

ICE-OUT TROUT: NAIL YOUR LIMIT OPENING DAY

MODERN PIONEER

APRIL/MAY
2016

BOSS GOBBLERS

7 KEY STRATEGIES
TO BOW-BAG
A TOM

**SURVIVAL:
KNIVES FOR
HIM & HER**

5 TIPS
FOR EASY
RELOADING

**BOW
FISHING
101**
BUILD THE
PERFECT RIG

**DEADLY
SNAKES**
SAFETY
PRECAUTIONS
YOU NEED TO
KNOW

**BIG
BRUISES**
PUNCH YOUR
TAG THIS
SPRING

**HERITAGE
HOGS**
THE QUEST FOR
PERFECT PORK

HOME TECHNIQUES

1 RESTORATION &
CARE OF CAST-IRON
COOKWARE

2 BREW YOUR
OWN BEER
AT HOME

3 HOW TO
PRESERVE YOUR
GARDEN'S YIELD

FROM THE EDITORS OF AMERICAN SURVIVAL GUIDE
U.S. \$9.99 DISPLAY UNTIL 06/21/16



ENGAGED MEDIA INC.



“Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime.” —MAIMONIDES



contents

APRIL/MAY 2016

FEATURES

GENERAL

16 | Ice-Out Trout

Catch your limit on a frigid early spring outing

By Patrick Meitin

54 | The Quest for Perfect Pork

The resurgence of heritage breeds

By Michael Pendley

100 | Antler Business

Buying, selling and trading antlers

By Tracy Breen

112 | Exploring Wild Areas by Rail

Four train tours with breathtaking views

By Dana Benner

124 | All-Natural DIY Lotion

A chemical-free solution to dry skin

By Charles Witosky

HUNTING/SHOOTING

28 | Bow-Kill Your Next Gobbler

Swipe the king of spring with one well-placed arrow

By Darron McDougal

42 | Gun Review: Gamo Whisper G2

A varmint's worst nightmare

By Thomas C. Tabor

60 | Top 10 Youth Deer Cartridges

Low-recoil calibers with knockdown power

By Michael Pendley

80 | A Beginner's Guide to Reloading

Roll your own ammunition in five easy steps

By James E. House

90 | Hunting the Woodcock

Share in a fading tradition

By Jason Houser

106 | Bullish for Bears

Spice up your spring with an in-your-face encounter

By Brian Strickland

118 | Bowfishing Basics

Fundamentals for a successful voyage

By Larry Schwartz

SURVIVAL

36 | Dangerous Encounters With Snakes

Be prepared for the unexpected strike

By Larry Schwartz

86 | Benchmade Knives for Him and Her

Sweethearts test new knives during a western venture

By James E. House

BUSHCRAFT

48 | Traditional Turkey Tales

A bowhunter's fondest springtime memories

By Mike Yancey

72 | Pelt Shooting

Stop predators in their tracks without destroying valuable pelts

By Patrick Meitin

48



54



72



90



MODERN PIONEER

EDITORIAL

Doug Jeffrey Editorial Director
Darron McDougal Editor
Michelle Salcedo Managing Editor
Henry Z. De Kuyper Senior Staff Photographer

DESIGN

Claire Morales Art Director
Eric Knagg Design Director

CONTRIBUTORS

Dana Benner, Tracy Breen, James E. House, Jason Houser,
Patrick Meitin, Michael Pendley, Larry Schwartz, Brian Strickland,
Thomas C. Tabor, Darryl Quidort, Charles Witosky, Mike Yancey

ADVERTISING

Gabe Frimmel Ad Sales Director
(714) 200-1930
gfrimmel@engagedmediainc.com

Casey Clifford Senior Account Executive
(714) 200-1982

Mark Pack Senior Account Executive
(714) 200-1939

Charles Dorr Senior Account Executive
(714) 200-1931

John Cabral Advertising Design
Gennifer Merriday Advertising Traffic Coordinator
Kristan Beckman Advertising Traffic Coordinator

DIRECT MARKETING GROUP

John Bartulin (866) 866-5146 ext. 2746
Neal Medalla (866) 866-5146 ext. 2780

OPERATIONS

Subroto Mallick Business Analytic Manager
Robert Short IT Manager
Harsh Srivastava Newsstand and Circulation Analyst
Shailesh Khandelwal Subscriptions Manager
Alex Mendoza Administrative Assistant
Jeno Torres Administrative Assistant
Victoria Van Vlear Intern Program Manager
Arvind Sidhu Prepress Manager

EDITORIAL, PRODUCTION & SALES OFFICE

22840 Savi Ranch Parkway, #200, Yorba Linda, CA 92887
(714) 939-9991 • Fax: (800) 249-7761
www.americansurvivalguidemag.com
www.facebook.com/americansurvivalguidemagazine
www.facebook.com/eembybeckett

MODERN PIONEER (ISSN 2331-8937) is published bi-monthly in
December/January, February/March, April/May, June/July, August/September,
October/November by Engaged Media Inc., LLC, 22840 Savi Ranch Parkway,
#200, Yorba Linda, CA 92887. © 2016 by Engaged Media, Inc. All rights re-
served. Reproduction of any material from this issue in whole or in part is
strictly prohibited.

CUSTOMER SERVICE

Engaged Media, Inc.
22840 Savi Ranch Parkway, Ste. 200, Yorba Linda, CA 92887

(239) 653-0225 Foreign Inquiries
customerservice@engagedmediainc.com
Back Issues: www.engagedmediamags.com
Books, Merchandise, Reprints
(800) 764-6278 • Foreign (239) 653-0225

Letters to Editor, New Products or to Contribute a Story or Photo
djeffrey@engagedmediainc.com

Single copy price is \$9.99.

ENGAGED[®]
MEDIA, INC.

ENGAGED MEDIA INC.
Nick Singh President
Celia Merriday HR and Office Management
Gus Alonzo Circulation/Marketing Director
Jason Mulrone Director of Content
Pinaki Bhattacharya Vertical Manager

This magazine is purchased by the buyer with the understanding that
information presented is from various sources from which there can be no
warranty or responsibility by Engaged Media Inc., as to the legality,
completeness or technical accuracy.

SELF-RELIANCE

22 | How to Preserve Your Fruits and Vegetables

The ins and outs of a time-honored tradition

By Charles Witosky

66 | Home-Brewed Beer

An aspiring home brewer's how-to handbook

By Michael Pendley

94 | How to Restore and Care for Cast-Iron Cookware

11 secrets to non-stick results

By Charles Witosky

DEPARTMENTS

6 From the Editor

7 Review

8 News

14 Gear Showcase

COLUMNS

10 Do-it-Yourself

Make Your Own Portable Shooting Bench
By Darryl Quidort

130 Past Pioneers

"Mad Anne" Bailey
By Darryl Quidort

COVER COMPOSITE BY: YEKATERINA SVERDOLOVA

PHOTO: THINKSTOCK

GREEN MEANS GO

Springtime is tough to beat for avid outdoorsmen/women. Our country's transformation from wintery white into shoots of greenery is a welcome sight, especially following a long and dawdling winter.

Numerous outdoor opportunities arrive with spring's green-up. By far, my fondest is spring turkey hunting. I've been hunting wild turkeys for 14 years, and unlike the majority, I started out hunting them with archery tackle. As you can imagine, it took me a few springs to get on the board.

I'll always remember taking my first spring bird. My eldest brother, Joe McDougal, took me hunting only a few miles from home one May morning. We popped our ground blind in a field about 200 yards from a Wisconsin state highway just as dawn was breaking. Turkeys were gobbling in practically every direction. We planted a few decoys, crawled into the blind and prepared for the show.

Early on, a beautiful tom entered the field. He gobbled at nearly everything—even a man revving his motorcycle's engine from the highway. Though seemingly red-hot, the bird wouldn't commit to our decoys and eventually departed.

I thought our morning was through when three jakes were spotted making a beeline toward our decoys. I drew, aimed and shot. My arrow narrowly missed the lead bird's head. Confused, the birds mingled beyond the decoys 27 yards away. I nocked another arrow and prepared for the second opportunity.

Again, I drew my bow and aimed for the same Jake's head. This time, my arrow connected and anchored the bird instantly. I've since taken approximately 50 turkeys, most by bow. I never tire of spring's sights and sounds amidst the turkey woods.

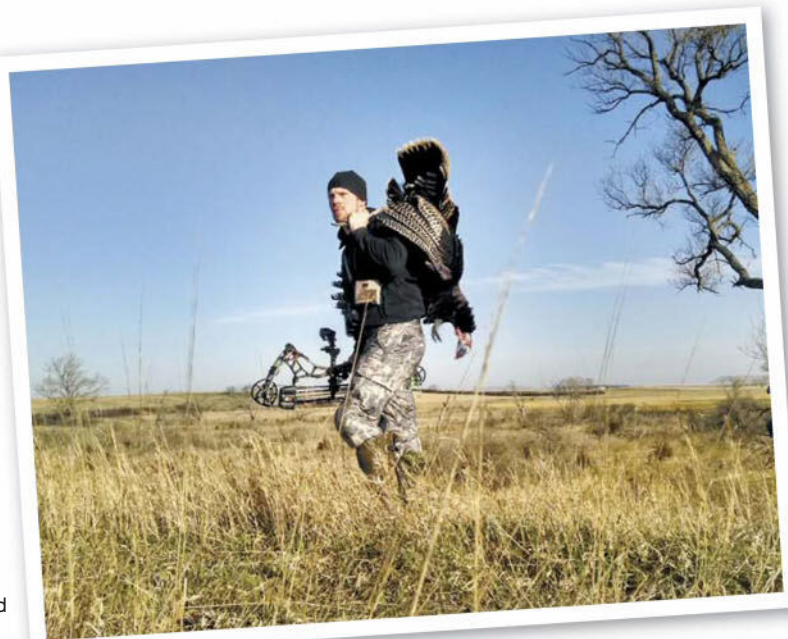
If gobbling toms fire you up the way they do me, Mike Yancey and I have just what the doctor ordered. In "Traditional Turkey Tales," Yancey relives his most memorable spring turkey hunts while using a Black Widow Recurve. One hunt, though not so green, went down in Wyoming where Yancey arrowed a gobbler during a spring blizzard. In "Bow-Kill Your Next Gobbler," I outline seven key considerations that'll boost your chances for bow-bagging spring gobblers.

In "Bullish for Bears," Brian Strickland presents strategies for bowhunting spring bruins. From baiting to calling to spot-and-stalk hunting, Strickland's strategies up your ante for a successful hunt.

Larry Schwartz presents yet another springtime favorite. In "Bowfishing Basics," he shares that bowfishing extends your bowhunting season. He covers the equipment you'll need to get started, as well as general tips and considerations for plunking fish.

If conventional fishing is more your cup of tea, Patrick Meitin's "Ice-Out Trout" is a must-read feature that discusses the ins and outs of fishing iconic brown and rainbow trout immediately following the spring melt.

For the DIY pioneer, "How to Preserve Fruits and Vegetables" by Charles Witosky outlines ways to preserve your garden's yield. These are tips you'll want to know well before the harvest. Witosky also incorporates history, discussing time-tested vegetable pits and cellars early pioneers used to store excess produce.



Though most of us already have enough spring diversions, perhaps you're considering learning the skills and tools required to reload ammunition or brew your own beer. James House's "A Beginner's Guide to Reloading" presents ammunition reloading in five easy steps. Likewise, Michael Pendley's "Home-Brewed Beer" offers a wealth of information on procedures and equipment for brewing fine-tasting beer.

For the adventurer, perhaps a spring vacation with sightseeing would tame cabin fever. Dana Benner suggests doing it the pioneer way. In "Exploring Wild Areas by Rail," Benner shares four scenic train trips that'll keep you on the edge of your seat. Besides serene rivers and mountains, Benner reports you'll see tons of wildlife during your ride. Should you venture out on one of these trips, consider packing a digital camera so you can capture the breathtaking views.

Spring's first green shoots popping through wintery landscape signal a time full of activities. The hard part is choosing which one(s) to partake in. As I write this note, I'm preparing to jumpstart my spring in Florida pursuing the coveted Osceola turkey in early March. I'm already imagining the sights and sounds I'll see and hear. My anticipation is building. I can feel it. Yes, for the modern pioneer, green means go.

DARRON MCDOUGAL

review

Garmin eTrex Touch 35 at a Glance

PHYSICAL

WEIGHT: 5.6 ounces

DISPLAY: 2.6-inch 65K color TFT

BATTERY: Two AA (not included)

BATTERY LIFE: Up to 16 hours

INTERFACE: USB

MEMORY

BUILT-IN MEMORY: 4GB

(also accepts micro-SD card—not included)

ROUTES: 200

WAYPOINTS/LOCATIONS: 4,000

TRACK LOG: 10,000 points, 200 saved tracks

ADDITIONAL

SHARING/INTERACTIVITY:

Garmin Connect

SMART NOTIFICATIONS: Yes

GEOCACHING-FRIENDLY: Yes

> Visit garmin.com



Compact Functionality

Garmin eTrex Touch 35

Outdoor enthusiasts, regardless of how well you know—or think you know—the water or ground on which your adventures take you, a GPS unit is one of your greatest assets.

For example, I extensively hunt Idaho's mountains for elk, where I must be opportunistic, often chasing bugling bulls into unknown places. I also annually hunt various other species across multiple states, often on public lands. To isolate from pressure other hunters create, I walk miles upon miles to be successful. While studying landmarks and developing land familiarity is beneficial, navigating solely by hunches is like asking for trouble. A GPS unit not only helps me return safely from the deepest forests, but also helps me mark hunting hotspots so I can easily locate them in the predawn blackness.

GPS units are certainly nothing new, but their technology improves steadily each year. One such GPS that wraps current technology into a user-friendly interface is Garmin's eTrex Touch 35. After testing it recently, I've concluded it's an excellent companion for outdoor enthusiasts. Let's review the reasons why.

Touch is In

When I first pulled the eTrex Touch 35 from its box, I noticed it has only one button, the power button. That's three fewer than my smartphone has. Besides powering on and off and accessing the main menu, all other actions are completed by using the device's touchscreen. Navigating through the device's features is incredibly simple and intuitive.

Setting up the eTrex Touch 35

To begin using the eTrex Touch 35, I simply installed two AA batteries, which will last up to 16 hours. Next, I followed the instruction manual's prompts to download Garmin Express to my PC. Once downloaded, I plugged my eTrex device into the PC via the included USB cable. Through Garmin Express, I effortlessly updated my eTrex Touch 35 with the latest software. The app also notifies when new software updates become available.

Also in the app is Garmin Connect, a platform for viewing and sharing your GPS activities or connecting with others and viewing their activities. Users can be as interactive as they wish with this connectivity.

Meanwhile, saved tracks, routes, waypoints and geocaches can be shared

wirelessly to compatible Garmin devices. A smart-notification feature always informs of texts, e-mails and notifications from your compatible smartphone, but the feature can be disabled, if you prefer.

One Device, All Activities

In their infancy, GPS units were basically used for navigation. Today, they offer so much more. For example, the eTrex Touch 35 has the following activity options: hike, hunt, fish, tour, bike, climb, geocache and mountain bike. This helps multi-activity outdoor enthusiasts track activities separately and keep everything organized.

Further, the eTrex Touch 35 has features spanning well beyond navigation. These include: calendar, stopwatch, altimeter, calculator, alarm clock, wireless sharing, sun and moon data and best hunting and fishing times, to name several. The unit even works as a remote for Garmin's VIRB action camera.

Fully Functional

The eTrex Touch 35's 2.6-inch color-capacitive touchscreen is sunlight-readable with adjustable brightness. A 4GB memory offers great storage, which can be augmented with a micro-SD card in the available port.

The device also comes preloaded with 250,000 geocaches from geocaching.com. It stores and provides important information on hints, terrain, locations, difficulties and descriptions. This makes manually adding coordinates and carrying paper printouts obsolete.

Additionally, the eTrex Touch 35 tracks GPS and GLONASS (developed by the Russian Federation) satellites simultaneously, which means it can pick up 24 more satellites than GPS satellites alone. This technology substantially improves your global navigation.

Conclusion

I could write a book on everything the eTrex Touch 35 does. Its vast features, compact design and user-friendly interface make it a choice unit for any outdoor enthusiast. And with a \$300 MSRP, it offers incredible value.

If you're currently shopping for a GPS unit, consider the eTrex Touch 35. I believe you'll be fully satisfied with everything it offers. After testing it for this review, I certainly won't go hunting—especially in wild places like Idaho's unforgiving mountains—without it.

—Darron McDougal

news



The Nebraska Game and Parks Commission reviewed a draft of a comprehensive pheasant-management plan at its meeting Feb. 25, 2016, at Pheasant Bonanza Hunt Club and Kennel north of Tekamah, Nebraska.

Nebraska Game Commission Reviews Draft of Pheasant-Management Plan

The Nebraska Game and Parks Commission reviewed a draft of a comprehensive pheasant-management plan at its meeting on Feb. 25, 2016, at Pheasant Bonanza Hunt Club and Kennel north of Tekamah, Nebraska. The commission approved the concept of the proposed plan and will refine it.

The objective of the draft Nebraska Mega Plan is to produce the best pheasant-hunting experiences throughout the next five years. The plan's goals are to increase pheasant abundance, increase the pool of potential pheasant hunters and access to land holding pheasants, manage hunters' expectations and improve the funding and policy environment related to pheasant management.

Eight multi-county areas were selected within the state to focus efforts for habitat management and hunter access. Those areas are within the northern panhandle, southern panhandle, central Platte River, northeast, southeast, south central, southwest and central parts of Nebraska; the plan details desired improvements on both public and private lands in each area. Beyond the significant contributions needed from the U.S. Department of Agriculture's conservation programs, full implementation of the habitat and hunter access improvements identified for all areas would require an additional \$5.9 million annually for the next five years.

Current policies, along with more efficient farming practices, have created substantial challenges to providing consistently good pheasant hunting in many Nebraska landscapes, particularly where wheat and other small grains are no longer part of crop rotations. The measures described in the plan are necessary if pheasant hunters are to have satisfying experiences in these landscapes.

Gamo's 2016 Squirrel Master Classic a Success

Gamo Outdoor USA, the leading manufacturer of high quality air guns, optics and laser designators, partnered with the Buckmasters organization to present the 3rd annual Squirrel Master Classic, held Feb. 17-18, 2016, in Montgomery, Alabama.

Participants consisted of 4-H kids, Gamo executives, outdoor-media members and outdoor-TV personalities. They were divided into six teams, each accompanied by a guide, an award-winning squirrel-hunting dog and its handler.

Gamo provided participants with the new and impressive Whisper Fusion Mach 1 .22 caliber, a spearheading model in the European manufacturer's lineup. This air rifle quickly impressed everyone with its accuracy, new SAT trigger technology and knockdown power, thanks to Gamo's latest propulsion system, the new IGT Mach 1 Piston.

The highly anticipated hunting event was captured by the *Bone Collector*, *Buckmasters*, *Doug Koenig Championship Season*, *Pigman: The Series*, *Hunt* presented by Hard Core and *The Choice* TV film crews, and will broadcast on national television this coming spring. Media members were covering the event through their various outlets including blogs, webpages, social media, newspapers and magazines and even radio broadcast.

"The Squirrel Master Classic gives hunting



Gamo's Annual Squirrel Master Classic participants used the new and impressive Gamo Whisper Fusion Mach 1 in .22 caliber to claim squirrels during an exciting competition held in Montgomery, Alabama.

and air-gunning fans a chance to see Gamo's 2016 models, new technologies and how they perform in real-life situations," Fedor Palacios, Gamo's marketing communications manager, said. "They get to watch some of the most iconic outdoor celebrities competing against one another, the hunting principles Gamo promotes, all the fun and opportunities that hunting small and medium game brings to families. Most importantly, we're grateful for the 4-H kids' involvement. They're our sport's future, and we support them," Palacios continued.



The 2016 Blade Show will be held in Atlanta, June 3-5.

Blade Show Celebrates 35TH Anniversary

The world's largest knife show is coming to the Cobb Galleria in Atlanta, June 3-5, 2016. The Blade Show, celebrating its 35th anniversary, is the best place to engage expert knife handlers, precision craftsmen and master knife makers in one location. Explore your passion for knife craft while perusing high-end blades and gear, or acquire a new skill from the instructors teaching Blade University classes. Here are the Blade Show's specifics.

750-plus Exhibitor Booths and Tables: Find prime knives and

material from prominent dealers, artists and top professionals.

Blade University Classes: Take your knife knowledge to the next level as you learn from legends.

Knife of the Year Awards: See which exhibitor wins the 2016 Knife of the Year Award. All eligible knives will be on display at the front of the lobby.

Early Bird Ticket: Get first pick of your favorite vendor's wares before everyone else hits the floor. The Early Bird ticket allows access two hours before general admission.

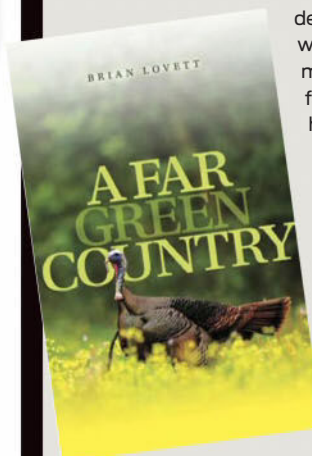
Turkey Master Shares Exhilarating Experiences in New Book

For nearly three decades, Brian Lovett has chased his turkey-hunting addiction across North America. Now, the longtime editor of *Turkey & Turkey Hunting* magazine and current field editor for *Turkey Country's* "On the Hunt" section has compiled a selection of memories, reflections and episodes from those days afield in a new self-published book, *A Far Green Country*.

The 70-page book features never-before-published material and touches on the origins of turkey-hunting devotion, fascination with the bird itself, musings on various facets of the turkey-hunting lifestyle and hilarious recollections from past adventures.

If you're a turkey hunter, you'll find something to love in this title, which is available in print (\$9.99) and electronic (\$4.99)

versions on Amazon, and in e-format on Smashwords, Barnes & Noble and other online sites. You can order a personalized copy through Lovett by contacting him directly at brianlovett131@gmail.com.



Blade University Returns

Participants will delve deep into the world of knives by attending Blade University classes, which offer unique opportunities to learn from industry professionals in a classroom setting. Knife makers Tom Krein and Lucas Burnley will teach you how to grind a knife blade, ABS journeyman smith Butch Sheely shows you the Dogbone Bowie handle, and Abe Elias takes you to Bushcraft Survival School. For more information, visit bladeshow.com.



Eligible knives for the Knife of the Year awards will be showcased in the front lobby at the 2016 Blade Show.



do-it-yourself

Make Your Own Portable Shooting Bench

Experience your firearm's potential with this inexpensive DIY creation

> By **Darryl Quidort**





The tabletop is constructed from $\frac{3}{4}$ -inch plywood and 2x4 supports. The removable 2x4 legs are made using metal sawhorse brackets.

No shooting position is more stable or repeatable than shooting from a bench. A quality shooting bench eliminates human wiggles and wobbles while aiming, which helps you determine just how accurately your rifle shoots or how well it's sighted in. Having one is a necessity for properly sighting in a rifle or checking accuracy variances among several loads.

Preliminary Considerations

An ideal bench would be immovable, with legs sunk deeply into the earth and featuring a large, solid table as its base. Some are even made of poured concrete to provide the shooter with a rock-solid platform. Most shooting clubs have these or similar benches for guests and members to use.

However, many shooters without range access have a safe place to shoot with a good backstop but lack a sturdy rest. A portable shooting bench is the solution.

A portable shooting bench should be as solid as possible when in use but still must be, well ... portable. It's important to consider how far you'll move it and how often. For example, you don't want to build it so big it can't fit into your vehicle if you plan to move it great distances. It might even need to be lightweight enough to be toted by hand.

Let's review some basic construction suggestions.

Specs and Construction

Generally, 34 inches is a good height for a portable shooting bench. The stool

or chair should be separate—not touching the bench when in use—and about 18 inches high. I use an old, wooden chair for a seat.

The actual tabletop can vary in size but should be long enough to safely hold the front rifle rest with sufficient room for the back elbow to rest comfortably on the surface. Also, it should be large enough to hold all of the equipment needed for typical shooting sessions: sandbags, notebook, ammunition, screwdriver, elbow pads, spotting scope, etc.

My portable shooting bench has three pieces: two leg sets and a tabletop—all made from scrap lumber. The top is made from $\frac{3}{4}$ -inch plywood and is 5 feet long and 3 feet wide. A 12-inch section is cut out on one side for 24 inches to

“A quality shooting bench eliminates human wiggles and wobbles while aiming, which helps you determine just how accurately your rifle shoots ...”

“A portable shooting bench should be as solid as possible when in use, but still must be, well ... portable.”

accommodate the shooter (be sure to consider your shooting ambidexterity so you make this cut on the correct side).

I used construction screws to attach a 2x4 down the center of the plywood to hold the removable legs. I also added short 2x4s for table support. A set of two metal sawhorse brackets was purchased to make the legs. I fastened the 2x4 legs securely into the brackets with construction screws.

I cut a 2-inch-square notch out of the bench top for a place to safely lean a rifle while checking my target. This also makes it easier to load and clean muzzleloading rifles.

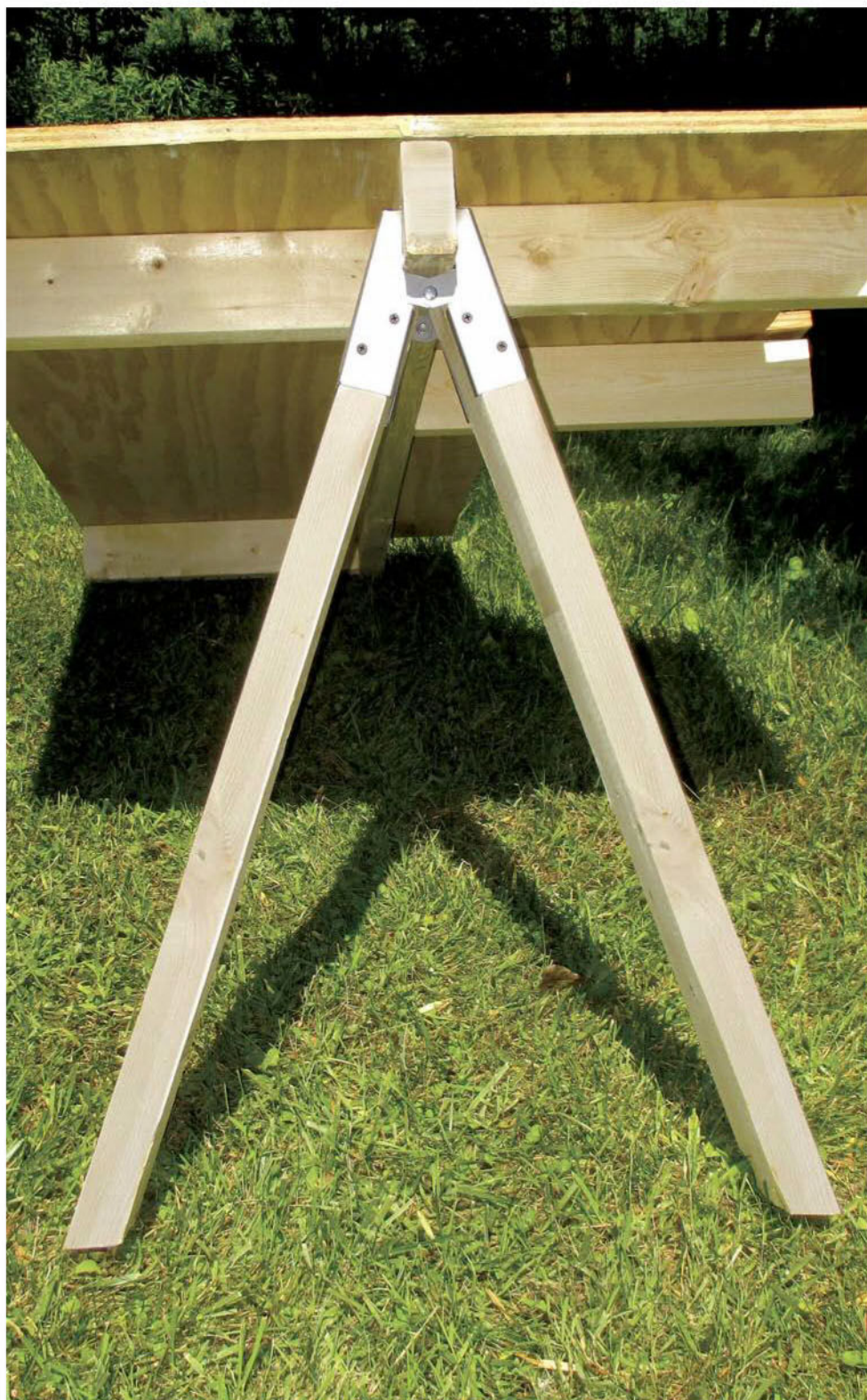
Assembly

Setup is easy: I simply clamp the center 2x4 into the sawhorse brackets and kick the legs out as widely as possible. One set of legs attaches at the front end of the table; the other attaches at the back end. This arrangement stabilizes the shooting bench.

Because my shooting bench is unpainted, I store it in my barn to keep it out of the weather. I cart it out to my range in a wheelbarrow each time I use it.

Overall, I'm very pleased with my homemade shooting bench, especially since it was inexpensive to build. It's sturdy enough to stabilize my aim, yet portable enough to move and set up by myself.

With a little grunt work and a plan, you, too, can build your own portable shooting bench. **MP**



The removable legs clamp firmly onto the shooting bench's center 2x4. Spreading the legs tightens the grip and stabilizes the shooting platform.

