

Jack Mountain Bushcraft Student Handbook

**A Guide To Bushcraft, Nature, And
Guide Training Studies**





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Guide Training Studies**



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Introduction

Welcome to the study of bush lore, a combination of bushcraft and nature knowledge. We've put this book together from handouts and outlines we've been using for the last ten years as a resource to outline and document your work. Studying bushcraft and the natural world is the realm of lifelong learning, and we hope this serves you well. If you're taking a semester course, be sure to familiarize yourself with the ESSP student packet, available online at:

<http://www.jackmtn.com/studentpacketESSP.html>

We hope you find this to be a useful tool in your studies, and that you'll use it as part of a program of lifelong learning. We also invite you to join our online community where you can interact with our community of lifelong learners, ask questions about this material in this book, network and plan trips. It's at:

jackmtn.ning.com

See you in the woods.

Tim Smith
Founder and Owner, Jack Mountain Bushcraft & Guide Service





Section 1

Educational Philosophy





Our Educational Philosophy

Knowledge is power, but knowledge is constructed, not received. It is built incrementally, over time. If teaching were simply telling, then anyone who excelled in a field would be an effective teacher of it. But this transmission model of teaching isn't effective for most learners. Standing in front of someone and telling them what they need to know isn't facilitating learning. Especially when you consider the differences between visual, auditory, and kinesthetic learning styles. We subscribe to the learning model of teaching, where the role of the teacher is to create situations where learning takes place. Students build upon their knowledge daily, and by the end of the experience they've accumulated a storehouse of information and experiences. But the instructor must also make it relevant. It's easy to scoff at friction fire since matches and lighters are so readily available. But remove them from the equation and it's instantly relevant, and the desire to learn the subtleties of the hand drill takes on renewed importance. Our students are actively learning, immersing themselves in the curriculum by necessity. An example of this is how we teach shelter building. You can learn something about a shelter by making one. You can learn more about it by sleeping in it. But to truly know that specific shelter, you need to spend four consecutive nights in it. In this way you're forced to deal with the consequences of shoddy construction or not paying attention to details. Maybe the first night is rough, but it teaches you what you need to do before the second night in order to shore it up and get some sleep. The second night is spent learning some of the subtleties that would make it more comfortable. The third night is fine-tuning it to your specifications, and the fourth night is enjoying the fruits of your labor. If you were to build the same shelter again, you could eliminate the learning curve because you'd know what to do from the outset. That's experiential education.

"Experiential education is the process of actively engaging students in an authentic experience that will have benefits and consequences. Students make discoveries and experiment with knowledge themselves instead of hearing or reading about the experiences of others. Students also reflect on their experiences, thus developing new skills, new attitudes, and new theories or ways of thinking." (Kraft & Sakofs, 1988)

We live in the day of the internet expert. Where people have seen tv shows about every imaginable topic, and they know the buzzwords. Nowhere is this more true than with bushcraft and survival. But as people have gotten to know the terminology better over the last 15 years, they are generally less experienced than at any time in the past. So keep in mind that having done is more valuable than knowing how. An ounce of experience is worth 100 truckloads of theory.

In addition to passing on traditional skills, we focus on using them to foster critical thinking, problem solving, creativity, curiosity, and a concern with ethical issues.

If we were to sum it up in a single word, our educational philosophy is this: CAN.



Section 2

Assessment





Assessment: Logbook and Portfolio

There are no certifications in bushcraft, wilderness survival or primitive skills that are accepted universally. If any school offers a certification, it's likely a result of their marketing department and probably isn't transferable. We don't recognize any. I've crossed paths with numerous people who were "certified" in one thing or another, but in the real world were incompetent, incapable of completing some of the most basic tasks. Thus certified doesn't necessarily mean qualified or competent. Neither does how many courses you've attended, regardless of the school or instructor. What you've accomplished and the experience you've accumulated does. We don't want to certify people. Instead, we seek provide training and field experience and let what they accomplish speak for itself. The way we do that is through our logbook and portfolio assessment system. It records what a student has accomplished instead of placing them in competition with their peers. Students keep a daily logbook during the program to record what they've done. These, along with crafts they've made, projects they've worked on, photographs they've taken, and everything else they've done during the program, are assembled into individual student portfolios.

Your portfolio is a factual record what you've done. This way, if someone were to ask if you knew how to start a hand drill fire, instead of saying you took a course on how to do it you could volunteer your logbook and state that you've done it "X" number of times. If they wanted to know about your skill with a specific craft, you could show it to them, as well as photos or video of you making it. In this era of people being over-certified and under-qualified, this type of assessment system offers a route back to reality.

Portfolio

Your portfolio includes your logbook and nature study journal, as well as other writings, crafts, photographs, plant pressings, journals and anything else you do during the program. By viewing your portfolio anyone should be able to determine exactly what you've done and what your qualifications are.

Logbook

Your logbook is a public document that serves as a factual record of what you've accomplished which you can use as proof of your experience and accomplishments. The logbook is not a personal journal or diary where you record your deepest, darkest secrets. Nor is it a notebook where you record the how-to information and personal musings that arise when taking a course. These both detract from its usefulness, and would necessitate anyone reading through it to sift through the parts that don't belong. It can be viewed by anyone wishing to determine your level of skill and training.

In the past we used bound notebooks (the black and white composition books) as logbooks, but we've transitioned to typing them on a computer for the ease of distribution and reproduction. We still use the composition notebooks on trips.

If you have an interest in teaching bushcraft or guiding, a well kept logbook is a great way to begin the marketing process. If you have an interest in being a teaching assistant or instructor with us, keeping an accurate and detailed logbook is a must.

The outline in section three will be the backbone of the skills listed in your logbook. As you

learn a skill, you document it in your logbook.

Frequency

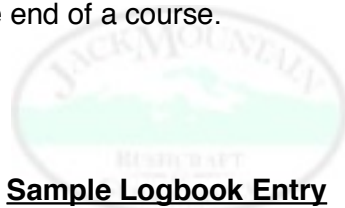
Logbooks should be maintained daily during training. The experience of past students is that if the day's events are not recorded that evening or early the next morning, their memory soon becomes lost. Since our programs are intensive immersion experiences, every day is a busy, full day. So in order to have your logbook document the full scope of your experience, be sure to add to it daily - don't skip a week and try to recap everything at a later date.

What To Include In Your Logbook

A logbook entry should include the date, location, a summary of the day's activities, a list of accomplishments and observations, and any reflection on how the accomplishments and activities of the day relate to the course. Similarly, it is useful to devote a page in your logbook to keeping lists of different activities and how many times you've successfully completed them. An example of this is friction fire - it is useful to keep a list of how many bow-drill and hand drill coals (separate lists) you have gotten. Also shelters you have built and slept in, etc.

Instructor's Signature

To verify that the content of your logbook is accurate, an instructor should regularly sign off on it. This can be weekly, bi-weekly, or at the end of a course.



Sample Logbook Entry

Date: 10/17/2003

Location: Croque Brook Campsite, Allagash River, Maine

Summary: Today we poled and paddled from Back Channel campsite on Round Pond downriver to Croque Brook. We left Back Channel at 8 am after a breakfast of oatmeal. We stopped at the spring near the ranger's cabin on Round Pond to fill up water bottles on the way. While there we identified several plants. We traveled through Round Pond Rips, a challenging section of river at such low water levels. The trip downriver was uneventful except for one of the boats hitting a rock and spinning around - it needed to be lifted off the rock and it's occupants needed to step out to get it floating again. Once we arrived at Croque Brook we set up camp and had lunch, then poled across the river to get firewood. When we had enough, we brought it back to camp, sawed to length, then split the big pieces. We spent the remainder of the afternoon learning about lining canoes and tying lining bridles onto our boats. I started the cooking fire with a bowdrill, and with a dinner of chicken stew we baked sourdough biscuits in the reflector oven. After the dishes were cleaned, I took a swim and after dark we had a short lesson on celestial navigation.

Accomplishments And Observations:

1. I worked on snubbing (poling downstream), and my downstream ferrying with the pole became much stronger.
2. Got my 23rd bow drill coal to start the dinner fire.
3. Pressed a specimens of *Viburnum trilobum* and *Eupatorium maculatum*
4. Saw bull moose with a full rack in the river just downstream from Round Pond
5. Felled, limbed and sectioned several trees with my axe for firewood.
6. Carved feather sticks with my knife
7. Learned to tie a lining bridle onto a canoe and line through rapids
8. Mixed and baked sourdough biscuits in the reflector oven

Reflections: My snubbing vastly improved today, as did my ability to put the canoe exactly where I want it with the pole. I feel confident in shallow class 2 whitewater, and if I encounter water I'm not comfortable poling or paddling, I confident in my ability to line a canoe through it. My axe use has improved greatly on this trip as a result of using it every day. I was much more confident and felt safer using it.





Section 3

Bush Lore Bushcraft, Crafting, Canoe Outlines





Bush Lore Is The Combination Of Nature Knowledge And Bushcraft. Passing It On Is The Basis of Our Programs.

Nature knowledge is an understanding of the natural world, including plants, fungi, lichens, animals, birds, fish, mollusks, insects, amphibians, reptiles, rocks, minerals, soil, water, ice, weather, celestial bodies and ecology, the dynamic interaction of each with the whole. It can be learned but, in most cases, not directly taught. Experienced teachers can aid the learning process by creating study routines and providing resources. Observation and study are the keys and it's a lifetime endeavor.

Bushcraft is the active component of our interaction with nature. Both art and science, bushcraft is doing, making, crafting, traveling, building and living in the natural world using simple, low-tech tools. Static knowledge, such as how to care for tools, etc., is a small percentage of the discipline. The vast majority is active, dynamic and hands-on.

A. Bushcraft Outline

This is a general outline of topics and skills taught by Tim Smith and Jack Mountain Bushcraft & Guide Service in the extended Earth skills programs and in shorter courses. Many of the individual topics could contain outlines of their own that might be numerous pages in length were all the related items listed.

Wilderness Survival

- Basic, intermediate, and advanced survival defined
- Survival equation
- Tools of survival
- Survival plan
- Survival Kits
- Psychology of Survival

Dressing for the Outdoors

- Mechanisms of energy transfer
- General principles of clothing materials with regard to keeping warm/cool
- Principles of dressing for the elements
- Specific clothing for wet weather
- Specific clothing for the cold
- Wet cold and dry cold footwear
- Clothing for hot weather
- Importance of keeping clothing clean
- Clothing repair kit
- Sewing mukluks and moccasins

Shelter

- Campsite selection and finding natural shelters
- Mechanisms of energy transfer
- 3 ways of keeping warm
- Basic concepts of shelter
- Distinct components of a shelter
- Bush architecture
- Shelter-specific design and construction
 - The open lean-to
 - Hot coal bed
 - Quad-Pod
 - Hoop House
 - Bush Tipi
 - Large dome
 - Debris hut
 - Long tipi
- Snow shelters
 - Principles of snow as a shelter material



- Quinzee
- Igloo
- Parachute shelters
- Constructing mosquito-proof shelters
- Safe use of external and internal fires with shelter
- Tipping trees so as not to harm the tree
 - Laying a bough floor
 - Laying a bough bed
- Building with Cob
- Stone and clay woodstoves
- Rock Pile woodstoves
- Wattle and daub
- Log walls
- Thatching methods and principles
- Bark shingling
- Bush sauna/sweat lodge construction
 - using hot rocks
 - using a wood stove
- Sauna/sweat bath cross-cultural history
- Nylon tent selection and care
- Canvas tents; choosing, care and use with and without a wood stove
- Egyptian cotton tents; choosing, care and use with and without a wood stove

Fire

- Fire as an agent in human culture
- Fire safety
- Choosing a fire site
- Understanding wood fire
- 5 Stages of fire
- Fire by friction
- Fire by percussion
- Fire by refraction
- Fire by parabolic reflector
- Fire by air compression
- Fire lighting with matches
- Various commercial fire-starting tools
- Twig bundle method
- Making and using feather sticks
- Burning properties of different woods
- Purpose of fire/different fire-lays
 - Fire for cooking
 - Fire for light
 - Fire for warmth
 - Signal fires
- Extinguishing a fire
- Techniques for minimizing the ecological impact of fire
- Primitive lamps
- Candle making
- Rock pile wood stoves
- Cob ovens
- Fire sinks



Sleep

- The need for restful sleep
- Relevance of the sleeping bag in survival
- Sleeping bag selection
- Keeping warm in an inadequate sleeping bag
- The mattress or sleeping pad as a sleeping bag component
- Bush beds of natural materials

Water

- Water purification - boiling, filtration, chemicals, and the use of the still
- Summer water sources
- Winter water sources and melting snow
- Avoiding dehydration
- Transporting water

First Aid and Long Term Medical Concerns

- Dealing with common outdoor medical concerns
- Managing cuts - short and long term
- Understanding and treating hypothermia
- Understanding and treating frostbite
- Dealing with breaks, strains, and sprains - splinting and immobilization
- Improvised traction splint construction
- Construction of a stretcher for transportation of the sick and injured
- Personal first aid kit components, sized to fit in shirt pocket
- Traditional bush medicine

Navigation – Map and Compass

- Use of a topographical map alone
 - Common map scales
 - What a map tells us
- Use of a compass alone
 - History of compass
 - Factors that effect accuracy
 - Declination, variation and the agonic line
 - Compass nomenclature
 - Finding directions
 - Taking and following a bearing
 - Returning to the original location
 - Triangulation and returning to precise points
 - Overcoming obstacles
- Use of topographical map and compass together
 - Four steps of traveling by map and compass
- Use of Global Positioning System (GPS)

Navigation - Barehand

- Understanding the movement of the celestial bodies
- Telling direction from the sun
- Telling direction from the moon
- Telling direction from the stars
- Constellations useful for determining direction
- Telling direction from weather patterns
- Determining latitude by the stars
- Traveling in a straight line in the woods
- Traveling in a straight line in open country
- Bush geometry and trigonometry
- Determining distances
- Angling off
- Myths of barehand navigation
- Making and using simple navigational tools

Cordage, Rope, Knots and Natural Bindings

- Cordage raw materials; plants
- Reverse wrap cordage
- Leg rolling cordage
- Use of the drop spindle to make cordage
- Braiding
- Preparing and using sinew

- Essential bush knots
- Tumpine knots for carrying canoe and wannigan
- Winches and windlasses for moving large objects
- Net making
- Selection of cordage to be carried when outdoors
- Binding with locally available materials
- Making and using spinners to make rope
- Making rope with a rope machine

Camp Crafts and Comforts

- Building tables
- Building chairs
- Building benches
- Building other furniture and useful camp items

Travel Equipment and Strategies

- Packframe construction and use
- Emergency snowshoe construction and use
- Traditional snowshoe use and principles
- Building traditional snowshoes
- Building traditional toboggans
- Travois
- Net bags
- Tumpines
- Making rucksacks

Observational Weather Forecasting

- Understanding weather patterns
- Understanding high and low pressure air masses
- Clouds and what they tell us
- Predominant winds, winds aloft, and local winds
- Finding the center of a storm
- Fronts and precipitation

Wild Plants and Their Uses

- Edible, Medicinal and otherwise useful plants - summer and winter
- Making and keeping an herbarium (plant collection)
 - Several methods of pressing plants
- Herbalism and herbal preparations
- Tapping trees, gathering sap, and making syrup
- Ethnobotany and historical use of plants

Mycology

- Mushrooms considered to be edible, poisonous, and magical
- Mushrooms in history and folklore

Signals and Signaling

- Audible signals and what they mean
 - Making an aluminum whistle
- Visual signals and their appropriate use
 - Use of the signal mirror
 - Basic ground to air signaling code
 - The signal fire

Camp Sanitation

- Washing cooking and eating utensils to clean and sterilize
- Dealing with human waste

- Thermophilic composting of human manure
- Building group latrines
- Getting by without toilet paper
- Laundering clothing
- The construction and use of the bush sauna
- Natural soap making
- Bush hair care

