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## HAVING DIFFICULT CONVERSATIONS

Bill Taylor, Area Community Development Educator



ing difficult conversations:

**Mistake #1: We fall into a combat mentality.**

When difficult conversations turn toxic, it's often because we've made a key mistake: we've fallen into a combat mentality. But the reality is, when we let conversations take on this tenor – especially at the office – everyone looks bad, and everyone loses.

**Mistake #2: We try to oversimplify the problem.** If the subject of your argument were straightforward, chances are you wouldn't be arguing about it. Because it's daunting to try and tackle several issues at once, we may try to roll these problems up into a less-complex problem. To avoid oversimplifying, remind yourself that if the issue weren't complicated, it probably wouldn't be so hard to talk about.

**Mistake #3: We don't bring enough respect to the conversation.** To avoid the combat mentality, you need to go further – you need to respect the person you're talking to, and you need to respect yourself. Making sure that you respond in a way you can later be proud of will prevent you from being thrown off course if your counterpart is being openly hostile.

**Mistake #4: We lash out – or shut down.** Some of us react by confronting our counterpart more aggressively; others, by rushing to smooth things over. Instead, move to the middle: state what you really want. The tough emotions won't evapo-

rate, but with practice, you will learn to focus on the outcome.

**Mistake #5: We react to thwarting ploys.**

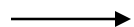
Lying, threatening, stonewalling, crying, sarcasm, shouting, silence, accusing, taking offense: tough talks can present an arsenal of thwarting ploys. The most effective tactic is to move to the middle: disarm the ploy by addressing it. For instance, if your counterpart has stopped responding to you, you can simply say, "I don't know how to interpret your silence."

**Mistake #6: We get "hooked."** When someone finds our weak spot, it becomes even harder to stay out of the combat mentality. Whatever it is, take the time to learn what hooks you.

**Mistake #7: We rehearse.** Having a "script" in mind will hamper your ability to listen effectively and react accordingly. Prepare by asking yourself: 1. *What is the problem?* 2. *What would my counterpart say the problem is?* 3. *What's my preferred outcome?* 4. *What's my preferred working relationship with my counterpart?*

**Mistake #8: We make assumptions about our counterpart's intentions.** Remember that you and your counterpart are *both* dealing with this ambiguity. If you get stuck, a handy phrase to remember is, "I'm realizing as we talk that I don't fully understand how you see this problem." Admitting what you don't know can be a powerful way to get a conversation back on track.

**Mistake #9: We lose sight of the goal.** Go into conversations with a clear, realistic preferred *outcome*; the knowledge of how you want your working *relationship* with your counterpart to be; and having done some careful thinking about any *obstacles* that could interfere with either.



When we're caught off-guard, we're more likely to fall back into old, ineffective habits like the combat mentality. If you're not the one initiating the tough conversation, or if a problem erupts out of nowhere, stick to these basics: keep your *content* clear, keep your *tone* neutral, and keep your *phrasing* temperate. Judy Ringer provides some advice on how to deal with difficult conversations.

Before going into the conversation, ask yourself some questions:

1. What is your purpose for having the conversation? What do you hope to accomplish? What would be an ideal outcome?

Work on yourself so that you enter the conversation with a supportive purpose.

2. What assumptions are you making about this person's intentions? You may feel intimidated, belittled, ignored, disrespected, or marginalized, but be cautious about assuming that that was their intention.

3. What "buttons" of yours are being pushed? Are you more emotional than the situation warrants? Take a look at your "backstory," as they say in the movies. What personal history is being triggered? You may still have the conversation, but you'll go into it knowing that some of the heightened emotional state has to do with you.

4. How is your attitude toward the conversation influencing your perception of it? If you think this is going to be horribly difficult, it probably will be. If you truly believe that whatever happens, some good will come of it, that will likely be the case. Try to adjust your attitude for maximum effectiveness.