SPEED KILLS




**HELL'S
CANYON**
SPEED

**IN STORES
JULY 2016**

BROWNING.COM



gear

SHOWCASE

FOUR-IN-ONE SOLUTION

The Revelation F4 Folding Lighted Knife is the newest addition to Real Avid's Revelation series. Anyone who's field-dressed game in the dark knows how complicated it can be. The Revelation F4's four LEDs are integrated right into the handle so you can easily cut, gut and saw using the 440 stainless-steel drop-point blade and the bone saw with an integrated 180-degree cutting-edge gut hook. Folding conveniently into a compact, ballistic nylon sheath, this knife helps you complete nasty jobs faster, easier and more safely. **MSRP: \$39.99**

> VISIT REALAVID.COM



LIGHT 'EM UP

Ultimate Wild offers the Ultra-Bright Handheld Spotlight, which produces day-like illumination after dark. The Ultra-Bright Handheld Spotlight is a rugged, lightweight, ultra-bright, high-output and rechargeable option for jobs requiring nothing but the brightest light. It's perfectly balanced, and the pistol grip allows for no-fatigue operation during prolonged use. With a comfortably placed power button that allows for convenient one-handed operation, the weather-resistant Ultimate Wild Ultra-Bright Handheld spotlight works well in any weather. **MSRP: \$99.95**

> VISIT ULTIMATEWILD.COM



A CAMPER'S COMPANION

Within the Allen Company's cutlery offerings is the Rockvale Compact Hand Axe. It features a solid one-piece stainless-steel frame and a 3-inch cutting edge. The Rockvale's compact design makes it perfect for various outdoor activities including hunting, fishing and camping. The ergonomic handle ensures a perfect grip with stunning comfort. A convenient nylon sheath with a belt loop safely keeps the Rockvale within arm's reach. **MSRP: \$24.99**

> VISIT ALLENCOMPANY.NET





WARMTH FOR THE CORE

The Fanatic Vest is the quietest wind-proof top offered by Sitka, meaning movements will be completely silent in the harshest conditions. Filling the vest with Primaloft Silver insulation retains core body heat, and GORE WINDSTOPPER breaks those frigid, late-season winds. A strategically placed rangefinder pocket keeps necessities in reach, and an integrated hand muff keeps fingers nimble and ready for the shot. The Fanatic Vest is available in the GORE OPTIFADE Elevated II pattern and comes in sizes small to 3XL.

MSRP: \$229

> VISIT SITKAGEAR.COM



WIDE FOV

TruGlo's Tru-Brite 30 Hunter combines speed, clarity and precision for a variety of hunting applications. Featuring a 30mm tube and variable 14x24mm magnification, the Hunter model incorporates an extremely wide field of view ideal for hog, deer, turkey and varmint hunting or other medium-range precision shooting. With true 1x magnification, hunters can now utilize an extremely fast sight picture and even shoot with both eyes open.

MSRP: \$135

> VISIT TRUGLO.COM



TACTICAL PERFORMANCE

Parker Bows proudly introduces the all-new Hurricane as its flagship crossbow for 2016. The Hurricane redefines tactical crossbows with innovative features and extreme performance. Parker's Reverse Cam Technology with DuraLast Advanced Split Limb Design makes the Hurricane ultra-compact while powering arrows at 380 feet per second. The five-position tactical-style AR adjustable butt stock gives hunters 3.5 inches of adjustment and includes

a rubber butt pad for comfort. The QuickGrip forearm adjusts 4.5 inches for added comfort. At only 8 pounds, the Hurricane is also ultra-lightweight and optimally balanced for enhanced stability. A complete package and Parker lifetime warranty round out the Hurricane. **MSRP: \$899.95**

> VISIT PARKERBOWS.COM

· GENERAL ·

ICE-OUT TROUT

**CATCH YOUR LIMIT ON A FRIGID
EARLY SPRING OUTING**

By Patrick Meitin

I paused momentarily to squeeze ice from each guide of my 9-foot fly rod, taking great care not to dip the reel into icy water. I wrung out my fingerless wool gloves, coaxing numb fingers back under cover. I peered intently through polarized glasses, attempting to penetrate the pewter surface as snow twisted slowly from a flocculent sky like sifted ash.

The dark mass lurking down there suddenly took shape. It was a pod of circling trout beneath the surface of the White Mountain Apache Reservation's Holly Lake. More specifically, rainbows attempting (unsuccessfully) to spawn in the season's first open water created by a normally inconsequential creek turned torrent. There were some browns, too, likely collecting spilled rainbow eggs. It was late March. We'd hit it just right.

After getting as much line in the air as I dared, I delivered the cast. There was three-blip contact, as the line came down on the wrinkled water, made by my #2 black Woolly Bugger point, three BB split shots and #8 damselfly nymph on a dropper. I anxiously counted to 30, then began twitching the works in irregular strips.





ABOVE: Phil Hance caught this gorgeous 20-plus-inch rainbow at a small inlet early in March when nighttime temperatures were well below freezing. Any flowing water will normally attract trout. This one was caught in a feeder creek, which actually goes dry during summer.

Suddenly, there was resistance and I recoiled involuntarily, coming up tight. I momentarily suspected a snag, but the unyielding force abruptly came alive with a deep throbbing, ripping line off my protesting reel.

My line angled beneath a lip of sharp ice marking the stream-fed cove's opening, slicing the surface like ripping cloth. I could do nothing but lower my rod tip and hope the frozen 8-pound tippet held. I suddenly realized I'd stopped breathing. I backed out of the waist-deep water, talking to myself sternly with the abrupt realization that my feet were numb and unresponsive inside 5mm neoprene. The thought of going in sent shivers

down my spine, though my pickup was just 200 yards away with a long plume of exhaust trailing from the tailpipe as my partner ran the heater full tilt, holding pruned fingers to the vents.

After what seemed a long time, but what was probably only minutes, I regained the line as I stumbled onto the sloping shore, now overly cautious. I was backing him closer to shore when my friend appeared, having witnessed my rod's arch and deciding it demanded further investigation. He waded to his knees and deftly netted the living thing at the end of my line. As he raised the net, the trout just kept coming. I slumped onto shore

DRESS FOR SUCCESS

The calendar may read spring, but ice-out fishing can bring on inclement weather. Forget the form-fit, breathable waders when fishing ice-out trout. Purchase the heaviest neoprene waders possible (normally 5mm) including boot-foot designs with 800-gram-plus insulation. Beneath this, start with a layer of body-mapped long underwear like Cabela's E.S.W.C.S. Thermal Zone (cabelas.com) against the skin to avoid binding, and lofty polar fleece "sweats" or a puffy insulating layer such as

Sitka Gear's Kelvin bottoms (sitkagear.com). This getup keeps cold and wet out, and traps heat to keep you warmer longer.

Whether wading or standing in a boat, the same layering techniques are effective; start with wicking long underwear, add a lofty vest or mid-layer and top it off with an insulated waterproof/breathable jacket. Pack boots—the kind worn while hunting winter whitetails—fingerless gloves and a warm hat will complete your outfit.

in utter shock. It was a rainbow, all 12 pounds and 27 ½ inches of him. Earlier I'd caught a 24-inch, 7-pound rainbow, and too many 18- to 20-inch 'bows and browns to remember, but this one was stupefying.

Such events unfold on trout lakes and ponds across the northern tier and Rocky Mountain states each spring. Fishermen often miss them, waiting for sunnier days, clearer roads and balmy temperatures. By then, the season's best trout fishing has passed.

Learning Curves

From early March through early May—depending on latitude and altitude—simply getting to a trout lake can prove adventurous. When I used to obsessively haunt those Arizona lakes at 8,000-plus feet above sea level, I commonly got my pickup stuck at least two times per outing while attempting to reach a lake made inaccessible via drifting snow and icy roads.

Also, there are always the premature starts, braving dangerous roads and slogging miles through deep snow to reach a favorite lake or pond, only to discover it's still iced over. The problem with this program is the very best fishing occurs in the one to two weeks immediately following ice-out (though fishing remains decent for weeks to come). That can occur almost overnight. One day a lake is locked up tight. The next, a slight temperature elevation allows a feeder creek or river to bust a single cove wide open. Trout flock to that open water, hungry, or just happy to see unfiltered sunshine again.

You can develop a feel for particular regions after some experience, but each spring is different, and sometimes your hunches are prompted by wishful thinking rather than commonsense.

Of course, certain lakes, like seemingly bottomless Dworshak Reservoir near my northern Idaho home, never actually freeze over. Still, a time comes when the trout inhabiting these expansive waters stockpile in inlets and begin feeding voraciously. Timing this is tricky, as it's more a matter of water temperature than ice-out. Knowing that, I launch a boat and motor 20 or 30 minutes through bitter temperatures, trying this inlet and that until I hit pay dirt—normally when water temperatures break 42°F to 45°F.

Initial exploratory trips burn tons of fuel and yield few trout, if any. Persistence is ultimately rewarded when you finally catch your limit of jumbo trout, some being the season's largest.

This business revolves around two basic truths: First, rainbow trout are early spring spawners and naturally nose into areas of



ABOVE: Old-fashioned angle worms or night crawlers are generally a safe bet for early spring trout, as inlet streams are washing them into lake coves and trout are hungry.


“... my pickup was 200 yards away with a long plume of exhaust trailing from the tailpipe as my partner ran the heater full tilt, holding pruned fingers to the vents.”

COLD WEATHER WADING SAFETY

Wade-fishing any time of year requires a certain degree of safety precautions, but especially when temperatures plummet. A dunking in early spring weather can prove life threatening, turning you hypothermic within minutes.

As a general rule, I wade no further than thigh deep on uncertain footing, and no more than waist deep on solid bottoms, even if that requires making longer casts. Wading boots should include soles appropriate to conditions; such as felt with cleats on rocky bottoms or aggressive waffle tread on muddy bottoms. Wearing felt in mud or boot tread in rocks can be disastrous.

In extreme weather, I'll normally start a fire on shore—when and where legal—even if it means hauling my own tarp-covered firewood to the site. This not only allows you to occasionally thaw your hands, but it can be a real lifesaver if you take an unexpected dunk. When practical, always fish close to your vehicle for quick sanctuary from the cold or should you become wet.



Sometimes you must get creative to reach productive lake or pond inlets during early spring. With access roads still beneath snow and boat ramps closed for the season, the author and his wife launched kayaks to reach this productive creek inlet.

“As he raised the net, the trout just kept coming ... all 12 pounds and 27 ½ inches of him.”

moving water with a mind toward spawning, which induces aggressive behavior and a willingness to smash flies and lures intruding on their perceived territory. Second, having spent an entire winter beneath ice, subjected to water temperatures slowing metabolism to a crawl, these trout are hungry. Flowing inlets act as conveyor belts for food organisms such as worms, larva, nymphs, drowned insects, winter-dazed baitfish and, in northern Idaho, returning kokanee pare.

Choose Irresistible Bait

Being a diehard fly fisherman, I invariably go at these trout with fly rods, which, considering water and atmospheric temperatures, typically means going deep with a sink tip and split shot or heavily weighted flies. I've hiked into coves and stood in knee-deep snow to catch a limit of 15- to 18-inch trout by stripping generic nymphs pulled down by a split shot or two.

That being said, I generally do best with large streamers: bucktails, Wooly Buggers, rabbit-strip leeches—all heavily weighted. It's generally safe to begin with standard black, olive and brown shades since they closely mimic natural fare, but because these trout have sex on the brain, glaring pinks, purples and chartreuse hues can sometimes rattle their cage and offer better visibility in runoff-clouded water.

The spin fisherman normally does well with crappie-sized twister-tail, marabou or bucktail jigs that sink fast to where these trout normally hold. Or, you can offer live bait. I've rigged up visiting fishermen with night crawlers or salmon eggs beneath a sliding sinker, positioned the boat to address an inlet slot, and within two hours, they've caught and released countless trout. One friend even said, “You know, I wouldn't have thought it possible, but I've caught all the trout I care to for today.”

Other times, bizarre bait is the ticket. Just last spring we caught a mess of heavy trout on, of all things, sparkle-chartreuse Power Bait, including a 21 ½-inch wild rainbow that pulled



ABOVE: Normally a strict catch-and-release fisherman, author Patrick Meitin doesn't mind keeping a limit of trout while fishing early spring lakes or ponds where most are planted artificially.

drag on my ultra-light spinning outfit and jumped four times. Go figure.

Endure the Elements, Catch Your Limit

The real point here is a willingness to suffer a bit for exceptional trout fishing. The key is diligently scoping out coves or inlets that shed ice first, or at least attract trout numbers that make fishing glutinous.

Unless you're extremely lucky, you'll have many false starts and experience numb fingers and sometimes chattering teeth. When you manage to time it just right, though, you'll find you not only have a popular lake or pond all to yourself, but that the season's largest trout have practically become suicidal. **MP**



ABOVE: Tim Rode, shown here, and author Patrick Meitin hit it just right one early March day, each catching gorgeous rainbows like this 21 ½-inch specimen. Two days later, cold weather returned and fishing shut down once more.

How to Preserve Fruits and Vegetables

THE INS AND OUTS OF
A TIME-HONORED
TRADITION

By *Charles Witosky*

Hundreds of different roots, fruits and vegetables can be grown in spring, summer and fall: peas, okra, corn, beans, squash, apples, peaches, cucumbers, eggplants, potatoes, tomatoes—the list is long. Veteran gardeners often end the season with a surplus yield. What should you do with the excess? You could sell it, gift it, compost it, use it as deer bait or preserve it. I prefer the last option.

While preserving fruits and vegetables requires some effort and knowhow, it's an excellent way to make the most of your harvest; plus, preserved produce makes a great pantry item with a long shelf life. Also, if you live where you'll likely be snowed in, a stash of preserved food can be a real lifesaver.

If you're interested in food preservation but don't know where to begin, consider the examples we'll explore in this article. They'll start you off on the right foot.



PHOTO BY THINKSTOCK

VEGETABLE PITS

Pickling and dehydrating are effective ways to preserve food, but freezing is another excellent method. Today, it's as easy as packaging produce and setting it inside a freezer. Past pioneers, however, didn't have this luxury. Even iceboxes couldn't freeze food for very long because the ice melted too quickly. In order to freeze their food, pioneers used a number of methods, one of them being vegetable pits. While you most likely have a freezer in your home, it's still completely possible to make a vegetable pit in your own backyard.

If you're unsure what a vegetable pit is or how it's used, here are some frequently asked questions with answers to clear up any confusion.

What is a vegetable pit?

A vegetable pit is a hole in the ground where vegetables are stored during winter in the hope they'll freeze to prevent spoilage.

What can be stored in a vegetable pit?

A vegetable pit is useful for storing root crops, including beets, turnips, parsnips, cabbages and potatoes. Root crops store best in vegetable pits (often called "root cellars") because they directly contact the soil where their roots can take hold.

How do you construct a vegetable pit?

Dig a hole 3 feet deep, 3 feet wide and as long as you like. This hole should be dug on a hill or where rainwater doesn't collect. Although 3 feet is a vegetable pit's standard depth, this varies by location. Dig to a depth at which the ground will be frozen throughout the entire winter.

How do you store crops in a vegetable pit?

Stack crops in a pyramid formation at the bottom. Stack as many pyramids as needed to store all of your crops down the length of the pit. Then cover the entire pit with two or three layers of hay. Sprinkle enough dirt on top to keep the hay in place.

How do you retrieve crops in the spring?

Pull out the crops the first day the ground thaws. This rarely corresponds with spring's calendar date, but varies by region. Remove crops from the ground, shake off the dirt, let them thaw and start cooking.



A washed and cored apple



Apples sliced and ready to be sprinkled with Fruit Fresh



Fruit Fresh sprinkled on top of sliced apples



Apples and bananas ready to be dehydrated

Dehydrated Fruit

Dehydrating is one of the oldest forms of food preservation. The process removes moisture from fruits and vegetables, which prolongs their edibility. While it's possible to dehydrate nearly any fruit or vegetable, we chose apples and bananas because they're delicious. We used an electric dehydrator, but you may use an oven or the sun. Preparation is the same regardless of the drying method used. Here's a simple recipe.

Ingredients

3 apples

2 bananas

Fruit Fresh preserving solution or
lemon juice

water

Directions

1. Wash, core and slice the apples into $\frac{1}{8}$ -inch-thick discs. Peel and slice the bananas about $\frac{1}{8}$ -inch-thick; they'll shrink considerably once dehydrated.

2. Mix Fruit Fresh or lemon juice with water. For every 4 cups of fruit, mix 2 teaspoons of Fruit Fresh or lemon juice with 3 tablespoons of water. Pour the mixture evenly over the fruit making sure it contacts each side of each piece of fruit.

3. Lay the fruit on the dehydrator trays, making sure that none of the slices touch, then stack the trays into the machine and turn it on. Drying time ranges from three to eight hours, depending on the type of fruit, the thickness of the slices and ambient humidity. Our apples were finished in three hours, the bananas in six. If you don't have a dehydrator or simply want to use a natural process, lay out one large piece of cheesecloth in a sunny area outside. Spread the fruit onto the cheesecloth and then cover it with another piece of cheesecloth. Allow the fruit to dehydrate, which should take approximately two to three days in sunny conditions. Bring the fruit indoors at night.

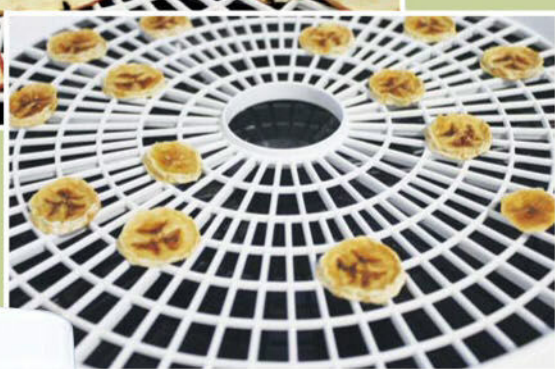
4. Once the fruit has completely dried, store it in airtight containers in a dry environment. The fruit should last up to six months, or up to one year if also frozen.



The dehydrator
at work



Apples fresh
from the
dehydrator



Dry, but not
crispy



Dehydrated fruit
in jars

VEGETABLE CELLARS

Vegetable cellars are similar to vegetable pits but are used for produce other than roots. Here are several things you should know:

What is a vegetable cellar?

A vegetable cellar is a container that has been set into the ground no less than 3 feet deep with the top resting above ground. Food stored inside the container is frozen throughout winter and is safe from animals, insects and material harm.

What can one store in a vegetable cellar?

A vegetable cellar can be used to store various vegetables like, tomatoes, peppers, cabbage, artichokes, dried beans and asparagus, to name just a few.

How do you construct a vegetable cellar?

First, choose where you'll put your cellar; make sure it's not a place where water accumulates. Also, make sure that it's in a safe location where you or your pets aren't likely to walk and fall in. Next, select a container no less than 3 feet tall.

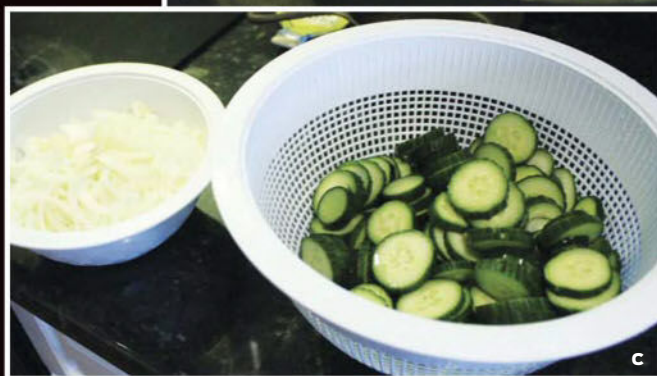
Pioneers built their own barrels to set in the ground, but you can use anything, such as a clean trashcan or a sturdy bucket, as long as it's tall enough. Dig a hole that accommodates the dimensions of the container. Dig the hole deep enough so that no more than 2-4 inches of the container stick up above ground. Place the container in the hole.

How do you store crops in a vegetable cellar?

Place vegetables gently into the container, making sure all of the varieties are grouped together. Stack them in layers, placing the heavier vegetables at the bottom. Next, cover the pit with a flat lid followed by a layer of hay.

How do you retrieve crops in the spring?

Brush off the hay from the top of the cellar, remove the lid (take care, it might be frozen in place), pull out the vegetables, allow them to thaw and enjoy.



A: Pickling supplies
B: The brine
C: Sliced cucumbers and onions

Refrigerator Pickles

Pickling is another effective method of food preservation. Pickled foods can be stored for months at a time without loss of flavor. Foods acceptable for pickling include eggs, grapes, pears, beets, onions, lemons, mangoes, peppers, green beans, cucumbers, cauliflower and even some meat. We pickled the most traditional of them all, cucumbers and onions, to create bread-and-butter refrigerator pickles.

Ingredients

- 3 cups apple cider vinegar
- 1 cup water
- 4 cups sugar
- ½ cup non-iodized salt
- 1 ½ teaspoons ground turmeric
- 1 ½ teaspoons celery seed
- 4-5 white onions
- 3-4 quarts mid-sized cucumbers



D: Onions and cucumbers in jars ready to be covered with brine **E:** Filling a jar with brine **F:** The brine has reduced the vegetables. **G:** Our completed bread-and-butter pickles

Directions

1. Add vinegar, water, sugar, salt, turmeric and celery seed to a pot and bring to a boil to create the brine.
2. Meanwhile, slice the cucumbers as thinly as you like. The thinner they're sliced, the more they'll absorb the brine's flavor. Slice the onions into semi-circles.
3. Layer the onions and cucumbers into mason jars. While it's not necessary to use canning jars specifically, make sure the containers you use can withstand boiling liquid. Our onions and cucumbers filled up four jars, with a handful of vegetables leftover. Don't toss the extras or force them into jars, just set them aside.

4. Once the brine begins to boil, remove it from the heat and allow it to cool for 5-10 minutes.
5. Pour the brine into the jars leaving a 2-inch headspace. Set all of the jars aside. Within approximately 20 minutes the brine will shrink all of the vegetables inside the jars. Eventually, you'll end up with a jar that looks like the one pictured in figure F with lots of room for more vegetables. Fill up the jar(s) with the remaining vegetables (figure G).
6. Close the jars. Since they'll be refrigerated, there's no need to seal and process them for canning. Store the jars in the refrigerator. The onions and cucumbers will absorb the brine's flavors within one or two days. Enjoy the pickles for up to six months (refrigerated). **MP**

Bow-Kill Your Next GOBBLER



SWIPE THE KING OF SPRING
WITH ONE WELL-PLACED ARROW

By Darron McDougal

Dew coated the spring floor as I planted my decoys into the earth 10 yards from my ground blind. A fanned-out gobbler had occupied this very location the previous two mornings, according to the landowner (my grandmother). I figured he'd do it again. My mother and I closed the zipper behind us as we settled in to absorb the morning's events.

As I nocked an arrow, a booming gobble brought the morning to life. My pulse quickened. His gobbles roared over other spring melodies. Yep, he was the king of spring.

Moments later he descended from his roost. Several yelps from my diaphragm call were immediately answered with gobbling. Although

vocal, he wouldn't budge. His reluctance was explained when a hen coasted into the objective view of my binoculars. I called aggressively, hoping to tick her off. It worked.

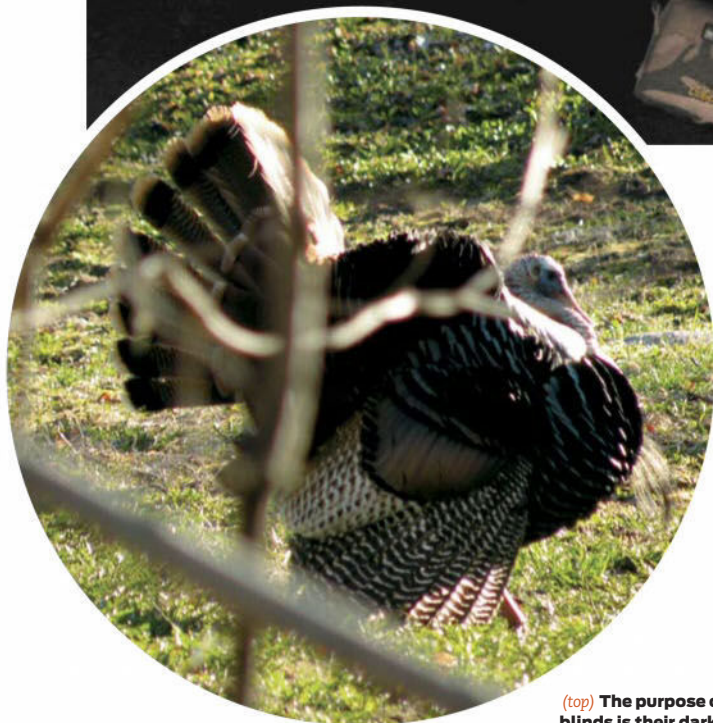
She soon towed the vibrant strutter right to our decoys. I drew my bow, and he coasted into my sight picture. My top pin centered on his side as the shot broke. My well-placed arrow quickly collapsed the gobbler and ended the hunt.

I've taken nearly 50 turkeys with archery tackle during the last 15 years. I've also botched numerous opportunities. Through successes and failures, I've created a solid playbook for bow-bagging spring gobblers. I'll share it with you here.



Author Darron McDougal believes realistic-looking decoys planted 10 to 18 yards away is the best way to garner a top-pin shot opportunity.

“She soon towed the vibrant strutter right to our decoys. I drew my bow, and he coasted into my sight picture.”



(top) The purpose of using ground blinds is their dark interior, which hides most of your movements from sharp-eyed gobblers. Melt into your surroundings by wearing black clothing.

(below) Gobblers are tough to anchor with a bow. On this broadside bird, aim high on the wing 3 to 4 inches behind the wing joint.

Ground Blind Considerations

For most bowhunters, a portable ground blind simplifies turkey hunting. However, neglecting to plan your setup has adverse effects. In the midst of gobbling birds, adrenaline-crazed hunters often pop their blind, shove decoys into the dirt and begin calling. But there's more to consider.

Sunrises and sunsets can decrease a ground blind's effectiveness. We use ground blinds because their blackout interiors hide our movements. Used properly, they also keep sun out of our eyes while aiming at gobblers. When sun shines through the blind windows, every move made becomes highlighted. Avoid this by facing your blind windows north or south. This ensures the sun won't beam through your windows. It's a simple consideration that makes your setup more effective.

Granted, turkeys sometimes approach from unexpected directions. In these cases, make sure you close windows behind you before opening one on the side from which the gobbler is approaching. Think of it this way: If turkeys can see all the way through your blind because of open windows, your movements



will easily be detected. Manage windows to keep your blind's interior as dark as possible. Also, wear black clothing to blend in with the dark interior.

Go Blind-less

Hunting from a ground blind while gobblers echo in the distance creates some anxiety. Although patience is beneficial, an aggressive move may yield success. When I predict success won't come from my ground blind, I dress in full camo and strike out on foot using the run-and-gun strategy. I've landed

numerous gobblers this way. In fact, it's my go-to method for bowhunting new property I haven't previously scouted.

One example is a hunt from last spring. I gained access to a new parcel in Wisconsin, and I knew a mobile approach would help me cover more ground with less commotion. I left my blind in the truck, taking only my bow, calls and decoys.

Just 100 yards from the truck, along a swamp, I heard turkeys walking through leaves. I squatted down, and soon spotted a band of jakes. I wasn't interested in shooting

(top) Study your surroundings and consider the sun before deploying your ground blind. Never face your blind windows east in the morning or west in the afternoon. Sun will beam into the blind, highlighting your movements and increasing aiming difficulty.

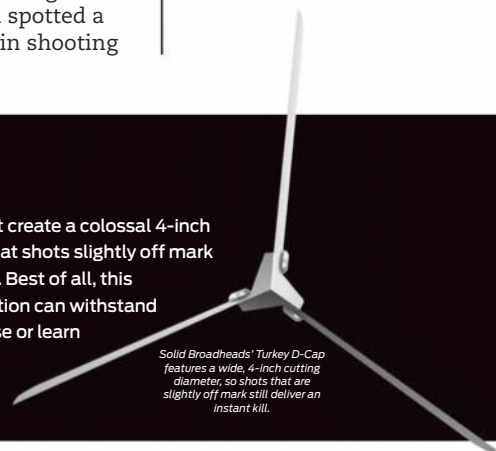
DEAD OR ALIVE

Head shots have become a popular way to bow-kill turkeys. It's a win-win proposition that either kills the turkey instantly, or lets him slip away to gobble another day.

Several broadheads have been designed specifically for head-shooting turkeys. One I like in particular is Solid Broadheads' Turkey D-Cap. It incorporates .060-inch-

thick stainless-steel blades that create a colossal 4-inch cutting diameter. This means that shots slightly off mark can still instantly kill boss toms. Best of all, this 200-grain head's rigid construction can withstand multiple head shots. To purchase or learn more about the Turkey D-Cap, visit solid-broadheads.com.

Solid Broadheads' Turkey D-Cap features a wide, 4-inch cutting diameter, so shots that are slightly off mark still deliver an instant kill.





(top) Once mastered, the author believes mouth calls sound most authentic. Plus, you can operate them without movement—a huge benefit when hunting without a ground blind. Chewing gum will prevent dry mouth and make it easier to operate your calls.

(right) If you're positive birds aren't within sight, operate your call near the blind window to create authentic sounds that carry to distant gobblers.

(opposite) Blind-less success comes by dressing in camo from head to toe. Draw your bow only when the gobbler's view is obstructed by a tree or his fan.



“Hunting pressure causes many toms to halt short of decoy spreads, leaving string-pullers to wonder what they did wrong. Cheap decoys are commonly the culprits ...”

