



Hunt Institute for Botanical Documentation
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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.

To: traverse@ems.psu.edu

AI:

I was in Chicago a couple of weeks ago - very briefly. I did track down Ben Williams in our library to ask him about Fortsas and your books. He told me that you and Peter Fortsas are now in touch and that this issue was moving forward. If this is not the case then please let me know and I'll give them another nudge.

On another matter I thought that you might be interested to know that the question of my paleobotanical replacement at The Field is now resolved. It will be Jenny McElwaine - a student of Bill Chaloner's. I think that she is a very good choice. But I had absolutely no input into this process - I wasn't consulted at all except to write a letter of reference for another candidate!

I hope that all is well with you and Betty!

With very best wishes.

Peter

Peter R. Crane FRS
Director
Royal Botanic Gardens, Kew
Richmond, Surrey, TW9 3AB, UK
Tel: 020-8332-5112
Fax: 020-8332-5109

8 Feb 00

To: traverse@ems.psu.edu
 Subject: (Fwd) Letter

----- Forwarded Message Follows -----

From: "Peter Crane" <p.crane@rbgkew.org.uk>
 Organization: Royal Botanic Gardens, Kew
 To: traverse@ems.psu.edu
 Date sent: Mon, 7 Feb 2000 10:43:15 -0000
 Subject: Letter
 Send reply to: p.crane@rbgkew.org.uk
 Priority: normal

Dear Al:

I have your letter of December 10th - I'm sorry to be so slow in responding - I have my hands pretty full here and some days I feel like I am collapsing under the weight of the emails, correspondence etc.

However, today I am writing (by email) both to Ben Williams in the FM library, and Peter Fortsas. I'll let you know as soon as I get a response.

I hope that all is well with you and Betty.

My apologies for the inefficiencies in Chicago!

Best wishes

Peter

Peter R. Crane FRS
 Director
 Royal Botanic Gardens, Kew
 Richmond, Surrey, TW9 3AB, UK
 Tel: 020-8332-5112
 Fax: 020-8332-5109

Peter R. Crane FRS
 Director
 Royal Botanic Gardens, Kew
 Richmond, Surrey, TW9 3AB, UK
 Tel: 020-8332-5112
 Fax: 020-8332-5109

August 13, 1999

Dr. Alfred Traverse
Department of Geosciences
Pennsylvania State University
435 Deike Building,
University Park, PA 16802

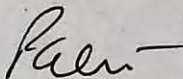
Dear ~~Colleague~~^{Al}:

I am about to move back to the U.K. as Director of the Royal Botanic Gardens, Kew. As one of my last duties at The Field Museum I am very pleased to share with you some of the scientific and educational achievements of the outstanding institution that I have been fortunate to have been associated with for the last 17 years.

Enclosed are several publications that describe a variety of recent collections, research, conservation and exhibition activities at The Field Museum. From field work in all parts of the globe to the development of exciting new exhibits like *Underground Adventure*, and from the analysis of DNA to the study of urban neighborhoods, The Field Museum continues to be a leader in building knowledge and understanding of the natural and cultural world.

Staff at The Field Museum will be pleased to respond if you have any questions regarding the enclosed materials, or if you need additional information. Please direct any comments or questions to Mark Alvey in the Office of Academic Affairs (malvey@fmnh.org).

Sincerely,



Peter R. Crane, FRS
A. Watson Armour III Curator
Vice President Academic Affairs, and Director

Great to see you at the IBC

Address from August 15, 1999:

Peter R. Crane
Director
The Royal Botanic Gardens, Kew
Richmond, Surrey TW9 3AB
U.K.

Tel: +44-(0)-20-8332-5112
Fax: +44-(0)-20-8332-5109
E-mail: p.crane@rbgkew.org.uk

Peter R. Crane, 09:12 AM 2/26/99 , No Subject

Delivered-To: traverse@ems.psu.edu
X-Sender: crane@fmppr.fmh.org
Date: Fri, 26 Feb 1999 09:12:19 -0600
To: Alfred Traverse <traverse@ems.psu.edu>
From: "Peter R. Crane" <crane@fmppr.fmh.org>
Cc: Jflynn@fmppr.fmh.org

Dear Al:

It was great to have you and Betty visit, and I hope that you enjoyed your brief time in Chicago. Thank you so much for taking the time to come - it was great to see you both. Thank you also for the wonderful gift of your library, which will help ensure the future of paleobotany here at the Field - we are deeply grateful.

I couldn't lay my hands on a flier for the Margaret Mee exhibit, but by separate cover I am sending a copy of our museum magazine, which gives a little background information on the exhibit.

I hope that you had a safe and uneventful journey home.

With very best wishes,

Peter

Peter R. Crane, F.R.S.
A. Watson Armour III, Curator
Vice President, Academic Affairs and Director
The Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Phone: (312) 922-9410 ext.559
FAX: (312) 360-9858
<mailto:pcrane@fmnh.org>

Peter R. Crane, 03:50 PM 3/4/99 -, Re: recent visit, etc.

To: "Peter R. Crane" <crane@fmppr.fmnh.org>
From: Alfred Traverse <traverse@ems.psu.edu>
Subject: Re: recent visit, etc.
Cc:
Bcc:
Attached:

Dear Peter:

We also enjoyed the few hours in the Field Museum with you and the others VERY MUCH. That luncheon session was just great, for example. I also will always remember the behind-the-scenes tours, especially of the new underground exhibition, and the Margaret Mee show (which I am determined to see in its next incarnation). I look forward to getting the museum magazine.

We spent the next day at Purdue--I'd never been there and wanted to see the place. I began as usual on a new campus by asking the first ten students or so, where is the library, where is the on-campus bookstore. In this case they all answered, "I have no idea." It turned out not to be so dumb--they have no main library (only 16 branches), and the bookstore is a joke. The greenhouses, however, are very impressive because of horticulture.

Then we visited with friends in India.noplace for a couple of days and drove home on Monday through terrible weather, especially in the ridge country of PA.

All the best to you, old friend. I can't wait to visit you at Kew. What a fantastic place.

Best regards, and thanks again for that fantastic sandwich! Al

Peter R. Crane, 09:55 AM 2/16/99 , Re: visit

To: "Peter R. Crane" <crane@fmppr.fmnh.org>
From: Alfred Traverse <traverse@ems.psu.edu>
Subject: Re: visit
Cc:
Bcc:
Attached:

At 01:32 PM 2/14/99 -0600, you wrote:

>Dear Al;

>

>Sorry to neglect you - I have been out on vacation for the last week. I am
>still trying to track down an accurate and up-to-date map (everything is
>out of date since the Museum campus was created and opened last summer),
>but in the meantime here are some verbal instructions.

HI, PETER:

I HAVE PRINTED OUT YOUR INSTRUCTIONS. WE WILL BE COMING FROM THE EAST, OF COURSE. I HAVE EXCELLENT BRAND NEW MAPS OF CHICAGO AND CHICAGO AREA, AND WITH SUCH IN HAND, PLUS THE VERBAL INSTRUCTIONS FOR ARRIVAL FROM THE SOUTHEAST THAT YOU SENT, WE SHOULD HAVE NO DIFFICULTY AT ALL. BETTY IS AN EXCELLENT NAVIGATOR. WE HAVE NEVER HAD ANY DIFFICULTY FINDING OUR WAY TO THE SOLDIER FIELD-FIELD MUSEUM AREA. SO, I WOULD SAY NOT TO WORRY ABOUT THE MAP YOU WERE LOOKING FOR.

ON THE OTHER HAND, THE INFORMATION ABOUT WHERE TO REPORT AND HOW TO GET PARKED, ETC. IS JUST WHAT I WAS HOPING FOR. AND I AM GLAD TO GET THE WORD ABOUT THE STAFF. I RECENTLY NOTICED AN ABSTRACT IN THE GSA VOL. FOR TORONTO OF LAST OCT. BY RICK LUPIA, AND I AM HOPING HE CAN EXPLAIN THE RATHER ABSTRUSE IDEAS TO ME!

SEE YOU IN A LITTLE MORE THAN A WEEK!

