



**COLORADO STATE UNIVERSITY
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CSU Launches Victory Garden Program with Grow and Give

By CSU Extension

Coloradoans across the state are being encouraged to participate in CSU Extension's new gardening initiative [Grow & Give](#), a modern Victory Garden project designed for citizens to grow vegetable gardens and plant extra to share with local food banks and community members in need.

Victory gardens were planted on public and private land during World War I and World War II to reduce pressure on the public food supply. Roughly 40% of the U.S. vegetables grown in those years came from 20 million victory gardens.

Through the new [Grow & Give](#) program, CSU Extension is encouraging people to take advantage of their time at home during the COVID-19 pandemic to get outside and plant gardens, whether they are longtime gardeners or first-time planters.

"During a time when there is so much bad news and uncertainty, we are giving Coloradans a positive opportunity to contribute locally," said Katie Dunker, statewide coordinator for the CSU Extension [Master Gardener](#) program.

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Colorado Sustainable Small Acreage News is published and edited by Kara Harders,
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"We have wrapped our arms around something that is very tangible and accessible and are using university resources and expertise to promote growing food in every corner of the state to help those in need. This is what Extension does; this is who we are. Education and outreach are the very fabric of what a land-grant university does."

CSU Extension offers gardening resources for home gardeners

CSU has been dedicated to helping Coloradans grow for 150 years. This year, Colorado-specific food growing resources are being located on one site: <http://growandgivecolorado.org>. Resources are updated weekly as the season changes and provides information for all regions of our state. Join us and grow for your family and others. We're dedicated to your success in the garden!

CSU Extension supports sharing the harvest

Fresh produce distributed to those in need is the core component of the Grow&Give project. CSU has synthesized tips on what to grow for donation and how to connect with organizations who would love to receive it. Our hope is that gardening and giving promotes a healthier, more mindful, and more sustainable lifestyle for you and your community.

About CSU Extension

Charged with serving all 64 counties across the state of Colorado, CSU Extension empowers Coloradans to address important and emerging community issues using dynamic, science-based educational resources. The Colorado Master Gardener program is an extension program focused on enhancing Colorado communities through outreach, education and environmental stewardship. Learn more at <http://coloradomastergardener.org>.

About the Colorado Master Gardener Program

Master Gardeners enhance Colorado communities through outreach, education and environmental stewardship. Focused on home horticulture, Colorado Master Gardeners work to enhance Coloradans'

quality of life by extending knowledge-based education to local communities, helping individuals make informed decisions about plants and fostering successful gardeners while protecting neighborhood environments. The Colorado Master Gardener program is powered by Colorado State University Extension and is active in over 40 counties across the state with 1400 CSU volunteers serving in their local communities.

Recent Press:

CSU The Source: <https://source.colostate.edu/csu-extension-launches-victory-gardens-for-the-age-of-covid-19-with-grow-give/>

KUNC Radio: <https://www.kunc.org/post/colorado-edition-functional-fashionable-controversial>

ABC Denver News: <https://www.youtube.com/watch?v=TSMg3kjuUAg>

NBC Denver 9News: <https://www.9news.com/article/news/local/next/with-the-war-against-coronavirus-raging-victory-gardens-are-back-heres-how-to-grow-yours/73-9fdb6c7-0264-4da8-aa43-cd0dd6c3274c>

CBS Denver News: <https://denver.cbslocal.com/2020/05/18/grow-give-csu-plant-vegetables-give-surplus-food-bank/>

**Follow Colorado Stewardship
on Facebook**

**Upcoming focus -
Pasture Management**



4-H Carries On

By Maggie Hall Walsh

Photography by John Eisele

Originally published in [SOURCE](#)

Stetson Gable just celebrated his ninth birthday, but he already has a full-time job. He's up every day at dawn, and although he does get plenty of play time, his job doesn't officially end until evening.

Stetson is the proud custodian of Ringo, a steer, and Lightning, a pig; show animals he is raising as a member of Colorado State University Extension's 4-H Youth Development Program.