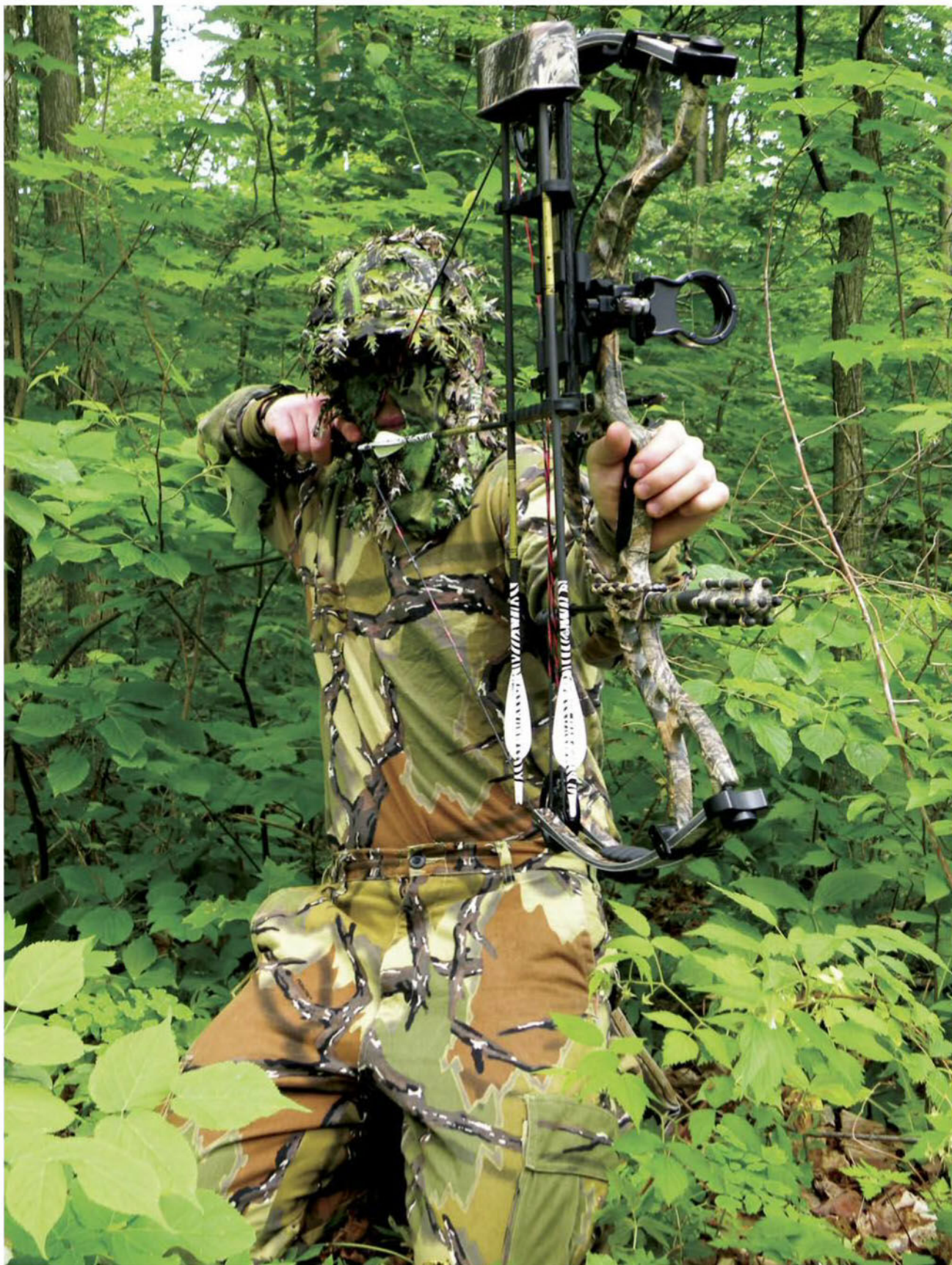
one, so I waited until they moved off, and then continued toward a green field the landowner had told me about. Once there, I planted my decoys, tucked into some brush and called. A distant gobbler responded. I knew he'd more likely come if I were closer, so I rounded up my decoys and quickly closed the distance.

Once set up, I called using my diaphragm call. Again he responded, this time much closer. While watching for the gobbler approaching from behind me, a jake appeared in my decoy spread. I easily could've taken him but elected to wait for the fast-approaching gobbler. His spit-and-drum sequences practically rumbled the earth under my feet. Adrenaline coursed through my veins. One final gobble nearly blasted me off my seat. Then, he spotted my jake decoy and the real jake standing next to my hen decoy. He dashed to confront my jake decoy. I drew while a branch obstructed his view, aimed carefully and shot. He came to rest 10 yards away. I raised my fist toward heaven, thanking God for the incredible experience.

In this scenario, I had to act quickly to reap the harvest. A ground blind—even a mobile one—would have slowed my pace and caused extra commotion, possibly hindering success. My blind-less approach yielded deadly results as it had during many previous hunts.

Decoy Sense

Hunting pressure causes many toms to halt short of decoy spreads, leaving string-pullers to wonder what they did wrong. Cheap decoys are commonly the culprits because they lack realism. A decoy's purpose is to convince a gobbler he's looking at another live turkey.



“Improving your spring harvest is done by failing and succeeding. When you’re unsuccessful, evaluate what went wrong so you can make changes to your playbook.”

Buy realistic decoys that feature the colors and contrasts of real birds. Where legal, further enhance decoys by incorporating real turkey feathers. I’ve even gone so far as to sew a gobbler cape over an existing jake decoy. The creation more than doubled my success.

More recently I purchased Dave Smith decoys. They’ve more than paid for themselves in the hunting time they save me. Routinely, they pull birds in ultra-close for an easy, top-pin shot, often during my first attempt.

I place my decoys approximately 10 yards away while hunting from a ground blind. I previously placed them 4 or 5 yards away, but soon found using my top pin results in slightly low hits since my arrow trajectory doesn’t match my top pin at that range. When hunting blind-less, I set my decoys at 18 yards. This keeps the bird’s attention on the decoy as I draw, and it’s close enough that I don’t need to use my rangefinder.

Two hens and one jake seem to be the

mainstay decoy spread most turkey hunters use. Toms constantly encounter such spreads throughout the season and often avoid them. I’ve found a lone jake decoy works effectively, as does a jake and a hen decoy. Hunters debate using a jake or not using one. I believe a fake jake makes the decoy spread more appealing. Again, my Dave Smith jake decoy has substantially increased my success rate.

How to Practice

Most turkeys are arrowed at less than 15 yards. I routinely launch arrows at my turkey target from distances between 20 and 60 yards, which simplifies shorter hunting shots.

I also shoot my turkey target from 2 to 6 yards. You must learn which pin to use at those distances. Again, your arrow’s trajectory won’t correspond with your top pin at such close ranges. Do your homework. Learn where your bow shoots.

Unlike deer, turkeys can ethically be arrowed from any angle. When crunch time



USE LARGE MECHANICAL BROADHEADS ON BODY SHOTS

Turkeys are difficult to anchor using anything short of large mechanical broadheads. I normally shoot bows set to 65 or 70 pounds, which allows me to push a huge mechanical broadhead with a 2-inch (or larger) cutting diameter.

The benefits of a large mechanical broadhead are twofold. First, the arrow’s energy unloads on the bird upon impact as the blades open. This alone helps knock the bird down. Second, the large cutting diameter forgives when shots are marginal. Put simply, behemoth blades increase recovery rates.



arrives, you must recognize the angle at which the tom is standing, and where to aim for a kill shot. This comes through practice. Turkeys are tough targets, and being even slightly off can result in losing your bird.

Use Mouth Calls to Reduce Movement

Every turkey bowhunter should master the diaphragm call (aka mouth call). You'll quickly learn that if your mouth is too dry, creating authentic calls with them is difficult. This is especially true of raspy, multi-reed calls. Coffee drinkers, the caffeine from your pre-hunt beverage saps saliva. When possible, tote a water bottle to stay hydrated and produce optimal calls.

When I can't take water, I shove a stick of minty gum in my mouth. This works to avoid a dry mouth and keeps your call fresh, too. Who wants to pop in a mouth call that tastes like old coffee? When it's time to call, I simply tuck the gum under my lip so it doesn't interfere.

Authenticate Your Ground Blind Calling

Most turkey bowhunters forget that ground blinds muffle noises. This is great for shifting into position for a shot but bad for calling. Blinds decrease the range at which your calls can be heard, plus they reduce the call's authenticity. If birds aren't within sight, I work my call near the window, which extends the call's range and produces more realistic sounds.

Apply the Science

Improving your spring harvest is done by failing and succeeding. When you're unsuccessful, evaluate what went wrong so you can make changes to your playbook. That's exactly what I did to scheme the tips presented within this article.

Today, I'm more successful at bowhunting turkeys than ever before. In fact, it's been years since I've struggled—knock on wood—to bow-kill spring gobblers. Employ my strategies and you too will become a more successful springtime bowhunter. **MP**

(top) This is one of many gobblers McDougal has arrowed without using a ground blind. He located the bird, closed within 200 yards, called the tom in and anchored it with one well-placed arrow.

· SURVIVAL ·



**The copperhead is both beautiful
and dangerous.**

PHOTO COURTESY OF U.S. FISH AND WILDLIFE SERVICE



Dangerous Encounters With Snakes

BE PREPARED FOR THE UNEXPECTED STRIKE

By Thomas C. Tabor

Perhaps you've heard a spine-tingling cry from a buddy during a remote hike, or maybe you screamed like a baby to warn your compadres of the impending threat, hidden and posed to strike. Regardless of who sounded the alarm, the word "snake" conjures up visions that can send the most stalwart person's heart pounding.

Throughout the years, I've certainly experienced my share of scary venomous encounters. I won't admit how many times those resulted in me screaming, but I will admit they increased my heart rate substantially. Many of these meetings came by simply being in the wrong place at the wrong time. Still, I could've been better prepared to address many of them.

One day while hunting chukar partridge in south central Washington State, I discovered one rattlesnake that hadn't yet headed to its winter den. I'd become so preoccupied with watching for birds, lulled a bit by the unseasonably warm weather, that the snake's buzz surprised me. Involuntary, I jumped back a full step and soon spotted the critter's waving rattles. Nearly invisible, the snake was coiled inside a small crevasse along the rocky canyon edge, very close to where my foot had been. His tongue, now jetting in and out, possibly could've licked the dirt from my boots. After removing my pounding heart from my throat, I whipped out my S&W snub-nosed .38 and ended the threat.

I've developed the habit of carrying a handgun loaded with birdshot whenever I'm in



snake country. In this situation, I could've shot the snake with the shotgun I was toting for partridge, but it likely would've destroyed the large rattler's hide, which I wanted.

A Few Snake Safety Tips

Understandably, many people are inherently fearful of snakes. However, snakes can only strike effectively when they're coiled or partially coiled. Even then they only reach out a maximum distance of about two-thirds their length. Nevertheless, that distance can be

TOP: Many snakes are well camouflaged and difficult to spot in their wild environments. Tabor encountered this furious combatant in the Utah desert while hunting coyotes.

BOTTOM: Skinning a snake is relatively easy, but when the skin is "green," it's quite fragile and must be handled carefully.



adequate to register a bite, especially on preoccupied victims.

Snake boots provide excellent low-leg protection, but hands and arms are more susceptible, particularly when climbing in rocky terrain. A good rule is to only place your hands where you're positive that there are no snakes. A snake's natural camouflage and coloration often conceal it from view, so don't be afraid to make noise as you walk around. Consider dislodging several rocks to cascade downhill into unseen areas. The commotion often alerts snakes to your presence and causes them to give away their location through rattling.

Unfortunately, other poisonous snake varieties—water moccasins, copperheads or overseas serpents—aren't necessarily equipped with a warning appendage. It's up to you to be extremely vigilant.

Preserving and Tanning Snake Skins

If you can look beyond their deadly fangs, many snakes have attractive hides. Knowing how to tan and preserve them helps you exhibit that inherent beauty. Once tanned, I find the skins can be used as a decorative wall hanging or table decoration. In other cases, they can be used to make attractive hatbands or adorn a belt.

I've regularly used a quick, easy method called Snaketan. But don't put the cart before

“I’d become so preoccupied with watching for birds, lulled a bit by the unseasonably warm weather, that the snake’s buzz surprised me.”

the horse; poisonous snakes can be dangerous even after they’re dead. A puncture wound from a dead snake’s fangs can cause serious harm. Consequently, I generally sever the head, then discard it safely where it can’t hurt anyone.

After that, make a slit up the center of the snake’s belly. I generally use a surgeon’s scalpel for this work, but a hobby-type X-Acto knife (or even a razor blade) will work as well. Even though you may eventually trim away a significant portion of the heavily scaled belly skin, keep the belly incision as centered as possible.

When skinning a rattlesnake, you may either leave the rattles attached to the hide, or remove them. I usually find it easiest to simply cut them free at the first joint. Make sure they’re free of flesh, which could deteriorate and spoil your prize.

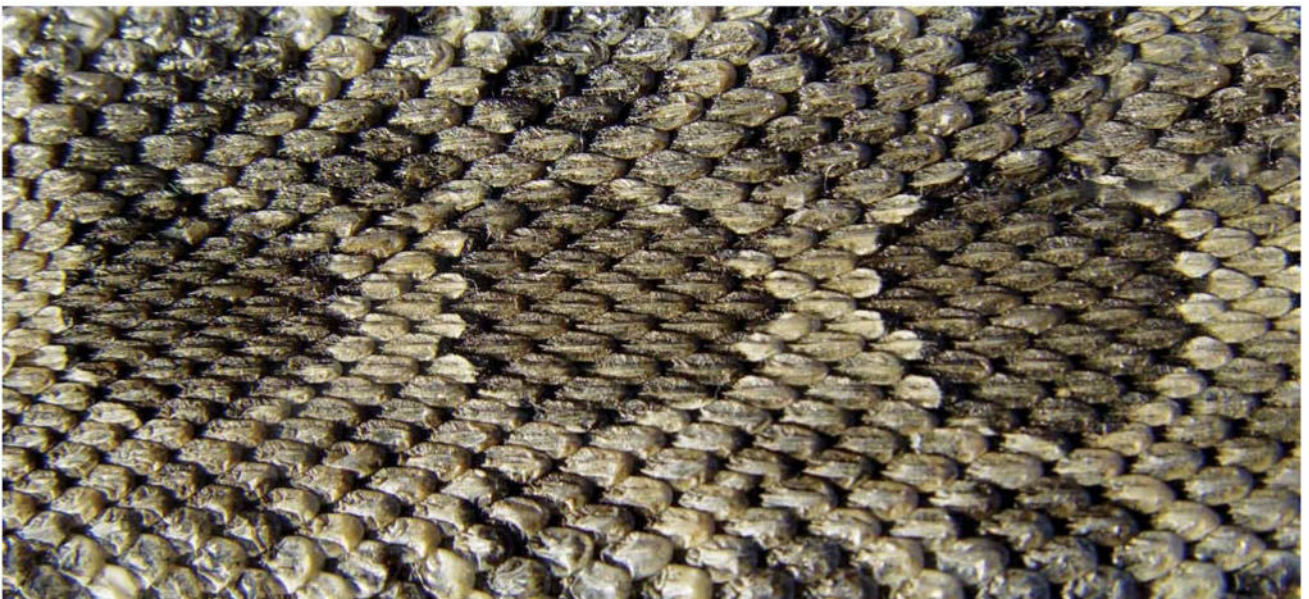
Following the belly incision, a second pair of hands becomes helpful during the actual skinning process. A pair of pliers can sometimes be beneficial, but remember that a “green” hide is super-fragile and rips easily. After skinning, you can either roll up the skin and place it in the freezer for later processing, or you can immediately move on to the next step.

Continue by tacking the skin to a board or piece of cardboard with the flesh side out. The



TOP: Once the skin has been tacked to the board and any remaining fat removed, a small paintbrush can be used to apply the Snaketan formula Tabor mentions in the text.

BOTTOM: The colors and markings on many venomous snakes are quite beautiful. This skin was from a small rattler the author’s daughter found and killed near her home in central Washington State.





“... I could’ve shot the snake with the shotgun I was toting for partridge, but it likely would’ve destroyed the large rattler’s hide, which I wanted.”

skin should be stretched as tightly as possible with the edges secured in place using a stapler. A small amount of fat most likely will remain on the skin and must be completely removed. I usually scrape it loose with a kitchen spoon.

Now, you can either salt the hide to dry it for later tanning, or move on to applying the Snaketan formula. If you choose to salt the skin, only non-iodized table salt should be used. Never use rock salt to dry any hide or skin. After applying about a ½ inch of salt over the entire surface, working it into all of the edges, the board should be tilted slightly to allow excess moisture to run off. Once the salt layer becomes saturated, replace it with a fresh layer. Repeat until the skin completely dries.

In lieu of salting the hide, I prefer to immediately move on to tanning, which ensures a softer, suppler finished product. In this case, the Snaketan formula is simply

applied to the skin using a small paintbrush. The skin will absorb the liquid. Follow up with another application and repeat until the skin no longer absorbs the liquid. Afterwards, if you find the surface a bit tacky, use a rag lightly saturated with rubbing alcohol to remove the tackiness.

AUTHOR’S NOTE: Snaketan is available from the manufacturer, Research Mannikins, in three different sizes ranging in price from \$15.90 to \$49.95. Visit snaketan.com for more information.

Closing Thoughts

Naturally, humans fear snakes. With the right preparation (see sidebar, “An Ounce of Prevention”), though, you can ward them off or kill them. Consider tanning a snake’s skin to create an interesting element to add to your home’s décor. **MP**

TOP: After tanning and being backed with a contrasting colored felt, snakeskins make very attractive wall displays.

AN OUNCE OF PREVENTION

CCI HANDGUN SHOTSHELLS

CCI produces loaded shotgun shells ammunition for use in conventional handguns in various calibers including .22 LR, .22 WMR, 9mm Luger, .38/.357, .40 S&W, .44 Spl/Mag, .45 Auto and .45 Colt. For shooters who prefer to load their own ammunition, CCI's sister company, Speer, offers empty shotgun capsules available in .38/.357, .44 and .45 Colt. Obviously, the shot charge varies in size by caliber, with some being notably more effective for snakes. I've personally used both the factory-loaded CCI ammunition, and my own shotgun hand loads to dispatch various snakes and other vermin. They're extremely effective short-range snake remedies. Visit cci-ammunition.com for more information.



CCI produces loaded handgun shotgun cartridges that can provide effective defense against poisonous snakes and other vermin. CCI's sister company, Speer, offers them as empties for hand loaders.

SAWYER VENOM EXTRACTOR

Trouble eventually finds even the most careful people. Always carry a snakebite kit when roaming snake country. The



The Sawyer Venom Extractor Kit is a great item to have with you when roaming snake country. The kit works favorably for snakebites and doubles to treat insect bites and bee stings.

Sawyer Venom Extractor is one of the market's finest. The supplied pump provides a strong suction to safely extract venoms and poisons. Sawyer kits come with four different-sized plastic cups to fit various applications ranging from snakebites to bee stings and even mosquito and other insect bites. Visit sawyer.com for more information.

MUCK BOOT SNAKE PROOF XPRESS

The Snake Proof Xpress is one of the latest offerings in the Muck Boot line. It comes thoroughly balloon-tested against rattlesnake bites. I've personally used this boot and found it

excellent in every way. It comes with a tough exterior layered with a durable full-rubber coating along with 4mm neoprene.

Snakes are most commonly encountered during warm weather, and the XpressCool fabric lining cools feet during hot weather. Each pair weighs only 5.01 pounds and measures 16.85 inches tall. Visit muckbootsandshoes.com for more information.

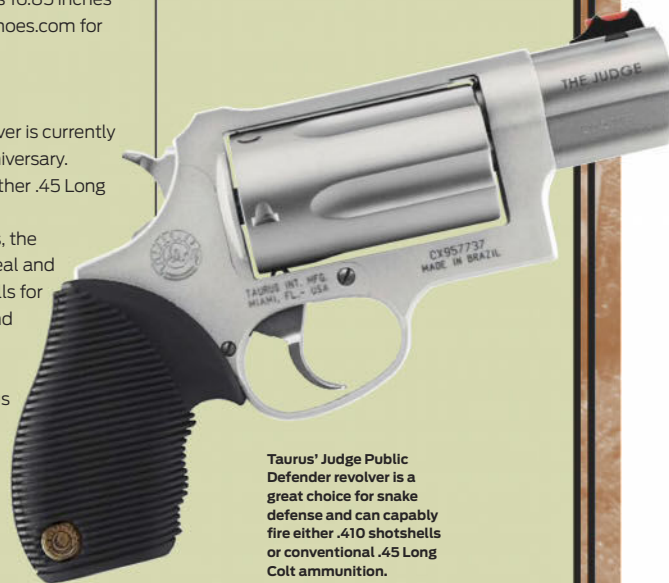


The Muck Boot Company produces a complete line of boots and shoes for outdoors people, including the Pursuit Snake Proof Xpress Boot, which is proven to be rattlesnake-bite proof.

to longer barreled models, and comes in blued or brushed stainless finishes. They're customized with fixed rear sights, fiber-optic front sights and a Taurus rubber grip. Visit taurususa.com for more information.

TAURUS JUDGE

The Taurus Judge revolver is currently celebrating its 10-year anniversary. Capable of chambering either .45 Long Colt ammunition or .410 2 1/2- and 3-inch shotshells, the Taurus Judge makes an ideal and versatile weapon: shotshells for close-range encounters and .45 for more conventional use at longer ranges. The Judge is available in various styles and configurations, ranging from snub-nosed



Taurus' Judge Public Defender revolver is a great choice for snake defense and can capably fire either .410 shotshells or conventional .45 Long Colt ammunition.

A
VARMINT'S
WORST
NIGHTMARE

By *Thomas C. Tabor*

As a kid hungry for adventure, I used to tote my Daisy BB gun around my family's backyard and small farm. Back then I was a little boy with big plans. Like most folks of my generation, those memories will always be some of my fondest.

As much fun as BB guns were to shoot back then, their performance now pales in comparison to today's air guns, which produce velocities comparable to their powder-charged counterparts.

My first eye-opening experience with new-generation air guns happened nearly a decade ago when I reviewed one for a magazine article. At first, I wasn't exactly enthusiastic about the assignment. However, I quickly learned air guns were no longer toys. They had become viable weapons for harvesting game.

Air-Gun Design Choices

Today, air gun options abound. There are pump-up versions where the velocity and energy varies based on how many times the

GAMO
Whisper G2

“... our Whisper G2 air rifles performed admirably on both gray squirrels and larger fox squirrels.”

Wintertime brings great rabbit hunting to Montana. Here, author Thomas Tabor holds up two cottontails he nailed using Gamo's Whisper G2 .22-caliber air rifle.



GAMO USA PRODUCTS

Gamo is an old-world company with roots dating back to the late 1880s in Barcelona, Spain, where it began fabricating various lead products for market. In 1950, that expertise evolved into the production of high-quality air-gun pellets for the European market.

In 1961, Gamo began producing its first air guns. Before long, it became Europe's largest air-gun manufacturer. The market in the U.S. followed, and Gamo Outdoor USA was formed in 1995.

Today, Gamo is considered by many as one of the most prestigious suppliers of air guns, pellets and related products within the U.S. Visit gamousa.com for more information.

(below) The Gamo Whisper G2 .22-caliber air rifle.



“Lewis and Clark even used an air gun in their American exposition between 1803 and 1806.”

gun is pumped; there are CO₂-powered designs that draw energy from a compressed cylinder; there are pneumatic (aka PCP) models that must be pre-charged with air prior to use, and there are break-barrel models. Perhaps the most popular are single-shot break-barrel models. Their popularity stems from their simplicity, affordability and effectiveness.

Caliber Advancements

Originally, most consumer pellet guns were offered in .177 caliber and fired BBs or pellets (they're the same diameter). As technology advanced, so did caliber options. Today the .22 is arguably the most popular choice for small-game hunting. However, air rifles are also now available in .25 caliber, as well as in big-bore choices like .30, .357, .44 and even a huge .50 caliber.

Big-bore models are generally only offered in PCP designs. Because of the power needed to propel such large pellets, only a few shots can be fired before the rifle needs recharging. This can be accomplished using a specifically designed hand pump, from a precharged air tank or from paint-ball facilities.

I primarily use my air guns to hunt rabbits, squirrels, pest birds and various other vermin. Personally, I feel the .177 caliber is a tad light for most small-game hunting, with the .22 or .25 caliber being better suited for rabbit-sized game. With the exception of several unique hunting applications, I generally view big-bore air guns as specialty weapons.

Gamo Whisper G2

In February 2015, I participated in a hunting competition sponsored by Gamo Outdoor USA where contestants used Gamo's Whisper G2 in

(below) Whisper G2 Technology reduces sound by 52%.





(left) Many areas of the West are plagued by ground squirrels, which usually can be hunted with few restrictions. These "pest species" provide great fun for air-gun shooters.

.22 caliber. The rifle was first introduced at the 2015 Las Vegas SHOT Show and since has become a popular choice for various air gun activities. The competition—dubbed the Annual Gamo Squirrel Master Classic—consisted primarily of writers and outdoor-industry celebrities, and took place at the Southern Sportsman Hunting Lodge located just outside Montgomery, Alabama. Unfortunately, my team didn't win the competition, but our Whisper G2 air rifles performed admirably on both gray squirrels and larger fox squirrels.

Typically, the Whisper G2 comes with a certified air-gun-safe 4x32mm fixed-power scope already installed, but for the competition, Gamo had mounted a BSA Essential AR 2-7x32mm scope on my rifle. With trees reaching skyward—in some cases well over 100 feet—I welcomed the additional magnification, especially because squirrels were often partially obscured by limbs.

Throughout the event, my Gamo Whisper G2 rifle performed perfectly. I came away so impressed with the rifle that it accompanied me home, where I use it to take Montana cottontails.

Even though a typical cottontail generally weighs twice as much as a fox squirrel, the .22 caliber G2 harvests them flawlessly. Any rabbit that steps within my 50-yard limit quickly becomes table fare.

In many cases, lead air-gun pellets have been replaced by those made from other materials or a combination of several materials. In order to boost velocities, many shooters opt to shoot these lighter versions to boost velocities. One such pellet is Gamo's PBA Platinum. Shot from the Whisper G2, it produces a muzzle velocity of 975 fps. That's only about 200 fps shy of standard .22 LR ammo.

GAMO WHISPER G2 SPECIFICATIONS

- **DESIGN:** Break-barrel, single-shot
- **CALIBER:** .22 caliber (also available in .177 caliber)
- **SAFETY:** Manual safety with automatic-cocking safety system
- **VELOCITY:** 975 fps with PBA Platinum pellets
- **TRIGGER:** Two-stage smooth action trigger
- **TRIGGER PULL WEIGHT:** 3.74 pounds
- **BARREL:** 18-inch fluted polymer jacketed steel with Whisper G2 Technology
- **STOCK:** All-weather molded synthetic
- **BUTTPLATE:** Shock Wave Absorber recoil pad
- **CHEEKPIECE:** Adjustable cheek piece molded for both right- and left-handed shooters
- **OPTICS:** 4x32mm air-rifle scope and rings
- **COCKING EFFORT:** 32 pounds
- **OVERALL WEIGHT:** 8 pounds
- **OVERALL LENGTH:** 46 inches
- **MSRP:** \$269.95



(above) The Gamo Whisper G2 .22-caliber air rifle performed its duties perfectly during the Second Annual Gamo Squirrel Master Classic.

Air-Gun Optics

Rapid bidirectional recoil, coupled with the violent vibrations associated with air-gun technology, can literally destroy a rifle scope if it hasn't been designed specifically for air guns. Put a conventional rifle scope on an air gun and it will very likely reduce it to an aluminum tube with loose internal parts.

Gamo incorporates a unique system called the Turbo Stabilizing System into the Whisper G2 to manage its inherent responses. As the rifle is fired, the spring is brought to a controlled stop within the chamber, decreasing recoil and vibrations. It also increases the pellet's velocity.

Last Words

Honestly, I won't be selling my powder-charged firearms and replacing them with air-powered weapons. Still, air rifles have several significant advantages.

For example, there are generally fewer restrictions to applying to purchase and/or sell them as compared to conventional firearms. When fired, air guns are relatively quiet, which makes them suitable weapons for backyard shooting in populated areas where gunfire is unwelcome. Air rifles can be just as accurate as conventional firearms, of course, within the realm of reasonable shooting distances. Possibly best of all, air-gun pellets are often far cheaper than conventional ammunition.

If you're currently shopping for an air gun, try one from Gamo's selection. I believe the performance will amaze you. **MP**

AIR-GUN HISTORY

Air guns date farther back than casual users might believe. For centuries, they've played significant roles in hunting and even defense. It's believed one of the oldest handheld air guns is currently on display at the Royal Danish Arsenal in Copenhagen, Denmark. The gun dates back to approximately 1580 and was built by Hans Lobsigner.

Many of the older designs possessed bellows chambers and had smooth bores sometimes as

large as .50 caliber. Lewis and Clark even used an air gun in their American exposition between 1803 and 1806. It was built by an Italian named Girandoni and typically was charged up with 800 psi of air. It was a repeater design capable of holding up to 22 .46-caliber round balls and possessed a rifled barrel. At 100 yards, it was reportedly very accurate and capable of putting its lead ball clear through a 1-inch pine board.

A Combo That Boosts Your Self-Reliance!

SAVE BIG

ONLY \$44.95

Embrace a natural, self-sufficient lifestyle, while mastering essential survival strategies. Get a 1-year combined subscription of **Modern Pioneer** and **American Survival Guide** and save **73% Off** the cover price!



Get this truly empowering combo and save big.
Limited-time offer. Act now!

Fill out the order form below and mail it with your payment information to Engaged Media Inc., Lockbox # 70253, Philadelphia, PA 19176-9883

JUST
FILL IT ► CUT IT ► SEND IT

YES! Sign me up for a subscription to Modern Pioneer and American Survival Guide for \$44.95 only

That is a total of 18 issues for a total savings of \$122.87 off the cover price

Method of Payment	<input type="checkbox"/> Check enclosed	<input type="checkbox"/> Credit Card	<input type="checkbox"/> Money Order	<input type="checkbox"/> Bill me Later
Payment through credit card	<input type="checkbox"/> Visa	<input type="checkbox"/> MC	<input type="checkbox"/> AMEX	<input type="checkbox"/> Discover
Credit card number	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>			
Subscriber name	First <input type="text"/>		Middle <input type="text"/>	Last <input type="text"/>
Address	<input type="text"/>			
	City <input type="text"/>		State <input type="text"/>	
Phone	<input type="text"/>		Email	<input type="text"/>
Signature	<input type="text"/>		Date	<input type="text"/>

Alternatively, Log on to www.engagedmediamags.com/combo_mpsg and use Promo code **A264X4V1**
or call our toll free no **800-764-6278** to order your subscription. Allow 6 to 8 weeks for delivery of first issue.
Outside US, add \$69 per year for postage. Pay in US funds only.

