



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.

April 7, 1940

Dear President Robinson:

The committee which you appointed regarding the proposed memorial of Dr. J. F. Sleeper wishes to make the following report:

The materials proposed to be given would probably make a valuable addition to the facilities for cultural and scholarly work in any institution ultimately receiving them. We doubt, however, the wisdom of making an effort to bring them to Butler University because:

1. We now have at Butler a collection of shells from many parts of the world. Since our collection compares favorably in numbers, at least, with the collection under consideration, it is likley that to ~~bring~~ this proposed collection here would result in considerable duplication.
2. We now have at Butler a larger collection of fossils for which there is at present no adequate means of use or display.
3. Under our present crowded conditions it would be difficult to spare the floor space necessary to adequately care for and display the material proposed to be donated.

Sincerely yours,

April 7, 1940

Dear President Robinson:

The committee which you appointed regarding the proposed memorial of Dr. J. P. Sloop wishes to make the following report:

The materials proposed to be given would probably make a valuable addition to the facilities for cultural and scholarly work in any institution ultimately receiving them. We doubt, however, the wisdom of making an effort to bring them to Butler University because:

1. We now have at Butler a collection of shells from many parts of the world. Since our collection compares favorably in numbers, at least, with the collection under consideration, it is likely that to bring this proposed collection here would result in considerable duplication.
2. We now have at Butler a larger collection of fossils for which there is at present no adequate means of use or display.
3. Under our present crowded conditions it would be difficult to spare the floor space necessary to adequately care for and display the material proposed to be donated.

Sincerely yours,

From Ralph Krinkel

Mr. Ray C. Friesner  
Butler University  
Indianapolis, Ind.

Wadesville Ind

Apr 11, 1940

Dear Mr. Friesner:

Before leaving Bedford this morning  
I sent you via parcel post some Chinese Chestnut  
and oak planting stocks which were sent to  
the Soil Conservation Service by Mr. Jesse Miller  
of the Bureau of Plant Industry for experimental  
purposes. You may recall our conversation  
about these plants.

In order that the B.P.I. may know the  
location of the stocks for ~~further~~ observations  
in the future we would like to have the  
following information: (1) A map or sketch showing  
the name of the farm or property (2) its exact  
location in sec. twp. range or other position  
method of location (3) locations of plantings of species  
on farm, (4) spacing of trees, (5) soil type, (6) degree  
of slope (7) exposure (8) forest type associated  
vegetation. I think you might want

a specimen for your (Butler's) arboretum  
 or botanical garden. Feel free to take  
 one each for that purpose if you  
 want to.

Below is a list of what I sent you  
 together with the Bureau of Plant Industry  
 number on them.

number of plants	BPI Accession number	name of Plant
4 15 (11)	FP 870	<i>Castanea mollissima</i> hybrid, Bell
3 20 (12)	FP 903	<i>Castanea mollissima</i> Tientsin
2 10 (6)	FP 799	<i>Castanea arlington</i> , mixed hybrids
1 10 (5)	FP 873	<i>Castanea crenata</i> , forest type
5 5 (3)	120652	<i>Quercus acutissima</i>
6 5 (3)	120654	<i>Quercus fabri</i>
7 5 (3)	120658	<i>Quercus variabilis</i>

April 11, 1940

Mr. Preston Smith  
Osborne Botanical Laboratories  
Yale University  
New Haven, Conn.

Dear Mr. Smith:

Your request for data on pollen analyses of Lake Cicott, Fox  
Prairie, Cranberry bogs is at hand. We will be glad to forward  
this to you within a few days, i.e. as soon as we can find the  
time to type it out from the original manuscripts.

We have the data on four more bogs in manuscript just about  
to be taken to the printer. Copies will, of course, come to  
you as soon as off the press.

Sincerely yours, Ray C. Friesner

Ray C. Friesner

RCF:meb

April 12, 1940

Dr. Arthur Sandler, M.D.  
2700 Devon Avenue  
Chicago, Illinois

Dear Dr. Sandler:

Your communication containing list of species desirable for demonstration purposes in connection with hay fever was awaiting me upon return from vacation. We do not happen to have many of these on hand, but will send what we have just as soon as we can find the time to hunt them out and get them mounted. Others will be collected this season and we can send them to you as we get them if that will be of value to you.

Sincerely yours,

Ray C. Friesner

RCF:mob

1424 Bommell Ave.  
Reading, Ohio  
April 17, 1940

Dr. Roy Friesner  
Butler University  
Indianapolis, Ind.

Dear Sir,

Dr. A. T. Evans from Miami University  
asked that I write and ask you if you  
have any publications or references on  
"Invasion of Old Fields." I am doing my  
thesis on that subject under Dr. Evans  
and would appreciate any help you  
may offer. Thank you.

Yours very truly,  
Mary Lang

April 15, 1940

Mr. Ralph Kriebel  
Soil Conservation Service  
Bedford, Indiana

Dear Mr. Kriebel:

The trees of *Castanea* and *Quercus* were received in good condition Friday, April 12, and planted Saturday, April 13. We placed 2 each of the oaks and 5 each of the chestnuts in the Butler University Botanical Garden. We placed more of the chestnuts there in order to give a good chestnut blight test for there are several blighted chestnut trees within 1500 feet of where the trees were planted.

The material taken to Brown County was planted at the head of a wooded ravine the site having an east and northeast exposure and being fairly well protected from the winter winds by ridge top on the west and south and by native forest on the east and north. The soil is yellowish clay, the product of weathered Knobstone. (Dooden, I think)

The area is in Hamblin township in the east half of the southwest quarter of section 3, township 9 north, range 3. It is on the Clay Lick road which is the first road running north from State Rd. 46 west of the east entrance to Brown County State Park. The area on the same ridge as Bear Wallow, about 2 miles east of Bear Wallow and 3 miles north of Road 46. I am enclosing a diagram of the tract and planting site.

I am greatly indebted to you for the privilege of trying these species and shall be glad to report their condition at any time.

Sincerely yours,

Ray C. Friesner

RCF:mab

April 15, 1940

Alberts Teachers' Agency  
25 E. Jackson Blvd.  
Chicago, Illinois

Dear Mr. Albert:

In reply to your inquiry of March 22, I should like to recommend three of our graduates who have Masters' degrees. Either of the three would be quite capable of doing a good job of teaching college work, especially Junior College work. They are:

John W. Howell  
915 21st Street  
Sacramento, California

Byron W. Moss  
Route 5  
Logansport, Indiana

Dayton Swichard  
Botany Department  
Butler University  
Indianapolis, Indiana

Sincerely yours,

Ray C. Friesner

RCF:meh

Oklahoma  
Agricultural and Mechanical College

DEPARTMENT OF  
BOTANY AND PLANT PATHOLOGY

STILLWATER

April 16, 1940

Dr. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Dr. Friesner:

Under separate cover I am sending you a specimen of  
what is commonly called the Rayless Goldenrod.

I have no systematic manual that describes this  
particular species. I shall be pleased to have you identify  
it as to scientific name, and will you be kind enough to cite  
me the reference where the description may be found.

You may keep the specimen for your collection.

With kindest regards, I am

Very truly yours,

*Robert Stratton*

Robert Stratton  
Associate Professor  
Botany and Plant Pathology

RS:mb

West Virginia University  
MORGANTOWN, W. VA.  
COLLEGE OF ARTS AND SCIENCES

DEPARTMENT OF BOTANY AND ZOOLOGY

April 16, 1940

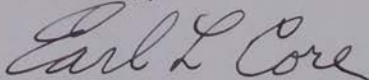
Dr. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Ind.

Dear Dr. Friesner:

Thank you very much for the list of golden-rods of West Virginia and for permission to use it in my checklist. It sounds to me as though you will have an interesting paper and I hope you work it out in the way you wish. If possible at all, we will publish it in its entirety. Material on hand now will run us into autumn, so you can take as long as you like. We shall not get around to it before December or January, in view of the present stock of manuscripts.

I have written to Marshall and  
Concord.

Sincerely,



Earl L. Core  
Curator of the Herbarium  
Editor of Castanea

ELC/eab

THE NEW YORK ACADEMY OF SCIENCES

FORMERLY THE LYCEUM OF NATURAL HISTORY

ROY WALDO MINER, President  
Vice Presidents  
LESLIE E. SPOCK, Geology and Mineralogy  
HORACE E. WOOD, 2nd, Biology  
ANNE ANASTASI, Psychology  
RALPH LINTON, Anthropology  
VICTOR K. LAMER, Physics and Chemistry

EUNICE THOMAS MINER  
Executive Secretary



Central Park West at Seventy-ninth Street  
NEW YORK, N. Y.

DUNCAN A. MACINNES, Recording Secretary  
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JOHN HENDLEY BARNHART, Librarian

17 April, 1940

Doctor Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Doctor Friesner:-

I have at hand your letter of March 27th, in which you state it will not be possible for you to become a Member of the Academy, and I am wholly sympathetic with your reason.

