

Part One – What’s Involved with Homestead Living

1 Life on the Green Learning Homestead

- 1.1 Tom and Genny – Partnership to Build the Homestead
- 1.2 Standing Up Our Homestead Farm – 10 Year Chronology
- 1.3 Add Your Own Axioms

2 Homestead Living

2.1 The Reality of Homestead Living

Understanding Your Personality • Homestead Economics – Time and Money • New Way of Life
Personal Relationships • Health Issues • Lifestyle Changes • We...The Earth-Keeping People
Carrying Capacity • Science on the Homestead • What Makes a Healthy Homestead
Homestead Calendar • The Homestead Community • Personal Assessment for Homestead Living

2.2 Homestead Infrastructure

Homestead – Defined • Land – Take a Critical Look • Turning Land into a Homestead
Participants on a Homestead • Living with a Homestead

2.3 Land – Know Before Buying

Living with Land • Unworked Land – A Good Thing • Reclaiming Land • Finding Land
Auctions – Another Way to Buy • Looking for Land in Unusual Places • Marginal Land and Structures
Impact of Climate Change on Property Sales • Stewardship of Land

2.4 Soil Testing

Self-Testing Soil • What pH Means • County Extension Service Testing • Independent Lab Soil Testing
Typical Soil Parameters from Lab Testing • Limitations with Soil Testing • Examples of Lab Results

2.5 Water and Hydrology

Living with Water • Types of Water • Know Your Water • Working with Water Tables
Working with Moving Water • Working with Rain Water • Working with Well Water

2.6 Daydreaming – The Vision

Making Plans • Put It in Writing • Forest Garden – Daydream Brought to Life • Homestead Priority List
Example of Our Actual Homestead Priority List

2.7 Establishing the Right Priorities

Hierarchy of Needs • Staying on Track • Slow Down – Avoid Big Mistakes • Adapting to Climate Change

2.8 Infrastructure for Humans

A Place to Rest and Recover • The First Shelter • Planning for Homestead Shelters
Living with Septic Systems • Fixing Up the House • Children on the Homestead

2.9 Infrastructure for Living Things

The Wild Things • Chickens • Goats and Sheep • Dogs and Cats • Fences

2.10 Infrastructure for Food

Fresh Veggie Storage Systems • Determining What's Right for the Homestead • Cooking Tools
Cooking Tips • Scullery Work

2.11 Infrastructure for Stuff

Barn Garage • Outside Storage • Kayak Storage • Wood Sheds • Garden Tools and Supplies
Animal Feed • Small Sheds • Tractor Barn • Outdoor Living • Cold Room Food Storage • Attic Storage

3 Soil – Heart and Soul of the Homestead

3.1 High-Quality Garden Soil – Loose, Loamy, and Ready

Living with Soil • Know Your Soil • Soil Composition • Microbes – Your Unseen Workers
Nitrogen – Chemistry in Your Soil • Compost – Breathing Life into Soil • Too Much Phosphorous

3.2 Building the Compost Pile

Living with Compost • Working with Compost • Sources for High-Volume Compost Material
Growing for the Compost • Closed-Loop Composting • Compost Bins – Keeping It Under Control
Workers in Composting • Compost Buckets and Fruit Flies • Problems with Compost Tumblers

3.3 Working the Compost Pile

Chop It – Cut It – Rip It • Cooking the Compost • Amending the Compost • Help from Worms

3.4 Creating and Amending Garden Soil

Build It Right – Build It Fast • Budget for Supplies • Compost Sifting • Notes About Peat Moss
Notes About Vermiculite • Compost, Peat Moss, and Vermiculite Together – A Powerful Combination
Doing Without Soil-Building Supplies • Economic Impacts on Garden Supply Costs

3.5 How to Build Garden Soil

Preps Before Starting • Materials and Tools for Building Soil • Procedures for Building Soil

3.6 Raised Beds – Growing Up Instead of Down

Living with Raised Beds • Concrete Blocks – Durable Raised Beds • Wood for Raised Beds
Effects of Raised Beds on Garden Soil

3.7 Weed Control

Fact, Myth, and Reality • Managing Weeds • Weed Control with Hay • Weed Blocker Cloth
Weed Blocker Cloth

3.8 Vermiculture Composting

Living with Worms • Worm Bin Systems • How the System Works • Harvesting Worm Castings
Red Wigglers in the Compost – Huge Advantage

3.9 Fertilizing Garden Soil

Working with Fertilizers • Internal Organic Fertilizers • Compost Tea as Natural Fertilizer
External Synthetic Fertilizers • Experiments with External Fertilizers

4 Getting Started with Growing

With soil development underway, learn all you can about growing. It's more than just throwing seeds in the ground and expecting wonderful results. This takes you from beginner to everything else you'll likely incorporate within your gardens.

