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The benefits of revegetation with native plants have been widely published. The following is a summary of the advantages of replanting a shoreline:

- 1. Food source for wildlife.
- 2. Protective cover for small fish and other animals.
- 3. Source of nesting material for reptiles, birds, and small mammals.
- 4. Shade for fish and humans (cypress trees).
- 5. Erosion control and soil stabilization.
- 6. Aesthetics and landscaping appeal.
- 7. Animal attractor.
- 8. Nutrient uptake.
- 9. Plant competition for preventing encroachment of invasive exotics such as hydrilla.
- 10. Living surface for small insects and other invertebrates important to fisheries.

The plants listed in this document are species that can be used to provide one or more of the above. Below is a brief explanation of the terms used in this document:

Average Height: Typical height of the plant from substrate to top of leaves (not flowers).

Leaf Type: Shape of mature leaves.

Leaf Size: Length of mature leaves.

Flower Type: Arrangement and/or number of flowers per stem or stalk.

Flower Color: Color of the plant's flowers.

Flowering Season: Spring (April, May, June), summer (July, Aug, Sept),

fall (Oct, Nov, Dec), and winter (Jan, Feb, Mar).

Habitat: Most common areas where plant is found.

Wildlife Value: Animals that utilize the plant.

Distribution: Location within the state – South, Central, and North Florida.

Overwinter: Survivability, leaf drop, or leaf burn occurrence.

Common Uses: Reasons why plant is used - erosion control, landscape, fish habitat, nesting, etc.

Soil: Suggested planting substrate such as sand or muck.

Light: Shade or sun preference.

Salinity: Tolerance to brackish water (low – freshwater, medium – brackish,

high - estuaries).

Propagation: How a plant reproduces or spreads. Rhizomes are underground stems that produce daughter plants.

Pest Problems: Insect, small mammal or reptile damage, and grass carp if they have been stocked in the waterbody.

Growth Rate: Slow, medium, or fast growth.

Water Depth: Typical recommended water depth of planting (not the maximum depth a plant can survive). **Density:** Typical recommended spacing of plantings.

Planting: Planting suggestions to improve survivability.

Survivability: Low, medium or high.

Cost: Retail and wholesale cost per plant (does not include labor). Cost is dependent on the quantity, size, and time of year purchased. These cost figures are an average based on several sources checked in 2001-2002.

HIBISCUS

(*Hibiscus coccineus* (red) • *Hibiscus laevis* (white to pink) • *Hibiscus moscheutos* (white to cream) • *Hibiscus grandiflorus* (light-pink))

DESCRIPTION

Average Height: 5 to 6 ft Leaf Type: Ovate, some strongly lobed Leaf Size: 4 to 6" Flower Type: Single flower per leaf axil, numerous on plant Flower Color: Red. white or pink Flowering Season: Spring to summer Habitat: Marshes, edges of streams and lakes Wildlife Value: Shelter for small birds; butterfly attractor Distribution: Statewide Overwinter: Leaves and stems die back; resprout in spring Common Uses: Flowering shrub

PLANTING REQUIREMENTS

Soil: Sand to muck, prefers acid soilsLight: Medium to highSalinity: Low (except H. coccineus and H. grandiflorus, occasionally in brackish marshes)Propagation: Seeds (and cuttings)Pest Problems: NoneGrowth Rate: Medium to fastWater Depth: Moist soils and seasonal wet areasDensity: 5 ft apartPlanting: Trim branches to avoid leggy appearance and to promote bloom productionSurvivability: High (using small potted plants)Cost: Retail\$ 15.00\$ 4.00 - 6.003 galWholesale\$ 4.00 - 6.003 gal



HIBISCUS

Hibiscus coccineus (red) • *Hibiscus laevis* (white to pink) *Hibiscus moscheutos* (white to cream) • *Hibiscus grandiflorus* (light-pink)





BALD CYPRESS

(Taxodium distichum)

