



## Exploring Science using the 4-H Horticulture Project!

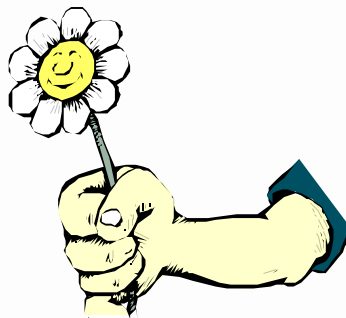
The 4-H Horticulture project can help engage youth in the exploration of science in exciting and meaningful ways, helping youth create a sense of wonder about the world around them. Horticulture provides youth with the opportunity to plan, create and care for their own environment. In the process, they ask questions about their environment, and make observations, research topics, and can set up experiments in search of answers.



Many children do not realize the connection between their growth, the food they eat, and where this food comes from. They have a hard time understanding the intertwined relationship between themselves and all living things on earth. The 4-H horticulture curriculum provides topics on plant science and human nutrition that helps to join these connections through simple concepts.



Youth can learn a lot in a garden, it encourages children to dream and use their imaginations and promotes environmental stewardship and provides opportunities to learn about science, nutrition and health. When youth work with plants, they have to make many important decisions. To make the best decision, youth have to know about plants and what they need. Some of the science skills and experiments that club members can learn in the Horticulture project are listed below.



- Learn the parts of a seed.
- Learn the parts of a plant.
- Learn how to germinate seeds.
- Learn what plants need to grow.
- Learn about plant parts and how they help the plant grow.
- Learn about plant life cycles.
- Learn how to transplant and set seedling plants in the garden.
- Learn about soil and what is made of.
- Learn the human impact of gardening.

Encourage members to participate in county contests like favorite foods, presentation contest, speech contest, tractor driving contest, clover challenge, meats judging, livestock judging, vegetable I.D. contest or farm safety events.

Do a service project! Make a meal for an elderly person(s) once a month; host a bicycle inspection day; volunteer at a local senior center; find a walking partner.

Each 4-H Manual provides lesson ideas and fun activities that teach life skills. We encourage you to use them to create a Healthy Lifestyles lesson at your next club meeting.

**Spotlight On ... 4-H!**



## How Sweet It Is - How Much Sugar is in Your Beverage?



Obesity and overweight in kids is a national epidemic, and while there are many causes for the problem, emerging evidence suggests that sweetened soft drinks are the key culprit. Since obesity is one of the contributing factors in potential to develop diabetes and weight and eating patterns are established in childhood it is important people understand the impact of their beverages (Kaufman, Francine, M.D., "Back Away from the Soda!", Diabetes Forecast, September 2005).

### Swallowing the Facts:

- Nearly half of all children between the ages of 6 to 11 years drink sweetened sodas, with the average drinker consuming 15 ounces per day.
- Teens now drink twice as much soda as milk.
- Sodas are the leading source of added sugar in children's diets.
- Teenage girls consume an average of 36.2 grams of sugar per day from soft drinks----that is about 140 empty calories a day.
- Teenage boys consume 57.7 grams on average of sugar, which amounts to 223 calories daily, enough to cause weight gain.

The follow activity will help member see how much sugar is in soft drinks. Collect beverage containers with nutrition labels. Have members read the labels and figure out how many servings are in each container (ex. 20 ounce container is 2.5 servings). (Leader's Guide of Six Easy Bites gives label reading details) Multiply the number of grams sugar (see nutrition label) per serving by the number of servings in the container. Have member measure out the amount of sugar they consume by drinking pop. One teaspoon of sugar equals four grams of sugar. All will be amazed by the amounts of sugar, especially in liter containers. You can also make a point with flavored milk, but note there are naturally occurring sugars in milk as well as what is added with flavoring.



Many athletes think special water replacement drinks, ades or soft drinks work better than water. As demonstrated above soft drinks contain about nine teaspoons of sugar per 12 ounce can. Sports drinks have a high concentration of sugar as well. Help members understand how absorption is slowed with the following experiment. Measure 1 ½ cups of water into a glass. Measure another 1 ½ cups of water into another glass, add 9 teaspoons of sugar and mix well. Line a funnel with a coffee filter and set in an empty glass. Pour the plain water through the funnel. Note how many seconds it takes for it to pass through the filter. Line the funnel again with a filter. Pour the sugar water through it. Note the seconds it takes to pass through. Page 7 of Tasty Tidbits gives more for this activity.

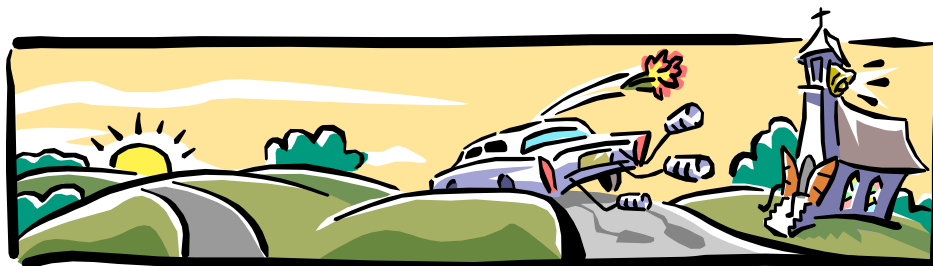


## Welcome To Auto Town!

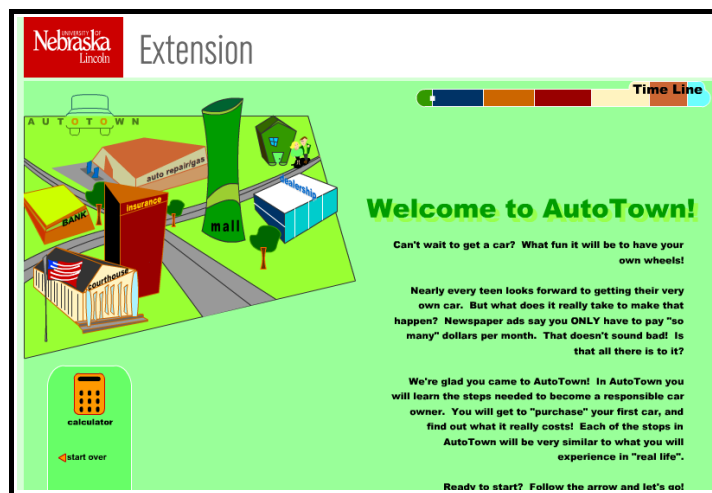
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Do you have teenagers in 4-H who can't wait to purchase their first real car? If so, you should have them to visit a Web site called Auto Town. University of Nebraska–Lincoln Extension has developed a site, which helps teens learn about the process of buying a vehicle and the costs involved. Many teens realize what the vehicle itself costs, but may not know about some of the maintenance, insurance or other costs incurred by vehicle owners.



A nationwide survey conducted in 2004 for the Jump\$tart Coalition for Personal Financial Literacy reveals that 65.5 percent of the 4000 high school students who took the personal financial literacy survey failed the exam. There is an on-going need for personal financial education opportunities for teenagers. This is a fun way to learn about finances since buying a car is almost always of interest to teenagers. John Bryant, founder and Chairman of Operation Hope, a national non-profit organization which seeks to bring economic self-sufficiency and a spirit of revitalization to America's inner cities, spoke at the National Council on Economic Education summit, about the need for financial literacy. Bryant summed up his message by stating, "The issue is not making more money, but making better decisions with the money they made. Education can make a difference. Education is the ultimate poverty eradication tool. When you know better, you tend to do better."



The site, <http://autotown.unl.edu>, features a diagram with buildings depicting businesses a teen would visit when buying a car, including an auto dealership, a bank, an insurance company and an auto repair business. Quizzes help teens determine financing and test their knowledge about car-buying basics. Youth can also pick out a car or use the cost of a car they wish to buy and input the figures into a budget. After working through the site, teens will be able to determine whether or not they can afford the vehicle of their choice.

Encourage teenage 4-H'ers to visit the site and learn about the process of and costs involved in buying an automobile. If site users complete the evaluation found at the end of the site, their name will be put in the hat for a quarterly drawing for a cool prize!





## 4-H Awards Applications!

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The 4-H Incentives and Awards Program begins with the 4-H youth doing their best and recording their accomplishments.

The first step is encouraging 4-H'ers to complete the 4-H Career Portfolio Awards Application. When accurately and carefully assembled, it is a useful tool for determining progress and charting personal growth. It is a record of leadership experiences related to knowledge learned, skills gained and community service/volunteer experiences through 4-H. Careful planning, recording facts and selecting only the most important information are essential to prepare a complete application.



The 4-H Career Portfolio is submitted in a standard acco-type fastener binder cover. It includes pre-printed tab dividers, the application and curriculum forms, 4-H Career Portfolio forms (a composite of 4-H and non 4-H projects/activities), 4-H curriculum story, project and activity photographs, and support materials. The complete instructions are available on the Nebraska State 4-H website at [4h.unl.edu](http://4h.unl.edu) or on the 4-H Career Portfolio CD available at your local County Extension Office.

In "Section 1 Project Accomplishments," the 4-H'er identifies project(s) and lists accomplishments and what they learned through completing each project. In Section 2 "4-H Leadership, Community Service, Volunteer, Citizenship Educational Experiences," the 4-H'er lists each 4-H activity in the appropriate curriculum area. Activities include camps, contests, workshops, county events, educational experiences, service projects, elected offices, committees, judging contests, presentations, speeches, etc. In Section 3 "Non 4-H Experiences," the 4-H'er lists participation in school, church and community organizations other than 4-H, including leadership roles and honors received.

The 4-H Career Portfolio Awards Application is very useful when documenting 4-H experiences and recording development of life skills. It also is instrumental when applying for National 4-H Youth Congress or National 4-H Conference. It is valuable when completing scholarship applications, applying for college entrance, building resumes, and applying for jobs.

More useful tools in recording accomplishments are the four new/revised 4-H project record sheets. The 4-H Project Record sheet is a record of what has been learned and accomplished in a project. It is a useful tool for determining progress and growth in project, recording activities and recognition, and developing the 4-H Career Portfolio and/or resume. These two-page project record sheets are available on the Nebraska State 4-H website at [4h.unl.edu](http://4h.unl.edu).



NE4H 9010 Nebraska 4-H Project Record  
NE4H 9020 Nebraska 4-H Animal Project Record  
NE4H 9030 Nebraska 4-H Companion Animal Project Record  
NE4H 9040 Nebraska 4-H Junior Leader Record



All incentives, scholarships, and other forms of recognition are available when completing applications. Incentives, when used properly, can strengthen the 4-H program and enrich the lives of many 4-H youth in Nebraska.

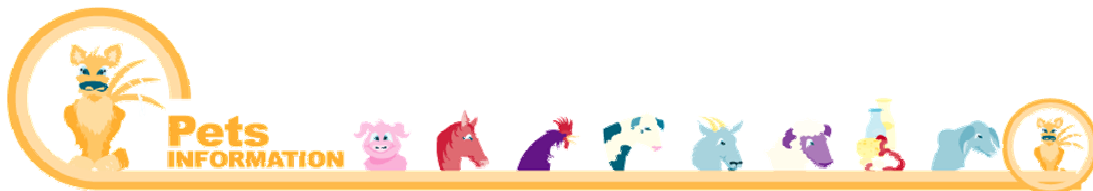




## Small Pet Showman at the Nebraska State Fair!

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### New at the Nebraska State Fair – 4-H Pet Show

The Nebraska State Fair will have a **new opportunity** for anyone with pet rabbits or small household pets.

The **4-H Pet Show** will consist of pets such as:

- ▶ Ferrets (12 weeks old)
- ▶ Chinchillas (7 weeks old)
- ▶ Guinea Pigs (4 weeks old)
- ▶ Gerbils, Hamsters, Mice, or Rats (4 weeks old)
- ▶ Hedgehogs (5 weeks old)
- ▶ Pet Rabbits (9 weeks old) – those not eligible for the 4-H Rabbit Show

*THERE HAVE BEEN A FEW CHANGES IN  
OTHER SMALL ANIMALS SHOWS.  
PLEASE CHECK THE STATE FAIRBOOK FOR  
MORE DETAILS.*

Bring your Household Pet to the first annual **4-H Pet Show** at the Nebraska State Fair.

