A.T. Saw Program

A.T. Sawyer Authorization

Agency Authorization: Volunteer Service Agreement (VSA)

- Only certified sawyers are authorized to buck blowdowns > 5” DBH and saw within their qualification.
- Felling of trees requires agency coordination due to NEPA compliance and hazard tree complexity.
- Authorization requires Training, Evaluation, and Certification

A.T. Sawyer Certification Coordination

Club Coordination:

How many chainsaw sawyers do we need to manage the Appalachian Trail?

How many crosscut sawyers do we need to manage the Appalachian Trail in Wilderness and beyond?

Report needs to ATC and agency for certification and recertification with as much advanced notice as possible.

ATC Coordination:

How do we meet the needs of clubs for the saw program?

How much agency capacity is there for training and evaluating A.T. sawyers?

How much funding is needed to supplement a lack of capacity?

Coordinate saw courses with agency to meet club needs for certification and recertification.

Agency Coordination:

How many sawyers are in need of certification or recertification on the District?

Who is the point of contact on the District for the saw program?

How do we build capacity to meet the needs of USFS-A.T. volunteers?

Provide a point of contact for the saw program on each District and support saw courses with chainsaw/crosscut instructors.

A.T. Sawyer Certification

Certification: 1 day classroom, 1 day field evaluation

Recertification: 1 day field evaluation

Training: Classroom and/or field instruction of USFS Developing Thinking Sawyer course curriculum

Evaluation: Sawyer proficiency is evaluated; fills out a chainsaw/crosscut evaluation form and submits sawyer level recommendation to the certifying official for card signature.

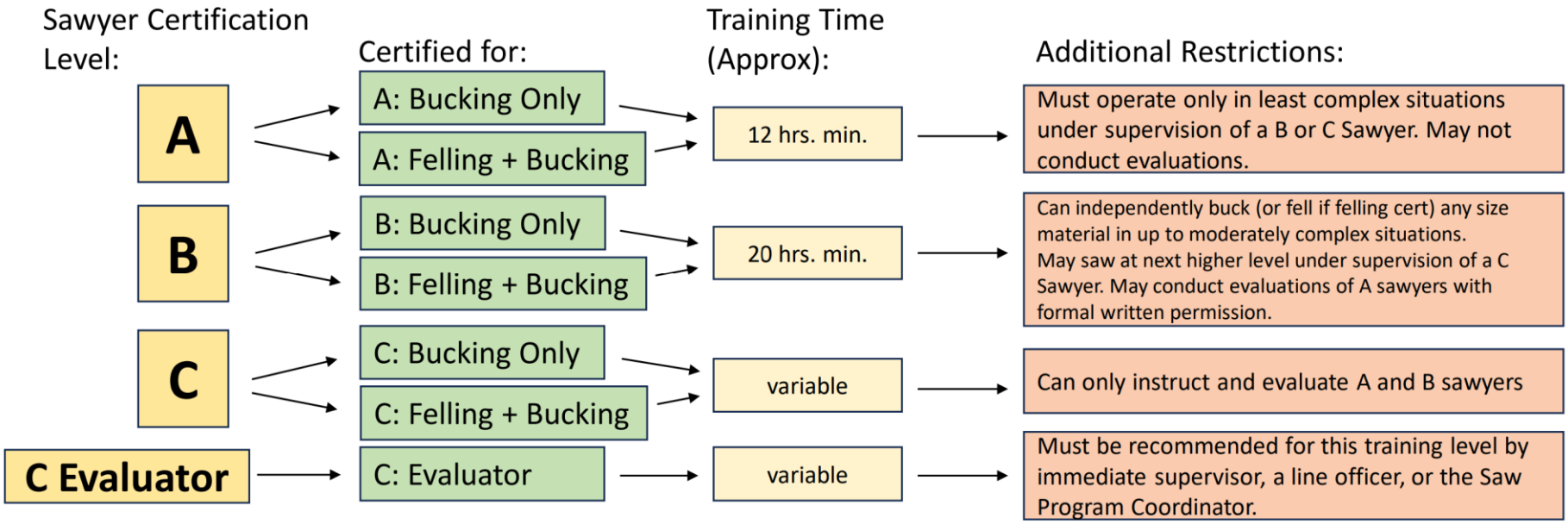
Certification: Saw card is signed by District Ranger or other certifying official designee (Forest Saw Coordinator, Saw Program Manager)

A.T. Sawyer Certification

Sawyer certification requires current Adult FA/CPR certification to be valid.

