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MCCH 9743

GENERAL INFORMATION ON OUR HERBARIUM

CAPE HATTERAS NATIONAL SEASHORE

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Park Technician
1-29-1974

WHAT IS A HERBARIUM ?

A Herbarium is a collection of identified plants. You may consider it as a "Plant Museum"

WHAT IS ITS PURPOSE?

It is a tool to help you identify a plant, or to check an identification you have made. If you can't find a specimen of the plant you have placed a name on, and are quite sure you are right, you may want to mount it and put it in the herbarium to help someone else who may look for it later. Or if there is no other plant from the locality in which you got yours, it would be good to leave your specimen as a record from that area.

In a listing of the specimens in a herbarium, you should be able to get a good idea of what plants are growing in the area, what sort of area (habitat) it grows in, ~~and~~ what its range or distribution is, and variations in the species.

If you want to know what a certain plant looks like, you can see by going to the herbarium .

The more complete a herbarium is, of course, the better it is. If you aren't sure of an identification you have made, it is good to have a sample of all the possibilities to compare your specimen to - this involves having a collection of everything possible, and correctly identified.

Its purpose then, is to help you to identify a plant you want to know, to learn the habitat of ~~the~~ various plants, and to know what is growing in the area.

CHANGING INCORRECT NAMES

It is standard herbarium policy that a professional who knows a plant to be incorrectly named on a sheet has the privilege to change the name on the sheet. This is done by typing the correct name and authority (who gave the plant that name) of the plant with the correctors name and date of correction and gluing this onto the sheet above the present label. This then is the name it should be filed under.

It is good to have professionals check the names ~~as~~ as they use the herbarium. In this way we may be more sure of having plants correctly identified.

LABELS

A good label should include the following information: Latin name and authority (underline the Latin words) , Common name, habitat, locality in which collected (so that someone could return to look for it), date collected, collector, identifier. Sometimes some added notes are helpful. Mention such things that may not be recognizable in the future: color of flower or fruit, sex of plant (where applicable), or unusual attributes of your collection (like unexpected abundance or rarity).

THE SPECIMEN

It is good to have specimens in as many stages of the plants life history as possible : in flower, in fruit, vegetative, in twig. If frequently infested with galls (from insects) , this condition would be good to be recognized.

MOUNTING

Standard herbarium sheets measure $16\frac{1}{2}$ in. x $11\frac{1}{2}$ in. Stiff paper of this size should be used. The label usually goes in the lower right hand corner of the sheet. When placing your specimen bear this fact in mind, and experiment so your plant will fit.

The specimen to be used should be pressed between a folded page of newspaper, and dried quickly to retain color. A plant press of alternating corrugated cardboard and blotter paper should be used to flatten the specimen.

A water soluble glue is used to hold the plant down at first. This glue is diluted ~~aw~~ by spreading it on a large plate of glass with a small paintbrush and by adding water to this. The right consistency of glue will allow the brush to freely pass over the surface, but will have a slight drag.

After experimental placings of the specimen on the sheet to see which way fits best, lay the specimen onto the glue tapping along it with forceps (to contact the plant with the glue). Lift the plant with forceps and fingers onto the herbarium sheet as planned. Stack specimens and allow a few hours to dry. You may want to place a sheet of wood with some weight onto the stack to keep the plants flat. When this glue is dry, then ~~take~~^{glue} the joints, and other bulky places which might not be held by the first gluing. To do this, Buco cement is best as it holds firm and dries clear. It is helpful to put washers onto the locatity "Ducoed" to hold it down. Don't stack these! It will take these a few hours to dry. Some specimens, especially bulky things, like twigs, or especially large stems or fruits, may have to be sewn on.

The label is put onto the lower right corner with the glue on the glue plate.

ARRANGEMENT IN CAHA HERBARIUM

As of fall 1973 this herbarium has been arranged in the following manner:

Algae, ferns and fern allies are together on the first shelf (in folders according to genus, arranged in families. The Spermatophytes (Angiosperms, and Gymnosperms) are arranged alphabetically by family, and alphabetically by genus within the family grouping. The family is written on the lower right of the manilla folder, the genus is on the lower left.