Tanning Skins and Furs

- Skinning and case skinning game
- Wet scrape brain tan buckskin
- Dry scrape brain tan buckskin
- Brain tanning fur
- Using substitutes for brains

Spinning and Weaving

- Use of the drop spindle to make yarn (1 ply) and cordage (2 ply)
- Making simple looms
- Card weaving

Felting

- Making felt from raw wool
- Using felt for clothing, bags, etc.
- Making felt boot liners

Natural Basketry

- The coil basket
- The twined basket
- The plaited basket
- The birch bark bowl, bucket, and basket
- Brown Ash basketry
- Pack Baskets
- Root baskets
- Half-round baskets



Primitive Pottery

- Finding and testing natural clays
- Preparation of natural clays
- Selection of tempers
- Pinch pots
- Coiled pots
- Form-made pots
- The ocarina or clay flute
- Firing in an outdoor fire

Building Simple Boats

- Coracle
- Raft

Backpacking Skills

- Minimum/positive impact camping skills
- Setting up and using backpacking tents
- Use of backpacking stoves

Flintknapping and Stone Tools

- Tools and safety

- Basic flintknapping
- Bi-polar percussion
- Hertzian cone
- Percussion flaking with hammer stones
- Pressure flaking
- Making and using stone tools

Making and Using Projectiles

- Bow Making
 - Making a selfbow - unbacked wooden longbow
 - Making a backed bow
 - Making a quickie bow
 - Making bowstrings by hand
 - Making Flemish bowstrings
- Arrow making
- Making an atlatl
- Making a baton de comandement
- Making a sling
- Making a fustibal
- Making an arrow thong
- Making a rabbit stick - a form of boomerang

The Art and Science of Tracking

- Locate, Identify, Interpret
- Basic, Systematic and Speculative Tracking
- Three perspectives of the tracker
- Three disciplines of tracking
- Animal locomotion, movement and biology
- Animal habits, tendencies and behavior
- Weathering and track aging
- Pressure releases - how foot and substrate interact dynamically
- Use of the tracking stick
- Use of the tracking box
- Making plaster track casts
- Historical role of tracking in human development of abstract thought

Primitive Music

- The didgeridoo
- The ocarina
- The drum
- The whistle
- The flute

Campfire and Outdoor Cooking

- Primitive
 - Rock Boiling
 - Natural Vessels
 - Planking
 - Stick-woven grilling
 - Steam Pit
 - Stone/cob oven construction
- Traditional
 - Cook kit components
 - Pot selection and materials
 - Skillet selection and materials
 - Reflector oven construction and use
 - The Dutch oven
- Cast iron cooking and care
- Sourdough and other leavenings
- Pot suspension systems

- Pot hooks
- Bean Hole
- Fire-lays useful for cooking
- Germination and sprouting
- Bear avoidance
- Garbage disposal and transport

Fasting

- Role of fasting in wilderness survival
- Role of fasting in the cleansing of toxins
- Historical significance of fasting

Outdoor Fitness and Health

- Stretching
- Hydration
- Perspiration
- Meditation

Living off the Land

- Survival vs. living off the land
- Hydration
- Caloric requirements
- Plant foods
- Animal foods

Angling and Fishing

- Fishing vs. Angling
- Recreational vs. Survival fishing and angling
- Understanding fish in their environment
- Angling strategies – lakes
- Angling strategies – rivers
- Net making
- Setting nets – lakes
- Setting nets – rivers
- Setting nets – under ice
- Fish traps
- Fish spears
- Fish Wheels
- Mollusks
- Other edible aquatic life
- Ice angling with modern and improvised gear
- Set Lines
- Fly Fishing
 - Selection of gear
 - Fly casting
 - Where fish live and why

Trapping and Snaring

- Furbearer population management
- Population dynamics
- Traditional deadfalls
- Traditional snares
- Modern trap use
 - Leghold traps
 - Body-gripping traps
- Modern snare use
 - Building snares
- Trapping specific animals
- Avoiding non-target catches



Hunting

- Strategies for specific animals
 - Deer
 - Moose
 - Bear
 - Turkey
 - Small game

Firearms

- Safety
- Ballistics
- Actions
- Marksmanship
- Handguns
- Rifles
- Shotguns

Provisioning and Menu Planning

- Meal Planning for low cost and high nutrition
 - Seasonal considerations in meal planning
- Buying in Bulk
- Meal Packaging and repackaging
- Two-meal day
- Value of appropriate condiments

Hazards of Specific Importance

- Ticks and diseases they carry
- Bears
- Giardia
- Fire
- Cold
- Heat
- Carbon monoxide in winter shelters



Hand Sewing

- The various sewing stitches
 - Stitch samples

Outdoor Leadership

- Decision making
- Effective communication
- Conflict resolution
- Team building
- Expedition Behavior

Guide Training and Other Topics Related to the Guiding Profession

- Finding a lost person
- Liability Insurance
- Risk management
- Trip planning and preparations
 - Use of checklists

Environmental Education Core Topics

- The flow of energy
- The cycling of matter

- The interrelating of life
- The changing of forms

The Bushcraft Tool Kit

- Axe
- Knife
- Saw blades – saw frame is built when needed
- Draw knife
- Spoke shave
- Rasp
- 1/2" chisel
- Auger gimlet
- Crooked knife or gouge
- Cabinet scraper
- Awl
- Sand paper
- Tool roll or other way to carry your kit
- Ice chisel
- Sharpening kit
- Shave horse or other traditional vise

The Knife

- Choosing an appropriate knife for the outdoors
 - litmus test for a good bush knife
- Sharpening the knife to a shaving edge
- Safety in knife use
- Cutting poles
- Felling trees
- Making replacement knife sheaths
- Assorted carving projects

The Axe

- Choosing an appropriate axe
- Axe safety
- Sharpening the axe
- Carving replacement handles and hanging
- Use of the axe
 - Felling
 - Sectioning
 - Limbing
 - Splitting

The Saw

- Choosing an appropriate saw
 - Types of saw teeth and how a saw cuts
- Construction of the bush bucksaw when only the blade is carried
- Using small folding saws
- Using crosscut saws
- Sharpening saws

Movement and Awareness

- Moving quietly in the bush
 - Different ways of walking
- Sensory awareness
 - Different types of vision
 - Focused hearing
- Sensory awareness of other creatures
- Stalking game animals



Metal Working and the arts of the Blacksmith

- Making tools and blades

B. Crafts And Long Term Projects

Crafting and Building Traditional Northwoods Gear

- Wooden toboggan
- Plastic trail toboggan
- Komatik sled
- Mukluks – snowshoe moccasins
- Pack Basket – reed or pounded brown ash
- Birch bark basketry
- Burned bowls, spoons and vessels
- Didgeridoo
- Bullroarer
- Natural cosmetics: soap, hair conditioner and toothpaste
- Snowshoes
- Packframes
- Wooden Bow and Arrows
- Atlatl and Dart
- Fibers, string and rope; cordage
- Fishing nets and hammocks
- Wooden canoe paddle
- Traditional canoe pole
- Whistles
- Felt Clothing
- Fly Tying



C. Lake and River Canoeing

Our goal is to move the boat across the water with as little effort as possible. Ironically, it can take more effort than you currently use to learn to paddle with less effort. This is part of the learning process. Give it some time and your efficiency will increase dramatically.

Parts of a Canoe

Parts of a Paddle

River Safety Briefing

- Self Rescue
- Objective River Hazards
- Never Lean Upstream
- Throw Bags

3 Types of Strokes

- Propulsion
- Correction
- Brace

Parts of the Stroke

- Propulsion

- Recovery
- Catch

Types of Resistance

- Frontal
- Surface
- Eddy

Landing and Leaving Shore

- Protect Boat
- Feet Won't Stay Dry
- Landing Safely in a Current

Body Positioning and Biomechanics

- Paddling Postions
 - Sitting
 - Kneeling
 - Standing
- Stroke Length
 - Lifting Boat
 - Burying Boat
- Shortening Waterline
- Push/Pull and Large Muscle Groups

Forward Strokes

- Forward Stroke
- J Stroke
- Wabanaki J/Knifing J/Canadian Stroke
- Underwater Stroke/Indian Stroke
- Pitch Stroke
- Maine Guide Stroke
- Goon Stroke



Backward Strokes

- Backward Stroke
- Reverse Sweep
- Reverse J

Steering Strokes

- Draw & Cross Draw
- Pry
- Sweep (Full and 1/4 Sweep)
- Reverse Sweep
- Dufek & Cross Dufek

Braces

- Low Brace
- High Brace

Trim for Wind and Current

- Downstream Heavy
- Upwind Heavy
- Shortening Waterline
- Weathercocking
- Sea Anchors
- Tying In Gear, Flotation, Displaced Water

Reading the River

- Eddys (contre-courant)
- Eddy Lines
- White Waves
- Dark Waves
- Upstream V's
- Downstream V's
- Horizon Line
- Pillow
- Pour-Over
- Hydraulic
- Keeper
- Wave Train
- Haystacks or Standing Waves
- Strainer or Sweeper
- Variable Waterflow
 - Bend
 - Depth
- Current Lines
- Ledges

Maneuvers (On and Offside)

- Eddy Turn
- Peel Out
- Upstream Ferry
- Downstream Ferry
- Eddy Sets
- Sideslips
- S-Turns
- Straight Backpaddle
- Pivots



Offensive vs. Defensive Paddling

Rapid "Shuns"

- Protection
- Navigation
 - Choosing Straightforward Lines
 - Boat Parallel to Current
 - Sneak Routes
- Communication
- Maybe you Shouldn't Run It

Rescue

- Self Rescue
 - Knee Deep Rule
 - If You Run It, Be Prepared to Swim It
 - Feet Downstream, Near Surface
 - Don't Be Downstream of Boat
- Throw Bags
- Boat-Based
- Rescue Priorities
 - People
 - Boats
 - Gear
- T Rescue

Lining and Tracking

- Bridles
- Painter Lines
- Canoe Trim
- Station Lining

Scouting

- From Eddys
- From Shore
 - Wear Lifejackets
 - Bring All Throwbags
 - Bring a Paddle or Signal

Group Management

- Approaching Major Rapids
- Approaching Major Portages
- Easier Stretches
- Running Rapids
 - Lead Boat
 - Sweep Boat
- Disembark - Portage Gear, Run Rapid

Carrying/Portaging

- Organizing Gear
- Tumplines
- Knots
- One/Two Person Lifts
- One/Two Person Carries



Tandem Paddling

- Switching Sides
- Bow Overcorrecting
- Communication
 - Positive Commands Only

Lashing Boats Together

- Catamaran
- Sailing Catamaran

Gear for Each Canoe

- Painters with Bridles
- Bailer or Sponge
- Spare Paddle

D. Canoe Poling and Snubbing

“You can’t push a rope, you can’t pull a pole.”

Poles

- Unshod
- Shod with a pipe on end
- Shod and Tipped – pipe with a lag bolt in end
- Shod with a pole point

Maine Style – Thick end down, like on tree

New Brunswick Style - Double Taper

Stances

Stance 1: Squared to center line with knees bent

Stance 2: Oblique or diagonal stance

- forward foot is just off center line
- rear foot is on side of pole

Switch stances or sides by hopping

Hop forward and back to adjust trim

Poler's Shuffle – hop forward and back in canoe

Upper body stays straight

- Center of gravity over centerline of canoe
- Move from end to end of canoe and touch the deck plates

Pole Grips

1. Kayak Grip – hands shoulder width apart

2. Batter's Grip

Kayak Stroke – paddle like a kayak - gives you a means of locomotion if nothing else works

Standard Pole - Push Stroke

- Pole behind your hip at 45 degree angle
- Set on bottom
- Push

Pool Cue Recovery

- At finish, back end of pole is still dragging in water

Sequence

Back (Push) – Shoot (Recover) – Drop (Drop pole to bottom)
All in a Straight Line

Turn – Toward Pole Side

At End of Stroke; Not Under Power
Plant pole on hip or gunwhale and pull (fulcrum)

At Beginning of Stroke; Under Power
Plant Pole under Stern of Boat
Pull in with top hand, push with bottom

Turn – Away from Pole Side

At End of Stroke; Not Under Power
- Recover and paddle a sweep with Pole

At Beginning of Stroke; Under Power
- Plant Pole 35-40 degrees off centerline behind you
- Push out with top hand, pull in with bottom hand, bringing pole under boat. Be sure to retrieve pole before you float over it.

The straighter the push and the lower the angle the better it works

Poling Backwards

Face stern of canoe and keep pole in line with center line of boat to go straight.

Poling in Moving Water

Snubbing - Poling Downstream

Things that will get you in trouble when snubbing:

1. Getting your pole caught on the bottom between rocks
2. Floating over your pole when it's stuck on the bottom
3. Snubbing across your body and getting your pole stuck

Jabs

As long as you're not planting the pole in front of you, you can make short jabs for controlling the boat both onside and offside. Don't break the perpendicular.

Keys to Successful and Dry Snubbing:

1. Don't snub across your body - Snub with the pole parallel to the centerline of the canoe.
2. Don't break the plane of the perpendicular when snubbing. Doing so makes it easy for the pole to get caught between two rocks. As you near the perpendicular, lift pole off of the bottom.
3. When using snubbing to ferry, it will seem like you're going the wrong way at first - it's counter-intuitive. This is especially so if you've got someone in your bow. This is because you point the bow in the direction you don't want to go, and it makes bow paddler's nervous. Tell them in no uncertain terms that you have control of the boat.
4. Stay close to shore and to the inside of corners when the water gets fast. Due to friction with the bottom and the bank, the water along the shore is usually slower and thus it is easier to keep control of your boat.

Poling Upstream

The key to poling upstream is to move from eddy to eddy, taking short breaks as you go. Adjust your poling stroke for the speed of the water. When it gets fast, sometimes short, choppy strokes are more effective than long strokes. As with poling downstream, seek out the slowest water to move through.





Section 4

Nature Knowledge Building Your Own Field Guide Series





Nature Knowledge

"Start with the wonder, move to the order, which leads back to the wonder."

Nature Knowledge consists of knowing about: Plants, Fungi, Lichens, Animals and Their Tracks, Birds and Their Tracks, Fish, Mollusks, Insects, other Invertebrates, Amphibians, Reptiles, Rocks and Minerals, Soil, Water and Ice, Weather, the Sky and Celestial Bodies, and Ecology, the dynamic interaction amongst each other and man.

Nature knowledge can be learned but, in most cases, not taught. Observation and study are the keys and it's a lifetime endeavor. You can learn a lot by watching and listening to a knowledgeable person, but they cannot transfer their knowledge to you. You need to learn it and make it your knowledge. They can help you, though, by designing exercises that facilitate learning. Our approach is to use reference materials and first-hand knowledge to make your own set of field guides on Nature Knowledge.

This aspect of the program is designed to help you learn background knowledge on the natural world. It is broken down into different sections to facilitate learning, but it is important to remember that the different sections operate together in an organic manner.

Learning the language of nature is a lifelong endeavor. It is a process and a journey that will continue to teach you throughout your life. With that in mind, don't expect to learn it all in our brief time together. You can, however, learn the process, familiarize yourself with the tools, and absorb an incredible amount of information. Just not all of it.

Building Your Own Field Guide Series

The goal of Nature Knowledge is to use reference materials and first-hand knowledge to make your own set of field guides. Unlike those available at the library, this one will ride around in your head and be with you all the time.

Systems

There are a variety of ways to learn, but the best ones all operate as systems. There are a variety of systems available, with the common thread being that you write down your findings. The act of writing things down helps you to commit it to your long term memory. Some systems make outrageous claims about their superiority and how they were handed down from the natives over generations. Don't pay these any mind. It's important to have a system, but not so important what that system is. The following pages are the system we've been using for ten years and it has been useful for our students. We don't claim, however, that it is "the" system.

Your work and knowledge will progress much faster if you choose a system and stick with it. Bouncing around from system to system will cause you to spend most of your time on systems. A good system should, after a week of using it, become invisible. It's just a way to organize and record information, so you should learn it quickly and then focus on the information. Because it's the information, not the system, that's important.

