# internatio

40 YEAR ANNIVERSARY 2021 CLASS CATALOG

TEACHING BLACKSMITHING | WOODWORKING | TIMBER FRAMING | FARMING WITH DRAFT ANIMALS COOPERING | AND OTHER PRACTICAL SKILLS

# WHAT WE DO





Tillers International turns to the historic farming tools, skills, and knowledge from the 19<sup>th</sup> and early 20<sup>th</sup> Centuries and repurposes them for small-scale farmers in developing countries where tractors are out of reach. The cost of the purchase, maintenance, and repair of tractors makes them nearly impossible to own for so many farmers which is why the affordable, rugged, and easily repaired farming tools from America's farming heritage become relevant.

Tillers International uses these historic tools and skills and collaborates with small-scale farmers in developing countries to adapt them to the farmers' fields, animals, and access to construction materials.

Since our founding in 1981, thousands of small-scale farmers across Central and South America, the Caribbean, and Africa have gone through our training clinics to learn how to adapt these tools to fit their needs.

To keep these skills alive in North America, and to help support our overall mission, we teach variations of many of the skills used overseas with a special emphasis on metalworking, woodworking, and draft animal handling.

We're proud to say that many of our classes in the United States have been recognized for their expertise and excellence. These include having North America's leading coopering program (barrel making), the leading school for

traditional blacksmithing in the Midwest, being one of the top sites in the U.S. for learning how to work with draft animals with a special emphasis in oxen, offering the best value for learning the craft of timber framing, and more.

By offering these classes on practical skills, we keep these once common skills alive and relevant in the daily lives of small-scale farmers everywhere.

In this modern age, we're honored to keep the work of our forefathers and foremothers relevant to new generations and to those around the world that could benefit the most from it.

Please join us for a class at our location in Scotts, MI. The classes are fun, unique, and wonderful to enjoy by yourself or with your friends and family. Donations to help us keep continuing these skills would also be deeply appreciated. And we're also always looking to work with businesses as sustaining partners.

From our staff in Africa and the United States, we'd like to thank you for considering Tillers International as you begin enriching your future by learning these skills from the past. We look forward to being a part of your journey.

- Your Friends at Tillers International

DETROIT PARTNERSHIP FOR FOOD, LEARNING, AND INNOVATION CLINICS IN UGANDA. www.CANR.MSU.edu/DETROIT PARTNERSHIP INSTAGRAM: MSU DETROIT AG

# OXEN AND DRAFT HORSES

# **FARMING WITH OXEN & HORSES**

INSTRUCTORS: RICK ESHUIS AND JEHRA SMITH \$450

This course is a unique opportunity to put skills in ox and horse handling to work. We immerse you in a wide variety of field work—tillage and planting, the first hay cutting, and cultivating early weeds. Part of each day is spent learning skills and the rest in field practice. Coaches help refine field skills and draft animal handling. Assignments depend on skill, but we entrust you with real farm work. Activities flex with the weather.

JULY 21 - 24

WED - SUN

The Connection: Tillers International trains farmers in developing countries how to make and use custom-made tools that are often powered by draft animals such as oxen or donkeys. This helps farmers work their fields more effectively and better provide for their families and communities.



# **OX DRIVING INTRO**

INSTRUCTORS: ROB COLLINS, FORMER PRESIDENT MIDWEST OX DROVERS ASSOCIATION JEHRA SMITH, TILLERS INTERNATIONAL \$250

Farmers have been working with oxen for more than 6,000 years. Oxen have done everything from helping people build ancient wonders to pulling siege weapons into battle. In many parts of the modern world, oxen are still in heavy use because they're an inexpensive alternative to tractors and an excellent resource on small farms or in woodlots. This class will teach you to drive oxen using visual, verbal, and tactile cues. Expert instructors introduce you to these amazing animals by concentrating on driving skills, but also introducing yoking, training, hitching, and alternatives to standard techniques. No previous experience with large animals needed.

MARCH 13 - 14 SAT - SUN

### **OXEN BASICS**

INSTRUCTORS: DREW CONROY, PHD, UNIVERSITY OF NEW HAMPSHIRE, ROB COLLINS, FORMER PRESIDENT MIDWEST OX DROVERS ASSOCIATION, JEHRA SMITH, TILLERS INTERNATIONAL \$450 WITH YOKE IN JUNE | \$295 WITHOUT YOKE IN AUGUST

This comprehensive class lead by an all-star line-up of instructors develops skills in driving, training, and yoking. Learn to select, team, and care for oxen. Use low-stress training to teach calves. Drive teams hitched to various loads, practice field tasks, and try your hand at early shop skills to shape your own small yoke (added charges for yokes more than 6" bow width). This class is a must for anyone interested in learning how to work with these incredibly powerful animals.

JUNE 20 - 24 SUN - THUR AUGUST 8 - 11 (NO YOKE) SUN - TUES

# **OX TRAINING/DRIVING CLINIC**

INSTRUCTORS: ROB COLLINS, FORMER PRESIDENT MIDWEST OX DROVERS ASSOCIATION JEHRA SMITH, TILLERS INTERNATIONAL \$295

Designed to take your ox training skills to a higher level. Tillers' staff and guest instructors share training skills for remote commands, driving from behind, use of lines, etc. Participants should have experience driving oxen before taking this class. Participants are also encouraged to bring their own animals for focused training.

OXTOBER 15 - 17 FRI - SUN

### **DRAFT HORSE BASICS**

# INSTRUCTORS: DONN HEWES, RICK ESHUIS, JEHRA SMITH \$450

Some of the most highly regarded draft horse teachers in North America share draft horse handling, hitching, and driving skills. Participants begin by building confidence with the gentle giants in the barn, brushing, and harnessing. Then, skills will be honed with simple ground driving of a single horse progressing to plowing and other fieldwork with a team.

APRIL 15 - 18	THUR - SUN
OXTOBER 20 - 23	WED - SAT

# **DRAFT HORSE TRAINING SEMINAR**

# INSTRUCTOR: HARLAN YODER, AMISH FERRIER \$140

This seminar will take place at farm of an Amish Ferrier in Centerville, MI, and will cover Draft Horse Basics for students interested in training techniques. Harlan Yoder, who specializes in training working horses, will take you through the steps for transforming an inexperienced colt into a well-behaved workhorse. Topics include working inadequately trained horses and building confidence in horses.

BLACKSMITHING + METALWORK

M. Will

The Connection: Blacksmithing using traditional methods that work "off-the-grid" plays an important role in what we do internationally. We partner with local blacksmiths to create tools such as plows, weeders, planters, and parts for water carts. The blacksmithing classes we teach in the U.S. reflect the skills we rely on when working in the field in developing countries.



