

SPOTLIGHT ON 4-H

Nebraska Extension 4-H Newsletter

May 2018

#4HGrowsHere

Head, Heart, Hands, Health the four H's of the 4-H program are still the reason to participate in a 4-H program throughout Nebraska and the nation. In a country where 89% of business leaders are concerned that college graduates do not have the necessary skills for success, how do we improve that statistic? 4-H is the answer.

4-H programming focuses on community service, leadership, and life skill development no matter what the particular project or subject area. A youth interested in learning to build a rocket can also learn Science, Technology, Engineering, and Mathematics (STEM) concepts and a life skill like decision making. This youth might also plan and teach a community service project where the youth teaches other students design thinking and they solve a problem in their community.

All of this happens because of 4-H volunteers. Caring adults who believe that young people are capable of learning and doing great things are the reason 4-H Grows Here in Nebraska. 4-H volunteers can and have made this difference in counties where 4-H youth reported a 51% increase in their confidence they can create

positive change in their community and a 46% increase in their confidence to lead other people.

Recruiting youth into 4-H programming includes helping their parents, guardians, and the adults around them understand the value of 4-H. According to a 4-H National Youth Survey on Leadership, 86% of youth said adults recognize the negative in their generation. These same youth stressed the importance of encouragement from adults that will help them build confidence and grow skills. This is where 4-H shines. With help from Nebraska 4-H volunteers, Nebraska youth grow in their life skills as well as in leadership and citizenship. In three counties in Nebraska during the 2016-2017 4-H year, 4-H youth self-reported a 43% increase in their belief that young people have an important role in their community. This means that 4-H can change lives and change attitudes.

The key to 4-H growing in Nebraska is a personal invitation from one friend to another to a 4-H activity. Tell youth and their parents the 4-H story. Invite someone to your 4-H activity today, because 4-H Grows Here.



In the Spotlight for May

- Club: Brain Breaks
- Grab & Go: Showing Rabbits & Poultry
- Contest: National 4-H Poultry Judging
- Crop Projects Teach Careers & More
- Keep HOT Food Hot & COLD Food Cold
- 4-H Leadership Opportunities
- Pre-Veterinary Medicine Program

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the United States Department of Agriculture.

The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.



Club Meetings: Brain Breaks

Regardless of the activity or project that we're teaching, we work with children. Brain breaks are quick, whole-group activities that give youth opportunities to move, stretch and re-energize. Brain breaks only take a few minutes and can quickly get your members back on task.

What are brain breaks?

For youth to learn at their highest potential, their brains need to send signals efficiently from the sensory receptors (what they hear, see, touch, read, imagine, and experience) to memory storage regions of the brain. Brain breaks are planned learning activity shifts that mobilize different networks of the brain. These shifts allow those regions that are blocked by stress or high-intensity work to revitalize. Brain breaks allow the resting pathways to restore their calm focus and foster optimal mood, attention, and memory.

The Neuroscience of Brain Breaks

We all know that physical movement increases blood flow, bringing more oxygen to the brain and leads to improved concentration. But it goes deeper than that. For new information to become memory, it must pass through an emotional filter called the amygdala and then reach the prefrontal cortex. When members' brains become anxious, highly confused, or overwhelmed, the activation of the amygdala surges until this filter becomes a stop sign. New learning no longer passes through to reach the prefrontal cortex to sustain memory. Even if students are not stressed by the pace or content of new learning, a point arises when the amygdala exceeds its capacity for efficient conduction of information through its networks into memory. Brain breaks can be planned to restore the emotional state needed to open the pathways for new learning.

"We're increasingly recognizing the importance of physical activity for children even as the academic demands placed on them are cutting into the traditional programs of recess and physical education," said Gerd Bohe, an assistant professor in the OSU College of Agricultural Sciences, an expert in public health nutrition and behavior. Brain Breaks were incorporated to bring more activity back into classrooms, especially when it may be most useful – in the afternoon after lunch, for instance, when attention spans and concentration tend to waver. Research has shown that physical activity can increase academic performance, students focus and classroom behavior. This all transfers over to club meetings or project days when youth are learning new things and at different points their brains still need a break to continue learning.



References

Willis, Judy MD. (2016). *Using Brain Breaks to Restore Students' Focus*. Retrieved from <https://www.edutopia.org/article/brain-breaks-restore-student-focus-judy-willis>

Stauth, David. (2014). Brain Breaks increase activity, educational performance in elementary schools. Retrieved from <http://oregonstate.edu/ua/ncs/archives/2014/sep/%E2%80%9Cbrain-breaks%E2%80%9D-increase-activity-educational-performance-elementary-schools>

Grab & Go: Showing Rabbits & Poultry



Showing rabbits and poultry are great projects for young and seasoned 4-Hers. Like all livestock, raising and showing these animals teaches skills such as responsibility, decision making, public speaking, etc. I refer to showing rabbits and poultry as the gateway projects because often these lead the 4-Hers into other 4-H projects they can complete and exhibit at the county fair.



