



The Industrial Revolution sparked an explosion of innovation across the United States and few areas were more affected as a result than the American farm.

In 1917, Henry Ford began the mass production of the Fordson, a wildly successful tractor that would go on to claim three-quarters of the U.S. market.

American farmers moved away from the tools and techniques commonly found in the days before tractors, but the need for this incredibly useful gear and knowledge remained viable.

Today, Tillers International turns to the historic farming tools, skills, and knowledge from the 19th and early 20th Centuries and repurposes them for smallscale 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 smallscale 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





Oxen training seperated by 7,500 miles.

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 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

AND STONE MASONRY. FOLLOW HER ON ETSY.COM/SHOP/MERGWERKS UNIVERSITIES TO IMPROVE AREA CROP YIELDS.

ON THE COVER: CRAFTSWOMAN MORGAN H. HAS TAKEN SEVERAL CLASSES OPPOSITE PAGE: A FARM IN BURKINA FASO WHERE WE COLLABORATE ATTILLERS INTERNATIONAL, USA, INCLUDING BLACKSMITHING WITH FARMERS, SOIL SCIENTISTS, AND AMERICAN AND LOCAL



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 hardware for ergonomic and modernized yokes. 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 \$250

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 11-12	SAT - SUN	9 - 5 PM	G/ JULY 11-12	SAT - SUN
B/ FEB 7-8	FRI - SAT		H/ AUG 8-9	SAT- SUN
C/ MAR 7-8	SAT - SUN		I/SEP 12-13	SAT-SUN
D/ APR 17-18	FRI - SAT		J/ OCT 10-11	SAT- SUN
E/ MAY 2-3	SAT - SUN		K/ NOV 14-15	SAT - SUN
F/ JUNF 6-7	SAT - SUN		L/ DEC 5-6	SAT - SUN

BLACKSMITHING II: SKILL BUILDING

INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$250

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. Agreat way to enjoy and refine your smithing skills

FEBRUARY 15 - 16 SAT - SUN AUGUST 22 - 23 SAT - SUN

BLACKSMITHING FOR WOMEN

INSTRUCTOR: JENNIFER HORN, DAISY HILL FORGE \$250

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.

APRIL 4 - 5 SAT - SUN NOVEMBER 7 - 8 SAT - SUN

FORGE WELDING INTENSIVE

INSTRUCTOR: ROY ADAMS, CHRIST CENTERED IRONWORKS \$275

Forge welding is one of the cornerstones of blacksmithing. Learning the various forge welding techniques can elevate your work to an all new level. In this class, you will learn various types of forge welding such as lap weld, tee weld, jump weld, butt weld, bird's mouth weld, and glut weld. No prior forge welding experience required.

FEBRUARY 29 - MARCH 1 SAT - SUN

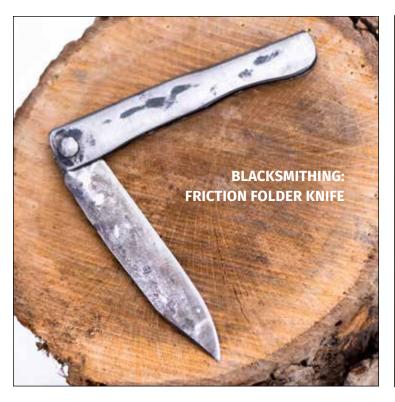
PARENT AND TEEN BLACKSMITHING

INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$425

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.

JULY 16 - 17 THU - FRI

TILLERS INTERNATIONAL. ORG

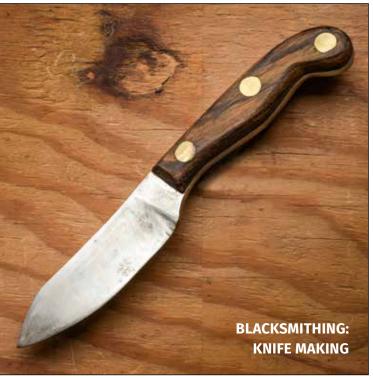




INSTRUCTOR: JOHN SARGE, TILLERS INTERNATIONAL \$250

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: KNIFE MAKING

INSTRUCTOR: TIM CARR, BLACK BEAR FORGE, MICHIGAN \$250

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 professionally since 2007. Blacksmithing I or similar experience recommended.

