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Press Releases



Several 4-H stories have been highlighted on Clemson University's Media Relations page. We are so proud of all the hard work volunteers, agents, and 4-H'ers are doing across the state and country! Check out the latest 4-H news, here: <http://newsstand.clemson.edu/?s=4-H>

3

New 4-H Agents



South Carolina 4-H is growing with the addition of 4 new 4-H Agents since December 2015! Please, welcome our new agents to the South Carolina 4-H family.

4

Monthly Activity Idea



Email Ashley (taberp@clemson.edu) if you have an activity lesson you would like to share or pictures of previous lessons in action!

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Lowcountry 4-H Livestock Team Competes at Nationals

Kentucky Exposition Center – Louisville, KY
November 17, 2015

By Shannon B. Herndon, Bamberg/Barnwell County Extension 4-H Agent

South Carolina 4-H was represented at the National 4-H Livestock Judging Contest held on November 17, 2015 in Louisville, Kentucky during the North American International



Livestock Exposition. Team members are: Ralph Wallace Rentz, Wes Ulmer, Hannah Rentz, and Geneffer Sweatman. The team was coached by Wesley Ulmer.

The team started practice sessions in January 2015 learning how to state oral reasons and conformation of beef cattle, swine, goats and sheep. The team placed first at the SC 4-H/FFA Livestock Judging Contest held at T. Ed Garrison Arena in Clemson on April 4, 2015 and was awarded the trip to the National 4-H Livestock Judging Competition.



Top: Iconic backdrop showcasing the 2015 North American International Livestock Expo sign
Bottom: Lowcountry 4-H Livestock Judging Team stops at the University of Kentucky on their way to Louisville. Team members were Hannah Rentz, Wes Ulmer, Geneffer Sweatman, and Ralph Wallace Rentz. Team is coached by Wesley Ulmer. Photo Credit: Karissa Ulmer, Allendale/Hampton Extension 4-H Agent.

Continued on page 2

(Continued from cover) The National Contest consisted of: reason classes for two beef, one swine, and one sheep; questions classes on breeding or market swine, breeding or market sheep or meat goat, and breeding or market beef; an oral reasons class on breeding beef, including performance records. Contestants were allowed 12 minutes to place each non-reason class and 15 minutes on each reasons class, to make observations, take notes and complete their placing card.

The South Carolina Team competed with thirty-four state teams for a total of 130 4-H competitors. The team left South Carolina on Sunday, November 15 and stopped in Owenton, Kentucky at Southdowns to practice judging sheep. On Monday they practiced judging more sheep at University of Kentucky and toured Keeneland and Churchill Downs. Tuesday was contest day and Wednesday morning the winners were announced at the awards breakfast. For more information about Livestock Judging in South Carolina, contact Dr. Meghan Wood at mlmcphl@clermson.edu.

“My livestock judging experience was an unforgettable one. From learning new things, growing in my confidence, & getting plenty of laughs along the way, it really gave me a leg up before heading off to college to major in animal science. I will be forever grateful to everyone that pushed and believed in me and my team along the way.”

Hanna Rentz,
4-H Judging Team Member &
Freshman at the University of Georgia

“My time with the livestock judging team has helped me increase my confidence, improve my public speaking and speech writing skills. It also gave me the unforgettable experience of competing in a national 4H event. It has also given me an advantage when selecting animals to show. Livestock judging has taught me a lot of life skills with plenty of laughs along the way.”

Geneffer Sweatman
4-H Judging Team Member

Color Your 4-H Imagination

Camp Bob Cooper – Summerton, SC
February 5-7, 2016

The 2016 Junior Weekend was held at Camp Bob Cooper with the theme, “Color your 4-H Imagination”. Junior 4-H’ers (4th-8th grades) indulged in fun, hands-on activities that focused on Head, Heart, Health and Hands. Throughout the weekend, youth experienced a bonfire, explosive science experiments, smoothie making, a dance, and so much more! They learned leadership skills, participated in service projects, and enjoyed fellowship with youth from across the state.



Clockwise from top right: 4-H members engaging in service project for kids in Uganda, participating in archery activity, and showcasing art project.

the NEWSSTAND

'Down on the Farm' teaches kids the importance of agriculture

Deon Legette & Jim Melvin, Public Service Activities
December 8, 2015

Boykin — What happens when you put horses, donkeys, cows, goats, pigs and hundreds of young children in the same place at the same time?

Good rollicking fun.

More than 200 second-graders from Kershaw County recently gathered at...Click [HERE](#) for full article.

4-H partners with chefs to prove healthy eating is rich with flavor

Scott Miller, Public Service Activities
February 9, 2016

COLUMBIA — MacKenzie Riley from Saluda County wrinkled her nose at the making of ricotta cheese, observing the coagulation as vinegar mixed with hot milk. She enjoyed the....Click [HERE](#) for full article.

