

# Country Living Expo

& Cattlemen's Winterschool

2020 Class Information and Descriptions

Saturday, January 25



Register online:

[Skagit.wsu.edu/countrylivingexpo/](https://Skagit.wsu.edu/countrylivingexpo/)



Jump Start  
Your Pasture

Photo by Amy Anderson

# Want to Jump Start Your Pasture?

Take any of the classes on the right. See following pages for class descriptions.



Class Title	Session #	Class #
Livestock Fencing Basics	1	119
Noxious Weeds - The Silent Killer	1 or 2	155 or 255
Pasture Evaluation & Management	3	315
Rain Water Catchment for Agriculture and Small Farms	3	321
Electric Fences—Facts, Myths, and Troubleshooting	4	407
Pasture Management	4	445
Solar Powered Water & Electric for Small Farms	5	507
Reseed, Renew, Rebound Your Pasture	5	534
Raising a Couple of Beef	6	634
Best Horse Keeping Practices for Western Washington	6	673
What to Look for When You Buy or Rent a Piece of Property	6	680

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement PC-01J18001 to the Washington State Department of Health. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

## Class Choice Info

- Lunch is included with your registration and is offered during Session 3 or 4. Choose only one class from Sessions 3 and 4, so that you may attend lunch in the other
- OR
- You may attend classes in both Session 3 and 4, but then you'll sacrifice our prime rib or vegetarian lunch and must bring a sack lunch.
- Some classes cover two sessions and **require** signing up for **both** parts consecutively (see the next the page for all the "two-session" classes). **READ CAREFULLY.**
- Some classes are repeated in more than one session.
- Some classes have a materials fee, which is listed in the class description.

# Two-Session Classes

Each class described on this page is scheduled consecutively over two sessions. Each class title and number is also listed on the additional session pages.

To attend these two-hour classes, you must sign up for both parts consecutively (one for each session). For instance, for "Let's Talk Goats", sign up for #518 for Session 5, #618 for Session 6.

## **Necropsy: "Why did Ewe Die?"**

Take #105 & #205 - Sessions 1 & 2 **OR**

Take #392 & #492 - Sessions 3 & 4 + time for LUNCH

Where there's livestock, there's deadstock. This necropsy demonstration for cattle, sheep and goat owners will show producers how to do a basic necropsy and look for evidence of injury and diseases. It will also help producers understand basic anatomy and body functions.

**Instructor—Sessions 1 & 2:** Dr. Susan Kerr

**Instructor—Sessions 3 & 4:** Dr. Kevin Jacque

## **Intro to Landscape Design**

Take #139 & #239 - Sessions 1 & 2

This class will focus on design fundamentals to help you improve and **design** your individual landscape from the ground up. Particular emphasis will be given to: site analysis, exploring how you have used or want to use your landscape or outdoor space, and connecting your home to your outdoor living space and the surrounding environment.

**Instructor:** David Malda

## **Basics of Wool Processing**

Take #151 & #251 - Sessions 1 & 2

Learn how to get that fresh-off-the-sheep fleece into prime spinning or felting shape! We'll talk about picking, washing, drying, carding and combing, and spend the second hour getting some hands-on experience using carders and combs with a variety of wool types.

**Instructor:** Denise Mor

## **Getting Started in the Sheep Business**

Take #176 & #276 - Sessions 1 & 2

Are you interested in owning your own small flock of sheep whether for fiber, meat or milk? Learn from an expert as Amy Wolf shares her immense knowledge of raising, breeding and caring for sheep. Gain hands on techniques for catching and containing sheep while performing simple maintenance procedures like trimming hoofs or vaccinating. Explore several breeds and discover which appeals to you.

**Instructor:** Amy Wolf



## **Poultry Processing 101**

Take #188 & #288 - Sessions 1 & 2 **OR**

Take #488 & #588 - Sessions 4 & 5

Want to raise your own chicken to put in the freezer but not sure how to go about butchering your own birds? Come learn the basics of poultry processing from live bird to roasting in your own oven. This will be a hands-on class outside, dress **WARMLY** and bring a cooler for your take home fresh chicken. *Fee: \$ 8.00 (includes processed bird)*

**Instructor:** Cassie Goodin

## **Beekeeping for Beginners**

Take #190 & #290 - Sessions 1 & 2

Got bees? Want bees? Learn the where, when and how of setting up your first hive. From location, equipment, tools, and basic management, to how to install a package or nuc. Mann Lake catalog provided as well as a planting for pollinator guide.

**Instructor:** Bonnie Swanson

## **Building a Small Farm Building**

Take #235 & #335 - Sessions 2 & 3

Learn how to build a small farm shed for your animals or equipment. Get off to a good start learning how to lay out and square your building, add walls, roof and a window and door.

**Instructor:**

## **Yarn From Scratch: Handspinning on a Wheel**

Take #451 & #551 - Sessions 4 & 5

Come spin a yarn! We'll cover basic principles of spinning, wheel adjustment/setup and drafting techniques, plus winding off and setting the twist. No experience necessary, but please bring a wheel. Wool will be provided for your use.

**Instructor:** Denise Mor

## **Preparing for Lambing and Kidding**

Take #512 & #612 - Sessions 5 & 6

Don't be caught unprepared in an emergency situation during the most important time of the year! Check your inventory for important medicines, prepare a gear bag with critical tools near-at-hand, and assess your infrastructure in the weeks ahead, so you are ready for anything!

**Instructor:** Michelle Canfield

## **Let's Talk Goats**

Take #518 & #618 - Sessions 5 & 6

Have you ever wanted to know what is involved in caring for a goat? Are you new to goats and just need more information? Or have you had goats for awhile and would just like to know how someone else makes it all work? We'll talk about basic requirements, housing, fencing, and feeding to keep your goats healthy and happy.

**Instructor:** Kristi Boyd

## **Good Clean Fun! - Soap Making 101**

Take #537 & #637 - Sessions 5 & 6

Lye doesn't have to be scary! In this 2-hour class you will learn the basics of old fashioned soap making. By the end of class you will have the resources and knowledge to safely make soap in your very own home. Both "hot process" and "cold process" soap making will be demonstrated.

**Instructor:** Heather Forthofer

*Two-session class descriptions continued on the next page*

### **Fruit Tree Grafting**

Take #522 & #622 - Sessions 5 & 6

In this workshop, we cover the basics of hardwood grafting - tools, timing, and technique. Come prepared for hands-on grafting! Bring your own grafting knife if you have one. We'll have some tools on hand. We will also supply a limited selection of apple rootstock and scion wood. If you wish to graft something other than apple, bring your own rootstock and scion wood. Fee: \$5.00

**Instructor:** Dan Vorhis

### **Forestomachs, not Four Stomachs!**

Take #592 & #692 - Sessions 5 & 6

Learn the practical skills for feeding a cow, sheep, or goat's rumen to promote health, avoid disease episodes, and increase productivity.

**Instructor:** Dr. Kevin Jacque

## **Session 1: 9:00 - 10:00 AM**

### **Two-Session Classes**

See pg. 2 & 3 for class descriptions. To attend these classes, you must sign up for Part 2 in Session 2.

