

Miscellanea

Reviews

Remarkable Trees of Virginia, by Nancy Ross Hugo & Jeff Kirwan; photography by Robert Llewellyn. 2008. Albemarle Books, Earlysville, VA (distributed by University of Virginia Press, Charlottesville). 206 pp., 30 x 28 cm, ca. 160 color photographs (plus six black and white). ISBN 978-0-9742707-2-2 (cloth; \$49.95).

This large coffee table book features well-written narratives and stunning color photographs of more than 100 of the most “remarkable” trees found in Virginia. As noted by the authors, about 20 of these trees would appear on virtually anyone’s list of the 100 most remarkable trees in the state. Their task was to sift through more than 1,000 nominations provided by the general public, as well as other trees identified by their own research, to find the other 80 or so to include in the book. The chapter titles reveal the diverse criteria that were considered when selecting the state’s remarkable trees (numbers included are listed in parentheses): Old Trees (9), Historic Trees (12), Champion Trees (14), Community Trees (11), Unique Trees (10), Fine Specimens (11), Noteworthy Species (18), Mighty Oaks (14), and Tree Places (six categories such as cemeteries, college campuses, botanical gardens, parks, and national forests). Featured trees range from native species found in old growth forests and remote swamps to non-natives planted in urban parks and yards.

The book is the result of a four-year effort by noted lecturer and outdoor writer Nancy Ross Hugo, Virginia Tech Department of Forestry extension specialist and professor Jeff Kirwan, and photographer Robert Llewellyn to document Virginia’s largest, oldest, most historic, beautiful, and otherwise interesting (even unusual) trees. They reportedly traveled over 20,000 miles (Kirwan walked 300 of them) to research, locate, and photograph the trees considered for and ultimately included in this book. Examples of large trees include national champions (defined as the largest specimen of a particular tree species based on a scoring system that considers height, circumference, and crown spread) such as an overcup oak in Isle of Wight County, eastern arborvitae in Alleghany County, and osage orange at Patrick Henry’s Red Hill property in Charlotte County. Readers learn that Virginia ranks 5th nationally in terms of the number of state champions (56) that are also national champions. The authors note that champion trees are dethroned more often because a larger tree is discovered than because of the death or loss of part of the tree. In fact, several new champion trees were discovered in Virginia while this book was in

preparation. Champion tree hunter Byron Carmean is recognized for his efforts in Virginia. Featured old trees include stunted red cedars on limestone cliffs along the New River in Giles County that are more than 450 years old (see also Larson, 1997) and huge bald cypresses along the Blackwater River in Southampton County that exceed 800 years old. Historic trees include a tulip poplar planted by Thomas Jefferson in 1807 at Monticello and several trees with connections to Civil War sites or slavery. Unique trees include hollow, bizarre-shaped water tupelos and a massive sycamore leaning at a 45° angle with no signs of falling over.

The authors discuss many interesting topics in their narratives about specific trees. For example, they lament the loss of the once-dominant American chestnut and briefly describe current efforts aimed at trying to restore this species. The widespread declines of elms, hemlocks, and dogwoods are also mentioned. They discuss urban forests and the strategies proposed by communities to maintain and protect their trees.

The book affords its readers the opportunity to visit different parts of the state with the goal of trying to track down particular trees described in the text and see them “in the flesh.” However, the text often does not provide precise locations of the trees, so additional research is needed in many cases. Some of the trees grow on properties that are closed to the general public, whereas others are in front lawns or beside municipal buildings and schools. My family has already traveled to see some of the trees described in the book, such as the historic, sprawling cucumber magnolia outside of Robert E. Lee’s Civil War headquarters in Colonial Heights, the red mulberry in the Children’s Garden at Lewis Ginter Botanical Garden in Richmond, and the willow oak in an office park in Midlothian, as well as Jefferson’s tulip poplar at Monticello and the former national champion of this species in a tiny park in Bedford that is now surrounded by a chain link fence and residential neighborhood and drastically pruned in recent years due to safety concerns, reducing it to a mere skeleton of its once mighty stature. Although sight of the latter verged on depressing, I have also had the good fortune to see the enormous, awe-inspiring bald cypresses and large water tupelos that grow along the Blackwater River at The Nature Conservancy preserve near Ivor. Like many people, I suspect that I have passed by some of the remarkable trees featured in this book without giving them much notice (e.g., several along the Blue Ridge Parkway). I will pay them more attention the next time we cross paths.

The authors have succeeded in meeting their goal to “educate the public about Virginia’s finest trees and

their importance.” The fact that this book is already in its 3rd printing attests to its widespread appeal among naturalists, botanists, arborists, foresters, landscapers, gardeners, historians, artists, photographers, and many others who appreciate trees. Purchase a copy for yourself or a relative or friend, enjoy it, and then make plans to visit some of Virginia’s most remarkable trees.

