



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.

TEXAS RESEARCH FOUNDATION

RENNER, TEXAS

February 26, 1957

Dr. G. R. Ball
381 E. Jocelyn St., N. W.
Washington 15, D. C.

Dear Dr. Ball:

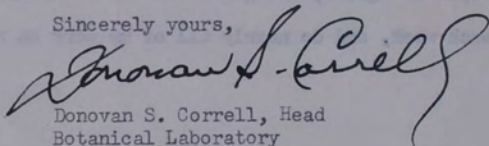
I am at present trying to complete before the end of this year a manuscript on the genus Populus for the "Flora of Texas". Along with this work, I have checked over your Salix manuscript to see that all of the corrections and insertions you sent were included. I believe that I have this in fairly good order.

We are expecting to send the Salicaceae to press before the end of this year. The delay thus far has been because of a need for the manuscript on the genus Populus.

I am wondering if you would like for me to send you a copy of your manuscript for a final checking, and in case you may have some additions or corrections which you would like to make. Please let me know, and I will forward the manuscript to you at once.

With best wishes, I am

Sincerely yours,


Donovan S. Correll, Head
Botanical Laboratory

DSC:ds

(See over)

Dr. Donovan S. Correll,
Botanical Laboratory,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St., N.W.
Washington 15, D.C.

4 March, 1957.

Dear Dr. Correll:

Your letter of 27 Feby. was promptly received, but has been neglected because of my attendance at several meetings, and some visitors who stayed with us.

I have given no thought to the Texas mss. recently, but if you care to send it I will give it a careful review and make any changes or additions which seem desirable.

Dr. Elbert L. Little of the U.S. Forest Service, U.S. Dept. of Agriculture, has done the genus Populus for the Flora of Nevada, for which I am finishing Salix now. If you need help on your Populus, I am sure that he would be glad to render any assistance possible.

Trusting that all goes well, I am

Most Cordially yours,

Carleton R. Ball, Collaborator.

P.S. Please address me at the home address. I am still under appointment by the Dept. of Agric., but get mail more promptly at home. as I go down only once or so each week, and do nearly all of my work on willows at home.

TEXAS RESEARCH FOUNDATION

RENNER, TEXAS

March 19, 1957

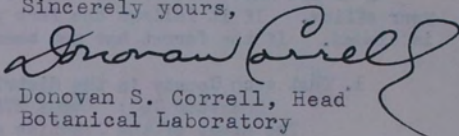
Dr. Carleton R. Ball
3814 Jocelyn St., N.W.
Washington 15, D. C.

Dear Dr. Ball:

In accordance with our exchange of letters,
I am enclosing a copy of your manuscript on the Salix
of Texas for the Flora of Texas. I should appreciate
your looking over this manuscript and returning it to
me at your earliest convenience.

With best wishes,

Sincerely yours,



Donovan S. Correll, Head
Botanical Laboratory

DSC:ds

Enc.

(See over)

Dr. Donovan S. Correll,
Botanical Laboratory,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.

25 April, 1957.

Dear DR. Correll:

Your letter of March 19, and the copy of manuscript on the Willows of Texas, were promptly received. I have given the revision as prompt attention as has been possible and hope that the delay has not been unduly harmful to your project.

I had forgotten writing the manuscript, and am unable to find a copy of my original manuscript here. I am returning your copy and the revisions by registered mail today, and trust that it reaches you safely.

For each species listed, (and/or variety), I have prepared a list of additions, correction, or deletions of specimens in the distribution lists. In several cases I have added additional discussion (2 pages in Salix taxifolia). These sheets are enclosed with the manuscript.

I do not know whether the copy of the mss. you sent me was typed by me, or by your office. If it follows the form you have adopted for the volume, the question is closed. If the format has not been finally decided, I would offer two suggestions.

1. That each County in the distribution be considered a sentence, thus:
Brewster Co.: Jones 2749; Smith 3688; Robinson 920. Cass Co.:
The names of the Counties should be in heavy black type.
2. That the names of collectors and the numbers of their collection be set in ordinary type, instead of underscored for italic type. This use of italics on such a large scale will slow down type-setting and increase costs. The Co. name in heavy black type, and the other data in roman type (except latin names) will give clarity and lessen expense.

If any of the data sent are not clear to you, please let me know and I will give it immediate attention.

I am delighted to know that a State Flora is in the making. We need more of them and they are well worth the long labor required.

Cordially yours,

Carlton R. Ball

P.S. If you prefer change in any of my discussion, or feel that any parts are better omitted, feel perfectly free to write me about them.

a. n. ... To...

Texas

Dr. Donovan S. Correll,
Botanical Laboratory,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.

25 April, 1957.

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Cordially yours,

Carlton R. Ball

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Lundell
at, cent

FEBRUARY 2, 1945

SCIENCE

111

DR. C. L. LUNDELL, director of the Institute of Technology and Plant Industry of the Southern Methodist University at Dallas, has been engaged since 1940 in the preparation of a comprehensive Flora of Texas. With the cooperation of collaborators, four parts of the descriptive flora have been published. A post-graduate research fellowship in systematic botany has now been established. The fellows will conduct research on the flora of the state and will participate in the survey of natural plant resources of the Southwest.

Dr. C.L. Lundell, Director,
Indt. of Tech. & Plant Industry,
So. Methodist Univ., Dallas, Texas.

February 6, 1945

Dear Dr. Lundell:

I note in Science, Feb. 2, that you are publishing a Flora of Texas. I am working on my monograph of American willows (*Salix*).

I am always glad to study collections from anywhere in the Americas, and am equally glad to help on State and local publications.

If you care to send in the willows from your herbarium, I will determine and annotate them at any time. I also can give you many Texas records of willows from my own collections and those I have determined for others.

Separately I send copy of the Willows of Virginia, which covers most of the species found in Texas and, of course, some which are not. You also have *S. Gooddingii* var. *vulvicola* (Dudley) Ball and varieties of *S. interior*, as well as *S. angustata* and/or var. *Wrightii*.

Cordially yours,

Carleton R. Ball
Collaborator

SOUTHERN METHODIST UNIVERSITY
DALLAS, TEXAS

INSTITUTE OF TECHNOLOGY AND PLANT INDUSTRY
OFFICE OF THE DIRECTOR

February 20, 1945

Dr. Carleton R. Ball
3814 Jocelyn Street N. W.
Washington, D. C.

Dear Dr. Ball:

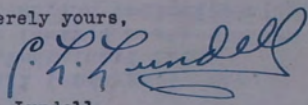
Thanks for your letter of February 6th. I have long known of your work upon the American willows, and I am anxious to have you write up the genus Salix for our Flora of Texas. If you will consider doing this, I will be deeply grateful for your cooperation.

Under separate cover I am sending you parts III and IV of Volume 3 of the Flora of Texas.

Since widespread collecting will be carried out in Texas this year, particular attention will be given to the willows. Do you have any specific instructions for collecting willow specimens?

If you will write up the Texas willows, I will arrange to have the material in Texas herbaria sent to you on loan.

Sincerely yours,


C. L. Lundell
Director

CLL:lh

Prof. C. L. Lundell,
Inst. Technology & Pl. Industry
Southern Methodist Univ., Dallas, Texas.

February 24, 1945

Dear Professor Lundell:

Your letter of Feb'y 20 is here. I will be glad to write up the willows of Texas for your Flora. It certainly will include the following species and varieties:

1. *S. longipes* var. *Wardii* (Bebb) Schneider
2. *S. Gooddingii* var. *valliscia* (Budley) Ball
3. *S. amygdaloides* Andersson and var. *Wrightii* (Anders.) Schn.
4. *S. nigra* Marshall & vars. *altissima* and *Lindheimeri* Schn.
5. *S. exigua* Nuttall and/or vars. *nevadensis* (Nutt.) & *stenophylla*
6. *S. interior* Howles & vars. *angustissima* (And.) & *pedicellate* (And.)
7. *S. taxifolia* HBK.
8. *S. lasiolepis* Benth. and southern narrow-leaved var.
9. *S. tristis* Aiton.

Others which may be found in the SW. mountains or Rio Grande valley (except *S. humilis* which would be in northeast) are:

1. *S. caudata* and/or var. *Bryantiana*
2. *S. lasiandra* and/or var. *lanceifolia*.
3. *S. Bonplandiana* and / or var. *Toumeyi*.
4. *S. humboldtiana* (crossing the river from Mexico)
5. *S. ligulifolia* Ball
6. *S. prostrata* Andersson (from Colo. & N. Mex.)
7. *S. humilis* and/or var. *rigidiscula*
8. *S. Bebbiana* and or var. *prostrata*.

I am sending some reprints separately. That entitled "Illustrating Plant Organs" etc. is important for the willows. To be remembered:

Practically all species and varieties can be identified from foliage specimens, so that, however desirable the flower and fruit specimens, collections should be made throughout the season.