- Provider needs to be nationally accredited (Red Cross, American Heart Association, SOLO, Landmark, etc.)
- Cannot be entirely virtual course; hybrid courses allowed (virtual classroom with in-person practicum)

Sawyer certification expires in three years.



A.T. Sawyer Coordination

- **Club internal communication:** Ensure saw operations are coordinated with trail supervisor or saw coordinator.

- **Communication across ATC, A.T. Maintaining Club, Agency**
  - Best safety practices or safety alerts- fuel geysering
  - Near misses and incidents
  - Complex situations: storm damage, hazard trees, complex bucking/felling objectives.
  - Felling operations: confirm NEPA compliance is completed by agency and hazard trees coordinated with agency point of contact.
  - Changes to saw policy or saw operation processes.

A.T. Sawyer Operation

1. Review Job Hazard Analysis (JHA) for chainsaw/crosscut on USFS-GWJEFF or NPS-APPA.
2. Signed 301b (club roster) after the tailgate safety session for the workday.
3. Check-in, Check-out Procedure in place for the workday.
4. Emergency Response Plan in place for the workday.
5. Volunteer Injury Packet

- PPE, tools, equipment inspected.
- Sawyer operating within qualifications with a current saw card and FA/CPR.
- OHLEC for every cutting operation.
- Minimum of two volunteers for any saw operation.

A.T Sawyer Safety

Aside from driving to the worksite, this is the most dangerous activity staff and volunteers do.

Authorization, certification, and coordination between the land management agency, the A.T. maintaining clubs, and ATC are designed to ensure safe saw operations.

“If it don’t feel right, don’t fool with it!”

Safety is always the highest priority!

Storm Damage & Complexity

Operational Complexity Overview

	LOW	MODERATE	HIGH
O	**Objective** is easily accomplished	**Objective** may be difficult to accomplish	**Objective** is difficult to accomplish and/or high consequence of failure
H	**Hazards** are minimal and understood	**Hazards** are present and understood	**Hazards** are numerous, not totally understood and/or stable
L	**Leans or binds** do not require wedging or sequence of cuts	**Leans or binds** may require wedging	**Leans or binds** require a significant wedging plan
E	**Escape** path is clear	**Escape** path may be limited	**Escape** path is limited
C	**Cut plan** is simple	**Cut plan** requires sequence of cuts and/or wedging plan	**Cut plan** requires modified sequence and/or wedging plan

Complexity continued…

	Complexity			
	LOW	MODERATE	HIGH	
Objective	•Options available to fell tree to mulitiple lays to meet objective	•Options available to fell tree within 45 degrees of intended lay to meet objective	•Tree must be felled within 5 degrees of intended lay to meet objective	• No Safe Lay - STOP Reevaluate objective!
Hazards	•No hazards are present that will impact cutting operation	•Hazards are present but can be easily identified and understood	•Hazard(s) are present but may be mitigated by altering cut plan and technique.	• No Escape from Hazards STOP Reevaluate objective!
Leans	•Less than 3 ft. of side lean •Less than 3 ft. of head lean •Back lean does not exist with intended lay •Binds - Known low release of energy •Leans or binds do not require wedging or sequence of cuts	•Three to five ft. of side lean •Three to five ft. of head lean •1" of lift to overcome back lean required •Leans or binds may require wedging	•Greater than 5 ft. of side lean •Greater than 5 ft. of head lean •One to two inches of lift required to overcome back lean •Binds - High release of energy expected	More than 2" of lift required to overcome back lean - STOP Reevaluate objective!
Escape Plan	•Escape path is clear •Multiple escape paths - Easily accessed	•Access to escape path could be limited i.e., Only one escape path available	•Access of escape path(s) could be difficult and/or in steep terrain	No Escape Path - STOP Reevaluate objective!
Cutting Plan	•Single cut undercut •Green or Sound Hinge •Cuts can be made from 1 side of tree - escape to same side •Single backcut	•Compromised Fiber •Double Cut Undercut / Backcut •Requires moving from side to side of tree	•Cut plan requires more than Double Cut •Terrain makes cut plan implementation difficult •Cut plan requires an elaborate sequence of cuts and wedging plan •Tree fiber integrity has been significantly compromised i.e., rot, fire weakened etc. •Hung-up or limb-locked trees	Cutting plan does not meet sawyers ability and qualifications - STOP Reevaluate objective!
Qualification Level	A	B	C	

** The factors identified above are to be used as support when trying to determine the overall complexity of a cutting operation by going through each step of the OHLEC process. These different factors are not to be considered conclusive when determining complexity, but rather a tool that assists sawyers and instructors when trying to determine the complexity of a cutting operation and how it aligns with a sawyers experience, ability, and qualification level.*

Why Complexity Matters

5.5” virginia pine
knocked back 21’

Saw Program by the Numbers

- **MRNRA: 91.3 miles of A.T.** including 3 Wilderness Areas (includes GHSP) and 9 miles of side trails.
  - MRATC: 59.8 miles
  - PATH: 31.9 miles
- **EDRD: 145.8 miles of A.T.** including 5 Wilderness Areas (includes APPA lands) and 23 miles of side trails.
  - PATH: 33.9 miles
  - OCVT: 27.6 miles
  - RATC: 112 miles
- **GPRD: 112.7 miles of A.T.** including 4 Wilderness Areas (includes BLRI lands) and 35 miles of side trails.
  - RATC: 11.6 miles
  - NBATC: 90.4 miles
  - TATC: 10.7 miles
  - ODATC: 19.1 miles
- **45 shelters**
- **51 privies**
- **109 bridges**
- **86 parking areas**
- **63 open areas**
- **Dozens of access roads**

Saw Program by the Numbers

85 Volunteer Sawyers in VARO (PATC not included)

MRATC: 5 sawyers (2 crosscut, 4 chainsaw)

- **60 miles of the A.T., 12.5 miles of Wilderness**

PATH: 10 sawyers (1 crosscut, 9 chainsaw)

- **66 miles of the A.T., 8 miles of Wilderness**

OCVT: 4 sawyers (2 crosscut, 4 chainsaw)

- **27 miles of the A.T., 3 miles of Wilderness**

RATC: 24 sawyers (8 crosscut, 23 chainsaw)

- **113 miles of the A.T., 11.1 miles of Wilderness**

NBATC: 18 sawyers (13 crosscut, 10 chainsaw)

- **90 miles of the A.T., 17.7 miles of Wilderness**

TATC: 14 sawyers (14 crosscut)

- **11 miles of the A.T., 9 miles of Wilderness**

ODATC: 10 sawyers (10 chainsaw)

- **19 miles of the A.T., 0 miles of Wilderness**

Saw Program by the Numbers

Average of 1 Sawyer per 5.4 miles of A.T.

MRATC: 1 sawyer per 12 miles of trail

PATH: 1 sawyer per 6.6 miles of trail

OCVT: 1 sawyer per 6.75 miles of trail

RATC: 1 sawyer per 4.7 miles of trail

NBATC: 1 sawyer per 5 miles of trail

TATC: 1 sawyer per 0.8 miles of trail

ODATC: 1 sawyer per 1.9 miles of trail

Saw Program by the Numbers

Average of 1 Crosscut Sawyer per 3.2 miles of A.T. in Wilderness

Remember: Two-man crosscut saw operations only requires one B-bucking sawyer, the second sawyer can saw as a Crosscut Sawyer Trainee (they do not need to be FA/CPR certified)

MRATC: 1 crosscut sawyer per 6.25 miles of trail in Wilderness

PATH: 1 crosscut sawyer per 8 miles of trail in Wilderness

OCVT: 1 crosscut sawyer per 1.5 miles of trail in Wilderness

RATC: 1 crosscut sawyer per 1.4 miles of trail in Wilderness

NBATC: 1 crosscut sawyer per 1.4 miles of trail in Wilderness

TATC: 1 crosscut sawyer per 0.7 miles of trail in Wilderness

Saw Instruction For Sawyers

C-level Instructors on A.T. Districts-led by Jeff Cleek (GWJEFF Saw Program Coordinator):

MRNRA:

- **?**

EDRD:

- Caleb Hairfield- Chainsaw C evaluator Felling and Bucking

GPRD:

- Megan Martin- Crosscut C Felling and Bucking
- Christopher Shultz- Chainsaw C Felling and Bucking

Cooperators/Partners/Contractors:

- Chainsaw:
  - Helton Forestry Enterprises- Dennis Helton
  - ATC- Conner McBane
- Crosscut:
  - TATC volunteer- Paul Dickens
  - SAWS- Scotty Bowman
  - PATC volunteer- Paul Boisen
  - USFS volunteer- Joe Parrish

The Great Balancing Act

Safety chain: Do we have enough sawyers to adequately maintain the A.T.?

Standard chain: Do we have a stable cadre of sawyers ready to replace existing sawyers?

Skip chain: Are sawyers getting enough trigger time to maintain their skills and certification?

How does instructor capacity and funding for instruction impact volunteer sawyers?

Questions?