

# Bartram Broadside



Published by the John Bartram Association for the 'noble & curious friends' of Historic Bartram's Garden, Philadelphia

## Preface

In this issue, we are pleased to report new growth in the documentation of the Bartram site through recent accessions and research.

1994 accessions to our Special Library Collections include -

- ❖ Original drawing of the *Franklinia alatamaha*, Frances Lee Jaques. Illustration in Helen Cruickshank's *John & William Bartram's America* (1957). Gift of B. Bartram Cadbury.
- ❖ Hand-tinted photograph, "In Bartram's Garden," Henry Troth (ca. 1900). Gift of Dallett Hemphill.
- ❖ Invitation to the "Strawberry Festival Held June 9, 1859 at the Old Bartram Botanic Garden." Gift of Mrs. Helen MacDonald.
- ❖ Five botanical engravings from the *Encyclopaedia... (the first edition of the Encyclopaedia Britannica printed in Philadelphia 1790-1798)*. From Vol. iii article "Botany," engraved by Robert Scot. Gift of Jay Robert Stiefel (see below).
- ❖ Manuscript, "Early History of the Bartram Garden Tract," by William Middleton Bartram, a fifth generation Bartram descendant, and other papers. Gift of Tessa Cadbury.
- ❖ Lithograph, "From John Bartram's Garden" by Theo B. White, mid-20th century (see page 9).

Modern-day correspondence has added significantly to our understanding of Historic Bartram's Garden. Exchanges with both the West Chester University Department of Biology and renowned Rafinesque scholar, Charles Boewe, led to the publication in this issue of new research on John Bartram Carr and the tea plant.

An article on garden restoration published in *Mid-Atlantic Country* (May, 1994) states our position that Bartram's is "the best documented historic garden in America." This is not an idle boast. We trust that our well documented articles in this and future issues of the Broadside will prove our point.

Martha Leigh Wolf, Executive Director

## John Bartram Carr, The Unknown Bartram

Joel T. Fry

Wednesday, June 12, 1839 the *Philadelphia National Gazette and Literary Register* recorded the following obituary:

DIED

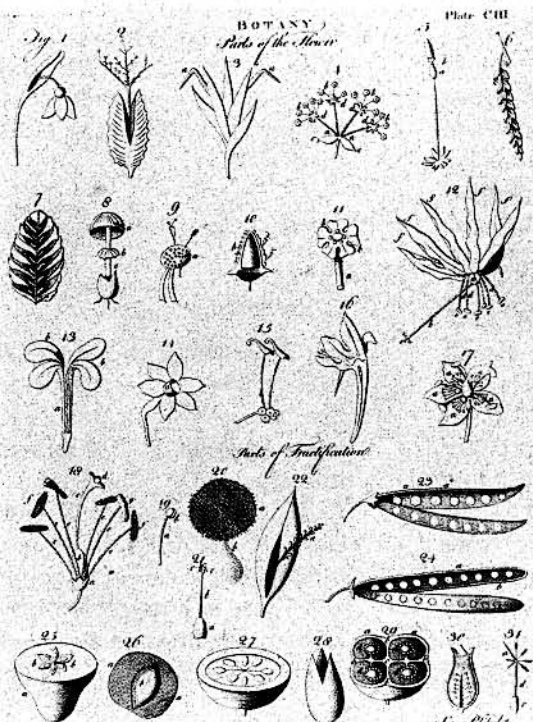
On Tuesday night, the 11th inst. of pulmonary consumption, JOHN B. CARR, in the 34th year of his age.

His friends and those of the family are respectfully invited to attend the funeral, from his father's residence, at the Bartram Botanic Garden, on Thursday afternoon at 3 o'clock.

John Bartram Carr (1805-1839) is virtually unknown today, and yet during his short life he continued the Bartram family tradition of natural science and horticulture into a fourth generation. He spent most of his life at the Bartram Botanic Garden and was trained in the family business by his step-mother Ann B. Carr (1779-1858) and her uncle William Bartram (1739-1823). A single piece, "The Diary of a Naturalist" from 1831, is the only published example of John B. Carr's work as a naturalist, and a little over 60 herbarium specimens he prepared from the Garden also survive. The facts of his life are a record of lost possibilities and questions of what might have been.

Robert Carr (1778-1866), John B. Carr's father, was born in the parish of St. Andrews, County Down, near Belfast Ireland. His family emigrated to Philadelphia in 1784. In 1792, Robert Carr was apprenticed to Benjamin Franklin Bache at his Franklin Court print shop. Bache, the grandson of Benjamin Franklin, had been trained in fine printing and typography in Paris. Bache's radical newspaper, the *Aurora*, became an important political force in the young United States and a model for American journalism to come. Carr became foreman of Bache's print shop. In 1801, he left to go into business for himself, and "Robert Carr, Printer," soon had a reputation for fine printing.<sup>1</sup> Carr's shop printed the American edition of Abraham Rees' *Cyclopaedia*, the second edition of Benjamin S. Barton's *Essay Towards a Materia Medica*, James Mease's *Geological Account of the United States*, and Mease's editions of Willich's *Domestic Encyclopaedia*, and Smith's *Wonders of Nature*, and most importantly Alexander Wilson's *American Ornithology* (Snyder 1866b: 1-8).

Robert Carr married Rebecca Gale, the widow of a cousin, in 1801. They had four children, but



Ca. 1791, "Parts of the Flower" and "Parts of Fructification," illustrations to accompany the article on "Botany" published in the *Encyclopaedia; or A Dictionary of Arts, Sciences and Miscellaneous Literature...* (Thomas Dobson, Phila., 1790-1798). Dobson's *Encyclopaedia*, the first printed in America, was a revised version of the third edition of the *Encyclopaedia Britannica*, then under way in Edinburgh. [Gift of Jay Robert Stiefel to the John Bartram Assn.]