Nature Study Journal

Your nature study journal is where you document the work you do in learning about the natural world. It consists of daily studies on the weather and plants, and weekly studies on mammals (and their tracks), constellations, fish, birds, and other critters and phenomena. Like the logbook, it is not a place for your deepest darkest secrets or your notes. It should be easily read and understood by someone (such as the instructor) who wants to gauge the work you've accomplished.

Each entry should be dated and include your daily weather journal as well as the other information you're working on that day.

The point of the exercise is to get you to focus on one item at a time, research it in a variety of different resources, and record the information you discover. The act of recording it will help you remember it.

The Value of Silence

The natural world is a quiet place. Most animals go about their business quietly, and as such pay close attention to any noises they hear. Our human world is the exact opposite. It is loud, and our ears are constantly bombarded by TV, radio, and people's voices. Because we've grown accustomed to this, many of us have difficulty with silence. It can feel uncomfortable because it has become so foreign. But to learn about, and immerse ourselves in, the natural world, silence is a prerequisite. When in the woods, listen to the sounds you hear and the sounds you make. Try to make as little sound as you can.

The Sit Spot

In many native traditions the sit spot was an important learning tool. As the name describes, it is a place where you go, alone, and quietly observe the world around you. Over time the animals and birds become used to you, and will go about their business. You will be going to a sit spot each day for about ten minutes, usually first thing in the morning, and the experiences and observations will contribute greatly to your knowledge and understanding of the natural world. An important thing to keep in mind is that the knowledge gained through this experience is incremental; it builds upon itself little by little, adding bits and pieces that you may not put together for some time. With that in mind, don't expect the forest to reveal its secrets to you on the first day. Stick with it and make it a part of your daily routine. For a validation of the sit spot and what it can do, be sure to read Peter Frost's Journal from the 2004 winter ESSP at:

<http://www.jackmtn.com/journals.html>

Weather Observation and Forecasting

For the duration of the course, you are to record the current weather conditions each morning and evening. The information to record includes:

Time and Date

Location (where you are)

Temperature

Cloud types and % cover (see cloud chart)

Wind direction and speed (light, strong, gusty, etc.)

Precipitation (type, heavy or light, continuous or intermittent)

Humidity (wet, damp, dry, humid, etc.)

Note any fronts that come through and their time of passing

Lunar Phase

Barometric Pressure (if known)

After recording the weather, you are to make a prediction on the coming weather based on your observations and understanding of weather systems. In the morning, predict the weather for the rest of the day. In the evening, predict the weather for the following day. If time is short and you're only doing one weather entry per day, record the current weather and make your prediction for the next 24-48 hours based on what you see.

You should also be paying attention to your moods and energy levels, and those of others, and how they relate to the weather. Do you have more energy on a sunny or rainy day? When are people around you more happy or energetic? Paying attention to this over time, and recording it with your weather log will give you considerable insight into human and animal nature.

Keeping an accurate account of the weather is vital to learning the aging process for tracks, and can also provide insight into fish, animal, and human behavior. As time goes by your predictions will become more accurate. You will also begin to see the relationship between things like good fishing and approaching fronts, weather during which animals are most and least active, etc.

Moon and Planet Information is to be Recorded in AM Weather Journal

In the AM weather journal note planets, moon phase, and other celestial objects visible the previous night. With planets, note where they are (what constellation or area of the sky they're seen).

Resources:

Eric Sloane's Weather Book - get a copy and read it before beginning this exercise.

Eric Sloane's Book Of Storms - get a copy and read it before beginning the exercise

Cloud Chart - these are available for free online or as a poster, and allow you to name the cloud types.

Collecting Wild Plants

Where and when you collect plants are both important and related to their nutritional and healing properties. With regards to when, season, month, and time of day all play an important role.

Rules for Collecting:

1. Take only what you need.
2. Harvest no more than 1/3 of available plants, and only when abundant, to ensure enough plants to maintain a healthy community.
3. Harvest in areas that need thinning. Cultivate the attitude of a gardener and through harvesting try to improve the health of the entire area.
4. Don't harvest from areas with elevated levels of toxins. These include, roadsides, under power lines, along polluted waterways, agricultural areas where there is significant amount of spraying, etc. Be wary of water and soil quality. When in doubt, harvest somewhere else.

When to Collect for Medicinal Purposes:

Morning: Green leafy parts of plant, just after dew has come off of them (waking up).

Midday: Berries

Evening: Roots

Cautions in Gathering

Be aware of the plants you're gathering, and know if they develop toxins

Example: Ergot Fungus on Grains, Wilted Raspberries

Seasonal Cycle

When collecting plants you should focus on where the plant is directing its energy.

Spring: Young shoots and leaves, before full flower develops. Energy is expended on new growth.

Summer: Flowers, berries, seeds, fruits. Above-ground portions of plant. Energy is expended on reproduction.

Fall: Underground portions of plant. Energy is moving to roots to be stored for the winter.

Winter: Underground portions of plant. Energy is stored to provide for new growth in the spring.

With this in mind, developing a seasonal harvest schedule should take into account when the best time for harvesting certain plant parts is.

Plant Of The Day

Background Information To Record

1. Family name, both Latin and common
2. Species name, Latin and common
3. Description of the plant from a field guide
4. Alternate or opposite
5. If herbaceous plant, description of flower
6. If herbaceous plant, is it an annual, perennial, or biennial
7. Habitat; where does it grow
8. Range: what regions does it grow in
9. Does it commonly grow near or alongside other specific plants
10. Does it grow fast or slow
11. Is it a common plant, or rare?
12. Is it a pioneer species, helping to transition the landscape from one habitat to another?
13. Does it grow in bunches, or will you find one singular plant
14. How much moisture does it like? Dry feet or wet?
15. How does it reproduce
16. Does it attract certain species of animal or bird for food and/or shelter
17. Does it like to grow in full sun, full shade, or a mix
18. If it is a tree, what does its silhouette look like
19. Are there any other keys to identification
20. Is any or all of the plant toxic
21. Does it have any poisonous look-alikes
22. Are any members of its family poisonous
23. Is it edible
24. What parts of it are edible
25. How do you process the plant for eating
26. In what seasons are the edible parts available
27. What type of nutrients do you get from eating the plant
28. Is it medicinal
29. What parts of it are medicinal
30. How do you process the plant for medicine
31. When should it be gathered for medicine
32. What survival or craft uses does the plant have
33. What is the best way (for the health of the plant) to gather it for these uses
34. Is it reputed to have any hallucinogenic, entheogenic, spiritual or magical properties?
35. What other uses does the plant have

If question is not applicable to the plant you're working with, skip it. When you have recorded this information, either make a sketch of the plant or press a sample of the plant. Be sure to label these for future identification. A good way to keep your plant pressings organized is to keep them in a 5" x 8" 3-ring binder.

The point of the exercise is to get you to focus on one plant at a time, research it in a variety of different resources, and record the information you discover. The act of recording it will help you remember it.

Mammals and Their Tracks

Record the following information using several resources such as field guides.

Mammals

Common Name
Latin Name
Family
Range
General Description
Size: Height, Length, Weight
Population Density
Habitat
Habits
Does it make a den? If so, where and what does it look like?
When Active (Day, Night, both?)
Family/Social Habits
Reproduction/Breeding
 Mating Season
 Length of Gestation
 When are Young Born
 How many Young per Litter
 How many Litters per Year
 At what Age are Young Independent
Diet
Dominant Sense(s)
Economic Importance



Tracks (include measurements when possible)

Front Foot Measurements (draw)
Rear Foot Measurements (draw)
Track Patterns (draw and include measurements)
Most common slow gait
Most common running gait
Scat (shape and size, segmented, contents, location)
Common Signs or Indicators

Studying tracks is one aspect of studying the natural history of an animal. The three important steps of tracking are:

1. Locate
2. Identify
3. Interpret

Dangers

There is nothing to fear in the northern forest. There are, however, things to respect. With this in mind, you should learn something about the following topics. Knowledge and understanding are an antidote to fear.

Weather

- Hypothermia and Frostbite
- Hyperthermia
- Lightning

Water

- Dehydration
- Hyponatremia
- Giardia

Insects

- Ticks
- Mosquitos and Black Flies
- Brown Recluse and Black Widow Spider
- Bees, Wasps, and Hornets

Mammals

- Black Bear Attack
- Rabies

Fungi

- Amanita species

Plants

- Umbelliferae – Parsley Family
- Ranunculaceae – Buttercup Family
- Other Poisonous Plants:

- Dogbane
- Hellebore



Stars and the Night Sky

Constellation Studies

Record the following information on each constellation studied:

English Name

Latin Name

Correct Pronunciation

Draw Constellation

- Note leading and trailing stars
- Note orientation to celestial north pole (north star)
- Name brightest stars, especially 1st magnitude stars
- Note the season when visible (ie. Orion is visible in the winter)

Briefly note mythology of constellation

Draw small map showing adjacent constellations and other pertinent information

- example: ecliptic, celestial equator, etc.

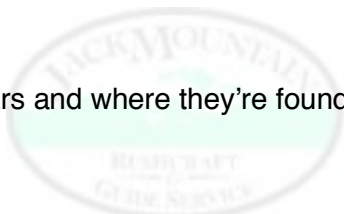
First Magnitude Stars

Make a list of the 21 first magnitude stars and where they're found

In Daily Weather Journal

In AM weather journal, note planets, moon phase, and other celestial objects visible the previous night.

With planets, note where they are (what constellation or area of the sky they're seen).



Fish and Mollusks

To record the following information you should use John Scarola's book Freshwater Fishes of New Hampshire.

Information to Record

Common Name

Latin Name

Other Nicknames (if any)

Identification/Description

Adult Size

Range/Distribution

Habitat

Reproduction

- Season
- Water Temperature
- Habitat for beds or spawning areas

Foods Eaten By Fish

Other Pertinent Information

- Economic Value
- Is it a sportfish or gamefish?
- Are there specific strategies for catching it?
- Are there specific ways to prepare/cook it?



Other Nature Information

Please refer to handouts for study information on birds, insects, geology, ecology, and other topics.



Section 5

Nature Inventories





Plants And Trees of the Northeast

Vascular Plants

Aceraceae - Maple Family

Acer pennsylvanicum – Striped Maple, Moose Maple
Acer saccharum – Sugar Maple, Rock Maple
Acer rubrum – Red Maple, Swamp Maple

Alismataceae - Arrowhead Family

Sagittaria latifolia - Broad-Leaved Arrowhead, Wapato

Amaranthaceae - Amaranth Family

Amaranthus retroflexus - Green Amaranth

Anacardiaceae - Sumac or Cashew Family

Rhus glabra - Smooth Sumac
Rhus typhina - Staghorn Sumac
Rhus vernix - Poison Sumac
Toxicodendron radicans – Poison Ivy

Apiaceae (Umbelliferae) Parsley Family

Cicuta maculata - Water Hemlock
Conium maculatum - Poison Hemlock
Daucus carota - Queen Anne's Lace
Heracleum maximum - Cow Parsnip

Apocynaceae - Dogbane Family

Apocynum androsaemifolium - Spreading Dogbane

Aquifoliaceae - Holly Family

Ilex verticillata - Winterberry

Araceae - Arum Family

Acorus calamus - Sweet Flag
Arisaema triphyllum – Jack-in-the-Pulpit
Symplocarpus foetidus – Skunk Cabbage
Calla palustris – Water Arum, Wild Calla

Araliaceae - Ginseng Family

Aralia nudicaulis - Wild Sarsaparilla
Aralia hispida - Hairy Sarsaparilla

Aristolochiaceae - Birthwort Family

Asarum canadense – Wild Ginger

Asclepiadaceae - Milkweed Family

Asclepias syriaca - Common Milkweed

Asteraceae (Compositae) - Aster or Sunflower Family

Cichorium intybus - Chicory
Taraxacum officinale - Dandelion
Arctium minus - Common Burdock
Cirsium vulgare - Bull Thistle
Ambrosia artemisiifolia - Common Ragweed
Anaphalis margaritacea - Pearly Everlasting
Achillea millefolium - Yarrow
Matricaria matricarioides - Pineapple Weed
Tanacetum vulgare - Common Tansy
Eupatorium perfoliatum – Boneset
Eupatorium maculatum – Spotted Joe Pye Weed
Arnica
Helianthus annuus - Sunflower

Helianthus tuberosus - Jerusalem Artichoke
Solidago spp. - Goldenrod
Erigeron canadensis - Canada Fleabane
Conyza canadensis - Horseweed
Rudbeckia hirta - Black-Eyed Susan
Leucanthemum vulgare – Ox-Eye Daisy
Tussilago farfara - Colt's Foot
Hieracium aurantiacum – Orange Hawkweed

Balsaminaceae - Touch-Me-Not Family

Impatiens capensis - Jewelweed, Spotted Touch-Me_Not

Berberidaceae - Barberry Family

Berberis vulgaris - Common Barberry

Betulaceae - Birch Family

Betula papyrifera - Paper Birch, White Birch, Canoe Birch
Betula lutea - Yellow Birch
Betula lenta - Black Birch, Sweet Birch, Cherry Birch
Betula populifolia - Gray Birch
Alnus rugosa - Speckled Alder
Ostrya virginiana - Hop Hornbeam

Boraginaceae - Borage Family

Symphytum officinale - Comfrey

Brassicaceae (Cruciferae) - Mustard Family

Brassica spp. - Mustard

Caprifoliaceae - Honeysuckle Family

Viburnum alnifolium - Hobblebush
Viburnum trilobum - Highbush Cranberry
Viburnum lentago – Nannyberry
Viburnum recognitum – Northern Arrowwood
Sambucus canadensis - Common Elderberry
Linnaea borealis - Twinflower

Caryophyllaceae - Pink Family

Stellaria Media – Chickweed

Celastraceae - Staff-Tree Family

Celastrus orbiculatus - Oriental Bittersweet

Chenopodiaceae - Goosefoot Family

Chenopodium Album - Lamb's Quarters

Cornaceae - Dogwood Family

Cornus canadensis – Bunchberry
Cornus stolonifera – Red Osier Dogwood

Cupressaceae - Cypress or Cedar Family

Thuja occidentalis - Northern White Cedar
Chamaecyparis Thyoides - Atlantic White Cedar

Cyperaceae - Sedge Family

Sedge

Droseraceae - Sundew Family

Drosera rotundiflora - Round-Leaved Sundew

Elaeagnaceae - Oleaster Family

Shepherdia canadensis - Canada Buffaloberry

Ericaceae - Heath Family

Empetrum nigrum - Crowberry
Ledum groenlandicum - Labrador Tea
Arctostaphylos uva-ursi - Bearberry, Kinnikinnik
Gaultheria procumbens - Wintergreen, Checkerberry, Teaberry
Gaultheria hispida - Creeping Snowberry
Vaccinium vitis-idaea - Mountain Cranberry
Vaccinium corymbosum - Highbush Blueberry
Vaccinium angustifolium - Lowbush Blueberry
Chimaphila umbellata - Pipsissewa
Pyrola rotundiflora - Round-Leaved Pyrola
Monotropa uniflora - Indian Pipe
Kalmia angustifolia - Lambkill, Sheep Laurel

Fabaceae (Leguminosae) - Pea Family

Hedysarum
Trifolium hybridum - Alsike Clover
Trifolium repens - White Clover
Trifolium pratense - Red Clover
Lupinus perennus - Wild Lupine
Lathyrus japonicus - Beach Pea
Vicia cracca - Cow Vetch

Fagaceae - Beech Family

Quercus alba - White Oak
Quercus borealis - Red Oak
Quercus alba - White Oak
Fagus grandifolia - Beech