5. Who is the opponent? What might they be thinking about this situation? Are they aware of the problem? If so, how do you think they perceive it? What are their needs and fears? What solution do you think they would suggest? Begin to reframe the opponent as partner.

6. What are your needs and fears? Are there any common concerns? Could there be?

7. How have you contributed to the problem? How have they?

The majority of the work in any conflict conversation is work you do on yourself. No matter how well the conversation begins, you'll need to stay in charge of yourself, your purpose and your

emotional energy.

Breathe, center, and continue to notice when you become off-center – and choose to return again. This is where your power lies. By choosing the calm, centered state, you'll help your opponent to be more centered, too. Centering is not a step; centering is how you are as you take the steps.

Four steps to a successful outcome:

**Step #1: Inquiry.** Cultivate an attitude of discovery and curiosity. Pretend you don't know anything, and try to learn as much as possible about your opponent and their point of view. Pretend you're entertaining a visitor from another planet, and find out how things look on that planet, how certain events affect them, and what the values and priorities are there.

Let them talk until they're finished. Don't interrupt except to acknowledge. Whatever you hear, don't take it personally. Try to learn as much as you can in this phase of the conversation.

**Step #2: Acknowledgment.** Acknowledgment means to show that you've heard and understood. Explain back to them what you think they're really going for. Guess at their hopes and honor their position. They won't change unless they see that you see where they stand. Acknowledge whatever you can, including your own defensiveness if it comes up.

Acknowledgment can be difficult if we associate it with agreement. Keep them separate. My saying, "this sounds really important to you," doesn't mean I'm going to go along with your decision.

**Step #3: Advocacy.** When you sense that they've expressed all their energy on the topic, it's your turn. What can you see from your perspective that they've missed? Help clarify your position without minimizing theirs.

**Step #4: Problem-Solving.** Now you're ready to begin building solutions. Brainstorming is useful inquiry. Ask your opponent what they think would work. Whatever they say, find something that you like and build on it.

If you've been successful in centering, adjusting your attitude, and in engaging with inquiry and useful purpose, building sustainable solutions will be easier.

## *IT'S THAT TIME OF YEAR AGAIN!*

By Vicki Hayman University Extension Educator — Northeast Area- Nutrition and Food Safety

Grilling, one of the easiest cooking methods can be a centerpiece for summertime meals. Grilling is a great way to spend time with family and friends. But are you using your grill to its potential?

When you've got the grill lit for your meat, cook vegetables on it as well instead of heating up the stove. Grilling vegetables can be simple or a little fancy. A variety of vegetables including bell peppers (whatever color), yellow and green summer squash, onions, corn on the cob, or mushrooms, tomatoes, potatoes, green onions--pretty much anything, may be grilled. If you can roast it, you can grill it. Just oil them first and season with various herbs or just simple salt and pepper.

Slice the vegetables big enough to handle. For a smaller eggplant, zucchini or yellow squash slice them lengthwise. For asparagus, trim the thicker ends off. For onions, slice across, to make rings. Again, coat them with a bit of oil, then salt and pepper. This works great for any vegetable that is large enough to cut into manageable pieces. Lay them on the grill across the grates so they don't fall through. (Wire baskets or perforated aluminum foil may be used.) Cook, turning halfway through. The time will vary depending on how hot your grill and how thick the vegetables. Experiment. Generally 5-10 minutes works well for soft-ware vegetables like squash, eggplant and onions.

Grilling vegetables on skewers works great for those that are smaller, like mushrooms and cherry tomatoes. Cut eggplant, onions and zucchini in chunks rather than slices when doing skewers. Use metal or wooden skewers, when using wooden ones; soak them in water for half an hour while prepping the vegetables.

It looks pretty and is fun to serve kabobs with meat and vegetables interchanged. Just make sure to cut the meat and vegetables into pieces that will all cook about the same time. Alternately,



create skewers of meat only and others with just vegetables. Marinate the vegetables in simple vinaigrette or play with seasoning them with various herbs.

