

HISTORY OF BOTANY IN WEST VIRGINIA
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The history of botany in West Virginia is characterized by "people who live life to its fullest" that often lived in rural communities, and were frequently very determined to succeed, often religious and who held nature in great awe.

Listed below are many of these amateur and professional botanists who have made major contributions to botany from the late 1700s to the present (2006).

George Washington – His journal of trips along the Ohio, Kanawha, and Monongahela Rivers provide glimpses in plant and animal life in the late 1700s.

Thomas Jefferson – His notes of discoveries of many plants and the vegetation of western Virginia (now West Virginia) provides insight into our early vegetation. Twinleaf (*Jeffersonia diphylla*) was named for his determined desire to be knowledgeable about all phases of science.

Meshach Browning – Author of, "Forty-four Years of the Life of a Hunter" covering the period of 1790-1835, provides descriptions of plants and animals of western Maryland adjacent areas of present day West Virginia. He wrote details about the relationships and food habits of wild animals of the region. He also noted the original vegetation of the glades and bogs and changes caused by grazing cattle in these habitats.

Thomas Lewis – His journal while helping survey the Fairfax Line in 1746 that crossed the southeastern boundary of Hardy County and continued through Petersburg, across Dolly Sods and Canaan Valley to the Fairfax Stone, is our first description of the vegetation and landscape of the Ridge & Valley Province, and Allegheny Front. Descriptions of the grass balds and virgin spruce stands are especially interesting.

Matthias Kin – European plant explorer who apparently traveled through the mountainous areas of West Virginia looking for seeds and plants to take back to Europe. He discovered the famous Fraser's Sedge in "Deigher Walli in ter wilternus" in Tygart Valley. The plant was lost to scientists until rediscovered by Lawrence Nuttall in the 1890s along New River.

Asa Gray – Wrote Gray's Manual of Botany. Collected plants on an 1843 trip in Tucker County, across Cheat Mountain (where he found *Aconitum reclinatum*) at Cheat Bridge, southward through Minnehaha Springs, Warm Springs and to Big Spring in Mercer County. An historical marker near Cheat Bridge along US Route 250 marks the occasion of the trip through West Virginia.

Philip Pendleton Kennedy – Wrote "The Blackwater Chronicle" that described the plant and animal life of the Blackwater region (Canaan Valley) in 1851, from the perspective of explorers on a hunting and fishing trip. One description describes a little glade some 300 yards wide and 2 or 3 miles long surrounded by big laurel and areas of the "tallest and most inspiring of the fir species".

Andre Michaux (1746-1802) – Collected plants at Harpers Ferry, Charles Town, Summit Point in Jefferson County, and at Wheeling, Buffalo Point, and the mouth of the Little Kanawha River (Parkersburg) on the Ohio River in 1793. His collections are in a Paris, France herbarium.

Frederick Pursh (1774-1820) – Noted German botanist collected from Harper’s Ferry southward to Greenbrier and Monroe Counties in 1805. His collections are in London.

Constantine S. Rafinesque (1783-1840) – In 1818 he collected plants at Wheeling, Williamstown, and Point Pleasant on a trip to Kentucky and collected in all 3 northernmost Panhandle counties on his return trip. In 1819, he collected along the Potomac River from Cumberland, MD to Harpers Ferry. He also collected along the Ohio River in 1825 and along the South Branch-Potomac River through Hampshire, Hardy, and Pendleton Counties where he “collected many fine plants”.

Henry Ney Mertz (1846-1926) – School teacher and administrator in the Wheeling and Stubenville areas. He collected plants in Ohio & Brooke Counties and deposited them in the US National Herbarium. He jointly published “A Checklist of the Plants of West Virginia” with his good friend Gustav Guttenberg in 1878 in which they listed 590 plant species. He also collaborated with Miss Hattie Jones in 1878 to make a comprehensive collection of plants at Cranberry Summit, Preston County that were deposited in the Carnegie Museum herbarium in Pittsburgh.

Dr. Gustav Guttenberg (1844-1896) – Prominent botanist in western Pennsylvania who collaborated with Henry Ney Mertz to publish “A Checklist of the Plants of West Virginia” in 1878. Plant collections of Guttenberg and Ney are in the Carnegie Museum of Pittsburgh with a few duplicated in the herbarium at WVU. Discovered *Clematis albicoma* on Kate’s Mountain on July 31, 1877.

Merton Benway Waite – Pathologist with US Department of Agriculture collected about 500 parasitic fungi in Fayette and Greenbrier in 1889. In 1911, additional specimens were collected in Berkeley and Morgan counties. All are deposited in the herbarium of the US Bureau of Plant Industry.

John Kunkel Small (1869-1938) – Wrote book entitled “Manual of the Southeastern Flora”. An exploring trip in 1892 to Greenbrier County resulted in discovery of several plant species new to science including Kate’s Mountain Clover.

Nathaniel Lord Britton and Judge Addison Brown explored the shale barrens around White Sulphur Springs in 1896. Britton and Brown’s 3-volume “An Illustrated Flora of the Northern United States and Canada” that was published in 1913 is still the classic illustrated flora and had common names for virtually every species.

Dr. Edgar T. Wherry – The expert on Shale Barrens, Phlox and Heuchera genera, and ferns in the United States. He collected extensively in the Ridge and Valley Province of eastern West Virginia. He was a prolific author of several hundred technical papers and early field guides.

Many of his duplicate collections are in the WVU Herbarium.

Dr. Carl Keener became the expert on shale barrens in the 1980s and wrote indepth articles on the geology/soils, ecology, and vegetation. He visited West Virginia shale barrens and other unique plant communities several times.