The first objective to showing rabbits and poultry is to find good stock. Poultry and rabbits are judged from a set standard which can be purchased from the American Poultry Association or the American Rabbit Breeders Association. Your Extension Office may also have copies of the standards. Avoid picking cross-breed animals; they will never be able to compete with purebred animals. Talk to breeders or attend poultry and rabbit shows and get to know breeders that specialize in different breeds of rabbits and poultry.

After you've received your animals, provide good husbandry and nutrition. Do your homework and learn how to properly care for these animals. Proper housing and nutrition ensures your animals will grow and thrive. Poor housing and nutrition equates to an animal that does not show well.

There are a number of resources to learn about anatomy and physiology of your species. Your Extension Office may have the Ohio State Learning labs which contain a number of different activities that teach 4-Hers the ins and outs of rabbits and poultry alike. This knowledge comes in handy for showmanship presentations. Showmanship speeches for rabbits and poultry are unlike those of livestock in that an actual speech is prepared and given which describes your animal's good and bad points as well as outlines the breed standards. An example how to put together and present a poultry showmanship can be found at this link. https://www.youtube.com/watch?v=ZDmAuhLEb6g&list=PLnc_S0Gfnp6cRObKx-gdQzhE8Of5aEKy3



Grooming your animal will ensure they look their best. There are a number of ways to groom and none are wrong. For poultry, giving your project a bath 3 days before the show will ensure they birds are free from dirt and manure. Use warm water and a mild soap like baby shampoo. Air dry or towel dry. A blow-dryer may be used but make sure it does not come too close to the skin. **RABBITS SHOULD NEVER BE WASHED!** Rabbits do not respond well to washing and can be stressful and cause death. A moistened cloth will work. In both species, clip toe nails if needed. Apply baby oil or mineral oil to combs, wattles, earlobes and legs of poultry to brighten them up.



Contest: National 4-H Poultry Judging

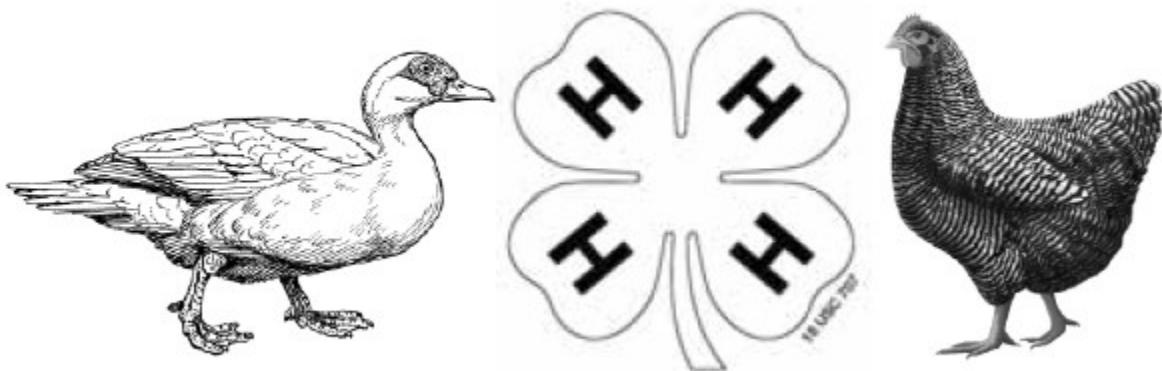
Poultry judging can take many different forms. Most 4-Hers in Nebraska who show poultry are familiar with the exhibition poultry or purebred poultry but not many are familiar with the production poultry. The National 4-H Poultry Judging Contest highlights the production poultry sector, aiming to teach youth about judging laying hens for overall productivity, quality grading eggs and carcasses and identifying retail cuts of chicken.

Every year during the Premier Animal Science Event (PASE), myself and Dr. Sheila Purdum, UNL Poultry Extension Specialist, host the poultry judging event. Teams from around Nebraska compete in the judging contest, where they judge hens for past egg production, internal and external quality of eggs, egg break out quality, broiler chicken carcass quality and retail cuts. All of which adheres to the USDA standards. As you may expect, this is much different than what the poultry 4-Hers are used to seeing.

