

## Vermicomposting Timeline

Good Morning, our names are: Sydni, Dru, and Jackie. We are 5<sup>th</sup> graders. Together with some fourth graders, we will be sharing our experiences with vermicomposting.

### January 2008

In January 2008, as 4<sup>th</sup> grade students we brainstormed ideas of ways that we could help our community. The first step in this process was to identify problems our community faced. One of those problems was the amount of food waste there was from our lunches. It generated a lot of trash. At the same time, the City was also trying to decide what to do with our landfills and how to get rid of our rubbish. One of the alternative options was to ship the trash to the mainland. We felt it was too expensive and not helpful to the environment. Our solution was to reduce the amount of rubbish we make.

One of the ideas that emerged was the use of decomposers to break down our food waste and return the nutrients back to the soil, vermicomposting. That was when we contacted Ms. Jaffe at Waikiki Worm Co. to get more information. To fund this project, we held 2 bake sales after school and received a grant from the Kokua Hawaii Foundation and another grant from the City Recycling Office.

### February 2008

Ms. Jaffe came down to our school to teach the fourth graders about the process of vermicomposting and the FBI (Fungus, Bacteria, and Invertebrates). This was our first experience with our baby Perionyx Excavatus, also known as the Indian Blueworm. Ms. Jaffe taught us that the Perionyx are epigeic worms that are surface dwelling decomposers and eat the dead or rotting matter. They then digest this material and poop out nutrient rich cast.

June 2008

Our first Harvest. Every four months, we separate the worms from the cast(worm poop) and weigh our worms. At each harvest our worm population should double. We went from 2 lbs. of worms to 4lbs. of worms. We were a success! We then set the cast aside to dry. Over the summer, our teachers had the task of feeding our precious worms. Thanks to Maunalani Nursing Homes cafeteria and Colleen who dropped it off each week, we had healthy delicious waste to feed them.

August 2008

Good morning, we are Chika, Ivy, and Raellis. Now we are the new fourth grade class and have the opportunity to continue this project. We collect the lunch waste every Thursday and feed our worms.

October 2008

We harvested our worm bins and went from 4lbs. of worms to 12 lbs.! Because we had such a huge population of worms, we doubled the amount of bins from 6 to 12. This is when Ms. Jaffe brought us the great news of a huge donation to our project. The Pipeline. This would greatly reduce the labor involved in taking care of the worms. We are combining 10 of our 12 bins into the one pipeline. Our principal, custodians, and parents built a shelter for our worm colony.

By caring, feeding and harvesting our worms we have learned to use scales to measure, make detailed observations, understand the role of decomposers, and the importance to reduce, reuse and recycle. The biggest lesson we have learned is that it is our knowledge and skills that can make a difference.