### **BLACKSMITHING I: INTRODUCTION**

# INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$275

This fast-paced introduction to smithing moves you through the fundamentals: basic hammer skills, heat treating, forge welding, and identification of "found" steels. By the end of the second day students will be turned loose to make interesting forged pieces with the support and collaboration of a blacksmith with 30 years of experience. Safety, tools, techniques, materials, terminology, and shop set-up will all be explored. With an anvil for each student, there is plenty of hands-on learning and superb coaching in this popular class. The Herb Nehring Blacksmith Shop is a beautiful timber-framed structure and consists of six coal forges and twelve anvils, along with a myriad of other tools of the trade. Students will work almost exclusively with coal. This class is an excellent start for a hobby or new occupation.

A/ JAN 9-10	SAT - SUN	9 - 5 PM	G/ JULY 10-11	SAT - SUN
B/ FEB 6-7	SAT - SUN		H/ SEPT 11-12	SAT-SUN
C/ MAR 6-7	SAT - SUN		I/OCT 23-24	SAT- SUN
D/ APR 17-18	SAT - SUN		J/ NOV 18-19	THU - FRI
E/ MAY 7-8	FRI - SAT		K/ DEC 4-5	SAT - SUN
F/ JUNE 5-6	SAT - SUN			

# **BLACKSMITHING II: SKILL BUILDING**

# INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$275

Build on skills learned in Blacksmithing I. Hands-on projects improve your hammer skills and add to your techniques. Work on two projects, a trivet and tongs, and have plenty of time for individual projects. Coaching speeds your progress. A great way to enjoy and refine your smithing skills.

FEBRUARY 13 - 14	SAT - SUN
AUGUST 21 - 22	SAT - SUN

# **BLACKSMITHING FOR WOMEN**

# INSTRUCTOR: JENNIFER HORN, DAISY HILL FORGE \$275

Created due to popular demand, this introduction to blacksmithing covers the same projects as Blacksmithing I except in an all female environment including the instructor, Jennifer Horn of Daisy Hill Forge. The all female class is intended to create an atmosphere where students feel free to ask questions as they begin their journey into the craft.

MARCH 13 - 14	SAT - SUN
NOVEMBER 6 - 7	SAT - SUN

# BLACKSMITHING III: FORGE BRAZING & PUNCHING A HAMMER HEAD

# INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$275

The class will primarily focus on two different skills: forge brazing and punching a hole through metal such as a hammer's head. Forge brazing is a way to weld pieces of metal together with softer metals such as copper or brass.Punching allows smiths to create a hole through metal for functional or design reasons.

NOVEMBER 20 - 21 SAT - SUN

# PARENT AND TEEN BLACKSMITHING INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL

### \$450

Teens and their parent (or other adult) together can learn metal forging skills in the blacksmith shop with experienced instructors in this popular class. Students make BBQ tools, chisels, and other projects. The fire and tools used in this class demand respect and develop responsibility. Note-Teen and parent/adult need to register together for this class. Tuition and materials price reflects registration for the pair.



# ADVANCED BLACKSMITHING WITH PETER ROSS: COMPASSES TIMES TWO

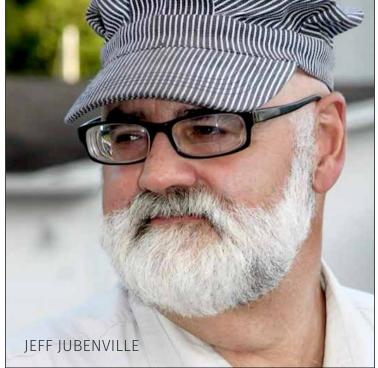
INSTRUCTOR: PETER ROSS, STUDIO FOREMAN BLACKSMITH/WHITESMITH, SILER CITY, NORTH CAROLINA WWW.PETERROSSBLACKSMITH.COM \$650

Straight leg compasses have been an essential workman's tool for centuries. In this workshop we will make two types; a 6" friction joint, which we will then use when making the second pair, a 10" cooper's compass with wing and locking thumbscrew. Both styles involve forging to specific dimension, some forge welding, hot fitting the joint, and then finishing at the vise with files. The smaller pair are forged freehand, while the cooper's compasses require open forging dies which we can make during class. The forgings are challenging- expect to make several sets of forgings as part of the learning process.

The emphasis will be on basic hand hammer skills at the anvil and basic filing skills at the vise. We will discuss the basis for the designs and the traditional aesthetic involved. While the forms are traditional, there is opportunity in this class to modify the tools to suit your taste. Variants, such as calipers, can be made as well. We will also compare the characteristics of wrought iron and mild steel. Students may elect to use iron in making the tools.

AUGUST 16 - 20

MON - FRI



ADVANCED BLACKSMITHING WITH JEFF JUBENVILLE INSTRUCTOR: JEFF JUBENVILLE, STUDIO FOREMAN PALEY STUDIOS, ROCHESTER, NY WWW.ALBERTPALEY.COM \$650

Producing successful wrought iron forms requires thoughtful consideration of the characteristics inherent in the material as a basis for design. These characteristics are also integral to solving problems associated with transforming challenging designs (designs which stretch the visual and mechanical envelope) into finished, three-dimensional iron forms.

Jeff Jubenville brings over four decades experience blending historic and contemporary design/technique traditions through which to create exciting and refreshing forms. While much of Jeff's work has made extensive use of trip-hammer forgings, he is also adept at freehand processes.

This class will orbit around hand-hammer and anvil, exploring considerations involved in creating vibrant original iron forms. Unique to this class will be the chance to explore design opportunities available through the proper selection and use of heating torches, a technique often misunderstood and misapplied.

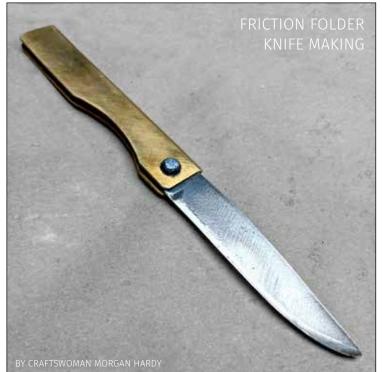
JUNE 15 - 19

TUE - SAT

Thank you to Holland Anvil for sponsoring the Blacksmithing and Metalwork portion of our 2021 Class Catalog

ALL HOLLAND ANVIL PRODUCTS ARE CAST AT OUR FOUNDRY IN HOLLAND, MICHIGAN. WE HAVE YEARS OF INDUSTRIAL EXPERIENCE WITH H13 AND DUCTILE IRON AND WE ARE PROUD TO BRING OUR KNOWLEDGE TO YOU THROUGH OUR CASTINGS. WE ARE HONORED TO SUPPORT AMERICAN BLACKSMITHS AND THOSE AROUND THE WORLD.





