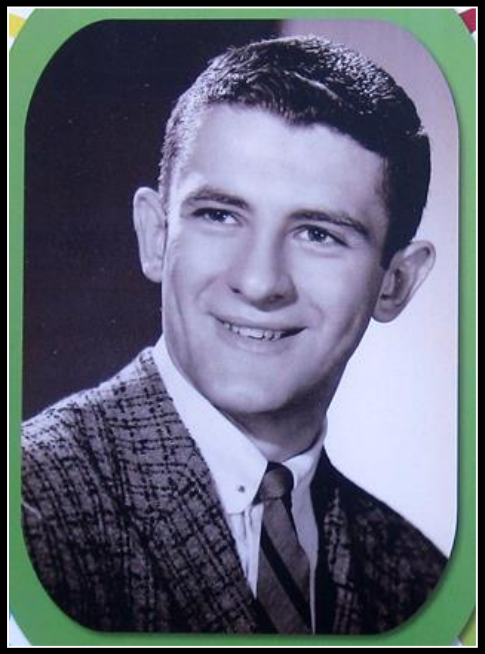
Thomas Norwood Taylor

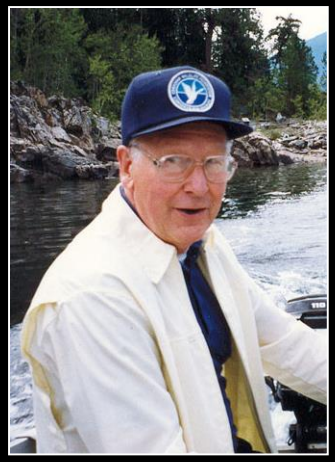
(June 14, 1938 – April 28, 2016)



Background

Education
B.A. Miami University (Ohio), 1960
Ph.D. University of Illinois, 1964
Post Doc. Yale University, 1964-65

Academic Positions
University of Illinois at Chicago Circle, 1965-1972
Ohio University, 1972-1974
The Ohio State University, 1974-1995 (Chair)
The University of Kansas, 1995-2016 (Chair)



Visiting Professorships
University of Texas (1978)
University of Alberta (1984)
Westfälische Wilhelms Universität (1994, 1996)

With Mom, Velma

Sydney, Australia, 1981

Mentor
Wilson N. Stewart

Ruth, Gar, Mary Liz, Bill & Tom

1976, Corvallis, Oregon

In Kootenay Bay, BC

Early Field Work

Tom, second from left
with Wilson and Mary
Liz Stewart

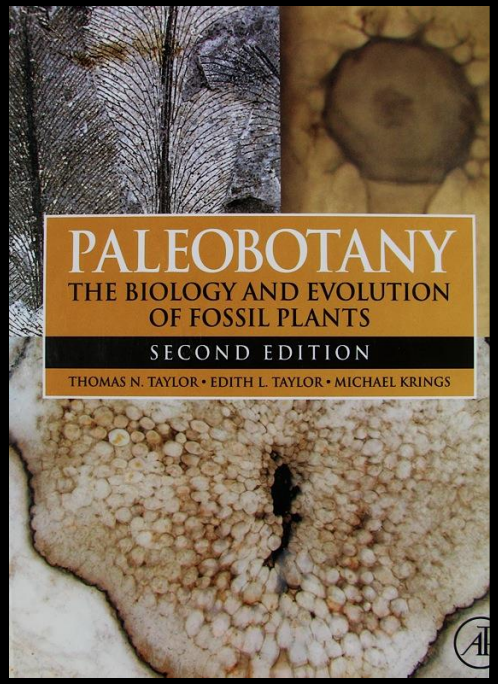
Tom, second from right
with David Dilcher, and Don Eggert

Productivity, Breadth, Innovation, Rigor

468 peer reviewed papers

Three Editions of Paleobotany Text Books

First Paleomycology Text Book



Progression of Research Innovation

Morphology & Anatomy →

Pollen & Spores →

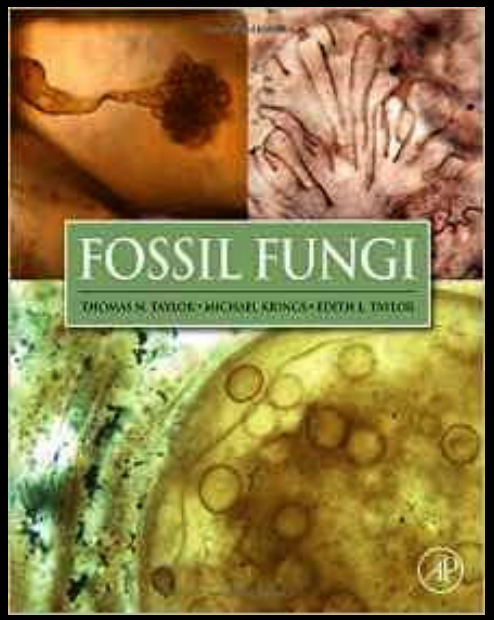
Scanning Electron Microscopy →

Transmission Electron Microscopy →

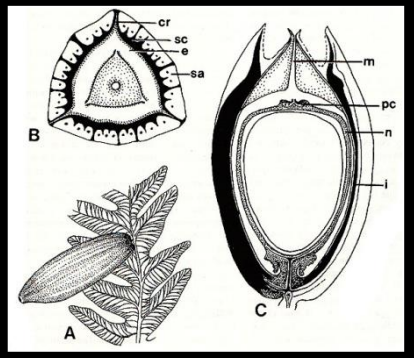
Fossil Fungi →

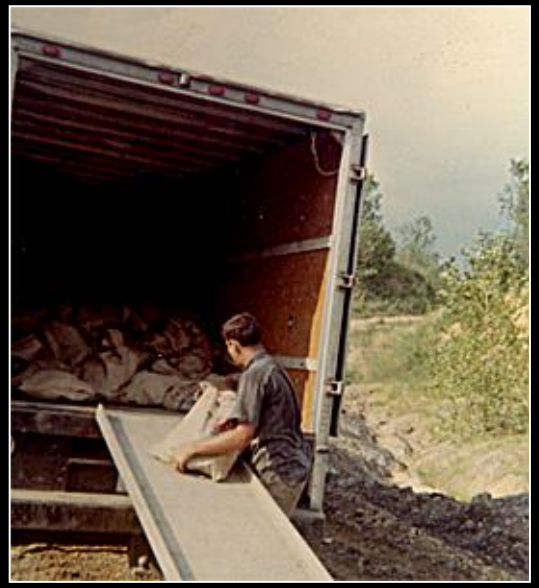
Organismal Interactions →

Antarctic Paleobotany →



Coal Ball Paleobotany





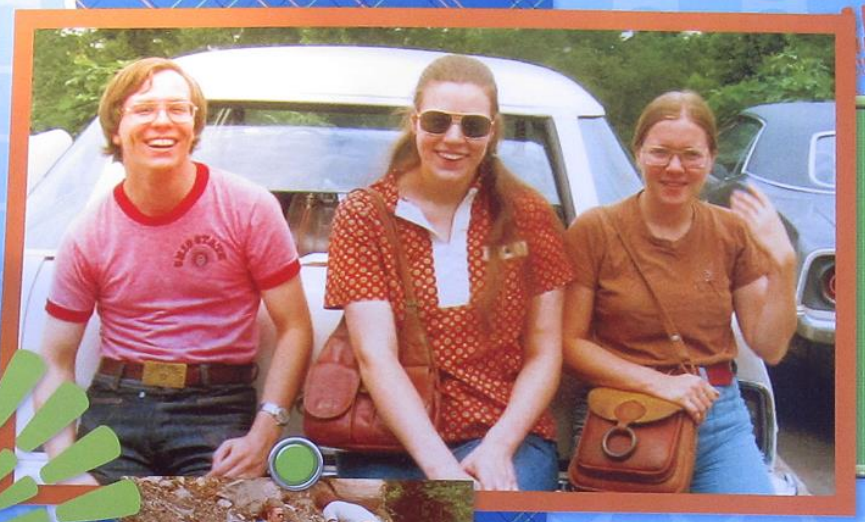
Mentorship

Master of Science:

