

Ice Age National Scenic Trail
8075 Old Sauk Pass Road
Cross Plains, WI 53528
Phone: 608-798-8700



Ice Age National Scenic Trail

Chainsaw Training, Safety, Maintenance and Operation SOP

Plan Created: 07/30/21

Plan Revised: 1/27/24

Superintendent Signature of Approval:

ERIC GABRIEL

Digitally signed by ERIC

GABRIEL

Date: 2024.01.30 10:47:16

-06'00'

Definitions:

ANSI	American National Standards Institute
CFR	Code of Federal Regulations
DBH	Diameter Breast Height (width of tree trunk at chest level)
DOI	Department of the Interior
FISTA	Forest Industry Safety & Training Alliance
FSM	Forest Service Manual
GAR	"Green-Amber-Red" risk assessment model from <i>Trail Safe!</i>
IATA	Ice Age Trail Alliance
IATR	NPS-Ice Age National Scenic Trail
JHA	Job Hazard Analysis
Lesson Learned	Teaching aid shared with others to avoid repeated mistakes from past injuries or Near Miss
MOA	Memorandum of Agreement
NCSP	National Chainsaw Safety Plan (the chainsaw policy of the NPS)
Near Miss	Reportable incident when someone is nearly injured
NPS	National Park Service
NRSTC	Nationally Recognized Sawyer Training Course
OF-301A	Volunteer Service Agreement used by the NPS and USFS
OSHA	Occupational Safety and Health Administration
Park	Generic term synonymous with Ice Age National Scenic Trail
PPE	Personal Protective Equipment
RM-50B	NPS' Reference Manual: Occupation Safety & Health Program
SOP	Standard Operating Procedure
SPE	"Severity X Probability X Exposure" risk assessment model from <i>Trail Safe!</i>
Swamper	Someone directly assisting a chainsaw operator
<i>Trail Safe!</i>	Safety video series for Risk Management and the "human factor" of safety
UPBBP	Universal Precautions of Blood Borne Pathogens
USFS	United States Forest Service

Purpose:

It is National Park Service (NPS) policy to provide a safe and healthful workplace for individuals performing chainsaw operations. The purpose of this Standard Operating Procedure (SOP) is to provide the rules and guidelines for operating a chainsaw in non-wildland fire settings within Ice Age National Scenic Trail (IATR). This SOP applies to all volunteers, employees, and partners. Contractors (private sector vendors who are awarded contracts to perform chainsaw work on NPS lands) who are not working directly under NPS Supervision will be required to have an equivalent safety program that is approved by the NPS Contracting Officer. Non-NPS Emergency rescue crews are exempt and are expected to have their own training program and safety requirements.

Background and Explanation:

The route of the Ice Age National Scenic Trail extends for approximately 1,200 miles and crosses numerous land management agency jurisdictions, including NPS (both IATR and St. Croix National Scenic Riverway); USFS (Chequamegon-Nicolet NF); US Fish & Wildlife Service (USFWS) refuges; WI Department of Natural Resources (WDNR) state parks and forests; numerous county public lands; and various other public and private properties. IATR requires a standardized chainsaw training and certification policy that is transferrable along various trail ownerships. Overall administration of the Ice Age National Scenic Trail is the responsibility of the Secretary of the Interior (*National Trails System Act, Public Law 90-543*).

There has previously been no NPS national policy, training, or certification program addressing chainsaw certification for non-wildland firefighters. The interagency Wildland Fire community had previously addressed this hazardous operation for Wildland Fire operations through policy and training, but much of the NPS felling operations are conducted by employees and volunteers who are not Wildland Firefighters. IATR policy until now has been to provide volunteers with a one-day chainsaw safety orientation course (FISTA curriculum offered at annual "Ice Age Trail-University" venues), but this training did not provide any official chainsaw certification designation for sawyers. USFS has had chainsaw certification standards in place for non-wildland fire personnel, but until recently those standards were not transferrable to NPS.

In 2016 the US Forest Service finalized its Forest Service Saw Plan (FSM 2350, Sections 2358.01 through 2358.6) found at <https://www.fs.usda.gov/about-agency/regulations-policies/saw-policy>

On April 8, 2019, the NPS' National Chainsaw Safety Program (NCSP) for Non-Wildland Fire Operations was signed, and included in NPS RM 50B, Chapter 15.
https://www.nps.gov/policy/RM50B_chainsaw_safety.htm

On April 24, 2020, RM 50B was amended to allow *Trail Safe!* as an acceptable substitute to the 16-hour NPS Operational Leadership training required by the NCSP for volunteers of National Historic and Scenic Trails only. The amendment also better clarified the need for "universal precautions" of Blood Borne Pathogens training. See Appendix A.

On March 15, 2021 a Memorandum of Agreement (MOA) was signed between USFS and NPS allowing for reciprocity of approved chainsaw training and certification standards. This MOA was updated on June 22, 2022. See Appendix B.

On April 7, 2021, IATR was granted a written Implementation Extension of its chainsaw safety program until October 31, 2022 to allow time for new and existing IATR sawyers to rotate through the new training course(s). See Appendix C.

Due to the long distance route of the Trail, the current number of volunteer sawyers (approximately 100-110) and their widespread locations, availability of instructors/evaluators, and considering the logistics and timing of training courses needed to initially stand up and then recurrently recertify sawyers, it is the determination of the Superintendent that **IATR will train and certify sawyers via the Forest Service Saw Plan**, while also incorporating elements of the NPS NCSP.

This determination does not preclude IATR from certifying chainsaw operators using stand-alone NCSP procedures/training standards if deemed beneficial for the park in future circumstances.

Chainsaw Certification Steps-- Quick Reference

1. Student registers for upcoming course and submits all pre-requisite materials
2. Student attends course; instructor/evaluator completes the evaluation form recommending level of chainsaw certification
3. Evaluator provides all evaluation forms to NPS
4. NPS fills out the saw certification card; superintendent signs; cards are forwarded to USFS District Ranger
5. USFS District Ranger signs saw certification cards, and returns to NPS for distribution
6. NPS files electronic copies of all final documents and mails saw certification cards to students

Roles and Responsibilities:

Superintendent

The superintendent, or their designee, is responsible for:

1. Ensuring compliance with all requirements set forth under this policy, including:
 - a) Training requirements
 - b) Skill competencies
 - c) Safe work practices
2. Appointing a Chainsaw Safety Program Manager within the park
3. Ensuring chainsaw operators follow USFS and/or NPS chainsaw safety program requirements as outlined in this SOP
4. Performing an annual review to ensure compliance with this program
5. Signing the chainsaw operator's National Sawyer Certification Card Form FS-2300-53 (see Appendix D) as a Co-Approving Official with the USFS. This authority may be delegated. Signatures are based on receiving the recommendation from the Instructor/Competency Evaluator stating that the individual has successfully met the competency qualification requirements set forth by this policy
6. Forwarding the National Sawyer Certification Card to the USFS District Ranger, Medford-Park Falls District, Chequamegon-Nicolet National Forest for final Co-Approving Official signature, along with all corresponding FSM 2358.3 evaluation forms

USFS District Ranger

The District Ranger, Medford-Park Falls District, Chequamegon-Nicolet National Forest is responsible for:

1. Signing the National Sawyer Certification Cards, and returning them to NPS for distribution to sawyers
2. Input information from FSM 2358.3 evaluation forms into the National Sawyer Certification Database if available, or otherwise maintain internal records of qualified sawyers following local Forest policy

Chainsaw Safety Program Manager

The program manager is responsible for serving as the primary point-of-contact at IATR for the chainsaw safety program. As delegated by the superintendent, the Chainsaw Safety Program Manager may support or assist the superintendent in his/her duties.