# 105 Necropsy: "Why did Ewe Die?", Part 1

# 139 Introduction to Landscape Design, Part 1

# 151 Basics of Wool Processing, Part 1

# 176 Getting Started in the Sheep Business, Part 1

# 188 Poultry Processing 101, Part 1

# 190 Beekeeping for Beginners, Part 1

### **# 100 Aching Hands and Stomped-on Feet: Simple Tools and Modifications for Farmers and Gardeners**

Awaken your body by adopting the right tool or modification to help reduce the strain and stress of farming on the body. In a hands-on demo, join Washington State AgrAbility Project, a USDA-funded program, in exploring simple tools and techniques for protecting your health while farming and getting back in the dirt.

**Instructor:** Curt Johnson

### **#102 Financing Options and the 5 C's of Credit: Financial Resources for Your Farm or Ranch**

Ready to take the next step in starting (or expanding) your business and your current lender doesn't understand your needs? Come to this informative session to hear firsthand about the resources available regionally from members of Northwest Farm Credit Services. Opportunities for startups, Entrepreneurial resources, Nuts and Bolts of Loans Available, Limitations and things to be aware of when applying.

**Instructor:** Jess Sarsfield, Northwest Farm Credit Services

### **# 103 Beginning Felting**

Create your first felting project. We will felt around a soap bar and then embellish it with needle felting. Take home your project to adorn your bathroom. *Class Fee:* \$5.00

**Instructor:** Holly Barnes

### **#104 Sheep Dairying 101**

"Cheese from the ewe, milk from the goat, butter from the cow." - Spanish proverb. Sheep are amazing animals! In the US, we most commonly connect these creatures with meat and wool production, but you can milk sheep too! Not only is their milk highly nutritious and easily digestible, but it also makes delicious cheese and yogurt! In this class we will review the basics of homestead sheep dairying, with a focus on the ewe-nique properties of sheep's milk and sheep's milk products. We will explore dairy sheep breeds and the tools and materials needed to raise and care for them. If you love sheep and/or are interested in the intricacies of farmstead cheese, this class is for you!

**Instructor:** Jessica Gigot

### **# 106 Equine 101: A Horse of Course?**

In this class we will discuss the basics of responsible horse or pony ownership including: factors to consider before bringing a horse home, purchasing a horse, housing options, vet and farrier care, and feed requirements. We will also explore alternatives to ownership for horse-loving kids and adults, for when buying your own is not an option.

**Instructor:** Sidney Smith

### **# 107 Food Forests**

Learn about the potential of food forests as a community, urban, and rural land use. I will discuss the social and ecological benefits of these food systems as well as present some practical information on creating a food forest in your local community or on your own landscape.

**Instructor:** Carrie Brausieck, SCD Natural Resource Planner

### **# 109 Smoking Fish**

Learn the processes for curing and smoking fish producing your own mouthwatering delights.

**Instructors:** Carol Fagerlie

### **# 110 Managing Wildlife Habitats**

Many species of native wildlife live in small forested acreage in Washington. Habitat is the diversity in the key to providing for the wondrous species. This class will discuss habitat, animals and simple methods of enhancing your land for wildlife.

**Instructor:** Ken Bevis, Department of Natural Resources, Forest Stewardship Program

### **# 111 Arc Welding**

Intro to welding with an opportunity for hands-on training for each student. *Add \$5 materials fee.*

**Instructor:** Darryl Main

Session 1 class descriptions are continued on the next page

### # 115 Feeding Dairy Goats

Feeding your goats should maximize production, maintain the health of the animal and should not be costly. If you are not achieving these three goals, come learn feeding tips that help both you and your herd.

**Instructor:** Gary Fredricks

### # 119 Livestock Fencing Basics

Come and learn how to build a proper, safe, strong fence by using the best techniques for building corners and braces that withstand the test of time, properly setting posts, and hanging gates that don't sag. Learn why setting a post in concrete halves the life of a post and more tricks for building a strong, straight fence.

**Instructor:** Monte Geerdes

### # 129 Livestock Guardian Dogs

An environmentally-friendly solution to predator control—livestock guardian dogs are not like other dogs. Learn about breeds, temperament, training, rules of thumb, and prevailing myths. Become predator-free.

**Instructor:** Laura Faley

### # 137 Praise the Lard!

Where does it come from and how is it made? This soft, white fat is making a comeback, and for good reason! In this class, you will learn to utilize and embrace lard as a healthy cooking oil. We will cover the different types of lard and their best uses—from baking and cooking to candles and soap! Class participants will have the opportunity to get hands-on and bring home a small jar of lard that they filter themselves.

**Instructor:** Heather Forthofer

### # 138 Canning 101

Learn the basics of safe canning practices as we explore water bath and pressure canning. Discover how to determine which foods may be safely processed with a boiling water bath, which foods require the use of a pressure canner, and why. This introductory class will cover some important terminology, identify different types of equipment, and ways to access safe, tested recipes for canning.

**Instructor:** Jennie Bryan-Goforth



### # 147 The Future of Fire in Washington Forests: Risks and Responses

Wildfire and smoke are growing concerns in the Pacific Northwest. Could the wildfires that burned through California communities in recent years happen here? This session will explore (1) the basic science of fire, (2) projections of future fire occurrence in Washington, including the effects of climate change, (3) fire risk in western Washington, and (4) actions that homeowners can take to reduce those risks.

**Instructor:** David Peterson

### # 155 Noxious Weeds: "The Silent Killer"

Many noxious weeds can be hard to identify, control and can be devastating to established farms and new property owners. Invasive species in Washington State cause 282 million dollars in crop and livestock death loss every year. We will discuss the various toxic noxious weeds and how to identify, eradicate and mitigate them before they harm your livestock.

**Instructor:** Joseph Shea

### # 160 Fruit Tree Pruning

Learn the proper techniques & strategies for pruning fruit trees to maximize fruit production and strengthen the tree.

**Instructor:** Gary Moulton

### # 165 Tractor Maintenance

A well-maintained working tractor is the mainstay of many small farms. Learn routine preventative maintenance to keep your tractor starting up on the first turn.

**Instructor:** Steve VanValkenburg

### # 166 Lefse Making 101

Come and see how lefse is made! Find out what tools are needed and what are the secrets to making successful lefse. Students will have an opportunity to try their hand at making (and eating) lefse.

**Instructor:** Geri Prater

### # 168 Learn to Spin Yarn

If you've always wanted to learn how to make your own yarn and you've got your beginner's mind ready, join us! We'll start slowly by learning fiber basics like staple length and twist, and then we'll move on to using simple tools to make some yarn. No experience necessary! \$5 class fee.

**Instructor:** Caryn Vainio

### # 175 Pruning Your Shrubs

Are older shrubs taking over your landscape? Have you purchased a home with overgrown bushes? Learn basic pruning cuts, timing for pruning, types of shrubs and how to prune them. Current local pictures with correct and incorrect types presented.

**Instructor:** Claudia Wells

### # 196 Raising Waterfowl: Are There Geese or Ducks in Your Future?

Whether you raise them for eggs, meat, or ornaments these birds are low maintenance, voracious eaters of slugs, snails, and bugs and willing to eat weed seeds and emerging weeds. Geese are happy to chase interlopers out of your yard while they guard your farm. Explore raising ducklings and goslings, and how to make them feel at home on your farm.

**Instructor:** Ben Janicki

### # 198 Beginning Backyard Chicken Raising

Home-grown hens are a fantastic source of fresh eggs, compost and amusement. Learn the basics of raising chicks including the nutrition timeline of switching from chick starter to grower and then layer pellets. Housing and coop requirements, picking a breed based on production potential, and learning to tell which chickens are laying will all be covered. Receive a short overview of local city ordinances as well as public health safety for the urban chicken rancher.