## **John Bartram Carr (1805-1839) is virtually unknown today, and yet during his short life he continued the Bartram family tradition of natural science and horticulture into a fourth generation.**

only John Bartram Carr survived infancy.<sup>2</sup> Carr's first wife, Rebecca, died soon after the birth of John B. Carr. (Snyder 1866a; 1866b: 15; Sees Family Genealogy). On March 4, 1809, Robert Carr married Ann M. Bartram. Nathan Jones, Ann's brother-in-law, acted as Justice of the Peace (Carr-Bartram Marriage Certificate 1809). Robert Carr and Ann Bartram probably met through the production of Wilson's *American Ornithology*,<sup>3</sup> although Carr was already friendly with most of the natural science community in Philadelphia through his printing work.

From 1812 through 1815, during the war with Britain, Robert Carr served in the U. S. Army, first as a Major, and then as a Lieutenant Colonel. He had been active in the Philadelphia militia since his days as an apprentice printer. Carr was promoted for bravery while in command of the defense of Ft. Oswego, on Lake Ontario, in June 1813 — a brief success in the generally inglorious campaigns of the War of 1812. For the rest of his life, he was referred to as Col. Carr (Snyder 1866b: 8-15).

In the course of the war, several tragic events disrupted the printing career of Robert Carr and changed the lives of his family. Ann's father, John Bartram, Jr., died in November of 1812. John, Jr. had owned and operated the Bartram Garden since the 1770s. The continuation of the family Garden fell to Ann B. Carr and her uncle, William. Alexander Wilson died in August 1813, before completing the final volumes of *American Ornithology*. At the same time his publishers, Bradford and Inskeep, and several other large Philadelphia book houses became insolvent. Carr's printing business, under the control of his brother and partner, William Carr, was forced into bankruptcy. William Carr took ill and died soon after in 1815. Col. Carr returned from the war to a new life at Bartram's Garden (R. Carr Journal and Letter Book).

Ann Carr and her husband Col. Robert Carr took over operation of the Bartram Botanic Garden in 1813, and maintained and expanded the Bartram plant collection until they were forced by debt and old age to sell the Garden in 1850. Ann Carr was probably William Bartram's most adept pupil in botany, horticulture, and art, but she remains unrecognized today. Most

of what is known of the historic Bartram Garden from 1813 to 1850 comes from the hand of Robert Carr—either letters, advertisements, catalogues, or scattered bills and receipts. Only a rough outline of biographical material is available for John Bartram Carr.

John Bartram Carr was raised at the Bartram Garden and infused with the Bartram family knowledge of nature. He was four at his father's remarriage, and initially the new family lived in the city with frequent trips and long summer visits to the Bartram Garden in what was then still country. From 1812 onward, John and his new mother were resident at the Garden. The most famous American naturalists of the day were frequent visitors. Alexander Wilson spent summers at the Garden with the Carrs from 1809 to 1812, living at the Bartram house. Thomas Say was a cousin. Thomas Nuttall had a room set aside for his use at the Garden in the late 1810s. W. P. C. Barton, William Baldwin, Rafinesque, and Audubon were frequent visitors. A host of notable European travelers paid visits to the Bartram Botanic Garden, and to its resident celebrity, William Bartram.

The earliest reference to John B. Carr comes in a letter to Lt. Col. Robert Carr at Sacketts Harbour from his "sincere Friend and affectionate Unkle William Bartram," dated November 5, 1813. William as temporary head of the Bartram family at the Garden wrote with news of Wilson's funeral, brother William Carr's illness, and general family matters:

Mrs. A. Carr my esteemed Niece continues in tolerable good health & spirits, especially at receiving Letters from You. Your son John who I much esteem for many good qualities is in good health & improves in Reading.

William Bartram seems to have taken a hand in educating young John, much as he had trained his niece, Ann, but details are lacking. An 1817 letter to William Bartram from Caspar Wistar, introducing Dr. John Torrey,<sup>4</sup> was later decorated with doodles and the signature of a teenage John Carr (Wistar 1817). Torrey would later have an interest in the career of young John B. Carr.

There is little record of young Carr's formal education, although his cousin William B. Snyder reported he "received a liberal education, was an



*Clethra acuminata* (L.) Mill. B.  
*C. — montana* (Mill.) B.  
 Hort. Bartram  
 Jno. B. Carr

*Clethra*  
*acuminata*  
 Jno. B. Carr

HERBARIUM  
 West Chester State Normal School.  
 EX 1029-B of the West Chester University

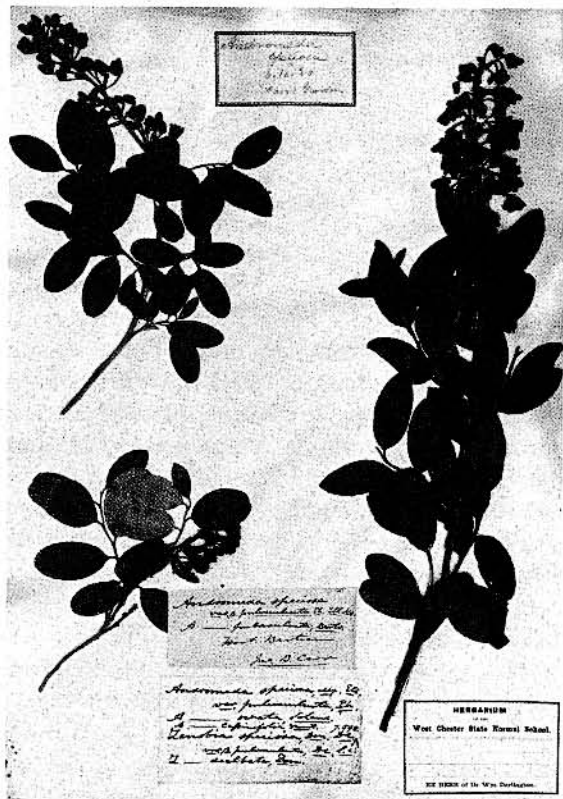


*Gordonia pubescens* L'Herit.  
 Franklinia  
 Franklinia americana  
 Franklinia  
 Franklinia  
 Franklinia

HERBARIUM  
 West Chester State Normal School.  
 EX 1029-B of the West Chester University

Above: 2 specimens, "*Clethra acuminata*, Mx / *C. montana*, Bartr., Hort. Bartram Jno. B. Carr." Below: 3 specimens, "*Andromeda speciosa* var. *β. pulverulenta*, Ph. / *A. pulverulenta* Bartr., Hort. Bartram, Jno. B. Carr [One dated June 10, 1830]."