Among other duties delegated by the superintendent, the IATR Chainsaw Safety Program Manager will be responsible for:

1. Procuring and providing necessary PPE for sawyers and swampers

2. Reporting and investigating all near misses and incidents resulting in injury or property damage according to NPS and Department of the Interior (DOI) policy as well as OSHA regulations, and sharing that information with the USFS if the incident occurred on lands administered by the USFS
3. Creating a Lesson Learned paper from the investigation and submit it to the Regional Risk Management Office, and USFS District Ranger as applicable

First Line Supervisors/Partner Group

The term “supervisor” is applicable to the IATR Chainsaw Safety Program Manager; and IATA Staff who maintain their chainsaw certification and assist the NPS with overall chainsaw program management, and coordinate volunteer events involving chainsaw work.

Supervisors are responsible for:

1. Ensuring that an individual is designated as a “qualified chainsaw operator” (for the specific skill level at which he/she is assigned to perform)
2. Ensuring all assigned chainsaw operations are within an operator’s skill level
3. Ensuring all chainsaw operator qualification cards, CPR and First Aid Certification Cards, and UPBBP training are current
4. Taking corrective actions if any unsafe practices are observed
5. Reviewing record keeping procedures to determine that up-to-date and accurate records are kept
6. Cooperatively plan and schedule training courses in locations and quantities sufficient to ensure program viability

Instructor/Competency Evaluator

The Instructor/Evaluator is responsible for:

1. Instructing at the skill level commensurate with their saw qualifications, to include chainsaw safety, maintenance, complexity assessment, and operations (use)
2. Conduct sawyer training using Nationally Recognized Sawyer Training Courses (NRSTC)
3. Evaluate sawyers’ proficiency in the field using the Sawyer Training and Field Evaluation Form FS-2300-52 (see Appendix E)
4. Sign the Sawyer Training and Field Evaluation Form as the sawyer evaluator for sawyers that are determined to have satisfactorily met the requirements for the safe use of saws and recommend them for certification by the certifying official

5. Provide the NPS Superintendent or the designated NPS Chainsaw Safety Program Manager with copies of all completed FS-2300-52 evaluation forms

Chainsaw Operator

Operators are responsible for:

1. Maintaining the correct tools and accessories in good repair before starting any chainsaw operation
2. Protecting equipment and tools from damage during transport or use
3. Operating chainsaws within their qualification rating (see Appendix F)
4. Conducting Risk Analysis and following JHA procedures before and during chainsaw operations (see Appendix G)
5. Always enlisting the assistance of a qualified swamper during chainsaw operations
6. Helping IATR/IATA to identify swampers in their section of the Trail so that appropriate PPE can be provided to the swampers
7. Notifying their first-line supervisor of any chainsaw operation they are not comfortable performing or that is above their ability to perform
8. Notifying the first-line supervisor of all chainsaw safety related incidents including injury, property damage, and "near miss" incidents
9. Maintaining records of their own required training and qualification/re-qualifications completed
10. Presenting verification of current chainsaw certification, and certification in First Aid, CPR, and UPBBP training to their first-line supervisor and/or mentor
11. Chainsaw operators must be at least 18 years of age

Swampers

Swampers are responsible for:

1. Meeting all pre-requisites before assisting sawyers (OF-301A Volunteer Agreement, currency in First Aid/CPR, and completion of Safe Swamping and *Trail Safe!* videos)
2. Wearing all PPE required of swampers (logger's hard hat with eye and hearing protection, gloves, and sturdy leather boots)
3. Following all instructions from the sawyer

4. Assisting the sawyer to maintain control of the operation site and surrounding area

Mentors/Program Growth

An important component to the growth, and overall success, of the IATR Chainsaw Safety Program is the willingness for sawyers who currently have higher saw qualifications than others to facilitate opportunities for mentoring and skills coaching.

A chainsaw mentor is a sawyer who works with and coaches other certified sawyers having saw qualifications at or below the qualifications of the mentor. Mentoring will assist sawyers to gain additional practice and skills which may allow them to be recommended for a higher saw qualification during subsequent training and evaluation courses conducted by the Instructor/Competency Evaluator.

Mentors shall refer to the charts in Appendix F of this policy to ensure they are coaching other sawyers commensurate with the saw qualifications of all involved.

Training Course Scheduling & Rotation

Chainsaw certification is valid for three years. Courses are capped at 12 students per course. To consistently maintain a cadre of at least 100 qualified sawyers throughout IATR, three to four training courses must be offered each year. Training venues must be established in various geographic locations along the Trail route to minimize volunteer sawyer travel and personal expense. Training venues must also take into consideration the location of most existing IATR sawyers in order to maximize attendance while minimizing volunteer travel needs.

To the extent possible, IATR and IATA will schedule training courses within a 90-mile radius of known populations of existing sawyers (see Appendix H).

To the extent possible, recurring training courses (primarily refresher courses for current sawyers) will return to a previously established training venue three years after the initial course was provided at a particular venue/geographic area. (i.e.: training conducted in Cross Plains, WI in 2021 should again be offered there in 2024 to re-certify those who attended in 2021). Exact training venues may vary due to various factors such as property availability/permission, compliance requirements, etc., but should remain as near to previous venues within a geographic area as possible.

Attrition of existing sawyers will allow for a measured influx of new sawyers to attend upcoming training courses. To the extent possible, sawyers should attempt to receive their recertification within geographic venues where they initially attended, and in years when their expiration dates will occur. This will streamline planning processes and funding requests to

proactively ensure future courses are being offered in predictable manners, and ensure that training opportunities are available where and when needed most.

IATR and IATA may consider offering additional chainsaw skills training in places and at times as funding and logistics allow in order to grow the overall chainsaw program for new sawyer numbers, and offer opportunities for qualified sawyers to improve their skills, attain higher qualification levels, and/or serve as mentors to others.

Training course locations and dates will be determined annually by IATR and IATA, and will be announced to volunteers each year in time for individual planning by those who need to attend to maintain their certification, or those seeking to gain initial certification.

Training Application Process

As training courses are announced and advertised, volunteers will fill out and submit a Chainsaw Training Application to the IATA. This will assist IATA to determine class rosters and create “stand-by” lists. See Appendix I.

Training Pre-Requisites

Prior to being accepted into a chainsaw training course, all sawyers must fulfill the following training pre-requisites and provide verification as noted:

- **OF-301a Individual Volunteer Services Agreement**
Volunteers must have a completed and signed Individual Volunteer Agreement on file with the NPS. The form and instructions are available at https://www.iceagetrail.org/wp-content/uploads/fillable_individual-301a-updated-packet.pdf or https://www.nps.gov/iatr/getinvolved/supportyourpark/iatr_vip_program.htm
- **Safe Swamping Video**
Volunteers (both sawyers and swampers) must watch the “Safe Swamping” video found on the Alliance’s website at <https://www.iceagetrail.org/get-involved/volunteer/nps-chainsaw-training/>. Email the NPS and IATA when you have watched this video for pre-requisite credit.
- **Trail Safe! Risk Management Videos**
Volunteers must view all eight safety videos in order to perform Risk Assessments as outlined below. Email the NPS your participation verification per the instructions found at <https://www.nps.gov/iatr/trail-safe.htm>. All videos are available through this same link.
- **First Aid/CPR Certification**
Volunteers must always maintain current certification in First Aid and CPR in order to operate chainsaws, and for acceptance into chainsaw training. Training should be attained from a nationally recognized provider such as American Red Cross, American

Heart Association, or equivalent.

Physician and/or nursing certifications or licenses alone do not qualify as proof of currency in First Aid and CPR.

