

Shade Gardening



March 18, 2023

Garden Philosophy

- Mix native and non-native (not invasive) in naturalistic combinations
- Promote high diversity and layer plants to give the garden structure
- Create a diverse garden to enrich us and wildlife

Significance of a Shade Garden

“Texture and foliage keep a garden interesting through the season. Flowers are just moments of gratification.”

Kevin Doyle (Landscape Designer)

Garden “Journey”

➤ Studied site characteristics

- Sun Exposure
- Soil samples
- Water availability and storm water runoff

➤ Researched plants

- Native or non-native
- Aggressiveness
- Common traits and needs of plants

➤ Planted over 750 plants (not all at once!)

- 2 Canopy Trees (because the original trees are all 50-70 years old)
- 15 Understory
- HUNDREDS of shrubs, perennials, and ground covers

“Shade” Characteristics

- Level of canopy coverage
- Turf grass generally will not grow in dense shade conditions
- Is soil naturally wet or dry?
- Shade generally keeps soil moister but tree roots can dry out the area
- Do exposed tree roots require adding topsoil for a “raised” bed?

Sunlight Considerations

➤ Sunlight Spectrum

- Full Sun (>6 hours)
- Part Sun (4-6 hours)
- Part Shade (2-4 hours)
- Dense Shade (<2 hours)

➤ Any area with less than 4-6 hours of sunlight can be considered for “shade” gardening

➤ Other Considerations

- Dappled or filtered sunlight
- Sun Intensity; afternoon vs. morning

Full Sun

- 6 or more hours sunlight between ~9 and 5
- Once established, plants in full sun can handle drier growing conditions
- Usually need several inches of mulch to keep roots moist and cool
- Majority of flowering annuals and perennials prefer full sun in order to set buds and optimize growth

Part Shade or Part Sun

- Often used interchangeably
- Part Sun usually requires 4-6 hours sunlight for optimal growth
- Part Shade usually requires 2-4 hours sunlight for optimal growth
- Quality or intensity of the light -- morning or afternoon – makes a difference

Dense Shade

- Dense (or full) shade does not mean “no” sunlight
- Usually less than 2 hours of sunlight
- Photosynthesis requires some sunlight to create food for the plants

Determine Sunlight Availability

- Check your garden multiple times during the day and different seasons
 - Study sun path
 - Angle of the sun changes during the year
 - Record sunlight conditions throughout the garden
- Use a sunlight meter to track sunlight (Sun Surveyor app)
- Draw a simple (or complex) diagram of sunlight characteristics
- Sunlight will change
 - Deciduous trees leaf out
 - Plants mature
 - Plants die or are removed