BEST. AL.

Peter R. Crane, 01:32 PM 2/14/99 , Re: visit

Peter R. Crane, F.R.S.
A. Watson Armour III, Curator
Vice President, Academic Affairs and Director
The Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Phone: (312) 922-9410 ext.559
FAX: (312) 360-9858
<mailto:pcrane@fmnh.org>

Delivered-To: traverse@ems.psu.edu
X-Sender: crane@fmppr.fmmh.org
Date: Sun, 14 Feb 1999 13:32:39 -0600
To: Alfred Traverse <traverse@ems.psu.edu>
From: "Peter R. Crane" <crane@fmppr.fmmh.org>
Subject: Re: visit

Dear Al;

Sorry to neglect you - I have been out on vacation for the last week. I am still trying to track down an accurate and up-to-date map (everything is out of date since the Museum campus was created and opened last summer), but in the meantime here are some verbal instructions.

>From the North take I-90 and from Northwest I-94 exit at Roosevelt Road, head east to Columbus Drive, right on Columbus Drive to McFetridge Drive, left on McFetridge Drive, the Museum will be on your left.

>From the West take I-88 to I-290 east through the City to Columbus Drive, right on Columbus Drive to McFetridge Drive, turn left the Museum will be on your left.

>From the Southwest take I-55, exit on Lake Shore Drive, north past Soldier Field to McFetridge Drive, right on McFetridge Drive, the Museum will be on your left.

>From the South or Southeast take I-80/94 to the Calumet Expressway I-94 north to the Dan Ryan Expressway to the Lake Shore Drive exit, I-55 east to Lake Shore Drive north, north past Soldier Field to McFetridge Drive, right on McFetridge, the Museum will be on your left.

McFetridge Drive is the only road between Soldier Field and The Field Museum. As you turn in from Lake Shore Drive or Columbus you will be heading east (towards the lake). In about a hundred yards you will come to a stop sign (aligned with the south steps of the Museum). After the stop sign you should take the first left, which will in effect be a U-turn, and will bring you in to a kind of "service road" that runs along the south side of the Museum. At this point you will be heading back in the direction from which you have just come (i.e., heading west). Follow that service road back toward Lake Shore Drive until it ends, at which point you will turn to the right and then quickly to the left to enter the West Parking Lot of the Museum. There will be a guard on duty who will have your name and allow you into the lot to park. After you have parked the car, enter the museum by the west door (directly from the parking lot and call me at extension 552. We'll be expecting you.

I am going to try and find that map, and also give you a call sometime before you leave to just check final details.

Looking forward to seeing you and Betty soon.

Peter

PS - The other paleobotanists here at the Field who I hope that you will meet are;

Rick Lupia - my post-doc and one of my former students from University of Chicago - currently interviewing for positions. Cretaceous mesofossils and also with an interest in Cretaceous palynology.

Susana Magallon Puebla - one of my graduate students - from UNAM in Mexico City - a wonderful student working on Cretaceous flowers and angiosperm phylogeny - especially basal eudicots - will finish this summer and will go on to a post doc with Jim Doyle and Mike Sanderson at Davis.

Jolanta Kobylinska - our Collection Manager who is really superb in terms of keeping our collections in order and in helping with our work on mesofossils.

crane@fmppr.fmnh.or, 11:43 AM 2/14/99 , visit

To: crane@fmppr.fmnh.org
From: Alfred Traverse <traverse@ems.psu.edu>
Subject: visit
Cc:
Bcc:
Attached:

Hi, Peter:

It now is only a week until we leave for Chicago. The map you said we might need never came. (I have AAA current maps for Chicago, both general area and downtown area) Perhaps more importantly I need information about what I should do about parking when I get there. I have decided to bring our big diesel truck (Ford 250) because the boxes won't quite all go in the Explorer.

Assuming you respond to this e-mail, could you me tell whom else I will be meeting at the Museum on the 25th? Just this morning I read an abstract for last Fall's GSA meeting in Toronto, at which a paleobotanical paper was presented by a Field Person whose name wasn't familiar to me! I don't want to be too DUMB!

See you on the 25th. Al.

To: crane@fmppr.fmnh.org
From: Alfred Traverse <traverse@ems.psu.edu>
Subject: visit
Cc:
Bcc:
Attached:

Dear Peter:

Did you get my e-mail message of 25 Jan., which I did as a "reply" to your earlier e-mail missive? I need a response, so that I know it is appropriate to go ahead with reservations for the trip. I proposed arriving at the Field about 10 a. m. on 25 Feb., etc. Betty and I will stay several hours, so as to make my delivery, visit with you briefly, and with whomever is there now in the paleobotany department, and to see a bit of the "Ausstellungen." We will then head toward Indianapolis in more or less mid afternoon. I also noted the necessity of a parking permit, etc.

I should probably explain that emeritus professors here do NOT have long distance telephone privileges. So, I must either remember to phone at an appropriate time at home, or remember to bring a phone card to the office. On the other hand, e-mail is (so far!) free, so it is a BIG temptation to use it instead of the phone.

Cheerio. Al.

Peter R. Crane, 09:21 AM 1/25/99 , No Subject

Delivered-To: traverse@ems.psu.edu
X-Sender: crane@fmppr.fmh.org
Date: Mon, 25 Jan 1999 09:21:34 -0600
To: traverse@ems.psu.edu
From: "Peter R. Crane" <crane@fmppr.fmh.org>

Al:

Thanks for your call on Friday. I am in meetings this morning but I'll give you a call as soon as I get out.

The last few weeks have been very hectic for me. I don't know whether you have heard but it was just announced that I am going back to the U.K. in August to take over the Directorship of Kew.

Personally, I don't think that this should affect your decision regarding the library. The paleobotany program here is strong and I will be replaced very soon, but obviously this is an unexpected development and something that we should discuss.

I hope to reach you in the next few hours.

Best wishes to you and Betty,

Peter

P.S. I am in town and available Feb. 22, 23, and 25.

Direct phone line!

312 - 922 - 6946

Peter R. Crane, 09:12 AM 1/28/99 , Re:

Delivered-To: traverse@ems.psu.edu
X-Sender: crane@fmppr.fmh.org
Date: Thu, 28 Jan 1999 09:12:33 -0600
To: Alfred Traverse <traverse@ems.psu.edu>
From: "Peter R. Crane" <crane@fmppr.fmh.org>
Subject: Re:

Al:

Great - we are looking forward to seeing you on the 25th. I am sending you a map of how to get to the museum - the roads have changed quite a bit in the last few years! I'll also try to give you a call.

Next time you and Betty come to Kew you'll definitely get the Royal treatment!

Peter

>Hi, Peter:

>
>Gee willikers, what fantastic news. The director of Kew a friend !Wow! I
>first went there in 1946 when a student at Cambridge Univ. (studying with
>Hamshaw Thomas) I think it cost about tenpence. The last time was a great
>day there with Bill Chaloner several years ago, and I think it cost five
>quid, or some such sum. Well worth it. I LOVE the place. Can't wait to
>visit again! Congratulations! (Sure makes it easy to understand why
>you've been on the road!)

>
>I also got your phone message. Good to have your direct phone number, in
>case of problems (I hope not) arising later. Of the dates you mention, 25
>February would work out the best, and I already have it on the calendar.
>We will drive to the Chicago area on the 24th, arrive at the museum the
>morning of the 25th at about 10 a. m. and hope to see you and make our
>delivery, possibly meet other paleobotanical personnel? Then we should
>look at some of the things at the Field (which I first visited in 1934 as a
>schoolboy in St. Joseph, MI, across the lake) that we haven't seen lately.
>Sometime in the afternoon we will head out of town toward Indianapolis
>(Betty's home town), as we have business there on the 26th.

>
>Of course, with neither you or Pat there any more, paleobotany/palynology
>at the Field will be pretty different from what I saw when last there--but
>that's life!

