

# The Colden Estate and Mansion



# Site Entrance



# Major Themes for Visitor's Site

## ❑ Mansion and remains

- Mansion and other buildings
- Layout and history of other important manmade features
- Slave cemetery

## ❑ Animal Ecology

- with emphasis on Cadwallader Colden's writings and philosophy
- Deer
- Black Snake
- Others (rabbits, woodchucks, hawk, etc.)
- *Number of animals could be reduced due to visitors*

## ❑ Plant Ecology

- The Coldens' emphasis on flora identification, history, ethnobotany, etc.
- Osage Orange tree and the site's horticultural history

## ❑ Fossils

- The Coldens' emphasis on religion, geology, evolution and natural history.



- Make the best use of this space.
- View everything within its natural setting.
- Interpret important pieces of local natural and cultural history.
- Engage in the outdoor teaching experience and nature walks.

# Proposed Pathways



## Features

1. Mansion
2. Building 2 (Barn?)
3. Grove and Opening
4. Pathway to back
5. Buildings to Right
6. Cistern/Well to left
7. Deer Path
8. Short Path to Swamp
9. Path Back to Front
10. Inaccessible Terrain

*Note: all trails are subject to change based on results of archeological and ecological reviews. The area between number 7 and the west fence is possibly an ephemeral wet land sensitive to utilization.*

# Site Areas & Spaces *(with easiest paths)*



*Some open spaces need to be re-assessed and their uses and history confirmed.*

# I. The Mansion and it's Recovery

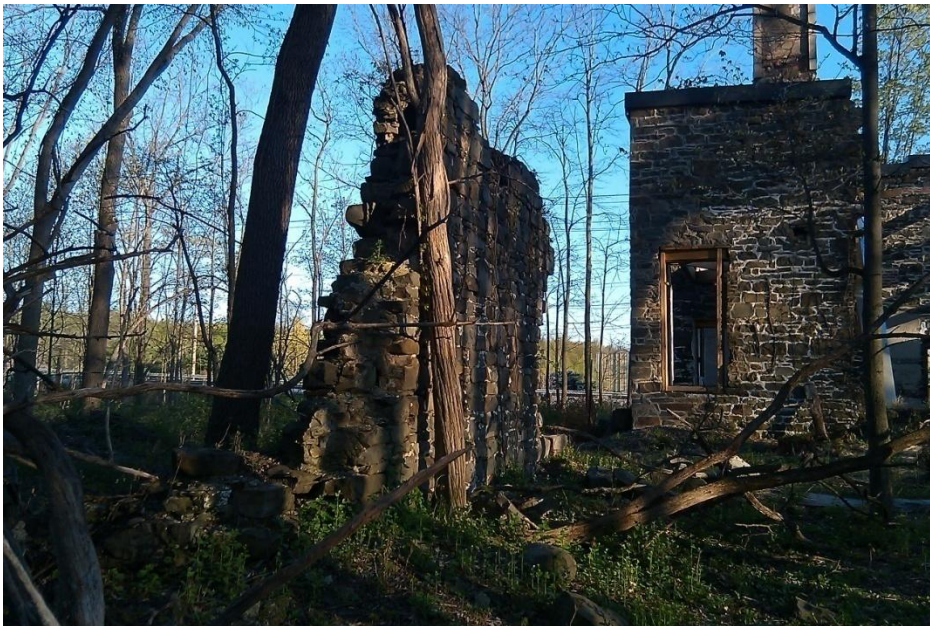
*(Issues, changes, planning-related issues are in gray)*



## Other views of the Mansion



*Northeast corner  
(facing SW)*



*West-facing view*

## Mansion.

*Need to develop a way to protect the mansion and prevent easy access of the remains.*

- This is the very first thing a visitor sees in this site and will probably be the main reason for a visit.
- The restoration of the mansion has to be maintained, with improvements made when necessary.
- The current state of the mansion is that it is stable, but is very accessible to visitors
- There are support structures, remnants and debris at risk of loss, change or destruction due to “over-engaged” or unattentive visitors.
- There are some items in need of documentation, photographing, collection, and preservation.



# Building 2

*(Related issues: Accessibility? Safety?)*



# Other Buildings

*Need partial barriers to prevent climbing*

- Accessibility and safety are the primary issues
- There are remnants that have to be collected or documented
- There is less of a potential problem for unwanted damage or change, except with regards to the structures of the walls, especially the free-standing walls with minimal support.
- Stones may fall from free standing walls
- Access to inner portion of foundations probably does not have to be limited, but the few metal objects seen on the premises may have to be marked, or removed.