Because of the great diversity of leaf size and characteristics (see paper mentioned), it is desirable to collect both the small-leaved previously flowering twigs and the larger-leaved seasonal shoots and/or sprouts.

Setchell's rule (see Dr. Setchell and Alaska Willows) was to collect each variation noted at each stop, in order not to miss anything. By so doing, he added several species and vars. to known Alaska flora and brought in one new species.

Will study you publs. when they arrive for treatment of spp. & vars. Will not wish to retain the papers. Shall I return them to you or give them to some one you designate?

I strongly urge two sets of keys, one based on vegetative characters and the other on floral characters. See willows of Virginia. If that is done, even amateurs (or even professionals) will know willows.

Will be glad to have the herbarium material start soon but not all come at once. Will handle rapidly. Cordially yours.

Carleton R. Ball, Collaborator

Texas

Prof. C. L. Lundell,
Inst. Technology & Pl. Industry
Southern Methodist Univ., Dallas, Texas.

February 24, 1945

Dear Professor Lundell:

Your letter of Feb'y 20 is here. I will be glad to write up the willows of Texas for your Flora. It certainly will include the following species and varieties:

1. *S. longipes* var. *Wardii* (Bebb) Schneider
2. *S. Gooddingii* var. *vallicola* (Dudley) Ball
3. *S. amygdaloides* Andersson and var. *Wrightii* (Anderss.) Schn.
4. *S. nigra* Marshall & vars. *altissima* and *Lindheimeri* Schn.
5. *S. exigua* Nuttall and/or vars. *nevadensis* (Wats.) & *stenophylla*
6. *S. interior* Rowlee & vars. *angustissima* (And.) & *pedicellata* (And.)
7. *S. taxifolia* HBK.
8. *S. lasiolepis* Benth and southern narrow-leaved var.
9. *S. tristis* Aiton. (out)

Others which may be found in the SW. mountains or Rio Grande valley (except *S. humilis* which would be in northeast) are:

1. *S. caudata* and/or var. *Bryantiana*
2. *S. lasiandra* and/or var. *lanatifolia*.
3. *S. Bonplandiana* and / or var. *Foumeyii*.
4. *S. humboldtiana* (crossing the river from Mexico)
5. *S. ligulifolia* Ball
6. *S. irrorata* Andersson (from Colo. 7 No. New Mex.)
7. *S. humilis* and/or var. *rigidiuscula*
8. *S. Bebbiana* and or var. *prostrata*.

I am sending some reprints separately. That entitled "Illustrating Plant Organs" etc. is important for the willows. To be remembered:

Practically all species and varieties can be identified from foliage specimens, so that, however desirable the flower and fruit specimens, collections should be made throughout the season.

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Hand m
file & Tex Salix Carleton R. Ball, Collaborator

SOUTHERN METHODIST UNIVERSITY
DALLAS, TEXAS

INSTITUTE OF TECHNOLOGY AND PLANT INDUSTRY
OFFICE OF THE DIRECTOR

March 12, 1945

Dr. Carleton R. Ball
U. S. Department of Agriculture
Extension Service
Washington, D. C.

Dear Dr. Ball:

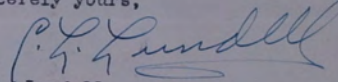
I am pleased that you will write up the willows for the Flora of Texas. Include two sets of keys, for they will be very useful.

Enclosed herewith are instructions for preparing manuscript for our Flora. The parts sent to you will serve further to indicate details of format.

I would prefer that you delay in preparing the final draft of the manuscript until next fall, for we plan to make extensive collections over the state this year.

Within two weeks you will receive on loan the first lot of Texas willows, and other lots will follow at short intervals.

Sincerely yours,


C. L. Lundell
Director

CLL:lh
Enclosure

EDITORIAL POLICY FOR THE FLORA OF TEXAS

All papers should be consistent regarding the following: (1), general format and method of presentation; (2), general typography; (3), abbreviation of authors' names; (4), abbreviation of names of books and journals; (5), initials and spelling of collectors' names; (6), spelling of county names; (7), use of "var." and "f." rather than omitting them or writing them out; and, (8), capitalization of specific names. The international rules and recommendations are to be followed.

Include only the principal synonyms of genera, species, and varieties; these should be cited just as written in the place cited. All names based upon Texas material should be accounted for. Where transfers have been made, include parenthetical authors. Misspellings and mis-accreditations of names, as well as misdeterminations, must not be listed as synonyms; if necessary, a statement regarding these can be included in the discussion. List all synonyms in chronological order.

The description of the family, genus, and species should cover all the members of the group, not just the representatives of the group in Texas. If a genus contains ten species, but only one is known from Texas, the generic description should cover all ten species! In constructing keys for large genera, the division into subgenera, sections, or groups is recommended.

When varieties and forms are given, cite all authorities for species, varieties, and forms.

The four manuals listed below are the ones most familiar to Texans; they should be cited whenever they mention any of the plants treated. Other comprehensive publications must be cited also.

- a. Coulter, Contrib. U.S. Nat. Herb. 2. 1894.
- b. Small, Fl. Southeast. U.S., ed. 1. 1903, ed. 2. 1913
- c. Small, Man. Southeast. Fl. 1933.
- d. Britton & Br., Illustr. Fl., ed. 1. 1897, ed. 2. 1913

Do not cite the following or any other local Texas publications:

- a. Sperry, Sul Ross Bull. 1933 & 1941.
- b. E. D. Schulz, 500 wild Fls. 1922; Texas Wild Fls. 1928.
- c. Cory & Parks, Catalogue of the Flora of Texas. 1937.

All other matters are left to the discretion of the contributors.

Collaborators are to receive, without charge, 50 copies of the fascicle in which their contribution appears.

FORMAT FOR FLORA OF TEXAS

Eriocaulaceae Lindl., Veg. Kingd. 122. 1847*

Description of family-----

Key to genera..... 1. ----- p. 000
.....
..... 2. ----- p. 000
..... 3. ----- p. 000

1. Eriocaulon L.

Eriocaulon L., Sp. Pl., ed. 1, 87. 1753; Gen. Pl., ed. 5, 38. 1754;
etc. (include references to monographs, revisions, or
treatments of the genus or sections of the genus; restrict
to a maximum of 10 references)

List principal generic synonyms.

Description of genus-----

Type species: E. decangulare L.

Key to species..... 1. -----
..... 2. -----
.....
..... 3. -----
..... 4. -----

1. Eriocaulon fuliginosum C. Wright ex Griseb., Cat. Pl. Cub. 226. 1886;
etc. (include principal references only)

List principal synonyms.

Description of species-----

-----In savannas, pine lands, and around ponds,
southeastern Texas, Jasper and Polk counties. (Texas distribution)

Anderson Co., C. L. Lundell & Amelia A. Lundell 8843; Bastrop Co.,
Lundell & Lundell 9143, 9900; Nacogdoches Co., B. C. Tharp 934;
(counties to be arranged alphabetically; cite only county, collector, and
number; repeat initials of collector only once for each species, unless
there are two collectors of the same name; omit herbarium references
where collections are deposited).

Vernacular names:

General distribution of species, discussion, etc. -----

* List as footnote the herbaria in which collections examined are deposited.
List herbaria alphabetically.

ORDER OF DATA FOR TEXAS WILLOWS

- A. No., name, and citation of publication, and of leading treatments, number at left margin, and other lines to first letter of *Salix*
- B. Synonyms (*italics*) in chronological order, *Salix* set flush to margin for each synonym and second lines indented 1 space, 3 spaces, or 5 spaces
- C. Description, first line indented 2 spaces or rarely 3 spaces when on letter below is 1 or a comma or period. Description followed by dash and Habitat and range.
- D. Distribution in Texas by alphabetical counties, the first indented 2 spaces, with initials of men and first name and initial of women collectors the first time cited under each species, and only their surnames thereafter, unless there are two persons by same name, ~~when~~ and then initials are repeated each time. Only collector and No. are cited. If no No. use "s.n." followed by date name(s):
- E. Vernacular, the 1st line indented 2 spaces and the names in quotes.
- F. Any desired notes (indented 2 spaces) on plant and its relations, on misidentifications, wrong inclusions of other species, etc., etc.

Digitized by Hunt Institute for Botanical Documentation

March 16, 1945

Mrs. Esther Taubenhaus
The Museum
A. & M. College
College Station, Texas

Dear Mrs. Taubenhaus:

Please send only the Texas material of
Salix to Dr. Carlton R. Ball. He is interested
only in this genus.

Sincerely yours,

C. L. Lundell
C. L. Lundell
Director

CLL:lh

cc: Dr. Carlton R. Ball
Extension Service
U. S. Department of Agriculture
Washington, D. C.