>
>All the best. Al

>
>P. S. As mentioned in my earlier letter, I would appreciate it if you
>could arrange some sort of parking permit for me to use while at the
>museum. In case it is of importance at this juncture, we will be driving a
>Ford Explorer, white, Pennsylvania license no. BJT-838. If I need special
>instructions as to procedures when we arrive on the 25th, I had better have
>them too.

>Alfred Traverse
>Palynological Labs.
>Department of Geosciences
>307 Deike-PSU
>University Park, PA 16802
>Ph.:814-863-3419
>Fax:814-863-7823

Peter R. Crane, F.R.S.
A. Watson Armour III, Curator
Vice President, Academic Affairs and Director
The Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Phone: (312) 922-9410 ext.559

Peter R. Crane, 09:12 AM 1/28/99 , Re:

FAX: (312) 360-9858
<mailto:pcrane@fmnh.org>

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

16 December, 1998

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Drive
Chicago, IL 60605

Dear Pete:

Forgive me if the above address doesn't match your present status and position in the Museum! It's what I have, and I will change the card when I next get something from you.

This is to check base with you regarding my paleobotanical library, which has been nicely boxed in containers labelled "FIELD" at my home ever since I had to vacate my office space here in July. I had two grandsons help me with the move and with getting established in the new office/lab I had constructed at home. I am now actually getting going again on my various research projects, though I still can't find lots of things. The latest is that I have also had to vacate my preparation lab here because I guy with a huge grant needs it (he has started—I am not making this up—The Institute of Astrobiology, and needs the palynology lab to process moon rocks and the like). I have another lab, however, and it will be o. k. once Betty and I get used to it. There is no certainty that I won't be evicted there also, but I'll face that when it comes.

I propose to bring the abovementioned boxes to the Field during the last week of February, 1999, if that is o. k. That way I can combine the delivery with a planned trip to Indianapolis at that time. If that week is o. k., perhaps you could tell me if the precise day matters, because that can be arranged, providing it is not Friday, 26 Feb., because we need to be in Indy that day. Also, I will need a permit to park our vehicle near a door for unloading the boxes.

I note from your card that I haven't sent you reprints recently (I never get around to general mailouts), so I enclose a small batch of same.

All the best to you and yours for the season and for a great 1999.

Yours very truly,

Alfred Traverse
Professor Emeritus of Palynology

Enclosure: reprints

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

29 January, 1996

Dr. Peter R. Crane
Office of Academic Affairs
The Field Museum
Roosevelt Rd. @ Lake Shore Dr.
Chicago, IL 60605

Dear Peter:

Betty and I are just back from a month's trip to the west coast. We took our new diesel truck, loaded to the gunwales with all my teaching materials for paleobotany, which I gave to Nan Arens, a former student, who is now professing the subject at UC Berkeley.

My collections and library for paleopalynology are still slated to go to you all one of these years. I take it that you all are still planning on that.

I just had a long letter from my very good friend in Stuttgart, Professor Ulrich Kull, who was instrumental in getting your previous assistant established as director of the natural history museum there. He tells me that the man decided he had made a mistake, pulled up stakes, and is back with you. Any insights on the situation? Doesn't sound good for the Stuttgart museum, which would seem to have considerable potential.

This letter was prompted by your beautiful seasonal card, which was in the pile of mail awaiting our return. We left on 26 Dec., but there was no effective mail service on campus after the 20th. All the best to you.

Yours very truly,

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

18 June, 1995

Dr. Peter R. Crane
Vice President, Academic Affairs
The Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Dear Peter:

Thanks for yours of 26 May, which arrived during our absence on a little trip to our place in the Adirondacks.

Thanks also for the Kew magazine, which contains all sorts of things of interest to me. Perhaps I should subscribe to the thing, though quality control seems to be a problem for them. Did you note that they misspelled WGC's name in the table of contents? The hot-wire story, by the way, is my story--Bill would never tell such a thing, but I've been amusing people by it for years--one of those stories that needs no embellishments to make it funny. I published it in my tribute to Bill a couple of years ago.

Betty got her Ph. D. at the May commencement. I will be officially "retired" on 30 June (also our 44th wedding anniv.). Paleobotany then will be formally deceased at PSU, but palynology will continue for a while--maybe quite a while if I stay in good shape. My course in palynology will be taught in the Fall Semester--ten are already signed up for this Fall, which probably means the usual full house of 16. The teaching collections for paleobotany are going to Nan Arens (a former student) at UC Berkeley. They are of no research significance. The research collections and library in palynology goes to you all, as you know, but you may have to wait a while--which, however, has the advantage that the collections and library are constantly improved!

All the best.

Yours very truly,

Alfred Traverse

The Field Museum
Exploring
The Earth And Its
People

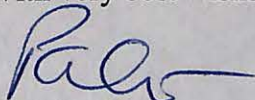
May 26, 1995

Professor Alfred Traverse
Palynology Laboratories
Department of Geosciences
The Pennsylvania State University
Deike Building
University Park, Pennsylvania 16802

Dear Al and Betty:

I thought you might be interested in the enclosed which recently came out in connection with the new "Evolution House" at Kew. Please ignore the bubble diagram associated with my article, which curtains several glaring errors. I had no control over the artwork. However I thought that you might also enjoy the piece on Bill Chaloner - which includes the famous hot wire story in which I believe you were involved!

With very best wishes for an enjoyable summer,



Peter R. Crane
A. Watson Armour III Curator
Vice President, Academic Affairs

PRC/ts

COMPAT BOND.

25% COTTON FIBRE

1893-1993

The Field Museum
Exploring
The Earth And Its
People

August 23, 1994

Professor Alfred Traverse
Palynology Laboratories
Department of Geosciences
The Pennsylvania State University
Deike Building
University Park, Pennsylvania 16802

Dear Al:

Many thanks for your letter, and the reprints, the c.v. and most importantly your wonderful hospitality at the State College last week. I thoroughly enjoyed my brief stay with you both, and it was an special delight to get to know Betty.

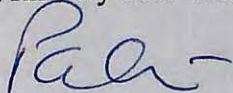
Enclosed is the promised letter for your files, along with various information on the Museum (including our Centennial Book). I have also enclosed for your interest a copy of our donors brochure and also the materials that we distribute on gift planning options - perhaps not up to Missouri standards, but I thought that you might be interested to see it.

I have passed on your vita to the Department of Geology. It might take a month or so for them to act (many of the curators are in the field at the moment) but it will come through in due course.

Thank you again for all your kindness last Tuesday and Wednesday. It was a great week all-the-way-round - the Potomac fieldwork was truly excellent! This week Bill Stein, Steve Manchester and Peter Endress have all been visiting - so it has been quite busy around here!

We look forward to your next visit to Chicago.

With very best wishes,



Peter R. Crane
A. Watson Armour III Curator
Vice President, Academic Affairs

Enc.

1893-1993

The Field Museum
Exploring
The Earth And Its
People

August 23, 1994

Professor Alfred Traverse
Palynology Laboratories
Department of Geosciences
The Pennsylvania State University
Deike Building
University Park, Pennsylvania 16802

Dear Al:

This is to follow up from our conversations at State College on August 16th and 17th, and to confirm the willingness of the Field Museum to accept your library, palynological preparations, residues and associated reference specimens. We are absolutely delighted that you have decided to make a gift of this material to the Field Museum and in this way to continue to make it available to future specialists in paleobotany and related fields. In particular, your library, in combination with that of Ted Just will form the nucleus of a free-standing paleobotanical library in the Department of Geology at the Field Museum, which I believe will be the first of its kind in the mid continent.

Many thanks indeed for your generosity. Please do not hesitate to contact me if you need any additional information.

Sincerely,



Peter R. Crane
A. Watson Armour III Curator
Vice President, Academic Affairs

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
28 November, 1994

Dr. Peter R. Crane
Vice President, Academic Affairs
The Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Dear Pete:

Yours of 17 Nov. interesting. In more or less the same mail I had a letter from my friend, Prof. Dr. Ulrich Kull, whose name you will recall in connection with the museum curatorship in Stuttgart. Prof. Kull sent me a clipping from a Stuttgart paper, of which I enclose a xerox. I hope you can get it translated--perhaps by Rieppel! The other article, about Bill 187 in CA, seems at least partly to miss the point--that a country or a subdivision thereof can't provide free welfare services to unlimited illegal immigrants. That these immigrants are all Spanish speakers is another story. However, Bill 187 is unenforceable and probably unconstitutional.

