the pre-Tertiary pole direction by the same technique. Perhaps some of our Cretaceous coals would offer such an opportunity, though such well defined stumps are much more of a rarity in the Cretaceous coals I know in Wyoming than they are in your brown coals.

With best wishes.

Yours very truly,



Alfred Traverse

AT:rlg

Shell Development Company
Exploration and Production Research Division

Dalson, Oct. 31st 1936

Dear Dr. Travers!

Many thanks for your card and letter. Five weeks ago I have sent you the No. 1715 "Branikoble" with my work on fossil tree radii. In the next time an other paper will be published. I have found now also in Germany recent Sequoia (Gigantea) on the island Mainau in the Bodensee. These trees are not so great like yours in California.

Maybe there are now more vacancies in USA for geologists? My opinion is, that it is not the best way for a German

July 13, 1956

Dr. Karl Krames
Deutsche Schachtbau-u. Tiefbohr GMBH
Dalum, Ems
Western Germany

Dear Dr. Krames:

Your letter of May 31 came several weeks ago, and I have made some enquiries about your prospects. The opinion around here is that your best opportunity would be in one of the many overseas fields outside of the United States, such as South America. I suggest that you apply directly to the Chief Geologist, Bataafsche Petroleum Maatschappij, 30 Carel van Bylandtlaan, The Hague, The Netherlands, if you are interested in an overseas job with Shell. I am told that the hiring of personnel for such jobs with Shell is always handled by B.P.M.

It has also been suggested to me that you might write to Dr. Hollis D. Hedberg, Gulf Oil Corporation, Box 1166, Pittsburgh, Pennsylvania, U. S. A., expressing your interest in a job and outlining your qualifications and training. Gulf has jobs in South America and elsewhere that may be available. It might also be worthwhile to write to the Chief Geologist, Creole Petroleum Corporation, Caracas, Venezuela. Creole is the Venezuelan part of Esso.

You would probably be best advised to write in English and have somebody check your letters be sure that the grammar is good, etc. In each case please feel free to use my name as a reference.

If you are interested in emigrating, I am sure you can get a job, though it may take something of a campaign. After all, there is a great demand for trained people. Please keep me informed of your progress. If there is anything further that I might be able to do for you, let me know.

Yours very truly,


Alfred Traverse

AFT:rlg

Shell Development Company
Exploration and Production Research Division

Dr. Karl Krames
Dalum, Ems
Deutsche Schachtbau- u.
Tiefbohr - GmbH
Western Germany

Dalum, May 31, 1956

Dear Dr. Traverse !

Many thanks for your postal card and your letter. In the next time I shall publish my work on the fossil tree radii with many photographs of the stumps in the brown coal and I shall send you a reprint.

Before two month I have send copies of the papers "Geologischer Kompaß" and "Neue Methoden zur Feststellung etc" to Prof. Chaney.

But these works are only my hobby for the holliday. I am now working 4 years in a german oil company as Geologist. My wife was wounded during the war and she is obliged therefore to live in a warmer country. Therefore I will thank you for a situation as geologist in your or in an other company in anywhere country.

First of all I would go alone to this place. Please let us know, if it is possible for you, to get a situation as geologist for me in USA or in oversea.

I like also to work in every kind of geological matter especially in the field geology.

My wife and myself thank you already now for your nice kindness to intercede with a p. for us. I am prepared to travel directly.

Best wishes,
very truly
yours

March 9, 1956

Dr. Karl Krames
Deutsche Schachtbau- und Tiefbohrgesellschaft M.B.H.
Kalam, Ems
Krs. Meppen
Germany

Dear Dr. Krames:


The mailing tube with your reprints came several weeks ahead of your letter of January 25, with the result that my earlier postcard to you was sent after the papers came, but before the letter had arrived. I very much appreciated your letter and assure you that I shall tell interested people here about your work.

I regret that I have no suitable photographs of Sequoia for you but suggest that you write to Professor R. Chaney, Dept. of Paleontology, University of California, Berkeley, California. I am writing to him about your work. He can supply you with the photographs you desire, and I am sure that he will be very interested in your work also. I would suggest that you send him copies of your papers, "Geologischer Kompass" and "Neue Methoden zur Feststellung, usw." If possible, include a copy of at least one of the "stump" photographs.

I am very suspicious of the identification of the stumps in the brown coal as Sequoia. It seems far more likely that other members of the Taxodiaceae are represented, e.g., Glyptostrobus, etc.

Very best wishes.

Very truly yours,


Alfred Traverse

AT:lbd

Shell Development Company
Exploration and Production Research Division

DEUTSCHE SCHACHTBAU- UND TIEFBOHRGESELLSCHAFT M. B. H.

BOHR- UND ERDÖLGEWINNUNGSBETRIEBE

Dr. Karl Kraimes Datum/Meppen
 Deutsche Schachtbau- und Tiefbohrgesellschaft m. b. H., Lingen-Ems, Postfach 142

• Drahtwort:	Tiefbohröl Lingenems
• Fernruf:	Lingen-Ems 971 - 975
• Fernschreiber:	039620 Tiefbohr Lingen
• Büro:	Waldstr. 39 - Besuchszeit 9-12 Uhr, außer sonnabends
• Bankkonten:	Hamburger Kreditbank A. G. Salzgitter Westfalenbank A. G. Bochum Norddeutsche Bank A. G. Salzgitter-Watenstedt Kreissparkasse Lingen-Ems
• Postscheckkonto:	Hannover 735 70

Dr.
 Alfred Travere
 Shell Development
 3731 Bellaire Blvd
 Houston 25, Texas
 USA

Ihre Zeichen Ihre Nachricht vom Hausruf Unsere Abt. und Zeichen

Datum 25. I. 1958
 (23) Lingen-Ems, den

Betreff:

Dear Dr. Travere!

Maybe you remember our short contact at Knapsack near Cologne. I hope that you have had still good days in Europe and especially in Germany. With this letter I send you as a printed matter of some of my work, geological. In the next time a new study over the tree-fossil at Berrenrath will be published. I send you enclosed in the printed matter some pictures from the tree-fossil. For the text I need a photo of sequoia gigantea, s. washingtonia. Maybe it will be possible for you to send me a picture from a tree living still in California. I hope to see you one day again in America?

Yours sincerely

Kraimes

Dr. Kraimes
 Datum, Ems
 Kr. Meppen
 Germany

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802
Phone: (814)863-3419; Fax: 814-863-7823

14 May, 1993

Dr. Valentin A. Krassilov
Institute of Biology & Pedology
Far Eastern Scientific Center
Academy of Sciences
690022 Vladivostok, Russia

Dear Val:

I just received from you a fax of the supplemental ballot page for the CFP--re Lycopodites conservation, for which thanks. However, the official committee report has already been typeset for Taxon, without your vote. It's very puzzling, because I never got the main ballot and questionnaire from you. So, we only know that you favored that one conservation! Did you ever get the main b. and q.? Bill Chaloner could add your votes when the report comes up in Yokohama, so it would be of interest to have your ballot even at this late date. Presuming that it miscarried in the mail, could you send me a copy? If you never got the original mailing at all, I'd still like to send you one.

Perhaps most important, is that Bill would like to know whether you wish to remain on the Committee (we had been assuming not, in the absence of information). He would also like to know if you can make it to Japan in August--only a hop, skip, and jump for you! That would please Bill immensely, as most members, including AT cannot attend. I would suggest that you communicate directly with Chaloner about those two matters.

I still retain the hope that I can visit Vlad. one of these years!

Yours very truly,

Alfred Traverse

c: W. G. Chaloner

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

27 May, 1987

Dr. Valentin A. Krassilov
Institute of Biology & Pedology
Far Eastern Scientific Center
Academy of Sciences
690022 Vladivostok, U.S.S.R.

Dear Val:

This time your ballot miraculously made it, though the envelope was not sealed! More later. Thanks.

Best.

Yours very truly,

Alfred Traverse
Professor of Palynology
Secretary, IAAPT.CFP

AT/et

17 March, 1982

Dr. Valentin A. Krassilov
Institute of Biology & Pedology
Far Eastern Scientific Center
Academy of Sciences
690022 Vladivostok, USSR

Dear Val:

Have read the papers on Orestovia, and the paper on dinosaur extinction, with great interest. We are working on lower Silurian pioneer land plants here, and thus your ideas on Orestovia were interesting. The dinosaur paper appealed to me especially because of many discussions with Ken Hsü (Zürich) and Leo Hickey of the catastrophic (comet? meteor) theories for end-K events of Hsü and others.

Best wishes and kind regards.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

23 June, 1980

Dr. Valentin A. Krassilov
Institute of Biology & Pedology
Far Eastern Scientific Center
Academy of Sciences
690022 Vladivostok, USSR

Dear Val:

Thanks so much for "Far-Eastern Paleofloristics".. It is certainly a diverse collection--and much of interest. Naturally, I especially enjoyed the Tilia paper, but I got something of value from each paper. Thanks for remembering me!

All the best. Thanks for the great stamps, too!

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

December 22, 1975

Dr. Valentin Krassikov
Institute of Biology & Pedology
Far Eastern Scientific Center
Academy of Sciences
690022 Vladivostok
USSR

Dear Val:

I don't know how to thank you for the recently arrived batch of your publications. There are some fascinating ideas contained therein, and the whole set will be much used in my teaching. I have especially enjoyed "Causal Biostratigraphy"--much food for thought. Best wishes for you and Tamara for the holiday season and always. Thanks again for the publication.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT:jb

P.S. Please tell Tamara that I appreciated the note in Russian and will answer it in kind as soon as I get a chance--and courage!

Prof. A. Traverse

22.9.1975

529 Deike Building

Pennsylvania State University

University Park, Pa. 16802,

U.S.A.

Dear Alfred,

Many thanks for your letter and please excuse a delay in answering it, for I only recently returned home. The memories of the congress are still vivid and it was really nice to meet you there. I feel that we have mutual interests in paleobotany as well as the theory of evolution, and would be glad to keep in touch with you. I am sending some reprints separately.

Yours sincerely,

V. Krassilov
V. Krassilov

Tamara would add a few words in Russian to give you an opportunity to practice this language.

very glad that you remember me
me Очень рада, что вы помните
our маму. Вспоминаю с удовольствием
meetings and little conversations
 наши встречи и маленькие беседы
I am studying the English language
 и ваш очаровательный русский язык,
 и в следующий раз, думаю, мы сможем поговорить
 по-русски.
rather longer

До свидания.
Тамара.

Senckenbergische
Naturforschende Gesellschaft

gegründet 1817

Postscheck: Frankfurt (Main) 7985

Fernruf: 778934, 771108

Bank: Frankfurter Bank 738

Stadtsparkasse Ffm. 76015

Frankfurt a. M., den 21. 7. 1960

Senckenberg-Anlage 25

Herrn

A. T r a v e r s e

Shell Development Company

P.O. Box 481

H O U S T O N 1, Texas

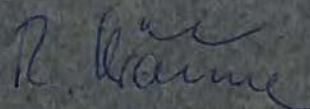
USA

Sehr verehrter Herr Kollege!

Ich habe Ihnen für die Zusendung des PLANT SCIENCE
BULLETIN zu danken, in dem Sie Ihren wunderbaren Be-
richt über unseren paläobotanischen Lunch geschrieben
haben. Ich habe mich lebhaft an das Zusammensein mit
den amerikanischen Kollegen erinnert.

Mit besten Grüßen

Ihr



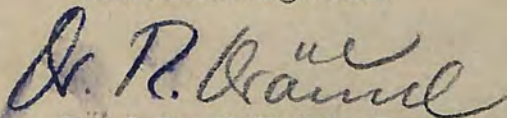
Prof. Dr. R. Kräusel
Leiter d. Bot.-Paläobot. Abt.
Forschungs-Institut und
Natur-Museum Senckenberg.

Frankfurt a.M., d. 26. 8. 1952

Sehr geehrter Herr!

Das von Ihnen erwähnte Buch ist bei Fischer in Jena erschienen. Da dieses in dem russisch besetzten Teil Deutschlands liegt, und der Verkehr mitunter auf Schwierigkeiten stößt, schicke ich Ihnen direkt ein Exemplar als Drucksache und bitte Sie den Gegenwert von 1,5 \$ an Herrn Dr. A. T. Schildge, Middle Town, New Jersey, für meine Rechnung zu überweisen.

Hochachtungsvoll



Prof. Dr. R. Krausch
Leiter d. Bot. Paläobot.
Natur-Museum Se

Region V
Box LL, University Station
Grand Forks, North Dakota

September 25, 1952

Prof. Dr. R. Kräusel
Leiter d. Bot. Paläobot. Abteilg.
Natur Museum Senckenberg
Senckenberg - Anlage 25
Frankfurt A. M., Germany

Dear Dr. Kräusel:

Thank you for your card of 26 August in which you wrote that a copy of "Die Paläobotanischen Untersuchungsmethoden" was on its way to me. The paper has arrived in good condition. I am delighted to have it and have sent my check for \$1.50, as requested, to Dr. A. T. Schildge, Middletown, New Jersey.

Sincerely yours,

AT

ALFRED TRAVERSE
Coal Technologist

cc Region V
Dr. Traverse ✓
File

Region V
Box 11, University Station
Grand Forks, North Dakota

July 17, 1952

Prof. Dr. Richard Krausel
Director Botanical--Paleobotanical Section
Natur-Museum Senckenberg
Senckenberg Anlage 25
Frankfurt am M. Germany

Dear Dr. Krausel:

I should very much like to acquire, for my research on tertiary coal, a copy of your monograph "Die paläobotanischen Untersuchungsmethoden; ein Leitfaden für die Untersuchung fossiler Pflanzen sowie der aus ihnen aufgebauten Gesteine im Gelände und Laboratorium." Ed. 2. Jena: 98 pp., 47 tfs.; 1950. Would you advise how I may get a copy?

Sincerely yours,



ALFRED TRAVERSE
Coal Technologist

cc Region V
Dr. Traverse ✓
File

Frankfurt a.M., d. 27.10.1952

Sehr geehrter Herr!

Für das Schreiben v. 25.9. danke ich Ihnen sehr und freue mich, daß das Heft gut angekommen ist. Hoffentlich ist es von einigem Nutzen für Sie.

Hochachtungsvoll

Ihr ergebener

R. Krausel

Prof. Dr. R. Krausel
Leiter d. Bot. Paläobot. Abteilg.
Natur-Museum Senckenberg

*file as correspondence; Peter R. Kremer
Includes botanical
data!*

To: A. Traverse
From: Peter R. Kremer
Subject: Geology 600 - 1968 - 1 credit

Acetylation preparations were made from flowers and inflorescences of extant plants collected in northeastern Venezuela during 1967 by the Pennsylvania State University Latin American Development Project, Botany Section. The methods employed were those of A. Traverse as outlined in Kummel & Raup (1965), but slightly modified for the material under study. The basic method consisted of the following steps:

1. Screen and shred floral parts through a 60 mesh sieve into a funnel
2. Insert fines into a 15 ml. centrifuge tube.
3. "Wash down" screen and funnel with 100% acetone.
4. Centrifuge and concentrate the plant material as a pellet at the bottom of the tube.
5. Decant the acetone.
6. Add 10 ml. of acetylation mixture. [(acetic anhydride and concentrated sulfuric acid, both reagent grade) in the proportions of 9 : 1 by volume, mixed with suitable caution]
7. Heat in a water bath until grains have entines and cytoplasmic contents digested away; also until any detritus is suitably digested. (The solution usually turned a dark coffee color. The time interval varied with different species and was, therefore, closely observed at this stage.)
8. Centrifuge, decant acetylation mixture (precautions duly observed.)
9. Wash pellet with 100% glacial acetic acid, reagent grade.
10. Centrifuge, decant acetic acid, rinse twice with distilled water.
11. Preliminary examination: if too dark, bleaching followed.
12. Bleach: add 1 ml. 5% NaClO₂ (aqueous) to pellet in centrifuge tube; mix, add 1 drop of 10% HCl. Set aside until proper decolorization has been attained.

13. Centrifuge, decant, rinse twice in distilled water.
14. Add glycerine jelly (commercial preparation); stir well, mount.
15. Label slides.

Initial trials of preparatory procedures were done using recent pollen from the Pennsylvania State University Conservatory. These are included with the other slides. Twenty-five preparations of Venezuelan materials were made; three proved to be barren. Subsequent investigation showed that the flowers were well past anthesis.

The slides are labelled with family, genus, and species names. The appellation, PAC, refers to The Pennsylvania Agricultural College collections and the numbers following that is the collection number of the particular herbarium sheet carrying that number housed in the herbarium collections of The Pennsylvania State University Botany Section. The following list indicates the data associated with the habitat from which the respective numbers were gathered:

- | | |
|--|---|
| PAC 8000
PAC 8002 | 7 February 1967 - Estado Monagas - Sabana abierta, ca. 5 kilometers saw (ca. 35° w of s) of Santa Barbara. Soil sandy (medium to coarse) with little organic matter |
| PAC 8010
PAC 8019 | 8 February 1967 - Estado Monagas-Dammed tributary to the Rio Guarapiche ca. 9 kilometers wsw (40° w of s) of Jusepin . Elev. 160 m. |
| PAC 8021
PAC 8022 | 13 February 1967 - Estado Monagas - Sabana ca. 10 kilometers wsw (40° w of s) of Jusepin. Elev. ca. 140 m. |
| PAC 8064 | 18 February 1967-Estado Monagas. Sabana ca. 10 kilometers w.s.w. (60° w of s) of Jusepin. Elev. ca. 140 m. |
| PAC 8079
PAC 8087
PAC 8089
PAC 8100 | 20 February 1967-Estado Monagas- Recently cleared area. Elev. ca. 160 m. |

- PAC 8109 21 February 1967-Estado Monagas. Recently cleared area.
- PAC 8125 22 February 1967-Estado Monagas. Moist open area
PAC 8130 of flood plain of Rio Guarapiche, ssw of Jusepin.
Elev. ca. 130 m.
- PAC 8143 23 February 1967-Estado Monagas. Same locality as
on 22 February 1967
- PAC 8192 1 March 1967-Estado Monagas. Flood plain of Rio
PAC 8194 Guarapiche. Elev. ca. 130 m.
PAC 8198
PAC 8199
PAC 8214
- PAC 8220 3 March 1967-Estado Monagas-Wooded -facing slope.
Elev from ca. 125 m. Above flood plain of Rio
Guarapiche. Area open.
- PAC 8244 5 March 1967-Estado Monagas. Same data as for
3 March 1967

Prepared slides and residues are submitted with this report.

