UNIVERSITY OF WYOMING | Extension

CONNECT 2020

LEARNING FOR BETTER LIVING

Build financial muscles to manage next emergency

Here's something we might not want to think about, but probably should: we're just getting through the coronavirus pandemic, and now the wildfire season is within sight. That means many people's emergency funds are depleted just when another emergency is possible.

Let's revisit what good preparedness looks like.

Build Cash

According to the Federal Reserve*, 40 percent of Americans couldn't come up with $400 cash within 24 hours for any emergency – and that was before the coronavirus pandemic.

Ask yourself: Do I have enough cash reserves to take care of my family, home, land, and animals in an emergency? A good emergency fund has three to six months of expenses.

Respond Intelligently and Positively

Respond intlligently when (not if) the next emergency happens. Do you panic? No. Just like Wyoming kids learn in hunter's education, the first thing you do when you realize you're in trouble is sit down and think (the first two steps of STOP: Stop, Think, Observe, Plan). Your mind is the best tool to have in any situation. Begin by avoiding concentrating on things you cannot control. Then, remember your self-talk can help you respond, so be positive and focused on the future.

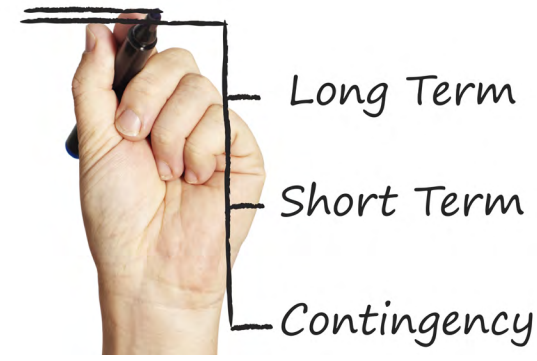
Create a Plan

Start living on a budget if you aren't already. A budget is a plan that shows exactly where funds will go. You can't make the most of every dollar if you don't know how much money you have.

Build the budget by observing past expenses and income – the O in STOP. Examine your bank and credit card statements going back at least a month so you work with real data. Brainstorm ideas and ways to cut expenses. Income can be grown – everyone has skills to employ or assets to sell. Promptly call lenders and work out a plan for debt payments you'll have trouble making.

Take Action

Whether the next order is "shelter in place" or "evacuate," work now to be on stable footing. Being fully financially prepared for a real emergency goes beyond cash reserves and spending plans to take on other aspects – such as collecting important personal, household, and



medical information – which is a topic for another article.

More info is available at www.ready.gov/financial-preparedness.

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*Source: Report on the Economic Well-Being of U.S. Households in 2018. May 2019.

Tomatoes a must-have for the garden

Can't grow tomatoes in Wyoming? I do. Here's how.

Fruit is the most popular vegetable in the home produce garden. Most everyone who wants to grow some (or all) of their own food wants to grow tomatoes. I even grew tomatoes most every year when I lived in Laramie at 7,200 feet.

Now that I am back at 5,100 feet elevation (Casper) and growing in Zone 4 or 5, tomatoes seem a much more manageable and successful an undertaking than in Zone 3 (Laramie - the lower the zone number, the colder the climate).

Tomatoes can be grown in as few as 50 to more than 90 days. That is one of the reasons gardeners at higher elevation grow plants from seeds indoors (or transplants) and plant outside after all danger of frost is gone. Some varieties need almost 110 to 120 days to produce fruit – not enough time to make fruit before the first frosts of fall at higher elevation. I suggest selecting varieties with shorter days to maturity, 60 to 70 days, as listed on a label or seed packet.

A good guide to growing vegetables in our state is at bit.ly/growing-vegetables-Wyoming.

Starting plants inside

Seeds can be planted indoors as many as eight weeks ahead of the last average frost date for any location, but most often two to four weeks prior.

Plants started from seed indoors need plenty of sunshine once they germinate to have short, stout, strong stems. Plants can grow long internodes and have thin, weak stems that fall over easily, or fail under the weight of heavy fruit, if they are stretching to get into the light of a window several feet away.

Overhead lighting can help develop strong stems as the seedlings develop. Full spectrum or "grow" lights are the best for plants indoors. A shop light with a cool white and a warm white

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Learning for better living

Dear friends,

Kelly Crane
Director, University of Wyoming Extension

Welcome to our 2020 Barnyards and Backyards insert. I genuinely hope you enjoy the information, learning opportunities, and University of Wyoming Extension personalities you encounter in this publication.

As you read I also hope you repeatedly say, "I know that author," "I could use this information," and "I should contact my local UW Extension office."

The community-based education strategy of UW Extension works best when you know your extension educator, you talk to your extension educator, and you work together to address the educational needs of your community. We are committed to serving Wyoming communities with locally relevant, research-based knowledge and learning opportunities.

The "locally relevant" portion of this commitment requires extension educators and specialists live, work, and develop relationships with our customers. Please know UW Extension recognizes the value of community-based educators and the resulting relationships critical to effective education.

Recent events demonstrate the profound value of local businesses, local agricultural producers, and locally sourced food. In Wyoming, "local" is often considered "better," "fresher," "purer," and "more beneficial."

Like food, I think locally produced education and research is also "better" because it is more accurate, more relevant, and more responsive to your needs. I hope you share my perspective and that you will engage with UW Extension as we strive to provide you with learning for better living.

If the "big box" providers of education are doing something UW Extension could do, I also hope you will share this information so UW Extension and our College of Agriculture and Natural Resources can find ways to better meet your needs. Email us at uwe@uwyo.edu.

Finally, I wish you all good health, good growing conditions, and an outstanding summer.

Kelly

Find us online at www.uwyo.edu/uwe and a list of county offices at www.uwyo.edu/uwe/county.

Tomatoes, from page 1

bulb is pretty close to full spectrum, or one can use LED lights that have both red and blue bulbs to get the full spectrum of beneficial light waves.

Harden plants off once they are ready to go outdoors. This means that they have some experience out in the weather they will be growing in before they are stuck out in it. Put them out for a few hours a day, then bring them in for the night. Keep extending the outdoor time until they have been out for at least 8 hours. Bring them indoors one more night, and it will be safe to plant them outdoors the next day.

Tomatoes will grow roots along their stems if the stems are buried. If the stem does get leggy growing indoors, they can be laid flat in a trench instead of a hole, and the plant will grow upright and develop an extensive root system.

My directions for watering is to saturate the soil in your gardening site. Figure out how long it took to saturate the soil and water for that length of time every time you water. We tell people to get water to a depth of 6 to 8 inches. You can check by digging a hole or using a long screwdriver to test if it goes through the soil smoothly to that depth you are seeking. In pots, I would want to be sure the soil at the bottom pot never dries out, because the roots will spread into that soil as it grows larger and larger. Roots can't grow into or gather water in dry soil. You will need to water more and more frequently in the heat of summer. A consistent water supply is most benefical.

Protection from cold nights is important at high elevations as tomatoes grow best at temperatures in the 80s and 90s. Any temperatures below 50 degrees slows or stops their growth, and they have to gain back the lost heat during the next day. Providing a heat-absorbing reservoir like a double walled, water-filled plant protector (Wall of Water, for example), gallon jug of water, large dark stone, or other protective device will minimize overnight heat loss.

Tomatoes benefit from staking or caging to support the heavy fruit crop that develops on the branches. Cages also hold the fruit out so they are easier to harvest.

Dreaded blossom end rot

Blossom end rot is the major problem we see in tomatoes in Wyoming. Blossom end rot is a calcium deficiency in a plant during fruit development. Wyoming water and soils have plenty of calcium. The reason plants don't get enough calcium is that the water is not there to channel it into the roots for plant absorption and use in developing fruits. The way to prevent blossom end rot is to maintain even or consistent moisture levels in the soil surrounding the tomato plants. That way the plants have a continuous supply of needed calcium.

Tomatoes with blossom end rot

Harvest is the best time for any garden plant. But, tomatoes lead to all kinds of seasonal pleasures, from just eating the fruit and having the warm juice run down your chin, to the first BLT of the season or stuffed tomato salads with friends on the patio or deck.