Have a happy holiday season. The welcome sign is always out for you at $\alpha\beta$. You were a fun visitor, but you didn't stay long enough!

All the best.

Yours very truly,

Alfred Traverse

encl.: xerox of clipping (Stuttgarter Nachrichten)

The Field Museum
Exploring
The Earth And Its
People

November 17, 1994

Professor Alfred Traverse
Palynology Laboratories
Department of Geosciences
The Pennsylvania State University
Deike Building
University Park, Pennsylvania 16802

Dear Al:

Many thanks for the photograph I received a couple of weeks ago. It was good to be reminded of my visit to State College this summer - and I hope to be back for a tour of the "Brandon Community" before too long.

I remember our conversation about the qualifications of Museum Directors this summer and especially the situation in Stuttgart. Well it has turned out well for your German colleague, but not so well for me. One of my staff, Olivier Rieppel has been offered the directorship in Stuttgart. Olivier is an excellent and highly productive scientist - our loss is certainly Stuttgart's gain. It's a small world!

With best wishes to you and Betty.



Peter R. Crane
A. Watson Armour III Curator
Vice President, Academic Affairs

PRC/ts

COMPAT BOND
25% COTTON FIBRE

THE PENNSYLVANIA STATE UNIVERSITY
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435 DEIKE BUILDING
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Phone: (814)863-3419; Fax: 814-863-7823
E-Mail: traverse@ems.psu.edu
30 October, 1994

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Pete:

Here's a small souvenir of your very brief visit to " $\alpha\beta$ "--you didn't even have time for the (1 mile) walk around the arboretum and woods of the property--that must happen next time.

Regards to Pat, Donna and Hallie.

All the best.

Yours very truly,

Alfred Traverse

encl.:photo

THE PENNSYLVANIA STATE UNIVERSITY
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435 DEIKE BUILDING
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Phone: (814)863-3419; Fax: 814-863-7823
E-Mail: traverse@ems.psu.edu
19 October, 1994

Dr. Peter R. Crane
Vice-President, Academic Affairs
The Field Museum
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Dear Pete:

Many thanks for the most encouraging letter of 10 October.
It is a great pleasure to accept the appointment as Research
Associate in Geology. Unlike some such honors I have received, I
am pretty sure this one will actually result in research work one
of these years! When I first visited the Museum in 1932 wouldn't
it have astonished me to know that this would happen in 1994!

All the best.

Yours very truly,

Alfred Traverse

encl.:reprints

1893-1993

The Field Museum
Exploring
The Earth And Its
People

11 October 1994

Professor Alfred Traverse
Palynology Laboratories
Department of Geosciences
The Pennsylvania State University
Deike Building
University Park, Pennsylvania 16802

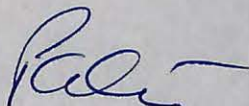
Dear Al:

I hope that you and Betty had an enjoyable trip to Spain. I was pleased to see the copy of your letter to Jim King and I am also very pleased to be able to enclose an "official offer" of a Research Associate appointment.

Most of our curators are now back in town and the administrative chores are beginning to pile up again. I am also struggling with the loss of my long-time Administrative Assistant who is relocating to Colorado. On the bright side, we are just gearing up for our next Capital Campaign and we are also interviewing for five vacant curatorial positions - both promise an exciting future for this institution.

I hope that all is well.

With best wishes,



Peter R. Crane
A. Watson Armour III Curator
Vice President, Academic Affairs

1893-1993

The Field Museum
Exploring
The Earth And Its
People

Vice-President,
Academic Affairs

October 10, 1994

Professor Alfred Traverse
Department of Geosciences
Pennsylvania State University
University Park, PA 16802

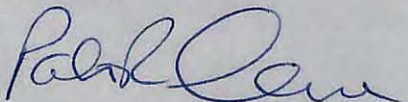
Dear Al:

I am pleased to tell you that the staff of the Department of Geology has recommended your appointment as Research Associate in Geology in recognition of your association with The Field Museum. As a matter of policy, these honorary three-year appointments, which are renewable, end on June 30th of their final year. Accordingly, this appointment will end on June 30, 1997.

These appointments are intended to give recognition to active scientists who have demonstrated their ability to make effective use of museum resources, or who contribute to our research collections, or who collaborate with members of the museum staff in their research. As a Research Associate we will be pleased to provide space for your work here at the museum and access to department collections, equipment and to the Museum library. Unfortunately, we are unable to provide support for research consumables and access to professional staff personnel, but we wish to do everything possible to further strengthen your relationship with The Field Museum. It goes without saying that the Research Associate title does not impose any specific obligations on your research; rather it enables us to express the relationship that exists between you and the museum, and to facilitate collaboration in scientific matters.

I will be pleased to have your acceptance of this appointment and your permission to include your name with the staff of this institution.

Sincerely,



Peter R. Crane
A. Watson Armour III Curator
Vice President, Academic Affairs

PRC/ma

cc: Archives

THE PENNSYLVANIA STATE UNIVERSITY
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PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
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Phone: (814)863-3419; Fax: 814-863-7823

1 September, 1994

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Pete:

Enclosed are several pamphlets you should have for your collection, now that I have read them!

All the best.

Yours very truly,

Alfred Traverse

encl.:pamphlets

P. S.:as I am signing this, a large packet has arrived from you-- will get to that later.

THE PENNSYLVANIA STATE UNIVERSITY
DEPARTMENT OF GEOSCIENCES
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435 DEIKE BUILDING
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18 August, 1994

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Road at Lake Shore Dr.
Chicago, IL 60605

Dear Peter:

It was fun to have you here, and we covered a lot of ground.

Enclosed is the vita, which is to help get me appointed honorary curator, or whatever. I will resign the similar thing at the Carnegie and also see our lawyer to get the will changed, assuming that you have not had in the meantime a change of heart!

Also enclosed are AT reprints I now have available, which according to my records I've never sent you.

All the best.

Yours very truly,

Alfred Traverse

enclosures: vita, reprints

THE PENNSYLVANIA STATE UNIVERSITY
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Phone: (814)863-3419; Fax: 814-863-7823

11 August, 1994

Dr. Peter R. Crane
A. Watson Armour II Curator
Vice President for Academic Affairs
Field Museum
Roosevelt Rd. at Lake Shore Drive
Chicago, IL 60605-2496

Dear Pete:

Betty and I are looking forward very much to your visit next week. It is likely that you won't get this letter until your return to Chicago, but that's o.k., as I really hate to load yet another folder onto a visitor.

As you can see from the enclosures, a very good friend who is professor in Stuttgart, Prof. Dr. Ulrich Kull, has written me about the fact that an inadequately qualified person has been appointed to be the new Director of the Natural History Museum in Stuttgart. Prof. Kull (and other colleagues in Germany) fear that this will be bad not only for the future of the Stuttgart museum, but also for scientific museums in Germany in general, if this sort of appointment becomes a trend.

Prof. Kull requested that I try to get colleagues such as yourself to write to the chief political officer of Baden-Württemberg, President Teufel, laying out the objections to this sort of move, and if possible to one or both Stuttgart papers. President Teufel's office, "Minister-President," has no direct equivalent in our system but is closest to a state governor.

I will have discussed this matter with here, so no need for more detail. I will have also explained perhaps, that the blotches on the materials from Prof. Kull are not his fault, but are the result of unfortunate encounter with noxious fluids in my barn during the process of transfer from "alphabet" to my office.

See you soon.

