

An underwater photograph of eelgrass (Zostera marina) in Long Island Sound. The image shows several tall, thin, green stems rising from the seabed, with clusters of long, narrow leaves at the top. The water is clear and light-colored, and the sun is visible as a bright spot in the background, creating a lens flare effect.

Long Island Sound Eelgrass Collaborative Eelgrass
(*Zostera marina* L.) Seed Harvest, Processing, and
Storage Guidance

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What this guidance represents:

- **Protocols that have been adapted over more than 25 years to support CCE's eelgrass restoration work around Long Island.**
- **One of many guidance documents that can be used as reference and starting point for practitioners developing their own eelgrass, seed-based restoration program.**
- **Suggestions on where there may be gaps in our knowledge that, if pursued, may significantly improve the success rates of eelgrass seed-based restoration.**

What this guidance is not:

- **Protocols that will not continue to adapt with changing conditions and expanding knowledge.**
- **A comprehensive guidance of all of the methods and protocols that are currently being used in eelgrass, seed-based restoration.**

Where do we need more work:

1. Donor Meadow Assessment/Monitoring

- Collaborative development of assessment protocols for collection of comparable data
- Establishment of thresholds for propagule harvest from individual donor meadows

2. Eelgrass Seed Processing

- Develop methods that allow eelgrass seed-based restoration accessible to practitioners with limited resources

3. Eelgrass Seed Storage

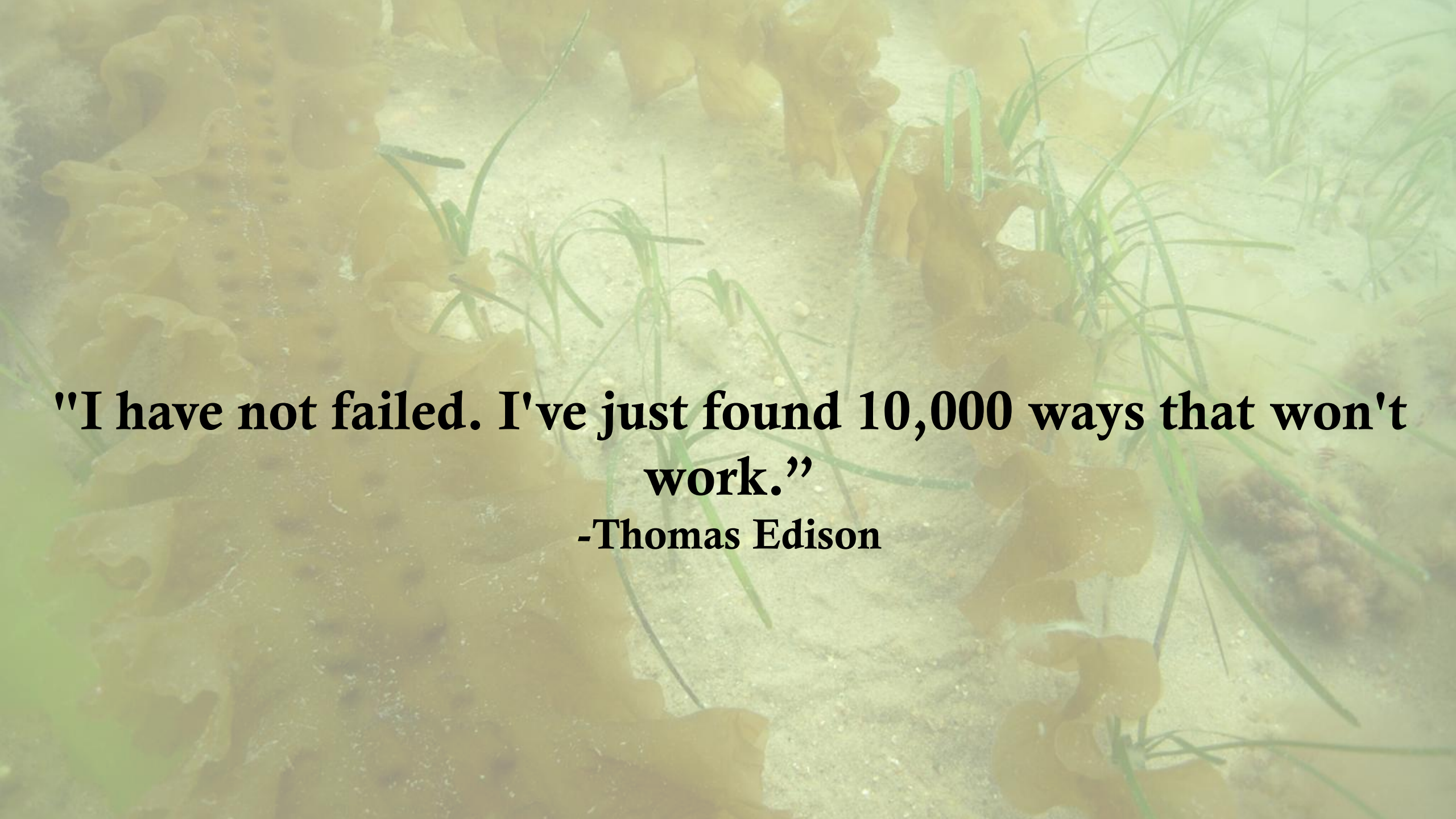
- Long-term storage
 - Maintenance of seed dormancy
 - Preservation of seed vigor
- Pathogen Control
 - Alternatives to copper sulfate
 - Seed sterilization for seed transfer

4. Germination/Viability Testing

- Standardization of testing method(s)
- Seed priming methods

Work that CCE will be pursuing:

- 1. Evaluation of donor meadow assessment protocols**
- 2. Development of low-cost, minimal infrastructure flower shoot/seed processing methods and design of alternative equipment**
- 3. Experimentation with various seed storage techniques**
- 4. Germination and viability testing experiments**

An underwater photograph showing a sandy seabed with patches of green seagrass and large, brownish, leafy seaweed. The water is slightly hazy, giving the scene a soft, natural feel.

"I have not failed. I've just found 10,000 ways that won't work."

-Thomas Edison