Gar W. Rothwell 1969
Sheila Brack 1969
Lydia Bohorquez 1970
Charles W. Good 1970
Ruth A. Stockey 1974
Andrew J. DiLiddo 1976
James E. Mickle 1978
Edith L. Smoot 1978
Cynthia A. Wagner 1978
Wilson A. Taylor 1984
Juan Garcia-Massini 2004

Doctor of Philosophy:

Sheila D. Hanes 1975 (Eckerd College, St. Petersburg, Florida)
Michael A. Millay 1976 (Ohio University)
Ruth A. Stockey 1977 (Oregon State University)
Edith L. Smoot 1983 (University of Kansas)
Michael A. Cichan 1984 (deceased)
Kathleen B. Pigg 1988 (Arizona State University)
Wilson A. Taylor 1989 (University of Wisconsin-Eau Claire)
Jeffrey M. Osborn 1991 (College of New Jersey)
Xuanli Yao 1994 (University of San Francisco)
Lisa D. Boucher 1995 (University of Texas)
Brian J. Axsmith 1998 (University of South Alabama)
Carlie Phipps 2000 (SUNY - Institute of Technology)
A. Schwendemann 2011 (Lander University)
Carla J. Harper 2015
(Bayerische Staatssammlung für Paläontologie und Geologie)



Lewis Creek, Kentucky

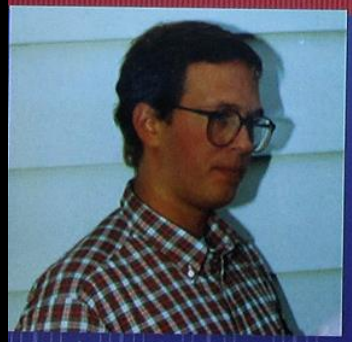
Class field trips to Lewis Creek were always the highlight of Paleobotany Class and summer fieldwork

Top: Jim Mickle, Edie Smoot, Ruth Stockey
Left: TNT and students
Mike Millay
Tom expounding in front of Sarah
Below: Walking in to the coal ball site at Lewis Creek

Teaching in the field

Bob Dennis,
Sheila Brack-Hanes
Tom Taylor
Don Eggert

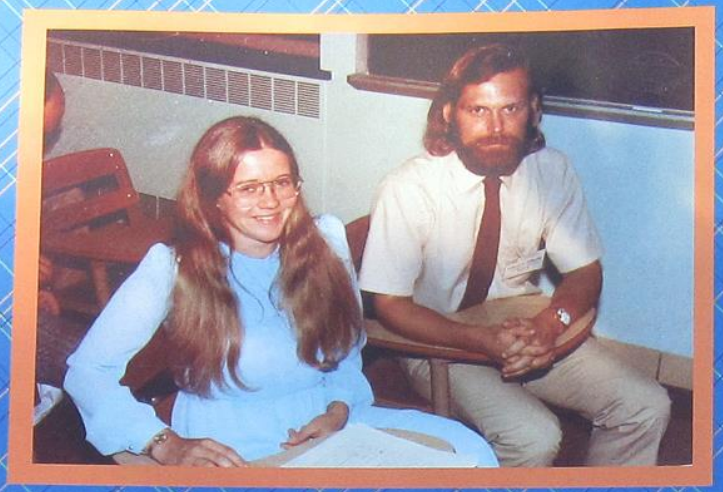
Ohio State Students and Colleagues

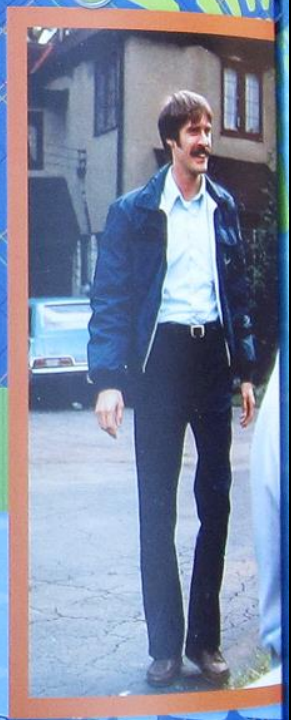


Left: Kathleen Pigg, Charlie Good
Ruth Stockey
Mike Cichan, Marie Kurmann, TNT, Edie, Ruth

Right: Sara Stubblefield, Mike Millay,
Kathleen Pigg, Willy Taylor

Vicki Funk, Edie Smoot, Jim Lawrey,
Bob Slocum, TNT





Students and Colleagues

Mentorship

POSTDOCTORAL FELLOWS:

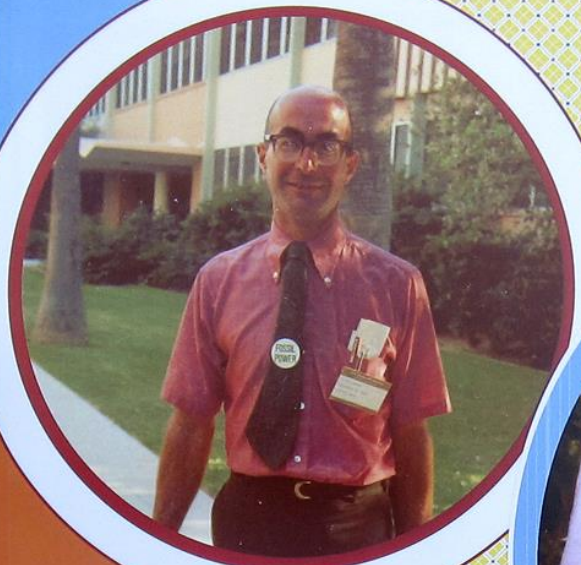
Dr. Michael A. Millay (University of Illinois) 1975-1979; Dr. Coleman R. Robison (University of Montana) 1976-1977; Dr. Charles P. Daghlian (University of Texas) 1978; Dr. Bruce E. Serlin (University of Texas) 1981; Dr. Sara P. Stubblefield (Ohio University) 1981-1985; Dr. Tim Jefferson (Cambridge University, England) 1982-1983; Dr. James F. White, Jr. (University of Texas) 1987-1989; Dr. Michael J. Farabee (University of Oklahoma) 1987-1989; Dr. Georgina del Fueyo (Universidad de Buenos Aires, Argentina) 1992-1994; Dr. Michael Zavada, (University of Connecticut) 1985-1987; Dr. Edith L. Smoot, (Hope College, Holland, Michigan) 1986; Dr. Brigitte Meyer-Berthaud (Université des Sciences et Techniques du Languedoc, Montpellier, France) 1988,1990, 1993; Dr. N. Ruben Cúneo (CONICET, Buenos Aires, Argentina) 1990-1991; Dr. Robert Shaw (Exploration and Development Research Center, Taiwan) 1991-1992; Dr. Masood Khan (Lahore, Pakistan) 1992-1993; Dr. Ana Archangelsky (Museo Paleontológico, Trelew, Argentina) 1997-1998; Dr. Brian J. Axsmith (University of Kansas) 1998-1999; Dr. Michael Krings (Westfälische Wilhelms Universität, Münster, Germany) 1999-2001, 2001-2002; Dr. Sharon Klavins (Southern Illinois University) 1999-2002; Dr. Wolfram Kurschner (University of Utrecht, The Netherlands) 2000; Dr. Elizabeth J. Hermsen (Cornell University) 2005-2008; Dr. Ignacio Escapa (Museo Paleontológico, Trelew, Argentina) 2008-2010; Dr. Anne-Laure Decombeix (Université des Sciences et Techniques du Languedoc, Montpellier, France) 2008-2012; Dr. Benjamin Bomfleur (Westfälische Wilhelms-Universität Münster, Münster, Germany) 2010-2013; Dr. Andrew B. Schwendemann (Lander University) 2011-2012; Dr. Carla J. Harper (Bayerische Staatssammlung für Paläontologie und Geologie) 2015.