In order to judge production poultry and eggs, you'll first need to supply the 4-Hers with the National 4-H Poultry Judging Manual. UNL is the publisher for the manual which can be purchased through UNL Marketplace or your local extension office. In the manual, it will explain how to judge hens for past egg production performance and what constitutes an egg to be classified as an AA, A, B, or inedible grade egg along with USDA qualifications for carcass quality. Study these with your team. Teams can be up to 4 individuals with the lowest score being dropped. Individual members may also compete. If counties or county units do not have a full team, then two counties/units may combine members as long as the two counties/units are touching. For instance, if Douglas-Sarpy didn't have enough members for a team, they may combine with Cass, Saunders, Dodge or Washington Counties.

The team that wins the PASE poultry judging contest has the opportunity to represent Nebraska at the National 4-H Poultry Judging Contest in Louisville, KY in November. This contest coincides with the International Livestock Exhibition and teams from throughout the U.S. compete in the contest. There are industry tours, a pizza and bowling night where 4-Hers from other states swap trinkets and a formal awards banquet. The contest only lasts two days.

Finally, workshops are being planned to introduce youth to production poultry judging which will take place at UNL's Department of Animal Science in the spring of 2018 and possibly one in Grand Island or Kearney. More information is forthcoming.





Crop Projects Teach Careers & More

Crops play a key role in Nebraska's economy. A wide variety of career paths are available in this rapidly-changing field. With a degree in agronomy, careers are possible as an:

- Agricultural Communicator,
- Crop Consultant,
- Crop Insurance Adjuster,
- Educator,
- Elevator or Co-op Manager,
- Farmer or Rancher,
- Farm Credit Banker,
- Farmer Manager,
- Field or Lab Researcher,
- Plant Breeder,
- Seed, Fertilizer, or Chemical Sales or Technical Representative,
- Soil or Water Conservationist.



If you haven't taken a look at the projects offered in the crop area recently, you should consider exhibiting projects related to field crops, weed science, and range. The crops & range division has a wide variety of projects for youth to express their creativity while learning the science behind their exhibit.

If you enjoy making educational displays, consider making a Career Interview Display! The purpose of this class is to encourage youth to investigate a career in agronomy. Youth should interview one person that works with crops about such topics as what parts of their job they like/dislike, why they chose that career, what their educational background is, etc. They should include a picture of the person interviewed and creatively explain what they learned about that career on a display board which could be on poster board or plywood, no larger than 24" x 24".

Other crop displays are:

- Crop Production Display – Contains information about crop production aspects such as crop scouting, alternative crops, etc.
- Crop Technology Display – Aspects of how technology is used in crop production such as genetic engineering, crop breeding, GPS, yield mapping, etc.
- Water or Soil Display – Information about water or soils, such as how soils are being used for crop production, range, conservation, wildlife, or wetland use, or ways to protect or conserve water and soil resources.

The field crops project also has grain or plant exhibits which enable youth to exhibit grain from the previous year, so if planned early, save some grain after harvest, write a short essay on the project and you could have a project completed well before fair time! Another option is to exhibit plants from the current year's project and explain your exhibit in a short essay as well.

Need resources to help youth learn about crops?

Check out the CropWatch.unl.edu/youth website which provides educational resources and activities for leaders or educators to teach youth about crops. If you have questions or need additional resources, contact Brandy VanDeWalle at brandy.vandewalle@unl.edu.



Keep HOT Food Hot & COLD Food Cold

Cleanliness is important when preparing food to eat. Food carry germs that make you sick. Dirty utensils, hands, clothes or work area can also spread germs to the food you are preparing. Follow simple rules when you are cooking to keep food safe. These rules should become a habit.

Before cooking:

- Wash hands with soap and warm water for at least 20 seconds and tie long hair back.
- Wear clean clothes.
- Make sure work area is clean.
- Use clean cooking utensils & wash them often.
- Have clean towel and/or paper towels to dry hands. Use different towel and/or paper towels to wipe floor.

While cooking:

- Keep hands away from hair, face and pets.
- Cover nose and mouth if you have to sneeze or cough. Wash hands before touching food again.

Clean up:

- Soak cooking utensils to make easier to wash.
- When washing dishes use plenty of hot soapy water to get clean.

Food Prep/Storage Safety:

Keep HOT food hot. Keep COLD food cold. Germs grow quickly in foods that are left at room temperature. Bacteria need time and the right environment to grow and multiply. Your kitchen can provide the moisture and warmth bacteria need to grow. Some bacteria can double their numbers every 20 minutes at temperatures above 40 degrees. In a few hours, bacteria on food can multiply and cause anyone who eats the food to get sick. Many people who think they have the flu may actually have a food borne illness. You can become sick 20 minutes to 48 hours after eating food with some types of harmful bacteria.

To fight bacteria CLEAN hands and cooking surface often. Separate raw meat, poultry, and egg products from cooked foods to avoid cross contamination. Cook raw meat, poultry and egg products thoroughly. Chill food promptly in the refrigerator.

