



San Diego Zoo

Botanical Tours



Cycads



1. Florida Arrowroot

Zamia integrifolia

Endemic to Florida and southeastern Georgia, this small cycad is also found in Cuba, Puerto Rico, the Cayman Islands, and the Bahamas. It is listed as Near Threatened due to habitat destruction for housing and agriculture.

Fun Fact

This is the only cycad native to the continental US. It is also a larval host for the rare *Atala* butterfly.



2. Madagascar Cycad

Cycas thouarsii

This species is found on the island of Madagascar along with the islands of Comoros, Mayotte and the Seychelles. It is also found along the eastern coast of Africa in Kenya, Mozambique, and Tanzania where it grows in open woodlands or forest margins. This species looks similar to *Cycas rumphii* and *Cycas circinalis*.

Fun Fact

The first species of *Cycas* was described by Carl Linnaeus in 1753 as *Cycas circinalis* from India. Linnaeus created the system of formally naming and classifying organisms, known as binomial nomenclature.



3. Emperor Sago

Cycas taitungensis

This endangered species is a vigorous grower; some people believe it is the fastest growing of all cycads. Its species name comes from its native habitat: rocky slopes of Taitung County, Taiwan.

Fun Fact

This cycad was only identified as a distinct species in 1994. Until that time, it was grouped together with another species *Cycas taiwaniana*.



4. Tiusinte

Dioon mejiae

First collected in 1910, this hardy plant grows primarily in dry, rocky canyons of Honduras and has been found in north-central Nicaragua. It's one of the most commonly grown *Dioon* and may be the most abundant cycad in the world.

Fun Fact

The striking, rigid leaves can reach up to 6 feet long and are used in religious celebrations.



5. Golden Dioon

Dioon merolae

This plant is especially valued among cycad hobbyists, but overcollection in the wild has caused it to be designated a vulnerable species. Its native habitat is forests in Chiapas and Oaxaca, Mexico.

Fun Fact

Golden dioon plants are arborescent or tree-like without branches. The new fronds are woolly.



6. Bamboo Cycad

Ceratozamia hildae

With a trunk held mostly underground and unique leaves, this plant is different from many other cycads. The groups of leaflets sprouting from upright stems gives the appearance of a kind of bamboo, hence the common name. This unique cycad is endemic to Mexico, but overcollecting by plant enthusiasts has diminished its numbers greatly.

Fun Fact

Although it was first collected in 1950, it took 29 years to be determined as its own species.



7. Cardboard Cycad

Zamia furfuracea

This cycad forms dense, low branching clumps, and is found in mountain ranges to coastal limestone habitats in southeastern Mexico. While exceedingly common in cultivation, it is endangered in its native habitats due to limited distribution and overcollection.

Fun Fact

Like other cycads, cardboard cycads are pachycauls and store water in their trunks.



8. Kei Cycad

Encephalartos princeps

The deep blue-green color of its leaves is a key characteristic of this cycad. It's suited to subtropical and temperate regions and is endemic to South Africa. In its native habitat, it grows in sunny, rocky outcroppings.

Fun Fact

Cycads are dioecious—separate male and female plants. Often, it is difficult to determine a cycad's sex until it produces cones.



9. Uganda Giant Cycad

Encephalartos whitelockii

This species is only found in one location in Uganda and is critically endangered in the wild. It has exceptionally long fronds - each leaflet alone can reach up to 12 inches. Another distinctive feature is its male cones that resemble long snakes.

Fun Fact

E. whitelockii is named after the late Loran Whitelock, an American botanist from Los Angeles who is known for his extensive travels to remote locations in search of cycads, and for the conservation of these plants.



10. Blue South African Cycad

Encephalartos trispinosus

Native to South Africa, this small but hardy species prefers full sun and can withstand moderate frosts.

Once believed to be a form of *E. horridus*, it was identified as a separate species in 1965.

Fun Fact

While its species name refers to the three sharp spines on the tips of each leaflet, new emerging leaves are incredibly soft and velvety.



11. Suurberg Cycad

Encephalartos longifolius

Endemic to Eastern Cape region of South Africa, this species has one of the largest female cones in the genus, reaching up to two feet long. This species can be identified by its arching leaves and overlapping leaflets. The seeds are dispersed by a variety of wildlife including hornbills and baboons.

Fun Fact

This cycad was one of the first cycads to be scientifically described and in 1775, a specimen was placed in the Royal Botanic Gardens in Kew, UK—where it is still alive today!



12. Pineapple Zamia

Macrozamia pauli-guilielmi

The twists in this plant's rachis makes it easy to identify. Native to coastal areas of eastern Australia, it is considered an endangered species due mainly to land clearing in agriculture, forestry, and housing developments. This species only produces cones every four to six years.

Fun Fact

The pineapple zamia grows in pine forsts and is adapted to wildfires with a subterranean caudex.



13. Johnson's Cycad

Macrozamia johnsonii

This species has a very restricted range in northern New South Wales, Australia where they can tower nearly 10 feet tall. The seeds are equally large, measuring 1.5 inches long, and 1 inch in diameter.

Fun Fact

The trunks are made of fused leaf bases and this species is one of the largest of the Australian cycads.



14. Pineapple Cycad

Lepidozamia peroffskyana

Native to Australia's wet, forested slopes and gullies, it's also found in many of the country's public gardens because of its beautiful growth and adaptability. Unlike most cycads, this one is spine-free making a garden-friendly specimen.

Fun Fact

Cycads are the first group of plants to be insect pollinated. This species is pollinated by a type of weevil; up to 500 weevils have been found on a single cone!



15. Moore's Cycad

Macrozamia moorei

Best known for its date-palm-like appearance (but not related) and massive size, this species is considered one of the most majestic cycads of Australia. Although it grows slowly, the trunk eventually reaches over 20 feet tall. It is endemic to central Queensland, where it grows in dry woodlands in rocky soils.

Fun Fact

A single individual of this species can bear eight female cones at the same time.