**Instructor:** John Nelson

### # 199 Flower Arranging 101

Do you have pretty garden flowers and want to display them in your home? Learn techniques such as greening arrangements, placing flowers that help you create a shape, and keeping flowers alive longer. \$4 materials fee.

**Instructor:** Stanwood FFA Horticulture

## Session 2: 10:15 - 11:15 AM

### Two-Session Classes

See pg. 2 & 3 for class descriptions. To attend these classes, you must sign up for Part 1 in Session 1 or Part 2 in Session 3.

# 205 Necropsy: "Why did Ewe Die?", Part 2

# 235 Building a Small Farm Building, Part 1

# 239 Introduction to Landscape Design, Part 2

# 251 Basics of Wool Processing, Part 2

# 276 Getting Started in the Sheep Business, Part 2

# 288 Poultry Processing 101, Part 2

# 290 Beekeeping for Beginners, Part. 2

#### #200 Water Rights Basics for Rural Land Owners

Do you use surface water or groundwater at your property to supply your home, irrigate crops or landscaping, water livestock, or produce something you sell? If so, you may need a water right. Or you may be covered by a permit-exempt water right. Or you may already have a water right! Or you might be able to acquire a new water right or transfer a water right to your property from somewhere/someone else. The current regulatory framework controlling both permit-exempt groundwater wells and water rights has become increasingly difficult to navigate for landowners in rural Washington State. The availability of a legal water supply for rural domestic, irrigation, commercial, and stock watering uses can affect single-family homes, farms, ranches, and commercial/industrial operations of all sizes. Topics covered will include:

- What is a water right?
- What is a permit-exempt water right?
- Do I need a water right?
- Do I have a water right?
- How does where I live affect water rights?

**Instructor:** Jay Chennault

#### #201 Barn Quilts

Learn the ins-and-outs of creating a painted barn quilt so you can do it at home. This trend started in 2001 in Ohio and now you can drive across the country following quilt trails. Make your barn stand out with a unique piece of Americana, crafted by you.

**Instructor:** Joe Hardy

#### # 203 Intermediate Felting

Make your own seamless small felted bag that you will embellish with needle felting. Experience felting flat pieces of fiber is a must.

*Materials fee: \$5.00*

**Instructor:** Holly Barnes

#### # 209 Home Methods of Preserving Wild Game Meat

YUM! Learn to preserve wild game meat, make regular & smoked jerky, & prepare biltong (the 400-year-old traditional South African beef snack cured in a unique and highly-nutritious way that's different from American jerky in taste & prep).

**Instructors:** Jim Fagerlie

#### # 210 Managing Wildlife Habitats

Many species of native wildlife live in small forested acreage in Washington. Habitat is the diversity in the key to providing for the wonderous species. This class will discuss habitat, animals and simple methods of enhancing your land for wildlife.

**Instructor:** Ken Bevis, DNR, Forest Stewardship Program

#### # 211 Arc Welding

Intro to welding with an opportunity for hands-on training for each student. Add \$5 materials fee.

**Instructor:** Darryl Main

#### # 212 Using Kanban to Organize Work and Flow

Borrow a concept from Lean Manufacturing, make a Kanban (card) board for tracking the flow of work and inventory. Kanbans help you prioritize, communicate and track work status, celebrate progress, understand labor capacity, and avoid running out of the materials you need!

**Instructor:** Michelle Canfield

#### # 217 Hop Growing

Hop, skip, and jump to this class and learn about a hard working crop. Flavorful hops aren't hard to grow but there are some things you need to know to be successful.

**Instructor:** Byron Betts & Amy Moe

#### #220 How to Raise Meat Rabbits

Learn to properly house, feed and care for meat rabbits. Instructor will cover breeding (how, when and how often), sexing rabbits, and costs of operation. Discover how rabbits are an affordable, nutritious and low impact protein. (*In the next hour, Class #320 is a follow-up class for those who are interested in rabbit processing.*)

**Instructor:** Devin Day

#### #222 Introduction to Mosaics

Learn to how to design and make a one-of-a kind tile project with tips and ideas. Everyone will receive a kit with everything needed to finish your project. Take it home to finish final step. \$5.00 fee.

**Instructor:** Alice DeVries

#### # 229 Starting a Livestock Guardian Dog Puppy

Puppies are so adorable! And puppies seem so much smaller, easier to manage, and less expensive to purchase than mature working dogs. But what are the training challenges and pitfalls to be aware of to get a Livestock Guardian Dog from puppy to 2-yr-old working maturity? Are there advantages? What training methods are most effective with LGDs? How do I choose which breed? What is my financial commitment? This class is a crash course on the do's and don'ts, the challenges, the joys and stages of development when starting with an LGD puppy on your farm. This class is not about pet puppies; it is exclusively about puppies from Livestock Guardian Dog breeds who are needed to work as Livestock Guardians on your farm.

**Instructor:** Laura Faley

#### #231 Mama Drama - Calving Tips for Success

This class will focus on the practical considerations for successful calving from beef and dairy cattle. Most principles will be applicable to other farm animals. Specific considerations to tips and tricks during calf delivery trouble.

**Instructor:** Dr. Kevin Jacque

*Session 2 class descriptions are continued on the next page*

### # 238 Pickling & Fermentation

Natural fermentation is one of the oldest means of food preservation, and it reduces the risk of foodborne illness and food spoilage. Jennie will demonstrate preparation techniques, explain the science behind pickling and fermentation, how to make sauerkraut, and will share recipes.

**Instructor:** *Jennie Bryan-Goforth*

### # 255 Noxious Weeds: "The Silent Killer"

Many noxious weeds can be hard to identify, control and can be devastating to established farms and new property owners. Invasive species in Washington State cause 282 million dollars in crop and livestock death loss every year. We will discuss the various toxic noxious weeds and how to identify, eradicate and mitigate them before they harm your livestock.

**Instructor:** *Joseph Shea*

### # 258 Instant Pot®: The Electric Pressure Cooker

This appliance has taken the world by storm. In this class, we will learn how to safely use electric pressure cooking units as well as how to incorporate them into our busy lives so our participants can cook healthy and nutritious meals at home in no time.

**Instructor:** *Diane Smith*

### # 260 Tips for Growing Blueberries Successfully

Would you like a bountiful blueberry harvest this year? We will cover irrigation, what is needed in soil pH, creating good soil fertility, mulching, pruning, pest control (including birds) selecting quality plants and which varieties produce best in our area.

**Instructor:** *Gary Moulton*

### # 265 Chainsaw Maintenance and Safety

Learn how to keep your chainsaw in top operating condition and how to use it safely. If you bring your own saw and a new saw file of the appropriate size, and a pair of gloves, I will show you how to properly sharpen the chain.

**Instructor:** *Steve VanValkenburg*

### # 266 Ya Sure Ya Betcha: Let's Make Some Scandinavian Cookies

This session is a demonstration of how to make several types of Scandinavian sweet treats! Krumkake rosettes, and more! Come observe and taste!

