Magnolia

Magnolia grandiflora
The Laurel Tree of Carolina
Catesby's *Natural History*, 1743

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"An Undebauched Mind:" Farmer Washington at Mount Vernon, 1759-1799

by G. Terry Sharrer, Mount Vernon, Virginia

"The more I am acquainted with agricultural affairs, the better I am pleased with them; insomuch, that I can no where find so great satisfaction as in those innocent and useful pursuits. In indulging these feelings, I am led to reflect how much more delightful to an undebauched mind is the task of making improvements on the earth, than all the vain glory which can be acquired from ravaging it, by the most uninterrupted career of conquests."

Washington to Arthur Young, December 4,1788[1]

Washington was, before, during and after everything else, a farmer. He claimed that being a good farmer was his only lifelong ambition, though perhaps he exaggerated a bit. His diaries and letters show a constant concern with agricultural matters, leaving the clear impression that he sincerely believed "the life of a Husbandman of all others is the most delectable." It would be difficult to prove that farming was the main source of the man's character, but just as hard to deny. The kind of farmer Washington was, however, may indicate why that occupation figured so persistently in his thoughts.

As every school child knows, the place Washington loved best was Mount Vernon. He acquired the mansion house and 2,100 acres after settling his brother's estates in 1761, although he had moved there with his bride, Martha Dandridge Custis, in 1759. Martha's inheritance from her first husband gave the couple enough money to develop Mount Vernon into one of the largest plantations under cultivation in Virginia. Shortly after his marriage, Washington wrote to his London agent asking for a copy of a book. Its title likely revealed his intention — *A New System of Agriculture: Or a Speedy Method of Growing Rich.*[2]

courtesy of Mount Vernon Ladies Association

George Washington at Mount Vernon.

From the time he took over Mount Vernon until the end of his life, Washington acted out the role of "gentleman farmer." Considering the slightly derogatory connotation that term now has, an explanation of its eighteenth-century meaning seems

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CALENDAR

March 4th- 5th; 11th- 12th, 2000. River Oaks Garden Club 65th Annual Azalea Trail, includes tours of Bayou Bend, Rienzi, and private gardens. Call (713) 523-2483; www.riveroaksgardenclub.org

April 2nd- 5th, 2000. "A Focus on Plants - History, Culture and Future," the 54th Williamsburg Garden Symposium. Features garden historians, nurserymen, and educators, including John Elsley of Wayside Gardens; Robert E. Lyons, director, J. C. Raulston Arboretum; Greg Grant, Austin State University; and Peggy Cornett of Monticello as keynote speaker. For more information on Williamsburg Institute programs, call (800) 603-0948, or visit their web site: www.history.org

April 14th-15th, 2000. The Florence Hand Lecture, Flower Show and Tour, at Hills and Dales, the home and garden of the late Mr. and Mrs. Fuller E. Callaway, Jr. in LaGrange, Georgia. The first annual Flower Show will benefit the Florence Hand Home Charitable Trust. For information, call (703) 845-3600 or visit: www.wghs.org

April 29th, 2000. Georgia Historic House and Garden Pilgrimage. Tours include the homes and gardens of J. Neel Reid and Philip Trammell Shutze in Atlanta. Contact the Garden Club of Georgia, Inc. at: P. O. Box 767732, Roswell, GA 30076-7732.

April 29th- 30th, 2000. 10th Anniversary Celebration of the Leesburg, Virginia Flower & Garden Festival. Call Leesburg Parks and Recreation Department, (703) 777-1368.

May 5th-7th, 2000. ***18th Annual Meeting of the Southern Garden History Society***, Mount Vernon, Virginia. Speakers include Lucy Coggins, Laura Viancour, Tom Burford, Libbey Oliver, and William Seale. Meeting chair J. Dean Norton, director of horticulture at Mount Vernon has organized a thoroughly delightful extravaganza of events, including breakfast on the Potomac via an authentic paddle wheel boat. For more information, contact Dean Norton at (703) 799-8661; dnorton@MountVernon.org

July 28th, 2000. "The Future of Garden History,"Annual Garden Seminar at George Mason's Gunston Hall Plantation. For more details, call (703) 550-9220; toll free (800) 811-6966. Web site: www.Gunstonhall.org; e-mail: historic@GunstonHall.org

August 10th- 12th, 2000. North American Fruit Explorers 2000 Conference. Organization devoted to the discovery, cultivation, and appreciation of fruits & nuts, including Southern heirlooms. On the grounds of the University of Virginia. For general information, call (804) 752-6508; e-mail: munson@erols.com; web site: www.nafex.org

August 25th- 26th, 2000. "Historic Plant Hunting: Process & Discovery," the 2nd biennial Historic Plants Symposium of the Thomas Jefferson Center for Historic Plants at Monticello. Speakers include Christy White, horticulturist at Old Sturbridge Village; former CHP director John Fitzpatrick; landscape historian C. Allan Brown; rosarian Doug Seidel; flower historian and author Greg Grant; and Monticello's Peter Hatch and Peggy Cornett. For more information, contact Peggy Cornett at (804) 984-9816; pcornett@monticello.org

November 16th- 18th, 2000. "The Colonial Revival in America," co-sponsored by the National Park Service and the University of Virginia's departments of Landscape Architecture and Architectural History. This conference will explore new ideas and perspectives on the Colonial Revival, which, in all its manifestations is one of the most persistent elements in American culture; as design, it may be our national idiom. For information, contact Richard Guy Wilson at (804) 924-6462; rgw4h@virginia.edu

May 4th-6th, 2001. "Pocosin to Parterre: Landscapes of the Carolina Coastal Plain," the19th annual meeting of the Southern Garden History Society at Tryon Palace, New Bern, North Carolina. This meeting will explore the varied landscapes of the coastal region, from unique natural features to high style gardens. The program also includes a visit to historic Edenton. The meeting coordinators are Carlton B. Wood and Perry Mathewes. For more information, contact Tryon Palace Historic Sites and Gardens, (800) 767-1560.

October 14th-18th, 2001. 9th International Heritage Rose Conference in Charleston, South Carolina. This conference will focus international attention and educate the public on the historic contributions of Charleston as the source of the Noisette rose, the first class of rose to be developed in America. Hosted by Ruth Knopf; honorary chairs: Mrs. Joseph H. (Patti) McGee and Mrs. Alexander Sanders. Contact Charleston Area Convention and Visitors Bureau, P. O. Box 975, Charleston, SC 29402. Phone (803) 853-8000.

April 18th- 21st, 2002. 20th Annual Meeting of the Southern Garden History Society in Natchez, Mississippi. Dr. Elizabeth Boggess, meeting chair, is planning a special anniversary event.

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deserving. In Fielding's Tom Jones (1748), the term first appeared in literature. Telling Tom and Mr. Partridge his story, "The Man of the Hill" recalled:

> My father was one of those whom they call gentlemen farmers. He had a little estate of about £300 a year of his own and rented another estate of near the same value. He was prudent and industrious, and so good a husbandman, that he might have led a very easy and comfortable life, had not an arrant vixen of a wife soured his domestic quiet.

Good husbandry, rather than great wealth or high social standing, was the original mark of a "gentleman farmer." Naturally, people of wealth had more opportunities to discover what good husbandry was. Still, "improved" farming drew attention in all but the meanest "neighborhoods" of Britain, Europe, and America. Voltaire quipped that in France, "the nation, satiated with verse, tragedies, comedies, novels, operas, romantic histories, and still more with romantic moralisings, romances and theological squabbles, began to discuss the question of corn." Later on, Arthur Young wrote that "the farming tribe is now made up of all ranks from a Duke to an apprentice." Actually, he should have said "from a King," as George III, who came to the throne in 1760, took great pride in his agricultural efforts, enjoyed being called "Farmer George," and published his own studies of crop husbandry under the name of his gardener Ralph Robinson. One might easily imagine an enlightened but dirty-booted plowman and a well-heeled aristocrat discussing a system of crop rotations in the eighteenth century. They were both "gentlemen farmers."[3]

Complicated economic forces lay behind the heightened interest in farming on both sides of the Atlantic. The same forces were generating the industrial revolution. But, in a nutshell, population was expanding faster than the area of cultivated land. Between 1740 and 1800, England's population grew from 6 to 9 million; France, 17 to 27 million; Germany, 18 to 24 million. More Europeans (including the British), demanding more goods, so created the consumption circumstances commercial farmers have always loved. In Virginia, Europe's wishes were measured out in more tobacco to England, more wheat to Southern France and Spain, and more cereals and livestock products to the West Indies.[4]