MARCH 28 - 29 SAT - SUN OCTOBER 3 - 4 SAT - SUN

SMALL FOUNDRY WORK & PATTERN MAKING

INSTRUCTORS: RUSS ALLEN AND PAUL MCGUIRE \$250

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 and 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 21 - 22 SAT - SUN

BLACKSMITHING: TRADITIONALLY CONSTRUCTED FLAGGING IRON (COOPERING REPAIR TOOL)

INSTRUCTOR: JIM SLINING, TILLERS INTERNATIONAL \$125

The Flagging Iron is a coopering repair tool. It is used to pry barrel staves apart in order to place gasketing made from reeds (called "flagging") between the head and the container, as well as between

the staves themselves thereby sealing leaks. The "Coopering Tools" class uses a combination of modern and traditional construction techniques in order to quickly and assuredly provide students with a kit of useable tools. This additional class provides an opportunity to learn to make this common tool strictly with traditional forging techniques. No blacksmithing experience required.

JUNE 10 WED

BLACKSMITHING: SOCKETED HANDLES FOR TOOLS

INSTRUCTOR: JIM SLINING, TILLERS INTERNATIONAL \$325

This three-day class will focus on the skills necessary to make handle sockets for a variety of robust tools. We will focus on the required skills - fullering, bending, welding and drifting - and 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. Students completing Blacksmithing I and II (or equivalent experience) possess the basic skills necessary for this class.

OCTOBER 15 - 17 THUR - SAT



BLACKSMITHING: FIREPLACE HEARTH SET

INSTRUCTORS: NANCY BINKOWSKI WILDER CREEK WORKSHOP, LLC JOHN SARGE, TILLERS INTERNATIONAL \$250

Stock your fireplace with a new set of hand-forged tools including a broom handle, poker, shovel and tongs. Students will also weave a small hand made broom with guest instructor Nancy Binkowski, Wilder Creek Workshops, to attach to their handle. Blacksmithing I or similar experience recommended.

NOV 21 - 22 SAT - SUN

BEGINNING TINSMITHING

INSTRUCTOR: MIC RUNYON

\$225

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. Past choices have included a variety of 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. Students will take home their finished projects.

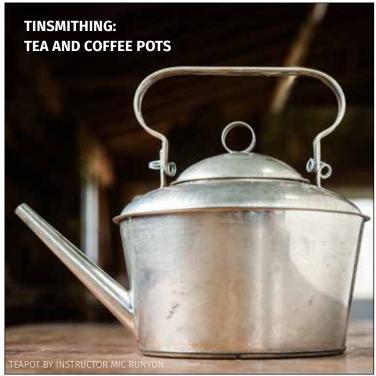
MARCH 13 - 14 FRI - SAT

TINSMITHING: PATTERN LAYOUT

INSTRUCTOR: MIC RUNYON

\$225

For beginners and advanced students. 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



TINSMITHING: TEA AND COFFEE POTS

INSTRUCTOR: MIC RUNYON

\$225

We will look at a variety of tea pot, coffee pot, and coffee boiler styles from the eighteenth and nineteenth 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 FRI - SAT

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.

MAY 29 - 30 FRI - SAT

BASIC COPPERSMITHING

INSTRUCTOR: DOC SCHERTZ, DOC'S BLACKSMITHING \$225

This is a beginners class for those who are interested in learning the basic skills to manipulate copper. Students begin by learning to deburr, 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 15 - 16 SAT - SUN

TILLERS INTERNATIONAL.ORG 7



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 is a Malagasy farmer making a wooden baseplate for use in a planter.



WOOD FUNDAMENTALS I: INTRO TO HAND TOOLS

INSTRUCTOR: JACK GESMUNDO

FOUNDER OF HAWKS HOLLOW BUILDERS

\$68

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

MARCH 24 TUESDAY 6 PM - 9 PM SEPTEMBER 8 TUESDAY 6 PM - 9 PM

WOOD FUNDAMENTALS II: SHARPENING

INSTRUCTOR: JACK GESMUNDO, FOUNDER OF HAWKS HOLLOW BUILDERS

\$68

Abraham Lincoln said, "Give me six hours to chop down a tree and I will spend the first four sharpening the axe." 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, machetes, knifes, etc.