"It's a big chore to take care of them, but I love it," the recently graduated second-grader said from his family's farm in Weld County. "We feed them early and then wash and brush them. We're teaching them to walk with me. At 10 we check for poop, and then we check again at noon. Then at 3:30 we condition and brush them. Then they eat again

later. You learn a lot about life being around animals."

COVID-19 might have canceled or postponed schools, sports, and other activities this spring and summer, but for 4-H youth who have spent months caring for animals as part of this long-lived program, they have continued to learn valuable leadership and agricultural business skills.

"CSU Extension is working closely with local health officials, county commissioners, and others throughout the state to ensure that public health guidance is followed as we consider the best options to provide programming," said Blake Naughton, vice president for CSU Engagement and Extension. "Our communities are very resilient, and we are eager to be a part of that strengthening across our many families and individuals that we have the honor to work with. Our commitment remains strong to our mission for our Colorado communities."

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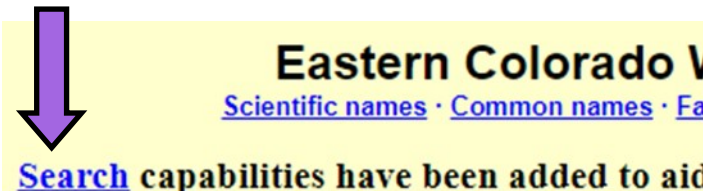


Stetson Gable and his pig named Lightning

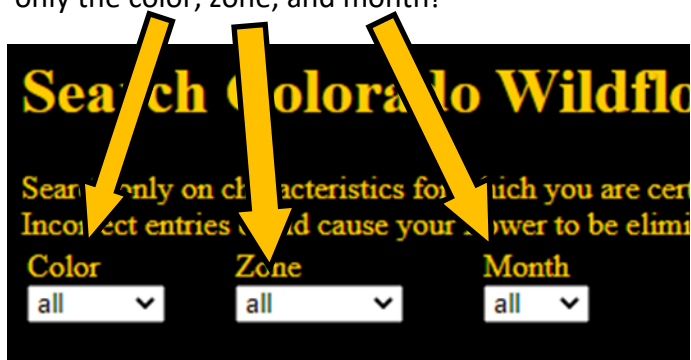
A Website We Love: Eastern Colorado Wildflowers

<http://www.easterncoloradowildflowers.com/>
Photos from EasternColoradoWildflowers.com

Do you ever struggle to identify wildflowers on your property? Find yourself saying something like this to someone hoping to solve the mystery “well its white and kind of big but not very tall”? Eastern Colorado Wildflowers contains photographs and information for over 525 plant species growing east of the Continental Divide in Colorado. Species listed in Weber and Wittmann's Colorado Flora: Eastern Slope, 3rd Edition are included. I like to use the search feature.



I am regularly shocked at what I can find entering only the color, zone, and month!



Once you enter those three things just scroll through the excellent pictures to see if your mystery plant is there! I used it just last week to help get a positive ID this little fella!



If the site doesn't load or act properly, try switching browsers or opening a new page, it can be finicky, but is worth it!



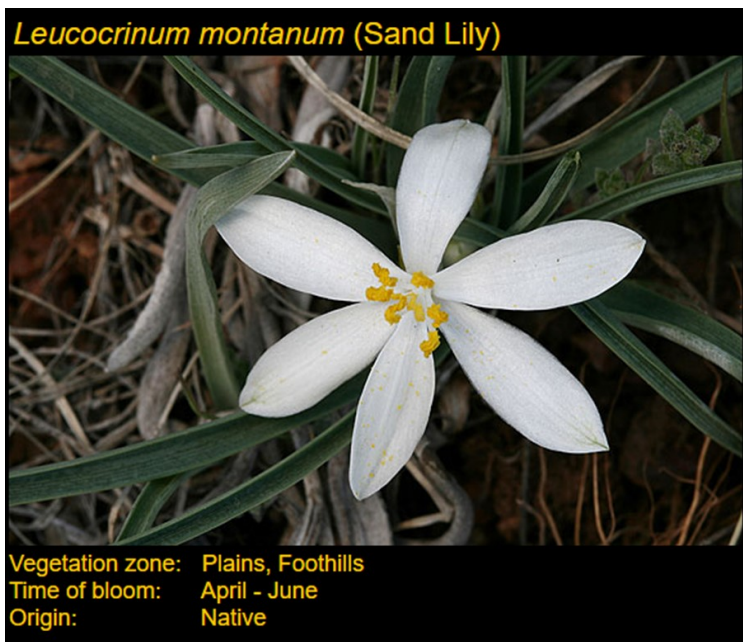
Colorado Small Acreage Services Database