The expansion of farming into new lands was never very complicated. Intensifying agriculture on existing land, however, was always a problem of the most tangled order, wherever attempted, because it required that farmers understand more than a little about biology, soil chemistry, mechanics, and farm management. It was to these subjects that Washington paid considerable attention and much of what he learned came from books. In England, men such as Jethro Tull, William Marshall, Lord Townshend, the Earl of Leicester, and Arthur Young were writing about a number of practices known collectively at the time as "the new husbandry." Actually, there were two branches of thought in this school, represented by Tull and Young. Jethro Tull, the author of Horse-Hoeing Husbandry (1731) based his advice on the theory that plants took nourishment from the soil by eating small particles of dirt through their "lacteal mouths." All plants, he believed, subsisted on the same kind of food. The aim of horse-hoeing was to break the earth into small enough particles for the plants to eat. He was a lawyer. In spite of his mistaken premise, Tull's work on plows and grain drills represented an important advancement in agricultural technology.[5]

Young popularized "the Norfolk system," which held crop rotation and marling as the cornerstones of enlightened practice. Marl, a mixture of clay and lime, neutralized soil acidity, discouraged the growth of acid-loving diseases, and promoted the growth of nitrogen-fixing bacteria. Young became so devoted to its application that on his wife's tombstone he had inscribed: "Martha Young, the great-grand-daughter of John Allen, Esq. of Lyng House in the county of Norfolk, the first person, according to the Comte de Boulainvilliers, who there used lime." Young disapproved of Tull's horse-hoeing and had gotten into farming because

courtesy of Mount Vernon Ladies Association

An 18th century tobacco farm. (source Arents collections New York Public Library, Astor, Lenox and Tilden Foundation.)

his mother refused to let him become a cavalry officer. Washington owned Tull's book and corresponded with Young for many years.[6]

On the basis of notes he took and new ideas he put into practice, Washington was particularly influenced by two other writers. The English edition of Henri Duhamel du Monceau's *A Practical Treatise of Husbandry* (1759) expanded upon Tull's ideas about agricultural implements and provoked Washington to try his own hand at devising a cultivator that both plowed and planted. Henry Home's (Lord Kaimes) *The Gentlemen Farmer: Being an Attempt to Improve Agriculture, by Subjecting It to the Test of Rational Principles* (1779) described harrows and a plan for crop rotations that Washington used. Both books actually covered

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a variety of subjects: soils, fertilizers, plant physiology, livestock, and equipment.[7]

Much of the information about "the new husbandry" was newly rediscovered rather than entirely new. In fact, a good share of the advice was ancient. "We ought to imitate others and attempt by experimentation to perform some operations in a new way, following not chance but a systematic program" was Varro's counsel to farmers in 37 B.C. He also stressed the interdependence of crops and livestock husbandry. Colmuella's twelve-book, *De Re Rustica* (50 A.D.), even quantified farm production in terms of man-hours to land. What brought the ancient advice into vogue during the eighteenth century was the recurring need to expand production on existing farms. Experimenting with new ways was the key, but experimentation risked a high degree of uncertainty. Some practices succeeded, some failed, some succeeded physically but failed economically, and so on. Farmers like Washington, who tried new ideas, took ridicule in failure and skepticism in success from their more traditional neighbors. Either way, the role of demonstrating experimental agriculture served a useful purpose in expanding the scope of knowledge about farming.[8]

If any crop symbolized traditional agriculture in Virginia at the time Washington took over Mount Vernon, it was tobacco. From about 1612 to 1660, tobacco was a bonanza crop and the tobacco trade was what drew John Washington to the colony in 1657. George's great-grandfather, grandfather, and father had all raised tobacco, though not extensively. At the time of his death in 1743, Augustine Washington (George's father) owned 10,000 acres in Westmoreland County on which he raised cereals, flax, peas, and beans, garden and orchard produce and a variety of livestock. He had only five acres in tobacco. Price fluctuations made tobacco sometimes profitable, but often not. By 1759, however, Washington learned that prices were higher than they had been for many years and so he planted and brought in a crop of over 34,000 pounds. He continued, raising 89,079 pounds in 1763. Prices collapsed in 1764. Two years later, Washington said that he had given up tobacco altogether, and he repeated the assertion in 1768. Off and on,though, he made a little tobacco for the rest of his life. Actually, it is somewhat surprising that he paid so little attention to tobacco, as his diaries indicate. It was certainly worthy of some scientific curiosity. There were several sub varieties (e.g. Pryor, Long, Green, Townsend, and Little Frederic) of the main Sweet-scented and Oronko types. Horse-hoeing was readily applicable. On the other hand, marl did nothing for tobacco and manure only made it taste bad. Drilling tobacco was impossible. Perhaps, especially important, Washington could find no guidance for improvedpractice in the literature he owned or could buy. If Washington saw tobacco as a symbol of anything, it was probably of backwardness. And, if so, he was right.[9]

The first agricultural experiments that Washington recorded were in the spring of 1760. In April, he built a box with ten compartments for testing different fertilizers. Each compartment had soil from one of his fields, to which he separately added river sand, creek mud, marl, clay, black

courtesy of Mount Vernon Ladies Association

Farm site at Mount Vernon.

mold, and manure of cattle, sheep, and horses. Perhaps thinking of Tull's advice, he "reduced the whole to a tolerable degree of fineness and jumbled then well together in a cloth." Then, "in each of these divisions were planted three grains of wheat, 3 of oats, and as many of barley — all at equal distances in rows and of equal depth (done by a machine made for the purpose)." Later on, he noted that the grains raised in the sheep dung were the strongest, but more had sprouted in the compartment with the black creek mold. What this proved, if anything, was that the best fertilizers were those that were the hardest to come by.[10]

In May, Washington planted Lucerne (alfalfa). Where he got the seed or how he knew about its cultivation can only be guessed. Lucerne was scarcely known in America, although in 1739 Eliza Lucas had tried raising it along with indigo in South Carolina and John Bartram in Philadelphia kept Lucerne in his botanic garden at about the same time. Samuel Hartlib was the first Englishman to write about Lucerne in his Legacy of Husbandry (1655), a copy of which Washington owned. Tull, too, discussed it in Horse-Hoeing Husbandry and took a surprisingly positive attitude in contrast to what he thought about clover (i.e. "foul feed for horses and injurious to cattle"). He remarked that "Lucerne is the only hay in the world that can pretend to excel or equal St. Foin" and went on to discuss how Columella had raised it in the first century. Duhamel du Monceau's book, Thomas Hale's *A Complete Body of Husbandry* (1759), and Robert Maxwell's *The Practical Husbandman* (1757), all of which

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Washington owned, discussed Lucerne at length, but it is uncertain whether he read these works before he planted his first crop.[11]

Lucerne has several advantages, if properly handled. It is rich in totally digestible nutrients for livestock and, as a legume, is nitrogen fixing. To grow well, however, Lucerne requires neutral to slightly alkaline soil conditions, and the land at Mount Vernon tended toward slightly acidity. Marling corrected the chemistry for Lucerne, as the Norfolk improvers knew. Apparently, Washington had mixed results, though he never explained exactly why. In 1795, he wrote to Jefferson, "Lucerne has not succeeded better with me than with you, but I will give it another and fairer trial before it is abandoned altogether." (Probably, Washington's Lucerne crop died off because the plants' deep roots drowned during the winter season's high water table). Still, from beginning to end, his attempts with Lucerne spanned a period of over thirty-five years.[12]

It troubled Washington that much of what he read about farming was untried by its proponents. Tull worked in his fields, but Lord Townshend, the great propagandist for turnips, never did. Washington had good reason to be skeptical even of theorists who wallowed in mud. Eastern Virginia's climate and soil were more like Portugal's than Britain's. English technology was not entirely transferable to America, at least not without some adaption. As best he could, Washington tried to figure out the variables of biological control according to his own circumstances. With plants, he studied the depth at which seeds were sowed and the effect of different widths between the rows. With manure and lime, he experimented with top, side, and under dressings. He kept weather records and tried altering the planting dates of his crops. On fruit tree grafting, livestock nutrition, and animal diseases, Washington carefully recorded his experiences about what worked best.[13]

Every time Washington left Mount Vernon, he worried about his overseers keeping things in good order. And he was away part of every year. He took a seat in the House of Burgesses in 1759. Then, in April 1775, he started his most momentous trip. Writing to his brother John Augustine, he said "I am now to bid adieu to you, and to every kind of domestic ease for a while. I am embarked on a wide ocean, boundless in its prospect, and in which, perhaps no safe harbor is to be found. I have been called upon by the unanimous voice of the Colonies to take the command of the Continental army." The next time he returned home was a stop on the way to Yorktown.[14]

courtesy of Mount Vernon Ladies Association

Washington the Farmer.