SOUTHERN METHODIST UNIVERSITY

DALLAS, TEXAS

INSTITUTE OF TECHNOLOGY AND PLANT INDUSTRY

OFFICE OF THE DIRECTOR

May 17, 1945

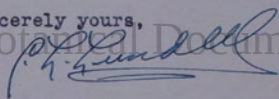
Dr. Carleton R. Ball
Extension Service
U. S. Department of Agriculture
Washington, D. C.

Dear Dr. Ball:

Your letter of April 13 and the package of willows from the herbarium of O. E. Sperry have been received. Thanks for the information about Salix in southwest Texas. We will get all the material possible this season.

I have asked Dr. B. C. Tharp to send you on loan the Texas material of Salix from the University of Texas Herbarium at Austin.

Sincerely yours,


C. L. Lundell
Director

CLL/1

Dr. C. L. Lundell,
Inst. of Plant Industry & Technology,
Southern Methodist University, Dallas, Texas.

February 17, 1946

Dear Dr. Lundell:

I am inclosing a rough draft of the two pages covering the treatment of *Salix nigra* for your proposed Texas Flora. in

As I have not listed all collections in my own Herbarium or ~~inserted~~ the Natl. Herbarium, I have not inserted the distribution not given the range within Texas.

I have not cited all the synonyms, but only that one which has been regarded as a separate species in fairly recent times. For some of the older synonyms, we cannot now determine whether they represent *S. nigra* or *S. longipes* and vary. There seems little profit in confusing Texas users with these speculations.

The description is fuller than needed, especially for this well known and widely-distributed species. However, I am trying to picture this plastic group to readers as it varies from spring to fall, from season to season, and from habitat to habitat. I have had the joy of seeing amateur botanists learn to identify the willows in the field, even where they are abundant and in many species and vary. If you want this out, please give me an idea of the percentage reduction, and I will meet the requirements.

In looking through the sample publication (Vol. 3, part IV), I note some variation in the indentation of the first line of paragraphs. There also is variation in the indentation of second line under a synonym, in this case 1 space, 3 spaces, and 5 spaces. One space seems hardly enough for clearness, especially as second lines almost never are full.

I have noted carefully the methods of citing collectors and collections, and agree in all the usage except one minor point. When there is no collection number, I find "s.n.", followed by the date or year. When there is no number, that is self-evident and the use of a latin abbreviation seems unneeded and expensive as set in italic type. Personally, I use the following form: "Jones, in 1896", which shows clearly that the numerals are a year and not a number. Also: "Jones, April 21, 1896", which is clear, and both are shorter than the form in the Flora.

I hope to be able to go on straight thro your material and that in the Natl. and Bull Herbariums and at the same time write out the descriptions and notes and finish up the paper for you rapidly.

Any suggestions will be greatly appreciated.

Cordially yours,

P.S. I note that most of the "vernacular names" are not "vernacular" at all, but purely manufactured names, none of which ever will be used by "white folks". It seems foolish to give a long translation of a long latin name and call that a "common" name.

Carlson R. Ball
Collaborator

SOUTHERN METHODIST UNIVERSITY

DALLAS, TEXAS

INSTITUTE OF TECHNOLOGY AND PLANT INDUSTRY

OFFICE OF THE DIRECTOR

February 22, 1946

Dr. Carleton R. Ball
Extension Service
U. S. Department of Agriculture
Washington 25, D. C.

Dear Dr. Ball:

Your letter of February 17, and the two pages of manuscript covering Salix nigra have been received. Your treatment of the synonyms is adequate. Please supply all authors, parenthetical or otherwise, as Salix nigra Marsh. var. falcata (Pursh) Torr.

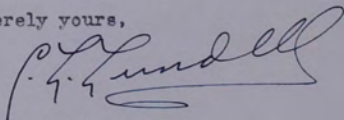
As to the descriptions, I prefer full ones as you have done for Salix nigra. I am interested solely in clarity and completeness.

We prefer the use of "s.n.", and "Jones, in 1896" can be cited as "Jones s.n. in 1896".

As to vernacular names, their choice is left up to each author. Do as you like regarding them.

I am pleased that you are making such fine progress with the treatment, and I deeply appreciate your collaboration.

Sincerely yours,



C. L. Lundell
Director

CLL:avj
enclosure.

Dr. C. L. Lundell, Herbarium,
Inst. of Tech. & Plant Industry,
Southern Methodist University,
Dallas 5, Texas.

February 22, 1946

Dear Dr. Lundell:

I have just completed determination of the some 115 willows sent by express with your letter of October 22. Therein you expressed the hope that they might be of aid in clarifying the willow problems of Texas. That certainly have been.

I inclose a list of the determinations of all the Texas specimens, but not of the Mexican and other non-Texan material. I made the list for my own use and thought you might find a copy handy.

The most important find is *S. irrorata* Anderss., your No. 14251, from the Davis Mts. It may be the first collection from the State that I have not gone through all records. I listed it as occurring in SW Texas, in New Man. Rocky Mtn. Bot. but that may have been in error for the narrow-leaved form of *S. lasioplepis*, not then known to come so far east. Recently it has been collected several times in the Davis Mts., *S. irrorata* should be collected again in earlier season.

Salix nigra var. *Lindheimeri* Schn. certainly was picked up abundantly. The distribution is as expected, but for the Donley Co. specimen. I have gone over that and the specimen of *S. Gooddingii* var. *vallicola* from Donley Co. with a fine-toothed comb, but still feel that they are rightly named. After all, there is no reason why they should not meet in the Panhandle.

I am surprised that only the Kerr Co. collections of *S. longipes* var. *Wardii* turned up in the wide-spread collecting done. It is a plant of rocky river and creek banks, whereas *nigra* stays in the alluvium.

So far, no one has turned in any specimens of *S. humilis* and *S. tristis*, which is rather peculiar. Both are upland, or at least not alluvial and river bank plants, which may account for the overlooking.

The specimens of *S. interior* var. *angustissima* differ from those of *Berlandier* and *Lindheimer* in showing their true colors (not darkened in drying) and are much less sericeous on shoots and young leaves than the earlier collections. The scales and capsules, however, are typical.

Your 14530 (2 sheets) from Dallas is *S. babylonica*, the weeping willow. Do you wish introduced species included in the write-up? Probably *S. fragilis* and *S. alba* occur, and possibly the former has escaped.

I now will draw off the distribution data, by counties, and plot the the range of each species and variety. I am including the material in the National Herbarium and my own willow herbarium (18,000 sheets), as well as that you have sent (Sou. Meth. Univ.; Sully Ross Normal; Texas A. & M.; and Univ. of Texas. Do they have a herbarium at the West Texas School at Lubbock? Arthur Leigh is an old friend.

I have determined willows for several Texas collectors, in recent years. Are all Cory's specimens in Herb. Texas A. & M. Where are Hinkley's specimens, which I have determined for Nat. Herb? I assume that they are in Nat. Herb. but they are far behind on mounting. Where is Sperry's material?

Will return carton express collect.

Cordially yours

Carleton R. Ball, Collaborator

SOUTHERN METHODIST UNIVERSITY
DALLAS, TEXAS

INSTITUTE OF TECHNOLOGY AND PLANT INDUSTRY

March 2, 1946

OFFICE OF THE DIRECTOR

Dr. Carleton R. Ball
Extension Service
U. S. Department of Agriculture
Washington 25, D. C.

Dear Dr. Ball:

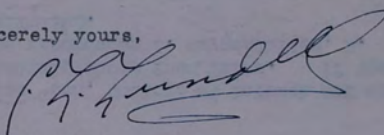
I was pleased to receive your letter of February 22 and the list of determinations. Very little collecting has been done on top of the Guadalupe Mountains or in other elevated portions of the Trans-Pecos country. Possibly that accounts for our failure to find Salix humilis and Salix tristis. I hope that you have been able to verify the records.

As to the weeping willows which have been introduced, I feel that their inclusion would be useful. S. babylonica appears to have escaped. Possibly S. fragilis has done the same.

You have seen the Hinckley and Sperry material in Texas herbaria. Most of their specimens are probably in the U. S. National Herbarium. Texas Technological College at Lubbock has a small herbarium, which might contain something of interest.

Most of Cory' material is at Texas A. & M., largely unmounted and not available.

Sincerely yours,


C. L. Lundell
Director

CLL:avj

(over)

Dr. C. L. Lundell,
Dept. Tech. & Pl. Industry,
Southern Methodist University,
Dallas 5, Texas.

March 8, 1946

Dear Dr. Lundell:

I have written to Leidigh at the Texas Tech. College at Lubbock and asked him to send me any willows they have, especially those from Texas. If they have collected locally we may get some good records on *S. amygdaloides*, *S. Gooddingii vallicola*, and some of the *Longifoliae*.

I am inclined to think that I have seen most of Cory's material because he sent me some of the willows direct (he used to work for me), and I have had some specims of 1943 and thereabouts referred to me by Dr. S. F. Blake of our Bu. of Plant Industry.