**Instructor:** *Geri Prater*

### # 268 Learn to Spin Yarn

If you've always wanted to learn how to make your own yarn and you've got your beginner's mind ready, join us! We'll start slowly by learning fiber basics like staple length and twist, and then we'll move on to using simple tools to make some yarn. No experience necessary! \$5 class fee

**Instructor:** *Caryn Vainio*

### #272 Tips and Skills for Maintaining Your Landscape - You Can Do It!

Do you have large old shrubs taking over your landscape? Are you interested in adding new plants in new places? In this class you will learn how to properly prune, plant or transplant your plants at the proper time of year to support blooms and new growth. Maintaining healthy soil, plant selection, pest management, and helpful tips and tools will be covered

**Instructor:** *Diana Wisen*

### # 287 Construction Questions Answered Here

Did your quick a minute project turn into a bear?

Email your construction questions to Jon at

jon.schwegler@outlook.com with a photo, and he will answer them in class.

**Instructor:** *Jon Schwegler*

### # 291 Clipping & Fitting Beef Cattle

What does it take to win in the show ring? Learn current trends in the art of clipping and fitting to stand out in the show ring.

**Instructor:** *Tarisa Toth*



### # 295 Chicken Necropsy Basics & Demonstration

The goal of this course is to provide a glimpse into diagnostic poultry necropsies and the process that happens behind-the-scenes in figuring out why a chicken is sick or has passed away. The course starts by reviewing the basic internal anatomy of poultry and then goes on to explain the basic steps of a necropsy examination; common findings; and the additional testing involved in the process.

**Instructor:** *Dr. Laura Chen*

### # 296 Advanced Poultry Genetics and Selection:

Already raise poultry, but want to take your breeding operation to the next level? Love genetics and want to learn more about how it works in chickens, ducks, geese, and turkeys? This class will cover a brief history of poultry breeding, overview of poultry genetics, inbreeding, hybridization, and common strategies on breeding for show and productive qualities.

**Instructor:** *Benjamin Janicki*

### #298 Flower Arranging 101

Do you have pretty garden flowers and want to display them in your home? Learn techniques such as greening arrangements, placing flowers that help you create a shape, and keeping flowers alive longer. \$4 materials fee.

**Instructor:** *Stanwood FFA Horticulture*

# Session 3:

11:30 AM -  
12:30 PM

Please choose a class from Session 3 or 4. You'll eat lunch during the session not chosen for a class.

Or choose to forego our prime rib or vegetarian lunch and choose a class in both sessions. Bring your own lunch.

## Two-Session Classes

See pg. 2& 3 for class descriptions. To attend these classes, you must sign up for Part 1 in Session 2, or Part 2 in Session 4.

# 335 Building a Small Farm Building, Part 2

# 392 Necropsy: "Why did Ewe Die?", Part 1

### #303 Physical Exam of the Ruminant—Looking Deeper Into Your Animal

This class will cover a hands-on physical exam of the ruminant animal. My examination is based on a systems approach to the animal. These systems include sensory, reproductive, digestive, mammary plus several more. I will go over equipment needed, safety, provide normal parameters for the animal, and just as importantly, give you abnormalities for each system. For those animals who are not as cooperative, I will also provide some information for an over-the-fence exam. The goal I have in all my classes is to help owners take a more active role in the management of their animals.

**Instructor:** Dr. Tim Cuchna

### # 306 Grow Luscious Tomatoes—Even in the NW!

Even here, where our summer can be damp and a bit chilly, you can learn the tricks to cultivate tomatoes like an expert. Start little tomato plants right, and learn what varieties to choose. What's the best fertilizer, and when to apply it? When summer comes you'll have a juicy harvest to share.

**Instructor:** Bob Bryan

### # 312 Managing The 7 Wastes on Your Farm

Borrow a concept from Lean Manufacturing, and master The Seven Wastes on your farm. Analyzing your operation to identify and eliminate "muda" (waste) will improve profitability and reduce the cost of non-quality, as well as cut down your workload and stress!

**Instructor:** Michelle Canfield

### # 313 Raising a Pair of Weaner Pigs

The feeding, housing and fencing options for raising a pair of weaner pigs will be discussed.

**Instructor:** Chris Carlson

### # 315 Pasture Evaluation and Management

Too many weeds, not enough grass? Learn how to look at your pasture management with a critical eye and find out some simple management strategies for improving your forage production.

**Instructor:** Gary Fredricks

### #320 Butchering Meat Rabbits

Come prepared to first see a rabbit processed and cleaned for home consumption and then go through the process with rabbit provided for you. Bring a cooler to take home your processed rabbit meat.

DRESS WARM! Class fee: \$8

**Instructor:** Devin Day

### # 333 Pie Crust

Pie is an iconic American dessert and Jeannie has the whispering hands needed to transform just a few ingredients into a light, fluffy, crust as it wraps around the filling. You too can create mouth-watering crusts.

**Instructor:** Jeannie Boon

### # 336 "The Mountains are Calling, I Must Go" - Backcountry Horsemen of Washington

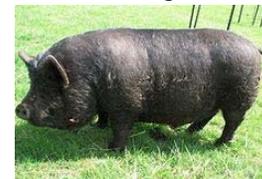
Learn all about the Backcountry Horsemen of Washington and the steps that this organization takes to make backcountry riding for horse and mule owners safe, environmentally friendly, and fun. Many of the hiking trails in Washington state were developed by BCHW members, and many of those trails are still open to stock animals. Backcountry Horsemen of Washington has local chapters in every county in the state, and hosts a variety of workshops, large scale events, prize rides, trail repair work parties, and much more. The idea is to hit the trail that is less traveled, leave no trace, and meet some amazing folks in the process. Learn the ins and outs of Back Country riding: from equipment, to safety, where to go, how to prepare yourself and your horse, and how to work seamlessly with the Forest Service and other trail users. BCHW helps horse and mule owners experience some of the most breathtaking natural wonders of Washington state from their saddle.

**Instructor:** Cindy Kinney

### # 337 Raising Pigs on Pasture

Learn about the various breeds and how to choose the right one for you! We will discuss rotational grazing, the importance of forage and supplemental feed, shelter requirements, fencing, and the unique challenges faced by raising pigs in an unconventional manner.

**Instructor:** Heather Forthofer



### #338 Freezing, Drying, & Root Cellaring

Learn about storage and preservation methods including freezing, dehydration, and using root cellars or other microclimate storage in your home. We will also look at different designs for root cellars and basic construction methods. Instructor has lived with the root cellar for 20 years and can offer practical advice and information.

**Instructor:** Jennie Bryan-Goforth

### # 347 Bats! Who They Are, Where They Live, and Who They Benefit!

Washington State has 15 different species of bats. Find out how many live in your neighborhood, why you should like bats, and how to attract bats to your yard. Learn what they eat, where they like to live and why they like to live in your attic or roof. Find out what bats do each season of the year, how to make a bat house, and which is the best style for our area. And of course, learn how to do bat exclusions.

**Instructor:** Meg Lunnum

### # 348 Beef Nutrition

Learn the basics of beef nutrition to keep your herd healthy and productively on the gain until finishing.

**Instructor:** Tony Hansen

Session 3 class descriptions are continued on the next page

### #350 Perfect Pairing: Chocolate & Strawberries

In this class learn how to create gourmet dipped berries—a deliciously sweet gift for any occasion. *Class fee \$5*

*Instructor: Kim Fox*

### # 364 Back Country First Aid For Horses

This class will cover what to pack and what to know when you are headed out to the back country with your horse.

*Instructor: Dr. Jennifer Sparks*

### # 365 Rainbird Sprinkler Head Repair

Bring your broken sprinkler heads and we'll figure out how to fix 'em!