Chart Sunlight Exposure

8:00 am

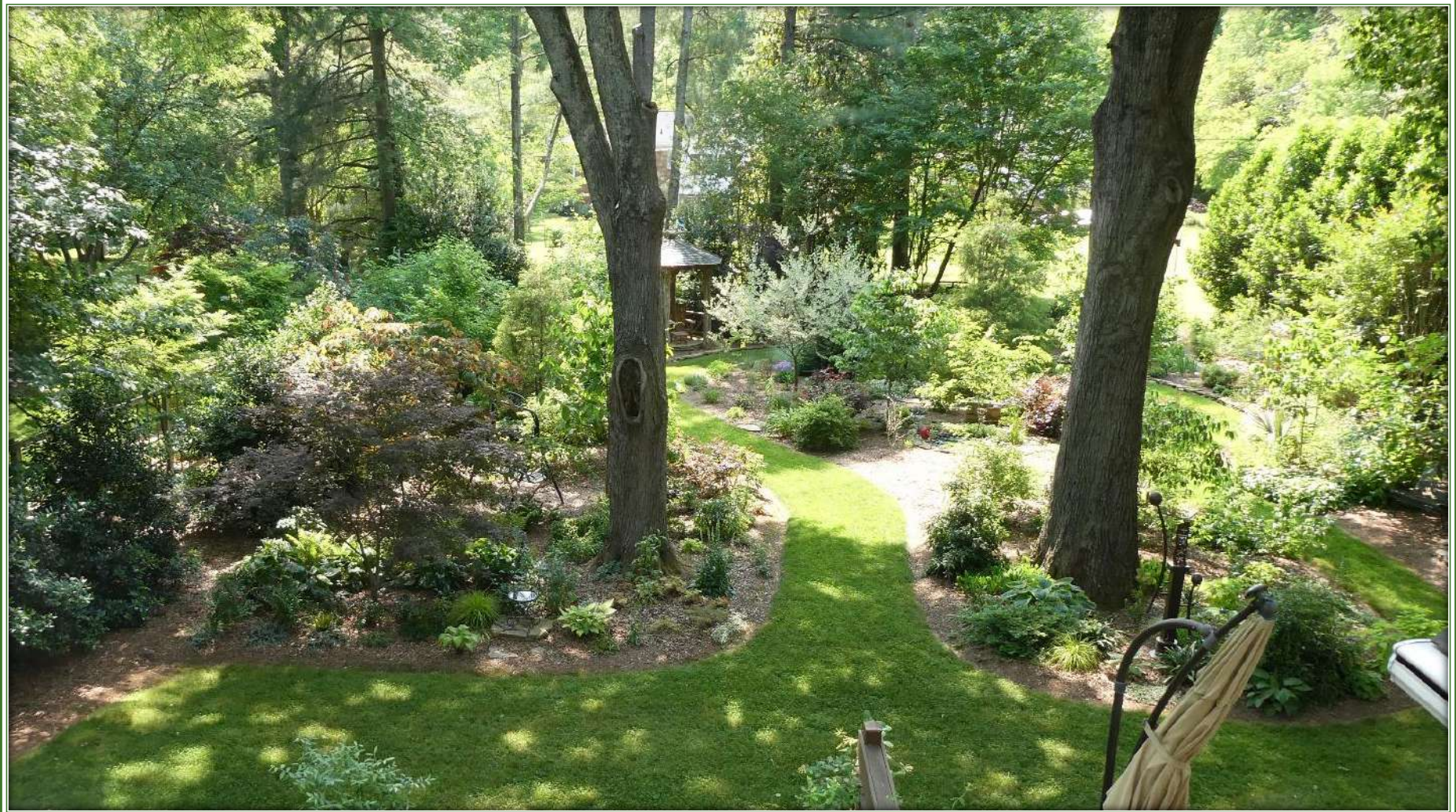


Chart Sunlight Exposure 9:00 am

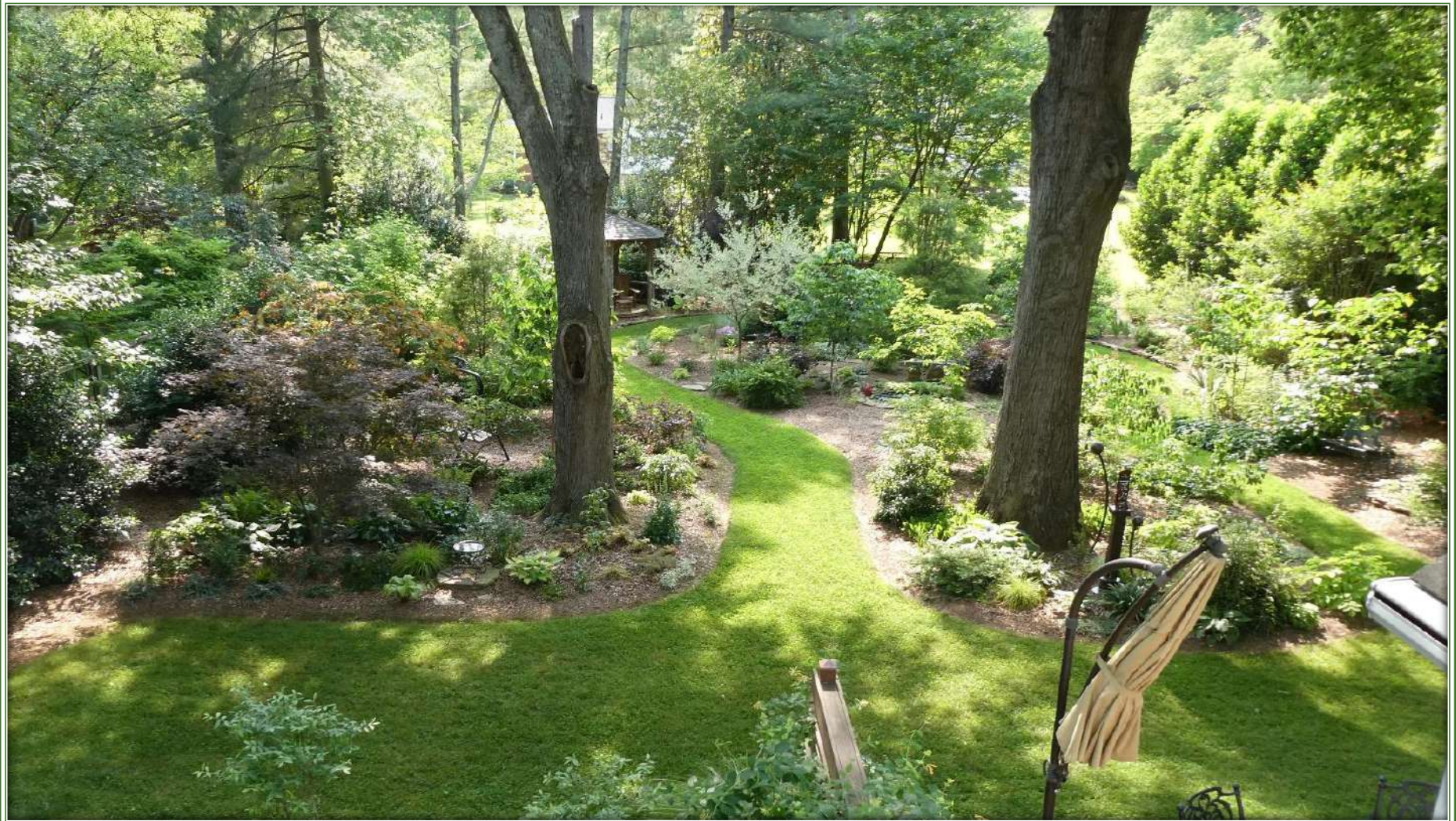


Chart Sunlight Exposure

10:00 am

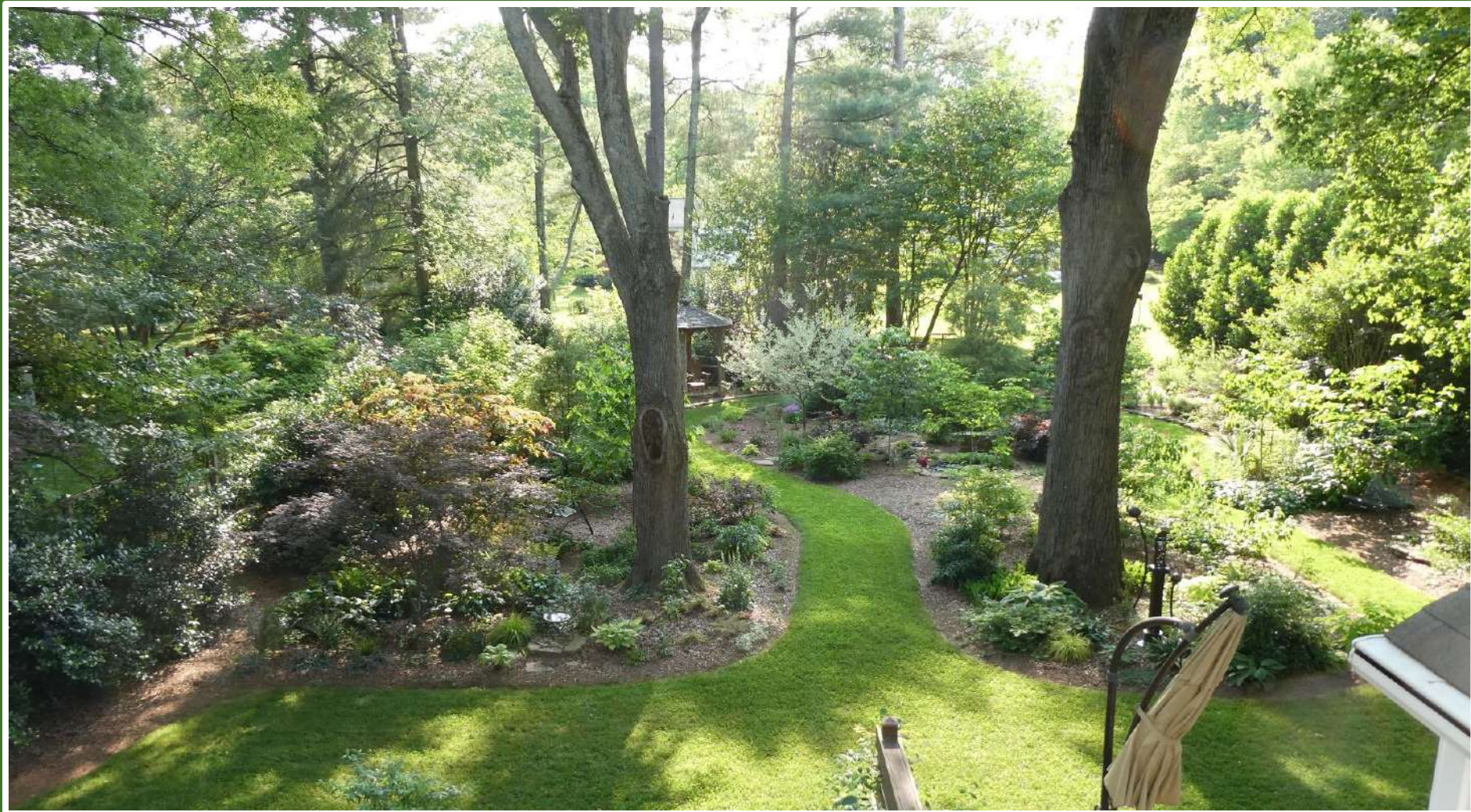


Chart Sunlight Exposure

