



**COLORADO STATE UNIVERSITY
EXTENSION**



United States Department of Agriculture
Natural Resources Conservation Service



Winter 2021

Issue 49

sam.extension.colostate.edu

Inside this Issue:

New SAM Specialist	1
Keeping Dogs Safe around Livestock and Horses	2
Windbreaks and Small Acreages	3
USDA Expands Resources for Poultry Growers	5
Winter Chicken Care	6
Gardening Predictions for 2021	7
Learning and Grant Opportunities	10



Welcome Kat Caswell! The new Front Range SAM Specialist!

Hello! I'm happy to be beginning my role as the Small Acreage Management Specialist for the Front Range Region! I come to CSU Extension from western Nebraska, after two years as a Cropping Systems educator with UNL Extension. I completed both my degrees at The Pennsylvania State University (BS: Agriculture Science, Minors in Animal Science, Poultry and Avian Science, and Agronomy. MS: Agronomy, focusing on Weed Science). I have previously worked on grazed, dryland, cover crops in CO, combining both my interests in weed control, cover crops, and livestock. I hope to use my previous experiences to support landowners in reaching their conservation goals and support the needs of my colleagues around the region. When not thinking about what cover crops would be best for small pastures, I can be found baking, hiking, or chasing my dogs away from the house plants.

Check out Kat's article on page 6!



Colorado Sustainable Small Acreage News is published and edited by Kara Harders, Small Acreage Management Coordinator, NRCS/CSU Extension, 248 Dozier Ave, Canon City, CO 81212
Kara.harders@colostate.edu

Please direct all inquiries regarding this publication to Kara Harders

Colorado State University Extension and U.S. Department of Agriculture programs are available to all without discrimination. Colorado State University Extension, U.S. Department of Agriculture and Colorado counties cooperating.

Keeping Dogs Safe around Livestock and Horses

By Valley Vet Supply

Whether working cattle, or trotting happily alongside you and your horse on the trails – if you have a dog, life on the farm, or time at the barn, means you're likely never alone. And while it may seem commonplace, cattle dogs and barn dogs live a unique lifestyle, being nearby 1,000-pound livestock, horses and heavy farm equipment. Their lifestyle requires grit, wit and intelligence. Help ensure your dog's safety and well-being; learn what to do should your dog be injured at the farm, and training tips for a dog's safety.

DEALING WITH ON-FARM PET INJURIES + STEPS TO TAKE

When it comes to injuries stemming from large animals and livestock, they can range from mild, requiring dogs only rest for a few days, to life-threatening. "We've seen dogs with head trauma from horses or cows, and even limb amputations after getting too close to a mower bar. We've definitely seen some things," said Paul DeMars, DVM, DABVP, clinical associate professor at Oklahoma State University's College of Veterinary Medicine. All dogs (even those well-trained) can be at risk for injuries stemming from horses and livestock, as their instincts ultimately play the largest role in

their behavior.

"My dogs are well-trained, agility dogs. They are always good and are well-trained not to chase horses. However, I had a dog that fell victim [to injury from livestock]," said Kris Hiney, Ph.D., Oklahoma State University associate professor and Extension equine specialist.

Dr. Hiney was out one evening feeding, with one of her three agility-trained dogs by her side – a Border Collie named Avispa – when her horse at the other end of the field began galloping not toward her and the feed bucket, but straight toward her dog. She gave her command for Avispa to recall, but his Border Collie instincts kicked in, and he crouched into the grass. As the horse neared, the horse lowered his head and curled up his front legs, intentionally coming down directly onto Avispa.

Dr. Hiney quickly bundled up Avispa and went to an emergency veterinary clinic. Thankfully, he pulled through and is fine today.

"The reality of horses and dogs is something not to take lightly," said Dr. Hiney. "Some owners may not realize how badly a dog can get hurt. A lot of horses are dangerous with dogs. Cattle don't seek them out as much, unless dogs are in their space. It is 100% instinctual, as even well-trained dogs who do this for a living can get kicked, and they can be severely injured when working cattle."