Manual of the Vascular Flora of the Carolinas by AE Radford, HE Ahles, and C.R. Bell, 1968, Univ. of N.C. Press, Chapel Hill is the most recent manual on our area. It is according to this book that the families and genera here are based. Some of the more common families are cited here under different names. The "new" names of these families is used here. (Such families as: Compositae now is Asteraceae, Leguminosae is Fabaceae, Umbelliferae is Apiaceae, Graminae is Poaceae, Labiatae is Lamiaceae.)

This Manual is in the Library here at Headquarters.

OLD HERBARIUM

Recently an old herbarium made in 1936-37 in Buxton was located. There were about 300 mounted specimens. However, this collection was not taken care of and rusted, molded and was soaked with water. Most of the information from the labels was saved and copied onto a list. Most of the specimens were also saved, but are in too deplorable condition to be of much use. The list of plants collected will be kept in the present herbarium, along with a location of the present whereabouts of the old specimens. (They are oversized for our cases). It is hoped that the identifications of these will be verified, as the collection includes many rare specimens or county records.

MCCH 9745

SPECIES OF PLANTS (EVOLUTIONARY)

Equisetaceae	Araceae
Lycopodiaceae	Eriocaulaceae
Selaginellaceae	Bromeliaceae
Isoetaceae	Juncaceae
Ophioglossaceae	Xyridaceae
Osmundaceae	Commelinaceae
Schizaeaceae	Liliaceae
Hymenophyllaceae	Commelinaceae
Polypodiaceae	Pontederiaceae
Marsileaceae	Hydrocharitaceae
Salvinaceae	Dioscoreaceae
Taxaceae	Haemodoraceae
Pinaceae	Amaryllidaceae
Lemnaceae	Iridaceae
Typhaceae	Burmanniaceae
Sparganiaceae	Marantaceae
Zosteraceae	Orchidaceae
Najadaceae	Loranthaceae
Juncaginaceae	Juglandaceae
Alismataceae	~~Utriculariaceae~~
Ebutomaceae	Salicaceae
Gramineae (Poaceae)	Leitneriaceae
Cyperaceae	Corylaceae

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~~Haloragaceae~~
Moraceae
Fagaceae
Santalaceae
Nyssaceae
Lauraceae
Menispermaceae
Empetraceae
Ceratophyllaceae
Cannabinaceae
Callitrichaceae
Amaranthaceae
Chenopodiaceae
Euphorbiaceae
Buxaceae
Urticaceae
Euphorbiaceae
Elaeagnaceae
Lauraceae
Thymelaeaceae
Ulmaceae
Aceraceae
Podostemaceae
Hydrocaryaceae

Haloragaceae
Chenopodiaceae
Ranunculaceae
Saururaceae
Polygonaceae
Nyctaginaceae
Aizoaceae
Caryophyllaceae
Lythraceae
Phytolaccaceae
~~Simaroubaceae~~
~~Simaroubaceae~~
Hippuridaceae
Aristolochiaceae
~~Simaroubaceae~~
Simaroubaceae
Anacardiaceae
Menispermaceae
Platanaceae
Nyssaceae
Aceraceae
Aquifoliaceae
Rhamnaceae
~~Simaroubaceae~~