On-line only training is not sufficient to attain a saw qualification card or to operate a chainsaw. “Blended” courses that comprise a mix of on-line training and in-person skills training are acceptable. Certification cards that are “provisional” (meaning on-line only) are not sufficient.

(Provisional certification is acceptable only to participate in training and evaluation courses, but the sawyer will not be issued a saw card until the skills portion of First Aid/CPR has been completed—nor may the volunteer operate a chainsaw outside of the official training environment until they have met full compliance with First Aid/CPR requirements).*

Per Appendix A, First Aid and CPR certification courses must also include “Universal Precautions” of Blood Borne Pathogens (UPBBP). UPBBP (wearing rubber gloves while performing first aid, using barrier masks while performing CPR, etc.) are typically addressed by nationally recognized providers as part of the standard First Aid/CPR training curriculum. **There is no requirement to register and pay for the full Blood Borne Pathogens training** these vendors may offer. The full Blood Borne Pathogen certification is focused on those who work in the Emergency Medical Field and is not required for chainsaw certification.

Submit copies of your First Aid/CPR certification documentation to IATR and/or IATA.

Submit copies of your First Aid/CPR training receipts directly to IATA for reimbursement of personal expenses.

Swamper Qualifications

Swampers are subject to the same pre-requisites as sawyers. Follow the guidelines above for remaining current with an OF-301a Volunteer Agreement, Safe Swamper and *Trail Safe!* videos completion, and current certification in First Aid/CPR.

Chainsaw Operator Qualification Levels

Taken directly from USFS Saw Policy

A Sawyer. An apprentice sawyer who may saw only in the least complex situations or, for training purposes, at the next higher level and in either case only under the immediate supervision of a B or C Sawyer qualified to supervise the work (FSM 2358.1, Appendix F).

B Sawyer – Bucking Only (not applicable in the fire management context). An

intermediate sawyer who may independently buck and limb any size material in moderately complex situations and who may saw at the next higher level, but only under the immediate supervision of a sawyer qualified to supervise the work (FSM 2358.1, Appendix F).

B Sawyer – Felling and Bucking. An intermediate sawyer who may independently fell, buck, and limb any size material in moderately complex situations. This person may saw at the next higher level under the immediate supervision of a sawyer qualified to supervise the work (FSM 2358.1, Appendix F). This person may also conduct classroom and field training for A and B Sawyers with prior written approval from the Saw Program Coordinator.

C Sawyer – Bucking Only (not applicable in the fire management context). An advanced sawyer who may independently buck and limb any size material in highly complex situations based on the Regional Saw Program Manager's or Saw Program Coordinator's written recommendation. The recommendation must be supported by demonstrated advanced saw knowledge, skills, and in most cases certification as a B Sawyer (FSM 2358.1, Appendix F). This person may conduct classroom and field training within that person's skill level for A and B Sawyers, and may conduct field proficiency evaluations within that person's skill level for A Sawyers and B Sawyers – Bucking Only.

C Sawyer – Felling and Bucking. An advanced sawyer who may independently fell, buck, and limb any size material in highly complex situations based on the Regional Saw Program Manager's or Saw Program Coordinator's written recommendation. The recommendation must be supported by demonstrated advanced saw knowledge, skills, and in most cases certification as a B Sawyer (FSM 2358.1, Appendix F). This person may conduct classroom, field training, and proficiency evaluations for A and B Sawyers.

C Sawyer Evaluator. An advanced sawyer who may independently fell, buck, and limb any size material in highly complex situations based on the Regional Saw Program Manager's written recommendation. The recommendation must be supported by the successful completion of training on organizing and conducting advanced sawyer evaluation sessions in the field, demonstrated advanced saw knowledge and skills, and in most cases certification as a C Sawyer – Felling and Bucking for at least 3 years (FSM 2358.1, Appendix F). This person may conduct classroom, field training, and proficiency evaluations for sawyers at all certification levels.

Revocation

Revocation processes are initiated by the first-line supervisor and approved by the park superintendent. Revocation of chainsaw operator qualification may occur when:

1. An operator has failed to demonstrate appropriate operational procedures resulting in placing themselves or others in danger
2. An operator lacks the physical ability to safely undertake cutting activities commensurate

with their qualification

3. The review of chainsaw-related accidents and near misses reveals the operator was acting outside of their qualification

Risk Analysis:

Prior to beginning each chainsaw operation/task, the crew/operator must perform a risk analysis using the *Trail Safe!* GAR and/or SPE analysis, or similar model, to determine a task rating of:

- a) Low risk
- b) Moderate risk
- c) High risk

Regardless of task rating, all sawyers must still operate within their skill level and certification limitations. Risk Analysis is performed to identify and mitigate hazards.

Personal Protective Equipment:

The intent of PPE is to protect an individual from injury or illness when a hazard cannot be controlled through engineering controls or other more suitable methods. It is the last line of defense.

Sawyers and Swampers will provide their own boots and gloves. The park will provide all other PPE. Refer to JHA #6 (Appendix G) for a list of required and recommended PPE for both Sawyers and Swampers.

Recommended PPE items (belt trauma kit and safety whistle) become mandatory PPE when the Risk Analysis indicates a high risk operation.

Mandatory First Aid Kit Supplies (29 CFR 1910.266)

The following list sets forth the minimally acceptable number and type of first aid supplies for first aid kits required under paragraph (d)(2) of the logging operations standard (29 CFR 1910.266). The contents of the first aid kit listed should be adequate for small work sites, consisting of approximately two to three individuals. When larger operations or multiple operations are being conducted at the same location, additional first aid kits should be provided at the work site or additional quantities of supplies should be included in the first aid kits:

1. Gauze pads (at least 4 x 4 inches).
2. Two large gauze pads (at least 8 x 10 inches).
3. Box adhesive bandages (Band-Aids).

4. One package gauze roller bandage at least 2 inches wide.
5. Two triangular bandages.
6. Wound cleaning agent such as sealed moistened towelettes or bottles of sterile water.
7. Scissors.
8. At least one blanket.
9. Tweezers.
10. Adhesive tape.
11. Latex gloves.
12. Resuscitation equipment such as resuscitation bag, airway, or pocket mask.
13. Two elastic wraps.
14. Splint.
15. Directions for requesting emergency assistance.

Trauma kit must be kept in a properly labeled container that is organized and kept in a clean and neat condition.

In addition to the supplies listed above, each trauma kit must have a Safety Plan that is filled out at each job.

The park will provide First Aid Kits that meet this standard to all certified sawyers.

Appendix A

Trail Safe! and UPBBP Changes to RM 50B



United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, DC 20240

IN REPLY REFER TO:
2430

April 24, 2020

Memorandum

To: Regional, Associate, and Assistant Directors

From: Associate Director, Visitor and Resource Protection JENNIFER FLYNN Digitally signed by JENNIFER FLYNN
Date: 2020.04.24 16:14:29 -0400

Subject: Changes to Reference Manual 50B, Ch 15. *National Chainsaw Safety Program*

On April 17, 2019, the National Chainsaw Safety Program was released under Reference Manual 50B, *Occupational Safety and Health Program*, with an implementation date of May 1, 2020. Over two hundred comments were received from the field and addressed before the policy was released, and the National Park Service's first Servicewide chainsaw policy has been well received. During the last 12 months, members of the Chain Saw Safety Working Group have continued to look for opportunities to make the policy more effective, and to assist parks in implementing effective safety programs around this use. Two requirements that have caused the field difficulty have been identified, and the following changes are incorporated:

1. Bloodborne Pathogens Training. The current policy requires all chainsaw operators to complete Bloodborne Pathogens (BBP) training. The policy is amended to provide clarity that all chainsaw operators must receive training in "universal precautions". The concept of "universal precautions", a component of BBP protection, is addressed during required First Aid and CPR training. Supervisors shall ensure First Aid and CPR training for employees includes universal precautions.
2. Operational Leadership. The current policy requires chainsaw operators to complete the 16-hour NPS Operational Leadership Course. While over 30,000 NPS employees have completed the training, volunteers who work for partner organizations maintaining National Historic and Scenic Trails do not have ready access to this training; therefore, the chainsaw policy has been modified to allow trail volunteers supervised by partner organizations who are a part of the Trails system to complete the NPS "TrailSafe!" risk management training program as an equivalent training to fulfill this requirement. NPS employees and volunteers directly supervised by the NPS must continue to complete the 16-hour Operational Leadership training, but formal risk management training equivalent to the 16-hour Operational Leadership Course is acceptable until newly hired permanent or seasonal employees or volunteers are able to attend the NPS Operational Leadership Course. Regional

Appendix A continued

Safety Managers and the Office of Risk Management can be consulted for questions regarding equivalent training.

