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A NATIONAL HERBARIUM FOR THE BAHAMAS

Lee B. Kass

Associate Professor and Curator Elmira College Herbarium,
Elmira College, Elmira, New York 14901

Karra Subba Reddy

Senior Lecturer, Natural Science Division, College of the Bahamas,
Nassau New Providence, Bahamas

Robert E. Hunt

Proprietor, Woods of Newfield,
Newfield, New York, 14867

ABSTRACT

The Bahamas Department of Agriculture (DOA), the Natural Science Division of the College of the Bahamas (COB), and the Bahamas National Trust (BNT) cooperated in establishing a National Herbarium in the Bahamas. The proposal for the establishment of a National Herbarium was made by Lee B. Kass, Fulbright Scholar at the College of the Bahamas from January to June 1996. The main herbarium is currently located at the Botanic Gardens in Nassau with annex and branch herbaria at COB, BNT, the Bahamian Field Station on San Salvador and the Rand Nature Center at Freeport, Grand Bahama.

INTRODUCTION

When Dr. Lee B. Kass, Associate Professor of Botany and Curator of the Elmira College Herbarium (ECH) and her husband Dr. Robert E. Hunt proposed the establishment of a National Herbarium in the Bahamas, they were appreciative of the work of many former and contemporary researchers and collectors of the Bahama Flora (Kass and Eshbaugh 1994, 1993; Smith 1993; Nickrent et al. 1988; Correll and Correll 1982; Gillis, Howard, and Proctor 1973; Howard 1951; Britton and Millspaugh 1920; Northrop 1902; Catesby 1731,1734). Kass became aware of the lack of botanical field collections deposited in the Bahamas while writing a field guide to the common plants of San Salvador (Kass 1991). Most plant collections from the Bahamas are deposited in the countries of the collectors (U. K., France, Jamaica, U.S.A., etc.), with few duplicate collections deposited in the Bahamas. During the past 30 years a few collectors sent a small number of duplicate specimens to the Bahamas (see below). Kass therefore

proposed the establishment of a National Herbarium in the Bahamas.

In 1993, at the Fifth Symposium of Natural History of the Bahamas Symposium, Dr. Maurice Isaacs, of the Department of Agriculture, and Mrs. Sandra Buckner, of the Bahamas National Trust, encouraged Kass to apply for a Fulbright Scholarship award to teach and conduct research in the Bahamas. As a Fulbright Scholar at the College of the Bahamas (COB), Oakes Field Campus, Nassau, New Providence, from January to June 1996, Kass, collaborating with Hunt, worked with various Bahamian organizations to initiate a National Herbarium for the Bahamas (Kass 1995, 1997). Along with teaching classes in botany and ecology, they collaborated with faculty and students of COB, staff of the Department of Agriculture (DOA), and staff and members of the Bahamas National Trust (BNT) to establish the Bahamas National Herbarium. We report here a brief summary of their efforts and plan to publish a more detailed account elsewhere.

A NATIONAL HERBARIUM

The DOA, COB, and BNT cooperated in establishing a National Herbarium, including annex and branch herbaria, in the Bahamas. An herbarium is a collection of plants or plant parts that are obtained from the wild or from cultivation, pressed and dried, and then glued on acid free paper for permanent preservation. Specimens are systematically identified using technical and common names, along with family listings, dates collected, collectors, and locations of collections (see Fig. 1, an example of an herbarium label). Each plant specimen serves as a permanent reference to compare with previous and future collections. The herbarium serves as an educational and research center, where one can study differences that may occur among individuals of a species.

Table 1. Holdings of the Bahamas National Herbarium (BNH), Botanic Gardens, Nassau, New Providence, BAHAMAS (A), and including annex and branch herbaria at the College of the Bahamas (COB), Oakes Field Campus (B); Bahamas National Trust (BNT) Retreat, Village Road, Nassau, New Providence (C); Bahamian Field Station (BFS), San Salvador Island (D); and Rand Nature Center, Freeport, Grand Bahama (E).