Continued on page 4



Photo from original article

Windbreaks and Small Acreages

By Jerry Miller

Planting windbreaks on small acreages can provide many benefits to home owners. Privacy is one of the many reasons people choose to build outside metropolitan areas. Small acreages provide adequate space between dwellings but that space is often completely open with unobstructed views of neighboring homes. See Figure 1.



Figure 1: Google Earth. Subdivision near Hudson

Well-designed windbreaks will quickly grow to provide the privacy many seek and develop into beautiful natural areas which will enhance the value of any property. Rows of trees and shrubs can be strategically located to screen yards from the view of neighbors yet allow folks to retain views they desire.

Windbreaks consist of multiple rows of trees and shrubs that are adapted to the dry climate of Colorado. These plantings can also provide other benefits such as noise barriers, snow deposition control, wildlife habitat, and protection of dwellings and livestock from cold winter winds. See Figure 2.

Properly placed dense windbreaks have been shown to reduce home heating costs by 20 to 30 percent and can reduce feed requirements for livestock from 10 to 15 percent. Viewing birds and wildlife using the tree plantings is enjoyable for many people. Berry producing shrubs attract many species of birds and Juniper, cedar and pine rows provide screening and travel corridors for wildlife.

American Windbreaks LLC is based out of Sterling Colorado. Forester Jerry Miller has been planting windbreaks across Northeast Colorado since 1987 to help landowners protect their soil, water and wildlife resources. In 2018 his son David joined the company as manager of operations.

American Windbreaks provides services to landowners that include designing windbreaks and selecting species, sourcing quality seedlings from reputable nurseries, preparing the site for planting, planting trees, and sourcing and installing weed barriers.

American Windbreaks provides no cost site visits to meet with landowners to discuss objectives, design considerations, and provide free cost estimates.

Contact American Windbreaks LLC by calling Jerry Miller at 970-580-5028 or David Miller at 970-309-0949. Email at americanwindbreaks@gmail.com and visit the website at americanwindbreaks.com.



Figure 2: USDA . Windbreaks for Communities



Photo from Pixabay

Dog Safety continued from page 2

Should your dog experience an injury, Dr. DeMars recommends monitoring immediately if they are:

- Up on all legs and mobile
- Favoring any limbs
- Experiencing any seizures
- Completely conscious

“If the animal is unconscious, get them to your veterinarian right away,” said Dr. DeMars. “Even if an animal is up on all four legs, there still could be internal bleeding. Taking your dog to your veterinarian is always the best answer.”

Steps to take, should your dog be injured:

Share pictures with your veterinarian. Before driving to the clinic, use your cellphone to take pictures of the injury or wound, and share with your veterinarian. This will help the office prepare for your dog’s arrival and for swift treatment.

Have a 24-hour emergency veterinary clinic on speed dial. If your dog experiences head trauma, he requires precise care and likely, 24-hour monitoring, which is not always an option at a primary veterinary clinic. For such cases, it is best to immediately take your dog to the nearest emergency veterinary clinic or University veterinary school.

Refer to your stocked first-aid kit. Assist wounds to help stop any bleeding. If it’s a leg injury, wrap the leg just as you would wrap a horse’s leg (apply a sterile lube, then gauze and then cover with vet wrap or bandages, going in the direction of front to back with gentle support – not too tight or

too loose).

In some cases, use direct pressure. If your dog experiences heavy bleeding, he could be suffering from a ruptured artery. Apply direct pressure to help stop excess blood loss. Get to your veterinarian, fast.

INCREASE SAFETY FOR DOGS ON FARM OR IN THE BARN + TRAINING TIPS

For years, Dr. Hiney has trained dogs for agility. She has three Australian Shepherds and one Border Collie. When it comes to working cattle, Dr. Hiney says, “Just because they’re a herding dog doesn’t mean they are naturally good around livestock. It means they have intense interest in livestock, and that interest has to be channeled through training.”

