

Agenda

TREE BOARD

Regular meeting

9 a.m. Wednesday, Sept. 18, 2024

Board Meeting Room of Town Hall Annex, 105 E. Corbin St.



1. Call to order, roll call, and confirmation of quorum

2. Agenda changes and approval

3. Minutes review and approval

Minutes from regular meeting on Aug. 21, 2024

4. Discussion items

- A. Review proposal from Gold Park Football Club to donate trees to plant in Gold Park
- B. Continue discussion of Prohibited and Recommended Plant List
- C. Discuss opportunities for plantings at Hillsborough Skate Spot (review updated Cates Creek Park Master Plan)

5. Updates

- A. Garden Club (see report from Garden Club)
- B. Invasive Removal Team
- C. Staff

6. Adjournment

Interpreter services or special sound equipment for compliance with the American with Disabilities Act is available on request. If you are disabled and need assistance with reasonable accommodations, call the Town Clerk's Office at 919-296-9443 a minimum of one business day in advance of the meeting.

Minutes

TREE BOARD

Regular meeting

9 a.m. Aug. 21, 2024

Board Meeting Room of Town Hall Annex, 105 E. Corbin St.



Present: Chair Linda Paynter, Thomas Darling, Brian Mayell and Gregory Yavelak

Absent: Mixon Nelson and Jon Simpson

Staff: Public Space and Sustainability Manager Stephanie Trueblood

1. Call to order, roll call and confirmation of quorum

Chair Linda Paynter called the meeting to order at 9 a.m. Public Space and Sustainability Manager Stephanie Trueblood called the roll and confirmed the presence of a quorum.

2. Agenda changes and approval

There were no changes to the agenda

Motion: Chair Linda Paynter moved to approve the agenda. Member Thomas Darling seconded.

Vote: 4-0.

3. Minutes review and approval

Minutes from regular meeting on May 15, 2024. Darling noted in the May 15, 2024, item 4.a. should have stated "Member Thomas Darling reported on a successful evening."

Motion: Darling moved approval of the May 15, 2024, minutes as submitted. Member Gregory Yavelak seconded.

Vote: 4-0

4. Discussion items

A. Review Tree Board Brochures

The board reviewed edits to the brochure. Trueblood acknowledged the board's accomplishment on completing the brochure. staff will distribute them around town.

B. Review Prohibited and Recommended Plant List

Paynter acknowledged Brian Mayell's contributions. Working on the prohibited list, Yavelak discussed his findings. The board discussed approaches to recommendations on potentially invasive species, such as pigmy bamboo. Trueblood reminded the board, the list is for the Unified Development Ordinance (UDO), not individual homeowners. Paynter asked for additional board member assistance with the prohibited plants spreadsheet. The board suggested creating a subcommittee. Tim Logue noted to include Member Mixon Nelson. Mayell elected to coordinate future subcommittee meetings.

C. Elect Vice Chair

After discussion, the board selected Darling as the new Vice Chair.

Motion: Paynter moved to elect Thomas Darling to Vice Chair. Yavelak seconded.

Vote: 4-0

5. Tree Board related reports

A. Garden Club

Acknowledging the board would benefit from a Garden Club contact, Trueblood will request communication between the board and the Garden Club. Also, this is the Garden Club's 100-year anniversary.

B. Invasive Species Removal Team

Tim Logue updated that the plantings along the Eno River have been successful. Also, he reported the owners of Bellevue Mill have granted the team access to treat Japanese knotweed outside of the easement. Trueblood reminded the team that the easement can be treated by the town. Upcoming treatment plans were created to coordinate with Utility System Superintendent Joel Lashley, and Trueblood suggested filming a video on the dangers of Japanese knotweed. Team workdays will resume after a summer pause, and Trueblood will provide a press release to advertise the workdays. Logue has begun to treat Ailanthus along the Eno River.

6. Staff

Trueblood reported:

- The town lost several trees in tropical storm Debby.
- The North Carolina Department of Transportation has been contacted numerous times regarding the dying sycamore tree on Churton Street.
- An Integrated Pest Management and Vegetative Management Plan will be presented to the town board in the late fall 2024, and Tree Board suggestions are appreciated.
- The Skate Spot will have a grand opening September 28, 2024, at 10:30 a.m. The Skate Spot will need input from the board in coordination with Stormwater and Environmental Services Manager Terry Hackett for future plantings.
- There are new interpretive signs at the King's Highway Park about constructed wetlands and Cate's Creek Park about green infrastructure.
- The Ridgewalk Phase II study is complete and will be shared with the Parks and Recreation Board and the town board.
- The train station is still in the permitting phase.
- A contractor was hired to maintain the garden at Turnip Patch Park.
- The town is addressing complaints due to fiber installation in Cornwallis Hills and property maintenance in Waterstone.

7. Adjournment

Paynter adjourned the meeting at 10:22 a.m.

Respectfully submitted,

A handwritten signature in cursive script, reading "Stephanie Trueblood".