I assure you that if in the future you desire to apply for membership, we shall be pleased to receive your application.

I thank you for your interest, and even though you do not become a Member, I hope that you will find our work of value.

I have been absent from my desk, and I therefore regret the delay in answering your cordial letter.

Very sincerely yours,

*Eunice Thomas Miner*  
Executive Secretary

ETM:OA

Sheldon T. Gardner

Olive Branch, Mississippi,  
April 17, 1940.

Butler University (proposed) Arboretum,  
Indianapolis, Indiana.


Dear Sirs:

Do you have any scholarships, fellowships, assistantships, or openings of any kind or will you have in the near future for a young man very much interested in plant and arboretum work? I offer the following qualifications:

1. I am 31 years old, have a moderately light complexion, and am six feet tall.
2. B.S., Wisconsin College of Agriculture, 1931, with courses in horticulture with excellent scholarship. Am successful at research and have fifteen credits on a Master's degree.
3. Experienced nursery worker as salesman and laborer.
4. Experienced high school teacher of science and am now employed.
5. Am on the eligibility list for junior forest ranger in Wisconsin having passed a civil service examination.
6. Am now working on a book on the trees and shrubs of the North.
7. Do not object to manual labor if it offers advancement and an opportunity to work with plants.

What do you have to offer?

Sincerely yours,

  
Sheldon T. Gardner

April 19, 1940

Miss Mary Lang  
1424 Bormell Avenue  
Reading, Ohio

Dear Miss Lang:

Your inquiry regarding published papers on invasion of old fields is at hand. We have not published any papers directly on this topic. Dr. Potzger and I have often talked of laying out some permanent quadrats in some old field sites but we have never actually gotten around to it.

We have published one paper which will have some bearing on the question, viz. Potzger, J.E. and Ray C. Friesner. Some comparisons between virgin forest and adjacent areas of secondary succession, *Butler Univ. Bot. Stud.* 3:85-98. 1934. You will find this in the library at Miami University or in case the library lacks this volume, we can send it to the library upon request. I am sorry we do not have reprints that could be sent direct to you for your own possession.

I recall the following reference which may be of value to you: Cafton, W.H. and B.W. Walls. The old field prairie: an ecological study. *Jour. Elisha Mitchell Sci. Soc.* 49:225-246. 1934

In case this should not be available to you in the Miami University library, you might ask them to get it for you on an inter-library loan. I am sure our library would be glad to supply it.

I am sorry I cannot be of more direct help to you.

Sincerely yours,

Ray C. Friesner

RCF:mab

April 19, 1940

Mr. Sheldon T. Gardner  
Olive Branch, Miss.

Dear Mr. Gardner:

Your inquiry regarding scholarships and fellowships is at hand.  
I am sorry that we do not have any such aids that will do more  
than pay tuition.

Sincerely yours,

Ray C. Price

RCF:meh

April 20, 1940

Dr. Robert Stratton  
Oklahoma A. & M. College  
Stillwater, Oklahoma

Dear Dr. Stratton:

The specimen referred to in your letter of the 16th came today. The data coming with it do not give locality where collected and, since it is a plant unfamiliar to me, I am unable to choose the proper manual to use in attempting determination. I know that it is not the plant referred to by Small in his Manual of Southeastern U. S. as the Rayless goldenrod. Your specimen looks more like a species of *Chrysanthemum* to me but I do not know this latter genus well so I may be mistaken. At any rate, I will attempt determination but will wait for your locality data because it will save me time.

Sincerely yours,

Ray C. Friesner

RCF:mob

Draw Ek

Kokomo, Ind. - April 23, 1941,  
1812 North Curdum St.

Dear Dr. Friesner -

Your fine and prompt message  
rec'd Tues. A.M. Glad to know you  
are coming up Thurs. 3 P.M. May 1-41.  
I'll be ready. Should anything, now  
unforeseen intervene, will let you know.  
Evans didn't come up last Sat. - Apr 19. - I  
hope he can come up this Sat. " 26. - I  
have things all mapped out for a busy day.  
Made a list of about 30 species that  
we can find, some I'm sure that are  
new to him. Was out yesterday P.M. - for  
over an hr. - not long - but time enough to  
locate a lot - old man Long autoed me  
7 mi. SW - Twin Springs

A few other items I forgot. Have  
a big collection of strings for tying packages.  
Also plenty of boxes to use for enclosing

specimens - heavy<sup>2</sup>, stiff boxes from a dress  
+ coat store. my Jewish friend - also a lot  
of broom-handles. 9 or 10. - You have never  
gotten my 1940 specimens - 15 big  
packages - They will be ready May 1. - if you  
want them. I went thru them and  
selected enough for 4 boxes for N. York  
Bot. Garden - Letter from Dr. Krukoff  
this morning said the Garden would be  
glad to get them + pay the postage. In  
no way will Butlers <sup>living</sup> suffer. - They are  
just a specimen from most of the  
species collected in 1940. - You know I  
always get plenty, - a surplus if possible.  
Presume you and Dean have sent the  
N. Y. Bot. Garden a lot. At least they'll get  
some new Co. - + maybe new state records.

Hope Evans can come up Sat. - and if  
no conflicts with his Butlers program - wish  
you'd encourage the trip. - if weather is good.  
Have started pressing - a nice little stack.  
See you May 1 - 3 P.M. - Best Wishes to All. -  
Plan Evans + I to go to Shenn Woods. - Sincerely Chuck.

P.S. Forgot to say that  
of course I'll be glad to do all  
and everything I can. - as far  
as my physique will permit -  
in the soil and moisture  
work you have in mind.

It will be new to me.  
+ I'll have to learn.

Am sure Evans + I can  
locate all the stations. - Sat.  
As always -

Best Wishes -  
Yours.  
Chas. M. EK

Box 448, College Station,  
Pullman, Washington,  
April 25, 1940.

Dr. Ray C. Friesner,  
Department of Botany,  
Butler University,  
Indianapolis, Indiana.

Dear Dr. Friesner:

Your letter of January 5 has been lying in the basket so long that I really begin to have a guilty conscience. I presume that it really doesn't make too much difference since there is nothing we can do about your request until summer.

There are several species of Solidago listed for this region, but, since I have never made an effort to identify any of them, I do not know just how many occur in areas adjacent to Pullman. An effort will be made to secure an amount of such species as are available. Although I do a great deal of traveling during the summer, I have ceased the habit of carrying a vasculum and a plant press, and consequently on the longer runs it is not likely that material will be collected. However, if some good specimens are noted, it will no doubt be possible to make some arrangement for handling them.

There are a lot of things that we would have to talk about if we ever get a chance to be together. I have often wondered if it would be possible for you to spend part of a summer out in this country instead of staying east of the Mississippi. Personally, I think that you would not only enjoy it but learn a great deal about conditions here which are certainly different than those in the central states. I have just about lost track of most of the old gang who were at Butler at the time I was there. There is a possibility that we will get back home sometime this winter and if so will most certainly look you up. Please give my regards to Mrs. Friesner and those of the Butler staff who may remember me.

Sincerely,

Lowell A. Mullen, Manager,  
Seed and Plant Collection Unit.

Oklahoma  
Agricultural and Mechanical College

DEPARTMENT OF  
BOTANY AND PLANT PATHOLOGY  
STILLWATER

April 24, 1940

Dr. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Dr. Friesner:

I have your letter in regard to data concerning  
the Rayless Goldenrod which I sent you.

I am positive I enclosed a slip giving all the in-  
formation about the plant that I know. Perhaps the slip  
was lost in opening.

Several of these specimens were sent me by C. A. Lathrop  
of Dexter, New Mexico. The package was postmarked August 19,  
1939. As I recall, no particular habitat or the exact location  
where the plant was collected was given. I feel quite certain  
that the plant must have been collected in New Mexico.

Yours very truly,

*Robert Stratton*

Robert Stratton  
Associate Professor  
Botany and Plant Pathology

RS:mb

P.S. In his letter, he lists it as *Aplopappus heterophyllus* Blake.  
H. E. Hansen, p. 22, Bull. 263, S. Dak. Exp. Sta. lists Rayless Goldenrod as  
1. *Bigelovia douglasii*, Gray  
2. " *graveolens*, Gray  
" "  *Greene*  
or  
*Chrysanthemum graveolens* Green

April 24, 1940

Mr. M. B. Esterline, General Manager  
Eagle Creek Nursery Co., Inc.  
New Augusta, Indiana

Dear Mr. Esterline:

Mr. Scott McCoy has reported to the University Administration the receipt of a number of very valuable plants for planting in the Botanical Gardens. On behalf of the University, I wish to express to you our sincere appreciation for these specimens. They are, in every case, an addition of material not previously in the garden.

It is our sincere desire to cultivate amongst the people visiting the garden a deep appreciation for plants as such and we feel that this appreciation will have an effect upon the development of their personalities and their outlook upon life.