Above: "*Gordonia pubescens*, L'Herit. / *Franklinia Alatomaha*, Bartr., Hort. Bartram, Jno. B. Carr." Below: "*Dahlia pinnata*, Bartram's Garden Sept. 7, 1827 By Jno. B. Carr."

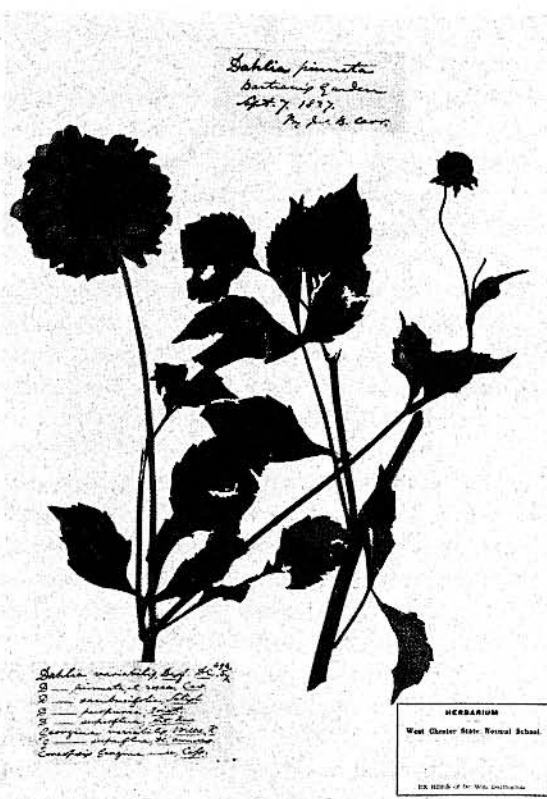


*Andromeda speciosa*  
 var. *β. pulverulenta*  
 Bartram's Garden

*Andromeda speciosa*  
 var. *β. pulverulenta*  
 Bartram's Garden  
 Jno. B. Carr

*Andromeda speciosa* var. *β. pulverulenta*  
 Bartram's Garden  
 Jno. B. Carr

HERBARIUM  
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*Dahlia pinnata*  
 Bartram's Garden  
 Sept. 7, 1827  
 By Jno. B. Carr

*Dahlia pinnata*  
 Bartram's Garden  
 Sept. 7, 1827  
 By Jno. B. Carr

HERBARIUM  
 West Chester State Normal School.  
 EX 1029-B of the West Chester University

Four plant specimens from the "Darlington Herbarium" (now housed at West Chester University), prepared by John Bartram Carr.

The labels are not in John Bartram Carr's handwriting, and were probably prepared by William Darlington. Many of the specimens from Bartram's Garden in the Darlington collection were either rare Bartram discoveries or cases of debatable taxonomy. The accepted names of some plants have changed since the 1830's, and in some cases the

Bartram names have been validated. *Franklinia* is now accepted as *Franklinia alatamaha*; and William Bartram's *Andromeda pulverulenta* (first illustrated in his Travels of 1791) is now named *Zenobia pulverulenta*. The Dahlia may be a true species form (a native of Mexico), but the hybrid Dahlia was already widespread. The *Register of Pennsylvania* (Oct. 25, 1834), reported 270 different varieties of Dahlia in bloom at the Bartram Botanic Garden in October 1834.



## A single piece, "The Diary of a Naturalist" from 1831, is the only published example of Carr's work as a naturalist. The facts of his life are a record of lost possibilities and questions of what might have been.

accomplished Latin and French scholar, familiar with the natural sciences and especially well versed in Botany" (Snyder 1866b: 15-16.), and there is no reason to doubt this statement. In early 1823, Robert Carr made application to John C. Calhoun, Secretary of War, for the appointment of his son to the "National Academy" at West Point. Carr described his son as

between 17 and 18 years of age--tall & active of good constitution and unexceptionable moral character. He most ardently desires to be enrolled in the military service of his country.

Soon after Carr asked his old commander, Major General Jacob Brown, to second this application. Explaining the great losses his business suffered during the war, he wrote

I have not had it in my power to defray the expence of giving my son a suitable education (my present property barely producing a decent livelihood) and have yielded to his pressing importunities to apply for his admission as a Cadet in the Military Academy at West Point.

There is no evidence that these applications were successful. (R. Carr Journal and Letter Book; Calhoun 1973: 434, 442, 494). Several years later, Robert Carr reported that his son's "education has been tolerably good (with a little French)..." (R. Carr 1829a).

Following his education, John Bartram Carr remained at the Bartram Botanic Garden, and by the late 1820s he was essential to its operation. New plants continued to arrive at the Garden through John B. Carr's life. The Carrs continued the traditional family business, collecting and shipping North American seeds and plants around the world, but they also expanded their local nursery business. Following popular trends the Garden expanded its selection of fruit trees and exotics. Ultimately there were 10 glass houses at the Garden with over 10,000 plants in pots. Robert Carr reported that he employed a foreman and "from twelve to twenty men and boys nearly all the year" (R. Carr 1831: 667). John Carr became his father's "right hand" at the Garden and when opportunity seemed likely to take him away, Robert Carr and the "garden would feel his loss most severely" (Rafinesque 1831; R. Carr 1829a).