The tomato supply does not have to come to a screeching halt when the season comes to a close. Plants can be pulled and hung upside down in a garage or a cool location in the basement or a crawl space. The fruit will continue to ripen on the vine. Or, they can be wrapped individually in newspaper and stored in cardboard boxes until they are ripe. Be sure to check the box periodically for the ripest fruit and to ensure none have begun to spoil.

Contact your local UW Extension office for suggestions of well-suited varieties or growing assistance in your area. Office contact information is at *www.uwyo.edu/uwe/county*.

Donna Hoffman is the county horticulturist in the Natrona County office of the University of Wyoming Extension. Tomatoes continue to be a must-have in her home garden and in many of her favorite dishes from the kitchen. She can be reached at (307) 235-9400 or at *dhoffman@natronacounty-wy.gov*.

Editor: Steve Miller • Designer: Tanya Engel

Several methods to preserve food; explore your options

Any food will spoil over time unless preservation steps are taken.

Preserved food lasts longer than fresh produce and refrigerated items. Decide what you are preserving. The answer will help determine what method to use. Here are the most common ways.

Freezing

Freezing food is an easy and quick method. Proper freezing of fruits and vegetables tends to maintain their color, flavor, and nutrients better than other methods.

Pickling

Pickling uses a high concentration of acid to prevent spoilage. Pickled foods are saturated with acid to smother most bacteria. Heat treating these products is also important to kill any remaining bacteria in a jar.

Fermentation

Fermenting is done in a warm environment using salts, sugars, or grains creating a brine, which covers the produce. Time is an important factor when fermenting.

Water Bath Canning

Water bath canning is used for high-acid foods and recipes that incorporate the correct amount of acid. The combination of time and temperature destroys mold, yeast, and enzymes that cause spoilage while creating a vacuum-sealed jar. This process is recommended for produce and recipes including most fruits and acidified and fermented foods.

Pressure Canning

Pressure canning is the only processing method that reaches the 240°F temperature needed to safely preserve low-acid foods. Time and temperature will destroy foodborne bacteria and create a vacuum sealed jar necessary to prevent spoilage. This process is required to preserve meats, most vegetables, and combination foods.

Pressure canner dial gauges should be tested for accuracy each year. Contact your local University of Wyoming Extension office to determine locations and times for testing.

Dehydrating

Dehydration prevents and delays spoilage by removing most of the food's water content. While possible to dry most fruits and vegetables in an oven or even in the sun, you'll get more dependable results using an electric dehydrator.

Use Current Methods and Recipes

Significant changes to canning guidelines were made in 1994, 2006, 2009, and again in 2015. Botulism can't be seen, smelled, or tasted, so the best way to prevent foodborne illness is to only use recipes that have been tested by reliable sources and have a known pH. ALWAYS use current research-based recipes developed after 2009 and preferably 2015.

UW Extension recommends using one of the following approved resources for home canning recipes.

Books:

- Ball Blue Book cookbooks
- *So Easy to Preserve, 6th Edition*, 2014
- *USDA Complete Guide to Home Canning*, Revised 2015

Websites:

- University of Wyoming Extension: *www.uwyo.edu/foods*
- Fresh Preserving: *www.freshpreserving.com*
- National Center for Home Food Preservation: *nchfp.uga.edu*
- USDA Complete Guide to Home Canning: *nchfp.uga.edu/publications/publications_usda.html*

Preserving some foods during their most abundant time is one of the best ways to eat a local, seasonal diet year-round. Contact your local UW Extension office for complete details on food preservation and upcoming classes. Contact information is at www.uwyo.edu/uwe/index.html.

Vicki Hayman is a University of Wyoming Extension nutrition and food safety educator. She can be reached at (307) 746-3531 or at vhayman@uwyo.edu.

Fresh Vegetable Salsa

Makes about 10 (8 oz.) half pints
or 5 (16 oz.) pints

Ingredients

- 7 cups (8-10 medium-large) tomatoes
- 8 jalapeño peppers, seeded and finely chopped
- 2 cups onions, coarsely chopped
- 1 cup green bell pepper, coarsely chopped
- 3 cloves garlic, minced
- 1 can (6 oz.) tomato paste
- 3/4 cup white vinegar
- 1/2 cup chopped cilantro, lightly packed
- 1/2 teaspoon ground cumin
- 10 (8 oz.) half pint or 5 (16 oz.) pint preserving jars with lids and bands

Recipe source: *Ball Complete Book of Home Preserving*

Instructions

1. Blanch, peel, seed, and coarsely chop tomatoes. Measure 7 cups. Wearing rubber gloves, remove seeds and finely chop jalapeño.
2. In a large stainless-steel saucepan, combine tomatoes, jalapeño pepper, onions, green pepper, garlic, tomato paste, vinegar, cilantro, and cumin. Bring to a boil; boil gently, stirring occasionally, until salsa thickens, about 30 minutes.
3. Fill canner halfway with hot water, cover, and pre-heat to 180°F (simmering) for hot pack.
4. Heat canning jars in hot water until ready for use; however, do not boil!
5. Place flat lids in a small saucepan and bring to a simmer over low heat until ready to use – do not boil. Set bands aside.
6. Ladle salsa into hot jars one at a time, leaving a ½-inch headspace. Adjust headspace if necessary.
7. Remove air bubbles with a straight spatula. Wipe jar rim/threads using a clean damp cloth/paper towel to remove any food residue. Center the lid on jar. Screw on band until fit is "fingertip" tight.
8. Place jars in canner rack and lower rack into water. Make sure 1-2 inches of water covers jar; add more hot water if necessary.
9. Place lid on the canner and bring to a full rolling boil. Once at a rolling boil, set timer and begin processing time. Process in a boiling water canner for the appropriate time according to the altitude chart.
10. Once processing time is complete, turn off the heat, remove the canner lid, and wait 5 minutes before removing jars.
11. Remove jars from canner without tilting and set upright on a towel with 1-inch space between jars to prevent jar breakage. Leave jars undisturbed for 24 hours. Do not re-tighten bands or push on the center of lids!
12. Check the jar lids for a good seal after 24 hours. The lid should not flex up and down when the center is pressed. If it does, refrigerate the jar and use food within two days.
13. Remove bands. Clean the jars, label, and store in a cool, dry, dark place. Consume within one year for best quality.

Tips: When cutting or seeding hot peppers, wear rubber gloves to keep hands from burning. If you don't mind heat, leave the seeds and veins in the jalapeños.

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Ancient grains a story of what once was old is new again

Market data forecasts show ancient grain food markets could expand 35 percent in four years

Einkorn, emmer, and spelt are ancestors of modern wheat. These "ancient" cousins have some unique nutritional and flavor characteristics, and many people find them easier to digest than modern wheat.

Some varieties thrive in low-input systems, giving them good potential as an alternative crop for Wyoming farmers.

Remember Otzie the Iceman who showed up well-preserved in a glacier in the Alps? He is thought to have died around 3300 BCE, and in his stomach were the remains of a meal that included einkorn.

Worland was home to an emmer breakfast food factory around 1915 under the ownership of Professor B.C. Buffum (former director of the Wyoming University state experiment station and a Worland native). An article published in 1911 in The National Magazine about Buffum's work claims that "improved winter Emmer...is surpassing even the best wheat as a food for civilized man."

A team from the University of Wyoming is working with farmers around the state to learn to grow some of these ancient grains and develop markets. Their hope is these grains will thrive in Wyoming's arid climate and produce profitable yields with less water and fertilizer than modern wheat and barley.

A report from Market Data Forecast predicts the "ancient grains" food market will expand at a growth rate of over 35 percent to $6.3 billion by 2024, and that more than 20 percent of shoppers are willing to pay a premium for products that contain "Ancient grains." This could be good news for Wyoming farmers!

Nutritional Benefits

Research has shed light on some nutritional benefits of ancient grains. Ancient wheat varieties are higher in polyphenols. Polyphenols have antioxidants, which help inhibit oxidation of cells to reduce free radicals. Polyphenols may also improve digestion or reduce digestive issues. Einkorn and spelt were found to be richer in carotenoids, which is an antioxidant that can lower inflammation. Phytic acid, which impairs the absorption of iron, zinc, and calcium, was found to be 40 percent lower in spelt than modern wheat, thus making it easier for people to absorb those minerals.