4.1 Learning How to Grow

The Basics of Growing • Working with Gardens • Growing Zones • What to Grow First • Growing Cycles
Tending to Your Garden

4.2 Garden Planning

Planning Before Growing • The Garden Binder – Retaining Key Information • Recordkeeping that Works
Garden Grid Form • Seed Ordering Form • Seed Schedule Form

4.3 Seed Purchasing

The Seed Business • When to Order • Shifting Availability of Seeds

4.4 Advanced Garden Planning

Eight Advanced Techniques • Practicing Permaculture • Know Your Veggies

4.5 Crop Rotation

History of Crop Rotation • Heavy Feeders and Light Feeders • Crop Rotation on a Practical Scale

4.6 Succession Planting

Growing with the Seasons • Lots of Planning • Simple Succession Planting • Leaving Soil Fallow

4.7 Companion Planting

Significant Garden Production • Impact on Crop Rotation • Companion Planting with Herbs
Companion Planting for Pest Control

4.8 Biointensive Planting

Modern Description of Old Techniques • Triangular Planting – No More Rows

4.9 Vertical Growing

Working with Small Trellises • Working with Big Trellises • Alternative Trellises
Veggies that Grow Vertically • Veggies Adapted to Vertical Growing • Growing Potatoes Vertically

4.10 Groundcover – Cover Crops – Green Manure

Working with Groundcover • Groundcover Seeds • Growing Groundcover • Overgrown Groundcover
Soil Remediation with Groundcover • Groundcover in Com-Ag

4.11 Cheating the Weather

Planning Around the Weather • Cloches to the Rescue • Working with Low Hoop Covers
Wind Breaks – Protection from High Wind

4.12 Flowers in the Garden

Planning for Flowers • Pot Marigolds – Friends of Pollinators • Deadheading and Pruning Flowers
Feeding the Pollinators in Early Spring • Favorites of Pollinators • Herbs and Wildflowers • Comfrey
Impact of Flowers on Honey Production • Mint for Pest Control

4.13 Container Growing

Living with Container Growing • Container Soil • Growing Requirements • Veggies in Containers
Flowers in the Container Garden • Success and Failures with Container Growing • Carrots in Containers

5 From Seeds to Veggies

Ok, here you go. You've got good seeds in hand and you're ready to start. These are step-by-step procedures on how to develop healthy seedlings. There's lots of ways this can come to fruition—many you'll probably use and some maybe not.

5.1 Setting Up the System

Workplace • Seedling Rack • Water – Breaking Dormancy / Germinating • Seed Starting Tools
Seed Starting Material • Potting Soil + Sifted Compost + Worm Castings • Sterilizing Compost

5.2 Seed Starting Procedure

Preps for Seed Starting • Step-by-Step Procedures • Working with Seed Trays • Cold Stratification
Special Case – Starting Tomatoes

5.3 Up Planting to Pots

Seedling Indicators • Up Planting Procedure • Caring for Seedlings • Soil Blockers

5.4 Transplanting to the Garden

Pre-Transfer Garden Preps • Prep the Seedlings • Transplanting – Out to the World • After Transplanting

5.5 Direct Seed Starting

Lettuce and Spinach • Peas and Beans • Inoculant • Pelleted Seeds

5.6 Other Than Seeds

Working with Dormancy • Potato Eyes • Sweet Potato Slips • Garlic Cloves • Onion Starts and Sets
Asparagus Crowns • Grape Root Stock • Berry Shoots • Strawberry Seedling Stock

5.7 Seed Saving

How Seeds Develop • F1 Seeds vs OP Seeds • Developing Heirloom OP Seeds • Preserving Seeds •
Switching to Saved Seeds • Easy Seeds to Save • What's Required to Start Saving Seeds

6 Growing Year Round

With the first good growing season behind you, the great lament will be what about the rest of the year. With some advance preparation and garden planning, you can keep fresh veggies coming in right through winter. It's actually quite easy.

