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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.

September 28, 1940

Miss Elisabeth Ann Bartholomew,
Herbarium Clerk, Department of Botany,
West Virginia University,
Morgantown, West Virginia.

Dear Miss Bartholomew:

I had laid aside the package of willows collected by Mr. Frye with the thought that I might receive a reply to my letter of August 6. I have now completed the determinations and am returning the package by franked mail today.

I feel quite certain that in some cases there are from two to several specimens which represent a single collection but, because they bear no collector's numbers, it is impossible to be sure of this.

I am especially interested in those specimens of *S. sericea* Marshall which have the aments on short bracted peduncles. Normally the aments of this species are sessile but there is a tendency for them to be somewhat pedunculate, especially in the Ohio river area. It would be very helpful to science if Mr. Frye or someone else could locate and tag a plant or plants with the young flowering aments already showing short peduncles and then collect specimens with mature aments later and mature foliage specimens still later. In this way we would discover how much difference these peduncled specimens show when compared with the normal plants.

One of his collections of *S. cordata* was unusually hairy but too young for much certainty as to what the fully developed plant would look like. It is possible that he has here a specimen of *S. glaucophylla albovestita* Ball in its juvenile stages. It would be helpful if he could collect *S. cordata* with mature aments and later with mature foliage from that area.

Thanking you for the opportunity of seeing this material, I am

Cordially yours,

Carleton R. Ball,
Executive Secretary

W. V. a

December 13, 1944

Miss Elizabeth Ann Bartholomew,
Dept. Botany, Univ. of West Va.,
Morgantown, West Virginia.

Dear Miss Bartholomew:

Some time ago I had the privilege of determining the willows in the University herbarium, as well as those in several other institutional and private herbariums from W. Va. and adjacent States. Recently I have determined the willows in the private herbarium of Prof. H. A. Davis of your Dept. of Mathematics..

Prof. Davis has a specimen of *S. lucida* Muhl. collected by him at Amboy, Preston Co., the first record of the species in W. Va., so far as I know. It recently was discovered in Roanoke Co., Va., the first and only record for that State.

* Your herbarium had one specimen of *Salix discolor* Muhl., from Okonoko, Hampshire Co. Marshall College herbarium had one from Pink, Calhoun Co. Now Prof. Davis has one from Canaan Valley, Tucker Co.

All of this serves to remind me that West Virginia is a very important State so far as willows are concerned because it covers the major part of the mountain pathway by which northern species penetrate the southern area. The Blue Ridge in Va. and the mountains of eastern Ky. are parts of the same plateau and serve the same purpose.

I am writing primarily to suggest that you, perhaps jointly with Prof. Davis, get out a check list of the known species of willows in West Va., with a view to stimulating further collecting before I complete my monograph (with full distribution notes) and my spot-map distribution of willows in the southern States.

As an aid to such an undertaking, I am preparing a list, by counties, of all the West Va. specimens in the herbariums which I have determined personally all the southern material, including my own and the U.S. Natl. Herb. I inclose the first 5 pages, covering *S. lucida*, *S. alba*, *S. fragilis*, *S. babylonica*, *S. longipes* var. *Wardii*, *S. nigra*, *S. interior* and its var. *Wheeleri*, and *S. cordifolia*. There remain *S. sericea*, *S. discolor*, *S. humilis* and its var. *rigidiuscula*, and *S. tristis*. There is a possibility that *S. petiolaris* and *S. Bebbiana* may yet be found.

If such a check list is prepared, I doubt if descriptions would be necessary. Keys could be included, based separately on vegetative and on floral characters. These I could prepare easily from the Virginia bulletin, adding *S. discolor*. Distribution maps by counties would help greatly, and could be reduced to small size.

I could furnish brief notes on the habitats in which each species should be looked for. I also can supply a list of the counties in adjacent Va. and Ky. where each species and var. has been collected, so far as I have the records, also Md. Of course, if the map were squared it would include western Md. & Va. One problem is your "Panhandle, including Marshall, Ohio, Brooke, and Hancock Cos. It really belongs to the northern floral area, including Penn. and Ohio.

If such a checklist is issued, it should emphasize also that all willows can be determined from leaf specimens, without flowers or fruit (desirable as these are) and therefore that collecting can be done throughout the summer and autumn months. I will be glad to have you consider the matter at your convenience. I will finish the list of known specimens and mail the remaining pages promptly.