The changes listed above are in effect as of the date of this memorandum, and the new implementation date of the National Chain Saw Safety Program is May 1, 2021.

Please direct questions to Daryl Avery, Branch Chief, Occupational Safety and Health, at daryl_avery@nps.gov, or Susan Eaves, Occupational Safety Manager, at susan_eaves@nps.gov.

Attachments

Cc: (A) Deputy Director, Operations
Deputy Regional Directors
All Superintendents
Chief, Office of Risk Management
Regional Safety and Health Managers
National and Historic Trails Program Manager

Appendix B

MEMORANDUM OF AGREEMENT

between the

**UNITED STATES DEPARTMENT OF AGRICULTURE
UNITED STATES FOREST SERVICE**

and the

**UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE**

REGARDING RECIPROCITY OF THEIR SAWYER TRAINING, EVALUATION, AND CERTIFICATION PROGRAMS

I. PARTIES

Agriculture (USDA), United States Forest Service (FS) and the United States Department of the Interior (DOI), National Park Service (NPS), collectively referred to as “the Agencies.”

II. PURPOSE

The purpose of this MOA is to document agreement between the FS and NPS to grant reciprocity to each other’s chainsaw and crosscut saw program (“saw program”) and to accept training, evaluation, and certification conducted by the other agency for volunteers and cooperators. This agreement does not apply to chainsaw use in wildland firefighting operations.

III. STATEMENT OF MUTUAL BENEFIT AND INTERESTS

The FS and NPS rely heavily on volunteers and cooperators utilizing chainsaws and crosscut saws (saws) to achieve each respective agency’s mission. Both the FS and NPS require saw operators to be trained, evaluated, and certified in accordance with specific requirements. After reviewing their saw programs as reflected in Attachment A and Attachment B, the FS and NPS have determined they are similar enough to accept the saw program training, evaluation, and certification conducted by the other Agency. Granting reciprocity to each other’s saw program will improve efficiency in program administration, particularly in use of chain saws and crosscut saws, while continuing to ensure competency of operators on lands managed or areas administered by the Agencies.

IV. AUTHORITY

This MOA is executed under the following authorities:

A. Organic Administration Act, 16 U.S.C. § 551.

- B. Organic Act of 1916, 54 U.S.C. §100101 et seq.
- C. Occupational Safety and Health Act of 1970, Sections 6 and 19, 29 U.S.C. §§ 655 and 668.
- D. Executive Order 12196, Occupational Safety and Health Programs for Federal Employees.

V. RECIPROCITY OF THE AGENCIES' SAW PROGRAMS

The Agencies have reviewed each other's sawyer training, evaluation, and certification programs as reflected in Attachments A and B and agree that:

- A. While the programs have different processes, the programs are similar, and both ensure the competency of operators.
- B. Each Agency will accept the saw program training, evaluation, and certification conducted under the other Agency's program for individuals working under agreement for a volunteer partner or cooperator organization on lands managed or areas administered by each Agency.
- C. Volunteers and cooperators operating a chain saw or crosscut saw on lands managed or areas administered by either Agency:
 - 1. Must carry a valid FS National Sawyer Qualification Card or NPS National Chainsaw Safety Program Qualification Card; and
 - 2. Must be affiliated with a volunteer or cooperator organization authorized to perform work involving use of a chain saw or crosscut saw under an agreement with the Agency that has management or administration responsibility over the land or area.

VI. GENERAL PROVISIONS

FS Contact	NPS Contact
Pete Duncan National Saw Program Manager Recreation, Heritage, and Volunteer Resources USDA-Forest Service o: 530-394-8100 c: 530-394-8100 pete.duncan@usda.gov	Daryl Avery Branch Chief, Occupational Safety and Health DOI-National Park Service c: 202-768-1490 daryl_avery@nps.gov

A. Principal Contacts. The principal contacts for this MOA are:

Any communications by the FS or NPS related to the matters covered by this MOA will be delivered in person, mailed, or transmitted electronically by e-mail or facsimile to the contacts identified above.

- B. Conduct of Activities. The FS and NPS and their respective divisions and offices will handle their own activities and utilize their own resources, including the expenditure of their own funds, in pursuing the objectives of this MOA. Each Agency will carry out its separate activities in a coordinated and mutually beneficial manner.
- C. Non-Fund-Obligating Document. Nothing in this MOA shall obligate either the FS or NPS to obligate or transfer any funds. Specific work projects or activities that involve the transfer of funds, services, or property among the various divisions and offices of the FS or NPS will require execution of separate agreements and be contingent upon the availability of appropriated funds. Such activities must be independently authorized by appropriate statutory authority. This MOA does not provide such authority. Negotiation, execution, and administration of each such agreement must comply with all applicable statutes and regulations.
- D. Lack of Benefit to Members of Congress. Pursuant to 41 U.S.C. § 22, no member of or delegate to Congress may benefit from this MOA, either directly or indirectly.
- E. Enforceability. This MOA is not intended to, and does not create, any right or benefit, substantive or procedural, enforceable at law or equity, by a party against the United States, its agencies, its officers, or any person.
- F. Existing Authority. Nothing in this MOA is intended to alter, limit, or expand the Agencies' statutory and regulatory authority.
- G. Participation in Similar Activities. This MOA in no way restricts either of the Agencies from participating in similar activities with other public or private agencies, organizations, and individuals.
- H. Effective Date, Extension, Amendment, and Termination. This MOA takes effect upon the signature of the FS and NPS and shall remain in effect for five years from the date of execution. This MOA may be extended or amended upon written request of either the FS or NPS and the subsequent written concurrence of the other Agency. Either the FS or NPS may terminate this MOA with a 60-day written notice to the other Agency.

VII. SIGNATORIES

By signing below, the respective Agencies certify that the individuals listed in this MOA are their representatives and are authorized to act in their respective areas for matters related to this MOA.

GORDON BLUM Digitally signed by GORDON BLUM
Date: 2022.06.22 08:43:06 -05'00'

Gordon Blum
Acting Director
Recreation Heritage, and Volunteer Resources
United States Department of Agriculture
United States Forest Service

Date

JENNIFER FLYNN Digitally signed by JENNIFER FLYNN
Date: 2022.06.06 13:11:21 -04'00'

Jennifer Flynn
Associate Director
Visitor and Resource Protection
United States Department of the Interior
National Park Service

Date

Appendix C

IATR Implementation Extension



United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, DC 20240

IN REPLY REFER TO
I.C. (2400)

April 7, 2021

Memorandum

To: Superintendent, Ice Age National Scenic Trail

From: Associate Director, Visitor and Resource Protection **JENNIFER FLYNN**

Subject: National Chainsaw Safety Program Policy – Implementation Extension

Digitally signed by JENNIFER FLYNN
Date: 2021.04.07 15:08:17 -0400

Your waiver request for the implementation of the training-related program elements outlined in Reference Manual 50B, *Occupational Safety and Health Program*, Chapter 15, *National Chainsaw Safety Program*, is approved. The full policy implementation deadline for Ice Age National Scenic Trail is now October 31, 2022.