DESCRIPTION

Average Height: 60 to 80 ft Leaf Type: Tiny on green, feather-like branchlets Leaf Size: 1/4" to 3/8" long Flower Type: No flowers; seeds formed in small, round female cones Flower Color: Cones green to brown; pollen formed in long delicate cones Flowering Season: Pollen released in spring Habitat: Marshes, rivers, lakes Wildlife Value: Habitat for fish and other aquatic animals; birds nest in upper branches; wood ducks and mammals feed on seeds Distribution: Statewide Overwinter: Branchlets drop during late fall to early winter (one of a few deciduous conifers) Common Uses: Either along the shoreline or offshore; frequently grouped in clusters of 3 or more, good shade tree during spring through fall

PLANTING REQUIREMENTS

Soil: Sand to much Light: Medium to						
Salinity: Low to medium (brackish)						
Propagation: Seeds						
Pest Problems: None						
Growth Rate: Medium, about 1 to 2 ft/yr						
Water Depth: Upland to 36" of water						
Density: 10 ft apar	rt					
Planting: Grows well in dry (if watered frequently during establishment) to wet soil; don't plant in too deep						
of water to increase survivability (seeds must be unflooded to germinate)						
Survivability: High with small trees						
Cost: Retail	\$ 15.00	3 gal	5-6 ft			
	\$ 25.00	7 gal	6-8 ft			
	\$ 50.00	15 gal	8-10 ft			
Wholesale	\$ 4.00 - 5.35	3 gal	5-6 ft (100 minimum order)			
	\$ 14.00 - 15.00	7 gal	6-8 ft (100 minimum order)			
	\$ 35.00 - 40.00	15 gal	8-10 ft (100 minimum order)			



BALD CYPRESS

Taxodium distichum





GOLDEN CANNA

(Canna flaccida)

DESCRIPTION

Average Height: 3 to 4 ft Leaf Type: Lance shape Leaf Size: 12 to 18" long Flower Type: A few large flowers on a short spike Flower Color: Yellow Flowering Season: Mid spring to summer Habitat: Marshes, ponds, and lake margins Wildlife Value: Butterfly attractor Distribution: South, Central and North Florida (west to Franklin County) Overwinter: Hard freeze will brown upper leaves (lower leaves will remain green), but will not kill plant Common Uses: Ornamental plant with large, showy flowers producing seasonlong color

PLANTING REQUIREMENTS

Soil: Sand to muck **Light:** Medium to high Salinity: Low **Propagation:** Seeds and rhizomes Pest Problems: Insect (aphids) leaf damage, not a preferred grass carp plant Growth Rate: Fast Water Depth: Dry, moist soils to intermittent flooding **Density:** 18" apart Planting: Will survive in low sunlight, but requires full sun to produce blooms Survivability: High Cost: Retail \$ 6.00 1 gal Wholesale 0.25 - 0.45 bareroot (1000 minimum order) \$ 1.50 1gal (1000 minimum order)



GOLDEN CANNA

(Canna flaccida)





ALLIGATOR FLAG

(Thalia geniculata)

DESCRIPTION

Average Height: 6 to 8 ft Leaf Type: Lance shape Leaf Size: 1 to 2 1/2 ft long Flower Type: Panicled spikes Flower Color: Purple Flowering Season: Spring to summer Habitat: Marshes, rivers Wildlife Value: Habitat for aquatic animals; butterfly attractor; ducks and mammals feed on seeds Distribution: Statewide Overwinter: Dies back in winter; resprouts from rhizomes during spring Common Uses: Can be used in partial shade areas and as protective cover for wildlife

PLANTING REQUIREMENTS

Soil: Sand to muck **Light:** Low/medium to high Salinity: Low **Propagation:** Seeds and rhizomes Pest Problems: Insect (aphids and spider mites) leaf damage, not a preferred grass carp plant Growth Rate: Fast Water Depth: Moist soils and intermittent flooding **Density:** 3 ft apart Planting: Strong winds can cause some leaf damage in unprotected areas Survivability: High Cost: Retail \$ 4.50 1 gal Wholesale \$ 0.40 – 0.57 bareroot (1000 minimum order)



ALLIGATOR FLAG

(Thalia geniculata)





SOUTHERN BLUE-FLAG

(Iris virginica)

DESCRIPTION

Average Height: 2 to 2 1/2 ft Leaf Type: Ribbon shape, or strap-like Leaf Size: 2 to 2 1/2 ft long Flower Type: Single flower at a time on short spike Flower Color: Blue to blue-purple Flowering Season: Spring Habitat: Marshes, ponds and streams Wildlife Value: Habitat for small aquatic animals; butterfly attractor Distribution: Central and North Florida Overwinter: Evergreen Common Uses: Ornamental plant with showy flowers, especially when planted in dense groupings