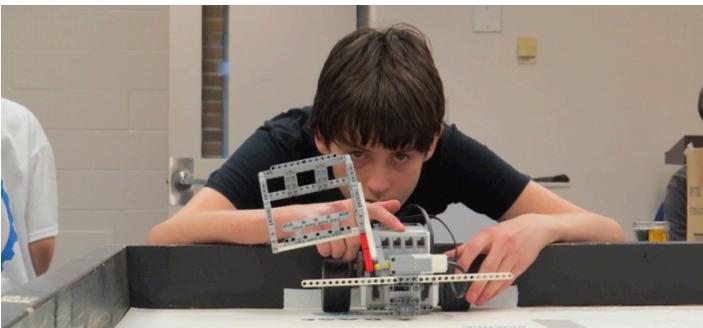


Patrick Duggan, chef instructor, teaches 4-H'ers at the 4-H Healthy Lifestyles Summit. Photo Credit: Scott Miller, Public Service Activities

Statewide 4-H contest to challenge STEM skills

Scott Miller, Public Service Activities
February 23, 2016

ORANGEBURG — South Carolina students interested in science and technology will have an opportunity this spring to showcase what they have learned in the classroom. The fourth annual S.C. 4-H Engineering Challenge...Click [HERE](#) for article.



A student participates in the robotics competition at the 2015 4-H Engineering Challenge. Image Credit: Clemson University



Top: Doris McGougan, a dedicated 4-H volunteer explains how food gets from the farm to the plate.

Bottom: Longtime 4-H member Katherine Ellig talks about chickens to eager students. Image Credit: Weatherly Thomas, Richland Co. 4-H Agent



We continue to grow here in South Carolina, proudly announcing another group of new County 4-H Agents!

Help us *welcome* our new



Greenwood – Lucy Wetzel

Lucy Wetzel grew up in Greenwood County. She participated in 4-H throughout her entire life showing horses, cows, and goats. In 2011, Lucy won the 4-H Presidential tray award. She graduated from Clemson in May of 2015 and looks forward to being the Greenwood County 4-H agent. Lucy can be reached at lucyw@clemson.edu or 864-223-3264 ext. 113.



Lexington – Allie Winter



Allie Winter began working at the Lexington County Extension Office in December of 2015. A graduate of Clemson University, Allie studied Animal Science and grew up on a family farm in Pickens, SC. Allie has a broad range of interests and experiences and is looking forward to working with volunteers in Lexington County to further develop Lexington 4-H programs. Allie can be reached at aewinte@clemson.edu or 803-359-8515 ext. 124.

Oconee – Mallory Dailey

Mallory Dailey joined the Clemson Extension team in January as a 4-H agent in Oconee County and serves on the 4-H Natural Resource Committee for the state. Mallory has her Master's degree in Agricultural Education and a Bachelors of Science degree in Wildlife and Fisheries Biology, both were earned from Clemson University. Mallory is also a certified Master Naturalist through the South Carolina Master Naturalist Program. She is very excited to work in Oconee County and throughout the state of South Carolina, and can be reached at mallord@clemson.edu or 864-638-5889 ext. 117.



Richland-Weatherly Thomas

Weatherly Thomas is the 4-H agent in Richland County. She is a former marketing specialist for the South Carolina Department of Agriculture and a former Agriculture Coordinator for the South Carolina Farm to Institution Program. Weatherly is a graduate of the University of South Carolina and the Savannah College of Art & Design. Weatherly can be reached at marjort@clemson.edu or 803-865-1216 ext. 123.



South Carolina 4-H Small Garden Project



Registration
Deadline:

April 1, 2016

Cost: \$10 for 4-H'ers
\$20 for non-members

For more
information visit:
http://www.clemson.edu/extension/4h/4h_naturalresources/small_garden/index.html



Now available or 2016 – Group Registrations!



Look for summer programs offered in your area!