*Instructor: Steve VanValkenburg*

### # 374 Hoof Care for Sheep and Goats

The best way to prevent lame sheep or goats on your farm is timely hoof care. Learn the proper techniques for trimming to allow for healthy strong hooves to keep your livestock outstanding in their field. Class will also cover common causes and treatment of lameness in sheep and goats. Bring your questions.

*Instructor:*

### # 375 Microclimates: Success or Failure in Your Yard

Learn how to determine what microclimates you have in your own yard. And why does this even matter—because plants are going to thrive in the conditions they like best and you need to know where specific variables exist in your yard related to slope, orientation to the sun, wind exposure, soil type and drainage, elevation. Even slight changes in any of these can create a different microclimate than exists in the rest of your garden.

*Instructor: Claudia Wells*

### # 382 Using Essential Oils on the Farm

Learn how to use essential oils on your farm, inside the home and out, for you, your family, your pets, your livestock, and more. From natural, effective cleaning in your home and barn, to helping keep your pets and livestock thriving on your farm, this class is for everyone!

*Instructor: Tamara Shelley*

### # 391 Clipping & Fitting Beef Cattle

What does it take to win in the show ring? Learn current trends in the art of clipping and fitting to stand out in the show ring.

*Instructor: Tarisa Toth*



### # 395 Edible Mushroom Cultivation

Learn the basic steps to inoculate logs to grow your own edible mushrooms.

*Instructor: Kevin Zobrist*

### # 396 Organic Certification and Standards for Crop Production & Raising Livestock

Interested in organic? Learn about the requirements for organic certification for crops and livestock. This course will provide attendees with:

- Steps to organic certification
- Transitioning land from conventional organic production
- The Organic System Plan—what is it and why does it matter?
- Practices to prevent the use of input materials and how to find compliant inputs
- Feed, healthcare and living conditions for livestock
- Recordkeeping requirements and best practices
- Use of the organic claim on labels and other marketing information
- Technical assistance and financial resources

Attendees will have an opportunity to ask questions and take resource handouts.

*Instructor: Jennifer Tillman, WSDA Organic Program Certification Lead*

## Session 4: 12:45 - 1:45 PM

**Please choose a class from Session 3 or 4. You'll eat lunch during the session not chosen for a class.**

***Or choose to forego our prime rib or vegetarian lunch and choose a class in both sessions. Bring your own lunch.***

### Two-Session Classes

*See pg. 2& 3 for class descriptions. To attend these classes, you must sign up for Part 1 in Session 3, or Part 2 in Session 5.*

**# 451 Yarn from Scratch: Handspinning on a Wheel, Part 1**

**# 488 Poultry Processing, Part 1**

**# 492 Necropsy: "Why did Ewe Die?", Part 2 and LUNCH**

### # 401 Managing Stress in Agriculture

Country living is rewarding, but let's face it, life and making a living off the land isn't easy. Come learn about ways to limit and manage stress, identify risk warning signs, and help yourself and others live life to the fullest.

*Instructor: Kate Seymour*

### # 404 Everybody Loves a Galette!

It's not a pie or a pizza, but it's delicious and easy to make. Galettes are flat, free-form, low-fuss tarts that originated in Europe. In this class we will make both sweet and savory galettes and explore dough-making techniques as well as seasonal filling options and recipes. Open to all cooking levels.

*Instructor: Jessica Gigot*

*Session 4 class descriptions are continued on the next page*

#### # 407 Electric Fences—Facts, Myths, and Troubleshooting

Ground rods, connectors, jules—what does it take to keep a fence hot? Learn how to measure power needs, fence lay out gates, and handles.

**Instructor:** Bryan Faley

#### # 411 Arc Welding

Intro to welding with an opportunity for hands-on training for each student. Add \$5 materials fee.

**Instructor:** Darryl Main

#### # 421 Rain Water Catchment for Agriculture and Small Farms: Part 1

This will be a two-part class (second session is optional). In the first session we will learn how to use the runoff from your existing roofs for livestock watering, garden irrigation and emergency storage. We will explore key components for every collection system, as well as some of the more unique considerations specific to agricultural uses. All are welcome, whether you are just considering a 50 gallon barrel or want to do a 100,000 gallon cistern. See #521 for Session 2 (optional).

**Instructor:** Derek Hahn and David Jackson

#### # 423 Bovine Reproduction Basics

We will be discussing signs of heat/estrus, when to breed AI to get your cattle herd pregnant and basic reproduction anatomy of a cow. There will be bovine reproductive tracts available to explore the art of AI.

**Instructor:**

#### # 424 Building a Pollinator Garden from Grass to Blooming Exuberance

That pollinators are in peril has been in the news. One cause is the loss of habitat and lack of abundant floral blooms to sustain them. Using urban landscapes and marginal land to replace lost flowering plants and habitats for nesting may restore some of the meadow habitats lost to development.

**Instructor:** Sharon Collman

#### # 436 Uncommon Fruits for Puget Sound Gardens

This topic discusses some tree, bush, and vine fruits that are not commonly known and grown in our area (i.e. hardy kiwi, aronia, quince, haskap, shipova, and others). The information is based on trials at WSU Mount Vernon NWREC and observations from nursery growers over several years.

**Instructor:** Jacqueline King

#### # 442 Owls of the Night

For thousands of years myths and legends have surrounded owls: are they symbols of good fortune and wisdom or harbingers of death? The Skagit Audubon Society will present an in-depth program about these unique and sometimes mysterious birds of the night. We will explore what makes an owl and owl, and their special adaptations for hunting at night. In Puget Sound we have nine regularly occurring owls. In the second half of the program we will take a look at these owls which are more likely to be heard than seen.

**Instructor:** Sheila Pera and Jane Brandt

#### # 444 Saddle Fitting

A good fitting saddle is imperative for the comfort of both horse and rider. It improves the way your horse will work, making them more willing. The goal of proper saddle fit is to identify a saddle that fits both participants - the horse and the rider. But which is the most important of the two? Without question, fitting the horse. Cherie will look at the key physical characteristics affecting saddle and fit and share critical saddle fitting points.

**Instructor:** Cherie Geerdes

#### # 445 Pasture Management

Too many weeds and not enough grass? Come find out how to assess your current livestock grazing program to help improve forage production, reduce weeds and runoff through some simple management strategies for helping to improve forage production.

**Instructor:** Eric Schuh

#### # 460 Home Orchard Pest Control

Learn how to control your fruit pests using organic, conventional, and mechanical means. Timing is most important and with dwarf trees it is possible to almost eliminate pesticides using mechanical control.

**Instructor:** Gary Moulton

#### # 468 Learn to Knit

Make your own fabric with two sticks and some string! This very basic class aims to teach those who've always wanted to learn how to cast on simply, make some knit stitches, and gradually build from there. Come with your learning hat on, no experience is required! *Class fee:* \$5

**Instructor:** Caryn Vainio



#### # 469 The Equine Tooth Fairy

Did you know the job of an equine dentist is mostly preventive work? Horse's teeth are always changing and can affect the overall health and performance of your horse. Come learn about annual dental care, dental deformities, tooth extractions, and the anatomy of your equine's mouth.

**Instructor:** Dr. Claire Tungseth

#### # 472 Fragrant Shrubs for PNW Gardens

Fragrance offers another level of pleasure to your garden. Learn about fragrant shrubs that will thrive in Pacific Northwest landscapes. There are some for every season of the year.