Don't forget about fruits. Cut fruit before putting it on the grill: apples, peaches and pears can be halved and bananas split lengthwise. Use fruit that isn't completely ripe so it retains its texture. If you brush fruit or the grill, with a bit of oil, it won't stick, and remember to watch closely so it doesn't get overdone. Serve as is, with a sprinkle of cinnamon or a dollop of plain frozen yogurt.

If you choose to grill meat, mix it up: Try chicken or fish instead of sticking with burgers and hot dogs. Whichever meat, start by mixing up a marinade with favorite herbs along with vinegar or lemon juice. Keep the meat marinating in the fridge while you prepare the sides. Marinating meat has been shown to reduce the formation of HCAs. Precisely why marinades are protective is still under investigation; some evidence points to the acids (vinegar and citrus) or the antioxidant content. Even just 30 minutes in the marinade can help.

Partially pre-cook. You can do this in the microwave, oven or stove to help reduce the amount of time the meat sits on the grill exposed to high heat. To ensure safe food handling, just be sure to put the partially cooked meat on the pre-heated grill immediately to complete cooking.

Go slow and low. To reduce the amount of cancer causing heterocyclic amines (HCAs) and polycyclic aromatic hydrocarbons (PAHs) that end up in, and on, the meat, slow down the cooking time with a low flame and keep burning and charring to a minimum. Cut off any visible fat (to reduce flare-ups), cook food in the center of the grill and cut off any charred portions of the meat. *(Health News Digest)*

Cook fish in foil packets to retain natural flavors and protect it from smoke and fire.

Food safety should be a priority while grilling. By following the suggestions listed you can be surer of a safe, summer bar-b-que:

- ✦ Keep meat cold until ready to grill. Do not leave it at room temperature.
- ✦ Pre-cooked meats can still be grilled to add authentic flavor and shorten grilling time.
- ✦ If starting with frozen products, thaw in the refrigerator or microwave. Grill immediately after thawing in the microwave.
- ✦ Do not use the same platter or utensils to handle raw and cooked products.
- ✦ Use a meat thermometer to check internal temperatures. Ground meat should be 160°F, poultry 180°F, poultry breasts 170°F, pork 160°F, and steaks 145°F.
- ✦ Once taken from the grill, keep the meat hot until serving in a warming tray or slow cooker.
- ✦ Place leftovers in the refrigerator. Discard anything left out more than two hours. Before placing food on grilling surface, preheat the grill. Remove charred food debris to reduce exposure to possible cancer causing substances formed during high heat cooking.
- ✦ Avoid fire flare ups by using lean meats and trimming away all visible fat. Raise the rack to the highest position away from direct heat.

Marinades enhance flavors, tenderize and keep foods moist. If you plan to use the remaining marinade later as a sauce, it must be

boiled for at least three minutes to eliminate bacteria.

**Grilling Safety Tips:** Pick a safe area. Position the grill in a well ventilated, flat, level surface away from overhangs, deck railings and shrubbery. Keep children and pets away from the hot grill.

**Handle charcoal grills carefully** - Fire starters are your friend. No, not the liquid lighter fluid our dads used to douse the charcoal briquettes. Instead, use the new nontoxic fire starter squares now available online and at hardware stores. They're easier, quicker, and less scary to work with than a giant bottle of lighter fluid. Use proper utensils for safe handling of food and coals.

**Cook over wood** -- mesquite, oak, hardwood, or a mix. The flavor is so distinct and makes the simplest of meals special.

**Use a gas grill** if you're grilling-phobic. It's as easy to light as a gas stove. Most new grills have their own starter, so you just have to turn a knob.

So whether the snow is blowing or the sun is shining brightly, it's important to follow food safety guidelines to prevent harmful bacteria from multiplying and causing foodborne illness. Use the simple guidelines above for grilling food safely and enjoying family meals!