Cordially yours,

copy in (Care) file
+ to H.A. Davis

Carleton R. Bell, Collaborator
* This was *humilis* var. *rigidiuscula*
1946

December 14, 1944

Miss Elizabeth Ann Bartholomew,
Dept. Botany, Univ. West, Va.,
Morgantown, West Virginia.
Dear Miss Bartholomew:

Continuing my letter of yesterday, I inclose pages 6-9 of the list of W. Va. willows, arranged by counties. These pages contain *S. sericea*, *S. discolor* and vars., *S. humilis* and var., *S. tristis*, and *S. Bebbiana*.

In writing you yesterday, I did not make clear that I did not think it necessary to include such full data in any check list which may be issued. For the more common species, such as *S. nigra* and *S. sericea*, the names of the counties might be sufficient. For fairly common and well distributed species (and vars.), such as *S. longipes* var. *Wardii*, *S. cordata*, *S. humilis*, etc., the counties with names of places where collected would be desirable. For rarities such as *S. lucida*, *S. discolor* and vars., *S. Bebbiana*, etc., the fullest possible data would be helpful.

Prof. Davis says that there is a duplicate of his *S. lucida* (distributed as *S. amygdaloides*, in the Univ. W. Va. herbarium. It did not come to me with the herbarium willows when they were sent by Dr. Core but that may have been before *lucida* was collected or at least before it was distributed to you.

The specimen which is listed here as *S. Bebbiana*, was one of some 20 or 30 specimens collected by Wilbert M. Frye in Hampshire Co. and sent by you to me in 1940 for determination. I probably was just leaving on a field trip because the list is in pencil, in the handwriting of a girl who worked for me then, and only the twons where collected are recorded (Cold Stream, Globe, Hanging Rock, Pleasant Dale, and Slanesville), but no collection numbers or dates. Either I did not realize that this species was far out of its range or was too hurried to do anything then, and afterward forgot it. All of Frye's specimens are in these lists, without full data and I do not know where the specimens are now. (If you know, will you please have that specimen sent to me for a recheck. There is no hurry about it. If the specimens are there, you can send it when you are sending others to me or to the specialists in Bu. Plant Industry at Beltsville, or Natl. Herbarium here.

Wholly apart from any checklist of West Va. willows, I am working on the mss. of the willows of the NE. States, the mss. for N.A. Flora, and for my monograph. For all I am trying very hard to get distribution worked out so that for once we may have accurate data in the ranges assigned.

Cordially yours,

Carleton R. Ball
Collaborator

January 5, 1945

Miss Elizabeth Ann Bartholomew,
Dept. Botany, Univ. West Virginia,
Morgantown, West Virginia.

Dear Miss Bartholomew:

I was exceedingly glad to have the shipment of willows and was able to give them immediate attention. They were mailed back on Wednesday and I hope that they arrive safely.

I was very sorry that some of them were badly broken in coming, as you will discover when they are unpacked. This breakage had two different causes. First was the method of mounting. Gluing to the sheet produces rigidity and results in breakage if bending occurs. Putting more material in the centers of the sheets taken at the sides or in the corners humps up the middle and causes bending and breakage when piles are tied and the sides depressed. Mounting so that the pile remains level, and mounting with adhesive strips on the twigs permits flexibility when bonding occurs and prevents breakage.

The second cause of breakage was in the packing. Mounted specimens, especially if glued should be tied in small packages with stiff cardboard on both side to take up the shock in mailbags and trucks. I tried to pack them in this way for the return shipment. But I could not undo damage already done.

As I recall, the se specimens did not change the State list greatly but did add many counties for some species. Your specimens of *S. interior Wheeleri* and *S. cordata* (read. as *S. alba*) were fine additions.

I inclose a list of specimens so far as they were not included in previous list sent, including that of collections by Prof. Davis. Those previously had I entered on the other lists simply by adding the XXX UWVa herbarium designation.

I still am worried about *S. Bebbiana*. I feel sure that the specimen I have listed here as *S. cinerea* is not *S. Bebbiana*. There is much similarity in the partly-unfolded leaves of *S. cinerea*, *S. Bebbiana*, and *S. humilis* & var. If I recall correctly, we have no flowering or fruiting specimen of *S. Bebbiana* from Wets Va. We need careful collecting in the areas or supposed occurrence before we will know surely what we have.

This list shows that several persons were collecting in 1940 and it may be possible to get several people to do scouting in 1945, or at least after the war ends.

If you decide to go ahead with a check list or manual, I will be glad to help in any way,

With best seasonal wishes, I am

Cordially yours,

Carleton R. Ball
Collaborator