11:00 am

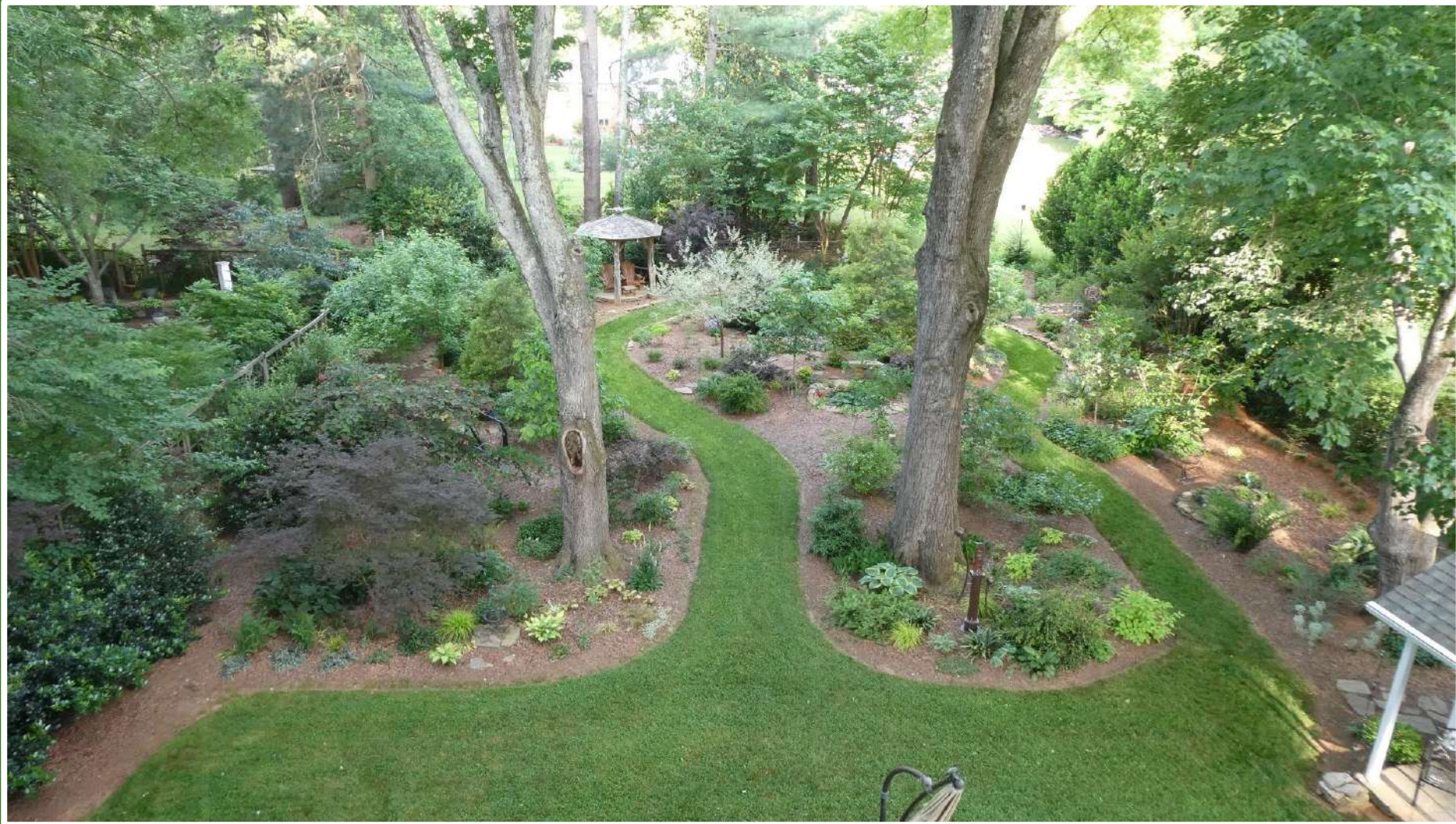


Chart Sunlight Exposure 12:00 pm

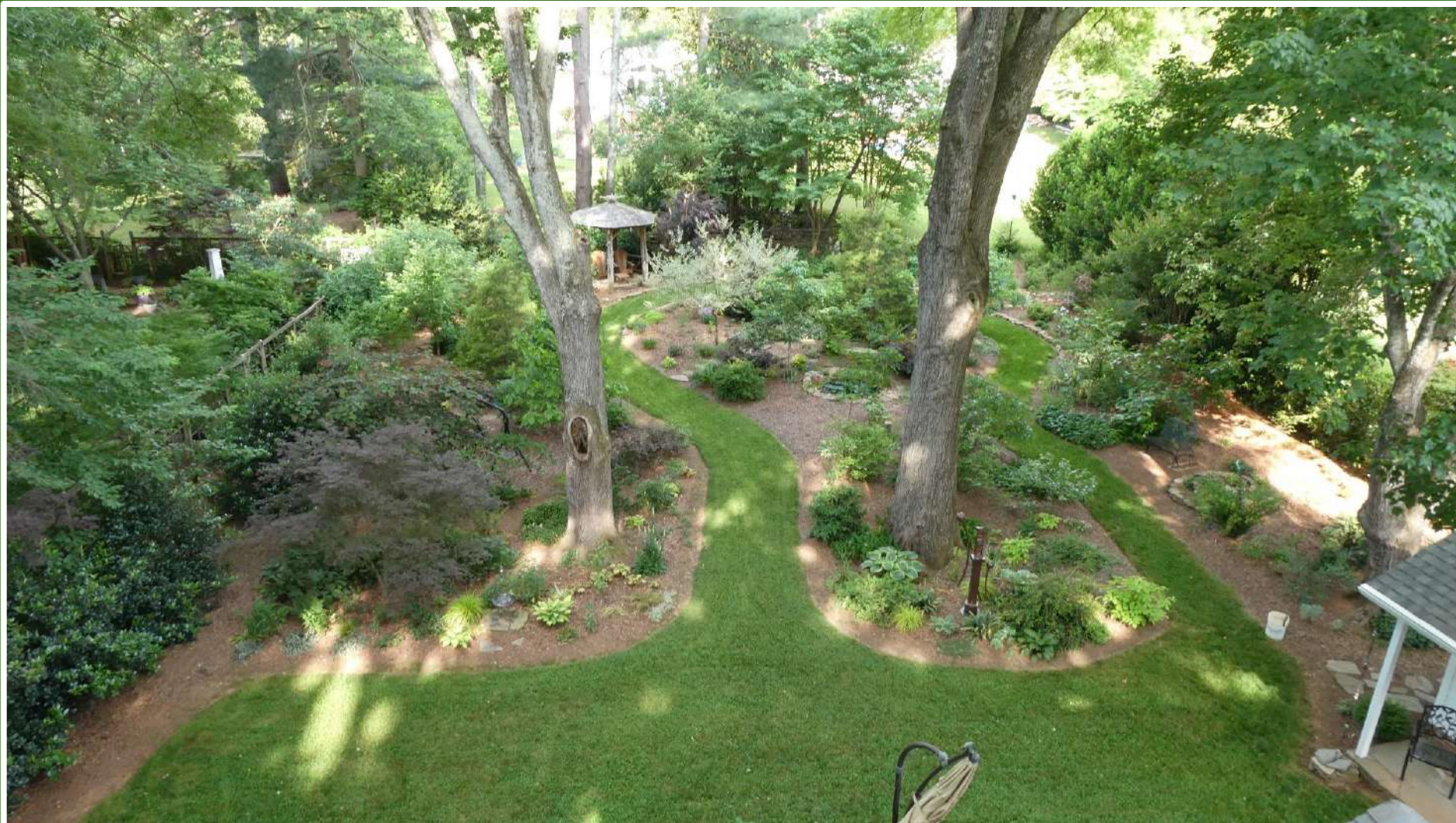


Chart Sunlight Exposure

1:00 pm

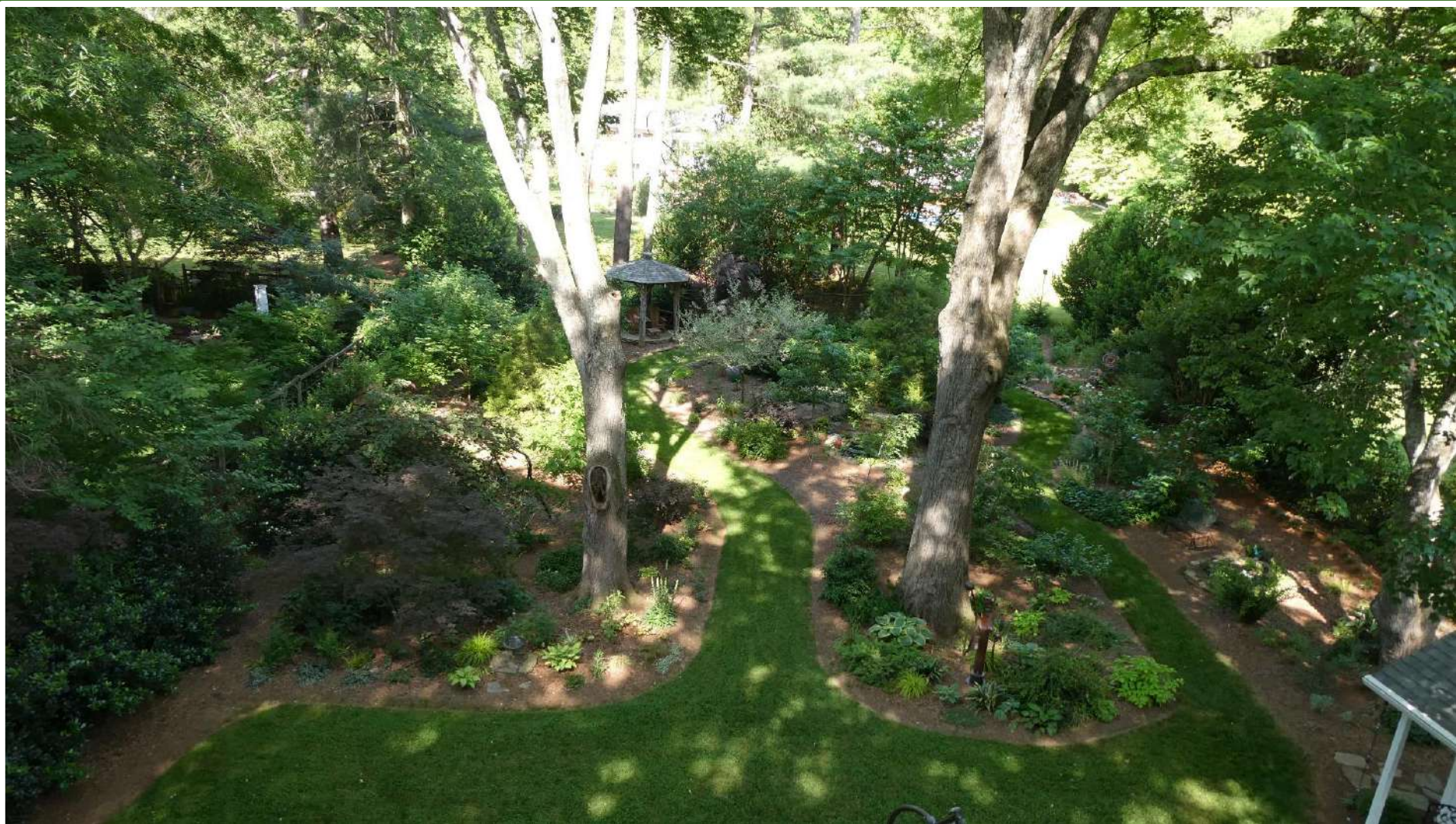


Chart Sunlight Exposure

2:00 pm

