

MNLA Plant Geek Day Tour: 19 Stops



THEMES

- Zoological Horticulture Principles in Design and Operations
- Arthur Schurcliff Historic Rock Garden
- Sustainability Initiatives: Tree Canopy, Food Forests, Rain Gardens
- Plant I.D. Team Challenge: Weeds & Unique Plants of Franklin Park Zoo

GUIDES

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GORILLA GROVE

Gorilla

TROPICAL FOREST

Baird's Tapir
Giant Anteater
Gorilla
Green Anaconda
Pygmy Hippopotamus
Ring-Tailed Lemur
Spotted Hyena
Two-Toed Sloth

BIRD'S WORLD

Kea
Kookaburra
White-Naped Crane
EXHIBITS INSIDE BUILDING
• Swamp • Rainforest
• Scrubland • Riverbank
RAPTOR RIDGE
Andean Condor
Stellar's Sea Eagle

Plant Geek Day Tour Stops

Franklin Park Zoo

Visitor Guide



FRANKLIN FARM

Barn Owl
Chicken
Contact Corral (weather permitting)
Goat
Guinea Hog
Mini Donkey
Poitou Donkey

KALAHARI KINGDOM/ TIGER TALES

Bactrian Camel
Lion
Red River Hog
Tiger

BUTTERFLY HOLLOW

(seasonal)

OUTBACK TRAIL

Aussie Aviary (seasonal)
Emu
Kiwi
Red Kangaroo

SERENGETI CROSSING

Cape Porcupine
Hartmann's Mountain Zebra
Ostrich
Warthog
Wildebeest

CHILDREN'S ZOO

Blanding's Turtle
Hooded Crane
Muntjac
Prairie Dog
Red-Breasted Goose
Red Panda
Spotted Turtle

GIRAFFE SAVANNAH

Grevy's Zebra
Masai Giraffe

1. Pine Knoll Event Space

Pre-K Site w/ Yurts

Organic garden

- Pre-k site with Yurts and edible garden coming Sept 2024
- Food forests and sensory garden for kids
- Organic garden meaning no pesticides or fertilizers
 - “Hügelkultur” (pronounced hyoo-gul-kulture) is a German word that means mound culture or hill culture.
- Organic garden provides animal enrichment
 - Tomatoes, herbs, strawberries, fruit
 - Some woody shrubs for use in other plantings
- Plant ID: bare root beach plum / *Prunus maritima*

2. Australian Planting

- Using native plants to evoke the feeling of our animal's natural habitat
- Large proportion of natives and plants that serve ecosystem roles (nectar, fruit, etc)
- Plants from Australia itself are hard to find due to strict export laws.
- Australia is home to plants with many unique adaptations to the harsh environment (fixing phosphorus, fire adaptations, foliage has silvery cast to reflect heat. Compare with animal adaptations?)
- Plant ID: Chinese chestnut hybrid
- Plant ID: Austree (hybrid willow). It is a cross between Hankow willow, *Salix matsudana* and white willow, *Salix alba*.

3. Giraffe Exhibit

- Berm soil from Big Dig construction. Tough growing conditions
- Plant ID: Robinia pseudoacacia- toxic to most animals except for Giraffes who have adapted to it.
- Invasives: cloudberry, miscanthus, mugwort, ailanthus
- Plant ID: Morus alba (white mulberry) is great browse!
- Plant ID: Yellowwood tree, *Cladrastis kentukea*

4. Butterfly gardens and solar panels

- Solar petals power butterfly hollow/carousel/many outbuildings
- Butterfly host plants out front. Milkweed (monarch), lupine (blue elfin), hoary skullcap (bombus species), quinine (small flies, wasps, bees), monarda (bombus species), veronica (lots of butterflies), little bluestem (skipper species), heliopsis (nectar for butterflies and parasitoid wasps, seeds for birds), goldenrod (goldenrod gall fly)
- Riverbirch allee
- Butterfly hollow (interior butterfly display)
- Plant ID: *Diervilla lonicera*

