Cogongrass

Imperata cylindrica (L.) Beauv.

Poaceae

Biology

- Native to southeast Asia
- Infests nearly 500 million acres worldwide, on every continent, except Antarctica
- Tropical and subtropical areas, limited spread to northern temperate regions
- Accidental (1911 – Mobile, AL) and intentional (1921 – Mississippi, 1930 - Florida) introductions

Background

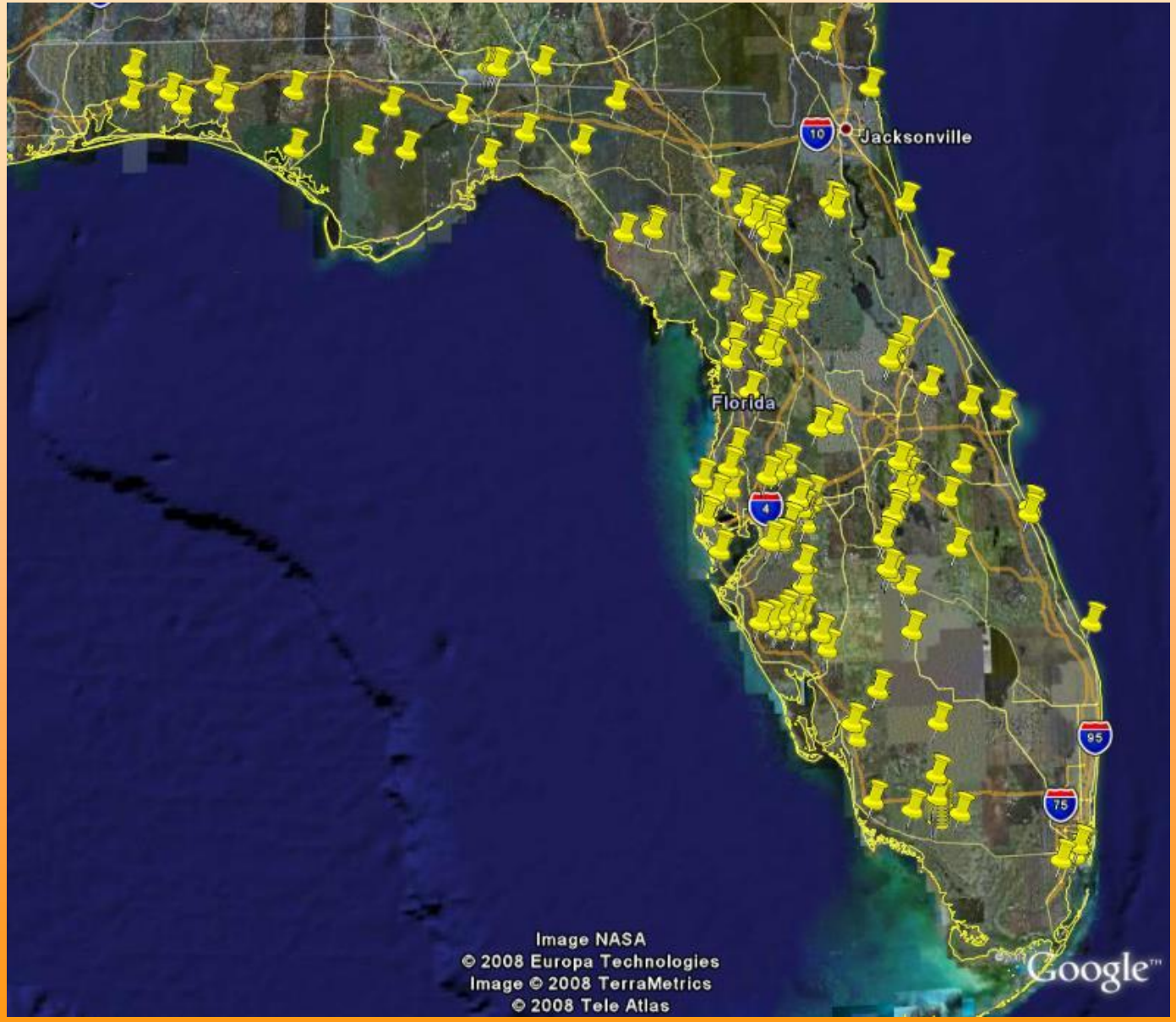
Economic Uses

- Cultivated as a forage in central and north Florida
- Poor nutritional quality

Distribution

- Found throughout much of Florida
- Commonly found in disturbed areas, upland forests, rights-of-way, pine plantations, mining sites and abandoned areas
- Highly adapted to poor soils, drought, pyrogenic ecosystems

Cogongrass Distribution in Florida



Impacts

- Category 1 invasive species (FLEPPC)
  - Very aggressive spread into undisturbed sites
- Strong competitor, forms large monotypic stands, alters ecosystems due to fire adaptation (frequency and intensity)
- Becoming a major problem in rangeland
- Allelopathy, deterring growth of neighboring plants