THE PENNSYLVANIA STATE UNIVERSITY
INTER-OFFICE CORRESPONDENCE

Date: July 31, 1967

From: Dr. Alfred Traverse
Associate Professor of Geology
To: Mr. Peter Kramer
Botany Department
Penn State University

Dear Pete:

Just got back from our collection trip in Texas and find several additional pieces of correspondence from you which still further intensify my feelings of anxiety about not being able to answer previous letters you have sent. They have all been read with interest, and I am very much looking forward to talking to you about such problems as your barren upper Miocene siltstone. (I must say it seems improbable that there would be nothing in such a sample.) I have sent your pictures on to Professor Kovar to be delivered to you when you arrive.

I look forward to seeing you when you once more are established in Centre County.

Yours very truly,

Alfred Traverse

AT:kaw

June 26, 1967

Mr. Peter R. Kremer
Universidad de Oriente
Nucleo Monagas
Jusepin, Estado Monagas
Venezuela

Dear Pete:

Suffering catfish--over two months since I got your last letter. Out of sight, out of mind, as has been said. The people demanding grade reports and other things have been tangible, and PK more of a pleasant theory and memory.

However--I have finally been able to get your 35 mm. rolls developed and strip-printed. Trouble is that Nichols and I take off for Texas almost immediately, so I am having the photographer call Dr. Kovar to find out where would be the best place to send the developed film and the strip contact prints.

I enjoyed your letter greatly. You certainly are in virgin territory, as you discovered last year. You will quickly be the ranking palynological authority on Venezuela. I am an absolute failure to you as far as the present location of Sulek and Fournier is concerned. I should think it would be easy enough to find out in Venezuela whether Creole or Mene Grande currently have a palynologist. You might find it interesting to correspond with some of the old Shell hands who have done time in Venezuela, but that can wait until you get back to these bucolic parts.

Best regards, and sorry to be so tardy and (this time, anyway) ineffectual.

Yours very truly,

Alfred Traverse
Associate Professor of Geology

AT:kaw

Jaquein, Monagas

9 April 1967

Dear Professor Travençolo:

Greetings again. Not much to report except that our work is going apace. Accumulating a vast store of work, this letter should prove to be enthusiastically received by the stamp collectors. Tate will get one also. Your last letter said something about getting a prospective thesis problem cut out from under me. My memory fails — what were you referring to? Went to the beach this week-end and sampled some coals and shales. Hope they prove fruitful. Found some macrofossils and from what I've seen of Venezuelan "macro" material, this isn't half bad. I wonder if I can get it back intact? In two weeks am making arrangements to visit coal mines (Naricaul) near Barcelona. Hope to be able to come away with a treasure. The field trip gave me a preview (last month) and have been itching to get on with it since. Can you please check up paleontology and tell me if Salek (Crede) & Furnier (Mene Grande) are located in Caracas. Would be most grateful to you for the info. Dr. Kover writes he and Dean Noll are planning to be in the area sometime early in April. If I send several rolls of black and white can your film lab process the material for me. Develop and contact print then return mail to checkout what may require duplication. If so, will send a glob. back with A.J.K. Have recently learned several "anti"-Christ jokes that should shock you. I'll save these for when I return.

Shocking — Pete Kerner

27 February 67
Monday (I think)

Dear International Compendium:

I have a problem. Fate has struck me another dirty blow. Between the interval of sending my missal and receiving yours, the powers that be decreed that the gymnasium nee warehouse must be spruced up for the coming wrestling meet. The drawers were dumped in a pile, each drawer was disassembled and the whole works piled in wheelbarrows and hauled to another warehouse and unceremoniously dumped into one huge pile. What a mess! So from this I'm picking from time to time and trying to find a matching set but it looks hopeless. However — we are making progress of another kind. The collections of extant vascular plants is building rapidly. [and therefore, also, is the collection of pollens]. This is supposed to be the dry season but it hasn't failed to rain (showers) at least every 3-4 days since we arrived. The local people say this is the wettest dry season in a very long time. In April, Spring starts, flowers bloom, and the rainy season commences. The future looks busy. Last weekend I accepted an invitation to the Ven. Geol. Society foray near Barcelona. A visit to the type locations for eastern Venezuela and a visit to the Navicular mines. I lucked out — but good. Met P. Bermúdez; the grand old man of paleontology of Ven, the professors Bellizzia & Bellizzia; a husband and wife team of geologists [all 3 work for Ministry de Minas y Hidrocarburos], Dennen, a geologist consulting and from MIT; and assorted lesser lights. I have extensive notes and stacks of photos. Long hours of discussion are in the offing when I return. Enough for now. More later. As usual —

CATALOG OF FOSSIL SPORES AND POLLEN

DEIKE BUILDING
THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PENNSYLVANIA 16802
U. S. A.



THE
INTERNATIONAL COMPENDIUM
OF
PALYNOLOGICAL SYSTEMATICS

February 9, 1967

Mr. Peter R. Kremer
Universidad de Oriente
Nucleo Monagas
Jusepin, Estado Monagas
Venezuela

Dear Peter:

Thanks for yours of 1 Feb., 1967. My philatelist son is swooning over the stamps, which I gather communicate a most interesting fact--that Bolivar assumed various disguises. I've never read a biography of the fellow.

Well, about your grade--it was just like I said--if you had got the paper in on time you would have had your A-, or if the paper had been an A+ you would still have got it, but the combination of tardiness and A-minusness meant Bness. But B isn't a bad grade--not outrageously bad anyway.

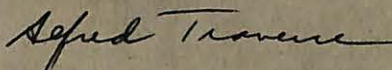
Enjoyed your letter as much as I miss your occasional visits over here. We just now are having about six inches of snow and zero temperature, so the heat you describe sounds rather outer Slobbovian.

But, as you request, to get right down to cases: It is impossible for me on the basis of what you say to guess at the value of the Mene Grande hoard. As you will remember from last term (we miss you in the course--there are five taking it), if the sacks contain mostly sand, forget it--if shales and siltstone, especially if dark colored, you might have something. It is likely that you can get the exact location of the cores from somebody. If you can get them plotted on a map and have the exact depths, etc., it would definitely be subject matter for a thesis, if as I say, the lithology is right. You could select a set of cores from some interesting section and sort through the bags. Remember that for spore analysis you'll need about 20 grams of most clays and siltstones. That is not much, and you could

condense quite a few samples into a shoebox full of envelopes. A footlocker ought to contain sufficient samples for study of a couple of cores. I suppose it would be wise to inquire about who has what strings attached to the bags and the data which they represent. It would be a shame to repeat your previous experience and have a prospective thesis problem cut out from underneath you. I would also still keep my eyes open for some good looking coals!

Best wishes.

Yours as ever,



Alfred Traverse
Associate Professor of Geology

AT:kaw

Wed
1 Feb '67
Jusepin, Monagas
Venezuela.

Dear Dr. Traverse:

It is a hot sweaty sticky afternoon and despite the 90% comfort index (what a misnomer) and the bad news from you yesterday I send you most joyful greetings. Extend them also to Tate and Doug and the boys. Also Jane. I didn't think the paper was too good but then I also felt it wasn't too bad. Maybe not too good + not too bad does = a B.*. Our facilities here are at a new branch of the University of the East (a national institution) (Universidad de Oriente). It is located in an old oil camp, which along with much acreage, was donated by Crede Oil to the U. de Oriente - gratis. It was built in 1938 (started, that is) and ~~is~~ has been gently going to seed. The University is trying to make a first class institution of it and having founded this Nucleo (center) only five years ago, they are doing a good job - by Latin American standards. In one of the old warehouses I was introduced to some 481 (hand count) drawers, each $\frac{1}{2} \times 1$ meter approximately in size. Each drawer contains no less than 12 ^{cloth} bags, each labelled with ^{at least} well or core number, sample depth, and/or assorted other data or numbers. In each bag is the core or part of a core. In addition the labels bear the title of the Mene Grande Oil Company, Geological Laboratory, Caracas, Venezuela. There are also hundreds of packets of analysis report samples. Plus about $\frac{1}{2}$ -1 $\frac{1}{2}$ tons of similar ^{full} bags piled on the floor in one corner. It's this a treasure or a junk pile.

Please advise! PRONTO!
- Pite

P.S. Send AIR LETTER, NO FANCY STAMPS.

EXACT ADDRESS:

TAKES 10 DAYS.

P.R.K.

Kremer

UNIVERSIDAD DE ORIENTE

NUCLEO MONAGAS

JUSEPIN, ESTADO MONAGAS

VENEZUELA.

January, 1967

Mr. Peter R. Kremer ✓
Department of Botany
Pennsylvania State University
etc.

Dear Peter:

Presumably your mind is far from Geology 526, PSU, these days-- I wish I could be a small rodent in your knapsack or some other part of your impedimenta--what a wonderful, splendid opportunity you are having, and while you still (heh, heh) are in the bloom of yourth (new word, combination of youth and health)

Before going into a brief discussion of your paper, let me explain what I have done about your grade--I knocked you a half grade for the tardiness of your paper. I then felt obliged to knock you another half grade for the paper itself. Your participation in the seminars was strictly A across the board. So, I am giving you a B+, but I understand that PSU doesn't recognize +s--too bad.

The paper was a valuable piece of work that I have enjoyed reading and which, I would like to think, must have contributed somewhat to the value of your field work in S. A. (time will tell about that!). I knocked you down on the paper for several reasons that are quite important and which need improvement for your future work.

1. Spelling and grammar--these are not a part of palynology, but occasionally your defects in this direction hurt the understandability of what you have written. I urge you to have an (informal or formal) editor go over your stuff before you submit it--don't let her take away from your colorful language, but have her be ruthless regarding inexact statement, dangling participles and the like.

2. Organization--in places I couldn't tell what was a main heading and what was a sub-head.

Also, the figures should have had complete captions. The geological map needed a caption and a legend explaining the colors and so forth.

Keep up the good work and bring back a boodle.

Yours affectionately,

Prof. A. Traverse
Pensylvania State university
Dept. of Geosciences
Palynological Laboratories
435 Deike Building
University Park, PA 16802
USA

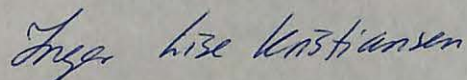
Dear Professor Alfred Traverse,

Thank you so much for taking the time to write to me.

I would appreciate it if you would send me reprints of your articles concerning Palynofacies and Palynomorph distribution.

With best wishes for the new year.

Yours very sincerely,



Inger Lise Kristiansen

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6711

6 January, 1989

Inger Lise Kristiansen
Norsk Hydro
Bergen Research Center
P.O. Box 4313
Bergen, Norway N-5028

Dear Colleague:

Just had a little time to clean up the last of my 7ICP notes. One item was your business card with a note by me to send you something--but unfortunately the note has smeared, and I can't read it. Do you recall what it was that I was to send you?

Best to you for 1989.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et



Norsk Hydro

Bergen

Traverse, Alfred
Dept. of Geosciences
Pennsylvania State Univ.
435 Delike Bldg.
University Park, PA 16802
USA

Deres ref.

Deres brev av

Vår ref.

Dato

22. Oct. 1984

I have recently started as a palynologist in the Norwegian oil company Norsk Hydro. We are building up a literature collection on Permian, Mesozoic and Tertiary palynology, which is planned to contain dinocyst and spore/pollen papers concerning taxonomy, paleoecology and stratigraphy. I would greatly appreciate receiving reprints of your work on these subjects.

Yours faithfully

Inger Lise Kristiansen

bcc Robert Dunay

September 22, 1971

Mr. Tom Kritser
3907 Amarillo Boulevard, W.
Amarillo, Texas 79106

Dear Mr. Kritser:

It is expecting too much that you will remember, but I was in the Amarillo area for several days about three years ago, looking for exposures of Triassic rock with certain characteristics which are of scientific (but no commercial) importance, and I visited your ranch on the advice of Dr. Gus Eifler of the University of Texas, Gus had told me that you found petrified wood on your place (this sometimes means that the sort of rock formation that I am interested in--containing microfossils--will be present). In fact, as I recall, the samples of reddish petrified wood which we thin-sectioned and identified for Eifler came originally from your place. I talked with you over the phone the day before we came out to the ranch, and you seemed quite interested and seemed to have no objection to our visit. Unfortunately, however, the day of my arrival at the ranch was exactly coincident with the most unfortunate death of David Kritser. When we heard this from the ranch foreman, we abandoned any idea of getting onto your ranch for the sort of reconnaissance we had in mind. Even though I never met the other Mr. Kritser, I somehow felt involved by the odd coincidence that we should arrive on that day, and I wrote a few words to your family about all of that in my collateral capacity as an Episcopal priest. I still treasure the nice letter I had from your wife in November, 1968.

My student who is working with me on this project, and I, will be in the Amarillo area in about a month, and are hoping that you will be willing to let us take a "rain check" on your offer to let us look around for the sort of dark colored shale in which we have a special interest. I will be glad to tell you about why it is of interest when we get together--I have a feeling you will consider

it pretty academic business! In any case, I do hope I will this time get a chance to meet you.. It would be helpful to Mr. Dunay and me to have a look for microfossil-containing shale on your place.

Best wishes to you.

Yours very truly,

(The Rev.) Alfred Traverse
Professor of Geology & Biology

AT/vsi

91 W. Tom Krit
Amarillo, Texas
79109
AMARILLO
09
PM
18 NOV
1968
79109

Tom Kritzer

3907 Americas Blvd, W.

Dear Mr. Krause,

Thank you for your thoughtful letter - our family somehow gained some strength - or something unexplainable from the fact that you are also a priest.

We hope you will be in our parts again. Sincerely,
Barbara Kritzer

11-17-68

3907
Amarillo Blvd
W
Amarillo, Tex



DAVID KRITSER

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
McCATHERN, KRITSER

2 Area Men Die in Plane

By WAYNE BOARD
Of Our Staff

Two prominent businessmen — David Kritser of Amarillo and Lowry M. "Larry" McCathern of Pampa — were killed Friday in a plane crash at the Monahans Municipal Airport.

Another man, Roy G. Mason, 34, of 3411 Patterson, is listed in serious condition at the Odessa Medical Center. He is suffering from back and internal injuries. He is a salesman for West Texas Equipment Company here.

Kritser, 50, the pilot, was president of West Texas Equipment Company. McCathern was president and general manager of the McCathern Pipeline Construction Company.

Funeral services for Kritser will be at 4 p.m. today in St. Andrew's Episcopal Church with the Rt. Rev. George H. Quarterman, bishop, officiating, assisted by the Rev. Allan Conley, curate.

Burial will be in Llano Cemetery under the direction of Boxwell Brothers Funeral Directors.

Funeral services for McCathern are pending with Carmachel-Whatley Funeral Home of Pampa.

Kritser was dead at the scene of the crash, and McCathern died shortly after 2 p.m. in the Odessa hospital.

McCathern's company was laying a natural gas pipeline some 17 miles west of Monahans. One of his employees, Ramon Estrada of Canadian, was killed earlier Friday morning when a stand of

(See CRASH on Page 2)

★ ★ ★ ★ ★

Crash--

(Continued From Page One)

pipe struck him in the head. Witnesses at the scene said the Beechcraft Baron twin-engine plane, owned by Kritser's company, was attempting to land about 11 a.m. when the right engine apparently lost power, throwing the aircraft into a clockwise spin and hurling it onto the sand.

"It was flying low and all of a sudden it flipped over sideways and hit the ground," said Mrs. Barbara West, who lives two blocks north of the Monahans airport.

Ward County Sheriff W. B. McNerlin of Monahans said the plane did not catch fire but rather looked as if it "just settled to the ground. Ordinarily they'll dig a ditch with the front end, but it looked like he just settled down."

A Ward County deputy said there were no skid marks on the apron of the runway where the crash occurred. The nose of the plane was dug into a five-foot bank of hard sand, he explained.

Airport authorities said Kritser had filed a flight plan for a round trip journey from Lubbock to Monahans. The trio left Amarillo early Friday morning and stopped briefly in Lubbock before flying to Monahans.

Kritser's brother, Shelby, was killed here in August of 1966 when an F8F Navy Bearcat crashed during Aviation Day ceremonies.

The Kritser Ranch was established here by Kritser's grandfather, R.B. Masterson Sr., a King County rancher who purchased 122,000 acres of land in Potter County in 1910.

Kritser was born April 24, 1918, in Amarillo and was graduated from high school and junior college at the New Mexico Military Institute at Roswell in 1937.

Two years later, he received a degree in animal husbandry from Texas Technological College in Lubbock.

He and his wife, the former Miss Betty Knight, were married March 1, 1944. She is a member of the Amarillo Independent School District board of trustees.

They have three children, David, 21, of Fort Benning, Ga.; John, 18, a student at Texas Christian University, and Ann, 15, an Amarillo High School student.

Kritser was on the vestry of St. Andrew's Episcopal Church, a member of the board of directors for the Amarillo Children's home, a director at First National Bank here, campaign leader for expansion of St. Anthony's Hospital, a member of the Texas Tech Development Board, vice president of the Amarillo Area Foundation, a member of the Texas Good Roads Association, a director for the Panhandle Producers and Royalty Owners Association on the board of Amarillo Chamber of Commerce, and a member of the City of Amarillo Airport Board.

Kritser was also an owner of the Flying Diamond Ranch north of Amarillo.

November 15, 1971

Mrs. Tom Kritser
3809 Linda
Amarillo, Texas 79109

Dear Mrs. Kritser:

Your letter from Houston arrived here after I had left for Arizona, New Mexico, and Texas in October, and unfortunately nobody happened to open it--I suppose because it looked more personal than business. So it was waiting here on my return, and I missed an opportunity to visit you on the short Amarillo segment of my trip. That is a big disappointment.

We did manage to find some pretty good things in the general Panhandle area--with the help of some of my friends at West Texas University in Canyon.

I am very sorry to hear that Mr. Kritser had to have heart surgery, but I was pleased to know that at least as of the time of your letter he was doing very well. Houston certainly is the place to have such a job done if it must be done! Certainly your family has had quite enough hard luck in the last few years, and I hope and pray that things will begin to look up for you all.

It may be that sometime during the coming year I can get down your way again, and if I do I certainly would like to accept your implied "raincheck". God keep you both. Best wishes.