MARCH 26 THURSDAY 6 PM - 9 PM SEPTEMBER 10 THURSDAY 6 PM - 9 PM

WOOD FUNDAMENTALS III: BASIC EDGE TOOL USE

INSTRUCTOR: JACK GESMUNDO

FOUNDER OF HAWKS HOLLOW BUILDERS

\$68

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

MARCH 31 TUESDAY 6 PM - 9 PM SEPTEMBER 15 TUESDAY 6 PM - 9 PM

WOOD FUNDAMENTALS IV: BASIC JOINERY

INSTRUCTOR: JACK GESMUNDO

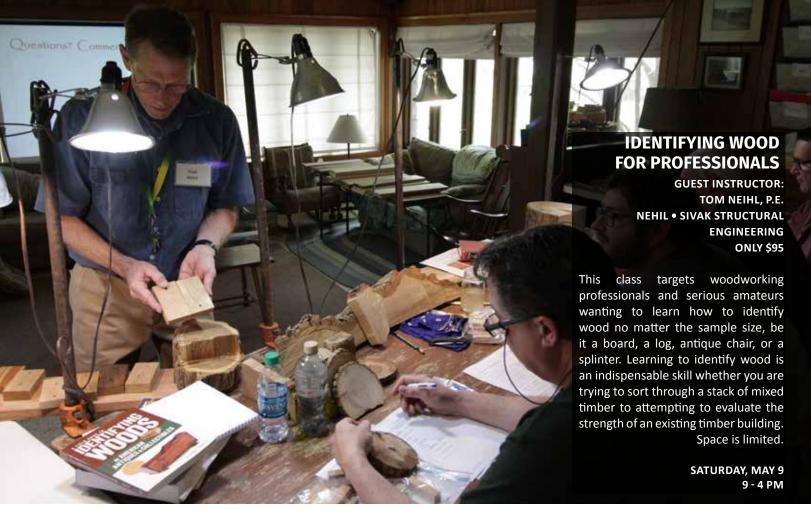
FOUNDER OF HAWKS HOLLOW BUILDERS

\$68

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.

APRIL 2 THURSDAY 6 PM - 9 PM SEPTEMBER 17 THURSDAY 6 PM - 9 PM

TILLERS INTERNATIONAL. ORG



WHEELWRIGHTING

INSTRUCTORS: CHUCK ANDREWS AND DAVE KRAMER

\$325

Learn to construct 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).

MAY 2 - 3 SAT - SUN

IDENITFYING TREES

INSTRUCTOR: TODD BARKMAN, PHD

WESTERN MICHIGAN UNIVERSITY PROFESSOR

\$95

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 400 acre farm. The species we will identify are known to produce some of the most exquisite woods in the world.

BASIC WOODWORKING: STAKED SIDE TABLE

INSTRUCTOR: ROB COLLINS, PROFESSIONAL TEACHER \$250, EVENING CLASS

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 27 - JULY 28 MON - TUE 6 PM - 9 PM AUGUST 3 - AUGUST 4 MON - TUE 6 PM - 9 PM

MAKE A SHAVING HORSE

JOHN SARGE, TILLERS INTERNATIONAL \$250

The shaving horse (a bench with a foot-operated vice) 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 12 - 13 SAT - SUN

MAY 8 FRIDAY 9 AM - 4 PM



Tillers International's intensive coopering classes make us the leading school in North America for anyone wanting an in-depth 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.

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 12 - 16 MON - FRI

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

INSTRUCTOR: CHUCK ANDREWS, PRAIRIE WORKSHOPS, LLC

\$22

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 11 - 12 THURS - FRI

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

INSTRUCTOR: JOHN DAVENPORT

\$225

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 27 - 28 THURS - FRI

COOPERING BUCKETS / PIGGINS

INSTRUCTOR: JOHN DAVENPORT. FRED ROGERS

\$275

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 13 - 14 SAT - SUN DAVENPORT BUCKETS - AUGUST 29 - 30 SAT - SUN ROGERS BUCKETS - OCTOBER 10 - 11 SAT - SUN DAVENPORT

TILLERS INTERNATIONAL, ORG



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 efficitly and better provide for their families and communities.