## II. THE OUTDOOR ARENA FOR TEACHING

### Possible actions/additions:

- Natural features should be used to enhance display and define site
- This site should be open and unlikely to harbor ticks
- Display Board with maps and pamphlets
- Warning signs regarding ticks, deer, west nile, snake, burrow holes, mud and water.
- Educational Materials for visitors
- Shelter to later be added (Long Term goal)
- Space for temporary set-up/takedown for occasional use

This long-lasting Natural Barrier can be used to define specific areas



*Center of outdoor teaching area*

# More Open Space in Back Area



# More Open Space



# Osage Orange Remains *(Carpentry skills needed)*



# Pre-formed or Cut Logs

*(use these to set up land use areas)*





# More Logs

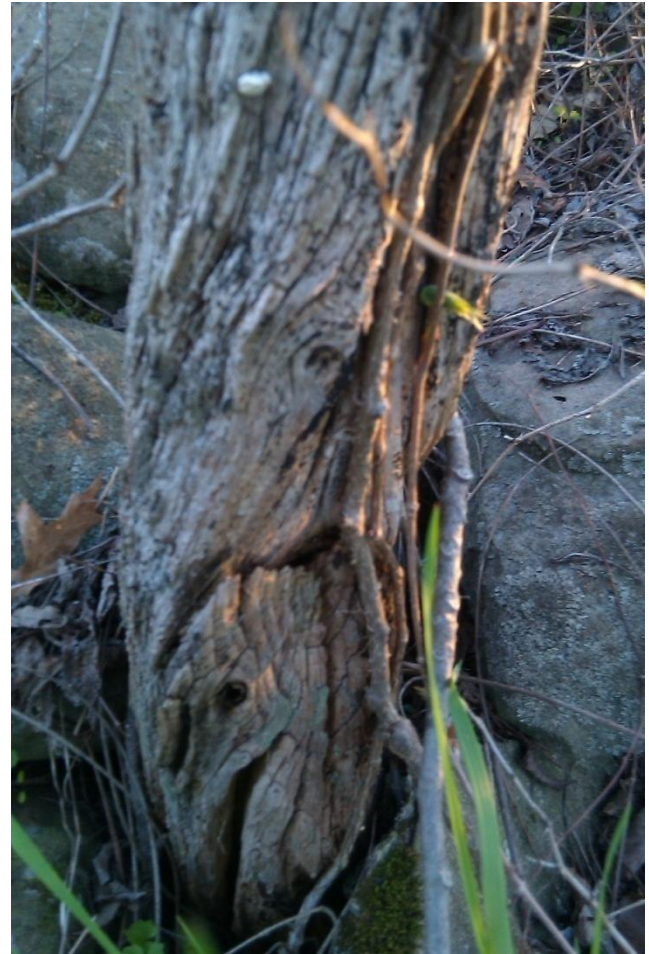
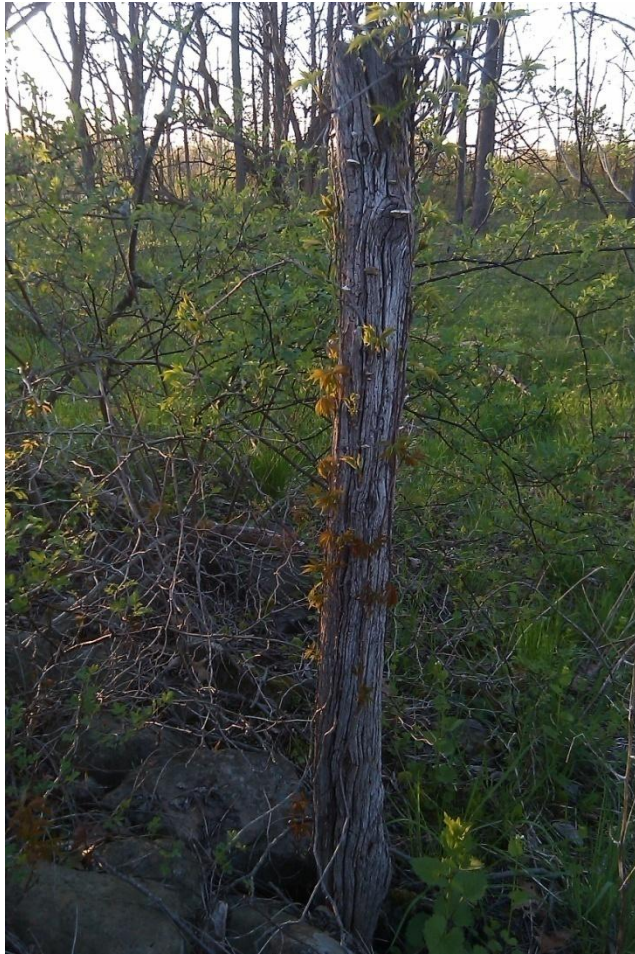
>> *Can these be cross-dated?* <<