Ancient wheats were also found to maintain satiety, of a feeling fullness, for longer periods of time compared to modern wheats. Ancient grains have a low glycemic index value, which may benefit those living with diabetes and may help prevent type 2 diabetes. They may also have cardiovascular benefits as einkorn was found to have approximately 50 percent more monounsaturated fatty acids (MUFAs) and 21 percent less saturated fatty acids than modern wheat.

Emmer, einkorn, and spelt were also found to have increased levels of magnesium, phosphorous, selenium, and zinc compared to modern wheat.

Einkorn is generally less immunoreactive than modern wheats, which may lessen the symptoms of those with chronic digestive diseases such as irritable bowel syndrome. These ancient wheats are not gluten free.

In their whole grain form, ancient wheats have a slightly lower dietary fiber content than modern wheat. Like modern wheat, ancient wheats can also be processed to remove the bran and germ making them refined, but you also miss out on the nutritional benefits of whole grains when doing so. Whole grains are higher in fiber, phytonutrients, antioxidants, B vitamins, and healthy fats.

More information about the Wyoming First Grains project: www.uwagec.org/neolithicbrand

To see photos of these grains growing across Wyoming, and adventures in baking, follow #WYFirstGrain on Instagram and Facebook.

Although ancient wheat varieties may have some nutritional benefits, concluding they are superior to all modern counterparts in reducing chronic disease risk is not possible. Considering some of the beneficial components of ancient grains, it will be exciting to see more research on this topic and how Wyoming can produce, and utilize, this resource.

Shelley Balls is a University of Wyoming Extension Cent$ible Nutrition Program educator in Lincoln County, and **Caitlin Youngquist** is an extension educator based in Washakie County and serving northwest Wyoming. Balls can be contacted at (307) 885-3132 or *sheap@uwyo.edu*. Youngquist can be reached at (307) 347-3431 or *cyoungqu@uwyo.edu*.

EASY WHOLE GRAIN SPELT BREAD WITH FLAX AND SESAME

Makes: 1 loaf

Ingredients

4½ cups whole grain spelt flour
¼ cup flax seeds
2 Tablespoons sesame seeds
2 teaspoons active dry yeast (1½ tsp at 7,200 feet)
2 teaspoons salt
1¾ cups water room temperature
2 Tablespoons honey

Instructions

1. In large bowl whisk together spelt flour, flax, and sesame seeds, yeast, and salt until combined.
2. Add water and honey and stir until a dough starts to form. Turn out on a flour surface and knead into a firm dough ball. Alternatively, you can make the dough in a stand mixer with dough hook attachment.
3. Place the dough into a clean bowl, cover with a dry kitchen towel, and let it rise until doubled in size (about 90 minutes).
4. Lightly grease a loaf pan (9x5 inches). Turn the risen dough out onto a floured surface and form into a loaf shape. Place the dough in the loaf pan seam side down. Sprinkle the top with sesame seeds. Make a few diagonal cuts across the loaf surface. Cover and let rise 30 minutes to 1 hour. The loaf should look obviously bigger than before but doesn't exactly have to be doubled in size.
5. Preheat oven to 450°F. Bake the spelt bread loaf for about 30 minutes until the top is golden brown and crusty. Let the bread cool in the pan for 10 minutes, then turn out onto a wire rack to cool fully.
6. Tightly wrapped spelt bread loafs keep for about 4 days at room temperature. You can also wrap it airtight and freeze for later.

Recipe Tester's Notes

The loaf in the photo was baked at 7,200 feet and it collapsed a bit while baking. If you are baking at a higher altitude, reduce yeast to 1½ tsp. The dough was more spongy than firm. This is a hearty bread. We enjoyed it freshly baked, toasted, and in grilled cheese sandwiches. — Tanya Engel

(Recipe source: *leelalicious.com/easy-whole-grain-spelt-bread-recipe-with-flax-and-sesame/*)

Many food pantries seek to offer healthier choices

Food pantries are a vital resource for many in Wyoming communities.

The Cent$ible Nutrition Program (CNP), through the University of Wyoming Extension, partners with food pantries across the state to support the health of the thousands of people who rely on food pantries for food throughout the month.

"Food pantries help an overlooked part of our community," said Kay Rossiter, director of The Lord's Storehouse in Evanston.

"When the economy takes a hit, when jobs are lost, when the winter is long and heating bills are higher than normal, the pantry is the constant source of food assistance for individuals," said Sierra Mitchell, director of the Afton Food Pantry. "Many people don't realize a bulk of our numbers are elderly patrons. They cannot go out and work overtime to get ahead; they are living with a consistent amount each month."

Thayne Community Food Bank

People often think about shelf-stable pantry items like canned and dry goods when it comes to food donations. While these items are essential, many pantries are looking to offer fresh foods and healthier choices.

"Fresh food donations have proven to be the most wanted and needed items," said Mitchell. "When a family is already financially struggling, they may shop for the cheaper food items, and produce is more expensive. We have loved being able to offer fresh and healthier options while trying to take off the financial burden."

Fresh fruits, vegetables, meat, and dairy are often among the top donation requests from food pantries that have the capacity to safely store such items.

"Fresh donations are a necessity for people to thrive, as opposed to just sustain," said Rossiter.

Fresh foods are not the only healthy foods that benefit pantries. Canned goods low in sodium and sugar, whole-grain products, and dried, canned, and frozen fruits and vegetables all make good donations.

The holidays are a popular time for food drives and donations to community food pantries, but donations are needed year-round. March through August tends to be when pantries see the lowest donations and the time when they struggle to provide food, especially healthier options.

"Food banks and pantries can only survive on the generosity of the community they reside in," said Jillaine Maes, board member and coordinator of The Emergency Food Assistance Program at Thayne Community Food Bank. "Although we receive some grant money, it is usually limited in scope and duration. Without the help of the community, we would soon run out of food and be unable to assist those in need."

Many pantries will accept fresh fruit and vegetable donations from community gardens and local gardeners as well as meat from hunters. Check with your food pantry on their policies and capacity for storage and consider donating extra food from your harvest.

Kali McCrackin Goodenough is the marketing coordinator with the Cent$ible Nutrition Program in the University of Wyoming Extension. She can be reached at (307) 766-4147 or at *kali.mccrackingoodenough@uwyo.edu*.

TOP DONATIONS REQUESTS

- Fresh fruits, vegetables, meat, and dairy (for pantries that can accommodate these items)
- Canned meat (chicken, tuna, ham, etc.)
- Baking staples (flour, sugar, oil, etc.)
- Soups (look for low-sodium options)
- Pasta (look for whole-wheat options)
- Canned tomato products (diced, stewed, paste, sauce)
- Frozen meat (if storage options are available)
- Dry cereal (look for low-sugar, whole-grain options)
- Peanut butter
- Jelly

Try to pick items low in sodium, fat, and added sugar when choosing foods for donations. Cans with pop-tops are also preferred, if possible.

Hunters:
Donate game meat to your community at no cost!
Learn more at: www.nohungerwyo.org/field.

