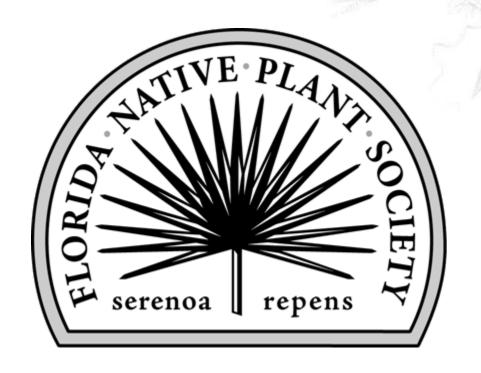
# Florida Native Plant Society



**Native Plant Owners Manual** 

Helianthus debilis - Beach Sunflower

Mark Hutchinson

#### Putting things in perspective

All seasonal references are applicable to the eastern panhandle of Hernando County where the plants portrayed in this presentation grow. This area happens to be a cold spot in central Florida due to the Brooksville Ridge and approximates a Hardiness Zone of 8a or 8b, average annual low temperatures ranging between 10 and 20 °F.

Any reference to medicinal or culinary use of plants or plant parts should in no way be considered an endorsement by the Florida Native Plant Society of any sort of experimentation or consumptive use.

Please do not attempt to rescue any native plants without first reviewing the <u>FNPS Policy on Transplanting Native Plants</u>

Special thanks to Lucille Lane and Shirley Denton







## **Navigation Links**

(for use in open discussion)

What's in a Name?

Biological Classification – Tree of Life

Where does this plant grow?

• In Florida

What this plant needs to -

- Thrive
- Propagation
- Pollination
- Live a long life

Life Cycle

References



Throughout this presentation, clicking this symbol will return you to this page.



# Beach Sunflower, cucumberleaf sunflower, east coast dune sunflower, dune sunflower

Helianthus (hee - lee - AN - thus)

From the Latin 'heli-' meaning sun, and 'anthus,' or flower

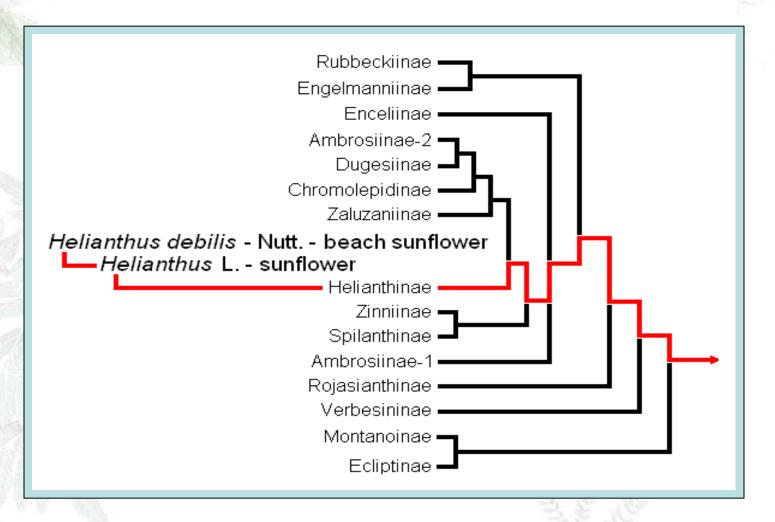
debilis (deb - IL - iss)

Latin, meaning weak, lame, weak or debilitated, describing this plant's tendency to crawl along the ground (decumbent).