### III. Protection of Other Remnants, for example Slate, Housewares, etc. *(Collect pieces for display, preservation)*



# Old Wooden Posts (2 found)



# Stone Walls

*(Stability? How to protect?)*



*Need to photograph completely*

# Mansion's Water Closet?

*(South Face) (Safety issue=Fencing)*



# Well with Water

*(More safety issues)*



# Dry Well *(Fence this in?)*



# Stone Pile

*(Blacksnake habitat)*





# Barn area

*(debris issue, excess blackberry shrubs)*



????

*(Safety Issues)*



# Stone Walls



# Brush (Deer Trail) looking southeast towards canal

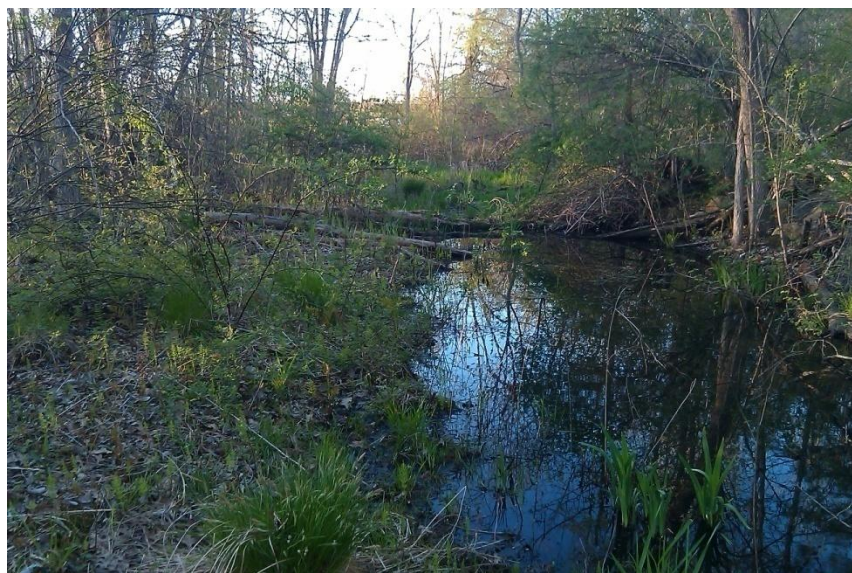


# Deer paths



# Canal or Ditch

*(Fencing? - expensive)*



# SW Corner (“Shed(s)”)

*(Need accurate drawing of foundations. More relics to gather and catalog)*



# *IV. The Native, Domestic and Introduced Flora of this Setting*





# Wild and Introduced Plants



**Ground Ivy**  
**(*Glechoma hederacea*)**



***Polygonum* spp.**  
**(Accidentally introduced?)**

# Native Species

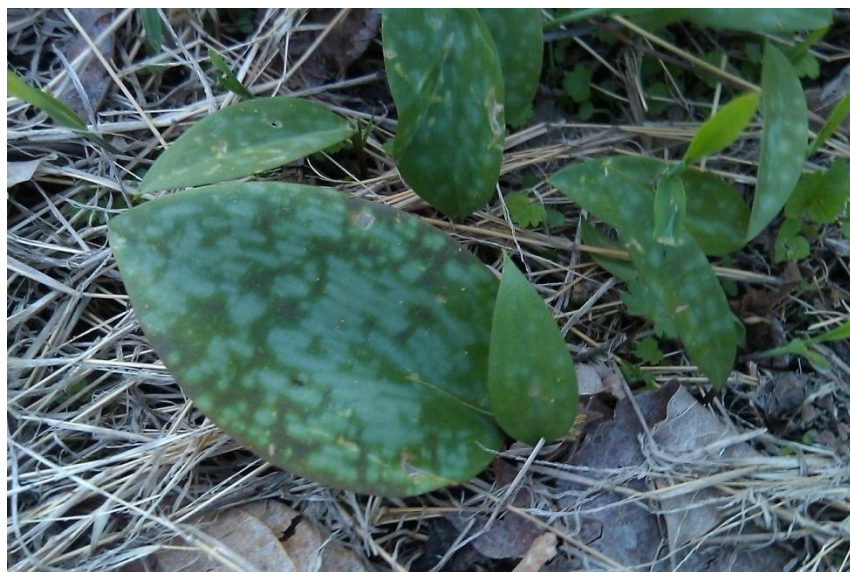


Sneezeweed? (*Hymenoxys* sp.)?  
or other Native?



