# Joy and Gordon Patterson Botanical Garden SELF-GUIDED TOUR



## Welcome to the Joy and Gordon Patterson Botanical Garden, a place of peace and inspiration.

The 15-acre garden is a shady hammock abounding in palm trees and tropical growth. A meandering stream passes through more than 200 palms, bamboos, and other rare and common botanical specimens—too many to appreciate in one visit. The self-guided walking tour outlined in this brochure will introduce some of the more interesting and accessible specimens in the garden. Use a smart phone to scan the QR codes on the plant labels throughout the garden to access more information online. You can also visit floridatech.edu/garden.

Established in the 1960s by Founding President Emeritus Jerome P. Keuper, Florida Tech's Patterson Botanical Garden has become one of the most unique campus botanical gardens of its kind in the continental United States—very few university campuses have a dedicated botanical garden. Also called "the Jungle," the mission of the Patterson Botanical Garden is to preserve and maintain the beauty of the natural garden hammock as a peaceful place for wellness and inspiration for the campus community and its visitors.

The main trail is named the Dent Smith Trail in honor of the founder of the Palm Society, a worldwide organization primarily engaged in the study of the palm family. Dent Smith was instrumental in the acquisition of palms for the garden.

#### To help protect the flora and fauna and for the safety of visitors, we ask that you walk bicycles and skateboards and do not bring dogs into the garden. Do not feed the turtles or other wildlife. Removing, cutting, or tampering with plant life in the garden is a serious offense. Help the garden remain a pleasant place

This is a public area. Please exercise caution during your visit as there are natural water features and other potential hazards. Unique specimen plants, some delicate plants, and some poisonous plants are planted or naturally occurring in the garden and hammock. See the warnings on the sign at the entrance.

#### Parents: Please always maintain appropriate control over your children. For your safety, please stay on the defined trails or within the walled/patio areas.

We hope you enjoy your visit!

for all by respecting and caring for it.



Support the Botanical Garden with a tax-deductible donation. Scan the QR code for details.





#### Joy and Gordon Patterson Botanical Garden

Florida Institute of Technology 150 W. University Blvd. Melbourne, FL 32901-6975

#### floridatech.edu/garden

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#### Begin the tour at the north entrance to Evans Library, across from the garden.

#### Screw Pine

(Pandanus veitchii from Australia) This specimen in the library courtyard has managed to thrive here because it is protected from the wind and warmed by the buildings during cold snaps.

#### **Clumping Bamboo**

[In front of the Ruth Funk Center]

#### Saw Palmetto

FAt the end of the brick path that leads from the library patio to the road and the garden entrance]

#### Turn left at the roadway and walk west along the edge of the Molly Butterfly Garden.

#### Buccaneer Palm (Pseudophoenix sargentii)

#### [Small palm to the left and behind the Botanical Garden sign]

A slow grower, this young Buccaneer palm is an endangered Florida native, once found in abundance in the upper Florida Keys. Wild collecting and development have greatly reduced its numbers. It is one of the most wind and salt tolerant palms.

#### **Triangle Palm** (Dypsis decaryi)

#### [In mulched bed along roadway]

Indigenous to the Madagascan rainforest, this unique palm is easy to identify by its striking growth habit. The fronds grow almost upright from the trunk and arch gracefully outward from their tips. The leaf bases are arranged in three vertical columns set about 120 degrees apart on the main stem, forming a triangular shape in cross section.

#### Silver Bismarck Palm (Bismarkia nobilis)

#### [Mature specimen, in turf area near the roadway]

Wherever the Bismarck Palm is placed, it will draw attention with its massive, stiff, silvery-blue-green fronds and its stout trunk. A slow-grower, the big 'Bizzy' will reach an average height of 20–30 feet if kept regularly watered.

#### Turn right into the parking lot. The Pioneer Trail entrance will be on your right.

Gingerbread Palm (Hyphaene spp.)

The two large palms at the start of the Pioneer Trail. one with a branched trunk. are Gingerbread Palms. The branched trunk looks as if it might be the aftermath of a lightning strike, but it's not. The branching of the trunk well above the base is a natural tendency of this species of palm. As you follow the path into the garden, you will be descending into the floodplain of Crane Creek. You will note that these Gingerbread Palms are growing on the higher ground above the creek's floodplain. This palm is

native to the more arid regions of central Africa and is guite at home here in this relatively drier and open location on the edge of the garden.