As a postscript, I should note that the state’s largest (and possibly one of its oldest, perhaps as much as 800-1000 years) known tree at the time of the book’s publication, a huge bald cypress tree dubbed “Big Mama” that grew along the Nottoway River in Southampton County died in 2008. However, the “Lost Forest” in which it and many other very large and old trees were found in 2005 is now protected as part of the new Cypress Bridge Swamp Natural Area Preserve.

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Larson, D. W. 1997. Dendroecological potential of *Juniperus virginiana* L. growing on cliffs in western Virginia. *Banisteria* 10: 13-18.

Steve Roble
Editor, *Banisteria*

Checklist of the Vascular Plants of Plummers Island, Maryland, by Stanwyn G. Shetler, Sylvia S. Orli, Elizabeth F. Wells, & Marcie Beyersdorfer. 2006. Contribution XXIX to the Natural History of Plummers Island, Maryland. *Bulletin of the Biological Society of Washington* 14. 58 pp. (\$15)

The Invertebrate Fauna of Plummers Island, Maryland, edited by John W. Brown. 2008. Contribution XXX to the Natural History of Plummers Island, Maryland. *Bulletin of the Biological Society of Washington* 15. 226 pp. (\$35)

(These publications can be purchased from the Biological Society of Washington; see the society’s website at <http://www.brynmawr.edu/biology/BSW/>).

The Washington Biologists’ Field Club: Its Members and its History (1900–2006), edited by Matthew C. Perry. 2007. Washington Biologists’ Field Club, Washington, DC. x + 342 pp. (A complete pdf version is available at: http://www.pwrc.usgs.gov/resshow/perry/bios/WBFC_booksm.pdf).

Plummers Island, a small (4.8 ha) island along the Maryland shore of the Potomac River about 15 km upstream of Washington, D.C., is one of the best-

studied field sites in the mid-Atlantic region. Members and guests of the Washington Biologists’ Field Club, including many past and present scientists associated with the Smithsonian Institution’s National Museum of Natural History, have been inventorying the biota of the island and adjacent mainland since 1901. The club gave the island to the National Park Service (under threat of eminent domain) in 1959 in exchange for exclusive access, and established a research and publication fund with proceeds from the sale of the mainland parcel to the NPS. Nearly 400 articles, ranging from short notes to monographic studies, have been published concerning the fauna and flora of the area. Many of these papers, including thirty in a series entitled “Contributions to the Natural History of Plummers Island, Maryland”, have appeared in the *Bulletin* or *Proceedings* of the Biological Society of Washington. The first two papers cited above are significant additions to the body of knowledge of the area’s biota.

The 2006 plant checklist updates previous lists (1935, 1953) of the vascular flora of the area and accounts for 885 species, including 76 known only from the mainland site. Of the total, 703 (79%) are native, 182 (21%) introduced, and 92 are new records for the Plummers Island area. The authors found 300 species during 2003-2005, and estimate that the current flora totals about 350 species. Many species, including bloodleaf (*Iresine rhizomatosa*), originally described based on collections from the island, have been lost due mostly to natural habitat changes (succession). The history of floristic work at Plummers Island, changes in the vegetation cover and flora during the past century, including discussions of the present plant communities and known deliberate introductions, are included within the pages of this important botanical work.

The vertebrate fauna of Plummers Island has been well-documented in previous publications but relatively little attention has been paid to the invertebrates. Notable exceptions include studies on bees, ground beetles (Erwin, 1981), and tortricid moths (Brown, 2001). According to a summary included in the 2008 volume edited by John Brown, more than 3,000 species of insects in 253 families and 18 orders have been recorded from Plummers Island. Insect orders treated in the 29 papers contained within this multi-authored volume include the Neuroptera (antlions, lacewings, and relatives), Megaloptera (dobsonflies and fishflies), Coleoptera (eight families of beetles), Mecoptera (scorpionflies), Trichoptera, (caddisflies), Lepidoptera (butterflies, skippers, and selected families of moths, including a paper on caterpillars), Diptera (Ephydriidae – shore flies), Siphonaptera (fleas), and Hymenoptera (bees and sawflies only). Some of these orders are represented by only a handful of species, whereas

hundreds of moths are reported. Other invertebrate groups treated in this volume are the nematodes, planarians, snails, freshwater mussels and clams, crustaceans (copepods, terrestrial isopods, crayfishes, and entocytherid ostracods), and pseudoscorpions. The appendix contains a complete list of the invertebrate species recorded from Plummers Island to date.

