



## Highlands Record

June 2013

# A Year of Atmospheric Measurements

This July marks the end of the one-year deployment of the Department of Energy's Atmospheric Radiation Measurement (ARM) Mobile Climate Research Facility at the Highlands Center. Over the past year, scientists have been collecting data related to aerosols—tiny particles in the air such as dust, soot and sea salt—and how they affect clouds and the climate.

In addition, scientists collected data through two 3-week airborne sampling campaigns. The flights took place at two intervals during the year-long deployment, in July 2012 and February 2013, to provide seasonal comparisons as part of the Two-Column Aerosol Project (TCAP). During these periods, a plane with measurement equipment flew out from Barnstable Municipal Airport, circled over the Highlands Center, then out to a point several hundred kilometers to the east and circled over the ocean, before returning to the airport. This allowed the team to gather aerosol data from two different areas, or columns.

We are pleased that the National Park Service's Atlantic Research Center could host this research at the Highlands Center, knowing the data will not only be used to understand the climate around Cape Cod, but will help scientists better understand clouds and aerosols around the world and will help improve the accuracy of models used to predict future climate.

*continued page 2*



At the July 25, 2012 opening ceremony, Los Alamos National Laboratory's TCAP Project Coordinator Amon Haruta guides dignitaries in a ceremonial weather balloon launch (with DOE Office of Science Director of Climate and Environmental Sciences Dr. Gerald Geernaert and NPS Deputy Regional Director Mike Caldwell).

## Also Inside...

|  |        |
|--|--------|
| A Fun Day of Learning at Junior        |        |
| Ranger Day.....                        | page 2 |
| Highlands Fest .....                   | page 2 |
| Partner Happenings.....                | page 3 |
| Shaping Up for Summer                  |        |
| (at Highlands Center Clean-Up Day).... | page 4 |

# A Year of Atmospheric Measurements

*continued*



Visitors at the ARM site



View of the ARM facility from the Highlands Center overlook

# A Fun Day of Learning at Junior Ranger Day



ARM Education Ranger Cathy Skowron describes the weather balloon's sensor, called a radiosonde, to one of the Junior Rangers.

25 kids and 18 adults joined park education rangers at the Highlands Center for Junior Ranger Day on April 17. Attendees participated in several hands-on weather activities and observed a weather balloon launch from the Department of Energy's ARM Mobile Facility site. The day was the culmination of special year-long educational outreach activities funded by the project, which brought over 1,100 students to the site throughout the school year to learn about research related to the climate facility deployment.

## Highlands Fest 2013: Weathering Change in our Air, Land & Sea

**Saturday, June 29 10 AM to 2 PM. Free.**

**(Rain Date, Sunday, June 30)**

Join in participatory activities expressing science through art at Highlands Fest to be held at the Highlands Center in Truro on Saturday, June 29th from 10am to 2pm! This year's focus is exploring our climate and provoking thought about ways to live with climate change.

Pitch in on the creation of engaging murals to showcase climate research. Hear from personnel involved with the Department of Energy's Atmospheric Radiation Measurement (ARM) Mobile Climate Research Facility, who have been gathering data during a one-year deployment at the Highlands Center to advance long-term climate models. All ages and abilities are invited to participate, learn, listen to live music, enjoy light refreshments and support your Climate Friendly Park through public art!



Come participate in the creation of public art, like these painted globes from last year's Fest.



# Partner Happenings

## Happy 15th to Payomet Performing Arts Center!

Payomet has been at Highlands Center for seven years and had more than 5,000 people attend. Join in celebrating Payomet's 15th anniversary season with a full schedule of classes, children's programming, Shakespeare, and other theater and music performances at their Highlands Center tent. Two fully-staged theater productions will be performed by the Payomet troupe of professional actors! Shakespeare's beloved classic, *Twelfth Night*, opens on Wednesday, July 10 and runs for 20 performances through August 13. A special, shorter 45-minute version of *Twelfth Night* for children will be performed once or twice a week at 5 PM, followed by a 10 minute Q&A with the Payomet actors. Payomet's other main theater offering will be the world premiere of (*Enter Kurt Vonnegut*), a new work written and directed by Payomet Artistic Director Kevin Rice.



The Holmes Brothers will perform at the Payomet tent on July 6.

