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### ***Hay Harvest Height***

There's a lot that goes in to making a good hay crop. Often overlooked, our cutting height can have an impact on this year's crop – and potentially a larger one on future ones as well.

Advancements in harvest technology over the last 20 years have allowed us to do a much better job of getting as much hay out of the field in a timely manner as we possibly can. We're able to pick up down hay or more quickly harvest heavy hay than ever before. We're also able to cut lower than ever before – and that isn't always a good thing. Forages regrow from two places: leaves using photosynthesis to add more leaves and root systems pushing out new shoots. If both are working up to par, the perennial forage 'system' keeps chugging along from year to year.

When we disrupt that system, problems can occur. For example, if we harvest at a two-inch height instead of three to four inches (minimum recommended for most of our grass forage crops), we remove leaf area vital for forage recovery and requires the root system to compensate. If the root system is in optimum shape, we probably get by with it. If not – problems arise.

We complicate matters when we experience droughts, armyworm feeding or harvest outside the optimum harvest window. In these instances, the crop is stressed and already requiring more of remaining leaf area and root systems. In those cases, further cutter bar height adjustments may be necessary.

When possible, harvest at the optimum growth stage (typically early to mid-June for cool season forages and mid-July for warm season forages) and appropriate harvest height (three inches minimum for established forages – higher for late harvest/drought/new stands). It may reduce quantity slightly – but help with stand health and longevity in the long run.

### ***Why Didn't My Garden Produce?***

Last week, I referenced the effects of wind on garden plants. Another issue affecting garden production is rainfall events.

Heavy rains, especially if accompanied by high winds, result in raindrops falling with a force that can result in soil issues for the duration of the growing season. For starters, they can create crusting. If that crust is too thick, seeds may not be strong enough to push through. The crust can limit oxygen to roots as well. Consider a light scraping (avoid deep tillage) after the soil surface has dried to open the surface back up.

After a heavy rain or even long periods of moderate rainfall, ponding water can be an issue. Oxygen levels to roots are again a concern. If water doesn't drain quickly enough (most plants can withstand 24 hours of standing water without harm), oxygen starved roots can begin to result in plant declines. If hot, sunny weather accompanies water saturated soils, plants may be 'cooked' by the hot water. While there's not much you can do in these cases (short of creating drainage off the garden – often a very difficult task...), be aware of how plants may respond.

If hail accompanies any of the above, take a second look at plants. Most leaf damage isn't a big deal. Leaves grow back and the plant will recover. If stems or fruit are damaged, a decision is in order. Minimal damage can be tolerated. If plants look as if they've been weed whipped, consider replanting.

Next week: soil fertility.

Cindy Williams  
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Food, Nutrition, Health and Safety

### **Thinking About Grilling Safely**

Grilling outdoors is often one of the most anticipated activities of the summer. Grilling can be a healthy and low-fat way to cook your favorite meals. To avoid foodborne illness and accidents, follow these tips to stay safe and prepare healthy meals.

As simple as grilling can be, it is important to remember building, personal, and food safety rules. Thousands of fires and injuries are reported each year due to grilling accidents. Keep these safety tips in mind:

- Propane and charcoal grills should be used outdoors only. Grilling inside can cause a fire and carbon monoxide poisoning.
- The grill should be placed at least 10 feet away from the house.
- Check the propane grill tank hose for leaks before using the grill.
- Keep children and pets away from the grill until the grill has cooled.
- Never leave a grill unattended.

Here are seven tips to make grilling a happy, healthy, and nutritious experience:

- Always wash your hands and wrists with warm, soapy water for at least 20 seconds before, during and after handling food. Bacteria thrive in moist environments, so it is important to remove all moisture on your hands by drying them thoroughly.
- Use separate utensils, cutting boards, and serving dishes for raw and cooked foods. Thoroughly wash each item that has come in contact with raw foods with warm, soapy water before re-using. Never serve grilled food on the same platter that held raw meat, poultry, or fish. This is considered cross-contamination and results in yourself and others becoming sick.
- Never thaw or marinate food at room temperature. Marinate foods in the refrigerator. If you plan to use the marinade on the cooked food as a sauce, reserve a portion separately before adding the raw meat, poultry, or seafood. However, if the marinade used on raw meat and poultry is to be reused, make sure to let it come to a boil first to destroy any harmful bacteria.
- Keep raw foods that will be grilled such as meat away from foods that will not be cooked such as a salad.
- Vegetables can easily be grilled. Large vegetables such as corn on the cob can be placed directly on the grill. Wrap chopped vegetables in aluminum foil before grilling.
- Make sure your grill is hot before you put food on it. If you are using a charcoal grill, preheat the coals for at least 20-30 minutes before adding food.
- Use a food thermometer to make sure food reaches the correct internal temperature.

Grilling is a great way to prepare healthy food for family and friends. Keep the tips above in mind as you prepare your next meal on the grill.