6.1 Putting Gardens to Sleep

Working with Winter Hay Mulch • Working with Winter Groundcover • Final Fall Compost Harvest
Waking Up the Gardens

6.2 Extending the Growing Season

Living with Season Extension • Planning for Season Extension • What Can Be Grown
Working with Winter Veggies

6.3 Low Hoop Winter Growing

Creating Micro-Ecosystems • Creating Low-Hoop Enclosures • Low-Hoop Materials
Adding Heat • Adding Light

6.4 Cloches – Mini Greenhouse in a Bottle

Historical Background • Updated Versions of Cloches • Working with Cloches • Impact on Gardens
Sources for Cloches and Storage

6.5 Greenhouses

Working with Greenhouses • Living with Greenhouses • Greenhouse Impact on Growing
Modifications to Improve Growing • Greenhouse Cover Maintenance • Covers and Installation Materials
Installing Greenhouse Covers • Installing Wind Straps • Alternative to Buying New
Alternative to Buying a Complete System

6.6 Cold Frames

Working with Cold Frames • Different Ways to Use Cold Frames

7 Harvesting, Preserving, and Storage

Alright, you're bringing in the harvest. Now you've got to do something with it. This gets into handling all those veggies and everything else that can be harvested from the homestead to maximize the quality of your food. Here you'll find out what to do with everything that's available.

7.1 Food and Nutrition

The Homestead-Living Environment • Environmental Realities About Nutrition

Things to Know About Nutrition • Preserving Homestead Nutrition • Limiting Exposure to Com-Ag Food

You Are What You Eat • Health Through Nutrition • Who Loses Out from the Right Nutrition

Looking to the Future

7.2 Vegetables and Fruit

Living with Fresh Vegetables • Harvesting Onions • Harvesting Garlic • Harvesting Asparagus

Harvesting Sweet Potatoes • Harvesting Potatoes • Veggie Harvest Tools and Material

End-of-Season Harvesting • How to Husk Beans • Requirements for Keeping Veggies Viable in Storage

Making Storage Decisions • Vegetable Broth – Don't Waste Anything • Harvesting and Preserving Fruit

7.3 Herbs

Living with Herbs • Growing Habits • Harvesting, Storing, and Using Herbs

Powdering Herbs and Veggies

7.4 Root Cellaring

Perspectives on Root Cellars • Building a Root Cellar • Requirements for a Root Cellar

Alternatives that Make Sense • Alternatives that Don't Make Sense

7.5 Canning

Living with Canning • Working with Canning • Cold-Jar Canning • Handy Canning Tools

Impact of Heat on Veggies • Between Harvest Seasons • Basic Hot-Water Bath Procedure

7.6 Fermenting

Living with Fermenting • Tools for Fermenting • Storing Fermented Foods • Sauerkraut and Pickles

7.7 Foraging

Living with Wild Food • Bringing in the Wild Harvest • Mushrooms – Fungus in the Woods

7.8 Refrigerated Storage

Living with Refrigeration • Blanching Before Freezing • Freezing Onions with Peppers
Pickles, Peppers, and Carrots

7.9 Air Drying / Dehydrating

Living with Air Drying / Dehydrating • Alternatives – Solar or Electric • Storing Dehydrated Foods

7.10 Freeze Drying

Living with Freeze Drying • Resources on Home Freeze Drying • Working with Freeze Drying
Downsides to Freeze Drying • Sources for Home Freeze Drying Systems

7.11 Chicken Harvest

Creating a Supply of Meat • Preps for Harvest • Procedures for Harvesting Chickens
Cleaning Up After Harvest • Harvesting Chicken Feathers • Chicken Plucking Machines
Cooking with Free Range Chickens

7.12 Meat Harvest

Superior Homestead Meat • Preps for Meat Harvest • Meat Harvest Procedure
Alternatives to Homestead Butchering • Hunting for Meat

7.13 Maple Sap Harvest

Using the Right Maple Trees • Tapping Strategy • Materials – Keeping Everything Organized
Maple Tap System • Collecting and Holding Sap • Cooking Down to Syrup • Quality Check for Syrup
Storing Syrup • Living with Maple Syrup • Professional Tools and Equipment

7.14 Honey Harvest

Volunteer to Learn • Borrowing Hives and Expertise • Setting Up for Extraction • How Much Honey

7.15 Butter, Cheese, and Yogurt

Getting Fat Out of Ruminant Milk • Making and Storing Butter • Making and Storing Cheese
Making and Storing Yogurt

7.16 Bulk Purchase and Storage

Obtaining Large Quantities • Working with Bulk Storage • Handling Bulk Products
Bulk Distribution of Groundcover Seed

8 Living Things on the Homestead

Surprise! You're not alone on your homestead. You are now part of an ecosystem that includes everything you brought aboard plus all that was here long before you arrived. Learn how to live with your new companions because you've got company.