PLANTING REQUIREMENTS

Soil: Sand to muck **Light:** Medium to high Salinity: Low **Propagation:** Seeds; rhizomes Pest Problems: Infrequent caterpillar and aphid damage; not a preferred grass carp plant Growth Rate: Medium Water Depth: Water's edge, moist soils to intermittent flooding **Density:** 1 to 2 ft apart Planting: Will survive in low sunlight, but requires full sun to produce blooms Survivability: High Cost: Retail \$ 3.50 1 gal Wholesale \$0.25 - 0.30 bareroot (1000 minimum order) \$1.75 – 2.00 1gal (1000 minimum order)



SOUTHERN BLUE-FLAG

(Iris virginica)





SWAMP LILY

(Crinum americanum)

DESCRIPTION

Average Height: 2 ft Leaf Type: Ribbon shape, or strap-like Leaf Size: 12 to 24" long Flower Type: 2 to 6 flowers on long stalk Flower Color: White Flowering Season: Spring to summer Habitat: Marshes, rivers Wildlife Value: Habitat for small aquatic animals; ducks and mammals feed on seeds Distribution: Statewide Overwinter: Hard freeze will cause leaves to turn yellow and burn, but will not kill plant Common Uses: Along shoreline as a border plant; showy fragrant flowers

PLANTING REQUIREMENTS

Soil: Sand to muck						
Light: Low to medium						
Salinity: Low to med	ium (brackish)					
Propagation: Seeds						
Pest Problems: None, not a preferred grass carp plant						
Growth Rate: Medium						
Water Depth: Edge to 3" of water, seasonal wet areas						
Density: 2 ft apart	,					
Planting: Make sure leaves are above water and not in an area flooded all year; in nature, it's usually found						
in partial or deep shade						
Survivability: High						
Cost: Retail	\$ 4.00 1 ga	al				
Wholesale	\$ 0.40 – 0.50 bare		(1000 minimum order)			
	\$ 1.50 - 2.00 1 ga		(1000 minimum order)			
	\$ 3.50 - 5.00 3 ga		(1000 minimum order)			
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(Crinum americanum)







(Sagittaria latifolia)

DESCRIPTION

Average Height: 2 1/2 ft Leaf Type: Arrowhead shape Leaf Size: 7 to 10" long Flower Type: In whorls of 3 flowers on tall flowering stalk Flower Color: White Flowering Season: Spring to fall Habitat: Marshes, rivers, lakes Wildlife Value: Habitat for fish and other aquatic animals; butterfly attractor; waterbirds and mammals feed on seeds and tubers Distribution: Statewide Overwinter: Hard freeze will brown margins of leaves, but will not kill plant Common Uses: Along edge of shoreline, usually landward of arrowhead and pickerelweed

PLANTING REQUIREMENTS

Soil: Sand to muck
Light: Low to high
Salinity: Low
Propagation: Seeds and rhizomes
Pest Problems: Leaf spots and aphid damage occasionally; not a preferred grass carp plant
Growth Rate: Medium
Water Depth: Edge to 6" of water
Density: 2 ft apart
Planting: Make sure leaves are above water; plant landward of Sagittaria lancifolia
Survivability: High
Cost: Retail \$ 3.50 1 gal
Wholesale \$ 0.35 - 0.55 bareroot (1000 minimum order)



DUCK POTATO

(Sagittaria latifolia)





ARROWHEAD

(Sagittaria lancifolia)

DESCRIPTION

Average Height: 3 ft Leaf Type: Lance shape Leaf Size: 9 to 12" long Flower Type: In whorls of 3 flowers on tall flowering stalk Flower Color: White Flowering Season: Spring to fall Habitat: Marshes, rivers, lakes Wildlife Value: Habitat for fish and other aquatic animals; butterfly attractor; ducks and mammals feed on seeds and tubers Distribution: Statewide Overwinter: Hard freeze will brown margins of leaves, but will not kill plant Common Uses: Along shoreline, it's light-green leaves and white flowers are a good contrast to the darkgreen leaves and purple flowers of pickerelweed

