Index Herbariorum Kentuckiensis III

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ABSTRACT

A survey conducted during the academic year 1994–1995 provides information on herbarium collections at 13 Kentucky institutions. Totals of approximately 243,000 vascular plant specimens and 2,700 nonvascular plant specimens are reported for the state.

Introduction

The objective of this study was to determine the current status of collections of vascular and nonvascular plants in the state. This is an update of previous surveys published by Lassetter (1) and Jones (2). In the earlier report, 119,000 specimens were reported from 12 herbaria, and in the latter study 187,000 specimens were reported from 15 institutional herbaria. For this update, a survey was conducted by mail and by phone. All known Kentucky herbaria at public and private institutions were included. Private collections were excluded. The following data were requested: name and address of collection, phone/fax/e-mail numbers, emphasis and special collections, loan and exchange policies, and names of curators. In addition, information was gathered on the status of data-basing efforts. We appreciate the cooperation of all who supplied information.

RESULTS

This survey presents information on 13 institutional herbaria. Totals of approximately 243,000 mounted vascular plant collections and 2,700 nonvascular plant collections are reported. Vascular plant collections at the University of Kentucky (two herbaria) and the University of Louisville number 101,000; at the 5 regional institutions there are about 122,000 specimens; collections at the 5 private colleges total approximately 20,000. The great majority of private college collections are at Berea College. More than half of nonvascular plant collections are at the University of Kentucky.

Data gathered in this survey are listed below. Acronyms (given in parenthesis after the institution) and general format are based on *Index Herbariorum* (3). Proposed but unpublished acronyms are indicated by an asterisk.

BEREA: Herbarium of Berea College (BEREA), Biology Department, Charles Martin Hall Science Building, Rm 212B, Berea, KY 40404. 606-986-9341, ext. 6320. Fax: 606-986-4506, e-mail: Ralph-F.Thompson@Berea.Edu. Established about 1961. 15,000 vascular plant specimens. Special interest in Fabaceae and Campanulaceae of Kentucky, surface-mine flora, and general floristics of Kentucky. Collections of J. D. Pittillo, D. D. Taylor, and J. R. Abbott. On-going projects: floras of Madison and Laurel Counties. No loans, visitation open to qualified researchers. Ralph L. Thompson, Curator.

BOWLING GREEN: Herbarium of Western Kentucky University (WKU), Biology Department, Rm 218 Thompson Complex NW, Bowling Green, KY 42101. 502-745-6008. Fax: 502-745-6856. e-mail: murreze@wkuvxl.wku. edu. Established in 1967. 15,000 vascular plant specimens, teaching collection of 600 fungi. Special interests in Calycanthus, Cornus, molecular and morphological data in understanding the evolutionary history of plants, and local and pathogenic fungi. Collections of E. O. Beal, R. Athey, and G. Johnson. Ongoing projects: Systematics of Cornus, variability in the internal transcribed spacer region (ITS) of nuclear ribosomal DNA, demographics of Spiraea virginiana. Standard loan and exchange policies. Kenneth A. Nicely, Zack E. Murrell, Jeff Jenkins, Curators.

CAMPBELLSVILLE: Biological Collection, Science Building Rm 101, Campbellsville College, Campbellsville, KY 42718. 502-465-8158. Established in 1965. About 1,000 vascular plant specimens. Flora of Taylor County and surrounding counties. Exchanges and loans available. G. Weddle, M. Rogers, Curators.

GEORGETOWN: Herbarium of Georgetown College, Department of Biological Sciences, Georgetown, KY 40324. 502-863-8085. e-mail: brafaill@gtc.georgetown.ky.us.edu. Established in 1945. 1,000 vascular plant specimens. General floristics. Standard loan and exchange policies. Barbara Rafaill, Curator.

HIGHLAND HEIGHTS, Herbarium of Northern Kentucky University (KNK), Department of Biological Sciences, Highland Heights, KY 41099. 606-572-6390. Fax: 606-572-5639. Established in 1973. 26,500 vascular plant specimens. Special interests and current research in *Carex*, Poaceae, cultivated plants, general flora. Standard loan and exchange policies. Robert F. C. Naczi, John W. Thieret, Curators.