I am greatly gratified at the abundance of material from far Southwest Texas (Brewster, Culberson, Jeff Davis, El Paso, and Presidio Cos. This is extremely important because in that area, east and west, north and south, meet, and we need plenty of material to settle the questions that arise.

I will look into specimens of *S. alba*, *S. fragilis*, and *S. babylonica*. There probably has been some escaping, even in that area.

S. humilis Marsh. and *S. tristis* Aiton would be found only in the extreme northeastern part of the State, if at all. I have neither in my herbarium. In the Natl. Herb. is one specimen of *S. tristis* from Harrison Co., but no specimens of *S. humilis* from the State.

I think that I will ask Mo. Bot. Gard., N.Y. Bot. Gard., Gray Herb., and Arnold Arboretum to look into their collections from Texas and see if they find any specimens of either species. If there are any extant, now is the time to find them.

The more specimens I study, the less valid some of the supposed varieties appear to be.

Cordially yours

Carleton R. Ball
Collaborator

SOUTHERN METHODIST UNIVERSITY

DALLAS, TEXAS

INSTITUTE OF TECHNOLOGY AND PLANT INDUSTRY

March 18, 1946

OFFICE OF THE DIRECTOR

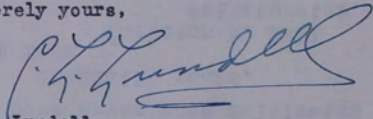
Mr. Carleton R. Ball
Extension Service
U. S. Department of Agriculture
Washington 25, D. C.

Dear Mr. Ball:

Thanks for your letter of March 8th. I intend to undertake extensive collecting in northeastern Texas this spring, and I will look for Salix humilis Marsh. and S. tristis Aiton. Please let me have the exact locality where each of these has been found in the state.

The Verhalen Nursery in Harrison County has many introductions. Could the record of S. tristis be from a nursery grown tree?

Sincerely yours,


C. L. Lundell
Director

CLL:avj

(over)

Dr. C.L. Lundell,
Inst. (Plant Indust. & Technology,
Southern Methodist Univ., Dallas, Texas.

March 29, 1946

Dear Dr. Lundell:

Replying to your letter of March 18, I would say that both *S. humilis* and *S. tristis* are upland, rather than stream bottom shrubs.

S. humilis grows to some 2 meters high, seldom in thickets, preferring clayey soils, and is found in open woods and open brush or at borders of thickets, etc., scattered here and there.

S. tristis is from 0.5-1 meter, usually single sparsely distributed plants, preferring sandy uplands but also on clays, in open grassland or woodland or edges of thickets, or rarely along the edges of alluvial lowlands.

Both are precocious in flowering but the staminate are conspicuous when in flower but not after leaves appear. Flowering probably is over now.

I intended to look up the *tristis* specimen at Natl. Herb. today but did not do so. Will do it next week. I doubt if any nursery handles this very small plant. I have never seen cultivated plant except in botanic gardens.

Cordially yours,

P.S. Both are easily identifiable from foliage specimens.

Carleton R. Ball
Collaborator

Digitized by Hunt Institute for Botanical Documentation

Dr. C.L. Lundell,
Dept. Technology & Plant Industry,
Southern Methodist University,
Dallas Texas.

April 4, 1946

Dear Dr. Lundell:

The lone Texas specimen of *S. tristis* Aiton (in U.S. Natl. Herbarium) is E.J. Palmer/ 13221, ~~from~~ "in moist sandy ground, Marshall, Harrison Co., (distr. as *S. humilis*). 3/29/1918. Open

There would seem to be no indication whatever that this was a cultivated plant, and as it almost never is cultivated, it could hardly be an escape.

That's all I know, and probably more. But you might write to said nursery and see what they know. Also Palmer might recall where he got it with reference to the twon.

Cordially yours,

Carleton R. Ball
Collaborator

Texas State Research Foundation

Dallas, Texas

MAILING ADDRESS

SOUTHERN METHODIST UNIVERSITY
DALLAS 5, TEXAS

August 28, 1946

Dr. Carleton R. Ball
Extension Service
U. S. Department of Agriculture
Washington, D. C.

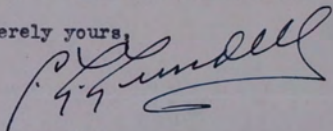
Dear Dr. Ball:

Since receiving your letter of last April we have searched for Salix tristis Aiton in the vicinity of Marshall without success. However, the habitat is typical of that where the species usually is found. S. tristis should be included in the flora, for I believe that it will be found again.

Various other collections of Salix have been made, and this material can be sent to you at your convenience.

I would like to receive your manuscript this fall for publication.

Sincerely yours,



C. L. Lundell
Director

CLL:avj

3814 Jocelyn St., N.W.
Washington 15, D.C.

October 10, 1946

Dr. C. L. Lundell, Director,
Inst. Tech. & Plant Industry,
Southern Methodist University,
Dallas, Texas.

Dear Dr. Lundell:

Woe is me! I'm in trouble again, as always.

I have just gone thro about 500 sheets of *Salix amygdaloides* and var. *Wrightii*, in my herbarium and the U.S. National Herbarium.

What has generally passed for var. *Wrightii* can be found all the way from Lower Canada to the Cascade Mtns. and southward, being most common in the souther part of the Great Plains area. This merely means that in a dry year we would collect only the variety and in a normal or wet year only the species. Nice mess!

I fell sure that we must restrict var. *Wrightii* to those plants with leaves shape much as in *S. nigra*, but glaucous beneath, or else not recognize it at all. The extreme is so different from the average for the country that it probably is wise to maintain the variety, even if it is largely physiological in origin. This restriction probably will limit it to the higher drier Great Plains from Nebr. south. The species will be found throughout the same area.

In order that my treatment my be uniform, I ought to see the material I have named in the past two or three years.

Will you share the burden by sending me your material of *Salix amygdaloides* and the var. *Wrightii* (or *S. wrightii*) from Texas? It might be well to include any from New Mexico and Oklahoma, as well.

I am more than ever impressed with the value of a thorough treatment of the Texas willows. Your State is the meeting ground for north and south, and east and west in floristics, and runs from subtropical sea-level marsh to high dry plains and rugged mountains. It is making me work but the end should make it worthwhile.

Cordially yours,

Carlton R. Ball

Carlton R. Ball

Texas State Research Foundation

Dallas, Texas

MAILING ADDRESS

SOUTHERN METHODIST UNIVERSITY
DALLAS 5, TEXAS

November 4, 1946

Dr. Carleton R. Ball
Extension Division
U. S. Department of Agriculture
Washington, D. C.

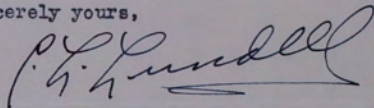
Dear Dr. Ball:

In response to your request to reexamine our material of Salix amygdaloides, we are sending you these specimens, and other recent collections mostly from Texas. There are 117 sheets of Salix in the lot. I believe that this additional material will be of interest.

How soon can you let us have your Salix manuscript? I would like to schedule your contribution for publication this winter.

With highest regards, I am

Sincerely yours,



C. L. Lundell
Director of the Foundation

CLL:avj

New York
November 6, 1946

Dr. C. L. Lundell,
Department of Plant Industry,
Southern Methodist University,
Dallas, Texas.

Dear Dr. Lundell:

I am inclosing pages 4-29 of the *Salix* manuscript. I have not yet finished the keys (pp. 1-3) nor the write-ups of *S. lasiolepis* and vars., *S. humilis* (if found), and *S. tristis*. These should not take long.

Much of the time has been spent in separating *S. nigra* and var. *Lindheimeri*, *S. amygdaloides* and var. *Wrightii*, *S. interior* and its two varieties, *S. exigua* and its two varieties, and these latter from each other and from *S. taxifolia*.

The mess has been caused largely by the fact that some earlier workers included two or three different things in their descriptions and in the collections cited, and sometimes shifted the name to an entirely different plant after its original application. This has required unusually extensive citation of synonyms and similar discussion and interpretation of the material.

As a result, the manuscript is not the simple manual style I had expected, but more in the nature of a contribution to knowledge of mixed-up materials. In the case of the worst mess of all (*S. interior* Rowlee, var. *angustissima* (Andersson) Ayton) I have put some of the explanation into the synonymy because it will be more easily understood there than away from the citations. Its hard enough to understand, at the best.

If you cannot use it in its present form, please be perfectly frank in your statements and suggestions.

You will recall that I had supposed that we would find both *S. humilis* and *S. tristis* in Texas, but found none of the former and only one collection of the latter in the Texas herbariums. None of either was found in my herbarium or the U.S. National Herbarium.

Recently I wrote to the Arnold Arboretum, Gray, Field Museum, Mo. Bot. Garden, and N.Y. Botanic Garden, asking them to scan their specimens from Texas and either send label copy or the specimens. N.Y. Bot. Garden promptly replied that they could find none of either species.

Will send the remainder of the manuscript shortly.