WEST VIRGINIA UNIVERSITY

Dr. Charles Frederick Millspaugh (1854-1923) – He wrote the monumental book on “American Medicinal Plants”, a 6-set volume with 180 full-page color plates. He served as botanist and microscopist at West Virginia University from 1889-1892. He traveled West Virginia extensively in an effort to “obtain specimens of each species of herb, shrub or tree”. “In company with the Station entomologist, I began at noon on the second of July, a trip by team and wagon, from Parkersburg on the Ohio, east to the valley of Tygart’s River in Randolph County, thence south-west to the Gauley River, westerly along the Great Kanawha River to Charleston, and north to the starting point. This trip covered 376 miles of road, led us through twelve counties, and consumed 27 days.” He traveled extensively in the eastern panhandle and southern and southeastern WV in 1891. At the end of 1890, Millspaugh estimated there were 1650 flowering plants, 60 ferns, clubmosses, etc., 300 mosses, liverworts, etc., and 2000 fungi, lichens, etc. in West Virginia. In 1896, he jointly published, “The Living Flora of West Virginia” that listed 341 species, varieties and forms of plant life in WV. He compiled the first extensive list of fossil plants in West Virginia in 1892.

Lawrence W. Nuttall (1857-1933) – Amateur botanist and coal operator on New River in Fayette County. He collected nearly 1000 flowering plants and hundreds of fungi (108 fungi new to science) most of which are in the WVU Herbarium. He collaborated with Dr. Frederick Millspaugh to write the, “Flora of West Virginia” in 1896. In 1902, he spent 6 weeks at WVU identifying rusts and other fungi at the request of President D. B. Puriton.

William Earl Rumsey- Native of New York who studied entomology and joined the WVU Agricultural Experiment Station from 1892-1938. He was also interested in botany and added many specimens to the WVU Herbarium.

Dr. John Lewis Sheldon (1865-1947) – He taught bacteriology and botany at WVU from 1903 – 1919. In 1939 an entire issue of Castanea was devoted to the life and writings of Dr. Sheldon, who is described as “A pioneer in the botanical exploration of West Virginia, a discriminative and critical collector, a teacher whose enthusiasm inspired alike his students and associates”. He retired, at the age of 54, in a dispute with WVU administration but continued to be active in botanical circles. Sheldon authored numerous scientific publications on plant diseases and botany.

Dr. Perry Daniel Strausbaugh – He was born in 1886 and began teaching botany at WVU in 1923. He was considered to be an excellent teacher and re-established an almost defunct herbarium started by Millspaugh and continued by Sheldon. He is also recognized for starting Phi Epsilon Phi (botany honorary) at WVU and the WVU Botanical Expeditions field surveys. He was the major advisor of the following graduate students who also made major contributions to WV botany: Elizabeth A. Bartholomew, William Basil Fox, Russell G. Brown,

Earl Berkley, Henry L. Dean, Wilbert M. Frye, Oscar Haught, and Weldon Boone. He co-authored the highly acclaimed book (published in 4 parts), "Flora of West Virginia" with Earl L. Core.

Earl E. Berkley – Graduate student of P.D. Strausbaugh who earned a Master of Science degree and assisted in the founding of Phi Epsilon Phi botany honorary at WVU. He made an intensive study of grasses throughout WV from 1928-1934. He co-authored "West Virginia Grasses" with Earl L. Core and H. A. Davis in 1944.

Wilbert M. Frye - He was a teacher, amateur botanist and nut grower in the South Branch of the Potomac River. He contributed several thousand plant specimens from Hampshire and the surrounding area to the WVU Herbarium. He also authored several scientific articles on Hampshire County floristics and the South Branch Valley from 1935-1942.

William B. Fox- Professor at North Carolina State University and president of the Southern Appalachian Botanical Club.

Oscar L. Haught- Geologist and amateur botanist who contributed about 900 plant specimens to the WVU Herbarium from Wetzel County in 1931. He also contributed about 6000 specimens to the National Herbaria in the US and Columbia, South America. He collected extensive plant and animal fossils in the Dunkard geological series.

Weldon W. Boone – He was a schoolteacher and administrator in Summers County, WV. He was a charter member of the Southern Appalachian Botanical Club. In 1933 he completed a survey of the flora of Summers County that included nearly 1000 specimens and about 2 dozen WV state records. He also collected from surrounding counties and other areas of the United States such as New England, western US, Minnesota of which most specimens are in the WVU Herbarium.

Dr. Russell G. Brown- Native of Morgantown who earned Bachelor and Master of Science degrees in botany at WVU and a doctorate in plant physiology at the U. of Maryland. Taught biology and botany at New River State College (now WV Tech) from 1934-1936 and conducted studies of the botany in Fayette and Kanawha Counties. He joined the botany faculty at the University of Maryland in 1936 and was very active in botany teaching and studies until his death in the late 1990s. He co-authored with Melvin L. Brown the set of books on Maryland's flora "Woody Plants of Maryland and Herbaceous Plants of Maryland".

Dr. Earl L. Core – He was a WVU professor of biology & botany starting in 1926, mayor of Morgantown, member or officer of numerous botany, fraternal and civic organizations. His career was very closely associated with that of P. D. Strausbaugh with whom he co-authored the 4-part book, "Flora of West Virginia" published from 1952-1964. He was curator of the WVU Herbarium for over 10 years, very active with the WVU Botanical Expeditions, and helped organize the Southern Appalachian Botanical Club in 1936. He served as editor of *Castanea* and President of SABC at various times. Core directed the development of trails and plantings at the WVU Arboretum that is named Core Arboretum in his honor. He collaborated

with Herald Bennett, a colleague at WVU, to establish the Terra Alta Biological Station for field studies and summer fieldwork. Among his accomplished graduate students are: Melvin Brown, Charles L. Bryner, Nathan William Easterly, William N. Leeson, and Robert Tetrick II. Earl Core was West Virginia's most prolific scientific and popular writer of botanical articles.