LEXINGTON: Herbarium, College of Agriculture, Department of Agronomy, University of Kentucky, Agricultural Science Building North Rm A-4, Lexington, KY 40546. 606-257-4898. Fax: 606-257-2185. e-mail: jgreen@ca.uky.edu. Established about 1887. About 21,000 vascular plant specimens. Emphasis on agricultural weeds of Kentucky. Many specimens of Harrison Garman and Mary Didlake from 1896–1930. A public service collection, providing identifications of specimens sent to the College. No exchange or loans; visitors welcome. J. D. Green, Curator.

LEXINGTON: Herbarium of the University of Kentucky (KY), Thomas Poe Cooper Building, Department of Forestry, Lexington, KY 40546. 606-257-7596. Fax: 606-323-1031. email: for121@ukcc.uky.edu. Reestablished in 1948 after fire destroyed the previous collection. Estimated 50,000 vascular plant specimens, 1,500 bryophytes. Flora of the Bluegrass region and general floristics of Kentucky. Collections of Mary Wharton and various county floras. Standard loan and exchange policies. Robert Paratley, Curator.

LOUISVILLE: Davies Herbarium, Department of Biology, University of Louisville (DHL), Louisville, KY 40292. 502-852-5940. Fax: 502-852-0725. e-mail: wsdavi01@ulkyvm. louisville.edu. Established in 1953. 30,000 vas-

cular plant specimens. Floristics of nearby counties and natural areas. Research collections of *Malacothrix* (Asteraceae). Standard loan and exchange policies. W. S. Davis, Curator.

MOREHEAD, Herbarium of Morehead State University (MOKY*), Lappin Hall, Room 306, Morehead, KY 40351. 606-783-2947. Fax: 606-783-5002. e-mail: h.setser@msuacad.more head-st.edu. Established in 1930s. 12,000 vascular specimens, 455 bryophytes. Data-base project on-going. Flora of Eastern Kentucky, Rowan County and adjacent counties, Neotropical Tiliaceae. Fern collections of T. McCoy. Current research on local wetlands and flora of Rowan County. Standard loan and exchange policies. Howard L. Setser, Curator.

MURRAY, Herbarium of Murray State University (MUR), Department of Biological Sciences, Blackburn Science Building, 5th floor, Murray, KY 42071. 502-762-2786. Established in 1967. 35,000 vascular plant specimens; 600 nonvascular plants. Data-base project on-going. Special interest and current research in flora of the Jackson Purchase. Fern collections of T. McCoy, and recently acquired the Athey Herbarium, formerly located in Paducah, and many Athey specimens from Memphis State University. Standard loan and exchange policies. Marian J. Fuller, Curator.

RICHMOND: Herbarium of Eastern Kentucky University (EKY), Department of Biological Sciences, Memorial Science Rm 170, Richmond, KY 40475. 606-622-6257. Fax: 606-622-1020. e-mail: bioclark@acs.eku.edu. Established in 1974. 33,000 vascular plant specimens; 500 bryophytes. Special interests and current research in woody plants, wetland flora, Asteraceae, Aquifoliaceae, regional county floras, rare species studies, statewide generic treatments, and bryophytes of Kentucky. Recent acquisitions include a set of Mary Wharton collections and specimens from the Kentucky State Nature Preserves Commission. Sets of specimens from several natural areas and local county floras. Interested in exchanges of vascular plants and bryophytes of southeastern United States. Standard loan policies. Ronald L. Jones, Ross C. Clark, and David A. Eakin, Curators.

WILLIAMSBURG: Herbarium of Cumberland College, Biology Department, Science Building 116, Williamsburg, KY 40769. 606-539-4399. Fax: 606-539-4490. e-mail: tyetter@cc.cumber.edu. Established in 1984. 2,000 vascular plant specimens. Special interest in Lamiaceae. Standard loans and exchange policies. Todd Yetter, Curator.

WILMORE: Herbarium, Department of Biology, Asbury College, Wilmore, KY 40390. 606-858-3511, ext. 2233. Fax: 606-858-3921. Established in 1967. 350 vascular plant specimens. Herbaceous flora of Jessamine County. No exchange or loans. John Brushaber, Curator.