Again thanking you for your kindness, I remain

Yours sincerely,

Ray C. Friesner

RCF:mab

April 25, 1940

Dr. Earl L. Core, Curator  
The University Herbarium  
West Virginia University  
Morgantown, West Virginia

Dear Dr. Core:

I am returning the herbarium specimens of *Solidago* and *Brachyachaeta* and hope they will reach you in good condition. I sincerely appreciate the privilege of studying these specimens for there are a number in your collection with which I have not previously been familiar.

As opportunity affords I shall continue to work on the data obtained from your material and will submit the finished paper as soon as I can get it completed. In-so-far as I am concerned, there is no hurry about publication anyway.

Thanking you again for your kindness in loaning the specimens, I remain

Sincerely yours,

Ray C. Friesner

RCF:mob

UNITED STATES  
DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

Box 448, College Station,  
Pullman, Washington,  
April 25, 1940.

Dr. Ray C. Friesner,  
Department of Botany,  
Butler University,  
Indianapolis, Indiana.

Dear Dr. Friesner:

Your letter of January 5 has been lying in the basket so long that I really begin to have a guilty conscience. I presume that it really doesn't make too much difference since there is nothing we can do about your request until summer.

There are several species of Solidago listed for this region, but, since I have never made an effort to identify any of them, I do not know just how many occur in areas adjacent to Pullman. An effort will be made to secure an amount of such species as are available. Although I do a great deal of traveling during the summer, I have ceased the habit of carrying a vasculum and a plant press, and consequently on the longer runs it is not likely that material will be collected. However, if some good specimens are noted, it will no doubt be possible to make some arrangement for handling them.

There are a lot of things that we would have to talk about if we ever get a chance to be together. I have often wondered if it would be possible for you to spend part of a summer out in this country instead of staying east of the Mississippi. Personally, I think that you would not only enjoy it but learn a great deal about conditions here which are certainly different than those in the central states. I have just about lost track of most of the old gang who were at Butler at the time I was there. There is a possibility that we will get back home sometime this winter and if so will most certainly look you up. Please give my regards to Mrs. Friesner and those of the Butler staff who may remember me.

Sincerely,

*Lowell A. Mullen*

Lowell A. Mullen, Manager,  
Seed and Plant Collection Unit.

(Note-book Continued)

All written notes must be in ink.

Notes must be removed from notebook and placed in manila envelopes when handed in for correction. Each section of notes must be placed in a separate envelope and each envelope must contain on the outside, plainly written:

- (1) Student's Name.
- (2) Laboratory section number.
- (3) Name of the material covered in enclosed notes.

Notes incorrect in this regard will not be accepted.

#### MISCELLANEOUS.

Everything used about the laboratory must be kept clean. This applies in particular to slides, covers, lenses, and instruments. <sup>April 25, 1940</sup> It also applies to the laboratory floor: do not allow small bits of paper to get on the floor. There is a waste basket near the preparation table.

Department of Botany

Oklahoma A. & M. College

Stillwater, Oklahoma

Use only water for cleaning lenses. For everything else use a clean cloth. Clean up your water at the end of the period. Carry all paper to the basket.

Lockers must be kept orderly and locked at all times except when student is in laboratory.

Dear Dr. Stratton:

Work slowly and carefully. Be sure you understand each point before going on to the next. I am returning, via prepaid express, the herbarium specimens of Solidago which you have so kindly loaned to me for study. You

have a number of species with which I have not been familiar and

ask questions whenever possible. I am happy to learn such from you. The Instructor or his student cannot do the work for you.

If I can find time to do this same thing for a considerable number of herbaria I ought eventually to know the 250 odd species fairly well.

Two of your specimens are being returned without annotation because I cannot recognize them and they are not complete enough to run through the keys.

Again appreciating your kindness, I remain

Sincerely yours,

Ray C. Friesner

RCF:meh

UNITED STATES  
DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
San Antonio, Texas

Box 199

April 26, 1940

Professor Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Professor Friesner,

Your specimens of Solidago sent to me in December, 1938 have not been forgotten. However, collecting during the past two years has been almost useless due to the extreme drouth throughout this part of the country. This year we have had rains, and plants are making fine growth. I have as a result done considerable collecting of spring flora and will shortly send you a set of plantspecimens.

As I am considerably better informed on Texas plants now than at the time of our previous correspondence, perhaps the delay has been advantageous. Most of my collecting is done in the company of Mr. H.B. Perks who is an outstanding Texas Botanist and Apicultural authority, all specimens sent to you will automatiwally be verified by him.

I trust that this delay has caused you no inconvenience.

Sincerely yours,

*Mildred M. Fladeck*  
Mildred M. Fladeck

PLANTS PRESENTED TO THE BOTANICAL GARDEN OF BUTLER  
UNIVERSITY BY THE PARK DEPARTMENT OF THE CITY OF INDIANAPOLIS  
April 27, 1940.

Species	number	total book value
<i>Alnus glutinosa</i>	1	2.00
<i>Celastris scandens</i>	5	3.75
<i>Eucommia ulmoides</i>	1	4.00
<i>Liquidambar Styraciflua</i>	2	7.00
<i>Magnolia soulangeana</i>	1	5.00
<i>Pseudotsuga mucronata</i>	2	16.00
		<hr/> \$37.75

Dr. Friesner,

A letter of appreciation should be sent  
to Andrew Miller, Supt. Riverside Nursery, for these many  
valuable plants.

Scott

The book value of the Eagle Creek Nursery  
lot was 37.50 making a total due for  
of 990.00 SM

West Virginia University

MORGANTOWN, W. VA.  
COLLEGE OF ARTS AND SCIENCES

DEPARTMENT OF BOTANY AND ZOOLOGY

April 30, 1940

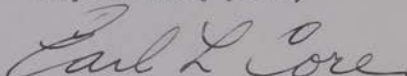
Dr. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Ind.

Dear Dr. Friesner:

The specimens of Solidago have been received in good condition and I certainly want to thank you for the very careful manner in which you studied the material and for the very neat annotations. Needless to say, our material representing the genus is now infinitely more valuable to us and upon the publication of your paper will be even more so.

Thanking you once again, I remain,

Very sincerely yours,



Earl L. Core  
Curator of the Herbarium

ELC/eab

May 1, 1940

Mr. Preston Smith  
Osborne Botanical Laboratory  
Yale University  
New Haven, Conn.

Dear Mr. Smith:

We have at last found time to assemble the data on pollen counts which you asked for recently. We are enclosing copies for each bag.

If there is any other way in which we can be of service to you we shall be glad to be informed.

Sincerely yours,

Ray, C. Friesner

RCF:meh

Dr. Arthur Sandler, M.D.  
2700 Devon Street  
Chicago, Illinois

Dear Dr. Sandler:

I am forwarding to you under separate cover a few herbarium specimens of species requested in your recent letter. This is all we have on hand at present but we will be on the look-out for additional species for you.

Sincerely yours,

Ray C. Friesner

RCF:mcb

Middletown, Indiana  
May 3, 1940

Dr. R. C. Friesner,  
Butler University,  
Indianapolis, Indiana

Dear Dr. Friesner:

I am planning to attend Butler University for both terms this summer. The work that I would like to take, and which I feel will help me most at the present time in my work, only makes eight hours.

My classes will be from 7:30 to 11:30. I would like very much to take the course S302 - Trees. I took the General Botany course the first semester this year under Mrs. Esten and I understand at that time others were taking this one hour course outside, and did not have to attend regular classes, but did the work outside.

Would it be possible for me to take this course in a similar way, along with the rest of my work this summer?

Thank you.

Very truly yours,

*Ruby M. George*

Osborn Botanical Laboratory,  
Yale University,  
New Haven, Connecticut.  
May 3, 1940.

Dr. Ray C. Friesner  
Butler University,  
Department of Botany,  
Indianapolis, Indiana.

Dear Dr. Friesner:

The pollen analyses of Lake Cicott, Fox Prairie, and Cranberry bogs arrived today, and are very interesting, as all of the Indiana records are. I am glad to hear that you have four more bogs ready to publish. A paper of mine will be out in the August American Journal of Science, I believe, and you shall have copies as soon as I receive them.

I am especially interested in the larch counts from the Indiana bogs. I am wondering if there is not something in the ground water throughout your region that causes larch pollen to be preserved.

Thank you again for the very neatly typed and interesting records.

Sincerely,

*Preston Smith*

May 3, 1940

Dr. Mildred Fladeck  
U.S. Soil Conservation Service  
San Antonio, Texas

Dear Miss Fladeck:

The matter of exchange of plant specimens has caused us no inconvenience at all. We regularly have about a year's work in mounting ahead so that our mounters have been kept busy just the same.

I shall be glad to receive your specimens whenever it is convenient for you to send them and I am looking forward with eagerness for the species of *Solidago* you may be able to include.

If you should have any use for the general run of Indiana species, I shall be glad to send a representative set to you at any time.