As stated in your waiver request, all other program elements identified in Chapter 15 will follow the Servicewide implementation deadline. If you do achieve full implementation prior to October 31, 2022, please inform the Office of Risk Management.

As requested, the signed Reciprocity Memorandum of Agreement is attached for your reference.

Please direct questions to Daryl Avery, Branch Chief, Occupational Safety and Health, at daryl_avery@nps.gov or at 202-678-1490.



Attachment: NPS & USFS Memorandum of Agreement, Chainsaw Safety Reciprocity Agreement

Cc: Regional Director, Regions 3, 4, & 5
Chief, Office of Risk Management
Chief, Office of Policy
Regional Safety Manager, Regions 3, 4, & 5

Appendix D

Sawyer Certification Card

Form FS-2300-53, National Sawyer Certification Card

 United States Department of Agriculture			
National Sawyer Certification Card <small>(Ref. FSM 2358)</small>			
Sawyer Name:		Date Issued:	
Agency:		Region:	
Cooperator:		Forest:	
 Forest Service		<small>FS-2300-53 (09/2016)</small>	
Chain Saw	Crosscut	Saw	Evaluator
Expiration			(Print)
		A Sawyer — Felling	
		B Sawyer — Bucking Only	
		B Sawyer — Felling and Bucking	
		C Sawyer — Bucking Only	
		C Sawyer — Felling and Bucking	
		C Sawyer — Evaluator	
Certifying Official Signature:		Title:	Date:

Appendix E

Evaluation Form

Form FS-2300-52, Sawyer Training and Field Evaluation for Chain Saws

Name:	Date:	Agency/Cooperator Name:
Training Location: Classroom: Field:	Address:	
Telephone Number:	<input type="checkbox"/> Yes, I permit the Forest Service to share my Sawyer qualifications and e-mail address with other federal agencies and non-federal organizations so that I can be contacted about saw project opportunities in my area. _____ (initial)	
E-mail Address:		
Previous Certification: Yes <input type="checkbox"/> No <input type="checkbox"/> Level _____ Agency/Unit _____ Year _____		
First Aid/CPR: <input type="checkbox"/> I certify that I have completed and will maintain first aid and CPR training _____ (initial)		

BELOW THIS LINE - TO BE COMPLETED BY SAWYER EVALUATOR					
SAFETY EQUIPMENT AND TOOLS					
Y/N		Y/N		Y/N	
	Hard hat		Gloves		Approved fuel/oil container
	Eye protection		Boots		Bar guard
	Hearing protection		Chaps		Whistle/radio/cellular telephone
	Long-sleeved shirt		Axe (3-5 lb)		Wedges
	First aid kit		Chain saw		Tool kit
SAW USE: APPLIES TO ALL CUTTING OPERATIONS					
SCORE		SCORE		SCORE	
	Starting procedure		Bar tip use (boring)		Positive communication with co-workers
	Correct body position		Control of cutting area		Cut preparation
	Thumb placement				
	Bar tip use (general)				
	Chain brake use				
LIMBING and BRUSHING					
SCORE		SCORE		SCORE	
	Overhead & ground hazard analysis		Limb removal sequence		
	Escape route		Spring poles (tension/compression analysis)		
	Swamp out of work area		Kickback recognition		
BUCKING					
SCORE		SCORE		SCORE	
	Overhead & ground hazard analysis		Wedging procedure		
	Swamp out of work area		Bucking sequence		
	Bind/tension (compression analysis)		Axe use		
	Kerf observation		Use of compound cuts		
	Escape route		Kickback recognition		
	Multiple bind situations				

Privacy Act Statement

Collection and use is covered by Privacy Act System of Records OPM/GOVT-1 and USDA/OP-1, and is consistent with the provisions of 5 USC 552a (Privacy Act of 1974), which authorizes acceptance of the information requested on this form. The data will be used to maintain official records of volunteers of the USDA for the purposes of tort claims and injury compensation. Furnishing this data is voluntary, however, if this form is incomplete, enrollment in the program cannot proceed.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800) 795-3272 (voice) or

Appendix E continued

Sawyer Name: _____

FELLING					
SCORE		FELLING AREA	SCORE		FELLING PROCEDURE
		Control of cutting area			Procedure alteration (if necessary)
		Ground & overhead hazard analysis			Wedging procedure
		Positive communication			Use of escape route/safety zone
		FELLING PROCEDURE			Exposure time at stump
		Go/no-go decision/walk away			
		Plumbing of lean (determination of lay)			STUMP ANALYSIS
		Cutting Plan			Felling to desired lay
		Use of gunning sights			Undercut/facecut
		Undercut/facecut			Stump shot
		Warning shout			Hinge/holding wood
		Back cut			Other
		Proper body position/looking up			

EVALUATOR'S STUMP ANALYSIS SKETCHES					
Tree 1		Tree 2		Tree 3	
Height _____	DBH _____	Height _____	DBH _____	Height _____	DBH _____
% Slope _____	Species _____	% Slope _____	Species _____	% Slope _____	Species _____
Condition _____		Condition _____		Condition _____	
Feet from center of lay _____		Feet from center of lay _____		Feet from center of lay _____	

COMMENTS: Attitude, Confidence, Commitment level, Technical Skills, Awareness, Verbal Skills, Weak-Strong Traits, etc.

Certification Level, Subject to Final Approval

- ☐ A Sawyer
 ☐ B Sawyer – Bucking Only
 ☐ B Sawyer – Felling and Bucking
 ☐ C Sawyer – Bucking Only
☐ C Sawyer – Felling and Bucking
 ☐ C Sawyer Evaluator

Evaluator's Signature _____ Sawyer Level _____

Evaluator's Name _____ Evaluator's E-mail Address _____

Evaluator's Signature _____ Sawyer Level _____

Evaluator's Name _____ Evaluator's E-mail Address _____

Student's Signature _____

Appendix F

FSM 2358.1: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

<p>A Sawyer</p>	<p>May saw only in the least complex situations or, for training purposes, at the next higher level and in either case only under the immediate supervision of a B or C Sawyer qualified to supervise the work.</p> <p>Sawing activities restricted to brushing, bucking, and limbing and, if specifically noted on the sawyer's National Sawyer Certification Card, felling the least complex, small-diameter trees.</p> <p>Has successfully completed an NRSTC that introduces general sawing principles, including brushing, bucking, limbing, and felling; has been trained at the introductory level; and has successfully completed a sawyer training and field proficiency evaluation for that level.</p> <p>The proficiency of A Sawyers is determined by a sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: at least 4 hours</p> <p>Demonstrated Field Proficiency: at least 8 hours</p> <p>Total Training: 12-36 hours</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction utilizing one or more NRSTCs, including introduction and review of:</p> <ul style="list-style-type: none"> • JHA. • PPE requirements. • Saw accidents, near misses, and lessons learned from them. • Forest Service saw directives (FSM 2358 and FSH 6709.11, sec. 22.48). • Situation awareness. • Proper selection, maintenance, and care of saws and other cutting equipment. • Operational safety. • Introduction to brushing, bucking, limbing, and felling techniques. • Proper stance and maintenance of a safe work area. 	<p>Developed through hands-on operation of saws and axes.</p> <ul style="list-style-type: none"> • Emphasis is placed on situation awareness, correctly selecting and using tools, and saw and axe handling techniques. • Practices and successfully demonstrates brushing, bucking, and limbing logs of various sizes and in minimally complex situations. • Introduced to felling in minimally complex situations. • Demonstrates ability to identify various binds and the proper method and sequence of cuts to safely release them. • Demonstrates ability to assess when a sawing task exceeds the sawyer's capabilities. <p>Field Evaluation: Demonstrated application of formal instruction in brushing, bucking, and limbing techniques of least complexity. Demonstrated proficiency in and safe use of a saw in the least complex situations.</p>
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Appendix F continued