Traditional Turkey Tales

A BOWHUNTER'S FONDEST
SPRINGTIME MEMORIES

By *Mike Yancey*

Cold winter days with howling winds and short daylight hours are perfectly spent in front of a wood stove, sipping piping-hot coffee and reflecting on past hunts. Staring into the mesmerizing inferno, I recall the sounds of wing tips dragging across the ground, followed by a thunderous boom—these were the reverberations of a drumming gobbler as he approached my decoy while I watched wide-eyed from my ground blind's dark interior. Moments like these are burned into my mind, and I reminisce about them often. They're not simply fleeting glimpses of the past; they're memories that last a lifetime.

PHOTO BY THINKSTOCK



**“Suddenly,
everything just
felt right ... I was
totally zoned in
on the bird ...”**

**“Walking up on
that gobbler
in Wyoming’s
snow-covered
mountains was a
moment I’ll cherish
forever.”**





(above) Gobblers typically approach a hen decoy from behind. When one struts toward the decoy, he'll be faced directly away so you can draw undetected and take your shot.

(opposite) The author totes a Kansas jake he arrowed with a Black Widow recurve bow. Despite a lethal shot, the bird went airborne and died in midair, descending through a sycamore tree's branches.

While staring deep into the flames, one special bow and the memories I've made while using it come to mind. My friends at Black Widow Bows made the recurve bow for me, and it was perfectly tailored for bowhunting turkeys from a ground blind.

Kansas Eastern

I first used the bow to take an Eastern turkey in Kansas. Birds were gobbling nearby each day of my hunt, but they just wouldn't come within bow range. Hens came right up to my decoy. They scratched in the leaves and even took dust baths, but even these live decoys didn't pull any gobblers into range.

Finally, a pack of jakes came in and gave me an opportunity. At the shot, I watched the arrow fly right through my intended target. I knew my shot was good, but the bird flew straight up as if nothing was wrong. He gained altitude as he left the green field and was about to clear the tallest sycamore tree at the

field's opposite end when he died in flight. The descending bird hit every limb on the tree before walloping the ground. Obviously, I'll always remember that hunt.

Wyoming Merriam's

As I stoke the fire and refill my coffee cup, I drift back to a Wyoming hunt where I took a beautiful Merriam's turkey during a spring blizzard. Snow had been falling like crazy—mostly at night—and the mornings were active with gobblers. I think they were more accustomed to the spring snow than I was.

I'll never forget the sights and sounds when one of them ran toward my decoy. The snow was a foot deep, and he approached in full strut with his white-tipped tail feathers fanned. I can still see it: His wing tips dragged across the frozen ground, and his head was brighter than a light bulb. I drew my bow and released. He ran away and out of sight behind my blind. The shot looked good, and the fact



Spring blizzards didn't stop author Mike Yancey from taking this gorgeous Merriam's gobbler in Wyoming.

CALLING ADVICE

In my mind, calling is one of turkey hunting's most overrated elements. Sure, sounding authentic helps, but don't concern yourself with becoming a pro caller. Find a call you like, practice with it before season, and you'll be just fine. Slates are my go-to call. I've tried many brands throughout the years and now have a couple that I rely upon heavily.

Over-calling is something hunters often do when a gobbler responds. It always seems like the right thing to do in the moment; however, yelping continuously is far from authentic. Mix it up and try to master other calls, such as purrs and clucks. Spend time observing live hens and the calls they make. The more you're around turkeys, the better you'll grasp their language and mimic it with your calls.

that he couldn't fly made me confident I'd recover him quickly.

My mind raced while I allowed the bird time to expire. Darkness was falling fast, so I took up the trail. It was easy to follow through the snow, and I quickly found my blood-covered arrow. Soon after, I found where the bird went down, but he wasn't there. I returned to camp for flashlights and to get help from my hunting partner.

Together, we picked up the trail where I'd left off. With snow cover and moonlight, we seldom used our flashlights. It didn't take us long to find my mountain prize. Walking up on that gobbler in Wyoming's snow-covered mountains was a moment I'll cherish forever.

Texas Rio Grande

With the frigid bite of Wyoming's mountain air fresh in my mind, I fondly

“I waited a while before taking up the trail, which gave me time to reflect on the morning’s events.”

recall warmer times in West Texas hunting Rio Grande turkeys. Rios are made for bowhunting because they’re available in large numbers, and they’ll respond to calls from great distances.

On this hunt, I was working a bird near a waterhole that turkeys frequent all day long. Gobblers know that hens regularly filter through, so they loaf in the shade provided by small oak trees as they wait for receptive hens.

I’d placed a hen decoy near my blind, but for some reason, this gobbler wouldn’t come to the stationary phony. He’d apparently drawn an imaginary line in the sand, and strutted back and forth for more than an hour. As I watched the show, I prepared to shoot. I closed one blind window and opened another—an inch at a time—taking care not to spook him since he was only 30 yards away the entire time. With the blind windows now ready for the shot and my nerves somewhat calmed, I mentally rehearsed the shot.

Most birds I shoot with a traditional bow are within 10 yards. This dude, however, wasn’t coming closer than 30 yards as he marched back and forth in the Texas sand. Suddenly, everything just felt right. If you’ve hunted long enough, you know exactly what I mean. I was totally zoned in on the bird, even though he was farther away than I usually like.

I gripped my recurve, and the Traditional Only carbon shaft easily slid to full draw. My Woodsman-tipped arrow flew true to its intended target. It was one of the best shots I’ve ever made, and it landed me a long-spurred Rio Grande gobbler. On impact, he spun and quickly darted out of sight. I waited a while before taking up the trail, which gave me time to reflect on the morning’s events. I found him shortly after.

Looking Forward

As I watch the flames dance, I’m also anticipating future hunts with that comfortable little Black Widow recurve bow. As I add another stick to the fire, sparks fly into the air, which I feel are symbolic of great things to come.

With practice before season and a good call, decoy and ground blind, you, too, can punch your turkey tag this spring with a traditional bow. Good luck, and go make some memories. **MP**



The Woodsman broadhead combines long, sharp blades with a somewhat compact cutting diameter. The result is maximum penetration and devastation, excellent qualities that put tough birds down fast.


RECOVER YOUR BIRD

Pound for pound wild turkeys are some of the toughest critters to anchor with archery tackle. Although I’ve taken some from farther distances, I want all of my shots inside 15 yards, and I also want my arrow to hit the turkey’s spine.

To pull gobblers in close, I place either a hen or a jake decoy near my blind. I always position the hen facing away and the jake facing towards me. A gobbler usually approaches a jake decoy head on, offering a shot at his back with a large kill zone. Conversely, gobblers usually approach hens from the rear, also offering a straightaway shot angle. An arrow placed between the top of his head and the base of his tail results in an instant kill.

On a broadside shot, don’t aim for the wing butt like most foam turkey targets suggest. Instead, aim where the thighs meet the body. An arrow placed here immobilizes the bird and cleanly kills him within seconds. Draw an imaginary line up the leg to center mass and focus there.

Broadhead selection is also a key to quick recoveries. I prefer a razor-sharp, three-blade broadhead, and I want a complete pass through, if possible. The deeper the arrow penetrates, the more it will damage bones and vitals. For this reason, I use the Woodsman, a three-blade cut-on-contact head that has proven itself time and again on tough turkeys. I’m always impressed with its penetration and destruction.

A photograph of two spotted hogs, likely American hogs, standing in a field of tall, green grass. The hogs are facing left, and their bodies are covered in white and brown patches. The background shows a clear blue sky and some bare, dry branches. The overall scene is a natural, rural setting.

“As American farms grew, cheaper grain was available to supplement the wild forage hogs ate. More feed meant farmers could grow more pigs each season.”

A trio of purebred
Herefords enjoys
free range in a pasture.
(TRAVIS HOOD, TWO FORKS FARM)

From the first pigs introduced by Christopher Columbus and Hernando De Soto up until 50 years ago, hogs in America were a diverse lot. Breeds from all across Europe and the Far East were imported by various cargo ships that docked along the East Coast.

These hogs were mostly high-fat, slow-growing breeds—a commodity for cooking and lubrication. Once here, the hogs were basically left to roam, foraging throughout the woods and pastures for grasses, soft and hard mast like berries and hickory nuts, occasional grubs and other odds and ends.

This daily foraging helped pack tiny fat marbles throughout the pigs' muscles. Each season brought new feeds, and the essence each source imparted helped layer flavors throughout the meat.

As American farms grew, cheaper grain was available to supplement the wild forage hogs ate. More feed meant farmers could grow more pigs each season.

Breeding History

Around the 1800s, farmers began importing specific breeds relative to their geographic locations. These pure-bred hogs were mated with the best naturally selected hogs each area had produced, and new breeds emerged. Several

THE QUEST FOR PERFECT PORK

THE RESURGENCE OF HERITAGE BREEDS

By Michael Pendley



(above) This is cured and smoked bacon from the small muscle located between a hog's neck and shoulder. On commodity pork, this cut is simply tossed into the grind pile. On an Iowa Swabian Hall, the cut holds more than enough fat and rich, lean meat for curing.

(STEVEN JAGODA)

(right) Pictured here are Woodlands Pork hams ready for curing. Notice the thicker fat layer and heavy marbling throughout the meat. Fat equals flavor, making these hams far superior to commodity pork.

(WOODLANDS PORK AND JUSTIN DEAN)

breeders began selecting for specific traits—meat production, lard production or a combination thereof—in a pig that thrived under local weather and feeding conditions.

In time, breed numbers established main lines that fulfilled both producer and consumer needs, and were refined until the characteristics bred true from generation to generation. Some of the more popular examples became household names (see sidebar, “Heritage Breeds”).

For 100 years or so, American farmers used these and other breeds including Duroc, Hampshire, Yorkshire, Poland China, Chester White and others to breed pigs with the characteristics their local consumers desired. These pigs typically featured dark, well-muscled red meat with a fairly thick fat cap. Unfortunately, these delicious characteristics aren't common in grocery-store pork. Here's why.

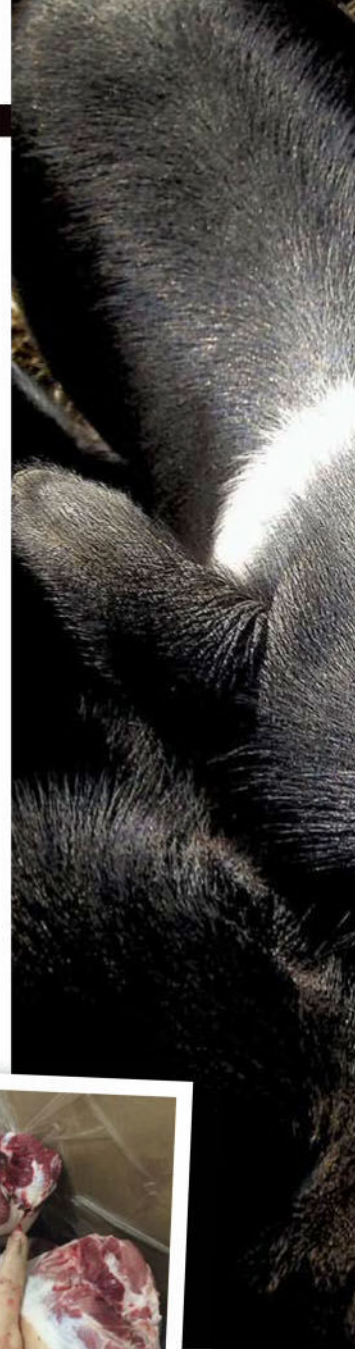
The Government Steps In

In the '60s and '70s, the federal government decided leaner pork was better from a health



perspective. It began paying additional premiums for pork that met leanness standards. To capitalize on additional profits, pork farmers started breeding for rapid growth and lean muscle. Furthermore, an advertising blitz by the Pork Council convinced American consumers lean pork was best. As pork across the board met governmental standards, new standards calling for even leaner meat were implemented.

Meanwhile, massive factory farms realized they could house up to 2,000 sows inside giant metal barns with concrete floors. These pigs





were bred to grow fast and lean, and never allowed to move around and build intramuscular fat. The result? Pale, lean and nearly flavorless meat that passes as “quality pork” at most grocery stores today.

The Resurgence Begins

Fortunately, several hog farmers across the nation have recently answered the call of restaurant chefs, small butcher shops and demanding pork lovers to produce a higher quality pork with dark red meat and delicious marbling. To do this, they’ve resurrected heritage breeds—some on the verge of extinction—and have begun crossbreeding to produce desirable characteristics.

Bob Perry, chef in residence at the Department of Agriculture for the University of Kentucky, has studied these heritage breeds and the pork they produce.

“The heritage breeds are nothing like commodity pork in taste or anything else, and people must stop comparing heritage to commodity, especially on price,” Perry said. “They cost more to raise, and thus cost more to the consumer. No one looks at a Porsche and expects to pay the same price as a VW.”

Breeding for Perfect Pork

Perry said the husbandry used to determine the breed cross for particular pieces of pork must be influenced by end use. For example, the cross that produces the best dry-cured prosciutto doesn’t necessarily produce the best grilled pork chop.

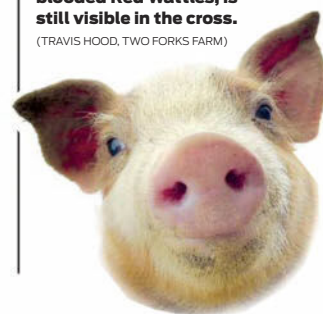
To that end, breeders are producing crosses not seen in America in decades. Today, Swabian America LLC is marketing Iowa Swabian Hall pork, a breed developed in the early 1800s for King Wilhelm I of Germany.

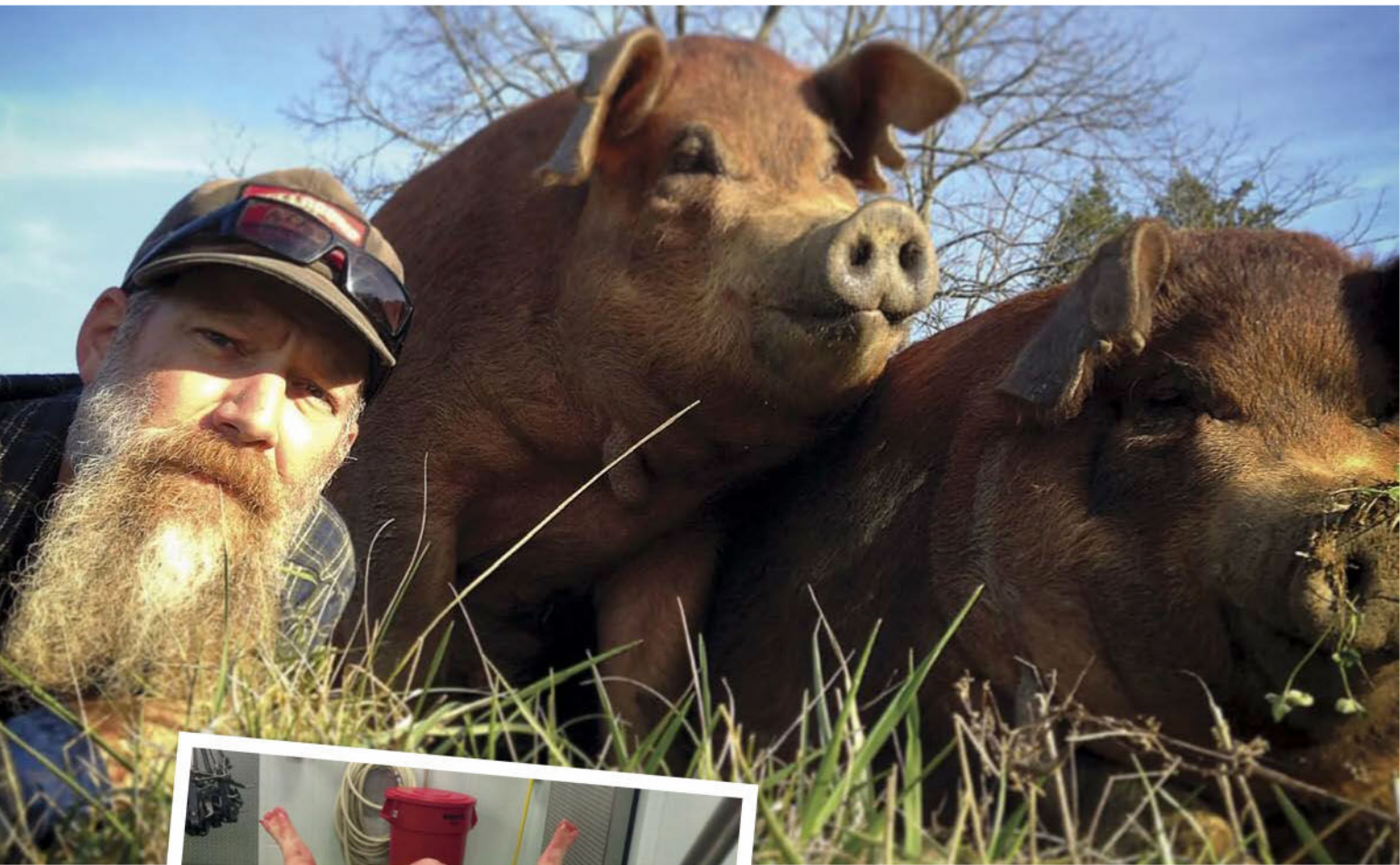
(above) This litter is from a Red Wattle boar crossed with a Eurasian dam. This cross produces huge litters of fast-growing pigs.

(TRAVIS HOOD, TWO FORKS FARM)

(below) Pictured here is a Hereford/Red Wattle cross piglet. Notice the small wattle, though not as prominent as the full-blooded Red Wattles, is still visible in the cross.

(TRAVIS HOOD, TWO FORKS FARM)





(top) Travis Hood, co-owner of Two Forks Farm, enjoys a little pasture time with two of his Red Wattle hogs. The breed is known for its friendly nature.

(TRAVIS HOOD, TWO FORKS FARM)

(below) Notice the darker meat and extra-thick fat layer along the loins of this Woodlands Pork mast-finished pig, which is ready to be broken down into individual cuts.

(WOODLANDS PORK AND JUSTIN DEAN)

Because pure Swabians aren't exported, breeder Carl Blake replicated the breed in the U.S. by crossing European and Ossabaw boars with Meishan sows.

The resulting breed boasts dark red meat colored similar to beef. The pigs also feature heavy intramuscular marbling—similar to the famed Wagyu beef—and a 2-inch-thick fat cap over the loin and back. This is accomplished within 9 months. "We've sliced steak from the shoulders of these pigs and grilled them just like you would beef. The results were

unbelievable," said Steven Jagoda, who, along with Blake and Dan Katzman, forms the partnership behind the brand.

Like pork from the past, these pigs are raised almost entirely on pasture and wild forage. "The more they exercise, the more they build marble," Jagoda told us.

The pigs are compact with a swayed belly, forward-facing ears and a black coat. They produce an average of 10 to 12 piglets per litter and are attentive mothers. Their good nature in the field makes them easy to work around.

Swabian America LLC markets its pork to high-end restaurants and shops where consumers willingly pay extra. In fact, Jagoda shares samples with chefs all around the country. "Most people want more once they've tried it," he said. "They say it's unlike any pork they've ever eaten."

Besides fresh pork, Jagoda and Katzman also produce exceptional cured meats and sausages from the Iowa Swabian Halls. "The meat cures just beautifully," Jagoda reported. "The fat is so firm and flavorful, and the meat is a much higher quality than commodity pork. It takes the cure so much better, and the improved flavor is instantly recognizable."

“... the husbandry used to determine the breed cross for particular pieces of pork must be influenced by end use.”

Another breeder striving to produce the market's highest quality pork is Travis Hood, co-owner of Two Forks Farm and Hood's Heritage Hogs. The Hoods procured some of the last remaining pure Red Wattle brood stock from the Andrus family in Texas. "I'm pretty sure our farm and another one in Oregon are the only two places left in the country with a breeding population of Andrus Red Wattle," Hood said.

From this brood stock, the Hoods began experimenting with crosses between the Red Wattles and other heritage breeds, like Tamworth and Hereford, Eurasian and Mulefoots, in an attempt to produce pork perfectly balanced with fat, color and flavor. "The Red Wattle/Mulefoot cross produces the prettiest marbling I've ever seen," Hood said.

Meanwhile, they also want a hog that produces a large litter, grows quickly to market weight, thrives on pasture and foraging, and has an amiable disposition.

"Some of our hogs are too friendly," Hood said. "You can't go into the enclosure without them coming up to you for a belly scratch. It gets somewhat annoying when you're trying to work on fences or other chores."

Like Jagoda, the Hoods direct-market their pork to restaurants and charcuterie chefs. They also sell it directly to consumers at farm markets in the Lexington, Kentucky, area.

A Top-Shelf Taste

While the pigs these farmers produce make up only a fraction of American pork, they're numbers are increasing. Once people realize what real pork should taste like, they seek it out from producers like these, or even begin raising heritage pigs for themselves on small family farms.

Besides providing a much higher quality protein to pork consumers, breeders are preserving these heritage breeds and even expanding their numbers for future generations. **MP**



A full-grown Hereford hog forages across the countryside. Unlike commodity-raised pork that live on concrete inside large buildings, pigs like this build excellent intramuscular fat while foraging freely.

(TRAVIS HOOD, TWO FORKS FARM)

HERITAGE-BREED HOGS

AMERICAN RED WATTLE: Known for its distinctive red color and fleshy wattles hanging from either side of the neck, the Red Wattle hog first became popular mainly in the southern United States. It grows quickly, is relatively lean and forages well on its own. Friendly almost to a fault, the breed is popular among pork producers whose main goal is flavorful meat.

TAMWORTH: Originating in central England, where they were expected to forage for their food in large forests, these long, lean hogs were imported into America for meat production more than their lard-producing capabilities. Because they grow relatively slowly, they form dense layers of both meat and fat, particularly in their bellies, making them prized for bacon production.

HEREFORD: Unlike the southern breeds above, the Hereford was developed in Iowa and Nebraska in the early 1900s. Known for their red-and-white color patterns, Hereford hogs were bred to be docile, fast-growing and adaptable to climate and habitat conditions. A large-framed hog, the breed was developed mainly for meat production.

MULEFOOT: Named for its distinctive non-cloven hoof, the Mulefoot most likely descended from similar-footed stock in Asia imported by early Spanish explorers. Mulefoots are prized for both meat and lard production and produce excellent cured hams.

OLD SPOT GLOUCESTERSHIRE: Known for its distinctive black spots on a white coat, this breed derives its name from the English town where it was first documented. Also known as a "cottage pig," Old Spots were prized for their ability to subsist on forage.

OSSABAW ISLAND HOG: Direct decedents of European stock left on Ossabaw Island off Georgia's coast in the 1500s, the Ossabaw Island hog still exhibits many of the same traits as European wild pigs. Due to their geographic isolation, Ossabaw hogs were shaped by natural selection rather than the hand of man. The result is a small-framed, lean yet muscular hog that's able to store large amounts of fat, helping it exist through lean times when Mother Nature offers little.



Top 10 YOUTH DEER CARTRIDGES

LOW-RECOIL CALIBERS WITH
KNOCKDOWN POWER

By Michael Pendley

One of a deer hunter's proudest moments is when he or she introduces a young person to hunting. Too often, though, first hunts turn out less than ideal, sometimes poorly enough to prejudice youngsters against hunting ever again. Too much gun is commonly the problem. Well-meaning mentors simply hand over full-frame, large-caliber rifles and turn the youngster loose. The bone-jarring recoil is unpleasant for experienced shooters and downright unbearable for young hunters.

Fortunately, today's firearm manufacturers recognize the need for shorter, lighter rifles specifically tailored for small shooters. Bolt-action, lever-action, single-shot and even AR-style semi-auto rifles, are available in nearly every youth-friendly caliber.

Once you've settled on a particular style, choose a caliber that suits your young one. The perfect youth deer cartridge carries enough energy to quickly and humanely dispatch whitetails without shoulder-bruising recoil. Thus, the shooter can practice before deer season without developing a habit of flinching, which only hinders accuracy and confidence.

The following youth-tested calibers are suitable for young deer hunters.



The .257 Roberts is a seasoned deer round. With bullets in the 110- to 120-grain range, it's possibly the market's best combination of low recoil and down-range performance.



Federal offers a .223 load with a 62-grain bonded bullet, which performs well on deer-sized game.

“The perfect youth deer cartridge carries enough energy to quickly and humanely dispatch whitetails without shoulder-bruising recoil.”

.223/5.56

This one makes the list not so much for its down-range performance, but for the platform that made it popular. AR-style rifles are the perfect fit for young shooters. They're compact and lightweight with low recoil, and many feature adjustable stocks able to be shortened for beginners and lengthened as they grow.

By far, the most popular round for AR rifles is the .223/5.56. About 10 years ago, I would've hesitated to include it on this list. However, recent advancements in bullet technology, coupled with ammunition manufacturers' efforts to build premium bullets for this caliber, make it deadly on broadside deer inside 150 yards.

Bullets should be on the heavy side for the round—55 grains or heavier—and of a bonded or controlled-expansion design. Excellent choices include Federal Fusion, Hornady GMX and Barnes Triple Shock. Black Hills Ammunition has a newer 5.56 round that boasts a 70-grain GMX bullet and regularly provides up to 22 inches of penetration with 5-inch wound channels in ballistic-gel tests—performance more than adequate for most whitetails.

.243 Winchester

Created by Winchester in 1955 when it necked a .308 brass down to a .243 caliber in order to produce a dual-purpose varmint/large-game rifle, the .243 Winchester is perhaps the most popular youth deer round ever introduced. Hard-hitting bullets

weighing 95 to 115 grains and traveling right around 3,000 fps at the muzzle provide more than enough knockdown power. At the same time, recoil is light enough for even the smallest shooters.

As with the .223, spending a bit more on premium ammo ensures best performance. Federal's Vital-Shok loaded with 100-grain Nosler Partitions, Hornady Superformance with 95-grain SST bullets, Barnes Vor-TX with 80-grain TSX bullets and Winchester Ballistic Silvertips with 95-grain bullets are all proven performers.

.257 Roberts

Next on the list is the slightly larger .257 Roberts, designed by Ned Roberts in the '20s. It started out as a 7x57mm Mauser case necked down to .257 caliber in an attempt to build the perfect general-purpose round with low recoil, flat trajectory and sufficient down-range power.

In 1934, Remington Arms picked up Robert's wildcat load and made it official. Though not as popular today, the round is still an excellent choice for young shooters or anyone chasing deer-sized game.

Nearly every ammunition manufacturer offers a suitable 100- to 120-grain deer load in .257 Roberts.

.260 Remington

The .260 Remington's 1997 introduction is one reason the .257 Roberts lost popularity. Long a popular choice among wildcat-cartridge designers, this round started life as a .308 case necked down to .264 inch.



Look for a well-constructed bullet in the 90- to 105-grain range for .243 deer loads. Lighter bullets for the caliber are designed for varmint hunting and may splatter on deer impacts.

When Remington made it an official factory load, the caliber immediately became a favorite for deer-sized game. The .260 Remington pushes a 140-grain bullet in the 2,800-fps range, producing more than enough power for deer.

6.5x55 Swedish

The 6.5x55 Swedish has been around since 1891. First designed for the new smokeless-powder rifles that were being considered for Sweden's and Norway's armies, the 6.5 offers low recoil with a case capacity that accommodates longer, heavier bullets. The results are exceptional bullet flight and deeply penetrating down-range performance.

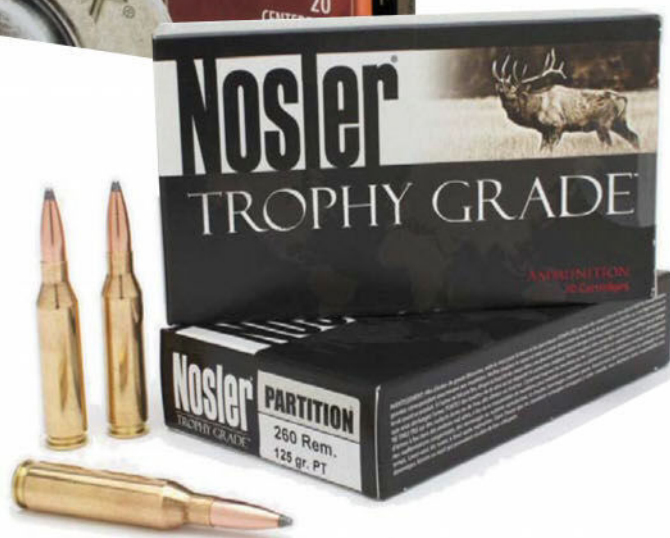
Those attributes make the 6.5 Swede an outstanding deer rifle. The fact that many surplus military Mausers exist in this caliber also helps, as many custom rifle builders prefer that platform for building modern sporting rifles.

The 6.5 is the most popular moose rifle in use in its native Sweden, a resounding testament to its down-range abilities.

7mm-08

Young by 6.5 Swede standards, the 7mm-08 has been around more than 30 years. It started life as yet another wildcat round based on a necked-down .308 brass. Remington picked it up in 1980 as a perfect all-purpose rifle.

With bullet weights in the 130- to 150-grain range, the 7mm-08 features velocities in the 2,700- to 2,800-fps range, delivering plenty of knockdown power with relatively light recoil.



The .260 Remington is a newer cartridge that offers a performance boost over the .257, yet still manages recoil. It's an exceptional deer rifle for both beginning and experienced hunters.

The 7mm-08 has been tabbed by many as the perfect deer round. It's a great choice for young hunters who need a dual-purpose rifle for larger game animals like elk or caribou.

.300 Blackout

A few years ago, Advanced Armament Corporation (AAC), sought to design a .30 caliber round that would function reliably in the AR-15 platform for military operations in which a larger bullet than the standard .223/5.56 was necessary.