The Revolution altered the course of commercial agriculture for Washington as it did for practically all farmers in America. Britain directed its mercantile policy against the United States after the war and the effects were, in some places, devastating. The indigo industry in South Carolina and Georgia collapsed with the loss of its protected market and transportation subsidy. Dairymen in New England and the middle states were shut out of the British West Indies trade. In his *Observation of the Commerce of the American States*, Lord John Sheffield argued that the British Empire needed nothing of American shipping and little of its goods. Canada, he thought, could supply fish, wheat and flour, naval stores, and lumber to the Atlantic colonies and perhaps to the wine islands and Portugal as well. "The West India islands will then be under no necessity of drawing supplies from the American states, and the importation of their wheat and flour should be prohibited ...." But on this last point, Sheffield was wrong.[15]

In the first place, Sheffield overestimated Canada's strength as the empire's granary. The Canadians could not fill the gap. In fact, Canada was not itself self-sufficient in wheat. British farmers were in no position to help. Crop failures in England in 1782 and 1783 forced Parliament to prohibit all wheat exports. Even in good harvest years afterwards, Britain was only marginally self-sufficient in breadstuffs.[16]

Also, Sheffield poorly understood the physical peculiarities of the flour trade. Among the major commodities in Atlantic commerce, flour was the most perishable. Meats, wine, fish, rice, and even butter all had longer merchantable lives than flour and corn meal. Changes in temperature, from cool to hot, and humidity, from dry to damp, caused milled cereals to ferment. Simply, English flour rotted almost as soon as it arrived in the British West Indies, if not sooner. By contrast, American flour, especially that milled in the Southeastern states, kept sweet longer. Sir Humphrey Davy explained the problem, comparing Yorkshire and Maryland wheat's in Elements of Agricultural Chemistry (1803).[17]

In short, the British were unable to close the cereal trade between the United States and the West Indies. Crop failures in Spain and France during the 1780s did as much for those countries' Caribbean colonies. Later on, the wars of the French Revolution and Napoleon worked to American farmers' benefit. As Jefferson figured, "this (war in Europe)

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we cannot help, and therefore we must console ourselves with the good prices of wheat which it will bring us. Since it is so decreed by fate, we have only to pray that their soldiers may eat a great deal."[18]

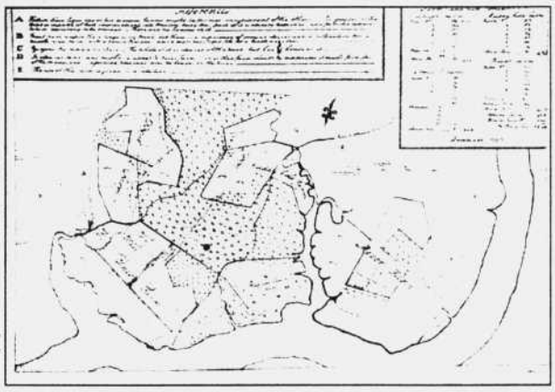
On December 4, 1783, Washington gave a farewell to his officers at Fraunces' Tavern in New York and returned to Mount Vernon. Lund Washington had managed the plantation during his absence, though perhaps not to the General's satisfaction. In June 1785, he wrote to George Fairfax in England to ask for help in finding a new manager who knew the best methods and "above all, Midas like, one who can convert everything he touches into manure, as the first transmutation towards Gold." Fairfax asked Arthur Young for a recommendation, and with that, Young and Washington began a thirteen-year correspondence. In his first letter to Young, Washington said "agriculture has been amongst the most favourite amusements of my life, though I never possessed much skill in the art; and nine years total inattention to it has added nothing to a knowledge which is best understood from practice; but with the means you have been so obliging to furnish me, I shall return to it (though rather late in the day) with hope and confidence." Over time, Young sent to Mount Vernon plans for buildings, English plows, books and seeds, though his first favor must have given Washington some misgiving. James Bloxham, Young's choice for Mount Vernon's manager, turned out to be an alcoholic.[19]

In his "Notes and Observations" for 1786, Washington recorded planting peas, turnips, oats, clover, barley, carrots, cabbage, flax, millet, potatoes, orchard grass, timothy, rye, pumpkins, corn, and wheat, though he elaborated more on wheat than on anything else. Indeed, it was in the context of wheat production that most of his agricultural practices fit together.

Washington knew, like farmers everywhere, that crop rotation had several benefits, including higher yields, lower incidence of weeds, and less soil erosion. His problem was to figure out what rotation worked best at Mount Vernon. Even before the Revolution, he had broken with the customary rotation of wheat, clover, and fallow. In Henry Home's *The Gentleman Farmer* (1779), he studied a six-year plan and modified it to run for seven: wheat, turnips, barley, hay, oats, fallow, and pasture. Washington may have taken some inspiration for his field system from John Beale Bordley's *A Summary View of the Courses of Crops in the Husbandry of England and Maryland* (1784). And, certainly, Arthur Young had a great deal to say on the subject.[20]

Crop rotation was the key to farming systematically, the aim to which Washington aspired. To get the best yields, however, crop rotation had to be carried out with close attention to seed-bed preparation, marling to neutralize soil acidity, and greater application of animal manure. InWashington's plan, wheat was the only crop not returned to the soil, in part, as manure. As he wrote to his manager in 1793, "my object is to recover the fields from the exhausted state into which they have fallen, by oppressive crops, and to restore them, if possible by any means in my power, to health and vigor. But two ways will enable me to accomplish this — the first is to cover them with as much manure as possible, winter and summer — the second a judicious succession of crops."[21]

Of course, Washington wanted greater harvests as well as higher yields per acre. To that end, he bought more land and



courtesy of Mount Vernon Ladies Association

Washington's five farms

put more under the plow. His original estate of 2,100 acres grew to over 8,000 by 1787. In all, he had 3,260 acres of cultivable land, divided among five farms: Mansion House Farm, Union Farm, Dogue Run Farm, Muddy Hole, and River Farm. For wheat, heallocated about 700 acres at the different sites.[22]

Besides raising wheat, Washington saw advantage in milling it himself. On Dogue Run, he owned a gristmill that had fallen into disrepair during his wartime absence. Then, on his tour of the United States in 1791, he saw a mill being built near Wilmington, Delaware that kindled the notion of rebuilding his own. Washington had his secretary, Tobias Lear, contact Oliver Evans who was responsible for designing the mill in Delaware and Evan Evans, Oliver's brother, went to Mount Vernon and supervised the construction. What the Evans's created was not simply a remodeling, but rather an entirely new set of mechanisms that allowed flour to be milled automatically, with little human labor. In fact, it was the beginning of industrial automation. Oliver Evans, of course, could hardly have found a more prominent wheat farmer among his first clients.[23]

Though wheat husbandry and all it involved probably occupied more of Washington's attention than anything else, he wrestled with other farming problems too. He was always concerned about his livestock, in which he had an enormous

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investment. There were usually more than 300 head of cattle and between 600 and 1,000 sheep at Mount Vernon. Washington thought that the wool he produced was equal to the best in England, but he was probably mistaken. He had little luck with dairy cattle because the abundance of garlic and wild onions in his fields tainted the flavor of milk; most of his cattle were kept for meat. The size of Washington's herds was important, because heterosis had slim prospects among fewer than eighty animals. Washington kept alert for chances to buy good breeding stock in cattle and sheep whenever he could.[24]