Morel mushroom

# Trout Lily, Catnip or Vervain?



# Natural Ecology indicators



*Jack in the Pulpit*



*Sensitive Fern*

# Introduced farm crops, Black Medic and Red Clover, and Black Walnut



# Activities needed

- Documentation of plants in their entirety
  - Locations of
    - stone remains
    - temporary and permanent water forms
    - animal trails
    - major domestic trees
    - original garden sites, including escapee habitats
    - define small area vegetation domains or “regions”
  - Produce a list
  - Produce a pamphlet or booklet
  - Produce a map of these features

# V. Cadwallader Colden's Blacksnake Theory







# Cadwallader Colden's Blacksnake Theory



**RADIX SENEGA.** 135

8. *SANTICULA canadensis* foliis radicalibus compositis, foliolis ovatis. Gron. Virg. 146.  
Black Snake - Root. Coldenii. Radix sudorifera.

9. *UVULARIA perfoliata* caule perfoliato. Gron. Virg. 37.  
Radix cum aqua contusa ictui Caudifera applicatur apud Novoboracenses. Cozd.



Uvularia

# Example of Reference to Colden (*misstated*)

[Quote]

## “European Experience: 1743-1980

- *The first person in Europe to recommend use of Cimicifuga was Colden, who suggested use to stimulate uterine contractions as early as 1743, apparently inspiring Linnaeus to add the plant to his Materia Medica in 1749.<sup>57, 58</sup>”*

Steven Foster. Black Cohosh: A Literature Review. HerbalGram. 1999; 45:35-50 American Botanical Council. <http://cms.herbalgram.org/herbalgram/issue45/article2659.html>

# VI. FOSSILS

*Fugitive Pieces on Various Subjects, in Two Volumes (1709, vol. 1)*



# Reasons to include Fossils



<http://www.hudsonrivervalley.org/themes/mastodon.html>

- New York has a unique environment when it comes to fossil history. With a 450 Million Year Old fossil bed underlying the region, this part of the state influenced much of science.
- This reviews the local “professional opinion” for the time and its importance to the history of science and religion. It helps us understand why the Coldens had such an globally with regard to this new theory (Erasmus Darwin’s precursor to Charles Darwin’s evolution theory)
- Other famous scientists like Alexander Garden and John Bartram are known for their interest and documentation of the local fossils; now members of the Colden family like Jane, Alexander and Cadwallader, Sr. and Jr. are added to this list.

The Hudson Valley was the heart of Mastodon country during the very early 19<sup>th</sup> century.

**James Parkinson, 1811**

Many bones of this animal having been found, in 1799, in the State of New York, in the vicinity of Newburgh, which is situated on the Hudson, or North River, Mr. C. W. Peale, of Philadelphia, purchased these,

...

From the whole of the bones which they obtained, two skeletons were formed, composed of the appropriate bones of the animal, or exact imitations from the real bones in the same animal, or from those of the same proportion in the other. Mr. R. Peale, who has given a description of this animal, asserts, that there is one bone less in the neck of this animal than in that of the elephant, never having met with a single bone resembling a seventh vertebra of the neck. The dorsal vertebrae were supposed to agree in number with those of the elephant; as nineteen of these vertebrae and as many ribs were found, one in all probability having been lost: three vertebrae were thus left for the loins.

The only instance of hair, Mr. Peale says, being found with the remains of this animal, occurred in a morass belonging to Mr. A. Colden. The hair was coarse, long, and brown; a large mass of it was found together, but so rotten, that, after a few days exposure to the air, it fell into a powder\*.

*Organic remains of a former world...*, Volume 3.

By James Parkinson. 1811. “Letter XXVI. Mastodon,” pages 352-367.

# Fugitive Pieces on Various Subjects in Two Volumes (1709, vol. 1) [Book Review]

IOANNIS IACOBI BAIERI  
ORYCTOGRAPHIA NORICA  
SIVE  
RERVM FOSSILIVM  
ET  
AD MINERALE REGNV M PERTINENTIVM  
IN  
TERRITORIO NORIMBERGENSI  
EIVSQVE VICINIA OBSERVATARVM  
SVCCINCTA DESCRIPTIO  
CVM SVPPLEMENTIS A. MDCCIX  
EDITIS.