FOOD FROM THE FIELD
WYOMING HUNGER INITIATIVE

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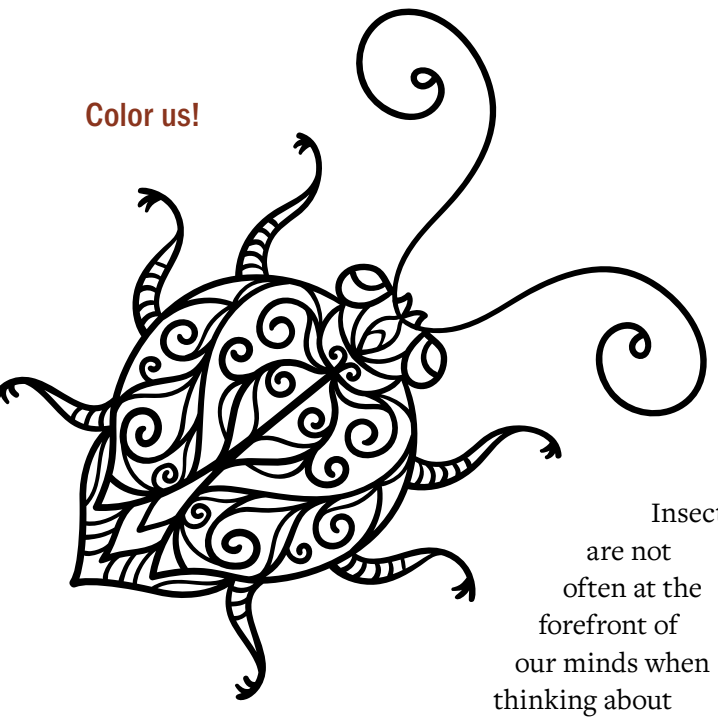


Not all insects harmful; tunnelers, dwellers, rollers benefit environment

Insects are not often at the forefront of our minds when thinking about agriculture, but they definitely have a part, often beneficial.

You've probably seen a dung beetle or two if you've kicked very many cow patties in a pasture. ,There are three different kinds of dung beetles: tunnelers, dwellers, and rollers.

Tunnelers tunnel under the dung in the soil and then bring the dung into their tunnels.

Dwellers live within the dung pile or right below it.

Rollers roll up the dung and then roll it away from the pile.

By removing dung, both by tunneling and consumption, dung beetles reduce available dung for flies, which indirectly reduces the number of flies livestock producers have to control.

Flies can be problematic for livestock producers. Biting flies can cause major losses in production both in the amount of money spent trying to control the flies and also in cattle efficiency losses. Cattle getting bit by flies spend less time eating and more time swishing and twitching. They are also more stressed, which in turn can effect daily gain.

However, not all flies are pests. There is a family of flies called **Tachinidae** that are parasitic of other insects in their larvae stages, and then pollinate as adults. The insects the larvae prey upon are often plant-damaging insects. Having tachinids present can reduce plant damaging pests, which can reduce the amount of forage damage by insects.

The **robber fly** (family Asilidae) is another beneficial fly. Robber flies prey other insects, some of which are also plant damaging pests. So again, by having robber flies, insects that cause plant damage can be reduced and in turn there is less forage damage.

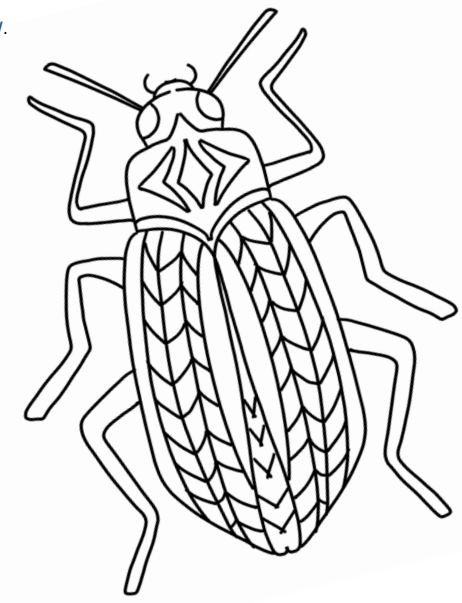
If in the business of raising livestock, or growing food for animals or people, this is great news.

The **golden dung fly** (*Scathophaga stercoraria*) is a third beneficial insect. The golden dung fly is a predator to horn flies and filth flies. Horn flies are huge contributors to livestock production losses. Golden dung fly larvae also help recycle manure and has some of the same beneficial traits of dung beetles.

It's important to understand and recognize the insects that may be in your region and how they may be affected by treatment methods used for controlling pests. Having contributors like dung beetles building soil organic matter and beneficial flies aiding in Integrated Pest Management is great.

Take a closer look and see what aid you may be receiving; they may be small, but every bit helps.

Abby Perry is the University of Wyoming Extension educator based in Carbon County and serving southeast Wyoming. She can be contacted at (307) 328-2642 or *ajacks12@uwyo.edu*.



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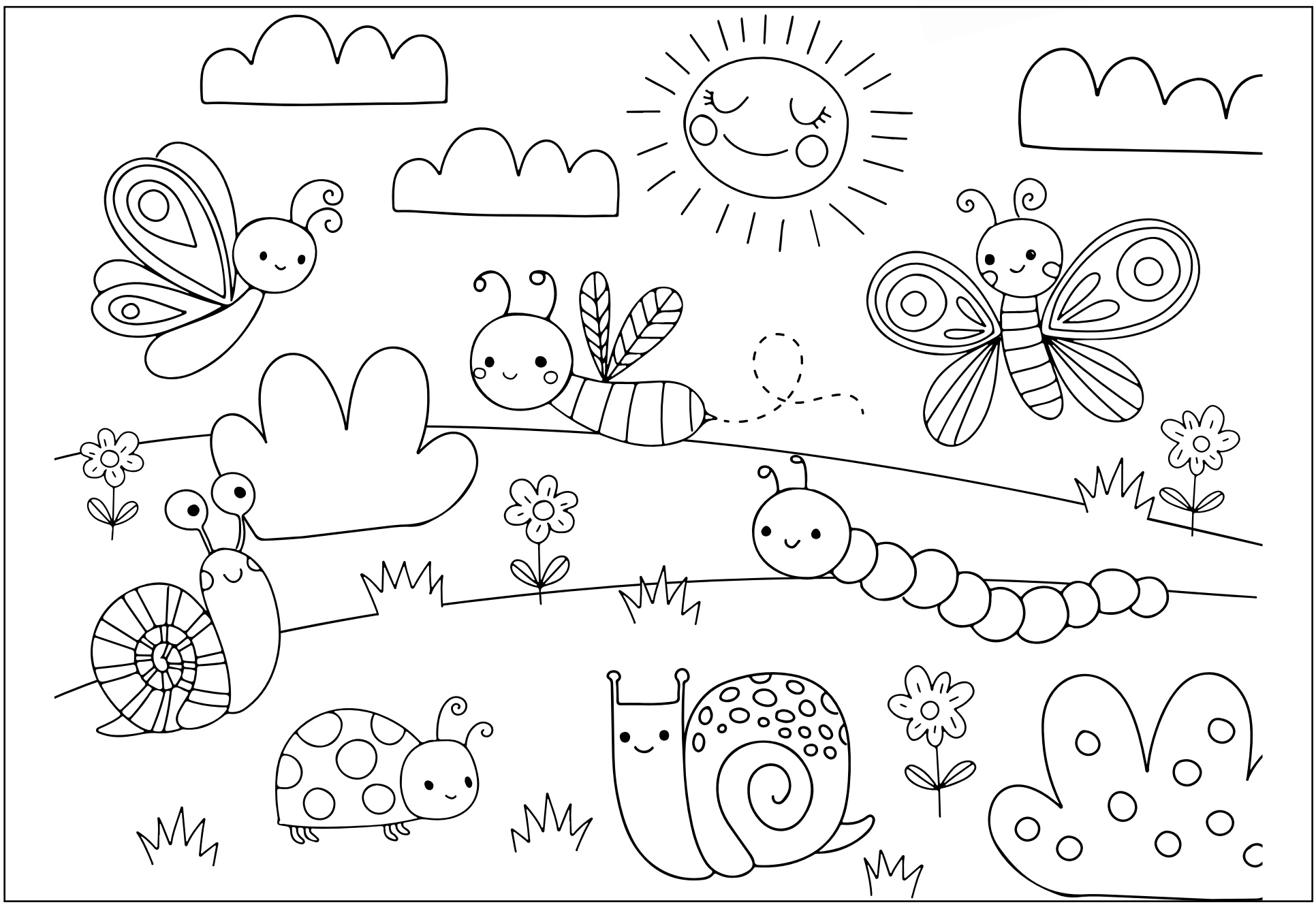

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Study finds how rangeland grasses and upland sedge stack up in crude protein, TDN

How do some common rangeland grasses and an upland sedge compare in their crude protein and total digestible nutrient (TDN) contents?