Where Washington achieved singular distinction in animal breeding, however, was with mules. In 1785, the King of Spain sent to Mount Vernon a jackass (male donkey) named "Royal Gift" and the following year Lafayette sent a Maltese jack and two jennets (female donkeys). Attempts to mate them were unsuccessful at first. Washington wrote: "at present, tho' young, he ["Royal Gift"] follows what one may suppose to be the example of his late Royal Master, who cannot, tho' past his great climacteric, perform seldomer or with more majestic solemnity than he does. However, I have my hopes that when he becomes a little better acquainted with republican enjoyments, he will amend his manners and fall into our custom of doing business ...." In time, "Royal Gift" proved himself with one of the Maltese jennets and sired "Compound," Mount Vernon's most famous stud. Washington had little luck getting his stallions to breed with the jennets, but he discovered that the jennets' ability to tease was sufficient to excite the jacks into mating with almost anything. By 1799, Mount Vernon had fifty-seven mules, descending mostly from "Compound" and twenty mares.[25]

courtesy of Mount Vernon Ladies Association

Mule at Mount Vernon

Washington employed his mules for farm work even more than his oxen or horses. Mules were generally healthier, lived longer, and ate less than the horses and worked faster than oxen. Their only disadvantage was that they produced less manure. Whether or not he actually calculated it, Washington assigned mules to his farms at roughly one animal for forty acres. Because he was the first to be successful at mule breeding in the United States, Washington was centrally involved in the important shift from bovine to equine power on American farms.[26]

In 1875, the same year that "Royal Gift" arrived, Washington built a greenhouse on the North side of the flower garden at Mansion Farm. It was a large building with a forced hot air system (now reconstructed on its original site at Mount Vernon). In it, he raised oranges, pineapples, strawberries, and other exotics. A visitor described it as "a complete greenhouse, which at this season is a vast great source of pleasure. Plants from every part of the world seem to flourish in the neatly finished apartments ...." As with his field crops, Washington read what he could to direct his experiments. John Kennedy's *A Treatise upon Planting, Gardening and the Management of the Hot-House* (1777) and John Abercrombie's *The Hot-House Gardener* (1789) were in his library. Washington's diaries, however, give little indication that he had much success as a horticulturist. Still, the picture of Washington trying to raise seeds from China (he had no idea what the plants were) testifies to a sense of experimentation that ran the gamut of his day.[27]

Throughout his life, farming fascinated Washington. His aim, more than simply making a living from the land, was to put agriculture on a permanent footing at Mount Vernon, in contrast to the migratory tradition of farming until the soil wore out, then moving on. In the eighteenth-century sense of "scientific" (empirical experiments and observations), Washington was a "scientific farmer." He devised some of his own implements, and imported other "new models" from abroad. He kept in contact with the most prominent men in farming on both sides of the Atlantic. With attempts to raise over sixty field crops, he more that demonstrated his reluctance to be bound entirely to one. And, in at least one area of animal husbandry — mule breeding — he was a pioneer.

Yet, to assess Washington as a farmer is no simple matter. A catalogue of his shortcomings would include the fact that most of his experiments failed. His plow broke. His drill broke. His Chinese seeds sprouted and withered, and citrus growing never caught on in Virginia. Unlike Eliza Lucas or Eli Whitney, Washington's name was not associated with a dramatic change in agriculture during his lifetime. The list might go on to include that Washington never truly applied scientific principles to agriculture, nor had any literary influence on farming.

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In an ironic way, however, Washington's failures in farming may hold his enduring importance. Experimentation is, by nature, risky and often doomed to a high failure rate. Insofar as change in agriculture partly rests on an accumulation of knowledge drawn from failure as well as success, Washington's sense of experimentation represents an essential element of agricultural development. Furthermore, he was persistently experimenting from the time he acquired Mount Vernon until his death, and the extent of his practice with plants and animals was perhaps unrivaled in the world. Washington may or may not have been an agricultural visionary, but he wrestled with the greatest problem of his or any day — that of bringing permanence to farming. In this, as Henry Lee said, "he was second to none in the humble and endearing scenes of private life."

Washington's persistence in the face of failure, his resourcefulness and self initiative, and his optimism and limited ambition apply almost equally to his agricultural, military, and political careers. His writings, however, give the impression that these qualities originated in his aspirations to be a good farmer and translated elsewhere rather than the other way around. ✦

End Notes

1. Franklin Knight, ed., *Letters on Agriculture from His Excellency George Washington* (Philadelphia: W. S. Martien, 1847), 24-25.
2. William McDonald, *George Washington: A Brief Biography* (Mount Vernon: Mount Vernon Ladies Association, 1973), p. 12; Cecil Wall, "George Washington: Country Gentleman," *Agricultural History* 1 (January 1969): 5.
3. Voltaire quoted in Wilhelm Abel, *Agricultural Fluctuations in Europe from the Thirteenth to the Twentieth Centuries* (New York: St. Martin's Press, 1979), 204; Young quoted from Sir E. John Russell, *A History of Agricultural Science in Great Britain*, 1620-1954 (London: George Allen & Unwin Ltd., 1966), 53; Rodney C. Loehr, "Arthur Young and American Agriculture," Agricultural History 1 (January 1969): 45. See also Paul Haworth, *George Washington, Country Gentleman: Being an Account of His Home Life and Agricultural Activities* (Indianapolis: Bobbs-Merrill, 1925).
4. B. H. Slicher van Bath, *The Agrarian History of Western Europe, A. D. 500-1850* (London: Edward Arnold Ltd., 1963), 80; Jonathan D. Chambers and G. E. Mingay, *The Agricultural Revolution, 1750-1880* (New York: Schocker Books, 1966), Ch. 2.
5. The best survey of "the new husbandry" is Naomi Riches, *The Agricultural Revolution in Norfolk* (Chapel Hill: University of North Carolina Press, 1937); Jethro Tull, *The Horse-Hoeing Husbandry or an Essay on the Principles of Tillage and Vegetation* ... (London: the author, 1733), 4; Sir E. John Russell, History of Agricultural Science, 42.
6. Sir Leslie Stephen and Sir Sidney Lee, eds., *The Dictionary of National Biography* (London: Oxford University Press, 1973), Vol. 21, p. 1273; George Edwin Fussell, *Crop Nutrition: Science and Practice Before Liebig* (Lawrence, Kansas: Coronado Press, 1971), 89.
7. For a list of agricultural books in Washington's library, see Alan and Donna Fusonie, *A Selected Bibliography of George Washington's Interest in Agriculture* (Davis, California: Agricultural History Center, 1976).
8. Kenneth D. White, *Roman Farming* (Ithaca: Cornell University Press, 1970), 140.
9. Charles E. Hatch, Jr. *Popes Creek Plantation: Birthplace of George Washington* (Washington: National Park Service, 1979), 32; Lewis C. Gray, *History of Agriculture in the Southern United States to 1860* (Washington: Carnegie Institution, 1933), Vol. I, p. 272; Donald Jackson, ed., *The Diaries of George Washington* (Charlottesville: University Press of Virginia, 1976), Vol. I, p. xxx; see also Aubrey C. Land, "The Tobacco Staple and the Planter's Problems: Technology, Labor and Crops," *Agricultural History* 1 (January 1969): 69-81.
10. John C. Fitzpatrick, ed., *The Diaries of George Washington*, 1748-1799 (Boston: Houghton, Mifflin Co., 1925), Vol. 1, pp. 153-154, 158.
11. Lyman Carrier, *the Beginnings of Agriculture in America* (New York: McGraw-Hill Book Company, 1923), 244.
12. Walter E. Brooke, *The Agricultural Papers of George Washington* (Boston: R. G. Badger, 1919), 92. The first American book on alfalfa was Jacquelin Ambler, *A Treatise on the Culture of Lucerne* (Richmond, Virginia: the author, 1800).
13. For more description of Washington's plant experiments, see David M. Matteson, *Washington the Farmer* (Washington: George Washington Bicentennial Commission, 1931).
14. Joanne Young, *Washington's Mount Vernon* (New York: Holt Rinehart and Winston, 1973), 5.
15. John Baker Holroyd, Lord Sheffield, *Observations on the Commerce of the American States with Europe and the West Indies* ... (Philadelphia: n. p., 1783), 64-68; Elinor Oakes, "A Ticklish Business: Dairying in New England and Pennsylvania, 1750-1812," *Pennsylvania History* (Summer 1980): 195-212; G. Terry Sharrer, "The Indigo Bonanza in South Carolina, 1740-1790," *Technology and Culture* 12 (July 1971): 447-455.
16. Elizabeth B. Schumpter, *English Overseas Trade Statistics*, 1697-1808 (Oxford: Clarendon Press, 1960), p. 56; Stephen Dowell, *A History of Taxation and Taxes in England* (London: Longman, Green and Co., 1884), 10.
17. G. Terry Sharrer, "Flour Milling and the Growth of Baltimore, 1750-1830," *Maryland Historical Magazine* 71 (Fall 1976): 323.
18. Ibid., 324.
19. Jackson, *Diaries of George Washington*, Vol. I, p. xxviii; Knight, ed., *Letters on Agriculture*, 15; Loehr, "Arthur Young," 49; William C. Abbott, *Adventures in Reputation, With an Essay on Some "New" History and Histories* (Cambridge, Mass.: Harvard University Press, 1935) discusses the career of John Bloxham.
20. Harry Snyder, Bread: *A Collection of Popular Papers on Wheat, Flour and Bread* (New York: Macmillan Co., 1930) 273-275. Has discussion of "Washington as a Wheat Farmer;" Moncuse D. Conway, *George Washington and Mount Vernon* (Brooklyn, NY: Long Island Historical Society, 1889), 282. (This source contains letters between Washington and his manager at Mount Vernon, William Pearce, 1793-1796). See also Bordley's *Sketches on Rotations of Crops and Other Rural Matters* (Philadelphia: Charles Cist, 1797).
21. Washington to William Pearce, Dec. 18, 1793 in Conway, *George Washington at Mount Vernon*, 11. For more description of agricultural problems and practices in Fairfax County, see "Dr. David Stuart's Report to President Washington on Agricultural Conditions in Northern Virginia," *Virginia Magazine of History and Biography* 61 (July 1953): 283-292.
22. Washington to Arthur Young, Dec. 12, 1793 in Knight, *Letter on Agriculture*, 114-122. This letter contains Washington's most complete description of farming going on at the Mount Vernon farms.
23. Greville Bathe and Dorothy Bathe, Oliver Evans: *A Chronicle of Early American Engineering* (Philadelphia: Historical Society of Pennsylvania, 1935), 27.
24. Washington to Arthur Young, Dec. 12, 1793 in Knight, ed., *Letters on Agriculture*, 120; Catherine C. Coblentz, "George Washington's Animals," *National Historical Magazine* 73 (1939): 31-34.

