

Venus Bay Pipi project update

Dr John Morrongiello, University of Melbourne

- We have now completed the twice a month summer surveys (6 sampling events) and are moving into the bimonthly autumn and winter survey period
- We have repeatedly surveyed locations from Point Smythe to 8km south of beach access point 1.
- We are using two techniques to survey the population: 'corer' samples which allow us to estimate adult pipi abundance and 'kick net' samples that are an effective measure of juvenile abundance
- Pipi abundance is highly variable along the beach from NW to SE, from the low to high water mark, from day to day and even hourly (depending on tidal cycle). This spatial and temporal complexity makes it difficult to detect clear patterns with the amount of data we have collected and therefore we'll need at least a year's worth of sampling before more concrete patterns arise.
- Nonetheless, it appears that pipi abundance, and the individual size of pipis is greater south of beach 1 compared to elsewhere on the beach.
- We are also measuring beach slope and sand grain size as these are important environmental properties that affect pipi distribution (affects their ability to burrow and also the wave energy which brings them food). Areas of Venus Bay to the NW of beach 1 are generally flatter and have smaller grain size, two conditions that are sub-optimal for pipis, regardless of harvesting effort.
- We are surveying harvester effort along the beach to quantify how far people are willing to walk
- I was unable to secure the required funds to cover Brien Robert's PhD stipend and therefore he is not working on this project (FYI, he is instead doing a PhD with a colleague of mine at Charles Darwin University on barramundi). I have instead employed a research assistant, Dr Fletcher Warren-Myers to help with the fieldwork component of the project. Fletcher is out on every trip and covers for me during the University teaching period.



Kick net sampling



Large sample of pipis south of beach 1.



Surveying a beach transect. Note the corer in Fletcher's hand used to take standardised sand samples.