While other companies were looking to accomplish the same thing through reshaping other cartridges—like the 7.62x39—to fit the AR platform, AAC necked the existing .223/5.56 brass up to .30 caliber. The resulting round fed reliably through the same magazines and lowers of existing rifles, requiring only an upper-rifle swap with an appropriately sized barrel.

The new round became a popular deer caliber, and ammo manufacturers began offering loads with appropriate hunting bullets. Most .300 Blackout hunting ammo



MAKE PRACTICE SAFE AND EXCITING

Once you've chosen a rifle and caliber combination, do what you can to keep shooting fun for young hunters. First, studies prove young shooters commonly associate louder firearms with more recoil. To deflect this, outfit them with sufficient hearing protection. I'm a big fan of foam or soft plastic earplugs underneath a quality ear muff. The combination deadens the report from even the loudest rifles.

Next, introduce young shooters to the firearm on a shooting bench using a recoil-reducing rest like the Caldwell Lead Sled. Such rests help with trigger control and target acquisition. This allows for much longer practice sessions and helps the shooter build positive fundamentals.

Pick a target that provides instant feedback. Punching paper is OK for fine-tuning, but reactive targets like balloons, frozen water bottles or steel targets that fall when hit help hold a young shooter's attention.

With these considerations, you'll make firearm shooting an enjoyable experience for youngsters.

The 6.5x55 Swedish might be one of the oldest calibers on the list, but it more than holds its own against newer offerings. The bullet's long, sectional density makes it an outstanding performer on game as large as moose in its native Sweden.



The .300 Blackout was designed to increase stopping power out of a .223-sized round that would still fire through a standard AR-15 platform. While the Blackout's 200-plus-grain bullet doesn't move remarkably fast by other rifles' standards, the additional lead delivers exceptional down-range performance.



Based on a necked-down .308 cartridge, the 7mm-08 sends a 130-grain bullet downrange at around 2,700 fps without shoulder punishment. The 7mm-08 is often tabbed the ultimate deer caliber for all shooters.

ranges from 140 to 220 grains. Its recoil is similar to the 5.56, making it ideal for young shooters who prefer the AR platform.

.308 Winchester

Many wildcat cartridges have been based on the .308 over the years because it's an excellent all-purpose hunting cartridge. Since its introduction in 1952, the .308 has been a deer-hunter favorite and currently reigns as one of the most popular hunting calibers worldwide.

Quality loadings for the .308 abound in the 150- to 165-grain range from nearly every ammo manufacturer. While heavier loadings are available, they're unnecessary for deer-sized game, and simply increase felt recoil without adding down-range performance.

While the .308 produces more recoil than most calibers we've covered, many manufacturers offer reduced-recoil loads, which still provide sufficient power for deer. The .308's beauty is that young hunters won't outgrow it.

.30-30 Winchester

The .30-30 has quite possibly claimed more deer than any other round in history. First developed in 1895, the .30-30 is still going strong today in modern production rifles. The .30-30 is most closely associated with lever-action rifles like the Marlin 336, Winchester 1894 and Savage Model 99. These lever-action rifles are compact, and easily handled by young shooters.

Bullet weights for the .30-30 range from 125 to 170 grains, and manufacturers have



The .308 is by far the most powerful cartridge on the author's list and, by default, produces the most recoil. While full-power loads might be stout for young shooters, reduced-recoil loads are available with sufficient deer-stopping power.

“... studies prove young shooters commonly associate louder firearms with more recoil. To deflect this, outfit them with sufficient hearing protection.”



In states or areas where centerfire rifles are illegal for deer hunting, 20-gauge slugs offer a deadly alternative. Modern bullet designs have increased both speed and down-range performance, without increasing recoil.

recently begun incorporating many modern bullet technologies into the old .30-30, making it an even more efficient deer caliber.

20-gauge Slug

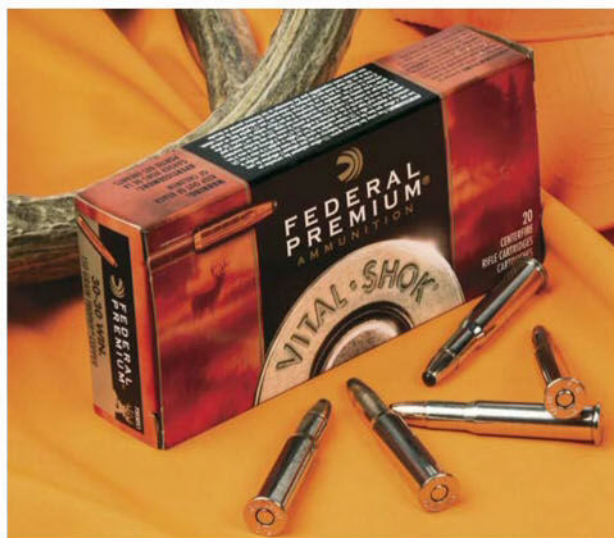
While this article focuses on the most popular rifle calibers for young deer hunters, several states don't allow centerfire rifles for deer hunting. In these states, hunters are limited to shotgun slugs and sometimes muzzleloaders.

While adult hunters often choose 12-gauge slugs, their recoil is excessive for youth hunters. The 20-gauge slug has recently surged in popularity among hunters and ammo manufacturers alike.

New slug options and bullet technologies wring near 12-gauge performance out of the 20-gauge platform, with far less recoil. Ammo choices like Hornady's SST slugs incorporate modern pointed bullets into a 20-gauge hull, offering much greater down-range performance than conventional full-bore lead slugs.

Conclusion

If you want to ensure your young one experiences deer hunting pleasantly, outfit them with a gun of proper fit and caliber. Do this and they'll more likely take up deer hunting for life. **MP**



The venerable .30-30 has probably claimed more deer than any other round, and it's mostly available in lever-action designs, which are compact, lightweight and easily maneuvered by young shooters.

HOME-BREWED BEER

AN ASPIRING HOME BREWER'S
HOW-TO HANDBOOK

By Michael Pendley

Man has been brewing beer for ages. In fact, some of the earliest written records were Babylonian clay tablets detailing how to make ale. Besides the fact that it tasted good, brewing beer and ale helped to sterilize the not-so-clean drinking water of ancient times. That's right, beer started out as "health food."

Today, we have safe drinking water, and beer is a commodity. Home brewing gives you charge over a recipe's individual ingredients, allowing you to customize the flavor to your preference. Besides having a better flavor than most mass-produced offerings, home-brewed beer can be made at a fraction of the cost.

Quite often, prospective home brewers review the process and conclude that it's too complicated. It's actually not. If you can boil water and be sanitary, you can brew beer at home.

Like most hobbies, the gear needed usually accumulates as you become more involved, but a basic starter setup can be built for less than \$100. Watch sites like Craigslist, and stop in at yard sales to get outfitted inexpensively. Let's discuss what you'll need.



PHOTO BY THINKSTOCK



THE EQUIPMENT

A home-brew kit is generally the best setup for beginning brewers because they include basically everything you need to make your own beer. Following is a breakdown of what constitutes a good kit or an inventory if you want to build your own.

Brew kettle: A brew kettle is any large kettle that'll hold enough volume (usually around 5 to 15 gallons) to brew a batch of beer. Look for something with heavy-duty, easy-to-grip handles. Stainless steel, enamel-coated iron and turkey fry pots all will work. Some home brewers report that

aluminum stockpots can give beer an off flavor.

6.5-gallon fermenting bucket: This is the vessel in which the actual fermentation happens.

Look for one with a tight-fitting lid, preferably with a hole drilled for use as an airlock.

6.5-gallon bottling bucket: Once the beer is ready for bottling, you'll need a bottling bucket with a valve at the bottom. Look for one with a solid, tight-fitting lid to prevent contaminants from entering the beer while you bottle it.

Airlock: An airlock goes into the drilled hole of the fermenting-bucket lid. The small, liquid-filled tube allows the excess air generated during fermentation to escape the bucket while preventing airborne contaminants from entering.

Hydrometer: A hydrometer is a sealed glass tube similar in appearance to a thermometer. By sinking it in beer or wort (more on that later) and reading the level to which the tube floats, home brewers can cross check the desired readings to determine if the beer is at the correct stage of the brewing process. Hydrometers are also used to check alcohol levels.

Floating thermometer: Many stages in the home-brewing process are temperature dependent. By using an accurate floating thermometer, brewers can correctly time additions of hops or flavoring, check for proper temperature for the yeast to work and monitor the temperature while the beer ferments.

Long spoon or paddle: Many times during the brewing process, you'll need to stir the entire batch of beer consistently from top to bottom. Heavy grain-mash must be stirred well to ensure all grain is saturated. A long spoon of heavy plastic or stainless steel is ideal for the task. Make sure it easily reaches the bottom of your brew kettle and that it has sufficient spine to withstand heavy loads of wet grain. While many home brewers use wooden spoons, they're more difficult to sterilize, and can contaminate your beer if not completely clean.

Siphon kit with bottling attachment: You'll need a way to transfer your beer from one bucket to another and a way to bottle it without introducing lots of air. A siphon kit uses gravity to easily transfer the liquid. Siphon kits virtually eliminate catastrophic spills.

A bottling attachment fits on the end of the siphon hose. A pressure valve on the bottom allows you to fill the bottles by pressing down on the bottling attachment, allowing the liquid to flow out the end and fill the bottle from the bottom.

Bottles, caps and a capping tool: Once the beer has fermented, it gets transferred to the bottles to finish for one to three more weeks. While in the bottles, the yeast will continue working, releasing carbonation into the beer. Bottles should be dark brown to keep out light. They should be recappable, not twist-off style. The caps should be clean and new. Look for oxygen-absorbing caps if you plan on storing the beer in the bottle for long periods. Cappers come in many styles. Most work on the same principle: Levers provide pressure to press the cap down and crimp the caps tightly to the bottle, simultaneously.

Sanitizer: A meticulous devotion to sanitation is a home brewer's most important trait. Every single piece of equipment that contacts the beer has the capacity to introduce harmful bacteria. Avoid "skunky" beer by sanitizing everything. The best sanitizers are no-rinse styles that allow you to sanitize your equipment, pour off the excess, and then immediately use it without rinsing. The sanitizer leaves no traces or flavors in the beer.

As you build your gear inventory, watch for sales at home-brew supply stores, as well as used equipment on eBay or Craigslist and at yard sales.



BREWING STEPS

STEP 1 – Make the wort: Kits are the way most brewers begin. Available from scores of homebrew suppliers, there are kits for basically every beer style imaginable.

Starting from a kit means the malt extract is already made. Malt extract is the liquid left from boiling malted barley condensed to a syrup or powder. It contains the sugars the yeast needs for fermentation later in the process. A handy tip when using a malt syrup from a kit is to submerge the container in warm water before pouring to reduce the viscosity and allow easier transfer from the container to the boil pot.

As brewers become more comfortable with the process, many decide to make their own wort by adding malts of choice to hot (not boiling) water and steeping for a set amount of time, depending on the recipe. After all of the grain's sugars have been extracted, the temperature of the water is increased to 172°F in what's known as a "mash out," effectively stopping sugar extraction from the grain.

STEP 2 – Boil: Whether it be a malt extract from a kit or a homemade wort from malted barley, the next step is to boil the mixture.

Most recipes call for a rolling boil of at least 60 minutes, although several call for boils of up to 90 minutes. Until this point, the wort is sweet from the dissolved sugars extracted from the grain.

STEP 3 – Add hops: In order to give the beer bitterness, hops are added during the boil stage. Care must be taken to maintain an even boil and prevent boil overs. Since the wort is sticky, boil overs get quite messy. In fact, stovetop boil overs are probably the leading reason home brewers move their boil operation outdoors. At the end of the boil, many brewers drop a Whirlfloc tablet—available from any brewing-supply store—into their wort to help settle any particulates suspended in the beer.

Hops for beer brewing are the hop plant's dried female flower. Besides adding bitter balance to the sweet wort, hops stabilize the beer and increase flavor and aroma. Hops added early in the boil notoriously add bitterness but very little flavor. Hops added late in the boil add more flavor and aroma. Most recipes provide exact times for hop additions. Popular hop varieties for American

A. Transferring the wort from the mash pot to the boil pot by passing it through a third vessel helps clear the wort before boiling, allowing any leftover mash to settle out of the wort. **B.** Hops can be added at various times during the brewing process to obtain different flavors. **C.** By pumping cool water through the immersion chiller, the wort can be cooled quickly, stopping extraction from the grain.

(PHOTOS BY DEREK DEFRANCO)



home brewers include Citra, Amarillo and Cascade, among others. Pelleted hops are also available from many home-brew supply companies. They're more shelf-stable, and can be substituted for dried hop flowers in most recipes.

STEP 4 – Cool: Once the boil has finished, cool the liquid as quickly as possible. To do this, place the boil pot into a large ice-filled sink. Experienced brewers often use an immersion chiller. Immersion chillers are made of a large copper coil with a water hose attached at each end. The chiller is submerged in the boil pot, and cold water is circulated from a faucet, through the copper tubing and out the discharge hose located in a sink or

collection vessel. The heat from the boil is absorbed through the copper tubing and removed from the pot with the water. Again, sanitation is the key to successful home brewing. If using an immersion chiller, submerge it in the boil pot a full 15 minutes before the end of the boil to make sure the outer surfaces are bacteria free.

STEP 5 – Ferment: At this point, the boiled wort is ready for fermenting. Fermentation in beer is caused by yeast feeding on the wort's sugars. These yeasts then produce alcohol as a byproduct. Fermentation can take place in either a fermentation bucket with a tight-fitting lid, or in a narrow-necked glass or plastic carboy container. Be careful not to introduce contaminants to the beer when transferring from the boil pot to the fermenter. The siphon kit is the easiest way to make this transfer.

STEP 6 – Add compressed oxygen and yeast: Once the beer is in the fermentation chamber, many home brewers add compressed oxygen to the brew to provide perfect working conditions for the yeast. Too little oxygen can result in stressed yeast and a bitter finished product.

Once the oxygen has been added, pour in the yeast. Yeast is a live culture and available in many forms from brewing-supply companies. Different strains of yeast can yield different flavors, so follow the recipe guide.

Many brewers start their yeast in a flask with water and a bit of malt extract to increase the yeast numbers, ensuring they have an active batch. Longtime brewer Mike Anthony likes to make a starter. "I start my yeast before I start my boil so it's active and

D. A beaker full of started yeast waits to be added to a wort-filled carboy. The yeast will feed on sugars in the wort and produce alcohol. **E.** Carefully controlling the temperature as the beer ferments is key to allowing yeast to perform to its greatest extent. Here, the wort ferments in an old refrigerator repurposed for home brewing with an aftermarket temperature-control unit. **F.** A check valve allows excess gas produced by the yeast to exit the fermentation chamber while preventing airborne contaminants from entering and spoiling the batch.

(PHOTOS BY DEREK DEFRAZCO)



PHOTO BY THINKSTOCK



G.



H.



I.

ready when I need it," he said. "If I don't see the right amount of fermentation after a day or so, I add more yeast to the batch."

STEP 7 – Prevent contamination with airlocks: As the beer ferments, it emits carbon dioxide, which must have a way to escape the fermentation chamber. At the same time, no outside air can enter and possibly contaminate the brew. Airlocks chambered with liquid sanitizer allow the gas bubbles to rise through the tube and out the top but prevent outside air from entering. When inserting the airlock into the fermentation chamber, it's a good idea to spritz the outer surfaces with sanitizer to ensure a sterile environment inside the chamber.

STEP 8 – Control the temperature: Most beer recipes call for a two-week fermentation. During this process, temperature control is critical. Derek DeFranco, homebrew expert at Lexington Beerworks in Lexington, Kentucky, said, "Temperature control during fermentation is the most common thing new home brewers struggle to do correctly. Temperature control might be the second most important thing in home brewing, after good sanitation, of course."

DeFranco recommends temperatures between 48°F and 55°F for lagers, and 60°F to 72°F for ales. While the latter can be accomplished in a cool basement, DeFranco prefers using a modified refrigerator with a temperature-control unit for the lower-temperature fermentation.

Step 9 – Add carbonation: Once your beer has finished fermenting, it's basically flat beer. In order to provide carbonation, the beer must be bottle-conditioned or kegged. In bottle-

conditioning, the beer continues a low fermentation inside the bottle for four to six weeks. Since the bottle is capped, the excess CO₂ produced has nowhere to go and the beer absorbs it, thus providing carbonation. Beer that's been transferred from the fermenter to a keg can have CO₂ added directly from a compressed tank, shortening the time until the beer is ready to drink to as little as a few days.

STEP 10 – Bottle: When bottling beer, the batch first must be transferred to a bottling bucket to which a small amount of priming sugar has been added. Priming sugar gives the yeast leftover from fermentation something to feed on while in the bottles, thus increasing the CO₂ levels in the finished product. Refer to the sidebar for information on beer bottles.

Long Live the Tradition

Brewing beer is fun and rewarding. Not only can home brewers tailor beer to individual tastes, but they also can save money over commercially produced beer. Beyond that, home brewers can take pride in continuing a nearly 7,000-year-old tradition. **MP**

G. A hydrometer is used to measure both the fermentation stage and alcohol content as the beer brews. H. Boil overs cause household strife. Keep a close watch on your boiling pot to avoid overwhelming messes. I. Dark glass bottles help keep light away from beer as it bottle-ferments. Press-on caps seal the bottle and keep the gasses released by the yeast inside the bottle, thus adding CO₂ to the beer and carbonating it.

USE DARK BOTTLES

Dark glass bottles or any material that prevents light from penetrating and has the ability to be tightly capped should be used for beer. Most home-brew supply companies offer various jugs, bottles and growlers suitable for bottle conditioning. Use the siphon tube fitted with the bottling attachment for transfer from the bottling bucket to the individual bottles.

Pelt Shooting

STOP PREDATORS IN THEIR TRACKS WITHOUT DESTROYING VALUABLE PELTS

By Patrick Meitin

During those years when fur prices hit all-time highs, I shot lots of fur for profit. In fact, varmint shooting kept the lights on and a roof over my head during my first few years in college. Consequently, I approached varmint hunting pretty darned seriously.

While hitting and recovering gray foxes, coyotes and bobcats was imperative, so was minimizing pelt damage. Killing varmints using anything from my old Remington 700 .243 Winchester to my pre-1964 Winchester 70 .30-06 Springfield was easy enough, but the fist-sized holes these calibers punched didn't help me fetch premium pelt prices. Plus, staying up late tediously sewing up ragged holes is no one's idea of fun.

PHOTO BY THINKSTOCK



**“... staying up
late tediously
sewing up ragged
holes is no one’s
idea of fun.”**



To stop predators and ensure premium fur prices, you must choose cartridges carefully or reload specialized ammunition specifically for this vocation. Even when fur prices plummet, I somehow just can't ruin a perfectly good winter-prime pelt. After 30-plus years as an avid predator hunter, I've gleaned valuable insights through hard-earned trial and error. Let's review.

Small Varmint Cartridges

During those lean times immediately following high school—when a dead coyote translated into \$55 cold hard cash to put toward rent, groceries and truck fuel, and a \$500 bobcat meant I was set for an entire month—I used my Savage 340 .22 Hornet almost exclusively to collect fur. I'd invested in this new rifle after too many monotonous sewing sessions resulting from the 85- and 100-grain bullets shot from my love-worn .243 Winchester.

The Hornet has the advantage of mild recoil and shot noise; so, when I called in multiple coyotes, I normally received more than one standing shot. The Hornet proved absolutely ideal for smaller predators such as gray foxes and delicate bobcats. I initially fed the Savage 45-grain factory ammo fished from green-and-yellow boxes. Those soft-nosed bullets mushroomed well for knockdown kills and seldom produced exit wounds larger than a quarter, even following bone hits.

As my brass collection grew, reloaded 45-grain Nosler Solid Base bullets atop 13 grains of Hodgdon Lil' Gun became my go-to varmint load. Exit wounds seldom exceeded the size of nickels.

I still shoot that battle-scarred Hornet, but its maximum effective range is 200 yards. Granted, I've killed coyotes with

(left) Shots can be long in the West's expansive country, so a more powerful round, like the .22-250 Remington or .220 Swift, is ideal. These flat-shooting, super-fast cartridges also yield higher odds on running shots.

it out to 350 yards, but that's pushing the absolute limits of this antique cartridge. On running shots, the .22 Hornet is abysmal, like playing pin the tail on the donkey.

More recently, I invested in a Savage 25 Walking Varmint in Hornady's .17 Hornet, similar to the wildcat Ackley .17 Hornet, but with slight variations. Loaded with a 20-grain pill—the cartridge's optimal bullet—it's ideal for smaller varmints such as foxes and thin-skinned bobcats out to 350 yards. It's a little light for coyotes. Although I have killed them with this setup, shot placement becomes more critical, and I suspect if I used it regularly, I'd eventually lose dogs. I might choose a 25- (Hornady V-Max) or 30-grain (Berger) bullet for added reliability, but then the cartridge's super-flat trajectory, which carries well to 350 yards, would be lost, sacrificing 500 to 750 fps in velocity and returning to a .22 Hornet pace.

In addition to the Hornets, other small-cartridge, mild-recoil champions include the .222 and .223 Remingtons. Of these, the .223 has emerged as the undisputed winner in the interminable popularity contest of determining which cartridges prosper and which ones die on the vine. The .223, of course, is the U.S. military's cartridge of choice, making reloading brass super abundant and factory ammo generally affordable.

To date, I've shot at least 100 coyotes with the .223. I find it's a happy medium of flat trajectory, mild recoil and report, affordable reloading (it uses half the powder of larger .224 rounds, a real consideration in these days of component shortages) and adequate knockdown energy. The standard load using a 55-grain bullet has accounted for many coyotes using standard soft-nose bullets or full metal jackets (see sidebar, "The Case for FMJs"), seldom creating exit channels larger than the size of a quarter.

I've more recently begun loading 40-grain polymer-tipped pills (Hornady V-Max and Nosler Ballistic Tips, for instance) over 27 grains of Hodgdon Benchmark, pushing these bullets to 3,750 fps and producing sub-1-inch groups. Alternatively, 27.7 grains of Ramshot TAC produce similar velocities and one-hole groups from my customized Savage 110.



(top) Author Patrick Meitin flattened this New Mexico coyote with a 55-grain full metal jacket fired from his custom Thompson Center pistol chambered in .223 Remington. The coyote dropped instantly, a testament that FMJs do the job.

(below) Lighter varmint rounds tame recoil and shot noise and are perfect for fox or bobcat. The .223 Remington serves as a bridge between the lightest and fastest varmint rounds. Examples are (left to right): .17 Hornet loaded with 20-grain Hornady V-Max and 12 grains of Accurate 1680, .22 Hornet loaded with 40-grain Hornady V-Max and 11.7 grains Hodgdon H110, and .223 Remington loaded with 40-grain Nosler Ballistic Tip and 27.3 grains Ramshot TAC.



“Many predator hunters don’t realize magnum shotguns are deadly varmint medicine, especially in brushy areas with limited shooting ...”



(top) Running shots are common. They're more easily made with fast rounds, such as the popular .22-250 or proven .220 Swift. However, without the right bullets, they can damage fur. Choose wisely.

(below) Full metal jacket bullets can provide predator-killing options without worry of pelt damage. Examples include (left to right) .30-06 150-grain FMJ Boat Tail loaded with 50 grains of IMR 4064, .30-30 Winchester 110-grain FMJ Round Nose loaded with 17.5 grains of W296, and the .223 Remington loaded with surplus military 55-grain FMJ Boat Tail and 27.5 grains of Hodgdon CFE-223.



AUTHOR'S NOTE: These are hot loads and must be approached carefully. These highly frangible bullets, combined with high speeds, normally shed their noses upon impact, and the bullet base exits to create dime-sized holes.

The Need for Speed

Speed is a welcome attribute, especially when shooting at shifty coyotes. While I've shot darned few foxes or bobcats beyond 200 yards (most are shot at 90 to 125 yards), coyotes are an entirely different story, especially in areas with hunting pressure. Coyotes commonly hang up at 350 to 400 yards after approaching a meadow or clear-cut edge. A heavier pill pushed on a flatter trajectory is more likely to stay on course at such ranges, especially in a breeze.

Running shots are all too common on wily coyote. The difference between a 3,300- and 3,700-fps round (at range, not muzzle velocity, remembering a heavier bullet maintains better long-range velocity) is holding on a coyote's head or shoulder (depending on range) rather than the open space in front of a quickly departing dog.

Two obvious choices here are the wildly popular .22-250 Remington and venerable .220 Swift. Both can capably push 55-grain bullets at 3,700 to 3,800 fps, respectively. Hodgdon's

THE CASE FOR FMJS

Many serious varmint hunters forsake full metal jackets, believing they're ineffective on predators, especially tough coyotes.

Don't believe it. I nabbed a good number of coyotes with inexpensive 55-grain FMJ military ball ammo when I first acquired my .223 and was building my brass supply for reloading. Nearly every one rolled over on the spot. None were lost. Obviously, all of those shots produced minimal pelt damage.

FMJs—military surplus ball ammo usually available in .308 Winchester and .30-06 Springfield—really shine for the reloading buff who wants to shoot occasional predators with a perfectly good deer rifle. Understand, though, these calibers produce more recoil and noise than typical predator choices. FMJs will knock a varmint over without damaging pelts. In the case of .243/6mm, .257, .264/6.5mm, .277 (270 Winchester) and .284/7mm, a lack of true FMJs can be substituted with target/match bullets like the Sierra MatchKing or similar offerings from Berger, Norma and Nosler, which act much like FMJs on light-framed targets such as coyotes. Bulk .224- and .308-caliber FMJ bullets can often be purchased cheaply as military surplus.

Winter predator calling can actually pay for itself, but only if the varmints you shoot aren't unduly damaged. Choosing the right cartridge or cartridge/bullet combination ensures top dollar for your take.

“During those lean times immediately following high school ... I used my Savage 340 .22 Hornet almost exclusively to collect fur.”

H380 is a magical powder for both.

For years, I used a .220 Swift, and one of my best friends used a .22-250. With them, we shot a couple of pickup loads of yodel dogs, learning many painful lessons in the process. The first was that most factory ammunition wreaks havoc on fur from these rounds, especially if the bullet impacts bone. I solved this by pushing a 50-grain Nosler Solid Base to around 3,900 fps. The nose was shed on impact with only the solid base exiting in a neat little .224-caliber hole, most of the time. That bullet is no longer available, but the new controlled-expansion models such as Barnes 50-, 53- or 55-grain Triple Shock X and 55-grain Hornady GMX offer superior substitutes, solid copper construction peeling to a solid core and expansion checked.

I've tried the hot .17s for predators, including the .17 Mach IV and the original speed champ .17 Remington. Results were far too sporadic

to take them seriously. Loaded too hot, they frequently splattered on hides without penetration, and wind really affects them. These bullets are better designed to splat smaller game such as prairie dogs and ground squirrels—for coyotes, in particular, not so much.

Conclusion

Even if you aren't paying your bills by selling predator pelts, fur prices are climbing again, and it's senseless to waste prime pelts, regardless of your predator-hunting motives. Many buyers happily buy fur “on the carcass” (though skinning and stretching your fur—a fairly simple task for which there is plenty of how-to information available—normally fetches more money), which helps offset fuel costs while you enjoy one of hunting's most exciting aspects. **MP**

(below) In areas where shots will be inside 60 yards, tote a shotgun fitted with a full-choke tube. A 3- or 3 1/2-inch magnum 12-gauge loaded with lead or HeviShot BBs provides deadly results.

DON'T FORGET SCATTERGUNS



Many predator hunters don't realize magnum shotguns are deadly for varmints, especially in brushy areas with limited shooting or in the case of cooperative coyotes desperate for a meal during cold winter months. I regularly carry a rifle and shotgun while predator calling, using the shotgun to address close-range predators (especially coyotes arriving in packs), keeping the rifle handy for those who hang up or escape the opening fusillade. Also, when hunting predators at night with the aid of a spotlight (where

legal), a magnum shotgun's effective range roughly corresponds with the spotlight's beam.

A 3- or 3 1/2-inch chambered 12-gauge is a mainstay, but most predator hunters choose shot sizes that are too large (anything with “Buck” on the label) allowing predators to run right through the shot pattern or escape wounded. In my experience, lead (today HeviShot) BBs are the ticket, rolling even tough mountain coyotes out to 60 yards with a full-choke tube.



NAVY ARMS

PARKER-HALE ENFIELDS UNQUESTIONABLY THE BEST

NAVY ARMS PARKER-HALE WHITWORTH RIFLE

What first made this gun famous was the iconic sketch in *Battles and Leaders* of a Confederate sniper positioned in a tree branch with his trusty Whitworth rifle. Since the 1970's when Navy Arms first began producing the Parker-Hale Whitworth, the gun has been used by skirmishers, precision target shooters and hunters alike, all to great effect. Val Forgett, Jr., used a Parker-Hale Whitworth big-game hunting in



Africa, taking numerous plains and dangerous game. Parker-Hale Whitworths have been used by countless competitors in international championships and at North-South Skirmish Association shoots. The Navy Arms Parker-Hale Whitworth features an American walnut stock, checkered at the wrist and forend, sporting the famed round "Parker-Hale" cartouche. Bone charcoal color-case hardened hammers, locks and barrel bands, and a hammer-forged .451 hexagonal-bored barrel ensures unparalleled accuracy at the farthest distances. The result is a rifle, in look and function, that is worthy of the Parker-Hale name and, as it has been since the 1970's, superior to any Enfield replica made. Caliber - .451

NAVY ARMS PARKER-HALE VOLUNTEER RIFLE (Not Shown)

This round-bored cousin of the Whitworth is also made in .451 caliber and has all of the features specified in the Whitworth. The Volunteer is better suited for shorter range accuracy (under 200 yards) as its round bore allows for instant stability of the projectile out of the bore. Caliber - .451



Stock cartouche



Authentic Whitworth markings



*Hexagonal bbl
&
front sight*





PHOTO BY THINKSTOCK

• HUNTING/SHOOTING •

A Beginners Guide to Reloading




ROLL YOUR OWN AMMUNITION IN FIVE EASY STEPS

By James E. House

Technological advances and breakthroughs are frequently announced to the shooting public. Some announcements introduce new calibers, or new types of bullets or powders for existing calibers. Except for lean times, the component choices for rolling your own ammunition are almost bewildering.

