

Coastwide Survey of Marsh Dieback in Georgia

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Study Initiated: summer 2003

Anticipated Completion Date: autumn 2003

Study Site Location(s): 18 sites in the 6 coastal Georgia counties

Keywords: Elevation, Fauna, *Juncus*, Nutrients, Salinity, *Spartina*, Sediment, Soil chemistry, Water chemistry

Project Type: Descriptive

Project Outline:

Specific Aims: To look for associations between measured properties and the presence of dieback

Methodology

4 healthy, 4 dieback quadrats (0.5 m²) were set up at each site, and measurements were taken of :

- Plant species, height, stem density
- Fauna: Littoraria, Uca, Geukensia
- Porewater salinity, pH, Eh, temperature
- % sand, silt, clay; % organic matter

After assigning qualitative categories to each factor, associations were sought among:

- Snail density
- Dieback patterns (creebank, berm, upland, midmarsh)
- Dieback severity
- Elevation
- Proximity to freshwater
- Upland influence
- Hydrologic barriers

Results to Date

There were no differences in parameters between healthy and dieback sites except for the vegetation.

Lessons Learned

Publications, reports, or web-accessible materials

Suggested citation: Georgia Coastal Research Council, 2004. Proceedings of the Marsh Dieback Workshop, held February 3-4, 2004, Savannah Georgia.