RECUSA NORIMBERGÆ A. R. S. MDCCIX.  
IN COMMISSIONE WOLFFGANGI SCHWARZKOPFFIL

Our Author divides the figured Stones, which are those of the second sort, into two Classes, *viz.* such as have received their External Form by pure Nature, or are really the Petrification of Plants and Animals.

He places under the first Class several sorts of Stones, some of which have a Geometrical Figure, and others represent Plants, or the Parts of some Animals. The most remarkable of both are, 1. The Eagle Stone (*Actites*) of a round Figure, whose Center is usually full of a stony and light Kernel, upon which we have a particular Treatise writ by *Bausch*. 2. The *Balem-*

for february 1709.

73

*nites*, sometimes call'd the Lynx-Stone, sometimes the Thunder Stone, of a Conical Figure, and brown Colour, and smells like burnt Horn, when 'tis beat or calcin'd. The Species of this being many, are to be exactly describ'd by *M. Scheuchzer*, who has promis'd a Dissertation upon it. 3. The *Stalactites* or *Stalagmites*, a Stone of an Oblong Figure, form'd of a Liquor, which petrifies as it drops from Vaults or the sides of some Caves. 4. The Starry Stone (*Asteria* or *Astroites*) cut in 5 Angles or Rays, whose different Species are here accounted for. 5. *Dendrites*, or the Stone upon which Nature seems to have taken Pleasure to draw Plants and Landships, of which *M. Sebeucher* has spoke at large, in a Book printed among the Pieces which compose the Astronomical Tables of *Germany*. 6. The *Jews Stone*, whose Figure is like that of an Acorn, or small Cucumber. 7. Several Stones, which represent Olives, Plums, Almonds, Cherry-Stones, Cloves of Pepper, Muscadine Pears, Peaches, Figs, Mushrooms, &c. 8. Others which resemble a piece of Leather, a little Gammon of Bacon, the Nipple of a Pap, a Foot shod with a Sandal, a Shooe, the End of a Horn, &c.

# Bajeri's 1709 Interpretation of Fossils

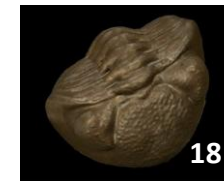
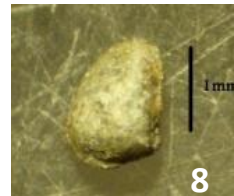
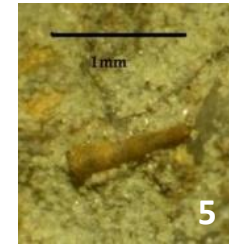
- Eagle Stone
- Balanites (Lynx Stone)
- Thunderstone (conical)
- Stalactites and Stalagmites (oblong figures)
- Starry Stone, cut in 5 angles or rays
- Dendrites (Plants and 'Landskips')
- Jews Stone (acorn or small cucumber)
- Olives
- Plums
- Almonds
- Cherry Stones
- Cloves of Pepper
- Muscadine Pears
- Peaches
- Figs
- Mushrooms
- Piece of Leather
- Gammon of Bacon
- Nipple of a Pap
- Foot shod with a sandal
- End of a Horn

# Fossils described, 1709

[see *Edinburgh, Part 2*]



- Eagle Stone (1,3,7)
- Balanites (Lynx Stone)
- Thunderstone (conical) (15)
- Stalactites and Stalagmites (oblong figures)
- Starry Stone, cut in 5 angles or rays (2, 17, Stephanocrinum?)
- Dendrites (Plants and Landscips (landscapes)) (4)
- Jews Stone (acorn or small cucumber) (18)
- Miscellaneous
  - Olives (8)
  - Plums (13)
  - Almonds (12)
  - Cherry Stones (13)
  - Cloves of Pepper (5,6)
  - Muscadine Pears
  - Peaches (13)
  - Figs
  - Mushrooms
- Piece of Leather (14, bottom)
- Gammon of Bacon (16?)
- Nipple of a Pap (10?)
- Foot shod with a sandal (3?)
- End of a Horn (10,15)
- Angels (1,3,7)



# Mansion Rock Fossils

See <http://louisvillefossils.blogspot.com/>



Ordovician  
brachiopod



Brachiopods?