### Noteworthy:

Payomet Performing Arts Center has received \$7,500 from the Massachusetts Cultural Council for a feasibility study of turning building T5 at the Highlands Center into its year-round headquarters to provide much needed office and rehearsal space, and performance space for children's theater productions. Payomet has agreed to fundraise an additional \$7,500 to go towards the project.

Music at the tent will start off with a Cajun-Zydeco Music & Dance mini-fest, the Jumpin Jambalaya Jam, on June 15. Other music dates feature Grammy winners as well as younger breakout artists, including Ben Taylor June 23, Rosanne Cash July 1, The Holmes Brothers July 6, Mavis Staples July 11, and Tom Rush September 14. For more information and additional artists and dates, visit [www.payomet.org](http://www.payomet.org), or call 508-487-5400.

### NPS Atlantic Research Center

Join NPS for the annual 2013 Science Symposium, on Friday, August 23rd from 1-4 PM. Hear scientists present the findings of their research projects within the park to the public at the Salt Pond Visitor Center auditorium. For more information about the Atlantic Research Center, visit [www.nps.gov/caco/naturescience/atlantic-research-center.htm](http://www.nps.gov/caco/naturescience/atlantic-research-center.htm)

## Truro Center for the Arts at Castle Hill

Castle Hill will hold firings of its wood-fired kiln at the Highlands Center this summer and fall. The upcoming dates are June 29-July 1 with unloading July 6, August 25-27 with unloading August 31, and October 12-14 with unloading October 19. Castle Hill's Woody English Distinguished Artists and Writers chair honors the founder of the grassroots global movement group, "350.org", Bill McKibben, who will give "a report from the front lines—the desperate but beautiful fight against climate change" on August 11 at the Wellfleet Congregational Church. For more information, visit [www.castlehill.org](http://www.castlehill.org).



Castle Hill will fire its wood-fired kiln at the Highlands Center this summer and fall.

## Provincetown Center for Coastal Studies

The Center for Coastal Studies is hosting two Benefit Whalewatches, Saturday June 29 and Saturday July 20 from 5:30-8:30 pm. Come join the fun at the Third Annual Provincetown Whale Week, July 29-August 3. For more information, visit [www.coastalstudies.org](http://www.coastalstudies.org).

## Sustainable CAPE

The Highlands Historical Medicinal Garden grows taller! For more info on Sustainable CAPE's programs, including Truro Agricultural Fair and Truro Farmer's Market, visit their website: <http://www.sustainablecape.org/>.

*Directions to the Highlands Center: Take Route 6 to the Highland Light Exit in North Truro. Go East on Highland Road. At the end, take a right onto South Highland Road. After 0.6 miles, take a left onto Old Dewline Road. The Highlands Center is at the end of the road.*



National Park Service  
U.S. Department of the Interior

Cape Cod National Seashore  
99 Marconi Site Road  
Wellfleet, MA 02667

EXPERIENCE YOUR AMERICA

# Shaping up for Summer (at Highlands Center Clean-Up Day)

16 members of AmeriCorps Cape Cod joined park maintenance staff and volunteers from Friends of Cape Cod National Seashore, Truro Center for the Arts at Castle Hill, Payomet Performing Arts Center, and Highlands Center Inc., for the Highlands Center Clean-Up Day on April 19. Partners converge on this annual clean-up day to

make site improvements before the summer season. This year, projects included planting native shrubs, renewing pathways, and giving selected buildings a fresh coat of paint. Volunteers worked through the day, undeterred by dense smoke from a nearby wildfire, to complete these and many other tasks, leaving the Highlands Center looking in much better shape.



AmeriCorps Cape Cod member Ben Fairbank applies a fresh coat of paint to one of the buildings.



National Park Service  
U.S. Department of the Interior

## Cape Cod National Seashore

99 Marconi Site Road  
Wellfleet, MA 02667  
(508) 771-2144

This issue of the Highlands Record was created by AmeriCorps - Cape Cod member Lindsay Crouch with assistance from Cape Cod National Seashore's Marianne McCaffery.

**For additional information concerning the Highlands Center at Cape Cod National Seashore, contact:**

Lauren McKean, AICP  
NPS Highlands Center Project Manager  
lauren\_mckean@nps.gov  
(508) 957-0731

*The National Park Service cares for the special places saved by the American people so that all may experience our heritage.*