Yours very truly,

(The Rev.) Alfred Traverse
Professor of Geology & Biology

AT/vsi

Tides II

MOTOR INN

Kritser

6700 SOUTH MAIN
P. O. BOX 25006
HOUSTON, TEXAS 77005

Across From The Texas Medical Center

MORIN M. SCOTT
President

DICK L. MAEGLE
Vice President

AREA 713
522-2811

10-8-71

* Convenient to Everything:

- Rice Stadium
- Astroworld
- Astrodome
- Zoo
- Golf Course
- Annual Fat Stock Show

Dear Mr. T -

Sorry about your trouble in locating us! Can't imagine why your letter was returned.

As you can see, Tom & I are in Houston where he had heart surgery (a triple by-pass) on Tues. He is doing beautifully and with luck we'll be home in 10 days or so -

When you get to Amarells call me and I'll make every

"In The Heart Of Uptown Houston"



Ham Institute for Botanical Documentation

appears to see that you
get what you need on
Fritser Ranch.

Yours in Christ
Barbara
Fritser

Mr. Tom Kirt
Linda
Amador
Texas
79109



Dear Mr. Trause,

Thank you for your thoughtful letter - our family somehow gained some strength - or something unexplainable from the fact that you are also a priest!

We hope you will be in our parts again. Sincerely,
Barbara Kirtser

11-17-68



DAVID KRITSER

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
McCATHERN, KRITSER

2 Area Men Die in Plane

By WAYNE BOARD
Of Our Staff

Two prominent businessmen — David Kritser of Amarillo and Lowry M. "Larry" McCathern of Pampa — were killed Friday in a plane crash at the Monahans Municipal Airport.

Another man, Roy G. Mason, 34, of 3411 Patterson, is listed in serious condition at the Odessa Medical Center. He is suffering from back and internal injuries. He is a salesman for West Texas Equipment Company here.

Kritser, 50, the pilot, was president of West Texas Equipment Company. McCathern was president and general manager of the McCathern Pipeline Construction Company.

Funeral services for Kritser will be at 4 p.m. today in St. Andrew's Episcopal Church with the Rt. Rev. George H. Quarterman, bishop, officiating, assisted by the Rev. Allan Conley, curate.

Burial will be in Llano Cemetery under the direction of Boxwell Brothers Funeral Directors.

Funeral services for McCathern are pending with Carmachel-Whatley Funeral Home of Pampa.

Kritser was dead at the scene of the crash, and McCathern died shortly after 2 p.m. in the Odessa hospital.

McCathern's company was laying a natural gas pipeline some 17 miles west of Monahans. One of his employees, Ramon Estrada of Canadian, was killed earlier Friday morning when a stand of

(See CRASH on Page 2)

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

KRITSER, Tom

3907
Amarillo Blvd.
W.
Amarillo, Tex.

Crash--

(Continued From Page One)

pipe struck him in the head. Witnesses at the scene said the Beechcraft Baron twin-engine plane, owned by Kritser's company, was attempting to land about 11 a.m. when the right engine apparently lost power, throwing the aircraft into a clockwise spin and hurling it onto the sand.

"It was flying low and all of a sudden it flipped over sideways and hit the ground," said Mrs. Barbara West, who lives two blocks north of the Monahans airport.

Ward County Sheriff W. B. McNerlin of Monahans said the plane did not catch fire but rather looked as if it "just settled to the ground. Ordinarily they'll dig a ditch with the front end, but it looked like he just settled down."

A Ward County deputy said there were no skid marks on the apron of the runway where the crash occurred. The nose of the plane was dug into a five-foot bank of hard sand, he explained.

Airport authorities said Kritser had filed a flight plan for a round trip journey from Lubbock to Monahans. The trio left Amarillo early Friday morning and stopped briefly in Lubbock before flying to Monahans.

Kritser's brother, Shelby, was killed here in August of 1966 when an F8F Navy Bearcat crashed during Aviation Day ceremonies.

The Kritser Ranch was established here by Kritser's grandfather, R.B. Masterson Sr., a King County rancher who purchased 122,000 acres of land in Potter County in 1910.

Kritser was born April 24, 1918, in Amarillo and was graduated from high school and junior college at the New Mexico Military Institute at Roswell in 1937.

Two years later, he received a degree in animal husbandry from Texas Technological College in Lubbock.

He and his wife, the former Miss Betty Knight, were married March 1, 1944. She is a member of the Amarillo Independent School District board of trustees.

They have three children, David, 21, of Fort Benning, Ga.; John, 18, a student at Texas Christian University, and Ann, 15, an Amarillo High School student.

Kritser was on the vestry of St. Andrew's Episcopal Church, a member of the board of directors for the Amarillo Children's home, a director at First National Bank here, campaign leader for expansion of St. Anthony's Hospital, a member of the Texas Tech Development Board, vice president of the Amarillo Area Foundation, a member of the Texas Good Roads Association, a director for the Panhandle Producers and Royalty Owners Association on the board of Amarillo Chamber of Commerce, and a member of the City of Amarillo Airport Board.

Kritser was also an owner of the Flying Diamond Ranch north of Amarillo.

27 September, 1966

Mme. E. Krivan-Hutter
Institut de Geologie de L'Universite
Budapest VIII, Muzeum Korat 4/a
Hungary

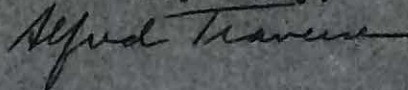
Dear Mme. Krivan-Hutter:

Since becoming Editor of the Catalog of Fossil Spores and Pollen, I have discovered that the enclosed original photos from your paper covered in volume 21 of the Catalog have not been returned to you. I return them with our thanks for your cooperation and for your patience.

At the recent International Conference in Utrecht I had the pleasure of meeting for the first time Dr. E. Nagy. I am only sorry that we were not able to spend very much time together, but at least I met her, and it helps to make palynology in Hungary seem more real and human to me.

With best wishes.

Yours very truly,



Alfred Traverse, Editor
Catalog of Fossil Spores and Pollen

2 copies

- MAGYAR ÁLLAMI FÖLDTANI INTÉZET
BUDAPEST, XIV., VOROSILOV ÚT 14

INSTITUT GÉOLOGIQUE DE HONGRIE
ВЕНГЕРСКИЙ ГЕОЛОГИЧЕСКИЙ ИНСТИТУТ
UNGARISCHE GEOLOGISCHE ANSTALT

Alfred F. Traverse
Exploration and Production Research Division,
Shell Development Company,
P.O. 481 Houston 1 Texas

Dear Sir,

I should very appreciate if you had the kindness to
send me off-prints of your following papers:
Pollen Analysis of the Brandon Lignite of Vermont.
Bureau of Mines Rep. Investig 5151, 1955
Systematic Methods for Mesozoic and Cenozoic plant
Microfossils. Micropaleontology 2, h.4, 1956
The nomenclature problem of plant microfossils species
belonging to extant genera. Micropaleontology 4, h.2, 1957

I am working in this field carrying out analysés of
plant microfossils and the literature requested would
make a great contribution to my actual work.

I would consider it a great honour if I could return
your kindness by providing you with any material not
available for you.

Yours faithfully

Erika Kriván-Hutter

Budapest, 4, 11, 1960.

Dr. Erika Kriván-Hutter

*Sent 12/7 in plain envelope - no letter
recd.*

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

22 October, 1987

Mr. Pete Kroehler
North Museum
Franklin & Marshall College
P.O. Box 3003
Lancaster, PA 17604-3003

Dear Pete:

Yours of recent date re Triassic plant fossils, etc., was most interesting. In the letter you raise the question of coming here for graduate work. I presume you mean in geology, tho' I have a joint appointment in biology, and that would also be possible. I'm going to assume geology and have asked Linda Gruhn, who is responsible for such things here, to send you application forms, etc. Regarding requirements, write to:

Graduate School Information Center
The Pennsylvania State University
113 Kern Graduate Building
University Park, PA 16802
(phone: 814-865-5436)

Request a Graduate Catalog, etc. The materials from Ms. Gruhn will tell you specific things about Geosciences.

Perhaps you could visit me and ^{bring}~~buy~~ some of your (and Brian's) specimens for a look-see? Would kill two birds with one stone.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
cc: Linda Gruhn

TB. Dr. Al Traverse
Dept. of Geosciences
Penn State University
University Park, PA. 16802

ca. 70
October, 1987

Pete Kroehler
North 
Museum

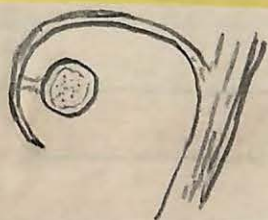
Franklin & Marshall College
P.O. Box 3003, Lancaster, Pennsylvania 17604-3003

Dr. Traverse,

Recently found material from the Phoenixville site (of Brian Axsmith) has yielded an unusual structure that appears to be a cross sectional piece of a "spore bearing"/"seed bearing" plant. I haven't photographed it as yet but have included a drawing. The leaf or stem it is attached to is similar to Striatotaxis sp. specimens we have been finding. We, Brian + I, have a good sampling of mega fossils from the Upper Shale Member of Upper Stockton / Lower Lockatong transitional zone that we've been collecting over the past 8 or 10 months.

I was wondering if you could give an address to write to concerning entrance requirements, required courses, degrees, etc. for your ^(Penn State's) graduate program in paleontology or paleobotany. Thank you in advance.

Sincerely
Pete Kroehler



I have both halves (+, -) of the specimen and it probably warrants closer examination, for it is among other fossils ^(on a cluttered slab) and may not be of any importance.

Pete

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802
Phone: (814)863-3419; Fax: 814-863-7823

Dr. Wilfried Krutzsch
Museum für Naturkunde der
Humboldt-Universität
Invalidenstraße 43
D-10115 Berlin

den 8. Juni 1994

Sehr geehrter Herr Dr. Krutzsch,

von Ihrer Unterschrift auf der Publikation "1993
Pflanzen...Festschrift...." nehme ich an, daß ich mich Ihnen für
die Überreichung dieses Buches bedanken sollte. Ich habe Ihren
Lebenslauf mit besonderem Interesse gelesen. Daß Sie so viele
Hindernisse überwunden haben, habe ich vorher nicht (oder nur
teilweise) gewußt. Eines Tages möchte ich das "Arboretum" sehen.
Ich versuche so was auch auf unserem Landgut zu schaffen, aber
ich habe zu viele Probleme mit Tieren (besonders Hirschen) und
dem Wetter (dieser letzte Winter bzw. Frühling hat mindestens 30%
meiner Bäume und Sträucher entweder getötet oder stark
beschädigt). Sie sind immer willkommen das Landgut persönlich zu
besuchen!

Ich gratuliere zum Geburtstag, aber ich hoffe, daß Sie
zukünftig noch weitere palynologische Arbeiten machen werden.
Wir brauchen besonders eine Wiederaufnahme der Atlasarbeit! Sie
sind offensichtlich ein junger Mann--drei Jahre jünger als ich!

mit besten Grüßen

Ihr

Alfred Traverse

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802
Phone: (814)863-3419; Fax: 814-863-7823

26.I.93

Prof. Dr. Wilfried Krutzsch
Museum für Naturkunde der Humboldt-Universität
Invalidenstraße 43
D(O)-1040 Berlin

Sehr geehrter Kollege,

haben Sie besten Dank für die Übersendung Ihrer Publikationen
"Paläobotanische Klimagliederung des Alttertiärs" usw. Sie haben
fast unglaublich viel in Ihren Leben zustande gebracht! Diese
Arbeit wird eine lange Zeit für alttertiäre Forschung wichtig
bleiben.

Ich wünsche Ihnen alles Gute und hoffe, daß ich Sie irgendwo
wieder treffen kann!

mit besten Grüßen verbleibe ich

Ihr

Alfred Traverse

AT/et

Wolfgang Kützner

O 1110 Berlin

Paul Franke Str. 2

Berlin, 15.5.92

Liebes Kollege Prof. Trautwein,
Sobald erhalte ich ^{aus} am einen Brief von Ihnen zu R. Dabber,
dass Sie die Absicht haben an einem Tag in Göttingen zu
sein (APP). Für mich ergibt sich ebenfalls die Möglichkeit
einen Tag in Göttingen zu sein, allerdings erst am Freitag,
dem 29.5.92. Vielleicht läuft sich noch ein Zusammen treffen
an. Ich würde mich sehr ^{über} ein Soldes freuen. Es ist
immerhin seit 1966, dass wir nur das letzte Mal begegnet
sind. Ich habe heute mehrfach versucht, Sie telefonisch in
Frankfurt zu erreichen, aber leider kam keine Verbindung
zustande.

Auf alle Fälle gebe ich Ihnen mein persönliches Telefon Nr.
mit, vielleicht könnten Sie am Abend versuchen mich zu
erreichen. Allerdings sind wir an den Wochenenden immer
auf dem Grundstück (mit privatem botanischen Garten, seit
20 Jahren in der Zeit der "unten Emigration" angelegt),
dort aber telefonisch nicht erreichbar. Ihnen noch gute
"Rest-Wochen" in Deutschland sind falls Sie Friseur
sich besuchen sollten, bitte richten Sie ihm herzliche Grüße
und ganz Wünschenswert auf baldige Gelegenheit aus.
Mit besten Grüßen

Ihr Wolfram Kützner

(Tel. Zw-Str - 4892149)

Museum für Naturkunde
der Humboldt-Universität zu Berlin

Paläontologisches Museum

Museum für Naturkunde der Humboldt-Universität, Invalidenstr. 43, ⁰⁻DDR-Berlin 1040



Herrn
Prof. A. Traverse
Beethovenstr. 36, Nr. 25
W 6000 Frankfurt/M. 1

Datum 25.3.92

Liebe Kollege Traverse,

Besten erspielt ich Ihren Brief mit der Ankündigung
Ihrer geplanten Berlin-Besuches. Leider bin ich ab

28.3. hier Osteren im Urlaub und nicht in
Berlin. Ich bedauern sehr, daß wir uns deshalb
nicht treffen können, jedenfalls nicht zu diesem
Zeitpunkt. Mit Prof. Grath habe ich gestern telefonisch
vereinbart, daß Sie als trotzdem am 6.4. hier
herkommen könnten um E. Schütz zu sprechen im
evant. Kollegen L. Ruffe, mit dem ich in dem letzten
Jahr sehr eng zusammen gearbeitet habe (vorrück im
Hintergrund auf bot.-ökolog. Aussagen). Leider hat auch
E. Schütz 3. Zt. eine Krankheit (Zungenentzündung)
wird als zum 6.4. wieder hier sein. Es hat keine
feste Ausstellung auf, ist mir noch auf Zeit als sog.

Telefon 2897 2579

ABM - Kraft beschäftigt bei der "NWG" (Naturw.-biol. Ges. =
Nachfolgeinstitution der ZG). Hier bezieht sich alles

langsam aufzulösen als Folge des „Deutschen Einflusses“
Vor allem die Paläobotanik sind von mir
Sporen-Untersuchungen ist als fast nichts in die
Zukunft zu retten. Ich selbst bin nun und
im letzten Dienstjahr im Museum; ab Frühjahr
1993 kann ich dann als „Sozialrentner“ wieder
frei über mich verfügen. Die Welt sieht also
aus „österreichischer Sicht“ anders aus, als aus etablierten
„Wertlichen“.

Apropos: Sollten Sie ev. am 11.4. noch in Berlin
sein, so wäre vielleicht ein rein privater Treffen
bei mir zu Hause möglich. Sollte Sie dasfalls
an meine Privat-Adresse: 0 1110 Berlin, Paul Frank-
str. 2, Tel. 4892149 (Berlin-Ost). Ich komme am 10.4. Abends
nach Berlin zurück, habe aber noch bis Ostern Urlaub.

Besten Dank, daß Sie sich an einem der
„österreichischen Kräfte-Kollegen“ noch erinnern, die
meist als 2 Jahrzehnte weder mit herzlich
Kolleg Korrespondenz dürften (seit 1969!), noch
Sperren empfangen konnten, noch Publikationsmöglich-
keiten hatten — also „verdorrten“ waren — aber
ständig weitergearbeitet haben!

Mit besten Grüßen

Im Wortschatz

Frankfurt a. M.

28. März. 92

J. Wilfried Krutzsch
Museum für Naturkunde Berlin
usw.

Sehr geehrter J. Krutzsch,

Der interessanter Brief vom
25. 3 hat mir natürlich sehr
gefallen. Es ist eine Enttäuschung,
daß ich Sie in Berlin vergessen
muß. Es ist sogar eine Versuchung,
bis 11. 4 zu bleiben, um Sie zu
besuchen. Ich bin jedoch hier
sehr im Vorzug geraten und die
Tagung in Berlin wird schon zu
lang (½ langweilig) sein. Wir
planen am 9. April aufzubrechen.

Ich habe Fr. Rüttle geschrieben,
um einen Termin am 6. April
zu arrangieren. Hoffentlich
darf ich an selber Nachmittage
auch Fr. Schutz besuchen.

Erinnern Sie sich an den
Exkursion in 1966 nach Hunderwijk?
Wir haben beide diese Exk. besucht,
und ich habe irgendwo ein Foto,
in dem Sie und ich (unter anderem)
bei dem Bus stehen.

Ich hoffe, daß Sie nach 1993
die Gelegenheit haben werden,
Ihre hervorragende Forschungen weiter
zu fahren!

mit besten Grüßen

Dr. Alfred Trautwein

Traverse
Beethovenstr. 36, Nr. 25
6000 Frankfurt a. M. 1

21. März. 92

H. Wilfried Kuntzsch
i. v. v.

Ihre geehrten H. Kuntzsch,

H. Greuter hat sofort zurück-
geschrieben, daß ^{Dienstag} ~~Montag~~ ^{7. d. M.} ~~7. d. M.~~
um 14⁰⁰ für ihn am besten
wäre. Ich würde daher vorschlagen,
daß ich Sie (und hoffentlich
auch H. Schulz) am ^{Mittwoch} ~~Dienstag~~
den 8. April besuchen könnte.

Ich würde gerne Sie zum Mittagessen
einladen, wenn das für Sie
möglich wäre, oder ich könnte
um 14⁰⁰ nur für ein Gespräch
melden.

mit besten Grüßen

Hunt Institute for Botanical Documentation H. Schulz

Traverse
Beethovenstr. 36, Nr. 25
6000 Frankfurt a. M. 1

18 März, 1992

Herrn Dr. Wilfried Krutzsch

VSU.

Sehr geehrter Dr. Krutzsch,

ich bin dieses Semester als „Fulbright-
Professor“ am Jenckenburgmuseum mit
Friedemann Scharaschmidt tätig.