OX DRIVING INTRO*

INSTRUCTOR: ROB COLLINS, FORMER PRESIDENT MIDWEST OX DROVERS ASSOCIATION \$195

Farmers have been working with oxen for more than 6,000 years. Oxen have done everything from helping people build ancient wonders to pulling seige 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 14 - 15 SAT - SUN

DRAFT HORSE TRAINING SEMINAR*

INSTRUCTOR: HARLEN YODER, AMISH FERRIER \$125

This seminar will take place at Amish Ferrier in Centerville, MI, and will cover Draft Horse Basics for students interested in training techniques. Amish trainer 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 spoiled horses and building confidence in horses that haven't worked.

APRIL 18 SAT

* A limited amount of schlolarships are available for new or young farmers who are interested in learning how to work with draft animals. Email tillers@TillersInternational.org for details.

OXEN BASICS*

INSTRUCTORS: DREW CONROY, PHD, UNIVERSITY OF NEW HAMPSHIRE, ROB COLLINS, AND JOHN SARGE \$425

This comprehensive class developes 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). Make this the outstanding experience of your year!

JUNE 21 - 25 SUN - THU

FARMING WITH OXEN & HORSES*

INSTRUCTOR: FARMER-IN-RESIDENCE, TILLERS INTERNATIONAL \$425

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 20 - 23 MON - THU

OX TRAINING/DRIVING CLINIC*

GUEST INSTRUCTOR: ROB COLLINS, PRESIDENT MIDWEST OX DROVERS ASSOCIATION, 2013-19 \$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.

OXT 15 - 17 THURS - SAT

TILLERS INTERNATIONAL.org



STONE MASONRY

INSTRUCTORS: TOM NEIHL, P.E., NEHIL • SIVAK STRUCTURAL ENGINEERING BLAIR BATES, BUILDING RESTORATION, INC. \$295

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 10 - 12 THURS - 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 20 - 24 TUE - SAT

APPALACHIAN BROOM MAKING

INSTRUCTOR: NANCY BINKOWSKI WILDER CREEK WORKSHOP, LLC \$225

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.

AUGUST 15 - 16 SAT - SUN

SMALL GRAIN PRODUCTION

INSTRUCTOR: FARMER-IN-RESIDENCE, TILLERS INTERNATIONAL \$75

In this one day class we'll be looking at different methods of planting, harvest, and post harvest processing for wheat, oats, and rye. We'll see harvesting equipment from the scythe and the flail to the combine. We'll be able to use some of this equipment in the field, although like all grain growers, we are at the mercy of the weather and the ripeness of the grain. We have plots of grain from 3/4 of an acre to just a few square feet. There will be several different varieties of wheat and oats both modern and historic to compare and a discussion on the pros and cons of different grain growing approaches.

AUGUST 1 SAT

HERB WALK AND MEDICINE MAKING

INSTRUCTOR: BRENNA PIXLEY, HERBALIST \$50

In this afternoon class we'll be looking at different methods of planting, harvest, and post harvest processing for wheat, oats, and rye. We'll see harvesting equipment from the scythe and the flail to the combine. We'll be able to use some of this equipment in the field, although like all grain growers, we are at the mercy of the weather and the ripeness of the grain. We have plots of grain from 3/4 of an acre to just a few square feet. There will be several different varieties of wheat and oats both modern and historic to compare and a discussion on the pros and cons of different grain growing approaches.

class. No previous mechanical experience is required, but a basic understanding

MAY 9 SAT 1 PM - 4 PM AUGUST 8 SAT 1 PM - 4 PM

SMALL TRACTOR REPAIR

INSTRUCTOR: JIM SUSEMIHL \$275

Participants will be guided through the basics of getting an old tractor "up n' goin'." We'll have a tractor here for the instructor to use as an instructional tool or participants can bring their own tractors to work on during the course of the

of how an engine works is helpful.

JUNE 6 - 7 SAT - SUN



TIMBERFRAMING

TIMBER FRAMING AND RAISING

INSTRUCTORS: CHRIS NEWMAN, NEWMAN CARPENTRY, TIMBER FRAMING GUILD TOM NEIHL, 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 11 - 16 SEPTEMBER 21 - 27 **MON - SAT MON - SAT**



OUR SITE

Tillers International, USA, is located on a nearly 400-acre farm in Scotts, MI. We have several timber-framed structures onsite including many picturesque barns, two main workshops, and a beautiful stone-house 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 \$40 per night.