Geraniaceae - Geranium Family

Geranium maculatum - Wild Geranium, Spotted Cranesbill

Grossulariaceae - Gooseberry Family

Ribes sativum - Currant
Ribes cynosbati - Gooseberry

Hamamelidaceae - Witch Hazel Family

Hamamelis virginiana - Witch Hazel

Hypericaceae - St. Johnswort Family

Hypericum perforatum - St. Johnswort

Juncaceae - Rush Family

Rush

Lamiaceae - Mint Family

Mentha spp. - Peppermint

Liliaceae - Lily Family

Maianthemum canadense - Canada Mayflower, Wild Lily-of-the-valley
Medeola virginiana - Indian Cucumber
Clintonia borealis - Clintonia, Corn Lily
Erythronium americanum - Trout Lily
Smilax rotundiflora - Common Greenbrier
Veratrum viride - False Hellebore, Indian Poke
Allium canadense - Wild Garlic
Hermerocallis fulva - Day Lily
Polygonatum biflorum - Solomon's Seal
Smilacina racemosa - False Solomon's Seal

Lythraceae - Loosestrife Family

Lythrum salicaria - Purple Loosestrife, Spike Loosestrife

Menyanthaceae - Buckbean Family

Menyanthes trifoliata - Buckbean

Moraceae - Mulberry Family

Maclura pomifera - Osage Orange

Myricaceae - Wax-Myrtle Family

Myrica gale - Sweet Gale
Myrica pensylvanica - Northern Bayberry
Comptonia peregrina - Sweet Fern

Nymphaeaceae - Water Lily Family

Nuphar variegatum - Yellow Pond Lilly, Bullhead Lily

Oleaceae - Olive Family

Fraxinus americana - White Ash
Fraxinus nigra - Black Ash
Syringa vulgaris - Lilac

Onagraceae - Evening Primrose Family

Oenothera biennis - Evening Primrose
Epilobium angustifolium - Fireweed

Orobanchaceae - Broom Rape Family

Epifagus virginiana - Beech Drops

Orchidaceae - Orchid Family

Goodyera pubescens - Downy Rattlesnake Plantain
Cypripedium acaule - Pink Lady's Slipper, Moccasin Flower

Oxalidaceae - Wood Sorrel Family

Oxalis stricta - Yellow Wood Sorrel
Oxalis montana - Northern Wood Sorrel

Pinaceae - Pine Family

Tsuga canadensis - Eastern Hemlock
Pinus strobus - White Pine
Pinus resinosa - Red Pine, Norway Pine
Pinus banksiana - Jack Pine
Pinus rigida - Pitch Pine
Picea glauca - White Spruce
Picea maiana - Black Spruce
Picea rubens - Red Spruce
Abies balsamea - Balsam Fir
Larix laricina - Tamarack, Hachmatac, Larch

Plantaginaceae - Plantain Family

Plantago major - Plantain

Poaceae (Gramineae) - Grass Family

Phleum pratense - Timothy Grass
Zizania aquatica - Wild Rice
Phragmites australis - Phragmites, Common Reed

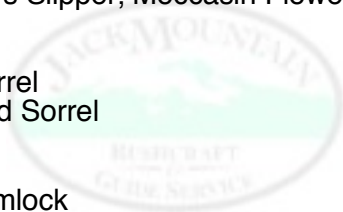
Polygonaceae - Buckwheat Family

Rumex crispus - Yellow Dock, Curled Dock
Rumex acetosella - Sheep Sorrel
Polygonum cuspidatum - Japanese Knotweed

Pontederiaceae - Pickerelweed Family

Pontederia cordata - Pickerelweed

Portulacaceae - Purslane Family



Claytonia virginica - Spring Beauties
Portulaca oleracea – Purslane

Primulaceae - Primrose Family

Trientalis borealis – Star Flower

Ranunculaceae - Buttercup or Crowfoot Family

Ranunculus acris - Buttercup
Coptis groenlandica - Goldthread
Actaea pachypoda - White Baneberry, Doll's Eyes
Actaea rubra - Red Baneberry
Caltha palustris - Marsh Marigold
Aconitum dephinifolium – Monkshood, Wolfbane
Thalictrum pubescens – Tall Meadow Rue

Rosaceae - Rose Family

Rosa rugosa – Beach Rose
Fragaria virginiana - Common Strawberry
Rubus odoratus - Purple Flowering Raspberry
Rubus idaeus - Raspberry
Rubus fruticosus - Blackberry
Rubus flagellaris - Dewberry
Potentilla fruticosa - Shrubby Cinquefoil
Potentilla anserina - Silverweed
Spiraea ulmaria - Meadowsweet
Prunus spp. - Cherries
Amelanchier canadensis – Juneberry, Serviceberry, Shadbush
Sorbus americana – American Mountain Ash
Crataegus crus-galli - Cockspur Hawthorn

Rubiaceae - Madder Family

Galium aparine - Cleavers, Goosegrass
Galium verum - Yellow Bedstraw
Mitchella repens - Partridge Berry

Salicaceae - Willow Family

Salix spp. - Willow
Populus tremuloides - Quaking Aspen, Trembling Aspen
Populus grandidentata – Bigtooth Aspen

Santalaceae - Sandalwood Family

Geocaulon
Bastard Toadflax

Scrophulariaceae - Figwort or Snapdragon Family

Verbascum thapsus - Common Mullein

Solanaceae - Nightshade Family

Solanum nigrum - Common Nightshade

Taxaceae - Yew Family

Taxus canadensis - Canadian Yew

Tiliaceae - Basswood Family

Tilia americana – Basswood, Linden

Trilliaceae - Trillium Family

Trillium erectum - Red Trillium

Typhaceae - Cattail Family

Typha latifolia - Common Cattail

Urticaceae - Stinging Nettle Family

Urtica dioica - Stinging Nettle

Valerianaceae - Valerian Family

Valeriana officinalis - Valerian

Violaceae - Violet Family

Viola papilionaceae – Common Blue Violet

Vitaceae - Grape Family

Vitis spp. - Wild Grape

Spore Plants: Mosses and Ferns

Lycopodiaceae - Club Moss Family

Lycopodium clavatum – Staghorn club moss

Lycopodium obscurum – Tree club moss

Equisetaceae - Horsetail Family

Equisetum arvense – Field Horsetail

Equisetum hyemale – Scouring Rush

Polypodiaceae - Fern Family

Pteretis pensylvanica - Ostrich Fern

Pteridium aquilinum - Bracken Fern

Osmunda cinnamomea – Cinnamon Fern

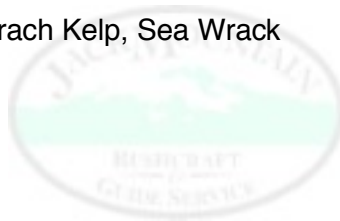
Sphagnum cymbifolium - Sphagnum Moss

Seaweeds

Alaria esculenta - Kelp

Chondrus crispus - Irish Moss

Fucus gardneri - Rockweed, Bladderwrack Kelp, Sea Wrack



Lichens Of The Northeast

Lichens

Umbilicaria mammulata - Smooth Rock Tripe
Cladonia rangiferina - Reindeer Moss
Cladonia cristella – British Soldiers
Usnea



Fungi Of The Northeast

Innonotus obliquus - Chaga or True Tinder Fungus
Fomes fometarius - Hoof Fungus or False Tinder Fungus
Phellinus ignarius - Aspen Conk
Piptoporous betulinus - Birch Polypore or Razor Strop Fungus
Grifola frondosa - Hen of the woods
Laetiporus sulphureus - Sulpher Shelf or Chicken of the Woods
Ganoderma oregonense - Hemlock Varnish Shelf
Ganoderma applanatum - Artist's Conk
Phellinus pini - Pine Conk
Amanita muscaria - Fly Agaric
Boletus edulis
Claviceps spp. - Ergot



Mammals Of The Northeast

Beaver
Muskrat
Pine Marten
Fisher
Short-Tailed Weasel
Long-Tailed Weasel
Mink
River Otter
Striped Skunk
Raccoon
Lynx
Bobcat
Red Fox
Coyote
Black Bear
Moose
Whitetail Deer
Porcupines
Red Squirrel
Snowshoe Hare
Eastern Chipmunk



Freshwater Fish Of Maine

Brook Trout
Brown Trout
Rainbow Trout
Lake Trout (Togue)
Land Locked Salmon
Splake
Arctic Char
Cusk
Rainbow Smelt
Lake Whitefish
Round Whitefish
Largemouth Bass
Smallmouth Bass
Chain Pickerel
Northern Pike
Muskellunge
Black Crappie
Yellow Perch
White Perch
Brown Bullhead
Pumpkinseed Sunfish
Redbreast Sunfish
American Eel
Alewife
Baitfish



Constellations And Star Clusters

Big Dipper
Ursa Major
Casseopia
Ursa Minor
Orion
Bootes
Auriga
Taurus
Pliades
Gemini
Leo
Cygnus
Aquila
Ophiuchus
Canus Major
Draco
Cepheus
Dog Stars





Section 6

Guide Training And Trip Planning





Trip Planning and Safety Management Form

Trip Type and General Location:

Specific Location:

Trip Leader:

Start Date:

Intended Return Date:

Number in Party:

Names/Ages of Trip Members: (See Attached #1)

Vehicle Make/Model:

Color:

Plate Number:

Nearest Towns

Name:

Name:

Directions:

Directions:

Police Dept. Phone Number:

Police Dept. Phone Number:

Nearest Phone

Location:

Name:

Directions:

Phone:

Emergency Phone Numbers

State Police:

Warden Service:

Ranger Dispatch:

Land Management Agency Office:

Other(Specify):

Emergency Contact Person

Name:

Phone:

Address:

Email:

Itinerary

Proposed Itinerary: See Attached #2

Evacuation Routes: See Attached #3

Other Help Along the Route:

Please Notify The Police If We Do Not Return By:

Date:

Time:

Name:

Signature:

Fill out three of these forms. Carry one with you, leave one in your vehicle, and leave one with the emergency contact person.

Student Gear List - Trips

Personal Gear	Summer Clothing
Pack/Liner or Drybag-(summer)	Wide-Brimmed Hat
Sleeping Bag	Touque/Warm Hat
Sleeping Pad	Sandals or Water Shoes
Knife	Knee-High Waterproof Boots
Axe	Wool Socks
Matches	Long Pants
Personal 1 st Aid Kit	Shorts
Sewing Kit	Long Sleeve Shirt
Compass	Wool Shirt or Light Jacket
Logbook/Journal	Work Gloves
Pencil/Pen	Underwear
Plant Pressing Material	Bathing Suit
Headlamp & Extra Batteries	Rain Gear - Top And Bottom - No Ponchos In Canoes
Sun Glasses	Winter Clothing
Sun Block	Mukluks
Toilet Paper	Rubber Boots
Hand Sanitizer	Boot Liners & Insoles
Toothbrush & Paste, Dental Floss	Long Johns
Other Toiletries	Wool Socks (4 pairs)
Biodegradable Soap	Wool Pants
Towel (summer)	Wool Shirts (3)
Washcloth	Parka/Jacket
Bandanas (2)	Wind Layer
Headnet and/or Insect Repellant	Rain Gear
Insulated Mug (unbreakable)	Touque/Warm Hat
Water Bottle	Mittens
Camera	Work Gloves
Book or Reading Material	Scarf
Whistle	
Fishing Gear	Optional
Fishing License (mandatory if fishing gear is taken)	Personal Tent

Section 7

Bibliography





Bushcraft and Earth Skills Education Bibliography

- A Work In Progress

Topics

1. Anthropological Studies
2. Awareness and Perception
3. Bears
4. Bow Making and Archery
5. Braintanning and Leatherwork
6. Bush Living Skills and Camping
7. Canoe and Kayak - Using and Building
8. Composting and Sanitation
9. Cooking, Nutrition, Preservation and Fasting
10. Cordage, Knots and Net-Making
11. Crafting and Specific Skills
12. Firearms
13. History and Human Development
14. Hunting, Fishing and Foraging
15. Mushrooms and Plants
16. Navigation and Astronomy
17. North Woods Nature and Ecology
18. Outdoor Education and Leadership
19. Philosophy of Bushcraft
20. Primitive Living Skills
21. Science of Bushcraft
22. Shelter Design and Construction
23. Survival
24. Teaching Outdoor Skills to Children
25. Tracking
26. Trapping
27. True Stories and Memoirs - General
28. True Stories and Memoirs - Maine and New Hampshire
29. Weather Understanding and Forecasting
30. Wilderness Medicine
31. Winter Skills
32. Woodworking, Tods and Wood Heat
33. Miscellaneous Topics
34. The Twenty-One Most Important Books

Note: * = Available on the web for free

1. Anthropological Studies

- Barker, James H. Always Getting Ready: Yup'ik Eskimo Subsistence in Southwest Alaska. Seattle: University of Washington Press, 1993.
- Cooper, John Montgomery. Snares, Deadfalls, and Other Traps of the Northern Algonquians and Northern Athapaskans. Washington: Catholic University, 1938.
- Cree Hunters of the Mistassini - Documentary Film - <http://www.der.org/films/cree-hunters-of-mistassini.html>
- Hough, Walter. Fire As An Agent In Human Culture. Washington: Government Printing Office, 1926.
- Lips, Julius. Trap systems among the Montagnais-Naskapi Indians of Labrador Peninsula. Stockholm: Statens Etnografiska Museum, 1936.
- Mason, Otis Tufton. Primitive Travel and Transportation. Washington: Government Printing Office, 1896.
- Mason, Otis Tufton. Traps of the Amerind - A Study in Psychology and Invention. American Anthropologist 1900 Vol.2: 657-675.
- Nelson, Richard K. Hunters of the Northern Forest. Chicago: University of Chicago Press, 1968.
- Nelson, Richard K. Hunters of the Northern Ice. Chicago: University of Chicago Press, 1969.
- Nelson, Richard K. Make Prayers to the Raven; A Koyokon View of the Northern Forest. Chicago: University of Chicago Press, 1983.
- Netsilik Eskimo Film Series - Documentary Films - <http://www.der.org/films/netsilik.html>
- Ojibway and Cree Cultural Center Films. Bush Toboggan. Outdoor Education. Tamarack Goose. Traditional Snowshoe. Traditional Winter Fishing. - <http://www.occ.ca/>
- Osgood, Cornelius. Ingalic Material Culture. New Haven: Yale University Publications In Anthropology, 1949.
- Popov, A. A. The Nganasan: The Material Culture of the Tavgi Samoyeds. Bloomington: Indiana University Press, 1966.
- Tomkins, William. Indian Sign Language. New York: Dover Publications, 1969.
- Turner, Lucien M. Ethnology of the Ungava District, Hudson Bay Territory. Washington, DC: Smithsonian, 1894.
- Vaillancourt, Henri. Documentary Films. Beavertail Snowshoes. Building an Algonquin Birchbark Canoe. Indian Hide Tanning. - <http://www.birchbarkcanoe.net/>
- Vuorela, Toivo. The Finno-Ugric Peoples. Bloomington, Indiana: Indiana University Publications, 1964.
- Whitehead, Ruth Holmes. Elitekey: Micmac Material Culture from 1600 to the Present. Halifax: The Nova Scotia Museum, 1980.
- Winterhalder, Bruce A., and Smith, Eric Alden. Hunter-Gatherer Foraging Strategies. Chicago: University of Chicago Press, 1981.

2. Awareness and Perception

There are likely hundreds of books on the science of perception and sensory awareness, but these are the two that I've read that have do do with the outdoors and related endeavors.

- Elliot, Charles. The Outdoor Eye: A Sportsmen's Guide. New York: Funk & Wagnals, 1969.
- Brown, Tom with Brandt Morgan. Tom Brown's Guide to Nature Observation and Tracking. New York: Berkely Books, 1983.

3. Bears

Bears are often seen either as marauding killers or curious oafs. The truth, as it is with most subjects with opposing extremes, lies somewhere in the middle. If you're heading to bear country and are worried about storing your food, remember this; you don't need to manage your food, you need to manage your food smells. Bears are scent-driven. Manage the smell and you've taken care of the problem.

Herrero, Stephen. Bear Attacks; Their Causes and Avoidance. New York: Lyons and Burford Publishers, 1985.

Herrero is a biologist from Alberta who writes with authority on bear attacks. Required reading if you live or camp in bear country.

Kaniut, Larry. Alaska Bear Tales. Anchorage: Alaska Northwest Publishing Co., 1983.