While any dog can learn to be good around livestock, it is important to realize that cattle dogs, for instance, the Blue Heeler, Catahoula and Corgi, will be attracted to it and stimulated by the livestock’s movement. “A lot of people think dogs can help while working cattle, but only a trained dog is helpful. An untrained dog creates more chaos and anxiety from both livestock and people. If your dog isn’t trained, he needs to be secured. Tie or pen them up safely out of the way, with water,” recommends Dr. Hiney.

Continued on page 9

USDA Expands Defend the Flock Campaign with New Resources for All Poultry Growers

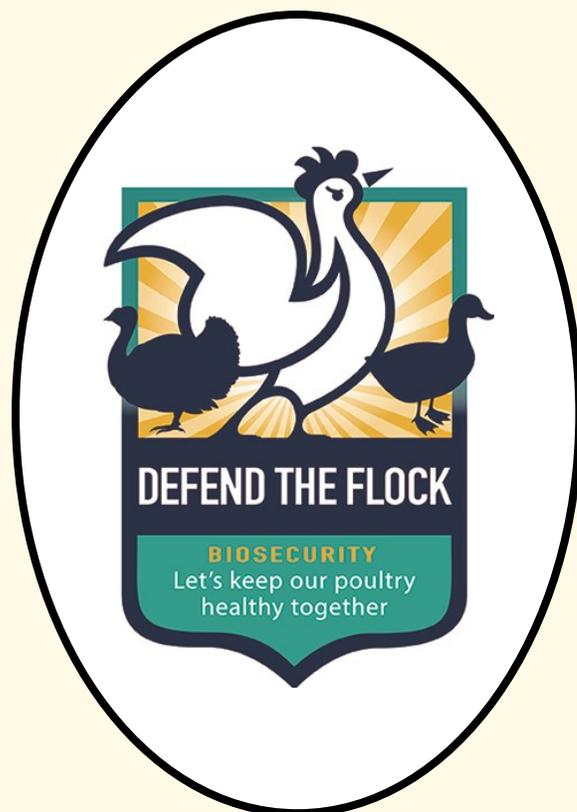
The United States Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) has expanded its Defend the Flock program to educate all poultry growers about best practices in biosecurity. This comprehensive public education program provides new resources to ensure that all growers have the information they need to keep flocks safe from infectious diseases.

APHIS is introducing the expanded program to combat the increasing risk of serious disease outbreaks. Biosecurity, which encompasses structural and operating practices to block diseases and the pathogens that carry them, has proven to be the most effective way to protect the nation’s poultry, property, and people.

According to Dr. Jack Shere, Deputy Administrator, Veterinary Services, Chief Veterinary Officer, APHIS, “Defend the Flock taps into the pride, purpose and sense of responsibility all poultry growers share. The health of our nation’s poultry is a responsibility that must be embraced by all growers – from operators of large commercial enterprises to owners of small backyard flocks. This program will rally commercial growers and backyard enthusiasts to adopt best practices in biosecurity and keep our flocks safe from infectious diseases.”

The Defend the Flock program includes checklists, videos, and other resources that reflect the knowledge, insights, and experience of USDA, veterinarians, poultry owners, growers, scientists, and other experts. All Defend the Flock materials are available at no charge 24/7 at the Defend the Flock Resource Center. For more information on the program, visit usda.aphis.gov/animalhealth/defendtheflock.

Follow Defend the Flock on Facebook and Twitter for practical tips about keeping poultry healthy and new additions to the Resource Center.



Winter Chicken Care

By Kat Caswell

Chickens are a fun addition to your life year-round. While chicken housing and care can seem simple during the spring and summer, when the birds can roam free in the grass, winter housing and maintenance can require more thought and planning. Colorado winters regularly go from mild and pleasant to cold and harsh overnight. It is important to ensure your chickens are set up for comfort before the next big snowstorm hits.