Yours very truly,

encl.: xeroxes
c: Prof. Kull

Alfred Traverse

1893-1993

The Field Museum
Exploring
The Earth And Its
People

FAX: 1-814-863-7823

June 22, 1994

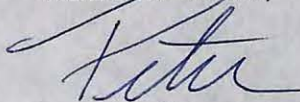
Professor Alfred Traverse
Palynology Laboratories
Department of Geosciences
The Pennsylvania State University
435 Deike Building
University Park, Pennsylvania 16802

Dear Al:

I'm sorry that it has taken me so long to get back to you. I've been wading through quite a backlog since our Centennial Colloquium a few weeks ago! However, in the interim I have learnt that I have to be in Philadelphia on August 15th and/or August 16th. If it fits with your schedule I thought that I might make a stop in State College as part of that trip. Please let me know if August 14th or 17th would work for you.

Regarding your visit to Chicago at the end of this month it would be wonderful if you could visit the Field Museum. It would be an ideal opportunity to show you our expanding facilities, some of the work we are doing and our plans for the future. Pat Herendeen will be in town and would be pleased to arrange an itinerary. Among the things that I would especially like you to see are our new "DNA to Dinosaurs" exhibit, the newly renovated paleo labs, and our new collections space. Please give Pat a call if there is any possibility of fitting this into your trip.

With best wishes,



Peter R. Crane
MacArthur Curator
Vice President, Academic Affairs

cc: P. Herendeen

THE PENNSYLVANIA STATE UNIVERSITY
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PALYNOLOGICAL LABORATORIES
435 DEIKE BUILDING
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26 June, 1994

Dr. Peter R. Crane
Geology/Paleobotany
The Field Museum of Natural History
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605-2496

Dear Peter:

Your fax of 22 June was welcome and caused me to phone Pat Herendeen immediately. We've set up a visit for the afternoon of 1 July.

The dates you mention for August are o. k. It used to be that I was often out of town about then, but then came the new semester system that almost all American universities have adopted! Our fall semester this year starts on 20 August, so I'll definitely be around getting set for that--I give my palynology course presumably. It's especially important that we get off to a flying start this year, as I'll miss ten days in mid-September when I go to Valencia, Spain, to give a "keynote address" to the Spanish palynologists.

We live in the country south of here, near Huntingdon. It's a nice ride on Amtrak from Philly, if you wish to come that way. Stops in Hunt. Arrives early evening in time for dinner. Or you can fly to State College (=Univ. Park) by USAir. We have a special guest room for paleobotanical dignitaries, and there have been a flock of them, including such previous Brits as Bill Chaloner, Mike Boulter, Rob Fensome, etc.

I really look forward to talking with you about whether FM would be interested in making my library and collections part of your palynological plans. Carnegie has expressed such interest, but it seems to me that the present personnel there are so Pleistocene ("Quaternary") oriented, that they don't really understand paleopalynology and would therefore probably pitch really essential elements of the working apparatus I have created over a half-century.

Best regards.

Yours very truly,

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

5 February, 1990

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Peter:

Your express package arrived AOK almost before you sent it. I am updating the AASP Committee draft report to include the Field as one of the suitable potential repositories.

It would help the case if palynology, as such, were specifically designated as a research area at the Field. It doesn't seem to be--in fact, micropaleontology in general isn't. Palynology could be argued to fit better into that category than into paleobotany because of chitinozoans, scolecodonts, dinocysts, acritarchs, fungal spores, etc. Hmm.

The promptness and thoroughness of your response impressed me greatly! Thanks so much.

See you in April, I hope.

Yours very truly,

Alfred Traverse

AT/et

SCIENCE

Author/Title

Crane, P. R.
'Angiosperm Diversification and Paleolatitudinal Gradients in
Cretaceous Floristic Diversity'

RE21181

Comments for transmittal to author

(Please restrict comments regarding acceptance of the paper to space below the perforation)

I have read the Crane and Lidgard paper with interest and profit. As it is a review paper, none of the data is by definition new, but the statistical approach is novel and informative. I believe that the authors do all of us with an interest in plant evolution a good turn by putting this information together in a comprehensive fashion. The paper is well written and cogently put together. I find no errors, or areas which I would want the authors to change. I only wanted to argue a bit about the selection of insect-pollination as a character uniting the Gnetales and Angiosperms. It is probably more characteristic of other gymnosperms (Bennettitales, for example) than of the Gnetales. Indeed, the most abundant (by far) extant gnetalean is not significantly insect-pollinated, as far as I know.

(Continue on additional sheet if necessary)

Overall evaluation

- Excellent and exciting, merits rapid publication.
- Above average, publish if space is available.
- Mediocre or poor, should not be published.
- Belongs in a more specialized journal.

If you recommend publication in Science, please check one or more of the following:

- Opens a new and significant area of research.
- In an established field, rates in the upper:
_____ 1% _____ 5% _____ 10% _____ 20%
- Provides important information of broad interest to the scientific community.
- Is important to specialists in three or more disciplines, namely:

paleobotany, paleopalynology, evolutionary studies

Confidential comments:

Advisor's name

Dr. Alfred Traverse
13750

Date

19 July, 1989

TO Al Traverser
DATE 3/27/89 TIME 2:02

WHILE YOU WERE OUT

M. Peter Crane

Of _____

Phone _____

TELEPHONED

PLEASE RETURN CALL

CALLED TO SEE YOU

WILL CALL AGAIN

RETURNED YOUR CALL

RUSH

MESSAGE

He says he has
your number

Signed

Muri

The Standard Register Company

arranged to meet: PKS, PC
+ WAC - AT at
Arlington, 9⁰⁰ a.m.
5 Apr. 89

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

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

28 March, 1989

Dr. Peter R. Crane
Department of Botany
University of Massachusetts
Amherst, MA 01002

Dear Peter:

Here's a PA map with your route to Millerstown marked in orange. When you get to US 22-322 at Millerstown, turn right on 22-322. The enclosed guidebook pages tell you how to get to it from the west, so it's reversed for you. As you see, it's about .6 mi. to the outcrop from the 17-322&22 intersection. See you there at 9:00 a.m. on Sat., 8 April.

All the best.

Yours very truly,

Alfred Traverse

AT/et
encl

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

13 October, 1987

Dr. Peter R. Crane
Botanischer Garten und Institut für
Systematische Botanik der Universität Zürich
Zollikerstrasse 107
CH-8008, Zürich, Switzerland

Dear Peter:

Got yours of 27th September today when I returned from
AASP-Halifax.

I'm happy that you liked my paper in Berlin. Bill Chaloner has
urged me to publish same "...in the new journal Historical
Biology--Tony Hallam is one of the editors...." If they'll take~~X~~
it, that's where it will go. I must get at it!

All the best to you--I was glad ~~X~~to be able to play a small role
in helping smooth your way to Amherst. But aren't you getting
sick of the road?

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et



BOTANISCHER GARTEN UND INSTITUT FÜR SYSTEMATISCHE BOTANIK
DER UNIVERSITÄT ZÜRICH

Direktor Prof. Dr. Christopher D.K. Cook
Telefon 01 251 36 70

Zollikerstrasse 107
CH-8008 Zürich,
Switzerland

Professor Alfred Traverse,
435 Deike Building,
Pennsylvanian State University
University Park, PA 16802
U.S.A.

27th September 1987

Dear Al,

I have recently been asked to write a chapter on "Patterns of Evolution and Extinction in Higher Plants" for a forthcoming textbook on "Evolution and Palaeontology" to be published in Britain. The excellent paper that you gave in the Berlin symposium is obviously very relevant to this topic and I would very much like to cite this work in my chapter. Where do you intend to publish your contribution and would it be possible to have a pre-print to use in preparing my chapter? Although some of this ground has been covered by Knoll and others I think it would be a shame not to cite your treatment which is more comprehensive and therefore more helpful to an interested student.

It would be a great help if you could let me know your plans. I plan to start writing in November and the book is scheduled for publication in late 1988.

I look forward to hearing from you.