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Farmer Washington:...
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End Notes cont. ...

25. John C. Fitzpatrick, *The Writings of George Washington*, 1745-1799 (Washington: Government Printing Office, 1931-1944). Vol. 28, p. 426; J. H. Powell, "George Washington and the Jack Ass," *South Atlantic Quarterly* 52 (April 1953): 238-252; James W. Whitaker, "A Venture in Jack Stock," *Agricultural History* 38 (October 1964): 217-225.
26. "General Washington's Jacks," *The Draft Horse Journal* 8 (February 1971): 16. Contains Washington's advertisement for jack stud service.
27. Mount Vernon Ladies Association, *Mount Vernon: An Illustrated Handbook* (Mount Vernon: Mount Vernon Ladies Association, 1968), 28.

"Plans and Plants of the Southern Landscape," A Review of the 12th Conference on Restoring Southern Gardens and Landscapes

by Keyes Williamson, Horticulturist , Old Salem, Winston-Salem

Each winter, as the gardeners at Old Salem begin putting together seed orders for the upcoming year, we have the opportunity to reassess the list of plants grown in Old Salem's restored family gardens. Bill Crow scoures the pages of catalogues looking for vegetable varieties with introduction dates appropriate to our period. David Bare does the same for flowers, and this year he carefully reexamined our seed inventory, trying to justify each plant's place at Old Salem. We are fortunate to possess several good plant lists left behind by the Moravian settlers of this area and by the citizens of Salem. Philip Christian Reuter's two maps of the gardens of Bethabara (1759, 1761) provide lists of the vegetables, herbs, and flowers grown there. For specific varietal names, Old Salem relies on advertisements published in local newspapers and on the diaries and sketches that local residents left behind. Even with this information, we choose to grow varieties that we cannot positively place here at Salem from its founding in 1766 to 1859, the period presently reflected in the restored landscape. So we necessarily rely upon the lists of plants, compiled by various authors, that were known to be cultivated in America by the mid-nineteenth century. Although by no means a perfected science, this was exactly the topic of the Restoring Southern Gardens and Landscapes held this past October in Winston-Salem.

Every two years, leaders in the field of landscape restoration converge at Old Salem to discuss a topic pertinent to the profession. This year, speakers, representing disciplines across the spectrum, brought forth their ideas and opinions on a wide range of issues all built around the theme "Plans and Plants of the Southern Landscape." One participant remarked that the reoccurring theme of the Conference was "the pursuit of accuracy." Based on the three days of lectures and workshops, it is clearly evident that garden restoration is being actively supported by scholars whose research refine our understanding of our horticultural heritage. Dr. Arthur O. Tucker, in his lecture "The Myth of the Colonial Herb Garden," reminded the audience of garden historian Rudy Favretti's warning that "visitors to historic sites ? accept what they see as authentic. We do them a great disservice to exhibit untrue concepts."

A stroll through our gardens with vegetable historian and noted author William Woys Weaver illustrated just how difficult it is to be historically accurate. Weaver's remarkable knowledge of historic plant varieties enables him to recognize anachronistic plants and to verify if what we grow today is similar to what was grown in the past. Weaver's keynote address walked the audience through the steps he takes to identify an heirloom variety and then how he obtains an example of that plant today. At his 1830s *jardin potager* near Philadelphia, Weaver carefully grows thousands of heirloom plants. Showing several slides he made with the latest digital technology, Weaver demonstrated how he compares his own produce with historic botanical illustrations to verify a variety's identity. Weaver also encouraged historic sites to be

photo by Virginia R. Weiler

Conference participants touring Old Salem gardens.

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vigilant about authenticity, encouraging historic sites to develop their own seed production projects in order to protect the future of these varieties. Historic gardens often rely on only a few sources for their seed, and we should all support new seed suppliers who are careful to verify a plants identity and to document the plants introduction into American cultivation.

Peggy Cornett, director of the Thomas Jefferson Center for Historic Plants at Monticello, examined the many steps needed to identify a historic flower variety, from deciphering sometimes cryptic notations to matching popular names with botanical names. Using her research into the eighteenth- and nineteenth-century plant lists of Thomas Jefferson, Lady Skipwith, William Faris, and John Custis, Cornett discussed the characteristics and popularity of the flowers that appear on these lists. Interestingly, only China pinks, tuberose, and hollyhocks are mentioned in each of these four lists. George Stritikus has extensively studied period plants in his state of Alabama, using sixty-one primary and secondary source documents to compile several lists of plants. As a county extension agent, Stritikus has been researching Southern gardens since 1970. His presentation examined the limitations and obstacles to developing an accurate historic plant list, and specifically tackled the ambiguity of "introduction dates." Stritikus has computerized his research, creating comparative indexes that show the relative popularity of different trees, shrubs, and herbaceous plants.

William Rieley, landscape architect and principal of Rieley & Associates, demonstrated a very different way that computers can help garden restoration. Rieley used Monticello and Poplar Forest as examples of how the newest computer technology analyzes historic photographs, maps, and surveys. Rieley showed how the computer can process the information in these photographs and maps, creating three dimensional models and lines of perspective to accurately locate a now lost landscape feature.

Delaware State University research professor Dr. Arthur O. Tucker, dressed in colonial garb and equipped with various garden tools, discussed the myth of the colonial herb garden, once a standard feature of a restored colonial landscape. Tucker explained that rather than being common in colonial America, gardens devoted exclusively to herbs were exceedingly rare, and those that did exist were medicinal gardens. "I have searched and searched," Tucker said, "but I have never found an instance in history where an entire [vernacular] garden was devoted to all variety of herbs by the average gardener." His presentation stressed the practical realities of gardening today and in yesteryear.

We relearn this lesson every year at Old Salem. The gardeners discover the nuances of the site, finding the wet spots or the hot spots, and move plants to find a more favorable location. As a garden matures, or as is the case with our Miksch garden, that young saplings become robust trees, a garden changes and the attentive gardener changes with it, finding good selections and combinations from experience rather from pre(mis)conceptions. Taking a practical approach to garden restoration was also the subject of Camilla Wilcox's workshop. Wilcox discussed her experience as curator of education and research in the restoration of the Reynolda Garden, designed by Thomas Sears in 1917. Even with a detailed landscape plan that used twentieth-century plants, the staff of Reynolda Gardens needed to make several difficult decisions about how to restore the formal gardens of the Reynolds family. While trying to "remain faithful" to the 1917 plan, the Reynolda staff found that unavailable plants and present growing conditions justified making occasional substitutions. Wilcox shared with us Reynolda's method of organizing and keeping records during the restoration process, stressing that restoration is an ongoing research process.

photo by Virginia R. Weiler

William Woys Weaver giving tour through Old Salem gardens.