Stephanie Trueblood
Public Space and Sustainability Manager
Staff support to the Tree Board

Approved: September 18, 2024

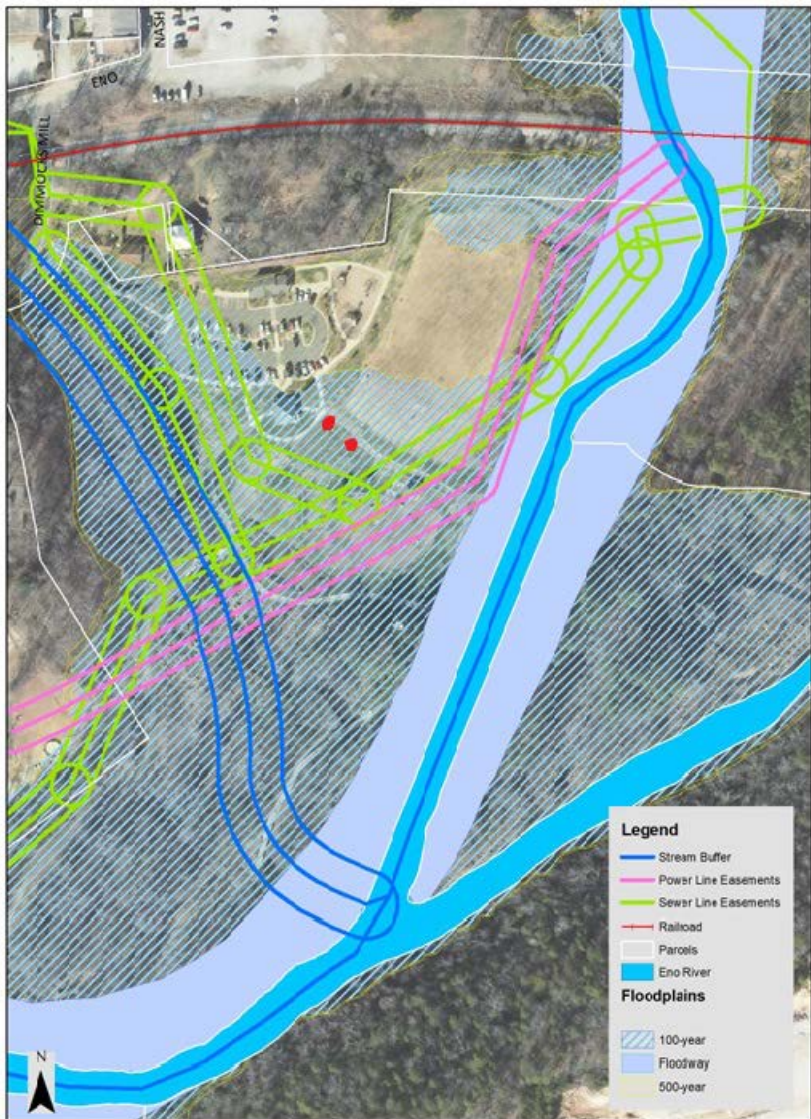
On behalf of the Gold Park Football Club, I would like to donate a tree on honor of Marilyn Moore. She was the grandmother of two young boys who play soccer in the Park almost every Saturday morning.

Our hope would be to plant the tree in the area between the dog park and the pavilion overlooking the field. I have attached a map which shows two possible locations.


The preferred tree would be a dogwood tree but can be flexible around the limits of species in Gold Park.

Lastly, if possible we would like a small plaque by the tree with the following:

*Tree donated by Gold Park Football Club,
in honor of Marilyn Moore 1955 - 2024*



Prohibited list Draft May 2024

| Habit | Scientific Name | Common Name | |
|---|---|-------------------------------|--|
|  | Tree | Acer platanoides | Norway Maple |
| | Tree | Acer saccharinum | Silver Maple |
| | Tree | Ailanthus altissima | Tree of Heaven, Copal Tree |
| | Tree | Albizia julibrissin | Mimosa, Silktree |
| | Tree | Broussonetia papyrifera | Paper Mulberry |
| | Tree | Cupressocyparis leylandii | Leyland Cypress |
| | Tree | Melia azadarach | Chinaberry, Pride of India |
| | Tree | Morus alba | White Mulberry |
| | Tree | Paulownia tomentosa | Princess Tree |
| | Tree | Populus alba | White Poplar |
| | Tree | Populus nigra | Lombardy Poplar |
| | Tree | Pyracantha spp | Scarlet firethorn, Formosa firethorn, Pyracantha |
| | Tree | Pyrus calleryana | Bradford Pear, Callery pear |
| | Tree | Quercus acutissima | Sawtooth Oak |
| | Tree | Robinia pseudoacacia | Black Locust |
| | Tree | Salix alba | White Willow |
| | Tree | Salix babylonica and all var. | Weeping willow |
| | Tree | Salix cinerea | Gray willow |
| | Tree | Salix fragilis | Crack willow |
| | Tree | Salix viminalis | Basket Willow/ osier |
| Tree | Triadica sebifera | Tallowtree | |
| Tree | Ulmus parviflora | Chinese elm | |
| Tree | Ulmus pumila | Siberian Elm | |
| Shrub/Vine | Akebia quinata | Fiveleaf Akebia | |
| Shrub/Vine | Ampelopsis brevipedunculata <i>aka</i> Ampelopsis glandulosa | Porcelain Berry Vine | |
| Shrub/Vine | Berberis bealei <i>aka</i> Mahonia bealei | Leatherleaf mahonia | |
| Shrub/Vine | Berberis thunbergii | Japanese Barberry | |
| Shrub/Vine | Buddleja davidii <i>aka</i> Buddleia davidii | Butterfly bush | |
| Shrub/Vine | Causonis japonica <i>aka</i> Cayratia japonica | Bushkiller, Sorrel vine | |