## **Ribbon Fan Palm** (Livistona decipiens)

#### [On right, in turf within the Molly Butterfly Garden]

This palm is native to the east coast of Oueensland, Australia, Its tall. graceful form and robust nature have earned this palm a place in tropical and subtropical landscapes around the world, easily adapting to many types of soil except those that are wet and soggy.

#### Palmyra Palm (Borassus flabellifer)

#### [On right, near sidewalk, within the Molly Butterfly Garden]

A widely planted crop plant in Southeast Asia, the Palmyra palm is an attractive ornamental tree, cultivated for planting in gardens and parks as landscape palm species. It can live more than 100 years and reach a height of nearly 100 feet. This one was planted from seed by our own Dr. Jerome Keuper! He planted another one at the back of the Human Resources building which has thrived. These two trees show why it is always about location. location. location.

#### Lady Palms (Rhapis excelsa)

#### [Directly in front of you, across the sidewalk from the Schoolhouse]

When left unattended, the dark green leaves on the Lady Palm stems grow to the base and form an effective screen. Older stands develop slender trunks beneath a nice mass of foliage. This palm usually reaches a height of 7 feet and can be successfully container-grown indoors. It is native to China and fairly cold tolerant.



#### Melbourne's original school house.

Relocated to the Botanical Garden on the grounds of Florida Tech. the old schoolhouse is a reminder of the education environment of times past in this part of Florida. The coguina rock beneath the schoolhouse is purported to be the original foundation for the original University of Florida structure. The stones were donated by the Gleason family.

#### Silk Floss Tree (Ceiba speciosa) [To the right of the schoolhouse]

The bulbous green trunk of the Silk Floss tree is covered with big blunt wart-like triangular spines and turns gray as the tree gets older. These spines serve to store water for dry periods. The trees typically drop their leaves just before they put on their spectacular autumn display of five-petaled pink flowers.

#### Follow the path to the Dent Smith Trail stone 4 marker, in the center of the paver circle.

#### Bottle Palm

(Hyophorbe lagenicaulis)

#### [Three palms to the left as you face the stone marker to read the inscription]

Bottle palms are native to the Mascarene Islands in the Indian Ocean where they are now threatened with extinction. The trunk becomes enormously swollen at the base as the tree matures. Mature height for these slow growing palms is about 12 feet.



#### **Taraw Palm** (Livistona saribus)

#### [To the right as you face the stone marker, in mulched bed]

A native of Southeast Asia, the Taraw can grow up to 40 feet, produces bright blue fruits and is cold hardy to 24 degrees. Watch out for those "shark teeth"-the long sharp spines along the stems are formidable!

#### **Teddy Bear Palm** (Dypsis leptocheilos) [Just beyond Taraw Palm]

This is a very identifiable tropical palm that is noted for its distinctive ringed trunk and beautiful fronds, the crown shaft of which is a whimsical, fuzzy rust-red—thus the common name! This one must be protected from hard freezes, so we snuggled it in among other trees for protection.

#### **Foxtail Palm** (Wodyetia bifurcata) [in turf to the right]

Also known as a "Little Royal" due to its similarities to the Royal palm, the self-exfoliating (frond dropping) Foxtail palms are prized for their beautifully smooth trunks and feathery leaves that look like fox tails.

#### **Staghorn Fern** (*Platycerium bifurcatum*)

#### [Hanging in trees and on the ground behind Foxtail Palm]

Staghorn ferns are epiphytes or "air plants," which means they get their nutrients from the air, not soil. Since they like a shady, moist location, it's not surprising that their native habitat is the tropical jungles around the world where they are found attached to the sides of trees, for support not nutrition. Keep an eye out while in the garden, and you may spot other Staghorns hanging about.

#### Follow the Dent Smith Trail beyond the stone marker into the garden.

#### Red Cabbage Palm (Livistona mariae)

#### [Right side of path]

There are several 'varieties' of this species, the most well known being Livistona rigida (some consider that a separate species, and some do not). It's truly a task to tell them apart. Cold tolerance is a big discerning factor. As a juvenile, this palm has a good deal of unique color-seedlings in full sun are nearly red, or at least maroon-thus the common name.