# Other Geological Events

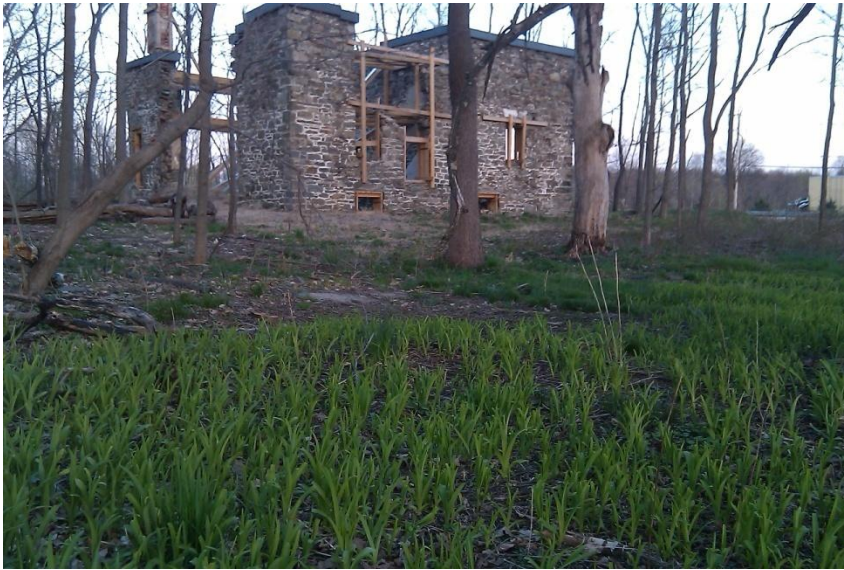


*Iron concretions  
(microbial based)*



Pockets, Erosion

# VII. Plans



Protect Day Lily Bed and artifacts

# A. Protect Mansion Wall Stones and other relics or remains



# B. Land Use Modifications



# C. Local Ecology



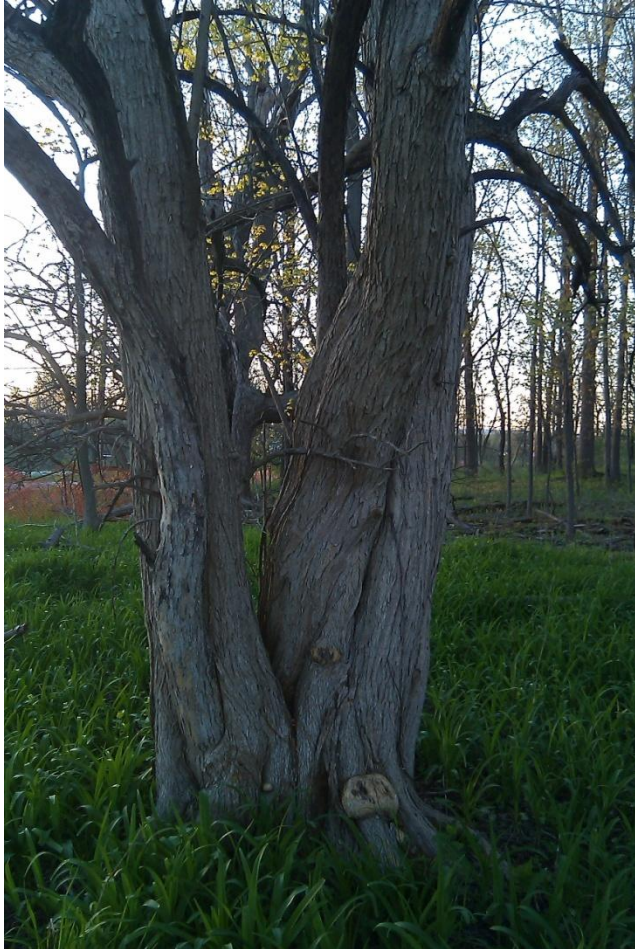
## D. Plants found around Colden's Mansion Estate

- Inventory
- Determine what to control
- Determine what can be added back
- Determine what can be added into the natural setting although not typical for this site (i.e. Tulip tree)



# E. Osage Orange Canker

*(is this a disease that can be treated?)*



# F. Plants to Introduce Back?

## Trees and Shrubs

- Flowering Dogwood (*Cornus florida*)
- Spicebush (*Lindera benzoin*)
- Staphylea
- Hamamaelis (Witchhazel)
- Liriodendron?