| | | | |
|--|------------|---|------------------------------------|
| | Shrub/Vine | Celastrus orbiculatus | Oriental Bittersweet Vine NCNWL |
| | Shrub/Vine | Citrus trifoliata | Hardy orange, Trifoliolate orange |
| | Shrub/Vine | Clematis paniculata <i>aka</i> terniflora <i>aka</i> dioscoreifolia | Sweet Autumn Clematis |
| | Shrub/Vine | Cytisus scoparius | Scotch Broom |
| | Shrub/Vine | Dioscorea polystachya <i>aka</i> Dioscorea oppositifolia | Chinese Yam, Cinnamon vine |
| | Shrub/Vine | Elaeagnus angustifolia | Russian Olive, Silverleaf |
| | Shrub/Vine | Elaeagnus pungens | Thorny Olive |
| | Shrub/Vine | Elaeagnus umbellata | Autumn olive |
| | Shrub/Vine | Euonymus alatus | Burning Bush |
| | Shrub/Vine | Euonymus fortunei <i>all variants</i> | Wintercreeper |
| | Shrub/Vine | Hedera helix | English Ivy |
| | Shrub/Vine | Hibiscus syriacus | Rose of Sharon |
| | Shrub/Vine | Humulus scandens <i>aka</i> Humulus japonicus | Japanese hops |
| | Shrub/Vine | Ilex Cornuta and varieties | Chinese Holly |
| | Shrub/Vine | Ipomoea quamoclit | Cypressvine Morninglory |
| | Shrub/Vine | Ligustrum japonicum & cultivars | Common Privet |
| | Shrub/Vine | Ligustrum lucidum & cultivars | Waxleaf Privet |
| | Shrub/Vine | Ligustrum sinense & cultivars | Chinese Privet |
| | Shrub/Vine | Ligustrum vulgare | European privet |
| | Shrub/Vine | Lonicera fragrantissima | Fragrant honeysuckle |
| | Shrub/Vine | Lonicera japonica | Japanese Honeysuckle |
| | Shrub/Vine | Lonicera maackii | Amur honeysuckle |
| | Shrub/Vine | Lonicera morrowii | Morrow honeysuckle |
| | Shrub/Vine | Lonicera standishii | Standish's honeysuckle |
| | Shrub/Vine | Lonicera tatarica | Tatar honeysuckle |
| | Shrub/Vine | Lonicera x bella | Pretty honeysuckle |
| | Shrub/Vine | Lygodium japonicum | Japanese climbing fern |
| | Shrub/Vine | Nandina domestica <i>All variants</i> | Heavenly bamboo |
| | Shrub/Vine | Poncirus trifoliata <i>aka</i> Citrus trifoliata | Trifoliolate orange |
| | Shrub/Vine | Rhamnus cathartica /catharticus | European/common buckthorn |
| | Shrub/Vine | Rosa lucieae <i>aka</i> Rosa wichuraiana | Memorial rose |
| | Shrub/Vine | Rosa multiflora | Multiflora Rose |
| | Shrub/Vine | Rubus phoenicolasius | Wineberry, Wine raspberry |
| | Shrub/Vine | Solanum viarum | Tropical soda apple |

| | | | |
|--|-------------------|--|---|
| | Shrub/Vine | <i>Spiraea japonica</i> <i>and variants</i> | Japanese Spiraea |
| | Shrub/Vine | <i>Viburnum dilatatum</i> | Linden Arrowwood/Viburnum |
| | Shrub/Vine | <i>Wisteria floribunda</i> | Japanese Wisteria |
| | Shrub/Vine | <i>Wisteria sinensis</i> | Chinese Wisteria |
| | Shrub/Vine | <i>Wisteria x formosa</i> (<i>W. floribunda</i> x <i>sinensis</i>) | Hybrid asian wisteria |
| | Herb | <i>Allium vineale</i> | Field Garlic, onion-grass |
| | Herb | <i>Centaurea stobe</i> <i>aka</i> <i>Centaurea beiberstenii</i> <i>aka</i> <i>Centaurea maculosa</i> | Spotted knapweed, Bushy knapweed |
| | Herb | <i>Cirsium arvense</i> | Canada thistle |
| | Herb | <i>Corydalis incisa</i> | Purple Kenman |
| | Herb | <i>Ficaria Verna</i> <i>aka</i> <i>Ranunculus Verna</i> | Fig buttercup, lesser celandine |
| | Herb | Hemerocallis spp. | Daylily |
| | Herb | <i>Lespedeza bicolor</i> | Bicolor lespedeza <i>aka</i> Shrubby lespedeza |
| | Herb | <i>Lespedeza cuneata</i> | Sericea lespedeza <i>aka</i> Chinese lespedeza |
| | Herb | <i>Liriope muscari</i> | Monkey grass, lirope |
| | Herb | <i>Perilla frutescens</i> | Perilla <i>aka</i> Beefsteak plant |
| | Herb | <i>Vitex rotundifolia</i> | Beach vitex |
| | Herb | <i>Youngia japonica</i> | Asiatic hawk's beard |
| | Groundcover/Grass | <i>Ajuga Reptans</i> | Bugleweed |
| | Groundcover/Grass | <i>Alliaria petiolata</i> | Garlic Mustard |
| | Groundcover/Grass | <i>Arthraxon hispidus</i> | Basket grass, Hairy Johnsongrass |
| | Groundcover/Grass | <i>Arum italicum</i> | Itain arum, Lords-and-ladies |
| | Groundcover/Grass | <i>Arundo donax</i> | Giant Reed |
| | Groundcover/Grass | <i>Glechoma hedereacea</i> | Ground ivy, Gill-over-the-ground |
| | Groundcover/Grass | <i>Imperata cylindrica</i> all variations | Cogongrass, Japanese blood grass |
| | Groundcover/Grass | <i>Iris psuedoacorus</i> | Yellow Flag |
| | Groundcover/Grass | <i>Lysimachia nummularia</i> | Creeping Jenny |
| | Groundcover/Grass | <i>Lythrum salicaria</i> | Purple Loosestrife |
| | Groundcover/Grass | <i>Microstegium vimineum</i> | Japanese Stiltgrass |
| | Groundcover/Grass | <i>Miscanthus sinensis</i> | Chinese Silvergrass |
| | Groundcover/Grass | <i>Persicaria perfoliata</i> <i>aka</i> <i>Polygonum perfoliatum</i> , | Mile-a-minute-vine, Asiatic Tearthumb |
| | Groundcover/Grass | <i>Phalaris arundinacea</i> | Reed Canarygrass |
| | Groundcover/Grass | <i>Phragmites australis</i> | Common reed, Old world reed |