Proper housing is the first way to combat issues caused by the cold. Properly constructed housing will provide your birds with an ample, wide, roost space. Wide roosts (around 4 inches) allow birds to sleep with their feet entirely covered by their bodies. The downy feathers and heat from their bodies, will cover the feet and keep them warm through low night-time temperatures. Placing roosts close to the coop ceiling or having a coop with a low ceiling will help retain the warmth from the chickens' bodies. Never place roosts greater than 4 feet off the ground, to prevent injuries from jumping on and off the perch. Coops should be well ventilated and have some air movement. Regularly remove wet bedding and replace it with dry bedding to keep the humidity in the coop lower. Chickens will do better in the winter if they have somewhere dry and unfrozen to stand, this also helps to prevent frostbite.

Chickens are hearty animals and generally will not require an additional heat source, provided they have a dry, well ventilated, place to sleep. Allowing chickens to acclimate the changing seasons can help birds thrive during the winter months. In Colorado, the concern for chickens are the sudden temperature drops and change in weather. These sudden very low temperatures can result in frost bite on combs and toes, even in coops that are generally well insulated. Heat lamps and heaters can help tide birds over through nights where the temperature is below

freezing for more than several hours. Heat lamps and heaters should be secured in a location away from direct contact with the birds and bedding. There should be enough room in the coop that birds can move away from the heat source if they become too warm. Heaters pose a fire risk and the electricity source should be located away from the birds.

Frost bite on chickens can range from some spots on the comb to loss of toes or feet. Commonly, frost bite presents as black scabs on the comb. The black area is a patch of dead skin that has frozen and died. The black area will scab over and flake off, healing underneath. When temperatures stay well below freezing over weeks, the tips of single combs may also freeze and fall off. Combs are more likely to get frostbite if the chicken is housed in damp, drafty conditions. Mild areas of frost bite on the comb pose no serious health risk to the bird but are cosmetically detrimental.



Photo from Pixabay

If you find a bird with an area of skin that is still frozen, slowly warm the area by submerging the affected area in warm water or using a warm compress.

Continued on page 8

Garden Gazing Ball Predicts Busy 2021

By Carol O'Meara, Colorado State University Extension Boulder County

This article originally appeared on 1/14/2021 in the CO Hort's Blog (<http://csuhort.blogspot.com/>)

As a little girl, I thought the ornaments in my grandparents' garden were old-fashioned to the point of being fogey. The ceramic squirrel perched majestically on the lamppost, the horsehead gripping a never-used tying ring in its teeth, or the green gazing ball nestled in the roses didn't inspire my preteen mind to anything other than an eyeroll. Now that I'm older I have more appreciation for garden tchotchke, although not to the point of immortalizing a squirrel in statue. The disembodied horse's head isn't fully appreciated out here in the West, either. But the gazing ball has made a comeback, and I admit, I can see why.

Gardeners always want to peek into the future to see if their flowers will bloom, vegetables thrive, or rain is on the way. We check almanacs, weather reports, fuzz on caterpillar's backs, and moon charts to get an edge on Mother Nature. We have many reasons for wanting to know how 2021 will shape up, especially in the garden.

To sleuth it out, I talked with a person wise in the ways of gardeners, one who runs a business on gauging trends and what new seasons will hold. And while Curtis Jones can't tell us if we'll have a wet season or drought, the co-owner of Botanical Interests Seed Company has some solid advice for 2021.

"This past season, 2020, was an unbelievable year; the U.S. had 19 million new vegetable gardeners. People are thinking about where their food comes from and self-sufficiency," said Jones who shares ownership of the seed company with Judy Seaborn. Across the country, seeds packets sold out rapidly and many seed companies ran out of their stock.

