





4-H Youth Development Program UF/IFAS Jackson County Extension 2741 Pennsylvania Ave., Suite 3 Marianna, Florida 32448-4022 http://jackson.ifas.ufl.edu/

Jackson County 4-H Youth to Send Rockets to the Rescue as Part of 4-H National Youth Science Day

2014 National Science Experiment challenges youth to use aerospace engineering to solve a global crisis.

Marianna, Florida (October 6, 8, 28 and 29, 2014) – Jackson County youth from the SeaPerch Robotics 4H Club, Golson Elementary Kindergarten, Graceville Elementary Third Grade, and over 500 Jackson County First Graders visiting Ag Adventures, will design, build, and launch an aerodynamic craft designed to deliver a payload of food to natural disaster victims as part of *4-H National Youth Science Day (4-H NYSD)*, the world's largest, youth-led science experiment. The activity, called *Rockets to the Rescue*, was designed by University of Arizona Cooperative Extension and selected as the winning experiment for the seventh annual *4-H NYSD*. Youth all over the nation and some globally, will also conduct the same experiment at hundreds of local events taking place in all 50 states.

The national rallying event for 4-H Science, 4-H NYSD is an interactive learning experience that gets youth excited about science, technology, engineering and mathematics (STEM), and spotlights the many ways millions of youth are engaging in 4-H Science programs year-round.

Jackson County 4H conducted the *Rockets to the Rescue* experiment at the UF/IFAS Jackson County Extension Office on Penn Ave., on October 6, 2014 at 4:00 PM CST. The Graceville Elementary Third Grade will hold their event at the school at 1:00 PM, and the Golson Elementary Kindergarten will hold their event at the school on October 10, 2014 at 9:00 AM. Jackson County First Grade Students will hold their event during the two-day Ag Adventures Program that will be held at the North Florida Research and Education Center in Greenwood, on October 28 and 29, 2014. All of the youth will respond to a fictional scenario: A natural disaster has left people without food on a remote, isolated Pacific island, and the youth have been asked to build a rocket that can be launched from the mainland, travel over the ocean and deliver high-energy food to the population. The experiment combines two 4-H issue areas—science and food security—and incorporates aerospace engineering concepts to help youth design a rocket out of everyday materials, including recyclable two-liter bottles, cotton balls, pipe cleaners, rubber bands and a protractor.

"Our nation is falling behind other countries in the fields of science, technology, engineering and math," Angel Granger, Jackson County 4-H Agent. "However, participation in high-quality positive youth development programs like *4-H NYSD* offers youth and adults the opportunity to engage in scientific exploration and work together to build the next generation of our nation's scientists, engineers and mathematicians."

A recent longitudinal study conducted by Tufts University, *The Positive Development of Youth: Comprehensive Findings from the 4-H Study of Positive Youth Development* revealed 4-H programming does indeed get young people more connected to science. According to the study, 4-H'ers are *two times* more likely to participate in *science programs* during out-of-school time (grades 10-12) and 4-H







girls are *two times* more likely (grade 10) and nearly *three times* more likely (grade 12) to take part in *science programs,* compared to girls in other out-of-school time activities.

The national sponsors of 2014 *4-H NYSD* are Lockheed Martin, Hughes (HughesNet Satellite Internet) and John Deere. Other partners include Dow AgroSciences, NBC Learn, Afterschool Alliance, and NASA who have all collaborated on this event.

Since 2008, more than five million youth have completed *4-H NYSD* experiments and 4-H science projects in robotics, agricultural science, rocketry, wind power, environmental science and alternative energy. To learn more about *4-H NYSD*, visit <u>www.4-h.org/nysd</u>.

About 4-H

4-H, the nation's largest youth development and empowerment organization, cultivates confident kids who tackle the issues that matter most in their communities right now. In the United States, 4-H programs empower six million young people through the 109 land-grant universities and Cooperative Extension in more than 3,000 local offices serving every county and parish in the country. Outside the United States, independent, country-led 4-H organizations empower one million young people in more than 50 countries. National 4-H Council is the private sector, non-profit partner of the Cooperative Extension System and 4-H National Headquarters located at the National Institute of Food and Agriculture (NIFA) within the United States Department of Agriculture (USDA).

Learn more about 4-H at <u>www.4-H.org</u>, find us on Facebook at <u>www.facebook.com/4-H</u> and on Twitter at <u>https://twitter.com/4H</u>. To view a video of a rocket build: <u>http://www.youtube.com/watch?feature=player_embedded&v=teCpdzBTrdw</u>

For information regarding these events, please contact Angel Granger, Jackson County 4-H Agent, at (850) 482-9620 / <u>amgranger@ufl.edu</u> or Betsy Willett, Jackson County 4-H SeaPerch Robotics Club Leader and Administrative Assistant PPLCS at (850) 209-1015 / <u>bwillett@pplcs.net</u>.

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