We sampled western/thickspike wheatgrass (AKA rhizomatous wheatgrass), needle-and-thread grass, green needlegrass, bluebunch wheatgrass, and threadleaf sedge, which are common throughout Wyoming's eastern plains and western basin.

Monthly samples were collected from pastures in northeast Johnson County (Powder River Breaks) and along the Red Wall and foothills of the southern Bighorn mountains in northwest Natrona County between July 2015 and October 2018.

The Texas A&M University Soil, Water, and Forage Lab analyzed samples for crude protein and acid detergent fiber (ADF) amounts. TDN levels in the plants were determined from their ADF values.

The table below shows crude protein and TDN of the rhizomatous wheatgrasses, needle-and-thread grass, green needlegrass, bluebunch wheatgrass, and threadleaf sedge for January through April, May and June, July, August and September, and October through December.

Combining months, except July, was due to the similarity of the quality values throughout those months. Crude protein and TDN were highest in May and June and lowest during the dormant season of October through April.

Rhizomatous wheatgrasses contained more crude protein compared to the other grasses and the sedge, and its TDN levels were higher, except for that of needle-and-thread. However, dormant season TDN levels of all were satisfactory for non-lactating beef cows in mid-gestation, and growing season amounts were sufficient for a cow in late gestation and when lactating.

Crude protein levels were only adequate in late spring and early summer in all the grasses and sedge for cows in all stages of production, and the rhizomatous wheatgrasses contained enough in late summer to meet the needs of a dry cow in mid-gestation.

Knowing the quality of range forage throughout the year is important to ensure the livestock nutrient needs are being met and if not, what needs to be supplemented. The results indicate that if a rancher chooses to sample their rangeland grasses and upland sedges for crude protein and TDN analysis, they need only sample the predominate plants and combine them, saving time and costs.

In addition, sampling would only need to occur in late summer and the dormant season to assess potential nutrient shortfalls, especially for crude protein.

Knowing the quality of range forage throughout the year is important to ensure the livestock nutrient needs are being met and if not, what needs to be supplemented.

Sheri Hagwood, hosted by the USDA-NRCS PLANTS Database

Western wheatgrass (*Pascopyrum smithii* (Rydb.) Á. Löve)

Blaine Horn is the University of Wyoming Extension educator based in Johnson County and serving northern Wyoming. He can be reached at (307) 684-7522 or bhorn@uwyo.edu.

	%Crude Protein					%Total Digestible Nutrients				
Grasses/Sedge	Jan – Apr	May - Jun	Jul	Aug - Sep	Oct - Dec	Jan – Apr	May – Jun	Jul	Aug - Sep	Oct – Dec
Rhizomatous wheatgrasses	3.71	12.36	8.71	6.36	4.25	59.0	68.3	65.8	62.5	59.5
Needle-and-thread grass	3.49	10.54	7.18	5.87	4.10	57.1	67.0	64.8	61.8	58.6
Green needlegrass	3.26	11.10	6.95	4.94	3.26	55.9	67.6	64.1	59.9	56.8
Bluebunch wheatgrass	3.29	9.30	6.92	5.48	2.98	54.9	63.3	63.4	61.9	53.8
Threadleaf sedge	Not sampled	11.00	6.81	5.84	Not sampled	Not sampled	69.8	68.0	64.1	Not sampled

We know you'd rather not give - or get - food poisoning. Here's how not to.

This is a case of not better to give OR receive

Enjoying the outdoors is part of living in Wyoming. Food safety can be a concern whether enjoying winter or summer activities. While foodborne illnesses are more common in the warmer months, these safe food practices can help you stay healthy all year long.

Farmers Markets and Gardens

- Wash fruits and vegetables under cool, running water. This is necessary even if you do not eat the outside or the skin. Bacteria from the outside can end up inside when cutting into a melon or peel a banana.
- Once cut, keep fruits and vegetables refrigerated.
- Use separate cutting boards for fresh produce and other foods, like meat and poultry. Wash and sanitize cutting boards between foods to avoid cross contamination, especially when cutting fruits and vegetables that won't be cooked.
- When buying fresh produce at the farmers market, use an insulated grocery bag with an icepack to keep fruits and vegetables, especially leafy greens, from wilting.
- If buying perishables at the farmers market, like meats or dairy products, bring a cooler with ice or icepacks to keep food safe, and put it in a refrigerator as quickly as possible.

Barbeques

- Wash hands before and after handling raw meat, poultry, and seafood.
- Keep raw meat, poultry, and seafood away from other foods.
- When grilling, use clean utensils and plates for cooked food and never place cooked foods on a plate that held raw food.
- When marinating, keep foods refrigerated and do not reuse marinades.
- Cook foods to the correct temperature. Use a food thermometer to check.
- Keep raw meat, poultry, and seafood refrigerated or in a cooler with ice until ready to cook, and put cooked food away quickly.

Camping

- Transport foods in a cooler and bring the smallest amount possible. For example, bring a small carton of milk. Discard any perishable foods if the ice melts or the icepacks are no longer frozen.

continues page 8

Side-by-sides seen as safer than ATVs but certainly not free from danger

Sometimes, accidents happen when doing the most routine things. See Tips for loading and unloading an ATV at *bit.ly/wyo-atv-sense*.

Recreational Off-highway Vehicles (ROVs) – side-by-sides or UTVs – have become increasingly popular for many uses including recreation, construction, and agriculture.

Their versatility makes them a great tool for farms and ranches. Often, they are chosen over ATVs because, in addition to versatility, they are also seen as safer, but many of the safety recommendations are often ignored by agriculture users.

Many of the jobs for which we use ROVs on a farm or ranch require more focus on the task at hand than on operating the vehicle. When moving cows on horseback, we tend to focus on the cows and let the horse do a lot of the driving. We expect our horse to avoid many hazards such as badger holes, ditches, etc., while we focus on the cows.

Unfortunately, there are times when using an ROV to move cows we expect the ROV to do a lot of the driving as well. When we move cows on an ROV we need to be aware of our driving as well as the cows.

When I travel across Wyoming and observe ROV use for recreation and agriculture, I would probably have to give us an overall grade of no better than a C-. The Recreational Off-Highway Vehicle Association has developed safety rules (right). Think about how we are doing as you read through these rules.

YouTube abounds with videos of people making poor choices on ROVs, including plenty of farm and ranch examples. I watched a video where the driver jumped a small ditch at a relatively low speed with a Can-Am Commander (a utility-type ROV). The ROV landed too far forward on its front tires then somersaulted over and lit on the rollover protection structure. The driver was not wearing his seat belt or helmet and was thrown from the ROV. He was lucky he only required a short hospital stay.

Accidents like this don't just happen to anonymous folks on YouTube; almost all of us know a farmer or rancher who has been involved in a serious accident. I know of ranchers who have rolled ROVs end-over-end as well onto the side.

ROVs are great tools for agriculture; however, taking them seriously is important as is utilizing proper safety procedures and techniques when using them. Please contact me if interested in more information about safe handling or in taking a safe handling course.

Bridger Feuz is a University of Wyoming Extension educator based in Uinta County and serving western Wyoming. He can be reached at (307) 783-0570 or at bmfeuz@uwyo.edu.

ROV SAFETY RULES

- Always fasten your seat belt, wear a helmet and other protective gear, and keep all parts of your body inside the ROV.
- Avoid paved surfaces. ROVs are designed for off-highway use.
- Drive only in designated areas, at a safe speed, and use care when turning and crossing slopes.
- Never drive or ride under the influence of alcohol or drugs.
- Never drive an ROV unless you're 16 or older and have a valid driver's license.
- Never carry more passengers for which the ROV is designed, and never allow a passenger who is too small to sit in a passenger seat.
- Read and follow the operator's manual and warning labels.
- Take an ROV safety class.

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continues from page 7

- Keep coolers in shady places, covered with a light-colored blanket to reflect the heat.
- Frozen meat and poultry will stay cold longer in a cooler. Keep these uncooked items away from other foods, especially any foods already cooked or foods meant to be eaten raw.
- Refrigerate or freeze packaged drinks prior to putting them into the cooler to help keep the ice from melting.