8.1 Dogs and Cats – Workers on the Homestead

Guardians of the Homestead • Homestead Dogs – Mutts Every One • Pure Bred vs Mutt • Training Dogs
Living with Dogs • Cats Are Like Humans • Always Somewhat Ferial • Comfort and Care

8.2 Chickens – Roosters, Hens, and Chicks

Living with Chickens • Chicken Coops – Design for Function • Working with Chickens • Brooder Hens
Incubating Eggs • Purchasing Baby Chicks • Working with Baby Chicks • Keeping It Clean
Putting Chickens to Work • Respecting the Fence • Chicken Tractors

8.3 Goats – Friends of the Homestead

Living with Goats • Before Getting Goats • Something to Climb On • Feeding Goats • Transporting Goats
Developing the Herd • Mommies and Babies • Horns or No Horns • Managing a Buck • Being Their Vet

8.4 Sheep – Mowers on Feet

Living with Sheep • Working with Sheep • Developing the Herd • Feeding and Watering • Vet Care
Rams and Bucks Together

8.5 Worms – Underground Workers on the Homestead

Living with Worms • Feeding the Worms • Working with Worms • Developing the Herd

8.6 Bees and Wasps – Seasonal Workers on the Homestead

Living with Bees • Working with Bees • When the Bee Stings • One Bee That's a Pest
Living with Wasps • Wasp Nests

8.7 Bats – Quiet Workers on the Homestead

Living with Bats • Establishing a Bat Colony • Bat Houses • How to Stand Up a Tall Pole

8.8 Insects – Good Guys and Bad Guys

Living with Insects • How to Reduce Pest Stress • Developing and Insect Pest Strategy
Working with Row Covers • Lures and Traps • Options for Pest Control • Other Homestead Insects
Insects and the Anthropocene

8.9 Critters – Thieves in the Night

Living with Critters • Squirrels • Racoons and Foxes • Opossums • Moles • Rabbits • Skunks • Snakes
Birds • Deer • Chipmunks, Field Mice, and Voles • Rats • Hawks • Owls • Eagles • Vultures • Turkeys
Critter Cages

9 Managing the Homestead

On every homestead, things need to get done. This is where using a systems approach turns complex into simple. You'll manage everything from water to wood to insects to equipment. These are the every-day nuts and bolts of homestead living.

9.1 Communication Management

How to Communicate • Hazards of Miscommunication • Put It in Writing • Keeping Track of Paperwork
Computers and Printers • What to Print and Keep • Homestead Living as a Business

9.2 Water Management

Standing Water – Lakes and Ponds • Moving Water – Creeks and Streams • Working with Scrub Slopes
Working with Erosion • Digging a Ditch • Soil Constantly on the Move

9.3 Egg Management

Finding Eggs • Living with Eggs • Using Egg Shells • Egg Production Cycles

9.4 Milk Management

Living with Milk • Milking Procedure • Working with Fresh Milk • Cows, Pigs, and Milk

9.5 Woodlot Management

Living with Woodlots • Pruning Trees • Developing a Woodlot • Close Clearing of Woodlots
Stewardship of Woodlots

9.6 Firewood Management

Living with Firewood • Wood Sheds • Heating with Wood • Safety When Cutting with Chainsaws
Harvesting Raw Wood • Setting Up Log Lines • Harvesting Log Lines • Manual Log Splitting
Splitting with the Weather • Mechanical Log Splitters • Alternative Log Splitters • Chipping Branches
Running Out of Wood

9.7 Orchard Management

Living with Fruit Trees • Planning an Orchard • Site Prep • Shopping for Saplings • Arrival Planning
Procedures for Planting Saplings • Sapling Protection • Irrigation • Pruning for Proper Growth
Servicing Fruit Trees • Native Plant Control • Working with Pollinators • Getting Help • Orchard Records

9.8 Berry Management

Living with Berries • Shopping for Berries • Cane Berries • Bush Berries • Tree Berries • Birds and Berries
Special Case – Growing Strawberries

