

# The Green Flash

## Introducing the iPad.....



WEEKLY ENERGY  
LAB TOURS

**Wednesdays  
3:30-4:30pm**

**For Reservations  
Please Call  
808-881-4266  
or  
Email:  
[elabassistant@hpa.edu](mailto:elabassistant@hpa.edu)**

The Energy Lab is fortunate to have 10 iPads in use for both students and teachers to explore learning in a new, innovative, and revolutionary manner.

The iPad allows users to access Web sites, photos, videos, and e-mails on a large multi-touch screen. On an educational level, the iPad introduces the potential of online textbook use.

Thousands of applications are being made every day for this new learning tool and the Energy Lab's floor plan template actually was designed to fit the dimensions of the iPad by the building's programmers.



iPad embodies Apple's continuing environmental progress. It is designed with the following features to reduce environmental impact:

- Arsenic-free display glass
- BFR-free
- Mercury-free LCD display
- PVC-free
- Recyclable aluminum and glass enclosure



*A fifth grade student enjoys the "Star Walk" application on the iPad that allows users an on-screen view of stars and constellations visible on a clear night from the user's current location.*

# FOOTPRINT FUTURES UPDATE



*Dr. Bill Wiecking hosting Footprint Future's first phase through video teleconferencing.*

Middle school science teacher, *Chris Nilsen*, brought four Middle School students to the energy lab on May 10 to participate in an introductory "Footprint Futures" lesson led by Dr. Bill Wiecking. Students were introduced to terms related to the global measurement tool used by researchers at *Global Footprint Network* when studying a nation's ecological footprint. Such

terms included understanding:

- Fixed and renewable resources
- Supply and demand
- Variable use renewable resources

This lesson will be the first of a series in a "Footprint Futures" global curriculum that will be implemented during HPA's Third Annual Student Congress on Sustainability held June 1-4, 2010.

## HPA THIRD ANNUAL STUDENT CONGRESS ON SUSTAINABILITY 2010

**WHO:** Students are invited from all public, charter, parochial, and independent high schools on the island of Hawai'i. The invitation also was extended to our partner schools in Alaska and Australia.

**WHAT:** The mission of the Student Congress on Sustainability is to educate, inform, celebrate and cultivate student-driven environmental initiatives addressing local, national, and global issues. Through the enthusiasm, talent, and resourcefulness of young men and women, the Congress will be one means of facilitating widespread education and collaboration among high school students, serving to cultivate and shape habits of mind that will translate environmental sustainable ideology into practice.

**WHERE:** The three-night, four-day residential conference is held on the Upper School campus of HPA.

**WHEN:** June 1-4

### CONGRESS HIGHLIGHTS INCLUDE:

- Guest speakers *Darren Kimura (SOPOGY)*, *Dr. Lisa Pickell (CELLANA)*, *Chris Bland (TRANSFIELD)* via video teleconference from Sydney, Australia)
- Footprint Futures Global Curriculum Studies
- Field trips to NELHA, Kawamata Farms, Sopogy, and more!

Learning About the Lab:  
Freshwater Catchment System

On the bottom of the westside staircase is the freshwater catchment system tank that collects water off the 6,000 square foot roof. For every inch of rain that falls on the roof, we capture 3,800 gallons of water!

There are sonar sensors in each tank that measure the water levels down to the thickness of a sheet of paper or one quart. This is important because the biggest issue in sustainable building is waste of productivity, electricity, and water. Water levels, flows, and temperatures all are electronically monitored and can be seen in the monitoring lab and lab control system screen on the first floor.



**WHAT CAN YOU DO TO USE LESS WATER?**

- Opt for showers vs. baths
- Use a bucket and hose to wash your car
- Only boil the amount of water you will need to fill your own cup
- Choose native plants to plant
- Only water your plants

DID YOU KNOW.....

The road leading up to the HPA Energy Lab resembles the winding road leading up to the famous **“Ronchamp Chapel”** in the north-eastern part of France. There, each part of the road up to the chapel puts an individual in a state of mind of reverence.

The road up to the Energy Lab offers views of the farm and evolving perspective for the site of the lab. It shows the photovoltaic panels on the roof, wing-like structure at the back, and finally how the building is nestled in the trees to be a part of its natural surroundings.



*HPA's Energy Lab*



*The Ronchamp Chapel in Ronchamp, France*

## FIFTH GRADE TECH CLUB

On May 20 the Energy Lab hosted the final meeting for **Kristin Tarnas** and her fifth grade Tech Club. Students showed off their projects in the main hall on the large screen monitors and also discussed possible future projects that they could undertake for next year.



## GREENTECH

The final project for students in Dr. Bill Wiecking's "Green Tech" class was to create a poster about the specific projects they have been working on this semester. These posters are now up on the walls of the Energy Lab for all to view. Projects included the set-up of a weather station, security cameras, and "HOBO" environmental monitoring system.



### Calendar

**June 1-4**

HPA Student Sustainability Congress

**June 7-12**

Global Footprint Network  
Footprint Forum 2010  
Tuscany, ITALY

**June 13-17**

American Association for the  
Advancement of Science (AAAS)  
Pacific Division Meeting  
Ashland, Oregon

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