| | | | |
|--|-------------------|--|------------------------|
| | Groundcover/Grass | Phyllostachys aurea | Golden Bamboo |
| | Groundcover/Grass | Phyllostachys nigra | Black Bamboo |
| | Groundcover/Grass | Pueraria montana <i>all variations</i> | Kudzu |
| | Groundcover/Grass | Reynoutria japonica <i>aka Fallopia japonica</i> <i>aka Polygonum cuspidatum</i> | Japanese Knotweed |
| | Groundcover/Grass | Reynoutria sachalinensis <i>aka Polygonum sachalinense</i> <i>aka Fallopia sachalinensis</i> | Giant Knotweed |
| | Groundcover/Grass | Reynoutria x bohemica <i>Reynoutria hybrid</i> | Bohemian knotweed |
| | Groundcover/Grass | Sasa palmata, | Dwarf Bamboo |
| | Groundcover/Grass | Sasa pygmaea | |
| | Groundcover/Grass | Securigera varia <i>aka Coronilla varia</i> | Crownvetch |
| | Groundcover/Grass | Sorghum halapense | Johnson grass |
| | Groundcover/Grass | Stellaria media | Common chickweed |
| | Groundcover/Grass | Tussilago farfara | Coltsfoot |
| | Groundcover/Grass | Vinca major | Vinca, periwinkle |
| | Groundcover/Grass | Vinca minor | Vinca, periwinkle |
| | Aquatic | Alternanthera philoxeroides | Alligator weed |
| | Aquatic | Egeria densa | Brazilian waterweed |
| | Aquatic | Hydrilla verticillata | Hydrilla FNWL |
| | Aquatic | Murdannia keisak | Asian Spiderwort |
| | Aquatic | Myriophyllum aquaticum | Parrot Feather |
| | Aquatic | Myriophyllum spicatum | Eurasian Watermilfoil |
| | Aquatic | Nymphoides cristata | Crested Floating Heart |
| | Aquatic | Nymphoides indica | Water snowflake |
| | Aquatic | Nymphoides peltata | Yellow Floating Heart |
| | Aquatic | Oshuna crassipes <i>aka Eichhornia crassipes</i> | Water hyacinth |
| | Aquatic | Salvinia molesta | Giant salvinia |

How list was built - draft Hillsborough UDO Prohibited list

| | Source | Current inclusion in HUDO draft | Website | Notes on source |
|---|----------------------------------|---|---|--|
| 1 | Original UDO Hillsborough list | All non-natives, which happen to be included already on NC IPC | https://assets.hillsboroughnc.gov/media/documents/public/recommended-and-prohibited-plants-list.pdf | We have removed the native plants from this original list. Our criteria are more focused on invasive plants. We assume the expertise on which plants will do well is held by the professional landscapers employed by developers. |
| 2 | NC IPC 2023 Invasives list | All plants Rank 1 - Severe threat All plants Rank 2 - Significant threat Rank 3 and watchlists? TL on the case to find out which plants on these lists are still available commercially | https://nc-ipc.weebly.com/uploads/6/8/4/6/6846349/invasive_plant_list_ranked_-_2023-11-16.pdf | This is our main source of invasive plants. It has been contributed to and is used by the main actors in invasive plant information such as the Botanical Garden, Wildflower NC, and many knowledgeable contributors. NC Invasive Plants List ranks invasive plants by level of threat and also includes a "watch list". Invasive plants are ranked as: Rank 1: Severe Threat Rank 2: Significant Threat Rank 3: Lesser Threat Watchlist A and B |
| 3 | NC IPC 'shun list' | All plants on this list. | | 41-ish plants that IPC consider invasive and readily available to purchase |
| 4 | NC IPC Piedmont list | All except 7 plants on this list. | https://nc-ipc.weebly.com/piedmont-invasive-plants.html | Omitted 7 plants on this list, those being Ranks 3 and below, AND not available for purchase: Tribulus terrestris Cyperus entrerianus Heracleum mantegazzianum Lygodium microphyllum Oplismenus hirtellus Tamarix ramosissima Ludwigia hexapetala |
| 5 | Raleigh Invasive Species program | thinking about daylilies and crepe myrtles | https://cityofraleigh0drupal.blob.core.usgovcloudapi.net/drupal-prod/COR24/invasive-species-native-alternatives.pdf | Includes a couple problematic plants that are not IPC invasives - Crepe myrtle and daylilies. Something to consider in our local environment. |
| 6 | NC Forest Service | All plants on this list | https://www.ncforestservice.gov/forest_health/invasives.htm | Very short list already covered by NC IPC list ! |
| 7 | Tree board members | | | Please look around town and tell me about plants that are becoming bothersome |

Other sources considered but not included in consideration spreadsheet

| | Source | Why not included | Website |
|---|----------------------|--|---|
| 1 | UNC Botanical garden | Uses NC Invasive Plant Council November 2023 list | |
| 2 | NC Wildflower | Uses NC Invasive Plant Council November 2023 list | |
| 3 | Carrboro website | Uses NC Forest service list | https://townofcarrboro.org/2679/invasive-Plants |
| 4 | Durham UDO | This list uses 1999 and 2005 sources, as well as sources that are not cited. Does not explain criteria for inclusion in list. May have included plants that are over-represented in urban landscapes but it doesn't say. I decided to cross refer but not consider too hard, as we have the Mother invasive list from NC IPC now. | https://www.durhamnc.gov/DocumentCenter/View/1034/Landscape-Manual-for-Durham-NC-PDF?bidid |

Questions!