5. The Greeting allée

- From original Olmsted plan
- Franklin Park is the largest park in the Emerald Necklace, measuring 527 acres, and this landscape was meant to serve as Boston's "central" park. Frederick Law Olmsted, Sr., with John Charles Olmsted, completed the general plan in 1885.
- The park was subdivided into two sections separated by Glen Lane, with the Country Park and Ante Park. The latter portion includes the children's play area, termed the Playstead, and a promenade known as the Greeting (now the Franklin Park Zoo). The design used existing topography, ledges, native stone, and vegetation to achieve the intended Picturesque character.
- Plant ID: Siberian elm, *Ulmus pumila*
- Plant ID: *Tilia cordata*, small-leaved linden

6. Childrens zoo

- Sourcing native plants
- Buttonbush restoration project
 - Propagation of buttonbush for local wetland restoration, good for pollinators and is an emergent shrub that provides locations for turtle basking and duck nesting.
- Bog garden: cardinal flower, bog bean, marsh marigold, blue flag iris, cat tail.
 - Adaptations for low nutrient environments found in bogs, pitcher plants have downward facing hairs that prevent insects from escaping from digestive juices in the pitcher, flowers have to be tall to prevent pollinators from falling into the trap.
- Red Panda bamboo sourcing
- Plant ID: False spirea, *Sorbaria sorbifolia*
- Pin oak tree house care
- Panicum grass maze

7. African Experience / New exhibit & entrance

- A new habitat for African penguins. Native seaside and dune plants to mimic their coastal home. Play structures for kids (rescue boat), ground level and underwater viewing stations
- Overhaul of the entryway incorporates new gift shop and red panda exhibit
- Mixed Savannah exhibit also is being expanded, new waterhole to deal with flooding, new tree plantings and pasture management plan (challenges with current exhibit with number of animals and seasonality), ha-ha fence to eliminate fence views

8. Lion / Hyena Exhibit: Challenges and Opportunities

- The folly predates the zoo itself, oldest structure at the zoo
- When this was private land, Lucius Manlius Sargent constructed it
 - Nonfunctional buildings designed to look like old ruins that were popular during the 18th and 19th centuries, oldest structure on the property
- Lion is an older exhibit in need of updating
- Primarily rugosa rose, yucca, dogwood plantings
 - Designed and planted before we had dedicated horticulture staff
 - Today we try to use plants from the animals' native habitats, or close relatives if they are not horticulturally available or cold hardy here
 - Don't touch the poison ivy
- Stinging nettle, enrichment logs, access, maintenance
- Plant ID: Honey locust, *Gledistia triancanthos*

9. Red river hog / Camel / Koribustard

- Red River Hog
 - Challenges of plants that have to coexist with animals in exhibits
 - Red river hogs chew and dig in roots to look for food, which damages trees and affects what species we are able to plant in here
 - Lost several trees / dig barrier maintenance
- Camel
 - Recent rain garden installed with City of Boston Green Infrastructure Unit.
 - Rain gardens aim to help to slow water runoff and absorb excess water by re-grading ground to divert flow into a designated channel filled with plants
 - These riparian plants absorb water as it gathers, reducing flooding in adjacent areas and providing shelter and host functions for wildlife
 - Plant ID: chelone sp.
 - Plant ID: mountain mint, *Pycnanthemum muticum*
- Koribustard

10. Tree planting project / Satellite nursery

- Planted approximately 300 trees in Franklin Park Zoo and 100 at Stone Zoo in 2023-2024.
 - in collaboration with the City of Boston to mitigate the urban heat island effect in Dorchester/adjacent neighborhoods
- Bare-root trees meant they had to be planted fast
 - (Great contractors helped a ton for this)
- Tree diapers are an alternative to gator bags, gather water during rains and then slowly release it into the soil, also serve as extra root protection
- "Kori hills" is a small production garden behind kori bustards
 - Currently growing raspberries, blackberries, boysenberries