9.9 Grape Management

Living with Grapes • Before Making the Big Commitment • Shopping for Grapes • Site Prep
Supporting Grapevines • Planting Grapevines • Servicing Grapevines • Blue Growing Tubes
Grape Production • Annual Work Schedule • Neglected Grapevines • Critter Control on Grapes

9.10 Pasture Management

Living with Pastures • Developing a Pasture • Developing the Soil • Busting Sod
Procedures – For Initial Pasture Development • Developing a Pasture the Amish Way

9.11 Native Bee Management

Living with Bees • Native Bee Culture • Feeding Native Bees • Working with Bee Hotels
Working with Cocoons • Keeping Native Bees Healthy • Maintaining the Hotel

9.12 Honey Bee Management

Living with Cultivated Bees • Preparing the Homestead for Bees • Bringing on Honey Bees
Working with Hives • Clothing and Material • Harvesting Honey

9.13 Nut Management

Living with Nuts • Working with Black Walnuts • Working with Hickory Nuts • Working with Hazelnuts
Nuts in the Forest Garden

9.14 Material Management

Living with Material • Getting Rid of Stuff • Recycling – A Hopeful Second Life
Repurpose – Finding the Mother Lode • Material During Changing Economic Times

9.15 Equipment Management

Living with Machines • Repairs and Maintenance • Model and Serial Numbers • Ordering Parts
Keeping Maintenance in Perspective • Discipline with Keys

9.16 Emergency Management

Living with Emergencies • Emergency Water • Emergency Fuel • Bug-Out Kit • Emergency Power
Emergency Cooking • Food During Emergencies • Toilet Paper • Health and Medical Care
Emergency Communication • How to Read a Power Pole • How to Read Buried Utilities

Part Two – How to Get It Done

10 Irrigation

There are several ways to approach getting water to your veggies. Some are quite wasteful, some are incredibly simple, and you'll be introduced to olla irrigation which has proven to be excellent for growing in gardens. In this section you'll find out how to design, plan, and install an irrigation system.

10.1 Options for Irrigation

Hoses – Random Watering • Sprinklers – Top-Down Watering • Drip Irrigation – Surface Watering
Soaker Hoses – Below-Ground Watering • Olla Irrigation – Buried Clay Pots

10.2 Impact of Water Pressure

Working with Water Pressure • Getting Around Water Pressure • Compromises with Water Pressure

10.3 Planning an Irrigation System

Designing Infrastructure • Designing Your Own Irrigation System • Topography Considerations
Irrigation Zones

10.4 Distribution Manifolds

Main Manifolds • Sub-Manifolds – Running the Irrigation • Building Manifolds • Installing Manifolds
Manifold Sketch • Lessons Learned About Plumbing Fittings • Managing Hoses • Plumbing Terminology

10.5 Installing Infrastructure

Preps for Infrastructure • Procedures for Installing Buried Mainline Tubing
Distribution Infrastructure • Working with Mainline Tubing • Reworking the System

10.6 Olla Irrigation

Historical Background • Types of Olla Pots • Working with Olla Irrigation • Buying Clay Flower Pots
Types and Size of Stoppers

10.7 Assembling Olla Pots

Three-Part Process • Tools and Materials • Part 1 – Prep the Stems • Part 2 – Prep the Saucers
Part 3 – Assemble the Pots • Cleaning Up the Worker

10.8 Planting the Ollas

Preps for Distribution • Procedures for Planting Ollas • Final Test – Adjusting the Infrastructure
Helpful Tips • Living with an Olla System • Mineral Salts in Water

10.9 Bucket Irrigation

Special Considerations on Buckets • Support Stands • Holes in Buckets • Tools and Materials
Helpful Hints • Filling the Ollas

11 Harvesting Free Water

Free water is that which passes through your homestead—horizontally with creeks and streams and vertically with rain. This is how to harvest free water from the sky with a water tote system that pulls together several concepts that together work quite well.