Reloading metallic cartridges is a longtime practice for many, primarily because life on the frontier or in remote places requires self-sufficiency, but beyond that there are other reasons to load your own metallic cartridges.



A metallic cartridge consists of four components: the case, primer, powder and bullet.

box of 50 handgun cartridges for around \$12 to \$14. This cost can be further reduced if plated or cast bullets are used.

Versatility

Versatility is another legitimate reason to reload. Ammunition may be loaded with many types of bullets not available in factory ammunition. Moreover, hand-loaded cartridges need not be loaded to one power level, and reduced loads for special purposes can be prepared. Through experimentation a shooter can produce loads that work exceptionally well in a particular firearm, rather than make do with factory loads.

With powder, bullets and primers on hand, a reloader can continue shooting when factory ammunition becomes unavailable; this self-sufficiency is a great asset. Reloading is a craft worthy of consideration; so, let's tour the steps to see how it's done.

Required Tools


If you're a beginner, start with the minimum equipment and add other items as your experience increases or as they become necessary. In order to carry out some of the reloading operations, a set of dies and a means of forcing the cases into the dies are required. For necked cases, two dies are required: one that resizes the case, removes the old primer and expands the inside of the case neck to hold a bullet of appropriate diameter, and the other to seat the bullet and crimp, if necessary. For straight-walled cases, such as the .45-70 Government, there are three dies in the set, with the third being the expander die.

The press must push a sturdy brass case into the sizing die with sufficient force.

Economy

There's the element of economy, assuming you already have empty cases and the necessary tools. For many calibers, a jacketed bullet costs about 20 to 30 cents, and a primer costs about 4 cents. Most powders sell for approximately \$25 per pound (7,000 grains) and, assuming 40 grains are used per cartridge, a pound of powder loads 175 cartridges, which equals about 14 cents per cartridge. The overall cost is typically 50 cents per cartridge, or \$8 to \$10 per box of 20. Factory ammunition costs approximately three times more.

Handgun cartridges cost even less to reload than rifle cartridges. For example, they're usually loaded with approximately 7 grains of powder, so 1 pound of powder would load 1,000 cartridges for a cost of roughly 2.5 cents per cartridge. It's entirely possible to load a



A simple beam-type powder scale can accurately weigh powder charges.

RELOADING SUPPLIERS

DILLON PRECISION
(800) 762-3845
dillonprecision.com

HORNADY
(800) 338-3220
hornady.com

LEE PRECISION
(262) 673-3075
leeprecision.com

LYMAN PRODUCTS
(800) 225-9626
lymanproducts.com

RCBS
(800) 379-1732
rcbs.com

REDDING
(607) 753-3331
redding-reloading.com

(right) Case length is important to ensure that cartridges chamber properly. This is particularly true of auto-loading handguns.



“Through experimentation a shooter can produce loads that work exceptionally well in a particular firearm, rather than make do with factory loads.”

Although bench-mounted presses are most common, crusher-type presses can also be used, with the most common being the Lee Crusher model. I've reloaded thousands of rifle and handgun cartridges using both styles. The setup need not be elaborate. Even a bench-type press can be mounted on a stand for storage and to conserve space.

After a case is deprimed and resized, a new primer must be seated. Most presses provide a way to do this, but most reloaders, including me, prefer to seat primers using a small hand tool.

A device must be used to measure the appropriate amount of powder, which is determined by studying loading manuals published by bullet and powder companies. Generally, “starting” and “maximum” loads are listed. Use only the starting loads until you gain experience. Variations in firearms, powder production and other factors can make great differences in a particular load's performance. Generally, it's better to start with a powder scale and weigh charges. If a powder measure is used, first weigh charges in order to correctly set the measure.

Basic Reloading Operations

To the uninitiated, loading ammunition may sound like a highly technical and dangerous practice. In its basic form, it's not. Reloading can be summarized in five steps, which I'll address further.

1. Inspect and clean cases.
2. Remove old primer and resize the cases.
3. Clean primer pockets and reprime.
4. Measure powder charges.
5. Seat bullets and crimp, if necessary.

Inspect and Clean Cases

Always inspect cases carefully before loading them. If the cases to be used have been recovered from once-fired factory ammunition, they'll usually be in good condition. However, if cases are picked up on a range or reclaimed another way, make sure they don't have split necks or other damage. Discard defective cases. Case failure, when the chamber pressure is 50,000 psi, is a serious issue. Clean cases before resizing, priming and loading them. Both case tumblers and ultrasound baths are commonly used, but light rubbing with very fine (0000 grade) steel wool or a polishing pad will work.

(left) The Lee Crusher press provides a convenient, portable way to load ammunition.





A.



B.



C.



D.

A. Digital powder scales have become very popular, and they're faster to use than beam scales.

B. The decapping pin used in dies for loading necked cartridges has an enlarged section that correctly expands the case neck as it's drawn from the die.

C. For straight-walled cases, such as this .45 auto case, a separate die is necessary and can be set to flare the case mouth slightly as expansion is performed.

D. Note how the case mouth is flared slightly to facilitate starting the bullet in the case.

Remove Old Primers and Resize Cases

These operations are considered together because they're normally accomplished simultaneously. Forcing a case into the resizing and decapping die brings the case back to correct dimensions and forces out the spent primer. This reduces the neck's outside diameter, which expands during firing. As the case is withdrawn from the die, a plug on the decapping pin draws through the inside of the case neck, which expands it to the correct diameter.

Priming the Cases

The primer is a cartridge's "sparkplug." Several types of primers are produced, but the four main types are rifle and pistol primers in small and large sizes. Priming a case involves forcing the new primer into the pocket in the head case until flush or slightly below base level.

Although priming tool types vary, a simple, one-at-a-time tool works well.

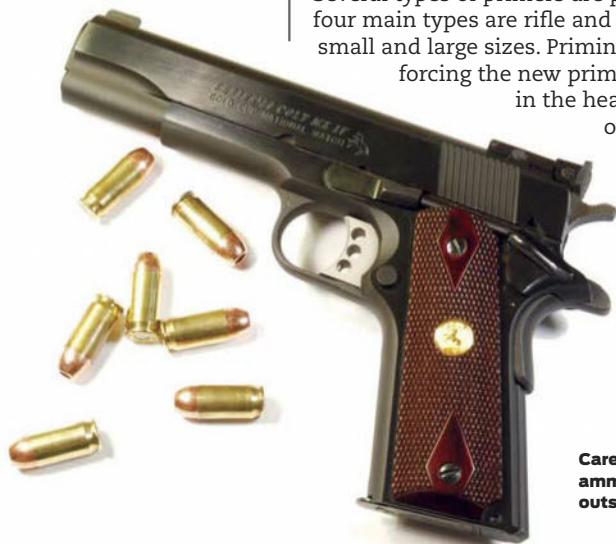
Loading the Powder

Having resized and primed the case, the powder charge is now placed inside. Assuming the charge has been weighed, it's transferred to the case via funnel. In some cases, the powder charge may occupy only a portion of the case's volume, so making sure a double charge isn't loaded is imperative. One technique is to keep the case inverted until the powder is poured in. After, immediately place an inverted bullet in the case mouth. That way, there aren't cases with open mouths upright and no possibility of adding powder to a case twice.

Seating the Bullet

The case containing the powder is placed in the shell holder on the press, and the bullet is then placed over the open case mouth. Forcing the case upward produces contact of the bullet nose with the seating punch, which is adjusted to push the bullet into the case to the required depth. Cartridges that are held in tubular magazines, which can force a bullet back into the case, generally have the bullet crimped in the case mouth. The seating die has an internal ridge that accomplishes this, but it should be done after the bullet is seated to the desired depth. Seating and crimping in one step can be a bit tricky.

Loading your own ammunition can be a safe and interesting process that adds to your shooting enjoyment and satisfaction. It can also be done safely and inexpensively with minimal equipment. **MP**



Carefully prepared ammunition provides outstanding accuracy.

Be Prepared With This Cutting-Edge Combo!

SAVE BIG

ONLY \$39.95

Sharpen your survival skills while loading up on the hottest knife news with this bumper saving combo. Get a 1-yr subscription of **American Survival Guide** along with a 1-yr subscription of **Knives Illustrated** and **carve 73% off** the combined cover price!



Get this dynamic duo and save big.

Limited-time offer. Act now!

Fill out the order form below and mail it with your payment information to Engaged Media Inc., Lockbox # 70253, Philadelphia, PA 19176-9883

JUST
FILL IT ► CUT IT ► SEND IT

YES! Sign me up for a subscription to American Survival Guide and Knives Illustrated for \$39.95 only

That is a total of 19 issues for a total savings of \$109.86 off the cover price

Method of Payment	<input type="checkbox"/> Check enclosed	<input type="checkbox"/> Credit Card	<input type="checkbox"/> Money Order	<input type="checkbox"/> Bill me Later
Payment through credit card	<input type="checkbox"/> Visa	<input type="checkbox"/> MC	<input type="checkbox"/> AMEX	<input type="checkbox"/> Discover
Credit card number	<input type="text"/>			
Subscriber name	First	Middle	Last	
Address	<input type="text"/>			
	City	State		
Phone	Email			
Signature	Date / /			

Alternatively, Log on to www.engagedmediamags.com/combo_kiasg and use Promo code **A264V3L2** or call our toll free no **800-764-6278** to order your subscription. Allow 6 to 8 weeks for delivery of first issue. Outside US, add \$58 per year for postage. Pay in US funds only.

· SURVIVAL ·

“Both in front of the grip and near the point, the blade has jimping to provide a secure grip while performing fine work.”

BENCHMADE **FOR HIM AND HER**



(left) Author James House tested Benchmade's Griptilian (left) during a western camping trip, while wife Kathy tested Benchmade's Steep Country (right). (top) The Steep Country is a rugged knife featuring a full-tang blade and raised portions that protrude through the handle. (center) Jiming on the Griptilian's blade and forward section of the grip is convenient and functional. (bottom) The metal strips that form jiming on the underside of the Griptilian's grip extend back through the handle.

KNIVES

SWEETHEARTS TEST NEW KNIVES
DURING WESTERN VENTURE

By James E. House

The breadth and scope of cutlery available today is the most comprehensive it's ever been. Knife manufacturers large and small are turning out knives in various styles that range from diminutive lock-back pocketknives to huge fixed-blade survival versions. Some perform everyday chores on a small scale, whereas others are designed to chop firewood and build shelters.

Despite the spectrum of styles and sizes, sturdy

“One would be hard-pressed to fault the blade and handle construction of these superb knives.”

folding knives and medium-sized fixed-blade models are most practical for all-around outdoor use. Even still, hundreds of designs issue from these two general categories. Choosing a reputable brand is a solid bet, and such knives need not break the bank.

Change is Good

Although my wife, Kathy, and I have a good selection of knives from which to choose, we decided to try new ones during a recent western camping trip. After shopping and comparing, we chose a couple of Benchmade models as cutlery companions.

Kathy prefers fixed-blade knives, so the model she chose for general use when hiking and camping was the Benchmade Steep Country Hunt series model 15008-ORG with orange scales. It's also available in a black-handled model, labeled model 15008-BLK.

When carried on the same belt with a handgun, I like to keep things compact, so I chose the Benchmade Griptilian model 551H2O, also with orange scales.

Respectively, let's review attributes of both models.

Steep Country

The Steep Country has a drop-point CPM-S30V steel blade that measures 3.5 inches long. The knife features a full-tang blade with a hole at the rear for attaching a lanyard. Both in front of the grip and near the point, the blade has jimping to provide a secure grip while performing fine work. Weighing just 4.4 ounces, the Steep Country is a nimble knife. However, its full-length blade adds incredible strength. A flat grind is utilized on the Steep Country's blade and measures .140 inch thick at the spine, tapering to a fine edge.

Griptilian

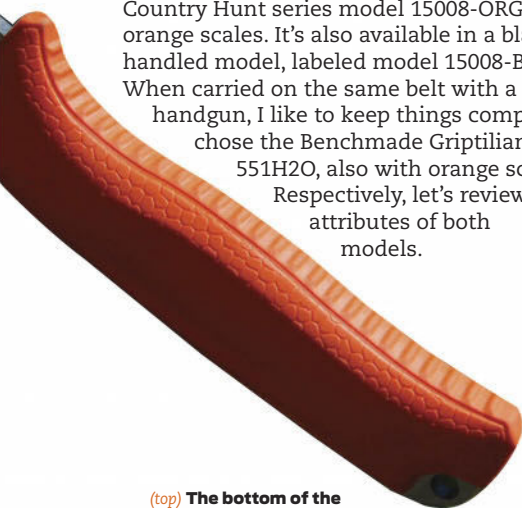
The Griptilian features a 3.4-inch drop-point blade made of N680 stainless steel with a .115-inch spine thickness. The locking mechanism involves a cross-bolt that moves in a slot. When opening the blade, the bolt is forced backward against spring pressure. When the blade is open, the bolt is forced to the front where it lies across the top edge of the blade's rear section, which prevents the blade from closing until the locking pin is manually pulled to the rear.

Although this model also comes with black scales, I chose the orange model. The polymer scales that form the handle are held together with several screws, making it undeniably rugged. Additionally, the handle's upper and bottom surfaces have ridged sections, and the sides have knobby texturing.

On top, at the handle's front section, metal



(above) The Steep Country's lanyard hole is conveniently located in the tang.



(top) The bottom of the Steep Country's handle is ridged to provide a secure grip. (right) The Griptilian features a modified drop-point blade.

CONTACT INFORMATION

Benchmade Knives
300 Beavercreek Road
Oregon City, OR 97045
(800) 800-7427
benchmade.com



plates with jimping are exposed. These metal plates form the portion of the locking mechanism in which the cross-bolt locking pin moves. The metal plates extend toward the rear along the inside of the handle, strengthening it.

High Points

If unable to be held securely, any blade becomes difficult to use effectively. In this regard, both the Steep Country and Griptilian are excellent thanks to their Santoprene gripping surfaces. This rubbery material provides excellent acquisition in any environment, but the Steep Country also has ridges along the bottom of the polymer grip to deliver secure gripping. Along the top of the grip, raised sections of the blade project from the rubber surface. Also, the handle drops at the forward edge to provide a built-in hand guard. The polymer handle provides a tactile grip in all situations.

Final Thoughts

One would be hard-pressed to fault the blade and handle construction of these superb knives. The Steep Country is sturdy without bulk. Its \$115 MSRP makes it a mid-priced knife that performs as well as custom knives costing two or three times more.

The Griptilian is a sturdy and capable folding knife that utilizes Benchmade's famous Axis locking mechanism. The folding knife easily performs required work while hiking and camping. Its \$135 MSRP bridges the gap between value and performance. Perhaps best of all, both Benchmade models are produced in the USA. That's a fact any American could proudly carry on their belt. **MP**



The Steep Country comes with a hard Kydex sheath that has a leather loop attached by screws.





A snipe relative, the woodcock is known for its black-and-brown plumage, eyes set high on the sides of its head and long, slender bill used to probe for food.

PHOTO BY THINKSTOCK

Hunting the Woodcock

SHARE IN A FADING TRADITION

By Jason Houser

Regardless of the species pursued, most hunters highly anticipate opening day's arrival. Some look forward to deer or turkey seasons, while others await pheasant or waterfowl seasons. "Timberdoodle"—better known as woodcock—season is an often-overlooked time I anticipate every year.

About Woodcock

Related to the snipe, the woodcock is known for its black-and-brown plumage, eyes set high on the sides of its head and long, slender bill used to find food.

Woodcocks forage by probing soft soil in secluded thickets. They eat mainly insects and earthworms, but occasionally consume plant material. They're most active at dawn and dusk and eat quickly to avoid sun and heat. When not eating, woodcocks take refuge under trees and bushes to stay cool during the day.

Once flushed in open country, woodcocks fly fast, often in a straight line. However, their flight pattern becomes unpredictable with twisting and fluttering—much like a dove—in timbered areas.

It is possible, but quite difficult, to successfully hunt woodcocks without using dogs. These birds typically hold tight, rather than run or fly away, when they sense danger. A well-trained dog with keen senses can help uncover these "camouflaged" birds.

"Woodcocks forage by probing soft soil in secluded thickets. They eat mainly insects and earthworms ..."



GUNS AND LOADS

A fine woodcock shotgun is one you're comfortable handling and shooting all afternoon. Good choices include 12-, 16- or 20-gauge autoloaders or pump actions (other actions work fine, too) with screw-in choke tubes. Use an improved-cylinder choke in brushy areas and a modified choke in more open areas.

My load of choice is No. 8 with a 1-ounce load. Smaller shot sizes such as No. 7 1/2 or 9 work fine, but I stay away from No. 6. Here's a comparison: My No. 8 loads have 186 more pellets than No. 6.

It doesn't take a lot of pellets to kill woodcocks, but the smaller shot sizes spray thicker patterns; this increases the odds of hitting your fast-flying target. You can shoot farther with heavier loads, but I'd recommend limiting your range to avoid crippling birds.

Woodcocks are primarily migrating birds that head south when the first frost arrives. However, some inhabit cold climates 12 months a year.

A Dying Tradition

Woodcock and woodcock-hunter numbers have slumped in recent decades. Surges in elk-, turkey- and whitetail-hunting popularity largely contribute to the woodcock-hunter decline. Habitat loss is perhaps the leading reason there are fewer birds to hunt. Without habitat management, such as cutting and mowing, much of the cover has become useless for woodcocks, which rely heavily on young growth. They thrive in areas where aggressive clear-cutting of aspen and mowing of alders occurs. Unfortunately, this isn't nearly as prevalent as it should be.

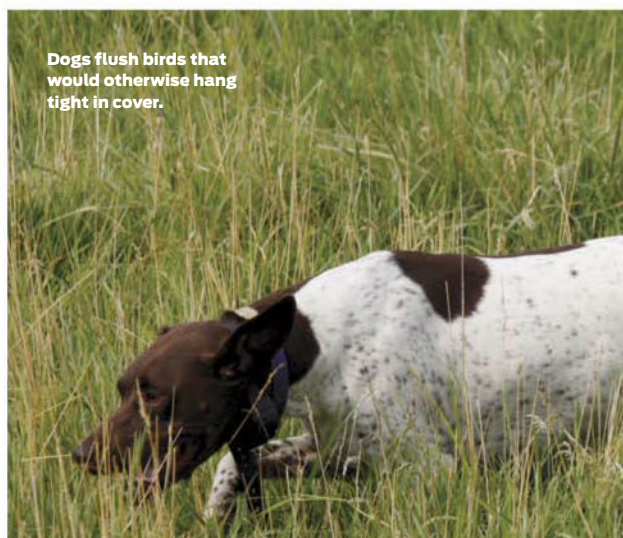
Pesticides and lead poisoning also contribute to the woodcock decline.

Location, Location, Location

As with any species, you must locate areas woodcocks inhabit to successfully hunt them. Areas wooded with birch, aspen and alders provide lots of shade and softer ground, allowing these birds to easily dig for food. Swamps and wooded areas near streams are also solid bets.

The best way to locate woodcock-rich areas is through scouting. They leave behind chalky-white marks on the ground. These are the remains of their droppings, which are easily washed away by rain. When they're visible, it means a woodcock was recently there. Also look for nests or fresh droppings.

When you suspect woodcocks are nearby, prepare your shotgun for action and flush them out.

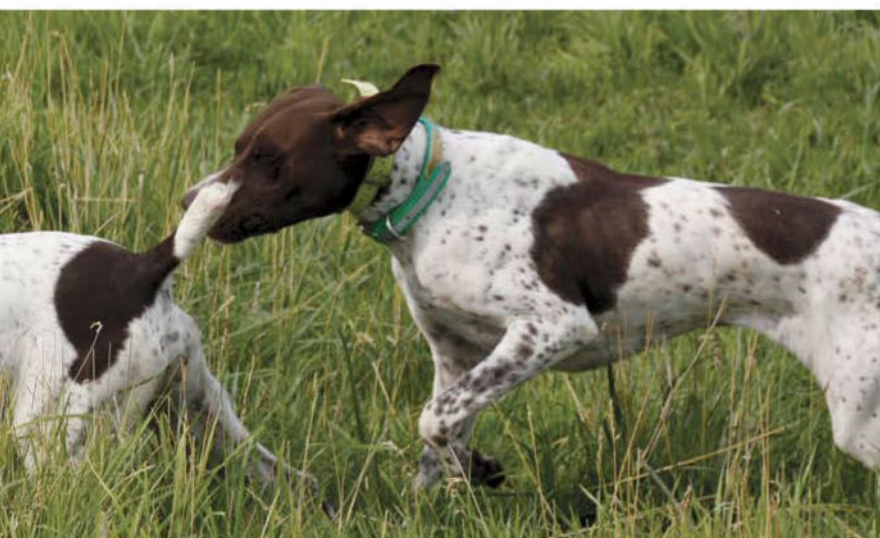


Dogs flush birds that would otherwise hang tight in cover.



Use a 12- or 20-gauge shotgun with size 7 1/2, 8 or 9 field loads for humane kills.

“... woodcocks normally hold tight, rather than run or fly, when they sense danger.”



One Challenging Target

As was mentioned earlier, woodcocks normally hold tight when they sense danger. When they fly, their flight pattern is jagged and frantic. When flushed, they'll usually only fly a few hundred yards, rising vertically very quickly. That's why hunters commonly shoot beneath them. Intuitively aim higher to avoid missing low.

Woodcocks can reach speeds up to 30 miles per hour, so you must be quick on the gun. In addition, they usually flush only once, so you must capitalize when the opportunity presents itself.

Woodcock hunting might not provide the excitement of arrowing a big whitetail buck or calling in a boss gobbler. Nevertheless, hunters seeking new challenges should look no further. **MP**

How to Restore and Care for Cast-Iron Cookware

11 SECRETS TO NON-STICK RESULTS

By Charles Witosky

Cast iron is timeless. It was created thousands of years ago and has since been used for making everything from cookware to gardening tools. It's incredibly versatile, sturdy and easy to use. Seasoned properly, a cast-iron pan can easily fry eggs without extra grease and without sticking.

Unfortunately, though, it's also

easy for cast iron to rust and become unusable, if not cared for properly. However, if that happens to your cast iron, it's easily fixed. If you're shopping for new cookware on a budget, consider attending a flea market and purchasing completely rusted cast-iron pots and pans—for a fraction of retail prices—and restoring them. A step-by-step guide on how to do it follows.



**“Once you’ve completely
restored and reseasoned
your pan, store and use it
carefully so it doesn’t
become damaged.”**

PHOTO BY THINKSTOCK



FIGURE 1



FIGURE 2

Figure 1: This is our cast-iron cornbread pan before and after being professionally sand-blasted.

Figure 2: Soaking the pan in vinegar and water loosens rust.

Step 1: Gather Your Tools

To get started, you'll need rusted cast-iron cookware and a container large enough to hold each piece submerged. You'll also need water, white vinegar and a scrubbing tool (we used steel wool).

For our example, we used a pan because of the simplicity of scrubbing it after soaking. Pictured in figure 1 is a cast-iron cornbread pan, which we were unable to completely clean and restore using the methods described here. We actually had it professionally sand-blasted. It can be difficult or impossible to clean detailed items like the individual kernel indentations in our cornbread pan or enclosed items like teapots, but sand-blasting is a reasonable last-resort method.

Step 2: Create the Mixture

Concoct a mixture of equal parts water and white vinegar in which to soak the cookware. We used approximately $\frac{3}{4}$ gallon of vinegar for our pan. You'll need to simultaneously pour both the water and vinegar into the container and mix well. You must use exact amounts of water and vinegar, otherwise the mixture will either be too strong or too weak, and you'll be unable to control how quickly the rust comes off.

Step 3: Soak the Pan

Lay the cast-iron pan in the container and pour the mixture over until it's submerged. Now, you must wait. Depending on how rusted the cookware is, it may take up to eight hours for the rust to loosen. However, very few pieces actually take that long.

Check on the progress at least once every hour. Use your fingernail or another sharp

“... consider attending a flea market and purchasing completely rusted cast-iron pots and pans—for a fraction of retail prices—and restoring them.”



FIGURE 3



FIGURE 4



FIGURE 5



FIGURE 6

object to scrape at the rust. If the rust comes off easily, start scrubbing. Don't let the pan sit in the mixture any longer, or it will begin to pit, which renders the cast iron unusable.

Another common mistake is removing the cast iron from the mixture and airing it out for a long period before scrubbing. This will oxidize the cast iron even more.

Step 4: Scrub the Pan

Using steel wool, scrub until every bit of rust comes off. If you're scrubbing a pot like we did, don't neglect to scrub the handle. Left there, the rust will expand, weakening the handle, which will eventually break off. Scrubbing took us about 15 minutes.

Step 5: Dry the Pan

After you've scrubbed off all of the rust, immediately dry the cast-iron piece. Make sure it's completely dry. Again, if iron is wet and in contact with air, it can easily rerust. Shown in figure 4 is our scrubbed and dried cast-iron pan. At this point, your cast iron is clean and only needs to be reseasoned before use.

Step 6: Oil the Pan

For this step, you'll need vegetable oil, a dishtowel you don't mind dirtying and an oven set to 400°F. Once you're sure the cast iron is dry, set it on a flat surface and drop ½ teaspoon of oil onto it. If you're using a pan,

Figure 3: We scrubbed our cast-iron pan with steel wool.

Figure 4: The cast-iron pan has been scrubbed and dried.

Figure 5: The pan is greased and ready to be heated.

Figure 6: The pan is heated.

FIGURE 7: The pan is ready for the second heating.
FIGURE 8: The finished pan is ready to use.



FIGURE 7

drop the oil into its cooking area. Then, use the dishtowel to spread the oil over the entire pan. Make sure oil hasn't pooled. Our oiled pan is pictured in figure 5.

Step 7: Heat the Pan

Preheat the oven to 300°F. Place the cast iron on the oven's middle rack. If you're restoring a pot or pan, place it in upside down. Once the oven has reached 300°F, leave the cast iron in for 15 minutes.

Step 8: Dry the Pan

After 15 minutes, pull the cast iron out and let it cool. Don't touch it until you're absolutely sure it has cooled. Once cool, use the dishtowel to do a once-over, making sure there's absolutely no remaining oil. If any oil is left behind, it'll leave permanent marks.

Step 9: Heat the Pan Again

Preheat the oven to 400°F, and place the cast iron back into the oven for a full two hours.

Step 10: Cool the Pan

After two hours, remove the cast iron from the oven. Once cool, the cast iron is restored



FIGURE 8

and reseasoned. You can now use it for its intended purposes. Our completed pan is pictured in figure 8.

Step 11: Care for the Pan

Once you've completely restored and reseasoned your pan, store and use it carefully so it doesn't become damaged. The better you treat it, the longer it'll last.

First, don't stack anything on top of cast-iron cookware. If you must stack cast iron on top of cast iron, put a coffee filter between the two pieces. Second, don't use metal utensils on your cast iron. Metal on cast iron scrapes off the seasoning. Third, clean it by doing a light reseasoning after each use. Our method is to clean food particles off with a paper towel, coat the pan in oil, then stick it in the oven at 400°F for one hour.

Finally, the best way to keep cast-iron cookware in excellent condition is to cook in it. Searing, frying and sizzling steaks and the like will keep it well-seasoned. At all costs, keep your seasoned cast-iron cookware away from water.

And there you have it, everything you need to know for restoring and caring for cast-iron cookware. **MP**

CAST-IRON FACTS

Strolling through your local flea market, you might notice cast iron, new and old, everywhere. Some is completely rusted over, some is renovated and some is brand new. Some flea-market stands are dedicated entirely to cast iron. Why do these vendors sell so many articles made of this material? Because old, rusted cast iron has no perceived value, yet, when restored, it's worth lots of money.

People buy rusted-over cast iron at wholesale prices from antique dealers. "Antique" is the keyword here. Cast iron lasts forever. In fact, it's been around forever.

Cast iron is an alloy (mixture) of iron and carbon that contains a carbon content greater than 2%. As the carbon content goes down in this alloy, cast iron becomes steel.

The earliest recordings of cast iron being produced were in China in the fifth century. In the 1700s and 1800s, bridges were built using cast iron. Later on, the bridges started rusting, pitting and eventually collapsing. Since then, bridges have been built primarily with steel and concrete.

For the longest time, factories were supported with cast-iron beams because the beams could be slender, thus accommodating more space for machines, while also supporting the buildings.

In Watervliet, New York, a building made of cast iron still stands, aptly named the Iron Building.

Originally, cast-iron pots were built with handles on top so that they could be hung over fires because commercial ovens hadn't yet been invented.

Much of the cast iron produced in the early 20th century in America still exists today. There's even a cast-iron museum in Queens, New York.

THE BUSHCRAFT SERIES
WEARABLE LEATHER FIRESTARTERS

WORN BY
REALITY TV
SURVIVAL STAR
MT Dani Beaulieu

ELEGANTLY
SIMPLE

AMAZINGLY
FUNCTIONAL

10% OFF
Exclusive Modern
Pioneer Coupon
MPDANI16
EXPIRES 7/1/2016

WAZOO SURVIVAL GEAR
PRODUCTS THAT CAN SAVE YOUR WAZOO

WWW.WAZOOSURVIVALGEAR.COM

Antler Business

BUYING, SELLING AND TRADING ANTLERS

By Tracy Breen

There are many ways to make money in the outdoors. Some people sell guided hunts; others sell articles and photographs to outdoor magazines. An income-producing outdoor hobby that's rarely discussed is selling shed antlers.

Each winter, deer, elk, moose and other antlered game drop their crowns and grow new ones. Finding them can be difficult, but virtually anyone with ambition and a good place to look can be successful.

In the February/March issue, we discussed tips for finding sheds. Here, we'll explore ways to make some extra bucks selling them.

Antler Uses and Demand

For hundreds of years, people have used antlers for various items from knife handles to chandeliers and everything in between. In the past 20 years, more people have been decorating houses, man caves and restaurants with antlers. They're even sold as dog chew toys. Antlers are in high demand.