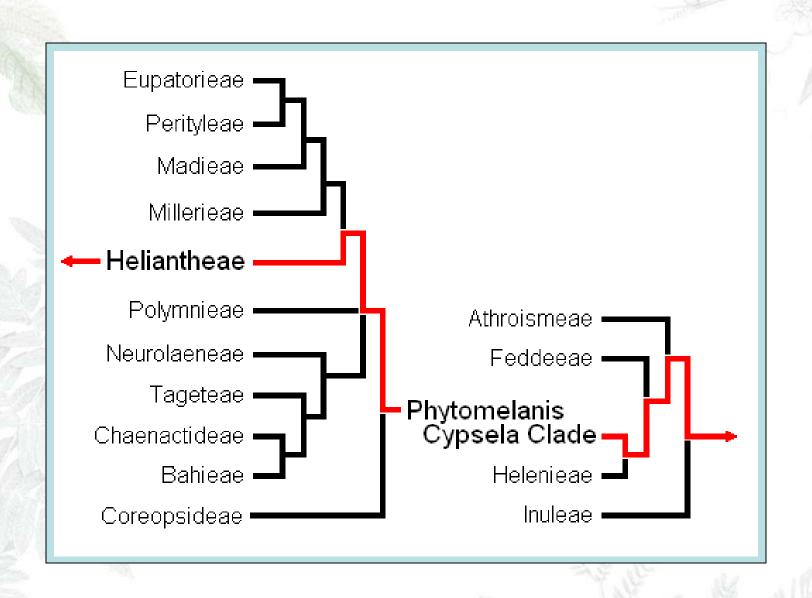


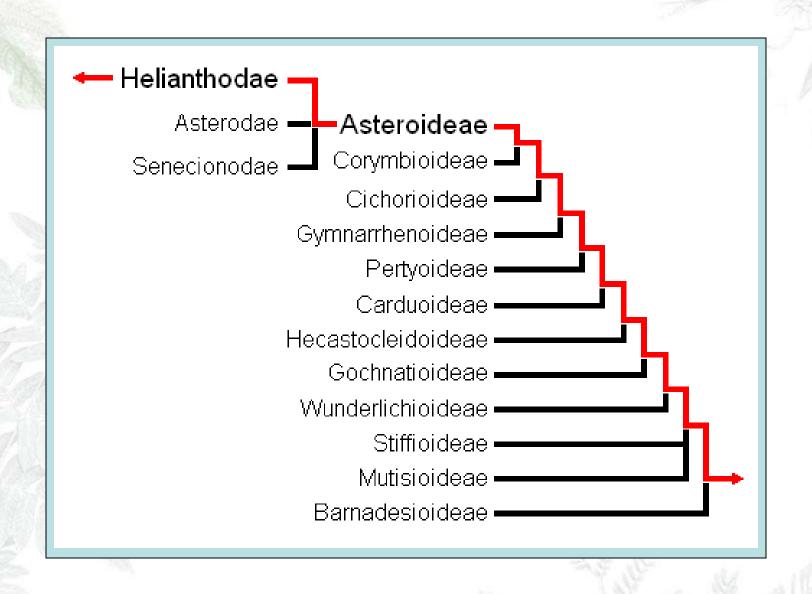


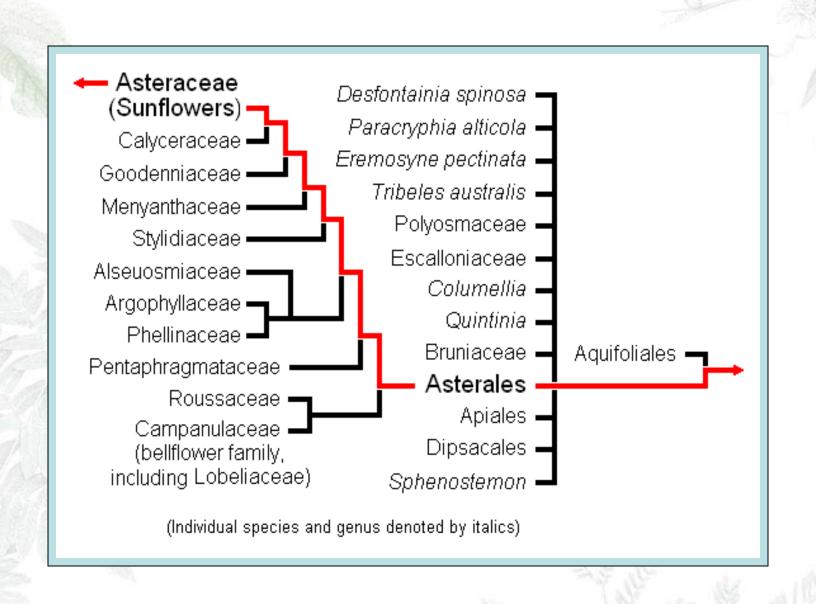
### Biological and Genetic Relationships