Kilham, Benjamin. Among the Bears; Raising Orphan Cubs in the Wild. New York: Henry Hold and Company, 2002.

Ben Kilham has raised several generations of bear cubs, and as such knows more about how bears live and think than likely anyone else in the world. His book isn't about how to deal with problem bears, but rather his experiences with the bears he's raised. Also see the film about him titled "Mother Bear Man".

4. Bow Making and Archery

Asbell, G. Fred. Instinctive Shooting. Self Published, 1988.

Asbell, G. Fred. Stalking and Still Hunting: The Ground Hunter's Bible. Twin Lake, Michigan: Hunter Image Productions, 1997.

Bear, Fred. The Archer's Bible. New York: Doubleday and Company, 1968.

Callahan, Errett, ed. Roving Handbook. Lynchburg, Virginia: Piltdown Productions, 1999.

Comstock, et al. The Traditional Bowyer's Bible, Volume 1, Volume 2, Volume 3. Azle, Texas: Bois d'Ark Press, 1992, 1993, 1994.

Comstock, Paul. The Bent Stick. Self Published, 19??.

Hamm, Jim. Bows and Arrows of the Native Americans. New York: Lyons and Burford Publishers, 1989.

Kidwell, Jay, Ph.D. Instinctive Archery Insights. Cassville, Missouri: Litho Printers, 2004.

McPherson, John and Geri McPherson. Primitive Living & Survival Skills; Naked Into the Wilderness. Self Randolph, Kansas: Prairie Wolf, 1993.

Building Wood Bows Video

Primitive Bowmaking Video by McPherson

5. Braintanning and Leatherwork

Edholm, Steven, and Wilder, Tamara. Wet-Scraped Braintanned Buckskin. Boonville, California: Paleotecnics, 1997.

A great book. Since I don't tan with alkaline soaks as described in Matt Richards' book, I'm that much more enthusiastic about this one. Great chapter on using buckskin.

Miller, Jim. Brain Tan Buffalo Robes, Skins, and Pelts. St. Clair, Michigan: Sundborn Inc., 1997.

Richards, Matt. Deerskins Into Buckskins; How to Tan with Natural Materials. Rexford, Montana:

Backcountry Publishing, 1997.

Everyone who has heard of braintanning in the last decade has heard of Matt Richards' book, and for good reason. Clearly written, a simple process, and an easy writing style, with a large website and active message boards to answer any questions that might arise. Excellent.

Richards, Matt. Deerskins Into Buckskins. Instructional DVD.

Riggs, Jim. Blue Mountain Buckskin. Self Published 1979. P.O.Box 627, Wallowa, Oregon 97885.

Like many tanners from decades past, I started with Jim Riggs's book. I made my own scraping tools from a truck leaf spring and tanned my first hide while checking his book to make sure I wasn't screwing up. I haven't dry-scraped a hide in ten years, but the book is an old friend.

Wilder, Edna. Secrets of Eskimo Skin Sewing. Fairbanks: University of Alaska Press, 1976.

6. Bush Living Skills and Camping

There is considerable overlap between this section and the Primitive Living Skills section.

Beard, Daniel Carter. Camp-Lore and Woodcraft. New York: Garden City Publishing Co., 1920.

Dan Beard was the founder of the Boy Scouts of America.

Breck, Edward. The Way of the Woods. New York: Putnam's Sons, 1908.

Buzzacott, Francis H. The Complete American & Canadian Sportsman's Encyclopedia of Valuable Instruction. ?

Cheley, Frank H. and Philip D. Fagans, ed. The Camper's Guide. New York: Blue Ribbon Books, Inc., 1933.

Cook, D. The Ax Book. Chambersburg, Pennsylvania: Alan C. Hood & Company, Inc., 1981.

Formerly published as "Keeping Warm With an Ax; A Woodcutter's Manual", this is the classic on axe use and lore from Mainer Dudley Cook.

Dart, Joe. Alaskan's How To Handbook. Fairbanks: Interior Alaska Trappers Association, 1981.

Written for subsistence trappers and hunters, this has lots of information on things like building a dog sled, making snowshoes, and building a fish wheel, amongst other things. Outstanding.

Edwards, Ron. Australian Traditional Bush Crafts. New York: Shocken Books, 1977.

Galton, Francis. Francis Galton's Art of Travel, 1872 (or Shifts and Contrivances Available in Wild Countries), (Reprint). Wiltshire, England: Redwood Press Limited, 1971.*

Now available for free on the web, this was the text used by generations of British explorers and is filled with interesting nuggets of knowledge.

Gibson, W. Hamilton. Camp Life In The Woods and the Tricks of Trapping and Trap Making. New York: Harper and Brothers Publishers, 1899.*

A classic on trapping and building your own traps, this is now available in a free online version. I searched through used bookstores for years before I found a copy, then a year later they reprinted it, and now you can get it on the web for free.

Graves, Richard. Bushcraft: A Serious Guide To Survival and Camping. New York: Warner Books, 1978.

I've had two copies of this long out of print book. As a kid and teen it was my bible of woods lore, even though I was in New Hampshire and the author wrote from, and about, Australia. Now available in a free online edition.

Hall, Ed, ed. A Way of Life. Yellowknife: Government of the Northwest Territories, 1986.

This book is about the subsistence lifestyle in the Northwest Territories. Included is information

on trapping, building snowshoes and spruce bark canoes, and shingling a house with flattened cans of white gas. A great book about living in the bush without much of the junk that comes when they're written by "guru" writers.

Jaeger, Ellsworth. Wildwood Wisdom. Bolinas, California: Shelter, 1945.

Great line drawings and diagrams on a variety of bush lore.

Kephart, Horace. Camping and Woodcraft. Knoxville: University of Tennessee Press, 1988.

A classic outdoor text. Encyclopedic in its scope, a must read by all who spend significant amounts of time in the bush.

Kochanski, Mors. Bushcraft. Vancouver: Lone Pine Publishing, 1987. Formerly titled Northern Bushcraft.

In my opinion, the most valuable book on bushcraft. Chapters on knife, axe, fire, shelter, saw, and bits on appropriate plants and animals. Kochanski is the grand old man of bushcraft. If you buy just one book, this would have to be it.

Kreps, E. Camp and Trail Methods. Columbus, Ohio: A.R. Harding Publisher.

Kreps, E. Woodcraft. Columbus, Ohio: A.R. Harding Publisher.

Mason, Bernard S. Woodcraft. New York: A.S. Barnes and Company, 1973.

Nessmuk. Woodcraft and Camping. New York: Dover Publishing, 1920.

George Washington Sears wrote under the pen name Nessmuk about the Adirondacks and bush living in general. He would travel very light by birchbark canoe, and is revered for his knowledge, quotations, and knives.

Provencher, Paul. I Live In the Woods. Fredericton, New Brunswick: Brunswick Press Limited, 1953.

Provencher, Paul. The Complete Woodsman. Toronto: Habitex Books, 1974.

Graydon, Don, ed. Mountaineering: The Freedom of the Hills. The Mountaineers; Seattle, 1962.

Riviere, Bill. Backcountry Camping. New York: Doubleday and Company, 1972.

Riviere, Bill. The Camper's Bible. New York: Doubleday and Company, 1961.

Riviere, Bill. The L.L. Bean Guide to the Outdoors. New York: Random House, 1981.

Roth, Charles B. The Sportsman's Outdoor Guide. New York: Prentice-Hall, Inc., 1953.

Rutstun, Calvin. The New Way of the Wilderness. New York: The Macmillan Company, 1958.

Wescott, David. Camping in the Old Style. Salt Lake City: Gibbs-Smith Publisher, 2000.

Wescott studied the old camping texts to put together this compendium. Drawing on numerous resources, it catalogs the pithy quotations from older books, as well as photos. A great introduction to traditional camping.

Wood, Pamela, ed. The Salt Book; Lobstering, Sea Moss Pudding, Stone Walls, Rum Running, Maple Syrup, Snowshoes, and Other Yankee Doings. Garden City, New York: Anchor Press/Doubleday, 1977.

- Somewhat like a Foxfire book, but specific to Maine.

Wiggington, Eliot. The Foxfire Book. New York: Anchor Press/Doubleday, 1972.(numerous volumes)

7. Canoe and Kayak - Using and Building

Adney, Edwin Tappin and Howard I. Chapelle. The Bark Canoes and Skin Boats of North America. Washington, D.C.: Smithsonian Institution Press, 1983.

Back, Brian. The Keewaydin Way. Salisbury, Vermont: Keewaydin Foundation, 2004.

The history of Keewaydin camp, the oldest canoe tripping camp in the US. Some great how-to

information mixed in with the history and personnel profiles.

Beard, Daniel Carter. Boat-Building and Boating. Kingston, Washington: Dixon-Price Publishing, 1911.

This was written for boys with little money, but a desire to make their own boat with the materials they had on hand.

Conover, Garrett. Beyond The Paddle; A Canoeist's Guide To Expedition Skills. Gardiner, Maine: Tilbury House Publishers, 1991.

The best information on poling a canoe I've seen. If you can't learn from a credible instructor, read the chapter on poling. Other chapters on lining, portaging, and canoeing in and around ice, as well as a section on the the author's ideal northwoods canoe, make this a great addition to the paddler's library. Written by a Maine Guide with years of experience.

Dowd, John. Sea Kayaking; A Manual for Long-Distance Touring. Seattle: University of Washington Press, 1981.

Evans, G. Heberton. Canoe Camping. Cranbury, New Jersey: A.S. Barnes and Company, Inc., 1977.

Evans was a trip leader for the Keewaydin camp. This shows some of their tested techniques.

Evans, G. Heberton. Canoeing Wilderness Water. Cranbury, New Jersey: A.S. Barnes and Company, Inc., 1975.

This shows more of Keewaydin's techniques, as well as the most significant discussion of the tump line I've seen.

Gidmark, David. BirchBark Canoe. Buffalo: Firefly Books, 1997.

Gilpatrick, Gil. The Canoe Guide's Handbook. Freeport, Maine: Delorme Publishing Company, 1981.

Since reprinted as the "Outdoor Leader's Handbook", this is a great book on guiding a canoe trip written by a Guide with decades of experience.

Hutchinson, Derek. Eskimo Rolling. Camden, Maine: Ragged Mountain Press, 1988.

Mason, Bill. Song of the Paddle; An Illustrated Guide to Wilderness Camping. Willowdale, Ontario, Canada: Firefly Books, 1988.

This was Mason's opus on canoe camping, and lives up to the hype. While I don't share his love for the campfire tent, the book is highly recommended.

Mason, Bill. Path of the Paddle. Richmond Hill, Ontario: Firefly Books, 1984.

Probably the best of the general books available on canoeing. As Mason wasn't from the northeast there's very little on poling canoes, but other than this it's a great text and reference. It's a great complement to his videos on paddling.

Nute, Grace Lee. The Voyageur. Minnesota: Minnesota Historical Society Press, 1931.

Riviere, Bill. Pole, Paddle, and Portage. New York: Van Nostrand Reinhold Company, 1969.

Stelmock, Jerry. Building the Maine Guide Canoe. Guilford, Connecticut: The Lyons Press, 1992.

Stelmock, Jerry. The Art of the Canoe with Joe Seliga. St. Paul: MBI Publishing, 2002.

Stelmock, Jerry and Rollin Thurlow. The Wood and Canvas Canoe: A Complete Guide to Its History, Construction, Restoration, and Maintenance. Gardiner, Maine: Tilbury House Publishers, 1987.

Warren, Graham and David Gidmark. Canoe Paddles; A Complete Guide To Making Your Own. New York: Firefly Books, 2001.

Bill Mason DVD

Becky Mason DVD

Steambending for Woodworkers DVD - from www.wooden-canoes.com/

8. Composting and Sanitation

Although there is some interesting information in this section, most of it is either ill-informed or superfluous if you've read Jenkins.

Appelhof, Mary. Worms Eat My Garbage. Kalamazoo, Michigan: Flower Press, 1982.

- A great plan if you're a fisherman, as you'll have lots of worms for a trip to the pond or river.

Campbell, Stu. Let It Rot! The Gardener's Guide to Composting. Pownal, Vermont: Storey Communications, 1975.

Jenkins, J.C. The Humanure Handbook: A Guide To Composting Human Manure. Grove City, Pennsylvania: Jenkins Publishing, 1994.

The book on composting. We've been using the system for more than a decade. It works, it's simple, it's cheap, and it dispels common myths that are annoyingly spouted off by people who don't know any better..

Hampton, Bruce, and Cole, David. Soft Paths. Harrisburg, Pennsylvania: Stackpole Books, 1988.

Minimum impact camping advice for environmentally sensitive areas.

Martin, Deborah L. and Grace Gershuny. The Rodale Book of Composting. Emmaus, Pennsylvania: Rodale Press, 1992.

Meyer, Kathleen. How To Shit In the Woods. Berkeley, California: Ten Speed Press, 1989.

I hated this book. It should be titled "how to transport your shit out of ecologically sensitive southwest canyons", as it has nothing to do with the woods. Written by a rafting guide in the southwest, its another example of the high-tech, sensitive ecology recreation crowd forcing their beliefs on everyone. If you read the book you'll notice she's not talking about the woods, as is describe in the title. Read Jenkins instead and learn how to sustainably manage human waste.

9. Cooking, Nutrition, Food Preservation and Fasting

This section has a variety of food related topics, from cooking to food preservation to fasting for both health and survival reasons.

Alaskans. Cooking Alaskan By Alaskans. Anchorage: Alaska Northwest Books, 1983.

Great cookbook on wild game, sourdough, cooking on woodstoves, preserving food, etc.

Audette, Raymond V. Neander-Thin: A Cave Man's Guide To Nutrition. Dallas: Paleolithic Press, 1995.

Bragg, Paul. The Miracle of Fasting. Santa Barbara, California: Health Science.

The story I heard was that Paul Bragg died at age 97 in a surfing accident. A great introduction to fasting for health, but valuable to the wilderness survivor in that they might have no other choice but to fast.

Child, Mrs. The American Frugal Housewife (Reprint). Bedford, Massachussetts: Applewood Books, 1832.

Dunaway, Vic. From Hook To Table; How To Clean and Cook all Fish. Miami: Wickstrom Publishers, Inc., 1991.

Eaton, S. Boyd, and Shostak, Marjorie, and Melvin Konner. The Paleolithic Prescription. New York; Harper and Row Publishers, 1988.

Fadala, Sam. Game Care and Cookery. Northbrook, Illinois: DBI Books, Inc., 1989.

Fallon, Sally. Nourishing Traditions. San Diego: ProMotion Publishing, 1995.

Traditional nutrition and food preparation, based on anthropological research of traditional cultures by the Weston Price Foundation. Highly recommended.

Fears, J. Wayne. Backcountry Cooking. Charlotte, North Carolina: Fast & McMullen Publishers, Inc., 1980.

Great general book on campfire cooking. Chapters on dutch ovens, reflector ovens, etc.

Fleming, June. The Well-Fed Backpacker. New York: Vintage Books, 1976.

Ford, Frank. Pack To Nature; Nutrition Made Easy In the Home Or In the Woods. Fort Worth, Texas: Harvest Press, Inc., 1974.

Gordon, David George. The Eat-A-Bug Cookbook. Berkeley: Ten Speed Press, 1998.

Herter, George Leonard and Berthe E. Herter. Bull Cook. Waseca, Minnesota: Herter's, 1960.

Katz, Sandor Ellix. Wild Fermentation. White River Junction, Vermont: Chelsea Green Publishing, 2003.

Kephart, Horace. Camp Cookery. New York: The Macmillan Company, 1946.

Kephart, Horace. Camping and Woodcraft. Knoxville: University of Tennessee Press, 1988.

Larsen, Joan S. Lovin' Dutch Ovens. Salt Lake City: LFS Publications, 1991.

Mollison, Bill. The Permaculture Book of Ferment and Human Nutrition. Tyalgum, Australia: Tagari Publications, 1993.

Older, Julia. Cooking Without Fuel. Dublin, New Hampshire: Yankee Books, 1982.