Alle (ungefähr 40 oder so) der Fulbright-
Professoren wurden gebeten, eine Tagung
in Berlin zu besuchen. Es wird 2-10
April stattfinden und wird wahrscheinlich
sehr langweilig sein! Ich nehme an, dass
wie die Nachmittage meistens frei haben
werden. Es gibt drei Männer in Berlin, die
ich tatsächlich besuchen möchte, d. h.
Sie, Dr. Greuter im Bolander Garten
und Dr. Schulz (der ein Autokollege von
Ihnen ist? — seine Triasarbeit habe ich
oft benutzt). Ich habe alle drei geschrieben,

um zu wissen, ob 4, 5 oder 6 April
Nachmittag eine Möglichkeit wäre, eine
Stunde mit Ihnen zu verbringen. Ich
vermute, wenn es richtig ist, lag Dr.
Schulz auch im Paläontologischen Museum
tätig ist, das ich Sie und ihn den-
selben Nachmittag besuchen könnte.
Könnten Sie Dr. Greuter anrufen, um zu
wissen, welchen Tag er gewählt hat
um diesen Tag zu vermeiden? (Es ist ^{oft} auf
Reisen und so würde mich nicht überraschen
wenn es überhaupt für ihn nicht möglich
wäre!)

Es ist besser, mich hier zu Hause zu schreiben,
weil die Post im Senckenbergmuseum
sehr verwirrt ist!

In der Hoffnung, daß es möglich wäre,
Sie zu besuchen verbleibe ich

Ihre Alfred Trautwein

July 23, 1969

Dr. Wilfried Krutzsch
Zentrales Geologisches Institut
Berlin 104, Invalidenstrasse 44
East Germany

Dear Dr. Krutzsch:

Many thanks for your publication on Pentapollenites from Paläontologische Abhandlungen Band I, Heft 2, which arrived recently. I especially appreciate having the copies of the original illustrations, as we shall be able to use them in our Catalog coverage when the time comes. We are currently working hard on development of a computer-based system for storage and retrieval of palynological data, but the more formal Catalog must go forward too!

Best wishes to you in your work.

Yours very truly,

Alfred Traverse
Associate Professor of Geology &
Biology
Editor
Catalog of Fossil Spores and Pollen

AT:kwc

February 13, 1969

Dr. Wilfried Krutzsch
Zentrales Geologisches Institut
Invalidenstrasse 44
Berlin 104, East Germany

Dear Dr. Krutzsch:

I find that for some reason I apparently never received a copy of your paper, "Mikropaläontologische (sporenpaläontologische) Untersuchungen in der Braunkohle des Geiseltales II," Paläontol. Abhandl. vol. 1, no. 2, pp. 73-103, 1962.

One of my students and I very much need to have this paper available for ready reference, and it would be much appreciated if you could let us have a reprint. In fact, if you could spare an extra reprint for the Catalog of Fossil Spores and Pollen, that would be even better.

The student in question is working on the Wilcox lignites of Texas. As you know, Elsik has already published a bit on the subject, most recently in Pollen et Spores, but there is still room for plenty of work in the field.

Hoping that you can help us out, and with best wishes I am

Yours very truly,

Alfred Traverse
Editor
C.F.S.P.

AT:kwc

October 1, 1968

Dr. W. Krutzsch
Zentrales Geologisches Institut
Berlin 104
Invalidenstrasse 44
East Germany

Dear Dr. Krutzsch:

I very much appreciate the package of reprints you recently sent ("Zur Kenntnis der präquartären periporaten Pollenformen", etc.). All of the papers will be useful to me in my work here. Your productivity amazes me!

Thank you for remembering me.

Yours very truly,

Alfred Traverse
Associate Professor of Geology

AT:kwc

29 Nov., 1966

Dr. Wilfried Krutzsch
Zentrales Geologisches Institut
Berlin N4
Invalidenstrasse 44
East Germany

Dear Dr. Krutzsch:

In connection with "assuming the reins" for the Catalog of Fossil Spores and Pollen, I find that your permission has not been sought for the inclusion in Volume 26 of the Catalog of material from your paper, "Uber einige liassische "angiosperme" Sporomorphen," Geologie Jahrg. 4, Heft 1, S. 65-76, 1955.

Although nobody has ever refused permission for such publication in the Catalog, we regard it as desirable to seek such permission formally.

The material in question is slated for inclusion in Volume 26 of the Catalog, which is very nearly completely prepared. I would appreciate it if you could write me indicating your approval.

Yours very truly,

Alfred Traverse
Alfred Traverse
Editor, Catalog of Fossil Spores and Pollen

27 September, 1966

Dr. Wilfried Krutzsch
Zentrales Geologisches Institut
Invalidenstrasse 44
Berlin N4
East Germany

Dear Dr. Krutzsch:

In the course of assuming some of the reins of the Catalog of Fossil Spores and Pollen here I have found some original plates of yours that were used in connection with preparing Volume 21 of the Catalog. I am returning these plates herewith, along with my thanks for your cooperation and for your patience.

I recently sent off a letter to you to thank you for the preprint of your very useful and interesting book given me at Utrecht. I sent the letter to an address I previously had for you--Kavalierstr., Berlin-Pankow. Is the above address now correct for you?

Yours very truly,

Alfred Traverse
Alfred Traverse, Editor
Catalog of Fossil Spores and Pollen

22 September, 1966

Dr. Wilfried Krutzsch
Kavallerstr. 9
Berlin-Pankow
East Germany

Dear Dr. Krutzsch,

It was so good of you to let me have a preprint of Heft 9 of "Abhandlungen des Zentralen Geologischen Instituts". This volume has already been very helpful to me and will doubtless become more so. Thanks again.

It was also interesting for me to meet you after hearing so much about you and having read your work. I do hope that there will be opportunities in the future to visit with you in less hectic surroundings.

Yours very truly,



Alfred Traverse
Associate Professor of Geology

Dr. W. Krutzsch

Berlin, den 24. 2. 1958

Berlin-Blankenburg,
Straße 42, Nr. 7

Herrn

Dr. Alfred Traverse

3737 Bellaire Boulevard

H o u s t o n 25

T e x a s , USA

Sehr geehrter Herr Traverse!

Ich danke Ihnen für Ihren Brief vom 27. Dezember 1957.
Ich begrüße es auch von mir aus, in Publikationsaustausch
mit Ihnen zu treten. Ich hoffe, daß etwa Ende Februar
die von Ihnen gewünschte Arbeit abgeht, zugleich mit einigen
neuen Papers von mir, die ich noch abwarten will.

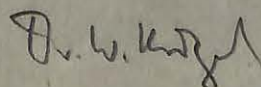
Mich interessiert speziell alles, was mit Oberkreide und
Tertiär zusammenhängt. Ich wäre Ihnen dankbar, wenn Sie
mir Ihre diesbezüglichen Arbeiten senden würden.

Meine bisherigen Kreidearbeiten sind nur ein Anfang, der sich
in vielerlei Hinsicht schon jetzt erweitern ließe. Eine
taxionomische Ergänzung ist auch zur Zeit im Druck. Desgleichen
eine Monographie der jüngeren Sporites.

Beide Arbeiten werden etwa in der zweiten Hälfte des Jahres
1958 erscheinen.

Mit Glückauf !

Ihr



(Dr. W. Krutzsch)

THE UNIVERSITY OF KANSAS
DEPARTMENT OF GEOGRAPHY
LAWRENCE

January 8, 1958

Mr. Alfred Traverse
Shell Development Company
Exploration and Production Research Division
3737 Bellaire Boulevard
Houston 25, Texas

Dear Mr. Traverse:

Thank you very much for your letter of December 5. I am sorry not to have answered it before but was overseas and have only just returned.

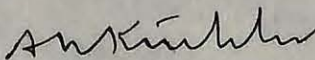
You should be able to order the Russian maps through the Telberg Book Company, 544 Sixth Avenue, New York 11, New York. The maps were published by the Geo-Botanical Institute of the Academy of Sciences, Professor Popova Street 2, Leningrad 22, U. S. S. R.

I am in the process of publishing a bibliography of vegetation maps. My publisher is the American Museum of Natural History, Central Park West at 79th Street, New York City, and the bibliography is in the hands of Dr. Jack McCormick. I am not sure when this bibliography will actually be published, but perhaps Dr. McCormick can enlighten you.

With regard to your last point, I am glad you feel so optimistic. You say: "I feel sure that financing through one of the larger foundations could be arranged if someone had the courage to undertake the work." It so happens that I have had the courage and that indeed the National Science Foundation is assisting me financially. However, you don't know the problems I had to face in obtaining these funds and for obtaining two assistants, when Sochova and Lavrenko had 55 assistants and were able to publish two different maps at the same scale. I shall be very happy to have just one map and a simpler one at that. However, work is progressing satisfactorily, and I hope that within a few years I shall be able to show you the results of my endeavors.

Thank you for showing such an interest in vegetation maps which are very close to my heart. If there is any way in which I can be of assistance to you, I want you to feel free to call on me at any time.

Sincerely yours,



A. W. Kuehler

AWK: jm

December 5, 1957

Dr. A. W. Klichler
Department of Geography
University of Kansas
Lawrence, Kansas

Dear Dr. Klichler:

I saw your recent review in Ecology, of the Soviet publication by Lavrenko and Sochava on the geobotanical and vegetational description of the U. S. S. R. I hope I may impose on you a bit by asking for a little further information. First, can you tell me how and where one can order this publication?

Secondly, can you tell me where one may look for vegetational maps of North America? Is there an index or bibliography of such publications on North America? It would greatly help me in my work (pollen analysis), if I could obtain such maps. So far I have had to depend on stumbling onto them.

Thirdly, I would like to say that I don't agree with you that a publication of the magnitude of the Soviet effort would be all but impossible in this country. I feel sure that financing through one of the larger foundations could be arranged if someone had the courage to undertake the work.

Very truly yours,



Alfred Traverse

AT:ml

Shell Development Company
Exploration and Production Research Division

Date: Fri, 13 Mar 98 13:25:24 CST
X-PH: V4.1@r02n06
From: "Deborah Kuehn" <Deborah.Kuehn@wku.edu>
To: axt8@psu.edu
Subject: unknown microfossil

Dear Al,

It's been a long time since we last communicated (can it really be 15 years already?). I see that you are now retired and, I hope, enjoying the fruits of your labor.

I am sending you this e-mail because it is quite probable that if you don't know the answer to my question, there is no one else who knows it, either.

I teach Sedimentology and require my students to develop a small lab project that involves the use of SEM. One of my students is trying to correlate a shale (really a slate or phyllite) from the southern Appalachian metamorphic belt with the Chattanooga Shale. There has been a lot of controversy over the age of this shale and its interpretation. A faculty member at a school in Alabama claims to have identified some fossils of scale trees in this shale, but the authenticity is in doubt. We decided to look for smaller fossils (palynomorphs possibly) that might be common to both shales. My student stumbled upon several very tiny (3-5 microns) spheres that many of the Biology faculty have said can't be organic, but the Geology faculty have pretty much concluded can't be inorganic, either.

The spheres have a fairly smooth, featureless outer surface, but on those where this outer surface is breached, the interior sphere is honeycomb in appearance with perfect interlocking hexagonal segments. They are present in both shales.

In looking through a book on plant biology, I found a couple of SEM photos of viruses with this same honeycomb pattern, but they are more on the order of 0.5 microns.

Have you ever run into something like this in your quest for palynomorphs. I wish I could tell you whether the spheres appear carbonized or replaced, but the samples were all metal coated to cut down on charging.

Hope to hear from you soon.

Debbie Kuehn

deborah.kuehn@wku.edu

traverse@ems.psu.edu (Alfred Traverse)

Subject: fossils?

Dear Debbie,

Yeah, I suppose it may be 15 years all right. But you remain very bright in my memory!

Technically I am "retired," but actually I do just about everything I ever did except teach my courses. I had intended to keep that up too, but the quality of people who signed up for paleontology and paleobotany the last couple of years that I gave them weakened my resolve.

The things you mention are almost certainly not palynomorphs for several reasons. One is that I feel pretty sure that your rocks would have the organic matter too carbonized for palynomorphs to be any longer recognizable. Further, internal, apparently solid spheres are not something that occurs in palynomorphs, as far as I can recall. It's dangerous to hypothesize anything without seeing the specimens, but I wonder if this isn't a crystallization phenomenon of some organic substance.

So, the bottom line is that the microfossils are indeed critical. In Alabama, my friend, Bob Gastaldi, at Auburn could certainly authoritatively decide whether the things are plants and if so, which taxa.

All the best, Al

To: deborah.kuehn@wku.edu
From: traverse@ems.psu.edu (Alfred Traverse)
Subject: fossil?

Dear Debbie:

Yeah, I suppose it may be 15 years all right. But you remain very bright in my memory!

Technically I am "retired," but actually I do just about everything I ever did except teach my courses. I had intended to keep that up too, but the quality of people who signed up for palynology and paleobotany the last couple of years that I gave them weakened my resolve.

The things you mention are almost certainly not palynomorphs for several reasons. One is that I feel pretty sure that your rocks would have the organic matter too carbonized for palynomorphs to be any longer recognizable. Further, internal, apparently solid spheres are not something that occurs in palynomorphs, as far as I can recall. It's dangerous to hypothesize anything without seeing the specimens, but I wonder if this isn't a crystallization phenomenon of some organic substance.

So, the bottom line is that the megafossils are indeed critical. In Alabama, my friend, Bob Gastaldo, at Auburn could certainly authoritatively declare whether the things are plants and if so, which taxa.

All the best. Al

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802

(814)863-3419 or (814)865-6711

6 January, 1989

Dr. Barry Kues
Department of Geology
University of New Mexico
Albuquerque, NM 87101

Dear Dr. Kues:

Quite a long while ago (1981), Sid Ash, who is I guess a mutual friend of ours, gave me a suite of samples from the Red Tanks Member (see Ash & Tidwell 1982) to see what the palynomorphs would say about the age. Students of mine and I have since then spent a lot of time on these samples, and we have considerable information assembled now on the palynology of the subject samples. I believe Sid quoted some of my results in a report that you presumably have seen.

Is there any reason why I should not describe this palynoflora in some palynological journal? Sid says I should ask you.

Best regards.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

8. 1. 1954.

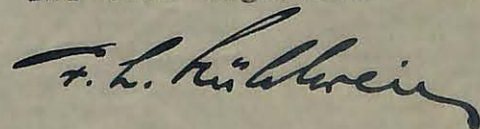
Sehr geehrter Herr T r a v e r s e !

Mit Bezugnahme auf unseren letzten Schriftwechsel danke ich Ihnen sehr für Ihre Informationen und Adressen. Seit Juli 1953 war ich schwer erkrankt und musste mich im Sommer einer Magenoperation unterziehen, die ich nun aber glücklich überwunden habe. Nach einem langen Erholungsaufenthalt im Schwarzwald fühle ich mich nun wieder ganz wohl.

Inzwischen ist nun auch der englische Prospekt des Bandes über Kohlenmikroskopie herausgekommen, den ich Ihnen anbei übersende in der Hoffnung dass Sie inzwischen bereits in den Besitz des sicherlich auch für Sie sehr interessanten Buches gelangt sind. Im Sommer haben uns hier in Essen noch die Herren Parks und Cady besucht, mit denen ich einen anregenden Nachmittag verbracht habe, ehe ich so krank wurde.

Mit besten Glückwünschen zum Jahreswechsel
und freundlichem Glückauf

Ihr sehr ergebener



Herrn A. Traverse
B. o. I. M. Region V
Box LL - University Station
Grand Forks - North Dakota

Lignite Research Laboratory
Grand Forks, North Dakota
U. S. A.

24 June, 1954

Dr. F. L. Kühlwein
95 Vossnacken
Essen-Kupferdreh, Germany

Sehr geehrter Dr. Kühlwein!

Über Ihren Brief vom 8. Januar habe ich mich sehr gefreut. Es tat mir leid zu hören dass Sie so krank gewesen sind. Ich hoffe Ihre Krankheit nun ganz vorbei.

Meine Arbeiten hier gehen auf in verschiedenen Gebieten weiter. Ich verfolge meine Forschung über den Zusammenhang der mikroskopischen Struktur von lignite mit den gewerblichen Beschaffenheiten dieser Kohle. Anferseits, habe ich auch eine Monographie über meine Forschungen über die Mikrofossilien eines kleinen Lagers von Braunkohle, in Vermont, in Vorbereitung.

Ihre Angaben über das Buch über Kohlen mikroskopie interessierten mich sehr. Ich kaufte es als es zuerst veröffentlicht war und gebrauchte es öfters. Ich habe nun eine kurze semi-populäre Veröffentlichung geschrieben, in der ich einige Ihrer wertvollen Tabellen benutze.

Herr Parks sprach mit mir im Winter über den Plan das Handbuch ins Englische zu übersetzen. Dieser Vorschlag interessierte mich nicht sehr. Ich denke, ~~es ist nicht gerechtfertigt~~ das Buch zu übersetzen nicht gerechtfertigt ist, da es nicht zu schwierig ist das Buch in Deutsch zu lesen.

Ich schreibe Ihnen auf Deutsch, um mich im Gebrauch der deutschen Sprache zu üben.

Mit besten Wünschen.

Ihr sehr ergebener,

Alfred Traverse

February 1, 1968

Mr. R.W. Kuhn
Color Print & Processing Services
Eastman Kodak Company
Rochester, New York 14650

Dear Mr. Kuhn:

Thank you for yours of 29 January, regarding my roll of film which was missing at the time of my earlier letter to you. I received the processed film back from you the day after I wrote. It had been about three weeks, which is longer than you had ever taken before--hence my worry.

I appreciate your helpfulness.

Yours very truly,

Alfred Traverse
Associate Professor of Geology

ATLkwc

Dr.-Ing. habil. F. L. KÜHLWEIN
Bergassessor a. D.

ESSEN-KUPFERDREH,
Voßnacken

am 25. Juni 1954.

A, T r a v e r s e, Esq.

Lignite Research Laboratory
Bureau of Mines
Grand Forks-N.Dakota.

Dear Mr. Traverse !

Many best thanks for your kind dedication of a print of your very interesting paper on Petrographic Analysis of commercially delivered Lignite which gives a satisfactory outlook on a successful method of analysing lignite microscopically. According to your figures the composition seems to be far away uniform reg. the percentage of opaque matter. I think this will be of practical purpose for briquetting on which relationship much work has been done in Germany especially in the Russian zone (H. Jacob- Freiberg).