Perry Mathewes discussed his continuing research into the plant lists of eastern North Carolina. As curator of gardens at Tyron Palace Historic Sites and Gardens, Mathewes developed a new interpretive garden, showcasing plants documented in New Bern during the nineteenth century. Using slides of photographs and paintings, Mathewes discussed some of the pleasant discoveries found along the way, including an 1885 list of roses. Several presentations discussed the distribution of historic plants, emphasizing that the availability or popularity of particular varieties varied across the region. Perhaps no speaker more thoroughly illustrated the great diversity of the South than did Atlanta landscape architect and author James Cothran. Using a great number of slides from around the South, Cothran examined

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how Southerners' interest in horticultural and ornamental gardening found expression in an enormous variety of architectural styles and agricultural practices. Additionally, for an evening session, Cothran showed a video introduction to the Cherokee Garden Library in Atlanta, a valuable repository of primary and secondary research material, which houses the archives of the Southern Garden History Society.

Peter Joel Harrison's research has led him around the country examining, photographing, and drawing historic fences and other garden features. He shared his personal experience trying to find a publisher for his exquisite renderings. Thankfully, with the advice and help from friends, he did get them published and several of his books were available and sold well at the Conference. This year the Conference returned to Old Salem and The Museum of Early Southern Decorative Arts after several years of being held on the campus of Salem College. Participants particularly enjoyed the more intimate setting of MESDA, commenting that the location helped facilitate conversation during the brief program breaks. Participants also toured Old Salem's gardens, and this year John Larson, vice president of Restoration for Old Salem, lead a walking tour of Tanner's Run. At one time, Tanner's Run stream ran through the heart of Salem, providing water and power. In recent decades, this much-neglected stream had become overgrown and filled with trash. Old Salem, in conjunction with Pilot View RC&D and the City of Winston-Salem, engineered a bioremediation of this important habitat for native flora and fauna. A highlight of the conference was the panel discussion, "How to Develop an Authentic Plant List." Moderator Gordon Chappell of Colonial Williamsburg, led the discussion on ways to produce an accurate, thoroughly referenced list of historic plants of the South. All agreed that great care must be taken to document the source of the information and to correctly identify the plants on the lists. Chappell has, to date, received numerous historic lists, and conference participants were encouraged to become involved in the collection of material. Those interested in providing information for the project should contact SGHS headquarters or Gordon Chappell directly. The goal, of course, is to further the mission of providing accurate information for garden researchers and restorers. While it will likely take some time to collect and organize this enormous amount of information into a usable form, we anxiously await its arrival and applaud Colonial Williamsburg's leadership in this effort. The 1999 Restoring Southern Gardens and Landscape Conference did produce immediately gratifying lessons. We personally came away with several ideas about researching our plants and organizing our inventory. William Weaver's mandate to grow our own seeds and to carefully identify what we grow leads us into the growing season excited about the possibilities and responsibilities of gardening at a historic site. ✦

"ORIENTAL LUXURY": BERGHOLZ, SUMMER, AND THE GARDENS OF ANTEBELLUM COLUMBIA, SOUTH CAROLINA

by James Everett Kibler, Hardy Plantation, South Carolina

In the midst of war, William Summer's agricultural and horticultural periodical, *the Farmer and Planter* of Columbia, South Carolina, began an ambitious series entitled "Visits to Columbia Gardens." It was written for the journal by W. R. Bergholz, an unheralded landscape architect of Columbia, who was overseer of Summer's Columbia branch of Pomaria Nurseries. Bergholz was a European, a replacement for two earlier European gardeners at Pomaria: James Crammond and William DeHines. He had special expertise in varieties of ornamentals currently introduced to Europe from Asia. His specialties were evergreens, conifers, roses, and perennials. Summer described him in 1861 as being "an accomplished Horticulturist and Floriculturist, who will spare no pains to make this establishment superior to any in the Confederacy." Bergholz was also an able and well-received horticultural writer. Before *The Farmer and Planter's* demise in or shortly after October 1861, he was a regular contributor to the periodical on such topics as ornamental trees and shrubs, roses, fuchsias, verbenas, geraniums, lantanas, heliotropes, "The Flower Garden," "The Study of Botany," and "The Color and Odor of Flowers." In a June 1861 advertisement in The Farmer and Planter, Bergholz offered his services as "Landscape Gardener and Rural Architect." He states in this ad that he will "devote particular attention to the improvement and laying out of country and city residences, public parks, cemeteries, and all kinds of ornamental and flower gardens, and garden architecture, the construction of green-houses,

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conservatories, graperies, etc." He says that his garden plans will be drawn up to "position every tree and shrub" and give a "list of the kind and quantity of plants required."

At the Columbia branch of Pomaria Nurseries, which Bergholz and Summer were developing in 1861, the newly-erected glass house for tender plants already measured 22 by 200 feet long, and contained "the choicest and rarest Exotics" (*Pomaria Nurseries Catalogue for 1862*). It was situated on the thirty cultivated acres of the nursery, which Bergholz was laying out in what he describes as "the natural or English style" to be both a display garden for the plants sold at the nursery and an arboretum and strolling grounds for the people of South Carolina's capital city. Summer described the landscape as being in the "Modern English Landscape Style," and to "contain specimens of all the rarest and finest Conifers and other Ornamental Evergreens, Deciduous Trees, and Flowering Shrubs, Roses, Herbaceous Plants, etc., which will make it at all times instructive and attractive to visitors." Summer concludes: "All the newest and most desirable species of latest introduction have been ordered from the first establishments in Europe, a Catalogue of which will be published early in 1862." No copy of this list has surfaced.

Perhaps owing to the war, Summer may have abandoned his publication plans. In a short article for his *The Farmer and Planter*, Summer described the new arboretum as "a model" of the English Style, "where visitors can see the superiority of this style over that so commonly used" (July 1861, pp. 215-216.) He promised them "a pleasant and instructive conversation with Mr. B. upon their visit."

This garden-nursery was situated adjacent to the South Carolina State Agricultural Society's State Fair Grounds ,off what is now Elmwood Avenue, at the northwest corner of the grid that comprised the formal late eighteenth-century layout of the city. The buildings of the Society are, in fact, pictured in the inset of the cover page of *The Farmer and Planter*. I conjecture that the garden-nursery's thirty-plus acres lay where Elmwood Cemetery is located today. From the extant ledger of the Nursery's sales (kept from 7 November 1861 to 21 September 1863), we can gauge the impressive variety and volume of plants purveyed. Here we also can assess the great sophistication of local gardeners, their tastes, and their habits.

For a year (beginning in January 1863), Bergholz was listed as one of the six editors of the Augusta, Georgia *Southern Cultivator*, in company with D. Redmond, C. W. Howard, M. W. Phillips, Robert Nelson, and William W. White. With the January 1864 issue, the *Cultivator* is edited by Redmond and White only, and Bergholz's name disappears from the journal.

We know that when Sherman burned Columbia in February 1865, he put the torch to the nursery, its grounds, and greenhouses. Summer describes his losses in an 8 April1867 letter to a friend as being "my entire Nursery in Columbia which estimated in detail amounted to $114,000" — a very large sum at the time. At the parent nursery itself, some thirty miles distant, he wrote that his house was several times set on fire and put out by house servants,

> but the barn and stables, gin house with 35 bales of cotton — the corn houses all burnt down — leaving us not a blade of fodder or a grain of corn. The next day — all my horses were taken away, 18 in all and many of them the best in the state. Provisions of all kinds taken — armed men going through the house every hour in the day taking what they chose, plundering the house from basement to garret — the only consolation we had after the destruction was over was that they did none of the family any personal harm, though cursed and abused by them all the time—reason and entreaty was alike of no avail with such a merciless army. (Unpublished manuscript, manuscripts division, South Caroliniana Library, University of South Carolina.)

By the time of Summer's letter in 1867, Bergholz seems to have disappeared from South Carolina; and no reference is again made to him. Did he return to Europe, or was he destroyed with his Columbia Nursery? Perhaps by 1864, he had put on the uniform of gray. Was he killed in battle? The answers to such questions might provide a good story.