Collaboration

VISITING SCIENTISTS:

Dr. Alicia M. Baldoni (CIRGEO, Buenos Aires, Argentina) 1982; Dr. Theodore Delevoryas (University of Texas) 1980; Dr. Andrew C. Scott (University of London) 1981; Dr. Barry A. Thomas (Goldsmiths College, London) 1981; Dr. Kenneth L. Alvin (Imperial College, London) 1982; Dr. Charles E. Miller (Ohio University) 1983; Dr. Sergio Archangelsky (Universidad de Buenos Aires) 1984-1985, 1986, 1987, 1992; Dr. Sara P.Stubblefield (Research Associate) 1985-1988; Dr. Geoffrey Creber (University of London) 1987; Dr. YaoZhaoqi (Nanjing Institute of Geology and Palaeontology, Nanjing, China) 1986; Dr. Jean Galtier (Universitédes Sciences et Techniques du Languedoc, Montpellier, France, University Distinguished Professor) 1993,2006; Dr. Ina Dobruskina (Department of Geology, Hebrew University, University Distinguished Professor)1993; Dr. Hans Kerp (Westfälische Wilhelms Universität, Münster, Germany) 2000; Dr. N. Ruben Cúneo(CONICET, Buenos Aires, Argentina) 2001, 2009, 2013; Dr. Michael Krings (Westfälische WilhelmsUniversität, Münster, Germany) 2003, 2004, 2006, 2007, 2009, 2010, 2011, 2012, 2013 (several months);Dr. Ignacio Escapa (Museo Paleontológico, Trelew, Argentina) 2013, 2014, 2015; Dr. Anne-LaureDecombeix (Université des Sciences et Techniques du Languedoc, Montpellier, France) 2013, 2014, 2015;Dr. Benjamin Bomfleur (Westfälische WilhelmsUniversität Münster, Münster, Germany) 2014; Dr. Carla J.Harper (Bayerische Staatssammlung für Paläontologie und Geologie) 2015.