Sincerely yours,

Ray C. Friesner

RCF:med

May 6, 1940

Miss Ruby McGeorge  
Middletown, Indiana

Dear Miss McGeorge:

Your letter of the 3rd instant is at hand. Under our rules all work to receive credit must be done as a regular college class. In the case of some of our courses involving only laboratory work, the material is of such a nature that once it is obtained and brought into the laboratory the work-up can be done at the convenience of the student.

It would, however, be quite essential that all students be assembled for the field observations and gathering of material and hence all would need to be present during the first part of the period. It is quite possible that this time might be changed if it could be made to better fit the convenience of the class as a whole.

I suggest that you send me your complete schedule of classes and we will then be able to see just what we can do to fit the work into your needs.

In case the tree course cannot be so made to fit, we can fit the course in ferns, S303, into any schedule because the work is entirely individual.

Sincerely yours,

Ray C. Friesner

RCF:mob

May 6, 1940

Mr. Preston Smith  
Osborne Botanical Laboratory  
Yale University  
New Haven, Conn.

Dear Mr. Smith:

In discussing the matter of preservation of pollen of *Larix* with Dr. Potsgor it was made quite emphatic by him that he thinks it is largely a matter of technique. The alcohol method (Goisler Method, Butler Univ. Bot. Stud. 3:141-146, 1935) is so much more "gentle" in contrast to the "rough" treatment given by most methods that the *Larix* pollen actually present is revealed on the slides.

When I consider the "rough" treatment given by so many investigators I marvel that any pollen grains are left to count.

Sincerely yours,

Ray C. Friesner

RCF:mab

RF: Finch

Mr. John S. Wright  
The Eli Lilly Company  
Indianapolis, Indiana

Dear Mr. Wright:

I am enclosing the clipping from the Indianapolis Times to which I referred in our conversation of last Friday evening.

With the coming of more reasonable weather we should find the beeches beginning to show growth in diameter soon. Today is regular observation day but the rain has so far kept me in. I hope to get out before the day is over, however.

Sincerely yours,

Ray C. Friesner

\*= ready - sent

DR. ARTHUR S. SANDLER  
2700 Devon Avenue  
CHICAGO, ILL.

6-V-40  
Sandler

HAY FEVER FLORA

- |  |  |
|--|--|
| Wheat                                      | * Couch Grass - <i>Agropyron repens</i>      |
| Rye  | English Plantain <i>Plantago lanceolata</i>  |
| Barley                                     | * Rye Grass - <i>Elymus</i>                  |
| Oats                                       | * Short Ragweed - <i>Amb. artemisiifolia</i> |
| Corn                                       | * Giant Ragweed - <i>amb. trifida</i>        |
| * Alder                                    | * Elm -                                      |
| Ash  | Maple -                                      |
| Aspen                                      | Sycamore -                                   |
| Common Mugwort - <i>Artemisia vulgaris</i> | * Willow -                                   |
| Cottonwood                                 | Poplar -                                     |
| Dandelion                                  | Beech -                                      |
| * Johnson Grass <i>Sorghum halepense</i>   | Cvpr ess -                                   |
| Tumbleweed <i>Amaranthus graecizans</i>    | Cedar -                                      |
| * <i>Dactylis glomerata</i>                |  |

THE CHICAGO MEDICAL SCHOOL  
710 SOUTH WOLCOTT AVENUE  
CHICAGO, ILLINOIS

Library

May sixth,  
1940.

Professor Ray C. Friesner,  
Department of Botany,  
Butler University,  
Indianapolis, Indiana.

Dear Professor Friesner:

In the name of Doctor Sandler and the Trustees of the Chicago Medical School, we wish to thank you for your recent gift to the School thru Doctor Sandler's agency of the very interesting specimens you sent him. Doctor Sandler, in behalf of the school is making an extensive exhibit and research of the plants that are allergic to mankind in the middle west, especially in the regions of Illinois, Iowa, Indiana and Wisconsin.

Any additional specimens you may send, will you please send them directly to Doctor Sandler's personal address, as he does his work in his own laboratory.

With renewed thanks,

Yours very truly,

M. E. Campbell  
for Dr. Sandler.

Written by  
Miss M. E. Campbell, Librarian.

JOHN S. WRIGHT  
4411 Washington Boulevard  
Indianapolis, Ind.

May 9, 1940

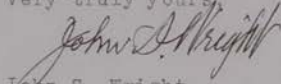
Dr. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Dr. Friesner:

Thanks for loan of article TIME BELT KEEPS TAB ON  
TREES. I now have two copies, one of which I am  
sending MacDougal; your copy is returned herewith.

Some day when you go out for a reading let me know  
an hour or two in advance and I will go with you  
if possible.

Very truly yours,

  
John S. Wright

JSW-M

May 9, 1940

To all Faculty Members  
Butler University

The local W. P. A. has asked Butler University to act as a member of an advisory council to join other universities and colleges of the state in an advisory capacity to advise the W. P. A. on its various research projects. The University has agreed to do so.

Furthermore, the officials of the W. P. A. have asked that members of our faculty suggest projects in which they are interested, of a general public interest, in which the W. P. A. might participate. Since Butler University is not a state supported institution, the University, or any department thereof, would have to act merely as a co-sponsor and secure the sponsorship of some tax supported institution such as the Indianapolis City Schools, the Department of Public Welfare, etc., in order to secure W. P. A. aid in carrying out the proposed project. Up to 80% of the cost of the project adopted would be borne by the W. P. A., the remaining cost to be borne by the co-sponsor or sponsoring institution.

The W. P. A. has given us the following information concerning all projects suggested by our faculty and participated in by the W. P. A.:

A. In cases where a faculty member publishes a volume or treatise based upon data collected by W. P. A. personnel, the W. P. A. would have no claim on royalties received from such work.

B. In nearly all W. P. A. clerical projects, funds are expended for labor only. Forms, equipment, and materials are usually furnished by the sponsoring agency or the co-sponsor. Federal funds can be used for traveling and per diem expenses of supervisors of the W. P. A. project, provided the supervisor is one of the W. P. A. personnel.

The attached questionnaire can be used by faculty members who care to suggest a research project in which they would like to have the W. A. P. participate and furnish W. P. A. labor to act as enumerators, collectors of data, and tabulators. Each faculty member is urged to give careful consideration to the sponsoring institution to be suggested and to the fact that proposed projects must be of general public interest.

If you will return the questionnaire, filled out, to H. O. Ross, College of Business Administration, it will be forwarded to the W. P. A. headquarters for consideration.

The Committee

A. B. Carlile  
C. L. Clark  
J. H. Peeling  
J. E. Potzger  
H. O. Ross, Chairman

May 11, 1940.

Dr. Friesner,

A letter of appreciation should  
be sent to the Hilledale Landscape  
Company for this contribution which  
adds much to our Botanical Garden.

Scott

PLANTS PRESENTED TO THE BOTANICAL GARDEN OF  
BUTLER UNIVERSITY May 11, 1940 BY THE HILLSDALE  
LANDSCAPE COMPANY.

	Book value
<i>Aquilegia alpina</i> var. <i>superba</i>	.29
<i>Arabis alpina</i>	.20
<i>Astilbe amethyst</i>	.20
<i>Buddleia</i> Isle de France	.75
<i>Buddleia</i> Fortuni	.75
<i>Calycanthus floridus</i>	.50
<i>Cimicifuga racemosa</i>	.25
<i>Clethra alnifolia</i>	.50
<i>Corylus Avellana fusco-rubra</i>	4.00
<i>Dicentra eximea</i>	.50
<i>Dicentra spectabilis</i>	.50
<i>Euphorbia epithymoides</i>	.30
<i>Helianthemum mutabile</i>	.25
<i>Hydrangea paniculata grandiflora</i>	.50
<i>Muscari botryoides</i>	.25
<i>Phlox subulata</i> ( Blue Hills )	.20
<i>Phlox subulata atropurpurea</i>	.20
<i>Primula</i> ( variety )	.20
<i>Sophora japonica</i>	1.75
<i>Sorbus americana</i>	1.50
<i>Ulmus campestris</i>	2.50
<i>Viburnum dilatatum</i>	.75
<i>Viburnum nudum</i>	1.00
Total	<hr/> \$17.75

From EK

Kokomo. Ind. - Sat. - May 11, - 1900.  
1812 No. Purdue St.

My Dear Dr. Friesner:-

Only a postal Card. - Am  
sending you some things that  
came to me - My name is in a  
Nature Directory

My daughter is coming up next week -  
about Tues. - & I plan to return to  
Lafayette about Wed. - & Collect. - My  
only question is - Have you any  
plans to come up May 18 or May 25?  
Of course if you are coming to R. Ind. -  
I'll be home sure. These are Great  
Days and I must + cannot  
miss a single one. - I may  
not come back from Lafayette

before Sat. or Sun. A postal will do.  
 - If you have any definite knowledge  
 of your dates - that would perhaps  
 help me. - You gave one date - June 22.  
 1940 - Your first 1939 date was June 10,  
 I think. You must not change  
 any work or dates or plans to suit  
 old - man - Ek. - The only fact is -  
 I want to fit into all your plans  
 as far as N. Ind. - is a part of  
 your Summer Collections. - & then  
 any place you want to go.