Unfortunately I am very ill again since Eastern and because of my stomach operation last year my health cannot more be restored. So I must finish with all scientific work and will spend my time this summer in a hospital near Baden-Baden (Black Forest) . Some days ago I was delighted by Mr. B.C. Parks' visit together with Dr. Teichmüller. I asked him for a copy of a B.o.M. paper from Fraas-Ralston " Universal type of electrostatic Separator " (Rep. Invest. 4766/1151 ?) . But it may be that it takes too much time until Mr. Park's return to USA. Could you let me have the copy perhaps earlier and let him know that you arranged it for me? Many best thanks for your kindness. With best wishes for your work, kind regards and " Glückauf "

Yours sincerely



UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
FOREST PRODUCTS LABORATORY
MADISON 5, WISCONSIN

File →

IN REPLY REFER TO:

1600

January 15, 1962

Dr. Alfred Traverse
P. O. Box 481
Houston 1, Texas

Dear Dr. Traverse:

The piece of wood referred to in your letter of January 5 is identified as southern yellow pine and could be either loblolly or longleaf pine. It is not possible to separate these species from small specimens but if the pith of the log is still intact, a separation could be accomplished. The pith in longleaf pine is generally about 0.2 inches in diameter while that of loblolly is commonly 0.1 inch or less in diameter.

If we can be of further assistance, please feel free to call on us at any time.

Very truly yours,

HAROLD L. MITCHELL, Chief
Division of Timber Growth and
Utilization Relations

B Francis Kuchka

By: B. FRANCIS KUKACHKA, Acting



XXXXXX

15 November, 1979

Dr. A. R. Kulkarni
Department of Biological Sciences
Ramnarain Ruia College
Matuaga, Bombay
India 400-019

Dear Dr. Kulkarni:

Thanks for yours of 24 October, 1979 re my Brandon Lignite monograph. It seems astonishing that some library in your area would not have the U.S. Bureau of Mines publications, especially as the Reports of Investigations were distributed free-of-charge. Unfortunately, the Report has been out-of-print for years, and I have no more copies either.

However, RI 5151 has been reprinted as a "Benchmark Paper in Geology", per the enclosed advertisement, and your library should get this publication for its collection.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
encl: xerox copy of ad

Dr. A. R. Kulkarni

M. Sc., Ph. D.

Telephone : 473098
Dept. of Biological Sciences
Ramnarain Ruia College,
Matunga, Bombay-400 019.

Date : 24/10/79.

To,

Dr. Alfred Traverse,
Deike Bldg., The Pennsilvani State
University,
University Park,
Penn. 16802.
U.S.A.

*refer to
Research Paper*

Dear Dr. Traverse,

We are investigating pollen flora of Ratnagiri lignite (India). We would very much like to have the reprint of your following paper. We have tried our best to procure it but so far we are not successful.

We will be obliged if you can spare a copy of the same. Please do the needful.

With best regards,

Yours Sincerely,

(Signature)
(Dr. A. R. Kulkarni.)

Traverse, A (1955)

Pollen analysis of Brandon Lignite of Vermont.
U. S. Dept. Bur. Mines. Rep. Invest.

5151 : 1-107

26 February, 1979

Miss Kerstin Kulp
114 Bittersweet Drive
Harleysville, PA 19438

Dear Kerstin:

Underseparate cover I am sending you eleven slides as listed below. The two slides PRC 1397 and PRC 1547 may be discarded when you are through with them as they are drying up and no good to us any more. However, the others must be returned. The two from the Black Sea are especially valuable as we have no duplicates from those particular levels. All of the slides are post-glacial, in other words 7000 years old or younger, with the exception of slide PRC 719 which is "Tertiary" (exact age unknown, but probably several million years old at least).

— PRC 698, Florida, surface sample (top 2") from Harney River
bottom

— PRC 710 same area

— PRC 719, Alaska, Heady Hotel well, Homer, AL, 86 ft. deep

— PRC 1377, Pennsylvania, Mt. Davis Marsh, Somerset, 3'4" deep

— PRC 1397, New York, State Line swamp, Columbia County, 4'-6' deep

— PRC 1547, West Virginia, Cransville swamp, Preston Co.,
66-68' deep

— PRC 2285, Black Sea bottom core, depth 4.60 meters

— PRC 2240, Black Sea bottom core, depth .01 meters

— no # Maryland, Holocene (recent), see label

— " two slides of pollen from honey in different areas

REMEMBER TO SEND BACK THE BLACK SEA SLIDES. THEY ARE ESPECIALLY IMPORTANT.

Yours very truly,

Elisabeth I. Traverse
Assistant in Palynology

Kulp, pg. 2

P.S. A word of caution--you seem to be trying to be an "instant" palynologist, and this is nearly impossible. Consequently, we can't be responsible for any conclusions you may draw from looking at our slides, as I'm sure you realize. If you wish to acknowledge the Penn State Palynological Laboratory as the source of your slides, that's fine, but don't say that we sent you such and such slides so that you could find out certain things. The only choices we have made in selecting the slides is to select representatives from different places and environments--any conclusions you draw from looking at them are your own. If it's convenient, you might send us a summary of your report. We would be interested.

16 January, 1979

Miss Kerstin Kulp
114 Bittersweet Drive
Harleysville, PA 19438

Dear Miss Kulp:

Your recent request for peat directed to Mr. Fred Rich has been referred to us as Mr. Rich has completed his degree requirements and is no longer here.

At this time we have no peat since it is collected in the spring or fall when the weather is good. Each year, students in the paleobotany class work on it, but they have long since completed the work for 1978-79. The project you outline is quite ambitious for a 9th grade student. It's amazing that you have even heard of palynology. A study of pollen and spores in peat deposits can be very involved, since you must first learn to recognize the different basic groups of plants and the pollen or spores they produce.

We want to help you as much as we can, so are sending you the following items (the slides will be sent under separate cover):

1. outline of lab process for extracting pollen from peat
2. xerox copies of pages from the reference book,
An Introduction to Pollen Analysis, G. Erdtman,
Chronica Botanica Co., Waltham, Mass., 1954
showing pictures of modern spores and pollen which you might encounter in peat studies
3. three slides of pollen from peat from different places for you to examine under your microscope.
Slide A: Bear Meadows peat from Centre Co., PA near Boalsburg
Slide B: Sharon Peat from Mercer Co., PA, from a bog near Sharon, PA
Slide C: New Brunswick peat from Salisbury Bay, New Brunswick, Canada

When comparing these slides it is not important that the residues do not look alike. Just look at the pollen and spores. You will notice that the Bear Meadows peat is very red--this is just the stain Safranin O and the person who made the original preparation used a bit too much. The Sharon Peat slide has a lot of what you might call "other organic junk" mixed in with

the pollen. This is quite normal. The New Brunswick slide is very rich in pollen and is fun to look at. When looking at the slides you can use the pictures from Erdtman's book to try to figure out what you are seeing. If you can recognize twenty or so different things you will be doing as well as most beginning students in our classes at Penn State. Good luck.

Yours very truly,

Elizabeth Traverse
Assistant in Palynology

P.S. If you really get interested in palynology you should come up to Penn State to visit us.

114 Bittersweet Drive
Harleysville Pa., 19439
January 13, 1979

Mr. Fred Rich, grad. student in palynology
Beike Building
PSU
University Park, Penn., 16801

Dear Mr. Rich,

My name is Kerstin Kulp and I am a student in the ninth grade from Indian Valley Junior High School. For my Science Fair Project this year I am interested in finding the plant coverage and climate of an area by studying the pollen from the peat moss in a log from that area. To be able to do this I will need some peat moss, and that is why I am writing to you. Would it be possible for you to send me one to three different samples of peat moss? For each test of extracting the pollen from the peat I will need .5cc of peat from the surface layer of the log, but I would like to make between five and ten tests for each sample. I would also like if possible to have these samples from different parts of the state. Please have these samples labeled with the exact location of the log.

I don't want to obligate you into something you cannot or do not have time to do. Anything that you can send will be greatly appreciated.
Thank-you for reading my request.

Sincerely,
Kerstin Kulp

P.S. You can send the samples quickly to:

Mr. Richard Arner
Indian Valley Jr. High School
Maple Avenue
Harleysville Pa., 19438

- or -

Kerstin Kulp
114 Bittersweet Drive
Harleysville Pa., 19438

Beethovenstr. 36, Nr. 25
6000 Frankfurt a. M. (Germany)

19. Feb. 92

Dr. A. K. Kulshrestha
Biology Department
Lucknow University, etc.

Dear Dr. Kulshrestha,

Thanks for the interesting reprint. It was forwarded here from ^{my} office at home. I am on sabbatical leave at the Senckenberg Museum.

Did I meet you in Lucknow in November? I was there for the 5th Birth Centennial at BSIP. Your country is fascinating.

The stamps were great! — I collect stamps with plants.

One small comment about the paper — when publications by D. Bhandari pre-1962 are cited, they must be cited with

the spelling than used: "Broadway."

All the best,

Yours

Alfred Trevenna

[Faint, mostly illegible handwritten text follows, appearing to be bleed-through from the reverse side of the page.]

22 January, 1986

KULTURA
Hungarian Foreign Trading Co.
P.O. Box 149
H-1389 Budapest
Hungary

Dear Friends:

Please send me one (1) copy of "Introduction to the palynology of pre-Quaternary deposits, Vol. 1-2 by M. Kedves. The order blank furnished by you and a check for U.S. \$18 are enclosed.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
encl

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802
Phone: (814)863-3419; Fax: 814-863-7823

31 January, 1994

Dr. Arun Kumar
10/11 Ashirwad Enclave
Ballupur, Dehra Dun
India 248001

Dear Dr. Kumar:

Thanks for your paper on the K/T studies in Texas. I had no idea you were working on this--apparently at about the same time as my doctoral student, Dale Beeson was doing much the same thing ("High resolution palynostratigraphy across a marine Cretaceous-Tertiary boundary interval, Falls County, Texas", Ph.D. dissertation, Pennsylvania State University, 1992). Dr. Beeson's findings and conclusions, however, contrast with yours, and you may wish to correspond with him (Chevron U.S.A., 935 Grovier St., New Orleans, LA 70112).

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
c: D. Beeson, A.T. Cross

21 June, 1977

Dr. Arun Kumar
Palynology Laboratory
Institute of Petroleum Exploration
Oil & Natural Gas Commission
Kaulagarah Road
Dehra Dun 248195, India

Dear Dr. Kumar:

Thank you very much for yours of 20 May. I am very much impressed with your information and especially with the wide degree of experience you have had. However, I must tell you that I do not contemplate that there will be any hiring of research assistants or teaching assistants or junior members of the faculty in palynology during the foreseeable future. Unfortunately, therefore, Penn State is not someplace where it is reasonable to expect you might "catch on". I do wish you all the best. May I suggest that your best chance is with one of the oil company laboratories.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et



Palynology Laboratory
Institute Of Petroleum Exploration
OIL & NATURAL GAS COMMISSION
Kaulagarh Road, Dehra Dun 248195
India.

20th May, 1977.

Dr. Alfred Traverse
Professor of Palynology
Department of Geoscience
Pennsylvania State University
University Park, Pennsylvania 16802
U.S.A.

Dear Dr. Traverse:

I am a stratigraphic palynologist and working at present in the oil company laboratory. I received my Ph.D. from the Geology Department, Michigan State University in 1976. I wrote my thesis on "Palynology of the Navarro Group (Maestrichtian) of Texas" under the guidance of Dr. A.T. Cross. Since March 1976, I am working on dinoflagellate cysts and acritarchs from the Early Cretaceous sediments of Cauvery Basin, South India.

I am planning to return to the U.S.A. again to work. I would deeply appreciate if you kindly accept me in your department and permit me to work under your guidance. I do not have to have a post-doctoral grant, I would just need any kind of financial help to support myself. I can teach Paleobotany, Palynology, Micropaleontology, and undergraduate courses in Sedimentology, Petroleum Geology, Historical and General Geology. I can also work as a museum or research assistant.

I am enclosing a copy of my bio-data. Please write me on the following address.

3-B/1, Kishan Nagar, Dehra Dun 248001, India.

With kind regards.

Yours sincerely,

Arun Kumar 20th May '77

Dr. Arun Kumar

Bio-Data

Name: Arun Kumar
Date Of Birth: 21st July, 1948
Place Of Birth: Jaunpur(W.P.) India
Father's Name: Mr. Krishna Kant Srivastava
Permanent Address: D-9/1, Paper Mill Colony
Lucknow 226006, India.

Educational Qualifications:

<u>Degree</u>	<u>Year</u>	<u>Institution</u>	<u>Division</u>	<u>Subjects</u>
High School	1962	U.P.Board,Allahabad	IInd.	Hindi,English,Maths., Biology,Science,and Economics.
Intermediate	1964	-----do-----	IInd.	Hindi,English,Physics, Chemistry,andBiology.
B.Sc.	1966	Lucknow University	IInd.	Geology,Botany,Zoology and General English.
M.Sc.	1968	-----do-----	Ist	Geology (Third positio -n in order of merit).
Ph.D.	1976	Michigan State University East Lansing,Mich. U.S.A.		Geology. (Other subject -ts studied are Botany Statistics,Computer Science).

Awards:

1. National Loan Scholarship by the Government of India,1964-1966.
2. Junior Research Fellowship of Wadia Institute of Himalayan Geology, 1969.
3. National Scholarship for Study Abroad by Government of India. 1973-1976.

Experience:

1. As a junior research fellow of Wadia Institute of Himalayan Geology, I along with a colleague completed preliminary geological mapping of about 400 square kilometers of the area of Kumaon Himalayas. Various types of rocks were collected and studied in thin section.
2. I joined Ahmedabad Project of Oil & Natural Gas Commission as an Assistant Geologist on 10th Feb. 1970. For almost 3 years I attended to the drillsite work, and studied the sub-surface geology by interpretation electric and radio-active logs. My work also included the preparation of isopachous and structure contour maps for the development and production of oil fields.
3. I joined the Geology Department, Michigan State University, East Lansing, Michigan, U.S.A. in Jan. 1973, and completed my Ph.D. in Feb. 1976. I did extensive field work in the Rocky and Appalachian mountains, Baja California Mexico, and Trinidad. Mostly my work included measuring and sampling outcrop sections.
I wrote my thesis on "Palynology of the Navarro Group (Maestrichtian) of Texas". This work includes, biostratigraphic zonations, correlation of these zones, age determination, taxonomy of spore and pollen, paleoecological interpretation, palynology of the sediments across the Cretaceous-Tertiary in Texas, and study and interpretation of transgressive and regressive sequences, and environment of sedimentary deposition using spore, pollen, dinoflagellates and acritarchs.

Publications:

1. 1975. Palynology of Cretaceous-Tertiary boundary in Texas. Proc. Michigan Acad. Sci. Arts & Letters. (Abstract).
2. 1976. Palynology in Institute of Petroleum Exploration, ONGC, Dehra Dun. In: Palynology in India. Ed. H.K. Maheswari. Birbal Sahni Institute of Palaeobotany, Lucknow. p. 53-67.
3. 1976. Palynostratigraphy and paleoecology of the Navarro Group (Maestrichtian) of Texas, U.S.A. Proc. 4th Int. Palynological Conf. Lucknow, India. (Abstract: 86-87). Full paper in press.
4. 1976. Additional phytoplankton from Dalmiapuram Grey Shale, Cauvery Basin, Tamil Nadu, India. Proc. 4th Int. Palynological Conf. Lucknow, India. Proc. 4th. (Abstract: 190). Full paper in press.
5. 1977. Aeropalynological studies in Sanford Woodlot, Michigan State University, U.S.A. (In Press, Geophytology, Lucknow.).
6. 1977. Palynological investigation of Pitch Lake, Trinidad. (In Press, Nature).
7. 1977. Ichnofauna from Clinton Group (Red Sandstone Facies), Early Silurian from Harrisburg area, Pennsylvania, U.S.A. (In Press, Geological Magazine, Cambridge).

Professional Memberships:

1. American Association of Stratigraphic Palynologists. U.S.A.
2. Palaeobotanical Society of India, Lucknow.
3. Geological Society of India, Bangalore.

Major Conferences Attended:

1. 1974. American Institute of Biological Sciences, Tempe, Arizona, U.S.A.
2. American Association of Petroleum Geologists, Dallas, Texas, 1975, U.S.A.
3. 1976. 1st. International Conference on Himalayan Geology, New Delhi, India.
4. 1976-1977. 4th International Conference on Palynology, Lucknow, India.
5. 1977. 4th International Gondwana Symposium, Calcutta, India.

Visits to Important Laboratories:

1. United States Geological Survey, Denver, Colorado, U.S.A.
2. Marathon Oil Company, Denver, Colorado, U.S.A.
3. Gulf Oil Corporation, Pittsburg, Pennsylvania, U.S.A.
4. AMOCO Research Laboratory, Tulsa, Oklahoma, U.S.A.
5. Institute of Oceanography, University of Rhode Island, U.S.A.
6. Museum, University of California, Berkeley, U.S.A.
7. Birbal Sahni Institute of Palaeobotany, Lucknow, India.
8. Institute of Petroleum Exploration, Dehra Dun, India.

31 March, 1983

Dr. K.P.N. Kumaran
Department of Biological Sciences
University of Calabar
P.M.B. 1115
Calabar, Nigeria

Dear Dr. Kumaran:

Thank you for yours of 10 March. Sorry to hear that U. of C. has not been a good research opportunity. I am also sorry to report that I have no position available for you here, even as a temporary post-doctoral researcher (I have two of them already). Furthermore, the employment situation in our field in North America is at the moment bleak.

You are of course welcome to visit us, providing we are here, and that other university duties permit. Late August--early September is not ideal, however, because that is the very beginning of term here. If you come a little later, perhaps you could present a talk to my students on your Triassic work, as that is of special interest to us.

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

UNIVERSITY OF CALABAR

P.M.B. 1115

CALABAR, NIGERIA

Prof. Ulo K. Enyenihi, B.Sc. (Lond.), Ph.D. (Ibadan)
~~Head of Department~~

Prof. M. S. Tambiah, B.Sc. (Ceylon), Ph.D. (Lond.)

Our Ref :

Your Ref :



DEPARTMENT OF BIOLOGICAL SCIENCES

Telegrams : UNICAL, CALABAR

Telephone : 222855 EXT. 128, 133

Telex : 65103 UNICAL NG.

Tenth March 1983

19.....

Prof. Alfred Traverse
435 Deike Building
Pennsylvania State University
University Park,
Pennsylvania 16802
U. S. A.