Upcoming Dates & Deadlines



3.4-6.2016

Sr. Teen Weekend – Camp Long

3.11-13.2016

Forestry Clinic – Webb Wildlife Center

3.14.2016

Registration Deadline for the SC 4-H
Engineering Challenge

Registration Deadline for the SC 4-H
Sporting Clays Fundraising Tournament

3.15.2016

Postmark Deadline for the SC 4-H Horse
Show Forms

Registration Deadline for Horse Judging

3.16.2016

Legislative Day – Columbia, SC

3.19.2016

Sporting Clays Fundraising Tournament –
Swansea, SC

3.31.2016

Registration Deadline for Livestock Judging

4.1.2016

Registration Deadline for the SC 4-H
Small Garden Project

4.7.2016

Registration Deadline for Poultry Judging

4.9.2016

SC 4-H Engineering Challenge

4.10-14.2016

National 4-H Conference

5.1.2016

Portfolios due in State 4-H Office



YLI CAMPS



Sporting Clays Tournament



Supports SC 4-H Leadership & Youth Shooting Sports Programs



South Carolina 4-H Sporting Clays Tournament

Saturday, March 19, 2016

**Live Oaks Sportsman's
Club, Swansea, SC**

**\$400 per team
\$150 per individual**

Clemson Cattlemen's Boot Camp

Thursday, March 24 at 8:00am to 3:30pm
T. Ed Garrison Cattle Complex

A one-day event open to anyone interested in learning more about a systems approach to beef cattle production. The Boot Camp will provide activities for **youth** and **adults** to learn from beef industry leaders. Topics will include optimizing nutrition, marketing and economics, youth livestock judging, dealing with dystocia, and more! Space is limited, so sign up early! *Event contact: Dr. Matthew Burns burns5@clemson.edu.*

The registration deadline is Monday, March 21st.

CLEMSON
COOPERATIVE EXTENSION
LIVESTOCK AND FORAGES



“Although no one can go back and make a brand new start, anyone can start from now and make a brand new ending.”

Image credit: 4-H Facebook Page

Thank you, 4-H volunteers, for all you do!

As always, we like to hear from you and how we can better enable you to work with youth. Also, if you would like share a success story or an innovative idea in this newsletter, please email taberp@clemson.edu.

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Monthly 4-H Club Activity Idea *Adapted from Acres of Adventures, 2*

Bigger, Better Bubbles

Objective: To give youth a greater understanding of how experiments are conducted, data is collected and displayed, and the role glycerin plays in bubble formation/retention.

Age Range: Material content best suited for grades 9-12, but coverage of material and the depth of information can be adjusted for all ages. Everyone likes playing with bubbles!!!

Hands-on Activity: Experimenting with different bubble wands and bubble solutions.

Life Skills: HEAD = critical thinking, problem solving, decision making;
 HEART = social skills, conflict resolution, communication, cooperation;
 HANDS = leadership, contributions to group effort, teamwork;
 HEALTH = self-esteem, character, managing feelings.

Leading Questions & Information

The purpose of this activity has less to do with teaching youth to make large, lasting bubbles and more to do with practicing the scientific method and becoming comfortable with data analysis. Playing with bubbles makes it fun and applicable!

What is one frustrating thing about bubbles?
They don't last long and they are small!

What is a bubble?
A very thin layer of soapy water in the shape of a sphere with air inside.

What causes bubbles to pop?
A bubble pops when something breaks the surface tension of the soapy layer (i.e. a finger) or when the molecules maintaining the bubble surface separate due to the water in the bubble solution evaporating.

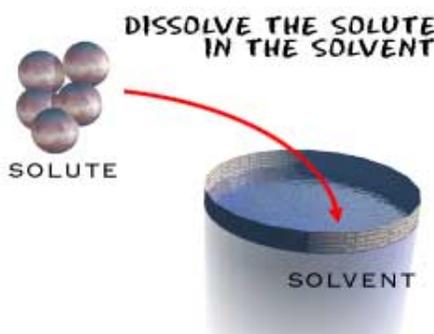
What does "evaporation" mean?
Evaporation is the process by which a liquid changes to a gas. Water goes from liquid form on the bubble surface to a gas in the air.

What is a "solution"?
A solution is made when a solute is dissolved in a solvent.

Can we affect evaporation to make bubbles last longer before they pop?
YES! You can add a solvent (glycerin; also known as glycerol) to your bubble solution that will decrease the rate of water evaporation and/or you can work with bubbles in an environment that is less likely to cause evaporation (cool, shady, humid, no breezes, etc.).



COHESIVE FORCES KEEP MOLECULES TOGETHER. EVAPORATION IS THE ESCAPE.



Glycerin

Often a soy-oil product, it is the backbone of a triglyceride. It reduces the rate of water evaporation.


OCC(O)CO

Hands-on Activity: How to

Bigger, Better Bubbles

Materials Needed:

- Bubble wands*
- Dishwashing detergent (Dawn or Joy recommended)
- Glycerin or Glycerol (skin-care aisle of drugstore)
- Empty 2-quart bottles
- Container to measure ~1 liter of water
- Container or scale to measure ~4 oz of liquid detergent
- Large, shallow containers for dipping wands in bubble solution
- Timer
- Ruler



*Be creative! You don't have to use a store-bought wand. Stretched-out coat hangers, rope, pipe cleaners, etc. all work well.

Step 1: Determine which factors you would like to test! You can design a very simple experiment, in which you compare the effect of 2 different bubble wands on the bubble size, or a very complicated one, by adding factors like the amount of glycerol (0, 1, 2, or 3 tbsn) in the bubble solution and the environment (indoors vs. outdoors, with or without a fan blowing). You can also increase the variables you are testing, such as the length of time it takes before the bubble pops.