Ray E. Harris – He was a public school teacher in Calhoun and Wood counties and later became Chairman of the Science and Mathematics Department of Shepherd College as well as, a biology professor. He studied the flora of Calhoun County in the 1930s as part of his masters degree program and donated over 1000 plant specimens to the WVU Herbarium.

Elizabeth A. Bartholomew – Native of Wirt County and received a masters degree for her floristics study of Wirt County in 1948. She conducted many nature tours and studies for Girl Scouts and church groups throughout her life in Ohio and Roane Counties. She was clerk or curator of the WVU Herbarium for nearly 41 years. She was secretary of the Southern Appalachian Botanical Club for more than 40 years. She wrote 12 scientific and popular articles and amassed a seed collection of nearly 2000 specimens. Betty contributed several thousand plant specimens to the WVU Herbarium from many parts of WV that included several state records and many new county records. Her greatest contribution was working with and encouraging WVU botany students.

Dr. Nathan William Easterly – Native of Greenbrier County who received a bachelors degree at WVU and a doctorate degree at the U. of Iowa where he studied *Ptilimnium* (*Harperella*). He contributed many plant specimens to the WVU Herbarium but most of his botanical contributions were at Bowling Green State University in Ohio.

Dr. William A. Lunk - Instructor in biology at WVU from 1946-1947. He was primarily a zoologist but did write a scientific article on the "Rubiaceae of West Virginia" in 1947. He was the premier illustrator of the vast majority of the plants in the "Flora of West Virginia" and several other publications by Strausbaugh and Core.

Dr. Roland L. Guthrie – Native of Charleston whose career included teaching biology, botany, and dendrology at WVU for more than 30 years. His dendrology (tree identification) classes were a major factor in the high quality of forestry graduates at WVU. He was director of the Core Arboretum for nearly 30 years and responsible for many improvements in the facility. He co-authored the book, "Forest Wildlife Plants of the Monongahela National Forest" with Homer Dupstadt and Roy Clarkson.

William H. Gillespie – He was born in Webster County and earned degrees in forestry and geology from WVU. He has been and continues to be a prolific writer of scientific and popular articles on botany and paleobotany (fossils). He wrote a 120-page book on the edible plants of WV, a book on the fossils of WV, and co-authored a booklet on poisonous plants of WV. He taught botany, biology, and dendrology at WVU and continues to teach in the geology department. He has been leader of more than 100 nature tours and a frequent speaker/presenter at seminars, workshops, and meetings. He supervised the WV Department of Agriculture's Plant Quarantine Division and was Chief Forester of the WV Division of Forestry.

Maurice G. Brooks (1900-1993) – He was a native of Upshur County and a second generation of the famous Brooks family. He earned bachelor and masters degrees at WVU. His first jobs were as 4-H youth agent and school teacher. He then joined the WVU faculty where he taught biology, forest recreation, and wildlife management. His specialties of expertise were ferns, orchids, salamanders, and birds. He was employed by WVU from 1934 – 1969. He was a charismatic speaker and prolific writer of scientific and popular articles. His crowning achievement was the extremely popular book, “The Appalachians”.

Dr. Ward McClintic Sharp – He was a native of Fairview who earned a bachelors and masters degree in science in the early 1930s from WVU. He taught botany at WVU from 1931-1932 and completed a study of the Composite family from 1928-1932. His major career accomplishments were with the US Department of Education, and US Fish and Wildlife Service.

Dr. Herald D. Bennett – He earned bachelor and masters degrees from WVU in the early 1940s and a doctorate degree at the U. of Iowa in 1949. He joined the WVU faculty in 1948 and taught biology classes and field courses at Camp Wood in Greenbrier County and at the Terra Alta Biological Station. His specialty was algae where he has made significant contributions.

Dr. Mason E. Hale, Jr - He was a WVU faculty member from 1955-1957. He was the US expert on lichens and moved on to the Smithsonian Museum where he wrote the “Lichen Handbook”. He collected nearly 2500 lichens from West Virginia during 1952-1959 that are deposited at the Smithsonian Herbarium.

Dr. Charles H. Baer – Native of Ohio who earned BS and MS degrees in botany at Ohio State University and his doctorate from the University of Maryland in 1961. He joined the WVU faculty in 1948 and taught plant physiology and ecology classes and researched subjects ranging from geological impacts on plants, microclimatology, transpiration, growth, and other environmental factors affecting plants. He was a charter member of the WV Chapter-The Nature Conservancy and has served that organization in many capacities including President. He completed research in the 1960s to identify WV’s National Natural Landmarks as part of a larger project in which he identified landmarks from New York to Alabama.

He is an ardent conservationist and has been honored numerous times including The Nature Conservancy’s highest award (Conservation Hero) given in 2000. He is a nature educator with an outstanding record of leading nature tours and organizing nature education events.

Dr. Jesse F. Clovis- Native of Clarksburg, WV who earned a BS Forestry and MS Botany from WVU, as well as, a doctorate from Cornell. He joined WVU in 1957 to teach general biology, and systematic botany. His collection of plants from central New York and many parts of WV are deposited in the WVU Herbarium. He was very active with the Southern Appalachian Botanical Club. He studied the aquatic plants of Cheat Lake and published a scientific paper on this research. He also published a booklet, “The Woody Plants of the Core Arboretum – West Virginia University” which is used in WVU classes.

