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Interviews	I & 2
Know your Pumpkins	3
Re-thinking Lawns	3
Grand Escape Outing	3
Book Review	4
Native Plant Symposium	5
4x4 Square Foot Garden	5
Contest Winners	
Falling Fruit map info.	5
Hail Projection Projects	6 & 7
Utah Sheep Ranchers Turn	8
Wool Waste into Cash	9
A Tour at the Montana	
Audubon Center	
What do plants have to do	9
with a root canal?	
Chrysanthemums	10

## Featured Master Gardeners - Vi Hills and Rick Shotwell



Learning and teaching would probably best describe Vi Hills' whole life. She was born in Great Falls and

grew up in a family of ten plus two uncles living on a farm outside of Dutton, MT. At the age of seven, the family moved to a ranch near Great Falls. She was the first girl born in the family, following seven boys. With this many siblings you learn how to get along, share, take care of the earth, fields, animals, gardens and family. Weeding the garden was everyone's chore when needed, like a field size potato patch. They raised cattle, pigs, turkeys, geese, guineas, two hundred chickens, grain and gardens. Everything was preserved or stored in the root cellar or "dark room" for the winter months. Wheat was traded for flour at the Sapphire Flour Mill in Great Falls. Monday was baking day for the 22 loaves of bread needed for the week.

In her early years on the ranch, the family made do without an indoor toilet. The bath tub was a stock tank set up in the basement. Though some things were in short supply, there was plenty of love, good times and food. One of the uncles living with the family dug a large hole in a creek that ran near the house. This served as a swimming pool in the summer and an ice skating rink in winter.

*cont. pg. 2*

## What's Weeding?"

I really like Rick's approach to gardening, unlike mine. I constantly feel like I should be weeding,

have weeded, or plan to weed. His yard does not synchronize with his quote about weeding, though!



Rick can't remember when he hasn't gardened because, as he says, there is something about Shotwells and tomatoes. His uncles routinely competed with each other for raising the best ones. His grandfather went so far as to sneak out of the nursing home and plant tomatoes among the shrubs. Rick has no idea where his grandfather got the tomato plants or seeds. This tradition apparently will continue, since his granddaughter latched onto his cherry tomatoes and told her mother that she wants to grow her own food. Rick saves seeds from tomato plants and rotates the plants' locations to maintain the family competition.

He finds satisfaction in growing his own food, and currently produces corn, cucumbers, and hot peppers for a mutual friend of ours, plus other vegetables. Rick experimented with corn this past summer but considers the results poor due to lack of enough sunlight.

*cont. pg. 2*

*Vi Hills cont.*

After graduating from Great Falls High, Vi attended St. Olaf College in Minnesota, later transferring to MSU Bozeman. She started out in pre-med. At one time she told a friend that her vision of hell was teaching 1<sup>st</sup> grade. Well, she ended up teaching 1<sup>st</sup> grade, by choice, and that became her favorite grade level. She taught in Three Forks, Guam, Joplin and was principal in Chester for 21 years, retiring after 7 years as principal in Laurel.

Vi married and has two daughters. One lives in Denver and is a lawyer and the other lives near Great Falls working in oncology and running her equine center, WALKERS ON WATER, (look it up on Facebook). She has one grandson, age 17.

You can tell from the above how Vi started gardening. She remembers helping her mother can 100's of jars of fruits and vegetables, most of which were in two quart jars. The family even went to Idaho in an old truck to bring back fruit to preserve. Before harvest her mother made sure there were at least 40 pies ready in the freezer.

In 2006 Vi retired and heard about Master Gardeners. Even though she grew up on a farm she doesn't remember hearing about soil tests or the science behind good crops and she was interested in that part. She also wanted more knowledge about pruning correctly, when to fertilize and water. She has loved working in the soil, meeting great people, sharing information and making good connections with different knowledge is priceless to her.

Vi has a "to die for" yard and her care and enthusiasm shows in everything she does. Her advice to newcomers is "if you are wondering about growing something, just do it. Give it a try."

We are so lucky to have Vi as a partner on the Master Gardener team.