FSM 2358.1: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

<p>B Sawyer – Bucking Only</p>	<p>This certification level is not used for fire management activities. There is no Incident Qualification and Certification System (IQCS) equivalent.</p> <p>May independently buck and limb any size material in moderately complex situations within the restrictions noted on the sawyer's National Sawyer Certification Card.</p> <p>May saw at the next higher level, but only under the immediate supervision of a sawyer qualified to supervise the work.</p> <p>May not fell.</p> <p>Can supervise A Sawyers when they are bucking but not when felling</p> <p>Has successfully completed an NRSTC covering general saw bucking, limbing, and brushing.</p> <p>The proficiency of B Sawyers – Bucking Only is determined by a sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: at least 4 hours</p> <p>Demonstrated Field Proficiency: at least 4 hours</p> <p>Total Training: 8-36 hours</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction utilizing one or more NRSTCs, which review the topics covered in A Sawyer training and introduce:</p> <ul style="list-style-type: none"> • Types of binds and techniques to relieve them. • In-depth instruction on bucking, limbing, and brushing techniques. • Identification and evaluation of hazardous bucking situations. • Proper turndown procedure for cutting situations that exceed the sawyer's abilities. • Specialized saw uses, as needed. 	<ul style="list-style-type: none"> • Proficient in basic saw skills and use of tools needed for crosscut, axe, and chain saw use. • Successfully demonstrates techniques for brushing, bucking, and limbing logs of various sizes and in various binds. • Demonstrates completeness and accuracy of log size-up, placement of wedges, complexity analysis, and application of safe bucking techniques. • When using a crosscut saw, proficient in single and double bucking techniques, including clear team communication. • Demonstrates ability to assess when a sawing task exceeds the sawyer's capabilities. <p>Field Evaluation: Demonstrated application of formal instruction in brushing, bucking, and limbing techniques of moderate complexity. Demonstrated proficiency in and safe use of a saw in moderately complex situations.</p>
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Appendix F continued

FSM 2358.1: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

<p><u>B Sawyer – Felling and Bucking</u></p>	<p><u>May independently fell, buck, and limb any size material in moderately complex situations within the restrictions noted on the sawyer's National Sawyer Certification Card.</u></p> <p><u>May saw at the next higher level under the immediate supervision of a sawyer qualified to supervise the work.</u></p> <p><u>Has successfully completed an NRSTC for general felling and bucking.</u></p> <p><u>Can supervise any A Sawyer.</u></p> <p><u>May conduct formal instruction for A and B Sawyers with written approval from the Saw Program Coordinator.</u></p> <p><u>May not conduct field proficiency evaluations of A and B Sawyers.</u></p> <p><u>The proficiency of B Sawyers – Felling and Bucking is determined by a sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</u></p>	<p><u>Formal Instruction: at least 8 hours</u></p> <p><u>Demonstrated Field Proficiency: at least 12 hours</u></p> <p><u>Total Training: 20-36 hours</u></p> <p><u>Prerequisites: First Aid and CPR</u></p>	<p><u>Acquired through formal instruction utilizing one or more NRSTCs, which review the topics covered in A Sawyer training and introduce:</u></p> <p><u>Types of binds and mitigation techniques.</u></p> <p><u>Principles of felling and bucking.</u></p> <p><u>In-depth instruction on felling techniques in moderately complex situations.</u></p> <p><u>Identification and evaluation of hazardous felling and bucking situations.</u></p> <p><u>Proper turndown procedure for cutting situations that exceed the sawyer's abilities.</u></p> <p><u>Solutions for hung-up trees.</u></p> <p><u>Specialized saw uses, as needed.</u></p>	<p><u>Proficient in basic saw skills and tools needed for crosscut, axe, and chain saw use.</u></p> <p><u>Demonstrates proficiency in all skills listed in B Sawyer – Bucking Only.</u></p> <p><u>Demonstrates proper placement of face cuts and back cuts in sound trees, as verified by stump analysis.</u></p> <p><u>Demonstrates completeness and accuracy in tree size-up, complexity analysis, placement of wedges, undercuts, back cuts, and stump analysis.</u></p> <p><u>Proficient in single and double bucking techniques, including clear team communication (crosscut saw only).</u></p> <p><u>Demonstrates ability to assess when a sawing task exceeds sawyer's capabilities.</u></p> <p><u>Can safely remove hung-up trees of low complexity.</u></p> <p><u>Field Evaluation:</u></p> <p><u>Demonstrated application of formal instruction in brushing/felling/bucking/limbing tech. of moderate complexity.</u></p> <p><u>Demonstrated proficiency in/safe use of saw in moderately complex situations.</u></p>
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Appendix F continued

FSM 2358.1: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

<p>C Sawyer – Bucking Only</p>	<p>This certification level is not used for fire management activities. There is no IQCS equivalent.</p> <p>May independently buck and limb any size material in highly complex situations based on the recommendation of the Regional Saw Program Manager or Saw Program Coordinator, which is supported by demonstrated advanced saw knowledge and skills and, in most cases, certification as a B Sawyer.</p> <p>Has experience working with C Sawyers in analyzing and implementing safe bucking practices in complex situations. Has demonstrated ability for advanced saw work, advanced understanding of Forest Service saw directives, and ability to teach saw skills to others. Has demonstrated good judgment in assessing complex situations and own skill limitations and in safely completing sawing tasks.</p> <p>May conduct formal instruction within that person's skill level for A and B Sawyers.</p> <p>May conduct field proficiency evaluations within their skill level for A Sawyers and B Sawyers – Bucking Only.</p> <p>The proficiency of C Sawyers – Bucking Only is determined by one sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: required; variable</p> <p>Demonstrated Field Proficiency: variable</p> <p>Total Training: to be determined by sawyer instructor</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction that:</p> <p>(a) utilizes information gathered and activities designed by the C Sawyer Evaluator that are specifically tailored to local needs; (b) reviews the topics covered in B Sawyer training; and (c) introduces:</p> <ul style="list-style-type: none"> • Principles of advanced bucking. • Advanced bucking techniques. • Determination of complexity of saw operations. • Tree health. • Fiber characteristics. • Advanced teaching methods and techniques for evaluating A and B Sawyers. 	<ul style="list-style-type: none"> • Proficient in advanced saw skills and tools needed for crosscut saw, axe, and chain saw use. • Able to communicate knowledge effectively and demonstrate field skills clearly to A and B Sawyers. • Able to understand, use, and communicate the contents of applicable federal regulations regarding the use of saws in the workplace and Forest Service saw directives to other sawyers and staff. • Able to complete complex bucking tasks safely, including single and double bucking (crosscut saw only). • Able to identify defects in danger trees comprehensively and clearly. • Additional skills may include refinement of various cutting techniques; decision processes for determining the use of saws, rigging, and explosives; and techniques for removing cut logs, such as use of skids and other mechanical means. <p>Field Evaluation: Evaluations may take place during regularly scheduled NRSTCs. Demonstrated application of formal instruction in brushing, bucking, and limbing techniques in highly complex situations. Demonstrated proficiency in and safe use of a saw in highly complex situations.</p>
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Appendix F continued