Dr. Roy B. Clarkson – Native of Cass, WV who earned a BS degree at Davis & Elkins College, and Masters and doctorate degrees from WVU. He taught in the public schools for 4 years

before joining the WVU faculty in 1956 as a biology and botany teacher. His doctoral dissertation dealt with a thorough floristics study of the Monongahela National Forest. The study resulted in nearly 4000 specimens being added to the WVU Herbarium. Later, he served as head of the biology department. He wrote nearly 15 scientific botany articles but is best known for his books on logging and timbering in WV. "Tumult on the Mountain" is an especially popular book that provides historical photos and narratives of the timbering of the high mountains of WV. He was co-author of the book, "Forest Wildlife Plants of the Monongahela National Forest", with Homer Dupstadt and Roland Guthrie.

Dr. Nelle Ammons- She earned BS and MS degrees at WVU and a doctorate from the University of Pittsburgh in 1937. She taught in the public school systems of Pennsylvania and Marion County, WV before she started her 39-year career in botany at WVU that spanned 1920-1959. She was treasurer for the WV Academy of Sciences for 7 years and president in 1949. She was treasurer for the Southern Appalachian Botanical Club from 1936-1958. She wrote authoritative books on "Shrubs of WV" and "Liverworts of WV" and collected a large number of bryophytes that she integrated into the WVU collections.

Dr. Robert Clifton Spangler- Native of Peterstown, WV who earned his BS & MS degrees at WVU and a doctorate at the University of Chicago in 1925. He joined the WVU biology and botany faculty in 1914 and taught until 1955. His plant collections are in the WVU herbarium.

Dr. Hannibal A. Davis- Native of Marshall County, WV who earned BS & MS degrees from WVU and a doctoral degree in mathematics from Cornell University. He and his wife, Tyreca collected thousands of plant specimens that are in the WVU Herbarium. They made thorough studies of the genera Viola and Rubus, especially by growing more than 2000 species in their garden in Morgantown. Rubus davisorium, a groundberry, from the Cranesville area was named by Liberty Hyde Bailey in their honor.

Dr. Kenneth L. Carvell taught forestry classes at WVU from 1953 to present. He has led hundreds of field trip, given many public presentation and written dozens of popular and technical articles on plants and history. His capabilities on moss and plant identification are very excellent.

George Edward Constable- Native of Fairmont who earned a BS from Fairmont State University, and an MS from WVU. He was the WVU Arboretum Assistant from 1955-1959 and wrote numerous articles for the WVU Arboretum Newsletter. He also collected hundreds of plants from Taylor, Harrison, Marion and Greenbrier Counties that were deposited in the WVU Herbarium. He wrote 3 scientific papers including, "The Flora of Taylor County, West Virginia". He moved to Florida in 1963 to continue his career in teaching.

George H. Breiding- Native of Wheeling, WV who studied the birds and flora of the Wheeling area while working as naturalist at Oglebay Institute in Wheeling. He is a highly respected naturalist, educator and prolific writer. His 50-plus fact sheets are still used by educators and cover a comprehensive range of topics from how to lead a field trip, botany, ornithology, to ecology.

Homer Duppstadt- Native of Pennsylvania who was associated with the WVU Department of Biology for 30 years as a part-time student and Herbarium Assistant. His primary duty was to identify incoming specimens and make collections in selected areas of the state. Numerous state records were reported in *Castanea* journals and at WV Academy of Sciences meetings. He co-authored, "Forest Wildlife Plants of the Monongahela National Forest" with Roland Guthrie and Roy Clarkson, and "Spring Wild Flowers of Central Pennsylvania" with Dr. Earl Core. He was very active with the WV Academy of Sciences, Southern Appalachian Botanical Club, and Phi Epsilon Phi.

William N. "Bill" Grafton earned BS (wildlife management) and MS (forestry) degrees from WVU and has worked 40 years (1966 – present) for the WVU Extension Service. He has led over 500 wildflower and ecological interpretation field trips. He has collected, identified, and pressed nearly 15,000 plant specimens that have been donated to the WVU Herbarium. He was a charter member and first president of the WV Native Plant Society and was the acting president in 1980-1981 and then was president four times (1982-1983 and 1999-2000). He has written numerous popular botanical articles and scientific report on wetlands, plant communities and rare plants.

Dr. Ronald Fortney completed his doctoral studies under Earl L. Core and researched the floristics and plant communities of Canaan Valley. He became the chief naturalist for the WV State Parks and later the chief planner for State Parks. He taught many biology and botany courses for the WV Graduate College, Salem-Teikyo University, and WVU. While at WVU in the late 1900s and early 2000s he conducted research on many wetlands, roadside flora and mined areas.

An unfortunate automobile accident in 2004 seems to have shortened a previously very productive botanical career.

Dr. James Rentch studied plant taxonomy and wetland ecology under Dr. Ronald Fortney, and researched grass balds of West Virginia for his Masters degree. He completed a PH.D. in forest ecology at WVU. Since then, he has been involved in floristic and ecological studies of wetlands in WV, particularly high elevation sites in Canaan Valley, as well as, old growth oak forests and restoration of red spruce ecosystems. He has co-authored a monograph, "A floristic quality assessment index for West Virginia wetland and riparian plant communities," as well as, papers on vegetation of roadside plant communities, and vegetation patterns within the lower Bluestone River Gorge. He has taught ecology, silviculture, and vegetation classes at Marshall University and WVU.