With best wishes,

Peter R. Crane
Visiting Professor
and
Associate Curator

Address from November 1st, 1987:

Dr. Peter R. Crane
Associate Curator
Field Museum of Natural History
Roosevelt Road at Lake Shore Drive
Chicago, IL 60605



UNIVERSITY OF MASSACHUSETTS
AT AMHERST

Morrill Science Center
Amherst, MA 01003
(413) 545-2235

Botany Department

22 September 1987

Dr. Alfred Traverse
435 Deike Bldg.
Penn. State University
University Park, PA 16802

Dear Al:

I want to thank you very much for your evaluation of Dr. Peter Crane's professional standing for our endeavor to bring him to the University of Massachusetts as a Visiting Professor. Your letter will be a great help in the Botany Department's effort to get permission from our Dean to bring Peter Crane here for a semester. I know that requests for letters of reference are a time-consuming task, and I want to thank you personally for taking the time to help us with this matter.

file Peter Crane
↓

Sincerely,

James W. Walker
Professor of Botany
and
Head of Department

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

15 September, 1987

Dr. James W. Walker
Department of Botany
University of Massachusetts
Amherst, MA 01002

*file
peter
crane*

Dear Jim:

It was most interesting to learn per yours of 4 September that it might be possible for your department to have Peter Crane as visiting professor. Peter is a very talented and dynamic individual, and his presence in Amherst along with the Walker team would be certain to produce some very good things!

Dr. Crane's work, especially in application of cladistic methods to plant evolution, is innovative, imaginative, and highly acclaimed. For example, in my lectures here on angiosperm evolution I give the students my version of Crane's cladistic proposals and discuss them at length. Peter is known for his useful work with fossils also, but it is probably the cladistic/statistical approach that has justly made him famous.

Dr. Crane has not just a national reputation, but an international one of the first order. At the recent Int. Botanical Congress in Berlin, as an example, his work was referenced in every paper in which angiosperm evolution played a role. In addition, his own contribution indicating earlier and more rapid angiosperm expansion than previously thought was memorable. He is a top researcher without doubt. For a person his age, his publication list is very impressive. Many of the papers are very important.

I would enthusiastically welcome Peter here if it were possible to arrange it. I would think if he came here, it should be a joint effort between botany and geology, and that might also be appropriate at UMass.

Best wishes as ever.

Yours very truly,

Alfred Traverse

AT/et

CURRICULUM VITAE

NAME: CRANE, Peter Robert
 DATE OF BIRTH: July 18, 1954
 NATIONALITY: British
 ADDRESS: Department of Geology
 Field Museum of Natural History
 Roosevelt Road at Lake Shore Drive
 Chicago, Illinois 60605-2496
 Tel. 312/922-9410, ext. 334
 Home 312/987-4670
 MARITAL STATUS: Married (Elinor Margaret Hamer, U.S. citizen)
 EDUCATION: 1975 B.Sc. Honours Degree, Botany, Class 1:
 Department of Botany, University of Reading,
 England.
 1981 Ph.D. Department of Botany, University of
 Reading, England. Studies on the Flora of the
 Reading Beds (Upper Palaeocene)
 EMPLOYMENT: 1978-1981 Lecturer, Department of Botany, University of
 Reading, England (fixed-term appointment)
 1981 (Sept.) Nature Conservancy (Geological Review Unit)
 England.
 1981-1982 Post-doctoral Research Scholar, Department of
 Biology, Indiana University, Bloomington,
 U.S.A.
 1982-1985 Assistant Curator, Department of Geology,
 Field Museum of Natural History
 Chicago, U.S.A.
 1985-present Associate Curator, Department of Geology,
 Field Museum of Natural History
 Chicago, U.S.A.
 1987-present Visiting Professor,
 Botanischer Garten und Institut für
 Systematische Botanik der Universität
 Zürich, Switzerland.
 OTHER PROFESSIONAL EXPERIENCE: 1980 Secretary and local organizer "First
 International Organisation of Palaeobotany
 Conference", University of Reading.
 1983 Chairman Search Committee Curator of
 Invertebrate Paleontology, Field Museum
 1984-1986 Chairman, Science Advisory Council &
 Publications Committee, Field Museum

84-present Lecturer in the Committee on Evolutionary Biology, University of Chicago

- EDITORSHIPS:
- 1983-present Associate Editor, Botanical Journal of the Linnean Society
 - 1984-1986 Co-editor, Paleobiology
 - 1987-present Associate Editor, Paleobiology
 - 1987-present Member Editorial Board, Review of Palaeobotany and Palynology
 - 1987-present Member Review Panel, Kew Bulletin

- PROFESSIONAL ORGANIZATIONS:
- Fellow of the Linnean Society
 - Member: American Institute of Biological Sciences
 - Botanical Society of America (Paleobotanical and Systematic Sections)
 - American Association of Plant Taxonomists
 - Geologist's Association
 - Tertiary Research Group
 - Systematics Association
 - Botanical Society of the British Isles
 - Palaeontological Association
 - Paleontological Society
 - Willi Hennig Society
 - International Organization of Paleobotany
 - Association of Systematic Collections

- RESEARCH AWARDS AND GRANTS:
- 1981 Fieldwork, southeastern Spain (Grant from the Linnean Society, and British Museum Natural History)
 - 1981 Research Visit, Indiana University (Grant from British Council & Reading University Research Board)
 - 1983 Palaeontological Association (U.K.) Presidents' Prize ("best presentation by a research worker under 30 at annual meeting")
 - 1984 Linnean Society of London, Bicentenary Medal ("in recognition of work done by a biologist under the age of 40 years")
 - 1985 One of 10 "Outstanding Young Citizens", Chicago Junior Association of Commerce and Industry
 - 1984-1987 \$83,000 (15 Jan. 1984 - 31 Dec. 1987) National Science Foundation, Early Fossil History and Evolution of the Betulaceae
 - 1987 S.Fr 24,000 (May - June 1987) Visiting Professor, Botanischer Garten und Institut für Systematische Botanik der Universität Zürich

- 1987 \$152,995 (Oct. 1987 - Sept. 1989), (with S. Lidgard & M. H. Nitecki) National Science Foundation, Support for the Care and Use of the Sytematic Collection of Mazon Creek Fauna and Flora
- 1987 \$110,000 (Jan. 1988 - Dec. 1990) National Science Foundation, Floral Structure and Systematics of Mid-Cretaceous Angiosperms

COURSES TAUGHT:

University of Reading (1978-1981);

Undergraduate Level

Taxonomy

Advanced Taxonomy

British Flora

Economic Botany

University of Reading (1978-1981);

Graduate Level

Introductory Plant Taxonomy

Practical Basis of Plant Taxonomy

Palynology

Palaeobotany

University of Chicago (1984-1987); 200 Level

Paleobotany and Plant Evolution

University of Zürich (1987);

Palaeobotany and Plant Evolution

Topics in Angiosperm Systematics

Aspects of Ecology

- BOOKS: FRIIS, E. M., CHALONER, W. G. & P. R. CRANE. Editors. 1987. The Origins of Angiosperms and their Biological Consequences. Cambridge: Cambridge University Press, x + 337 pp.

RESEARCH PUBLICATIONS:

- CRANE, P. R. 1977. The Alum Bay Plant Beds. Tertiary Research, 1: 95-99.
- CRANE, P. R. 1978. Angiosperm leaves from the Lower Tertiary of Southern England. (Summary of a paper read at the First International Symposium on Angiosperm Palaeobotany, Czechoslovakia, June 1977) Courier Forschungsinstitut Senckenberg, 30: 126-132.
- COLLINSON, M. E. & P. R. CRANE. 1978. Rhododendron seeds from the Palaeocene of southern England. Botanical Journal of the Linnean Society, 76: 195-205.
- CRANE, P. R. & G. PLINT. 1979. Calcified angiosperm roots from the Upper Eocene of southern England. Annals of Botany, 44: 107-112.
- SMITH, P. H. & P. R. CRANE. 1979. Fungal spores of the genus Pesavis from the Lower Tertiary of Britain. Botanical Journal of the Linnean Society, 79: 243-248.

CRANE, P. R. & E. A. JARZEMBOWSKI. 1980. Insect leaf mines from the Palaeocene of southern England. Journal of Natural History, 14: 629-636.

CRANE, P. R. 1981. Betulaceous leaves and fruits from the British Upper Palaeocene. Botanical Journal of the Linnean Society, 83: 103-136.

