Coastal Georgia Invasive Species Management Area

AL DEST

Coastal Invasive Species Manage

• 2011 – Started Phragmites australis management (~6 Species

Partner Agencies

Feorgia Ports

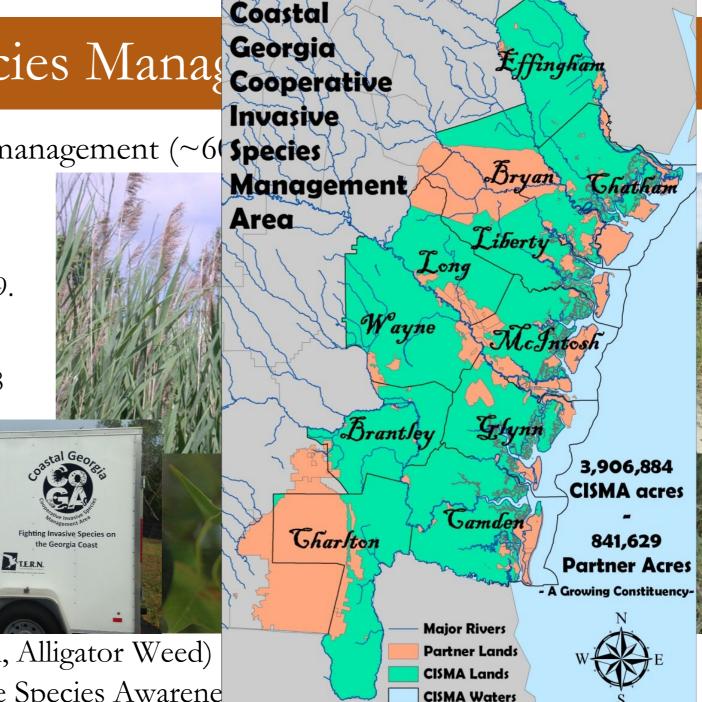
Georgia EDDMapS

- 2012 Started Coastal GA CISMA
 - <u>www.coastalgeorgiacisma.org</u>
 - NFWF funding 100K total
 - 6 years of SCA interns 2013-2017, 2019.
 - Additional Grants (TERN)
 - Trailer with equipment
 - AmeriCorps NCCC 2012,13, 15, 16, 18
- Focal Species
 - Phragmites
 - Water Hyacinth
 - Sand Pine
 - Chinese Tallow
 - Salt Cedar
 - Beach Vitex
- Biocontrol (Air potato, Water hyacinth, Alligator Weed)

GEORGIA

MAREX

• Outreach (Coast Fest, National Invasive Species Awarene



Grass – P1

Common Reed (*Phragmities australis*)

ID

• Tall, grass over 15ft, gray green leaves. Dense fluffy flower heads July-Oct.

Origin

- Eurasia and Africa
- introd. late 1700s in ballast material

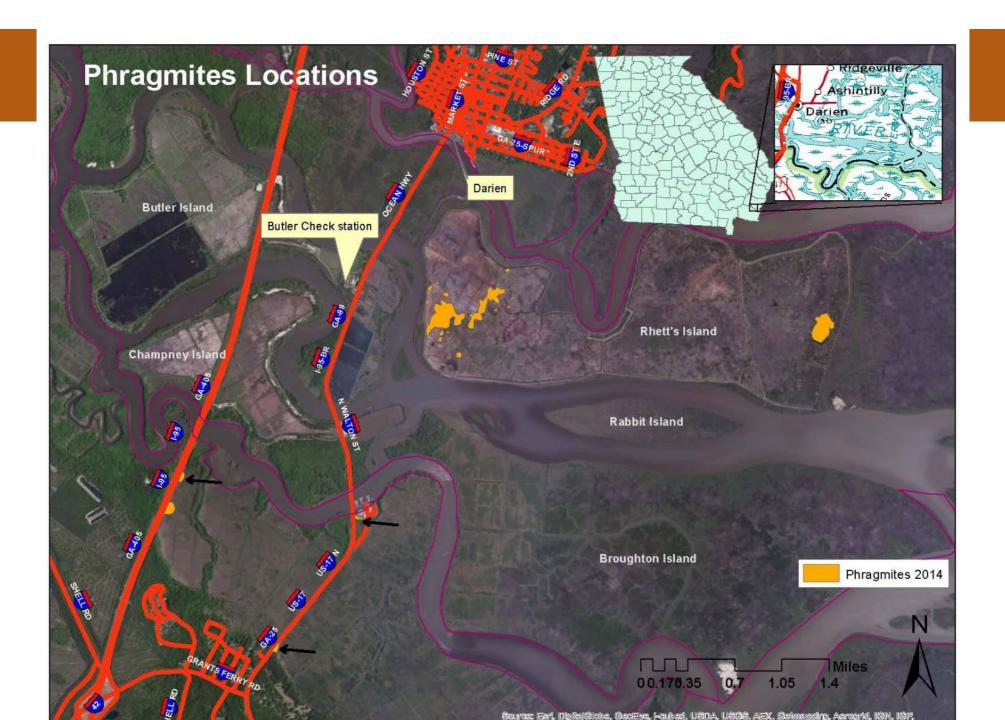
Ecology

- Invades marsh communities, crowding out native plants, changing hydrology, altering wildlife habitat, and increase fire hazard.
- Create a monoculture
- Spreads by seed and root fragments.

Management

• Cut stem- Imazapyr 10%, - Aerial 64-96 oz/acre, or Imazamox





Aquatic – P1

Water Hyacinth (Eichhornia crassipes)

ID

• Free floating, waxy oval leaves attached to spongy bulbous petioles, very showy blue-purple flowers.