Dr. Donna Ford-Werntz earned her BS from Miami University (Ohio) 1982, a MS from the University of Michigan in 1985 and a Ph.D. from Washington University in St. Louis in 1992. She has been the curator of the WVU Herbarium since 1995. She has completed an inventory of all West Virginia specimens and entered this data into a computerized database. She co-authored the "Checklist and Atlas of the Vascular Flora of West Virginia" printed in 2006. She is also very active with the WV Native Plant Society and teaches botany classes at WVU.

Dr. Susan Moyle Studlar earned a BA in Biology from Carleton College (Minnesota) in 1966 and a Ph.D. in Botany from the University of Tennessee (Knoxville: advisor, bryologist Dr.

Aaron J Sharp). Previously on the faculty at Centre College (Kentucky) and Mountain Lake Biological Station (Virginia), she has taught botany courses at WVU since 1993. She co-authored the "Annotated Checklist of the Hornworts, Liverworts, and Mosses of West Virginia", published in 2002, based on her critical review and curation of bryophytes in the WVU Herbarium. Her publications include ecological and floristic studies of Appalachian bryophytes (VA, KY, and WV); a co-authored study of the moss harvest in West Virginia is forthcoming in the Bryologist journal. Sue has also lead many moss walks and workshops for local and regional natural history clubs.

Dr. James McGraw received his BS in Biological Sciences from Stanford University and his Ph.D. in botany from Duke University. He came to WVU in 1982 as Assistant Professor of Biology. He has taught Plant Ecology, Ecology and Evolution, Plant Population Biology and Biometry. His research on adaptation of plants to environmental variation has taken him to Africa, Antarctica, Alaska, and Colorado.

Most recently, his work has focused on plant populations that are out of balance. Specifically, he and his students study economically valuable medicinal plants such as ginseng, goldenseal, and black cohosh. He is leading efforts nationally to manage such species using scientifically based population viability assessments. These species are especially important both culturally and economically to rural harvesters in the Appalachian region. Other students in his lab are focusing their research on the mechanisms of spread and effects of invasive plant species. One major project involves "tree-of-heaven" or "tree-of-almost-heaven" as he likes to call it, since it has become a major pest species in West Virginia. In 2000, Dr. McGraw was named Eberly Professor of Biology in the Eberly College of Arts and Sciences and in that same year was selected to be an Aldo Leopold Leadership Program Fellow by the Ecological Society of America.

William Morris Fontaine- He was a professor of chemistry and geology at WVU from 1873 to 1878. He was an avid student of fossil flora. He co-authored, with Israel Charles White of WVU a very controversial paper on the Permian fossil flora of the mid-Ohio Valley region of western WV. He published additional papers on WV fossils in 1884 and 1886. He wrote a portion of Maury's Centennial volume of the "Resources of West Virginia" in 1876 in which he listed 69 trees and 16 shrubs.

David White- He was one of America's leading paleobotanists who collected fossils with I. C. White in the Permian and Dunkard formations in 1902. He completed extensive field work in WV from 1886-1894 with several trips at later dates. He published "Fossil Flora of West Virginia" in 1913 that was the basis concerning the age and correlations of coals and fossils of the Kanawha Valley with similar stratigraphy of Pennsylvania. His last visit to WV was a week-long visit to give a series of special geology lectures at WVU in 1927.

Anthony Berg- Joined the faculty of WVU in 1913 as a plant pathologist. He researched and published numerous scientific papers on cedar apple rust, tomato diseases and potato diseases. He died in 1947 while still on the faculty.

Dr. C. R. Orton- He earned a BS from Vermont, MS from Purdue University, and a doctorate degree from Columbia University. He worked as a plant pathologist at WVU from 1929 until 1949 and served as head of the plant pathology department and Biology most of that time. His primary research dealt with potatoes and apples.

MARSHALL UNIVERSITY

Dr. Frank A. Gilbert- He graduated from Harvard after earning masters and doctorate degrees. While at Harvard, he helped Merritt Fernald with the 8th Edition of “Gray’s Manual of Botany”. He joined Marshall University in 1927 and served as professor and head of the botany department until 1942. He conducted comprehensive studies of the southwestern area of WV and was curator of the Marshall College herbarium that contained about 15,000 specimens. His plants were deposited in the Marshall Herbarium with many duplicates deposited at WVU. He wrote nearly 20 scientific botany articles. He also made a collection of more than 2000 lantern and microscopic slides as well as, 20 reels of movies of botanical subjects. After military service (1942-1945) he worked as a researcher at Battelle Memorial Institute in Columbus, Ohio and later taught at Union College, also in Ohio.

Dr. H.C. Darlington- Native of Wriston, Fayette County, WV who earned BS & MS degrees from WVU and a doctorate from the University of Chicago in 1947. He taught in public schools for 12 years and at Marshall University for 27 years from 1930-1957. His doctoral dissertation was titled, “Vegetation and Substrate in Cranberry Glades, West Virginia”. For many years during the 1960s and early 1970s he conducted monthly tours through Cranberry Glades for the general public.

Dr. Edward Lewis Plymale- Native of Wayne County, WV earned a BS from Marshall College, MS from U. of Kentucky, and doctorate from Iowa State University. He joined the botany department at Marshall College in 1946 as a professor and department head and remained at Marshall until he retirement in 1974. He studied and collected plants in southwestern WV and wrote a scientific article on the, “Plants of Wayne County, West Virginia”. His only graduate student was Edsel Lafferty who completed a floristic study of Wyoming County, WV.