#### **Paurotis Palm** (Acoelorraphe wrightii)

#### [Left side of path]

This native Florida palm is found in the Everglades and thrives in wet locations. The Paurotis maintain a slender trunk, grow to a height of 20 feet and, if left unattended, will form large clusters.

#### Continue following the trail, then turn right at 6 the first intersection.

#### Cabbage Palm (Sabal palmetto)

#### [In center and to the right of path at intersection]

This familiar looking palm, also known as the Sabal Palm, is native to the southeastern United States and is the state tree of South Carolina and Florida. This hardy palm is common in both the wild and in planned landscapes throughout Florida, including several in this garden. The terminal bud (cabbage) can be harvested for food and was reportedly done so in the past. However, the practice is destructive to the palm.

#### Motacu Palm (Attalea speciosa) [On right]

A tree of the South American lowlands, this slow-growing palm is now widely planted in public places. It is a frost-resistant palm that reaches a height of about 50 feet.





#### Fishtail Palm (Caryota mitis) [On left]

This clustering palm is a native of Southeast Asia. It is relatively fast growing to a height of 20-30 feet. It gets its common name from the shape of its leaves.

## King Palm/Piccabeen (Archontophoenix cunnningham)

#### [On right]

Originally from the rain forests of eastern Australia, this palm will grow relatively quickly to 25–40 feet in height if given adequate water and light. It is a self-cleaning palm, which means it sheds its boots naturally.

# 7 Veer right to follow the path around the Teardrop Loop.

#### Golden Cane Palm (Dypsis lutescens)

[At top of loop, on the right after the coquina path]

A popular landscape staple in Florida, this multi-stemmed/clumping palm is a moderately fast growing one. It has smooth stems/canes and when the new growth (pups) are kept trimmed back, the golden cane palm offers a bamboo-like effect. Also called "Areca" palm.

#### Spiny Licuala Palm (Licuala spinosa)

Prized for its attractively segmented circular leaves, the most striking aspect of this clustering palm is the shape of the split leaves with their blunt, serrated ends. Note also the clustering nature of this palm and its spiny leaf stalks. This palm's home is the wet, low-lying regions in and around Indonesia.

# 8 Exit the Teardrop Loop to the right and follow the path.

**Chocho Palm** (Astrocaryum mexicannum)

#### [Ahead in trail fork near tiny waterfall]

This native of Mexico and Central America likes filtered light and plenty of rich moist soil. It is a spiny palm and remains small, growing to only about 15 feet. The leaves can get to 10 feet in length and the leaflets as long as two feet. Note the leaflets are bright green above and silvery below. Be careful of this one!

# 9 Turn left at the trail intersection and cross the concrete bridge.

#### **Green Stripe Bamboo** (Bambusa emeiensis 'Flavidorivens') [On left after bridge]

This is a warm climate, clumping bamboo that can grow to a height of 30 feet or more. If you are visiting in the warmer part of the year, you might notice new sprouts emerging from the underground rhizomes next to the existing culms (canes). Note the alternating green and gold stripes on the mature canes. Origin: China.

#### Syagrus Palm (Syagrus pseudococos) [Up trail, on right]

This slender palm originates from Brazil and can reach to a height of 50 feet. It is related to the common, locally planted Queen Palm and is not freeze tolerant.

#### Split Leaf Philodendron (Philodendron selloum)

#### [On the right, at the bridge]

The name says it all. This large-leaved, easily grown philodendron makes a dramatic, tropical statement wherever it is used in the landscape. It can grow and develop a three- to four-foot-long, tree-like trunk and a spread of 8–10 feet—look up to see how it uses the oak as a trellis!

#### Silver Bismarck Palm (Bismarkia nobilis)

#### [At trail T, straight ahead]

This younger representative of the striking Madagascar native is a palm that would be noticed in any location with its distinctively silver-blue leaves. The leaves themselves can attain a spread of over 6 feet, even on young trees, making it a specimen of choice for only larger yards and spaces.