*Submitted by: Sheri Kisch*

I cannot endure to waste anything as precious as autumn sunshine by staying in the house. So I spend almost all the daylight hours in the open air.

~ Nathaniel Hawthorne

*Rick Shotwell cont.*

He plans to change the direction of his cucumber trellis from north/south to an easterly/westerly direction.

So this Master Gardener, who took the classes twice, continues to learn and grow. The MG Program consistently promotes modesty: When I first phoned Rick, he claimed to know nothing, an understatement if there ever was one! The MG program introduced him to different ideas, and he means that in a positive slant. Taking the classes twice helped to solidify the information for him. I plan to do so as well. My first round of classes felt like my face was in an open fire hydrant. I only recall random snippets.

His greatest challenge is finding enough area in his urban setting. He has reworked it, putting in sprinklers and re-sodding his front yard three years ago. And earwigs taking root in his corn this summer provided another challenge. From a design standpoint, Rick claims that anything looks good in a pot, and that is where flowers go at his place. He prefers keeping lilacs trimmed.

During his four years in the U.S. Navy, Rick was a brown water sailor, which means he worked in the coastal waters, including two tours of Vietnam, although he prefers discussing gardening. In reflecting about his eight years as a Master Gardener, he found particular pleasure while helping with the Special K Ranch. Lately Rick volunteers at the Metra. His advice to gardeners is to enjoy the process and be patient. Did gardening teach Rick patience, or is he truly a patient person among few? My inkling is the latter.

*Submitted by: Bess Lovec*

How bravely Autumn paints upon the sky (exerpt)  
by Thomas Hood

Written in a volume of Shakespeare.  
How bravely Autumn paints upon the sky  
The gorgeous fame of Summer which is fled!  
Hues of all flowers that in their ashes lie,  
Trophied in that fair light whereon they fed,  
Tulip, and hyacinth, and sweet rose red, --

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The Poetical Works Of Thomas Hood  
Copyright 1861  
Boston: Crosby, Nichols, Lee and Company

Listen! The wind is rising, and the air is wild with leaves, We have had our summer evenings, now for October eves! ~ Humbert Wolfe

## It's Fall, Y'All! The season for everyone's favorite...Pumpkins!

Native to North America, pumpkins are a type of winter squash, genus *Cucurbita*, that are a category all their own, species *pepo* or *maxima* (this species is for the really big pumpkins). At this time of year, the market is filled with many different types of pumpkins besides the basic orange globe. If you see an unusual one at your market, try it for a different look in your fall decorations or as a completely different culinary taste treat.

By the way, did you know pumpkins are technically a fruit, not a vegetable?

Enjoy your exploration!

<http://us1.campaign-archive2.com/?u=6b87cbdbca7a158540d881d9e&id=b08dcd295c>

## RE-THINKING LAWNS

With 40 million acres devoted to grass lawns in the U.S., we may want to consider other alternatives for our yards. Manicured lawns are basically biological deserts—monocultures of one or two species rather than a complex healthy diverse system of plants and animals like a native forest or grassland. Taking care of these lawns is hard on the environment: synthetic fertilizers and pesticides can pollute our ground and water; gas-powered mowers use up fuel and pollute the air; copious amounts of good drinkable water keep the grass green; and houses and lawns often cover over former agricultural land.

The editors of this newsletter wish to present some other choices to Kentucky bluegrass lawns in this and in upcoming issues. In this issue please see the book review on [Bringing Nature Home](#) about re-planting our yards with native plants. In future issues we will look at xeriscaping, drip irrigation, more on choosing and planting native plants, and replacing at least part of our lawns with vegetable gardens.

Here are a couple of resources on xeriscaping:

– “Xeriscape - Greater Yellowstone Area, A guide for Landscaping with Less Water”:

<http://www.fedgycc.org/wp-content/uploads/2015/06/XeriscapeGuide7mb.pdf>

If you are seriously looking into Xeriscaping, do request “Creating Native Landscapes in the Northern Great Plains and Rocky Mountains” from our office, or you can also download a copy from here: [http://www.nrcs.usda.gov/Internet/FSE\\_PLANTMATERIALS/publications/mtpmcpunatland.pdf](http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/mtpmcpunatland.pdf)



Photo from the Grand Escape Room, Sept.. 27th. We did the diner, where you have just one hour to figure out how to get out. And after 3 clues and much work we did make it....with just 8 seconds to spare.

