

Like



Share

Tweet

Share this Page:

powered by



# Key Biscayne's Citizen Scientist Project

## NEWSLETTER

Volume 2, Issue 1, April 2014

### EDITORIAL

*This version of the Citizen Scientist Project's (CSP) Newsletter is being published somewhat early to describe the CSP's Summer Challenge Project so as to encourage participation of Key residents in the program.*



*The Citizen Scientist Summer Challenge is an island-wide initiative directed at increasing Key resident's appreciation and knowledge of the island's inanimate natural resources and living creatures. The Challenge includes four areas: questions on important natural resources, community service activities to protect these resources, sightings of Key living creatures, and definitions of environmental features. Contestants can be either in groups of 5 or less individuals or individuals, but not both. In particular, we encourage families to participate as groups. Points will be awarded for addressing the various areas of the Challenge. The three Groups and three Individuals with the most points will be awarded prizes.*

***The Challenge opened on June 21<sup>st</sup>, 2014 and closes on August 15<sup>th</sup>, 2014.** A kick-off ceremony was held on June 21, 2014 for registration and to explain the rules of the Challenge. However, registration is open for the duration of the Challenge.*

**Contacts for questions:**

Robert Molinari - [robert.molinari9@gmail.com](mailto:robert.molinari9@gmail.com)  
 Anne Richards Rothe - [arichardsrothe@bellsouth.net](mailto:arichardsrothe@bellsouth.net)  
 Cailen Caplan - [info@keybiscaynefoundation.org](mailto:info@keybiscaynefoundation.org)  
 Caroline Baxendale - [info@keybiscaynefoundation.org](mailto:info@keybiscaynefoundation.org)

## — ADDITIONAL KEY SUMMER CHALLENGE DETAILS —

### OBJECTIVE:

Learn, experience, and protect the natural resources and animal life of Key Biscayne and Virginia Key.

### REGISTRATION:

Registration is open for the duration of the Summer Challenge to August 15, 2014.

### METHOD:

Given by the 4 sub-categories of the Challenge.

### I) NATURAL RESOURCE SUB-CHALLENGE:

The main categories of this sub-challenge as well as 2 representative questions and points received for answering correctly are given.

#### A) Beaches

- Provide Name of Beach:
- Provide Beach Log (dates/times of day visited):
- General Observations at Beach (e.g., tide, wave height, turbidity)
- Question. 1B: Have you noticed any differences in the water levels surrounding the Key, for example higher or lower tides affecting the beaches? If yes, explain. When do you notice the tides are highest? (8 pts)
- Question. 2B: Have you noticed a change in the frequency of turtle nesting? If so, on what beach? (repeated observation) (8 pts)

#### B) Green Spaces/ Pathways

- Provide name and location of Green Space or Pathway. If feature is not named, provide detailed location information:
- Provide date and time of observation:
- Provide weather conditions:
- Q. 1GP: Have you noticed any changes in the number and/or type (i.e., in groups, alone) of bikers and walkers? (repeated observation) (3 pts)
- Q. 2GP: Have you seen any trash on any of Key Biscayne or Virginia Key's nature trails or open spaces? If so, where? What kind of trash? How much? (8 pts)

#### C) Mangroves

- Location of mangrove:
- Q. 1M: Identify the prevalent mangrove species in the location observed. Include name, location found, characteristics of the plant, and, if possible, a picture of the plant. (8 pts) (+1 for each drawing or sketch)
- Q. 2M: Have you noticed any areas with signs of human disturbance (e.g., damaged or

removed mangroves, litter or marine debris)? If so, where? (5 pts)

## D) Sea grass

- Provide position of sea grass observation
- Provide tidal level
- Q. 1SG: Identify species of Sea grass observed. Take a picture and describe in as much detail as possible. (8 pts) (+1 pt for a drawing or sketch)
- Q. 2SG: When do you notice the most sea grass (high tide/low tide; after a large storm)? (3 pts)

## E) Waterways

- Provide position of waterway
- Q. 1W: Have you noticed any changes in water visibility, clarity, or color? If so, where and at what time? What are the weather conditions when these observations are made? (repeated observation) (8 pts)
- Q. 2W: Have you noticed areas with marine debris (e.g., plastics, Styrofoam, fishing nets or monofilament line)? If so, where? (5 pts)