Are there any plants not listed that invade yards in Hillsborough?

How can we break this list up so our main worries are highlighted and so we don't lose our audience?

Just ban all types of ligustrum instead of naming them?

should we say all non-native lonicera? I guess we are not allowed to and need to list the banned ones out

Should we prohibit plants that are not doing well in this area, either due to pests of climate? Or just stick to those that are invasive?

If we are thinking longevity of plantings left by developers, this might be worth considering

(Sharon - ash, hawthorn, sweetgum)

Should we call them forbs or herbs?

Answers!

| | | | | | | | | | | | |
|-------------------|--|---|---|-----|----|---|---|---|---|---|-----|
| Shrub/Vine | Ilex Cornuta and varieties | Chinese Holly | n | n | 3 | n | n | y | n | | |
| Groundcover/Grass | Imperata cylindrica all variations | Cogongrass, Japanese blood grass | n | n | 3 | n | y | n | n | | |
| Shrub/Vine | Ipomoea purpurea /tricolor | Common Morninglory | n | Yes | no | n | n | y | n | remains banned | Yes |
| Shrub/Vine | Ipomoea quamoclit | Cypressvine Morninglory | n | n | A | n | n | n | y | | |
| Groundcover/Grass | Iris psuedoacorus | Yellow Flag | n | Yes | 2 | y | y | n | n | wetlands threat | yes |
| Tree | Lagerstromia indica | Crepe Myrtle | n | n | no | n | n | y | n | Not added to list | ask |
| Herb | Lespedeza bicolor | Bicolor lespedeza aka Shrubby lespedeza | n | n | 1 | y | y | n | y | | |
| Herb | Lespedeza cuneata | Sericea lespedeza aka Chinese lespedeza | n | n | 1 | y | y | n | y | | |
| Shrub/Vine | Ligustrum japonicum & cultivars | Common Privet | n | Yes | 1 | y | y | y | n | | yes |
| Shrub/Vine | Ligustrum lucidum & cultivars | Waxleaf Privet | n | Yes | 1 | y | n | y | n | Should we just say ligustrum sp. Is banned? | yes |
| Shrub/Vine | Ligustrum sinense & cultivars | Chinese Privet | n | Yes | 1 | y | y | y | n | | yes |
| Shrub/Vine | Ligustrum vulgare | European privet | n | n | 2 | y | y | n | n | | |
| Herb | Liriope muscari | Monkey grass, lirope | n | n | 3 | n | n | y | n | | No |
| Shrub/Vine | Lonicera fragrantissima | Fragrant honeysuckle | n | Yes | 2 | y | y | | | | |
| Shrub/Vine | Lonicera japonica | Japanese Honeysuckle | n | Yes | 1 | n | y | y | y | Can we just say NO Lonicera except Semprevirens | yes |
| Shrub/Vine | Lonicera maackii | Amur honeysuckle | n | Yes | 2 | y | n | n | n | | yes |
| Shrub/Vine | Lonicera morrowii | Morrow honeysuckle | n | Yes | 2 | n | n | n | n | | yes |
| Shrub/Vine | Lonicera standishii | Standish's honeysuckle | n | n | 2 | n | n | n | n | | |
| Shrub/Vine | Lonicera tatarica | Tatar honeysuckle | n | Yes | 2 | n | n | n | n | | yes |
| Shrub/Vine | Lonicera x bella | Pretty honeysuckle | n | n | 2 | n | n | n | n | | |
| Shrub/Vine | Lygodium japonicum | Japanese climbing fern | n | n | 2 | n | n | n | n | | |
| Groundcover/Grass | Lysimachia nummularia | Creeping Jenny | n | Yes | 2 | n | n | n | n | widely available | yes |
| Groundcover/Grass | Lythrum salicaria | Purple Loosestrife | n | Yes | 2 | n | y | | n | | yes |
| Tree | Melia azadarach | Chinaberry, Pride of India | n | Yes | 3 | n | y | | n | | y |
| Groundcover/Grass | Microstegium vimineum | Japanese Stiltgrass | n | n | 1 | n | y | n | y | | |
| Groundcover/Grass | Miscanthus sinensis | Chinese Silvergrass | n | Yes | 1 | y | y | n | y | rare now but threat from other states | yes |
| Tree | Morus alba | White Mulberry | n | Yes | 2 | n | n | | n | | y |
| Aquatic | Murdannia keisak | Asian Spiderwort | n | n | 1 | y | n | n | n | | |
| Aquatic | Myriophyllum aquaticum | Parrot Feather | n | n | 1 | y | y | n | n | | |
| Aquatic | Myriophyllum spicatum | Eurasian Watermilfoil | n | n | 2 | y | n | n | n | | |
| Shrub/Vine | Nandina domestica All variants | Heavenly bamboo | n | n | 2 | y | y | y | n | | |
| Aquatic | Nymphoides cristata | Crested Floating Heart | n | n | B | y | y | n | n | | |
| Aquatic | Nymphoides indica | Water snowflake | n | n | B | y | n | n | n | | |
| Aquatic | Nymphoides peltata | Yellow Floating Heart | n | n | 3 | y | n | n | n | | |
| Aquatic | Oshuna crassipes aka Eichhornia crassipes | Water hyacinth | n | n | 2 | n | n | n | n | | |
| Tree | Paulownia tomentosa | Princess Tree | n | Yes | 1 | n | y | | n | | y |
| Herb | Perilla frutescens | Perilla aka Beefsteak plant | n | n | 2 | y | y | n | n | | |
| Groundcover/Grass | Persicaria perfoliata aka Polygonum perfoliatum, | Mile-a-minute-vine, Asiatic Tearthumb | n | Yes | 1 | n | y | | n | this one has sci names a kimbo, how to make sure people know what we are talking about. | |
| Groundcover/Grass | Phalaris arundinacea | Reed Canarygrass | n | Yes | no | y | y | | n | currently invasive in mountains. Not on IPC main list but is on the shun list. Did this just go awol from ipc list? | ? |
| Groundcover/Grass | Phragmites australis | Common reed, Old world reed | n | n | 1 | n | y | n | n | | |
| Groundcover/Grass | Phyllostachys aurea | Golden Bamboo | n | Yes | 2 | y | y | y | n | | |
| Groundcover/Grass | Phyllostachys nigra | Black Bamboo | n | n | 2 | n | n | | n | | |
| Shrub/Vine | Poncirus trifoliata aka Citrus trifoliata | Trifoliata orange | n | n | 2 | y | y | n | n | | |
| Tree | Populus alba | White Poplar | n | Yes | 3 | n | n | | n | Considered invasive in Maine though.... | ? |
| Tree | Populus deltoides | Cottonwood | y | Yes | no | n | n | n | n | Remove from banned list | No |
| Tree | Populus nigra | Lombardy Poplar | n | Yes | no | n | n | | n | this is a problematic landscaping tree but not invasive | ? |
| Groundcover/Grass | Pueraria montana all variations | Kudzu | n | Yes | 1 | n | n | | y | | |
| tree | Pyracantha spp | Scarlet firethorn, Formosa firethorn, Pyracantha | n | | | | | n | | | |
| Tree | Pyrus calleryana | Bradford Pear, Callery pear | n | Yes | 1 | y | y | y | y | | y |
| Tree | Quercus acutissima | Sawtooth Oak | n | Yes | A | n | n | | n | Native to Asia. It's already banned in hboro so maybe just keep it so? | ? |
| Groundcover/Grass | Reynoutria japonica aka Fallopia japonica aka Polygonum cuspidatum | Japanese Knotweed | n | Yes | 1 | n | y | | y | this is illegal | yes |

