

Plankton Patterns

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Plankton, microscopic passive drifters, produce up to 50% of Earth's oxygen and are the primary food source for the sea life humans enjoy eating. In Narragansett Bay, plankton make up the foundation of this critical ecosystem. The Narragansett Bay Long-Term Plankton Times Series has collected plankton from the lower west passage in the Bay from 1959 to present. To showcase the uniqueness and importance of these plankton, original microscopic images of plankton from the time series were converted into illustrative graphics and then created into repetitive patterns with Adobe Illustrator. Plankton biomass data (chlorophyll *a*) were also used to showcase changing patterns in plankton distribution for three decades (1970s, 1990s & 2010s). At a far glance, the shape and color of the panels change over time. The color change from blue to red illustrates a long-term seawater warming trend recorded in Narragansett Bay since the 1950s. The change in shape indicates a long-term decline in plankton biomass as well as a shift in the seasonal distribution of plankton biomass over the different decades. At closer inspection of the wallpaper, there are patterns of plankton in which the types and sizes vary throughout the year from winter to summer to fall. This wallpaper enables the viewer to take a walk through time to witness the long-term phytoplankton changes occurring in Narragansett Bay.