11.1 Living with Free Water

Important Advantage to Free Water • Know Your Free Water • Creeks and Streams • Ponds • Wells
Shallow Water Tables • Working with Rainwater • Following Our Lead on Rainwater Catchment Systems
Hydraulic Ram Pumps

11.2 Water Catchment Systems

Each System is Unique • System Considerations • Tote Considerations • Working with Barrels

11.3 Water Tote Foundations

Preps for the Foundation • Procedures for Building a Foundation

11.4 Water Tote Frame

Minimum Requirements • Preps for the Frame • Procedures for Assembling Tote Stands

11.5 Putting Pipes Together

Overall Piping System • Inflow Sub-System • Clean Out Sub-System • Overflow Sub-System
Vent Sub-System • Drain Sub-System • Materials and Fittings Required • Assembling Pipes
Supporting Pipes • Fine Tuning the System • Cutting PVC Pipe

12 Building Out the Homestead

The first and most obvious point to potential homesteads is that everything needed will not be there. Stuff has to be built. This is how to turn daydreams into reality with step-by-step procedures for those parts of your homestead you'll be using every day. There are four phases to structural building.

Phase One – Prepping the Parts and Pieces

This takes the longest but it's the most important. Everything that happens during Phase One affects the entire structure. It takes patience, diligence, and tenacity to get it right.

12.1 Planning a Project

Perspective on Projects • Making a Project Plan • Step-by-Step Process • Getting Started
Building Inspections and Permits • Example – Brooder Hutch Plans

12.2 Buried Utilities

Public vs. Private • Locating Buried Public Utilities • Locating Buried Private Utilities • Locating Hack

12.3 Foundations

Preps for Foundation • Procedures – Getting It Level

12.4 Getting Ready to Build

Pre-Building Preps • Buying Lumber • Screws vs Nails • Accuracy When Cutting • Cutting Lumber

12.5 Protecting the Work

Protect First – Build Second • Working with Paint and Brushes • Procedures – How to Paint Lumber

12.6 Assembling Walls

Preps for Assembling Walls • Procedures – Putting It Together • Framing Production

12.7 Cutting Flat Panels

Types of Panels • Preps for Cutting Panels • Circular Saw Safety • Procedures – Cutting a Straight Line

12.8 Cut-Outs from Panels

Doors and Windows from Panels • Preps for Cut-Outs • Procedures – Cutting from a Main Panel

12.9 Door and Window Hardware

Hinges • Closers and Security • S-Biner and Carabiner Clips • Flip Closer – Simple Alternative
Closers for Adjoining Doors • Barrel Bolt Closers • Hook and Eye Closers

12.10 Installing Hardware the Easy Way

Preps for Fitting Hardware • Procedures – Getting the Right Fit

12.11 Painting Flat Panels

Preps for Painting • Procedures – The Right Way to Protect Panels

12.12 Preparing Flat Panel Doors

Preps for Bracing Doors • Procedures – Cutting and Fitting Braces

12.13 Floors and Decks

Planning Deck for Frames • Building Deck Frames • Mesh Flooring Option

Phase Two – Putting the Pieces Together

12.14 Putting Up the Structure

Preps for Standing Up Walls • Procedures – Going Vertical

12.15 Securing to the Foundation

Preps for Foundation Anchoring • Procedures – Keeping It Stationary

12.16 Screening

Keeping Out the Critters • Preps for Installing Screening • Procedures – Locking Them Out

12.17 Installing Wall Panels

Preps for Installing Panels • Procedures – Closing in the Structure

Phase Three – Putting on the Roof

12.18 Shed Roofs

Comparison of Roof Types • Working with Polycarbonate Roofing • Planning for Slant Roofs
Prep Procedures – Same as for Walls

12.19 Installing Roof Infrastructure

Preps for Installation • Installing Rafters • Installing Runners • Installing Storage Bars

12.20 Cutting Polycarbonate Roofing

This is a special, but simple technique. Just follow these procedures.

Preps for Cutting • Methods for Cutting polycarbonate Roofing • Procedures – Making a Good Cut

12.21 Installing Roof Panels

Preps for Installation • Procedures – Putting on the Roof • Finishing the Roof

Phase Four – Finishing the Project

12.22 Installing Doors, Windows, and Closers

Preps for Installation • Procedures – Organized Installation • Installing Flip Closers
Installing Hasp and Shackle Closers

12.23 Installing Utilities

Preps for Installation -- Plumbing • Preps for Installation – Electric • Procedures for Burying Electric
Preps for Wiring • Procedures for Wiring

12.24 Finishing Touches

Pacing for Finish Work • Final Inspection and Site Clean Up • Celebrate the Achievement

13 Fences

There are pretty fences and there's homestead fences—those that actually work. This is how to go from concept to completion with step-by-step procedures to remove the mystery of fences and avoid mistakes.