Caryophyllaceae

Vitaceae

Leguminosae

Meliaceae

Rosaceae

Rutaceae

Simaroubaceae

~~Staphyleaceae~~

Staphyleaceae

Hippocastanaceae

Ericaceae

Clethraceae

Pyrolaceae

Magnoliaceae

~~Hamamelidaceae~~

Annonaceae ~~Convolvulaceae~~

Calycanthaceae

Celastraceae

Tamaricaceae

Cyrillaceae

Rhamnaceae

Tiliaceae

Theaceae

Cactaceae

Saxifragaceae

Hamamelidaceae

Symplocaceae

Styracaceae

Cornaceae

Berberidaceae

~~Hamamelidaceae~~

Melastomataceae

Portulacaceae

Caryophyllaceae

Nymphaeaceae

~~Ranunculaceae~~

Papaveraceae

Capparidaceae

Cruciferae

Resedaceae

Sarraceniaceae

Droseraceae

Crassulaceae

Saxifragaceae

Plumbaginaceae

Linaceae

Oxalidaceae

Geraniaceae

Zygophyllaceae

Polygalaceae

Limnanthaceae

Balsaminaceae

Malvaceae

Cuttiferae	Hydrophyllaceae
Elatinaceae	~~Leguminosae~~
Cistaceae	Diapensiaceae
Violaceae	Verbenaceae
Passifloraceae	Plantaginaceae
Lythraceae	Convolvulaceae
Loasaceae	~~Urticaceae~~
Onagraceae	Solanaceae
Araliaceae	Acanthaceae
Umbelliferae	Oleaceae
Cornaceae	Phrymaceae
Styracaceae	Martyniaceae
~~Ranunculaceae~~	Orobanchaceae
Pyrolaceae	Lentibulariaceae
Symplocaceae	Bignoniaceae
Ericaceae	Schrophulariaceae
Ebenaceae	Cucurbitaceae
Malvaceae	Campanulaceae
Adoxaceae	Valerianaceae
Sapollaceae	Caprifoliaceae
Primulaceae	Rubiaceae
Plumbaginaceae	Dipsacaceae
Asclepiadaceae	~~Scrophulariaceae~~
Loganiaceae	Compositae
Apocynaceae	
Boraginaceae	
Labiatae	
Gentianaceae	

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Plants collected in 1936-37, which are not in our current herbarium.
The early collection was all done in the Camp SP 6 area of Duxton.
It would be good if we could re-collect as many of these as are existant.
(Some of the following names may have been mis-identified in the 30's).
Habitats are as given on the labels of the old molded sheets, as are dates.

This list is in addition to one I made up Feb. 6.

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Park Tech.
Feb. 20, 1974

Copies: Clay Gifford
Richard Travis
C. McCaffrey
Herbarium Master

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- Gerardia regalis* var. *spectabilis* (Willd) Gray
Sagittaria latifolia Willd. 9-14
Hydrocotyle umbellata L. open shallow ponds 9-27
Sium suave Walt. - edge fresh ponds 9-16
Sabal minor (Jac.) Pers. - low pine woods 9-10
Aster tenuifolius L. - marsh (salt) 9-25
Ridens vulgata Greene - open fields and woods 9-16
Elephantopus nudatus A. Gray - dry woods 9-16
Erechtites hieracifolia (L.) Raf. - damp fresh bottoms - 9-21
Erigeron canadensis var. *canadensis* - damp fresh bottoms - 9-21
Erigeron philadelphicus L. - open field - 9-21
Eupatorium coelestinum L. - shaded woods at base of Bux. light tower 9-25
Hieracium gronovii L. - dry hill tops in woods - 8-3
Iva frutescens L. - fresh marsh - 8-27
Lactuca floridana (L.) Gaert. - open patches in low woods - edge of road
on 3 rd fresh pond - Buxton - 9-16 - (a mt. & pied.sp.)
Solidago fistulosa Muhl. - edge of pine woods - north side of
lighthouse pond - 9-15
Verbesina occidentalis (L.) Walt. - damp bottoms - woods - 9-16
Xanthium sp. - open fields near beach - 8-29
Anisostichus capreolata (L.) Bureau - Cross vine - low thick woods - 4-20
Specularia perfoliata (L.) A.D.C. - open protected areas - 5-1
Sagina decumbens (Ell.) T&G - 9-16 - Borders fresh swamps - 3rd ridge no. of 1.1
Stellaria graminea L. - marsh edge - 4-14
Stellaria media (L.) Cyrillo - dry woods - 3-18
Ceratophyllum demersum L. - shallow fresh ponds - 4-14
Salicornia europea L. - salt marsh - 10-2
Cornus stricta Lam. - marshy fresh bogs - 5-25
Bulbostylis ciliatifolia (Ell.) Fern. - low open bogs - 7-6
Carex stipata Muhl. ex Schkuhr - marshy soil 5-11
~~Hypericum~~
Tuirena squarrosa Michx. - edge inland marsh - 9-21
~~Rhynchospora~~
Rhynchospora glomerata (L.) Vahl. - marshy - 5-25
Vaccinium elliotii - Chapm. - low shrubs - 3-17
Acalypha ostryaefolia Ridd. - Tar weed - low flats - 10-11
Euphorbia supina Raf. - open beach So of CA. HA. & CG Sta. - 9-24
Desmodium fernaldii Schubert - pine woods - 9-16
Trifolium agrarium L. - protected grassy areas - 5-21
Trifolium campestre Schreber - open protected fields - 4-5
Trifolium dubium - Sibthorp - low fresh ponds - 5-30
Trifolium hybridum L. - old garden - 6-4
Quercus nigra - dry woods - 3-31
Nymphoides aquatica (Walt. ex. J.F. Gmelin) Kuntz - fresh ponds - 5-20
Sabatia calycina (Lam.) Heller - open sandy-grass fields - 8-25
Sabatia campanulata (L.) Torrey - open beach - 8-29
Hypericum gymnanthum Engelm. & Gray - low pond margins - 9-15
Hypericum virginicum L. - margins fresh ponds - 6-3
Hypericum walteri Gmelin - damp bottom 3 rd ridge no. of lighthouse - 9-16
Iris virginica L. - damp protected bogs - 4-27
Sisyrinchium mucronatum var. *atlanticum* (Bicknell) Ahles - open beach
in grass - 4-20
Juncus effusus L. - damp bottom, open, sw of lighthouse - 6-4
Juncus torreyi Coville - Low fresh bogs - 5-27