Dr. Dan Evans has taught botany classes at Marshall University from 1974 to the present. He earned his Ph.D. in Botany from Southern Illinois University. He has been very active in medicinal plant research in South America since 1990. He and his graduate students have provided a very considerable mass of new knowledge about wetland and floodplain communities of the Ohio, Big Sandy, Kanawha, and New/Gauley/Meadow Rivers and have added around 12 new plants to the flora of West Virginia. He was a co-author of the “Rare Plant of West Virginia” published in 1981. Early in his career, he inventoried the 14,000-plus plants in the Marshall Herbarium. The present day count is approximately 60,000 specimens.

FAIRMONT STATE UNIVERSITY

Charles Moore Roberts- Native of Pennsylvania who earned BS & MS degrees at Penn State University. He also completed post-graduate work at WVU. He taught at Fairmont State

College from 1926-1953 in the biology/botany program. He made an extensive collection of over 1000 bryophytes which are deposited in the WVU Herbarium.

Dr. William D. Creasy- Native of Calvin, WV who earned a BS from WV Tech College, an MS from WVU, and a doctorate from Iowa State University. He taught at Marshall for one year in 1950 and later joined Fairmont State College in 1954. He is best remembered for his teaching of botany and biology classes but did write articles on the genus *Scrophularia* and the growth of yellow poplar. His collections, mostly from Nicholas County, are deposited in the WVU Herbarium.

Dr. Steven L. Stephenson edited and wrote several chapters of the book, "Upland Forests of West Virginia" that describes the forest ecosystem of West Virginia's higher mountains. He also has written a book on slime molds and has completed research on red spruce forests and roadside plants. Steve worked many years as professor at Fairmont State College and is located at the University of Arkansas at the present time.

WEST VIRGINIA WESLEYAN COLLEGE

Dr. George B. Rossbach- Native of Maine who earned BS & MS degrees from Harvard and a doctorate from Stanford University. He joined WV Wesleyan College in 1949 to teach botany. He has written many scientific articles on plant taxonomy including, "Distributional and Taxonomic Notes on Some Plants Collected in West Virginia and Nearby States". He has collected extensively since 1930 in many areas of the United States (especially Maine, WV, Wisconsin, and California) and Canada. His specimens are deposited in numerous herbaria including WV Wesleyan and WVU.

Joe F. Glencoe, Jr.- Native of Davis, WV who earned BS & MS degrees from WVU. He taught at Potomac State College, Morris Harvey College and WV Wesleyan College. He is remembered for his influence on students and moderate field collections that are housed at WV Wesleyan College.

Dr. Kathy Gregg has taught botany classes at Wesleyan College from the 1980s to the present. Her research has focused on physiology, phenology, and ecology of orchids.

CONCORD COLLEGE

Dr. E. Meade McNeill- Native of Buckeye who earned a BS from Concord College, an MS from WVU, and a doctorate from Duke. He joined the biology/botany faculty at Concord College in 1928 and became head of the department in 1943. He worked closely with Dr. Earl Core on the WV Botanical Expeditions and was a major contributor to the original "Flora of West Virginia". As an enthusiastic teacher he had very positive influences on thousands of students who graduated from Concord College. He collected extensively in southern West Virginia and most of his specimens are in the Concord Herbarium. He was president of the WV Academy of Science from 1944-1946. He also wrote numerous scientific articles, especially about algae which was his specialty.

Dana Stike Evans was a native of Mullens, WV who earned a MS degree under P. D. Strausbaugh in 1941. She taught in the public schools until she joined the faculty at Concord College in 1958. Here she worked closely with Dr. Meade McNeill in teaching botany and as curator of the herbarium. She was an active member of Southern Appalachian Botanical Club and the WV Academy of Sciences

SALEM COLLEGE

Juanita S. McCoy was a native of Upshur County who earned BS & MS degrees from WVU. She joined the faculty of Salem College in 1955 and taught for nearly 2 decades. She collected over 500 specimens that are deposited at Salem and WVU. She also published a checklist of Harrison and Doddridge County Plants.

WEST VIRGINIA TECH

Dr. Violet S. Phillips is a native of Kingston, WV who earned BS from WV Tech and MS and doctorate degrees from WVU. She taught at WV Tech College from 1948 until her retirement in the 1980s. She is noted for her study of the flora of New River in West Virginia and adjacent Virginia. She was active in the WV Academy of Sciences and lives in Clay County.

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BETHANY COLLEGE

Wilbur John Sumpstine was a native of Pennsylvania who earned a BS at Bethany, an MS from University of Chicago, and nearly completed a doctorate at the University of Pittsburgh. He taught at Bethany College for a number of years. He studied the flora of the Northern Panhandle and western Pennsylvania and his large collection of specimens is in the WVU Herbarium. He wrote several scientific articles.

Dr. Jay Bucklew has taught biology and botany at Bethany College from to the present. He and his students have assembled considerable knowledge about the present day flora of the Northern Panhandle.

GLENVILLE STATE COLLEGE

Dr. Max Ward was a native of Grantsville, WV who earned a BS degree at Glenville College and MS and doctorate degrees from Harvard. He taught in several WV public schools before joining Glenville State College in 1955. He was Chair of the Science Dept. from 1958 until the 1970s. He was an active member of the WV Academy of Science and the American Bryological Society. He is best known for his teaching of botanical classes and the dozen or so scientific articles on bryology.

Verona Mapel was a native of Pennsylvania who graduated from Fairmont Normal School in 1879. She taught botany, mathematics and literature at Glenville and West Liberty Normal Schools in the late 1800s. She collected 355 species from 1881-1901 along with many grasses

and weeds that was cited by Dr. Frederick Millsbaugh, but have since been lost. She also grew a sizable flower garden in Weston that included many native plants. She was honored by Glenville State College as a former teacher and principal in 1926.