When food temperatures are between 40 and 140 degrees F, bacteria multiply rapidly. This is the DANGER ZONE for food safety.

An easy way to remember the conditions contributing to bacteria growth are: FAT TOM.

F is food – bacteria especially like protein foods like meat.

A is acid- bacteria can't grow in high acid environments like fresh fruits, or vinegar food items.

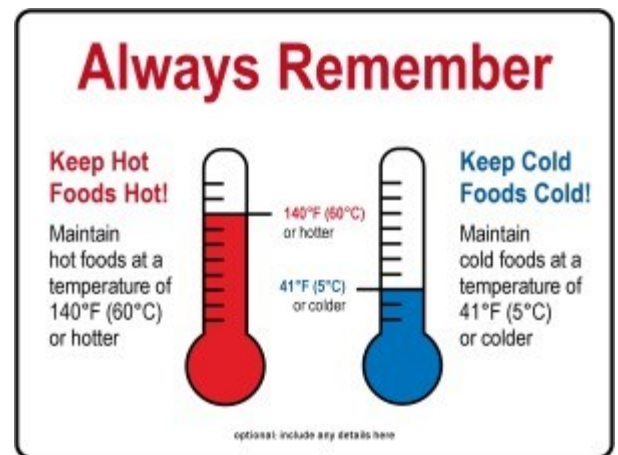
T is time- if food is left in the DANGER Zone for too long bacteria can grow rapidly.

T is Temperature- Bacteria reproduce quickly if food is 40-140 degrees.

O is Oxygen- that bacteria need to grow.

M is moisture- that bacteria need to grow.

Refer to the new 4-H Cooking 101, 201 & 301 project manuals for more great food safety information.





4-H Leadership Opportunities

As a club leader or volunteer, have you been purposeful about providing leadership opportunities for the 4-H'ers in your club? 4-H is an organization that has the potential to foster valuable learning experiences that can enhance leadership skills for our future leaders. A great way to provide these experiences is through a Junior Leader or an Ambassador Program. Even if your county doesn't currently have these programs in place, they can easily be individualized and adapted to fit the needs of your 4-H Club.

Depending on the amount of interest, a separate Junior Leader Club can be formed specifically for 4-H'ers that want to focus on the development of their leadership skills.

The first step is to set clear expectations of your young leaders. Obviously, you want them to be a positive influence and role model to other 4-H'ers in their club. They should also be encouraged to represent 4-H in a positive light. This can be done in a variety of different avenues, including writing a testimonial for the local newspaper, serving as a spokesperson during a radio interview, or visiting a classroom to promote 4-H.

It is important to give young leaders responsibility in this role. Gather feedback from your Junior Leaders to gain insight on their specific interests and passions and then help them create opportunities for themselves. Give them the ownership of planning a club wide fundraising activity or community service project that is important to them. Or it could be as simple as planning, organizing and facilitating a fair project they specialize in at a monthly meeting.

Remember to recognize your leaders for their hard work and help them understand the benefit of being a leader and developing their skills so early. Have a conversation about how to take their learning to the next level by recording their activities and reflecting on what they've learned. This can be extremely beneficial when filling out 4-H Career Portfolio's, resumes, and eventually college applications and scholarships.

The important thing to remember is you can individualize this experience to match the needs of your club. Give your Junior Leaders a purpose and responsibility, and don't forget to have fun with it!

True 
Leaders
in Service





CALENDAR OF EVENTS



Pre-Veterinary Medicine Program

Have you always enjoyed being around animals and is your career goal to help them you want to help them as a career? That's why most students enroll in the Pre-Veterinary Medicine program at the University of Nebraska – Lincoln. They want to work with and care for animals, and they want the opportunity to turn their passion into a rewarding career.

The objective of the Pre-Vet program is to help students prepare for admission to veterinary school, where they will pursue their dream of becoming a Doctor of Veterinary Medicine (DVM). The Pre-Vet coursework is matched to the admissions requirements for veterinary schools so students make the best use of their time, money, and efforts. Students will do participate in the Pre-Vet program alongside their degree of choice. Some popular degree programs for students who wish to become a veterinarians are Animal Science, Fisheries and Wildlife, and Veterinary Science.

In addition to academics, veterinary schools also expect students to gain experience outside of the classroom through internships, work experiences, and other opportunities that will help them understand what veterinary medicine is about. At UNL, students will have the opportunity to conduct research with expert faculty as well as getting first-hand knowledge in animal health from animal professionals at the University and around Lincoln.

With all the resources available to students through UNL and the College of Agricultural Sciences and Natural Resources, students can become highly qualified candidates for veterinary school, accomplished veterinary students, and successful veterinarians.

To learn more about the Pre-Vet program, please contact Lila Tooker at pre-vet@unl.edu or 402-472-6680!!