13.1 Homestead Fences

Picture-Perfect Fences – Not Homestead Fences • Homestead Fencing that Works

Other Types of Farm Fencing • Goats and Fences • Chickens and Fences • Fence Maintenance

13.2 Planning a Fence Project

When to Do It • Perimeter Fence – Where to Put It • Internal Fences • Measurements and Marks

Planning for a Fence • Take a Break – Think About It • Prepping the Area

13.3 Installing Gates

Preps for Installation • Procedures – Installing Posts and Hanging Gates • Fine Tuning Gates

Adding Gates to Existing Fences • One-Handed Gate Closer • Homestead Built Gates

Working with Heavy Gates

13.4 Installing Corners and End of Runs

Types of Corners with Braces • Materials, Tools, and Procedures

13.5 Installing Bridge Posts

Purpose for Bridge Posts • Types of Bridge Posts • Bridging with Gates

Materials, Tools, and Procedures

13.5 Installing Fence Posts

T-Posts – The Farm Standard • Preps for Installation • Installation – Pounding the Posts

Mistakes to Avoid with Fence Posts • Installing Wood Fence Posts

13.6 Installing Fencing

Installation Strategy—How It Gets Done • Attaching Fencing to Posts • Preps for Installation

Procedures for Installation

13.7 Making Changes to Fences

Removing T-Posts • Shifting T-Posts • Adding a Gate • Adding an Internal Fence • Patches to Fencing

Used Fencing

13.8 Temporary Fences

What Doesn't Work • What Does Work • Electric Net Fencing • PVC Tubes – Different Kind of Fence

Part Three – Open Access Material

14 Tools

Some tools are great and some terrible. Nevertheless, you will need tools. Shown and described here are the tools that make homestead work possible. There's everything from those you already know to those you might never suspect.

14.1 Non-Powered Tools

14.1.1 Small Gardening Tools

Trowels • Hand Rakes • Harvest Clippers • Utility Scissors • Kitchen Knives • Pruners • Loppers
Machetes • Rebar Stakes

14.1.2 Building and Maintenance Tools

Speed Square • Tape Measures • Calculator • Pencils, Markers, Erasers • Clipboards and Scrap Paper
Handy Clamps • Levels • Hand Saws • Roller Sawing Stand • Long Straight Edge • Sandpaper
Hammers • Brick Hammer • Crowbars and Pry Bars • Tool Pouch and Nail Apron • Mechanics Tools
All the Other Tools • Tool Boxes • Tool Bags • Flashlights • Grabbers and Magnets

14.1.3 Long-Handle Tools

Hoes • Pitch Forks • Rakes • Shovels • Kid-Size Snow Shovel • Mauls • Post Hole Digger • Spud / Pry Bars
Pickaxe, Mattock, Axe, and Sledge Hammer • Fruit Picking Basket • Pole Pruner • Sapling Puller

14.1.4 Other Important Tools

Buckets • Step Ladders • Extension Ladder • Hoses • Tarps • Tarp Grabbers • Bungee Cords
Grommet Kit • Bolt Cutters • Come Along Hand Winch • Heavy Cable • Fencing Stretcher Bar
T-Post Pounder • Paint Marking Wand • Marking Flags • Fencing Wire and Light Cable • T-Handle
Cargo Roof Racks • Light Duty Tie-Down Straps • Medium Duty Ratchet Straps • Floor Jacks
Jack Stands • Mower Jack • Steam Table Pans • Large Ladles • Chimney Sweep • Brooms • Vise
Rope • Twine • Boot Scraper • Knife Sharpener • Bug Bite Zapper • Stile Ladder

14.2 Power Tools

14.2.1 Small Battery-Powered Tools

Drill and Driver • Primary Drill Bits • Other Drill Bits • Palm Sander • Jig/Sabre Saw • Rotary Tool Kit
String Trimmer • Pole Saw • Battery Charging Stations

14.2.2 Small Electric-Powered Tools

Hammer Drill • Circular Saw • Shop Vacuum • Retractable Extension Cords • Regular Extension Cords

14.2.3 Large Power Tools

Chop Saw • Table Saw • Grinder • Lawn Mower • Power Washer

14.2.4 Chainsaws

Living with Chainsaws • Working with Battery-Powered Chainsaws • Maintaining Chainsaw Blades

14.3 Tools with Wheels

14.3.1 Small Tools with Wheels

Garden Cart • Utility Wagon • Cart for Rolls • Spreader • Measuring Wheel • Two-Wheel Hand Cart