Packed lunches and picnics

- Use an insulated bag or cooler for lunches and picnics to keep foods cool.
- Use a thermos or hot pack in a separate insulated bag to keep foods warm.
- Wash your hands and surfaces before making lunch or packing a picnic.
- Wash and dry fruits and vegetables before adding them to a lunch box or picnic basket.
- Foods that can easily spoil must be kept cold.
- Add ice or an icepack to your lunch or picnic basket. If you do not have an icepack, you can also keep foods cold by freezing items such as water bottles, yogurt, pudding, applesauce, or a 100 percent juice and packing it next to the perishable food right before you leave.

Kali McCrackin Goodenough is the marketing coordinator with the Cent$ible Nutrition Program in the University of Wyoming Extension. She can be reached at (307) 766-4147 or at kali.mccrackingoodenough@uwyo.edu.

FOOD SAFETY INFORMATION

- Handling food safely while on the road – keep your vacation fun. bit.ly/food-safe-road
- Safety practices for packing lunch and snacks for your child. bit.ly/safe-snacks
- Food safety during outdoor activities. bit.ly/food-safe-outdoors
- Here are food safety tips by event and season. bit.ly/food-safe-seasons

Great performances in Laramie's All-America Selections Display Garden

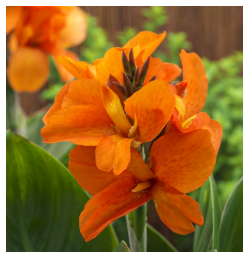
The University of Wyoming has played host since 2012 to the only All-America Selections (AAS) Display Garden in the state.

Every year AAS provides seeds and plant material to display and to help determine the best varieties for our area. The main garden is just west of Old Main on the Laramie campus. We grow and display flowering annuals and perennials.

All-America Selection is an organization devoted to testing and displaying new varieties of annual and perennial flowering plants and vegetables. According to the association's web site (all-americaselections.org), its mission is "to promote new garden varieties with superior garden performance judged in impartial trials in North America."

The process involves students who do the vast majority of the seed sowing and transplanting at the Laramie Research and Extension Center greenhouse complex. A volunteer professional gardener maintains the areas.

Here are a few of the best performers we've showcased over the years.



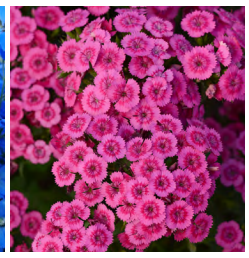
Canna 'South Pacific Orange F1' – This one is a cousin of 'South Pacific Scarlet'.

Canna 'South Pacific Scarlet F1' – Annual. This beauty only reaches about 12 to 15 inches tall.

Celosia 'Asian Garden' – Pink/red blooms on plants that love sunshine.

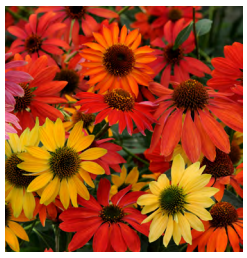
Cuphea 'FloriGlory Diana' – Gorgeous pink flowers on mounded plants.

Delphinium 'Cheer Blue F1' – Perennial. Compact delphinium with showy blue flowers.



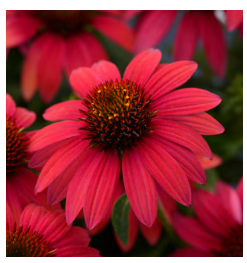
Dianthus 'Interspecific Jolt Pink F1' – Generally sold as annuals, often overwinters successfully.

Dianthus 'Interspecific Supra Pink F1' – Annual. Bright pink flowers with fringed edges.



Echinacea 'Cheyenne Spirit' – Perennial. Overwintered successfully for several years.

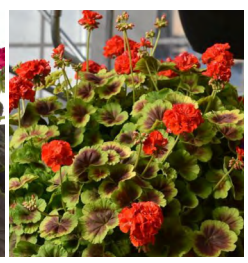
Photos courtesy AAS.



Echinacea 'Sombrero Baja Burgundy' – Perennial. Violet-red flowers great for cutting. Touted to be deer resistant.

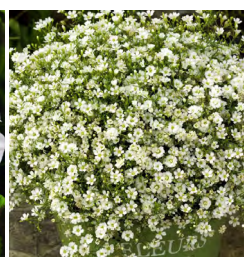
Gaura 'Sparkle White' – Treat this one as a beautiful white annual. It does not overwinter successfully in Laramie.

Geranium (Pelargonium) 'Brocade Cherry Night'(left) and 'Brocade Fire' – Annual. Produced blooms all summer, especially if kept free of spent flowers.



Geranium (Pelargonium) 'Calliope Medium Dark Red' – Annual. A prolific bloomer all summer.

Geranium (Pelargonium) 'Pinto Premium White to Rose F1' – Annual. Beautiful pink zonal geranium.

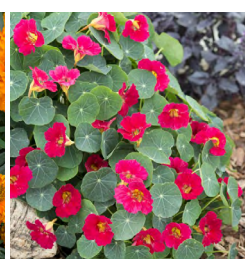


Gypsophila 'Gypsy White Improved' – Annual. Good for small garden beds, this short, mounding plant blooms with fluffy white flowers.

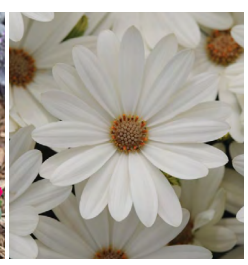
Marigold (Tagetes) 'Super Hero Spry' – A petite French marigold with darker red outer petals and yellow/gold inside petals.

Marigold (Tagetes) 'Big Duck Gold F1' (left) and 'Big Duck Orange F1' – Annual. Neon colors make these African-type marigolds pop!

Nasturtium 'Baby Rose' – Annual. Mounded plants, great for small gardens and containers.

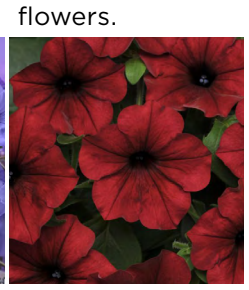


Osteospermum Akila 'Daisy White F1' – Annual. Loves our high light and cool nights.



Penstemon 'Arabesque Red' – Treat as an annual in Laramie. Blooms all summer.

Petunia 'Evening Scentsation F1' – Annual. Lilac-colored flowers on mounded plants.



Petunia 'Tidal Wave Red Velour' – Annual. Blooms all summer.

Petunia 'Wave Carmine Velour F1'- Annual. Spreading plants result in a blanket of color all summer.

Rudbeckia x 'American Gold Rush' – Perennial. Shorter than most other rudbeckia.

'Summer Jewel Lavender' (left), Salvia 'Summer Jewel Pink' (center), Salvia 'Summer Jewel White' (right) – Annual. There are several colors in the 'Summer Jewel' series, and all perform beautifully in our Laramie climate.

Zinnia 'Profusion Double Deep Salmon' (left) and 'Profusion Double Hot Cherry' – Annual. They do not get much taller than about 12 inches in our area but bloom prolifically all summer.

Zinnia 'Profusion Red' – Annual. An addition to the 'Profusion' series.

Karen Panter is the University of Wyoming Extension horticulture specialist and can be reached at (307) 766-5117 or at kpanter@uwyo.edu.

INTERESTED IN BUYING THESE FOR YOUR LANDSCAPE OR GARDEN?

They are all available through a number of retailers. Find a list on the AAS website: all-americaselections.org or contact your nearest garden center. Look for the AAS logo.

Failure-tolerant leaders use the experience as a positive tool that invigorates employees

Being willing and able to fail is a leadership skill.

After all, responding to failure well is how we encourage more of an experimentation mindset, which is essential for innovation.

Let's look at a couple characteristics of leaders who fail well, then dive into helping others reframe how they view their hurdles.