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



Best Plants to Create Habitat

By Irene Shonle

One of the best reasons to grow native plants is that they do more to provide ecosystem services than non-native plants. With pollinators and birds in decline, it's a great way to help. While everyone remembers from basic science classes that plants are at the bottom of the food chain, it is important to realize that some plants pull more weight than others. For starters, many non-native plants don't support any insects at all. This is because about 90% of herbivorous insects are specialists to one degree or another. The insects simply don't recognize the alien plant as food.

Here is where a functional definition of a native plant can be useful. Entomologist Doug Tallamy (author of *Bringing Nature Home*) uses this one: is a plant or animal that has evolved in a particular place long enough to be able to establish the specialized relationships that are nature. Alien plants just have not been around long enough to develop these relationships with the local fauna.

Further research by Tallamy's lab bear this out; they have found that some oaks have up to 557 species of moths and butterflies, *Prunus* like wild cherry and plum can yield up to 456 species; and maples support up to 297 species. Introduced species such as Bradford pears have almost no species on them. When it takes over 6,000 caterpillars to raise one brood of chickadees, it is clear which species will help birds and other insect-eaters the most.

Clearly, the moral of the story is that to support pollinators and birds, plant native plants. But even within native plants, some species are more helpful than others. Tallamy's research has found that just five percent of the local plant genera produces about seventy five percent of the insect food that drives food webs. Including these powerhouse in your garden (even if you otherwise have lilacs and petunias) will do much to support bird species. And the birds will keep the caterpillars from overrunning your plants. If you have breeding birds in your yard,



you won't see many caterpillars because the birds will have eaten them.

So, how to figure out which species are the powerhouses in our area? A really cool site where you can find native plants for your zip code – ranked by how many caterpillar and moth species they host- can be found at www.nwf.org/NativePlantFinder (based on collaborative work with Dr. Tallamy).

Typing in the zip code for Boulder as representative of the Front Range, I get results for both herbaceous plants and trees in order of how many insects they support. Granted, this website is still in Beta format, and is not perfect, but it is nonetheless a terrific start.

So, the winners of the best habitat plants in the herbaceous category for butterflies and moths for the Front Range are..... drum roll....

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Best Plants Continued from page 5

- Goldenrod (Solidago spp.)
- Sunflower (Helianthus spp.)
- Strawberry (Fragaria spp.)
- Lupine (Lupinus spp.)
- Sagebrush (Artemisia spp.)
- Violets (Viola spp.) (We do have native violets, although they are hard to find in nurseries).
- Rabbitbrush (Chrysothamnus spp.)

And in the woody category they are....

- Willow (Salix spp.)
- Poplars – aspen, cottonwoods (Populus spp.)
- Prunus (chokecherry, plum) (Prunus spp)
- Oak (Quercus spp – esp. Quercus gambelli here)
- Pines (Pinus spp)

You may even have some of them in your yard now, but it couldn't hurt to plant more.

Be careful when planting in areas with livestock, as some natives are poisonous. Do your research!



Goldenrod lights up the late summer garden and is fantastic for habitat (Photo credit: Irene Shonle)



Lupines are known for their beautiful spire type flower heads



Chokecherries have fragrant spring flowers and edible fall berries

NRCS Resources

NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters.