Students are welcomed to camp on-site for only \$7 per night 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. 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 REQUIREMENTS:

Students must be at least 16-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 for free or nearly free. The scholarship can be used for any class featuring horses, oxen, donkeys, or any other draft animal. 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.

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% off classes Newsletter Decal

Individual - \$50

5% off classes Newsletter Decal

Family - \$100

5% off classes for everyone in the household Free Admission to Plow Day Newsletter

Decal

Seniors 65+ \$50

10% off classes Free Admission to Plow Day Newsletter Decal

Veterans

15[%] off classes Free Admission to Plow Day Newsletter Decal

CORPORATE SOCIAL RESPONSIBILITY

SPONSORSHIP PARTNER LEVELS

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

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% 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% off classes 2 free classes 2 night free on site

Enterprise Partner

\$10.000+ p/v We'd work with you to tailor the package to your organization. This is just an example:

Logo on website & 4 newsletters 10% 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.ORG

TILLERS INTERNATIONAL

School of Practical Skills, USA

JANUARY

Blacksmithing I

January 11-12 9 a.m. - 5 p.m. \$250

FEBRUARY

Blacksmithing

Feb 7-8 Fri-Sat 9 a.m. - 5 p.m. \$250

Blacksmithing II

Feb 15-16 9 a.m. - 5 p.m. \$250

Forge Welding Intensive

Feb 29-Mar 1 9 a.m. - 5 p.m. \$275

MARCH

Blacksmithing I

Mar 7-8 9 a.m. - 5 p.m. \$250

Beginning Tinsmithing

Mar 13-14 9 a.m. - 5 p.m. \$225

Ox Driving Intro

Mar 14-15 9 a.m. - 5 p.m. \$195

Small Foundry Work & Pattern Making

Mar 21-22 9 a.m. - 5 p.m. \$250

Wood Fundamentals I: Intro to Hand Tools

Mar 24 6 p.m. - 9 p.m. \$68

Wood Fundamentals II: Sharpening

Mar 26 6 p.m. - 9 p.m.

\$68 Knife Making

Mar 28-29 9 a.m. - 5 p.m. \$250

Wood Fundamentals III: Basic Edge Tool Use

Mar 31 6 p.m. - 9 p.m. \$68

APRIL

Wood Fundamentals IV: Basic Joinery

April 2 6 p.m. - 9 p.m. \$68

Blacksmithing for Women

April 4-5 9 a.m. - 5 p.m. \$250

Draft Horse Basics

April 14-17 9 a.m. - 5 p.m. \$450

Draft Horse Training Seminar

April 18 9 a.m. - 5 p.m. \$125

Blacksmithing I

April 17-18 9 a.m. - 5 p.m. \$250

Plow Day 2020

April 25 11 a.m. - 4 p.m. \$5 per vehicle

MAY

Blacksmithing I

May 2-3 9 a.m. - 5 p.m. \$250

Wheelwrighting

May 2-3 9 a.m. - 5 p.m. \$325

Idenitfying Trees

May 8 9 a.m.-4 p.m. \$95

Idenitfying Wood for Serious Woodworkers, Craftsmen & Women, and Other Professionals

May 9 9 a.m.-4 p.m. \$95

Herb Walk & Medicine Making

May 9, 2019 1 p.m. - 4 p.m. \$50

Timber Framing & Raising

May 11-16 9 a.m. - 5 p.m.

Blacksmithing: Friction Folder Knife

May 15-16 9 a.m. - 5 p.m. \$250

Tinsmithing: Pattern Layout

May 29-30 9 a.m. - 5 p.m. \$225

JUNE

Blacksmithing I

June 6-7 9 a.m. - 5 p.m. \$250

Small Tractor Repair

June 6-7 9 a.m. - 5 p.m. \$275

Traditionally Constructed Flagging Iron

June 10 9 a.m. - 5 p.m. \$125

Straight Stave Coopering Tools: Inshave, Croze, Hollowing Knife, Gauges, and Bands

June 11-12 9 a.m. - 5 p.m. \$225

Coopering Piggins

June 13-14 9 a.m. - 5 p.m.