*Grilling can be as easy or complicated as you want. There are many selections in grills and accessories. Don't hesitate to try different recipes and methods*

## ENJOYING THE FAMILY PICNIC

Trish Peña, UW Cent\$ible Nutrition Educator, Weston and Crook Counties

Now is the ideal time for a family picnic! No school for a few weeks and you can take some time off to enjoy quality time with your partner and children. The destination is not as important as spending time together.

It's time to enjoy an informal meal outdoors, as a family, with space for little ones to scamper about without bothering anyone.

An ideal place for a family picnic is in a nearby stream, forested area or local park where there's room to run around.

A stretch of open ground is good for activities like flying kites or playing football, or wooded countryside for games like hide and seek.

There's no need to plan a long-distance trip – the children will not thank you for being cooped up in the car for more than ten minutes!

You want to convey a sense of freedom in being outdoors together and the simple pleasure of eating a family meal under the open sky.

The picnic activity could be a simple game of catch or hiking or throwing a ball for the pet dog. Of course you can choose from other picnic games especially if you want a more structured style to the event or other families are joining your family picnic.

It's a good idea to involve the children from the onset and let them help with the planning. This does not have to be complicated but, by giving each one their own task, they will take on some responsibility and will therefore enjoy the day more than simply being "taken" on a picnic.

Naturally the tasks allotted will depend on the ages of the children but here are some suggestions:

- Help with the picnic menu. Having food that they have chosen means they won't complain about it or not eat it, which means no arguments with fussy eaters! (This task may need to be done a day ahead to give time for shopping and preparation.)
- Assemble the ingredients for the picnic food
- Help with the food preparation
- Find picnic hamper, blankets, cool-box, picnic equipment etc.
- Pack drinks in a cool-box
- Pack equipment in the chosen containers safely and securely (fill any spaces with plastic bags, paper towels and tea towels)
- Assemble the sports equipment, dog toys etc.
- Be in charge of the picnic list to make sure nothing is forgotten.



Don't give each child too much to do and decide on a time when the tasks should be completed. Remember the idea of a family picnic is to have fun and spend quality time together.

### *Cent\$ible Nutrition Classes*

Weston County, Newcastle: USDA Service Center Conference Room - **September 15, 22, 29** 11:00 am - 12 Noon

Crook County, Sundance: Public Health - **September 16, 23, 30** 12 Noon-1:00 pm

Crook County, Moorcroft: Library - **September 17, 24** 11:00 am - 12 Noon

**Other classes may be scheduled individually, or for groups, at your convenience, please call**

**Trish Peña at 746-3531 or 283-1192.**



# FOOD SAFETY

By: Kentz Willis, M.S., UW Extension Educator in Nutrition and Food Safety for Northeast Wyoming.



Though it got a bit of a late start this year, the summer season is in full swing. For many of us this means grilling out, picnics, camping, and my personal favorite: homemade ice cream. Unfortunately, the increase in these activities puts us all at an increased risk for something that isn't much fun: foodborne illness.

More commonly known as food poisoning, foodborne illness will affect one in four individuals every year. Those at the greatest risk are the very young, the elderly, and pregnant women, along with anyone with depressed immune system function. Symptoms like cramping, vomiting, and diarrhea usually occur within 72 hours, but can lay dormant for weeks in some cases!

Fortunately, most cases of foodborne illness can be prevented by following a few simple rules.

Rule #1: Wash your hands! This simple step greatly reduces the chances of spreading dangerous bacteria or viruses to food. If soap and water is not available try to do your best with antibacterial wipes or hand sanitizer. Make sure to always clean up after using the restroom or handling potentially hazardous foods like meat or eggs.

Rule #2: Keep hot foods hot, cold foods cold. Bacteria can multiply quickly under the right conditions, and they love the hot, humid days of summer. Foods should only sit in the 'danger zone' (40-140°F) for two hours. If sitting in temperatures



greater than 90°F, food needs to be refrigerated or thrown out after only one hour! Pack your cooler with enough ice to keep foods cold, and try to minimize how often it is opened.