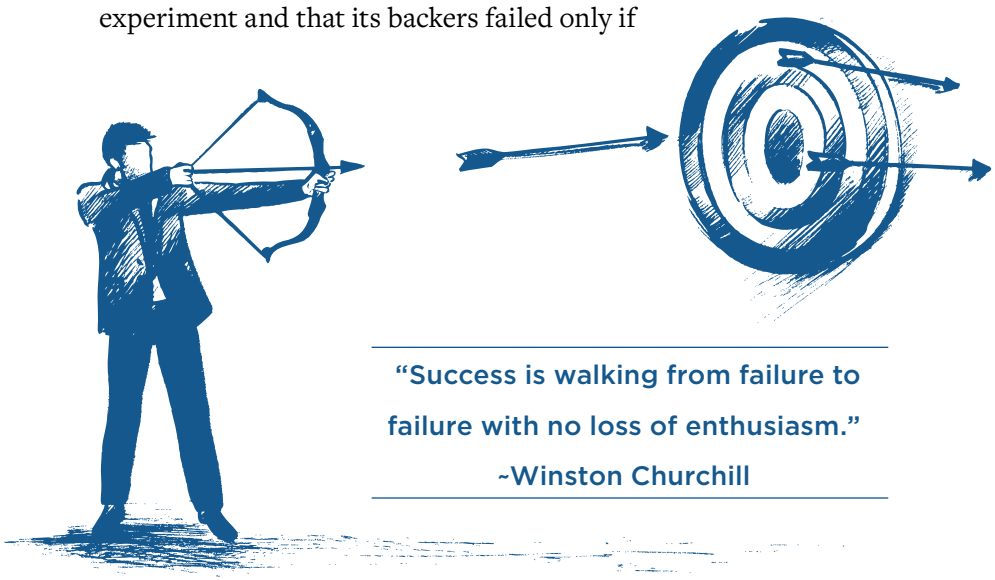
Richard Farson and Ralph Keys in their book *The Failure-Tolerant Leader* share, "During his years leading Monsanto, Robert Shapiro was struck by how terrified his employees were of failing. They had been trained to see an unsuccessful product or project as a personal rebuke."

Shapiro tried hard to change that perception. He explained every product and project was an experiment and that its backers failed only if their work was a halfhearted, careless effort with poor results.

Shapiro and other failure-tolerant leaders employ a number of strategies. Here are two.

Distinguish between excusable and inexcusable failure. Employees must know that failure is okay, but sloppy work will not be tolerated. A failure-tolerant leader is vigilant in examining what happened and why, and can tell the difference between a cavalier attempt that failed and a sincerely executed attempt that missed the mark.

Engage the person, not the project. Failure-tolerant leaders show a genuine interest in employees' growth and not just the status of the project. They send the message that learning and development are just as important as project success.



"Success is walking from failure to failure with no loss of enthusiasm."
~Winston Churchill

When engaging people, the failure-tolerant leader shows interest and expresses support by asking pertinent questions. Opening questions may include: What kinds of challenges are you facing? What might be the next steps we are looking at as a company? The conversations that develop focus on the learning taking place.

Sometimes, however, the answers we get may indicate a colleague or employee has negative thoughts. Here is where a good leader steps in to reframe the situation.

Reframing

Reframing is a questioning tool used in conflict resolution to re-word or re-state what someone has said more constructively.

Reframing validates the speaker's experience, then move from his or her perspective to a potentially more constructive one.

Original statement: Don't you know any better than to submit a proposal that will never fly?

Reframed statement: You may have a point there. How would you improve the proposal to make it fly?

Techniques of reframing can be used to cultivate creative and critical thinking skills.

Original statement: I've never been good at public presentations.

Reframed statement: If you imagine yourself as successful at a public presentation, how would you be speaking that would make it successful?"

To succeed and to thrive, we have to be willing and able to step from failure to failure and not give up. We have to be willing and able to hear the tough feedback and duly note how we've messed up, what we overlooked, what failed, and make the necessary adjustments and keep moving forward.

Mary Martin is a University of Wyoming Extension community development educator serving western Wyoming. She can be reached at (307) 733-3087 or at mmmartin@uwyo.edu.

Flexing your style

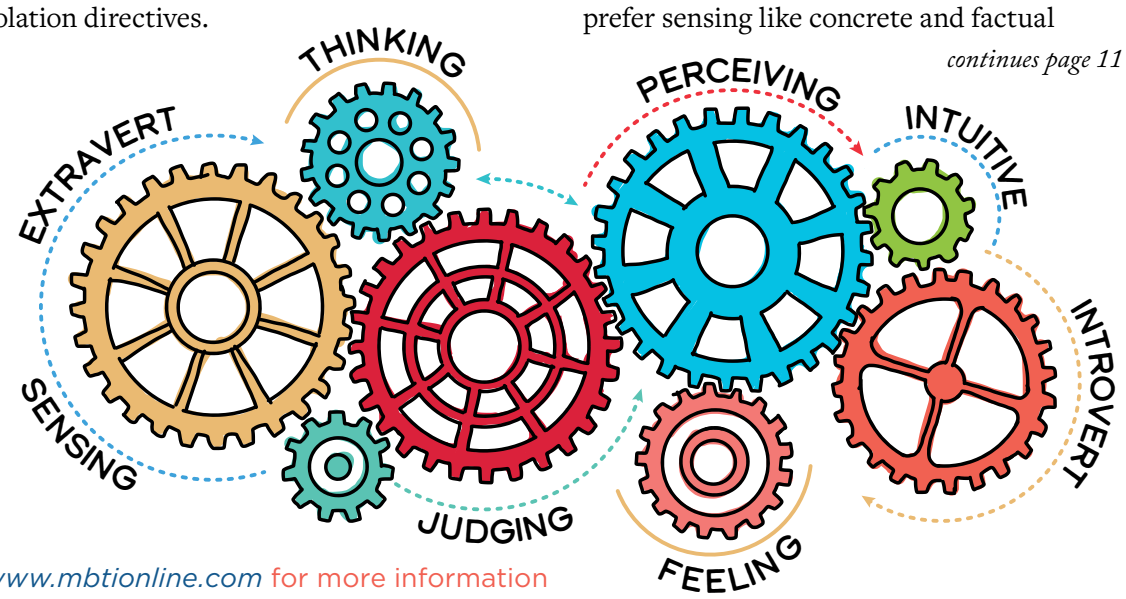
Exploring personality differences with the Myers-Briggs Type Indicator assessment

The coronavirus situation forced us to spend time with people at home and online in new ways – and differences in personality wear thin when we are trying to cope with everyday life, let alone pandemic-level struggles.

But, interpersonal differences can be explained and quantified, and they give us insights into how to work with others. One excellent tool is the Myers-Briggs Type Indicator (MBTI). The assessment uses word pairs and phrases to identify ways people prefer to interact with each other and the world around them. MBTI shows our preferences, or patterns of behavior, across four either/or scales that cover much of our daily behavior.

Extraversion or Introversion

Perhaps the most familiar of all Myers-Briggs dichotomies, the Extraversion-Introversion pairing is about where you prefer to focus your attention. Extraverts tend to focus on the outer world of people and activity. Interacting with others and talking aloud typically gives extraverts energy. Introverts typically get energy from self-reflection and appreciate time alone to recharge – they probably enjoyed the recent self-isolation directives.



Visit *www.mbtionline.com* for more information about the Myers-Briggs Type Indicator.

Sensing or Intuitive

The next dichotomy revolves around information gathering. Sensing and Intuitive types have different preferences for the kind of information they like and trust. People who prefer sensing like concrete and factual

continues page 11

Volunteers who provide sense of belonging to youth invaluable

Volunteers are key to the success of the Wyoming 4-H program

The Wyoming 4-H program serves over 6,900 youth and their families because of strong and motivated volunteers.

If you are a volunteer in a youth organization like 4-H, look at your involvement; are you helping or hindering belonging?

A sense of belonging is one of the most important elements volunteers can provide young people. All youth want to belong and be members of groups. Groups may be formal, like classrooms and school sports teams, or informal, like 4-H clubs. Belonging includes having a positive relationship with a caring adult, being in a safe emotional and physical environment, and being part of an inclusive environment.

That Belonging Feeling

If you think back to your own personal experiences with groups, you were more likely to get involved, stay involved, and have good experiences if you felt a sense of belonging within the group. As an adult working with youth, you may be wondering what you can do to help create a sense of belonging in an organization.