Cordially yours,

Carleton R. Ball
Collaborator

Reg. - Librarian

Dr. C.L. Lundell, Director,
Inst. Tech. & Plant Industry,
Southern Methodist University,
Dallas, Texas.

3814 Jocelyn St., N.W.,
Washington 16, D.C. November 12th, 1946

Dear Dr. Lundell:

I have just finished the identifications of the 117 (not counted) specimens sent me recently. I inclose 4-page list of them. I made full label records and added notes on only the more important specimens, merely listing the others by Co. and Number.

Tomorrow, I will try to pack them and return them by express. As I have always assumed that denominational colleges are poor, and especially the botany departments, I had intended to pay the return express myself, in return for the privilege of seeing and noting the material. However, when I found that new herbarium sheets had been used between the specimens (tho not so good as newspaper because slippery) and that new heavy genus covers had been folded to make wadding in the ends of the carton, I assumed that you must have more money than you can spend, so I send them collect.

The hitherto undetermined specimens covered much important area, especially in central and west Texas, and will mean many additions to some counties and the addition of several more counties. The restudy of *S. amygdaloides* and var. *Wrightii* did not make many changes of identification.

I wish you would consult with Miss Whitehouse about the 5 specimens of *S. taxifolia* listed, with comments, at the bottom of page 3, herewith. Altho the labels show them to be from 5 localities in 3 counties, I would take oath that all 5 came from the same place and from the same plant. As all were collected in 1941, the evidently have been lost somewhere and quite possibly got mixed up somehow. They all differ from normal *taxifolia* (see the 2 Correll specimens with these), as noted in comments, and all 5 are practically identical which never happens with different plants from different places and seldom with different plants from the same place. I shall not enter them in my copy of the mss. until I hear from you. The numbers on the labels have no relation to the problem because they are some of the 1946 numbers, the next succeeding being from other parts of the State.

I note, under *S. nigra* on p. 5, that the Crosby Co. specimen has no collector, as well as no locality of number. I have scanned all the list of Texas determinations I have but do not find it. Will look at US Nat. Herb. and my own tomorrow, and see.

In *S. Gooddingii* var. *vallicola*, on p. 9, the capsules are described as "3.5-7" mm. long. This should read 5.5-7, instead.

When I first determined Rogers McVaugh's No. 7234 from Randall Co., I named it *S. interior* Rowlee (approaching var. *pedicellata* by narrow leaves. Later I evidently entered it in the mss. under the variety. In your recent shipment was another specimen of this number and the leaves are much wider. The entry should be transferred, therefore, from var. *pedicellata* to *S. interior*.

Have finished the description and discussion of species and am working on the keys. Hope to get most of that typed tonight, but it always takes longer than expected.

Cordially yours,

Carleton R. Ball

3814 Jocelyn St., N.W.,
Washington 15, D.C.

Dr. C. L. Lundell, Director,
Inst. of Technology & Plant Industry,
Southern Methodist University,
Dallas Texas.

November 14, 1946

Dear Dr/ Lundell:

I find 3 questions which I have not yet asked you, and maybe more will turn up. (You see that 3 more have turned up).

1. Brewster Co., B.H. Warnock T 123, *S. lasiolepis* var., is labelled: "Buena Vista, west of Alpine, Brewster Co.". The only Buena Vista in my atlas is in northern Pecos Co. Do you know if there was one in Brewster also? Do you know where Warnock is?

2. I find that I have many specimens by a "C. H. Muller" and "C.H. Mueller". Do you know which is the correct spelling. It has gone into the manuscript in both ways.

3. Your 14251 was determined by me as *S. irrorata* Andersson. Full study of abundant material of both *S. irrorata* from Colo., New Mex., and Ariz., and the narrow-leaved variety of *S. lasiolepis* from Texas, New Mex., and Arizona, shows that the pubescent *S. lasiolepis* occasionally has more or less pruinose twigs and that your 14251 (Jeff Davis Co.) belongs there rather than with the glabrous *S. irrorata*. I inclose an annotation label for it.

4. When the county in which specimens were collected is not known, how do you prefer to indicate it? I note that "County Undetermined" is used in the sample issue sent me. I have used "County Unknown" or "----- Co. (?)" in the manuscript, I think.

5. Are you having novelties (new species, varieties, forms, and combinations published in Flora, or submitted to journals for publication. I prefer not to publish them in a Flora, altho I did in Standley's Flora of Glacier Natl. Park, because of lack of time to get them out elsewhere. It was especially unfortunate because the treatments there were so very brief. Your Flora is much more ample in treatment, and you already have permitted full descriptions. I have just discovered that apparently the combination "*S. Gooddingii* var. *valliscola* (Dudley)" has not actually been published. Will search farther tomorrow.

6. Are introduced species to be included unless positively known to be escapes from cultivation? If I recall correctly, both *S. babylonica* and *S. fragilis* have been represented in the collections referred to me but I have not included these species in the manuscript because there was no indication that they were true escapes.

Cordially yours

P. S. Carton of willows just received
and I'm working on them.

Carleton R. Ball

Texas State Research Foundation

Dallas, Texas

MAILING ADDRESS

SOUTHERN METHODIST UNIVERSITY
DALLAS 5, TEXAS

November 19, 1946

Dr. Carleton R. Ball
3814 Jocelyn Street, N. W.
Washington 15, D. C.

Dear Dr. Ball:

I am pleased to have your Salix manuscript which appears to be in excellent form. Since you will want to include the new records from the lot of willows recently sent to you, shall I return your manuscript, or insert the material here?

Regarding your inquiries, Dr. Warnock is in the Department of Botany at the University of Texas. He could give you the exact location of Buena Vista.

Muller formerly spelled his name Mueller, and both spellings occur on his labels. I suggest that you cite the collections with the name as spelled on each label, and explain the discrepancy in a footnote.

I note that Salix irrorata does not occur in the state. It was impossible for me to distinguish my 14251 from S. lasiolepis.

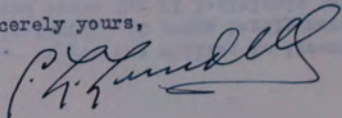
When the county is unknown, please use "County undetermined", as in the Flora of Texas.

I would prefer to publish your novelties, new combinations, and miscellaneous notes in our botanical journal, Wrightia. The next issue of Wrightia will be ready for printer in January.

Please include the introduced species of Salix, but point out that their naturalization is still uncertain.

Under separate cover, I am sending you a copy of Wrightia.

Sincerely yours,



C. L. Lundell
Director of the Foundation

CLL:avj

(over)

3814 Joscelyn St., N. W.,
Washington 16, D.C.

Dr. C. L. Lundell,
Texas State Research Foundation,
Southern Methodist University,
Dallas 5, Texas.

November 23, 1946

Dear Dr. Lundell:

Your letter of nov. 19 is here and noted. If you are willing to insert the recently determined county records, please do it there. It seems hardly necessary to return the Mss. just for that. I have entered those for *S. lasiolepis* var., in the portion being sent today.

I inclose the introduction and keys (pp. 1-3b) and the descriptions of the remaining four species (*S. la siolepis* var., *S. humilis* var. *rigidiuscula*, *S. babylonica*, and *S. fragilis*), covering pp. 3a-3c.

As you will see, I have added *S. babylonica* and *S. fragilis* at the end and have not given them serial numbers, as there is yet no proof that they are other than cultivated. If you would prefer to have them inserted between *S. caroliniana* and *S. interior*, where they stand botanically, feel free to put them there. I have keyed them at that point. The keys were done when your letter came so I had to rewrite them.

Your No. 14251, *S. lasiolepis* var., had somewhat pruinose 1-yr. and 2-yr. twigs, according to my notes in the list of determinations. Pruinosity has never been reported for *S. lasiolepis* or any of its varieties, whereas the Colo.-N.Mex. *S. irrorata* always has them. That is why I labelled it *S. irrorata*. Several of the N.Mex.-Texas specimens of *S. lasiolepis* var. have from faint traces to well-marked pruinosity and that has been noted in the mss.

I will write Warnock about Buena Vista. I am glad to know where he is at. Does Eula Whitehouse hold out with you. Is cory with you or still at Texas A. & M? I would like addresses for Shimmers, Hinchley, and Sperry also, as I wish to send reprints of my recent paper.

More Plant Study

Separately, I send you 3 copies, for self and assistants, if you can use them and would like to know who gets them, so as not to duplicate sendings.

I note your suggestion about Muller or Mueller. That would be desirable handling but I am afraid I may not have been wholly accurate in copying in all places. If Muller, as I assume, was his final choice, it would seem best now to put them all as Muller, with footnote from the first time used. Will try to give you a list of the entries, unless you have help enough to dig them out.

Will consider the Wrightia proposition when I know what needs publishing. I do want to publish somewhere, for historical purposes, just what Andersson and other did with poor little *S. interior* var. *angustissima*.