Rule #3: Separate, don't cross-contaminate. Make sure meats are well wrapped if you will be transporting them in a cooler, and keep cutting boards and knives separate. Use a clean plate to serve foods from the grill, never re-use something that has held any type of raw meat.

Rule #4: Know your temperatures. Different types of meats need to be cooked to different temperatures before they can be safely eaten. You can't tell if meat has been cooked properly simply by looking at it! For further tips on correct temperatures and how to use a meat thermometer please visit [www.IsItDoneYet.gov](http://www.IsItDoneYet.gov).

Rule #5: Wash your produce—even fruits like cantaloupe and watermelon. Your knife will just push all the outer germs to the inside of a melon if it hasn't been washed properly first.

As for that homemade ice cream—look for an eggless recipe, or one that uses a cooked custard base. If your favorite recipe calls for raw eggs try to use pasteurized shell eggs or pasteurized egg substitutes. You should be able to find these in the dairy case of your grocery store near the regular eggs.

While most cases of foodborne illness are mild, some can be severe and even life-threatening! Please keep these rules in mind to keep your family and friends safe this summer season.

# WYOMING WILDFLOWERS - WHAT TO LOOK FOR AND WHAT TO AVOID

Brian Sebade, Northeast Area Educator, SMRR

With Wyoming's cold, windy, and snowy winter as a faint distant memory, many of us are left thinking and looking at the painter's palette that covers much of Northeast Wyoming's landscapes. Shades of red, yellow, blue, purple, white, and other brilliant colors cover landscapes thanks to an abundance of native wildflower species.

Having a wide variety of plant species and landscapes, the Northeast area of Wyoming is blessed with color through much of the growing season. Staggered growing periods allow the first signs of color to appear at the lowest elevations and then progress higher in elevation as snow fields melt and temperatures increase. Changes in species and color dominance also occur as a result from physiological differences among wildflowers. Many of our low growing flowers are often first to bloom with taller species later to follow. Flowering tree species also produce early flowers and are often the most noticed and visible flowers in residential areas.

Some examples of early risers that are found in our area include many phlox species, pasqueflower, low larkspur, and arrowleaf balsamroot. As the season progresses, new species begin to bloom such as lupine, geranium, tall larkspur, Wyoming Paintbrush, and Yarrow. We are also lucky enough to observe flowering in some of our driest regions from hardy plants like plains prickly pear cactus.

Although not a complete list or found on every landscape, here are some pictures of common native wildflowers to keep eye an out for this summer. Keep in mind that Wyoming is host to

many invasive and introduced species which can obscure the viewer into thinking they are looking at a wonderful field of native wildflowers, when in fact it is a field of undesired plants.



Arrowleaf Balsamroot (*Balsamorhiza sagittata*)



Chokecherry (*Prunus virginiana*)



Pasqueflower (*Pulsatilla patens*)

While most of us get caught up with the aesthetics associated with wildflowers, they also serve an important role in Wyoming ecosystems. Many of our wildflowers are forb species. Forbs are an important food source for much of Wyoming's wildlife and also serve as good forage for livestock. Blue and rough grouse for example readily use wildflower areas as a food source for not only the plants themselves, but also for the insects that wildflowers attract. The insects attracted also help spread pollen and help keep the propagation of new seeds and plants possible.

A portion of wildflowers also provide edible parts for human consumption. Although most wildflowers would only be useful in survival situations, strawberries, raspberries, chokecherry and hips from wild roses are examples of some delicious plants that are readily used by humans. These species are found growing where sufficient moisture is present through most of the growing season. The berries from strawberries and raspberries can provide a healthy late summer treat. Hips from roses and berries from chokecherry can be made into jellies.