**Instructor:** Diana Wisen

#### # 474 Swine Health: Common Challenges

Producing high quality pork for yourself or your customers is enhanced by keeping them healthy and thriving. This class will cover common diseases that cause loss and illness in small swine operations. Bring your questions!

**Instructor:**

#### # 487 Concrete Slabs for Sheds, Greenhouses, Composting and Walkways

Need a place to hide the bodies? Pavement is forever, so concrete pads are the perfect solution to many farm problems such as manure management, rodent control, mud control and creating dry storage. We'll cover budgeting, design, permits, ground prep, forming, reinforcing, crack prevention, where to buy, installation, basic finishing, drying, tools, protective equipment, how to chip up and remove, and if it all goes to pot: cost to hire a pro.

**Instructor:** Jon Schwegler

#### #496 Raising Heritage Turkeys

Heritage turkeys are long lived, active foragers, genetically diverse breeds that are able to mate naturally and raise their young. Much slower to develop heritage birds live long enough to develop a layer of fat beneath the skin, which imparts a rich flavor to the meat. They also have larger thighs and legs because they still run and fly which produces especially dark, juicy meat. Learn how to raise heritage breeds of turkey for your family's needs.

**Instructor:** Benjamin Janicki



# Session 5:

2:00 - 3:00 PM

## Two-Session Classes

See pg. 2& 3 for class descriptions. To attend these classes, you must sign up for Part 1 in Session 4, or Part 2 in Session 6.

# 512 Preparing for Lambing and Kidding, Part 1

# 518 Let's Talk Goats, Part 1

# 522 Fruit Tree Grafting, Part 1

# 537 Good Clean Fun! - Soap Making 101, Part 1

# 551 Yarn From Scratch: Handspinning on a Wheel, Part 2

# 588 Poultry Processing, Part 2

# 592 Forestomachs, not Four Stomachs! Part 1

### #501 Souper-Natural Soups

We'll make souper-fast, souper-delicious soups from ingredients in your pantry and freezer that came from your souper-abundant garden.

**Instructor:** *Suzanne Butler*

### # 502 Intro to Home Cidermaking

An intro to making cider at home. Learn about equipment required, basic hygiene, apple processing, sweet cider making, hard cider fermentation and bottling. Also vinegar and cyser, and alternative methods of cider production.

**Instructor:** *Doug Hofius*

### #503 An Introduction to Dry Curing Salami, Curing Bacon & Making Prosciutto

Have the satisfaction of making your own bacon, pancetta or salami at home, with the ability to customize the flavor to your taste. Students will learn about meat selection and seasoning. We will discuss where to source equipment and spices. What is a "cure" and what is safe? Do I smoke? Is it a hot or cold smoke? What about food safety? Grinders, stuffers, and smokers will all be discussed as well as the different casings for the various sausages and salamis. If you have an interest in traditional food preservation, then this class is for you.

**Instructor:** *B.J. Martin*

### # 506 Design a Drip Irrigation System for Your Garden

After this dry summer you may be looking for a better way to water your garden. A drip irrigation system takes the work out of watering, whether a garden bed, deck garden, greenhouse, or individual plant, with a minimal loss to evaporation or runoff. It can be programmed to occur at any schedule desired. Master Garden and irrigation expert Bob Bryan will illustrate the design and implementation of drip systems in a number of scenarios.

**Instructor:** *Bob Bryan*

### # 507 Solar-Powered Portable Water & Electrics for Small Farms

Learn about practical home-built solar-powered water pumping, electric fences and lighting. great for small farms and leased pastures.

**Instructor:** *Brian Faley*

### # 515 Selecting the Right Hay

Paying too much for poor hay? Gary will discuss what to look for when buying hay and factors that affect hay nutrition. Learn what makes high-quality hay and how to identify it in the bale before you buy. **Participants are encouraged to bring samples of their own hay.**

**Instructor:** *Gary Fredricks*

### # 508 Camels: The Other Livestock

Milk. Wool. Meat. Pleasure riding. Carting. Dressage. All this and more is what a domestic camel can bring to your life. There are many factors to consider when contemplating addition of a camel or two to your herd, and as with other livestock animals, is it important to be fully informed before purchasing one. Learn about this fascinating, multi-purpose ruminant that's been domesticated longer than horses. Important information for choosing a camel such as species, age, gender and functional training will be covered as the speaker shares her experience and passion for this under-utilized and often poorly understood animal. In addition, learn about the cutting edge research with Animal Assisted Interventions utilizing these gentle giants both in Europe and North America.

**Instructor:** *Dana Brothers*



### # 514 Sourdough Bread Baking for Beginners

Flour, water, and salt. These are all you need to bake sourdough bread at home but the process can be confusing for the inexperienced. If you've tried keeping a sourdough culture without success, or if you'd like to try but are concerned about failure, come to this class on the art and science of sourdough. Come see and smell sourdough cultures at different stages and learn how to keep a thriving culture that will raise tasty bread in your home oven. We'll also learn ways to fit regular bread-baking into your busy life. Each student can take home well-tested recipes and their own established culture to help them get start baking right away.

**Instructor:** *Carol Frey*

### #520 West Coast Big Maple Syrup Tapping For the Hobbyist

Producing Maple syrup is no longer just for the east coast. Learn how to tap the big leaf maples in your backyard to make some of the most flavorful maple syrup you have ever tasted. This class will present you with how to know what trees will produce sap, what tools to use and how to cook it down into maple syrup. Impress your friends and family when you bring them homemade big leaf maple syrup produced on the West Coast.

**Instructor:** *Devin Day*

### #521 Build Your Own Rain Barrel (Rain Water, Part 2)

In this "second" session we will help you build a 55 gallon rain barrel to use at your own house. You will not need to bring any tools or parts for this class, but will need to have enough room in your car to take the barrel home. We can typically fit a barrel in the back seat of a sedan. *\$50 to cover the cost of the rain barrels and is limited to the first 30 people registered, who take their barrel home.* Anyone is welcome to watch the-build-your-own rain barrel at no charge. (See Session 3, #421 for Part 1.)

**Instructor:** *Derek Hahn and David Jackson*

Session 5 class descriptions are continued on the next page

### # 534 Reseed, Renew, Rebound Your Pasture

Has your pasture gotten thin, weedy, or weak? Have you over-grazed, hit it hard, and just want to bring it back to life or improve it? Learn when, why or how to renovate your pastures. Soil testing, combined with timing, seeding varieties, equipment and proper grazing management will be discussed to make your pastures the best they can be.

**Instructor:** *Bobbi Lindemulder*

### # 536 The Best Apple and Pear Varieties for the Northwest

What varieties are right for you? Hear about the very best apple and pear varieties of the Pacific Northwest from WSU researcher Jacky King.

**Instructor:** *Jacky King*

### #538 Plant-Based Diets

Interested in incorporating more plant foods into your diet? Many people are moving towards incorporating plant foods for better health. This workshop will provide introductory information and skills useful to those considering any configuration of plant-based diet. If someone in your household has dietary restrictions and is looking to move toward more plant foods, this is the course for you! Learn new recipes and enjoy samples of delicious plant based foods-based foods to incorporate into any diet!

**Instructor:** *Jennie Bryan-Goforth*

### # 543 Rats: It's Not Rudolph In Your Attic

EEK! That scurrying and squeaking won't go away with a squirt of oil -- but if you learn the habits and behavior of rats you will be able to get rid of them. Learn to bait, trap and exterminate these disease carrying pests.