Ririe, Robert L. Let's Cook Dutch. Bountiful, Utah: Horizon Publishers, 1979.

Shelton, Herbert. Fasting Can Save Your Life. Tampa: Natural Hygiene Press, 1978.

Stefansson, Vilhjalmur. The Fat of the Land. New York: The Macmillan Company, 1957.

Stefansson's anthropological treatise on diet. Includes his experience on the eskimo diet while living in New York City.

Taylor, Ronald L. Butterflies In My Stomach; Or, Insects In Human Nutrition. Santa Barbara, California: Woodbridge Press Publishing Company, 1975.

Thomas, Dian. Roughing It Easy. Salt Lake City: Dian Thomas Company, 1994.

Weiss, John. Trail Cooking. New York: Van Nostrand Reinhold Company, 1981.

10. Cordage, Knots, and Net-Making

Ashley, Clifford W. The Ashley Book of Knots. New York: Doubleday, 1944.

The biggest book on knots. If you only get one, this is it.

Dahlem, Ted. How To Make and Mend Cast Nets. St. Petersburg, Florida: Great Outdoors Publishing Co., 1996.

March, Bill. Modern Rope Techniques In Mountaineering. Cumbria, England: Cicerone Press, 1973.

Art of Castnet Throwing Video

Rope DVD by Karamat.com

Mors Kockanski Pocketbook

11. Crafting and Specific Skills

Adkins, Jan. Moving Heavy Things. Brooklin, Maine: WoodenBoat Publications, 2004.

This was given to me by a past student after I mentioned a rock in the woods that would be great by our fireplace. If you're looking to learn how to move heavy things, this is your text.

Bealer, Alex W. The Art of Blacksmithing. Edison, New Jersey: Castle Books, 1969.

Callahan, Errett. The Basics of Biface Knapping in the Eastern Fluted Point Tradition. Lynchburg, Virginia: Piltdown Productions, 1977.

Gibbey, Evard H. How To Make Primitive Pottery. Liberty, Utah: Eagle's View Publishing, 1944.

Griswold, Lester and Kathleen. The New Handicraft. New York: Van Nostrad Reinhold Company, 1969.

Hart, Carol and Dan. Natural Basketry. New York: Watson-Guptill Publications, 1976.

Hodges, Henry. Artifacts: An Introduction to Early Materials and Technology. London: John Baker, 1964.

James, George Wharton. Indian Basketry. New York: Dover Publications, Inc., 1972.

Kochanski, Mors. Bush Arts. Vancouver: Lone Pine Publishing, 1989.

McNair, Paul C. The Sportsman's Crafts Book. New York: Winchester Press, 1978.

Montgomery, David R. Indian Crafts and Skills. Bountiful, Utah: Horizon Publishers, 1985.

Navajo School of Indian Basketry. Indian Basket Weaving. New York: Dover Publications, Inc., 1971.

Schneider, Richard C. Crafts of the North American Indians, A Craftsman's Manual. New York: Van Nostrad Reinhold Company, 1972.

Sjoberg, Gunilla Paetau. New Directions for Felt. Loveland, Colorado: Interweave Press, 1996.

Spark, Patricia. Fundamentals of Feltmaking. Coupeville, Washington: Shuttle Craft Books, 1989.

Verdet-Fierz, Bernard and Regula. Willow Basketry. Loveland, Colorado: Interweave Press, 1993.

Vivan, John. Building Stone Walls. North Adams, Massachusetts: Storey Publishing, 1976.

Waldorf, D.C. The Art of Flint Knapping. Branson, Missouri: Mound Builder Books, 1993.

Waring, Dennis. Making Wood Folk Instruments. New York: Sterling Publishing Company, 1979.

Weygers, Alexander G. The Complete Modern Blacksmith. Berkeley: Ten Speed Press, 1997.

Whittaker, John C. Flintknapping. Austin: University of Texas Press, 1994.

White, George M. Craft Manual of North American Indian Footwear. Self Published, 1969.

Wiseman, Ann. Making Things; The Hand Book of Creative Discovery. Boston: Little, Brown and Company, 1973.

I picked this book up for a quarter when our local library was getting rid of it. It's filled with lots of ideas for simple crafts you can do with both kids and adults, and was worth every cent I paid for it.

12. Firearms

There are countless books on firearms. These represent only the ones that I've read.

Laycock, George. The Shotgunner's Bible. New York: Doubleday, 1969.

Lyons, Larry. The Gun Owners Handbook. Guilford, Connecticut: The Lyons Press, 2006.

Rinker, Robert A. Understanding Firearm Ballistics. Mulberry House Publishing, 1995.

Riviere, Bill. The Gunner's Bible. New York: Doubleday, 1965.

13. History and Human Development

Abram, David. The Spell of the Sensuous. New York: Vintage Books, 1996.

Bronowski, J. The Ascent of Man. Boston: Little, Brown and Company, 1973.

Diamond, Jared. Guns, Germs, and Steel; The Fates of Human Societies. New York: W.W. Norton and Company, 1999.

Morgan, Elaine. The Aquatic Ape. New York: Stein and Day Publishers, 1972.

Morgan, Elaine. The Descent of Woman. New York: Stein and Day Publishers, 1982.

Pyne, Stephen J. World Fire, The Culture of Fire on Earth. Seattle: University of Washington Press, 1997.

Shepard, Paul. Coming Home to the Pleistocene. Washington D.C.: Shearwater Books, 1998.

14. Hunting, Fishing, and Foraging

Barker, James H. Always Getting Ready: Yup'ik Eskimo Subsistence in Southwest Alaska. Seattle: University of Washington Press, 1993.

Dalrymple, Byron W. Hunting for the Pot, Fishing for the Pan. Harrisburg, Pennsylvania: Stackpole Books, 1981.

Dunaway, Vic. From Hook To Table: How To Clean and Cook all Fish. Miami: Wickstrom Publishers, Inc., 1991.

Gibbons, Euell. Stalking the Blue-Eyed Scallop. Putney, Vermont: Alan C. Hood, Publisher, 1964.
Guide to foraging at the seacoast.

Gordon, David George. The Eat-A-Bug Cookbook. Berkeley: Ten Speed Press, 1998.

Gruenwald, Tom. Hooked On Ice Fishing. Iola, Wisconsin: Krause Publications, 1995.
Introduction to ice fishing with an emphasis on modern, high-tech gear.

Irwin, R. Stephen M.D. The Providers. Blaine, Washington: Hancock House, 1984.

Kerasote, Ted. Bloodties: Nature, Culture, and the Hunt. New York: Kodansha International, 1993.

An interesting look at the culture of hunting. The book is broken up into three parts. In the first, the author is subsistence hunting with a native on the west coast of Greenland. In the second, he's with trophy hunters in Alaska. In the third, he's having a civilized discussion with the leader of an animal rights group. There is some interesting information on factory farm crop production, and the author makes a convincing case that as an environmental advocate his eating of wild game that he hunts himself is better for the planet than a vegetarian diet based on mass-produced crops.

McClane, A. J. ed. McClane's Standard Fishing Encyclopedia and International Angling Guide. New York: Holt, Rinehart and Winston, 1965.

Common in used book stores and on the web, this now out-of-print encyclopedia of fishing has something about everything.

McPherson, John and Geri McPherson. Primitive Living & Survival Skills; Naked Into the Wilderness. Self Randolph, Kansas: Prairie Wolf, 1993.

Nelson, Richard K. Hunters of the Northern Forest. Chicago: University of Chicago Press, 1968.

Ross, David A., Ph.D. The Fisherman's Ocean; How Marine Science Can Help You Find and Catch More Fish. Mechanicsburg, Pennsylvania: Stackpole Books, 2000.

Stewart, Hilary. Indian Fishing. Seattle: University of Washington Press, 1977.

Taylor, Ronald L. Butterflies In My Stomach; Or, Insects In Human Nutrition. Santa Barbara, California: Woodbridge Press Publishing Company, 1975.

White, Charlie. Living Off The Sea. Surrey, British Columbia: Heritage House Publishing, 1985.

Whitlock, Dave. LL Bean Fly-Fishing Handbook. New York: The Lyons Press, 1996.

Course Notes on Optimal Foraging Theory -

<http://www.biology.eku.edu/RITCHISO/behavecolnotes2.htm>

15. Mushrooms and Plants

This section omits the countless books on edible and medicinal uses of wild plants for the simple reason that there are hundreds, if not thousands of them. The books included represent knowledge that isn't covered in the rest of the literature.

Arora, David. Mushrooms Demystified. Berkeley: Ten Speed Press, 1986.

The book on mushrooms. Big, expensive, and encyclopedic.

Elpel, Thomas J. Botany in a Day; Thomas J. Elpel's Herbal Field Guide to Plant Families. Pony, Montana: HOPS Press, 1996.

I learned to organize plants by botanical family in Boyd Shaffer's "Field Botany of South Central Alaska" class at Kenai Peninsula College. It's a great way to learn plants. I had the first edition of Elpel's book, spiral bound, and I've had every edition since. I use it in all of my classes.

Erichsen-Brown, Charlotte. Use of Plants for the Past 500 Years. Aurora, Ontario: Breezy Creeks Press, 1979.

Heinrich, Clark. Magic Mushrooms in Religion and Alchemy. Rochester, Vermont: Park Street Press, 2002.

Thought provoking and good to keep in mind when you pass an Amanita muscaria on your travels.

Kuhnlein, Harriet V., and Turner, Nancy J. Traditional Plant Foods Of Canadian Indigenous Peoples. Amsterdam: Gordon and Breach Science Publishers, 1991.

The book on edible wild plants for Canada and the northern USA. Out of print and hard to find, it includes text by Nancy J. Turner and tables of plant nutrients.

Ratsch, Christian. The Encyclopedia of Psychoactive Plants; Ethnopharmacology and Its Applications. Rochester, Vermont: Park Street Press, 1998.

This is a huge book that contains immense amounts of information.

Turner, Nancy J. and Adam F. Szczawinski. Common Poisonous Plants and Mushrooms of North America. Portland, Oregon: Timber Press, 1991.

Other books on poisonous plants say that a plant is toxic, or occasionally very toxic. This book talks about what the toxins are, how they affect people, and dosages that are dangerous.

16. Navigation and Astronomy

Burch, David. Emergency Navigation. Camden, Maine: International Marine, 1986.

This book is the graduate level course on navigation without any tools. The premise of the book is that you just purchased a million-dollar yacht, you're sailing offshore, and you simultaneously get hit by lightning, get your maps swept overboard by a wave, and lose your compass (you decide how). David Burch has advanced degrees in astrophysics, so the book contains some math and science, but if you can make it through them the payoff is it will be impossible to ever be lost on Earth again if you wear a wrist watch.

Burch, David. Fundamentals of Kayak Navigation. Guilford, Connecticut: The Globe Pequot Press, 1987.

Burch turns his considerable knowledge to the topic of navigation for small, paddle-propulsion crafts in coastal waters.

Fisher, Dennis. Latitude Hooks and Azimuth Rings; How to Build and Use 18 Traditional Navigational Tools. Camden, Maine: International Marine, 1995.

Gatty, Harold. Finding Your Way Without Map or Compass. Mineola, New York: Dover Publications, 1999. (reprint of Nature Is Your Guide)

Essential for the student of barehand navigation. Unlike Burch, this isn't technical but is clearly written and interesting to even the casual weekend navigator.

Gatty, Harold. Nature Is Your Guide; How To Find Your Way On Land And Sea. London: Collins Press,

1958.

Gatty, Harold. The Raft Book. New York: George Grady Press, 1943.

A survival and navigation manual that used to be included on life rafts.

Kjellstrom, Bjorn. Be Expert With Map and Compass. New York: Charles Scribner's Sons, 1955.

The text for our map and compass workshops, and probably many other schools as well.

Levy, David H. Skywatching; A Nature Company Guide. McMahons Point, New South Wales, Australia: Weldon Owen Pty Limited, 1995.

- A coffee table-type book with lots of photos. Nothing special about this specific book, but such a volume is useful to have as they usually have simple explanations of solar lore as well as understandable diagrams.

Mooers, Robert L. Jr. Finding Your Way In the Outdoors. New York: Outdoor Life Books, 1972.

Owendoff, Robert S. Better Ways of Pathfinding. Harrisburg, Pennsylvania: The Stackpole Company, 1969.

Owendoff invented the shadow-stick method of navigation. This book features that and other methods of navigating without modern materials.

Popular Science Monthly Editorial Staff. Astronomy For Amateurs. New York: Grosset and Dunlap Publishers, 1934.

Clear, easily understood explanations and experiments. If you can find a copy it's highly recommended.

Rey, H. A. The Stars; A New Way To See Them. Boston: Houghton Mifflin Company, 1952.

Rutstrum, Calvin. The Wilderness Route Finder. Minneapolis: University of Minnesota Press, 2000.

17. Northwoods Nature and Ecology

Ames, Thomas Jr. Hatch Guide For New England Streams. Portland, Oregon: Frank Amato Publications, 2000.

Coulombe, Deborah A. The Seaside Naturalist. New York: Simon & Schuster, 1984.

DeGraaf, Richard M. and Mariko Yamasaki. New England Wildlife; Habitat, Natural History, and Distribution. Hanover, New Hampshire: University Press of New England, 2001.

Halfpenny, James C. Winter: An Ecological Handbook. Boulder, Colorado: Johnson Books, 1989.

Heinrich, Bernd. Winter World: The Ingenuity of Animal Survival. New York: HarperCollins Publishers, 2003.

Marchand, Peter J. Life In the Cold. Hanover, New Hampshire: University Press of New England, 1987.

Marchand, Peter J. North Woods. Boston: Appalachian Mountain Club, 1987.

Scarola, J.F. Freshwater Fishes of New Hampshire. Concord: New Hampshire Fish and Game Department, 1973.

Stokes, Donald W. A Guide To Nature In Winter. Boston: Little, Brown and Company, 1976.

Wessels, Tom. Reading the Forested Landscape. Woodstock, Vermont: The Countryman Press, 1997.

18. Outdoor Education and Leadership

Ajango, Deborah ed. Lessons Learned; A Guide to Accident Prevention and Crisis Response. Anchorage: University of Alaska Anchorage, 2000.

Drury, Jack K. and Bruce F. Bonney. The Backcountry Classroom; Lesson Plans for Teaching In the

Wilderness. Merrillville, Indiana: ICS Books, 1992.

Outlines and lesson plans on a variety of topics. Focused on modern, low-impact camping. Ford, Phyllis and Jim Blanchard. Leadership and Administration of Outdoor Pursuits. Venture Publishing, 1993.

Gilpatrick, Gil. Outdoor Leader's Handbook. Skowhegan, Maine, 2002.

Gil Gilpatrick spent forty years guiding canoe trips on the Allagash, as well as other rivers. This book is a primer for the working guide. You won't find a discussion of Maslow's Hierarchy of Needs, but you will find advice for the camp cook, advice on gear, and lots of advice on how to manage people.

We've used it

as a text for our guide training courses since it was published. It was originally called "The Canoe Guide's Handbook", but has been expanded into the current volume.

Graham, John. Outdoor Leadership: Technique, Common Sense, and Self Confidence. Seattle: The Mountaineers, 1997.

Herter, George Leonard. Professional Guide's Manual. Waseca, Minnesota: Herter's Inc., 1960.

Kosseff, Alex. AMC Guide to Outdoor Leadership. Boston: AMC Books, 2003.

Priest, Simon and Michael A. Gass. Effective Leadership in Adventure Programming. Champaign, Illinois: Human Kinetics, 1997.

Turner, James Morton. From Woodcraft To Leave No Trace.

<http://www.lib.duke.edu/forest/Publications/EH/July2002/Turner.pdf>

Van Horn, Paul. The Importance of Traditional Woodcraft Skills. Northland College.

<http://www.ncstaff.net/oed/TheImportanceOfTraditionalWoodcraftSkillsPage.htm>

Van Horn, Paul. The Evolution of Modern Camping Skills, Attitudes and Techniques. Northland College.