Friends and Colleagues



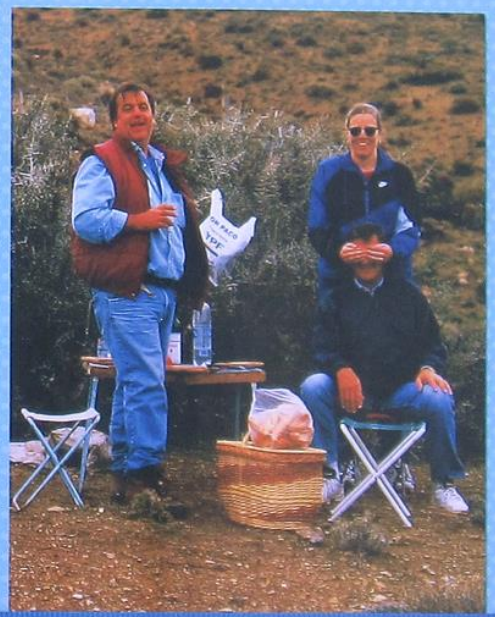
The Argentine Connection

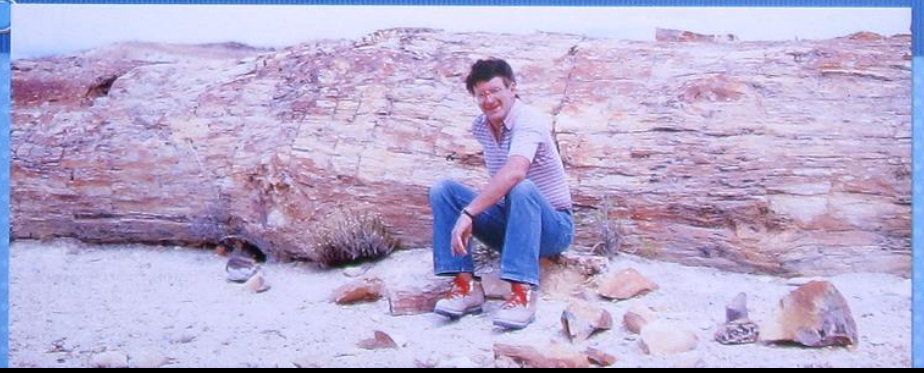
Sergio Archangelsky

Asado

1985

From Kansas to Argentina



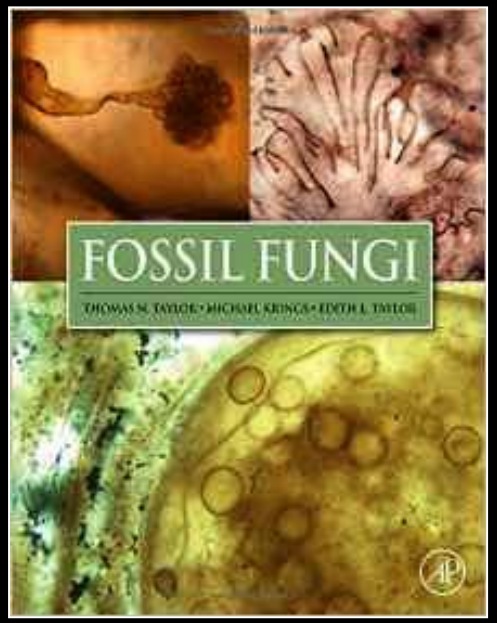


The German Collaboration

Alexander von Humboldt Senior Research Award. 1994-96

Rhynie Chert with W. Remy

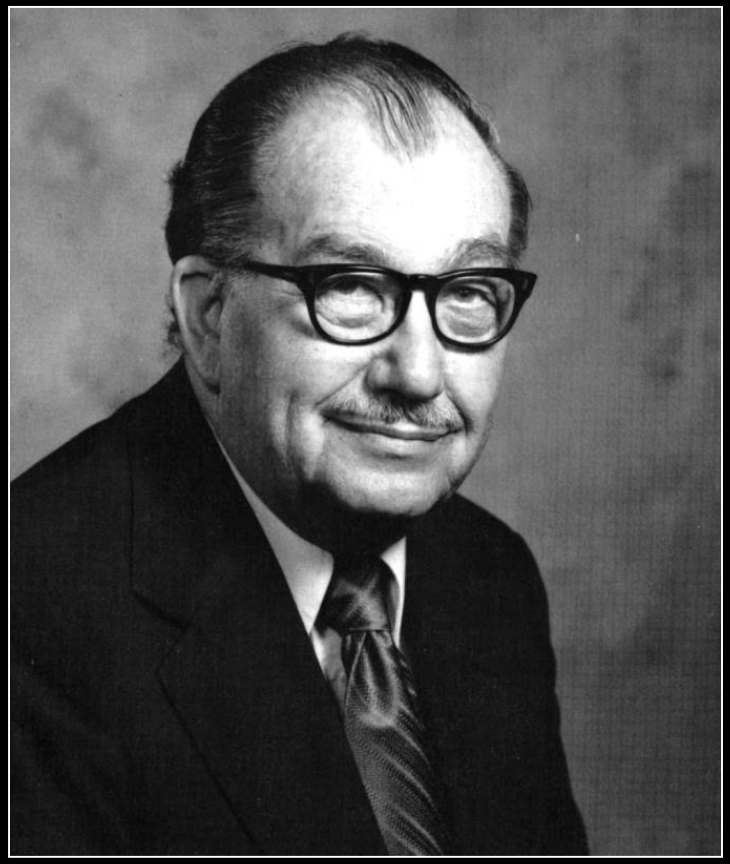
H. Hass, H. Kerp, and M. Krings



The Antarctic Agenda

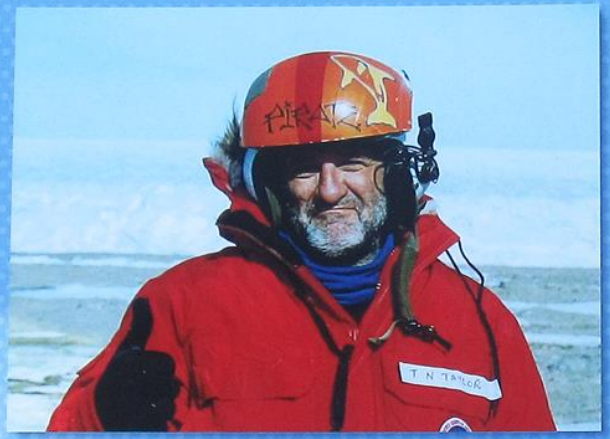
James M. (Jim) Schopf

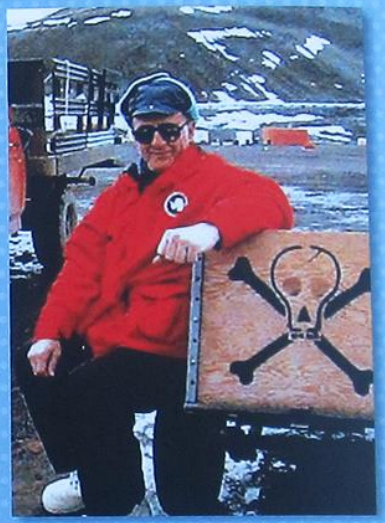
USGS Coal Geology Lab,
The Ohio State University



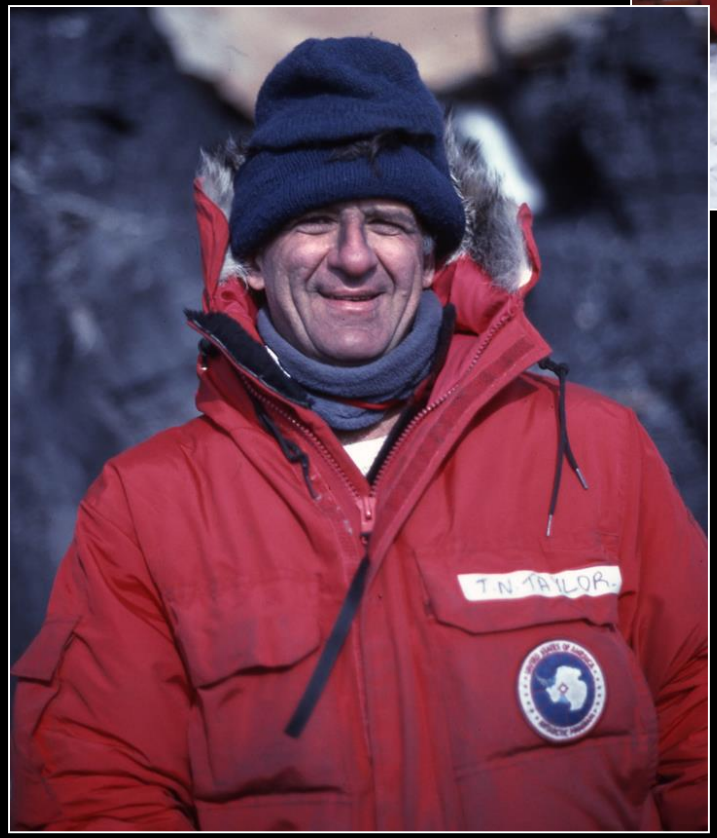
Permian, Triassic & Jurassic chert and compression floras

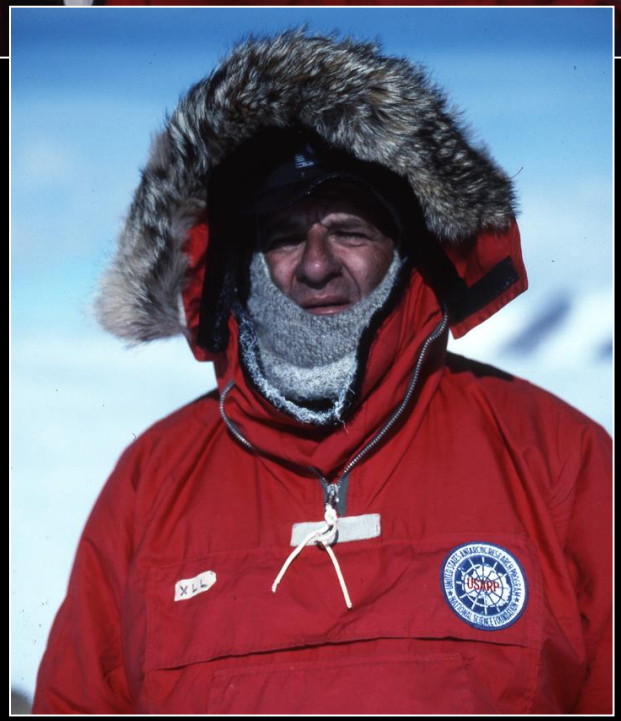
Tom in Antarctica





With John Isbell &
Ruben Cuneo

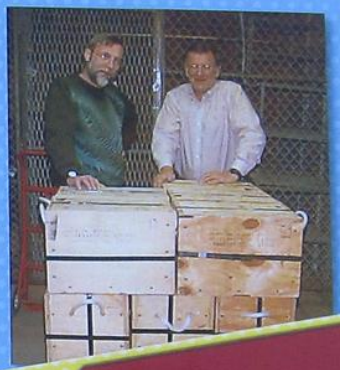




Antarctica – The First Trip, 1986

The first trip to Antarctica
Tom and Jerry Taylor
Edie and Ruth
We made an igloo for survival training - 6 ft. high!

