

Long Island Sound Shell Day

24 August 2023



What is Shell Day?



On 24 August, 9 community science organizations, CT-DEEP, and UConn will collaborate to simultaneously collect **total alkalinity** samples around the coast of Long Island Sound during high, mid-, and low tides.

Why Alkalinity?

Total alkalinity or TA describes the **buffering capacity** of seawater. In other words, TA is the capacity of water to **resist a change in pH** when acidity is added. As CO₂ from the atmosphere and from decay of algal blooms increases in LIS, TA guards against pH changes.

Collaboration to study the environment



Though important to the resilience of LIS to ocean acidification, TA is difficult to measure, leading to a scarcity of data. Researchers at UConn and CT-DEEP have established a monthly TA time series in LIS, but samples around the Sound are taken at different times. Through a multigroup collaboration, **we can obtain TA data across the LIS from the same time, allowing us to understand the spatial differences alone.**

Check out NECAN's 2019 Shell Day effort:



Contact Lauren Barrett (lauren.2.barrett@uconn.edu) with questions!



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