Dear Prof. Traverse,

After a brilliant academic career in Botany in south Indian universities and a doctorate degree from the internationally reputed Birbal Sahni Institute of Palaeobotany, Lucknow, I came to Nigeria in 1979. I teach some of the courses in Botany and have been working on the Upper Cretaceous/Tertiary flora and Palynomorphs of South-eastern Nigeria in collaboration with members of the Geology department. I have contributed a few papers after coming here.

I find it difficult to do much work here and as such I can't utilize my training properly. The atmosphere here is not congenial for research work and one has to struggle physically too much to get something done.

I am anxiously looking for a placement to pursue my research work in Palynology for a couple of years. I would very much appreciate if you could give me an opportunity to associate with you in palynological work. This would help me to utilize my expertise in a better way and at the same time I could gain more experience while collaborating with scientist of international reputation. A copy of my curriculum vitae is enclosed for your consideration and suitable action please.

I intend to visit the USA sometimes in August or early September 1983 on my way to India. I wish to see you and visit your lab during my stay in the USA. I shall let you know my travel arrangement after receiving your reply.

I look forward to hearing from you.

With best regards, I am

Sincerely yours,

K.P.N. Kumaran

K.P.N. Kumaran
Lecturer in Botany

29 July, 1980

Dr. K. P. N. Kumaran
Department of Biological Sciences
University of Calabar
P.M.B. 1115
Calabar, Nigeria

Dear Dr. Kumaran:

First, regarding the "p.s." in your recent postcard to me-- ICP, of which I am now the past-President, is a federation of societies. There are no individual members. You should write to Dr. Coetzee, expressing an interest in being associated with the African Committee for Palynology (unless there are perhaps enough palynologists in Nigeria and neighboring countries to form a new society). In the meantime, I am enclosing herewith a copy of the current ICP Newsletter.

You ask for "reprints of my papers, Paleozoic and Tertiary". Most of these are out of print, but if you will request particular papers, I will perhaps be able to prepare xerox copies or whatever.

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology
Past-President, ICP

AT/et
cc: Caratini
encl: ICP Newsletter

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419
fax: 814-865-3191

12 March, 1991

Dr. Lee Kump
etc.

Dear Lee:

This is in response to your request for a review of the Raven article.

First I should file the disclaimer that I am by no means qualified to judge the accuracy of fine points of Dr. Raven's photosynthetic pathway biochemistry-plant physiology and related matters. I am a paleobotanist/palynologist.

Having stressed that, I would like to say that I have the same reaction to this paper I have had to some of Dr. Raven's lectures--they are full of interesting tidbits, and the whole seems to move in a certain direction, but damn it, I wish he'd do the job of organizing the information to make the progression more obvious to me! Some of Raven's best points are buried, almost hidden, in the middle of various paragraphs. They need to be dug out and emphasized!

This paper cries out for an abstract that really abstracts the main ideas, without further brief essays along the way, the whole occupying no more than 40% as many lines as the present "abstract."

The main idea is to look at whether high oxygen in the atmosphere harms plants, inhibits their activities, etc. This is based on experiments, theory and, to a limited extent, paleontology. The main facts could be much more succinctly stated: 1, 2, 3....

To provide much-needed theme-setters, there should be at least one more table and perhaps some sort of graph showing clearly some major effects of hyperoxia. Of course, the last sentence of the abstract and the last paragraph of the paper tell the bottom line: there just isn't much evidence that high O₂ hurts plants much--the most important conclusion of the whole paper, and it's not developed at all!

Throughout the paper, high points should be emphasized, with the rest of the material organized to reinforce them. Furthermore, the paper could and should be condensed with real profit to readability. Some of the referencing could be cut back--e.g. the same reference often occurs 2-3 times in the same paragraph--not necessary. Verbosity and digressions throughout should be eliminated.

I have written a very few corrections directly on the MS--those correcting some capitalizations in the biblio were written in by mistake, before I noted that book titles are all capitalized.

Yours very truly,

Alfred Traverse

AT/et
encl: MS

June 18, 1968

A. Traverse

I. Kunasz


Re: Use of facilities of palynological laboratory.

When you called me over the weekend, it caught me by surprise, and I did not get said what should have been said. I thought that it might be valuable to get my position on the matter on paper, with the thought that you may also wish to discuss it further with me.

In brief, my policy will be that I will not approve of use of the palynological laboratory for processing of samples for palynological study unless the person who wishes to do this has had training in palynology (at least the equivalent of Geology 423) either at Penn State or elsewhere. There are two main reasons for this policy:

1. Safety. The procedures employed are somewhat dangerous to the people employing them, and also it is easy to damage the equipment that is used. Both of these facts have been demonstrated during the past year by unfortunate accidents, even though the persons involved had had some (but apparently not enough) training.
2. Competence. I am concerned that work done in the palynological laboratories by persons without training will be interpreted by persons both at Penn State and at other institutions as being done under my direction. I must insist that persons who work in the palynological laboratories therefore have received at least the very modest amount of instruction offered in Geology 423 or equivalent. Without this there is very little chance of productive research being carried out.

Yours very truly,


A. Traverse
Associate Professor of Geology

AT:kwc

cc: W. Spackman
L. Wright

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

11 January, 1991

Jack Kuntz
4706 NW 28th Street
Gainesville, FL 32605

Dear Mr. Kuntz:

Your letter of 5 Dec. 90 to the "Catalog" came here during the end of semester rush, was eventually referred to me, although I have not been connected with that publication since 1976. I am, however, the resident palynologist-paleobotanist!

Maybe you have already discovered that you now have a uniquely qualified person right in Gainesville to help you with your botanical problems:

Dr. David Dilcher
Florida Museum of Natural History
University of Florida
Gainesville, FL 32611-2035
phone: 904-392-6560

He could at least steer you in the right direction.

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
cc: A. Davis

4706 NW 28th Street
Gainesville FL 32605

December 5, 1990

Catalog of Fossil Spores & Pollen
Coal Research Section
College of Earth & Mineral Sciences
517 Deike Building
Pennsylvania State University
University Park PA 16802

Dear Sirs:

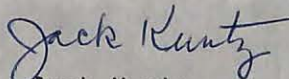
I am a free-lance writer, working on a novel about Hernando de Soto who explored what is now the southeastern United States in the mid-16th century. I need to learn what plants and trees he saw on his entrada (invasion), so I don't commit such errors as having him and his men picking oranges from trees, or eating kudzu leaves. I want to learn more about what food and medicinal value the flora that they found provided. Also, which plants and trees existed here also existed in Spain, and which were completely new to them?

The states de Soto traversed are: Florida, Georgia, South and North Carolina, Tennessee (eastern), Alabama, Mississippi, Arkansas, Louisiana (along the Mississippi) and Texas (as far as the Trinity River).

I have read parts of William Bartram's journals, but by the time he came through the region, some 200 years had elapsed and many exotics had already been introduced. Similarly, John Muir's journey was even later.

Can you suggest any references--whether books or scholarly papers--I might look up in the local libraries?

Yours,


Jack Kuntz

PROGRAMME

22nd October, 4.00 p.m.

Welcome Address	... Dr. L. B. SINGH
Introduction and Citation	... Prof. T. S. MAHABALE
Presentation of Medal and Address	... Madam SAVITRI SAHNI
Expression of Gratitude	... Madam <u>L. A. KUPRIANOVA</u>
Vote of Thanks	... Dr. P. K. K. NAIR

(COFFEE)

Professor Gunnar Erdtman International Medal Lecture
—Madam L. A. Kuprianova

The Pleasure of your Company is cordially requested at the Presentation ceremony of the Professor Gunnar Erdtman International Medal For Palynology (1968), Instituted by the Palynological Society of India, to Madam Ludmila, A. Kuprianova, Komorov Botanical Institute, Leningrad, U.S.S.R., by Padmashri, Madam Savitri Sahni on 22nd Oct. 1969, at 4.00 p.m., in the auditorium of the National Botanic Gardens, Lucknow.

R. S. V. P.

Dr. L. B. SINGH (Director, National Botanic Gardens, Lucknow)
—EXECUTIVE CHAIRMAN, RECEPTION COMMITTEE

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802, USA
Phone: (814)863-3419; Fax: 814-863-7823
E-Mail: traverse@ems.psu.edu

7. Aug. 1995

Frau Dr. Marie H. Kurmann
Palynology Unit, Herbarium
Royal Botanic Garden, Kew
Richmond, Surrey TW9 3AE
U. K.

Sehr geehrte Frau Dr. Kurmann,

die Frühling-95 Nummer der "Kew" Zeitschrift mit dem nicht sehr schmeichelnden Foto von Ihnen (S. 39) habe ich von Peter Crane bekommen. (Es war allerdings eine interessante Idee, Sie in der Bindung ausguckend zu porträtieren.)

Frage: welcher "conifer" hat das "Pollenkorn von Koniferen" produziert? Es sieht ganz wie ein Ephedra Pollenkorn aus. (Man findet Sigillaria auf Seite 34 als "Lepidodendron" identifiziert, Ginkgo "fruits" und "nuts" auf S. 55, usw. Ephedra als Mitglied der Koniferen ist vielleicht nicht zu weit...) Die Auskunft über Ihre Forschungen war jedoch sehr interessant. Die Zeitschrift ist so anregend, daß ich die Verwaltung anwenden werde, um zu lernen, ob ich preisgünstig abonnieren könnte.

Am 30.VI.95 bin ich "emeritus" geworden. Es bedeutet nicht viel, weil ich noch die Palynologie unterrichten werde, und ich werde meine verschiedenen Projekte weiter führen. Persönlich ist mein neuer Zustand nicht ohne Probleme. Die medizinische Versicherung der Universität zum Beispiel nicht weiter läuft. Man bekommt nur die "Medicare" der USA-Regierung. Nichts für zahnärztliche Behandlung. Im Juli mußte ich \$1500 einem Zahnarzt bezahlen. Im Juni wäre es von der Uni-Versicherung bezahlt werden.

mit besten Grüßen

Ihr

Alfred Traverse

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802, USA
Phone: (814)863-3419; Fax: 814-863-7823
E-Mail: traverse@ems.psu.edu

26. Dezember 1994

Dr. Marie H. Kurmann
Royal Botanic Gardens
Kew, Richmond, Surrey TW9 3AB
England

Sehr geehrte Frau Dr. Kurmann,

ich kann mich nicht sicher erinnern, ob ich mich für die Sonderdrücke der zwei Kapitel aus Ihrem Buch bedankt habe, obwohl wir das Buch besprochen habe. Inzwischen habe ich das Buch für unsere Bibliothek bestellt und bekommen.

Die zwei Veröffentlichungen finde ich hervorragend. Ich möchte nur ein bisschen klagen, daß der Sporen-Artikel die Namen der entsprechenden Sporaee dispersaee nicht gibt. Eine zusätzliche Tabelle wäre interessant gewesen.

Ich wünsche Ihnen ein glückliches und erfolgreiches Neues Jahr.

Ihr

Alfred Traverse

┌ Professor Alfred Traverse ┐
┌ Palynological Laboratories ┐
┌ Department of Geosciences ┐
┌ The Pennsylvania State University ┐
┌ 435 Deike Building ┐
┌ University Park, PA 16802 ┐
┌ U.S.A. ┐

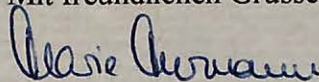
14. Oktober, 1994

Werter Herr Prof. Traverse:

Besten Dank für Ihre interessanten Sonderdrücke. In Kew sind wir zur Zeit inmitten der Vorbereitungen einer neuen, permanenten Ausstellung über die Evolution der Pflanzen, die im nächsten Frühling eröffnet wird.

Das Buch *Ultrastructure of Fossil Spores and Pollen* ist im letzten März erschienen, und ich lege Ihnen ein paar Bestellungsformulare dafür bei.

Mit freundlichen Grüßen,



Marie H. Kurmann

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
UNIVERSITY PARK, PA 16802, USA
Phone: (814)863-3419; Fax: 814-863-7823
E-Mail: traverse@ems.psu.edu

2. Oktober. 94

Dr. Marie H. Kurmann
Palynology Unit, Herbarium
Royal Botanic Gardens, Kew
Richmond, Surrey TW9 3AE
UK

Sehr geehrte Frau Dr. Kurmann,

könnten Sie mich informieren, ob Ihr Buch, "Ultrastructure of fossil spores and pollen...." schon ausgekommen ist? Ich möchte eine Kopie für unsere Bibliothek bestellen und um das zu erledigen, brauche ich darüber noch ein bisschen mehr Auskunft.

Wir hoffen, daß es Ihnen prima geht. Es ist kaum zu glauben, daß ein Jahr verstrichen ist, seitdem wir für ein paar Minuten in Royal Holloway Sie grüßen konnten.

Ich schicke Ihnen hiermit ein paar Sonderabdrücke.

mit freundlichen Grüßen

Ihr

Alfred Traverse

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

Dr. Marie H. Kurmann
Royal Botanic Gardens, Kew
Palynology Unit, Herbarium
Richmond, Surrey TW9 3AE, U.K.

den 6. Januar 1991

Sehr geehrte Frau Dr. Kurmann,

Ihre drei Veröffentlichungen über Pollenentwicklung bei den
Gymnospermen haben mich natürlich sehr interessiert. Sie sind
eine sehr begabte Wissenschaftlerin und Ihre Arbeit scheint mir
sehr wichtig zu sein.

Ich wünsche Ihnen und Ihrem Mann alles Gute zum 1991!

Ihr

Alfred Traverse
Professor für Palynologie

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
phone: 814-863-3419; fax: 814-865-3191

Frau Dr. Marie H. Kurmann
Palynology Unit, Herbarium
Royal Botanic Gardens, Kew
Richmond, Surrey TW9 3AE, U.K.

den 5. September 1990

Sehr geehrte Frau Dr. Kurmann,

Ihr Artikel in der Zeitschrift Nord J. Bot. über Tsuga Pollen interessiert mich sehr. Diese Zeitschrift ist hier nicht erhältlich. Könnten Sie mir entweder einen Sonderabdruck oder eine Xeroxkopie schicken?

Hoffentlich geht es Ihnen und Ihrer schönen Familie gut.

mit besten Grüßen

Ihr

Alfred Traverse

AT/et

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

Frau Dr. Marie H. Kurmann
Royal Botanic Gardens
Kew, Richmond, Surrey TW9 3AB, U.K.
den 14. September 1987

Liebe Marie,

herzlichen Dank für Ihren Brief vom 3. September 1987.

Ich war, wie Sie wahrscheinlich gewußt haben, von 1965 bis 1976 Redakteur des "Catalog of Fossil Spores and Pollen". 1976 habe ich eine schwierige Entscheidung getroffen, meine Verbindung zum "Catalog" zu lösen. Es ist eine lange Geschichte, und wir könnten sie eines Tages besprechen. Jedoch habe ich seit 1976, d.h. elf Jahren, gar nicht mit dem CFSP zu tun gehabt! Ich bin der Meinung, daß der "Catalog" mehr oder weniger tot ist, aber es ist nicht mehr mein Geschäft. Könnten Sie bitte an Herrn Prof. Alan Davis, Direktor der "Coal Research Section", für Auskünfte zu Ihren Fragen wenden? Ich fühle mich immer betreten, wenn ich diese Sachen mit ihm besprechen muß. Es tut mir leid, nicht besonders hilfreich zu sein.

mit besten Grüßen

Ihr

Alfred Traverse
Professor für Palynologie

P.S. Der Poststempel auf Ihren Umschlag "Twickenham" hat mich sehr beeindruckt. Es erinnert mich an das Jahr 1946, als ich das Rugbyspiel zwischen Oxford & Cambridge in Twickenham besucht habe. Ich war dann ein Student an der Cambridge Universität.

AT/et



Royal Botanic Gardens
Kew Richmond Surrey TW9 3AB

Telegrams Kewgar Richmond Surrey Telephone 01-940 1171

Prof. A. Traverse
The Pennsylvania State University
Department of Geosciences
Palynological Laboratories
435 Deike Building
University Park, PA 16802

Your reference

Our reference

Date 3. September 1987

Sehr geehrter Herr Professor Traverse,

herzlichen Dank für Ihren Brief, der meine Probleme mit Endungen zu einem so einfachen Ende gebracht hat.

Nun habe ich aber noch eine ganz andere Bitte an Sie! Dr. Ferguson ist an der Anschaffung eine Palynomorphen Kataloges für die Palynologie Abteilung hier in Kew interessiert. Ich habe ihn auf den "Catalog of fossil spores and pollen" aufmerksam gemacht und in unserem Gespräch sind einige Fragen aufgetaucht, die ich gerne an Sie richten möchte. Wieviele Bände sind bis heute publiziert worden? Wäre es noch möglich, alle Bände zu kaufen und wieviel würde das kosten? Könnten zukünftige Bände auf einer Abonnentenbasis bezogen werden?

Es würde mich sehr freuen, wenn Sie entweder mir oder Dr. Ferguson Auskunft zu den oben angeführten Fragen geben könnten. Zum voraus herzlichen Dank für Ihre Bemühungen.

Mit freundlichen Grüßen,

Marie H. Kurmann

cc: I.K. Ferguson

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
PALYNOLOGICAL LABORATORIES
435 Deike Building
University Park, PA 16802
(814)863-3419 or (814)865-6393

Frau Dr. Marie H. Kurmann
Palynology Unit, Herbarium
Royal Botanic Gardens, Kew
Richmond, SURREY TW9 3AE, U.K.

den 27. August 1987

Sehr geehrte Frau Doktor Kurmann,

es hat mir sehr gefallen, Sie und Ihren Gemahl in Berlin wieder einmal zu sehen, obwohl wir zu wenig Zeit gehabt haben, uns gut zu unterhalten. Ich freue mich, daß Sie so glücklich und erfolgreich sind.

Als ich erst gestern endlich wieder im Büro war, fand ich hier Ihren guten Brief vom 16. Juli.87.

Ihre Frage ist Gott sei Dank leicht zu beantworten! Alle Gattungsnamen mit der Endung -ites sind männlich (Rec. 75A). Wir haben diesen Vorschlag 1981 in Sydney eingeführt. Obwohl 75A eine Empfehlung ist und keine Regel, bin ich der Meinung, daß Artennamen die in dieser Hinsicht falsch geschrieben worden sind, unbedingt verbessert werden können. Wie die ursprünglichen Verfasser der Namen sie geschrieben haben, macht daher keinen Unterschied (cf. Art. 32.5). Die offensichtliche Absicht von 75A ist das Geschlecht von -ites Gattungsnamen in solchen Fällen klar zu machen.

mit besten Grüßen

Ihr,

Alfred Traverse
Professor für Palynologie

AT/et
cc: W.G. Chaloner



Royal Botanic Gardens
Kew Richmond Surrey TW9 3AB

Telegrams Kewgar Richmond Surrey Telephone 01-940 1171

Dr. A. Traverse
Department of Geosciences
Pennsylvania State University
University Park, PA 16802
U.S.A.