| | | | | | | | | | | | |
|-------------------|--|---------------------------|-------|-----|----|---|---|---|---|--|---------------|
| Groundcover/Grass | Reynoutria sachalinensis aka Polygonum sachalinense | Giant Knotweed | n | Yes | 1 | n | n | n | n | | |
| Shrub/Vine | Rhamnus cathartica /catharticus | European/common buckthorn | n | Yes | | n | n | | n | J Randall says bad at Mason Farm | ? |
| Tree | Robinia pseudoacacia | Black Locust | y/n | Yes | no | n | n | | n | Native to Southern Apalachians and considered invasive to midwest, but not here. So does it need to be prohibited in H'boro? It was overplanted and not a good development tree | Pending TL MM |
| Groundcover/Grass | Reynoutria x bohemica Reynoutria hybrid | Bohemian knotweed | n | n | 1 | n | n | n | n | | |
| Shrub/Vine | Rosa luciaeae aka Rosa wichuraiana | Memorial rose | n | n | 2 | n | n | n | n | | |
| Shrub/Vine | Rosa multiflora | Multiflora Rose | n | Yes | 1 | n | y | | y | | yes |
| Shrub/Vine | Rubus phoenicolasius | Wineberry, Wine raspberry | n | n | 2 | n | n | n | n | | |
| Tree | Salix alba | White Willow | n | Yes | no | n | n | | n | I am guessing Salix is on list because it's a bad landscaping tree. None of them listed as invasive. Was reported invasive twice in Orange County.... In 2008 and 2010 see link https://www.eddmaps.org/county.cfm?sub=11587&country=926&id=37135 | ? |
| Tree | Salix babylonica and all var. | Weeping willow | n | Yes | no | n | n | | n | Reported invasive EDD in NC but not on NCIPC list. Invasive root system? It's also on the list of recommended trees ...I feel the need to investigate | ? |
| Tree | Salix cinerea | Gray willow | n | Yes | no | n | n | | n | Not listed as NC invasive but adaptable in water bodies in other states | ? |
| Tree | Salix fragilis | Crack willow | n | Yes | no | n | n | | n | Invasive around water IN OTHER STATES | ? |
| Tree | Salix viminalis | Basket Willow/ osier | n | Yes | no | n | n | | n | Makes beautiful baskets. Don't be mean | ? I say no |
| Aquatic | Salvinia molesta | Giant salvinia | n | n | 1 | n | y | n | n | | |
| Groundcover/Grass | Sasa palmata, | Dwarf Bamboo | n | Yes | no | n | n | | n | Predicted to be invasive but not on IPC radar. I think it's hard to control in a yard setting. If it's already prohibited, maybe keep it so. We have a native alternative anyway. | |
| Groundcover/Grass | Sasa pygmaea | | japan | | no | n | n | | n | same story as sasa pamata | |
| Groundcover/Grass | Securigera varia aka Coronilla varia | Crownvetch | n | Yes | 3 | n | n | | n | | ? |
| Shrub/Vine | Solanum viarum | Tropical soda apple | n | n | 2 | n | y | n | n | | |
| Groundcover/Grass | Sorghum halapense | Johnson grass | n | n | 2 | n | y | n | n | | |
| Shrub/Vine | Spiraea japonica and variants | Japanese Spiraea | n | Yes | 1 | y | n | | n | | yes |
| Groundcover/Grass | Stellaria media | Common chickweed | n | n | 2 | n | y | n | n | | |
| Tree | Triadica sebifera | Tallowtree | n | Yes | 2 | y | y | | y | | y |
| Groundcover/Grass | Tussilago farfara | Coltsfoot | n | n | 2 | n | n | n | n | | |
| Tree | Ulmus parviflora | Chinese elm | n | n | 2 | n | n | n | n | | |
| Tree | Ulmus pumila | Siberian Elm | n | Yes | A | n | n | | n | | y |
| Shrub/Vine | Viburnum dilatatum | Linden Arrowwood/Viburnum | n | Yes | 2 | n | n | | n | I'd say easy to find native alternatives | ? |
| Herb | Vitex rotundifolia | Beach vitex | n | n | 1 | y | n | n | n | not sure this is in our area... | |
| Groundcover/Grass | Vinca major | Vinca, periwinkle | n | n | 2 | n | n | y | n | | |
| Groundcover/Grass | Vinca minor | Vinca, periwinkle | n | n | 2 | n | n | y | n | | |
| Shrub/Vine | Wisteria floribunda | Japanese Wisteria | n | Yes | 1 | y | y | | y | | yes |
| Shrub/Vine | Wisteria sinensis | Chinese Wisteria | n | Yes | 1 | y | y | | y | | yes |
| Shrub/Vine | Wisteria x formosa (W. floribunda x sinensis) | Hybrid asian wisteria | n | n | 1 | n | n | n | n | | |
| Herb | Youngia japonica | Asiatic hawk's beard | n | n | 1 | n | n | | | | |