11. Rock Garden

- History
 - Designed by Olmsted protégé Authur Schurcliff. Completed by 1930.
 - Schurcliff made a rock garden, rose garden and herb garden. Only the rock garden remains.
 - Suffered from "beign neglect" for decades.
 - Began campaign in 2019 to rehabilitate and preserve.
- Recent efforts: restoration of the water course, repointing the tower and bridge, ADA access, new ponds, rebuilt gardens.
- Different gardens represent different ecoregions.
- Ongoing: occultation for invasives management
- Plant ID: Winter jasmine, *Jasminum nudiflorum*

12. Tropical Forest / interior horticulture

- Managed by Pedro, interior horticulturist at ZNE for 25 years.
- Very different set of needs, use primarily tropical plants that you may recognize as houseplants
 - Ficus species used in exhibits, they are tough, nontoxic, and tolerate soil compaction and drought
 - Many new alocasia/colocasia add texture and color around exhibits
- Higher beds are irrigated, accessed by Pedro via ladder and climbing with buckets
 - Amorphophallus titanum smells like rotting flesh to attract flies and beetles
 - Just putting out a leaf right now. That whole structure is just one leaf
 - Largest corm, largest leaf, largest flower
 - Endemic to rainforests of Sumatra, Indonesia
- Maintenance: soil replacement, tree replacement, constant watering

13. Orchid Show

- First true orchid show in Boston hosted at Tropical Forest in February 2024.
- Hundreds of plants; thousands of blooms.
- Hundreds of plants within the tropical forest displayed in a naturalistic setting amid the animal habitats
- Specimens that share native ranges with many of our animals
- Valentines and opening night events.
- Plant sale after show.
- Orchid Adventure will take place February 2025

14. Gorilla grove

- Large exhibit done entirely in-house
- Some geraniums along the edges, edible enrichment plants in lamiaceae inside
- Challenges of planting trees with 400 lb herbivores is that they pull them to pieces to get the leaves off them
- (Browse list and toxicity collab w vet staff here)
- Plant ID: *Pterocarya stenoptera*, Chinese wingnut
- Plant ID: *Magnolia macrophylla*
- Tropical date palm on seasonal display

15. A2 entrance / food forest

- Daniel French-Science and Labor statues, originally from the 1885 post office, brought to the zoo in 1930, pedestals by Shurcliff (built with rock garden for the 300th founding anniversary of Boston)
- Giraffe statue – Kenya-based artist
- Food forest installations
- Island bed installation: amsonia replacing roses that died during cold period winter 2022
- Plant ID: *Amsonia hubrichtii*

16. Service yard

- Back of house operations
- Hort equipment
- Hort machinery

17. Birds world

- Last remaining building of the original zoo
- Condor: historic flight cage, full overhaul with new mesh and paint. Interior plantings to mimic alpine meadow, pollinator plants
 - Humphrey is aggressive. Gardeners need body guards!
- Crane and Koi: mimics a Japanese Garden
- Bonsai show: this summer 2025
- Kiwi exhibit: use of coco coir over peat moss for good results.
- Plant ID: rose rosette on Hawthorne trees

18. Greenhouse / nursery area

- Storage of plants before use
- Cold greenhouse shelters cold-hardy plants in pots, warm greenhouse is primarily for overwintering tropicals used in TF or in outdoor pots placed around the zoo during warm months
- The big palm we saw in front of TF gets dug up and overwinters in here every year, for example
- This building is showing its age, we are currently planning to build a new one either here or somewhere else on the property, details TBD

19. Budgie rain garden

- Another collaboration with Boston Green Infrastructure Unit
- Will soon be expanded; perforated pipe will redirect water pooling next door in Australia into this bed
- We discovered while installing it that this spot used to be an artificial river, and the concrete bottom is still under there
 - Therefore, some of the trees and deeper-rooted plants at the bottom of the basin are struggling
 - Bald cypress is a deciduous conifer native to swamps and marshes
 - Has "knees," woody protrusions that poke up from the water to allow gas exchange in submerged roots
- Plant ID: