Gardening Resolutions!
Before the successes and failures of the last year’s growing season fade from memory or get pushed aside by the anticipation of another gardening year, why not take a moment to convert lessons learned and good intentions into resolutions for the coming year.

I resolve to:

► Make a list of needed plants and seeds before I start browsing through the seed catalogs.
► Limit the size of vegetable and flower gardens to what I can care for properly.
► Plan my vegetable garden carefully and follow the plan closely so I can rotate crops and make good use of all available space.
► Plant cool season crops early and again in mid to late summer for a fall harvest.
► Harvest crops at their peak of quality and maturity. No more giant zucchini or tough beans.
► Freeze or can produce as soon as possible after harvest to maintain high quality.
► Check plants regularly for insect or disease problems and do a better job of controlling them.
► Mulch earlier to control weeds.
► Persist in weed control efforts all summer to prevent weeds from going to seed and adding to next year’s problems.
► Put tomato cages in place at planting time.
► Plant native trees, shrubs, perennials and other landscape plants according to a landscape plan, selecting less problem prone plants whenever possible to minimize or eliminate the need for pesticides, pruning and other maintenance.
► Plant more native plants for pollinators and remove invasive species.
► Plant tree(s) in areas where they have room to grow, not near power lines. Call diggers hotline before you dig the planting hole.
► Set timers for irrigation system and adjust during the growing season. No more running the irrigation system while it is raining.
► Place landscape prunings, grass clippings and other organic material in a compost pile. Turn the compost pile weekly.
► Set up a priority system for lawn and garden resolutions so gardening and landscape maintenance continue to be a pleasant experience rather than an overwhelming list of chores.

Source: Mary Jane Frogge, UNL Extension Associate
90 Days before Calving
Time to Sort off Your Thin Cows for Extra Feed

Now is the time to body condition score your spring-calving herd and sort off the thin cows so you can give them a little extra feed.

March calving cows have about 90 days left to put on body condition before calving. The last 90 days before calving is your last opportunity to cost effectively put condition back on thin cows.

Body condition at calving is an important factor affecting rebreeding performance of spring-calving cows. The longer you wait to put condition back on cows, the more difficult and expensive it becomes.

Cows calving in a body condition score of 5 or higher rebreed more quickly after calving than cows that are in a lower condition. Pregnancy rate increases as body condition at calving increase to a score of 5.

Not only do cows in a body condition score of 4 and thinner have reduced chances of rebreeding, but they also produce less colostrum and their calves have lower immunoglobulin levels. This means they may be less able to fight off disease. On top of that, calves from thin cows are less vigorous and slower to stand.

So, thin cows have a lessened chance of rebreeding and give birth to weaker calves. These are two good reasons to sort off thin cows and give them extra feed. Managing spring calving cows in two groups for the 90 days before calving allows you to better manage your feed resources. You can save feed by not overfeeding the cows that don’t need it.

For more in-depth information, see the recently revised NebGuide Body Condition Scoring Beef Cows: A Tool for Managing the Nutrition Program for Beef Herds (http://www.ianrpubs.unl.edu/sendlt/ec281.pdf). It describes the 1 to 9 of body condition scoring, complete with pictures and details for assigning scores.

Nebraska Extension also has Android (http://go.unl.edu/bcsappandroid) and Apple (http://go.unl.edu/bcsappios) versions of a smartphone app to help you learn to assign body condition scores.

Source: Jay Jenkins, Nebraska Extension Educator
How Much Can Selective Harvest Improve the Feed Value of Baled Corn Stover For Cattle?

The short answer is a lot! The valuable components of corn stover in terms of feed are the leaf and husk because they are the most digestible (have the most energy value to the animal) but they only comprise about 40% of the residue produced. UNL research has shown that the husk is 60% digestible, the leaf is 46% digestible and the cob and stalk are only 35% digestible. Thus a bale of corn stover with more leaf and husk and less stalk and cob would have greater energy content.

There are two harvesting technologies currently on the market that help a producer bale less stalk and make the bale be comprised of mainly leaf, husk, and cob. One of these is the Cornrower sold by New Holland. This attaches to a chopping corn head and catches the stover under the stalk rolls, chops it into small pieces, and placing it into a windrow.

Then after harvest the windrow can be baled (a double pass system). The number of rows of stalks that are chopped in with the leaf, husks, and cobs can be changed from 2 to 8 rows. Analysis of the digestibility of the bale produced with only two rows of stalks included was 66% compared to conventionally raked and baled stover that was 43% digestible.

There is also a baler sold by John Deer and Hillco Technologies that is hooked to the combine and collects the tailings straight out of the combine and bales it (single pass round baling system). This system resulted in bales that were 27% leaf, 17% husk, 42% cob and 14% upper stalk. In a feeding trial the stover baled with this system had 35% better energy value when fed to growing cattle than conventionally baled corn stover bales. Both of these selective harvest methods make the TDN value of the baled stover similar to good grass hay although protein is lower.

Another additional benefit is that the bales tend to be denser and thus reduce transportation costs per ton of DM. Furthermore, selective harvest would leave more residue on the field to feed the soil than traditional raking and baling. With current raking and baling methods 75 to 85% of the residue is removed.

Even if all of the leaf, husk, and cob produced were baled only around 50% of the residue would be removed. There are likely other ways that corn stover could be selectively harvested such as turning off the spreader on the combine and baling the windrow of tailings that result without raking.

When grazing corn fields cows already selectively harvest by consuming the grain first then the husks and leaves. It may be time we quit thinking about bales of corn stover as just “corn stalks” and start thinking about adding value to corn stover bales by selectively harvesting this feed resource.

Source: Mary Drewnoski, Nebraska Extension Beef Systems Specialist
Crop Production Clinics Offer Latest Information on Variety of Farm Topics

- What does it take to produce 80 bu/ac soybean routinely?
- How can you control glyphosate-resistant weeds?
- What can you do to delay corn rootworm resistance on your farm?
- Where is the safety in the farm income safety net?
- What are the truths and the legends of cover crops?

All programs start at 8:45 a.m. and end at 4 p.m. A meal and resource materials, including the 2016 Guide for Weed Management in Nebraska and the CPC Proceedings, will be available to those who preregister at agronomy.unl.edu.cpc. Preregistration is $65 or $80 at the door.

These one-day workshops will be held at nine sites, each featuring location-specific topics as well as timely research updates and recommendations for any farm. Pesticide applicator recertification for private applicators and for commercial/noncommercial Ag plant, demonstration/research, and regulatory will also be available.

High-Impact Training for Agricultural Professionals and Producers

**Practical, Profitable, Environmentally Sound**

**Program**
- Registration: $65
- Online preregistration required at agronomy.unl.edu/cpc
- Preregistration closes 3 p.m. the day prior to clinic.
- Note: Preregistration fee is $99
- Sessions: 8:35 a.m. - 4 p.m.
- Online Preregistration Includes:
  - 2016 Guide for Weed Management in Nebraska
  - 2016 CPC Proceedings
  - Lunch and refreshments

**CCA Credits** (max of 6 per day)
- Crop Production (2)
- Nutrient Management (1)
- Integrated Pest Management (5)
- Water Management (1)
- Professional Development (2)

**Pesticide Applicator Recertification**
- Commercial/Noncommercial Ag Plant (01)
- Demonstration/Research (D/R)
- Regulatory (R)
- Private Applicator

**Nine Locations**

<table>
<thead>
<tr>
<th>Wednesday, Jan. 6</th>
<th>Gering Civic Center</th>
<th>1050 M St., Gering, NE</th>
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<tbody>
<tr>
<td>Thursday, Jan. 7</td>
<td>Sandhills Convention Center</td>
<td>2102 S. Jeffers, North Platte, NE</td>
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<tr>
<td>Friday, Jan. 8</td>
<td>Holtbus Convention Center</td>
<td>3130 Helen Ave, York, NE</td>
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<tr>
<td>Tuesday, Jan. 12</td>
<td>Beatrice Country Club</td>
<td>1301 Oak St., Beatrice, NE</td>
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<tr>
<td>Wednesday, Jan. 13</td>
<td>Adams County Fairgrounds</td>
<td>947 S. Baltimore, Hastings, NE</td>
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<tr>
<td>Thursday, Jan. 14</td>
<td>Younes Conference Center</td>
<td>415 W. Talmadge Rd., Kearney, NE</td>
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<tr>
<td>Tuesday, Jan. 19</td>
<td>Atkinson Community Center</td>
<td>205 W. 5th St, Atkinson, NE</td>
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<tr>
<td>Wednesday, Jan. 20</td>
<td>Lifelong Learning Center, NECC</td>
<td>601 E. Benjamin Ave., Norfolk, NE</td>
</tr>
<tr>
<td>Thursday, Jan. 21</td>
<td>Saunders County Extension Office</td>
<td>ARDC (Mead)</td>
</tr>
</tbody>
</table>

Please call 402-472-5636 if you have questions.

Online preregistration and program details at agronomy.unl.edu/cpc
5 Easy Ways to Eat 100 Less Calories per Day

What does 10 pounds of fat look like? For a rough estimate, imagine 40 sticks of butter or margarine or 10 1-pound cans of vegetable shortening.

Looks like a lot — yet how many of us add this much weight in a year without realizing it until our pants fit a little tighter or our belt runs out of notches.

Sometimes, we’re too hard on ourselves when we’re trying to lose weight. We eat some pretty awful-tasting foods, forgo getting together with friends if food is involved or take the joy out of eating through a monotonous and limited diet.

While people have lost hundreds of pounds through some of these methods, it’s often the same 10 pounds over and over again!

It takes an excess of about 3,500 calories to gain a pound. Break that into smaller bites and 100 extra calories a day can put on about 10 pounds a year. The good news is LOSING 10 pounds can be as easy as eating 100 calories LESS each day for a year.

ONE dietary change may be all it takes. Here are some simple changes, involving just ONE food; each will decrease your daily intake by about 100 calories. The amounts of calories saved are approximate; check nutrition facts labels on specific foods for exact amounts.

As a general rule, experts recommend a slow and steady weight loss of 1/2 to 2 pounds per week. It’s difficult to obtain adequate nutrients if you consume less than 1,200 calories per day. It’s beneficial for most people to increase their activity level AND eat less.

1. **Modify Your Milk.** Instead of drinking two cups of whole milk, switch to two cups of 1% low-fat milk or skim milk. The nutrients are comparable.

2. **Downsize Your Drink.** If you’ve been drinking a 20-ounce container of a regular soft drink, switch to a 12-ounce container size. Or, better yet, drink a cold glass of water, perhaps with a slice of lemon!

3. **“Dress, Don’t ‘Drown’ Your Salad.”** *Cook’s Illustrated* magazine advises 1/4 cup of vinaigrette should be enough to dress 2 quarts (8 cups) of loosely packed salad, an amount they suggest for 4 servings. That means each 2-cup serving of salad greens should have about 1 tablespoon of dressing on it.

**TIP:** Dressing slides off damp salad greens and collects in the bottom of the salad bowl. You’ll get more flavor with less...
dressing if salad greens are washed and thoroughly dried. Bagged lettuce that is pre-washed and labeled “ready to eat” should be dry enough as is.

If you need to wash salad greens, the easiest way to dry them is in a salad spinner. Pack lightly to avoid overcrowding and bruising the greens. After spinning, pat off any remaining moisture with clean paper towels. If you don’t have a spinner, pat greens dry, thoroughly, with clean paper towels or a clean kitchen towel.

4. **Size up Your Cereal Bowl.** Check the portion size you’re pouring in relation to the size cited on the box; decide if you’re pouring more calories than desired. Try eating from a smaller bowl to aid in portion control.

5. **Count Your Cookies.** A single medium-sized cookie easily can have about 100 calories. Often we pop two or more into our mouths before we realize it. If you feel you’re not getting enough “crunch” by limiting yourself to one cookie, try eating an apple instead — the calories are similar.

   Source: Alice Henneman, MS, RDN at ahenneman1@unl.edu

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**Thankful for Health**

During the holiday season, we often think about the many things for which we are thankful. It might be family, friends, or a good job. It may also be our ability to keep ourselves healthy by eating good food and partaking in physical activity. Here are a few more ways to think about being thankful for health and physical activity.

If you are able to do physical activity outdoors, you might be thankful for the clean, crisp air that allows you to breathe. Walking outdoors in the sunshine increases your exposure to Vitamin D, which promotes calcium absorption, bone growth, immunity and decreases inflammation.

Exercising reduces stress by releasing your body’s endorphins which elevates your mood. People who engage in regular physical activity have fewer heart attacks and strokes, lower blood pressure and higher levels of HDL (healthy cholesterol) than non-exercisers. For some, it also improves quality of sleep and keeps you energized.

Maybe you are thankful that physical activity helps you to maintain a good weight. Physical activity, especially walking, can be free and is relatively easy to do. By enjoying physical activity, we are able to strengthen the heart and lower disease risk. It also tones the arms, legs and torso. During the holiday season, you might be especially thankful for physical activity when you feel like you’ve eaten too many desserts, and now have a way to work those extra calories off.

As you exercise, you might be thankful that you have a good friend to go with you. Maybe you have a spouse or child that likes to go and talk about their day. To be surrounded by friends and family and to be able to forget the stresses of the day may make you grateful for all you have.

While you are doing physical activity, you can take a few minutes to think of all the things that make you thankful. And by doing so, you can live a healthy life.

Source: Ann Fenton (ann.fenton@unl.edu), Extension Educator.
Cranberries – A Great American Fruit

Cranberries have become a common part of holiday celebrations, whether they're used as garland decorating a Christmas tree or in the holiday meal. One of only three native North American fruit crops, cranberries provide plenty of health benefits, too.

- Cranberries prevent harmful bacteria from wreaking havoc on the body. They have long been known to prevent urinary tract infections, which was commonly attributed to the juice's acidity. Recent research by Rutgers University found that certain compounds in cranberry juice prevent infection by not allowing some bacteria to stick to urinary tract walls. Additional research may have implications for stomach ulcers, gum disease, plus ear and respiratory infections.
- Cranberries also contain powerful antioxidants that slow or prevent oxidative stress caused by free radicals in our bodies, preventing harmful diseases such as cancer, heart disease and age-related neurodegenerative diseases. Research by Cornell University reported that cranberries ranked highest in total antioxidant activity compared to 10 other commonly-eaten fruits, including apple, red grape, strawberry, peach, lemon, pear, banana, orange, grapefruit and pineapple.

Tips for Getting Creative with Cranberries:

- **Nutrition and health.** Cranberries are fat-free, cholesterol-free, sodium-free, and a good source of Vitamin C and fiber. Cranberries are thought to provide health benefits because of their flavonoid and phytonutrient content. These naturally occurring compounds have antioxidant and antimicrobial benefits. They have also been shown to promote cardiovascular health by reducing low-density lipoprotein-oxidation (bad cholesterol), maintaining or improving high-density lipoprotein levels (good cholesterol), and improving vascular function.
- **Forms and availability.** The peak harvest season for fresh cranberries is October through December. Sometimes fresh cranberries can be found in the freezer section near the end of their season. Cranberry juice, sauce and dried.
- **Selection and Storage tips.** Choose fresh cranberries that are full, plump, firm and dark red or yellowish-red. Avoid cranberries that are soft, shriveled, or have brown spots. Fresh cranberries should be stored in the refrigerator, preferably in a crisper for about three to four weeks. Cranberries freeze very well, either whole or sliced. When sealed in an airtight container, frozen cranberries will keep for up to nine months.
- **Cooking with cranberries.** Shortly before use, rinse fresh or frozen cranberries and throw out any that are shriveled or bruised. Cranberries are good for both cooking and eating raw. If raw cranberries are too tart, cook them before eating. One method is to cook them in a pot of water for 10 minutes on medium heat or until the cranberries pop. If cooked longer, they will taste bitter.
- **Getting culinary with cranberries.** Cranberries are versatile and can be combined with many other flavors. Try mixing cranberry juice with other juices such as apple, orange or grape. Dried cranberries can be added to nuts, trail mix, granola, oatmeal, or even chicken salad. Fresh or dried cranberries work well in quick breads such as muffins, sweet breads, and yeast breads. These berries also work well in pies, cobblers, chutneys, salsas, and relishes.
Recipe Ideas with Cranberries!

**Chunky Cranberry Spread**  
*(16 servings, 1 tablespoon each)*

**Ingredients**

- 1 8-oz. package low-fat cream cheese  
- 1-2 tablespoons low-fat milk  
- 1/2 cup chopped dried cranberries  
- 1/4 cup chopped blanched almonds or other nut  
- 1/2 teaspoon orange zest, preferably fresh

**Directions**

1. Place cream cheese in a medium bowl and allow to soften at room temperature.  
2. Mash and work with a fork until texture is light enough to combine easily with other ingredients.  
3. Gradually add just enough milk so cheese becomes soft and easy to spread.  
4. Mix in remaining ingredients.  
5. Cover and refrigerate up to 2 days ahead. Flavors will blend and mellow if this recipe is made ahead of time and allowed to refrigerate at least a few hours before serving.  
6. Spread on slices of a whole-grain bread.

Source: fnh/chunky-cranberry-spread

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**Cranberry BBQ Sauce**  
*(8 servings)*

A spicy-sweet condiment delicious on grilled vegetables, lean meats or poultry.

**Ingredients**

- 1 Tablespoon (T) vegetable oil  
- 1 cup minced yellow onions  
- 1 T minced garlic  
- 1 tsp. dry mustard  
- 1 tsp. chili powder  
- 1-1/2 T tomato paste  
- 1-1/2 cups cranberry sauce  
- 1/4 cup cider vinegar  
- 1 T dark molasses  
- 1/4 - 1/2 cup water, if needed

**Directions**

1. In a sauce pan, heat oil over medium-high heat; add onions and sauté 2 minutes.  
2. Mix in garlic, mustard and chili powder and continue cooking 1 minute.  
3. Stir in tomato paste and cook 1 more minute.  
4. Add cranberry sauce, vinegar and molasses and bring to a simmer, whisking often until mixture becomes smooth.  
5. Lower heat and simmer 15-20 minutes or until mixture reduces and thickens. Add water to mixture if it gets too thick.  
6. Remove from heat and cool to room temperature. Place in a covered container and refrigerate until ready to use. Reheat before using.

Source:  
http://www.uscranberries.com/Recipe/Details/263

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Check out the U.S. Cranberry Marketing Committee website at www.uscranberries.com, which includes many healthy cranberry recipes. For more food, nutrition and health information from UNL Extension go to www.food.unl.edu.

Taken in part from http://hortupdate.unl.edu/Cranberry and http://food.unl.edu/healthy-bites-october-national-cranberry-month
Let’s Talk…Safe Sleep

Let’s face it… talking about infant safe sleep best practices in a marketing world full of soft plush blankets and generations of parenting practices can be a challenge. Some of my most difficult conversations with child care professionals have been around safe sleep recommendations and why infant care practices of the past are no longer appropriate. New and ongoing research is clear and consistent – there are infant sleep practices that significantly reduce the risk that a child will die from a sudden and unexplained cause.

To make the conversation easier and simpler, our partners at Iowa Child Care Resource and Referral have recently released an approach that makes safe sleep best practices as simple as A, B, C.

• A… Alone – the infant should be alone in the crib with no blankets, pillows, animals or loose bedding
• B… Back – the infant should be placed on his or her back
• C… Crib – a crib is best for a sleeping infant

Steps you can take:

• **Hang** the ABC’s of Sleep for Child Care Providers ([https://iastate.app.box.com/s/qhrfiiu62pjdsflhesfsc0070hn1j](https://iastate.app.box.com/s/qhrfiiu62pjdsflhesfsc0070hn1j)) flier wherever care of infants takes place
• **Share** the ABC’s of Sleep for Families ([https://iastate.app.box.com/s/qnnc7i8w6sa5dccdaccm3f9tvceyj43](https://iastate.app.box.com/s/qnnc7i8w6sa5dccdaccm3f9tvceyj43)) flier with families in your program
• **Discuss** safe sleep best practice as part of your regular conversations with staff and families
• **Follow** safe sleep best practices, always!

P.S. I would like to personally acknowledge the efforts of Mary Janssen for her hard work and efforts towards the creation of these documents.

Cindy Thompson is a family life specialist with fond memories of her years caring for children in her home.

Source: [http://blogs.extension.iastate.edu/childcare/safe-sleep/](http://blogs.extension.iastate.edu/childcare/safe-sleep/)
Playful Ways for Cooler Days

Relief from the heat is often welcome with the falling leaves and changing colors of fall. With the change of seasons comes change in our active lives. Kids were once playing in the outdoor pool, participating in organized sports like baseball, softball, and soccer, and going for bike rides down to the park during the warmer months.

What to do when it starts to get cold outside to keep young hearts healthy, young bones and muscles strong, and young bodies energized? NO couch potatoes allowed!

There are many activities that kids can do to help keep them fit while having fun during the fall and winter months. First of all, just because the temperature drops does not mean that outside activities have to cease. Just remember to wear warm layers of clothing, drink water with increasing activity and wear sunscreen. Here are some outdoor activities to enjoy in the fall and winter that is fun for all ages:

- Enjoy the beautiful foliage on a walk or hike
- Rake leaves and play in the piles
- Visit a pumpkin patch to select the perfect pumpkins
- Visit a corn maze
- Try a holiday race like a “Turkey Trot” 5k walk or run
- Snowshoeing around your yard or out on a golf course
- Ice skating at an indoor or outdoor rink
- Sledding on your favorite hill
- Build a snowman or snow fort
- Go cross country skiing
- Have a snowball fight and make snow angels
- Help your neighbors by shoveling their snow

There are always cold, wet, snowy days that require everyone to be inside for the day. Again, parents can encourage kids to be active while inside the home. The following are a few ideas to help keep kids moving while using their imaginations and their brains.

- Turn up the music and dance
- Play board games or card games for a while and then switch to a more active game
- Let friends come over to build forts with blankets and the furniture
- Jump rope
- See who can balance on one foot the longest
- Hula hoop

Source: Tracy Trumper, Family and Consumer Extension Agent, Phillips County
American Psychological Association Offers These Tips to Help Handle Holiday Stress

- **Take time for yourself** — There may be pressure to be everything to everyone. Remember that you’re only one person and can only accomplish certain things. Sometimes self-care is the best thing you can do — others will benefit when you’re stress-free. Go for a long walk, get a massage or take time out to listen to your favorite music or read a new book. All of us need some time to recharge our batteries — by slowing down you will actually have more energy to accomplish your goals.

- **Volunteer** — Many charitable organizations are also suffering due to the economic downturn. Find a local charity, such as a soup kitchen or a shelter where you and your family can volunteer. Also, participating in a giving tree or an adopt-a-family program, and helping those who are living in true poverty may help you put your own economic struggles in perspective.

- **Have realistic expectations** — No Christmas, Chanukah, Kwanza or other holiday celebration is perfect. View inevitable missteps as opportunities to demonstrate flexibility and resilience. A lopsided tree or a burned brisket won’t ruin your holiday; rather, it will create a family memory. If your children’s wish list is outside your budget, talk to them about the family’s finances this year and remind them that the holidays aren’t about expensive gifts.

- **Remember what’s important** — The barrage of holiday advertising can make you forget what the holiday season is really about. When your holiday expense list is running longer than your monthly budget, scale back and remind yourself that what makes a great celebration is loved ones, not store-bought presents, elaborate decorations or gourmet food.

- **Seek support** — Talk about your anxiety with your friends and family. Getting things out in the open can help you navigate your feelings and work toward a solution for your stress. If you continue to feel overwhelmed, consider seeing a professional such as a psychologist to help you manage your holiday stress.

**Nebraska 4-H – A Learn By Doing Approach**

4-H is a community of young people, ages 5-18, across America who are learning leadership, citizenship, and life skills. 4-H empowers youth to reach their full potential working and learning in partnership with caring adults. 4-H is education for life that uses a learn-by-doing approach. In Nebraska, 4-H is present in all 93 counties across the state!

Nebraska 4-H Youth Development continues to make a difference in the lives of young people across the state! Throughout 2015, 4-H in Nebraska intentionally targeted educational programs toward **4-H Science, Agricultural Literacy, Career Development and College Readiness, Community Engagement, and Healthy Living**. In addition, 4-H has always been focused in supporting the post-secondary education aspirations of young people.

Make a difference and join today. Call your local Extension Office.
How Will this El Nino Affect Nebraska & the Plains?

The current El Nino event unfolding before our eyes has been well forecasted for nearly six months and will likely lead to above normal temperatures this winter for the northern half of the continental U.S.

In July 2015 this El Nino was on pace to become the strongest event in recorded history. In the past 60 days, however, sea surface warming in the El Nino source region slowed down dramatically and it is now projected to be the second strongest in recorded history, dating back to 1950.

The US Climate Prediction Center (CPC) defines an official El Nino as five consecutive three-month periods averaging at least 0.5°C above normal. Weak events are defined as having a basin average 0.50 -1.0°C above normal, while moderate events are 1.0-1.5°C above normal. Strong events have at least one three-month period over 1.5°C. The following winters have met this criteria: 1957-58, 1965-66, 1972-73, 1982-83, 1987-88, and 1997-98.

Nebraska Outlook

Nebraska’s strongest weather correlation during El Nino patterns occurs from March through May and is not favorable during the spring calving season. The CPC indicates there is a strong tendency (65%-75% of the time) for the southern half of Nebraska to experience cold wet conditions in March and April, with above normal snowfall for south central and southwest Nebraska. In late April and early May it is not uncommon for the Panhandle and northwestern Sandhills to experience strong spring snowstorms 55%-60% of the time.

Please remember that past history can also be a guide to future scenarios. Statistical analysis of past El Nino events indicates that 80% of past moderate and strong events immediately reverted to La Nina conditions by the next fall. This El Nino is forecasted to end by June 2016. A La Nina would place the western Corn Belt under increased drought risk, especially during the second half of 2016.

Factors Leading to an El Nino

El Nino patterns lead to a weaker northern jet stream and an enhanced subtropical jet across North America. Because the northern jet is weaker, the influx of Arctic intrusions into the continental US is
subdued compared to normal. The mean position of the northern jet results in an upper air trough over the Great Lakes and northeastern US, while an upper level ridge is positioned across the northern Rockies and northern Plains.

The primary storm track during El Nino winters is associated with the subtropical jet and this leads to systems moving from west to east across the southern third of the United States. This region experiences above normal precipitation and below normal temperatures during winter about 70% of the time. The stronger the event, the more likely that wet and cool conditions will dominate the southern states, including an increase in the probability that California will experience significant drought relief for California.

I have heard numerous comments about how California is missing out on precipitation from this El Nino and that it appears that this event will be a bust for drought relief. Climatology would suggest otherwise. On average, 90% of the moisture that falls across California occurs from November through May regardless of whether it is an El Nino pattern or not.

If the current short-term numerical weather models are correct in regard to increased West Coast storm activity, a significant uptick in moisture is anticipated for the southwest as we move through November. This projected uptick in moisture during the month of November is a predicated on the recent trend of upper air lows moving into the Gulf of Alaska and intensifying. This intensification is developing a mean upper air trough position that is digging into the central Pacific Ocean and supporting the movement of low pressure systems into northern and southern California.

If the sub-tropical jet begins to strengthen like it normally does during winter, it will add additional energy into low pressure troughs approaching the West Coast. This would be very favorable for increased precipitation chances for central and southern California. This is also the type of pattern necessary to develop an atmospheric river of moisture from the central Equatorial Pacific into North America. This “Pineapple Express” is the primary mode of moisture transport when long-lived (three to seven-days) precipitation events slam the West Coast.

**Benefits of Drinking Water**

- **Helps with losing weight** – water has zero calories and research indicates that drinking water 20 minutes before meals makes us feel fuller and can reduce the amount of calories we normally consume.
- **Improves skin** – water absorbed by cells improves the elasticity and moisture of our skin.
- **Improves the brain** – the brain is made up of approximately 80 percent water, so it’s essential to keep it hydrated. Lack of water can notably affect our focus and memory ability.
- **Fuels muscles** – our bodies are made up of approximately 70 percent water, but our muscles tissues contain up to 75 percent. Muscles require a lot of water, especially when we’re trying to gain muscle.
- **Assists with digestion** – in order for our body to absorb all of its essential nutrients, we need a strong digestive system. Water helps move food through our body and can aid in the prevention of constipation and irregularity.
- **Fights sickness** – water can aid in lessening congestion and helps keep our bodies in better condition, which is the first step in the prevention of many seasonal colds and flus.
- **Improves mood** – dehydration can make us irritable and less comfortable, which can create serious problems with our mood.
- **Reduces cancer risk** – water keeps cells healthy and may be responsible for combating certain cancers such as bowel and breast cancer.
- **Keeps kidneys healthy** – our kidneys are responsible for filtering what we put in our body. Kidneys require a lot of fresh water to do their job.

A Holly Jolly Landscape!

Not surprisingly, many ancient cultures in the temperate world revered evergreen plants. According to Sandra Mason, Extension Educator with the University of Illinois, during the blinding cold of winter evergreens look as green and cheery as a summer’s day. Ancient Romans believed holly warded off lightning strikes and witchcraft. Early Celts used holly in their winter solstice celebrations. Holly continues in its long tradition as a winter decoration inside and outside the home.

Garden centers and florists sell lovely holly branches for winter decorations. Cut holly branches will last for weeks even out of water. To dress up those empty outside containers, stick in a few branches of holly, redtwig dogwood and evergreens.

Holly for fruit display in the landscape requires a bit of sex education. Hollies come as male or female plants. Both are needed for heavy fruit set. However, a single male can pollinate several females. How do you know if it’s a male or female? Look under the leaves of course! Actually you would have to look closely at the flowers to sex an existing plant or wait to see which one has fruit. Fruit is produced only on the females. When purchasing hollies their sex is usually quite clear with their sex-appropriate names.

Evergreen Hollies for Nebraska Landscapes

The Meserve hybrid hollies are known for their winter hardness and durability. However any of the evergreen hollies appreciate a protected site out of wind and a bit of afternoon shade in summer. Soil should be moist, slightly acidic and well drained. If you are planning on adding hollies in the spring, prepare the soil now with plenty of compost and sulfur according to a soil test. The east side of a house is a prime location for evergreen hollies.

Of the Meserve hollies 'Blue Girl' and Blue Princess® and their corresponding 'Blue Boy' and Blue Prince® are good for our area. Blue Stallion® and Blue Maid® have lovely blue green leaves year around. Blue Stallion's® leaves are not quite as prickly so are better for high traffic areas. Although their leaves are not quite as blue-green as the Blue series China Boy® and China Girl® show good heat and cold tolerance.

Are You Interested in Becoming a Master Gardener?

University of Nebraska-Lincoln Extension will host trainings in January or February. For more information contact the Nebraska Extension Office in Wayne County at 402-375-3310 or visit the Northeast Nebraska Master Gardener Website at http://extension.unl.edu/statewide/madison/northeast-nebraska-master-gardener-home/
The numerous holly species are a mixed bag of characteristics in leaf shapes, sizes, evergreen, deciduous, red fruits or black fruits. American Holly, *Ilex opaca*, has a grand red fruit display but allow plenty of room for these 30-foot trees. Japanese Holly, *Ilex crenata*, and Inkberry, *Ilex glabra*, are grown for their boxwood-like evergreen leaves and not for their black berries. Always check the winter hardiness rating for any holly before using it in your landscape to ensure it will be able to survive Nebraska's growing conditions.

**Deciduous Hollies**
We may think of evergreen hollies first but some native deciduous hollies are worthy of our attention. 'Warren's Red' a cultivar of the North American native Possumhaw, *Ilex decidua*, is a particularly heavy fruerter.

Common Winterberry, *Ilex verticillata*, is native to moist to wet areas of eastern North America. Its durable background translates into a tough insect and disease resistant shrub. Winterberry is excellent massed in front of pine trees or next to ponds. It has a compact rounded habit of up to nine feet tall. The dark green deciduous leaves are rounded in contrast to the prickly leaves of most evergreen hollies. Fall color is yellow tinged with maroon.

Winterberry's pea-sized fruit are abundant, bright red and not obscured by the leaves. Even though the fruit ripens in September they hang on for dear life until December or January.

The fruit of cultivar 'Winter Red' decorates the landscape until March or April for a long lasting winter display. The slightly larger fruit tends to hold a pleasing bright red color longer. In summer the leaves are leathery dark green. 'Winter Red' can get 8-9 feet tall and wide. For smaller landscapes the cultivar 'Red Sprite' is best at only to 3-5 feet tall. An excellent Winterberry hybrid is 'Sparkleberry', an introduction from the U.S. National Arboretum.

**Happy holly days!**

Source: John Fech, Nebraska Extension Educator - Horticulture

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**Ice and Snow Loads on Trees**

**Ice and snow loads** often occur during Nebraska winters. For evergreens, this can translate into branch breakage. A method used to protect evergreen shrubs from ice or snow loads is loosely tying stems together. If an ice or snow storm is predicted, twine can be used to loosely tie branches of valuable evergreen shrubs together for support. Start by tying the end of the twine around a sturdy stem near the base of the plant. Then loosely wrap the twine around and up the shrub to encircle about three-fourths of the plant and tie the twine to a sturdy stem. The goal is to prevent a snow or ice load from spreading or bending branches far enough to break. It is not to immobilize branches. Most spread or bent branches return to normal position as long as they do not break. Leave the twine in place until all ice has melted naturally. Never attempt to break ice off of a plant. This is dangerous and can cause branches to break. Snow can be carefully brushed off. Twine can be left in place for future storms, as long as it is removed in spring.

For fruit and small ornamental trees, two by fours can be used to prop up branches when an ice or snow storm is predicted. It is helpful to cut a v-shaped wedge in one end of the two by four to provide more stability when supporting branches.
Interesting Cool Facts about Snow!

► Each winter in the U.S., at least 1 septillion ice crystals fall from the sky.

► Tiny ice crystals fall and join with others to form a snowflake.

► That’s 1,000,000,000,000,000,000,000,000—24 zeros!

► The average snowflake falls at a speed of 3.1 miles per hour.

► Snowflakes are clear and colorless. They appear white because visible light is reflected, and what light that is absorbed is done so uniformly over the wavelength of visible light, thus appearing white.

► Chionophobia is a fear of snow.

Source: www.heraldnet.com

This Beautiful Picture Was Taken in Knox County!