14.3.2 Medium Tools with Wheels

Small Tug Cart • Large ATV Cart • Chicken Tractor

14.3.3 Tractors – Big Tools with Wheels

Living with Tractors • Types of Tractors • Types of Tractor Tools • Common Tractor Tools
Getting Stuck in the Mud • Working with Tractor Tires • Alternatives to Tractors and Equipment

14.3.4 Vehicles – Tugs, ATVs, Trucks, and Trailers

Living with Motorized Vehicles • Motorized Homestead Tools • Trucks • Alternatives to Trucks
Trailers – Life Without a Truck

14.3.5 Other Useful Tools with Wheels

Work Tables and Shelves • Rolling Wood Racks • Power Tool Stands • Rolling Tool Cabinets

14.3.6 Not-Quite-a-Wheel Tools

ATV Roller • Taboggan Sleds • Top Wire Reel • Scrap Pieces of PVC • Furniture Dollies

14.4 Homestead Clothing

14.4.1 Protection for the Body

Work Pants and Shorts • T-Shirts, Sweatshirts and Jackets, Shirts • Hats, Sweatbands, and Underclothes

14.4.2 Protection for the Feet

Work Boots • Work Socks • Taking Care of Leather Boots • Light-Weight Shoes • Sandals • Muck Boots
Replacements and Emergency Spares

14.4.3 Protection for the Hands

Living with Gloves • Log-Handling Gloves • All-Purpose Gloves • Garden Gloves • Compost Gloves

14.5 Chemicals on the Homestead

Living with Chemicals • Useful Chemicals • Medicines • Fuel – Necessary Chemicals
Soaps – Handy Chemicals • Unnecessary and Wasteful Chemicals • Plastics • Chemicals in Food
Chemicals in Water • Keeping Healthy Without Chemicals

15 Resources

It starts with a library, but there are so many possibilities that hoping to find the right books, websites, and material can be a colossal waste of time. These three areas are categorized and detailed to help you find what you need—quickly and easily—when you need it.

Then there's all of those things we built to make our homestead work. You'll find basic details so you can adapt these projects for your own needs. Finally, new projects are always looming in daydreams.

15.1 Information – The Key to Success

Importance of a Library • Primary Books • Primary Web Sites • Everything Else – Alphabetical Order
Other Important References • Environmental Stewardship • Personal Growth

15.2 Material – Where to Find Stuff

Growing Suppliers • Growing Supplies • Harvesting and Storage • Animals / Chickens • Irrigation / Water Tools • Farm Supplies • Building / Construction • Fences • Clothing

15.3 Small Projects

Tomato and Pepper Cages – Wood • Tomato and Pepper Cages – PVC • Critter Cages • Garden Bench Cart for Rolls • Compost Sifting • Cloche Storage • Bucket Stand • Veggie Storage Bins and Rack
Lettuce / Spinach Rack • Chicken Dirt Bath • Hay Crib • Goat De-Horning Box • Tarp Roll-Up Door
Small-Pieces Wood Rack • Cut-Ends Wood Rack • Firewood Rack • Scrap Lumber Rack • Fuel Shed
Chicken Storage Shed • Foot Bridges • Toboggan Sled Rack • Harvest Sink • Dish Tower • Saw Buck
Chainsaw Blade Sharpening Stand

15.4 Medium Projects

Garden Cart • Goat Mountain • Outhouse Chicken Coop • Field Chicken Tractor • Brooder Hutch
Woodworking Table • Long-Handle Tool Shed • Garden Sheds • Deck Sink • Large Trellis • Small Trellis
Fence Trellis • Chipper Shed • Firewood Drying Shed • Equipment Shed • Kids Bike Shed
Creek Equipment Bridges • Solar Food Dryer • Unschooling Shed • Kids Sandbox Play Area

15.6 Large Projects

Goat / Sheep Barn • Chicken Coop • Trailer / Hay / Wagon / Garden Storage System • Kayak Shed
Tractor Barn • Outdoor Deck / Kitchen • Wood Shed • Kids Yard Toy Shed • Kids Play Structure
Feed Enclosure / Storage Shed • Compost Bins

15.7 Upcoming Projects

Pond Construction and Water Flow • Alternative to Ponds / Water Hydrants • Orchard Development
Greenhouse for Citrus Trees • Mushroom Cultivation • Raising Meat Rabbits • Replace Goat/Sheep Barn