PLANTING REQUIREMENTS

Soil: Sandy to muck **Light:** Medium to high Salinity: Low to medium (brackish) **Propagation:** Seeds and rhizomes Pest Problems: Weevils infrequently feed on flowering stalks; yellowing of leaves during late fall; not a preferred grass carp plant Growth Rate: Medium Water Depth: 6 to 12" of water **Density:** 1 to 2 ft apart Planting: Make sure leaves are above water; tends to grow in slightly shallower water than pickerelweed Survivability: High Cost: Retail \$ 2.50 1 gal 0.25 - 0.55 bareroot (1000 minimum order) Wholesale \$ 1.25 4" pot (1000 minimum order)





(Sagittaria lancifolia)





PICKERELWEED

(Pontederia cordata)

DESCRIPTION

Average Height: 3 ft Leaf Type: Lance to heart shape Leaf Size: 7 to 10" long Flower Type: Spike Flower Color: Purple Flowering Season: Spring to fall Habitat: Marshes, rivers, lakes Wildlife Value: Habitat for fish and other aquatic animals; stems provide surface for apple snail attachment; butterfly attractor; ducks and mammals feed on seeds Distribution: Statewide Overwinter: Hard freeze will brown leaves, but will not kill plant Common Uses: Along shoreline as a border plant, provides good erosion control

PLANTING REQUIREMENTS

Soil: Sand or muck					
Light: Medium to high					
Salinity: Low					
Propagation: Seeds and rhizomes					
Pest Problems : Not a preferred grass carp plant; insect (borer and weevil) damage on leaves and stems is not					
uncommon, but usually will not kill plant					
Growth Rate: Medium					
Water Depth: 6 to 18" of water					
Density: 1 to 2 ft apart					
Planting: Make sure leaves are above water; tends to grow in slightly deeper water than arrowhead					
Survivability: High					
Cost: Retail \$ 2.25 1 gal					
Wholesale $\$ 0.25 - 0.45$ bareroot (1000 minimum order)					
\$ 1.25 4" pot (1000 minimum order)					





(Pontederia cordata)





SAND CORD GRASS

(Spartina bakeri)

DESCRIPTION

Average Height: 4 1/2 ft Leaf Type: Rolled or curled grass leaves Leaf Size: 10 to 30" long Flower Type: Narrow cluster of small spikes Flower Color: Bronze Flowering Season: Summer to fall Habitat: Marshes, lakes Wildlife Value: Habitat for small animals; waterfowl and songbirds feed on seeds Distribution: Statewide Overwinter: Hard freezes may cause some leaf browning Common Uses: Along shoreline in fresh and brackish waters; good erosion control

PLANTING REQUIREMENTS

Soil: Sand to muck					
Light: Medium to high					
Salinity: Low to medium (brackish to saline tidal marshes)					
Propagation: Seeds and rhizomes (division)					
Pest Problems: None					
Growth Rate: Medium					
Water Depth: Dry to moist soils; can survive in dry soils and extended flooded areas for long periods of					
time					
Density: 3 ft apart					
Planting: Establish at or above shoreline in moist soils					
Survivability: High					
Cost: Retail \$3.50 1 gal					
\$ 8.50 3 gal					
Wholesale \$ 0.35 bareroot (1000 minimum order)					
1.40 - 1.75 1 gal (1000 minimum order)					
\$ 3.50 - 4.00 3 gal (1000 minimum order)					



SAND CORD GRASS

(Spartina bakeri)









(Juncus effusus)

DESCRIPTION

Average Height: 3 to 4 ft Leaf Type: Leaves inconspicuous; stems green, round, tubular Leaf Size: Blades absent; stems elongated with stiff green bract rising above flower cluster Flower Type: Cluster of spikelets Flower Color: Greenish-brown Flowering Season: Summer Habitat: Marshes Wildlife Value: Habitat (shelter and nesting) for aquatic mammals and birds; ducks and small mammals feed on seeds Distribution: Statewide Overwinter: Evergreen Common Uses: Along shoreline in fresh and brackish water areas; good erosion control plant