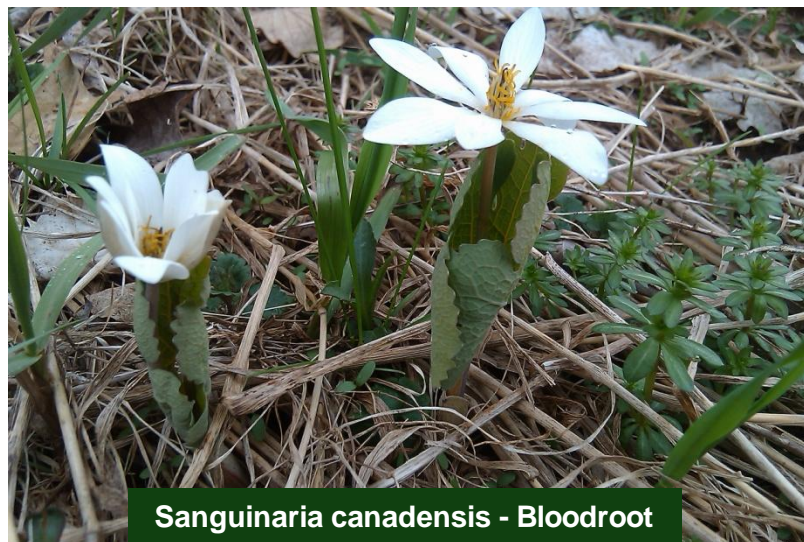




# G. Plants to Introduce Back?

## Herbaceous

- Replant some Wild herbaceous species?
  - Bloodroot (*Sanguinaria canadense*)
  - Goldthread (*Fibraurea* - Jane) today Coptis?
  - Cephalanthus (by Canal?)
  - *Thalictrum* sp.



# H. *Cornus* area (back SE corner) *Cornus sericea* and *Cornus florida*



*Species removed due to Poison Ivy in combination with local soil-water changes*

# I. Jane Colden Garden

- Jane Colden Garden layout?

- Plants to include

- Coldenia? and Coldenella?
- *Caulophyllum* (*Black Snakeroot*)
- *Hypericum* sp. (which she named *Gardenia* for Alexander Garden)
- *Asclepias tuberosa*
- *Aralia* spp.
- *Spiraea*
- *Asarum*
- *Sassafras*
- *Clematis*
- *Monarda*
- *Collinsonia*
- Etc. (to be determined)

## Examples of Themes

- Coldenia and Coldenella
- Jane's *Gardenia* (*Hypericum* sp.), *Whelks* and *Fossils*
- Jane's "Fibraurea" species
- Jane's documentation of Hudson's species and uses
- Snakeroots (The most popular folklore medicine topic; Jane identified at least 4 or 5 of these, her father another 3 or 4).
  - *Asarum canadense* (Jane's "coltsfoot", plant in 2 or 3 places)
  - *Polygala senega* (in garden; may not keep)
  - *Caulophyllum*

# Cautions and Precautions

## *Make Ecologically Sound Decisions*

- Motherwort (*Leonurus cardiaca*) is semi-invasive, naturalized, already present in plentiful supply.
- Clovers are naturalized; wild prairie clover would be a good addition and are natural to the southern state.
- Remove any “Korean Bamboo” species (*Polygonum* sp.)
- No *Arundinaria* in canal, if possible.
- No *Solanum dulcamara* or *nigrum*. Remove if possible. 1 species is native, this may be allowed (already has roadside/parking area presence).
- *Trifolium* (Clover) and *Melilotus* (sweet clover) species along the parking area are okay—although invasive. Same assumption holds true for most typical introduced species (plantains, dandelions, spring and water cress).
- Avoid all Polygonaceae members (esp. *Polygonum* and *Rumex*) and species from documented invasive allied families (esp. Amaranthaceae, Chenopodiaceae, Portulacaceae (Purslane), etc.); no need for Caryophyllum.
- Avoid toxic species: for example *Datura* and *Lobelia*

# Plants to Avoid

- **Pokeweed** (*Phytolacca americana*, important due to Cadwallader but too invasive and hard to remove after 5-10-20 years)
- **Any Sumac and Poison Ivy** (allergenic)
- Any introduced European species growing wild (*Mentha spicata* and *piperita*)
- ???European coltsfoot (*Tussilago*), for comparison with Jane's (*Asarum*)? But grows well on road edges or near ditch at entrance?

# J. Transplant Xanthoxylum

The name *Xanthoxylum*, signifying *yellow wood*, was originally given by Mr. Colden.



Source: American medical botany: being a collection of the native medicinal plants ...  
By Jacob Bigelow. 1817. p. 161.

## Features

- Native to local area
- Grows in front of the Mansion
- One of Cadwallader Colden's most important local native species in terms of publications

The name *Xanthoxylum*, signifying *yellow wood*, was originally given by Mr. Colden. The spelling has since been unaccountably changed to *Zanthoxylon* in a majority of the books which contain the name. The etymology, however, can leave no doubt of the true orthography.