FSM 2358.1: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

<p>C Sawyer – Felling and Bucking</p>	<p>May independently fell, buck, and limb any size material in highly complex situations based on the written recommendation of the Regional Saw Program Manager or Saw Program Coordinator, which is supported by demonstrated advanced saw knowledge and skills and, in most cases, certification as a B Sawyer.</p> <p>Has experience working with C Sawyers in analyzing and implementing safe felling and bucking practices in complex situations. Has demonstrated ability for advanced saw work, advanced understanding of Forest Service saw directives, and the ability to teach saw skills to others. Has demonstrated good judgment in assessing complex situations and own skill limitations and in safely completing sawing tasks. May conduct formal instruction and proficiency evaluations for A and B Sawyers.</p> <p>The proficiency of C Sawyers – Felling and Bucking is determined by two sawyer evaluators, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: required; variable</p> <p>Demonstrated Field Proficiency: variable</p> <p>Total Training: to be determined by sawyer instructor</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction that:</p> <p>(a) utilizes information gathered and activities designed by the C Sawyer Evaluator that are specifically tailored to local needs; (b) reviews the topics covered in B Sawyer training; and (c) introduces:</p> <ul style="list-style-type: none"> • Principles of advanced felling and bucking. • Advanced felling and bucking techniques. • Determining complexity of saw operations. • Tree health. • Fiber characteristics. • Advanced teaching methods and techniques for evaluating A and B Sawyers. 	<ul style="list-style-type: none"> • Proficient in advanced saw skills and tools needed for crosscut, axe, and chain saw use. • Demonstrates proficiency in all skills listed in C Sawyer – Bucking Only. • Able to communicate knowledge effectively and demonstrate field skills clearly to A and B Sawyers. • Able to identify defects in danger trees comprehensively and clearly. • Able to fell trees of a greater diameter than the length of the saw bar (chain saw only). • Able to fell trees against their natural lean. • Additional skills may include refinement of various cutting techniques; decision processes for determining the use of saws, rigging, and explosives; and techniques for removing standing trees. <p>Field Evaluation: Evaluations may take place during regularly scheduled NRSTCs. Demonstrated application of formal instruction in brushing, bucking, felling, and limbing techniques in highly complex situations. Demonstrated proficiency in and safe use of a saw in highly complex situations.</p>
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Appendix F continued

FSM 2358.1: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

<p>C Sawyer – Evaluator</p>	<p>May independently fell, buck, and limb any size material in highly complex situations.</p> <p>May conduct formal instruction and proficiency evaluations for all sawyer certification levels.</p> <p>This certification level is not used for fire management activities. There is no IQCS equivalent.</p> <p>Has successfully completed training to organize and conduct advanced sawyer certification sessions in the field and has received a recommendation from the Regional Saw Program Manager, which is supported by demonstrated advanced saw knowledge and skills and, in most cases, certification as a C Sawyer – Felling and Bucking for at least 3 years.</p> <p>Has demonstrated ability for advanced instruction, hazard assessment, and instruction in complex sawing techniques and an advanced understanding of Forest Service saw directives. Has demonstrated good judgment in assessing complex situations and own skill limitations and in safely completing sawing tasks.</p> <p>The proficiency of C Sawyer Evaluators is determined by the Regional Saw Program Manager (or that person's designee) and another sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: required</p> <p>Demonstrated Field Proficiency: variable</p> <p>Total Training: to be determined by Regional Saw Program Manager (or that person's designee)</p> <p>Prerequisites: First Aid and CPR</p>	<p>Must be recommended for the training by the immediate supervisor, a line officer, or the Saw Program Coordinator.</p> <p>Acquired through formal instruction that:</p> <p>(a) utilizes information gathered and activities designed by the Regional Saw Program Manager (or that person's designee) that are specifically tailored to local needs; (b) may be tailored to the students' needs; and (c) includes:</p> <ul style="list-style-type: none"> • Administrative duties and responsibilities. • Advanced teaching methods and techniques for evaluating A, B, and C Sawyers. 	<ul style="list-style-type: none"> • Able to effectively demonstrate and teach advanced sawing techniques, field skills, and hazard assessment decision-making processes. • Able to understand, use, and communicate applicable federal regulations regarding the use of saws in the workplace and Forest Service saw directives to other sawyers and staff. <p>Field Evaluation: Evaluations may take place during regularly scheduled C Sawyer NRSTCs. Demonstrated knowledge of techniques for providing instruction in brushing, bucking, felling, and limbing techniques in highly complex situations. Demonstrated ability to provide instruction in safe use of a saw in highly complex situations.</p>
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Appendix G

JOB HAZARD ANALYSIS (JHA): Ice Age National Scenic Trail

Chainsaw Operations: IATR-06

Analysis By: Daniel W. Watson, VIP Coordinator

Approved By: Eric Gabriel, Superintendent

ERIC GABRIEL

Digitally signed by ERIC GABRIEL
Date: 2021.07.30 17:12:07 -05'00'

Required Personal Protective Equipment (PPE): Hard Hat (ANSI Z89.1 compliant), Sturdy leather (cut-resistant) Boots, leather or other sturdy Work Gloves, Eye Protection/Face Shield (ANSI Z87.1 compliant), Hearing Protection (ear muffs, plugs, or a combination), Saw Chaps (meets or exceeds USFS 6170-4F), Weather-Appropriate Shirt & Long Pants

* Swampers also required to wear identified PPE, minus chaps

Recommended Additional PPE: Blood Stopper Belt Trauma Kit, Safety Whistle

Tools and Equipment: Chainsaw, Saw Kit, Fuel & Bar Oil, Logger's First Aid Kit (meets 29 CFR 1910.266), Cellular Phone or Two-Way Radio

Required Standards and General Notes: Chainsaw Operators must possess a valid National Sawyer Certification Card. Chainsaw operations always involve at least two people for safety enhancement. Sawyers and Swampers maintain currency in First Aid/CPR, *Trail Safe!* videos, and an approved OF-301A Volunteer Services Agreement

Sequence of Job Steps	Potential Hazards/ Injury Sources	Safe Action or Procedure
Certification/Training	Various potential injuries due to operating saw outside of skill/training level	Complete approved chainsaw operator training (NRSTP); operate chainsaw within certification parameters
Risk Management Analysis	Site-Specific Hazards	Identify site-specific hazards associated with each saw operation, mitigate hazards or stop work until safety concerns are addressed. Utilize <i>Trail Safe!</i> risk analysis tools (SPE/GAR) to determine Low, Moderate, or High Risk

Fueling	Fire from gas spilled on muffler or other ignition source; fuel geysering; damage to equipment from improperly labeled fuel	<p>Let saw cool before refueling.</p> <p>Fuel on bare ground, use funnels.</p>
	containers	<p>No smoking during refueling, or during chainsaw operations (includes vaping and e-cigarettes)</p> <p>Move at least 10 feet away from fueling site before starting saw.</p> <p>Replace excessively gas/oil-soaked gloves.</p> <p>Mix fuel in well ventilated area.</p> <p>Clean up spills promptly.</p> <p>Gasoline will be stored in approved containers or Department of Transportation (DOT) approved containers in quantities of 5 gallons or less. "Approved" containers are tested and certified by a nationally recognized testing laboratory (NRTL) such as Underwriters Laboratory (UL) or Factory Mutual Engineering Corp (FM). Approved containers will be marked or labeled with the UL or FM label. A safety can is a common type of approved container with a flash arresting screen, spring-closing lid and spout cover, and so designed that it will safely relieve internal pressure when subjected to fire exposure.</p> <p>Clearly mark fuel containers that have gas/oil mix ratio.</p>
Saw Maintenance	Fatigue/injury from improper saw maintenance	<p>Keep saw sharpened.</p> <p>Keep idle adjusted properly.</p> <p>Inspect for bar wear/proper chain tension.</p> <p>Take frequent rest breaks.</p>