Step 2: Create your bubble solutions! Add 4 oz of detergent to 1 liter of water to create your “basic bubble solution”. Stir it up (do NOT shake).

If you are going to test the effect of adding glycerol to the bubble solution, make enough basic bubble solution that you can add 1-3 tablespoons of glycerol to a liter of water. (To be the most scientifically correct, you should make 1 big batch of basic bubble solution and divide it up to add the glycerol. It removes batch-to-batch variability in your solutions. However, for the purposes of this activity and to give youth more hands-on time, you can make individual batches of basic bubble solution.)

Step 3: Make your bubbles and record your results on the data sheet! For scientific purposes, you want to replicate each bubble you make 2-3 times. For instance, if you are testing wand A verses wand B with the basic bubble solution, make 2 bubbles with wand A and 2 bubbles with wand B.

Step 4: Analyze your data! Within each replicate, average your results and plot them on a chart or graph. Youth can draw their graphs using grid paper (page 10). Follow the general guidelines below to set up the figure.

Step 5: Discuss your results! Discuss how the variables you decided to test were affected by each of your factors. Did size of the bubbles increase or decrease when you added glycerol? Did the bubbles last longer or shorter when a fan was blowing?

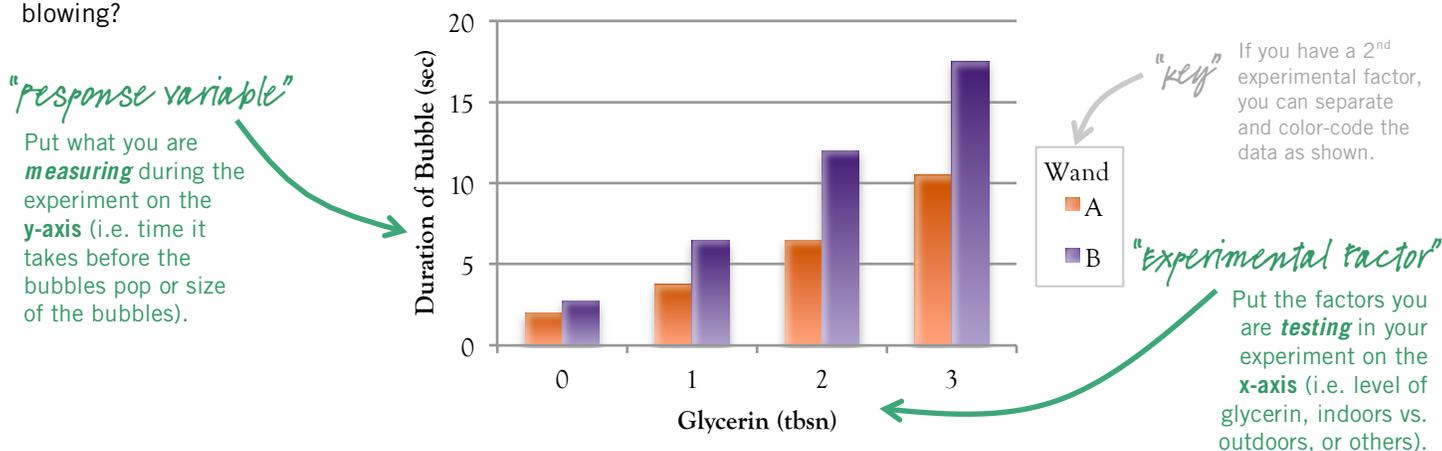


Figure 1. The effect of glycerin level on duration of bubbles before popping using 2 different wand types.

Hands-on Activity: How to

Bigger, Better Bubbles

Data Sheet:

Table 1. Add data collected from bubble experiment to the correct columns. (Letters and numbers in gray are examples and can be changed.)

Bubble	Wand	Glycerin (tbsn)	Duration (sec)	Size (in)
1	A	0	1	3.5
2	A	0	2	4
3	A	1	4	6
4	A	1	3.5	7
5	A	2		
6	A	2		
7	A	3		
8	A	3		
9	B	0		
10	B	0		
11	B	1		
12	B	1		
13	B	2		
14	B	2		
15	B	3		
16	B	3		

Table 2. Use the data you entered above to calculate the average for each replicate. (Letters and numbers in gray are examples and can be changed.) Average = $(x + y)/2$

Wand	Glycerin (tbsn)	Average Duration (sec)	Average Size (in)
A	0	1.5	3.75
A	1	3.75	6.5
A	2		
A	3		
B	0		
B	1		
B	2		
B	3		

Did you know?!

Bubbles love cold air & can last longer in the fridge with a glass bowl over them to protect from dust & drafts. The longest-lasting bubbles in the world have lasted up to two years!!!