A summary paper concludes that the insect fauna of the island generally appears to be tracking changes in the vegetation and overall habitat. Species richness of insects that require early successional habitats has declined during the past century, whereas groups that feed on woody vegetation have remained fairly stable.

A related, recent publication of interest concerns the Washington Biologists' Field Club itself. Since its founding in 1900 there has been a total of 267 members, representing all branches of science, with a strong emphasis on biology. Active members must be residents of the greater Washington metropolitan area. Women, of which there are 10 current members, were first admitted into the club in 1995. Club members have included some of the world's leading authorities on plant and animal taxonomy, as well as major figures in conservation, and fish and wildlife management. Besides Smithsonian museum staff, they include employees of government agencies such as the National Park Service, Forest Service, Fish and Wildlife Service, Geological Survey, and National Zoo, as well as private organizations like The Wilderness Society, The Wildlife Society, Urban Wildlife Center, and the Wildlife Management Institute, plus professors at local colleges and universities. Past honorary members have included Nathaniel Britton, John Burroughs, George Grinnell, and Leonard Stejneger. Regular members (some awarded honorary status later) have included such well-known figures as Durward Allen, Vernon Bailey, Herbert Barber, Terry Erwin, Albert Fisher, Alfred Gardner, Charles Handley, Horton Hobbs, Ronald Hodges, Albert Hitchcock, Hartley Jackson, Karl Krombein, Roy McDiarmid, Brooke Meanley, Joseph Morrison, Roger Tory Peterson, Gifford Pinchot, Stanwyn Shetler, Paul Spangler, Francis Uhler (an active member for 61 years until his death), Ernest Walker, Walter Weber, Alexander Wetmore, Don Wilson, and Willis Wirth. Distinguished guests have included Frank Chapman, William Douglas, Theodore Roosevelt, John Terborgh, and Ernest Thompson Seton. Annual social events of the club for the past century have included a spring shad bake and a fall oyster roast. Memorial plaques have been placed on the island for 14 members and the ashes of several of them are scattered there. Past and current long-term members with strong Virginia connections include Handley, Hobbs, Walter Bulmer, Ralph Eckerlin, and David Johnston.

As stated in the preface, this book was published mainly for the benefit of the current Club members. It contains biographies or autobiographies of all past and current members. Some of the biographies were previously published as obituaries in scientific journals, and many make for interesting reading. For example, I learned that Smithsonian malacologist Joseph Morrison was orphaned as a child while living in the Congo, collected many groups of animals besides snails and mussels, and would often brag that he used dust shot to collect dragonflies on the wing. Mason Hale and James Lawrey conducted their pioneering, long-term research on the effects of air pollution on lichen populations at Plummers Island. Terry Erwin's long-term studies of rain forest insects were initiated in part because a Smithsonian administrator substituted the word "Panama" for "California" in his first major grant proposal. William Emery died at age 83 from a fall while collecting plants alone along Difficult Run in Fairfax County (a bush he had grabbed to prevent his fall was still in his grasp when his body was found three days later). The biography of Charles Handley provides an excellent complement to the tribute published in *Banisteria* after his death a decade ago (Pagels, 2000).

An appendix to this publication includes a tally (by major taxonomic groups) of the documented biota of Plummers Island, accounting for 4,835 species, including 221 fungi, 353 vertebrates, 597 beetles, 617 flies, 828 butterflies and moths, and one springtail (undoubtedly an under-sampled group).

I would encourage everyone with an interest in the biota of the mid-Atlantic region to obtain copies of these three publications.

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Brown, J. W. 2001. Species turnover in the leafrollers (Lepidoptera: Tortricidae) of Plummers Island, Maryland: Assessing a century of inventory data. *Proceedings of the Entomological Society of Washington* 103: 673-685.

Erwin, T. L. 1981. *Natural History of Plummers Island, Maryland. XXVI. The ground beetles of a temperate forest site (Coleoptera: Carabidae): an analysis of fauna in relation to size, habitat selection, vagility, seasonality, and extinction.* *Bulletin of the Biological Society of Washington* 5: 103-224.

Pagels, J. F. 2000. Charles Overton Handley, Jr.: A remembrance. *Banisteria* 16: 51-54.

Steve Roble
Editor, *Banisteria*

Weevils of South Carolina (Coleoptera: Nemonychidae, Attelabidae, Brentidae, Ithyceridae, and Curculionidae) by Janet C. Ciegler. 2010. Biota of South Carolina, Volume 6, 276 pp. \$40.00. Available from the Public Service Bulletin Room, 96 Poole Agricultural Center, Clemson University; purchase information can be found at <http://www.clemson.edu/psapublishing>.