# **FRICTION FOLDER KNIFE** INSTRUCTORS: JOHN SARGE AND JEHRA SMITH TILLERS INTERNATIONAL \$275

A friction folder relies on the handle pressing against the blade to "lock" it in place. The simplicity of the design alludes to the fact that this is one of the first styles of folding knives commonly used around the world. This class will focus on creating the blade, handle, and hinge required for this unique knife. The photo above shows roughly what to expect by the end of the second day, but students can continue buffing their knives to their liking at home. Blacksmithing I or similar experience recommended.

MAY 15 - 16

SAT - SUN

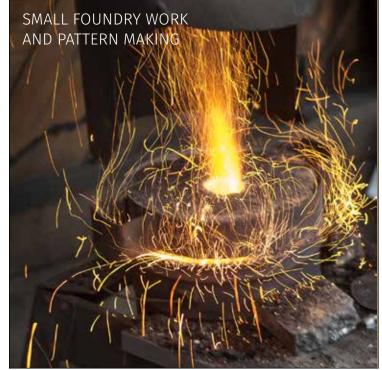
# BLACKSMITHING: MAKING WOODWORKING AND FARM-ING/GARDENING HAND TOOLS: GETTING A HANDLE ON SOCKETED TOOLS

INSTRUCTOR: JIM SLINING, TILLERS INTERNATIONAL \$295

This two-day class will focus on the skills necessary to make handle sockets for a variety of robust tools. While we will focus on the skills required in making this element (fullering, bending, welding and drifting) we will study and practice a variety of applications. Students will make an assortment of woodworking and farming/gardening hand tools as vehicles to explore applications for socketed handles. Any students completing Blacksmithing I and II at Tillers International (or equivalent experience) possess the basic skills necessary for this class.

APRIL 15 - 16

THUR - FRI



SMALL FOUNDRY WORK AND PATTERN MAKING INSTRUCTORS: RUSS ALLEN AND PAUL MCGUIRE \$295

Learn to cast aluminum in green sand molds. Begin with mixing your own sand and making a small furnace. Fuels, furnaces, and crucibles are discussed, challenges of patterns and molding are explored. Learn different techniques for duplicating objects. Bring a small, simple object for use as a casting pattern.

MARCH 20 - 21

SAT - SUN

KNIFE MAKING

# INSTRUCTOR: TIM CARR, BLACK BEAR FORGE \$275

Instructor Tim Carr shows you the care needed in forging high carbon blades. Refine hammer skills, make corrections with the file, and develop annealing and tempering techniques. Mount a fine wood handle to add beauty and contrast to the steel. Tim is active on the board of the Michigan Artist Blacksmiths' Association (MABA) and has been smithing for nearly 20 years. PREREQUISITE: Blacksmithing I or equivalent.

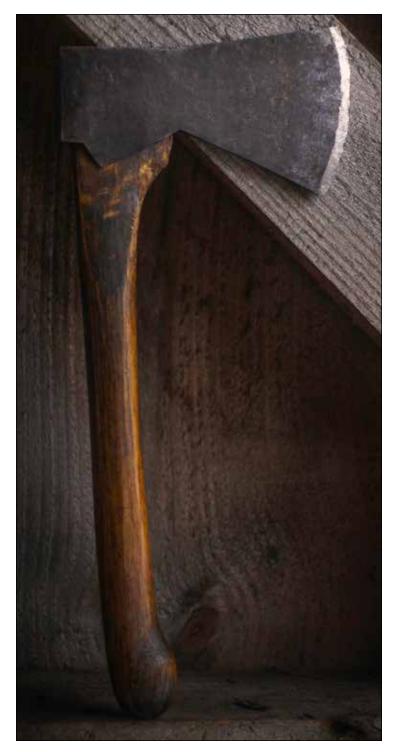
MARCH 27 - 28	SAT - SUN
OCTOBER 2 - 3	SAT - SUN

# KNIFE MAKING: HANDLES

# INSTRUCTOR: JEHRA SMITH, TILLERS INTERNATIONAL \$140

Scheduled for the day after Knife Making, this class is intended to focus on ways to elevate knife handles from functional to beautiful or extremely rugged. Jehra has been making knifes since his early teens and has experience making several kinds of handles. Students are welcome to bring their own materials if you have something special in mind.

MARCH 29 OCTOBER 4 MONDAY MONDAY



# ADVANCED BLACKSMITHING: HATCHETS - TRADITION-ALLY CONSTRUCTED EDGE-TOOLS

# INSTRUCTOR: JIM SLINING, TILLERS INTERNATIONAL \$295

Viewed through modern eyes, it may be assumed that work methods of former times were adopted for want of any other choice. In this course we will approach edge tool construction using pre-industrial techniques. Particular emphasis will be placed on understanding the techniques pre-industrial artisans chose and refined over many generations. Beginning with a tomahawk on day one and a jointer's hatchet the following days, students will focus on forging, welding, steeling and heat treating procedures.

OCTOBER 14 - 15

THUR - FRI



# **OFF-GRID BLACKSMITHING**

# INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$275

If there is one blacksmithing skill in which we uniquely excel in it's blacksmithing in areas under less than ideal conditions. Join us for this unique blacksmithing class where we explore ways to improvize forges, create anvils, and ways to work with metal when a traditional workshop is nowhere to be found. Great for those into international development, missionary work, homesteading, and those that want to be prepared for anything life throws at them.

AUGUST 7 - 8

SAT - SUN

# **BASIC COPPERSMITHING**

# INSTRUCTOR: DOC SCHERTZ, DOC'S BLACKSMITHING \$295

This is a beginners class for those who are interested in learning the basic skills to manipulate copper. Students begin by learning to debur, clean and anneal copper. Basic hammer control introduces texturing. Design layout and chasing will add another skill level by introducing chisels and their unlimited uses. Students will also learn the technique of silver soldering and low relief. Finishing up with a patina finish will highlight the texturing and designs. Students will take home four class projects. These include a coupon, pencil caddie, vase and an eight inch plate. The plate will be sunk in the center and highlighted with a low relief design.

AUGUST 14 - 15

SAT - SUN

# **BEGINNING TINSMITHING**

INSTRUCTOR: MIC RUNYON \$295

Students will be introduced to the basics of tinsmithing. The class will start with a simple project that each of us will work through at the same time. After finishing up with the first project, we will



then choose individual projects to work on for the remainder of the class. There will be a variety of project choices which the student can choose from including mugs, canisters, baking pans, mixing bowls, candle holders, etc. Starting with basic layout and pattern making, we will walk through the cutting, forming, and assembly of the project.

