A new Flora for the Old Dominion

by Alan Weakley, UNC Herbarium Curator

The University of North Carolina Herbarium has recently been contracted by the Foundation of the Flora of Virginia Project, Inc., to assist in researching and writing a Flora for the Commonwealth of Virginia. We are very excited to be at work on this important contribution to the understanding of the Southeast’s flora. Resources provided by the project will enable us to conduct taxonomic research on “problem” groups to resolve remaining taxonomic problems and to survey the collection for important Virginia records of rare native and introduced species, which will then be added to the specimen database and to conservation databases in Virginia.

A Flora is a manual used as an aid in the identification of the plants that grow in a given area. It is used to provide descriptive and diagnostic information on plant life, and to describe their ranges, habitats, and characteristics. Surprisingly, Virginia has not had a “state Flora” since 1762, when the second edition of Gronovius’s Flora Virginica was published.

In the absence of a modern state Flora, anyone interested in Virginia’s plants must work with other regional and state Floras, but these often lack species’ accounts, illustrations, and other critical components needed to identify and understand Virginia’s plants. Probably the two most widely used Floras in Virginia are the 1968 Manual of the Vascular Flora of the Carolinas, by Albert E. Radford, Harry E. Ahles, and C. Ritchie Bell, and Arthur Cronquist’s 1991 Manual of Vascular Plants of Northeastern United States and Adjacent Canada. But both of these Floras are now out of date, published prior to the recent explosion in field and molecular research. Moreover, the “Carolinas Manual” lacks many of Virginia’s species, especially those of shale and limestone habitats, and the Northeastern Flora deals superficially with the rich “southern” components of Virginia’s flora.

Virginia’s students need access to better information on the plants of their state. This Flora will provide fertile soil to grow a “new crop” of botanists. The format and text of this work will be designed for use by a wide range of people interested in Virginia’s flora—students and teachers of environmental and biological sciences, environmental consultants and wetlands biologists, state and local government agency biolo-

gists and land planners, foresters, park and wildlife resources personnel, members of the Virginia Native Plant Society, master gardeners, horticulturists, nurserymen, amateur botanists and others with a general interest in plants, and conservation professionals working for groups such as The Nature Conservancy and the Virginia Outdoors Foundation.

An accurate, up-to-date Flora will allow educators, conservationists, scientists, natural resource professionals, and citizens to work together to provide reliable information about Virginia’s plant life. Accurate information will then be available to decision makers such as land planners, state and local political leaders, citizens, and business leaders who shape Virginia through zoning, regulation, legislation, open space conservation, and myriad other actions.

What role will the UNC Herbarium play in the development of the Flora of Virginia? J. Christopher Ludwig (chief biologist at the Virginia Division of Natural Heritage) and I will co-author the book. The taxonomic treatments and keys will be based largely on the work that I have been doing for the last 15 years on the flora of the Carolinas, Virginia, Georgia, and other nearby states. New descriptions will be written by many contributors, mainly from universities and agencies in Virginia.

County distributional maps are being developed by a team of botanists (the Virginia Botanical Associates). The UNC Herbarium holds one of the largest collections of Virginia plants, and numerous important distributional records reside here. Herbarium employees will search for additional records here at UNC and contribute that information. Original illustrations of all species are being drawn by a team of botanical illustrators headed by Lara Call Gastinger.

Ultimately, the Flora will promote conservation. Solving environmental challenges requires a well-informed public and scientific community. By helping Virginians recognize and appreciate the plant life that surrounds them, the Flora will engender a deeper respect for the beauty and diversity of the Commonwealth’s plants, a respect that is vital to the conservation of the environment that sustains us.

For further information about the Flora of Virginia project, see the website <www.dcr.state.va.us/dnh/vaflora.htm>.