**Instructor:** *Karl Bishop*

### # 544 Gardening For Pollinators

The importance of our pollinators is in the news. Pollination of plants is responsible for 1 of every 3 bites of food we consume and is *essential* for our varied diet. Come learn some important ways you can attract and support those that 'buzz' in your own garden space.

**Instructor:** *Virgene Link-New*

### # 546 Tiny Home Design!

Interested in this popular idea, but need some professional help with design and construction ideas? This class will cover construction options and framing systems, code, foundation and roofing options, design styles, use of recycled materials, budgeting, and more. Instructor Robert Goforth is a builder with decades of experience who has built many different styles of tiny homes and small structures.

**Instructor:** *Robert Goforth*

### # 550 Leather Craft

Learn the single-loop round braid. You will make a Skillet Handle Mitt that you will be able to take home with you. Class Fee \$3.00

**Instructor:** *Eugene Barnes*

### #555 Quilts: Caring for Treasures

Have you been entrusted with heritage family quilts or perhaps a quilter yourself? Learn how to care and repair your quilts you make or have inherited from family members. Preserve these treasures for the next generation.

**Instructor:** *Dianne Coombs*

### # 561 Giant Pumpkin Growing for Beginners

Imagine the sun in your face in Half Moon Bay, CA while standing on top of your giant pumpkin weighing in at 1910 pounds because that's exactly what Cindy Tobeck, the instructor for this class, did and then collected her check for \$11,500. In class she will cover starting pumpkin seeds, pruning and training your plant, and general growing requirements. Seed nomenclature and growers resources will be covered. What a great opportunity to learn from the best.



**Instructor:** *Cindy Tobeck*

### #564 Buying a New Horse: Up the Odds

Horse shopping can be daunting, and weeding out the good from the bad is sometimes a difficult task. It's easy to get carried away by a big set of brown eyes, even though the horse batting them may not be the best horse for you. However, the wrong horse can ruin the fun of riding and may be unsafe. We'll talk about pre-purchase exams, horse attitudes, confirmation, and intended use.

**Instructor:** *Dr. Jennifer Sparks*

### # 565 Tractor Maintenance

A well-maintained working tractor is the mainstay of many small farms. Learn routine preventative maintenance to keep your tractor starting up on the first turn.

**Instructor:** *Steve VanValkenburg*

### # 567 Introduction to Mason Bees

This class covers the basics of why mason bees are important to us. Learn from someone who has been raising mason bees for 20 years how easy it is to raise mason bees, where to locate their houses for best results, how many bees you need, what plants attract mason bees, and how our NW weather can affect the bees and your crops.

**Instructor:** *Ray Strelecki*

### # 568 Learn to Knit

Make your own fabric with two sticks and some string! This very basic class aims to teach those who've always wanted to learn how to cast on simply, make some knit stitches, and gradually build from there. Come with your learning hat on, no experience is required! Class Fee: \$5.00

**Instructor:** *Caryn Vainio*

### # 571 Bicycle Maintenance 101

Learn the basics of maintaining your bicycle from a professional bicycle mechanic. We will discuss everything from how to speedily fix a flat tire to small repairs and catching issues early on. Bring any questions about your own bicycle and leave with some tips and tricks on making it run smoothly!

**Instructor:** *Nick Tuttle & Derrick DeVries*

### #582 First Aid for Farm & Family

Learn farm first aid, what to do in an emergency and how to evaluate for severity of injury from a career firefighter/EMT with 18 years of experience.

**Instructor:** *Robert Shelley*

### # 595 Why are So Many Trees Dying? Forest Health Basics in Western WA

The class covers what every owner of wooded property needs to know about how forest health works in western Washington. Learn about current and spreading issues affecting the area, risk factors, and how to know how well your forest is functioning. Know what's normal and what's not, when to be concerned, and what to do if you suspect a problem. The discussion will include root diseases, insects, parasitic plants, and drought, and we'll discuss practical strategies for recovering from and preventing problems.

**Instructor:** *Kevin Zobrist*

# Session 6:

3:15 - 4:15 PM

## Two-Session Classes

See pg. 2& 3 for class descriptions. To attend these classes, you must sign up for Part 1 in Session 5.

# 612 Preparing for Lambing and Kidding, Part 2

# 618 Let's Talk Goats, Part 2

# 622 Fruit Tree Grafting

# 637 Good Clean Fun! - Soap Making 101, Part 2

# 692 Forestomachs, not Four Stomachs! Part 2

### # 600 Motorcycle Maintenance 101

Maintain your bike before you crash and burn. Learn how to change and clean your air filter, change your oil, maintain and adjust your bike's chain and change out brake pads. Ken Oliver, crew chief for many local moto racers, will show you how to keep your bike at peak performance.

**Instructor:** Ken Oliver and Derrick DeVries

### # 601 Vets in International Missions: Giving a Hand Up, Not a Hand Out

Dr. Haskins will have just returned from his trip to Kenya where he and his team strive to improve the lives of the people by providing veterinary services to livestock and work on sustainability projects for the people.

**Instructor:** Dr. Dan Haskins

### # 602 Intro to Home Cidermaking

An intro to making cider at home. Learn about equipment required, basic hygiene, apple processing, sweet cider making, hard cider fermentation and bottling. Also vinegar and cyser, and alternative methods of cider production.

**Instructor:** Doug Hofius

### #603 An Introduction to Dry Curing Salami, Curing Bacon & Making Prosciutto

Have the satisfaction of making your own bacon, pancetta or salami at home, with the ability to customize the flavor to your taste. Students will learn about meat selection and seasoning. We will discuss where to source equipment and spices. What is a "cure" and what is safe? Do I smoke? Is it a hot or cold smoke? What about food safety? Grinders, stuffers, and smokers will all be discussed as well as the different casings for the various sausages and salamis. If you're interested in traditional food preservation, this is for you.

**Instructor:** B.J. Martin

### # 605 Keeping It Clean in the Coop, Cage, and Corral

With several serious new diseases of concern circling worldwide--including in Washington--and the usual pathogens always circulating, now is a good time to review your farm biosecurity plan. From vaccinations to visitor policies, this presentation will be a comprehensive look at the actions you can take to reduce the introduction and spread of diseases on livestock farms.

**Instructor:** Dr. Susan Kerr

### # 608 African Tortoises

Interested in having a reptile join your herd? Come learn about the African Spurred Tortoise, the largest land tortoise in the world. The strong and silent type, this animal has unique dietary and habitat needs. Do they hibernate? How can you sex a tortoise? Is there any personality differences between them? Are they affectionate? Learn all this and more and, weather permitting, you'll have the opportunity to meet Marvin the uniquely friendly tortoise.

**Instructor:** Dana Brothers

### # 611 Arc Welding

Intro to welding with an opportunity for hands-on training for each student. Add \$5 materials fee.

**Instructor:** Darryl Main

### # 614 Sourdough Bread Baking for Beginners

Flour, water, and salt. These are all you need to bake sourdough bread at home but the process can be confusing for the inexperienced. If you've tried keeping a sourdough culture without success, or if you'd like to try but are concerned about failure, come to this class on the art and science of sourdough. Come see and smell sourdough cultures at different stages and learn how to keep a thriving culture that will raise tasty bread in your home oven. We'll also learn ways to fit regular bread-baking into your busy life. Each student can take home well-tested recipes and their own established culture to help them get start baking right away.