Cordially yours,

Carleton R. Ball

5814 Jocelyn St., N.W.,
Washington 15, D.C.

November 25, 1946

Dr. C. L. Lundell,
Texas State Research Foundation,
Southern Methodist University,
Dallas 5, Texas.

Dear Dr. Lundell:

I have inserted the recent collections, by species and counties, in my copies of the mss. There were so many new entries for *S. nigra* var. *Lindheimeri* that I could not interline them on p. 7, already somewhat interlined. Therefore I have rewritten p. 7 and inclose copy. On p. 8 you will need to insert the Wilbarger and Wise Co. additions.

C.H. Muller's name appears first on p. 7, under Shackelford Co. Please insert there an asterisk and make suitable footnote explanation, if you approve my suggestion in previous letter.

I noted previously, also, that on p. 5, under *S. nigra*, there is a Crosby Co. citation of a specimen without locality and number, in 1926. Either it had no collector named or I omitted the name. I cannot find this specimen in my herb. or in U.S. Natl. Herb., nor did I catch it by scanning the Texas lists of determinations. Perhaps it should be omitted, unless you know who it was.

For *S. fragilis*, on p. 36, no counties are listed. I wrote the description because I thought I remembered a specimen in the Texas determinations but cannot find it in the lists. There are no specimens in my herb. or U.S. Natl. Herb. from Texas. I believe it should be left in mss., however, because I am sure it is planted in the State. I have it from Ark., N. Mex., and Colo. Use your own judgement. There may be specimens in Texas herbariums which were not sent, if filed with foreign species or in "cultivated" covers.

On p. 9, the capsule length for *S. Gooddingii vallicola* should read 5.5-7 mm, instead of "3.5-7".

On p. 11, capsule length for *S. amygdaloides* should read 4-5 or 5.5 mm. instead of "5-5 or 6".

On p. 16, line 10, change villous to villous.

On p. 16, line 13, insert hyphen in style length.

On p. 25, change El Paso Co. to El Paso Co.

On p. 25, line 13, change remotely to remotely.

I sent you the ribbon copy of the mss. before I had fixed in my mind the way you wanted undetermined counties cited. There will be a few points where you will wish to change my "----- Co.(?)" to County Undetermined. These all were placed at the end of the county lists, so will not be hard to find.

Must now get busy on the two taxonomic problems and then to work on Idaho and Alaska-Yukon willows.

Appreciating your friendly cooperation, I am

Cordially yours,

Carleton R. Ball

Carleton R. Ball

Texas State Research Foundation

Dallas, Texas

MAILING ADDRESS

SOUTHERN METHODIST UNIVERSITY
DALLAS 5, TEXAS

November 27, 1946

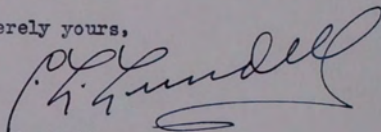
Dr. Carleton R. Ball
3814 Jocelyn Street, N. W.
Washington 15, D. C.

Dear Dr. Ball:

This is to acknowledge receipt of your letters of November 12 and 23 with the determinations and the remainder of the manuscript. I have asked Dr. Whitehouse to write to you regarding her collections of Salix taxifolia. Dr. Whitehouse and Mr. Cory are both with us. Sperry is now at Texas A. & M., and Hinckley is still at Marfa.

I will not start work on the manuscript until you have an opportunity to straighten out the collections being questioned.

Sincerely yours,



C. L. Lundell
Director of the Foundation

CLL:avj

Dr. C. L. Lundell,
Texas State Research Foundation,
Southern Methodist University,
Dallas 5, Texas.

Washington 25, D.C.
November 28, 1946

Dear Dr. Lundell:

1. Field Museum finally reports no specimens of either *S. humilis* or vars. or *S. tristis* from Texas. Harvard not yet heard from.

2. On page 1 of mss. I have used the word "genuses" instead of genera. English is very difficult at best. There are more than 40 different forms of Latin plural nouns. All of them just as well be replaced by the common English plural. I am doing it. I hope you will let me. Half the scientists who use the word "data" don't know that it is plural and enough editors don't so that it gets into print once a week. None seem to know the number of the ever-popular "agenda".

✓ 3. Under *S. lasiolepis* var., for Brewster Co., add Warnock 474.

✓ 4. Under *S. nigra*, from Cameron Co., draw down Studhalter 1165 so as to place it in Crosby Co., where it belongs, according to U.S. Natl. Herb. specimen.

5. Copies of *Wrightii* received. Thanks. Will look 'em over soon.

6. Sorry to bother you so much.

Cordially yours,

Carleton R. Ball

3814 Jocelyn St., N.W.,
Washington 15, D.C.

Dr. C. L. Lundell,
Texas State Research Foundation,
Southern Methodist University,
Dallas 5, Texas.

December 13, 1946.

Dear Dr. Lundell:

ML I have examined the specimen of Palmer 13221 from Arnold Arboretum and shall leave it under *S. humilis* var. *rigidiuscula*. It also is only juvenile but one of the two portions on the sheet has ~~immediately~~ some of the leaves broadly lanceolate to narrowly obovate and, taken by itself, would almost pass for the species. Because most of the specimens seen look like the variety, and because Revochán's two specimens from adjacent counties are the variety, it seems best to forget the species until proof is found.

I would like to drop a footnote from the first paragraph on p. 34 (county list) about as follows:

a. The author greatly appreciates the courtesy of the Missouri Botanical Garden and the Arnold Arboretum in sending their material of this variety for study, and that of the Chicago Natural History Museum and the Gray Herbarium for making sure that they had no Texas specimens.

Today, at the Natl. Herb., C.V. Morton asked me to determine two specimens for him. They proved to be Omer Sperry's Nos. T 450 and T 624 from from Old Ft. Pens Blanca Spring, Brewster Co., March 26, 1938. I determined them as *S. Gooddingii* var. *vallicola*, and now note that we have them under that var. in the mss.

Do you know what the "T" stands for. It seems to be found on only part of his collections.

Cordially yours,

Carleton R. Ball

J. R. ...

Texas State Research Foundation
Dallas, Texas

MAILING ADDRESS
SOUTHERN METHODIST UNIVERSITY
DALLAS 5, TEXAS

December 20, 1946

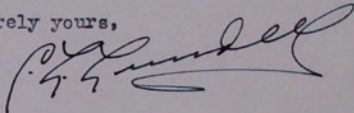
Dr. Carleton R. Ball
3814 Jocelyn Street, N. W.
Washington 15, D. C.

Dear Dr. Ball:

Your letters have been received giving additional data on Salix
species in Texas, and these data will be incorporated in the manuscript.
I deeply appreciate your careful and thorough work.

With best wishes for the Holiday Season, I am

Sincerely yours,



C. L. Lundell
Director of the Foundation

CLL:avj

Dr. C. L. Lundell,
Inst. of Technology & Plant Industry,
Southern Methodist University,
Dallas 5, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.

June 28, 1948

Dear Dr. Lundell:

Recently I determined several hundreds sheets of *Salix* for Dr. House of the New York State Museum at Albany, much of accumulated material. I listed the few from Texas and give you the record below.

Salix amygdaloides Andersson, var. *Wrightii* (Anderss.) Schneider

El Paso Co. El Paso, Miss E. M. Slater (no Number), June, 1923.

Salix nigra Marshall

Orange Co. Beaumont, Robert L. Crockett 41, March 26, 1940; 168a, April 8, 1940.

Salix nigra Marsh., var. *Lindheimeri* Schneider

Orange Co. Beaumont, R. L. Crockett 33, March 29, 1940.

Victoria Co., Victoria, R.L. Crockett 317, April 12, 1940.

Salix interior Rowlee, var. *angustissima* (Andersson) ined.

El Paso Co. El Paso, Miss E. M. Slater (no number), May, 1923.

I have not taken time to check these against the Texas manuscript but they probably do not add any localities for any of the four entities. The specimens may be worthy of entry, if not already there.

Cordially yours,

Carleton R. Bell

P.S. Some one told me recently that Victor L. Cory had transferred from the State range work to your institution. Is that correct? If so, give him my regards and tell him I don't know how he will stand the high humidity.

On file (Lundell, Texas mss)

TEXAS RESEARCH FOUNDATION

RENNER, TEXAS

June 29, 1948

Mr. Carleton R. Ball
3814 Jocelyn Street, N. W.
Washington 15, D. C.

Dear Mr. Ball:

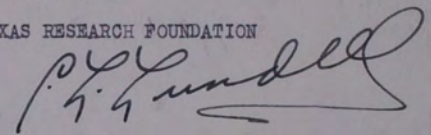
Thanks for your letter of June 26 together with the additional Salix records for Texas. These will be entered in the manuscript.

Mr. V. L. Cory was retired from Texas A. and M. in 1946, and he has been with us for two years. He is our field botanist, doing what he likes best - collecting.