Oxen Basics

June 21-25 9 a.m. - 5 p.m. \$425

Midwest Ox Drovers Association Gathering 25th Anniversary

June 26-28 Times Vary

JULY

Blacksmithing I

July 11-12 9 a.m. - 5 p.m. \$250

Parent and Teen Blacksmithing

July 16-17 9 a.m-5 p.m. \$425

Farming with Horse & Oxen

July 20-23 9 a.m. - 5 p.m. \$425

Basic Woodworking: Staked Side Table

July 27-28, Aug 3-4 6 p.m. - 9 p.m. \$250

AUGUST

Small Grain Production

Aug 1 9 a.m. - 5 p.m. \$75

Blacksmithing I

Aug 8-9 9 a.m. - 5 p.m. \$250

Herb Walk & Medicine Making

Aug 8 1 p.m. - 4 p.m. \$50

Appalachian Brooms

Aug 15-16 9 a.m. - 5 p.m. \$225

Basic Coppersmithing

Aug 15-16 9 a.m. - 5 p.m. \$225

Blacksmithing II

Aug 22-23 9 a.m. - 5 p.m.

Barrel Making Tools: Froe, Floor Jointer, Hoop Driver, & Rivet Set

Aug 27-28 9 a.m. - 5 p.m. \$225

Coopering Buckets

Aug 29-30 9 a.m. - 5 p.m. \$275

SEPTEMBER

Wood Fundamentals I: Intro to Hand Tools

Sept 8 6 p.m. - 9 p.m. \$68

Wood Fundamentals II: Sharpening

Sept 10 6 p.m. - 9 p.m. \$68

Stone Masonry

Blacksmithing I

Sept 12-13

\$250

Sept 10-12 9 a.m. - 5 p.m. \$295

9 a.m. - 5 p.m.

Nov 21-22 \$250

DECEMBER

Blacksmithing for Women

Wood Fundamentals III:

Wood Fundamentals IV:

Timber Framing & Raising

Tinsmithing: Tea and Coffee Pots

6 p.m. - 9 p.m.

6 p.m. - 9 p.m.

9 a.m. - 5 p.m.

Basic Edge Tool Use

Sept 15

Sept 17

Sept 18-19

Sept 21-27

OCTOBER

Knife Making

Blacksmithing I

Coopering Buckets

Coopering Barrels

Ox Training/Driving Clinic

Socketed Handles for Tools

\$68

\$225

\$750

Oct 3-4

Oct 10-11

Oct 10-11

Oct 12-16

Oxt 15-17

Oct 15-17

Oct 20-24

Oct 22-25

Nov 7-8

Nov 14-15

\$250

\$250

Set

NOVEMBER

Blacksmithing I

Windsor Chairs

Draft Horse Basics

\$325

\$450

\$275

Basic Joinery

\$68

DECEMBER

Blacksmithing I

December 5-6 9 a.m. - 5 p.m. \$250

Blacksmithing: Fireplace Hearth

Make a Shaving Horse

December 12-13 9 a.m. - 5 p.m. \$250

You can register for classes online at www.TillersInternational.org/Classes, by calling (269) 626-0223, or by filling out this form and mailing it to Tillers International, 10515 East OP Ave., Scotts, MI 49088

Name				
Address				
City	State		Zip Code	
Home / Mobile			Work	
E-Mail				
Student will be over 16-	years-old at time of the class:	: Y / N		
 Dietary Preference (Non	e, Gluten-Free, Vegetarian, Ve	gan, Halal, Kosher	, etc.)	
Cla	iss	Class Date(s)		Tuition
On-Site Lodging (call o	ffice for details) Beginning Da	ate # Nights	Fee per Night	Total Lodging
Charitable Gift to	Tillers International* (Rounc	d Up, \$25, \$50, \$10	0, \$250, Other)	
			Total	
Printed Name of Card Ho	older			
Billing Address				
City	State		Zip Code	
Credit Card Number			Туре	
Expiration Date	V-Code			

^{*} Tillers International is a non-profit 501(c)(3) organization. All donations go to our domestic or international missions. TILLERS INTERNATIONAL.ORG



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