MARCH 13 - 14 SAT - SUN

# **TINSMITHING: TEA AND COFFEE POTS**

INSTRUCTOR: MIC RUNYON \$295

We will look at a variety of tea pot, coffee pot, and coffee boiler styles from the 18<sup>th</sup> and 19<sup>th</sup> centuries. Uses and construction techniques of each piece will be discussed. The students will then work through the processes of creating a vessel of their choosing from the choices available. The project options will range from relatively simple Shaker style tea pots to complex Filey style bent spout coffee pots. Projects will be based on time restraints and students' skill level. Experience in historical tinsmithing techniques preferred but not required.

SEPTEMBER 18 - 19 SAT - SUN

### **TINSMITHING: PATTERN LAYOUT**

### **INSTRUCTOR: MIC RUNYON**

### \$295

Being able to layout patterns is vital to increasing your overall tinning skills. Starting with the study of construction techniques, we will be exploring the development and layout of patterns used in the creation of tinware. Parallel and radial line development will be demonstrated and practiced in depth with easy to understand steps. Students will be laying out the flat patterns for various geometrical shapes, including frustums of cones. We will also be looking at the art of reproducing an object, and how to get full size measurements from a photograph.

SAT - SUN

MAY 22 - 23

APPALACHIAN INSTRUCTOR: NAN WILDER CREEK WC \$295 ng your overall tinon techniques, we of patterns used in evelopment will be o understand steps. various geometrical

AUGUST 14 - 15

SAT - SUN



APPALACHIAN BROOM MAKING INSTRUCTOR: NANCY BINKOWSKI WILDER CREEK WORKSHOP, LLC \$295

Take a traditional skill to a new artistic level. Use hand-tying and stitching techniques to make superb sweeping brooms and great gifts. Learn broom handle selection, preparation, surface finishing, and broom corn selection. Learn the history of broom making. This class will prepare you to move forward with your skills and continue to develop this unique craft. All skill levels welcome.

TILLERS INTERNATIONAL.ORG

# WOODWORKING

Set

The Connection: Wood serves as a basic material for tools, components, fencing, buildings, and so much more. Understanding how to wisely make the most of this important resource is critical to craftsmen and craftswomen everywhere. Pictured are farmers carving a yoke at one of our training clinics in Uganda. The smooth and ergonomic wooden yokes are more comfortable for the oxen making it easier for them to pull loads including plows and other farming tools.



# **WOOD FUNDAMENTALS I: INTRO TO HAND TOOLS**

INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

In this day and age, so many people are rarely taught how to use basic hand tools even though most of these tools have been around for hundreds of years. This is Part One of a series of fundamental classes for those wanting to return to basics and be able to work and create with your hands. The skills in this introductory class can be used for woodworking or in other areas of interest. This class will cover fundamentals such as:

- Identifying chisel types and best uses
- Identifying saw types and best uses
- Identifying hand plane sizes / styles and best uses
- Hammers and mallets
- Measuring and marking / basic layout tools
- Vices and clamping methods

FEBRUARY 16 & 18	<b>TUES &amp; THUR</b>	6 PM - 9 PM
JUNE 16	WEDNESDAY	9 AM - 5 PM
SEPTEMBER 7 & 9	<b>TUES &amp; THUR</b>	6 PM - 9 PM

## WOOD FUNDAMENTALS II: SHARPENING

# INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$70

This introduction is vital for anyone wanting to work with wood to any degree. Much of the information can be applied to other tools not commonly used in woodworking such as hatchets, knives, etc.

FEBRUARY 23	TUESDAY	6 PM - 9 PM
SEPTEMBER 14	TUESDAY	6 PM - 9 PM

### TILLERS INTERNATIONAL.ORG

### WOOD FUNDAMENTALS III: HAND PLANE USE

# INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$70

A basic understanding of edge tools such as planes is key in woodworking. Planes are essential in everything from making a small wooden box to the construction of a three-story timber framed barn, etc.

FEBRUARY 25	THURSDAY	6 PM - 9 PM
SEPTEMBER 16	THURSDAY	6 PM - 9 PM

# WOOD FUNDAMENTALS IV: BASIC JOINERY

# INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$70

Understanding joinery begins elevating your work to the next level. When people think about fine wood craftsmanship, they are often imagining fine joinery. This last class in the Wood Fundamental series introduces you to one of the most functional, yet beautiful, aspects of woodworking. Taking the previous Wood Fundamentals, or their equivalent, is HIGHLY recommended before taking this class.

MARCH 2 & 4	TUES & THUR	6 PM - 9 PM
JULY 21	WEDNESDAY	9 AM - 5 PM
SEPTEMBER 28 & 30	<b>TUES &amp; THUR</b>	6 PM - 9 PM



**TOOL BOX/CHEST WITH DOVETAILED CORNERS** INSTRUCTOR: DAVE KRAMER AND ROB BURDICK TILLERS INTERNATIONAL \$325

Build a tool box for organizing/transporting your hand tools. It can also be a toy box, an heirloom quality memory chest, or anything your imagination desires.

This two-day class will focus on laying out and hand cutting dovetails for the box and apron corners, gluing and assembling the box and apron, and fitting the lid. Commercially purchased hinges will be provided, but you will need to purchase your own handles. If time allows, we will work on the tool holders/tray. More details online.

The sample box in the photograph is painted with traditional milk paint. We will not be applying any finish during the class as you can enjoy doing this final touch at home where the finish can dry properly.

JULY 29 - 30

THUR - FRI

# **BASIC WOODWORKING: STAKED SIDE TABLE**

# INSTRUCTOR: ROB COLLINS, PROFESSIONAL TEACHER \$295

This class will guide students through the building of a three-legged staked side table, one that looks good in many settings and can be adjusted up or down in size for many purposes. Students will learn to drill and ream accurate mortises, shape leg tenons with a simple tool, use a handplane to make tapered, octagonal legs and assemble their own table for permanent construction or as a knock-down piece. Some power tool safety and use will be covered, but most work will involve a basic set of hand tools.

### JULY 31 - AUGUST 1 SAT - SUN MAKING A FROE AND BEETLE



# INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

Learn how to forge an eye for a froe (a special tool for accurately splitting wood). Sharpen the blade by drawing out the hot steel on an anvil, and finishing with the grinder. Then turn a tapered hardwood handle on the wood lathe to fit the eye of your froe. If time permits, make a beetle (hardwood club for hitting the froe) on the wood lathe.

SEPTEMBER 15 DECEMBER 10 WEDNESDAY FRIDAY

# **MAKE A SHAVING HORSE**

# INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$275

The shaving horse (a bench with a foot-operated vise pictured on page 20) proves its usefulness to traditional woodworkers in many ways but especially when working on curved pieces like chair legs or preparing spindles for a turning lathe. Students of our nationally recognized coopering classes use shaving horses to hold wood firmly in place when making rounded staves for barrels and buckets.