In the meantime, we have two important essays in his planned series of "Visits to Columbia Gardens." The first is in *The Farmer and Planter* of July 1861 (p. 222). The garden described in "No. I," called the "seat of Col. Preston," is that city-block-sized walled garden surrounding the residence of Col. John C. Preston, son-in-law of Wade Hampton, and today called the Hampton-Preston Mansion, a museum house at 215 Blanding Street owned by Historic Columbia Foundation. By 1970, the garden was long since gone from this block and modern intrusions (including small modern buildings and a gasoline station) ran up close to the house. About that same year, the state of South Carolina acquired the surrounding property as a tricentennial gift to the people of the state. Since 1970, the house has been restored, the garden walls have been rebuilt, and some planting in the garden itself has begun. The garden again now takes up its entire original city block. "No. I" is printed here in its entirety from the issue of July 1861.

Visits to Columbia Gardens. No. I

Throughout the South, the city of Columbia has gained a high reputation in pont of Horticulture. The interest in the products of the garden, manifested by the citizens generally, is well exhibited in the surroundings of their residences, remarkable for trees of unusual

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grandeur and beauty, so essential to the charm of landscape.
The seat of Col. Preston is one of the most interesting in this neighborhood. The house is a large and respectable mansion of stone, [Actually brick stuccoed and scored to look like stone. Bergholz's European eye, accustomed to stone, was successfully fooled.] surrounded by pleasure grounds of fine Evergreen and deciduous trees. The most conspicuous ornament of the grounds, however, is a magnificent specimen of the *Cedrus Deodora* [the deodar cedar was one of the most popular trees ordered from Pomaria Nurseries in the 1850s by Upcountry South Carolina gardeners.] of large size, over thirty feet high, whose wide stretched branches give an air of dignity to the whole place.

The lover of the expressive in nature, will find, by promenading through the extensive grounds, innumerable subjects for his study, very instructive to the amateur of landscape gardening and the naturalist.

Among the sylvan features here most interesting, are the following handsome Evergreens. The *Araucaria exelsa* (Norfolk Pine,) has already obtained the height of twenty feet, remarkable for its graceful branches and noble carriage. The *Cryptomeria japonica*, fifteen feet high, *Araucaria brasiliensis* twenty-five feet high, *Abies* exelsa, twenty feet high, *Cupressus Funebris* (Funebrial Cypress) [a rare evergreen tree just introduced to England in the previous decade. Pomaria had been selling it as early as 1853.] *Thuja aurea* (Golden Arbor Vitae,) *Taxodium baccata*, and many other find varieties. Near the mansion are several large specimens of the Magnolia *grandiflora*, from thirty to fifty feet high, Magnolia *macrophylla* with its magnificent large and soft green foliage, Magnolia *purpurea* and the so highly esteemed Magnolia *fuscata* [The *Michelia figo*, or banana shrub.], Magnolia *tripetala, M. cordata*, are all to be found in the best state of cultivation, and when we consider the size and fragrance of their blossoms, or the beauty of their large and glossy foliage, we hardly can think of a more magnificent and showy genus of trees in the world.

Among the deciduous trees, our attention was arrested by a fine specimen of that curious tree, the Japanese Ginko (*Salisburia adiantifolia*) twenty feet high; the *Paulonia imperialis*, forty feet high, and many others of great excellence. Many of the large old trees, are now venerable specimens, over eighty feet high, whose huge trunks and wide spread branches are, in many cases, densely wreathed and draped with masses of English Ivy, forming the most picturesque sylvan objects, so rarely met with.

The lawn in front of the house is well decorated with specimens of *Cycas revoluta, Phoenix dactylifera, Strelitzia reginae, Maranta zebrina*, and others in fine cultivation, adding very much to the beauty of the whole.

All over the grounds are dispersed the finest ornamental trees and shrubs, fine collections of roses and other flowering plants. Among many other interesting points of this spirited place are some pretty rustic bark and moss houses, covered seats, etc. After passing through many fine walks and a neatly arranged flower garden we came to an extensive range of glass, and through the kindness of Mr. Scholz, the present intelligent gardener, were admitted to see the exotic treasures of the charming greenhouses. Here our attention was first attracted by a collection of Pelargoniums in full bloom, some fine Fuchsias, and well-grown specimens of Acacia pendula, Inga Pulcherrima, Musa Cavendishii and Paradisiaca, Nepenthis Destillatoria, Ficus Elastica, Maranta Zebrina, with its beautiful variegated leaves, Caladium Bicolor, the interesting Dionaea Muscipula, and some fine species of Lycopodium, etc. The rear walls the green-houses are beautifully decorated with the finest species of Passifloras, among which, we discovered the quite rare *P. Decaisneana*, in full bloom. The collection of Camelias and Azaleas, composed of many old and fine varieties, is represented in quite large plants.
After leaving all the richest treasures of the exotic flora, we were kindly invited to visit a glass structure, erected for the purpose of bringing the finer varieties of foreign grapes to the height of perfection; the structure, itself, is good, but the grape vines, we are sorry to say, were not in a condition to bring about a satisfactory result the present season. In repassing the Flower Garden, the attention of the visitor to this place is now arrested by a fine group of native and foreign Rhododendrons, Azaleas, Kalmias and other rare shrubs, beautifully arranged in the natural style, quite picturesque in appearance.

The grounds - a specimen of the ancient school - are layed out strictly in the geometrical style. All the symetry, uniformity, of the old school, introduced in Europe several centuries ago, are displayed here, in formal walks and small figures, mixed plantations, trellises, grottoes, artificial water, etc. The effect of this garden is striking, and its liberal proprietor, Col. Preston, by opening it freely to the public, no doubt, greatly increased the popular taste of the city.

At least some of the "artificial water" Bergholz describes in "No. I" played in a marble fountain carved by the famous sculptor Hiram Powers, whose patron the Hampton family was. Powers also did the mantels of the house.

Bergholz's "No. II" details a visit to the Crawford house in Columbia. The essay appeared in the August 1861 issue of The Farmer and Planter (p. 248). The Crawford house was built in 1837 by John A. Crawford, a Columbia banker, at the corner of Blanding Street and Bull, just a few blocks from the Hampton-Preston Mansion. It still stands there today as the Crawford-Clarkson house. The entire "No. II" is printed here in its entirety from the only known extant copy of the August 1861 issue. This unique copy is in the library of Pomaria Plantation, Pomaria, South Carolina.

VISITS TO COLUMBIA GARDENS.

No. II.

To the residence of J. A. Crawford, Esq., is attached a very neat and beautifully kept flower garden, decorated with many choice and rare plants, among others we noticed some fine specimens of the Oleander tribe in full bloom, the Chinese Tea plant, (Thea viridis), a large and beautiful plant of the Erythrina crista galli, some fine Chinese flowering shrubs, and a very fine collection of Roses, containing all the leading varieties. During the summer the whole place is kept gay with perennial and annual flowering plants, fine Dahlias, etc. The extensive range of green-houses, quite ornamental, contain some of the finest collections in Columbia.

At the time of our visit we could not help admiring a beautiful collection of Gloxinias, then in full bloom, of the most brilliant colors, from the snowiest white to the deepest blue and red. We also noticed a fine specimen of the Astrapaea Wallichii, Acacias, Musa, Cavendishii, Maranta zebrina, and others of great attraction. The Camellias and Azaleas are the finest in our city, represented in well grown specimens and the most showy sorts.

The collection of Geraniums, Fuchsias, etc., is quite extensive, and very attractive when in bloom. The place is well worth a visit by every admirer and lover of beautiful flowers.

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It is indeed unfortunate that this second piece is Bergholz's last known garden visit essay. As for Columbia itself, even its destroyers were impressed by the beauty of the streets and gardens they burned. The news correspondent of the *New York Herald* wrote on 13 March 1865 that Columbia was "famed for its fine public buildings, its magnificent private residences, with their lovely flower gardens which savored of Oriental ease and luxury," but had now become a place of cinders and starvation.

My own personal favorite glimpse of the antebellum city that epitomizes for me its garden atmosphere involves the very Crawford house described by Bergholz in his essay. The house still sports its original pair of hollow four-sided slender glass columns at its front door, close enough to the city to display exotic plants in the winter to passers by. These mini-greenhouse columns could be sufficiently heated with candles during Columbia's mild winters to display a welcome bit of living color to flower-hungry eyes. Bergholz described Mr. Crawford's extensive greenhouse in 1861, which no doubt supplied the columns with a variety of exotics. It was this sort of elegant gardening touch that must have given the *New York Herald* correspondent his inspiration for calling Columbia's gardens places of "Oriental ease and luxury."