On commencing a review of Janet Ciegler's latest contribution to the knowledge of South Carolina's beetles, I find myself in the position of a systematist who, after having bestowed the name *maximus* on a new species of organism, is confronted with a specimen of another even larger novelty in the same genus. Having exhausted my supply of superlatives in a review of her earlier (2000) treatment of the carabid beetles of that state, I am at a loss for words appropriate for an even better account of the weevils, the sixth part of an admirable series of state faunistic surveys being produced by Clemson University. From the eye-catching portrait of a gorgeous *Sphenophorus* on the front cover to the colorful menagerie of diverse species on the outside back, the tradition of high quality practical usefulness is strictly upheld, even enhanced.

The 276 pages that lie between these covers provide a descriptive account of 522 species in 181 genera -- referable to the five weevil families stipulated in the title -- that either are documented for South Carolina or are very likely to occur there. This is an impressive roster, even so it is not a complete list of the state's Curculionoidea (see comments in a subsequent paragraph). The format follows that established in preceding volumes: keys to taxa at all levels, short descriptive notes or diagnoses for each genus, tribe, and subfamily, and two clear photographs of a representative of each genus. That so many of them depict weevils only a few millimeters long in sharp focus is a testimony to Ms. Ciegler's skill with a digital camera. Familiarity with these pictures has already saved me a lot of frustrating "key time".

The introductory pages provide an overview of the physiographic and ecological regions of the state, and the very useful "Appendix A" lists 351 (!) collecting sites by county and physiographic province. In recognition of the known host plant specificity of many weevils, "Appendix B" is a seven-page concordance of the plant species mentioned throughout the book, by scientific name, vernacular name, and family taxon name. "Appendix C" documents 121 new additions to the known weevil fauna of South Carolina, and last, but not least, "Appendix D" accounts for 84 species associated with aquatic or semiaquatic habitats.

No effort has been spared in providing labeled line drawings of every character used in the keys (even the

antennomeres in the funicle are numbered), a vast improvement over the less user-friendly accounts in the classical old resource by Blatchley & Leng (1916). These graphics are supplemented by a three-page glossary defining every structure or condition mentioned in the keys.

While my review of the carabid volume was written from the standpoint of someone with a working knowledge of eastern Nearctic ground beetles, the following remarks are those of an admitted neophyte in the world of weevils, therefore a member of the consumer group to the needs of which the book is specifically addressed. Therefore, the final test of the book's success lay in whether I could identify Virginia weevils with it. With the aid of a handicap (starting with a genus I already knew, *Sphenophorus*), I have had general success in the several trials, although admittedly my selections have favored species more than 3 mm in length. So far about the only point of any concern is the use of the term "flattened" in the definition of the Cossoninae (many of which seem quite cylindrical to me).

I may allude to a curious loose-end, the absence of some genuine weevil taxa. On page 19 it is explained that the brentid subfamily Apioniinae was omitted because its species are minute and hard to identify, and an existing monograph on the group already exists. This rationale is reasonable; I would never try to identify an apionid anyway. But I found no commentary about the exclusion of scolytids, which are traditionally considered to be weevils even though they lack the trademark rostrate prolongation of the head. More striking is the unremarked omission of the Anthribidae, good card-holding weevils by any definition, and neither numerous nor hard to identify. Their inclusion would surely have required less effort than groups like Eriirrhinae. Perhaps treatment of this, or these, groups is in preparation or anticipated, but one wishes that a statement had been made upfront on page 1.

Having produced somewhat similar (but much smaller) faunistic synopses of several insect families in Virginia, I am well aware of the enormous investment of time and effort required to produce the present volume and its predecessors, from the field work right on through composition of the text and preparation of the graphics. Ms Ciegler's contributions maintain the high standard of useful and authoritative identification manuals in the tradition of W. S. Blatchley, earning the appreciation of everyone for whom identification of southeastern beetles has been made easy and possible. And lastly, one cannot overlook the signal contribution by Clemson University in producing the series "Biota of South Carolina" and by Dr. A. G. Wheeler, supervising editor of the project.

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Blatchley, W. S., & C. W. Leng. 1916. Rhynchophora of Weevils of North Eastern America. The Nature Publishing Company, Indianapolis. 682 pp.

Hoffman, R. L. 2000. *Review of* J. C. Ciegler. 2000. Ground Beetles and Wrinkled Bark Beetles of South Carolina (Coleoptera: Geadephaga: Carabidae and Rhysodidae). *Banisteria* 16: 55-58.

Richard L. Hoffman
Virginia Museum of Natural History
Martinsville, Virginia 24112