Dr. Potzger's *Jeffersonia diphylla* is drying  
 nicely - but slowly - Have them out in  
 the sun now - Been cloudy. Been  
 cleaning house & home for a week - except  
 last Sunday 3-4 hrs - 2-3 mi. W. Peru -  
 & W. Brunkes Hill - Herbalist here

knew where ginseng - Hydrocotyle, Twin leaf.  
+ a lot of stuff - 3-4 species - medicinal -  
I've not seen here - But we found  
nothing new - for the reason that  
he + other 'sang' hunters have gathered  
it all!! - Oh, these commercial hunters!  
- bad as quail killers -

I'll quit - Would be glad if  
you could postal card me post  
can get it by Wed. Noon - Sorry to  
hurry you - Should have written  
you sooner - but I planned to go on  
Monday - if I used bus - + be back  
before Sat -

Maybe you can use this Ad. I  
send you - Let Dr. Potyger see it -  
If I had any \$ - I'd use it myself -

4.  
Pardon this hurry. -

Am feeling fair. - Will be  
out somewhere tomorrow - Sun.  
- my only day. -

Best Wishes to your wife

Dr. Patzsch. -

P.S. - Maybe you told me Mich 16 -  
- Woods day - of your Saturdays.  
- I forget. -



R. R. - 13 - BOX 158

MAIN OFFICE AND NURSERY AT CASTLETON - BRANCH NURSERY AT E. 46th ST. AND ROAD 13

INDIANAPOLIS

INDIANA

PHONE - BROADWAY 3233

May  
fifteenth  
1940

Professor Ray C. Friesner,  
Butler University,  
Indianapolis, Indiana.

Dear Professor Friesner,

Plans for the Fourth Annual Rose Festival to be held June 9th are now being made.

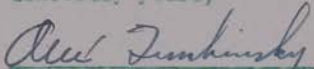
Through careful planning, diligent work, and splendid cooperation among many groups and individuals, we have been successful in the past.

It is hoped that this year the event will be an even greater success of state-wide importance.

With this thought in mind, I want to take this opportunity of inviting you to the luncheon-meeting of the committees to be held at the Athenaeum, Wednesday, May 23rd, at noon-12:15.

I hope you will find it possible to attend this meeting and take part in the planning and committee work for the 1940 festival.

Sincerely yours,

  
Alex Tuschinsky

AT:ah

P.S. Colored movie films taken at last years festival are to be shown at Wednesday noon meeting.

---

Landscape Contractors, Designing, Planting . . . Artistic Rock and Sinken Gardens, Fountains, Pools, Swimming Pools, Spraying . . . Garden Furniture . . . Moving Large Trees . . . 93 Acres Ornamental Trees, Evergreens, Shrubs, Roses, Vines, Perennials and Rock Garden Plants . . . Finest Nurseries in Indiana . . . Alex Tuschinsky, Owner.  
Member of the Indiana Nurserymen's Association.

Give notice to Collegian  
and send him a copy

Medellín Mayo 16 de 1940  
Mr. Ray C. Friesner  
University of Butler

Muy apreciado Dr:

Sus interesantes publicaciones que se ha servido enviarme hace algunos días las he recibido oportunamente junto con su amable carta en la cual me comunica la aceptación que me hace del canje de plantas por publicaciones sobre botánica sudamericana.

Yo hubiera querido más bien ser el primero en enviar a Ustedes plantas a fin de que allá, según el número enviado, me canjearan sus publicaciones de acuerdo con su propia apreciación; ya que ello no ha sido así, me he apresurado a responder a su amable envío de publicaciones con un centenar de plantas debidamente clasificadas, las que he podido por el momento tener a mano entre los duplicados que poseo. Ojalá les lleguen en buenas condiciones.

En estos días tengo varios trabajos entre manos que me impiden dedicarme por completo a la preparación de un nuevo envío; pero haré lo posible para despacharle otro paquete dentro de algunas semanas.

Mientras tanto, espero que ya hayan recibido el primero el cual fue despachado hace diez días por correo certificado.

En espera de sus gratas órdenes, quedo con todo respeto como su seguro y obsecuente servidor.

H. Daniel

RECEIVED

RECEIVED

May 16, 1940

Mr. Andrew Miller, Superintendent  
Riverside Nurseries  
Indianapolis, Indiana

Dear Mr. Miller:

The Botany Department and the Administrative Officers of  
Butler University wish to take this opportunity to express  
to you their appreciation for the fine lot of plants you  
have so kindly donated to the Botanical Gardens.

It is our sincere hope that we may be worthy of your confidence  
and that we may do all in our power to foster in the minds of  
citizens of Indianapolis a real understanding and appreciation  
of plants.

Thanking you again for your kindness, I remain,

Sincerely yours,

Ray C. Friesner,

Head of the Botany Department

RCF:meb

May 16, 1940

The Hillsdale Landscape Co.  
Castleton, Indiana

Dear Mr. Tuschinsky:

The Botany Department and the Administrative Officers of Butler University wish to take this opportunity to express to you their appreciation for the fine lot of plants you have so kindly donated to the Botanical Gardens.

It is our sincere hope that we may be worthy of your confidence and that we may do all in our power to foster in the minds of citizens of Indianapolis a real understanding and appreciation of plants.

Thanking you again for your kindness, I remain,

Sincerely yours,

Ray C. Friesner  
Head of the Botany Department

RCF:mob

May 17, 1940

Mr. Alex Tuschinsky  
P.R. 13, Box 158  
Indianapolis, Indiana

Dear Mr. Tuschinsky:

Your kind letter of invitation to participate in the work of the committee planning the annual rose festival is at hand. I am very sorry that I shall not be able to attend this meeting because of my college work. To attend the meeting would necessitate missing my one o'clock class and this is hardly permissible at this time when we are so near the close of our year's work.

I appreciate your kindness and am sorry to miss this opportunity.

Sincerely yours,

Ray C. Friesner

RCF:meb

UNIVERSITY OF MICHIGAN  
BIOLOGICAL STATION  
ANN ARBOR, MICHIGAN

ALFRED H. STOCKARD, DIRECTOR

May 18, 1940

ADDRESS, JUNE 15 TO SEPTEMBER 1  
CHEBOYGAN, MICHIGAN

Prof. Ray Friesner  
Butler University  
Indianapolis, Indiana

Dear Professor Friesner:

We should like to have the University  
Plumbing Shop here build a peat borer similar to the  
one you have. Would it be convenient for you to loan  
us your borer as a pattern for them to use in construc-  
ting one similar to it?

We shall be glad to pay the cost of trans-  
portation both ways if you would like to let us use  
it for this purpose.

Sincerely yours,

*A. H. Stockard*

A. H. Stockard, Director

J

May 21, 1940

Dr. A. H. Stoeckard, Director  
Biological Station  
University of Michigan  
Ann Arbor, Michigan

Dear Dr. Stoeckard:

We are glad to loan you our peat borer for the purpose of having a duplicate made. We will not be needing it until about July 1, at which time Dr. Potzger of our staff goes to Wisconsin for some peat boring work for the remainder of the summer. We are sending the borer by express.

Sincerely yours,

Ray C. Friesner

RCF:neb

May 21, 1940

Mr. H. H. Moore  
1041 Blue Avenue  
Zanesville, Ohio

Dear Mr. Moore:

Your letter of the 16th instant is at hand. It is kind of your to write to me in this regard and especially do I appreciate your kindness in telling me of your observations. Your method of recording the growth of these trees is unique and interesting even if simple in operation. I appreciate the data and have filed it with my study material. In case I have an opportunity to make use of it in publication, I shall give you credit for it.

I am sending you a copy of a short paper published from our laboratory several years ago on relation of tree-growth to rainfall. In this study we found that on land of high relief, i.e. very hilly, growth is proportional to the amount of rainfall during the months of June, July and August. We will also have another paper which will appear in print sometime in June or July and I shall send you a copy. This latter paper is not based upon the apparatus referred to in the article which you saw because this apparatus has not been in use long enough for us to draw conclusions.

In case you should run across any further newspaper references to our work, I should appreciate receiving a copy of the clipping.

I congratulate you on your interest in this field and your foresight in beginning the observations so long ago.

Sincerely yours,

Ray C. Friemore

RCF:neb

May 21, 1940

Professor Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

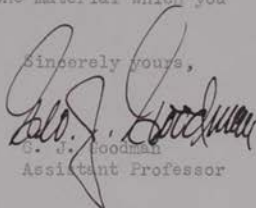
Dear Professor Friesner:

I am sending to you, by prepaid express, the following herbarium material:

Hayden	
Grasses & sedges of Iowa (plants useful to waterfowl)	35
Fulst	
Plants of Iowa	141
Goodman	
Plants of Oklahoma	30
Goodman and Payson	
Plants of Luka Chukai Mts., Arizona	57
	<hr/>
Total	263

I trust that you will find this desirable exchange material. We are very pleased with the material which you sent to us.