(A) HOLDINGS AT BOTANIC GARDENS

<u>COLLECTORS</u>	<u>DATES</u>	<u>NO. OF SPECIMENS</u>
W.T.Gillis, R.E.Howard, G.R.Proctor, D.S. & H.B.Correll, W.H.Eshbaugh, T.K. Wilson	1969-79	1391
G.W.Webster	1960	204
J.B.Iverson (unmounted)	1980	364
T.Bradley	1995-96	649
L.B.Kass & R.E.Hunt	1996	144
Miami University of Ohio	1996	70
M.Rollins	1996	37
D.Knowles, T.Ferguson, W.Munroe, L.Armbrister, E.Carey, Botanic Garden Staff	1996-97	143

(B) HOLDINGS AT COLLEGE OF THE BAHAMAS, Annex

E.Little	1982	41
Student & Staff of COB	1996-97	250

(C) HOLDINGS AT BAHAMAS NATIONAL TRUST, Annex

Members of BNT	1996-97	30
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(D) HOLDINGS AT BAHAMIAN FIELD STATION, Branch

R.R.Smith, L.B.Kass, N.Elliott, & researchers at BFS	1971-97	713
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(E) HOLDINGS AT RAND NATURE CENTER, Branch

D.Hall	1969-73	605
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and the Rand Nature Center herbarium have been designated as branches of the BNH.

COLLABORATIVE FINANCIAL SUPPORT

In March of 1996, President Keva Bethel of the COB received a letter from Mrs. Willamae Salkey, Permanent Secretary, Ministry of Agriculture and Fisheries, Commonwealth of the Bahamas, "fully support[ing] the establishment of a national herbarium at the Botanic Gardens in consultation with the Director of Agriculture." The Department of Agriculture provided funding for the establishment of the BNH in an air conditioned room in the Conservation Building at the Botanic Gardens. They also allocated funding to build additional herbarium cabinets, and to purchase a freezer, file cabinet, reference books and curatorial materials. A metal herbarium cabinet, purchased in the early 1970's by the Department of Agriculture, was refurbished and is currently housed at the BNH along with four newly constructed half-herbarium cabinets. Materials have been purchased for the construction of four additional half-cabinets. A computer system was purchased including a color monitor, color printer and electronic scanner. With this acquisition, the cataloging of specimens will now be done using an electronic data-base. The curators plan to have email capabilities in the near future. Mr. Cephas Ward, then Chair of the Natural Science Division, COB, secured funding for the purchase of curatorial material and for material to construct plant presses, and one half-herbarium cabinet, now housed in their biology/botany laboratory. Funding was also authorized from the BNT to construct one half-herbarium cabinet, now housed at their offices at the Retreat on Village Road.

WORKSHOPS, COLLECTING TRIPS, AND ASSISTANCE

Kass, Reddy, and Hunt conducted workshops on Plant Collection and Preservation for all persons interested in maintaining the BNH. Persons attending the workshops included faculty staff and students from the COB, DOA, BNT, and the general public. Ms. Marcia Pratt, Technical Assistant in the COB Natural Science Division, helped Kass and Reddy build plant presses, and assisted with Friday morning plant identification workshops for COB students. Pratt also made a large personal collection herself that she contributed to the herbarium. Marissa A. Rollins and Maria Russell, students at COB, worked conscientiously to collect and identify plants and to help curate existing collections at the Botanic Gardens. Faculty and students of COB, staff of DOA and members of BNT helped us

collect additional specimens from the islands of New Providence, San Salvador, and Andros. We are especially indebted to Mr. Pericles Maillis, Mr. Ian Lothian, and Dr. John Hammerton, for leading collecting excursions on the Island of New Providence and for supplying reference books for plant identifications. Additionally, specimens were received from current scholars of the Bahama Flora (Table 1). Mss. Munroe and Ferguson initially took responsibility for curating all of these collections.

STAFFING AND FUTURE GOALS

Co-curators and Assistant Curators have been appointed at the main herbarium and at the various annexes of the BNH. At the Botanic Gardens (DOA) Ms. Wanza Munroe is Co-curator and Ms. Tanya Ferguson and Mr. David Knowles are Assistant Curators; at COB, Dr. Karra Subba Reddy is Co-curator and Mr. Lionel Johnson is Assistant Curator; and Ms. Lynn Gape is Assistant Curator at BNT. The BNH now houses over 4000 specimens. A future goal is that every island of the Bahamas will have a representation of its local flora deposited in this herbarium. Researchers who currently hold collecting permits for the Bahamas are now required to deposit duplicate collections in the BNH. We invite former collectors to contact Ms. Wanza Munroe, (Co-curator, BAHAMAS NATIONAL HERBARIUM, Department of Agriculture, P. O. Box N3028, Nassau, BAHAMAS, FAX 1242-328-5874) to arrange deposition of duplicate collections in the newly established Bahamas National Herbarium.

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