## II) Sightings Challenge

For each animal seen include-

- A picture or sketch of the Animal
- Date and time of sighting
- Location of the sighting (as detailed as possible)
- Size of the animal (length, width, etc.)
- Color of the animal
- Health of the animal (visual estimate)
- Length of sighting (how long did the animal hang around for)
- Activities of the animal during sighting
- Any other observations

Example of Animals earning points:

- Iguanas (3 pts)
- Dolphins (5 pts)
- Turtles (5 pts)
- Ibis (White) (3 pts)

\* For any specific animal viewed 5 or more times, can you explain differences in animal properties such as size, color, health or activity level and possible causes. (10 pts)

## III) Definitions Challenge:

A completed definition and sketch or photograph is awarded two points each.

Examples of items earning points include.

- wrack line
- dunes
- stag horn coral
- elk horn coral

#### IV) Community Service Challenge:

Points will be awarded for trash picked up at any Key natural resource site.

##### 1) Trash Pick up:

- Provide location of pick up
- Provide time and date of pick up
- Provide type of trash collected
- Provide amount of trash collected
- Provide method of disposal of trash

**BOTTOM LINE: SIGN-UP NOW AND PARTICIPATE IN THE SUMMER CHALLENGE**

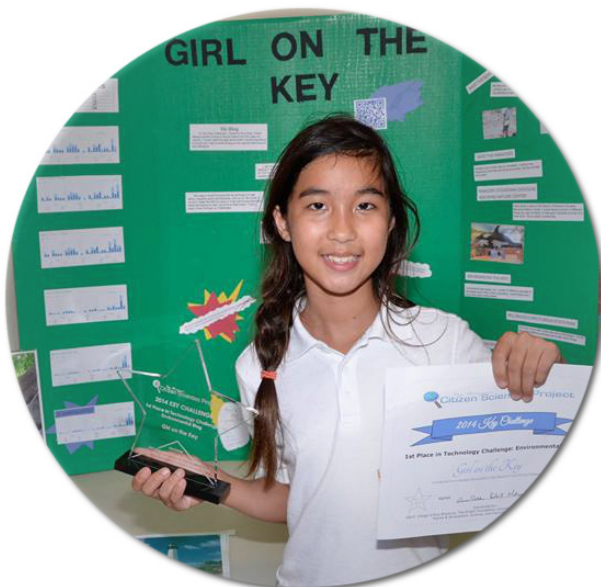
— PROJECT UPDATES —

### THE KEY CHALLENGE SUMMARY Anne Rothe and Robert Molinari



The Citizen Scientist Project of the Key Biscayne Community Foundation sponsored a Key Challenge. It was an island-wide initiative involving all 6 of the schools and grades on Key Biscayne and Virginia Key. The primary objective of the Citizen Scientist Key Challenge was to encourage students of all ages to increase their knowledge of Island resources, both animate and inanimate.

Fortunately, we had the example of the very successful Fairchild Challenge of the Fairchild Tropical Botanic Garden ([www.fairchildgarden.org](http://www.fairchildgarden.org)) to build on. The success of the Fairchild Challenge is measured, in part, by the 120,00 students that participated in this event in 2012. We not only employed the Fairchild literature but also obtained additional information in meetings with Fairchild associates to design the Key Challenge.



In general we followed the structure of the Fairchild Challenge with 3 major categories as the foundation for the Key event, Art, Writing and Technology. Each major category had subcategories, which were open to individuals, groups, or both as well as various grade levels depending on the type of event. For example, the Art Challenges were Mixed media, Collage of a local ecosystem, Photography, and Environmental statement posters. The Writing Challenges were Book, Report on local ecosystem, and Performance/video recording. The Technology Challenges were Environmental blogs and Computer apps. Each sub-challenge was limited to individuals or groups and specific grades. For instance, Photography participants were individuals in kindergarten/first grade and second and third grade, while Environmental blogs were limited to mid- and high school groups. All sub-categories had a requirement to focus on a feature or creature found on Key Biscayne.



The Key Challenge began on November 1, 2013 and ended on March 21, 2014. The Challenge had a total of over 950 students participating in the event. The impressive

number of participants was only possible through the intense involvement of the individual school coordinators:

- Joanna Lopez - St Agnes
- Annette Garcia-Acosta - K-8 center
- Ann Martinez - MAST
- Carolina Labrador - Key Biscayne Community Church
- Leslie Lasseville - St. Christopher's
- Anne Rothe-Key Biscayne Presbyterian Church School (*who also served as the overall school Coordinator*).

