

# Zooplankton Lab

**Grade Level:** All

**Summary:** Students will be introduced to plankton, with a focus on zooplankton, and the overall role of plankton in the ecosystem. Students will use stereoscopes to observe and identify zooplankton.

**Program Objectives:**

- Students will be able to identify 5 different species of zooplankton
- Students will use stereoscopes and deep well slides to observe plankton first hand
- Students will understand the importance of plankton in the marine ecosystem

**Concepts Covered:**

- phytoplankton vs. zooplankton
- holoplankton vs meroplankton
- Functions of bioluminescence
- Plankton's niche in food web
- Identification of collected specimens
- Phytoplankton's role in oxygen production
- Plankton adaptations

**Vocabulary:** plankton, nekton, zooplankton, phytoplankton, holoplankton, vertical diurnal migration, bioluminescence

**Procedures:** A MarineLab instructor will lead a discussion on concepts and vocabulary listed above while another instructor conducts a plankton tow in Largo Sound. The samples are brought back to MarineLab where bioluminescence is showed off and discussed, slides are made, and students work in pairs with stereoscopes to ID zooplankton in their slide. Select slides will then be projected for all to see and discussed to confirm identifications.

**Extensions:** MarineLab also offers a more in depth phytoplankton service learning program that can be incorporated into the school program in addition to the zooplankton program or as a substitute for the zooplankton program.