Penguin Rookery

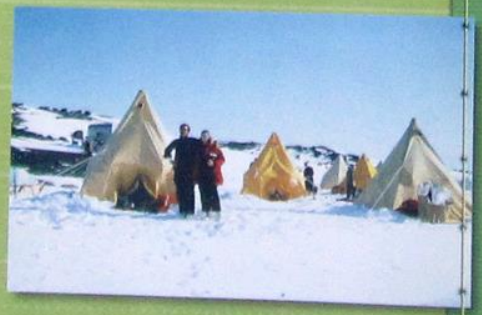


FuN

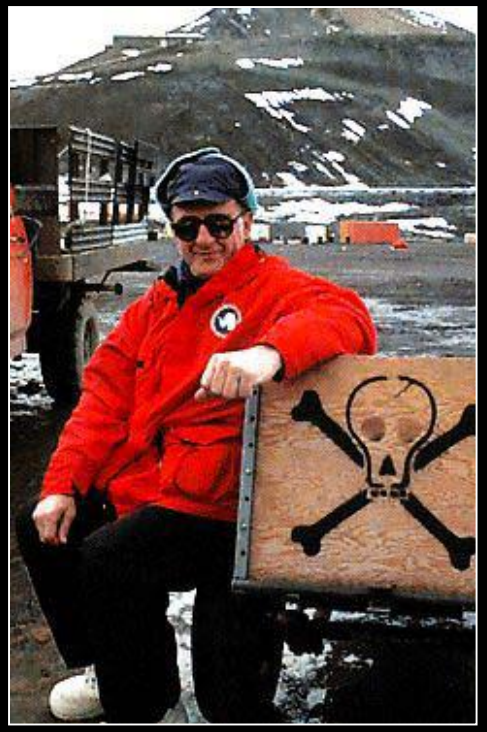
We went to the Adele penguin rookery

Many trips later
with many new colleagues

Antarctica - the Adventure



Beardmore Glacier, 1986



UNITED STATES ANTARCTIC RESEARCH PROGRAM
USARP
NATIONAL SCIENCE FOUNDATION

NEW ZEALAND ANTARCTIC RESEARCH PROGRAMME

This is to certify that

Thomas N. Taylor

Has completed the

Snowcraft/Survival School

Held in conjunction with the

New Zealand Antarctic Research Programme

and the

United States Antarctic Research Program

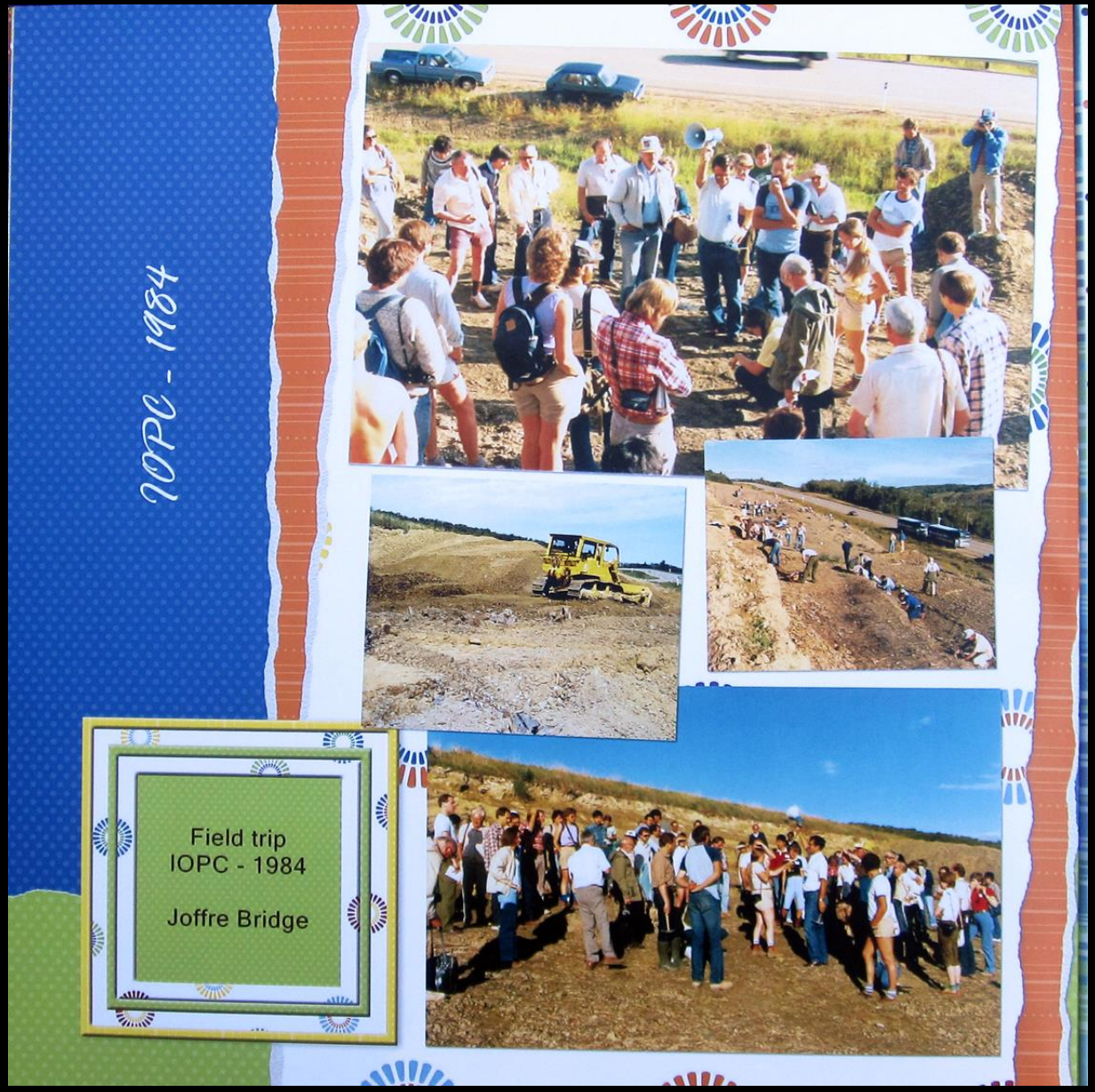
on

Ross Island, Antarctica

11/6/85
date

instructor

Buildinng the Discipline

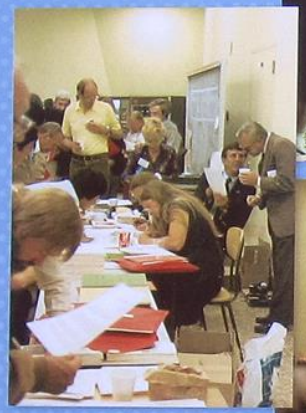


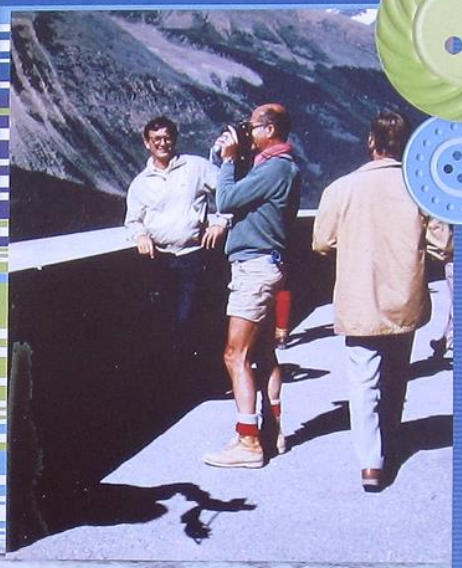
TOPC
1984

Champagne & Watermelon

Goldeye Lake & Genesee

There's never been a field trip like it again!