- Monarda punctata* L. - sunny open fields or dry woods - 9-14
Scutellaria latiflora L. - fresh ponds 9-21
Mentha aquatica L. - fresh ponds - 9-21
Ornithogalum umbellatum L. - damp grassy fields - 5-13
~~*Scilla maritima* L. - from shrub bogs - 5-13~~
Cynoctonum mitreola (L.) Britt. - edge fresh ponds - 9-16
Gelsemium sempervirens (L.) Ait. f. - Yellow jasmine - low woods on shrubs - 3-31
Nymphaea odorata Ait. - fresh ponds - 5-5
Ludwigia alata Ell. - edge fresh ponds - 9-21
Ludwigia hirtella Raf. - dry sandy fields - 9-21
Oenothera drummondii Hooker - sandy grass fields - 5-5
Pogonia ophioglossoides (L.) Ker. - west of lighthouse, low - May
Spiranthes cernua var. *cernua* (L.) Richard - low grass area - 10-23
Epifagus virginiana (L.) Barton - pine woods - 4-14
Oxalis sp. - protected areas - 5-6
 Bah
Plantago major L. - marshy - 5-5
Limnium nashii var. *angustatum* (Gray) Ahles
~~*Limnium latifolium* L. - open sandy areas - 5-27~~
Axonopus affinis Chase - low marshy areas - 6-23
Cenchrus longispinus (Hack.) Fern. - 7-8
Cynodon dactylon (L.) Pers. - open beach grass area - 6-3
~~*Friaribush* (L.) - damp fresh bogs - 5-27~~
Panicum dichotomum L. - low pine woods - 5-27
~~*Scilla maritima* L. - from shrub bogs - 5-13~~
Polygonum coccineum Muhl. ex Willd. - ponds 1 mi west SP6 - 9-21
~~*Polygonum gracile* Nutt. - damp fresh bogs - 5-27~~
Polygonum scandens var. *cristatum* (Engelm & Gray) Gleason - woods along dryparts - 9-27
Rumex hastatulus Baldw. ex Ell - grassy fields - 6-1
Samolus parviflorus Raf. - Water Pimpernell; Brookweed; - edge fresh ponds - 5-11
Ranunculus abortivus L. - damp bottoms, old house sites - 4-26
Berchemia scandens (Hill) K. Koch - Rattan vine - low swampy glades - 5-23
Agrimonia - flat pine woods - 9-10
~~*Androschier canadensis* (L.) - 5-29~~
Potentilla canadensis L. - open woods - 5-29
Prunus caroliniana Ait. - Thick protected dunes, woods west of lighthouse - 3-13
Rosa palustris Marshall - low damp protected thicket - 6-3
Rubus argutus Link. - thick woods near lighthouse - low - 4-23
Rubus trivialis Michx. - protected areas - 4-9
Sorbus melanocarpa (Michx.) Schneider - Chokeberry - thick damp woods - 4-17
Zanthoxylum clava-hercules L. - dunes and woods - 5-22
Salix nigra L. - low areas and on dunes - 3-31
Verbascum thapsus L. - fields - 9-10
Physalis viscosa ssp. *maritima* (M. Curtis) Waterfall - 9-14
Solanum carolinense L. - grassy - 5-25
Solanum gracile Link. - 9-16
Sparganium americanum Nuttall - fresh ponds - 6-6
Viola cucullata Ait. - low damp woods - 3-8 27
Xyris baldwiniana R&S - open low grassy fields - 4-22