<http://www.ncstaff.net/oed/TheEvolutionOfModernCampingSkills,Attitudes,AndTechniquesPage.htm>

19. Philosophy of Bushcraft

Williams, Christopher. Craftsmen of Necessity. New York: Vintage Books, 1974.

I learned about this book from Mors Kochanski. Often philosophy takes on a new age spiritual connotation, but not with this book. Common in used book stores and on the web, it chronicles the author's journey through areas of non-industrialized people who adapt their lifestyle and building practices to their environment. A must read.

Emerson, Ralph Waldo. Self Reliance. Essays: First Series, 1841.

If you read it in school because you had to, you should read it again because you want to. Its implications for bushcraft and living by your wits are many.

20. Primitive Living Skills

There is a lot of overlap between this section and the one on Bush Living Skills and Camping. Blankenship, Bart and Robin. Earth Knack: Stone Age Skills for the 21st Century. Salt Lake City: Gibbs Smith Publishers, 1996.

A great book written by great people that I had the pleasure to study with.

Callahan, Errett. Primitive Technology. Lynchburg, Virginia: Piltown Productions, 1987.

Diagrams and notes on a variety of primitive living skills, highly recommended.

Brown, Tom Jr., and Morgan, Brandt. Tom Brown's Field Guide to Living With The Earth. New York:

Berkeley Books, 1984.

Brown, Tom Jr., and Morgan, Brandt. Tom Brown's Field Guide to Wilderness Survival. New York: Berkeley Books, 1983.

Elpel, Tom. Participating in Nature. Pony, Montana: HOPS Press, 1992.

Jamison, Richard L. The Best of Woodsmoke. Bountiful, Utah: Horizon Publishers, 1982.

Jamison, Richard L. Primitive Outdoor Skills. Bountiful, Utah: Horizon Publishers, 1985.

Jamison, Richard and Linda. Woodsmoke. Birmingham, Alabama: Menasha Ridge Press, 1994.

Living A Stone Age Life, The Report of a Creative Game. Research Project, 1976.

I made a copy of this while a student of Errett Callahan's Cliffside Workshops (highly recommended). It chronicles the experiment of some European people in a primitive living experience during the 1970s.

McPherson, John and Geri McPherson. Primitive Living & Survival Skills: Naked Into the Wilderness. Randolph, Kansas: Prairie Wolf, 1993.

The McPherson's originally published a series of small booklets on primitive skills, eventually combining them into this volume and a second. This is one of my favorite books on primitive living skills. Their writing is a breath of fresh air in a genre dominated by professional writers who have no field experience with their topics. The McPhersons, in contrast, have less than polished writing skills, but like much of the information available on trapping, they write from their own experiences in the field. Well illustrated with numerous photos, this volume is a great introduction to primitive living skills as well as a great reference for people who have been at it for a decade. With chapters on braintanning, fire & cordage, bow & arrow making, traps and trapping, primitive cooking, processing deer, baskets, pottery, flintknapping and shelter building, it covers a wide variety of topics.

Olsen, Larry Dean. Outdoor Survival Skills. New York: Pocket Books, 1973.

Watts, Steve. Practicing Primitive. Salt Lake City: Gibbs Smith Publishers, 2005.

Watts is the president of the Society of Primitive Technology and a talented craftsman, and this is a great book with a focus on the southeastern US.

Wescott, David, ed. Primitive Technology; A Book of Earth Skills. Salt Lake City: Gibbs Smith Publishers, 1999.

Wescott, David, ed. Primitive Technology 2; Ancestral Skills. Salt Lake City: Gibbs Smith Publishers, 2001.

Wheat, Margaret M. Survival Arts of the Primitive Paiutes. Reno: University of Nevada Press, 1967.

Wilbur, C. Keith. The New England Indians. Chester, Connecticut: Globe Pequot Press, 1978.

- Wilbur has several books at our local store, and they're all fantastic. Amazing line drawings and solid research make them both enjoyable to read and useful to use.

21. Science of Bushcraft

Contrary to those who think bushcraft is the domain of uneducated bumpkins, in reality it is the joining of history and science. These books cover the science aspect.

Lyons, John M. Fire. New York: Scientific American Books, 1985.

Dunn, Kevin M. Caveman Chemistry. Universal Publishers, 2003.

Stewart, Ian. Nature's Numbers. New York: Basic Books, 1995.

22. Shelter Design and Construction

Beard, D.C. Shelters, Shacks, and Shanties. Bolinas, California: Shelter Publications Inc., 1914.

Kochanski, Mors. Bushcraft. Vancouver: Lone Pine Publishing, 1987. Formerly titled Northern Bushcraft.

Laubin, Reginald and Gladys. The Indian Tipi: Its History, Construction, and Use. New York: Ballantine Books, 1957.

Lyle, David. The Book of Masonry Stoves. White River Junction, Vermont: Chelsea Green Publishing Company, 1984.

Nabokov, Peter, and Easton, Robert. Native American Architecture. New York: Oxford University Press, 1989.

Phleps, Hermann. The Craft of Log Building. Ottawa: Lee Valley Tools Ltd., 1982.

Smith, Michael G. The Cobber's Companion. Cottage Grove, Oregon: The Cob Cottage, 1998.

Walker, Tom. Building the Alaska Log Home (Revised Edition). Anchorage: Alaska Northwest Books, 1998.

23. Survival

Next to losing weight, getting rich with no money down and making yourself more attractive to the opposite sex, there have probably been more books written on wilderness survival than on any other topic. But most of them are crap, written by people with no experience about which they're writing. And the situation isn't improving. With every trip to the bookstore I find one or two new books, each having a writer with a more-groomed pedigree than its predecessors. But their books still suck, and surprisingly seem to be getting worse. Now there are hundreds of instructional videos available as well, with varying levels of quality. Survival is not living off of the land, it's living through a crisis. In my opinion the best two from this list that deal with actual survival, and they complement each other well, are Emdin and Lundin. If you're looking for a book with facts and trivia about a variety of situations, try Maniguet.

Air Force Manual 64-5. Survival, Search and Rescue. Department of the Air Force, 1969.

Alford, Monty. Wilderness Survival Guide. Edmonds, Washington: Alaska Northwest Publishing, 1987.

Alloway, David. Desert Survival Skills. Austin: University of Texas Press, 2000.

Anderson, E.G. Plane Safety and Survival. Fallbrook, California: Aero Publishers, Inc., 1978.

Davenport, Gregory. Wilderness Survival. Mechanicsburg, Pennsylvania: Stackpole Books, 1998.

Emdin, Brian. Survival Secrets. Edmonton: Spotted Cow Press, 2002.

Emdin is a retired Canadian military survival instructor, and his book demonstrates the importance of having a plan and implementing it immediately. Not a lot of background material, but excellent for teaching you what you need to do in a survival situation. A great complement to Lundin's book.

FM 21-76. Survival. Washington DC: Department of the Army, 1957.

Fear, Gene. Surviving the Unexpected Wilderness Emergency. Tacoma, Washington: Survival Education Association, 1972.

Ferri, Gino, Ph.D. Psychology of Wilderness Survival. Hanover, Ontario: Skyway Printing, 1989.

Gonzales, Laurence. Deep Survival: Who Lives, Who Dies, and Why. New York: W.W. Norton & Company, 2003.

Greenbank, Anthony. The Book of Survival. London: Wolf Publishing, Ltd., 1967.

Lundin, Cody. 98.6 Degrees: The Art of Keeping Your Ass Alive. Salt Lake City: Gibbs Smith

Publishers, 2003.

- Explains what it takes to keep the body alive, then goes into detail about the background information involved. Excellent book and a great complement to Emdin's book.

Maniguet, Xavier. Survival: How To Prevail In Hostile Environments. New York: Facts On File, Inc., 1988.

Nesbitt, Paul H., Pond, Alonzo W. and William H. Allen. The Survival Book. New York: Funk and Wagnalls, 1959.

Nester, Tony. Desert Survival. Flagstaff, Arizona: Diamond Creek Press, 2003.

Robertson, Dougal. Sea Survival: A Manual. New York: Praeger Publishers, 1975.

Robertson also wrote Survive the Savage Sea, based on his 37 days adrift in the Pacific in a life raft after his boat sank in 1972. This book is based on his experience and research.

Schaffer, Boyd. Northern Wilderness Survival. Unpublished.

Troebst, Cord Christian. The Art Of Survival. Garden City, New York: Doubleday and Company, 1965.

24. Teaching Outdoor Skills to Children

Beard, Daniel Carter. The American Boy's Handy Book. Boston: David R. Godine, Publisher, 1882.

Beard, Lina and Adelia B. Beard. The American Girls Handy Book. Boston: David R. Godine, Publisher, 1887.

Brown, Tom Jr., and Morgan, Brandt. Tom Brown's Field Guide to Nature and Survival For Children. New York: Berkeley Books, 1989.

Cornell, Joseph. Sharing Nature With Children. Nevada City, California: Dawn Publications, 1979.

Cornell, Joseph. Sharing the Joy of Nature. Nevada City, California: Dawn Publications, 1989.

Gottlieb, Jeff. Teaching Primitive Skills To Children; An Instructor's Manual. Self Published, 1994.

Mason, Bernard S. Boy's Book of Camping and Wood Crafts. New York: The Derrydale Press, 2001.

25. Tracking

In my workshops I teach that tracking can't be taught without a knowledge of the animal and the habitat. Some of the authors here disagree. As such, my bias is for those that take biology and habitat into account. In order, my top two are Elbroch and Rezendez. If your interests are academic, you should look at Liebenberg.

Brown, Tom Jr. The Science and Art of Tracking. New York: Berkeley Books, 1999.

Brown, Tom Jr., and Morgan, Brandt. Tom Brown's Field Guide to Nature Observation and Tracking. New York: Berkeley Books, 1983.

Elbroch, Mark. Mammal Tracks and Sign. Mechanicsburg, Pennsylvania: Stackpole Books, 2003.

Halfpenny, James. A Field Guide To Mammal Tracking In North America. Boulder, Colorado: Johnson Books, 1986.

Liebenberg, Louis. The Art of Tracking; The Origin of a Science. Claremont, South Africa: David Phillip Publishers, 1990.

Murie, Olas. A Field Guide To Animal Tracks. Boston: Houghton Mifflin Company, 1954.

Rezendez, Paul. Tracking and the Art of Seeing. New York: Harper Collins, 1999.

Rue, Leonard Lee 3rd. Complete Guide To Game Animals. New York: Van Nostrand Reinhold, 1981.

Rue, Leonard Lee 3rd. Furbearing Animals of North America. New York: Crown Publishers Inc., 1981.

Stokes, Donald and Lillian. Animal Tracking and Behavior. Boston: Little, Brown, and Company, 1986.

26. Trapping

More than any other field, trapping represents democracy in publishing. This contains less than 1% of the available literature on trapping, with much of it written by practitioners in the field (unlike most of the junk that passes for survival literature). I've seen a bunch of other trapping books at trapper's rendezvous. While some of it is written by people with a limited grasp of language and grammar, they're the one's out there trapping, and it hasn't been filtered through professional writers. This makes their information that much more valuable. Check out Fur-Fish-Game magazine for a bunch of information on self-published authors.

Cooper, John Montgomery. Snares, Deadfalls, and Other Traps of the Northern Algonquians and Northern Athapaskans. Washington: Catholic University, 1938.

Gibson, W. Hamilton. Camp Life In The Woods and the Tricks of Trapping and Trap Making. New York: Harper and Brothers Publishers, 1899.*

Gilsvik, Bob. The Complete Book of Trapping. Columbus, Ohio: A.R.Harding Publishing Company, 1976.

Harding, A.R. Deadfalls and Snares. Columbus, Ohio: A.R. Harding Publishing Co., 1935.

Harding, A.R. The Trapper's Handbook. Columbus, Ohio: A.R. Harding Publisher, 1951.

Hawbaker, S. Stanley. Trapping North American Furbearers. Self Published, 1974. 258 Hawbaker Drive South, Fort Loudon, Pennsylvania 17224.

Krause, Tom. Dynamite Snares and Snaring. Self-Published.

Krause, Tom. NTA Trapping Handbook. National Trapper's Association, 1984.

Kreps, E. The Science of Trapping. Columbus, Ohio: A.R. Harding Publisher.

Lips, Julius. Trap systems among the Montagnais-Naskapi Indians of Labrador Peninsula. Stockholm: Statens Etnografiska Museum, 1936.

Mason, Otis Tufton. Traps of the Amerind - A Study in Psychology and Invention. American Anthropologist 1900 Vol.2: 657-675.

McPherson, John. Makin' Meat 2. Randolph, Kansas: Prairie Wolf, 1992.

Nelson, Richard K. Hunters of the Northern Forest. Chicago: University of Chicago Press, 1968.

Provencher, Paul. Bush Survival - Easy Way. Montreal: Sports/Famille, 1971.

Rue, Leonard Lee 3rd. Furbearing Animals of North America. New York: Crown Publishers Inc., 1981.

27. True Stories and Memoirs

Anderson, William Ashley. Angel of Hudson Bay; The True Story of Maud Watt. Toronto: Clarke, Irwin & Company Limited, 1961.

Arseniev, V.K. Dersu the Trapper. New York: McPherson & Company, 1941.

De Poncins, Gontran. Kabloona. New York: Time Life Books, 1941.

Hodgins, Bruce W. and Margaret Hobbs, ed.. Nastawgan; the Canadian North by Canoe and Snowshoe. Toronto: Betelgeuse Books, 1985.

Huntington, Sidney. Shadows on the Koyokuk. Anchorage: Alaska Northwest Books, 1993.

Keith, Sam and Richard Proenneke. One Man's Wilderness: An Alaskan Odyssey. Seattle: Alaska Northwest Books, 1999.

I first read Dick Proenneke's book in the Kenai, Alaska library, when I was living in Sterling. It was an edition of Alaska Geographic, and I loved it. Some of my friends knew Dick, so I wrote him a

letter. He wrote me back, and now his letter to me is my bookmark in his book. I was excited when his book was reprinted, and even more so when the video "Alone In the Wilderness" came out. It's the runner-up favorite of our students, second only to "Dead River Rough Cut". A great book.

Leslie, Edward E. Desperate Journeys, Abandoned Souls. Boston: Houghton Mifflin Company, 1988.

Merrick, Elliott. True North. Lincoln: University of Nebraska Press, 1933.

Elliot Merrick graduated from Yale and had a short stint working in New York City, as documented in the first five pages of this book. He expresses his quiet desperation, then follows his passion. He moved to Labrador and taught school for a year. This book is the journal of his second year there, when he and his wife went into the interior of the province with the trappers for the winter. He documents his experiences poling up the Grand (since renamed the Churchill) river, snowshoeing, trapping, and living off the country. Well written and as good a story as you'll be able to find. For years it was out of print and hard to find, but has recently come back into print. Highly recommended.

Nelson, Richard K. Shadow of the Hunter. Chicago: University of Chicago Press, 1980.

North, Dick. The Mad Trapper of Rat River. Toronto: MacMillan of Canada, 1972.

The story of Canada's longest manhunt. Shrouded in mystery, to this day the identity of the man they were hunting isn't known for sure. An incredible tale of endurance. Hollywood made a movie loosely based on the story called "Death Hunt" starring Lee Marvin and Charles Bronson.

Provencher, Paul. Provencher; Last of the Coureurs de Bois. Don Mills, Ontario: Burns & MacEachern Limited, 1974.

Paul Provencher's memoirs.

Rowlands, John J. Cache Lake Country; Life In the North Woods. New York: Lyons and Burford Publishers, 1959.

An enjoyable read with great diagrams and drawings in the margins.

Stefansson, Vilhjalmur. Hunters of the Great North. New York: Paragon House, 1922.

Stefansson, Vilhjalmur. My Life With the Eskimo. New York: Collier Books, 1913.

Thoreau, Henry David. Walden. Boston: Houghton Mifflin Company, 1975.

White, Stewart Edward. The Cabin. New York: Doubleday, Doran & Company, 1911.

White, Stewart Edward. The Forest. New York: Doubleday, Doran & Company, 1904.