HILL, C. R. & CRANE, P. R. 1982. Evolutionary Cladistics and the Origin of Angiosperms. In: K. A. Joysey & A. E. Friday (eds.) Problems of Phylogenetic Reconstruction, pp. 269-361. New York: Academic Press, Proceedings of the Systematics Association Symposium, Cambridge, 1980.

CRANE, P. R. & S. R. MANCHESTER. 1982. An extinct juglandaceous fruit from the Upper Palaeocene of southern England. Botanical Journal of the Linnean Society, 85: 89-101.

MANCHESTER, S. R. & P. R. CRANE. 1983. Attached leaves, inflorescences, and fruits of Fagopsis, an extinct genus of fagaceae affinity from the Florissant Flora of Colorado, U.S.A. American Journal of Botany, 70: 1147-1164.

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- 1980 1st International Organisation of Palaeobotany Conference, Reading, U.K.
Systematics Association Meeting, Problems of Phylogenetic Reconstruction, Cambridge, U.K. (presented by C. R. Hill).
Department of Botany, Reading University, U.K.
- 1981 Department of Botany, Reading University, U.K.
A.I.B.S., Bloomington, Indiana, U.S.A.
13th International Botanical Congress, Australia (presented by E. M. Friis).
Department of Botany, University of Illinois, Urbana, U.S.A.
Evolutionary Biology, Harvard University, U.S.A.
New York Botanical Garden, U.S.A.
Department of Biology, Indiana University, Bloomington, U.S.A.
- 1982 Linnean Society, London, U.K.
AIBS, Pennsylvania State University, U.S.A. (see abstracts for titles).
Department of Botany, Ohio State University, Columbus, U.S.A.
Third Meeting Hennig Society, University of Maryland, U.S.A.
Department of Geophysical Sciences, University of Chicago, U.S.A.

- 1983 Department of Biology, University of North Dakota, U.S.A.
 Evolutionary Morphology Group, University of Chicago, U.S.A.
 Department of Botany, University of Alberta, Edmonton, Canada.
 Department of Geology, University of Illinois, Chicago, U.S.A.
 Department of Botany, University of California, Davis, U.S.A.
 Workshop on graph-theoretical presentations, University of
 Pennsylvania, U.S.A.
 European Paleobotanical Conference, Montpellier, France
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 AIBS, North Dakota, U.S.A. (see abstracts for title).
 Missouri Botanical Garden 30th Annual Systematics Symposium. St.
 Louis, U.S.A.
 North Eastern Paleobotanical Meetings, Harvard Forest,
 Massachusetts, U.S.A.
 Palaeontological Association, Annual Meeting, Swansea, U.K.
 Department of Botany, Kings' College, University of London, U.K.
- 1984 4th Meeting of Hennig Society, British Museum, London, (presented
 by C. R. Hill).
 AIBS, Colorado State University, Fort Collins, U.S.A. (see
 abstracts for title).
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 Department of Biology, Loyola University, Chicago, U.S.A.
 Department of Biology, Indiana University, Bloomington, Indiana,
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 Department of Biology, Illinois State University, Bloomington,
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- 1985 Division of Biological Sciences, University of Michigan, Ann
 Arbor, Michigan, U.S.A.
 Department of Botany, Kings' College, University of London, U.K.
 Department of Botany, Reading University, U.K.
 Departments of Botany & Palaeontology, British Museum (Natural
 History), London, U.K.
 Österreichische Paläontologische Gesellschaft, Vienna, Austria.
 Botanischer Garten und Institut für Systematische Botanischer
 Universität Zürich, Switzerland.
 Department of Geology, Aarhus University, Denmark.
 Department of Earth Sciences, Cambridge University, U.K.
 International Symposium on Pollen Form and Function, London, U.K.
 International Conference on Systematic and Taxonomic Approaches in
 Palaeobotany, London, U.K.
 Department of Biology, University of North Carolina, Chapel Hill,
 U.S.A.
 Department of Life Sciences, Illinois Institute of Technology,
 U.S.A.
 Third International Congress of Systematic and Evolutionary
 Biology, Brighton, U.K. (see abstracts for titles).
 AIBS, University of Florida, Gainesville, U.S.A. (see abstracts
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- 1986 Department of Geology, McMaster University, Canada.
 Department of the Geophysical Sciences, University of Chicago,
 U.S.A.

- Department of Botany, University of Iowa, U.S.A.
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AIBS, University of Massachusetts, Amherst, U.S.A. (see
abstracts for titles).
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Department of Botany, University of Massachusetts, U.S.A.
Department of Ecology and Evolutionary Biology, University of
Connecticut, U.S.A.
- 1987 Department of Biology, University of Chicago, U.S.A.
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Universität Zürich, Switzerland.
XIV International Botanical Congress, Berlin, West Germany.



UNIVERSITY OF MASSACHUSETTS
AT AMHERST

Botany Department

Morrill Science Center
Amherst, MA 01003
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4 September 1987

Dr. Alfred Traverse
435 Deike Bldg.
Penn. State University
University Park, PA 16802

Dear Al:

The Department of Botany would like to have Dr. Peter Crane as a Visiting Professor here at the University of Massachusetts, Amherst. ~~In order to do this~~, I, as Head of the Department, will need letters of reference that I can present to our Dean in support of bringing Dr. Crane here for a semester. I am, therefore, asking if you would give me your evaluation of Dr. Crane's professional standing. To aid you in this process, I enclose a copy of Dr. Crane's vita.

It would be particularly useful to us if you would address the following points in your letter:

- (1) Dr. Crane's professional competency. Does his research display imagination and originality in the conception of problems and/or the interpretation of results? Do you find that his published papers are cited by others? What is your opinion of the quality and significance of Dr. Crane's professional publications?
- (2) How would you describe Dr. Crane's national reputation and relative standing in his field for a person of his age group? How would you rank him in terms of his professional standing among others in his field?
- (3) Would you recommend Dr. Crane as a Visiting Professor in your own Department? Would your response to him be negative, lukewarm, generally favorable, or enthusiastic?

Your reply will be kept in confidence. I will be most appreciative of your assistance in this matter. Since your letter will form an integral part of the file I must submit to our Dean of Natural Sciences and Mathematics for Dr. Crane's visiting professorship, it would be most helpful if your letter were received before September 30, 1987. I thank you very much for your consideration of this request.

Sincerely,

James W. Walker
Professor of Botany
and
Head of Department

12 December, 1984

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Pete:

Thanks for the reprint of your 'origin of angiosperms' paper from Taxon, which I was able to work into my 2 lectures on the subject for the evolution course. The "not for professional consumption" articles were nevertheless very interesting! (Am having a slide made of the Cooksonia drawing.)

All the best.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

10 February , 1984

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Pete:

Many thanks for yours of 20 January re cladistics-ish. Very helpful. I made a xerox for Martin Farley, who shares an interest in these somewhat arcane matters.

I believe you're right--it's all really rather simple, but a thick crust of jargon is growing and obfuscating some of the simplicity. It reminds me of the archeological fraternity. I sit on some of their doctoral committees because of ethnobotany. I'll be listening to talk of such matters as "optimal low-energy output foraging strategy" and at first not realize at all that they're talking about Indians trying to go the shortest distance possible for breakfast.

Your definitions are a big help--such a glossary should appear somewhere! And I believe you all should agree among yourselves to halt or at least greatly slow the spread of "in-language". Of course, I recognize that what I urge is against human nature. One of my palynological colleagues openly admits he prefers Erdtman's terms to others, because they're so complex and erudite. When I told one of the archeologists to say "economical food-gathering" instead of what I report above, he looked at me with scorn that I could suggest something so "amateurish".

Once again, thanks very much--I'm filing your letter as a reprint to be pulled out as a dictionary when needed!