Your reference

Our reference

Date 16. July 1987

Werter Herr Professor Traverse:

Zur Zeit haben Dr. Taylor und ich ein Manuskript über die Ultrastruktur von Cyatheacidites und Lophosoria Sporen im Druck. Die fossilen Arten sind C. annulatus und C. tectifera, und die Endungen dieser Arten bereiten mir Schwierigkeiten. Einer der Rezensenten (reviewer) schrieb dazu: "I have also corrected the gender of the epithet annulatus to its original annulata. I assume that Cyatheacidites is feminine since that is the way Cookson treated it in her original publication of C. annulata and since the epithet tectifera also appears to be in the feminine in agreement with Cyatheacidites." Ohne lange Ueberlegung änderte ich dann annulatus zu annulata.

Nun sah ich aber in einer Veröffentlichung von Dettmann (1986), dass Sie C. annulatus benützt und auch zwei neue Arten beschreibt (C. archangelskyi & C. botuliformis), die anscheinend auch eine maskuline Endung haben. Eine Diskussion mit Kollegen hier in Kew hat meine Verwirrung noch verstärkt. Deshalb wende ich mich an Sie, um Sie um Ihren Rat zu bitten. Ich hoffe Ihnen damit nicht allzu grosse Umstände zu bereiten. Ist Cyatheacidites maskulin oder feminin und welches sind die korrekten Endungen für die Artnamen? Ich habe Ihnen Kopien der relevanten Seiten der Veröffentlichungen über Cyatheacidites beigelegt um Ihnen die Arbeit etwas leichter zu machen. Die griechischen Notizen sind von einem Kollege von Kew.

Ich bin seit Januar in der Palynologie Unit der Royal Botanic Gardens Kew als Postdoc tätig, und mein zweijähriges Projekt wird vom Schweizerischen Nationalfonds unterstützt. Es gefällt mir hier sehr gut und es ist ein herrliches Gefühl wieder in Europa zu sein.

Herzlichen Dank für Ihre Bemühungen!

Mit freundlichen Grüßen,

Marie H. Kurmann

Keim Some more

'ites' examples: _____

ΠΥΡΙΤΗΣ (pyrites - timber) m.

ΠΟΛΙΤΗΣ (politēs - citizen) m.

ΚΡΙΤΗΣ (kritēs - judge) m.

ΥΠΟΚΡΙΤΗΣ (hypokritēs - actor) m.

Ἀρχιμανδρίτης (archimandrites - abbot) m.

Ἀρεοπαγίτης (Areopagites - ^{A Mars'} ^{Hill} tribune-member) m.

Κογχίτης (conchites - shell-marble) m.

μαγνήτις (magnētis { magnet } tale) f.

This may explain the source of confusion. Where a Greek word ends in iota-tau-eta-sigma it appears to be masculine, irrespective of whether it refers to people or things/substances, but where it ends in eta-tau-iota-sigma, it is feminine.

Other species. *C. (al. Muricingulatisporis) archangelskyi* nom. nov. (for *M. annulatus* Archangelsky and Gamero 1966a, p. 204, pl. 2, figs. 4-8); *C. botuliformis* sp. nov.: *Cyatheacidites* sp. 1 of Kotova 1983, p. 889; pl. 7, figs. 3 and 4; *Cyatheacidites* sp. 2 of Kotova 1983, p. 889; pl. 7, figs. 5 and 6.

Remarks and comparison. Cookson (1947), in following the coenotype system of classification and nomenclature, first proposed the name in the trinomial designation *Trilites (Cyatheacidites) annulata*. The name *Cyatheacidites* was used to denote the spores' morphological resemblance to what Cookson believed were *Cyathea vestita* spores, but which were, in fact, *L. quadripinnata* spores (see reference to Knox 1938 above). She was later (1957, p. 41) persuaded by contemporary opinion to abandon the coenotype system and referred the spores to *C. annulata* thereby implying a relationship to *Cyathea*, a relationship that Erdtman (1958) quickly contested. Potonié (1956) had meanwhile resolved the problem by validating *Cyatheacidites* as a form genus and selecting a nomenclatural type.

The above diagnosis follows Stover and Partridge (1973, p. 247), but specifies the distal sculpture and the finely scabrate surficial features which are here considered as generically diagnostic.

The cavate sclerine distinguishes *Cyatheacidites* from *Cingulatisporites* Thomson 1953, *Polypodiaceoisporites* Potonié ex Potonié 1956, and *Muricingulatisporis* Krutzsch 1959. *Densoisporites* Weyland and Krieger 1953 and *Lundbladispota* Balme 1963 have a cavate sclerine, but the wall layers are widely separated equatorially and their sculptural features are distinct.

Cyatheacidites annulatus Cookson ex Potonié 1956

Plate 13, figs. 11-15; Plate 14, figs. 1-7; Plate 15, figs. 1-7; text-fig. 2B

- 1947 *Trilites (Cyatheacidites) annulata* Cookson, p. 136, pl. 15, figs. 53-55.
 1956 *Cyatheacidites annulata* Cookson ex Potonié, p. 62, pl. 8, figs. 81 and 82.
 1957 *Cyathea annulata* Cookson; Cookson, p. 45, pl. 9, figs. 4 and 5.
 1965 *Cyatheacidites tectifera* Archangelsky and Gamero, p. 163, pl. 2, figs. 1-11.
 1969 *Cyathidites* Couper; Mechkova, p. 16, fig. 4.
 1983 *Cyatheacidites* sp. 1 Bratzeva, p. 912, pl. 7, figs. 1 and 2.
 ?1983 *Cyatheacidites* sp. 2 Bratzeva p. 912, pl. 7, figs. 3 and 4.
 non 1983 *Cyatheacidites tectifera* Archangelsky and Gamero; Truswell, p. 143, pl. 1, fig. 21.

Diagnosis. Spores radial, trilete; biconvex to plano-convex, the distal surface strongly arched. Amb subcircular to convexly subtriangular. Sclerine stratified; inner layer (intexine) 1.0-1.5 μ m thick, homogeneous, usually distally detached from sculptine. Sculptine 3-4 μ m thick, thicker at equator where a cingulum of uniform to uneven width (6-8 μ m wide) is developed; cingulum broadly rounded in profile, with internal duct 2-3 μ m in diameter circumscribing inner margin of cingulum

All figure
 Figs. 1-1
 tag, Ki
 distal s
 and sec
 aspect,
 view of
 cingulu
 granula
 Figs. 11-
 85a. 1
 B411/8
 view; E
 M30/2.

Dettmann, M. E.

1986

Significance of the Cretaceous-Tertiary
 spore genus *Cyatheacidites* in tracing
 the origin and migration of *Lophosoria*
 (*Filicopsida*).

Spec. Pap. Palaeontol. 35: 63-94.

imen
 v and
 high
 lateral
 ximal
 owing
 owing
 ample
 right;
 ximal
 11/10,

INCERTAE SEDIS

Group ACRITARCHA Evitt, 1963
 Subgroup ACANTHOMORPHITAE Downie,
 Evitt and Sarjeant, 1963
 Genus BALTISPHAERIDIUM Eisenack, 1958,
 emend, Downie and Sarjeant, 1963

Baltisphaeridium severinii Cookson and Cranwell,
 new species
 Plate 3, figures 1-2

Description: Shell relatively large, approximately circular to ellipsoidal in outline, covered with densely arranged, tapering, unbranched processes, which gradually decrease in width from broad, somewhat conical bases to over half their length, and then narrow rapidly to end in fine, frequently curved, very slender, apparently closed apices. Wall thin, usually obscured by the processes.

Dimensions of the Leña Dura material: Holotype - over-all diameter ca. 99 μ , shell diameter ca. 76 μ , wall thickness ca. 2 μ , processes mainly 10-16 μ long. Range in size of 20 specimens: Over-all diameter ca. 75-114 μ , shell diameter ca. 55-85 μ , length of processes 10-25 μ .

Leña Dura Forma-

SB-56:20 - single
 in collections

isely related to *B.*
 1939), a Senonian
 lints at Marong,
 in Upper Eocene
 west Victoria. It
 1) the larger size
 red with 23-34 μ
 and in 2) the size
 uly in respect to
 rmore, the small
 m has not been

. pilosum (Ehren-
 in Chile, which
 not been seen by

Downie,
 1933,

and Eisenack (per-
 mens illustrated

represent "a narrow-meshed *Cymatiosphaera*." Both have an angular archeopyle, a feature setting them apart from already described species in this genus. In one,

the operculum just free of the shell. The specimens are further characterized by small, crowded, polygonal plates outlined by thin membranes, which are supported at the angles by straight or bent peglike processes.

Dimensions: Over-all dimensions up to ca. 75 \times 55 μ ; shell diameter ca. 68 \times 48 μ ; ornamentation ca. 6.5 μ high.

Spores and pollen grains

Division PTERIDOPHYTA
 Class PTEROPSIDA
 Order FILICALES
 Family CYATHEACEAE
 Genus CYATHEACIDITES Cookson, 1947

Cyatheacidites annulatus Cookson
 Plate 3, figures 7-8

Cyatheacidites annulata COOKSON, 1947, p. 136, pl. 15, figs. 53-55.

Cyatheacidites annulata COOKSON, 1957, p. 45, pl. 9, figs. 4-5.

Comments: Six specimens (one in lateral view) agreeing in all essentials with spores of *Cyatheacidites annulatus* from Lower Tertiary deposits of Kerguelen Archipelago and southeast Victoria, Australia, have been recovered. When first described by Cookson (1947), this form was compared with spores of *Cyatheacidites vestita* Martens, as figured by Knox (1938). The possible affinities of *C. annulata* were subsequently discussed by Erdtman (1958), who pointed out close similarity to the spores of *Lophosoria quadripinnata* (Gmelin) C. Christensen, another member of the Cyatheaceae. Specimens described as *Triletes* "Typo K" by van der Hammen and Gonzales (1960) from Recent peats near Bogotá, Colombia, South America, come very close to *Cyatheacidites annulatus* in size (about 65 μ) and other features. These authors also comment on the likeness of "Typo K" to spores of *Lophosoria*, which, according to Skottsberg (1956), ranges today southward from México to parts of Patagonia, Chile, and the Juan Fernández Islands.

Dimensions of the Leña Dura material: Equatorial diameter of five specimens ca. 70 μ , one specimen only 40 μ .

Family DICKSONIACEAE?
 Genus TRILITES Erdtman ex Couper, emend. Dettmann,
 1963

Trilites tuberculiformis Cookson
 Plate 3, figures 4-5

Trilites tuberculiformis COOKSON, 1947, p. 136, pl. 15, figs. 61-62.

Trilites tuberculiformis Cookson, emend. DETTMANN, 1963, pp. 62-63, pl. 27, figs. 4-8.

Comments: In her recent treatment, Dettmann (1963) has restricted the genus and has amplified the description of the type species, after study of the holotype and over 30 specimens from the type locality at Cumberland Bay, Kerguelen Island.

Cookson, I.C. and L.M. Cranwell
 1967
 Lower Tertiary microplankton, spores and pollen grains
 from southernmost Chile
 Micropaleontol. 13(2): 204 - 216.

Estudio palinológico de la formación Baquero
(Cretácico), Provincia de Santa Cruz

Ameghiniana 4(5): 159 - 167.

referencias con *D. veivurus*. En cuanto al material identificado por el mismo autor como *D. perinatus* (l. c., pág. 61, lám. XVI, fig. 3), opinamos que pertenece a otra especie (no descartamos que sea coespecífica con nuestra especie *D. corrugatus*).

Densoisporites corrugatus n. sp.

(Lámina I, figs. 5-10)

DIAGNOSIS. — Espora trilete. Lesuras rimosas externamente salientes y llegando hasta el ecuador; más breves en la capa interna. Contorno ecuatorial circular a triangular circular. Cara distal convexa y proximal subcónica. Cingulo ligeramente más ancho en los ángulos que en los lados. Esclerina compuesta de dos capas, la externa parcialmente separada de la interna en el ecuador y cara distal, más adherida y delgada en la cara proximal y lesuras. Capa externa formando laxos y marcados pliegues en la cara distal, menos conspicuos en la zona polar y más numerosos y compactos en el ecuador, dándole al cingulo un aspecto granuloso irregular. Capa externa de textura alveolar en la cara proximal y zona ecuatorial, que da a las mismas un aspecto reticulado; en los bordes de la lesura, los alvéolos son alargados y paralelos a la misma. Capa interna de un espesor uniforme, pero con tres engrosamientos circulares o elípticos de 4-5 μ de diámetro x 2-3 μ de altura, situados en el polo proximal.

Medidas: Diámetro total, 52,7 - 72,9 μ , 15 ej.; diámetro cuerpo central, 40,3 - 58,9 μ , 13 ej.; longitud lesura, 18,6 - 31,1 μ , 8 ej.; ancho del cingulo: lados, 4,6 - 9,3 μ , 13 ej., ángulos, 6,2 - 10,8 μ , 11 ej.; diámetro polar, 31 μ , 1 ej.

HOLOTIPO. — Bajo Tigre, NF *Brachyphyllum*, P. m. 253, c. 42.4/112.8. Lám. I, figs. 5 y 6.

externa de la esclerina es menos marcada.

Género *CYATHEACIDITES* (Cookson, 1947)
Potonié, 1956

ESPECIE TIPO. — *Cyatheacidites* *annulata*
Cookson, 1947, BANZ Ant. Res. Exp., Rep. Ser. A 2: 136, lám. XV, figs. 53-55.

Cyatheacidites *tectifera* n. sp.
(Lám. II, figs. 1-11)

DIAGNOSIS. — Espora trilete. Lesuras salientes llegando casi hasta el borde proximal del cingulo. Contorno ecuatorial subtriangular, de ángulos redondeados y lados convexos. Cara distal fuertemente convexa (casi hemisférica) y proximal subpiramidal. Cingulo finamente granuloso; borde proximal del cingulo irregular. Cara proximal con facetas provistas de tres áreas fuertemente engrosadas a modo de pulvínulos, los que son fosulado-foveolados, de aspecto carcomido y algo separados de las lesuras. Pulvínulos más gruesos hacia el ecuador que hacia el polo proximal. Resto de facetas liso o suavemente granuloso. Cara distal tectada con columelas irregulares de base coalescente y tectum con perforaciones infundibuliformes, que le dan un aspecto foveolado. Endexina de 0,7 - 1,0 μ de espesor.

Medidas: Diámetro ecuatorial, 41,5 (52) 65,1 μ , 53 ej.; longitud lesura, 17,1 (21) 31 μ , 43 ej.; ancho del cingulo, 5,7 (8) 10,8 μ , 43 ej.; diámetro polar, 34 - 38 μ , 8 ej.; espesor exina distal, 4 - 6 μ , 9 ej.

HOLOTIPO. — Bajo Tigre, NF *Brachyphyllum*, P. m. 247; lám. II, figs. 2 y 3; paratipos, P. m. 248, 249, 250, 251.

DISTRIBUCIÓN. — Provincia Santa Cruz, Bajo Tigre: NF *Brachyphyllum*, NF base Cink-

Family CYATHEACEAE

Genus *Cyathea* Sm.*Cyathea annulata* Cookson

(Pl. IX, figs. 4, 5)

Cyathacidites annulata Cookson, 1947, B.A.N.Z. Ant. Res. Exp. Reports, Ser. A., 2: pp. 129-142, Pl. XV, figs. 53, 54.

Description. This species was originally described from Tertiary lignites of the Kerguelen Archipelago as follows:

"Spores tetrahedral, trilete, rounded to subtriangular in polar view $40-56 \times 32-56 \mu$, the distal wall also rounded. An annular flange $5.5-10.5 \mu$ thick extends around the equator of the spore, the overall measurements of the proximal surface being $58-77 \times 61-77 \mu$. Exospore thick, pitted and covered with irregular protuberances which are especially marked on the facets of the proximal wall, where they coalesce, more or less, to form three conspicuously thickened areas. The tetrad scar is distinct and extends to the periphery."

Spores which conform to this description can now be reported from Australian Tertiary deposits (Pl. IX, figs. 4, 5). The overall equatorial diameters of the various examples come within the range given for the Kerguelen specimens, with the exception of the one shown in Pl. IX, fig. 4, which measures as much as 101μ across. The width of the flange is also comparable.

Occurrence. Victoria—Ligneous clay from the "fruit zone" near the floor of the Open Cut, Yallourn. Age: Oligocene. Ligneous clay, Beenak, near Yarra Junction. Age: ?Oligocene. New South Wales—Snowy Mountains Hydro-electric Authority's sample bag 295, Eight Mile Diggings, Drill Hole M572, 167-180 ft. Nat. Mus. Vic. No. P16790; sample bag 80, lowest lignite, Round Mountain Diggings, Nat. Mus. Vic. No. P16791; New Chum Hill, Kiandra, soft ligneous shale 135 ft. below the basalt, Nat. Mus. Vic. No. P15710. Age: Lower Tertiary. Queensland—Carbonaceous clay under the basalt about 300 yds. below Curtis Falls, Cedar Creek, Mount Tambourine. Age: Uncertain, Pliocene according to Bryan and Jones (1945).

Comments. When first described the close agreement in every detail between *C. annulata* and the spores of *Cyathea vestita* Mart. from tropical South America was noted. Knox (1939, p. 454) has shown that the spores of *Lophosoria quadriinnata* have the same general type of construction, but lack the conspicuous excrescences present on the facets of the proximal surface of this species. Thus, since localised proximal thickenings are a conspicuous feature of *C. annulata*, there is little doubt that a similar type of spore is distributed in the same region.

Cookson, I.C.

1957

On some Australian Tertiary spores and pollen grains that extend the geological and geographical distribution of living genera

Description. Po
 28μ broad. Exi
ges.

Proc. Roy. Soc. Victoria 69: 41 - 53.

has little taxonomic value. This problem has, however, been discussed by Wilson and Webster (*loc. cit.*, p. 273) and Selling (1946, p. 62), and needs no further elaboration here.

TRILITES (Erdtman, 1947).

Trilites (*Cyatheacidites*) *annulata* n. spm. (plate XV, figs. 53-55).