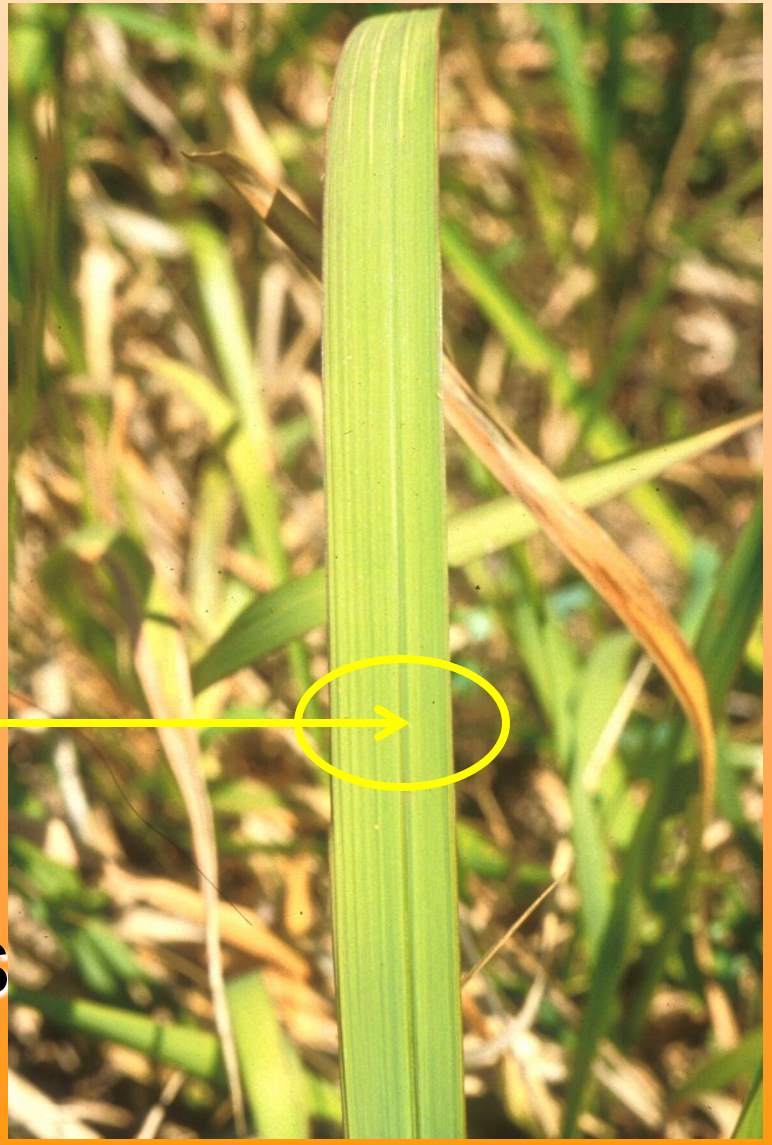
Identification

Mature Plant

- Perennial grass, 2 to 6 feet tall
- Extensive rhizome system
- Successful in low light environments
- Forms large monocultures

Leaves

- Leaf blades - 2 to 6 feet long, ½ to ¾ inch wide
- Leaves originate from ground level, rhizome
- Prominent, off-center midrib
- Finely serrated margins, accumulates silica



Panicle

- Flowers in spring or in response to stress drought, fire
- Long, fluffy-white seedheads
- Seeds extremely small, plume of long hairs – wind dispersed

Management

Preventative

Cultural

Mechanical

Biological

Chemical

Preventative

1. Remove existing plants, including rhizomes before seeds are produced
2. Prevent movement of plant material, such as rhizome contaminated fill dirt, into areas not infested with cogongrass

Cultural

1. Programs to educate farmers, ranchers and the general public about the problems associated with cogongrass and proper identification

Biological

1. Limited success with natural pests
2. Isolated pathogens, but no effective control

Mechanical

1. Small infestations can be removed with repeated, aggressive tillage
   - Limited to open (non-forested) sites
   - Deep plow or disk, several times during season
   - Desiccates rhizomes & exhaust food reserves
   - Cut to a depth of at least 6 inches
2. Burning effective in removing above ground biomass, may enhance chemical control measures – but will not provide control!!

Chemical

1. Broadcast applications for large areas
   - ✓ Glyphosate at 2 to 4 lbs-ai/A
   - ✓ Imazapyr at 0.5 to 1.0 lbs-ai/A
2. Spot treatment for smaller areas
   - ✓ Glyphosate – 2 to 3% solution
   - ✓ Imazapyr – 0.5 to 1% solution
3. Use surfactant at 0.25%
4. *Adhere to planting restrictions for imazapyr, may cause residual damage*


Soil Activity!!

Integrated

1. For best results combine:
   - Burning
   - Tillage (mechanical disturbance)
   - Chemical applications
2. Burn or mow before herbicide application
   - Remove excess thatch and older leaves
   - Initiates regrowth from rhizomes, reduces rhizome biomass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