"We were the only seed company to ship throughout the year, because we time shipments for seed throughout the season."

Asked if the interest in gardening was a flash in the pan, as some gardening prognosticators predict, Jones didn't think so. "A lot of people that started gardening find that they really enjoy it. A lot of younger people tried it and many are already into houseplants. People are psyched up for it; fall seed sales were very impressive. People were buying for spring." Flowers as well as vegetable seed sales were strong, not surprisingly. People staying closer to home wanted to surround themselves with beauty.

So what does next year have in store for us? Jones says gardening in 2021 will be just as strong as it was this year, so plan your garden now. "If we can get the seed in, we'll increase the amount we're offering," Jones said, commenting on source and supply during the pandemic. He doesn't expect a seed shortage, but to get the varieties you want, buy them now.



Photo from Pixabay

Continued on Page 8

Winter Chickens continued from page 6

Do not use a heat lamp or heating pad, as this will heat the bird too quickly and cause pain. Isolate the bird from the flock to allow it time to heal. It is more likely you'll find a bird after the frostbite has thawed and become red and swollen, looking like a blister. Again, isolate the bird from the flock so it has time to heal. Coat the affected area in an anti-microbial spray (available at most pet stores or farm supply stores) and wait for the swelling to go down. The area will scab over and eventually the dead tissue will fall off. Do not pop the blisters or removes the black scabs, this will open the bird up to greater infection. Toes generally do not need to be amputated, as the impacted area will fall off on its own, but this will leave the bird missing a toe. Chickens can adapt to the missing toe and go on to live a happy life. Good planning for housing can help save your chickens from any winter blues. Finally, make sure the birds have access to food and water, regardless of the weather.

Gardening Trends continued from page 7

"If we can get the seed in, we'll increase the amount we're offering," Jones said, commenting on source and supply during the pandemic. He doesn't expect a seed shortage, but to get the varieties you want, buy them now. "Even though last year taxed our inventory, we are in good shape for the upcoming season, but if I didn't own a seed company and I was planning my garden, I would get my seed sooner than later."

Those of us who have been around the vegetable patch a time or two should dive into catalogs to find coveted new introductions, such as Botanical Interests' potatoes from seed, purple tomatillos, or angel hair spaghetti squash. You can check out the full line of seeds at botanicalinterests.com or pay a visit to a local retailer to peruse their stock. The key to success next season is planning and preparation, so get shopping gardeners.

Colorado Small Acreage Services Database

The source for landowners to find contractors, equipment, and services.



<http://sam.ext.colostate.edu/>

Need help with weed control options?
Have a small pasture seeding project coming up?
Search the site today to find a local contractor!



This is a free service brought to you by NRCS/CSU Ext. and your local Conservation District

Follow Colorado Stewardship on Facebook



Dog Safety continued from page 4

Training tips from Dr. Hiney to increase your dog's safety:

For cattle dogs, talk to dog trainers who do herding and cattle dog training. Professional cattle dog training offers a safe space for your dog's learning, by working with livestock that are "dog broke," meaning they know how to move from a dog's pressure. They also can start them on sheep and goats, for a safer option. While a cow dog is bred instinctually to herd, they will benefit both mentally and physically from professional lessons and training to channel their instinctual habits into more strategized skills.

For barn dogs, seek out training options. Check your surrounding area for professional dog training classes. Keep in mind, well-mannered dogs are often welcome at horse shows and barns; however, a misbehaving dog nipping or barking is a quick way to be shown the door. In today's world, there are even online dog training options available, and the World Wide Web is filled with helpful training videos as an option, too.

Teach dogs the basics. Dogs among livestock and horses should know commands for recall, down and stay. Teach them the boundaries of what they can and cannot do. They will look to you for the correct answers.

Don't let "funny" and "cute" behaviors fly. Allow no recreational cattle or horse chasing, barking or nipping at all, if you can avoid it. This 'playtime' can easily turn problematic.