Tricks of the Trade

Gary Reissmann of Wisconsin knows about finding, buying and selling antlers. In fact, his antler business consumes most of his time. During the winter, he regularly searches the woods for antlers and spends a great deal of time on the phone buying and selling them. "One thing people need to know is that all antlers are worth something," Reissmann said. "Antlers are graded like fur ... the nicest antlers are valued

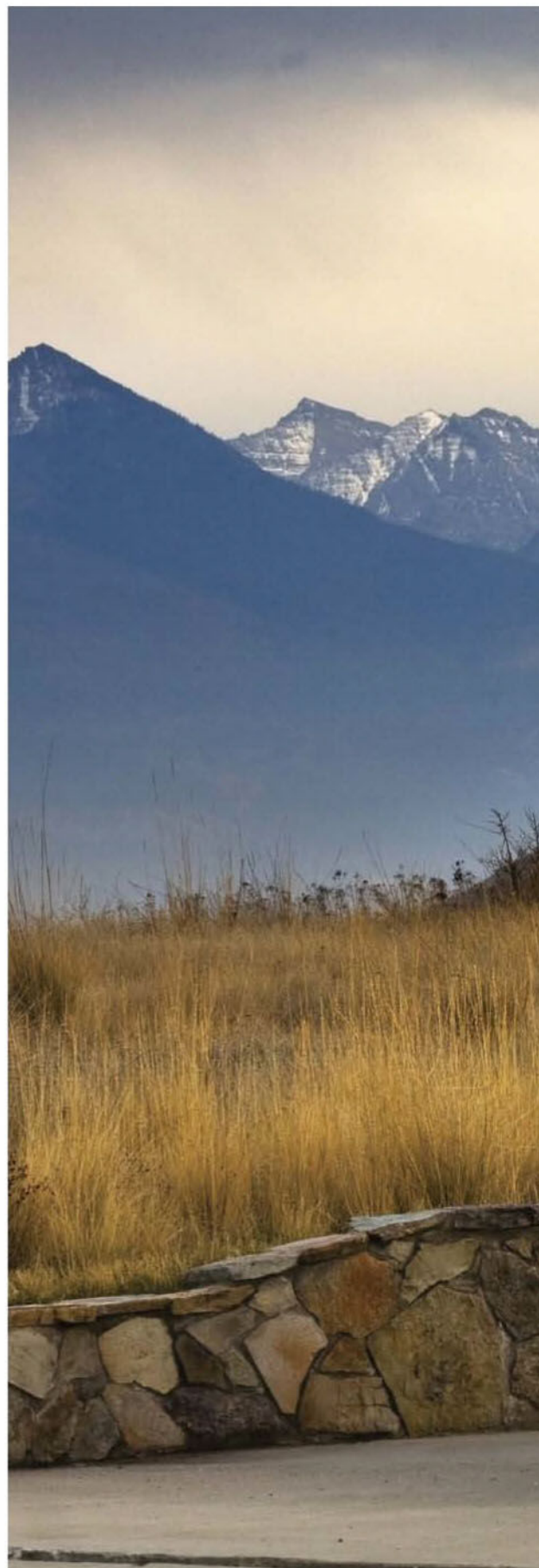




PHOTO BY THINKSTOCK



“For hundreds of years, people have used antlers for various items from knife handles to chandeliers and everything in between.”

(top) A truckload of nice shed antlers like this will fetch a premium price. Aside from finding them yourself, keep an eye out for farmyards with antler heaps. Farmers are often willing to part with them for reasonable prices.

(GARY REISSMANN)

(right) This antler lamp, crafted by Tekoah Guedes, makes a tasteful nightstand or reading-nook addition.

(TEKOA H GUEDES, 970-986-9648)

highest, and ones that’ve been chewed on are worth the least. Nonetheless, they’re all worth something.”

Reissmann acts largely as a middleman between people who find antlers in the woods and people who want large quantities of them for various end uses. “I sell antlers to collectors, crafts people and dog-bone companies,” he said. “I have an extensive network in place, and many people come to me with antlers. I buy them by the pound, then turn around and sell them. The cool thing is if someone enjoys finding sheds in the woods, they can actually sell them to me and make pretty good money if they work hard and find lots of them. Shed hunting is one of those rare hobbies that can help you earn money,” Reissmann said.

Antler Grades and Values

Before you start seeing dollar signs, realize antlers are graded on a number of considerations. Once you know the grading system, you’ll better understand what your antlers are worth.

Grade A antlers are typically those a buck recently shed and are in very good condition. “A grade A antler is usually one that someone found this winter,” Reissmann said. “It’s not bleached or chewed on. It basically looks as if





it fell off the buck yesterday. Most buyers pay \$7 to \$10 per pound for these, if the antler measures 70 inches or less. Larger antlers, of course, bring more money. For example, 100-inch-or-larger antlers are worth hundreds of dollars because they're really hard to come by. A nice shed with a few non-typical points and lots of character will be worth more money. A 90-inch-or-larger side, let's say a perfect 5-point, could be worth thousands of dollars if it's in perfect condition, has lots of mass and zero flaws," Reissmann added. "Bottom line: to find grade A antlers, you must search areas known to hold big bucks as soon as their antlers drop."

Grade B antlers are brown and may have small cracks, minor chips or slight chew marks from varmints. Overall, they look pretty good. "Grade B doesn't bring much less per pound than grade A—maybe a dollar or two less per pound—depending on size and character," Reissmann said. "If it has mass and

non-typical points, it will always be worth more than a small 30-inch antler that came off a small buck."

Grade C antlers are pure white and can't be used tastefully for décor. They're often only worth a few dollars per pound, and are usually shipped overseas where they're ground up and used in natural medicines. The nice thing is even though white, chewed-up antlers aren't worth as much, they're still worth something.

"At the end of the day, every antler is worth something," Reissmann noted. "If someone brings me a pile of antlers, they're going to make some pretty good money, regardless of grade."

The abovementioned prices are the going rates for whitetail antlers. Those willing to look for elk and moose sheds will likely be rewarded with even better prices. "I buy all kinds of antlers," Reissmann said. "Some guys enjoy going out West to find elk antlers. The

(top) Antler junkie Gary Reissmann travels across several states, buying and selling antlers as he goes. Here, his pickup truck bed is lined with stunning sheds.

(GARY REISSMANN)





(top) Even a small antler like this one is worth money.

truth is, if a person is willing to travel and work hard, they can make good money selling shed antlers.”

Stay on Top of Your Game

Finding a truckload of antlers can be hard work and requires tons of dedication. Reissmann believes people who’re serious about making money by selling sheds must hustle. “I get calls almost daily from people who have antlers,” he said. “Some people even have truckloads of them. In fact, a

gentleman recently called me who has trailer loads of elk antlers. If a person wants to make money by selling antlers to a buyer like me, the best thing to do is start in your area and expand from there.

“Many shed hunters who’re trying to make money travel to states with lots of deer and lots of big bucks,” Reissmann continued.

“Many guys take a week off work or a long weekend and shed hunt daily. The really serious people buy a shed dog. A good shed dog can find antlers much faster than its owner.

OTHER OUTDOOR CASH-MAKERS

Antlers are likely the most lucrative item to collect from the woods and sell, but other profitable items may be sold. For instance, customfeathers.com buys all things turkey related: turkey feet, wings and beards. They even buy turkey heads. If you’re a turkey guide, selling turkey parts—within legal bounds, of course—can help put a little extra jingle in the bank.

Squirrel tails are another overlooked piece. Mepps pays about 20 to 26 cents apiece for good fox-squirrel tails and a little less for gray- and black-squirrel tails. If you’re an avid hunter, it may be worth saving up tails and sending them in. You can be compensated with money or Mepps spinners. Visit mepps.com for more information.

Let’s not forget about furbearers.

Although fur prices are down, coyotes and red fox are still worth a fair amount of money. Putting a few hides in the freezer can help pay the bills.

Furs, sheds and squirrel tails probably won’t make you rich, but they may pay for an extra hunting trip each year, or at least pay for your gas. Making money in the outdoors is always a fun and rewarding experience.

“Those willing to look for elk and moose sheds will likely be rewarded with even better prices.”

Combined, you can have a pretty good day in the woods,” Reissmann suggested.

One way Reissmann accumulates sheds is by knocking on farmer’s doors. “Many people don’t realize antlers are worth money,” he said. “Farmers, for example, often find sheds in their fields and toss them into the woods or stack them alongside the barn. When I see a pile of sheds in someone’s yard, I knock on their door and ask if they’re interested in selling them. When they realize antlers have value, they often begin collecting them and call me once they have a bunch.”

Reissmann travels to four or five states regularly to pick up antlers. If you’re interested in selling him antlers, one option is to see how close you live to his route. The other is to ship them. “If someone has less than 100 pounds, I have them drive to me or ship them,” he said. “If they have hundreds of pounds and live near my travel route, I’ll either pick the antlers up or meet them somewhere.”

Check the Regs

Selling sheds isn’t legal in every state, so it’s important to know the laws before you start searching for sheds with the hope of making money. Other states require a dead head (a skull with antlers attached) to be tagged before it can be sold. Every state operates a little differently.

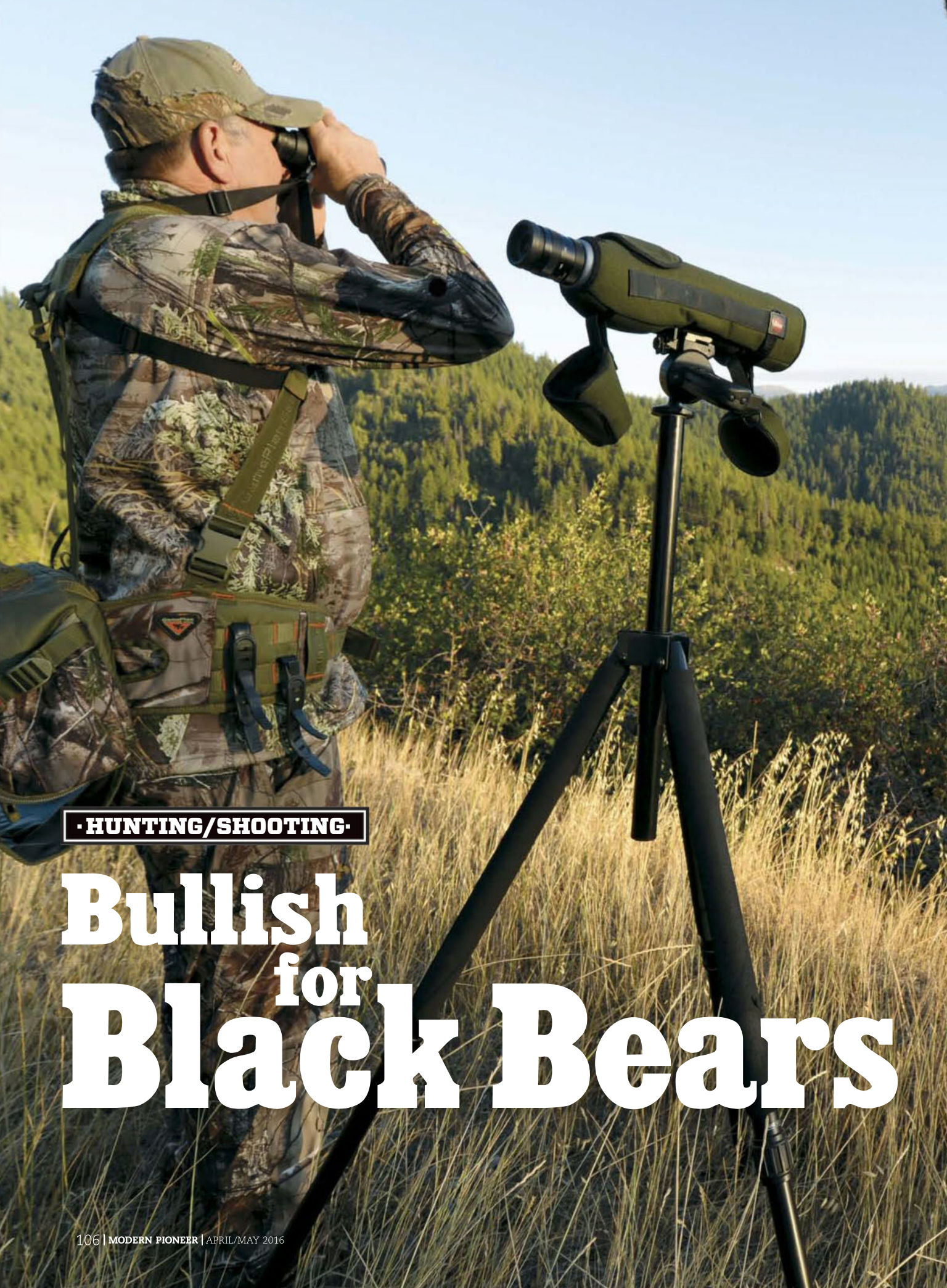
Find Sheds, Make Money

The nice thing about shed hunting is it happens in the middle of winter when most hunting seasons are closed. By looking for sheds, you can make extra money and determine where bucks bed and feed, and the travel paths between the two, which can help you determine where to hang your tree-stand next fall. All in all, shed hunting is a great activity that gets you outdoors, and you can actually earn money instead of spend it! **MP**



Cookstoves
Clean, Easy, and Efficient

STOVETECSTORE.NET



· HUNTING/SHOOTING ·

Bullish for Black Bears



SPICE UP YOUR SPRING WITH AN IN-YOUR-FACE ENCOUNTER

By Brian Strickland

In the West, glass distant basins
for bruins feeding on grasses.

INSET: Den-departed bears gorge
on everything in sight, including
grasses, clovers and dandelions.

After blowing a predator call for nearly 15 minutes, I was questioning my sanity. I have nothing against predator calls, but producing tunes from one usually means you're looking for trouble. When I saw the coal-black bear immediately turn in response to my distress tempo from across the canyon, I knew trouble was heading my direction.

When my peripheral vision caught movement moments later, I strained my eyes sideways to confirm it was him. His raven-black hide glistened in the lambent afternoon light as he stood motionless, trying to find the easy meal my call had proposed. I hoped he wouldn't mistake me for it.

Before this encounter, I'd never drawn my bow on a bear, so I really wasn't being too picky. However, at 20 steps away he looked larger than life: His body was plump and his head was melon-sized. These two indications confirmed he was mature. In fact, he was more than enough bear for a rookie.

I swear I didn't make a sound, but as soon as I began drawing my bow, he focused on me. In an instant, his beady eyes met mine, and icy chills traced my spine's entire length. I wasn't sure what to do next since I'd never been eye to eye at such close range with one of the Lower 48's most dominant predators. His presence reaffirmed I was no longer in control of the situation.

As the standoff unfolded, I sensed something was missing. I soon realized it was the cool breeze that once touched my face. Then, his head quickly tilted up, and he got a snout-full of the thin mountain air. Before I could finish drawing back, a sharp woof and the sound of snapping branches erupted as he ripped through the



(top) Tracks reveal bear-rich habitat and help you determine your quarry's size. (top right) Isolated logging roads are great places to spot-and-stalk bears out west or in Canadian provinces. (bottom right) Fresh droppings like this indicate a bear is nearby. (below) Such sign helps you select productive areas to focus your hunting efforts. (below) Although often overlooked by hunters, bear-crossing signs indicate areas with high bear densities.

“His raven-black hide glistened in the lambent afternoon light as he stood motionless, trying to find the easy meal my call had proposed.”

brush like a locomotive. I was left with my thumping heart, trembling hands and the burning memory of another close encounter with wild game.

Since that encounter, I've had numerous close calls with bears, both on the ground and from treestands. No matter how many times I get close, my perception of the world they inhabit and my place in it changes.

There's just something special about getting close to dangerous game, regardless of the type of weapon carried or hunting method used.

When it involves the stick and string, the intensity skyrockets.

Baiting

In my opinion, the most productive way to hunt the *Ursus americanus* is over a well-placed bait. Although some hunters believe it's

easy to kill bears over bait, it's actually quite difficult for the DIY hunter. The fact is, the work required to establish the bait is a labor of love that often takes weeks to accomplish. The job includes scouting, collecting bait and setting it up. Then, there are the routine trips to rebait. Throw in hunting time, which can take a week or longer, and you'll soon understand why it's difficult. Still, baiting yields the highest odds of any method.

My experience with bears has mostly been in the western third of the Lower 48 and Canada. The first step is locating high-density bear areas. Obviously, finding fresh bear sign is important, but even more critical is knowing specific regions that consistently hold solid numbers. You can obtain this information from local wildlife officers and biologists. Most western destinations have biologists specifically assigned to manage bear



populations, and they're generally very willing to share information with the DIY hunter who wishes to tackle such a hunt.

Once you've narrowed down a particular region, locating the right terrain is also important. Consider that a nearby water source makes bait sites consistently more productive. Bears are reclusive by nature, so I generally focus my attention at canyon heads, particularly, secluded ones. This keeps me isolated from other hunters, and bears move more naturally in these locales. Furthermore, the canyon's natural design funnels my bait's scent down the canyon toward them.

Oats, icing, syrup, dog food, expired pastries and cooking grease—virtually anything sugary—effectively attracts bears. Add meat to the mix (where legal) to really ramp up your bait site's appeal. Game meats like deer, elk and even some fish are usually illegal, but local ranchers or butchers are good sources for meat scraps or an entire cow carcass.

Lastly, patience is the bait hunter's greatest asset. I've spent countless hours in a treestand staring at a bear-less bait pile, only to have a bruin appear unexpectedly. During the spring breeding season, boars move around looking for sows. Western bears travel miles every day to find them. They may only hit your bait a few times before moving on, so being there is critical if you're looking to bag a big boar.

The Sneak

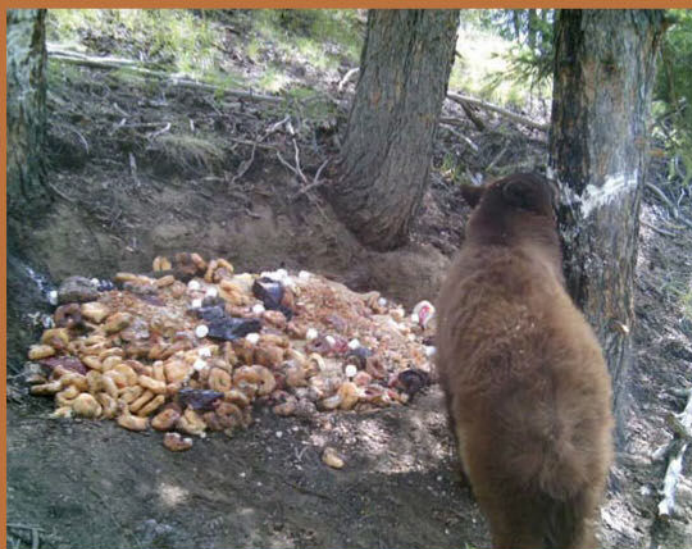
The spot-and-stalk approach is another productive method. Location is key. Seek regions offering expansive open areas close to thick cover where you can glass and move toward distant bruins. Idaho, Oregon, Alaska, Montana, Washington and British Columbia offer excellent spot-and-stalk bear-hunting opportunities. These regions are filled with clear cuts and logging roads where hunters can cover lots of ground quickly. Best of all, they're home to vast public lands and excellent bear numbers, making them ideal for adventurous DIY hunters.

Whether you're hunting in the spring or fall, remember that bears are largely motivated by food. Virtually everything a bear does is based on the urge to fill its belly. Again, open clear cuts, isolated logging roads and water systems are ideal locations to find them.

As snow melts and bears emerge from their winter dens, they're invariably attracted to greens like wild clover, grasses and dandelions. Generally, the first place you'll find these succulent food sources is on the edges of logging roads, cut-lines and open hillsides. With ambient-air temperatures being cooler on most spring days, south-facing slopes get the most sun, and this is where the



Although a bruin's pumpkin-sized head and dark, thick hide are signs of a coveted trophy, the author is impressed by huge paws with imposing claws.



Place your bait next to a big tree or an upright 55-gallon drum to determine the size of bears visiting the bait.

FIELD-JUDGE A BEAR

Field-judging bears for trophy status can be difficult; you're basically looking at a big dark blob. Some experts recommend studying the head and ears. They suggest that if the ears appear small and are set far apart, the bear is mature. Larger ears set closer together usually mean you're looking at a smaller bear.

Another way to judge bears is by placing your bait near a large tree or 55-gallon drum. Monitor the site with a trail camera. Once you capture images of bears, study them, comparing bears with the tree or drum. This will help you determine trophy status, even before you hunt the bait site.

—Darron McDougal

first grasses and dandelions sprout. In autumn, wild berry patches or areas with fruit trees are excellent places to hunt.

Stalking bears is relatively simple during ideal conditions. Generally, compound bowhunters must close within 40 yards. Primitive bowhunters shooting recurves or longbows must get even closer; 20 yards is a good goal. Moist, soft ground makes stalking easier, while dry, brittle ground makes the going more difficult. In these conditions, consider removing your boots as you make your final approach. A bear's eyesight is its weakest sense, so a stalking hunter can generally sneak within range in relatively sparse cover. Make your moves when bears are preoccupied.

Unquestionably, a bear's strongest survival attribute is its nose. With this in mind, always use the wind to your advantage, regardless of the hunting method you choose. Before executing a stalk, study wind currents and understand how they're working in the terrain you're hunting.

Call of the Wild

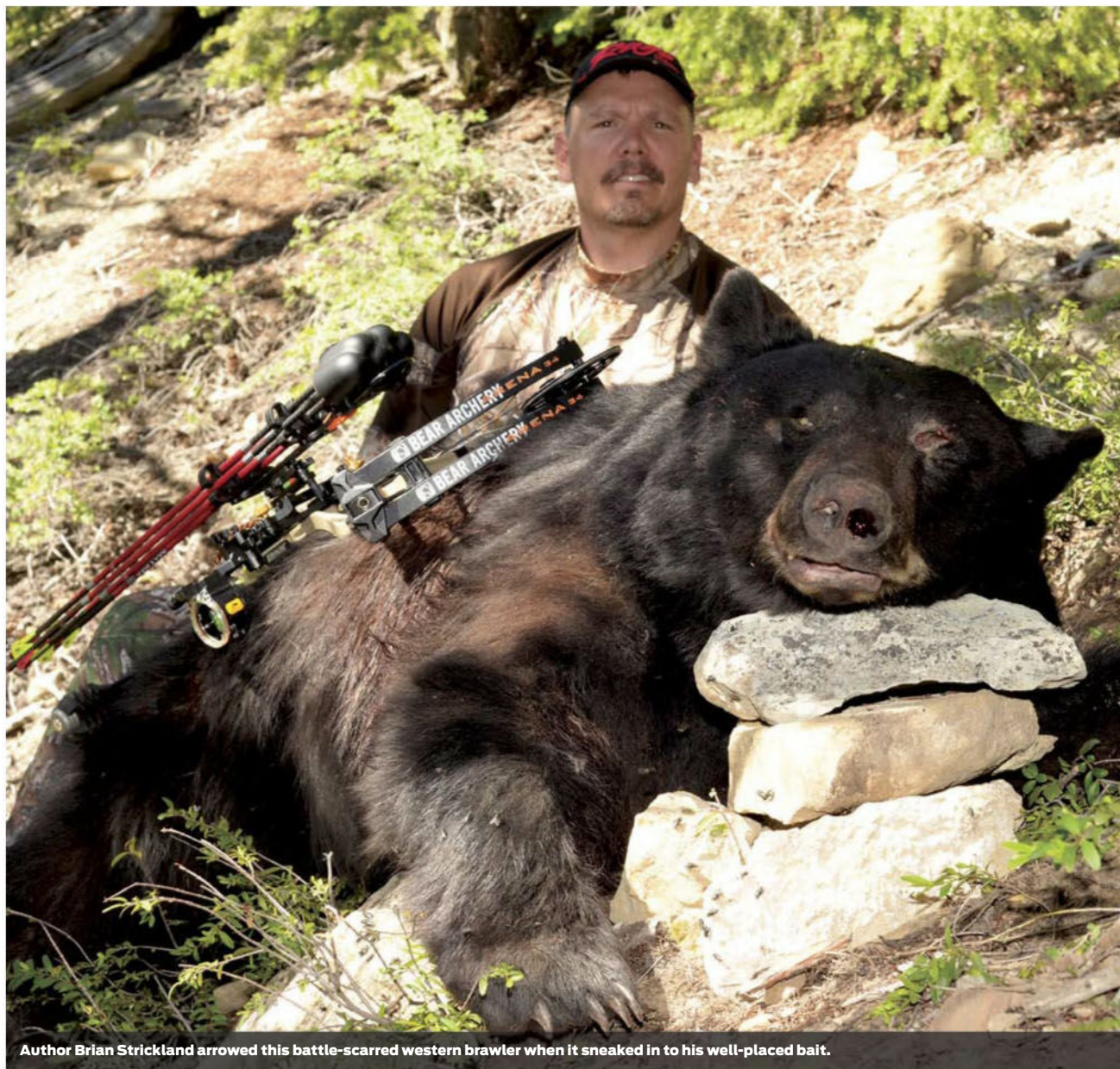
It's one thing to hunt bears over bait, or even to try to sneak close to them; to become the bait yourself, though, creates a more intense adrenaline rush. My first few attempts at calling in bears were unsuccessful (if success is measured by releasing an arrow). Throughout the years, I've managed to call in a few for buddies, plus, I've arrowed a couple myself. Watching a bear run in your direction, knowing that he's expecting an easy meal, is an unrivaled, heart-pounding experience.

Just like other hunting methods, calling bears successfully is done by hunting where they're plentiful. Bowhunters should set up in areas that offer ample shooting opportunities. To do so, you must consider potential openings where approaching bears are likely to expose themselves. Relatively open areas near thick cover are choice calling locations.

Rabbit-in-distress calls will bring curious bruins into range, but distress calls from elk calves and deer fawns can also evoke a running response. Both deer and elk drop fawns in the same general areas each spring. Hungry spring bears will likely exploit these locations.

Blind calling can work in bear-dense areas, but spotting a bear first, then closing the distance before calling, produces higher response rates.

The key to calling is patience. It can take more than an hour for a bear to respond, so allow the call some time to work. Also, keep your calling frequency consistent. In other



Author Brian Strickland arrowed this battle-scarred western brawler when it sneaked in to his well-placed bait.

words, don't start and stop repeatedly. Bears tend to lose interest quickly, so maintain a steady cadence.

An electronic call with a remote is worth its weight in gold. Set it up 20 to 40 yards away and pair it with a motion decoy. This diverts the bear's focus away from you so you can draw undetected. Keep the wind in your face or work with a crosswind. Be mindful that mature boars naturally sneak downwind before coming in.

Regardless of the method you use to hunt them, spring black bears are an exciting challenge for the DIY hunter. Not only do they make excellent table fare, but their fur is luxurious, and they're an apex predator worthy of the chase. **MP**

A PUNGENT BEAR POTION

Smell is a bear's keenest sense. Exploit it by masking your scent and spicing up your bait with potent bear lures. Many commercial scents are available for purchase at sporting-goods stores. I've successfully used Wildlife Research Center's Ultimate Bear Lure. It's a powerful attractant that emits irresistible aromas bears crave. The product is completely pure with no thickening agents or inexpensive fillers. Learn more about Ultimate Bear Lure at wildlife.com or by calling (800) 873-5873.

—Darron McDougal

•GENERAL•



The Grand Canyon Railway train rounds a bend through beautiful country.



Exploring *Wild Areas* by Rail

FOUR TRAIN TOURS WITH BREATHTAKING VIEWS

By Dana Benner

At one time during America's history, before paved interstate highways and cars and trucks existed, everything traveled by rail. From coast to coast, people and freight crisscrossed the country. Manufactured goods from the East Coast traveled to the plains and beyond. Livestock was transported from western ranches to Midwestern stockyards, and then to markets in the east. Gold, silver, copper and lumber all were shipped to factories by rail. The many railways also transported people to new areas and facilitated settlement. The

railroad system was America's lifeblood. Then it all but ended.

Today, there are still hundreds of miles of track running from New Hampshire to Alaska and Arizona to Colorado and beyond. Though just a remnant of what once was, they're a vital link to our past. If they could talk, imagine the stories they'd tell.

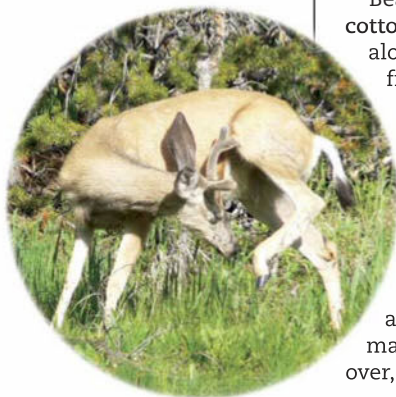
Slow Down and See What You've Been Missing

In our world of bigger, better and faster, people still appreciate rail life. The same rail lines that carried freight and people looking



(above) Riding the Verde Canyon Railroad leaves travelers wondering what's around the next bend.

(below) This mule deer was undisturbed by the train.



to restart their lives in untamed places now travel into some of our country's most remote places. Each year, thousands of people flock to our country's wild areas. Many travel by motor vehicle—cars, trucks and recreational vehicles—and miss out on sightseeing due to driving's diversion.

Beautiful rivers with willow- and cottonwood-lined banks, mule deer grazing along the roadside or pronghorn running free offer fleeting glimpses when driving at vehicular speeds. In contrast, trains allow travelers to sit back and enjoy the ride, taking in everything and truly enjoying the experience.

Wildlife is more easily seen and photographed from trains than from vehicles. Trains move more slowly, and the animals—which are quite accustomed to trains—aren't spooked. In many cases, it's unsafe for humans to pull over, get out and photograph wildlife. Animals

can become stressed and flee, or in the most extreme cases, attack.

Let's review four of the best trains that help people explore our wild areas.

Verde Canyon Railroad in Clarkdale, Arizona

Designed to carry loads of copper from the hills in Jerome, Arizona, the Verde Canyon Railroad now carries passengers on relaxing, awe-inspiring trips along the Verde River banks where stands of willow and cottonwood bring contrast to the rich red cliffs that tower above.