PLANTING REQUIREMENTS

Soil: Sandy to muck					
Light: Medium to high					
Salinity: Low to medium (brackish)					
Propagation: Seeds and rhizomes					
Pest Problems: None; not a preferred grass carp plant					
Growth Rate: Medium					
Water Depth: Moist soils; can survive extended flooding					
Density: 3 ft apart					
Planting: Can be sectioned into individual plants or clumps					
Survivability: High					
Cost: Retail \$ 5.00 1 gal					
Wholesale \$ 0.25 - 0.30 bareroot (1000 minimum order)					
\$ 1.50 – 1.80 1 gal (1000 minimum order)					





(Juncus effusus)







SPIKERUSH

(Eleocharis cellulosa & interstincta)

DESCRIPTION

Average Height: 2 1/2 ft Leaf Type: Leaves inconspicuous; stems green, round, tubular Leaf Size: Blades are absent, stems elongated Flower Type: Small short spike with scales, not showy Flower Color: Yellow-brown Flowering Season: Spring to fall Habitat: Marshes, lakes Wildlife Value: Habitat for fish and other aquatic animals; ducks and mammals feed on seed head Distribution: Statewide Overwinter: Yellowing of stems Common Uses: Adds diversity to shoreline plants and attracts wildlife

PLANTING REQUIREMENTS

 Soil: Sand to muck

 Light: Medium to high

 Salinity: Low to medium (brackish)

 Propagation: Seeds and rhizomes

 Pest Problems: None; not a preferred grass carp plant

 Growth Rate: Medium

 Water Depth: 6 to 12" of water

 Density: 2 ft apart

 Planting: Prefers shallow water areas, clumps soon send out rhizomes

 Survivability: High

 Cost: Retail
 \$ 2.50 1 gal

 Wholesale
 \$ 0.25 to 0.45 bareroot (1000 minimum order)





(Eleocharis cellulosa & interstincta)





PASPALIDIUM GRASS

(Paspalidium geminatum)

DESCRIPTION

Average Height: 3 ft Leaf Type: A grass; leaves with sheaths and blades Leaf Size: 8 to 12" long Flower Type: Spikelet seed head Flower Color: Green Flowering Season: All year Habitat: Marshes, rivers, and lakes Wildlife Value: Excellent habitat for fish and other aquatic animals Distribution: Statewide Overwinter: Stems and leaves may brown in hard freeze Common Uses: Planted in shallows beyond shoreline plants such as pickerelweed to improve fisheries

PLANTING REQUIREMENTS

Soil: Sand to muck Light: Medium to high Salinity: Low **Propagation:** Seeds and rhizomes Pest Problems: None, not a preferred grass carp plant Growth Rate: Medium Water Depth: 12 to 18" of water **Density:** 2 ft apart Planting: Leaves must be above water; place rhizomes on top or slightly below soil; weigh down if necessary in windy areas Survivability: Medium to high Cost: Retail \$ 3.00 1 gal Wholesale 0.45 - 0.55 2" pot (1000 minimum order)



PASPALIDIUM GRASS

(Paspalidium geminatum)







(Panicum hemitomon)

DESCRIPTION

Average Height: 3 ft Leaf Type: A grass; leaves with sheaths and blades Leaf Size: 7 to 11" long Flower Type: Spikelet seed head Flower Color: Green Flowering Season: Summer Habitat: Marshes, rivers, lakes Wildlife Value: Excellent habitat for fish and other aquatic animals, especially invertebrates; seeds fed upon by songbirds Distribution: Statewide Overwinter: Stems and leaves may brown in hard freeze Common Uses: Planted in shallows beyond shoreline plants such as pickerelweed to improve fisheries

PLANTING REQUIREMENTS

Soil: Sand to muck							
Light: Medium to high							
Salinity: Low	Salinity: Low						
Propagation: Seeds and rhizomes							
Pest Problems: None, not a preferred grass carp plant							
Growth Rate: Medium							
Water Depth: 12 to 18" of water							
Density: 2 ft apart							
Planting: Make sure	leaves are above water and rhizomes are firmly in soil						
Survivability: Medium to high							
Cost: Retail	\$ 2.25 1 gal						
Wholesale	\$ 0.25 - 0.40 bareroot (1000 minimum order)						
	\$ 0.45 - 0.55 2" pot (1000 minimum order)						
	\$ 0.75 - 0.80 4" pot (1000 minimum order)						