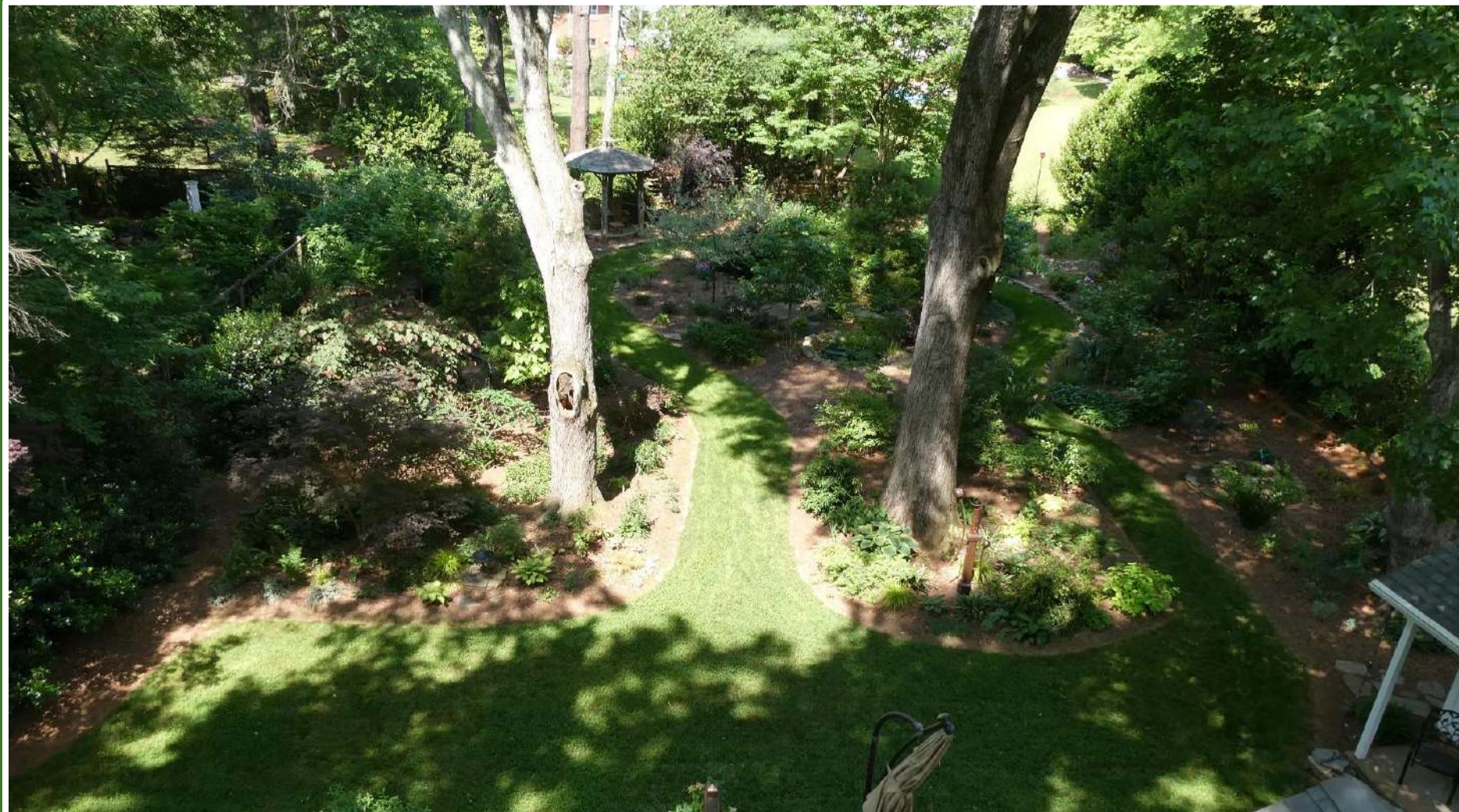


Chart Sunlight Exposure

3:00 pm

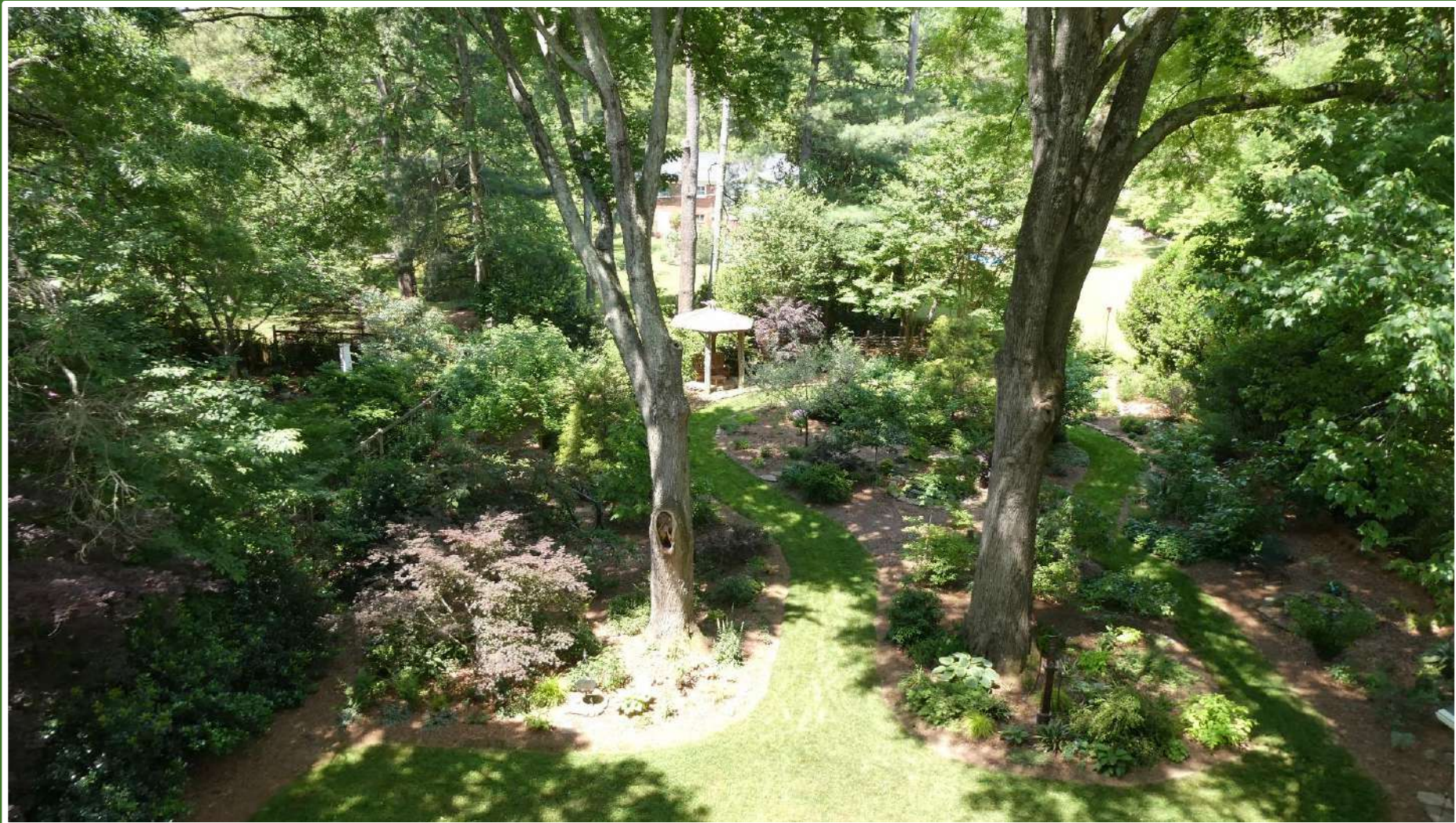


Chart Sunlight Exposure

4:00 pm



Chart Sunlight Exposure

5:00 pm

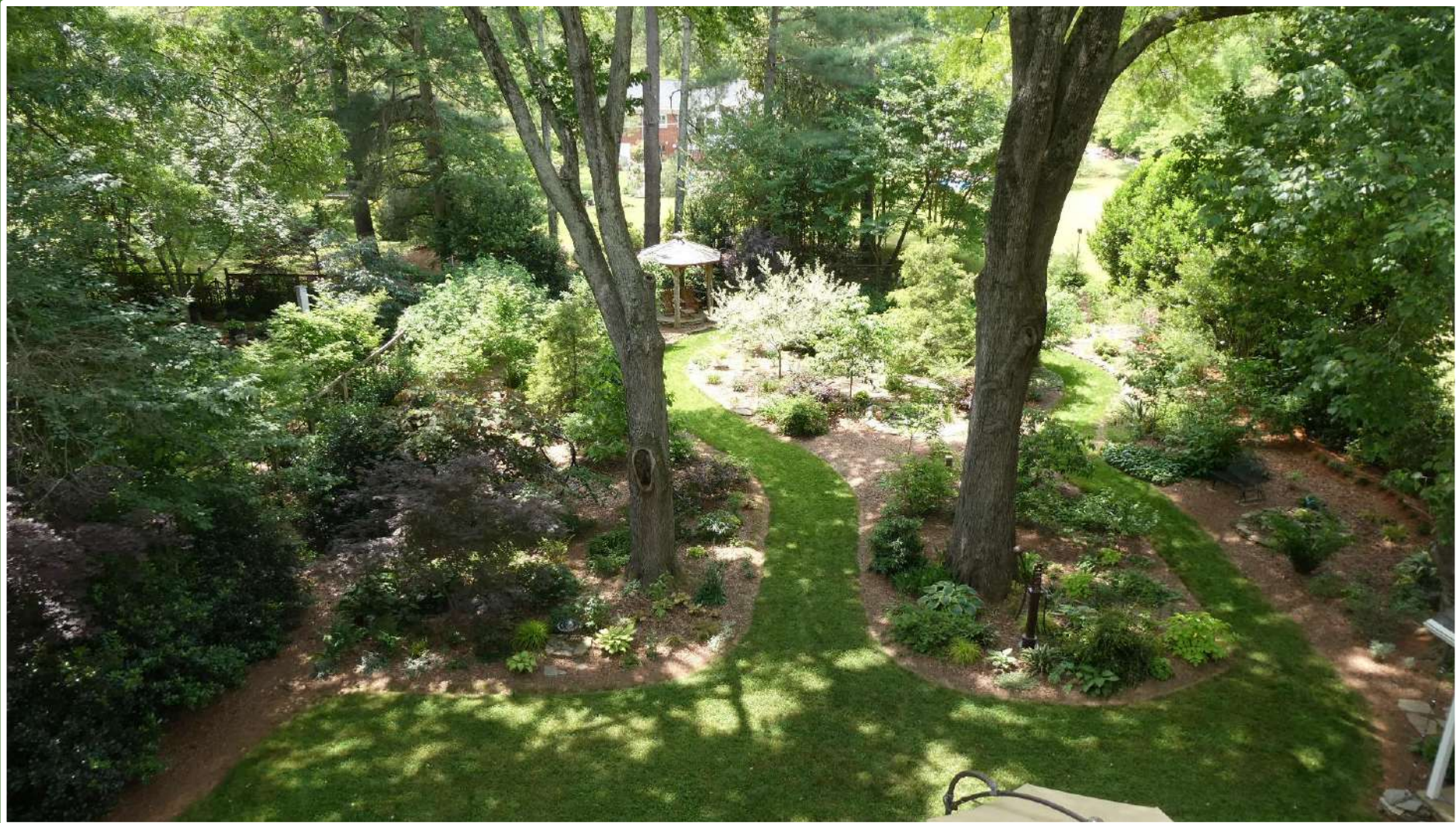
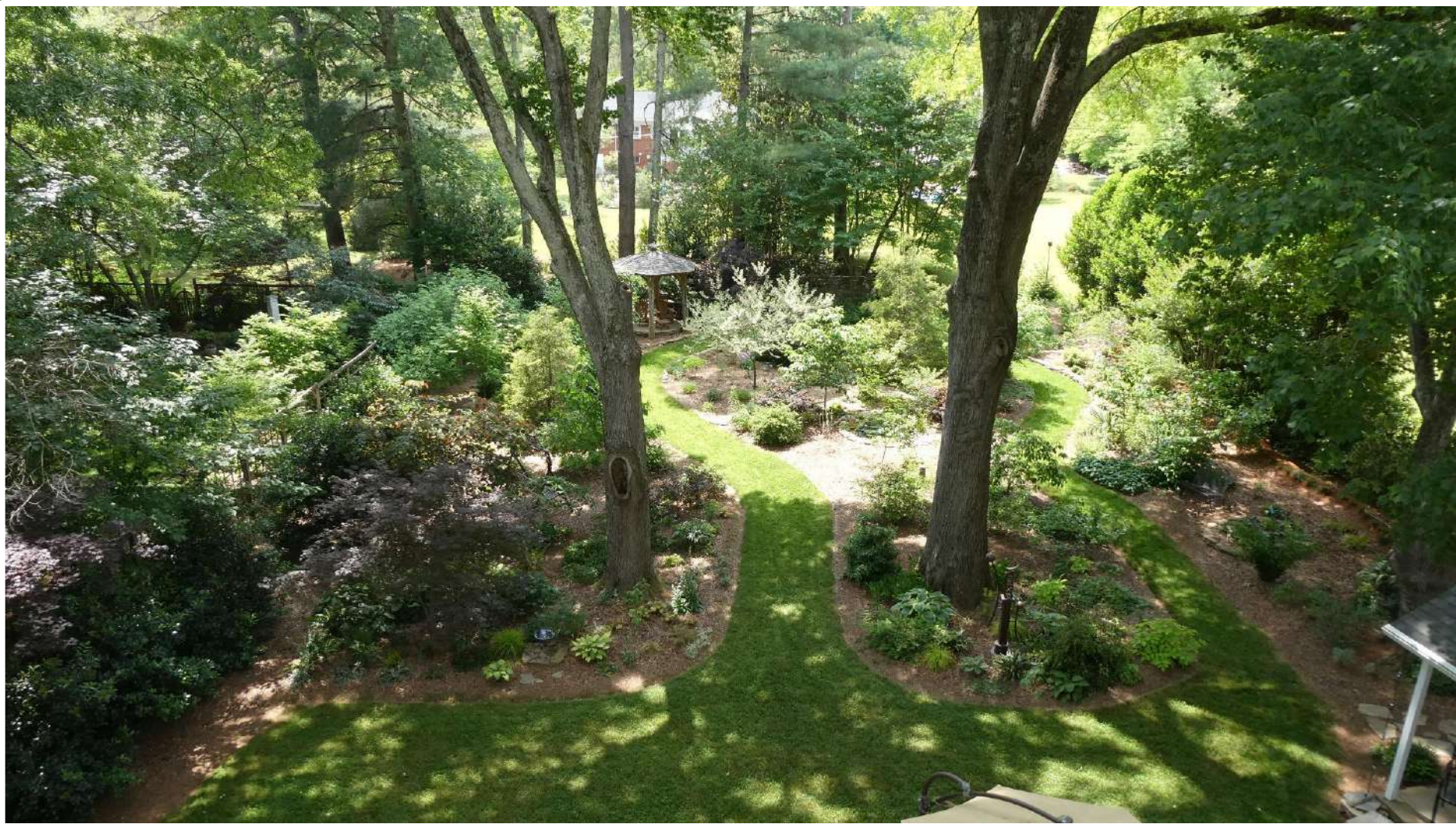