People who attended from left: Amy Grandpre, Rick Shotwell, Joann Glasser, Karen Honkomp, Linda Brewer, Lindsey James (front), Joan Griffith (back), Mary Davis, Merita Murdock and Shelley Thurmond.

## BRINGING NATURE HOME by Douglas W. Tallamy

Bringing Nature Home is a book for anyone who has a yard. For years home-owners have been encouraged to buy alien imported plants for many reasons: beautiful flowers, deer-resistance, hardiness, attraction for birds or bees, and even the allure of growing new and different plants. Native plants are not easy to find and we are not often urged to choose them for our landscaping. But unfortunately the result of choosing from the 5000 species of alien plants that have been introduced into the U.S. is to endanger the biodiversity of all our plants and animals.

Why is biodiversity important in suburbia? Don't we have a lot of wild areas? The author explains that over 95% of land in the contiguous 48 states is modified or disturbed in some way by humans, leaving only 3 to 4% of wild land, not enough to sustain our wildlife. In addition, the remaining wild areas are not contiguous, existing in unconnected fragments. And about 54% of the non-wild areas is in cities and suburbs—so providing native plants in our yards becomes highly significant. Your one yard, no matter its size, DOES make a difference. If you plant natives and your neighbors do as well, then a corridor begins to be formed for wild animals.

The author very clearly explains why non-native plants are a threat to the diversity of living species. Research shows that native insects generally cannot eat alien plants and they must go elsewhere or even disappear without the plants they need, because many are specialists and can only eat one or two plants. These same insects are the link between plants and predators such as other insects, birds, reptiles, and amphibians who cannot gain their energy directly from plants. So the planting of aliens has reduced the biomass and diversity of insects and thus reduced the diversity of all of our wildlife.

Non-natives create other major problems. They can become runaway invaders such as kudzu and spotted knapweed and they can bring in alien insects and diseases that can wipe out native species of plants. There is an excellent description in the book of American chestnut blight, Dutch elm disease, and a more recent threat called sudden oak death disease.

If after reading this clearly written and accessible book urging the planting of native species in our yards you are convinced that this is an important thing to do, how would you go about it? While not a detailed how-to book, Mr. Tallamy does give important guidelines in a chapter called "Making It Happen" and he further breaks down resistance to change in the chapter called "Answers to Tough Questions" (such as do I have to sacrifice beauty if I choose to plant natives, why is an alien plant full of birds or bees a problem, and won't aliens become natives over time?).

My one wish for this book is that there would have been more information about native plants for landscaping in the western U.S., but the book is important to read to understand the problem of growing alien plants and there are other resources to help if you choose to make your Billings yard fundamentally native (such as Creating Native Landscapes in the Northern Great Plains and Rocky Mountains published by the U.S. Department of Agriculture).

From the Afterword: "To me the choice is clear. The costs of increasing the percentage and biomass of natives in our suburban landscapes are small, and the benefits are immense. Increasing the percentage of natives in suburbia is a grassroots solution to the extinction crisis. To succeed, we do not need to invoke governmental action; we do not need to purchase large tracts of pristine habitat that no longer exist; we do not need to limit ourselves to sending money to national and international conservation organizations and hoping it will be used productively. Our success is up to each one of us individually. We can each make a measurable difference almost immediately by planting a native nearby. As gardeners and stewards of our land, we have never been so empowered—and the ecological stakes have never been so high."

*Book Review by: Ann Guthals*



The mission of the Yellowstone County Master Gardener Newsletter is to “educate and Inform,” not to advocate or persuade. The Newspaper Editorial Board takes no position endorsing or opposing, approving or disapproving, any of the assertions or arguments to the contributed information. Information submitted to the Newsletter is for your interest only.