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

Crane, p. 2

homology = paraclinal convergence and/or reversal (p. 5)

nodes (p. 4) synapomorphies, these can be interpreted as (position of?)
evolutionary characters

5 January, 1984

Dr. Peter R. Crane (p. 7) taxa which can only be defined phenetically,
Department of Geology (features versus paraclinal definition for me)
Field Museum of Natural History conceptualized independently of stratigraphy,
Roosevelt Rd. at Lake Shore Dr. the fossil record (??)
Chicago, IL 60605

Dear Pete:

More about definitions. I did not nor do not mean to imply that
the terms originate with you. I just wanted to make you aware that a
reasonably alert and well educated person may have problems unless

1. Glossaries are provided
2. Precision in usage is sought for
3. Attempts are made to use plain English wherever possible.

From the essay of yours, I glean the following definitions by analysis
of your language:

homologous character: (p. 2) features thought to be inherited from a
common ancestor (seems same as conventional usage)

clade: (p. 2) group defined by one or more homologies (= homologous
character?)

hierarchy: (p. 2) pattern of clades nested within clades

cladogram: (p. 2) diagram of a hierarchy.

From Crane & Hill, essay for UP Seminar, 1983, "Principles and
methods of cladistics):

symplesiomorphy: (p. 3) generalized component of "overall similarity":

synapomorphy: less generalized component of "overall similarity"

nested group: (p. 2) part of a hierarchical pattern

character polarity: (p. 3) depends on which characters are irrelevant.
Polarity (p. 14) is supported or rejected only in relation to total
parsimony, supported by out-group comparison and ontogenetic criteria

out-group comparison: (p. 3) raises level of universality to include
other plant groups as outgroups [hyphenated or not?]

ontogenetic criterion: (p. 3) raises level of universality to include
additional diversity of early ontogenetic stages

polarity determination = synapomorphy determination + homology determination
(p. 5)

Grane, p. 2

homoplasy = parallelism, convergence and/or reversal (p. 5)

nodes: (p. 6) in cladograms, these can be interpreted as (position of?)
hypothetical ancestors

paraphyletic taxa: ((p. 7) taxa which can only be defined phenetically,
with no unique features (needs more definition for me)

atemporal synapomorphy: (p. 8) constructed independently of stratigraphy,
then tested later against the fossil record (??)

morphocline: ((p. 9) definition not derivable

apomorphic conditions: ((p. 9) (?)

plesiomorphic conditions: ((p. 9) (?)

apomorphy vs. synapomorphy (?)

~~data~~ difference from "data" not clear

autapomorphy: (p. 10) = unique features (how different from apomorphy?)

"descisions": (p. 10, 11, 16, 18, 20) does this = decision? Seems possible,
but in strange territory, one assumes nothing, especially when a new
word is three times repeated.

Best for 1984.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

1st Dec. '83

Dear Al, Your last letter arrived just as I am about to leave for the U.K. (this p.m.)

-so I cannot answer here in full - I will however reply with more details in 1984. In the meantime

I am sending a couple of short manuscripts which you might(?) find interesting - and could help to clear up some of the terminological problems.

Joan Miró (b. 1893)

The Kerosene Lamp, 1924

Black and white chalk with touches of pastel and red pencil, 81.0x100.3 cm

Helen Regenstein Collection in collaboration with Print Department Funds and Friends.

THE ART INSTITUTE OF CHICAGO

I hope so - I am

certainly

not setting out

to be deliberately

obstruse with best wishes for Christmas and the New Year

Pete Crane



Dr. Al Traverse,
GEOSCIENCES,
PENNSYLVANIA STATE
UNIVERSITY,
DEIKE BUILDING,
UNIVERSITY PARK,
PENNSYLVANIA
16802

22 November, 1983

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Peter:

More to the glossary business. I have just re-read with considerable care your paper with Hill, "10. Evolutionary cladistics and the origin of angiosperms." I am making very good use of the information in my evolution lectures, but I feel that you all are in danger of using so much in-language that your main, not really difficult points are at risk of being lost or confused.

Here is my preliminary glossary made just from gleaning in the above-mentioned paper and no other sources (as if I'd never seen another such paper):

apomorphy: no definition derivable from context. How is it related to synapomorphy (q.v.), which seems perhaps the same in effect?

anagenetic component (p. 272): a continuous progressive component.

autapomorphy: unique character defining cladistic "species". Provides the "difference class", whereas synapomorphy defines limits of sub-class as a whole.

cladistics: (p. 272): Based on derived similarity. Uses only the less generalized (derived components) of homology (...synapomorphy) for defining taxa (p. 285).

cognitive recognition (p. 321): (compare "on cognitive grounds"). Is this double-talk?

CU: cladistically-resolved unit (?) (What sort of unit?)

evolutionary systematics (+phenetics) (p. 272): = clustering of overall similarity.

heuristic (p. 320); also (p. 340): alternative heuristic: Is the word used in the dictionary sense??

heterobathmy (p. 297): mosaic distribution of apomorphic + plesiomorphic conditions of the characters (?). ("heterobathmically"--p. 317--?)

Crane, p. 2: 22 Nov. 1983

homoplasy (1983 - NEPBC handout): parallelism, convergence and reversal are principal elements. (Are there others?)

out-group comparison (p. 279): Tests whether a character state may be more or less generalized (if found in too many it is "redundant"). Used to prove validity of a synapomorphy. (p. 280) A complex concept involving a regress....

plesiomorphy (p. 286): "generalized" character states relative to synapomorphies. But (p. 311): "...Taxon A is plesiomorphous relative to Taxon B". (What does that mean about B?)

semaphoronts (p. 303): comparable stages of life cycle.

symplesiomorphy: is to plesiomorphy as synapomorphy is to apomorphy (?). (p. 318) Common primitiveness. (N.B.: see statement under apomorphy. Plesiomorphy is often used by itself; apomorphy seldom is so used.)

Have I as a typical reader (?) correctly derived sufficient definitions? Would you comment on those that are wrong? I think your ideas are most interesting, but I fear them not being available to those not familiar with the jargon--it is becoming formidable.

All the best.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et

17 November, 1983

Dr. Peter R. Crane
Department of Geology
Field Museum of Natural History
Roosevelt Rd. at Lake Shore Dr.
Chicago, IL 60605

Dear Pete:

Here are the slides I borrowed--many thanks--will be handy for my evolution-of-angiosperms lectures next week.

Once again, I enjoyed and profited much from your presentation at NEPBC-83.

Best wishes.

Yours very truly,

Alfred Traverse
Professor of Palynology

AT/et
encl: slides

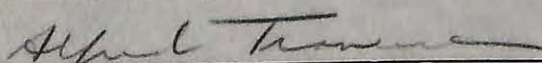
PROPOSAL NO. BSR-8314592	INSTITUTION FIELD MUS OF NATURAL HIST	PLEASE RETURN BY
PRINCIPAL INVESTIGATOR CRANE	NSF PROGRAM SYSTEMATIC BIOLOGY PROGRAM	
TITLE EARLY FOSSIL HISTORY AND EVOLUTION OF THE BETULACEAE		

COMMENTS (QUALITY OF THE PROPOSED RESEARCH, RECENT RESEARCH ACHIEVEMENTS OF THE PRINCIPAL INVESTIGATOR(S), ETC.)
CONTINUE ON ADDITIONAL SHEET(S) AS NECESSARY.

This is in practically all respects a near-perfect proposal. It clearly states where we now stand, what is proposed, and how the work will be carried out. The amounts of money requested are modest--only by paring the field work a little could even a small amount of money be reasonably cut. The subject is important. There are some good illustrations which are not padding but are referable to the points raised. There is no overwhelming, discouraging bulk of unnecessary information, as so often is the case with proposals I review. Dr. Crane is to be commended for this proposal, and it could well be used as a model for others to follow. He is already at a very young age one of the top people in paleobotany, and his institution has a long history of work in that field. The facilities are certainly adequate. That the project does not contribute directly to a university's program or to graduate education in particular is the only drawback I can see.

OVERALL RATING: EXCELLENT VERY GOOD GOOD FAIR POOR

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552 and formal requests from Chairpersons of Congressional committees having responsibility for NSF, reviewers' comments will be given maximum protection from disclosure.

REVIEWER'S SIGNATURE 	REVIEWER'S NAME (TYPED) Alfred Traverse
OTHER SUGGESTED REVIEWERS (OPTIONAL)	

REVIEWER'S COPY