A positive relationship with a caring adult is the most important belonging element to a positive youth development experience. Caring adults in 4-H act as adviser, guide, and mentor. This happens when adults can serve as the supporter, friend, and advocate for the 4-H member while helping set boundaries and expectations.

In a 4-H setting, or in any youth organization, there are simple ways to make this happen. Something as simple as volunteers calling youth by their first names. Getting to know the interests of members can happen by asking questions that show you care while also being an active listener to what youth have to say. Pay attention to the activities of youth outside of the organization. Look to structure group activities so youth and adults have time to learn about one another.

Feeling physically, emotionally safe

Youth need to feel physically and emotionally safe in their environments. Volunteers need to create an environment of support and encouragement.

Learn how you can be involved and help develop the next generation by visiting the Wyoming State 4-H Program website www.uwyo.edu/4-h.

4-H'er Keira Woffinden in a 4-H Horse Camp session last year with volunteer instructor Connie McGinley of Buffalo.

We cannot tolerate or participate in bullying, cliques, or put-downs. Be sure the young people in a group are helping plan, implement, and evaluate what the group is doing.

Finally, we need to encourage a program that brings together youth and adults from different backgrounds, experiences, and comfort levels. An organization needs to be a place where individual members and leaders feel supported and encouraged. This can happen by looking for ways to recognize all members, not just those who excel in competition. Meetings and events can start with ice breakers and fun games that get everyone involved.

Please contact me for more information on how to create an environment of belonging in 4-H or other youth organizations.

Sarah Torbert is the 4-H volunteer development specialist with the University of Wyoming Extension. She can be contacted at (307) 766-5027 or storbert@uwyo.edu.

Personalities, from page 10

information; they trust experience. Sensing types observe and remember specifics they use to build carefully and sequentially toward a conclusion. People who prefer intuition are more comfortable looking at the big picture. They look for patterns and connections between facts; they relate patterns back to the larger meaning. It is not uncommon for Intuitive types to have a hunch about some future possibility that they cannot fully explain but just know to be right.

Thinking or Feeling

The Thinking-Feeling dichotomy explains how we make decisions and the types of criteria we use. Those who prefer thinking tend to solve problems with logic; they generally like to use objective standards to analyze and weigh decisions. When making decisions, people who prefer feeling generally rely on personal and/or group values. Considering how a decision will impact others is a crucial piece of a feeler's process. It is very important to note both types use rational decision-making processes; whether we use subjective or objective criteria, it is critical we recognize each different, yet equally valid, approach.

Judging or Perceiving

The final dichotomy, Judging-Perceiving, is about how we implement decisions. People who prefer judging typically have scheduled, organized approaches to assignments/tasks. Judgers like having things decided so they can avoid the stress of doing things last-minute. People who prefer perceiving typically like to be spontaneous and flexible; they prefer things be open-ended so they can change them at will. Perceivers feel energized by last-minute pressures and will often say that is when their brains "turn on."

Putting It all together

You have an individual's personality type when you consider an individual's preferences on all four of the MBTI scales. The assessment shows what we prefer to do and what comes naturally, not what we can or cannot do. Each type has something to offer teams, organizations, and our communities.

COMMUNICATION TIPS

- Give introverts time to process.
- Let extraverts "think out loud."
- Know that sensers prefer a linear conversation format; intuitives prefer a circular format.
- Feeling types appreciate warmth and tactfulness; thinking types prefer directness and logic.

Members of UW Extension's community development education team are available to help you learn more about personality types and how to use them to improve group dynamics.

Kimberly Chapman and **Juliet Daniels** are University of Wyoming Extension community development educators. Chapman serves southwest Wyoming and can be reached at (307) 783-0570 or *kchapma3@uwyo.edu*. Daniels serves southeast Wyoming and can be reached at (307) 633-4383 or at *juliet.daniels@uwyo.edu*.

University of Wyoming | Extension

Want to raise your parenting IQ?

One way is understanding the needs at each stage of youth development

Raising children is one of the most difficult and ever-changing roles many adults will hold.

Deciding the best course of action and path of development can sometimes be daunting. A basic understanding of the developmental stages young people go through as they grow and mature can help guide many of the decisions we will make. We are really talking about the physical, social, emotional, and intellectual development of young people when we talk about developmental stages.

What are youth able to grasp, handle, or do that is conducive to creating a positive learning environment?

Understanding the different characteristics at each stage, and the implications for engaging young people at each stage of development, is important. Current research groups the various age categories into four stages of development: 5 to 8 year olds; 9 to 12 year olds; 13 to 15 year olds; and 16 to 19 year olds.

5-8 YEAR OLDS

Characteristics

- Mastering physical skills – have better control of large muscles than small muscles.
- Learning how to be friends and may have several "best friends."
- Cooperative games are enjoyable and help build social skills.
- Very concrete – like to see, hear, taste, feel, and smell.
- More interested in process than final product.

Implications for engaging

- Activities need to allow for movement and action – hands-on learning.
- Don't plan projects requiring fine detail or perfection.
- Focus on smaller projects that are easier to complete.
- Small-group activities are most effective and encourage parental involvement.
- Focus on cooperative games that allow each child to equally participate.

9-12 YEAR OLDS

Characteristics

- Small muscle coordination is increasing.
- Prefer to socialize with same sex groups.
- Prefer working in groups in cooperative activities.
- Individual evaluation by an adult is preferred – want to know how to improve.
- Find comparisons with success of others difficult – hard time differentiating between success or failure in activities with success or failure as a person.
- Have increased attention span but interests change rapidly.
- Begin to think logically and symbolically.

Implications for engaging

- Activities should include physical movement and involvement.
- Focus on activities that help develop and refine fine motor skills.
- Avoid creating competitive situations – this age group has a hard time
- differentiating between success or failure in activities with success or failure as a person.
- Give positive feedback for the effort and avoid generic praise – they will see through it.

13-15 YEAR OLDS

Characteristics

- Experience rapid changes in physical appearance.
- Are interested in activities involving the opposite sex.
- Seek acceptance and trust from peers and adults – search for adult role models.
- Compare themselves to others but like to have adults compare them to past performances.
- Strive for independence and seek privacy from adults and parents.
- Move to thinking abstractly – can solve problems that have more than one variable.
- Want to explore world beyond their community or current situation.

Implications for engaging

- Plan activities that do not depend on physical abilities.
- Provide activities to be with opposite sex in healthy ways – planning groups, parties, etc.
- Provide lots of opportunities to learn new skills.
- Plan activities that are more in-depth and require problem solving.
- Involve them in decision-making roles.

16–18 YEAR OLDS

Characteristics

- Are concerned about body image but more comfortable with maturity.
- Explore relationships and search for intimacy.
- Want to take on adult roles and be recognized as individuals.
- Desire respect, independence, and identity.
- Develop own set of values and beliefs.
- Search for career possibilities.
- Enjoy demonstrating knowledge but can lose patience with meaningless activities.

Implications for engaging

- Eliminate busy work – involve them in decision-making and carrying out plans.
- Give them opportunities to prove their abilities.
- Encourage individual goal-setting and self-responsibility.
- Offer vocational and career exploration opportunities.

Not all young people grow and develop at the same pace. Youth mature at varying rates, ages, and times but, as a general rule, these characteristics hold true. As we evaluate the need of the various age groups, a basic understanding of development stages can help guide important developmental decisions, such as how much responsibility or freedom to give young people and when it is appropriate to give.

A little flexibility and forethought can really have an impact on adults' decision-making ability and the appropriateness of any learning or social activity in which young people engage.

Warren Crawford is the state 4-H youth development specialist. He can be reached at (307) 766-5679 or crawford@uwyo.edu.

BEYOND THE FOUR-LEAF CLOVER

4-H is an informal, practical, learning-by-doing educational program for youths. 4-H helps youth acquire knowledge, develop life skills, and form attitudes that will enable them to become self-directing, productive members of society.

4-H is the youth education program of the University of Wyoming Extension. 4-H membership is available to all Wyoming youth ages 8-19. Members may choose from 45 different projects or they may develop their own projects with the help of an adult volunteer leader.

Visit *www.uwyo.edu/4-H* for more information