### DOG SHOW CHANGES:

Each dog should reside and be cared for by the 4-H'er the majority of the year  
A dog substitutions for Showmanship Classes **ONLY** by the superintendent  
Nebraska State Fair Dog Show Vaccination Record Form



### THE DOG SKILLATHON CHANGES:

(you do not need a dog to participate in this contest)

- The breed group for 2007 is working group
- Stations will cover: Breed identification; Breed conformation; Stations covering 4-H dog information from the manuals

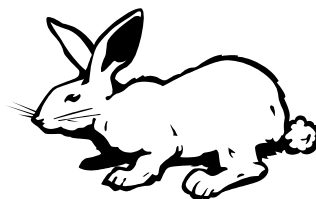


### CAT SHOW CHANGES:

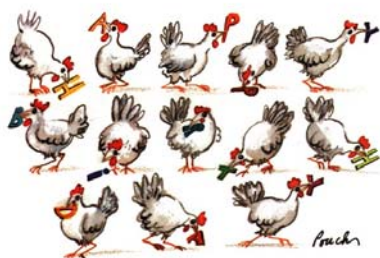
- Cat carrier requirements
- Feline leukemia vaccination or negative test
- Nebraska State Fair Cat Vaccination Record Form

### RABBIT SHOW CHANGES:

- ALL animals must be ID'd and will be physically checked during entry
- 4-H member is limited to exhibiting 7 rabbits



**POULTRY SHOW CHANGE:** Date has changed from previous year's schedule.



This is also an opportunity to share a great resource with you. Dr. Lisa Karr-Lillienthal, Small Companion Animals Specialist, has an extension appointment and is very willing to offer her expertise to any 4-H leader or member. This well qualified person did her undergraduate work at Illinois State University and her graduate work at the University of Illinois completing a MS and PhD in animal nutrition, specializing in companion animals. Since at UNL, she has been developing new courses in the companion animal program and has now added Companion Animal Nutrition and Companion Animal Behavior courses. If you have any questions concerning your small animals, Dr. Karr-Lillienthal can be reached at 402-472-6458.



## Earn College Credits from UNL for Your 4-H Interests

4-H members can get a jump start on their college education with UNL Husker Horizons and Advanced Scholars! Through this partnership, high schools can offer qualified seniors the opportunity to enroll in UNL courses for credit. These are the same classes taken by UNL freshmen students with the same coursework, books, assignments and grades as those used on-campus. For more information see: [http://extended.unl.edu/programs/advanced\\_scholars.shtml](http://extended.unl.edu/programs/advanced_scholars.shtml)

First, identify an area of interest and an interested faculty member (ex. Extension Educator or high school science teacher) CASNR and State 4-H staff can help students make linkages with UNL faculty members to serve as the mentor/evaluator of the project. Write a 200 word proposal including a description of the research/creative activity, methods to be used and the significance of the work and submit to the UNL faculty mentor. Complete UNL admissions "Visiting Student Application for Admission" at <http://admissions.unl.edu/apply/>, to get a PIN number and access to "What About Me" WAM which is their access to registration for UNL credits. There is a \$45.00 fee for the admission process and must pay tuition at the rate for the semester After acceptance you must register for classes via <https://wam.unl.edu/wam/login.jsp>.

Academic credit is awarded by time spent on the project. The UNL faculty member and the student determine the number of credit hours that will be received. Students are not required to come to campus to complete the project, but may find that the learning experience can be enhanced by a trip to campus. Students interested in a Husker Horizon project are encouraged to visit <http://casnr.unl.edu/future/horizons.htm>, or contact Sue Voss, Husker Horizon Coordinator, 402-472-2541, [svoss1@unl.edu](mailto:svoss1@unl.edu) or Kathleen Lodl, Extension 4-H Specialist, 402-472-9012, [klodl1@unl.edu](mailto:klodl1@unl.edu).



### Important News and Notes

## "Fair's Over, Now What?" Volunteer Training, Sept. 27

Leaders, parents and interested volunteers are invited to attend this 4-H training on Thursday, Sept. 27, 7 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln.

Discover how to complete the current 4-H

year and how to prepare for the next 4-H year.

Awards, project completion/selection and club reorganization will be covered. Bring your questions and ideas!

You must RSVP by calling 441-7180 by Tuesday, Sept. 25.

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