White, Stewart Edward. The Mountain. New York: Doubleday, Doran & Company, 1904.

Alone in the Wilderness DVD

Snowshoes and Solitude DVD - Survivorman Les Stroud's first wilderness film and the story of he and his wife's year spent in the Wabakimi wilderness. I met Les at the Snow Walker's Rendezvous years ago, before he became a star, and he plays men's league hockey with a friend of mine from college. Great guy, great video.

28. True Stories and Memoirs - Maine and New Hampshire

Averill, Gerald. Ridge Runner; The Story of a Maine Woodsman. Thorndike, Maine: North Country Press, 1976.

Dead River Rough Cut DVD

This has been the favorite film of our students, year after year. It chronicles Bob Wagg and Walter Lane, two Maine trappers, over four seasons of their living in the bush. They philosophize, drink, swear, and do a bunch of other things that make this probably not fit for children. But they're also 100% real. And since most survival experts on TV these days are city people who spend a few weeks

in the country each year, it's good to see them trapping, swearing, and not trying to look their best for the camera. Reality cinema long before it was cool.

Geagan, Bill. Nature I Loved... New York: Coward-McCann, Inc., 1952.

Hamlin, Helen. Nine Mile Bridge. New York: W. W. Norton & Company, 1945.

Helen Hamlin was the wife of a game warden in northern Maine. The books subtitle is "Three Years in the Maine Woods." Highly recommended.

Kidney, Dorothy Boone. Away From It All. New York: A. S. Barnes and Company, 1969.

Dorothy Boone Kidney lived at Lock Dam on Chamberlain Lake, on the Allagash Wilderness Waterway. I've been there many times guiding canoe trips, and her memoirs are fun to read both for me and my clients.

Kidney, Dorothy Boone. Wilderness Journal. Portland, Maine: Guy Gannett Publishing Company, 1980.

Knowles, Joseph. Alone in the Wilderness. Boston: Small, Maynard and Company, 1913.

Joseph Knowles, in his 40's, stripped to his underwear at King and Bartlett Camps, then walked into the woods for 2 months of living off the land. It came out after he was done that he might not have done everything he said he did, but to anyone who has spent time living off the land his book is refreshingly written by a kindred spirit. His detractors, who said he spent some time at a friend's cabin, were unanimous in saying that he had the skills to have done that which he wrote about.

Rich, Louise Dickinson. We Took To The Woods. Camden, Maine: Down East Books, 1942.

Pike, Robert. Spiked Boots. Woodstock, Vermont: The Countryman Press, 1959.

Pike, Robert. Tall Trees, Tough Men. New York: W.W. Norton and Company, 1967.

The wild west is often seen as the defining American experience, and has been lauded by Frederick Jackson Turner in his frontier thesis as our defining characteristic. But much of the history of the west was invented by historians and novelists. The wild northeast, characterized by the lumber camps and log drives, was not invented. Pike recounts the history and the characters of northern New England's lumbering past. The stories entertain and the characters are larger than life.

29. Weather Understanding and Forecasting

Rubin, Louis D. Sr. And Jim Duncan. The Weather Wizard's Cloud Book. Chapel Hill: Algoquin Books, 1989.

Sloane, Eric. Almanac and Weather Forecaster. Boston: Little, Brown, and Company, 1955.

Sloane, Eric. Eric Sloane's Weather Book. New York: Duell, Sloane and Pearce, 1952.

This has long been a text in our semester program. Excellent..

30. Wilderness Medicine: Modern and Traditional

Batmanghelidj, Fereydoon, M.D. Your Body's Many Cries For Water. Falls Church, Virginia: Global Health Solutions, Inc., 1992. www.watercure.com

Examines the effects of chronic dehydration and points to it as the causative factor in degenerative disease. Also promotes the solvent, as opposed to the solute, philosophy of medicine.

Dickson, Murray. Where There is No Dentist. Palo Alto, California: The Hesperian Foundation, 1983.

Forgey, William W. Wilderness Medical Society Practical Guidelines. Merrville, Indiana: ICS Books, 1995.

Root-Bernstein, Robert and Michelle. Honey, Mud, Maggots, and Other Medicinal Marvels. Boston: Houghton Mifflin Company, 1997.

This book explores the science behind traditional medical practices such as those listed in the title..

Stonehearth Open Learning Opportunities. Wilderness Emergency Medical Technician prepared notes. Conway, New Hampshire: SOLO, 1995.

These course notes are from the WEMT course I took with SOLO. Great course, if you can take one you won't regret it.

Tilton, Buck and Frank Hubbell. Medicine for the Backcountry. Guilford, Connecticut:Globe Pequot, 1999.

Werner, David. Where There Is No Doctor. Palo Alto, California: The Hesperian Foundation, 1992.

Wilkerson, James A. Hypothermia, Frostbite, and other Cold Injuries. Seattle: The Mountaineers, 1986.

Wilkerson, James A. Medicine for Mountaineering. Seattle: The Mountaineers, 1975.

31. Winter Skills

Alford, Montague. Winter Wise. Surrey, British Columbia: Heritage House, 1999.

Conover, Garrett and Alexandra. A Snow Walker's Companion. Camden, Maine: Ragged Mountain Press, 1995.

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Halfpenny, James. Winter: An Ecological Handbook. Boulder, Colorado: Johnson Books, 1989.

Kochanski, Mors. Bushcraft. Vancouver: Lone Pine Publishing, 1987.

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Randall, Glenn. Cold Comfort. New York: Nick Lyons Books, 1987.

Rossit, Edward A. Snow Camping and Mountaineering. New York: Funk and Wagnalls, 1970.

Rutstrum, Calvin. Paradise Below Zero. New York: The Macmillan Company, 1968.

Stefansson, Vilhjalmur. Arctic Manual. New York: The Macmillan Company, 1944.

Vaillancourt, Henri. Making the Attikamek Snowshoe. Greenville, New Hampshire: The Trust for Native American Cultures and Crafts, 1987.

Wilkinson, Ernest. Snow Caves For Fun And Survival. Boulder, Colorado: Johnson Books, 1986.

Weiss, Hal. Secrets of Warmth. The Mountaineers: Seattle, 1988.

32. Woodworking, Woodworking Tools and Wood Heat

Bealer, Alex W. The Old Ways of Working Wood. Edison, New Jersey: Castle Books, 1980.

Cook, D. The Ax Book. Chambersburg, Pennsylvania: Alan C. Hood & Company, Inc., 1981.

Donnelly, Warren. Poulan's Complete Book of Firewood. Colorado Springs: Donnelly and Sons Publishing Co., 1974.

Michael, David E. Saws That Sing: A Guide To Using Crosscut Saws. Missoula, Montana: USDA Forest Service, 2004.

Miller, Warren. Crosscut Saw Manual. Missoula, Montana: USDA Forest Service, 1977.

Sloane, Eric. A Museum of Early American Tools. New York: Wilfred Funk, 1964.

Sloane, Eric. A Reverence For Wood. New York: Ballantine Books, 1965.
Vivian, John. Wood Heat. Emmaus, Pennsylvania: Rodale Press, 1976.
Watson, Aldren A. Hand Tools: Their Ways and Workings. New York: W.W. Norton & Company, Inc., 1982.
Weisgerber, Bernie. An Axe To Grind; A Practical Ax Manual. Missoula, Montana: USDA Forest Service, 1999.
Wik, Ole. Wood Stoves; How To Make and Use Them. Anchorage: Alaska Northwest Publishing Company, 1977.
Filing Hand Saws DVD

33. Miscellaneous Skills and Topics

Aaland, Mikkel. Sweat: The Illustrated History and Description of the Finnish Sauna, Russian Bania, Islamic Hammam, Japanese Mushi-buro, Mexican Temescal and American Indian & Eskimo Sweat Lodge. Santa Barbara: Capra Press, 1978..

This is a great cross-cultural study of sweat baths. The author traveled the world and wrote about his experiences in them.

Back, Joe. Horses, Hitches, and Rocky Trails. Boulder: Johnson Books, 1959.

Written by a horse packer for horse packers.

Frazine, Richard. The Barefoot Hiker. Berkeley, California: Ten Speed Press, 1993.

Hartley, Dorothy. Lost Country Life. New York: Pantheon Books, 1979.

Herter, George Leonard. Professional Guide's Manual. Waseca, Minnesota: Herter's Inc., 1960.

Howard, Kathleen and Norman Gibat. The Lore of Still Building. Fostoria, Ohio: Noguska Industries, 1973.

Vihjerjuuri, H.J. Sauna: The Finnish Bath. Helsinki, Finland: Otava, 1952.

History and how-to on the Finnish sauna.

34. The Twenty-One Most Important Books

1. Kochanski, Mors. Bushcraft. Vancouver: Lone Pine Publishing, 1987. Formerly titled Northern Bushcraft.

In my opinion, the most valuable book on bushcraft, or living in wild places. Chapters on knife, axe, fire, shelter, saw, and bits on appropriate plants and animals. Kochanski is the grand old man of bushcraft. If you buy just one book, this would have to be it.

2. Stefansson, Vilhjalmur. Arctic Manual. New York: The Macmillan Company, 1944.

Out of print, expensive if you can find it at all, but dense with information. Written by Stefansson at the request of the Army during the 1940s. Based on his years of experience as an anthropologist in the arctic, the premise is to include everything a downed pilot would need to know in order to survive by "going native".

3. Provencher, Paul. The Complete Woodsman. Toronto: Habitex Books, 1974.

Provencher was a forester in the Quebec and Labrador country on the north shore of the St. Lawrence river. He traveled extensively with native guides who constantly demonstrated the techniques of living off the land, which he then wrote about in his books. All of his books are good, but if I had to choose just one, this would be it. Out of print and hard to find, if you do find a copy you'll be rewarded.

4. Wescott, David, ed. Primitive Technology; A Book of Earth Skills. Salt Lake City: Gibbs Smith Publishers, 1999.

This is volume 1 (of 2) of the first ten years of articles in the Journal of the Society of Primitive Technology. A variety of articles by a variety of authors. Thankfully in print and easy to obtain.

5. Wescott, David, ed. Primitive Technology 2; Ancestral Skills. Salt Lake City: Gibbs Smith Publishers, 2001.

This is volume 2 (of 2) of the first ten years of articles in the Journal of the Society of Primitive Technology.

6. Graves, Richard. Bushcraft; A Serious Guide To Survival and Camping. New York: Warner Books, 1978.*

I've had two copies of this long out of print book. As a kid and teen it was my bible of woods lore, even though I was in New Hampshire and the author wrote from, and about, Australia. Now available in a free online edition.

7. McPherson, John and Geri McPherson. Primitive Living & Survival Skills; Naked Into the Wilderness. Self Randolph, Kansas: Prairie Wolf, 1993.

The McPherson's originally published a series of small booklets on primitive skills, eventually combining them into this volume and a second. This is one of my favorite books on primitive living skills. Their writing is a breath of fresh air in a genre dominated by professional writers who have no field experience with their topics. The McPhersons, in contrast, have less than polished writing skills, but like much of the information available on trapping, they write from their own experiences in the field. Well illustrated with numerous photos, this volume is a great introduction to primitive living skills as well as a great reference for people who have been at it for a decade. With chapters on braintanning, fire & cordage, bow & arrow making, traps and trapping, primitive cooking, processing deer, baskets, pottery, flintknapping and shelter building, it covers a wide variety of topics.

8. Schneider, Richard C. Crafts of the North American Indians, A Craftsman's Manual. New York: Van Nostrand Reinhold Company, 1972.

Written by a teacher with easy to follow text and clear instructions. One of the best how-to manuals for making traditional crafts.

9. Emdin, Brian. Survival Secrets. Edmonton: Spotted Cow Press, 2002.

Emdin is a retired Canadian military survival instructor, and his book demonstrates the importance of having a plan and implementing it immediately. Not a lot of background material, but excellent for teaching you what you need to do in a survival situation. A great complement to Lundin's book.

10. Lundin, Cody. 98.6 Degrees; The Art of Keeping Your Ass Alive. Salt Lake City: Gibbs Smith Publishers, 2003.

Explains what it takes to keep the body alive, then goes into detail about the background information involved. Excellent book and a great complement to Emdin's book.

11. Kephart, Horace. Camping and Woodcraft. Knoxville: University of Tennessee Press, 1988.

A classic outdoor text. Encyclopedic in its scope, a must read by all who spend significant amounts of time in the bush.

12. Burch, David. Emergency Navigation. Camden, Maine: International Marine, 1986.

This book is the graduate level course on navigation without any tools. The premise of the book is that you just purchased a million-dollar yacht, you're sailing offshore, and you simultaneously get hit

by lightning, get your maps swept overboard by a wave, and lose your compass (you decide how). David Burch has advanced degrees in astrophysics, so the book contains some math and science, but if you can make it through them the payoff is it will be impossible to ever be lost on Earth again if you wear a wrist watch.

13. Jenkins, J.C. The Humanure Handbook; A Guide To Composting Human Manure. Grove City, Pennsylvania: Jenkins Publishing, 1994.*

The book on composting and dealing with human manure. We've been using the system for more than a decade. It works, it's simple, it's cheap, and it dispels common myths that are annoyingly spouted off by people who don't know any better.

14. Sloane, Eric. Eric Sloane's Weather Book. New York: Duell, Sloane and Pearce, 1952.

This has been a text in our semester program since the beginning. Clear diagrams, easy to understand with out lots of jargon, and thankfully now back in print, this is the shortest route to understanding the weather.

15. Wessels, Tom. Reading the Forested Landscape. Woodstock, Vermont: The Countryman Press, 1997.

Unlocks the history of the forests of New England and helps the reader uncover the tracks of past generations.

16. Elbroch, Mark. Mammal Tracks and Sign. Mechanicsburg, Pennsylvania: Stackpole Books, 2003.

The book on tracking, loaded with clear photographs and diagrams.

17. Williams, Christopher. Craftsmen of Necessity. New York: Vintage Books, 1974.

I consider this great book to sum up the philosophy of bushcraft and Earth skills education. Often philosophy takes on a new age or spiritual connotation in modern wilderness skills, but not with this book. It chronicles the author's journey through areas of non-industrialized people who adapt their lifestyle to their environment, and where the hero is the self-reliant craftsmen who is the prototypical bushcraft practitioner. Not directly about bushcraft or outdoor living, but a must read anyway.

18. Conover, Garrett and Alexandra. A Snow Walker's Companion. Camden, Maine: Ragged Mountain Press, 1995.

The theory and techniques of traditional, hot-tent winter camping. Great sections on tents, snowshoes, toboggans, footwear, and probably the best in any book on dressing to stay warm in the winter. Written by seasoned Maine Guides with years of experience.

19. Mason, Bill. Path of the Paddle. Richmond Hill, Ontario: Firefly Books, 1984.

Probably the best of the general books available on canoeing. As Mason wasn't from the northeast there's very little on poling canoes, but other than this it's a great text and reference. It's a great complement to his videos on paddling.

20. Riviere, Bill. The L.L. Bean Guide to the Outdoors. New York: Random House, 1981.

Bill Riviere was a Maine guide and wrote numerous books based on his experience outdoors. This book is a compendium of knowledge on a wide variety of topics, from choosing tents and sleeping bags to canoeing and reading the weather. Long out of print, it is common and inexpensive at used book stores.

21. Pocket Books by Mors Kochanski, sold by Karamat.com

Titles:

- The Compass
- Knife Sharpening
- Map Use
- Tools of Survival and Survival Training
- Basic Wilderness Survival in Cold Lacking Snow
- Basic Wilderness Survival in Deep Snow
- Top Seven Bush Knots and the Use of the Windlass
- Wilderness Steam Bath
- The Inuit Snow House
- The Night Sky
- Basic Netting
- The Two Kilogram Survival Kit Field Manual
- Survival Kit Ideas

These great little booklets are small and concise, yet are a fantastic resource. There are a few other titles available, but these are the ones I recommend for the northeastern US and Canada.





**For Updates, corrections, and anything else, go to
the Jack Mountain Bushcraft web site at:**

www.JackMtn.com