Chart Sunlight Exposure

6:00 pm



Shade Gardening Benefits

- Piedmont area can be quite hot and dry in the summer stressing plants
- Shaded areas are cooler and retain moisture better than full sun areas
- Irrigation may be required, especially during droughts, but not as extensively as full sun areas

“Right Plant, Right Place”

- Nursery tags generally identify the conditions under which a plant will grow
- This does not mean it will always grow well under listed conditions
- All plants have a preferred sunlight exposure
- Signs a plant may not be in the “right place”
 - Leaning in search of sunlight
 - Foliage is burned by the sunlight
 - Droopy stems, flowers, or leaves

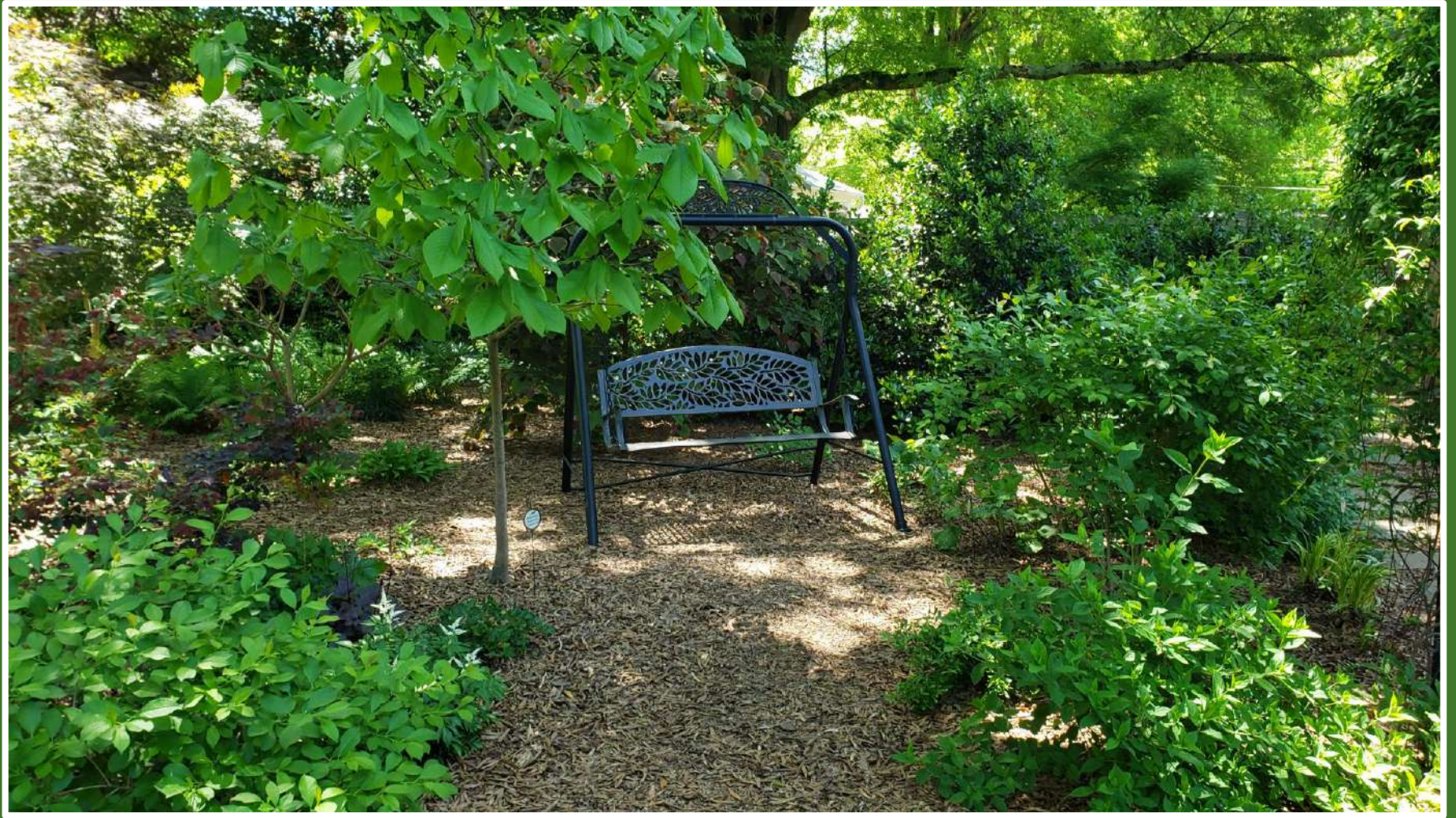
How do I get color in my garden?

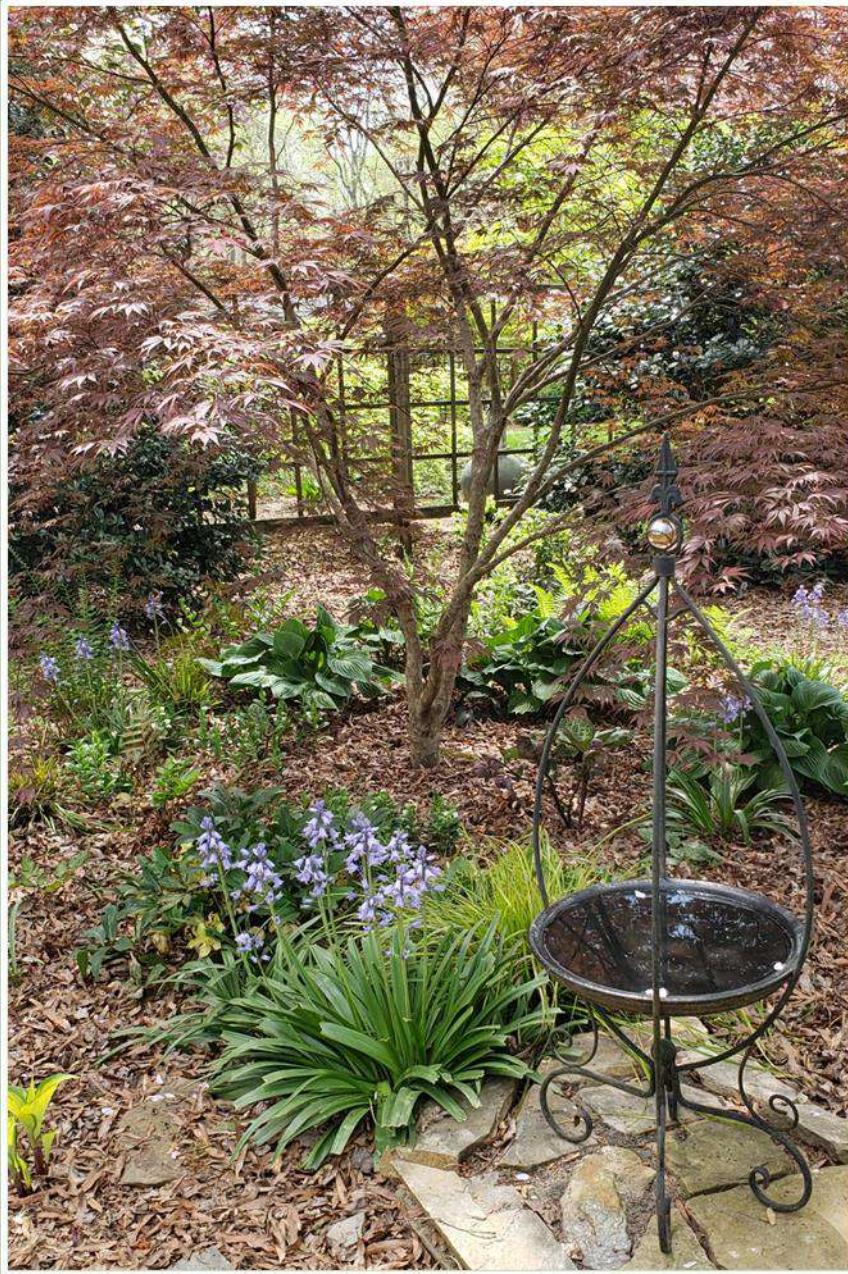
- Do not focus solely on plant blooms
- Foliage will last longer than blooms
- Use art work or sculpture
- Use pots or other “whimsy”