TOWN OF HILLSBOROUGH

Cates Creek Park Master Plan



Adopted August 2018

Updated August 2024

Background

Cates Creek Park is a 17-acre community park located at 1445 Cates Creek Parkway in Hillsborough. Park amenities include restroom facilities, playground, multi-purpose field with soccer goals, skatepark, pollinator rain gardens, and a picnic area. The park was built as part of the Waterstone development. Waterstone is a mixed-use development covering 337 acres in Hillsborough. Waterstone includes single-family neighborhoods, townhomes, apartments, a preschool, a community college, and a hospital. Additional parcels are available for development in Waterstone for retail and office uses. The development was approved by the town in 2004. As one of the conditions on the approval the town required the developer to build a community park that would be dedicated to the town upon completion. Original plans for the park included two phases of development. The first phase was for active recreation and designed to meet the conditions of development approval. It included the multi-purpose field, restroom facilities, parking area, and playground. Phase 2 included a pavilion, and additional trails and picnic areas in the wooded area of the park. The Phase 2 plan was never formalized or built.

Development of the Park

Cates Creek Park was dedicated to the town and opened to the public for use in spring 2016. Almost immediately the town began making improvements. Trees were added around the perimeter of the playground and in the parking lot islands. Several sections of failing concrete were removed from the play area and the play surfacing was replaced with engineered wood fiber. Hillsborough Tree Board and Public Space Division worked in partnership with the Stormwater and Environmental Services Division to replace a 100-foot length of stone-lined stormwater swale, that was adjacent to the playground, with pollinator rain gardens. Stone was removed and perforated pipe was laid in the swale and surrounded by gravel. Sand and topsoil were mixed together to create engineered soil which was laid in the swale. The swale was planted with native pollinator-friendly plants. Plantings were also added around the playground area and at the entrance of the park to provide shade and pollinator habitat.

Additionally, the parking lot drainage was improved. Stormwater runoff was eroding the bank at the rear of the parking lot, bypassing the stormwater control measure and emptying directly into a stream that runs to Cates Creek. A catch basin was added and piped to the stormwater control measure behind the restroom. Curbing was added at the back of the parking lot to prevent stormwater runoff and prevent further erosion of the bank.

The town also applied compost blankets that included native grass and wildflower seed mixtures to the compacted and eroded slopes around the multi-purpose field and parking lot. These areas are managed as natural landscapes and are mowed once a year to prevent woody materials from encroaching.

In 2023, the town installed a cistern to harvest rainwater from the roof of the restroom facility. The rainwater collected is used for irrigating the gardens and landscape plantings.

In 2022, the town contracted 5th Pocket Skateparks to design and build a skatepark in Cates Creek Park after an extensive process by the Parks and Recreation Board to identify an appropriate location in town for a skatepark. The volunteer board ranked potential sites based on 36 recommended criteria. The board determined that Cates Creek Park was the most suitable location because it is an accessible town-owned park, is located in a developing area of town, has sufficient space for a skatepark, and has existing restroom facilities and parking. In 2023, the consultant worked with the local skate community through a series of workshops to determine the preferred skate elements and park features. The Hillsborough Skate Spot was completed and open to the public in the summer of 2024. Ceramic artist, Payton Flynn of Cloud 9 Clay designed and installed a mosaic showcasing native plants and pollinators at the Skate Spot.

The town continues to add amenities at the park including a bicycle rack, benches, accessible musical play stations, and an interpretive sign that explains the benefits of the stormwater green infrastructure improvements in the park.

Existing Conditions

Cates Creek Park is used by neighborhood residents and the community at large. For instance, The Little School, a local pre-school in Waterstone, uses the park regularly for class field trips. The skate spot has become a regional draw to the park. The Parks and Recreation Board offered the following comments about the existing conditions and needs at the park:

- The skatepark will attract older children but there are no other activities for preteens and teens in the park.
- The multi-purpose field is oversized and underutilized.
- There is a problem in the park with people allowing dogs to run off leash.
- The picnic area is small and unshaded.
- There is no space for children to ride bicycles or scooters.
- There is no recycling container.
- The pollinator rain garden is an attraction to the park but needs more regular maintenance.
- There are bare spots on the field in front of the soccer goals.
- Cates Creek and the wetland area is located in the back of the park but has no improved access.
- The wooded area of the park is underutilized but has a system of informal trails created by the community.
- Informal trails are located in stream buffers and are causing erosion and damage to the banks of Cates Creek.

Photos of existing conditions and park improvements are shown below and on the following pages.



