Feeding and Habitat Preference of Small Grazers in Bodega Harbor
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WHY ARE SMALL GRASSERS IMPORTANT?
\begin{itemize}
\item Grazers consume algae that overgrows eelgrass, which allows sunlight to reach the eelgrass blades
\item Some species also consume Ulva (macroalgae) and Zostera (eelgrass)
\item Understanding how feeding and habitat preference influence grazer distribution can help predict the effects of grazer species on eelgrass beds
\end{itemize}

STUDY ORGANISMS
\begin{itemize}
\item The amphipod Ampithoe lacertosa and the isopod Idotea resecata are small crustacean grazers that feed on Ulva and Zostera
\item Ampithoe are usually found in Ulva, while Idotea are commonly found lying flat against eelgrass blades
\end{itemize}

RESEARCH QUESTION
\begin{itemize}
\item Does feeding choice and/or habitat preference influence the distribution of Ampithoe lacertosa and Idotea resecata?
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Feeding Trial
\begin{itemize}
\item Do Ampithoe and Idotea show a preference towards feeding on Ulva or Zostera?
\item In a 48 hour trial, the individuals were given equal masses of both Ulva and Zostera (choice), only Ulva, or only Zostera (no choice); n=10
\item Ampithoe strongly preferred Ulva and consumed little to no Zostera in the choice and no choice trials
\item Idotea consumed significant amounts of both Ulva and Zostera and consumed more Zostera than Ulva in the no choice trial; no clear preference was observed
\end{itemize}

Growth Trial
\begin{itemize}
\item Do Ampithoe and Idotea grow faster when consuming only Ulva, only Zostera, or a mixed diet?
\item Individuals were measured and placed in containers with one of three food treatments for a period of 5 weeks (currently underway)
\end{itemize}

Habitat Trial
\begin{itemize}
\item Do Ampithoe and Idotea show preferences for living in Ulva or Zostera?
\item Preliminary results indicate that both species prefer Zostera mimics as habitat
\end{itemize}

ONGOING RESEARCH

Evidence of amphipods feeding on eelgrass

The amphipod Ampithoe lacertosa (at left)

The isopod Idotea resecata (at right)

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