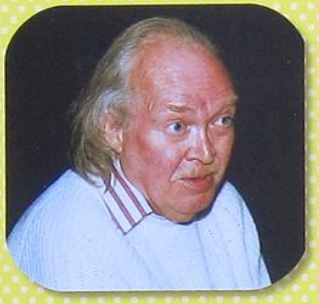




IOPC

1984

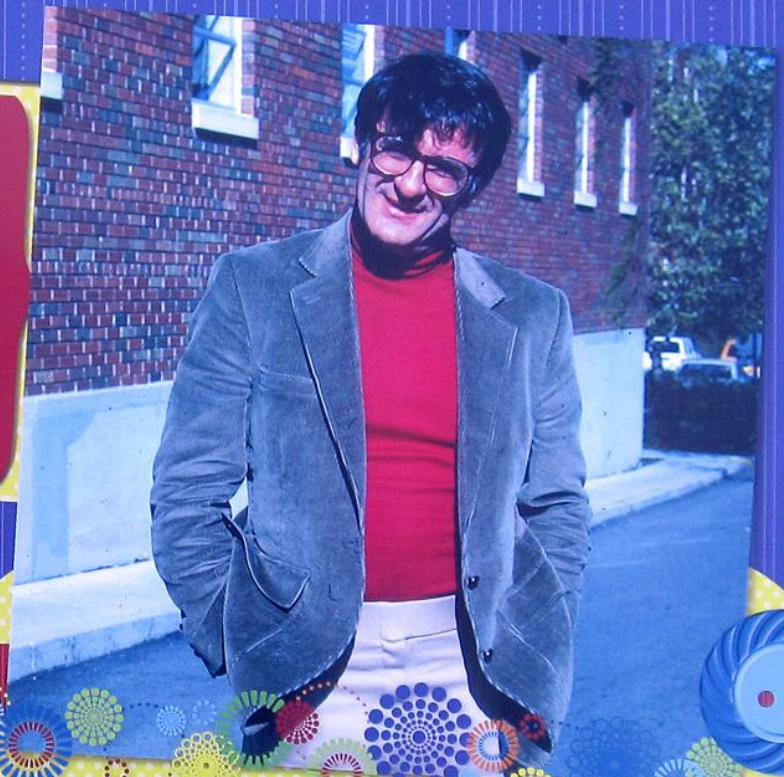
Japanese students from Tatsuki Kimura's lab play chicken, holding their hands in the icey glacial water on the Athabasca Glacier Jasper National Park, Alberta



Don, Ted
and
the kids

Family

B and Y Bldg.

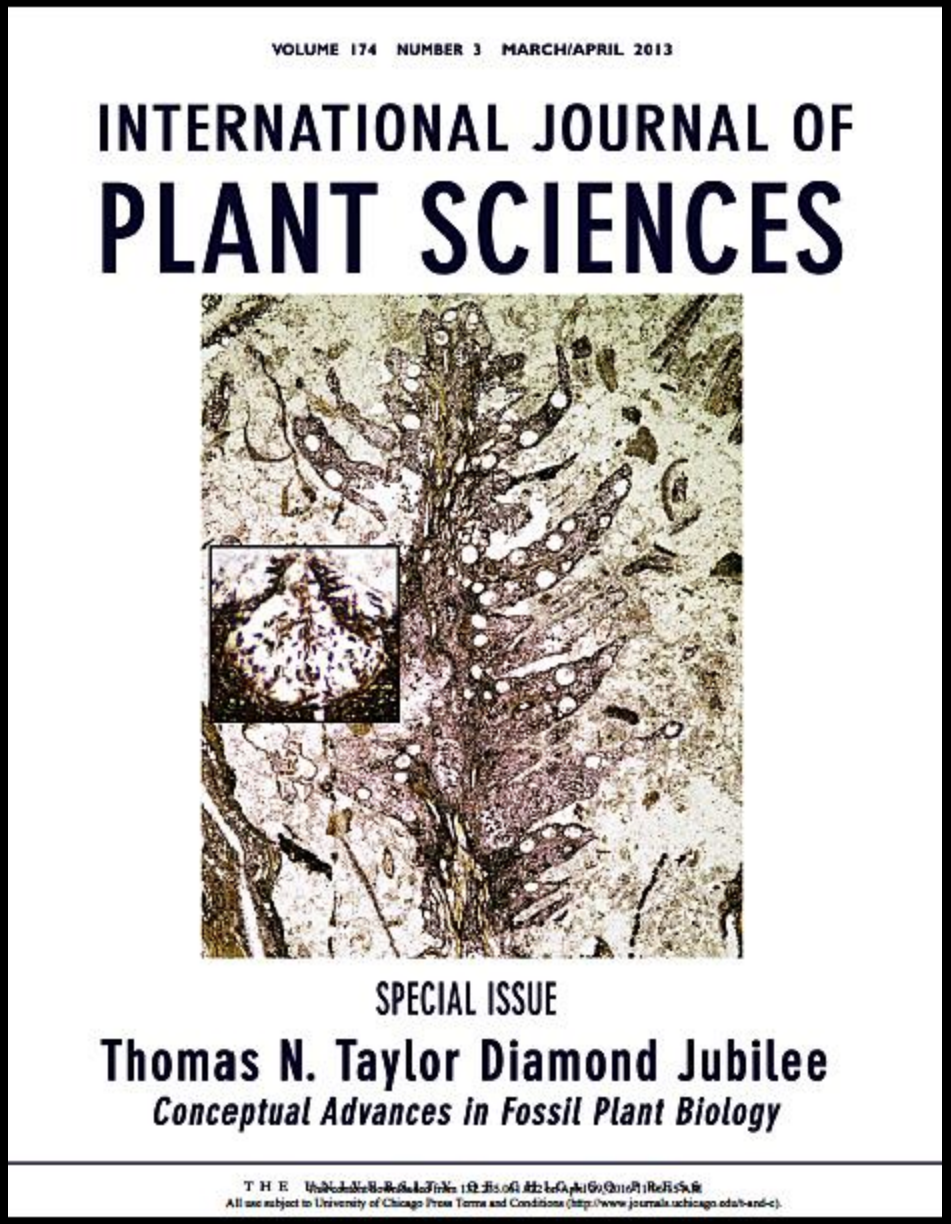


Acknowlegements for Photos

Ruth Stockey, Mike Millay, Georgina del Fueyo, Jean Galtier, Nacho Escapa, Ruben Cuneo, Gar Rothwell, Barry Thomas, Kathleen Pigg, Lisa Boucher, Jeff Osborn, Edie Taylor, Patty Ryberg, Sergio Archangelsky, William Chaloner and other anonymous sources!

Happy Birthday, Tom

A tribute to Tom Taylor



Tom as the poet

TWAS ON A NIGHT BEFORE FRIDAY IN THE LABORATORY

There once was an employee named Good-
Who worked with fossils as best as he could
His talents and drive were better than most-
He even was known to occasionally boast.

He peeled and published at a frantic rate-
With quality and scholarship that rivaled the best in the state.

Then one day a dear and close personal friend-
Who trained and counseled this horse's rear end-
Noticed an envelope, number 50 by sure-
Marked "zero" – meaning obviously obscure.
The master hastened to give the peel a peek-
And then in bewilderment that ended in shriek-
GAMETOPHYTE TISSUE AS RARE AS HEN'S TEETH !!!!!