DECEMBER 11 - 12 SAT - SUN

# **MAKING A DRAW KNIFE**

# INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

Woodworkers use draw knives to shave wood by drawing the tool towards themselves. You can see people using a draw knife with a shaving horse during a coopering class on page 20 of this catalog. Make a blade for a drawknife, learn how to harden and temper the tool steel, and turn two hardwood handles for your new drawknife.

DECEMBER 13

MONDAY 9 - 5 PM



# PARALLEL JAW HAND SCREWS/MOXON VISE

INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

Temporarily clamp on a powerful vise to almost any table or bench after you make this moxon vise with adjustable hand screws.

MARCH 17

WEDNESDAY

# **MARKING AND LAYOUT TOOLS**

INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

A good class for beginner workers, Marking and Layout Tools allows you the chance to practice your skills and leave with one or more useful tools that will help you with future woodworking projects.

**OCTOBER 27** 

WEDNESDAY

# WOODEN PLANE MAKING: RABBET PLANE AND COFFIN OR JACK PLANE

INSTRUCTORS: DAVE KRAMER AND ROB BURDICK TILLERS INTERNATIONAL \$325

Shaping and finishing a project with a plane you crafted yourself is a rewarding experience. In this class, every student will make two planes. Each student will make a rabbeting plane (a tool used to cut a notch — a rabbet — along the edge or a board) and then choose between a coffin profile smoothing plane or a jack plane with a handle. Learn how to shape the wooden bodies for the planes and then harden and temper your own cutting irons to fit your planes. You will also be taught how to set and adjust the blade in a wooden plane with the blade secured by a wedge.

OCTOBER 28 - 29



# **BENCH HOOKS, MITER BOXES, AND SHOOTING BOARDS** INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

These tools help you steady your projects on your work surface allowing you to quickly adjust and re-adjust as needed as clamps and vises are not in use. These are easy to use tools that make a great difference in completing many types of projects including the production of perfect miters joints.

APRIL 21

WEDNESDAY

# **IDENTIFYING WOOD FOR PROFESSIONALS**

GUEST INSTRUCTOR: TOM NEHIL P.E. NEHIL • SIVAK STRUCTURAL ENGINEERING

\$140

This class targets woodworking professionals and serious amateurs wanting to learn how to identify wood no matter the sample size, be it a board, a log, antique chair, or a splinter. Learning to identify wood is an indispensable skill whether you are trying to sort through a stack of mixed timber to attempting to evaluate the strength of an existing timber building. Space is limited.

MAY 8

SAT 9 - 4 PM

# **MAKE A WOODEN SAW HORSE**

NSTRUCTOR: CHRIS NEWMAN, NEWMAN CARPENTRY TIMBER FRAMING GUILD \$275

Two-day workshop, joinery and layout and assembly of a robust sawhorse. See photos and more details on the online class description.

AUG 21 - 22

SAT - SUN 9 - 5 PM



# **MAKE A BOW SAW** INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

Make a useful and graceful bow saw that can be used to cut curves and make ripping and crosscutting faster. A variety of sizes and various blade options will be available to choose from for different applications. Cut and shape parts on the band saw, then mortise and tenon the cross member and turn handles on the lathe.

FEBRUARY 17 WEDNESDAY AUGUST 18 WEDNESDAY

# WHEELWRIGHTING

**INSTRUCTORS: DAVE KRAMER AND JOHN SARGE** 

### \$325

Learn to costruct wooden wheels for wagons. See how small hubs are turned and mortised. Practice shaving spokes. Felloes are steam bent. Lend your hand as the team heat shrinks steel tires onto wheels in a cloud of steam. Wheel wrighting is a fascinating combination of early precision wood and metal working. This is the only class like this in North America. Discount available for members of the Association for Living History, Farm and Agricultural Museums (ALHFAM). ALHFAM members should call or email for discounted rate.

APRIL 22 - 23

THUR - FRI 9 - AM - 5 PM

# WAYS TO SECURE YOUR PROJECTS TO YOUR WORKBENCH

INSTRUCTOR: DAVE KRAMER, TILLERS INTERNATIONAL \$140

There are several ways to hold your project in place with various pros and cons to each depending on what you want to accomplish. On this workshop, we explore several methods of holding your work in place under different conditions.



### SPOKESHAVE / TRAVISHER INSTRUCTOR: DAVE KRAMER. TILLERS INTERNATIONAL

### \$325

Learn how to make your own spokeshave/travisher in this three-day long class for woodworkers looking to deepen their skill levels. Both tools are used in chair making. A travisher, the curved tool pictured, is used by chairmakers to shape the seat.

APRIL 8 - 10

THUR - SAT

# **IDENTIFYING TREES**

# INSTRUCTOR: TODD BARKMAN, PHD WESTERN MICHIGAN UNIVERSITY PROFESSOR \$140

In this short course, students will learn the traits of woody plants that allow for their identification using taxonomic keys and field characteristics such as smell, taste and texture. This will include a "crash course" in plant morphology so that different types of leaf arrangement, structure, as well as venation, margins and bases are understood. Emphasis on reproductive characters is essential so we will be sure to review characters of fruits. With a foundation in terminology of woody plant structure, the class will identify as many trees and shrubs as possible on the Tillers' nearly 300 acre farm. The species we will identify are known to produce some of the most exquisite woods in the world.

MAY 7 FRI 9 AM - 4 PM

We believe in empowering people everywhere by teaching them traditional and historically tested practical skills. A gift from you or your business would allow us to continue keeping these skills alive and sharing them with the world. Make a donation today at www.TillersInternational.org.

# **TIMBER FRAMING AND RAISING**

INSTRUCTORS: CHRIS NEWMAN, NEWMAN CARPENTRY, TIMBER FRAMING GUILD TOM NEHIL, P.E., NEHIL • SIVAK STRUCTURAL ENGINEERING, TIMBER FRAMING GUILD \$750

This class is widely considered the greatest value for learning timber framing in North America as we're more interested in keeping this great skill alive rather than profiting from students. Participants can expect to begin hands-on learning within a few hours of the first day of class. An engineer will discuss design elements and experienced framers guide you through layout, boring and chiseling mortises, forming tenons, cutting wind braces, assembling bents and more. The completed frames will be sold to help defray the costs of instruction (this is how we manage to keep class cost to only \$750). Please enroll at least a month in advance to give the Amish sawmill enough time to prep materials.

MAY 10 - 15	MON - SAT
SEPT 20 - 25	MON - SAT



# WINDSOR CHAIR MAKING GUEST INSTRUCTOR: JIM CRAMMOND \$550

In this 5 day class, students will fabricate parts and assemble them for the construction of a Windsor bowback chair. The class will begin with a log and finish with a completed chair. The topics covered will include riving a log, sharpening, and using a drawknife and spokeshave, bending wood, edge jointing, carving a seat, round mortise and tenon joinery, spindle turning on a lathe, chair assembly, and finishing with milk paint.