Contact your local NRCS offices to learn more!

The Conservation Stewardship Program (CSP):

Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns. Participants earn CSP payments for conservation performance – the higher the performance the higher the payment.

The Environmental Quality Incentives Program (EQIP):

Provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, increased soil health and reduced soil erosion and sedimentation, improved or created wildlife habitat, and mitigation against increasing weather volatility.

The StrikeForce Initiative: Designed to better serve communities with persistent poverty and socially disadvantaged farmers through the coordination of activities among USDA agencies and the use of community-based organizations.

Conservation Client Gateway: An NRCS website that provides secure access to conservation plans, practice implementation schedules, financial applications and contracts, documents, and payment information. Conservation Client Gateway is a voluntary program and an option to long distance travel to your local field office. For step by step instructions on getting started, visit <http://www.nrcs.usda.gov/clientgateway>, or call 970-372-4200 for additional assistance.

Composting 101

By Kara Harders

Composting is a natural process we can utilize to help break down and recycle materials which would have otherwise been considered trash or waste.

Materials including food scraps, garden byproducts, and other organic “trash” can become the magical soil amendment we know as compost!

Because composting is a natural process, it can be induced by following some basic rules and creating ideal conditions for the process to happen. While people may think they are the ones composting it is really bacteria, fungi, molds, and worms doing all the heavy lifting. When we compost it is important to keep these organisms happy and healthy so they can do what they do best, turn trash into soil gold! Luckily, they only need a few things to do what they do best.

Food! (Nitrogen and carbon rich)

These composting critters work best when given about a 30:1 Carbon to Nitrogen ratio. The carbon source could be dead plants, bedding, grass clipping, leaves or even shredded office paper. The nitrogen source could be fresh grass cuttings, food scraps or animal manure.

Moisture

Like all living things, water is essential to the life in your compost heap. Most of the organisms breaking down materials in your compost pile live in the film of moisture around the “ingredients” in the pile. Too little moisture and they will die or become dormant and too much moisture and they will drown (and the pile will smell BAD). Aim for a pile that feels damp, like a wrung-out sponge. If the pile gets too dry spray it lightly with a garden hose and try to keep it covered with a tarp in a shady area to retain moisture and to keep out heavy rains.

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Composting 101 Continued from page 7

Form

Compost needs to be grouped to maintain moisture and heat; therefore, the structure of your compost needs to be in a heap of sorts. This may seem obvious, but there are a few critical details.

Consider where you are putting your pile, avoid spots in direct sunlight for much of the day as this can dry out your pile. You should also avoid areas where water collects or drains. Compost piles are rich in nutrients that can be harmful to water ways and contribute to nutrient pollution. Think about keeping water from running through the pile when it rains or snow melts.

An ideal size is about on cubic yard, a pile this size can be built over time (cool composting) or all at once (hot composting), a benefit to doing hot composting is the sterilization of some weed seeds. Large heaps made all at once with the correct balance of materials and moisture can break down materials so fast the internal temperatures of these piles can reach 160°F! Smaller piles wont hold heat as well and can dry out quickly if done outside of a container, but they will be easier to turn. Speaking of turning...

Aeration

All those composting organisms you are after also need to breath, in addition to design, to get them oxygen you will need to “turn” the pile. Ideally, your compost pile will sit on some coarse materials to help allow air travel in from the base. When setting up the pile make an effort to use materials which create air pockets, such as stems, stalks, wood chips and other rigid materials. These will help to draw air up and out of the pile. Use a composting thermometer to gauge the inside temperature. When it reaches 140°F, give it a turn and water as needed. Turning the compost will also help get air to the organisms doing the dirty work. You can turn the compost as often as the temperature reaches 140°F. It is recommended to let the pile go through three heating cycles to help sterilize weed seeds.



INTERACTIVE ONLINE COURSE Holistic Land Planning: Grazing Infrastructure & Strategies for Success

With Special Guest Speaker Q&A Sessions on Water, Fencing, Permaculture and Urban Ag Land Planning!