Sincerely yours,

  
G. A. Goodman  
Assistant Professor

GJC:W

May 23, 1940

Mr. Charles M. Ek  
1812 Purdue Street  
Kokomo, Indiana

Dear Mr. Ek:

As you probably know, Dr. Potzger and I are planning an Ohio River trip for June 15 and 16. We are planning to leave here about 2:00 p.m. on the 15th and would be glad to have you come down and go with us. If you can make your way down to Indianapolis and back, Potzger and I will see to it that you have no other expense.

We expect to return to Indianapolis Sunday evening. Mrs. Friesner and I will be glad to have you stay over Sunday night with us and then that would leave you free to do as you wished on Monday.

We can put all of the plants, both yours and ours, on our drier here and then we will bring yours to you on the 22nd when we come up for our first northern trip.

Sincerely yours,

Ray C. Friesner

RCP:mcb

May 24, 1940

Dr. George W. Goodman  
Iowa State College  
Ames, Iowa

Dear Dr. Goodman:

Your package of herbarium specimens reached us in excellent condition yesterday. I have not had time to look at every specimen but as I looked at random through the material I was impressed with the good quality of the material. The specimens will make a valuable addition to our herbarium and we are grateful to you for them.

The number you have sent exceeds those we have sent to you by a little over a hundred specimens and we will be on the look-out for additional non-duplicating specimens for you during the present season.

Thanking you again, I remain

Sincerely yours,

Ray C. Friesner

RCF:mab

HUNTINGTON COLLEGE  
HUNTINGTON, INDIANA

Fred A. Loew A.M.  
Department of Biology  
Director of  
Botanic Garden and Arboretum

May 27-1940

Dr. Ray Friesner  
Indianapolis Ind

Dear Dr. Friesner:-

I have sent out about 200 post card announcements of our Garden day for Friday June 7. Hope we will get some who are away from here to be able to attend this occasion.

I will also have the dinner clubs announce the day and have it in our local papers.

If you have a photo I would like to get it so I can have your picture in our paper.

Let me know when you expect to get here. We will have dinner at the when you get here. If you could get here early enough in the forenoon I would like to take you over the arboretum before dinner it will probably take an hour and a half or so. I would like to have you see our entire "layout". I will be looking for you. Bring some one with you.

Yours very truly,  
Fred A. Loew

May 28, 1940

Mr. Kenneth F. Fry  
Brendonwood  
Indianapolis, Indiana

Dear Mr. Fry:

Your request for an analysis of the peat of Bacon's Swamp, Indianapolis has been received. We have been working on the peat bogs of Indiana in the Botanical Laboratory of Butler University for the past six or seven years and from our experience we have found that peat differs much more in physical character than it does in chemical composition.

The differences in physical character are due largely to two factors: (1) the character of the plant materials from which the peat is derived, and (2) the age and depth of the deposit. Differences in physical character will always be found within the same bog deposit at different levels of deposition. In this particular bog our studies have revealed the following composition from our deepest boring:

1. The topmost 7 feet is raw sphagnum peat, i.e. a fine-grained peat derived largely from moss.
2. From the 7- to the 15-foot level is a coarser peat composed largely of decomposed sedges and other coarser plants.
3. From the 15- to the 22-foot level is a finely divided, much-decomposed sphagnum peat. Zone 3 had the same type of origin as zone 1 but the former is older and much more disintegrated.
4. From the 22- to the 32-foot level is a calcareous deposit known as marl.

As to chemical composition: The dry peat is approximately 98% organic matter. Of this organic matter by far the greater percentage is carbohydrate materials which make up the structure of the plants from which the peat was derived. The small percentage of nitrogenous organic matter can be converted into "plant food" in the soil by soil bacteria but this is never an important value of any peat.

The values of this type of peat are three:

1. Its value as a mulch. This is the most important value and is greatly enhanced by the high water-holding capacity of peat.

4 of 4 23-V-40

2. As a fertilizer its decomposition yields humic acids which render insoluble rock constituents of the soil slowly soluble and hence make them available to plants as mineral "plant foods".

3. Also as a fertilizer the nitrogenous material is made available to growing plants through the decomposing activity of soil bacteria.

There is probably very little real difference in peat from different parts of the world, at least in so far as the purposes to which it is usually put are concerned. The peat from our Indiana bogs is essentially indistinguishable from peat from Canada or Europe.

Sincerely yours,

Professor of Botany  
Butler University

from EK

Kokomo, Indiana. Tues. Eve. - 5-28-1940.  
1812 to Garden St.

Dr. Roy C. Friesner.

My very dear Prof. Friesner: -

Your very excellent letter came as I was getting ready to go to Lafayette. I replied by card at once and expected to answer you before this.

Such a fine generous offer was wholly unexpected. It has been carefully thought over. Of course, at once I accepted your plan and opportunity to see the S. part of Indiana - entirely new territory. I feel very highly honored by this great kindness. Then when I reflect - - with whom I am going - the honor increases.

I went to Lafayette Fri.<sup>PM</sup> May 24 -  
worked S. E. Lafayette that evening - Then  
Sat. - 25<sup>th</sup> - went S. W. - along Wabash R.R.

then W. + NW. on N. side of Big Mica Creek. -  
 It was sprinkling when I began - 9.45 -  
 and in an hr. or so - feet were just - and  
 by 12 - wet to knees. - At 1.45 finally went  
 to a farm house and called Lois - daughter,  
 who came out + got me. - Thought I  
 might have 2-4 new ones - for I gathered  
 them hurriedly - but before I left at  
 4.15 P.M. - doubted it. - + so I found no  
new species. - On Fri. 7.30 P.M. - heard an  
 erosion lecture + pictures by Dr. + Mrs.  
 Soudernick. - on their 26,000 mi. trip  
 thru Europe - Africa - Asia - 15 month trip -  
 very good, - only the Dr. is a poor speaker - tho  
 a good student. -

Lois came up May 15. - and I spent  
 Thurs. - Fri. Sat. - in fall - N. + S.W. Lafayette.  
 Results good - About 11 species - new to me  
 I append the list, with fewer comments  
 than in the account I sent Dean. -  
 1. *Draba caroliniana* - abundant -  
 2. *Androsace occidentalis* - " growing with No. 1.

- 3 *Phlox pilifera* - Scattering several dry hillsides.
  - 4 *Euphorbia* <sup>complanata</sup> (*lithynalis*) Low places - shade.
  - 5 *Prenanthes latula*. - dry soil - big patches.
  - 6 *Synthyris Bullii* - 1 patch - top of steep bluff above Big Bear Creek. - Probably my best find - the scarcest of new plants - with exception of *Trillium*.
  - 7 *Chelidonium majus*. - abundant in several low moist places.
  - 8 *Sophia incisa* (*S. intermedia*) glandular - pubescent. - abundant in many places.
  - 9 *Cheirimia repanda* (*Erysimum*) One patch - old cornfield - fallow ground.
  - 10 *Myosotis virginiana* - immature - possibly *M. arvensis*. Dry hillsides.
  - 11 *Trillium erectum*. - (?! No description in B. B. Gray - exactly fits it - Both need revision. Keys deceptive - Peduncle was 9 cm. long, stem 48 cm. tall. sepals 3 cm. long. petals white 35 mm. long. anthers 14 mm. long - filaments 2 mm. long - stigmas 29 mm. long - H. cc. - Fits *T. erectum* best - but (2) Some new *Carex* - but too immature - It's silly to fool with " unless ripe - mature."
- I collected & pressed a lot of others - in hopes of a few new County Records.
- Plenty of *Lithospermum linearifolium*

and L. Carolinense. <sup>4</sup> - Very showy - I was  
over part of this area last June 5 - and where  
they were so abundant ~~last~~ this yr - + none  
last yr. is odd - Also why I didn't find  
1 - 2 - 3 - 5 - 7 - 8 - tho 1 + 2 were out of flower -  
- I simply couldn't have missed all of these.  
so conspicuous + so abundant. - These are  
problems in ecology.

Letter from Dean - May 15. - Flora  
promised in June. - still in local Tribune  
said May 27. - which I think is an error. Dr.  
Dean told of his trips in S. Ind. - with  
the "Big Four" - Kriebel, Pätzger, - Friesner,  
+ himself - of trip have - thru Bedford -  
Lafayette etc. + in bed 2 days. + ~~was~~  
weak for a week. -

Thing that took me again to Lafayette  
was - in search of *Astragalus tenuissimus*.  
Dean had told of a package of plants collected 40  
yrs. ago - + in<sup>th</sup> a specimen of above legume - bundle  
found by Herman, at Wash. D.C. - Plant was found  
below Wash. R.R. - along Big Tree Creek - but - I failed  
to find it. - I plan to "continue" where I left off  
in the rain; - 40 yrs. is a long time. - No doubt gone.