For each sub-category and grade levels, each participating school selected two entries to go on to the next level of judging. Over 350 students contributed work that reached this phase of judging. Every piece was reviewed and scored by 2 judges who rated them on a 1-5 scale for 4 or 5 attributes. These scores were totaled and added to the score given for required elements (student names, school, size etc.). The judges were chosen for their expertise in areas relative to the sub-challenges (e.g., photography, technology, art, writing, etc.) and spent considerable time in evaluating the entries.

Entries with the highest score were designated as winners in each sub-challenge and grade level. However, the small spread of the judge's score at this level was a measure of the high quality of the entries. Winners were announced and their works were presented at a well-attended awards ceremony on May 13<sup>th</sup>. A portion of the winning works will be placed on the [keyscience.org](http://keyscience.org) web site to demonstrate the amazing skills of Key students.

In conclusion, we must repeat that the Key Challenge would not have been as successful an event without the outstanding participation of Key teachers. We hope this group enjoyed the Challenge as much as we did and look forward to participating in the next Key Challenge. We also feel compelled to thank again Fairchild Garden for providing us invaluable assistance in managing the Key Challenge.



## — CITIZEN SCIENTIST EVENTS —

### Previous Events

#### [Virginia Key Dune Restoration](#)

Volunteers were required to perform tasks such as planting, water quality testing, growth rates of planted species, etc. in cooperation with volunteers from the Museum of Science. The project is the restoration of the North Virginia Key Dune area.

#### [Mashta Flats Restoration](#)

The Mashta Flats restoration is directed at restoring the sea grass beds on the portion of the Flats that is under the jurisdiction of the Village. The evolution of the restoration will be evaluated through 3-monthly monitoring visits to the Flats. Once the monitoring schedule has been established registration details will be provided. (*Ongoing Event*)

#### [Field Trip: Cape Florida Tour](#)

Led by Park Ranger Willy Philippe, a tour of the Key Biscayne Lighthouse and the keepers residence was conducted on June 14, 2014. Information about the history of the area was provided by Ranger Philippe and an educational video, providing interesting and informative facts about the southern tip of the Key.

### Future Events

These events are described as volunteers will be required to ensure successful endeavors. If you are interested in participating in one or more of the events, please forward the name of the event along with an email address. As we get closer to the events, we will provide details on dates, times, locations, etc. The variety of tasks to be performed should provide numerous opportunities for volunteers.



— CITIZEN SCIENTIST LECTURES —

 **Previous Lectures**

Thursday, April 10th, 7 PM

Senior Lounge, Key Biscayne Community Center

**Speaker:** Dr. Theodora Long, Executive Director, Marjory Stoneman Douglas Biscayne Nature Center Inc.

**Topic:** Activities of the Nature Center

Thursday, May 8th, 7 PM

Senior Lounge, Key Biscayne Community Center

**Speaker:** Dr. T. Blankenship, Coastal, Systems International Inc.

**Topic:** Beach management; introduction and applications to Key Biscayne beaches





## Future Lectures

### Thursday, September 11th

Dr. Andrew Baker, Rosenstiel School of Marine and Atmospheric Science of the University of Miami. Lecture topic: Effects of dredging in Government Cut on coral at **7:00 PM in the KB Community Center, Adult Lounge.**

### Thursday, October 16th

Dr. Kim Ogren, Ogren Planning & Communications, focusing on advancing the public interest around the natural and built environment. Lecture topic: Sea turtle conservation at **7:00 PM in the KB Community Center, Adult Lounge.**

## *Contacting the Citizen Scientist Project*

The KB CSP welcomes your input and strives to maintain open and clear lines of communication with Key Biscayne residents, visitors and anyone interested in becoming a Citizen Scientist.

Please use any of the following contact information to get in touch with us.

**ADDRESS:**

50 West Mashta Drive, Suite 3  
Key Biscayne, Florida 33149

Phone: (305) 361-2770

Website: [www.keyscience.org](http://www.keyscience.org)

Email: [info@keyscience.org](mailto:info@keyscience.org)



©2014 Key Biscayne Community Foundation. All Rights Reserved.