William Summer, in his *Southern Agriculturist* for September 1853, had described Columbia as being "celebrated for her beautiful avenues of triple-rowed willow oaks"(*Quercus phellos*). Summer continued that the city's nickname was fast becoming established as "The City of Magnificent Oaks." He applauds this title and calls Columbia, in his opinion, "that loveliest city of the South," owing to its location on its high bluff over the Cogaree River, and its many street trees and fine private gardens. He gave te town his blessing: "we hope its trees will flourish, and its princely and hospitable mansions arise until in the language of admiration it will always be known by the beautiful title - 'The City of Magnificent Oaks'." (*Southern Agriculturist*, 1 [September 1853], 259).

Such, unhappily, was not to be Columbia's fate. In the next decade, photographs made after the February 1865 sack and destruction of the city showed the charred trunks of these rows of oaks. Eye-witness diarists like Emma LeConte, in her *The Day the World Ended*, described the seared and blasted vegetation of gardens in which sat chimneys and gutted walls. Col. Preston's house was looted, then used as the head-quarters for Union General Logan. The house was itself saved by Ursuline nuns. From a city nicknamed "The City of Magnificent Oaks" just a decade earlier, it was now called "Chimneyville," owing to all the houseless chimneys in its 84 burned city blocks.

But, a knowledge of Pomaria's Columbia Nurseries contributes a few brush strokes to the picture of a place of garden beauty. The enigmatic Mr. Bergholz's nursery-order ledgers of 1861-1863, and his two essay "visits" offer a glimpse of the sophistication of that pre-war garden scene. Such documents provide a start for an exploration of yet another significant facet of antebellum Southern garden history - a story yet to be told.

[James Everett Kibler is author of the recently published *Our Fathers' Fields*.] ✦

Of Interest

The National Gallery of Art in Washington, D.C. is exhibiting, through May 7th, the first retrospective in thirty years of the work of Martin Johnson Heade (1819-1904), widely recognized as one of America's greatest romantic painters. Seventy-four paintings - including landscapes, seascapes, still lifes, and botanicals - are presented, many in their original frames. Heade's last series of works were painted in Florida, and included *Giant Magnolias on a Blue Velvet Cloth*, a haunting image of the Southern magnolia with voluptuous white flowers. Members attending the annual meeting of SGHS at Mount Vernon may want to take in this exhibit.

Annual Membership Dues

Benefactor	$250	Joint/husband-wife	$30
Patron	$150	Individual	$20
Sustainer	$75	Student	$5
Institution/Business	$30		
Life membership	$1,000 *(one time)*		

The membership year runs from May 1st to April 30th. Members joining after January 1st will be credited for the coming year beginning May 1st. Write to membership secretary at: **Southern Garden History Society, Old Salem, Inc., Drawer F, Salem Station, Winston–Salem, North Carolina 27108. phone (336) 721–7328.**

Book Review

Charles Eliot, Landscape Architect, by Charles W. Eliot. Introduction by Keith N. Morgan. (University of Massachusetts Press, Amherst: 1999). ISBN 1-55849-212-7. Hardcover, $50.

In 1999, in celebration of its 100th anniversary, the American Society of Landscape Architects launched its Centennial Reprint Series, a collection of ten books that have become classics in the field of American landscape architecture. *Charles Eliot, Landscape Architect*, published in association with the Library of American Landscape History, is the first in the series and has been reissued with a new introduction by Keith N. Morgan, professor of art history at Boston University.

Charles Eliot (1859-1897) achieved a remarkably influential position in the history of American landscape architecture in a career that lasted but eleven years and ended before the organization of the American Society of Landscape Architects in 1899. His life and professional career as a landscape architect was the first in America to be documented in book form, a loving tribute published in 1902 by his father, Dr. Charles W. Eliot, president of Harvard College. Charles Eliot was exceptionally well educated and well-traveled when he began his practice; in 1883-85 he was the first unpaid apprentice in the Brookline office of Frederick Law Olmsted, Sr., and he spent the following year in Europe on a series of travels from which he reported back to Olmsted. Invited to join the Olmsted firm in 1886, he declined, in part on his father's advice, and opened his own office on Park Street in Boston. He practiced alone until 1893 when the firm, faced with Olmsted, Sr.'s declining health, issued him a second invitation to join it and its work on the World's Columbian Exposition. Eliot was a partner in Olmsted, Olmsted and Eliot until his death of spinal meningitis on March 24th, 1897. Individually and with the firm, Eliot designed private estates, public parks, and other projects in his native New England. He is better remembered, however, as an environmentalist and advocate for public land preservation, for his leadership in the formation of the Trustees of Public Reservations, and for the critical early direction he gave to the formation of the Boston Metropolitan Park System.

Keith Morgan's excellent new introduction provides a useful contemporary perspective on Eliot, the landscape architect, and on the book, *Charles Eliot, Landscape Architect*. He places both in the context of an emerging profession in which the young Eliot, destined to follow the example of his mentor Frederick Law Olmsted, achieved renown in but a few short years and left an important legacy to his profession, his community, and the nation. As Dr. Eliot was preparing the manuscript for print, he oversaw the organization of a professional program in landscape architecture at Harvard College, which was inaugurated in 1900 under the direction of Frederick Law Olmsted, Jr., and Arthur Shurcliff. Of all that he accomplished in life and all that his father championed on his behalf for a quarter century after his death, this, Morgan notes, was perhaps his finest achievement.

- Davyd Foard Hood, book review editor.
Isinglass, Vale, North Carolina

In Print

Natural History Investigations in South Carolina from Colonial Times to the Present, by Albert E. Sanders and William D. Anderson, Jr. University of South Carolina Press. ISBN 1-57003-278-5. Hardcover, $45.00.

This book relates the largely untold story of South Carolina's distinguished professional and amateur investigations of natural history, especially in the fields of zoology and botany. The authors describe the lure of the state's diverse flora and fauna; the impact of social, political, and economic events on work in natural history; and the pivotal role Charleston has played in the making of the state's remarkable scientific heritage.

Soon after Charleston's founding in 1670, local collectors began sending specimens to such internationally renowned English naturalists as James Petiver and Hans Sloane. These plants, along with the illustrations of Mark Catesby and specimens sent by Alexander Garden to Carolus Linnaeus, brought South Carolina plants and animals to the attention of scientists throughout Europe. Sanders and Anderson document the findings of natural history's golden age in South Carolina from 1830 to1860, and profile the people who formed a scientific community superseded only by those in Philadelphia and Boston. ✦

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Members in the News

Anne H. Abbott of Cashiers, North Carolina, has been awarded the Certificate of Achievement by the Herb Society of America for her work in bringing an unprecedented number of new units into the society.

"Women in Action,"an article on the legacy of the Garden Club of Virginia in *House Beautiful's* October 1999 issue, highlights the leadership of Lynchburg's **Jane Baber White** in restoring the Anne Spencer gardens and reclaiming the Old City Cemetery from the ravages of honeysuckle, hurricanes, and neglect. Quoted in the article are: **Catherine Howett, William Rieley**, and **Rudy Favretti**.

The Dianthus collection of the **Thomas Jefferson Center for Historic Plants** is featured in the March issue of *Martha Stewart Living*.

Garden writer **Marty Ross'** article on boxwood, "For Instant Aristocracy and a Calming Effect," was published in the Sunday, September 12th, 1999 edition of *The New York Times*.

Georgia Chapter of SGHS Launched

In an effort to enhance and expand the effectiveness of the society, a regional Georgia Chapter of SGHS, the society's first, was formed this past fall in concert with the Cherokee Garden Library and the Atlanta History Center. Not only will this effort encourage greater participation and interest in southern garden history at the local level, but will also provide greater exposure and use of the resources housed at the Cherokee Garden Library. The first meeting of this Chapter was held October 11th, 1999, at the Atlanta History Center at which time Dr. Todd Groce, director of the Georgia Historical Society presented a program on "Southern Cemeteries." The Chapter's second meeting was held February 21st, 2000 in Atlanta's Buckhead/Ida Williams Library and featured Ian Firth, professor in the school of Environmental Design at the University of Georgia, on "An Agatha Cristie Approach to Historic Landscape Preservation." Georgia members of SGHS are encouraged to participate in these quarterly meetings, which are open to everyone. For more information about this budding group, contact SGHS board member Jim Cothran, ASLA, at (404) 577-4000; j.cothran@robertco.com

Peter J. Hatch,, *President*
Kenneth M. McFarland, *Vice-President*
Flora Ann Bynum, *Secretary-Treasurer*

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Deadline for the submission of articles for the spring issue of Magnolia *is May 1st.*

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