Please make some sort of mark - somewhere -  
I went to Main St. Christian Church last  
Sunday - I enclose program - Really enjoyed  
the entire service. - Dr. Robinson is a good  
thinker and talker. Will comment on  
the occasion when I see you - Easy to see  
that he is a Great President - a real  
leader - an inspiration to faculty and  
students alike - a fine Cooperative spirit -  
- a genuine mixer - and truly interested  
in youth - parents - teachers, public -

Got there 20-25 mins. early - + talked  
with Ava Evermann, an authority on birds  
- She said Dr. Motter had recently passed  
away. - I had not heard it. -

Since it is more than 2 weeks until  
June 14. - I will write you later about  
what to bring along - Cans - press. - "Momi"  
EK, daughter Lois Bennett, + I are in agreement  
that I should return Sun eve. or night  
if convenient. - Yet that item will solve  
itself easily - not now - but then -

You can then tell me where to meet

and I will tell <sup>6.</sup> you when the bus comes  
in. I am very much elated over  
this journey - so old to you and so new  
to me - + the prospects of seeing so  
much scenery and finding new species;  
- also happy that the Flora will be out  
in June. - so The Good Old Dock assures  
us --

On the other hand, was greatly disturbed  
over Roosevelt's "Chat." Seen. 400. 8-30-9-00  
P.M. - Really a War-Cry. Had you the  
time I'd "lecture" to you - but on our trip  
I want to talk + think - Science - + not  
destruction and Chaos -

Will write you briefly - first week in June -  
- Wanted to tell you about 2 trips to Lofoten  
- + my meeting Dr. Robinson - who told me of  
some new method or machine you had of  
measuring beach + other trees -  
Until next week, -

Very sincerely Yours.

Charles M. Ek.

May 29, 1940

Professor Fred A. Loew  
Huntington College  
Huntington, Indiana

Dear Professor Loew:

I am sorry that I do not have a mat of myself. I called our publicity office and they informed me that it would cost about \$5.00 to have a plate from which mats could be made. I feel that I should not have one made until I can find time to secure a better picture than the one we now have on file and I cannot spare the time now. Hence, I guess we will have to let the picture go unless you can use a glossy print.

I shall be glad to try to reach Huntington at any time you may designate. If ten o'clock will be early enough you need not reply. It will merely be a matter of starting at the right time. I am planning on spending tomorrow and Friday getting the talk in final shape and hope I can live up to the privilege you have given me.

Sincerely yours,

Ray C. Friesner

RCP:neb

May 29, 1940

Dr. H. Daniel  
Colegio de San Jose  
Medellin, Colombia, S. A.

Dear Dr. Daniel:

Your shipment of herbarium specimens reached us in excellent condition today. We are very grateful to you for these fine specimens. They will make a very valuable addition to our herbarium since we have very little South American material.

It is an educational treat to see the South American representatives of some of our familiar species and genera such as: Samanea repalis, O. Girardiniana, Lycopodium, Asplenium and others.

We shall be glad to send you some North American specimens at any time if you should care to receive them.

Sincerely yours,

Ray C. Friesner

RCF:mab

INDIANA UNIVERSITY  
BLOOMINGTON, INDIANA  
DEPARTMENT OF GEOLOGY AND GEOGRAPHY

June 3  
May 28, 1940

Returned  
9-6-40

Professor Ray C. Friesner  
Butler University  
Indianapolis, Indiana

Dear Dr. Friesner:

Herewith are several chapters of the Climate of Indiana which, I hope will interest you sufficiently to lead you to read them and make suggestions for their further improvement. The chapters which I had in mind when I asked you to read them were those on climate, weather and crop yields. Those chapters have been critically read so far only by Dr. Rose. I hope to get suggestions from others later, but you are the only one so far who has agreed to criticise them for me. Write your criticisms on the margin or between the lines or on slips of paper just as is most convenient. If other comments already are present, initial yours.

The other chapters sent herewith have been read by two or three critics but that by no means will prevent you from making helpful suggestions about them. I hope you will do so freely. The preface will be altered to include you among those who have assisted.

There are hundreds of illustrations which of course will increase the effectiveness of the text.

All of the chapters except II and VI are entirely or practically completed. Most of the work has been done on II and VI.

I shall be sincerely grateful for your assistance with these chapters, and with any others which you will be willing to read. Make any and all sorts of suggestions. Although I try hard, I know I am subject to all sorts of inadequacies and imperfections and hence will take in good spirit any suggestion which you make.

I leave here June 4th to return about September 4. Kindly return the package to Owen Hall, Indiana University by express (collect) by September 5.

Enclosed are a few reprints which may interest you.

Hoping that you will have a good summer, and that this additional work will prove to be not onerous, I am,

Cordially yours

*S. S. Visher*  
Stephen S. Visher

UNIVERSITY OF MICHIGAN

BIOLOGICAL STATION

ANN ARBOR, MICHIGAN

ALFRED H. STOCKARD, DIRECTOR

June 4, 1940

ADDRESS, JUNE 15 TO SEPTEMBER 1  
CHEBOYGAN, MICHIGAN

Prof. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Prof. Friesner:

The peet borer was received last week and is now being used as a pattern in the construction of a similar one for the Biological Station. I want to take this opportunity to thank you for loaning it to us. I will return it in a few days.

Sincerely yours,

*A. H. Stockard*  
A. H. Stockard

J

From E.L.

Kokomo, Ind. Tues. June 9 - 1940.  
1812 No. Purdue St.

My dear doctors Friesner  
and Patzger:

Got bus schedules up town  
yesterday. - Bus arrives in  
Indianapolis 11-10<sup>AM</sup> 1220<sup>PM</sup> 2.15<sup>PM</sup>  
I could get there 12.20<sup>PM</sup> + get off and  
meet you at University or you could  
meet me at Bus Station 2.15<sup>PM</sup>.....

However, I'll leave all to you.  
and try to fit into your plans  
and schedules - and not change  
them at all. - I want to cause no  
extra driving or inconvenience - or  
the least possible.

I'll bring along press + supply of papers  
and if you give no other directions - both  
my cars - the 1 night answer. I always

From EK  
4-VI-40

like to get plenty<sup>2</sup> of fresh specimens. If  
moistened - they keep for days - for  
purposes of study + description. - Give  
that them 4-5 days old - + still good for  
identification. - so - - will try and think  
of everything - + forget nothing - tho I usually  
do! -

Do not wait on me - My health  
is quite uniform - no good any time -  
- but usually equal to a day or two  
of rather strenuous efforts. - Like most  
boys who can never tire at ball-playing  
but complain terribly when mother wants  
5 minutes work done. - I forget myself  
in the field for 4-6-7 hrs. - but in the  
garden - or house-cleaning - an hr. is a  
week long! In fright, fear excitement,  
the adrenal glands come to the rescue,  
and so in my (our) field tramps. -  
If anything happens - will let you  
know - but don't wait - &c. - I'll

do my best to 3. fit exactly in your  
schedules. -

Bus leaves 5.45 9.30 11.00. Sunday  
but we'll wait until then. - - -

I am presuming that your  
plans are pretty well completed -  
- But I want to be as little  
expense to you as possible. -

When we think of the battlefields,  
refugees - people of Europe and  
all their indescribable horrors  
~~and~~ sufferings - - Me. too - Can  
surely suffer some inconvenience  
that we enjoy in our homes.

And so - I am anticipating  
a very pleasant - profitable -  
time - Write me - a postal will do  
I think, - telling me where - & when

To meet You - - and if  
anything special to bring along - -

Was out Sunday and collected a  
lot of Carex - for Dr. Potzger -  
should be care to see them - Going  
out again Wed. - and get some more -

Let it not be said of Butler  
- as of Indiana - that their  
graduates never heard of a sedge - -

Will be seeing You  
Friday - June 14 - 1940

Again I thank you  
for all your kindness - - -

Sincerely - Yours  
Charles M. Ek.



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2724 NORTH CHARLES STREET

BALTIMORE, MD.

June 7, 1940

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THE MAYOR OF BALTIMORE  
HOWARD W. JACKSON (*ex officio*)

Professor Ray C. Freisner,  
Dept. Botany,  
Butler University,  
Indianapolis, Ind.

Dear Prof. Friesner:

Please accept my apologies for not replying to your kind letter of March 14, 1940. This matter was mishandled and accounts for the negligence. I most certainly appreciate your offer to work up a list of your botanical publications and also to have made some pictures of your botanical laboratories, but feel that this would involve too much of your time, etc. From the catalog of publications I had hoped to draw some material for use in my laboratory in work involving plant physiology and anatomy. As for the pictures, I thought it might be possible to add to collection of laboratory history. However, I am most grateful to you. May I suggest that should such material become available in the future, will you consider my request if agreeable to you.