OCTOBER 19 - 23 TUE - SAT

# WINDSOR TALL STOOL GUEST INSTRUCTOR: JIM CRAMMOND \$450

NOTE: This three day class begins Friday evening at 6 pm. Its purpose is to familiarize students with wood-turning techniques, the joinery involved in making a Windsor chair or stool and carving a Windsor style seat. After fabricating the legs, stretchers and seat, students will assemble them to complete a stool. Topics covered will include sharpening, hand tool use, spindle turning, edge jointing, round mortise and tenon joinery and finishing with milk paint.

MARCH 5 - 7 FRI 6 PM, SAT - SUN 9 AM - 5 PM



**STONE MASONRY** INSTRUCTORS: TOM NEHIL, P.E., NEHIL • SIVAK STRUCTURAL ENGINEERING BLAIR BATES, BUILDING RESTORATION, INC. \$325

Instructor will take you through the history and theory of stone construction, making of mortar, and shaping of fieldstone into building stone. Presentations will provide insight into geology and the characteristics of different stone types, the mechanics of splitting and dressing stone, and the evolution of mortar systems from ancient to modern. You will then have opportunities to practice selecting, splitting, shaping and building with raw materials quarried locally.

SEPTEMBER 16 - 18

THUR - SAT

# COOPERING

Tillers International's intensive coopering classes make us the leading school in North America for anyone wanting an indepth introduction to this pre-industrial craft. Our highly respected barrel making classes come recommended by cooperages, wood enthusiasts, winemakers, distillers, and beer makers from throughout the United States and Canada. Call for group rates for professionals.

CHUCK ANDREWS COOPERING INSTRUCTOR

# **COOPERING BARRELS**

INSTRUCTOR: CHUCK ANDREWS, PRAIRIE WORKSHOPS, LLC \$750

This class moves students from straight-stave to tapered stave coopering. Water-tight coopering is the most difficult form of coopering. Students learn to make bent staves and assemble them into traditional barrels. In this class, each student will complete a 5 gallon pin keg made with white oak. PREREQUISITE: Coopering Buckets or Piggins. Note: A prerequisite qualifying Coopering Buckets / Piggins is being offered the week before this class. See below.

**OCTOBER 10 - 14** 

**SUN - THUR** 

# STRAIGHT STAVE COOPERING TOOLS: INSHAVE, CROZE, HOLLOWING KNIFE, GAUGES, AND BANDS

INSTRUCTORS: JOHN DAVENPORT AND DAVE KRAMER

\$295

Many of the specialty tools of the cooper are hard to find, new or used. Learn to make your own using basic blacksmithing and machining skills. This class has substantial value and expands the skills of a cooper into the realm of tool-making.

JUNE 10 - 11

# BARREL MAKING TOOLS: FLOOR JOINTER, HOOP DRIVER, FROE, AND RIVET SET

INSTRUCTORS: JOHN DAVENPORT AND DAVE KRAMER

\$295

Many of the specialty tools of the cooper are hard to find, new or used. Learn to make your own using basic blacksmithing and machining skills. This class has substantial value and expands the skills of a cooper into the realm of tool-making.

AUGUST 26 - 27

THUR - FRI

# COOPERING BUCKETS / PIGGINS

# INSTRUCTORS: JOHN DAVENPORT AND DAVE KRAMER \$295

The cooper was essential to packaging early fluid products. Learn to make your own small bucket or piggin with hand tools only. Among other things, students will shape bucket staves on the shaving horse with draw knives. They will also use a croze, inshave, hollowing knife, floor jointer, and hoop driver to complete the project.

PIGGINS - JUNE 12 - 13	SAT - SUN
BUCKETS - AUGUST 28 - 29	SAT - SUN
BUCKETS - OCTOBER 8 - 9	FRI - SAT



# **OUR SITE**

Tillers International, USA, is located on a nearly 325-acre farm in Scotts, MI. We have several timber-framed structures onsite including many picturesque barns, two main workshops, and a beautiful stonehouse where students may stay overnight at additional charge.

### WHERE TO STAY

We offer dorm-style, neo-rustic rooms with access to a fully-equipped kitchen, library, a dining area, and more. Most shared rooms have their own bathrooms The house's stone walls help keep the rooms cool through the early part of summer and plenty of windows help through the beginning of fall. The house includes rural Wi-Fi. Rates for the shared rooms start at \$50 per night.

Students are welcomed to camp on-site for only \$7 per night (or \$10 per night with power) which still gives you access to the bathrooms and shower in the stone house.

We are located minutes away from hotels in Kalamazoo and Battle Creek for those wanting air conditioning, TVs, faster WiFi and other amenities. A few hotels offer discounted rates for students taking classes at Tillers International. Check our website for a current list of partner hotels.

### **SAFETY & WHAT TO WEAR**

Many of the classes we offer come with inherent dangers especially when safety or other instructions are disregarded. Our classes often involve working by an open fire, handling sharp or heavy tools, working with powerful draft animals, etc. While all efforts will be given to student safety, an assumption of risk is still involved.

The specifics of what to wear may vary by class, but as a general rule we recommend dressing in layers as weather in Michigan is often unpredictable. For our blacksmithing classes, we recommend avoiding synthetic fabrics such as nylon or polyester which melt and adhere to skin when they're burning. While all fabrics are flammable, we suggest natural fabrics.

Closed-toed shoes are highly recommended for most classes. Steel-toed boots and other safety shoes are not required, but you're welcome to wear them. Classes featuring horses or oxen will have field work so please bring a pair of appropriate footwear such as muck boots. Hats and sun protection is recommended.

We provide protective eye-wear in our shops but encourage you to bring your own if you have a favorite pair.

Some students prefer using work gloves when doing different tasks such as erecting a timber-frame or pounding on an anvil. We recommend bringing a pair just in case.

### FOOD

All day-long classes include lunch. Please let us know if you have any dietary restrictions (e.g., vegetarian, vegan, kosher, halal, allergies, etc.) People staying overnight are welcomed to use our kitchen to prepare their own food or are free to drive to one of the many great restaurants in Kalamazoo, Battle Creek, Scotts, Galesburg, and the rest of the surrounding area. Unlike the other towns mentioned, Scotts doesn't have a grocery store so please plan accordingly.

# PETS

Students are not allowed to bring pets such as dogs and cats to Tillers International while taking a class. Draft animals such as your own horses or oxen that might be used in a class are an exception. If you have a service animal, please let us know by calling (269) 626-0223.