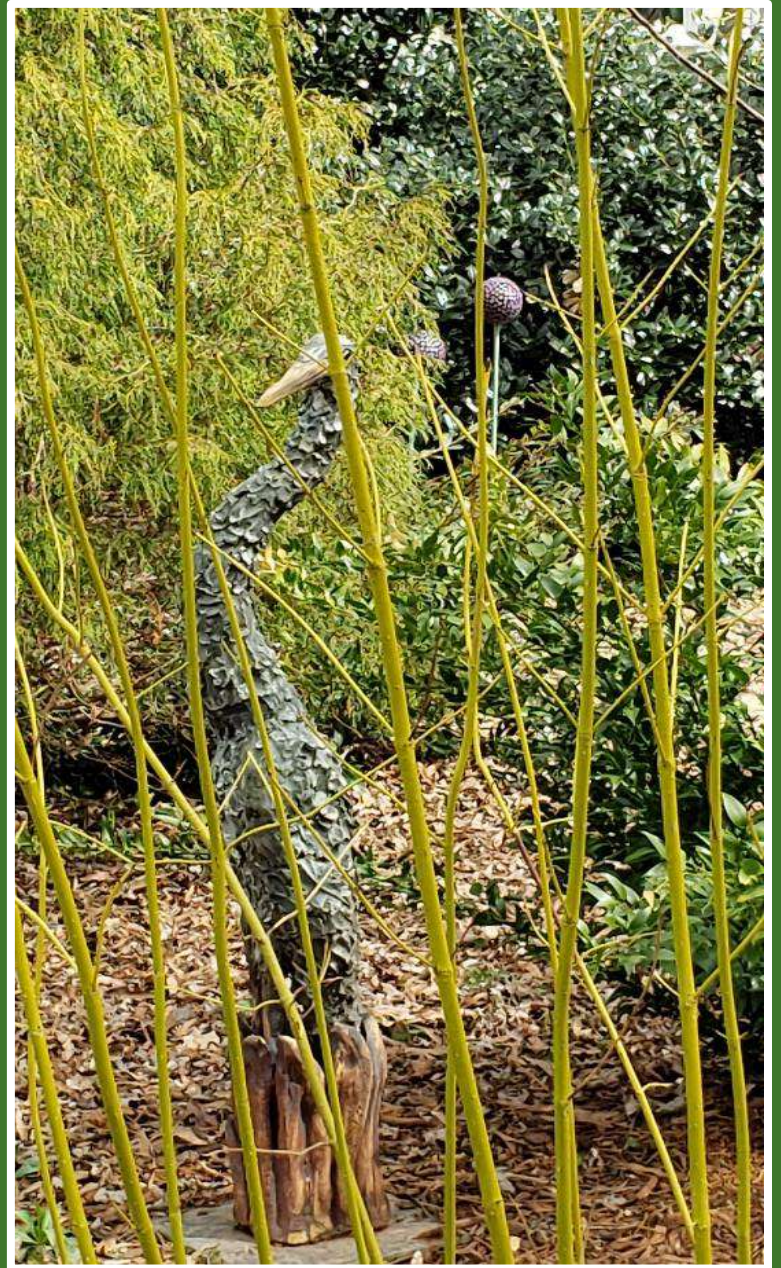
- Look to foliage for color and texture
 - Shades of green, yellow-green and burgundy
 - Variegation
 - Stem or trunk colors
 - Texture and form: Fine, Medium, Course (bold)

Variable foliage textures placed in close proximity and repeated throughout a composition provide a sense of unity no matter the flower contribution.