Thanking you again and hoping to hear from you, I am,

Sincerely yours,

*R. T. Hampton*  
R. T. Hampton.

HH/RTH.

Plant Physiology Lab't.

*Dr. H. Hapeman*  
225 BROWN AVENUE  
Minden, Nebraska

June 12th 1940.

Prof. Ray C. Friesner,  
Indianapolis, Ind.

Dear Prof. Friesner:

I have been working for several years to secure, so near as possible, a full line of the plants included in Britton and Brown.

If you wish to exchange specimens I can send you a list of my still desired numbers. In return I can offer you specimens from nearly any part of the United States west of the Miss. River, Hawaii, Kodiak Island, Sweden, France, Holland, Poland and Switzerland. I have Solidago from the Black Hills, Colorado and the plains states.

Yours truly,

*H. Hapeman.*

-3- 1940

June 14, 1940

Dr. B. A. Krukoff  
New York Botanical Garden  
Bronx Park  
New York City, New York

Dear Dr. Krukoff:

We are sending you under separate cover a package containing some material of Amsonia tabernaemontana salicifolia (Pursh) Woodson. I hope we have collected the material and prepared it in a way that will make it usable for you.

Sincerely yours,

Ray C. Friesner

RCF:Mob

June 14, 1940

Dr. H. Hapeman  
225 Brown Avenue  
Minden, Nebraska

Dear Dr. Hapeman:

Your letter regarding exchange of plants is at hand. I recall with satisfaction the fine specimens you sent us a number of years ago. I shall be glad to send you anything we can get that fulfills your needs. In case I can secure sufficient species for you to make a return from you justifiable, I would prefer specimens of Solidago first and Black Hills plants second.

Sincerely yours,

Ray C. Friesner

RCF:neb

June 17, 1940

Dr. F. C. Gates  
Kansas State College  
Manhattan, Kansas

Dear Dr. Gates:

Please accept my sincere thanks for the copy of "Flora of Kansas."  
It is a monumental piece of work and taxonomists and plant  
geographers will certainly welcome it. The maps certainly give  
a picture of distribution that words would be hard to convey.  
The ecologist will also welcome the work on "life forms". I  
congratulate both you and your state in this fine piece of work.

Sincerely yours,

Ray C. Friesner

RCF:mob

*Dr. H. Hapeman*  
225 BROWN AVENUE  
Minden, Nebraska

June 17th 1940.

Prof. Ray C. Friesner,  
Indianapolis, Ind.

Dear Prof. Friesner:

Inclosed is a list of my desiderata from the  
Britton & Brown Flora. Any specimens which you may send me from this  
list I shall repay, two for one, of Solidago or Black Hills specimens.

Yours truly,

*H. Hapeman.*

THE NEW YORK BOTANICAL GARDEN  
BRONX PARK (FORDHAM BRANCH P. O.)  
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TREASURER  
ARTHUR M. ANDERSON

June 17, 1940

Dr. Ray C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Dr. Friesner:--

You will be interested to hear that some progress is being made on our new project with plants that may have an insecticidal value. The newly standardized tests on insects, as they are now carried on at Rutgers, look fine. It took several months of solid work for entomologists to develop these tests.

Some interesting results were obtained recently with certain spp. of Helenium. In this connection we would be pleased to hear from you whether or not you are in a position to send us a sample (or samples), approximately 1 lb. or more each (dried), of Helenium spp. that are found conveniently near Indianapolis (not Helenium autumnale, H. Hoopesii or H. nudiflorum, inasmuch as we are in a position to obtain them from elsewhere). We would like to have, if possible, the upper parts of plants with mature flower-heads, as they appear to be especially potent.

A set of Puerto Rican plants is now being prepared for you and I hope to send it by the end of this month.

The identification of my Bolivian collection is being carried on, and Dr. Smith tells me that sets will likely be ready for distribution by the end of October. The collection proved to contain novelties - some 20 species have so far been described as new.

Under a separate cover I am sending you a reprint on Erythrina alkaloids.

Sincerely yours,

*B. A. K.*  
B. A. Krukoff

BAK/JD

P.S.

Your letter of June 14 just arrived, also the package with Amsonia. We appreciate your sending this material to us.

B. A. K.

*Helenium tenuifolium*  
pasture 0.7 mi n. Bicknell

Pyrethrum

Hytox  
Red Arrow

1320  
150  
30  
1500

June 20, 1940

Dr. B. A. Krukoff  
New York Botanical Garden  
Bronx Park  
New York, N. Y.

Dear Dr. Krukoff:

I am glad to know that your efforts regarding insecticidal properties of certain plants is yielding satisfactory results. In regard to material of *Helium*: we have three species in Indiana, viz. *H. autumnale*, *H. nudiflorum*, and *H. tenuifolium*. *H. tenuifolium* grows in abundance in Knox county which is in the southwestern corner of the state. I find that we collected material in flower from there on September 8, 1935. Dr. Potzger and I were planning a trip into south central Indiana for the first week in September so that we can easily swing over to the southwest on our way back and get this species in case it will be of value to you.

We very greatly appreciate your generous attitude toward our herbarium and will be more than glad to get your specimens as you may be able to send them. I am still picking up material of a non-duplicating nature for you and will have another consignment of specimens to send at the close of the present collecting season.

I hope you will not hesitate to let me know if there are any other species of plants we can supply for your insecticide work.

Sincerely yours,

June 20, 1940

Dr. H. Hapeman  
Hinden, Nebraska

Dear Dr. Hapeman:

Your list of botanical specimens desired came yesterday. I have gone over it carefully and have found very few species that grow in our region. I have made a list of these in my want book which goes with me into the field and will pick them up as rapidly as we run across them. I am returning your list thinking that you might care to send it to other collectors.

I shall keep the plants until the end of the season or at least until I have gotten all that we can get from our area this year.

Sincerely yours,

*c/s* THE NEW YORK BOTANICAL GARDEN  
BRONX PARK (FORDHAM BRANCH P. O.)  
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TREASURER  
ARTHUR M. ANDERSON

June 24, 1940

Dr. R. C. Friesner  
Department of Botany  
Butler University  
Indianapolis, Indiana

Dear Dr. Friesner:

We are much interested to hear (your letter of June 20) that you are planning a trip into south central Indiana (early in September) and that it will be possible for you to make an attempt to collect a sample of Helenium tenuifolium.

I hesitate to ask you for H. autumnale and H. nudiflorum inasmuch as it may happen that we will receive them from elsewhere. However, if you should see these plants on your collecting trip please remember us as we certainly would be interested in having extra samples. Furthermore, the content of active principles in plants of the same species might conceivably vary considerably from different regions. The "sneezeweeds" appear to deserve careful attention in connection with their possible insecticidal value.

Very truly yours,

*B. A. Kruckhoff*  
B. A. Kruckhoff

Bak/Jd

Trout Lake, Wis.

June 30, 1940

Dear Ray:

Since Dr. Juday is much interested in the collection of plants from this region, I must take three specimens of each species. I had taken only 60 bloters and corrugated sheets, and that will hardly be sufficient with an extensive collection, I wonder if you could have Mr. Palmer pack about 50 more of the driers into a box and send them to me, ask Miss McConaha to give you the postage from the money I left with her. I could also use some lens paper.

You might tell Miss McConaha that the tripod lenses for the class in Nature Study are in the pasteboard box in the corner of the desk against the east wall, it is standing on some of the lecture note books.

Sincerely,

John

Summer address:

Trout Lake Post Office,  
Vilas County, Wisconsin  
c/o Biological Station

Trout Lake, Vilas County, Wisconsin

June 30, 1940

Dear Ray:

Here we are in the Land of Lakes. We had a wonderful trip without any mishap. Spent the night at Beloit and reached the station on Saturday about 2 P.M. It is a most wonderful place located on the shore of Trout Lake in a grove of giant Norway Pine. I have spent some time collecting, no one has made a collection of the plants about the lake and Dr. Juday seems quite anxious to have a collection made. So that will be one of my sidelines. He also showed me two areas of about 200 acres of virgin timber, partly northern hardwoods and partly pine. It should be an interesting ecological study both for each forest type and for comparison of the two types.

If you can get one of the boys to pack my two desk lamps and ship them to me, it would be very much appreciated. The laboratories are excellent but the desk light facilities are not satisfactory. ----I will be "ganged" with a young geologist and we should have very valuable exchanges of thought. My knowledge of grasses has made a distinct hit with some of the young fellows who are interested in grasses but did not know them. Collected about 65 species to-day, among them our old friend Schizachne purpurascens, which literally covers the landscape up here. ----There will be approximately 15 men up here, covering nearly all phases of science. It is a very sociable group. One of the young men intruded too much on a skunk and we had some rare perfume in the "bunk house" last night. ---My work for the summer is pretty well all outlined and I am sure the summer will not be long enough.

Sincerely,

John