# **DRUGS AND ALCOHOL**

Impared students pose a danger to themselves, other students, and our instructors. Illegal drugs are not allowed at Tillers International nor is the use of alcohol or recreational marijuana during a class. Tillers International reserves the right to eject a student from our property that brings or uses illegal substances without refund.

# SEXUAL HARASSMENT AND OTHER **INAPPROPRIATE BEHAVIOR**

Tillers International is a fun place to hang out and enjoy the company of other people who are into learning new skills. That said, Tillers International will not tolerate sexual harassment of any kind including from our own instructors and staff. If you experience any sexual harassment while at Tillers International - whether it's from a student or member of our staff - please contact our executive director immediately.

# **MEMBERSHIPS**

Yearly memberships help save you money and makes you a part of our efforts to use America's farming heritage to help with food security worries. Memberships are good for one year from time of joining us.

Student (High School & College) - \$35 5<sup>%</sup> off classes Newsletter Decal

We will work closely with neighboring legal authorities and support you and them in any resulting investigations.

Students acting out inappropriately may be asked to leave without refund.

# AGE REOUIREMENTS:

Students must be at least 18-years-old at the time of the class. There are a few exceptions such as our Parent & Teen Blacksmithing class. We can make additional exceptions on a case-by-case basis after speaking to the prospective student's parent or legal guardian.

# DRAFT ANIMAL SCHOLARSHIPS

Draft animals are extremely important globally as they often serve as the only source of power on a farm. In recognition of their global importance, a patron has endowed a scholarship to keep the skills needed to work with these animals alive

In order to keep the skills of working with draft horses and especially oxen alive, a patron has endowed a scholarship to encourage people in their teens and twenties to take our draft animal classes at a reduced price. The scholarship can be used for any class featuring horses or oxen.

Details about the draft animal scholarship can be found on our website or by calling (800) 498-2700.

### **INTERNSHIPS**

Each year Tillers International invites internship applicants who are interested in international development and/or farming with draft animals. Most intern compensation is the opportunity to learn rare skills. For the duration of three to nine months, interns work on the farm and in our shops. Their work is focused on handson learning in farming, blacksmithing, woodworking, tool design & innovation, and international development. Interns take part in several of Tillers International's classes as part of their training. Many of our interns have gone on to work overseas or on small farms in North America.

If you're interested in an internship, please submit an email explaining your interest in Tillers International, a resume, and three references by February 1 to Tillers@TillersInternational.org, or via mail at Tillers International, Attention: Internship, 10515 East OP Ave., Scotts, MI, 49088. Internships generally run from March to November. Exceptions considered on a case-by-case basis.

Individual - \$50 5<sup>%</sup> off classes Newsletter Decal

### Family - \$100

5<sup>%</sup> off classes for everyone in the household Free Admission to Plow Day Newsletter Decal

Seniors 65+ \$50 10<sup>%</sup> off classes Free Admission to Plow Day Newsletter Decal

Veterans 15<sup>%</sup> off classes Free Admission to Plow Day Newsletter Decal

# CORPORATE SOCIAL RESPONSIBILITY

giving back to the world in one form or another. (All levels include free event Tillers International offers businesses a unique admission) opportunity for employers and employees because we're an organization that promotes the value of work in the U.S. and in the countries Premium gift we serve. Our 'teach a man to fish' approach to helping others resounds with so many business owners, community leaders, and hard-working individuals. To learn how your business or organization can support our work in the United States or abroad, contact us at (269) 626-0223 or email Tillers@TillersInternational.org.

SPONSORSHIP PARTNER LEVELS

Most businesses understand the importance of An impactful way to lend your support to the cause of helping others help themselves.

**Copper:** \$750 p/v 10% off classes

Silver: \$1,000 p/y Name/Logo on website 10% off classes Premium gift

**Gold**: \$2,500 p/y Name/Logo on website 15% off classes Premium gift

Platinum: \$5,000 p/y Name/Logo on website & 1 newsletter 15<sup>%</sup> off classes 1 Free Class 2 nights free stay on site Premium gift

Diamond: \$7,500 p/y Name/Logo on website & 2 newsletters 15<sup>%</sup> off classes 2 free classes 2 night free on site **Enterprise Partner** 

\$10.000 + p/vWe'd work with you to tailor the package to your organization. This is just an example: Logo on website & 4 newsletters 10<sup>%</sup> off classes for all employees 2 nights free stay on site (C-suite only) Exclusive class for 10 employees Free event admissions for all employees

Call or email us to discuss any of these sponsor options.

# tillers international School of Practical Skills, USA

<b>JANUARY</b> Blacksmithing I 9-10 9 - 5 p.m.	\$275
<b>FEBRUARY</b> <b>Blacksmithing I</b> 6-7 9 - 5 p.m.	\$275
<b>Blacksmithing II</b> 13-14 9 - 5 p.m.	\$275
Wood Fundamentals I to Hand Tools	
16 & 18 6 p.m 9 p.m	\$140
Woodshop Workshop Bow Saw 17 9 - 5 p.m.	<b>101:</b> \$140
<b>Wood Fundamentals I</b> <b>Tool Sharpening</b> 23 6 p.m 9 p.m.	<b>!:</b> \$70
Wood Fundamentals I Hand Plane Uset	11:
25 6 p.m 9 p.m	\$70
MARCH Wood Fundamentals I Basic Joinery 2 & 4 6 p.m 9 p.m	<b>V:</b> \$140
<b>Windsor Tall Stool Cla</b> 5 (6pm) & 6-7 9 a.m 5 p March 5 (6 pm)& 9-5pm	
<b>Blacksmithing I</b> 6-7 9 - 5 p.m.	\$275
<b>Beginning Tinsmithing</b> 13-14 9 - 5 p.m.	<b>\$</b> \$295
<b>Blacksmithing for Wor</b> 13-14 9 - 5 p.m.	<b>men</b> \$275
<b>Ox Driving Intro</b> 13-14 9 - 5 p.m.	\$250
Woodshop Workshop: Jaw Hand Screws/Mox 17 9 - 5 p.m.	
	U <del>+</del> I Ç
<b>Small Foundry Work</b> <b>&amp; Pattern Making</b> 20-21 9 - 5 p.m.	\$295
<b>Knife Making</b> 27-28 9 - 5 p.m.	\$275