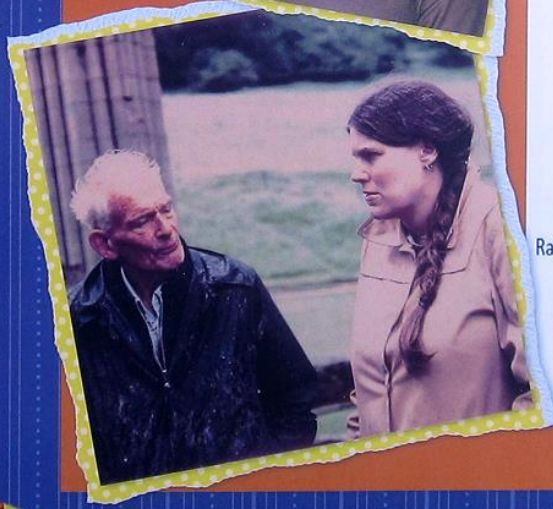
A mistake in judgement in training this man?-
Or merely an oversight in a masterful plan?

A moral, I have none to relate to this chap-
But were he now near me the thunder would clap.
And probably an echo would be whispered for sure-
You're a dear friend and colleague, and occasional
B*U*T*C*H*E*R*

Author unknown

Poem for Charlie Good

Poem for Edie



January 4, 1980

OH MY[1]

There once was a lady named Smoot,
The study of phloem was her strong suite.

Identifying peels of course had its place,
Knowing all of the plants was just part of the race.

Of Hazard and Harlan some fine coal balls came,
The level of preservation had won wide acclaim.

Even phloem was present on seven seven oh oh,
Associated with a likely *Psaronius* petioooooole.

J top was believed to have fungi en mass,
A scrap, a bit, even a spore to pass.

But none were encountered on more diligent look,
Rather, *Bowmanites* spores is what Ms. Smoot must have mistook.

Anonymous

[1]Adapted from the best seller...Dashed Hopes...

It is a little known fact among his professional colleagues, however, his students all know that Tom writes poetry. Some of us tried to NEVER get a poem. In later years, you could also get a poem for doing something good, not just for screw-ups.

An Ode to E.L. Taylor
(inspired by L. Boucher)

There once was a student named Lisa
Who had coal balls of several small pieces;

She identified roots, stems and twigs
And thought about floras the site of these digs;

There was a fine specimen that escaped her sharp eye
The stem of an interesting liana, or maybe moon pie;

Sent to a Professor, to ask her advice
"You missed this plant she said in a quivering voice;"

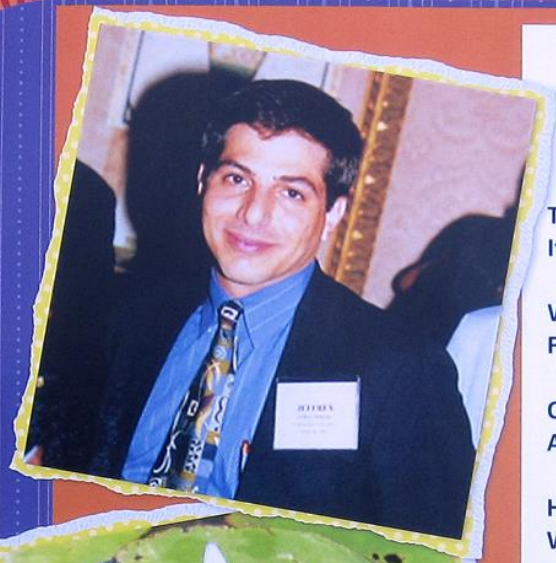
"How could you fail to know this old friend"
"It's a species of mine that will last to the end;"

"Go straight to the Triassic-you'll never mine coal"
"This astonishing event has damaged my soul".

(Anonymous)

Poem for Lisa

Poem for Jeff



How Sweet It Is

(It's About Time)

This is a day important for some
It's a place in the sun for years to come;

Word has arrived by post that is fleet
For one young lad the day is a treat;

Ozzie's his name
And pollen's the game;

He cuts the grains looking for things
What they are he'll continually sing;

Lamellae, lacunae and lots of orbicules
This young lad thinks all of them fools;

For it is on this day that Jeff has cashed in
It's an NSF grant, finally work can begin;

Taylor is happy, the student is proud
The work can now start here with the crowd;

Hooray, hooray, we'll all jump with glee
Now let's cut more pollen for the world to see.

This is a rare case of a poem that was signed by the author

January 24, 1991

Poem for Marie

CONGRATULATIONS

A pollen grain, or two, or three
Is what I aim to fix,
Just when the little rascals grow
Is one of life's mysterious tricks.

The exine, the sporoderm or even the wall
Are areas dear to me,
For I'm the one who will clearly state
When columellae actually fall.

The gymnosperms were a noble class
They have been around for a while,
Their days are numbered, the end is in sight
And geologically soon, they will all pass.

No more cones, or seeds or leaves
With which to ponder life,
The best we can do is catch a few grains
On microscope slides after passing through sieeeeeves.

Oh pollen wall of resistant stuff
Your journey through life is no sin,
But exactly how you developed and grew
Has made many a researcher's head just spin.

From your tiny wall you tell us much
As to how pores developed and such,
You even tell us how plants sprouted,
During climatic breaks when dinosaurs pouted.

But now there is hope
To investigate why,
Smooth grains go faster
Through the sky.

The long-winded poem to Marie continues

There is a group known far and wide
With mighty members and corporate pride,
The AASP is what they're called
Everything's great, but their journal is stalled.

They peek at pollen morning and night
Through Zeiss and Leitz they often sight,
Looking for grains to set a stage
Finding none they turn to rage.

But from this group some wise minds state
Let's set a competition with applicants in by a date,
To see just who is doing what
With research promise above the cut.

And so with forms and letters sent
We sit and count the days,
On the outside in cones pollen sacs ripen
Basked in February's occasional rays.

Primexine is forming, colpi are stretching
Tetrads are making their mark,
It happens at noon day, it happens at five
It even takes place in the dark.

Activities quicken, UA is at hand
In plastic the poor pollen goes,
So tough is the treatment the apertures burst
Nexine lamellae just waiting to band.

Through all of the days the Swiss lady sits
Teaching her classes, sharpening her wits,
Watching for mail from some distant state
Telling her how her proposal is great.

And then comes a letter from not a bad guy
It comes on a day when the sun filled the sky,
It said to this lady your research is swell
And signed by a chap whose name is Leffing—well.

On and on she read with glee
It's too long for the type that sends regrets to me,
And then a line, a magical phrase
That raised her spirits and lifted her gaze.

You are the one selected this year
By a panel of judges whose insight is clear,
We are happy to announce that you've won the prize
For research with grains of very small size.

A check is on the way to you
The bank is good, the dollars are too.

But even more important than this
Is the pleasure we have to say,
Your research is good, you're on the way,
Nationally competitive is a lot to say.

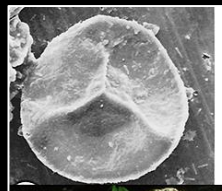
Spend a few hours basking in glee
But keep in mind that stately tree,
Whose pollen is forming and playing a trick
It's time to record it on an EM pic.

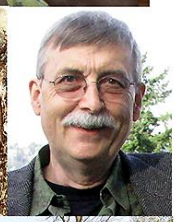
This little poem has run its course
The message is clear, there is no remorse,
We're happy as much we can be
Now off to collect grains from that conifer tree.

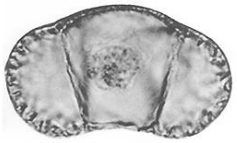
This is an example of the lengths to which some people will go to celebrate a successful grant proposal. The last line, however, is the bottom line!