Cates Creek Park Entrance



Native Plantings at Cates Creek Park Entrance



Restroom Facilities and Pollinator Rain Garden



Parking Lot

Photos of Existing Conditions and Park Improvements



Original Stone Stormwater Swale



Pollinator Rain Garden Installation



Pollinator Rain Garden Planting



Pollinator Rain Garden Plantings



Pollinator Rain Garden



Pollinator Rain Garden

Photos of Existing Conditions and Park Improvements



Original Eroding Slope by Multi-Purpose Field



Original Eroding Slope by Multi-Purpose Field



Compost Blanket Installation



Compost Blanket Installation



Compost Blanket Plantings



Compost Blanket Plantings

Photos of Existing Conditions and Park Improvements



Restroom Facilities



Picnic Area At Restroom Facilities



Playground



Playground



Accessible Musical Play Stations



Accessible Musical Play Stations

Photos of Existing Conditions and Park Improvements



Multi-Purpose Field



Native Plantings at Park Entrance



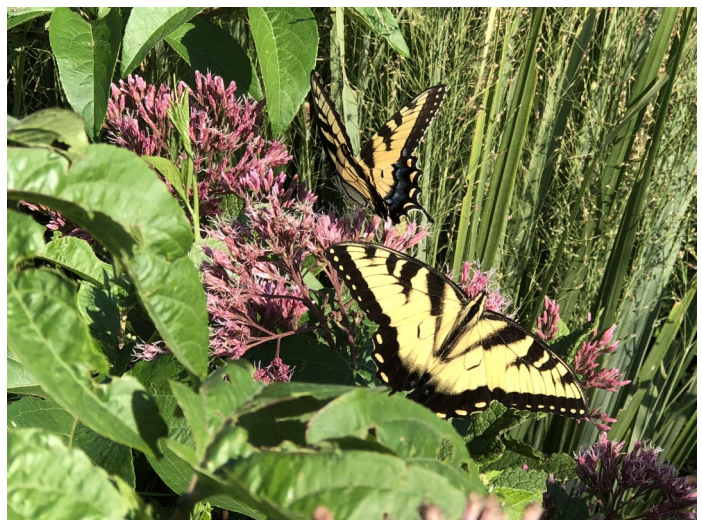
Improved Parking Area Drainage



Rainwater Harvesting Cistern



Stormwater Green Infrastructure Interpretive Sign



Swallowtail Butterflies in Pollinator Rain Garden

Photos of Existing Conditions and Park Improvements



Skate Spot Construction



Skate Spot Construction



Installation of Mosaic by Artist Payton Flynn at Skate Spot



Mosaic Showcasing Native Plants and Pollinators at Skate Spot



Hillsborough Skate Spot



Hillsborough Skate Spot

Photos of Existing Conditions and Park Improvements



Informal Trails in Wooded Area



Creekside Compaction Caused by Informal Trails



Creekside Compaction Caused by Informal Trails



Exposed Tree Roots Caused by Compaction



Fallen Creekside Tree



Cates Creek Wetland Area

Master Plan Priorities

In 2018, the Parks and Recreation Board and Hillsborough Tree Board, in coordination with the town public space and stormwater divisions, developed a list of recommended improvements for Cates Creek Park. The Parks and Recreation Board held several public meetings to solicit public input and received comments from community members. The Parks and Recreation Board conducted an update to the master plan in 2024, reviewing improvements and identifying continued needs and priorities. The board endorsed the following recommendations which are intended to guide future spending decisions.

Recommendations

- Maintain the existing playground equipment and park amenities in safe and working order.
- Utilize universal design principles for all new park features.
- Add recycling containers.
- Provide Public Wi-Fi.
- Add trees and landscaping around the skatepark and other appropriate locations in the park.
- Expand pollinator and wildlife habitat throughout the park.
- Protect Cates Creek and the wetlands and provide educational opportunities about conservation efforts.
- Incorporate sustainability initiatives. (Examples: electric vehicle charging equipment, solar panels, water bottle filling station)
- Create a safe pedestrian access to view the wetland area.
- Add a multiuse trail system in the wooded area of the park. (Trails should have firm and stable surfacing.)
- Add an interpretive sign about wetland conservation and wildlife habitat.
- Add benches along the trails at appropriate locations.
- Add outdoor basketball courts.
- Add amenities for preteens and teens like an art park for free expression and a “chill zone”.
- Add covered picnic shelters near the restroom and skatepark.
- Add public art and educational features.
- Consider adding a paved trail around the multi-use field.
- Consider adding an obstacle course along the paved trail around the field.
- Consider adding natural play features in appropriate locations.
- Consider adding disc golf practice baskets.
- Consider adding a fenced dog park in the wooded area of the park.

Priorities

The Parks and Recreation Board reviewed the recommended improvements and set the following priorities:

- Add recycling containers.
- Add amenities for preteens and teens like an art park for free expression and a “chill zone”.
- Add covered picnic shelters near the restroom and skatepark.
- Add outdoor basketball courts.

The following page includes a rendering showing that recommended location for improvements. The rendering is meant as a guide for planning purposes. Exact locations, dimensions, and alignments for any future improvements will be studied and decided during the design and engineering phases of projects.



Wetland Area

Trail System

Future Trail Connection

Future Dog Park

Future Connection to Ridgewalk

Basketball Courts

Future Stormwater Control Area

Picnic Shelter

Planting Area

Skate Spot

Chill Zone

Paved Paths

Art Park

Multi-Purpose Field

Playground

Restrooms

Picnic Shelter

Stormwater Control Area

Pollinator Gardens

Parking Area

PAPYRUS

CATES CREEK

COLLEGE PARK



Cates Creek Park Master Plan Rendering