**Instructor:** Carol Frey

### # 615 Body Score Condition: Your Livestock

How do you know if your feeding your animals correctly? Learn how to evaluate your animal's condition and understand how that relates to their productivity and health.

**Instructor:** Gary Fredricks

### # 624 Eyes in the Field: Invasive Insects Attacking Trees, Shrubs, Lawns/Pastures and Soils

Our state is being invaded by insects riding in on plants, planes, autos and air. Learn what to look for and how to get identifications on insects that puzzle you.

**Instructor:** Sharon Collman

### # 627 Clematis, the Queen of Climbers

Learn to bring the amazing beauty and variety of clematis to your garden—with ease. Laura Watson will tell you how. Using great photos and a friendly speaking style, she will showcase the splendor of clematis and their amazing variety in color, shape, bloom time, and growth habit. Get details about the care of clematis, information about simplified pruning, and recommendations for easy clematis to try. You will receive an informative and detailed handout.

**Instructor:** Laura Watson

### # 628 Shearing Sheep On A Stand

Take control of getting your sheep sheared on your timeline and your standard. Watch a local top breeder of premium wool and meat sheep show you her system for shearing sheep on a stand. Keeping your animal secure and safe while at an appropriate height makes this system a win for all. (*Outside; Dress warmly.*)

**Instructor:** Eileen Hordyk

### # 630 Get Your Smoke On

Smoke meat, fish and poultry at home with your barbecue or smoker while learning from award winner Pat Cairus.

**Instructor:** Pat Carius

### # 634 Raising a Couple of Beef

Bobbi Lindemulder, Snohomish Conservation District, partners with Todd Macomber, President of the Snohomish County Cattlemen, and a panel of beef producers to answer common questions including: How to find quality animals, What do I need in my vet box, How do I market my beef, How can I be successful when I've never farmed!? Come hear from cattlemen at all levels of experience, bring your questions, and avoid common pitfalls in getting into raising cattle.

**Moderators:** Bobbi Lindemulder and Todd Macomber. **Presenters:** Members of the Snohomish County Cattlemen's Association

### # 638 Seed Saving for Home Gardens

People save seed for many different reasons, including the preservation of genetic diversity and cost reduction. We'll learn the basics on what can be saved, best practices, seed processing, and storage options. Instructor is the director of Finney Farm Seed Distro, which has provided free seed to local schools, food banks, and community gardens for a decade. Packages of local, organic, heirloom seed will be made available to all participants.

**Instructor:** Jennie Bryan-Goforth

### # 643 The Family Milk Cow—Milk for You!

Learn about the joys, workload, options, benefits and realities of a family milk cow. Basic care, sanitary milking practices, and uses for your milk will be covered, as well as tips to make it all work on a small farm or even backyard.

**Instructor:** Karl Bishop

### # 650 Leather Craft

Learn the single-loop round braid. You will make a Skillet Handle Mitt that you will be able to take home with you.

**Instructor:** Eugene Barnes

### # 653 Cushing's Disease in the Horse

Interested in learning more about Cushing's Disease? Have you heard about Equine Metabolic Syndrome? In this lecture we will talk about every aspect of these common issues, from identifying early signs to management after diagnosis. The goal is to help our equine companions live long, happy lives by providing you with the most up-to-date information.

**Instructor:** Dr. Viveka Rannala

### # 661 Giant Pumpkins Beyond the Seed

This advanced class will cover soil amending, seed selection, fertigation and watering, pest management and disease control. Here's where you will learn to push your pumpkin to the max.

**Instructor:** Cindy Tobeck

### # 665 Fixing a Leaky Sink or Faucet

Tap, Tap, Tap, Do you have a leaky faucet driving you crazy? Learn how to make minor repairs to your sink and bring quiet to your home.

**Instructor:** Steve VanValkenburg

### # 667 Mason Bees: Now That I Have Them, What Do I Do?

This class goes into when to put out your bees, how to maintain a healthy bee supply, and how and when to harvest your bees. We'll cover storing bees for next season. Cleaning of bees and houses will be demonstrated during this class. Several styles of bee houses will be displayed, and their pros and cons will be discussed. **Each participant will be given their own bee house to build and take home.** \$20.00 materials fee/student.

**Instructor:** Ray Strelecki

### # 671 Cooking With Winter Vegetables

With our mild PNW winters, we're blessed to have an abundance of local produce available to us year-round. Join Boldly Grown Farm owner Amy Frye for this hands-on session providing tips and tricks for storing and preparing an assortment of winter vegetables—from stalwart staples like carrots, beets and squash to newfound favorites like radicchio and celeriac. Recipes provided so you can carry on your culinary adventures at home.

**Instructor:** Amy Frye

### # 673 Best Horsekeeping Practices for Western Washington

Join Michael Hipp, Farm Planner with the Snohomish Conservation District who specializes in all things equine, to discuss the best practices for keeping a horse in the unique environment of western Washington. Topics will include soil, pasture, bedding, managing manure, handling rain and runoff, water catchment, and a demonstration and model of how to properly construct a basic Heavy Use Area, including different footing options and how to choose which one is best for your horse.



**Instructor:** Michael Hipp

### # 680 What to Look for When You Buy or Rent a Piece of Property

You should always go on a second date! Match your farming goals and objectives with potential farm sites. All farms are not created equal. Learn what resources are available for evaluating soil types, land usage, setbacks, regulations and wetlands **before** you purchase a farm. Careful preplanning begins a strong foundation for meeting your personal and financial goals.

**Instructors:** Emmett Wild and Charlie Boon

### #682 First Aid for Farm & Family

Learn farm first aid, what to do in an emergency and how to evaluate for severity of injury from a career firefighter/EMT with 18 years of experience.

**Instructor:** Robert Shelley

### # 687 Hiking and Wilderness Recreation Basics

Get out there!... but... in the past decade, more than 200 hikers have been rescued by the Volunteers of Snohomish Search and Rescue. The best way to learn is to learn from the mistakes of others, so we will introduce the basics of backcountry risk mitigation through telling some of these stories. Beyond these basics, we'll cover hiking locations both popular and remote, as well as suggesting books and websites to help you discover your own adventure. Other topics include clothing, equipment, cell phone apps, satellite communication devices, permits, parking passes and weather.

**Instructor:** Jon Schwegler

### # 690 Harvesting the Hive

Got honey? How do you extract honey from the hive, bottle and store it. What about propolis? Pollen or honeycomb? This class covers harvesting from the hive, storage and use of honeybee products.

**Instructor:** Bonnie Swanson

### #696 Heritage Poultry Breeds

Heritage chicken breeds are heirloom breeds that adhere to a few important standards including: recognition by APA (American Poultry Association), naturally mating (no artificial insemination), have a long and productive outdoor lifespan, and have a slow growth rate. We will discuss breeding and standards, showing, and maintaining a flock of heritage birds.

**Instructor:** Benjamin Janicki

### #699 Common Health Conditions in Poultry

Do you currently have a backyard flock, or are you interested in starting one? Do you want to know more about common diseases in backyard chickens? Then this is the class for you! Come learn about the common diseases, their clinical symptoms, and possible management and treatment options. This includes, among others, bumble foot, egg impaction, internal and external parasites, among others!

**Instructor:** Dr. Laura Chen