With kind regards, I am

Sincerely,

TEXAS RESEARCH FOUNDATION



C. L. Lundell
Director of the Foundation

CLL:bjr

3814 Jocelyn St., N.W., Washington 15, D.C.

Dear Dr. Lundell:

9 March, 1950.

Some questions which have arisen lately make me interested to know if the Flora of Texas for which I furnished the treatment of Salix in 1948 has yet been published.

If it has not I will not be embarrassed in any way but I will be glad to know what progress has been made in that direction.

Do you care for reprints of my Salix papers, covering all areas, or just those which deal with southern or southwestern material and problems? Cordially yours,

Carleton R. Ball

TEXAS RESEARCH FOUNDATION

RENNER, TEXAS

March 13, 1950

Dr. Carleton R. Ball
3814 Jocelyn St. N. W.
Washington 15, D. C.

Dear Dr. Ball:

Your treatment of the genus Salix in Texas is scheduled to be published this spring. The various additions which you have sent to me have been incorporated in the manuscript, which I am enclosing for a final check by you. As soon as you return the manuscript, I will edit it and send it to printer.

I will be grateful to receive a complete set of your Salix papers. Slowly I am accumulating a botanical library, and all gifts are most welcome.

With best wishes,

Sincerely,

TEXAS RESEARCH FOUNDATION

C. L. Lundell
Director of the Foundation

CLL/je

enc.

(over)

Dr. C. L. Lundell,
Texas Research Foundation,
Romer, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.,

9 May, 1950

Dear Dr. Lundell:

In reply to our correspondence of last March, I am mailing, insured and special delivery, your rewrite mss. of Texas willows. I greatly regret this delay which has been caused by severe cases of virus flu in both Mrs. Ball and myself, and by preparations for a hospital operation for her.

Attached is a memo.-sheet showing special changes (with page locations) that have been made in this mss. An x or two in the right margin indicates that they have been made. I'm sorry that I overlooked the two minor additions required on page 41. I will get them in a day or two and send them to you but if they don't come before you are ready to forward the mss. just delete the items and send it along.

Attached also is a sheet with the two fuller bibliographies of *S. babylonica* and *S. fragilis*, printed weeks ago. Use them or not, just as you please.

Yesterday I mailed you reprints of all my *Salix* papers still available. Hope they come safely and are of some interest.

The two new varietal combinations: *S. Gooddingii*, var. *variabilis* (p. 12) and *S. lasiolepis* var. *braceliinae* (p. 37) are marked ined., just as a precaution. They go forward in mss. to the Washn. Academy of Sciences in a few days and should be published by midsummer. I will keep you informed and will send the proper citation as soon as known so that they may be entered in galley proof, if not before.

Appreciating your courtesy and patience, I am, Cordially yours

Carleton R. Ball

P.S. More woe! On Nov. 28, 1946, I wrote you to transfer Studhalter 1165 from Cameron Co., as typed, to Crosby Co. This you have done, on p. 8 of the retypo. But in both of our mss. it reads: "s.l. & s.n. in 1926". If it has the number 1165, it surely cannot be s.n. I cannot find it on any list I sent you, so will look at the USN. specimen again at once and send data.

(over)

Dr. C. L. Lundell, Director,
Texas Research Foundation,
Remmer, Texas.

3814 J. celyn St., N.W.,
Washington 15, D.C.

18 March, 1950.

Dear Dr. Lundell :

Your letter of 13 March, and the retyped manuscript on the willows of Texas, are received. I have spent two days in going over the manuscript line by line. Some matters are not yet settled but I can write you of some items. You doubtless have a carbon of the retyping, in case you wish to begin checking.

I had omitted any heading for the keys on floral characters. The one typed on the retyped mss. reads: "Keys to Texas Willows Based on Fertile Material". I have changed the words "Fertile Material" to read "Floral Characters, to agree with "Vegetal Characters" in the first key.

2. In the keys on p. 5, an error has been made in the indentation of the 2 items on aments, as I have indicated on the mss. They should have intermediate ~~in~~ indentation between "Flower Schales" and the 2 on Stamens.

3. In the retyping, a change has been made in the position of the second and succeeding lines of any item, where there was more than 1 line. I had indented the second line strongly, so that it was shorter than the first line of the next item. In the mss. now, the second line is indented exactly the same as the first line of the next item, which tends to make the latter harder to find. For printing purposes, these 2nd and 3rd lines, if any, could be indented 2 or 3 spaces and the first line of the next lower item indented 2 or 3 more spaces.

4. On p. 8, retyped, I note that "R.A. Studhalter 1165" is entered under Crosby Co. In my carbon it still is typed as the 5rd specimen under Cameron Co. If this was a required change you probably have some notation on p. 5 of my manuscript.

5. On your page 8 (S. nigra specimens) I find three comments inserted which I do not have in my mss. They probably are my comments on specimens. Under Sterling Co. the words "(not S. amygdaloides, var. Wrightii, as named)" follow the specimen cited. Under Taylor Co., the entry of Tolstead 7323 is followed by "(with pubescent scas. twigs and petioles but listed prev. as var. Lindheimeri)". This number, 7323, has been entered in ink under Taylor Co. for S. nigra but it still remains under var. Lindheimeri in both my carbon and your retyping. I assume that it should be deleted from both.

6. On page 8 of your retype, Tarrant Co. now appears after Tom Green Co., instead of before Taylor Co., as in my mss.

7. Under S. nigra var. Lindheimeri on p. 11, you have a Whitehouse 10958 entered. In my copy, it reads 10958. If mine was an error, you probably have a note on page 8 of my mss. *This was 10958 as det 20/11/46*

8. In the retype, you have followed me throughout in not using capitals initials for ed. (edition), f. and fig. (figure), etc., but in all cases except your page 7 (S. nigra) you have changed pl. (plate) to Pl. See S. longipes, p. 20, line 2; S. interior, p. 22, lines 1, 6; S. longifolia, p. 23, line 1; and S. taxifolia, p. 35, l. 4. Also on this page, line 8 of S. taxifolia, illus. is written Illus.

9. In a memo to you, attached to the mss., "Betty" says that she cannot find any Lundell 14504c under Oldham Co. of S. amygdaloides to transfer to the var. Wrightii. In my mss. and your retype, the No. is give as 18504c, so I must have made an error in listing it for the change.

Cordially yours,

Will write further very soon.

Carleton R. Ball

Dear Mr. Standell:

18 March, 1950

After going thro a lot of correspondence, I find that you can disregard items 4 and 7 in my letter of today.

4. I find I had asked you to transfer Stadhalter 1165 (S. nigra) from Cameron Co. to Crosby Co., as it is labeled in the U.S. Nat. Herb.

7. On Nov. 20, 1946, I sent you a list of determinations including Whitehouse 10958 (S. nigra Lindheimeri), but entered it wrongly as 10898 in my msg. Sorry.

This card should reach you before any time is wasted on those 2 queries.

Cordially yours,

Carleton R. Ball

Digitized by Hunt Institute for Botanical Documentation

18 march 1950

Dr. Lundell:

Mr. Ball asked that we make the following transfer: *S. AMYGDALOIDES* Anderss., var. *WRIGHTII* (Anderss.) Schneider, Oldham Co., 14504 C from *S. amygdaloides*, but there isn't a number like that listed.

On page 4 of his additions, he has listed *SALIX* *IRRORATA*, but I cannot find where this one goes.

Betty

Dr. C. L. Lundell, Director,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.

19 March, 1950.

Dear Dr. Lundell:

After mailing you my 9-point letter of 18 March, I wrote you a card saying that I had found my records on Nos. 4 and 7, and that they needed no further attention.

In No. 5, I referred to three comments on specimens which you had inserted in the retype of *S. nigra* on p. 8, but discussed only the first two of them. I now have found all three of these comments in my list of determinations of 20/11/46. Accordingly I will delete Tolstead's 7323 from *S. nigra* Lindheimeri in Taylor Co. and you can do the same from your carbon and my original mss.

10. The other comment you inserted, but I failed to discuss in No. 5, was: ~~XXXXXX~~ (first and third not *S. amygdaloides*, as named), which was inserted after the series of 4 Whitehouse numbers of ~~XXXXXX~~ Lindheimeri in Wilbarger Co. That comment was correct when I wrote it after Whitehouse 10940, 10941, and 10954. But in the mss. these three numbers follow her 9865 in Wilbarger Co. Therefore the comment must be changed to read: (2nd and 4th not . . .). This I have done in my carbon and the retype.

11. My mss. as sent to you contained only parts of the proposed bibliography of *S. babylonica* and *S. fragilis*. * I inclose more complete data for each, if you care to use them. I note that numbers 10 and 11 have been assigned to these 2 species, respectively, and am adding same to my carbon copy. I did not number them originally because some mammals do not assign numbers to introduced species.

12. No Texas specimens are cited for *S. fragilis* and I find that I have none in my herbarium. Will look up Natl. Herb. and Natl. Arb. Herb. I have several from Ark. and Okla. and it seems impossible to believe that it is not growing in Texas.