WEST VIRGINIA STATE COLLEGE

- Adolph Putnam Hamblin was a native of Illinois who earned a BS at Knox College, and an MS from Ohio State university in 1946. He organized the Department of Biology at WV State College in 1920 and served as chair and professor until the late 1960s. He made a large collection of vascular plants, algae, fungi, lichens, and bryophytes that are housed at the WV State Herbarium. His most important publication was entitled “ An Illustrated Key to the More Important Vascular Plant Families of West Virginia”.

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FROSTBURG COLLEGE, MD

Dr. Melvin L. Brown was born in Mineral County where he taught in the public schools but spent most of his career teaching biology and botany at Frostburg State College. He contributed about 1000 plant specimens to the WVU Herbarium as part of his dissertation on a “Floristic Study of Mineral County”. He co-authored with Russell G. Brown of the U. of MD. the set of books on Maryland’s flora: “Woody Plants of Maryland and Herbaceous Plants of Maryland”. He established a private arboretum at Elk Garden where he has conducted dozens of tours and has donated unusual plants to other arboreta. He has presented numerous talks to groups and has led over 100 nature tours at the Blackwater Falls State Park - Wildflower Pilgrimage and other events.

OTHER PROFESSIONALS AND AMATEURS

- Caroline Dane Bedinger (Danske Dandridge) was a native of Denmark who moved to Shepherdstown in 1859. She wrote dozens of popular botanical articles for different magazines such as Field and Stream, Gardening, etc. She also beautified her home and the grounds into a formal garden containing nearly 500 different trees and shrubs and numerous native wildflowers. Rose Brake Estate was a very popular and widely publicized home in the Eastern Panhandle.

Dr. Hamilton McSparrin Gamble was born at Moorefield, WV who earned medical degrees and returned to Moorefield after the Civil War to practice medicine and surgery. He searched for herbs along the South Branch- Potomac River and its tributaries in Hardy, Grant, Mineral and Hampshire Counties from 1889 until his death in 1917. His donation of 157 plant specimens is one of the oldest in the WVU Herbarium. Gamble Garden in the WVU Herbarium is named in his honor.

Dr. Fred William Gray was a native of North Carolina who studied religion and was a very successful and respected preacher in Philippi and Belington. He grew gladiolas and wrote several articles about the Genus. He also studied the plants of West Virginia's mountains from 1920-1960. His collection of 24,000 specimens of mosses, lichens, liverworts, ferns and seed plants was acquired by the WVU Herbarium in 1939. His discoveries of box huckleberry populations and ferns are major botanical accomplishments.

Alonzo Beecher "A B" Brooks (1873-1944) received a Bachelors degree in agriculture from WVU and worked as a school teacher, forester, and naturalist. His book "Forestry and Wood Industries" published in 1911 by the WV Geological Survey is the best historical data on early WV forests. His career included working at the WVU Agricultural Experiment Station, WV and US Departments of Agriculture, Chief game protector for WV, and Naturalist at Wheeling's Oglebay Park. His fame and charisma as a naturalist are extraordinary. He authored numerous reports on forests of various WV counties, tree identification, shrubs, orchids, etc.

Fred E. Brooks (1868-1933) was trained in entomology and he worked for the WVU Agricultural Experiment Station and the US Department of Agriculture on various insect damage projects related to fruits and nuts. After a heat stroke in 1930, he devoted most of his time writing nature oriented articles for the general public, many of which were published in the very popular "West Virginia Review" magazine. The Fred E. Brooks Memorial Arboretum at Watoga State Park was established in his honor.

Dr. Eugene E. Hutton was a native of Huttonsville, WV who practiced medicine in Elkins. He intensively studied the flora of Randolph County but also covered most of WV as a member of the Brooks Bird Club outings. His discoveries include more than a dozen state records. He wrote nearly 20 scientific articles on the flora of West Virginia over a 50 year period. Most of these were published in the Redstart or Castanea journals. One article of particular value to WV botanists is, "Representatives of the Circumpolar Arctic Flora in West Virginia, with Special Attention to Randolph County".

William C. Legg- Native of Mt. Lookout, WV who was an amateur naturalist. For many years, he operated a small-scale printing press and published "Twintiliana Press" that were articles of observation and popular science value that were distributed to his friends. He became nationally known for his distinctive writing style. Many of his plant collections are in the WVU Herbarium.

John Paul Tosh- Taught biology at Woodrow Wilson High School in Beckley, WV from 1940-1941 and made an intensive study of vascular plants of Raleigh County. He collected over 800 specimens that included several state records. His study was published in Castanea in 1942.

Joseph E. Harned- Native of Maryland, who practiced pharmacy in Oakland, MD but was honored with honorary doctor of science degrees from WV Wesleyan and Western Maryland College. He wrote and published a very nice book, "Wild Flowers of the Alleghenies" in 1931 that is a collector's item today. He gave numerous talks on wildflowers to local schools and civic groups.

Francis Welles Hunnewell- Native of Massachusetts who practiced law and was an amateur botanist. He made numerous trips to the mountains of West Virginia and collected hundreds of specimens that are mostly deposited in the New England Botanical Club, WVU, and Gray Herbaria. He also wrote several scientific articles on West Virginia's flora.

William McCauley Pollock- He was a student at WVU from 1893-1897 who collected extensively in Lewis, Upshur, Preston, Pocahontas, Taylor, and Wood Counties and in Monongalia County from 1898-1899. His main collection of 1700 specimens were accidentally destroyed.

