Causes and Consequences of Changes in Marine Biodiversity: The Critical Importance of Rare Cornerstone Species

New England rocky shores are characterized by a diverse assemblage of plants and sessile animals that provide food and habitat for other organisms.

Diverse plots contain an average of ~8 different basal species, most of which are rare.

We removed rare basal species (<10% of biomass) to mimic natural losses from the system.

Most species at the base of the food web on local rocky shores are rare, comprising <10% of total biomass.

Loss of these species has large and disproportionate impacts on community structure.

We call these organisms “cornerstone species”.

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