DISCUSSION

The current estimated total of 243,000 vascular plant specimens held in 13 Kentucky institutions represents an increase of 56,000 specimens in the past 8 years. About 70% of this increase occurred at the regional public universities. It should be noted that some of this increase was due to the incorporation of old collections, i.e., Wharton and Athey specimens, and therefore not all was the result of new collecting. The number of institutions with herbaria has decreased by two since the previous survey. In addition, with collections now at West Virginia University (S. Studlar, pers. comm.), there is no longer a bryophyte herbarium at Centre College in Danville, and the number of nonvascular plant collections in the state has decreased by 50%.

Other changes since the 1987 survey (2) are the presence of new curators at Western Kentucky University, Northern Kentucky University, Georgetown College, University of Kentucky (both herbaria), Richmond (2 additional curators), and Williamsburg. The KY Herbarium is being transferred from the School of Biological Sciences to the Department of Forestry. The EKY Herbarium recently has been moved into a larger remodeled facility; storage capacity has approximately doubled. Fax numbers and e-mail addresses are now generally available. The only active data-basing projects are at Morehead and Murray Universities, but several other curators plan to begin such projects in the future. The Kentucky State Nature Preserves Commission (502-573-2886) maintains a database for their rare plant records, as

well as a small reference collection. Discussions have already started among curators on the possibilities of sharing databases generated at different Kentucky herbaria over the Internet

The total number of collections in Kentucky herbaria is still far below that of nearby states. For example the 1990 edition of Index Herbariorum (3) lists over 800,000 vascular plant specimens in 8 herbaria in Tennessee, over 259,000 in 8 herbaria in West Virginia, over 700,000 in 11 herbaria in Indiana, over 400,000 in 22 herbaria in Virginia, and over 1 million vascular plant specimens in 14 Ohio herbaria. The discrepancy is even greater for nonvascular collections. For example there are 22,500 mosses and liverworts at the University of Cincinnati (CINC) (J. Snider, pers. comm.), and 165,000 nonvascular cryptograms at the University of Tennessee (TENN) (D. Smith, pers. comm.), compared to the 2,700 in Kentucky collections. There has been considerable bryophyte collecting in the state over the last two decades, but the majority of these collections have been deposited outside the state, particularly in CINC and TENN. There are also many Kentucky vascular plant specimens housed in other states—a list of herbaria with considerable Kentucky holdings was given by Jones (2). Obviously much collecting remains to be done in Kentucky, in particular, many counties in east-central and south-central Kentucky which have received little attention from collectors. There is a need to investigate these and many other areas in Kentucky in order to gain a better understanding of the presence and distribution of vascular and nonvascular plant species. An atlas of the state vascular flora is now a possibility in the foreseeable future and, perhaps soon thereafter, a manual. Relatively little is known about Kentucky's nonvascular plants, but with new studies of these plants now occurring at several institutions, available information is likely to grow rapidly.

In this survey, some curators expressed concerns about the future of their institutional collections. Others thought there should always be a place for even small research and teaching herbaria, especially when the value of these collections for varied data-gathering activities (from molecular to floristic to ecological to geographic) is recognized. Another com-

ment was that, if departments and institutions appreciate the critical role of organismal biology in broad biological training, then systematics and biological collections will continue to be valued.

In summary, this survey indicates to us that (1) active improvement of the documentation of Kentucky's flora is occurring, primarily by regional public institutions and private institutions which retain active systematists on their faculties; (2) Kentucky's flora remains much more poorly documented than that of most southeastern states; (3) Kentucky's collections of nonvascular plants are particularly depauperate; (4) there is an increasingly urgent need for additional, active documentation of Kentucky plants; and (5) factors and a cooperative spirit are emerging that could lead to significant improvement in coverage and in-

formation sharing in the near future. Of major significance is the fact that in the last 3 years 3 new systematic botanists have been added to the faculties of the public regional universities. All curators participating in this survey expressed a willingness to cooperate, contribute, and support our common goal of increasing our knowledge of the flora and vegetation of Kentucky.

LITERATURE CITED

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