Learn farm/ranch infrastructure planning principles and practices to move the vision of your property into reality. Come away with a plan that suits your lifestyle and accommodates changes and challenges.

This comprehensive approach will help you explore key infrastructure options, the timing and sequence of your infrastructure build out, and result in a step-by-step plan to achieve your property vision

When: September 8 - 29, 2020

Time: Live 5:30-7:00PM MDT (also recorded for later viewing)

Scholarship Deadline: September 1, 2020

Registration Deadline: September 7, 2020

Instructor: Larry Dyer

To learn more and/or register, visit: https://holisticmanagement.org/landplanningforsuccess/?utm_source=Announcement%3A+Land+Planning+2020&utm_campaign=Announcement+Land+Planning+2020&utm_medium=email



CSU sophomore Lauren Frink is completing her 11th and final year showing animals in 4-H.

4-H Carries On Continued from page 3

Showing will be different this year

CSU Extension, which oversees 4-H Youth Development programs statewide, announced in May that although virtual programming is still preferred for a majority of its programming in support of the health and well-being of our communities, offices across Colorado are working closely with their local public health offices and county government for any face-to-face activities that may occur.

Many programs, including those associated with county fairs, will not look the same as previous years due to public health restrictions, but Stetson and other 4-H members raising animals are still gaining valuable skills, even if showing their animals may be different this summer.

“Nothing has really changed in our lives getting these animals ready, but showing will be different,” said Lauren Frink, who is completing her 11th and final year showing animals in 4-H. The CSU student studying animal sciences said 4-H is a family affair, and is disappointed that her final county and state fair season will be so unusual, without as many pre-fair show opportunities and large gatherings of friends who have become close throughout the

years.

Like Stetson, Lauren spends a good portion of her days tracking her expenses; feeding, walking and grooming her show animals – in her case sheep – and learning about animal health and welfare to complete her 4-H livestock project and to make sure they are show-ready for fair season. Her mom, Amy, has been at her side throughout her 4-H career as a 15-year leader of Wyatt 4-H in Ault, near their home.

Virtual Programming

Since the pandemic began, monthly in-person 4-H meetings have been canceled, but Amy Frink has kept in touch with the 50 or so members in the chapter and provided encouragement to connect in virtual programming, whether their interests are cake decorating, sports shooting, raising show animals or 4-H STEM activities.

“We’re just all trying to stay on task and help these kids tell the story of how important agriculture is,” she said. “I have been so impressed. None of these kids have given up. 4-H is such an important part of their lives.”

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4-H Carries On Continued from page 9

Jean Glowacki, director of 4-H Youth Development at CSU Extension, praised the faculty, staff, volunteers, families, and community supporters for their collaboration and commitment to maintaining high-quality 4-H Youth Development Programming while ensuring the safety and well-being of all participants and community members in these very challenging times and circumstances.

Thousands of Colorado 4-Hers are in the same boat as Stetson and Lauren. They have worked hard on their projects and now, due to the pandemic, are unsure how, if or when they will be able to show off their handiwork.

“Participants in CSU Extension’s 4-H youth development program are able to complete their projects without showing at the fair, but we know it is a highlight for them and so many of our community members that come out to support the hard work of these outstanding youth,” said Ashley Stokes, associate vice president for Engagement and Extension at CSU.

But as the 4-H motto states, the organization is dedicated to helping young people, “Make the best better,” and the determination and flexibility of the youth – whether a first-year member learning the basics, or a celebrated titleholder in her last hurrah in the show ring – is impressive.

“Even if I don’t get to show my animals, I get to learn so much,” Stetson explained. “I have learned that I just love being around cattle and pigs. I have learned how to communicate with animals and so many other life lessons ... mostly patience.”

Lauren Frink and her mother Amy Frink work with Lauren’s sheep to keep them show ready for the possibility of 4-H competitions.

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/



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

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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):

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