# More on Colden's *Xanthoxylum*

## 335. ZANTHOXYLUM. Colden.

CAL. *Perianthium* quinquepartitum: *foliolis* ovalibus, coloratis.  
COR. nulla.  
STAM. *Filamenta* quinque (4-6). *Antheræ* didymæ, fulcata.  
PIST. *Germina* tria, (4-5), basi pedicello unita. *Styli* laterales, apice convergentes. *Stigmata* obtusa.  
PER. *Capsule* numero germinum, convergentes in globum pedicellatum.  
SEM. solitaria, protuberantia.  
OBS. Numerus multum in hoc genere variat. Plurima suadent Diœciam arboris.

Carl Linnaei Genera plantarum, eorumque characteres naturales ... By Carl von Linné. 1754.

## CON CINCO ESTAMBRES. 373

### 1333. Género ZANTHOXYLUM. † Colden.

*Fagara Duham.*

CAR. GEN. NAT.

Parte práctica de botánica del caballero Carlos Linneo, que ..., Volume 7. By Carl von Linné, Imprenta Real (Madrid). 1787. p. 373

### 1109. ZANTHOXYLUM. (Yellow-wood) † Colden *Fagara du Hamel. Toothach-tree.*

\* Male.

CAL. *Perianth* five-parted: the leaflets oval, erect, colour'd.  
COR. none.

STAM. *Filaments* oftner five, awl'd, erect, longer than the calyx. *Anthers* twin, roundish, furrow'd.

\* Female.

CAL. as in the male.

COR. none.

PIST. *Germ* roundish, ending in an awl'd style, longer than the calyx. *Stigma* obtuse.

PER. *Capsule* oblong, one-cell'd, two-valved.

SEED one, roundish, smooth.

OBS. I have borrow'd the Pistil and Fruit from Duhamel, but Colden mentions Pistils 4-6 fenced at the base with a pedicel.

CAL. five-cleft, colour'd, very small. Petals five, egg'd. Stamens five, the length of the petals.

PIST. *Germ* twin, roundish. Styles two, very small. Stigmas acute. Gron. virg. 47. Inspection must determine it.

In Syft. Veg. p. 741. Pistils five, and Capsules five, one-seeded are now ascribed to this genus. Brown also draws the character in another manner. R. III. A 5-

The families of plants: with their natural characters, according ..., Volume 2. By Carl von Linné, Johann Jacob Reichard, Erasmus Darwin. 1787.

# VIII. Trails

## Taken into consideration (“shown off”)

- Mansion and other structures
- Local Ecology and Plant-Animal Ecology Stabilization
- Modifications made of natural setting
- Other historical features
  - Horticulture/Floral business (Osage Orange history)
  - Fossils
  - Black Snake story
  - Slave cemetery



# Site Areas & Spaces *(with paths and features)*



## Plants

- W= Walnut
- G = Geranium
- Unk=Unknown decorative shrub
- Za=Prickly Ash

Cornus grove is just nw of semi-wetlands

## Spaces

- M or H = moderate to heavy modification
- B=Building Remains and perimeter
- N=Natural Barrier to east edge
- I=Inaccessible terrain (area 10)
- D=Deer path
- T=west edge Trench serving as barrier

## Other notes:

A stone wall traverses between sites 5 and 7  
 ? = exact placement uncertain  
 Useable open space is between H and B2

# Trail Pamphlets *(need examples)*

- General Information Pamphlets
- Trail Pamphlets
  - Historical
  - General Ecology
  - Plants
  - *Key to Fossils on site*
  - *Tree Ring Dating of Osage Orange Logs*
- Other subjects

# Example of Space Use and Site Development



# More specifics

- Safety Concerns
  - Debris, garbage, broken glass, etc.
  - Barrel and other rusty items, items protruding from soil
  - Stone wall safety
  - Ticks (Lyme Disease) and Mosquitoes (var.) (pamphlet on this?)
  - Too much Poison Ivy and Raspberry bushes
  - Ground hog/rabbit holes, wells, cisterns and the like
- Structural Concerns
  - Stone Walls secured? (esp. isolated wall)
  - Ability to go up close to Carriage house foundation
- Environmental-Ecological
  - Avoid Water/Canal Edge and wetlands like environment to South
  - Safety/Ecological Concern—numerous old, dead Cornus trunks with old Poison Ivy vines
  - Ecological concern—canker on Osage Oranges near the front
  - Take into consideration natural residents (snakes and deer mostly, but also voles and rabbits, perhaps ground hogs)
- Other (Cosmetics)
  - Moderately changed areas up front (improve view; add Colden garden)
  - Unchanged areas remain in the back
  - Improve display of site from roadway

# Example of Site Development



# Finis