The one published work of natural history that survives from John Bartram Carr appeared in

July 1831, in a Philadelphia newspaper, *Hazard's Register of Pennsylvania*, and in a new scientific periodical, *The Monthly American Journal of Geology and Natural Science*. The "Diary of A Naturalist" is a brief daily account of events at the Garden from March to June 1830. Carr was prodded into this record for the spring of 1830 at the "particular request" of Richard Harlan.<sup>5</sup> The "Diary" gives some idea of the routine of work at the Garden,

March 10. ...This morning commenced work in the garden.

April 27. A smart frost last night--ice was formed from the condensed vapours of the green house.

May 1. --garden overrun with visitors.

May 6. Fine and warm--removed the plants from the green-house to-day--...

May 24. --occupied in preparing plants, rare flowers, fruits, &c. for the *Horticultural* exhibition to be held by the society in Philadelphia, on the 25th and 26th.

May 27. --brought the plants home from the exhibition uninjured.

June 7. --summer has commenced.

John Carr's "Diary" was not essentially a simple record of work at the Garden though, but a naturalist's account of spring events on the lower Schuylkill. It follows the format kept by his great-uncle William Bartram for a number of years, and includes data on temperature, flowering plants, bird arrivals, and the appearance of fish, and even reptiles, amphibians, and insects in the local environment. In the introduction that appeared with the "Diary" Richard Harlan wrote "Having the most perfect reliance on the ability and talents of Mr. Carr for pursuits of this nature, I have perused the "Diary" with much satisfaction..." (John B. Carr 1831: 21).

Harlan was not alone in the Philadelphia naturalist's community in his reliance on the talents of John B. Carr. Between ca. 1829 and 1836 John B. Carr prepared herbarium specimens from the Bartram Garden for William Darlington (1782-1863), founder of the Chester County Cabinet of Natural Science. Today, 63 of Carr's specimens survive in the Darlington Herbarium preserved at West Chester University (Overlease 1992:84, 89).

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## John Carr's "Diary" was a naturalist's account of spring events on the lower Schuylkill--including data on weather, flowering plants, bird arrivals and other natural phenomena in the local environment.

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Constantine S. Rafinesque<sup>6</sup> was a frequent visitor to the Garden after his return to Philadelphia in the 1820s. Rafinesque wrote in his autobiography

Since 1828 it [the Bartram Botanic Garden] has become one of my favorite rambles. I visit it regularly 5 or 6 times every year, and always find something new, that the liberal owners allow me to study in liberty. (Rafinesque 1836: 94).

An exchange of letters between Rafinesque and John Torrey in New York in 1831 and 1832 indicate that Rafinesque had plans to send John B. Carr to Florida to collect.

I have at last hit on a proper Person to travel for us at least in Florida & explore as far as the Cape. It is Mr. Carr Junior the Son of Colonel Carr owner of Bartram's Garden, a very clever Collector and Botanist, who has been delighted with the Idea and the Project as Florida is almost a ground belonging to the Bartram family & he will collect roots, seed and trees for his garden at the same time.--He is almost resolved to go, if his father (whose right hand he is) will allow, & I believe he will as it will be working for the garden also. Besides the Winter is the idlest Season however I wish him to be in Florida from November to May--

Now we have merely to make up our terms with him...pray give me yr assent to the outlines of my plan before hand that I may induce Mr. Carr to prepare himself for the Journey...

Mr. Carr is perfectly qualified & he has made a small herbarium already--he is fond of fishing, it was he who caught my fine N. G. of fish *Trinectes scabra*.<sup>7</sup> I can instruct him this Summer in every requisite branches of collecting....(Rafinesque 1831a).

In May 1831, Rafinesque also mentioned this possible venture to A. P. de Candolle in Geneva, in part hoping to gain more financial backing. (Rafinesque 1831b).

Apparently Torrey was not interested or not able to split the costs of the expedition with Rafinesque, and no other backing was found. January 1832, Rafinesque lamented to Torrey

My friend Audubon wanted me next to go with him to Florida, where he is gone to spend the Winter with 2 assistant Collectors (but no Botanist)--Mr. Carr Junr. could not go with him neither, his father wanted him & could not send him upon my vague promises. You did not encourage me sufficiently last Summer to send him....(Rafinesque 1832).

Audubon visited the Florida Keys and the St. John's River in the winter of 1832 collecting to complete his ornithology. His letters from Florida

indicate he was familiar with William Bartram's *Travels*.... From historical hindsight, Robert Carr might have missed an important chance for his son by keeping him from this trip, but Florida remained a dangerous place to explore well into the 1830s and such a trip could not be undertaken lightly. Robert Carr may rightly have mistrusted Rafinesque's ability to fund his son's travel. Carr's own correspondence indicates the Garden was without a foreman in 1831. John B. Carr's assistance in the family business may have been a compelling necessity. (Carr 1831: 666-667).

The record of John B. Carr's career as a naturalist is a list of similar lost opportunities and failed applications. Beginning in 1829, Robert Carr solicited a position for his son on a planned exploration of the southern polar regions. This congressionally funded research expedition, now generally known as the Wilkes Expedition, was delayed several times and eventually ran from 1838 to 1842 as the great U. S. South Seas Exploring Expedition. The dubious initial premise of the expedition was to test the theory of John C. Symmes, Jr. of Ohio that the earth was hollow with entrance holes to the inner globe at the poles. It became an extended exploration of the South Pacific and the polar regions of Antarctica. The Wilkes Expedition had lasting impact on many branches of American science--anthropology, botany, geography, geology, oceanography--and helped set the stage for an American empire in the Pacific. (Viola and Margolis: 1985).

Robert Carr first wrote the Secretary of the Navy, Samuel L. Southard, and General T. D. Barnard in January 1829, seeking appointment of his son as Assistant Botanist. Initial congressional authorization for the expedition was passed in May 1828, and a ship was actually commissioned for the voyage in September 1828, but government support was withdrawn in 1829 under the new administration of President Andrew Jackson. A private expedition, partially funded by the New York Lyceum of Natural History, did travel south in 1829, but it was a decade before the U. S. funded expedition finally set off, and much political and sectional intrigue lay behind the final choice of the scientific corps. Young John Carr might have seemed an ideal candidate for the post of plant collector, and he had many to recommend him.