### Native Plant Symposium ~ Montana Audubon Center ~Saturday, October 8, 2016

Time: 9:00 - 12:00 - speakers, tours, and possible plant sale

Facilitated Discussion Panel -2:00 - 4:00 - invitation only

Trinity Pierce, Land Stewardship Coordinator, for the Montana Audubon Center is inviting Yellowstone County Master Gardeners to attend the Native Plant Symposium on Saturday, October 8th from 9:00-noon. The morning will host special speakers, tours and a possible native plant sale.

She is also looking for a couple Master Gardeners, who are knowledgeable and passionate about native plants, to be part of an invitation only, 2 hour, Facilitated Discussion Panel focused on where we are currently with native plants in our community, in landscapes, business, etc. This panel will meet from about 2:00-4:00 pm and if this sounds like a fit for you, please contact Trinity at: [tpierce@mtaudubon.org](mailto:tpierce@mtaudubon.org); 406.294.5099 (w) or 708.323.7173 (c)

### 4x4 Square Foot Garden Contest Winners

#1 Cindy Roesler - \$50 Prize

#2 Rick Shotwell - \$25 Prize

#3 Ron & Joyce Hendricks - \$10 Prize

Congratulations to our winners, and special thanks to all our participants.

You make each year's garden unique with your special touches.



Falling Fruit is a celebration of the overlooked culinary bounty of our city streets. They hope to facilitate intimate connections between people, food, and the natural organisms growing in our neighborhoods. Foraging in the 21st century is an opportunity for urban exploration, to fight the scourge of stained sidewalks, and to reconnect with the botanical origins of food.

This is an online interactive map, identifying locations around the world where fruits and vegetables are free for the taking. The map is open for public editing, too. <http://fallingfruit.org/>

## Hail Protection Projects

One of the most heartbreaking losses a gardener faces is hail damage. In minutes the yard can go from beautiful to broken. My farming background has prepared me well for the destruction a violent battering by small (or larger) ice balls can wreak on a garden, but for my husband it's a completely new experience.

His resistance to losing it all to a big black cloud has led to some ingenious building projects in the back yard. Together he and I have engineered a few versions of prevention on the theme of screen protection for our larger planting areas.



The first experiment was a hidden roll of mesh tarp under the arbor atop a raised bed. We used three lengths of metal conduit - one to suspend the tarp between the uprights and two to create rigid weights along the bottom edges that both keep the tarp down and serve as a core for rolling it up.



Stretch cords and screw hooks keep the tarp down and off the plants. Similar cords and hooks hold the roll up inside the chamber when not deployed. This tarp has proved helpful for keeping hail out but letting some light, rain, and wind through. It is flexible enough to resist tearing and tough enough to take a beating.

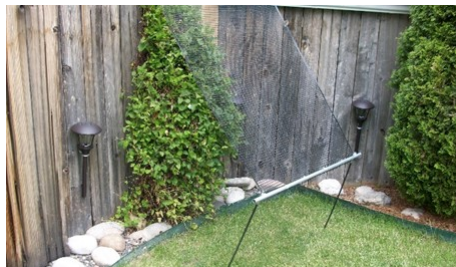
Several smaller projects provide protection for our clematis and a couple of wall gardens. These versions are not as camouflaged, but are quite effective. They also utilize conduit but the material is a plastic mesh, much more coarse than the tarp we used on the 'farm'. It is also rolled up and secured with Velcro straps rather than bungee cords.



When deployed there are cast-off tent poles, minus their shock-cord, used to hold the screen away from the plants, attached by zip-ties to the conduit at the bottom edge. The short poles rest at a right angle to the fence in modified conduit clips (not pictured).



A similar design was employed to protect the prize clematis. These photos prove that the system only works when you have time to deploy...the before and the after.



The initial design used on the first raised bed was also used on the second raised bed with minor modifications. They come down quickly, and even if we are going to be gone a few days the shades can stay down without damaging the plants below. One of the weaknesses of these screens as they are is that once the plants get too big, about halfway through the season, putting the screens down can do some damage as well. They are also easier to put down and roll up with two people, but given enough time one of us can do it just fine.