<b>Finishing Knife Handle</b> 29 9 - 5 p.m.	\$140	
APRIL Spokeshave/Travisher 8-10 9 - 5 p.m.	\$325	
Advanced Blacksmithing 15-16 9 - 5 p.m	\$295	
<b>Draft Horse Training Semi</b> 17 9 - 5 p.m.	<b>nar</b> \$140	
<b>Draft Horse Basics</b> 15-18 9 - 5 p.m.	\$450	
<b>Blacksmithing I</b> 17-18 9 - 5 p.m.	\$275	
Woodshop Workshop: Ber Hooks, Miter Boxes and	nch	
Shooting Boards		
21 9 - 5 p.m.	\$140	
Wheelwrighting 22-23 9 - 5 p.m.	\$325	
<b>PLOW DAY</b> 24 11 a.m4 p.m.	\$5	
MAY Blacksmithing I 7-8 9 - 5 p.m.	\$275	
<b>identifying Trees</b> 7 9 - 5 p.m.	\$140	
identifying Wood for Serious		
<b>Woodworkers</b> 8 9 - 5 p.m.	\$140	
Herb Walk & Medicine Making		
15 9 a.m12 p.m. 15 1 p.m4 p.m.	\$70 \$70	
<b>Timber Framing &amp; Raising</b> 10-15 9 - 5 p.m.	\$750	
Friction Folder Knife           15-16         9 - 5 p.m.	\$275	
Woodshop Workshop: Work-		
<b>bench Work Holding</b> 19 9 - 5 p.m.	\$140	
<b>Tinsmithing: Pattern Layo</b> 22-239 - 5 p.m.	<b>ut</b> \$295	

**JUNE** Blacksmithing I 5-6 9 - 5 p.m.

\$275

**Coopering Tools I: Inshave, Croze Hallowing Knife, Gauges** 10-11 9 - 5 p.m. \$295

 Buckets/Piggins

 12-13
 9 - 5 p.m.
 \$295

Advanced Blacksmithing with Jeff Jubenville 15-19 9 - 5 p.m. \$650

Wood Fundamentals I: Intro to Hand Tools 16 9 - 5 p.m. \$140

**Oxen Basics with Yoke** 20-24 9 - 5 p.m. \$450

Midwest Ox Drovers Association24-279 - 5 p.m.Free

# JULY

 Blacksmithing I

 10-11
 9 - 5 p.m.
 \$275

 Parent and Teen Blacksmithing

 16-17
 9 - 5 p.m.
 \$450

Woodshop Workshop:Basic Joinery219 - 5 p.m.\$140

 Farming with Horses & Oxen

 21-24
 9 - 5 p.m.
 \$450

Tool Box/Chest with DovetailedCorners Class29-309 - 5 p.m.\$325

\$295

\$275

\$650

\$295

\$295

**Staked Side Table** 31-1 9 - 5 p.m.

AUGUST Off-Grid Blacksmithing 7-8 9 - 5 p.m.

 Oxen Basics without Yoke

 8-11
 9 - 5 p.m.
 \$295

Advanced Blacksmithing with Peter Ross 16-20 9 - 5 p.m.

**Appalachian Brooms** 14-15 9 - 5 p.m.

Basic Coppersmithing14-159 - 5 p.m.

Woodshop Workshop: Make a Bow Saw			
18	9 - 5 p.m.	\$140	

Blacksmithing II			
21-22	9 - 5 p.m.	\$275	

 Make a Wooden Saw Horse

 21-22
 9 - 5 p.m.
 \$275

Coopering Tools II: Floor Jointer,Hoop Driver, Froe and Rivet Set26-279 - 5 p.m.\$295

 Buckets/Piggins

 28-29
 9 - 5 p.m.
 \$295

Herb Walk & Medicine Making			
28	9 a.m12 p.m.	\$70	
28	1 p.m4 p.m.	\$70	

# SEPTEMBER

	undamentals I:	
Intro to	Hand Tools	
7&9	6 p.m9 p.m.	\$140
	nithing I	
11-12	9 - 5 p.m.	\$275
	undamentals II:	
Sharpei	ning	
14	6 p.m9 p.m.	\$70
	nop Workshop: Mal d Beetle	ke a
15	9 - 5 p.m.	\$140
	undamentals III: ane Use 6 p.m9 p.m.	\$70
Stone N	lasonry	
	9 - 5 p.m.	\$325
	hing: Tea & Coffee	
18-19	9 - 5 p.m.	\$295
	Framing & Raising 9 - 5 p.m.	\$750
Wood Fi Basic Jo	undamentals IV:	
	6 p.m9 p.m.	\$140
остое	BER	
Knife M	aking	
2-3	9 - 5 p.m.	\$275

Finishing Knife Handle

4 9 - 5 p.m. \$140

[800] 498.2700

We'd like to thank these great partner publications for their support of our mission.

If you like what we do, you'll also enjoy these wonderful publications. Please, visit their websites to get more information and subscription rates.



www.rural heritage.com

# Farmingmagazine.net

# Small Farmer's Journal

A Quarterly Periodical, Defending Small Farms and Craftsmanship Since 1976. www.smallfarmersjournal.com

<b>Cooper</b> 8-9	<b>ing Buckets/Piggi</b> 9 - 5 p.m.	<b>1S</b> \$295	
-	<b>ing Barrels</b> 9 - 5 p.m.	\$750	
	n <b>ing/Driving Clinic</b> 9 - 5 p.m.	\$295	
	<b>e Blacksmithing</b> 9 - 5 p.m.	\$295	
<b>Blacksmithing I</b> 23-24 9 - 5 p.m. \$275			

<b>Winds</b> 19-23	<b>sor Chairs</b> 9 - 5 p.m.	\$550
	<b>Horse Basics</b> 4 9 - 5 p.m.	\$450
	Ishop Workshop: ayout Tools 9 - 5 p.m	0
27	a - 2 h.m	\$140

 <b>MBER</b> mithing for Wor 9 - 5 p.m.	<b>men</b> \$275
<b>mithing I</b> 9 - 5 p.m.	\$275
ation for Living nd Agricultural rence	

\$275

**Blacksmithing II** 20-21 9 - 5 p.m.

# DECEMBER

Blacks	<b>mithing I</b> 9 - 5 p.m.	\$275	
		<i>4</i> 270	
маке а	a Froe and Beetle		
10	9 - 5 p.m.	\$140	
Mako a	a Shaving Horse		
	-		
11-12	9 - 5 p.m.	\$275	
Make a Draw Knife			
13	9 - 5 p.m.	\$140	
15	> 5 p.m.	ΥTU	

Non-Profit Organization U.S. Postage PAID Permit No. 112 Kalamazoo, MI

# TILLERS

10515 East OP Ave. Scotts, MI 49088

# HERB WALK AND MEDICINE MAKING **INSTRUCTOR: BRENNA PIXLEY, HERBALIST** \$70

Herbs are a traditional source of nutrition and medicine. Join us for an herb walk to learn to identify and responsibly forage native seasonal plants with an emphasis on those that foster immunity and vitality, followed by a workshop on preparing herbs for use in teas, tinctures, infusions, and salves.

> 9 AM - 12 PM OR 1 PM - 4 PM SAT 9 AM - 12 PM OR 1 PM - 4 PM SAT

**MAY 15** AUGUST 28