Sharpening Chain	Cuts to hands	<p>Wear gloves when sharpening chain.</p> <p>Use vise if available.</p> <p>Never file chain while saw is running.</p>
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Transporting Saw	Injury due to falls while carrying saw	<p>Always employ chain guard (scabbard) whenever saw is not in operation.</p>
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All Sawing Maneuvers	Cuts to body, various reasons	<p>Wear all PPE (chaps, gloves, boots, etc.).</p> <p>Drop-starting a chainsaw is prohibited. A chainsaw must be started with the chain brake engaged and the operator holding the saw firmly in a manner that minimizes movement of the saw when pulling the starter handle.</p> <p>Chainsaws may not be operated unless the manufacturer's safety devices are in proper working order. Chainsaw safety devices may not be removed or modified.</p> <p>The chain brake must be engaged or the engine shut off if it is carried more than two steps.</p> <p>In manual tree felling operations, notches (face cuts) must be used on all trees and trunks greater than 5 inches in DBH.</p> <p>Check chain tension periodically to avoid "throwing" chain.</p> <p>When more than one individual is limbing or bucking a tree, each is positioned and their duties organized so the actions of one individual will not create a hazard for the other individual.</p> <p>Chainsaw engines must be started and operated at a 10-foot minimum distance from other individuals.</p>
<p>Felling</p> <p>*Securing Felling Area</p>	Others being struck by trees/limbs/debris	<p>The sawyer has the responsibility and authority to identify, secure, and manage the felling area.</p> <p>A MINIMUM OF 2.5 TIMES THE</p>

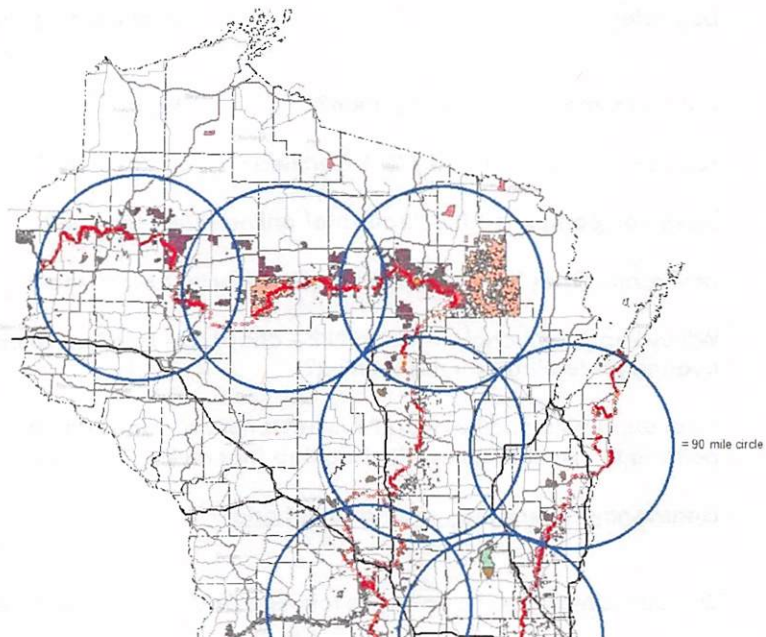
		<p>HEIGHT OF MATERIAL BEING FELLED IN ALL DIRECTIONS MUST BE SECURED. <i>Note: This requirement does not apply in the presence of site restrictions, such as waterways or cliffs. Other individuals must be beyond a tree's striking range and at a distance as close to twice the tree's height as practical</i></p> <p>No one is allowed inside secured felling area without authorization of the sawyer.</p> <p>Additionally, the entire downhill side will be included in the secure area on hillsides with steep slopes where material can roll for long, unpredictable distances.</p> <p>Establish a safe zone outside secured area where everyone remains until felling is completed and the sawyer signals "all clear."</p> <p>Position lookouts on all trails and roads entering the secured felling area.</p> <p>Before leaving the secured felling area, the sawyer must ensure that no hazards remain such as hang ups, unstable logs, or other dangers.</p> <p>It is the responsibility of the work leader and other volunteer workers to understand and follow these established standards, and to follow the direction of the sawyer.</p> <p>At times when Risk Assessments are elevated due to more complex operations, especially when chainsaw operations are part of a larger overall event with multiple workers moving through an area, the sawyer should enlist the help of another qualified sawyer (person of appropriate skills and knowledge) to serve as an overall lookout to maintain control of the</p>
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		secured area, allowing the active sawyer and swamper team to more fully focus on their immediate tasks, thus mitigating the chance of unapproved others entering the secured area.
Saw Certification & Working within the Felling Area	Other crew members observing felling procedures	<p>Make sure all trainees are aware of which tree is to be felled and what direction it is planned to fall.</p> <p>Point out identified hazards from size up.</p> <p>It is the sawyer's discretion to allow trainees within the 2-tree lengths to observe felling, but regardless, maintain safe distance and established escape route.</p> <p>All observers must remain quiet during felling.</p>
Medical Emergencies	Personal injury or illness	<p>All sawyers & swampers will maintain current First Aid/CPR training, and all saw work will be performed by sawyer/swamper buddy-system teams.</p> <p>Each operation must include a "safety station" within 100 feet of the work zone that contains a logger's first aid kit meeting paragraph (d)(2) of the logging standard 29 CFR 1910.266(e)(1) and (e)(2), Logging Operations.</p> <p>The safety station shall include "Site Safety Plan" information available to all people on site denoting the location of the work site (physical address, Lat/Long, GPS coordinates, or other appropriate locator info) and the name, address, and phone number of the nearest medical facility. IATA "Safety Net" documentation is sufficient for this purpose at larger sponsored work events. It is recommended that the Site Safety Plan be kept inside the logger's first aid kit within the safety station.</p>

		<p>Each logger's first aid kit comes with an "<i>Emergency Assistance Instructions</i>" card that should be filled out to satisfy this requirement.</p> <p>Communications to request advanced emergency medical treatment must be provided for (cellular phones/radios, etc.).</p>
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Appendix H

Training Venue Radius Map



Appendix I



2022 NPS Volunteer Sawyer Training Application

Your Name:

E-MAIL:

Street Address:

City, State, Zip:

Day Telephone:

Cell or Evening Telephone:

Are you a member of the Alliance?

Yes ☐ No ☐

Are you currently First Aid / CPR Certified?

Yes ☐ No ☐

Have you completed the "Trail Safe" online safety training?

Yes ☐ No ☐

How many times have you used a chainsaw in the last year?

0 ☐ 1-4 ☐ 5-9 ☐ 10+ ☐

Will use your own chainsaw and PPE – chaps, cut resistant safety boots, helmet w/eye & hearing protection – for this training?

Yes ☐ No ☐

If not using your chainsaw & PPE, what length of chaps do you need as measured from the belt line to about 2" below the boot top (not an inseam measurement)?

32" ☐ 36" ☐ 40" ☐

Emergency Contact Name and Telephone:

Do you actively volunteer on the Ice Age Trail? Please describe:

Please list any relevant trainings, such as Game of Logging, Crew Leadership and Skills or otherwise, you have completed in the last 3 years:

Please complete and return (email is preferred) this form to riley@iceagetrail.org or mail to: Ice Age Trail Alliance, 2110 Main Street, Cross Plains, WI 53528, attention Riley Dupee

This is an application and not an approval for the training. Limited space is available for each class. Individuals will be notified of acceptance to the training.