Origin

• South America

• introd. 1884 at the Cotton States Exposition in New Orleans

Ecology

- Invades lakes, pond, rivers, marshes.
- Reproduces vegetatively
- Form dense floating mats (pop can double in 2 weeks)
- Mats restrict light, affecting submersed plants, aquatic invertebrates, depletes oxygen levels.

Management

- Foliar Imazapyr 1-2 pints/acre; 2, 4-D; biocontrol leaf hopper
- Physical removal



Water Hyacinth

Trees – P1

Sand Pine (Pinus clausa)

ID

• Evergreen, 2-3 in long fascicles of 2, slightly twisted yellow green

Origin

- Native to Florida
- planted on sandhills in Georgia in replacing Longleaf
 Pine/scrub oak communities

Ecology

- Survive in poor, infertile soils.
- Grown in rows shades out groundcover
- Alters habitat for native species like gopher tortoise, indigo snakes, etc.

Management

- Hack and Squirt Triclopyr or Imazapyr (Aq) 20-25%
- Cut down below lowest branch
- Girdle below lowest branch



Trees – P1

Chinese Tallow (Triadica sebifera)

ID

• Deciduous, heart shaped leaves, yellow to red fall color

Origin

- China
- introd. to South Carolina/Georgia in 1770s
- Then Gulf Coast 1900s, USDA seed oil 1920- 1940

Ecology

- Invades wet areas (fresh and saline) and upland sites, disturbed and mature communities
- Alter soil chemistry
- 100,000 seeds/yr/tree disperse by birds and water viable 2-7yrs
- Plants 3yr old produce viable seed, reproductive for 60yrs

Management

- Hack and Squirt Triclopyr or Imazapyr (Aq) 20-25%
- Aerial Imazamox 64-96 qt per acre.



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Tree / Shrub – P1

Salt Cedar (Tamarix ramosissima)

ID

• Deciduous, gray green scale-like leaves. Showy flowers (spring),.

Origin

- Eurasia and Africa
- introd. Mid 1800s as an ornamental in the West

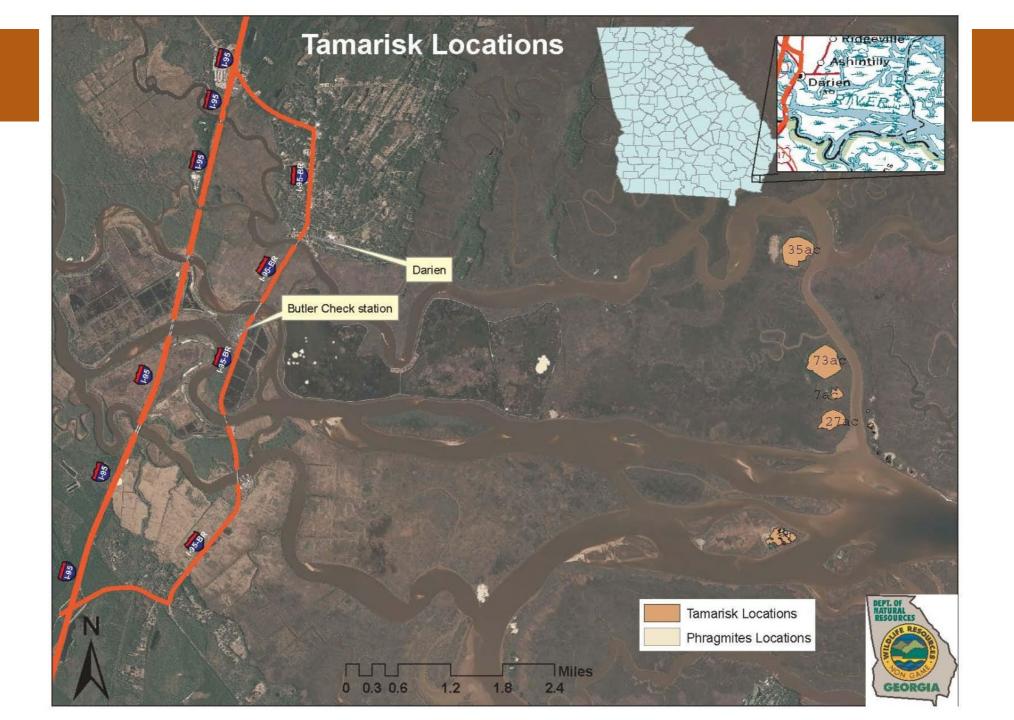
Ecology

- Invades dredge spoil islands, marsh hammock edges, causeways.
- It can crowd out native riparian species
- diminish early successional habitat
- reduce water tables and interferes with hydrologic process.

Management

Girdle – Triclopyr or Imazapyr (Aq) – 20-25% Aerial – Imazapyr (Aq) 64-96 qt per acre.





Shrub – P2

Beach Vitex (Vitex rotundifolia) P2; NA; NA,

ID

 Deciduous, oval, grey-green, semi-waxy leaves, eucalyptus smell when crushed. Showy purple flowers (summer).
 Purple/black berries. Sprawl > 60ft

Origin

- Pacific Rim
- introd. 1980 (1960?) beach stabilization

Ecology

- Invades dune systems and crowds out native species.
- May inhibit sea turtle nesting and trap hatchlings.
- Kudzu of the Beach

Management

• Cut Stem/Hack & Squirt – (10% Glyphosate with 1.5-3% Imazapyr and 2% Surfactant) or (25% Triclopyr)





Other Biocontrol (Alligator weed flea beetle, Air potato beetle)





Air potato beetle