Edward Strieby Steele- Native of Illinois, who deposited most of his specimens in the National Herbarium, as well as, several hundred duplicates at WVU. He collected 325 specimens near Aurora, Preston County in 1898. He also collected near Old Sweet Springs, Monroe County in 1903 & 1905, near White Sulphur Springs in 1906, in Grant County in 1910, and in Hardy County in 1911. He worked for the US Department of Agriculture in Washington, DC. One of his best publications is, 'New and Noteworthy Plants from the Eastern United States' published in 1911.

Edward Layman Morris- He was the curator of the Brooklyn Institute Museum. While engaged in fish studies in southern West Virginia, he collected plants along New River and southern WV in Summers, Mercer, McDowell, Raleigh, and Wyoming Counties. He deposited 397 specimens in the National Herbarium from WV and published an article, 'Some Plants of West Virginia' in 1900.

Jesse Moore Greenman- Curator of the Missouri Botanical Garden Herbarium who collected 1500 specimens in 1904 from Tucker, Pendleton, Randolph, and Pocahontas Counties that are deposited in the Gray Herbarium.

Per Axel Rydberg- Worked for the New York Botanical Garden and made collections from Spruce Knob and Snowy Mountain in 1925. Discovered *Aconitum vaccarum* and *Heuchera alba* species. He wrote two interesting articles about WV plants. He was a very noteworthy botanist nationally.

Harry A. Allard- Native of Mississippi, who earned a BS degree from the University of North Carolina specializing in botany and geology. He worked for the US Department of Agriculture in D.C. and spent many summer vacations in Tucker County studying plants. He published his findings in 1952 in a scientific article titled, "The Canaan and Stony River Valleys of West Virginia, their Former Magnificent Spruce Forests, their Vegetation and Floristics Today". He published over 200 scientific papers on photoperiodism, leaves, berries, toads, streams, springs, etc.

Dr. Aaron John Sharp- Served as faculty member during the summers at WVU from 1939-1941. He made numerous field collections in northern West Virginia. He also was a leader at some of the early Wildflower Pilgrimages in Tucker County in the 1960s. Most of his professional accomplishments were realized while working at the University of Tennessee.

H. P. Sturm- Native of Clarksburg who was an amateur botanist. He prepared five color movies on wildflowers of bogs, shalebarrens, carnivorous plants, and the Allegheny Mountains, and on general wildflowers.

Leo Lesquereux- He was a botanist and paleobotanist who was a native of Switzerland. He wrote the 2-volume "Geology of Pennsylvania" which notes several interesting fossils from the Kanawha Salines and from Charleston in 1854 and 1858. He also wrote "The Coal Flora of the Carboniferous in Pennsylvania and the United States". This is a classic 3-volume (published from 1880-1884) and describes 835 fossils of which several are based on WV material.

Osbra Eye was a forester who worked for the West Virginia state forests and state parks. He was an excellent photographer and interpretive field trip leader. He also collected many rare plant throughout West Virginia and especially from Kanawha County where he often collaborated with Margaret Dennison.

Dr. Larry Morse, the former botanist, with The Nature Conservancy has spent many weekends and vacations in eastern West Virginia studying our flora.

Eleanor M. Bush has traveled throughout West Virginia with the Brooks Bird Club studying the flora during the 1-2 week-long forays. Her writings include the technical report on the "Vascular Flora Along the Tygart Valley River near Arden, West Virginia published in Castanea in 1976. She also published a booklet in 2004 on the "Flora of Barbour County". She was also a charter member of the WV Native Plant Society.

Rodney Bartgis is probably the most knowledgeable botanist of flora and ecology of eastern West Virginia and the high mountains today. His determination to preserve many of West Virginia's most unique plant communities and rare species led him to become State Director of the West Virginia Chapter – The Nature Conservancy.

Stan Bentley is a Virginian who accomplished the seemingly impossible goal of finding a native plant new to science. The plant is Bentley's Coralroot. He also authored one of the excellent botany book, "Native Orchids of the Southern Appalachian Mountains" published in 2000 and includes his excellent photographs of our orchids.

Al and Scott Shriver (father and son) and Clete Smith of Pittsburgh, Pennsylvania have spent over 2 decades searching for orchids in West Virginia, western Pennsylvania, eastern Ohio, and western Maryland, as well as, many orchid hotspots in all parts of the United States and Canada. Their field work has greatly expanded ranges and filled gaps in orchid geography. Their photography and collections have added considerable new information on morphology, phenology, and taxonomy of our West Virginia orchids.

William C. "Bill" Roody is a seasonal biologist with the WV Department of Natural Resources – Wildlife Diversity Program who is an accomplished photographer of mushrooms and the author of, "Mushrooms of West Virginia and the Central Appalachians" published in 2003.

Allison Cusick is a well known botanist from Ohio who frequently explores for plants in West Virginia. He has donated many sedges and other plants to the WVU Herbarium.

Tom Weiboldt is a botanist from Virginia who frequently collects plants in the southeastern portions of West Virginia; especially along the New River.

Paul "PJ" Harmon is the state botanist with the West Virginia Division of Wildlife Resources. His field research has primarily been on rare plants and has published brochures, technical reports, and booklets on invasive species, rare plants and is co-author of the "Checklist and Atlas of the Vascular Flora of West Virginia", printed in 2006.

Tom Allen is a retired wildlife biologist with the WV Division of Wildlife Resources who authored a book entitled, "Butterflies of West Virginia" that lists host plants for butterflies that are in West Virginia.