Wildflowers serve as a food source for humans and wildlife, yet some of these spring and summer beauties can be extremely toxic to humans if ingested. As the growing season progresses so do the toxic plants that are available to humans. Meadow deathcamas, poison hemlock, and water hemlock are three white flowering plants that are extremely toxic to humans if ingested. All three of these species are found growing in Wyoming. Deathcamas and hemlock species can easily be confused with other wild plants that look similar. Deathcamas plants for example have a bulb similar to wild onions, yet the flowers differ. Harvesting of wild onions early in the season before flowers protrude could mislead to the con-

sumption of the wrong plant species. Cow parsnip is another wild flowering plant that can be consumed by humans, yet looks similar to poison and water hemlock. Confusing these species could prove to be extremely harmful if not identified correctly.

Problems associated with these species have affected humans for hundreds of years. Poison hemlock was introduced to North America and is responsible for killing Socrates in ancient Greece. More recently it is suggested to be responsible for killing a woman in Washington State in April of 2010 when she accidentally identified hemlock for a wild carrot plant and mixed it in a salad. The woman affected by hemlock is unfortunately not the only case that has experienced poisoning problems associated with wrongful identification. Before going afield to look for summertime treats, consult an expert or make sure you are 100% sure you know what you are eating.



*Meadow Deathcamas (Zigadenus venenosus)*



# Ranching in the Era of \$8/Bushel Corn

By Whit Stewart-Northeast Area Livestock Educator

There is a tremendous amount of optimism in agriculture currently. Specifically those of us in the livestock sector are enjoying historically high prices. However the flipside of the equation is that fuel, feed and labor inputs continue to rise to the extent that profit margins are squeezed. Strategies that attempt to reduce or eliminate these input costs will ultimately help our operations stay profitable over the long run. Allow me to discuss some of these challenges that we face in ranching, in an attempt to spur some thinking.

**Fuel:** Luckily most of us are in the business of growing grass and letting our livestock turn forage into meat, milk and fiber. We are still affected by rising input costs tied with operating a ranching enterprise. Fuel, feed, and equipment are just a few of the rising input costs that will continue to affect our bottom line. Some of us are busy cutting hay this time of year and can feel the fuel induced anxiety each time we fill up the bulk tank. Fuel and lubricant costs represent roughly 30 to 45% of total machine costs. Assuming diesel fuel costs \$3.50 to \$4.00/gallon it will cost approximately \$5.50/acre to run a swather, and \$26-\$30/hour to rake and bale with an 80 to 150 horsepower tractor. Lubrication costs are generally 10 percent of fuel costs and should also be accounted for when running equipment. A simpler yet less accurate method of estimating fuel consumption is multiplying your tractors horse power by 0.044 to give you gal/hr. For example a 150 hp. tractor will consume 6.6 gal/hr. ( $150 \times 0.044 = 6.6$ ). Fuel is one common production input that will continue to rise (See Figure 1). Improvements with fuel efficiency and GPS guided equipment may reduce some of our fuel expenditures but still require expensive capital upgrades. For additional information on calculating equipment fuel expenditures go to: [http://www.uwyo.edu/Agexpstn/Impact\\_of\\_Fuel\\_Prices.htm](http://www.uwyo.edu/Agexpstn/Impact_of_Fuel_Prices.htm).

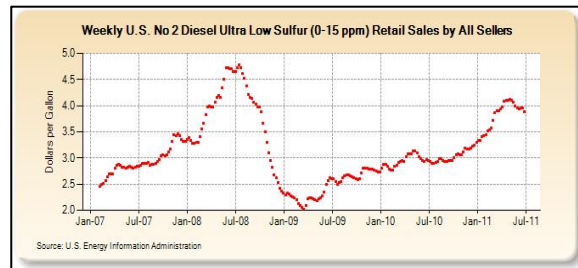


Figure 1.

**Hay:** Feed related inputs represent 50% to 75% of all ranch expenditures, it is with reason that we get nervous when hay reaches \$120/ton or according to the historical hay prices provided by USDA-National Ag Statistics Service a ton of hay in 1970 cost \$20, in 1990 \$60/ton and in 2008 the price rose to \$111/ton. Due to the economic slowdown we experienced in late 2008 hay prices declined. However nationwide it appears that hay prices will continue to rise this year (See Figure 2).