## Following his education, John B. Carr remained at the Bartram Botanic Garden, and by the late 1820s he was essential to its operation. New plants continued to arrive at the Garden through Carr's life.

Robert Carr's initial letters indicate William Darlington was supporting his son's application and

in addition to his recommendation, my son will have the support of Mr. Steinhaur, an excellent botanist, of Philadelphia, and of Mr. Sweinitz, of Bethlehem,--also of Mr. Thomas Nuttall, and probably Doctor W. P. C. Barton of Philadelphia,--with Zaccheus Collins, and other respectable names of gentlemen known as good botanists.

...as a *practical* botanist it will be difficult to meet with his equal, and he has been reared from infancy, in this garden, under the instruction of Mr. William Bartram, the botanist & naturalist. With the exception of Mr. Nuttall, perhaps there is none better acquainted with the plants of this country, and his knowledge of exotics is very general. As a collector of plants he would be industrious, and has a quick eye in discovering any thing new. He can describe systematically, and figure, whatever may be found, and his business has made him fully acquainted with the best method of preserving the seeds & plants of any thing valuable that may be met with...

He added "The compensation will be the least object with him, as the discovery & acquisition of new plants alone would induce him to volunteer, without pay, if required." (Carr: 1829b).

When the government expedition was again seriously underway in the mid-1830s, Robert Carr again sought a position for his son in the scientific corps. Carr and John Torrey both wrote the Secretary of the Navy in September 1836 recommending John Carr for the post of Assistant Botanist. (Carr 1836; Torrey 1836). Rafinesque commented on the planned expedition to Torrey in October 1836

I have heard that your friends Dr. Gray & Dr. Pickering of Philad. are preparing or applying to go on the Antarctic Expedit. of Gov'--I wish them joy & success--What a fine field for young men. My friend young Mr. Carr of Bartram Garden is spoken of as the gardener & seed collector: he will be very suitable, he is also a *clever* botanist, but not deep.--(Rafinesque 1836b).

When the Wilkes Expedition finally set out from Hampton Roads in August 1838 the scientific personnel had been shuffled many times. Sharp cuts were made in the scientific corps. Asa Gray, with Torrey's assistance, was appointed botanist in 1836. He resigned to accept a position at the yet to be built University of Michigan, just weeks before the departure. The final group included

Charles Pickering and Titian Peale of Philadelphia as "naturalists," William Rich of Washington as "botanist," and William D. Brackenridge, a Scots gardener recently emigrated to Philadelphia, as "horticulturalist." Rich, a well-meaning amateur, was a political appointment and incapable of fulfilling his position. Pickering became in effect the chief botanist and Brackenridge the assistant. In the 1840s, after the return of the expedition, Asa Gray was brought back by Torrey to sort out the botanical collections. The necessary research in Europe gave him an important world-wide view of botanic taxonomy. (Viola and Margolis 1985: 10, 26-36).

In the case of John Bartram Carr, the Wilkes Expedition was one more lost opportunity. Had Carr traveled in the company of Asa Gray or Charles Pickering the experience might have revitalized him, and the Bartram collection would certainly have profited in new plants and prestige--but of course this did not happen. Even before the expedition sailed, the family was beginning to look for a buyer for the Garden. When Alexander Gordon<sup>8</sup> visited the Bartram Garden in the summer of 1837 he reported that it was "the intention of Col. Carr to dispose of the gardens, green houses, &c." (Gordon 1837). On a previous visit in 1831, Gordon had admired the collection of mature American trees at the Garden. This time, "with the assistance of Mr. Carr, Jr.," he took accurate measurements of 30 species. Gordon also provided a rare descriptive portrait of Ann B. Carr at work at the Garden.

...to speak in just terms respecting her enthusiasm for plants, (which is only equaled by her success in their cultivation,) is a task I am incompetent to perform, for I am not possessed of words which could convey in the most remote degree the passionate fondness with which she toils among the plants, in every department, from the earliest dawn until darkness renders her operations impracticable. Mrs. Carr's botanical acquirements place her in the very first rank among American botanists. Her knowledge of American plants is most extensive, not surpassed, if equaled, by any one in the United States.

Gordon's article contains the only detailed description of the glass houses of the exotic department of the Garden as well. He ended with an ominous note indicating the destructive forces gathering to threaten the Garden and the pastoral environment of the lower Schuylkill in Philadelphia

# Carr testified in a suit against the Philadelphia and Baltimore railroad. James Bartram, Jr., had owned a farm just north of the Garden which the railroad cut in two, destroying valuable meadowland and mineral deposits.

County.

the Philadelphia and Baltimore rail road, now constructing, as originally planned, would have gone through the very center of the gardens, and sacrificed the most splendid of the specimens, but the rail-road company, with a desire to preserve them entire, altered the route at an additional expense to themselves of 10,000 dollars.

The next year, John Bartram Carr testified before a judge in a suit against the same railroad, brought by the heirs of James Bartram, Jr., his step-mother's cousin. James Bartram had owned the farm just north of the Garden. He died in February 1838 before reaching agreement with the Philadelphia, Wilmington and Baltimore company for the condemnation of his land. The railroad took the opportunity to build immediately, cutting the farm in two and destroying valuable meadow ground and mineral deposits. Longtime neighbors of the Bartrams testified that the railroad was no advantage and not an improvement in their minds. John B. Carr gave testimony on the amount of valuable mica, gravel, and building sand hauled out and wasted by the railroad. (Cadwalader 1838). The destruction at the James Bartram farm was soon mirrored on both sides of the Schuylkill, and today only the Bartram Garden survives from a once rich farming region in Kingsessing.