Paleobotanical Banquet 2015

In the 1970s Tom Taylor began composing poems for his students, particularly when they needed a bit of a pep-up. Ruth Stockey never received one of those coveted poems, until the 2015 Ruth Roast in Edmonton, where TNT presented this poem for her.







A Poem for Tom Taylor

(in the form of linked limericks, with considerable poetic license.
Each section could be read as a separate poem)

by Ruth A. Stockey

There once was a botanist named Taylor,
Who said that I talked like a sailor.
Mentor and friend,
No horse's rear end,
A prince of a fellow, Tom Taylor

His microscopy type, it was scanning
Flames of palynology then he was fanning
Pollen and spores
No study for bores
Carboniferous coal balls in planning

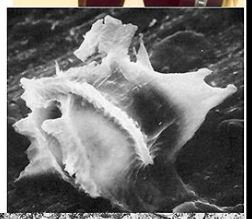
His partner in crime was named Donald
A guy with no need to be coddled
They blew up the truck
With a little bad luck
"Falling rocks" was the story they modeled

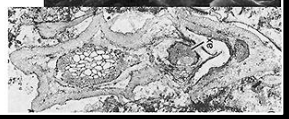
A fern they named glabrus *Tedelea*
With fern characteristics so curia
Named for Delevoryas
The name was just glorious
But *Norwoodia*, o mio dios.

Tom perfected the method of peeling
Ground *Pachytesta,* with verve and with feeling
Carboniferous seeds
Fulfilled all his needs
But in time, needed work more appealing

Left Chicago for Athens, Ohio
An additional notch on his bio
Start of interest in fungi
We all knew this fun guy
Was a scientist there for tomorrow

Calamites, Radstockia and seed ferns,
Bowmanites, saccate pollen, and we learned
He said that ontogeny
Recapitulates phylogeny
Toward reproductive biology his head turned

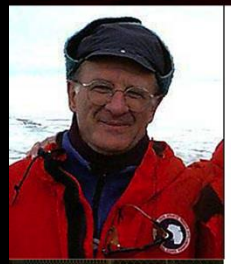


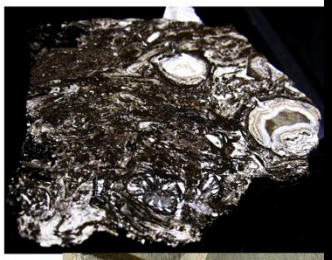


He moved on to Columbus, Ohio
To be Chairman, Department Plant Bio.
The dandelion bloomed
An insurrection loomed
But he triumphed in time, My oh, my oh!

His students the line should be towing
Darkroom whining on time spent is growing,
Help with "foot fatigue"
Called these workers, "bush league"
Rubber matting the solution, now showing

His wisdom for his students legendary
"In this lab no need to stall or ever tarry.
Get your pubs drafted
Or else you'll get shafted.
Now good jobs are what's customary".

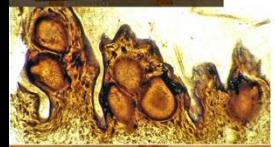




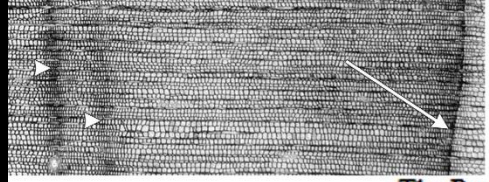
In my lab you'll get a Ph.D. in moving
It's coal balls from the strata we're removing
"Publish or perish"
The mantra we cherish.
It's hypotheses we should be proving.

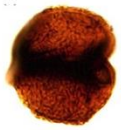
All his students at the uni. so productive,
Studied gymnosperms, horsetails and ferns reproductive.
"It's time for cathartic
We'll collect the Antarctic,
Glossopteris sure sounds seductive".
Beardmore Glacier, laboratory, students added to the story
Fossil plant exploratory, working on their oratory
Cambium and fossil phloem
Some of them deserved a poem
All their work is laudatory, added greatly to his glory.

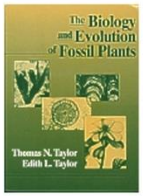
Many reconstructions of whole plants
Even gave us time to work on grants
Ferns and fungi from Triassic
Developmental studies classic
Paleobotanic rants.

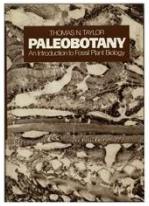


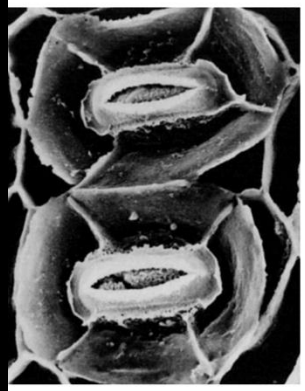
Fossil plants from the chert known as Rhynie
With fungi included so tiny
Studied with Hagen Hass
And others with class
With life cycles that formerly stymie





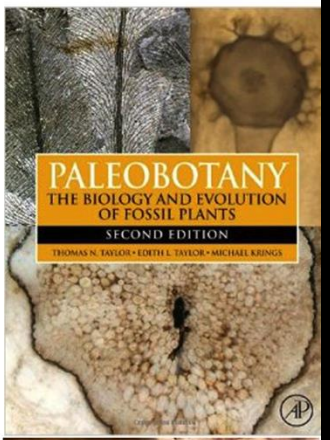






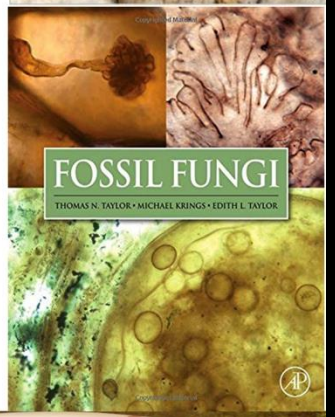
The Permian studies of tree rings
Conifers, cuticles and like things
Lichens and asci
The studies were classy
Bacteria with Michael Krings

Pennsylvanian leaf endophyte fungi
Were described by this famous once-buckeye
Cones of the cycads
Spores found in dyads
Were papers with his old alumni



His paleo books have been well received
Even better than we all believed
Biology and Evolution
Was his greatest contribution
Each particularly well achieved.

What will be his future goals?
Will he study petioles?
Will he macerate some coals?
Will he have new-founded roles?
Must stay away from all assholes.



We who have benefitted from his instruction
Succumbed to paleobotanical seduction
Learned the powers of botanical deduction
Practice whole plant reconstruction
Try to emulate his production.

Awards and Honors

Paleobotanical Section of the Botanical Society of America Award
for Contributions to Paleobotany (2012)
National Academy of Sciences (Elected 1994)
National Science Board (2006-2012)
Centennial Award - Botanical Society of America (2006)
Higuchi/Endowment Research Achievement Award
in the Basic Sciences in the State of Kansas (1998)
Service award from the VII International Organization of Palaeobotany Conference (2004)
Millennium Medal - Cell Biology and Evolutionary Micropaleontological Institute,
University of Szeged, Hungary (2000)
Alexander von Humboldt Senior Research Award (1994-1996)
Birbal Sahni Centenary Medal in Paleobotany, Lucknow, India (1992)
Honorary Associate - The Cleveland Museum of Natural History (1992-2012)
Distinguished Teaching Award - College of Arts and Sciences,
The Ohio State University (1989)
Distinguished Scholar Award - The Ohio State University (1989)
Merit Award - Botanical Society of America (1987)

So long Tom, we'll miss you!