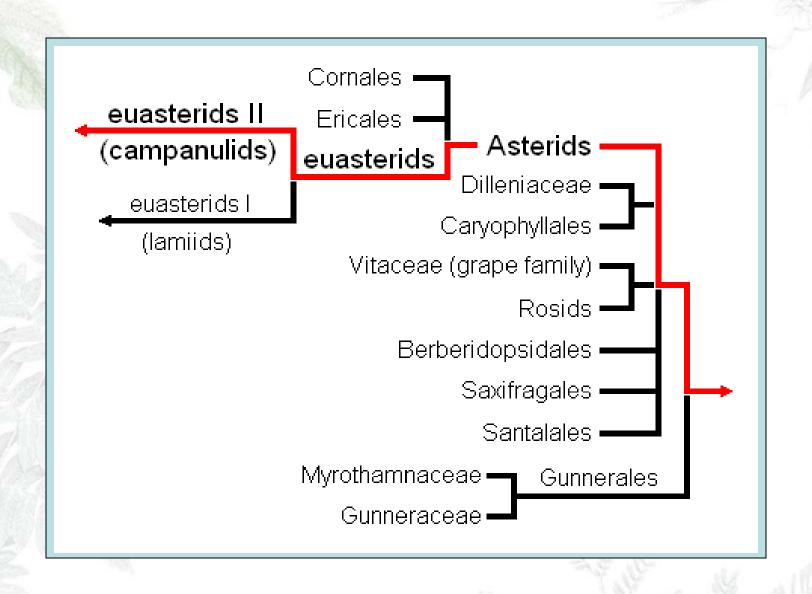


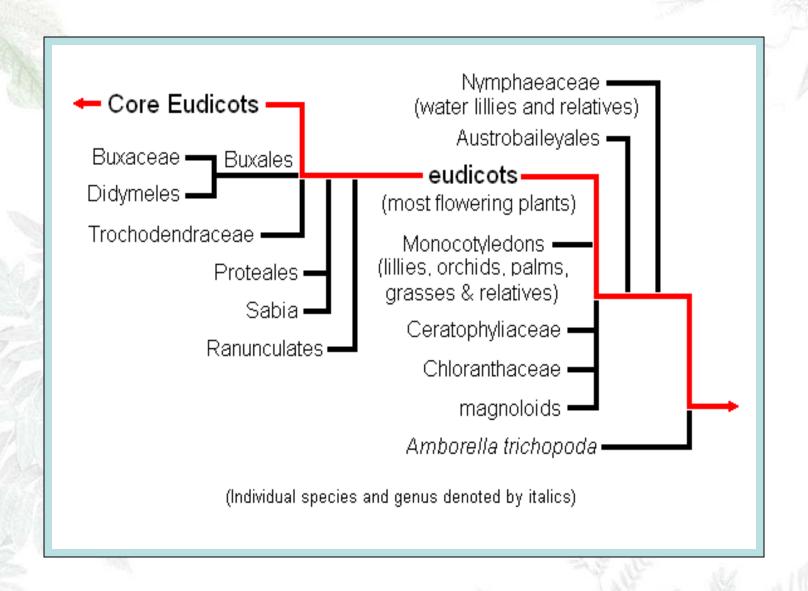


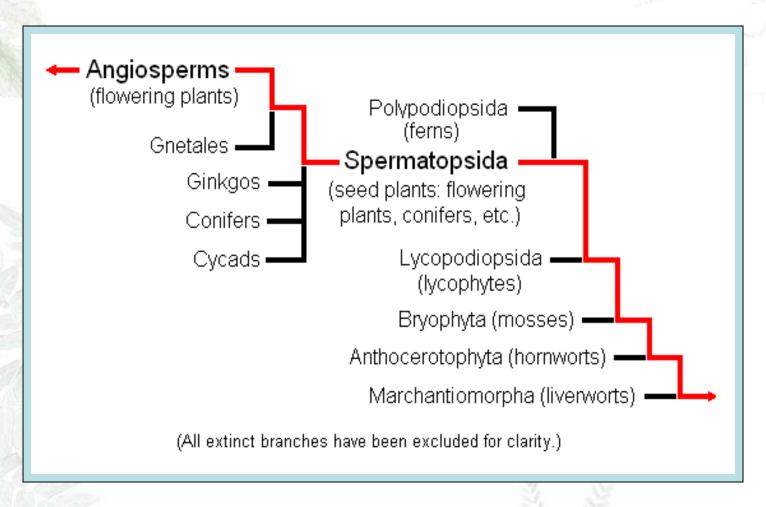






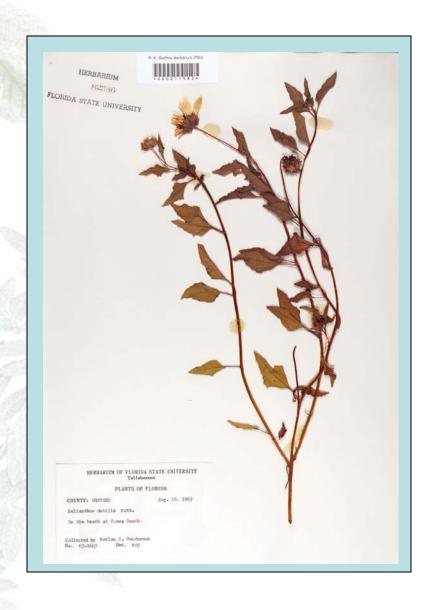






Link to the University of Arizona's Tree of Life.



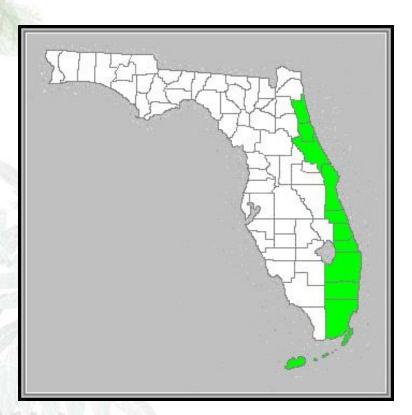


- The USDA NRCS, list a total of 62 species of the genus Helianthus L. in the United States.
- The Atlas of Florida
   Vascular Plants
   identifies 21 species of
   Helianthus L.
   occurring in Florida, 17
   of which are native.

R.K.Godfrey Herbarium (FSU) #41908 Liberty Co., 9/27/1982



# Species Distribution within Florida



(\*vouchered – indicates that a fully documented dried specimen has been deposited in an approved herbarium)

- Helianthus debilis, a perennial wildflower, is \*vouchered in approximately eleven counties in Florida, all of which are along the Atlantic coast. This plant is endemic to Florida.
- East Coast Dune
   Sunflower prefers the sandy soil of the coastal plain.

# Plant Structure and Yearly Cycle



Helianthus debilis, a herbaceous groundcover, behaves as an annual in areas that freeze, and as a perennial in freeze-free zones.

Its green leaves are deltoidshaped with a lightly toothed edge and hairs on the underside. Beach Sunflower readily selfseeds and sprouts early in the season.



Beach Sunflower has a taproot which in turn has numerous lateral roots. Together, they form an excellent system that securely anchors the plant on sand dunes of the windy coastal plains, and helps to stabilize the dunes. The large root system also serves as a reservoir for moisture during periods of drought.