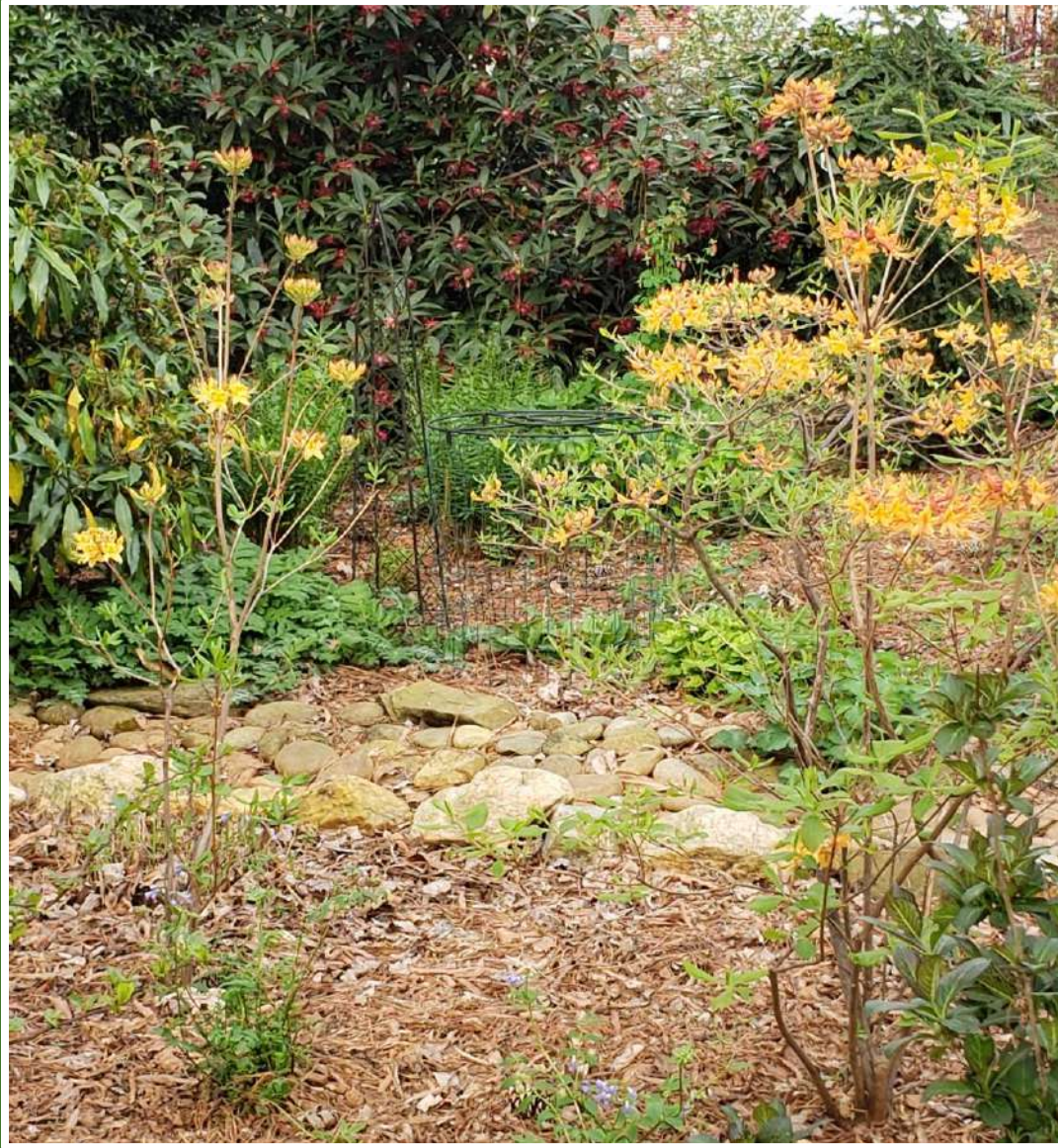


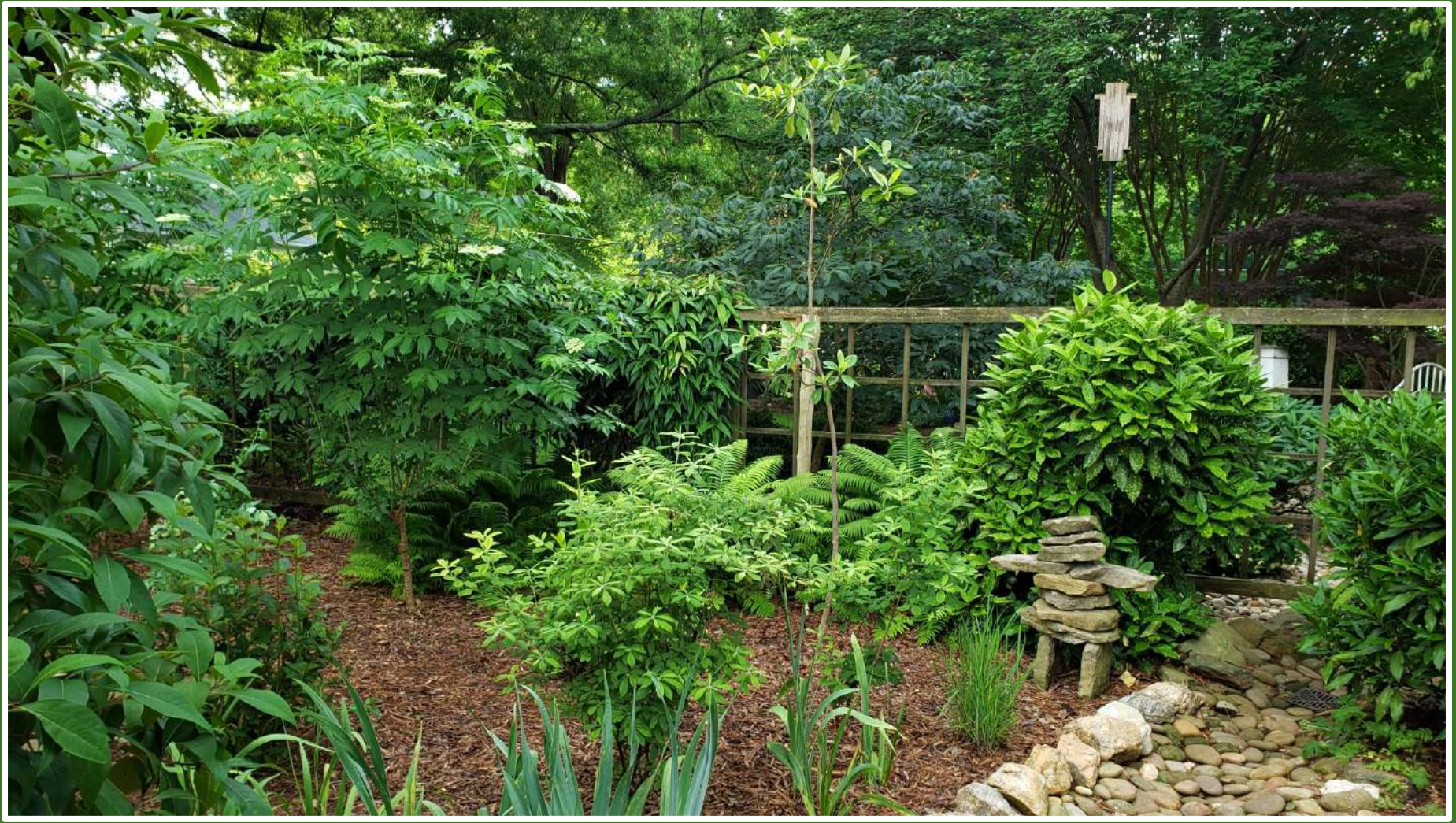




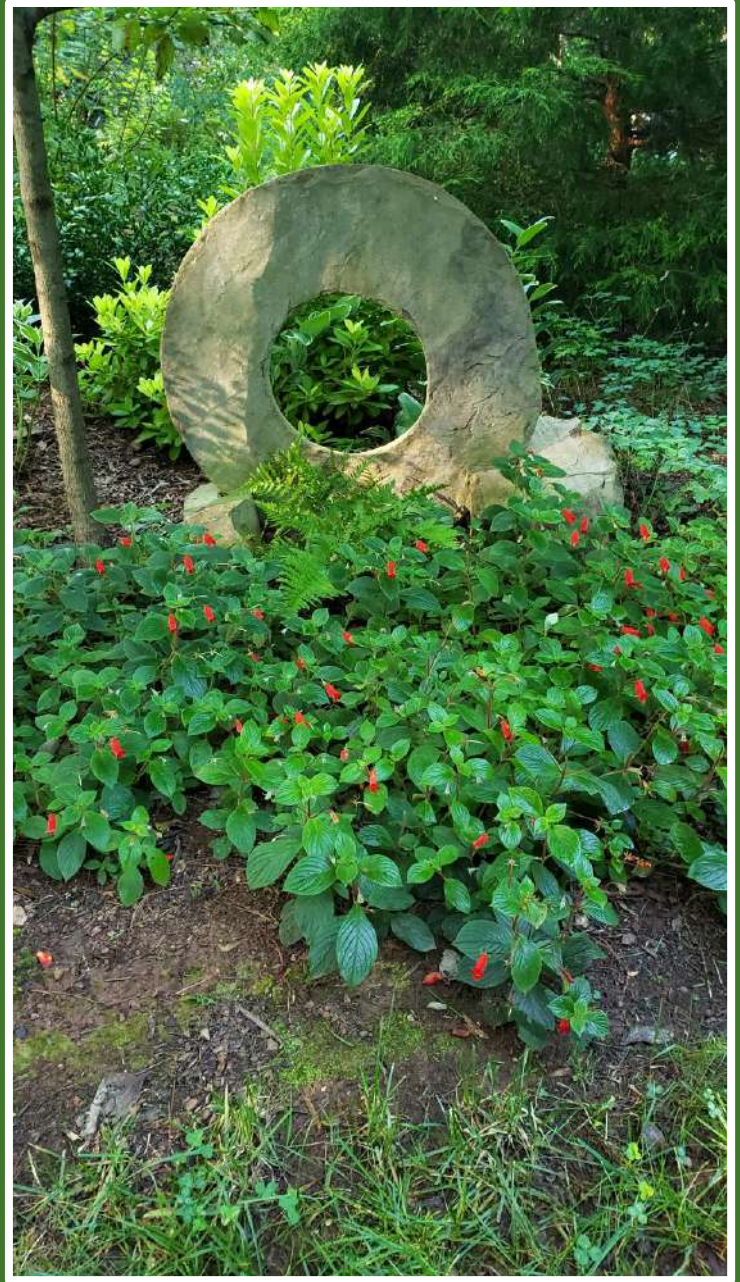
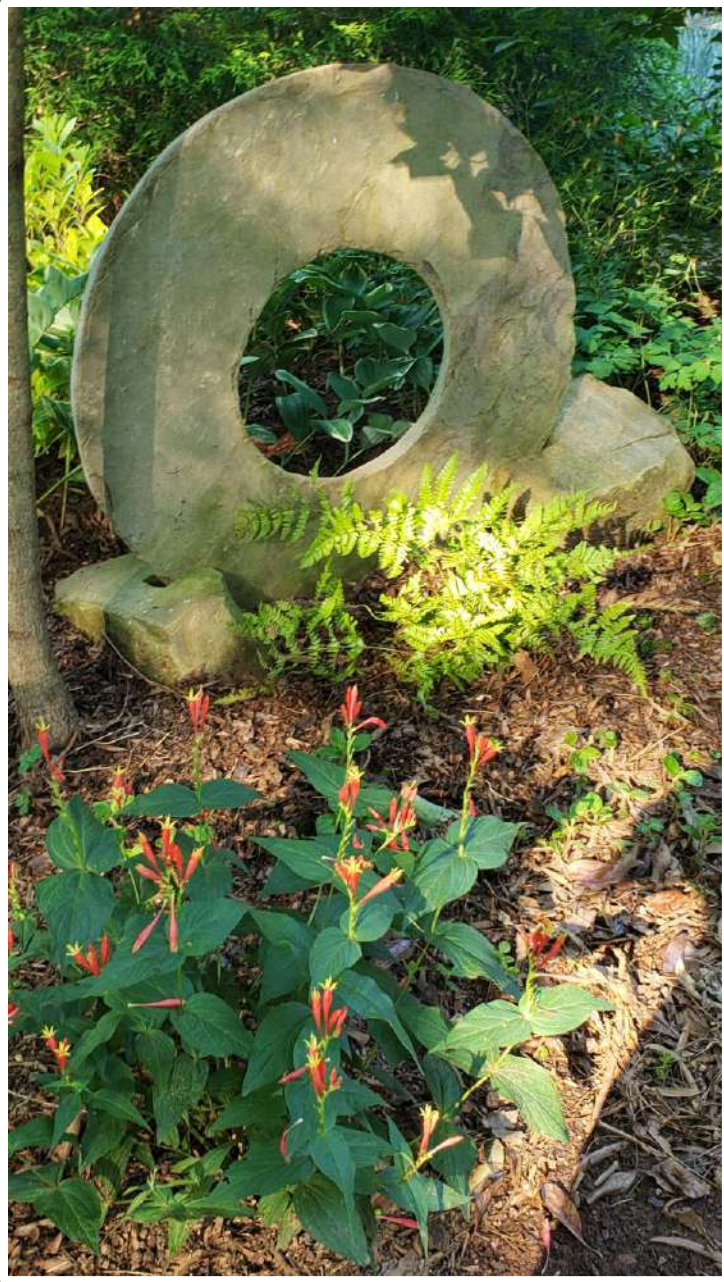