(Panicum hemitomon)





JOINTED FLAT SEDGE

(Cyperus articulatus)

DESCRIPTION

Average Height: 5 ft Leaf Type: Leaves inconspicuous; stems green, round, tubular Leaf Size: Blades are absent, stems elongated Flower Type: Cluster of spikelets Flower Color: Light-brown Flowering Season: Summer to fall Habitat: Marshes, rivers, lakes Wildlife Value: Habitat for fish and other aquatic animals; songbirds feed on seeds Distribution: Statewide Overwinter: Some browning of stems Common Uses: Offshore, planted in deeper water

PLANTING REQUIREMENTS

Soil: Sand to muck Light: Medium to high Salinity: Low to medium (brackish) **Propagation:** Seeds and rhizomes Pest Problems: None; not a preferred grass carp plant Growth Rate: Medium Water Depth: 18 to 30" of water **Density:** 3 ft apart **Planting:** Use small plants versus large mature plants; place between shoreline plants and bulrush/water lily plants; stems are frequently bent over mid-way to prevent whipping of plants in windy areas; new stems will sprout. Survivability: High Cost: Retail \$ 4.00 1 gal Wholesale 0.60 - 0.85 bareroot (1000 minimum order)



JOINTED FLAT SEDGE

(Cyperus articulatus)



BULRUSH

(Scirpus californicus & validus)

DESCRIPTION

Average Height: *S. californicus* – 6 to 9 ft *S. validus* – 4 to 5 ft Leaf Type: Leaves inconspicuous. Stems green, round tubular, tall Leaf Size: Reduced sheaths with blades absent. Flower Type: Spikelets, not showy Flower Color: Brown Flowering Season: Spring to fall Habitat: Marshes, rivers, lakes Wildlife Value: Excellent habitat for fish and other aquatic animals; stems provide surface for apple snail and invertebrate attachment; ducks, songbirds and mammals feed on seeds Distribution: Statewide Overwinter: Generally evergreen Common Uses: Plant offshore in deeper water to improve fisheries and for songbird/wading bird habitat

PLANTING REQUIREMENTS

Soil: Sandy or muck **Light:** Medium to high **Salinity:** Low to medium (brackish) **Propagation:** Seeds and rhizomes Pest Problems: At times insect damage can be heavy, especially during early fall; not a preferred grass carp plant Growth Rate: Medium Water Depth: 24 to 36" of water **Density:** 3 ft apart **Planting:** Use small plants versus large mature plants; stems are frequently bent over mid-way to prevent whipping of plants in windy areas; weigh down plants in deeper water; seeds can be spread in shallow muddy areas Survivability: Medium Cost: Retail \$ 2.60 1 gal Wholesale 0.35 - 0.45 bareroot (1000 minimum order)





(Scirpus californicus & validus)





YELLOW WATER LILY

(Nymphaea mexicana)

DESCRIPTION

Average Height: Floating leaves Leaf Type: Roundish heart shapes Leaf Size: 6" to 8" wide Flower Type: Single flower per stem Flower Color: Yellow Flowering Season: Summer Habitat: Marshes, lakes and quiet streams Wildlife Value: Habitat and shade for fish and other aquatic animals; mammals feed on tender stems Distribution: Statewide Overwinter: Perennial, majority of the leaves die off; overwintering rhizomes or stolons develop in late fall and occasionally produce small leaves. Common Uses: Deep water plant used to improve fisheries, showy yellow blooms attractive

PLANTING REQUIREMENTS

Soil: Sand to muck
Light: Medium to high
Salinity: Low
Propagation: Seeds and rhizomes
Pest Problems: Insect leaf damage; turtles and small mammals feed on the leaves; not a preferred grass carp plant
Growth Rate: Medium
Water Depth: 24" to 36" of water
Density: 5 ft apart
Planting: Place rhizome cluster just below soil (trim off stolons)
Survivability: Medium
Cost: Retail \$ 16.00 1 gal (multi-leaf)
Wholesale \$ 2.50 - 3.00 bareroot (1000 minimum order)



YELLOW WATER LILY

(Nymphaea mexicana)