Now to figure out how to protect the big pots as well...



*Submitted by Corrina Sinclair*

Then summer fades and passes and October comes. We'll smell smoke then, and feel an unexpected sharpness, a thrill of nervousness, swift elation, a sense of sadness and departure. ~ Thomas Wolfe



## Utah Sheep Ranchers Turn Wool Waste into Cash

CROYDON, Utah - Two brothers from Croydon may have just invented a product that could keep sheep farmers employed for years to come.

"It's a game changer. It could save the sheep industry here in Utah," said sheep farmer Logan Wilde.

Wilde and his brother Albert are sixth-generation sheep ranchers in the town northeast of Salt Lake City.

In the past few months, Logan Wilde said his brother approached him with an idea to make some money on the side.

"I was like, 'Oh man, here we go again,'" Logan Wilde said with a laugh.



Now, that idea is grabbing some attention from people across the country.

"They're like 'wow,'" Albert Wilde said of his invention. "Who would have thought you could take waste wool and do something with it?"

The Wilde brothers say only 75 percent of a sheep's wool is good enough to be used for clothing, the other 25 percent usually gets thrown away. But Albert Wilde thought of a way to take that trash and turn a profit.

"This is something no one has ever heard of before," Albert Wilde said. "We take that wool, and we make it into small pellets and then use that in gardening to put into plants."

Albert Wilde explains that the wool can hold 10 times its weight in water, which is helpful for plants for nourishment.

The brothers say the product has only been available for a month, but already they've sold over 500 units and have had inquiries from all over the world.

NorthernAg.net - Tuesday, May 10, 2016

Article By: Jeff McAdam Photograph By: Maurice King

*Submitted by Corrina Sinclair*

<http://northernag.net/AGNews/AgNewsStories/TabId/657/ArtMID/2927/ArticleID/6512/Utah-Sheep-Ranchers-Turn-Wool-Waste-into-Cash.aspx>

A different way to handle unwanted weed



The milkweed pods are breaking, And the bits of silken down float off upon the autumn breeze  
across the meadows brown. ~ Cecil Cavendish, The Milkweed



On July 16, 2016, we were in for a treat. As we made our way to the Montana Audubon Center, a group of early birdwatchers were ready with binoculars for a morning of viewing and identifying our feathered friends. We too were ready to take in the sweet smell of sage and the songs of birds calling from the trees.

We were met by Trinity Pierce, Land Stewardship Coordinator and former Master Gardener, who invited us to pick a variety of mint leaves to tear apart and place in a jar of sun tea for refreshment after the tour. A woman in our group also used the leaves on her legs as a bug repellent.

Since 1998, volunteers have been reclaiming an old gravel mine, planting 65,000 native trees, shrubs, and grasses just off of South Billings Boulevard. The Center is a cooperative partnership with YRPA, YVAS and the Montana Audubon. The Center was built with conservation and place-based education in mind for people of all ages to learn about the birds, plants, bugs, and aquatic creatures of the Yellowstone River riparian area. Children go there for field trips, classes, summer camps, and after school programs, and adults can enjoy the Center on Sundays, when they offer canoeing, bird watching, and other fun activities. Nearby Norm Schoenthal's Island is a great place to walk dogs, explore the trails, or cross-country ski in the winter.

Trinity and her volunteers have done a great job preserving the natural landscape and native plants, encouraging them through much mulching and coaxing. There were clusters of beautiful Blanket Flowers, Echinacea, Coneflowers, Blue Flax, Mustard and many other wildflowers to attract pollinators. Trinity took us to the three ponds where children can conduct research, enjoy the thrills of canoeing, and maybe experience a turtle or two. Giant cottonwoods and willows surround the water, providing habitat for many varieties of wildlife.