## **10** Turn right at the T toward the patio/plaza.

### Miraguama Palm (Coccothrinax miraguamma)

#### [On the right behind the wall, before pond]

This palm originates from Cuba and is popular in landscape plantings for its formal appearance and moderate mature size (20 feet). It likes sun and can be planted in groups. If you look carefully, you will notice a distinctive change in the width of the leaves about midway along their long axes.

#### Scheffer's Palm (Ptychosperma schefferi) [on left]

A palm from the tropical forests of New Guinea and adjacent Pacific islands. It prefers filtered light and moist conditions. It usually grows to about 15–20 feet in height in the semitropical United States.



# 11 You may notice some fish and quite likely some turtles in the pond.

We have Florida Red-bellied Cooters and Alligator Snapping turtles. On warm days, they may come greet you ... but please don't touch or feed them!

#### Majesty Palm (Ravenea rivularis) [Across pond]

The Majesty is a very large palm with a large, untidy crown. It has symmetrical leaves and develops an attractive swollen base of the trunk. Yet another perfect choice for our typically damp soils in the lower Jungle, the Majesty prefers full sun and plenty of water to ensure rapid growth.

#### Green Bamboo (Bambusa spp.)

#### [Huge bamboo clump along pond edge and to right of bridge]

It is estimated that this stand of warm climate, clumping bamboo has been growing here for 30 or more years. With adequate light, individual canes can grow to a height of 40 feet. Probable origin: China.

#### African Oil Palm (Elaeis guineensis)

#### [By stream bed on the northwest side of the steps to the residence quad]

Reaching up to 20 meters or more, the African Palm is characterized by persistent, spirally arranged leaf bases and crown of 20–40 massive leaves. Located by the stream bed, it loves both sun and wet, but welldrained feet!

#### 12 Exit the patio area to the west, along the Bamboo Trail toward Denius Student Center

#### **Slender Weaver's Bamboo** (Bambusa textiles gracilis) [On right]

This tightly clumping bamboo can handle below freezing temperatures as well as heat. It grows only 15–20 feet tall and can be planted as a standalone specimen or as part of a hedge. Origin: China

## Hurricane Palm (Dictyosperma album var. rubrum)

#### [3 palms on right]

This variety is also known as the Red Princess Palm. Hurricane palms are popular landscape palms and grow to 20 feet in height. The common name relates to its supposed resistance to hurricane force winds. Like the Spindle Palm, these palms also hail from the Mascarene Islands where they, like the Spindle, are facing extinction. We liked them so much, we planted three!

#### **Resurrection Fern**

(Pleopeltis polypodioides) [Grows on the fallen oak limb which crosses the stream]

It is an epiphytic plant which grows on the surface of other plants and trees. You can see it resurrect; it turns from brown to green when it has rained after a dry spell.



## 13 Walk west, turn left and cross the bridge.

#### **Travelers Palm** (*Ravenala madagascariensis*) [Several clustered just to the left]

The Travelers Palm, indigenous to Madagascar, is not a palm at all but a tree related to the banana tree. Note the vertical leaves that spread out like an open fan. Travelers can cut the stem and drink the water found inside, but it is doubtful the orientation of the leaves can provide, as legend has it, any reliable indication of compass direction. Like bananas, they propagate by sending up shoots and, as evidenced by this grouping, can get quite tall and stately.

# 14 Turn left at the intersection and follow path toward Denius Student Center.

#### Timor Black Bamboo (Bambusa lako) [On right]

This species of black clumping bamboo originates from the Timor Islands and cannot tolerate freezing temperatures. The glossy black culms (canes) and contrasting green foliage make this a striking bamboo in any setting. Its culms can grow to a height of over 40 feet.

# **15** Turn around, return to main sidewalk and go left to exit the garden at Panther Plaza.

#### Pindo Palm (Butia capitata) [On left]

The Pindo is one of the smaller palms, growing to a height only of about 15 feet. Pindos are remarkably cold tolerant, down to 17°F, and are widely planted in north Florida, South Carolina and southern Alabama. They make attractive specimens with arching, usually blue green leaves.

#### This concludes the guided tour.

We hope you enjoyed visiting the garden. Please sign the guest book at floridatech.edu/garden.