The facts of John Bartram Carr's life are brief and episodic, and there are yet many unanswered questions about his short career. There is no evidence when he became ill, but if he did indeed suffer from "consumption" or tuberculosis, he may have been weak for an extended time. As Col. Robert Carr was looking to sell the Garden as early as the summer of 1837, John may have already been ill. The deep economic depression following the Panic of 1837 also hit the Garden and its traditional customers at home and abroad. The finances of the Garden were never strong during the Carrs' lives and their prime source of income--American seeds to Europe--became less significant as time went on. As American plants were better known they became a less valuable commodity. Other new "exotics" replaced them in Europe, and at home and abroad American plants were no longer considered fashionable. At the same time botanic science in America moved away from examining live plants to organizing

herbarium collections. Maintaining a private botanic garden without institutional or government funding became impossible. Perhaps the final blow was the death of John B. Carr in 1839. The Bartram collection of plants was slowly sold off through the 1840s. After a decade, Robert and Ann Carr were forced to sell the Garden which by 1850 only contained mature trees and shrubs. As a fellow horticulturist mourned,

There was once a Botanic Garden in the vicinity of Philadelphia: It was created by the enthusiasm of a genuine naturalist, but it did not long survive its founder and director; it is no longer a botanic garden... (Scott 1853:365).

That the Bartram Botanic Garden survived as long as it did is a testimony to the four generations of the Bartram family that tended it.

## Acknowledgments

Thanks to Daniel L. McKinley, Charles Boewe, and Tim Long for valuable information regarding John Bartram Carr. Also to Dr. Martha A. Potvin, Chair of the Department of Biology, West Chester University for permission to photograph specimens in the Darlington Herbarium.

## Notes

<sup>1</sup>The scenes of Robert Carr's early life as a printer survive in Philadelphia today. The *Aurora* office is preserved by the National Park Service at Franklin Court, and Carr's first printing shop was located in the rear of the recreated "Graff House" at the southwest corner of Seventh and Market Streets.

<sup>2</sup>As yet, there is no evidence whether John B. Carr was christened "John Bartram" or if his middle name was added after his father re-married. Naming children after popular historic figures was common in the early years of the nineteenth century.

<sup>3</sup>Alexander Wilson (1766-1813), Scottish-born naturalist, writer, and poet, emigrated to the United States in 1794. In 1802, he came to teach at the Union School neighboring the Bartram farm. Deeply influenced by William Bartram, Wilson took up the study of birds. He was tutored in art by both William and his niece, Ann M. Bartram. In 1806, Wilson left the school to begin the researches for the first complete illustrated ornithology of North America. It was issued in 9 vols. from 1808 to 1814.

<sup>4</sup>John Torrey (1796-1873), botanist and professor of chemistry, was one of the first American advocates of the natural system of botany. He was a close friend and colleague of Asa Gray (1810-1888), and together they became arbiters of North American botanic taxonomy.

<sup>5</sup>Richard Harlan (1796-1843) was a Philadelphia-born physician and naturalist with major interests in zoology, and paleontology. He published *Fauna Americana* in 1825, and was an active supporter of G. W. Featherstonhaugh's *Monthly*



# A decade after John B. Carr's death, Robert and Ann Carr were forced to sell the Garden. That the Garden survived as long as it did is owed to the four generations of the Bartram family that tended it.

*Journal of Geology and Natural Science.*

<sup>6</sup>Constantine S. Rafinesque (1783-1840), botanist and naturalist, was the first professor of botany and natural history at Transylvania University in Lexington, Kentucky (1818-1826). He was born near Istanbul, but spent his childhood in France. He came to the United States in 1802 and first visited the Bartram Garden that summer. He spent 1805-1815 in Europe and then returned to America to stay. His publications in a variety of fields were immense, and he was surrounded by a number of scientific controversies during his life. He lived in Philadelphia from 1826 until his death in 1840.

<sup>7</sup>This fish, *Trinectes scabra*, helped fuel a dispute between Rafinesque and Richard Harlan. Harlan, writing the editor of *The Monthly American Journal of Geology and Natural Science* in March 1832, complained that Carr had presented him with a number of fish in the summer of 1830 "among which was a specimen of Flounder [Pleuronectes] never before noticed as an inhabitant of the Schuylkill." Rafinesque borrowed the fish to examine it, and "since that time I have never seen the specimen..." The new species was published and named by Rafinesque (Featherstonhaugh 1832: 514).

<sup>8</sup>Alexander Gordon (1813?-1873?) was an English? gardener and botanic collector who traveled extensively in the United States from the late 1820s onward. He included brief descriptions of Bartram's Garden in survey articles of North American gardens he wrote for John Claudius Loudon's *Gardener's Magazine* in 1828 and 1831.

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**In his lithograph, "From John Bartram's Garden," Theo B. White provides us a mid-century perspective on the encroaching industrial smoke which is indistinguishable from the foliage of the trees in the Garden.**

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**Theo B. White: A View From Bartram's Garden**

Janet M. Roberts

In his lithograph, "From John Bartram's Garden," Theo B. White provides us a mid-century perspective on the encroaching industrial smoke which is indistinguishable from the foliage of the trees in the Garden. Based on a series of views from Bartram's Garden, this print is a new acquisition for Bartram's Garden and the John Bartram Association.

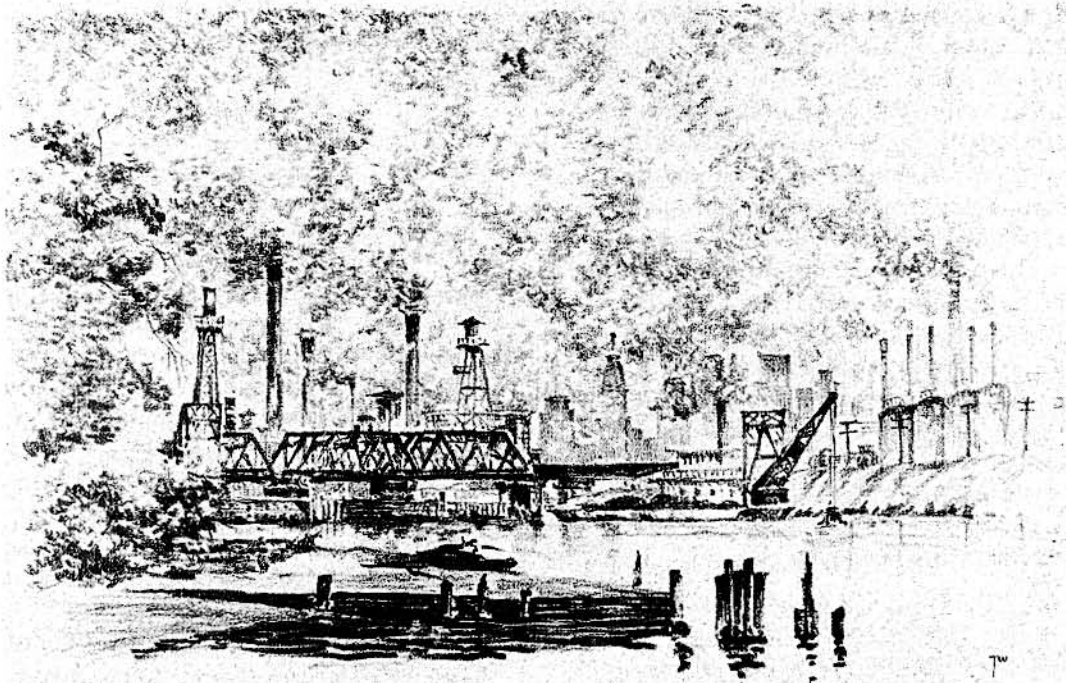
The artist of the work, Theo B. White, trained under architect Paul Cret and wrote his biography, *Paul Philippe Cret: Artist and Teacher* (1973). White was born in Norfolk, Virginia in 1903. He studied at the University of Pennsylvania and received a B.A. degree in Architecture. After graduation he practiced architecture first in the office of Paul Cret and latter as a partner in his own firm,

Hatfield, Martin & White. World War II arrived, and White served as a Major in the Corps of Engineers. White was a fellow of the American Institute of Architecture, a trustee of the New School of Music in Philadelphia, and a Director of the Philadelphia Art Alliance. Today, his architectural drawings are housed in the Special Collections at the University of Pennsylvania.

As the chairman of architecture for the Art Alliance, Theo White brought a number of outstanding architectural exhibitions to fruition, and wrote the book *The Philadelphia Art Alliance*. Several other books are to his credit as well: *Colonial Mansions in Fairmount Park*; *Richmond: The City on the James*; and *Philadelphia Architecture in the Nineteenth Century*.

The Philadelphia Print Shop in Chestnut Hill carries White's work, which was acquired from his estate. Donald Cresswell, of the Philadelphia Print Shop, says that other works include portfolios of churches in Virginia, scenes of Tidewater Virginia, and one of Boulder Dam.

*Janet M. Roberts an independent scholar, is a Pennsylvania Humanities Council Commonwealth Speaker.*





## In response to the Panic of 1819, the naturalist

**C. S. Rafinesque addressed a series of four open letters to the head of the N.Y. Lyceum of Natural History to explain how America could become self-sufficient in tea.**

### Introduction of Tea Plant at Bartram's Garden

Charles Boewe

In response to the Panic of 1819, the naturalist C. S. Rafinesque, then living in Philadelphia, addressed the first of four open letters to S. L. Mitchill, president of the New York Lyceum of Natural History, to explain how America could become self-sufficient in tea. One hardship of the financial depression was the lack of silver coins in circulation, for at that time 12 million in silver dollars went annually to China to pay for America's tea. Since ginseng was the only American product the Chinese were willing to buy, the tea trade caused a serious outflow of specie.

Rafinesque's first three letters, published in New York's *American Monthly Magazine and Critical Review* (March 1819), created considerable public interest, and the fourth, published in Philadelphia in *Poulson's American Daily Advertiser* (14 June 1819), caught the attention of Robert Carr and the aged William Bartram. In it Rafinesque mentioned tea plants he had seen flourishing at William Hamilton's estate, The Woodlands, and elsewhere in Philadelphia. He asserted that these plants resulted from the stock nurseryman David Landreth had originally imported from China. In the letter which follows, Carr wrote to put the record straight. In the meantime Rafinesque had moved to Lexington, Kentucky, where he became a professor at Transylvania University. Using a local newspaper, the *Western Monitor* (5 October 1819), as a vehicle, he conveyed the new information to Mitchill and also to the world at large. After his permanent return to Philadelphia in 1826, Rafinesque often visited Bartram's Garden, and he described several new plants from specimens found there.

Carr's letter with William Bartram's endorsement has remained unknown because few copies of the newspaper have survived. The copy from which this is taken may be unique. It is located at the Filson Club History Society in Louisville, Kentucky.

#### ON THE TEA SHRUBS

To Dr. Saml. L. Mitchell [sic], Professor of Botany,  
etc. New-York.

In addition to my former letters on the Tea-

shrubs, I shall now communicate to you a letter which I have received from Mr. Robert Carr, actual proprietor of Bartram's botanical garden of Kingsessing near Philadelphia, who claims for that establishment the honor of the first introduction of those valuable shrubs into the United States of America, and adds a variety of interesting details on the subject.

You will be pleased, I hope, with these new facts, and you will perceive how difficult it is to come at once to the knowledge of truth, even in such trifling subjects: since, notwithstanding my best wish of doing justice in all cases to those, who in their labors or exertions are entitled to it, I was apparently deceived in this instance. But I am glad that Mr. Carr has been able to give a more correct statement of the facts attending the introduction and dissemination of the tea-shrubs in our country, and to corroborate my ideas on the practicability of their cultivation with us, being satisfied for my share in having succeeded to draw the attention of the public to this interesting subject.

Your friend,

C. S. RAFINESQUE

Prof. of Bot. & Nat. History

Transylvania University,

Sept. 15, 1819.

Bartram's Botanic Garden,  
Kingsessing, Near Philadelphia  
June 18, 1819.

SIR,—Having read your letters addressed to Dr. Mitchell [sic] on the subjects of the Tea tree, some time since, I requested Mr. Thomas Say to communicate some particulars to you on that subject, which I thought might be acceptable; but, from your last letter, read before the Lycaeum on the 7th of June, I am led to believe that Mr. Say forgot to write to you.

I will briefly relate the history of the introduction of the plants into this country and with pleasure will answer any enquiries you may think proper to make. My information is supported by the authority of Mr. William Bartram.

About thirty years since, Dr. Anderson<sup>1</sup>, the superintendant of the Botanic Garden at St. Vincents, sent a present of rare plants to Mr. Bartram, amongst wh[i]ch were two fine plants of

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**Rafinesque's first three letters created considerable public interest, and the fourth, published in Philadelphia, on 14 June 1819, caught the attention of Robert Carr and the aged William Bartram.**

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the Bohea and Green Tea.<sup>2</sup> They arrived in good order and have been propagated both by seeds and cutting from that period to the present time, and we have never been out of them, though at present we have but a few. It is not two years since the last of the original plants died, and that we lost through accident. We have sold upwards of 100 plants, to different persons in the United States from New-York to Georgia. We formerly sold them at 50 cents each, and it is but five years since we raised the price to one dollar.

Mr. Hamilton procured his plants from us, as did also Mr. Pratt, of Lemon Hill, and I believe Mr. Peale bought his plant from us. Mr. David Landreth was gardener at Lemon Hill before he commenced his nursery, and he knows that we have had the Tea-plants for sale, very cheap, for many years, and before he began business here. They are among the most hardy of our greenhouse plants, and, no doubt, will stand the open air in any of the middle or southern states.

I am, with respect, your obedient servant,  
ROBERT CARR, *Proprietor of Bartram's Garden.*

P.S. I have lately received from London, and elegant work, entitled "The Botanical Cabinet" published by our correspondents and, friends, Messrs. Conrad Loddiges and Sons of Hackney near London, in which they have given coloured delineations and descriptions of both sorts of the Tea, from which I have extracted the following:-

The two species of tea trees, for such in our humble opinion they undoubtedly are, have been by some persons, (especially such as have only had an opportunity of seeing dried specimens) considered as the same. The Bohea has a leaf generally about two inches long and three quarters of an inch broad attenuated more towards the base than the point. It is coriaceous, very dark green, not at all undulated, and the serratures very small and even. The growth is quite erect, and the flowers are very numerous, usually two from each axil. It is a native of China and Japan, and will not endure the open ground in our winters (England;) but must have the protection of a green house or frame. It flowers in the autumn and beginning of winter, and the blossoms have a slight fragrance: it is increased by cutting, thriving in loam and peat soil. It was introduced about the year 1780.

Tea began to be used in London about the year 1660; when a tobacconist in Change alley retailed

it, with a recommendation that it was to cure all disorders.

The green Tea was introduced in England about the year 1798. It has a membranaceous leaf, from four to five inches long and about one inch and a half broad, oblong, more attenuated towards the point than the base, pale green, very much undulated, and serratures large and irregular. The growth is crooked and straggling; the flowers are few, usually situated above the uppermost leaf; they are produced in the autumn earlier than the Bohea. It is raised by layers and cutting, and grows in loam and peat. This sort is hardy: we have one which has stood near thirty years in a very exposed situation, and never had any covering. The leaves of both kinds have but little scent; this is added by other ingredients, among which the flowers of the *Olea fragrans*\* are said to be much used. The Chinese affect to make a mystery of the process of drying and curing tea; it is very tedious and employs vast numbers of people. Attempts have been made to cultivate the plant for use in other countries; but it is not likely that they can succeed, as the value of labour is so much greater in most places than in China. Some have thought the green to be less wholesome than the Bohea, as the former is supposed to derive some colouring principle from the copper pans in which it is said to be prepared: we rather think this is a mistake, as the leaf of that kind when fresh is of such a light hue as fully to account for this difference.

The descriptions of the two plants correspond with those in our collection. Our tea plants ripen seed almost every year. I would not readily doubt the veracity of Mr. Landreth; but I should be very glad to be informed the name of the vessel and captain that brought his tea plants from China, as we have never heard the circumstance mentioned before, and as our plants were so cheap, it seemed to unnecessary to import them from China.

R. C.

I have read the above statement of Robert Carr, and believe it to be correct.

WILLIAM BARTRAM

\* This plant we have also for sale at Bartram's Garden.

### Notes

<sup>1</sup>Dr. Alexander Anderson (d. 1811) was superintendent of the Royal Botanic Garden on St. Vincent, near Barbados in the Lesser Antilles, from ca. 1785 until his death in 1811. Prior to this, from 1755 to 1785 he was in North America attached to the British Army. He botanized in the neighboring Caribbean and in 1791 in Guyana. [I thank Dan McKinley for biographical information on "Dr. Anderson".]

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**"We have sold upwards of 100 plants, to different persons in the United States from New-York to Georgia. We formerly sold them at 50 cents each, and it is but five years since we raised the price to one dollar."--Robert Carr**

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<sup>2</sup>In March 1797 the Polish traveler, Julian Ursyn Niemcewicz, visited the Bartram Garden and reported "I have seen there green tea from China and Boha." Metchie J. E. Budka, trans., and ed. *Under their Vine and Fig Tree: Travels through America in 1797-1799, 1805 with some further account of Life in NJ.* (Elizabeth, NJ: 1965), p. 52-53.

*Charles Boewe is editing the correspondence of C. S. Rafinesque.*

**Bartram Broadside** is edited by Joel T. Fry, Curator, Historic Bartram's Garden. Ideas and contributions on the Bartram connections to exploration, horticulture, botany, and other natural sciences are encouraged. © 1994 The John Bartram Association.

### Historic Bartram's Garden



The Pre-Revolutionary Home of John Bartram  
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