FRAGRANT WATER LILY

(Nymphaea odorata)

DESCRIPTION

Average Height: Floating leaves Leaf Type: Large, roundish heart shapes Leaf Size: 10 to 18" wide Flower Type: Single flower per stem Flower Color: White Flowering Season: Spring to fall Habitat: Marshes, lakes, and quiet streams Wildlife Value: Habitat and shade for fish and other aquatic animals; invertebrates attach on underside of leaves; ducks and mammals feed on seeds and stems Distribution: Statewide Overwinter: Evergreen Common Uses: Deep water plant for fisheries; showy sweet-scented flowers aesthetically pleasing

PLANTING REQUIREMENTS

Soil: Sand to muck					
Light: Medium to high					
Salinity: Low					
Propagation: Seeds and rhizomes					
Pest Problems: Insect and fungal leaf damage; ducks, turtles and small mammals feed on the leaves; not a					
preferred grass carp plant					
Growth Rate: Medium					
Water Depth: 30 to 36" of water					
Density: 5 ft apart					
Planting: Use a 18 to 24" long rhizome for planting, place on soil, weight down; leaf tear damage may occur					
in windy areas					
Survivability: High					
Cost: Retail \$ 16.00 1 gal					
Wholesale $\$ 0.90 - 1.20$ bareroot (1000 minimum order					



FRAGRANT WATER LILY

(Nymphaea odorata)







SPATTERDOCK

(Nuphar luteua/advena)

DESCRIPTION

Average Height: Floating leaf or extending several inches above water surface Leaf Type: Heart shaped, longer than wide Leaf Size: 10 to 13" long Flower Type: Single, ovoid shape flower per stem Flower Color: Yellow Flowering Season: Late winter to summer Habitat: Marshes, rivers, lakes Wildlife Value: Habitat and shade for fish and other aquatic animals; waterbirds feed on seeds Distribution: Statewide Overwinter: No freeze damage (see pest problem below) Common Uses: Deep water plant; good plant for fisheries

PLANTING REQUIREMENTS

Soil: Sand to muck Light: Medium - high Salinity: Low **Propagation:** Seeds and rhizomes Pest Problems: Heavy insect damage to leaves and upper stems during winter; not a preferred grass carp plant Growth Rate: Fast in muck Water Depth: 30 to 36" of water **Density:** 5 ft apart Planting: Use small plant with submersed leaves or use 8 to 12" length rhizome for planting; place on soil, weigh down, leaves may die off soon after planting with new sprouts occurring in several weeks Survivability: High Cost: Retail \$ 12.00 1 gal Wholesale \$ 1.00 – 1.10 bareroot (1000 minimum order)



SPATTERDOCK

(Nuphar luteua/advena)





TAPE-GRASS, EEL-GRASS

(Vallisneria americana)

DESCRIPTION

Average Height: Plants submersed, 6 inches tall to several feet (horizontal length in flowing water) Leaf Type: Ribbon shape Leaf Size: 6 inches to several feet (in flowing water) Flower Type: Single flower per stalk; only female flowers seen at surface Flower Color: White, tiny green tube Flowering Season: Spring to summer Habitat: Rivers, lakes Wildlife Value: Excellent habitat for fish and other aquatic animals including invertebrates; waterfowl feed on leaves and flowers Distribution: Statewide Overwinter: Evergreen Common Uses: Excellent submersed species for fisheries; good competitor to invasive species such as hydrilla; reduces turbidity from sediments

PLANTING REQUIREMENTS

Soil: Sand to muck Light: Low to high Salinity: Low to medium (brackish) Propagation: Seeds, rhizomes and winter buds Pest Problems: Not a preferred grass carp plant; turtles feed on leaves Growth Rate: Medium Water Depth: 12" to 36" of water **Density:** 2 ft apart **Planting:** Plant in shallow water for best results; fence in area to prevent turtles from eating leaves; plant winter vegetative buds by burying them into the sediment 2 to 3" deep; make sure filamentous algae doesn't cover water surface and shade out eel-grass Survivability: Low Cost: Retail \$1.00 bareroot Wholesale 0.25 - 0.30 bareroot (1000 minimum order)



TAPE-GRASS, EEL-GRASS

(Vallisneria americana)