Use positive training methods that reward good behavior. Use treats, toys and your undivided attention to make training the most rewarding and fun part of their day. This will keep them happy and engaged with you to make the best choices.

During training, keep them on a long line before rewarding them with off-leash. For their safety's sake, not returning to you cannot be an option. Using long lines (essentially a long leash) can prevent bad habits from forming. This is a best practice before letting your dogs off-leash.

For a wide range of pet products, such as toys, treats and life-saving medications, visit veterinarian founded ValleyVet.com.

CSU Online Land Stewardship Short Courses

Take one or all of these self-paced online courses developed for the Colorado-arid west soil and climatic conditions.

Stewardship Planning—\$40

Soils—The Basics—\$50

Water—The Basics—\$50

Management of Forage Plants—\$50

Management of Invasive and Noxious Weeds—\$50

Emergency Preparedness—\$50

Management of Wildlife in Colorado—\$50

*Discounts for bundling classes

Each class aims to help small acreage audiences and takes 5—10 hours to complete at your own pace.

Participants will gain a better understanding of natural resources, localized land strategies, and build an effective long-term land management plan for their property.

More info and register here—

www.online.colostate.edu/badges/land-stewardship/

Colorado Fruit and Vegetable Growers Association

2021 Annual Conference

February 17, 2021 - February 18, 2021

Follow this link to the registration site and see a list of speakers and topics:

<https://pheedloop.com/cfvga2021/site/home/>

Value-Added Producer Grant

USDA Rural Business-Cooperative Service is accepting applications for approximately \$33 million in matching funds through the Value-Added Producer Grant program. Funds can be used for planning activities or for working capital expenses related to producing and marketing a value-added agricultural product. The planning grant maximum is \$75,000 and the maximum for Working Capital Grants is \$250,000.

Electronic applications must be received by March 16, 2021; paper applications must be postmarked by March 22, 2021.

<https://attra.ncat.org/event-calendar/value-added-producer-grants/>

Sustainable Farming Association Annual Conference

February 8-13, 2021

Online

The Sustainable Farming Association's annual conference features weekday lunch-hour sessions on silvopasture, urban agriculture, soil health programs, and farm to rural grocery. On Saturday, plenary and breakout sessions are offered in a half-day conference.

<https://attra.ncat.org/event-calendar/sustainable-farming-association-annual-conference-2/>

Guide to Federal Funding Opportunities for Agriculture and Forestry Updated

A new edition of Building Sustainable Farms, Ranches and Communities: A Guide to Federal Programs for Sustainable Agriculture, Forestry, Entrepreneurship, Conservation, Food Systems and Community Development is available from NCAT online and in print.

<https://attra.ncat.org/guide-to-federal-funding-opportunities-for-agriculture-and-forestry-updated/>

Nebraska Cover Crop & Soil Health Conference

Thursday, Feb. 11, 2021

The conference will be webcasted from the University of Nebraska Eastern Nebraska Research and Extension Center (ENREC) near Mead, NE and other locations.

To Learn more visit:

<https://extension.unl.edu/statewide/enre/nebraska-cover-crop-conference/>

Do you have a question for extension but don't know who to ask? [Try Ask an Expert!](#)

COOPERATIVE
EXTENSION

Check out our Dryland Pasture Assessment to see how your pasture measures up!

<https://sam.extension.colostate.edu/wp-content/uploads/sites/2/2018/07/GrazingGuide.pdf>

Do you have a question about managing your small acreage?

Contact CSU Extension /NRCS Small Acreage Coordinator(s):

Kara Harders
San Luis and Arkansas Valleys
970-219-9903
kara.harders@colostate.edu

Kat Caswell
Front Range Region
970-541-9834
kat.caswell@colostate.edu



COLORADO STATE UNIVERSITY
EXTENSION



United States Department of Agriculture
Natural Resources Conservation Service