As we savored our herbal tea, Trinity showed us the Center, named after the dedicated Norm Schoenthal, she told us that it recycles water as it is used inside. Children use the Center as a lab, and gain hands-on experience with identification of plants and animals. A lot of respect and hard work has gone into the reclaiming and healing of this area of the Yellowstone. It is a hopeful place. The tea was delicious too! A combination of chocolate, pineapple, and apple mint leaves, fragrant and cool.

Submitted by: Julie Osslund

### What do plants have to do with a root canal?

*Gutta-percha* refers to the rubbery sap of the *Palaquium gutta*, a tropical evergreen tree found in Malaysia and Indonesia. *Gutta-percha* has been used to insulate underwater telegraph wires, to make ornate jewelry and pistol grips, and as the core material in golf balls.

However, what I found to be most fascinating about *gutta percha* is how it is used in dentistry to fill the empty spaces inside the root of the tooth after it has undergone endodontic therapy. Dentists use *gutta percha* points that looked like small toothpicks to fill the prepared space. The physical and chemical properties (inertness, biocompatibility, ductility, thermo plasticity, malleability and melting point) make *gutta percha* ideal for this use. *Gutta-percha* points become flexible when heated and can be compressed into and against the walls of the root canal then when cooled, it becomes hard, durable, non-brittle, non-elastic latex that retains the form of the root canal to seal it.

Just another way plants make our lives better.

Submitted by: Elaine Allard





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## Chrysanthemums - Fall Fireworks

Gardening fever can set in before the first spring shoots even pop through the snow. It can fade by the time you've watered, weeded, pruned, and fertilized the lawn and garden through heat, wind, bugs, and hail. Those fabulous fall bloomers that have been slowly preparing themselves all season can be a lovely rejuvenating show after a long, challenging summer, reminding you that there is always something wonderful around the corner.

Chrysanthemums are a hardy, rewarding addition to any planting for vibrant fall color. Current varieties can be traced to their wild roots in China, where they were first cultivated as a flowering herb. Many countries and cultures consider the chrysanthemum to hold special meaning, commonly symbolizing nobility, death, honor, and the month of November. One variety's blooms are used to make tea, leaves and stems are used in various ways in far eastern cuisine, and valuable pyrethrum insecticides are made from crushed blossoms. Exhibition varieties include florists' favorite football and spider mums and can be trained into many interesting forms. Their various garden hardy forms deliver drama, bright color, and lots of long-lasting blooms on stems that don't require staking or caging. Popular colors include deep reds, flaming oranges, and piercing yellows, but pinks, plums, and white are also lovely for blending with other fall selections.



Versatile mums can be happy in beds or containers in full sun with well-drained, fertile soil, but want to have dry feet and need room to develop their bushy habit throughout the summer. They pair well in a bed with spring bloomers that die back through the summer and leave room for dense mounds to form without competition. When mums are crowded they can be especially susceptible to molds and disease, so they respond well to division (in the spring) every three to five years. Also plan for rotation to prevent disease. Mums bloom in response to the seasonal changes in light (photoperiodic) as summer wanes, so don't place them near street lamps and other sources of artificial light. Most will tolerate light frost and make a delightful little cut flower after other summer blooms have faded. Potted mums can be overwintered in a cool, brightly lit room indoors with limited watering, and should be gradually acclimatized to the garden in spring (protected outdoors during the day and in that cool room at night) while days get longer but frost is still a danger.

Make selections from varieties that appeal to your tastes for size, color, flower type and bloom time. They can be planted from seed, cuttings, or purchased from nursery stock (most commonly in late summer or early fall). When transplanting your established plants or introducing nursery stock, allow the roots to establish during cooler weather rather than the hottest days of summer for best results, but at least six weeks before killing frost. Consider overwintering potted mums when purchased during fall holidays for planting in spring. Some folks recommend pinching for encouraging a bushy habit and more abundant blooms, but many common varieties don't need this special treatment to become a tight mound covered in gorgeous blooms from early to late fall. Become familiar with the variety you choose to make the best decisions regarding planting, pinching, and placement. Compiled from Wikipedia,



Chrysanthemum Flowers: What Are "Hardy Mums"? by David Beaulieu, and experience by Corinna Sinclair