Figure 2

In southern Campbell County some producers are gradually planting forage species with better late season grazing qualities such as Forage Kochia and Russian Wild rye. These forage species are more accessible with snow cover and have greater crude protein than most dormant range grasses on winter range. These attempts to extend the grazing season, when fine tuned, will decrease hay and alfalfa cake costs. Ranchers have found that by deferring and strip grazing this late season pasture daily feed costs are cut in half. A northern Campbell County producer has capitalized on the recent favorable growing seasons by purchasing hay out

of the field at a reasonable price and stockpiling 3 years of winter hay supply. In commenting about making his own hay this rancher said, "I'm sick of trying to maintain and replace old equipment, and my cows are much better at harvesting grass than I am." What changes in management will your operation implement to prepare for the inevitable rise in feed related input costs?

**Corn:** I have yet to see a stalk of corn grown here in NE WY but the majority of our calves and lambs grown here will eat their share at some point. Unfortunately we are not isolated from the rise in corn prices. Corn is up \$3.00/bushel compared to a year ago. That's a 103 percent increase. Looking back over the past 100 years we can see an overall upward trend that would indicate the era of cheap corn is over (See Figure 3). Historic flooding in the Midwest and delayed planting might put a strain on this year's crop. Furthermore the corn committed to ethanol and weak U.S. dollar are driving strong international export markets and will continue to drive corn prices upward. All these factors contribute to a rising cost of gain (COG) for cattle feeders which will ultimately impact our production paradigms. In June 2010 it cost cattle feeders \$76/100 lbs. of live weight gain. This year it is costing cattle feeders \$92/100 lbs. of live weight gain. How long can record high feeder cattle prices and COG's last before costs are passed on to the consumer and hurt beef demand? Will the calves we produce have to weigh 800-900 lbs. before going on feed? How can we tweak our production models to stay ahead of market volatility?

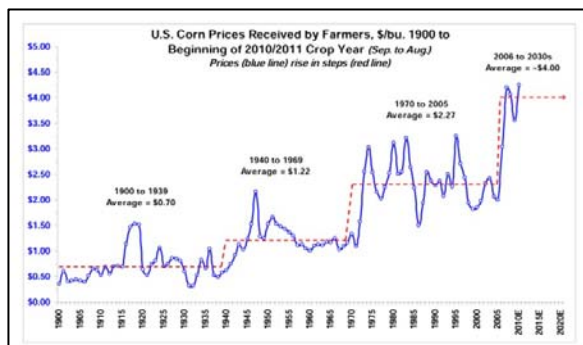


Figure 3

**Calculating Unit Cost of Production:** I'm reminded of the words, "You can't manage what you don't measure". When it comes to production measures

i.e., weaning weights, calving/lambing percentages, genetics, we enjoy striving to improve these aspects of our business. When two ranchers are visiting at the bull sale seldom will the conversation center around how much it costs to produce a ton of hay on the ranch or what it cost to feed his cows over the winter. I realize that we don't readily discuss financial information with anybody but I think in many cases we don't discuss costs because it's uncomfortable to think about components of our ranch losing money. When visiting with a rancher last week about unit cost of production on his ranch, he mentioned that he was "bracing" himself for that process. Such anxiety associated with looking critically at every aspect of our ranch is not uncommon. Recently I had the opportunity to conduct a unit cost of production on our family operation in western New York. To my grandfathers dismay we found that we could buy our winter feed for \$35/ton cheaper than we had been raising it. We calculated and re-calculated the numbers only to arrive at the same outcome. I can't say that my grandfather went and sold our \$100,000 worth of haying equipment the next day, but he is looking to purchase more hay out of the field this year. However uncomfortable the process of finding those unprofitable components of the ranch it was necessary to help us identify where we could reduce costs if we chose to do so. A colleague in Wheatland has put together information on how to calculate unit cost of production in addition to a dataset including costs and returns for 24 area rancher's. I encourage you to go to [www.hpranchpracticum.com](http://www.hpranchpracticum.com) and scroll down to "calculating unit cost of production" and compare and contrast your operations numbers with some of those in the data set.