As Beach Sunflower matures, it extends laterally along the ground in all directions from the central taproot. A mature plant can cover an area six to eight feet in diameter. Little wonder, then, that it is often used in mass plantings as a groundcover, while also serving as an excellent stabilizer for sandy soils.



Like many members of the Aster family, the flowers of Helianthus debilis are compound, having two major parts: a corolla that consists of several bright yellow rays which surrounds a disc containing many florets where pollination takes place. In this photo, several of the disk flowers have opened. These flowers attract many pollinators, including the delicate phaon crescent shown in the next photo.





In areas where it freezes, Helianthus debilis behaves like an annual and usually will die. However, this native wildflower is a prolific selfseeder, and numerous new plants will develop in the spring. Be prepared to thin them out or to relocate them to ensure sufficient space for the plants to grow as the season progresses.



# **Growing Conditions**



- Helianthus debilis prefers direct sun
- This plant does well in both calcareous and acidic, well-drained, sandy soils, and is salt tolerant.
- Strongly acidic to slightly alkaline soil 5.2 to 7.2 pH
- Good drought tolerance
- Hardiness: USDA Zone 8b: to -9.4 °C (15 °F)
   to USDA Zone 11: above 4.5 °C (40 °F)
- Flowering and seed production occur from spring into late fall and early winter.
- Height: 18 24 inches (45 60 cm.)



# Seed Collection and Propagation

Because *Helianthus debilis* is a profligate self-seeder the seeds can be easily collected by bagging or by deadheading the wilted flowers. The seeds don't need to be stratified and should be sown in late fall or after the last frost in the northernmost growing zones.

Beach Sunflower, is also commonly known as Eastern Dune Sunflower, and can be propagated using herbaceous or softwood cuttings. Take four-inch cuttings any time of the year, then remove all but the two terminal leafs. Plant the cutting in a soil mix rich in organics, with or without root hormones. Keep it in the shade and moist for several weeks before introducing the plant to direct sunlight.

#### Pollinators and Wildlife

As evidenced by the photos in this presentation, Helianthus debilis has numerous pollinators including bees, butterflies, beetles and true insects, and is a nectar source for many of these insects.

This plant's growth patterns form a tight canopy, affording protection to a wide range of small wildlife: insects, lizards, and small birds.





#### Maintenance and Care

Helianthus debilis is very easy to care for. It can be fertilized, but take care not to over-feed. A 10-5-10 fertilizer can be applied in mid-summer if desired.

Be careful not to overwater as this plant is very drought tolerant.



Given the right conditions, this attractive wildflower can grow prohibitively large and may need to be cut back. Try to cut the bottommost stems coming off the center of the plant.

#### **Presentation References**

Biological and genetic relationships

University of Arizona Tree of Life

United States distribution

**USDA** - Natural Resource Conservation Service

Florida distribution

Atlas of Florida Vascular Plants

Herbarium specimen

FSU Robert K. Godfrey Herbarium

Nectar Food Plants

Biospherenursery.com



#### Presentation References (cont.)

Growing conditions and general information

**IFAS** (University of Florida)

**Floridata** 

FNPS – Natives for Landscaping

FNPS.org This Link will take you to the profile for this plant on the FNPS website

• <u>Florida Plants</u> by zone and habitat, use your county name or zip-code to see native habitat classifications and appropriate plants.



For more in-depth study:

Native Florida Plants: Low Maintenance Landscaping and Gardening. Robert G. Haehle and Joan Brookwell. 2004 (revised edition). Taylor Trade Publishing. ISBN 1589790510.

A Gardener's Guide to Florida's Native Plants. Rufino Osorio. 2001. Gainesville: University Press of Florida. ISBN 0813018528.

Grafting, Budding, Cutting, Layering & Other Ways of Propagating Fruit Plants in Florida. 1995. Gainesville: Institute of Food & Agricultural Science. ISBN 0916287092.

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