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A Deep Dive into Marine Mycology

We explore marine fungal biodiversity, ecology and applications in megatidal Nova Scotia and identify species of interest for saltmarsh restoration. Fungi are key decomposers and food for marine invertebrates, while other salt tolerant fungi form vital symbioses with salt marsh plant roots. We interrogate substrates such as sediment, algae, seagrasses, submerged wood and *Spartina* for fungi using culture-based and metagenomic methods. Tidal mesocosm experiments document roles of fungi in coldwater coastal habitats including carbon sequestration, helping us integrate fungi into our understanding of coastal ecosystem processes.