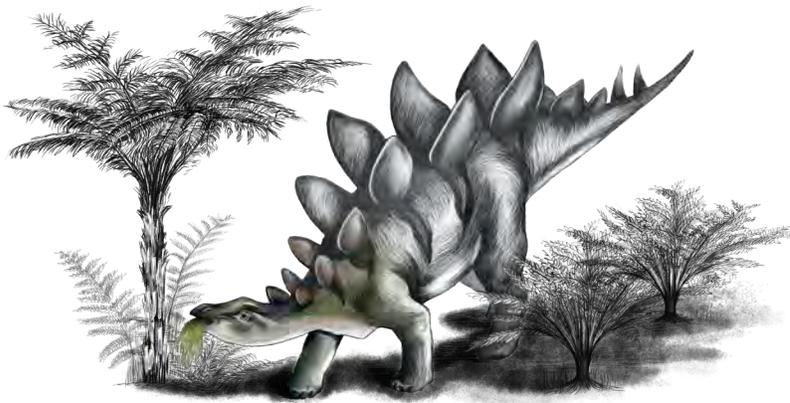


## Ancient Forest: A Glimpse into the Past

Descanso Gardens' Ancient Forest is full of prehistoric plants – plants from an age when dinosaurs roamed the Earth and the world's oceans and continents looked very different from today. In fact, many of the plants in this area are from a time before flowers. (Flowering plants are relative newcomers to the plant world, first appearing in the Jurassic period about 175 million years ago.)



These ancient plants, and their ancestors, appeared on Earth hundreds of millions of years ago. As the Earth changed, ancient plants created the air we breathe by absorbing carbon dioxide and releasing oxygen. They also became an important food source for the animals of long ago.

Today cycads, ferns, redwoods and other ancient plants persist relatively unchanged. They have survived dramatic changes in the world's geography, competition from other plant species and major extinctions – including that of the dinosaurs. Descanso Gardens is proud to feature these prehistoric plants and to invite you to experience the Ancient Forest.



### Australian Tree Fern

#### *Cyathea cooperi*

This tree fern is one of the most commonly cultivated for use as an ornamental plant in gardens and public landscaping. Its light green fronds may reach a length of 13 to 20 feet. Instead of bark and wood that evolved with seed plants, the trunks of tree ferns are composed of fibrous masses of roots modified to grow vertically.



### Burrawang

#### *Macrozamia communis*

Widespread in its native Australia, this cycad is popular for cultivation around the world because of its hardiness and highly ornamental qualities. Like all cycads, this species uses seed cones to reproduce. Male and female seed cones are on separate plants, and the large female seeds are red or yellow when ripe.



### Chestnut Dioon

#### *Dioon edule*

Found along mountain slopes in Mexico, this cycad is under threat from forest clearance and removal of plants from the wild for landscaping and plant collections. The extremely slow rates of growth and reproduction typical of cycads, and many ancient plants, limit the population's ability to recover from the ongoing decline.



### Coast Redwood

#### *Sequoia sempervirens*

Coast Redwoods can live for more than 1,000 years and grow to be the tallest living trees on Earth. The first redwood fossils date back more than 200 million years to the Jurassic period. Based on growth ring counts, the oldest known Coast Redwood is dated at nearly 2,200 years-old. It is located in Northern California.



### Monkey Puzzle Tree

#### *Araucaria araucana*

This conifer has thick, tough, needle-like leaves that can last for 10 to 15 years, and cover most of the tree like armor – perhaps these leaves prevented the plant from being eaten by dinosaurs or other ancient animals. Many botanists consider the Monkey Puzzle Tree to be the most primitive conifer alive today.



### Sago Palm

#### *Cycas revoluta*

Despite its name, the Sago Palm is a cycad and not closely related to true palms. Like many ancient plants, this cycad is slow growing and long-lived – individual specimens can grow to have trunks 20 feet tall over a period of 50 to 100 years. Native to Asia, this species is often used in ornamental horticulture.



### Staghorn Fern

#### *Platycerium bifurcatum*

Ferns in this genus get their name from their uniquely shaped fronds. They are epiphytic, meaning they grow on other plants for physical support, but do not negatively affect the host. Like all ferns, Staghorn Ferns reproduce via spores and have neither seeds nor flowers.