Rumbling through the canyon, the river is an oasis in the surrounding desert. The train travels past the remains of long-closed mining operations, the ruins of ancient natives and the ranches of early pioneers who lived off the land. The canyon is also home to a vast number of wildlife, and if you're in the right place at the right time, you may even see some of them.

Bald eagles nest in the canyon right around



(above, right) Open-air cars provide the best chance to see and photograph wildlife.



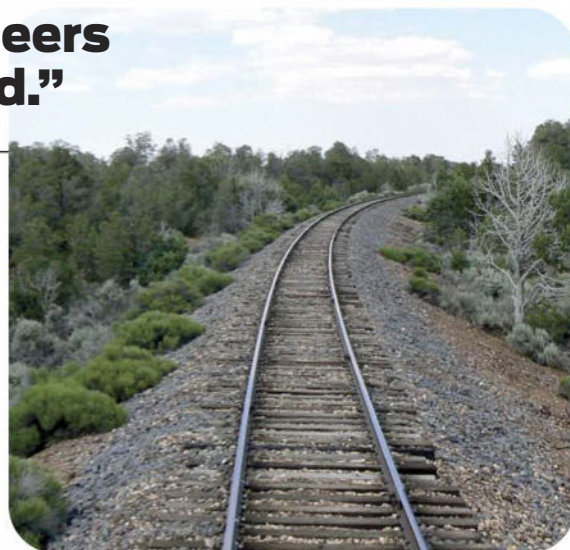
“The train travels past the remains of long-closed mining operations, the ruins of ancient natives and the ranches of early pioneers who lived off the land.”

milepost 32.5, and great blue herons are often seen along the river banks. The willows and cottonwoods are also home to elk, foxes, coyotes, javelina and mule deer, as well as skunks, rabbits and squirrels. The surrounding cliffs are home to mountain lions and black bears, though both are rarely seen.

Surprisingly, abundant plant life can also be found here. As the train passes, watch the cliffs for agave, banana yucca and various cacti.

Grand Canyon Railway in Williams, Arizona

Leaving out of Williams, Arizona, the proclaimed “Gateway to the Grand Canyon,” the Grand Canyon Railway travels due north to



CONTACT INFORMATION FOR EACH OF THE RAILROADS MENTIONED

VERDE CANYON RAILROAD

300 North Broadway
Clarkdale, AZ 86324
(800) 293-7245
verdecanyonrr.com

GRAND CANYON RAILWAY

233 N. Grand Canyon Blvd.
Williams, AZ 86046
(928) 635-4010
thetrain.com

**PIKES PEAK
COG RAILWAY**
515 Ruxton Ave.
Manitou Springs, CO
80829
cograilway.com

**ROYAL GORGE
ROUTE RAILROAD**
330 Royal Gorge Blvd.
Canon City, CO 81212
(888) 724-5748
royalgorgeroute.com

the Grand Canyon's South Rim, a distance of 65 miles. This ride is rich with different plants, animals and environments around every bend, so be attentive. With every change in elevation, you're likely to see something different. As the train leaves Williams, watch for prairie dogs, which seem to be everywhere.

Around Williams, you'll be surrounded by aspen, spruce, Douglas fir and Ponderosa pine. Watch for elk, mule deer and even black bear. Leaving Williams, elevation drops, and you'll find yourself in wide-open prairies where prairie dogs are seen on their mounds and pronghorn among sagebrush. You'll also see juniper and mountain ash.

Nearing the canyon, the train again climbs elevation. Watch the sky for ravens, bald eagles and even the rare California condor. As the train slows, scan tree branches for squirrels and porcupines. Also, search the undergrowth for rabbits and other small animals. This is also another likely place to spot elk, deer, bear and the occasional mountain lion.

Pikes Peak Cog Railway in Manitou Springs, Colorado

Dress warmly for this train ride, even during the summer. The Pikes Peak Cog Railway travels nearly 9 miles straight up Pikes Peak. This ride is worthwhile because Pikes Peak encompasses half of the different life zones found in Colorado. This translates into different plants and animals along the way.

At the base, which is the Eastern Plains Zone, the area is lush with brush, grassland and wildflowers. Here, you'll likely see foxes, rabbits and prairie dogs. As the train moves into the Foothills Zone, the landscape changes. The grasslands give way to scrub oak, juniper and piñon pine. This is a great spot to see deer, bear and even mountain lion. Reaching 8,000 feet, you're now in the Mountain Zone. The forests here are Douglas fir and aspen. Elk, deer, bear and mountain lions inhabit this zone. The landscape changes once again at 10,000 feet, or the Sub-Alpine Zone, with Englemann spruce, Douglas fir and bristlecone

(below) From Pikes Peak you can see the teeth, known as cogs, that help pull the train up the mountain.

WHAT IS A COG RAILROAD?

In 1866, the Mount Washington Cog Railway in New Hampshire was the first of its kind. Designed to climb New Hampshire's highest mountain, Mount Washington, it's the first and oldest of America's only two cog railroads, the Pikes Peak Cog Railroad being the other. But what is a cog railroad?

Cog railways operate much differently than normal railways. Typically, trains operate by having an engine pull cars with steel wheels along steel tracks. Because steel on steel slips, normal trains can only climb steep grades gradually. Cog trains operate by having the engine push the cars, and both the cars and the engine are fitted with gears (called cogs) that actually engage the track. Basically, cogs allow the train to climb the tracks—like you'd climb a ladder—thus pulling the train up the mountain.



“As you ride ... watch for great blue herons and mule deer along the river, and bald eagles and even bighorn sheep along the canyon walls.”

pine making up the forest. At 11,500 feet, you're now in the Alpine Zone and well above the tree line. This is tundra consisting of small flowers, mosses and lichen. Here, you'll find yellow-bellied marmots and bighorn sheep.

Royal Gorge Route Railroad in Canyon City, Colorado

Silver was discovered in the mountains surrounding the Arkansas River in the mid-1800s. This, in turn, brought people and the railroad to this area. Today, the Royal Gorge Route Railroad runs along those same rail lines, introducing people to the Royal Gorge. Running between the river and the sheer granite walls, the train runs along the same tracks that once transported silver ore, taking passengers back to times gone by, and offers great views along the way.

The area is steeped with history, and the train passes by old mining towns and the remnants of long feuds fought by railroad barons jockeying for a foothold in the area. As you ride in comfort along the Arkansas River, watch for great blue herons and mule deer along the river, and bald eagles and even bighorn sheep along the canyon walls. This is truly a once-in-a-lifetime experience since the only other way to get into Royal Gorge is by raft, many of which you'll see as the train chugs along.

Being a modern pioneer means learning from the past, and appreciating the efforts of those who came before us. At one time, rail travel was standard transportation. It can still be that way for people looking to explore our wild areas.

All of the rail lines I mentioned take visitors through country inaccessible by any other means, besides foot or horse. In some cases, like with Royal Gorge, even those aren't an option. Take advantage of these railroads and experience life as it was before everything became bigger, better and faster. You'll encounter breathtaking views you wouldn't from behind the wheel of your car or truck. **MP**



(top) Above the tree line, Pikes Peak offers expansive views.

(below) A trip on the Royal Gorge Route Railroad takes you through wild country along the Arkansas River.

(right) Pronghorns are common on the prairies surrounding the Grand Canyon.



· HUNTING/SHOOTING ·

Bowfishing Basics

FUNDAMENTALS FOR A SUCCESSFUL VOYAGE

By Larry Schwartz

Centuries ago, bowfishing was primarily a means for providing food. Today, things have changed. Well, slightly. While some edible fish are legal bowfishing targets—mahi mahi in the Gulf of Mexico, for example—carp are the most bowfishable species because they're so abundant. While carp can be smoked and eaten, they're not exactly a decadent entrée.

Of course, carp are bottom feeders, or more euphemistically, rough fish. These scaly behemoths stir waters that were once pristine, destroying prime habitat for native species. Thus, bowfishing is now done

primarily for entertainment, and to manage rough-fish numbers. It's a type of fishing that grows in popularity each year. Even women and children who perhaps wouldn't shoot deer have nothing against impaling a scale. Bowfishing is a great family sport, and makes an excellent launch pad for new archers looking to explore bowhunting.

There are very few bowhunting opportunities during the summer months; however, bowfishing occasions abound all summer long. Bowfishing can even be a year-round sport depending on where you live.

Bowfishing is often most productive at night. Rig your boat with lights so you can easily identify your target.





“Nighttime bowfishing is often most productive since that’s when fish are most active.”



(above) A pair of hip waders and your bowfishing rig are all you need to start stalking tidal flats during carp-spawning season.

(RON LANG)

(below) Bowfishing arrow points come in various designs. Points for smaller- to medium-sized fish use bent wire prongs that collapse when the arrow enters the fish and then reopen to avoid pulling out. Points for larger species incorporate stronger metal blades that expand and lodge beneath the skin.

(AMS BOWFISHING)

Perhaps you’ve never heard of bowfishing, or you have but just don’t know where to begin. In this article, I’ll present information that’ll help you realize just how simple it is to make it your new weekend hobby.

The Approach

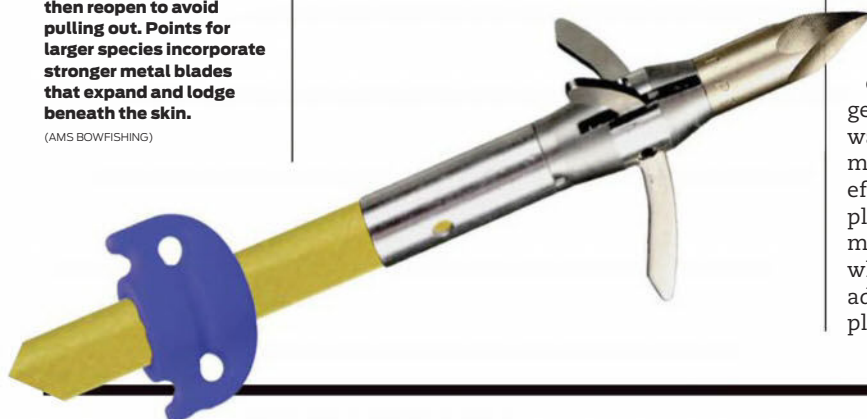
A fisherman using a fishing pole stealthily walks the banks of a favorite lake or stream looking for fish or even just likely fish habitat.

Once found, the fisherman casts his line and waits for a strike.

Bowfishing is similar. Stalk slowly along banks, being careful not to cast your shadow onto the water, which alerts fish of your presence. When you see a likely spot, take a stand and wait for fish to surface.

Wading through reedy, shallow water where carp and other fish spawn is another solid approach. Find a likely spot, plant your feet so you don’t disturb the water, and watch for underwater movement or fins protruding above water.

Although it can get expensive, a boat expands bowfishing opportunities. A boat gets you where fish are less accessible to wading or bank-stalking bowfishermen. A few modifications will maximize your boat’s effectiveness. First, you’ll want to add a platform on the bow from which to shoot, and maybe one on the stern, too. A friend of mine who’s bowfished stingrays most of his life adds a chair with a swiveling seat to the platform. This provides more stable shooting



when the boat is moving or if the water becomes choppy.

Nighttime bowfishing is often most productive since that's when fish are most active. Equip your boat with lights to effectively illuminate the water. Although less popular, some folks even rig up a backpack with a battery and lights to use while wading flats and shallows at night.

The Equipment

Several manufacturers offer all-inclusive bowfishing setups with everything needed to get started, but you can also assemble your own custom rig by adding the reel, arrows and points you prefer to an existing hunting bow. Let's explore the equipment you'll need piece by piece.

Bows: Any bow—recurve, longbow, compound or crossbow—used for bowhunting can easily be used for bowfishing. The key is to make sure it's powerful enough to deliver heavy bowfishing arrows into thick-scaled fish; bowfishing arrows are made three to four times heavier than typical bowhunting arrows in order to carry energy deep into the water. Women and youth frequently shoot 30 pounds or slightly more, but if you're able to pull more, do it. Carp and other fish fight hard, and if your arrow doesn't penetrate deeply, it can pull out of a fish.

Arrows and safety equipment: Bowfishing arrows are often made from solid fiberglass, but they're also available in aluminum and carbon-fiber versions. Line also attaches to the arrow from your bow-mounted fishing reel. Bowfishing arrows include a safety slide designed to slow the arrow down and prevent it from snapping back at the shooter in the event of tangled line. Arrows without a slide are unsafe and must not be used.

Arrowheads: Bowfishing points have two main designs based on fish size. Heads for small- to medium-sized fish are often equipped with wire barbs that collapse against the arrow shaft as it penetrates. Once the line tenses, the barbs spring out, plunging into the fish's flesh so the arrow doesn't pull out. Heads for medium to large fish use a similar design that collapses and expands but also use metal "wings," which are stronger and better designed to withstand large fish such as alligator gar.

Reels: A hub-like spool is the most basic reel design. Fishing line wraps around it, and a

BOWFISHING BUYER'S GUIDE



Cajun Sucker Punch
Ready-to-Fish
Package

AMS Retriever Pro Combo Kit

MSRP: \$169.99

AMS Bowfishing

Phone: (888) 541-7657

Website: amsbowfishing.com

Cajun Sucker Punch Bow

MSRP: \$449.99

Cajun Archery

Phone: (800) 694-9494

Website: cajunbowfishing.com

AMS Slinger Bow Case

MSRP: \$79.99

AMS Bowfishing

Phone: (888) 541-7657

Website: amsbowfishing.com

Cajun Screw-on Drum Reel

MSRP: \$21.99

Cajun Archery

Phone: (800) 694-9494

Website: cajunbowfishing.com

TruGlo Spring-Shot Bowfishing Kit

MSRP: \$51

TruGlo

Phone: (888) 887-8456

Website: truglo.com



AMS Slinger
Bow Case

Muzzy Addict Bowfishing Kit

MSRP: \$249.95

Muzzy Products

Phone: (770) 387-9300

Website: muzzy.com

AMS Retriever Pro
Combo Kit

Muzzy XD Pro Spin-style Reel

MSRP: \$89.99

Muzzy Products

Phone: (770) 387-9300

Website: muzzy.com



TruGlo spring-
Shot Bowfishing
Kit





(above) **Some persistence yielded a boatful of carp by the end of the day for these bowfishermen. Bowfishing is a great conservation tool: It's a fun way to remove invasive species from the ecosystem.**

(RON LANG)

metal clip holds the line in place. Like all reels, the line then attaches to the arrow's safety slide. When shot, the arrow pulls line from the spool. When a fish is arrowed, you can either set your bow down and retract line with both hands, or wrap it back onto the spool.

The second design closely resembles a bait-casting reel. It also attaches to the bow riser, most often by screwing it into the stabilizer bushing. It's easier and faster for retrieving fish and preparing for another shot.

Another design, the bottle reel, works similarly, but contains line in a bottle rather than on a spool. Line plays out much more freely from a bottle reel, plus, you can see how

much line is left when a big fish runs deep.

Miscellaneous accessories: Polarized sunglasses are a bowfishing must-have. They protect your eyes from glare and damage from ultraviolet rays, but also help you see through the water's surface.

A net can help you claim fish from Poseidon's domain, and if you are bowfishing from a boat or going after really big fish, a gaff will help you land your catch.

Lastly, be sure you have the correct hunting and/or fishing license(s). Regulations differ by state—sometimes even by region—so make sure you purchase the right tags, stamps or licenses.

LEARN ABOUT Bowfishing IN YOUR AREA

Your local fish and wildlife department is a great place to learn about bowfishing opportunities in your area, as well as to obtain the fishing licenses you'll need and to learn the regulations you must follow. Certain fish species are normally off limits, such as bass and trout, so be sure you know which species may lawfully be taken.

Another great resource is the Bowfishing Association of America (BAA). It's a national organization whose purpose is to educate people about the sport and promote it. Visit bowfishingassociation.com for more information.

“... bowfishing occasions abound all summer long. Bowfishing can be a year-round sport depending on where you live.”

The Broken-Pencil Effect

One of bowfishing's most challenging aspects is determining where to aim. When light rays travel between mediums of different densities, like going from air into water, they bend. This is because the light rays change speed when they cross the boundary between the two mediums. Consequently, things underwater appear higher to someone who's above the water in the less dense medium, the air. You may recall learning this concept, refraction, in grade-school science class where you stuck a pencil halfway into a glass of water.

Account for this by aiming approximately 4 inches beneath the fish for every foot of depth. For example, aim about 8 inches low to hit a fish that's 2 feet deep.

Additionally, you must determine how your bow shoots with a heavy bowfishing arrow attached to line. Do this by shooting into sand or soft dirt in your backyard. Some bowfishermen use sights, while others shoot instinctively. Choose what works for you.

Once you know how your equipment performs, you can begin practicing for refraction. My favorite technique is to drop golf balls into the water as targets in settings similar to where I'll be bowfishing. I then shoot at them to determine where I must aim to achieve hits.

Extend Your Hunting Season With Bowfishing

If you want to extend your bowhunting season, or simply want to partake in an all-out good time, consider putting together a bowfishing rig and heading to a nearby pond, lake, river or reservoir. It's the perfect way to bridge the gap between spring turkey and fall big-game seasons. **MP**

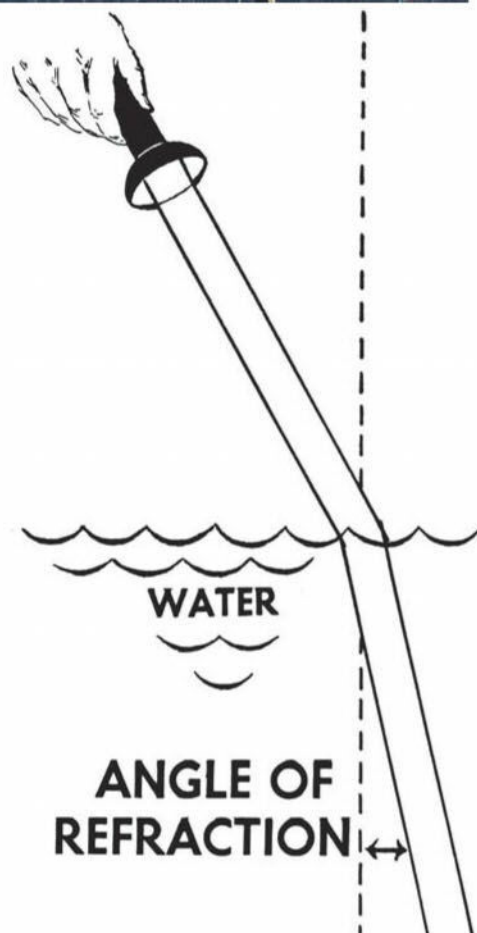


(above) This bow is set up for bowfishing larger game like stingrays or alligators. The float is designed to pop off the bow when the line runs out. It shows you where the arrowed game is going and helps tire it out.

(TERRY RECEVEUR)

(left) Because light bends as it passes through water, fish are deeper than they appear. Aim approximately 4 inches low for each foot of depth.

(WIKIPEDIA.ORG)



· GENERAL ·

ALL NATURAL DIY Lotion

A CHEMICAL-FREE SOLUTION TO DRY SKIN


By Charles Witosky

The amount of chemicals contained in most commercial soaps, lotions, aloe gels and body washes is alarming. Cetareths, alkyloamides and aminomethyl propanol are just some of the many scientific-sounding chemicals in lotion you rub into your skin. Yet, consumers daily purchase and use these harmful toiletries produced by giant corporations.

If you want to lose your dependency on these

lotions and their chemicals, you can make your own all-natural lotion at home. Upon first glance, the processes by which soaps, lotions and the like are made might seem difficult to laypeople. If you try to emulate store-bought lotion, you'll reconsider once you've read the label.

I'll teach you how to save money by producing your own unpolluted lotion at home using the following directions.



**“Pioneers didn’t
have to rub harmful
chemicals into
their skin, so why
should you?”**

Ingredients

There are only four ingredients necessary to make lotion. Everything else—except essential oils for fragrance—is unnecessary. Here's what you'll need:

Shea butter

Coconut oil

Extra-virgin olive oil

Beeswax

Your fragrance of choice (we used lavender)

The beeswax, shea butter and coconut oil must be measured in equal parts. For example, we used 2 ounces of all three. Only a splash of olive oil is necessary. The amount of fragrance depends on how much lotion you're making. For our roughly 6 ounces of lotion, we used 10 drops of lavender oil to infuse the entire batch.

The supplies needed to melt and mold the lotion are a double boiler, molds that can withstand at least 150°F and a rubber spatula to stir the ingredients as they melt. If you don't have a double boiler, a large and small pot work in a pinch. For molds, we used silicone cupcake molds, but a clean muffin tin also works.

Chop up the Beeswax

It's possible to buy pre-chopped beeswax or even beeswax pellets. These melt quickly. If you bought a block of beeswax like we did, chop it up into small pieces using a knife. The smaller the better.

Assemble a Double Boiler

If you own a designated double boiler, you're ready to begin. If not, fill a large pot with water. Put that pot onto the stove and turn the heat to low. Place a smaller pot inside the larger one; the water should be one-third to halfway up the smaller pot's sides.

Pour the Ingredients Into the Double Boiler

The only thing to consider as you combine ingredients into the double boiler is that if you chopped up beeswax from a block, the pieces will still be relatively large (like ours in figure B). They'll take a little longer to melt, so let them sit in the double boiler for a minute or two before pouring in the remaining ingredients. When you add essential oils, remember they're very strong and concentrated. Avoid direct contact with skin and eyes, and don't add too much. We used approximately 10 drops for our 6 ounces of lotion.

Monitor the Mixture as it Melts

Make sure the heat is on low. If not, the water underneath the top pot could easily boil



over into the mixture. High heat can also burn the mixture, diminishing the yield and also ruin the wonderful smell it once had. Stir the entire time it's melting to avoid burning. All in all, the time it takes for the mixture to melt will depend on how much you're making. Our 6 ounces took about 12 minutes to melt down to a clear, hot liquid.

Pour the Mixture Into Molds

Making sure not to spill any onto your skin, carefully pour the scalding mixture into the molds, but don't fill to the brim. Our 6 ounces filled five cupcake molds.

Wait for the Lotion to Set

As soon as the mixture touches the mold, the very bottom and the edges of the mixture will begin to dry and set into shape, thus creating lotion. After 30 minutes, it will be completely set.

(above) The melted mixture is poured into silicone cupcake molds.



Enjoy for Months

Just a few swipes of the lotion bar onto your hands, knees and elbows once or twice daily will keep your skin moisturized and healthy year-round, especially if you're active or outdoors. Warm it in your hands for a few seconds before rubbing it on, just so your skin absorbs it more easily. This lotion can also double as lip balm, and because it's made from 100% natural ingredients, it won't harm you if accidentally swallowed. This makes the lotion safe for households with children.

If your lotion bars turn out firmer or less fragrant than expected, you can always melt them back down and add more coconut oil or essential oils.

It's that simple: Four basic ingredients can create lotion. Keep it for yourself or gift it to others. Pioneers didn't have to rub harmful chemicals into their skin, so why should you?



A.



B.



C.



D.

(A) This is an all-natural lotion bar made by the author and his wife.

(B) Beeswax and coconut oil in the double boiler

(C) Extra-virgin olive oil is poured into the mix once the other ingredients have begun melting.

(D) Stirring the mixture

Spice up Your Lotion With Fragrances and Essential Oils

There's no limit to the varieties of essential oils and fragrance oils you can use in your lotion recipe. Essential oils are extracted from the source that contains the essence and smell. Fragrance oils are synthetically created to mimic fragrances of certain plants or fruits that don't have oils to be extracted.

Because the thesis of this article is to rid ourselves of a dependency on the fake and the synthetic, I cannot in good conscience recommend you use a fragrance oil. However, they're inexpensive, aren't known to be harmful in any way and do liven up a lotion. If you want to create a blueberry-scented lotion bar, for example, you'd have to use a fragrance oil.

In any case, here's a list of essential oils that'll make your lotion smell nice:

Agar oil (from Agarwood)

Ginger oil

Grapefruit oil (extracted from the peel)

Lemon oil

Nutmeg oil

Cinnamon oil

Cranberry seed oil

Basil oil

Peppermint oil

Tea tree oil

Rosemary oil

Cedar oil

SUGAR SCRUB

If you're looking for another way to care for your skin, an exfoliating sugar scrub is the answer. Here's a quick 10-minute recipe:

Ingredients

½ cup white or brown sugar (organic)

½ cup olive or coconut oil

A few drops of essential oils

Instructions


Mix all three ingredients in a bowl. Store in an airtight container to prevent water from entering the container while you shower. It'll also keep ants and flies out of the sweet, sticky mixture. **MP**



[Lotion]




“When you add essential oils, remember they’re very strong and concentrated. Avoid direct contact with skin and eyes, and don’t add too much.”

 **RANCHO SAFARI**.com
jerry@ranchosafari.com

SHAGGIE®

**LCBUJ
BOWHUNTER
GHILLIE
SYSTEM**


MADE IN THE USA

**P.O. Box 691
Ramona, CA
92065**

113015 MP

**AMERICAN
SURVIVAL
GUIDE**

Find us on



Be prepared when
disaster strikes.

www.facebook.com/americansurvivalguidemagazine

“Mad Anne” Bailey (1742–1825)

One Wild Ride

> By Darryl Quidort

Frontier woman “Mad Anne” Bailey is credited with risking her life on a 200-mile ride through the wilderness to save Fort Lee by bringing back much needed gun powder during a siege in 1791. This act was commemorated in a poem, “Anne Bailey’s Ride,” written by Charles Robb.

Born in Liverpool, England, in 1742, Anne Hennis became an educated girl who could both read and write. Her parents died before her 18th birthday. Alone, she sailed for America at 19 years old, apparently to join relatives.

She married Richard Trotter in 1765, and they moved to the Kanawha Valley in what’s now West Virginia. At that time, it was the wild frontier where the Native American Shawnee were on the warpath. Trotter joined the local militia to help protect the settlers. Unfortunately, he was killed Oct. 10, 1774, at the battle of Point Pleasant. Anne swore to avenge her husband’s death, and some say at this point she went “mad.”

After leaving their young son, William, with neighbors, she joined the militia herself. Wearing men’s buckskins and carrying a tomahawk, scalping knife and long rifle, she acted as a scout and messenger, carrying dispatches between frontier forts. Mad Anne knew every trail through the wilderness and was said to be an Indian killer, a charge she never denied.

Many undocumented stories have been told about Mad Anne and her exciting accomplishments. One recounts the time she was being chased by the Shawnee Indians. About to be caught, she jumped from her horse and hid in a hollow log. The Indians looked everywhere for her, and even sat on the log to rest. When they couldn’t find her, they stole her horse and left. During the night she emerged from the log, sneaked into their camp and reclaimed her horse. She rode away screaming at the top of her lungs. The Indians thought she was possessed and couldn’t be killed.

John Bailey, an Army Ranger from an elite group of frontier scouts, seemed to enjoy Anne’s rough ways. They married in 1785. Because of Indian conflicts, John was assigned to Fort Lee at the Clendenin



(STEVE WHITE)

Settlement (now Charleston, West Virginia). There, Anne continued her scouting and messenger work.

In 1791, the militia at Fort Lee discovered they didn’t have enough gun powder to withstand an Indian attack, which they believed was imminent. The colonel asked for a volunteer to ride to Fort Savannah at Lewisburg for powder. The dangerous ride was more than 100 miles each way across the mountains over rough wilderness trails.

When no men stepped forward, Anne volunteered to make the ride. Some accounts say Indians chased her when she left the fort but couldn’t catch her. Anne and her black horse, Liverpool—named after the city where she spent her childhood—made the entire trip without resting. If the horse could average 5 miles per hour for 100 miles, the trip to Fort Savannah would’ve taken 20 hours.

Anne rested the next day. On the third day, she was given the gun powder and another horse to ride. She refused an escort. Anne returned to Fort Lee a hero and was rewarded with a shot of whiskey and the horse she’d ridden.

Anne continued to work as a messenger for the militia and became a legend among the settlers. She was always welcomed at their cabins to spend a night and exchange her exciting stories for a dram of whiskey. According to the legends, she was a hunter, messenger, horsewoman, frontier scout, whiskey drinker, Indian fighter and an illustrious storyteller. She remained on duty at Fort Lee until 1795 when the Treaty of Greenville ended the Indian wars.

Anne’s second husband died in 1802. Legend has it that Anne left home, lived alone in the wilderness and slept in a cave near Thirteen Mile Creek for the next few years. It’s known that she left her beloved Kanawha Valley and moved with her son to Gallia County, Ohio, in 1818. There, William built her a cabin near his home so she could remain independent.

Anne was interviewed in 1823 by reporter Anne Royall. She quoted Mad Anne as saying, “I always carried an axe [tomahawk] ... and could chop as well as any man. I trusted in the Almighty ... I knew I could only be killed once, and I had to die sometime!” According to Royall, “Mad Anne Bailey could both drink and swear.”

Mad Anne died of old age on Nov. 22, 1825, and was buried in Gallia County. Later, her remains were moved to the Point Pleasant Battle Monument at Tu-Endie-Wei State Park. The museum there contains memorabilia of her life and adventures.

The true story of Mad Anne’s life has been muddled by local folklore and story repetition, and further confused by modern reenactors. Although many fanciful tales have been told about her, perhaps some were fabricated and told by Anne herself. After 200 years, we’ll never know Anne’s exact life story, but legends are born out of at least some truth. If the truth was even half as exciting as the stories, she lived quite a colorful life. **MP**

SOURCES:

WV Archives & History, Vol. XI, No. 3, March 1910.
National Women’s History Museum
ancestry.com

“The mountains are calling
and I must go.”

—JOHN MUIR

TOPS KNIVES



www.topsknives.com

101%
Made in the
USA

ONE LIFE ONE KNIFE™

**PASS ON YOUR TRADITIONS, YOUR
KNOWLEDGE, AND YOUR TOPS**

The BAJA 4.5 and the BAJA 3.0 make the perfect "father, son" combo.