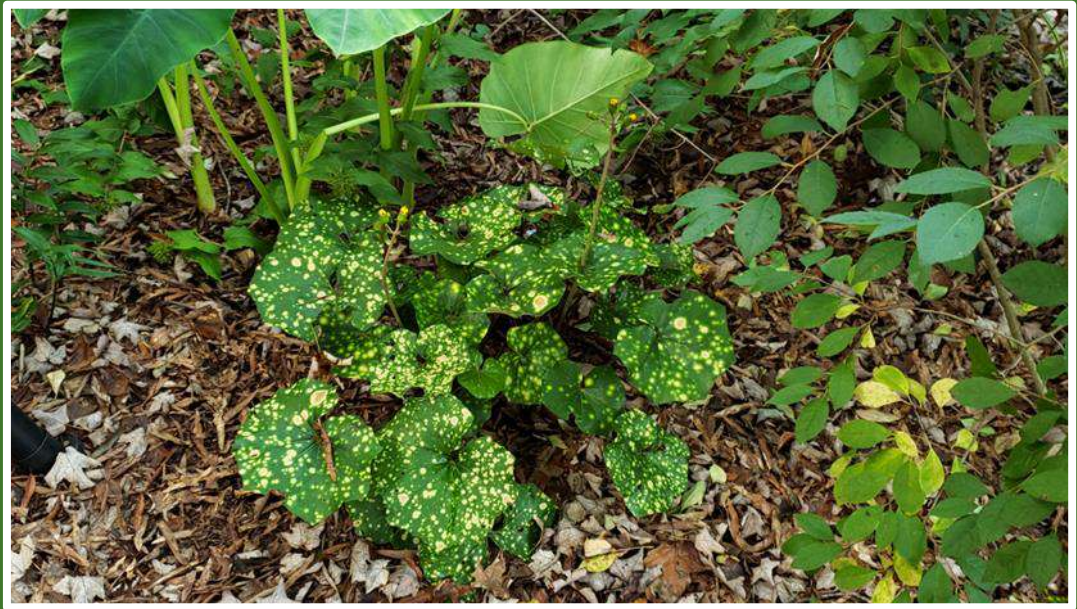






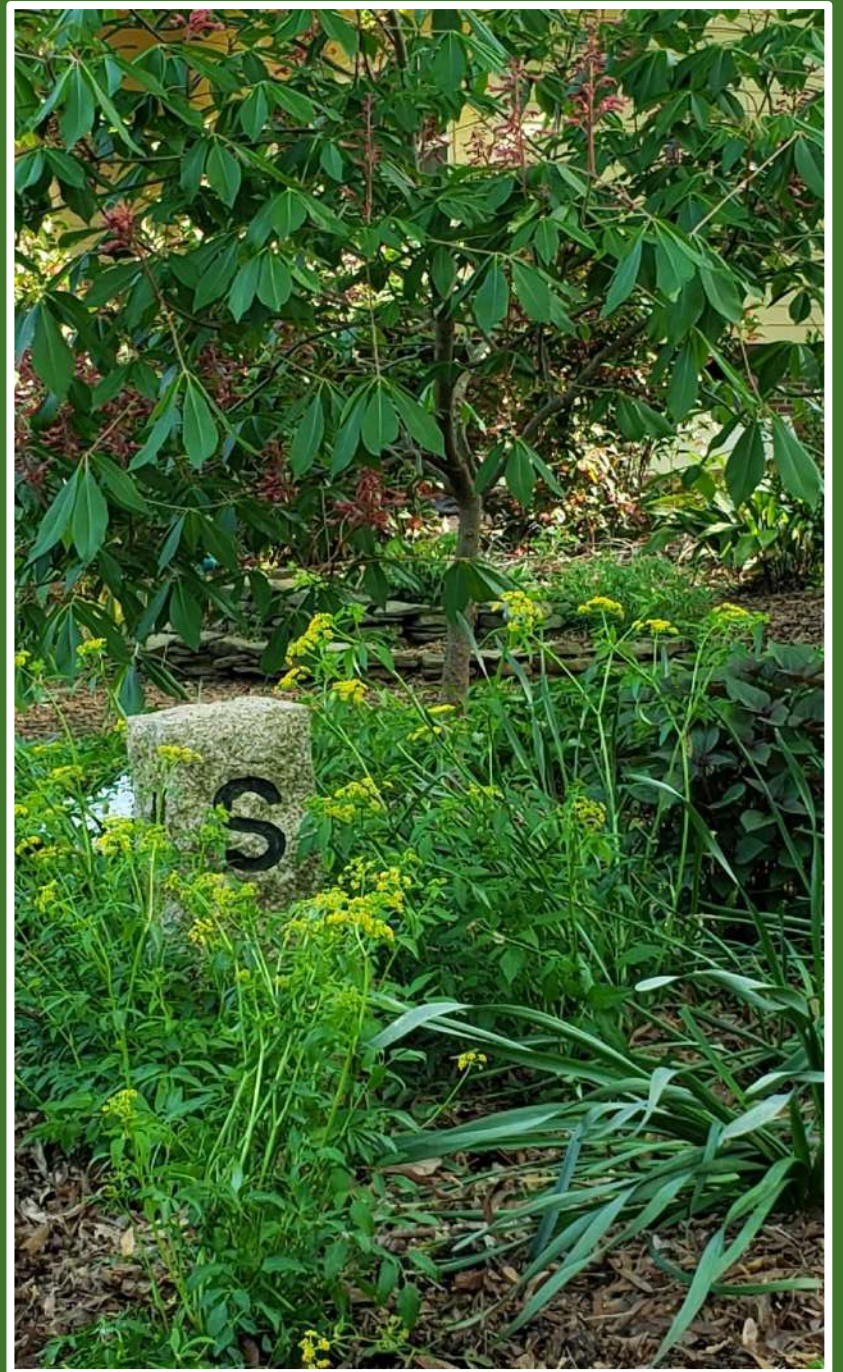






























What Plants Work in Shade?

<https://plants.ces.ncsu.edu/>

- NC State Extension Service site
- Filter by desired characteristics of plants
- Filter by site characteristics

Common Shade Plants

MOIST CONDITIONS

Cyclame
Trillium
Solomon's Seal
Hostas
Ferns
Astilbe
Heuchera
Sweet Woodruff
Columbine
Pulmonaria
Hydranga
Azaleas

Bell Flower
Cardinal Flower
Acuba
Boxwoods
Azaleas
Hydranga
Goat's Beard
Virginia Blue Bells

DRIER CONDITIONS

Ajuga
Dianthus
Mondo grass
Hellibore
Phlox
Pachasandra
Anemome
Pulmonaria

Acuba
Cardinal Flower
Azaleas
Boxwood
Goat's Beard
Day Lilly
Primrose

Less Common (but INTERESTING) Part Shade Plants (in our garden)

Daphne

Helesia

Acantha

Red or Yellow Twig

Dogwood

Fothergilla

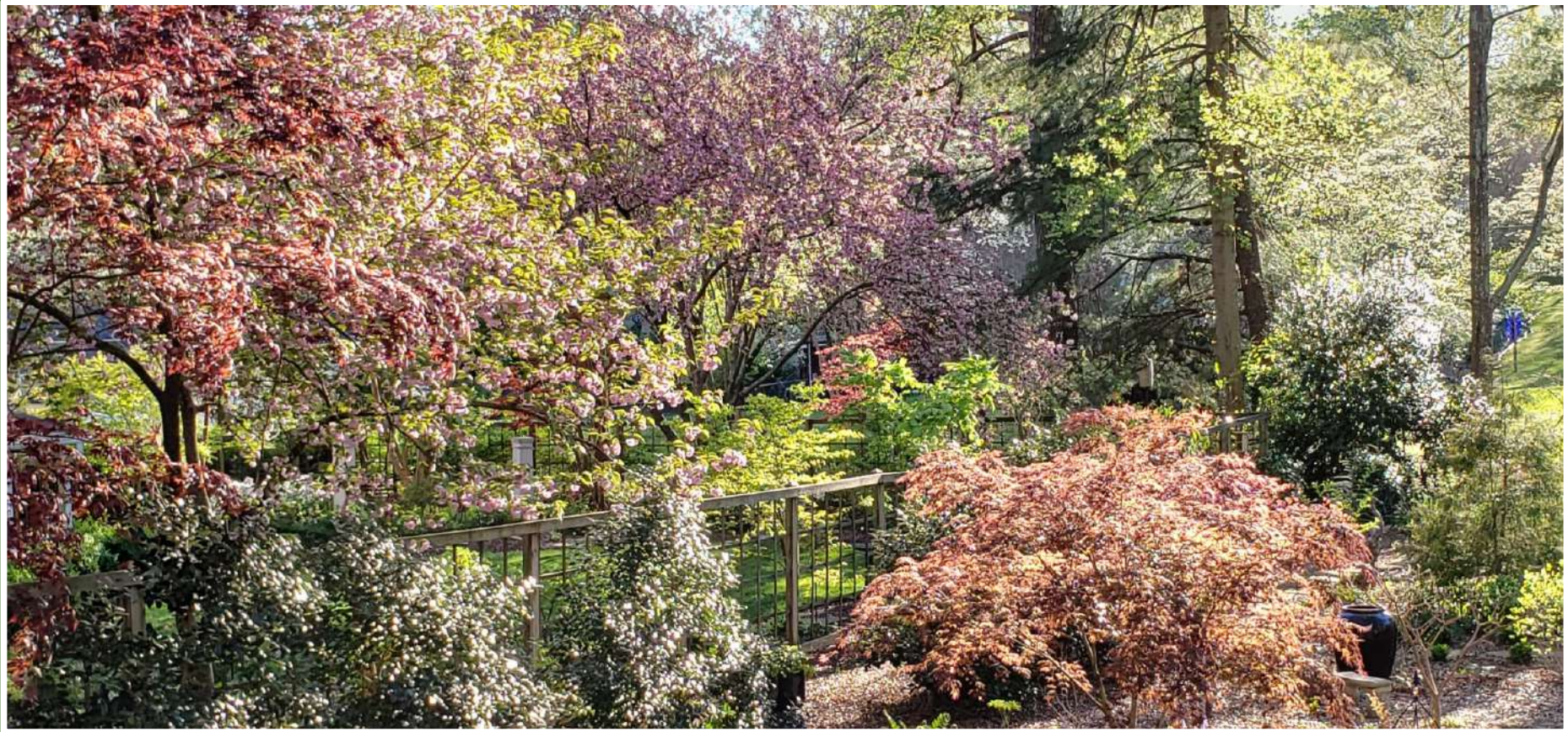
Nine Bark

Dystillium

Box Honeysuckle

Edgeworthia

Winterberry



When all else fails -- borrow the view
into your neighbor's garden.