13. In the retype, Donley Co. often was spelled Denley. I think that I have caught all of the cases but you might keep your eye out for it.

14. On p. 41, a footnote was omitted, and I have inserted it.

15. This is none of my business, but as a lifetime writer and editor I venture to mention it. I note a tendency to carry over 1 or 2 or 3 last lines of a paragraph to the next page when it could have been completed on the page where started. See pp. 7-8, 13-14, 14-15, 22-23, 23-24, 24-25, 25-26, 30-31, 32-33, 33-34, 34-35, and 42-43. In several cases, if a paragraph had been so completed, a paragraph splitting would have been avoided at the bottom of the next page. In other cases, instead of leaving a wide space at the bottom of a page and carrying a few lines forward, a new paragraph is started at the extreme bottom, as on pp. 8, 9, 12, 14, 21, 29, 30, and 42.

16. The combination *S. Gooddingii* var. *vallicola* (Dudley) has never been published, and the variety under *S. lasiolepis* has never been published. I am writing those up, and that was why I asked you when my paper would be published. In our correspondence, I note that you suggested publishing any novelties in *Wrightia*. When do you expect my paper to get into print, roughly? If I sent you these 2 write-ups for *Wrightia* could you get them out ahead of my paper? And could I add two others to these two? They deal with Rocky Mtn. species, reducing 1 to a var. of 1 species and 2 others to vars. of another.

Cordially yours,
Carleton R. Bell

Will write further about any changes in those two,
in this manuscript, and return your retype.

done in
carb + retype

S. nigra
carbon
retype

* Will send
later

TEXAS RESEARCH FOUNDATION
RENNER, TEXAS

March 22, 1950

Dr. Carleton R. Ball
3814 Jocelyn St. N. W.
Washington, D. C.

Dear Dr. Ball:

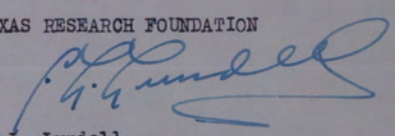
Your letters of March 18 and 19 together with your post card have been received and noted. As to the publication of the transfer and the new variety, these could be included as footnotes in the Flora of Texas. New species have been handled thus in other issues. Your paper on Salix in Texas is scheduled to go to printer in May, and the issue of the Flora should be off press by October.

As to Wrightia, no early issue is planned, for no manuscripts are now at hand.

With best regards,

Sincerely,

TEXAS RESEARCH FOUNDATION



C. L. Lundell
Director of the Foundation

CLL/je

Dr. C. L. Lundell, Director,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.

23, March, 1950.

Dear Dr. Lundell:

Some questions have arisen in connection with my writing up of the new comb., *S. Gooddingii* var. *vallicola* (Dudley) and the new variety of *S. lasiolaris*, which were contained in the *Willows of Texas* manuscript. These have to do with the citing of herbarium specimens.

I inclose a rough draft copy of the first page of my listing of specimens of var. *vallicola* from Texas. It includes all of those from Hemphill Co. southward to Brewster Co. But not those from Presidio, Jeff Davis, Culberson, and El Paso Cos., plus a few more from Brewster. You will note that I have included label data in full, and also containing herbarium by initials.

The first series of questions refers to your estimate of the value of such information to the workers in Texas and the other States in which these two vars. occur. I will greatly appreciate your frank opinion, with the understanding that the paper is to be published here in Washington.

1a. Do you believe that the data on height and trunk diameter of the individual collections are of sufficient value to workers to justify publication?

1b. Do you believe that the items on relative abundance at the given localities are ditto?

1c. Do you believe that the data on exact habitat and locality of collection are ditto? They might be for isolated occurrences, as in the northern counties but not for areas of common occurrence, as in SW. Texas.

1d. Do you believe that the full dates of collection are ditto, especially when no data are given on stage of development of the specimen?

1e. Do you believe that the initials of containing herbariums are ditto? I have assumed that all of the specimens I received are in Sou. Meth. Univ. herb. but do not know. By the way, is all of that material still there with them or do you have it in a Tex. Res. Fnd. herbarium? Many specimens came direct from the other institutions for identification.

The second series of questions covers your judgments on these problems in case I should submit this mss. to Wrightia, where you may have to count costs.

2a, b, c, d, e, are the same as 1a, b, c, d, e. The full Texas Data will occupy about 3 mss. pages as written. You know how much it occupies in my Texas willow mss., where only the bare identifying data are given in citations. ~~It would be a good idea to have a separate page for each specimen, giving the full data as in the Texas willow mss., and then to cite only the bare identifying data in the citations.~~

2c, b, c, d, e, would apply to the specimens from the other States and Mexico. These probably would occupy another 3 pages of mss. If I cited also the specimens of the species, for purposes of differentiation, they would need another page, perhaps more. It might be possible, either in Wrightia or other publication, to merely refer to the citations of Texas specimens in my *Willows of Texas*, if it were considered sufficient to include only the bare identifying data for specimens.

By the way, what is the title of journal series in which my *Willows of Texas* will appear?

Hope it won't burden you too much to give me your opinion on these problems, in the two cases postulated.

Cordially yours,

Carleton R. Ball

TEXAS RESEARCH FOUNDATION

RENNER, TEXAS

April 11, 1950

Dr. Carleton R. Ball
3814 Jocelyn St., N. W.
Washington 15, D. C.

Dear Dr. Ball:

With reference to your letter of March 23, I take up your questions in sequence;

1a. For a species of widespread distribution, I see no need for giving all data on labels regarding height and trunk size. The description of the plant is the place for giving range in size. For a rare species, known from only a few localities, the presentation of all details may be desirable.

1b. Regarding relative abundance, this is useful. Usually rarer things are collected much oftener than common ones; hence are more likely to have better herbarium representation.

1c. Data on exact habitat and locality are justified only where the plant is rare.

1d. Dates of collection are useful, but I prefer to state period of flowering and fruiting in the technical description.

1e. Initials of herbaria are useful, but by no means necessary, except for types and isotypes.

A complete set of my own willow specimens is at Southern Methodist University. A set of duplicates is in our herbarium here at the Texas Research Foundation.

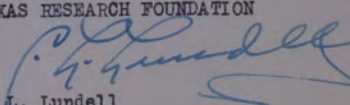
In response to 2a, b, c, d, and e inquiries, I consider that a reference to the citations of Texas specimens in your willows of Texas would suffice.

Your write-up of the genus Salix in Texas will appear in the Flora of Texas, Volume 3, Part 5.

With best wishes,

Sincerely,

TEXAS RESEARCH FOUNDATION


C. L. Lundell
Director of the Foundation



Dr. C. L. Lundell, Director,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St.
Washington 15

11 May, 1950.

Dear Dr. Lindell:

In further reference to mine of 8 May, here are the data on the two points left unsettled.

Studhalter 1165, *S. nigra*, in Crosby Co. (p. 8 of retype). The label reads: Silver Falls, Crosbyton, May 13, 1926. Therefore, it would seem that the words "s.l & s.n. in 1926" should be deleted. I don't know now how they got there.

On page 41 of retype, the stipules are "5-10" mm. long. The leaf sizes would be better if rewritten as follows: "6-10 cm. long by 1-1.8 cm. wide or, on vigorous shoots, 12-15 by 2-2.5 cm.,

Thanking you for making these changes, I am

Cordially yours,

Carleton R. Ball

UNITED STATES DEPARTMENT OF AGRICULTURE
COMMODITY CREDIT CORPORATION
WASHINGTON, D. C.

Dr. C. L. Lundell, Director,
Texas Research Foundation,
Renner, Texas.

3814 Jocelyn St., N.W.,
Washington 15, D.C.

3 August, 1950.

Dear Dr. Lundell:

The say "All God's chilluns got troubles". I have, and pass 'em along to you. When I decided on the varietal name *Bracelinae* for the narrow-leaved variety of *S. lasiolepis*, I consulted an internationally known taxonomist as to the proper feminine ending. He consulted the "rules" and assured me that without exception, it should be "iae". I so inserted it in the Texas manuscript.

Naturally, I spelled it with iae in the paper for Jour. Wash. Acad. Sci. Now I am told that, without exception, the feminine ending is "ae". The desired changes in the Texas mss. will be as follows:

On pages 3a and 3b (keys), delete the i from the varietal name.

On page 30, in title line, " " " " " " " "

At two points where ~~this~~ variety is mentioned in the discussion, the name apparently was not inserted. These are on page 32.

Page 32, par. 2, line 3, delete ~~this~~ the words: "this lasiolepis;
line 4, after variety insert Bracelinae

Page 32, par. 3, line 1, delete "the" and "under discussion", and
insert *Bracelinae* after variety.

If the paper is already in press, it may not be worth while to make the changes suggested for page 32.

Cordially yours,

Carleton R. Ball