Spores tetrahedral, trilete, rounded to sub-triangular in polar view, $40-56\mu \times 32-56\mu$, the distal wall also rounded. An annular flange $5.5-10.5\mu$ thick extends around the equator of the spore, the overall measurements of the proximal surface being $58-77\mu \times 61-77\mu$. Exospore thick, pitted and covered with irregular protuberances which are especially marked on the facets of the proximal wall where they coalesce, more or less, to form three conspicuously thickened areas. The tetrad-scar is distinct and extends to the periphery.

This uncommon type appears to resemble strongly the spores of *Cyathea vestita* as figured by Knox (*loc. cit.*, p. 453, fig. 75). Although not occurring in large numbers, it has been observed consistently in most of the samplings of lignite and sandstone from Waterfall Gorge.

Trilites australis n. spm. (plate XV, figs. 58, 59).

Spores tetrahedral, trilete, $34-45\mu \times 34-45\mu$, sub-triangular in polar view, sides convex, wall smooth, about 2.5μ thick. Branches of tetrad-scar usually about 8μ long.

This is one of the commoner types in the lignite from Waterfall Gorge, observed also in the sandstone.

Trilites (*Alsophilidites*) *kerquelenensis* (plate XVI, fig. 69).

Tetrahedral, trilete, triangular in polar view with rounded angles and straight sides $34.5-61\mu \times 32-61\mu$. The tetrad-scar reaches the angles, and is not bordered by ridges. Exospore psilate.

A rare type in the matrix from Waterfall Gorge, more numerous in samples 75096, Christmas Harbour and 75139 from Cumberland Bay.

Tri

Cookson, I.C.

1947

$3\mu \times 47-61\mu$.
wide, which
numbers in
ites neddeni
lustration of

Pro

ext

lign

(Po

the

Plant microfossils from the lignites of Kerguelen
archipelago

Tri

fair

irr

angles and
with large,

Wa

B.A.N.Z.A.R.E., Repts., ser A, 2(8): 129 - 142.

amples from

Tri

Spores tetrahedral, trilete, triangular in polar view, with broad, rather square-cut angles and straight sides, $40-55\mu \times 42-61\mu$. Proximal facets prominently sculptured with thick, irregular, wavy ridges which sometimes coalesce, tetrad-scar inconspicuous, and not reaching the angles.

This is a rare type from the lignite of Waterfall Gorge. A single larger spore of some-



Division of Biology

Ackert Hall
Manhattan, Kansas 66506
913-532-6615

five
January 13, 1981

Dr. A. Traverse
ETH Zürich
Geologisches Institut
ETH Zentrum
CH - 8092 Zürich

Dear Dr. Traverse:

Thank you for your letter. I was quite surprised, when I saw the envelope from the ETH with your name. I guess, you are working with Prof. Dr. R. Hantke, among others. He introduced me to the secrets of Palynology.

The address of the Institute of Geobotany is "Zürichbergstrasse 38". It is a private foundation (Stiftung Rübél), and Prof. Dr. E. Landolt is the Chairman. My research was part of a larger project, which is coordinated by PD Dr. A. Gigon. I am sure, he would be more than happy to tell you about it.

I think that the library of the Institute would also be of interest to you (and not only because my thesis is there!). The institution used to be dedicated to pollen analysis, and it has accumulated a lot of literature in this field. A lot of the publications of the Stiftung Rübél deal with pollen analysis.

I hope you enjoy your stay in Zürich, and I wish you good luck by looking for the Institute of Geobotany.

Sincerely,

M. Kurmann

file



Ecole Polytechnique Fédérale Zurich
Institut de Géologie

23 December, 1980

Ms. Marie H. Kurmann
Division of Biology
KSU - Ackert Hall
Manhattan, Kansas 66506

Dear Ms. Kurmann:

What a funny coincidence! Yours of 28 November was forwarded to me here, where I'm doing a sabbatical until next summer at your "alma mater". I am giving a course in palynology and doing research in Zürichsee sediments among other things.

At Penn State, I have a joint appointment between Geosciences (Geology Program) and Biology (Botany Program). I am officed in Geology, and my laboratory facilities are there, but I am quite ready to supervise a graduate student who would be admitted through Biology. I am, in fact, myself as much (if not more) botanist as geologist. So, if you want to go to PSU, please apply through Biology, but emphasize on the various forms that you wish to work with me. You should get the application in immediately as it is already late. Write for forms to both the Graduate School, Kern Graduate Building, Penn State Univ., University Park, PA, 16802, and to the Graduate Admissions Committee, Department of Biology, Mueller Laboratory, PSU, U.P.PA, etc. Make it clear that you wish to apply for an assistantship as well as admission.

You mention that you worked in the "Geobotany Institute" here--I have not yet encountered it. In fact, I hadn't heard of it. Could you let me know whom I should contact there to make myself known? It sounds close to my interests.

Where did you find a "grassland" in Switzerland? Could I see your thesis somewhere here in Zürich?

Best wishes to you for the holidays.

Yours very truly,

Alfred Traverse
Visiting Professor

AT/et

cc: Dr. Eugene Lindstrom, head, Department of Biology, PSU (please refer to appropriate person)



Division of Biology

Ackert Hall
Manhattan, Kansas 66506
913-532-6615

November 28, 1980

file

Neerah Lord
QUESTION

Dr. A. Traverse
Department of Biology
Pennsylvania State University
University Park, Pennsylvania 16802

Dear Dr. Traverse:

In May 1981 I will complete my studies at the Kansas State University with a Master of Science degree. Afterwards I intend to study for a Ph.D. with main interest in Palynology. I would like to do palynological studies from the viewpoint of systematic Botany rather than Stratigraphy. I would appreciate if you could send me some information about your graduate study programs, admission policies and application forms. In order to support myself during future studies, I am depending on some sort of assistantship.

My thesis research deals with phytolith and palynomorph studies of extant and fossil soils. Dr. A.S. Tomb (major professor), Dr. T.M. Barkley, Dr. C.E. Owensby, and Dr. P.C. Twiss form my advisory committee. The major part of my course work is in Botany.

Before I started my studies at KSU, I attended the Swiss Federal Institute of Technology in Zürich and I completed a dipl. Natw. ETH (Diploma of Natural Sciences). In order to obtain the Diploma, I did research at the Institute of Geobotany, and I wrote a thesis with the title "Ecological examinations of Bromus-grassland in northern Switzerland, with special regard to the root system." The major part of my course work in Zürich was in Ecology.

Your help in this matter will be most appreciated.

Sincerely,

Marie Kurmann

Marie H. Kurmann

interview: Prof. J. E. Landolt

6 February, 1981

Dr. Tomio Kuroda
Department of Geology
Faculty of Science
Kyushu University
Fukuoka, 812 Japan

Dear Dr. Kuroda:

Thanks for all the additional information! Also for the nice Japanese plant and animal stamps--unfortunately your postal authorities cancelled them with a very rough hand.

I don't agree with you about your English--it's not bad at all. But I do agree with you that the fact that "...the distribution patterns of pollen and spores are controlled by sedimentary agency and their pollen assemblages vary with every depositional environment." is not clear in your thesis. What would have helped in that regard would have been a page or so in your thesis expanding a bit on that particular theme. Also, a few distribution charts showing concentration of pollen/spores in the various environments would have helped. No, I did not mean 'original vegetation', but that your 88.8% figure refers to data which all have to do with plant-groups. Everybody I lent the thesis to agreed with my understanding that you were convinced that plant groups are what count in pollen sedimentation.

Regarding your proposal to study with our group at Penn State, the principal problem as always is money, and secondarily space. I certainly have no position open at the moment. However, I will keep you in mind if anything unexpectedly comes up.

All the best.

Yours very truly,

Alfred Traverse
Visiting Professor

AT/et

file

14 January, 1981

Dr. Tomiō Kuroda
Department of Geology
Faculty of Science
Kyushu University
Fukuoka 812, Japan

Dear Dr. Kuroda:

Thank you so much for the gorgeous Japanese calendar! It will be prominently displayed here in our apartment.

I am giving a course here on Neogene palynology, and have discussed your thesis in two of the lectures, especially from the point of view of whether the methods suffice to prove that the vegetation-source is nearly 90% responsible for the distributions you found. It has been interesting, and one of the students is now carefully studying your thesis--so Kuroda is a "household word", even in Switzerland! I believe we all agree we would like to see the raw data.

Best wishes,

Yours very truly,

Alfred Traverse
Visiting Professor

AT/et

24 October, 1980

Dr. Tomio Kuroda
Department of Geology
Faculty of Science
Kyushu University
Fukuoka 812, Japan

Dear Dr. Kuroda:

Thank you for yours of October 4 which was awaiting my return from an extended field trip in the American Southwest. Before I left I dictated my critique of your thesis, thinking that you wanted that to use in possible revision. I now am afraid that what I said may not have been appropriate and also may offend you. Nevertheless, thinking that you may be able to use the information, I am going to go ahead and send it to you, and it's all enclosed herewith. I have not discussed this with anybody, so the information is completely confidential. I think that the idea you had for your thesis is a splendid research project. I only wish to comment that I think the project needed more work to maximize the result. Thank you very kindly for the gift of beautiful Japanese stamps! I am more or less a stamp collector but don't have much time to spend on it. I really take a special interest in stamps which have plants of any kind on them. Thanks again.

Best wishes to you in your work.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
encl: previously dictated critique

Critique of: "An exploratory study on evaluation of factors controlling the dispersal process of pollen and spores by the statistical factor analysis"

by Tomio Kuroda

It is not clear to me what the exact status of this document is-- a separate, very nice letter from Kuroda identifies the title as that of his "doctoral" dissertation, but this bound document contains no statement that it is that thesis itself. Perhaps it is a summary in English of the thesis? Or is it a precis of the principal aims? If so, it is acceptable as a basis for discussion, and the author has a very interesting basic approach--well worth doing.

Per se, however, this document would not be an acceptable doctoral, or even a master's, thesis at one of our universities. The reason is that although the factor-analysis presented is an interesting idea, Kuroda does not present nearly enough data to substantiate his conclusions--for example, I would like to see the actual counts in more detail. Nor does he discuss his conclusions in the required depth--they need to be compared with the results of Muller, Cross, Traverse & Ginsburg, Koreneva, Stanley, Habib, etc., etc. This he has not done, despite the fact that the results seem to be in serious conflict with those of the authors just mentioned. One wants to know what Kuroda thinks of the fact that his factor analysis seems to show that the source vegetation is by so far the dominant factor! A detailed comparison is called for--it is lacking. Indeed, Kuroda's "Conclusion" is so terse and brief that one is left wondering whether he understands what he has concluded. I doubt very much that Kuroda is right, but it is an interesting set of ideas, and I would like more than this ultra-concise series of tables to evaluate what he has accomplished. I would advise Kuroda to present his data in much more detail, with more connecting explanation. Then he should carefully analyze the impact of what he has found, particularly in comparison to papers by those mentioned earlier, and others.

I also have a few specific comments:

Kuroda critique, pg. 2

p. 2, para 2: I would dispute heartily the statement that the final goal of palynology is to reconstruct vegetation. That is one sort of aim. There are others--interpretation of the sedimentary environment, interpretation of the environment of the body of water. For example, dinoflagellate cysts and acritarchs, colonial algae and fungal spores can scarcely tell us much about "vegetation of the source area", yet their study is certainly palynological and very significant.

p. 20: Factor analysis, cluster analysis and discriminant analysis need more explanation for the average palynological reader--as well as much more reference to the literature about such matters.

pp. 19-34 & pp. 38-51: These pages present a description of the mathematical tests, with hardly a word of explanation as to relationship to the problem, and virtually no data. This is, after all, 15/94 of the thesis!

There seem to be only 3 really major categories of palynomorphs--unbelievably simplistic?

p. 16, 1. 1: historic (sp.) (The English in the thesis is, however, very good on the whole.)

p. 37, para. 2, 1. 4: Erdtman (sp.)

p. 36: This is the sort of interpretative explanation--evidence of the author thinking about his problem--of which this thesis needs much more.

p. 38, 1. 6: "Markov model"

1.2: "Markov chain"

What is this about? The neophyte reader demands an explanation in detail--why introduced here? Where do I find an elucidation? At least, Figure 10 should be discussed.

Kuroda critique, pg. 3

pg 45, para. 2, l. 9: buoyancy (sp.)

para. 2, l. 6: Gramineae is not a "plant" but a family
of plants.

p. 52: "Varimax" and "Biquattrimin" methods--where do I find out
about these? A palynological thesis cannot assume that a reader knows.

p. 51-53: As stated in my general comment, supra, the "conclu-
sions" must be more! What does it mean? What is Kuroda's thesis?

p. 64: herbaceous (sp.)

p. 71: (Factor 2) "...are not a little"--meaning not clear in
English.

References: Many works are listed here, showing a grasp of the
literature, but in the thesis itself almost nothing is said about these
critical background papers! For example, where does the author discuss
the relationship between his results and those of Muller, Traverse &
Ginsburg, etc., etc.?

Alfred Traverse
Professor of Palynology
The Pennsylvania State University
Department of Geosciences
University Park, PA 16802

AT/et

Department of Geology
Faculty of Science
Kyushu University,
Fukuoka 812 Japan

Oct. 4, 1980

Professor Alfred Traverse
Department of Geosciences
Palynological Laboratories
Pennsylvania State University
University Park, Pennsylvania
16802 U.S.A.

Dear Professor Traverse:

I received your letter. I am sorry, I have mistaken to express my mind by the letter of 9 September. I intended to have expressed by the letter that I wanted to give you the reprint (copy) from my dissertation. For that reason, you do not have to return me the reprint of it. I have already gained the degree of Doctor of Science from Kyushu University by presenting the former one which I sent you.

But my dissertation is not officially published yet.

Now, I am preparing to release it in a few days.

Sincerely yours,

Tomio Kuroda

Tomio Kuroda

P.S. I forgot to send you an errata of the dissertation. Enclosed please find an errata and stamps which you loved ! Plant stamps such as Pinus Pentaphylla, Primula sieboldi and Narcissus, and the comemorative stamps of an Old Japanese Tale of "Itsunboshi" (The Tale of a dwarf), a series of the Japanese children's songs and so on are enclosed. Prof. Traverse, are you a stamp collector?

23 September, 1980

Mr. Tomio Kuroda
Department of Geology
Faculty of Science
Kyushu University
Fukuoka 812, Japan

Dear Mr. Kuroda:

I got the package with your very interesting paper on post-glacial related to the Fukuoka subway--the hypsithermal certainly shines through. A nice piece of work.

Also in the package was "An Exploratory Study....Factor Analysis". This does not say it's your thesis, but I would guess it is. It is not clear to me what you wish me to do with it, per your letter of 9 September. Am I to critique it and return it, or what?

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

18 September, 1980

Mr. Tomio Kuroda
Department of Geology, Fac. of Science
Kyushu University
Fukuoka 812, Japan

Dear Mr. Kuroda:

Thanks for your interesting letter of 9 September, 1980, and the too kind compliments to me and my work!

Of course I am willing to critique your doctoral thesis. Would I be the official "outside examiner"? What does the responsible professor have to say about the procedure?

I shall be in Zürich, Switzerland, 15 November, 1980--15 May, 1981. So, if you wish to send the thesis to me, it should be sent here immediately!

Best wishes in your work.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

P.S. I loved the Narcissus stamps. Any further Japanese plant stamps (cancelled is o.k.) would be welcome!

Professor A. Traverse
Department of Geology
and Geophysics, Pennsylvania
State University, University
Park, Pa. 16802 U.S.A.

Department of Geology,
Faculty of Science,
Kyushu University,
Fukuoka 812 Japan
Sept. 9, 1980

Dear Professor Traverse:

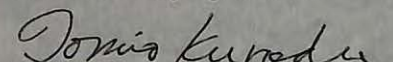
I would like to present my doctor's thesis to you.

I have been interested in the dispersal process of pollen and spores since I read your publication of " Palynology of the surface sediments of the Great Bahama Bank, as related to water movement and sedimentation. Marine Geol., vol. 4, 1966." Stimulated by this your paper, I started to investigate the following theme:

An exploratory study on evaluation of factors controlling the dispersal process of pollen and spores. And then I could receive the degree of Doctor of Science by presenting this thesis from Kyushu University.

I will be very happy, if you will read this paper and send me your influential opinions about it.

Sincerely yours


Tomio Kuroda

Region V
Box LL, University Station
Grand Forks, North Dakota

July 8, 1954

Mr. A. N. Kurts
Carbide and Carbon Chemicals Company
South Charleston 3, West Virginia

Dear Mr. Kurts:

The problem of making acceptable thin sections of crushed (minus 1/8-inch) lignite has interested me for some time, and I am glad to hear of your interest in a similar problem, as explained in your letter of July 6.


The enclosed reprint explains my technique for making such sections of crushed lignite, using plaster of Paris, with a plastic resin binder. We have been making very satisfactory sections by this method for some time now. Dental plaster of Paris is very good for embedding lignite, because its hardness is near that of the coal, because it is worked at room temperature, and for other reasons explained in my article.

Although I have not applied this technique to bituminous coal, it seems to me that the plaster might be too soft for satisfactory results. But it might be possible to adjust the content of plastic binder so as to compensate for this disadvantage. I would surely try it out.

Before I settled on the plaster of Paris technique, I experimented with a rather considerable range of waxes and plastics for this purpose. In my opinion, the cold-setting plastics or the low-heat-setting plastics would be worth investigating for your purposes.

I hope this information has been helpful, and am ready to give you any other advice I might be able to supply.

Very truly yours,


Alfred Traverse
Coal Technologist

Enc.

ATraverse:vh

cc: Region V

JDLankford

ATraverse

File 625.1

C File

Aug. 84

Thank
You...

H. Kottuk

Aug. 84



... very much.

Hatice

H. Kutluk

Frau

Dr. Brigitte Urban-Küttel
Institut für Bodenkunde
Nussallee 13
D-5300 Bonn, BRD

15.8.83

Sehr geehrte Frau Dr. Küttel!

Vielen Dank für Ihre Veröffentlichungen über die Palynologie der Neogen-Ablagerungen in Italien und in der Niederrheinischen Bucht, die ich mit grossem Interesse gelesen habe. Ich habe heute Ihnen ein paar meiner Publikationen geschickt.

mit freundlichen Grüßen,

Alfred Traverse
Professor für Palynologie

AT/et

Mr. Otto Kuyl
~~Palynology Laboratory~~ *Geologisch Bureau*
~~B. P. M.~~
~~30 Carel v. Bylandtlaan~~ *Akerstraat*
~~The Hague, Netherlands~~ *56-58*
Heerlen, Limburg
Netherlands

8, 10, 17, 20

stratigraphic palynology