**UW Cooperative Extension:** I am well aware that theory and practice are not always one in the same. Cutting costs and increasing profitability are not achieved over night. They require flexibility and long term commitment. Luckily we live in an era where we have numerous resources at our disposal to help implement cost cutting strategies. The UW Cooperative Extension Service is one resource that is free and unbiased. Feel free to contact me at 682-7281 or [wstewar2@uwyo.edu](mailto:wstewar2@uwyo.edu) for any questions and or suggestions you might have.

# Lawn Diseases

By Scott Hininger, Sheridan County, UW PSAS Area Educator

Gary Franc Professor and plant pathology specialist at the University of Wyoming's Department of Plant Sciences has diagnosed *Ascochyta* leaf blight as a common lawn disease in most Wyoming locations. This fungus-caused disease develops best at cool temperatures and becomes less noticeable with the arrival of warmer temperatures in July or August.

Disease development is essentially a race between the fungus growing downward from infected leaf tips and the grass leaves, which grow upward. Although the fungus usually wins under cool conditions, under warm conditions grass growth is enough so infected leaf tips (new disease symptoms) are removed by mowing. Fortunately, *Ascochyta* seldom causes permanent damage to lawns.

*Ascochyta* in lawns appears as patchy, straw-colored areas several inches in diameter that can merge to form much larger patches. Close inspection of patches reveals that healthy and infected leaves are actually interspersed. Leaves recently infected by *Ascochyta* will have bleached-brown tips that progress downward toward a normal-appearing area at the leaf base. The bleached leaf tip often appears to be pinched or rolled.

Disease management requires good cultural practices that provide water and fertilizer to meet the needs of the lawn without excess or deficiency. Mow the grass as necessary to maintain proper height and avoid other disease and pest problems favored by long grass. The tricky part is: mowing favors some diseases because mower blades spread the fungus and because freshly cut leaf tips become new infection sites. Disease spread is drastically reduced by mowing only when grass is dry and by maintaining a sharp mower blade to minimize leaf tearing and the creation of large wounds.

If infection in a lawn is severe, removing clippings from the lawn also removes the spores that spread and cause the disease. Normally, removal of clippings is not recommended. Water deeply and infrequently during the early morning according to the lawn's needs to minimize the period of time the grass is wet. Avoid excessive nitrogen fertilization, which stimulates growth and the need for additional mowing.

Dollar spot is a disease showing small, yellow-green blotches on grass blades. Turf becomes white, gradually becoming silver dollar size. This mainly occurs during hot summers with warm days and cool nights.

Fusarium patch is a browning and thinning of turf in large indefinite spots. This disease is most favorable in cool wet weather. Avoid excessive nitrogen and over watering; provide good drainage.

Helminthosporium diseases affect the root and crown of grass turning it yellow and thinning of the turf and may turn it tan to purple spots on the leaf. These diseases like moist cool weather on the leaves and warm moist area for the crown rot. Do not mow too low and allowing thatch to build up.

Necrotic ring spot causes dead circles, arches and patches several inches to several feet in diameter. Heat, drought and compaction with cultural practices promoting thatch are conditions favoring this disease.

Powdery mildew is white powdery spots on both surfaces of grass blades, with yellowish lesions sometimes developing. Cool shaded areas with stressed turf favor this disease. Plant shade tolerant grass varieties and try to increase light and air circulation with landscape modifications.

Summer patch shows small circular patches of slow growing, thin turf increasing to larger areas and shows straw colored turf with onset of hot weather. Soil compaction, hot weather, frequent light watering promotes this disease.

When these diseases are severe, a broad-spectrum fungicide may be the only option for control. As always, when using these products, read the label. With disease control not only is cultural practice changes needed but several applications of a fungicide over the spring and summer will be needed.



*Necrotic Ring Spot*

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