



# CREW LEADER

## tool & safety check list

### how to use this check-list

The items included reflect lessons learned from over ten years of training and managing volunteer trail and restoration crews at Volunteers for Outdoor Arizona. It is structured to follow a natural flow of preparation and execution of stewardship work – trail work in particular. Use it as-is or mark it up to fit the requirements of your agency. *Recommendations for future editions are invited.*

# PREPARE

## before you meet your crew

Review construction-notes & walk-in risks from technical manager

Review relevant sections of technical manuals (*Joy of Trail Work*)

Rehearse safety & tool talk

Review Event Fact Sheet to determine schedule and meal arrangements

Prepare/secure your tool list

Pack your own gear (gloves, etc.), food & water for event

Pack extra water and snacks for crew members, especially in warm weather or if volunteers are new to trail work

Some Crew Leaders bring hard candy for post-work treats

If you are also the Event Manager: secure waivers, sign in form(s)

## on-site

Visit work section & visualize strategy (before event if possible)

Determine who is the designated Safety Officer

Locate and/or designate “bathrooms”

Locate potable water on-site, if any

Help unload tools & set tool caches for multi-crew events

Secure your tool cache and check for damaged tools

Secure Crew Leader and first aid kits, perhaps a 2-way radio

# WELCOME

## at crew staging area

Verify **Sign-in** of each volunteer

**Ready to go** - all volunteers have:

proper footwear and layered clothing appropriate to weather

name tag

gloves

plenty of *water*

snacks/food

sun protection

“**Welcome** & thank you”

Today’s **Goals** (safety/fun/quality/output) & specific **Objectives**

### **Introductions**

Interests

Any relevant **prior experience**

Bathroom facilities/disposal of personal waste

Additional drinking water

## general safety items

**Altitude & Weather** factors

**Animals** that bite & sting (snakes, scorpions, spiders, bears, squirrels)

**Plant life** that can injure (cacti, cat claw, poison ivy, falling or thrown branches)

**Children** under adult supervision at all times

**Pets**, if allowed, leashed or caged

**If you must leave work area** (drop pack at side of trail where you leave trail)

Does anyone have *emergency skills training*?

Explain **first aid** support and **safety net** activation - appoint alternate activator

Inquire of significant **medical conditions** (allergies to plants/insects, medications, diabetes, epilepsy, back problems, heart or lung problems)

### **Tool Transport**

gloves on

only one tool per arm

tool at side-not on shoulder

heaviest tool on downhill side, most dangerous face down

stay one body-length behind

Advise of potential **Walk-in Risks**

Appoint **Lead** (slowest up front) and **Sweep** (Leader: monitor *safe walking distance*)

# GET READY

## at first work section

**Tool storage in work area** (in a group, high side of trail, handles toward trail, bars parallel & supported, buckets stable. don't drop or toss tools)

### Critical Safety Items

**Alerts** "Coming Through" and "Rock"

**Lifting** (bend at knees, ask for help. Handling rock is primary source of injury)

**Dehydration** (drink before thirsty, when asked by crew leader, nearest water station)

Signs of **heat exhaustion** (heavy sweating; cool, pale, moist skin; nausea; weakness; dizziness) or **hypothermia** (confusion; violent shivering; unstable). **Response:** lie down with feet above heart level, summon crew leader.

**Over-exertion** (pace yourself, pay attention to breathing, rest as needed and when directed - sit on high side, facing trail and within corridor), altitude?

## Leave no trace

**Minimize impact** on landscape beyond that needed to complete work

Always **walk within tread area** unless this would be unsafe

**Remove what you bring** to site, including toilet tissue

**Sit** during breaks **where it will not disturb** plants and terrain

Extend **Leave No Trace** to include **trail work**

## walk through the work section

discuss **objectives**,

**trail user needs**, and

how you will **complete the work**

# tool use & safety talk

**Lopper** and **Saw** (don't stress loppers; 3-cut large limbs – no hair-cuts or hat racks)

**Mattock** and **Pulaski** (grubbing & loosening materials; modest swing; accuracy over power; angle stroke to start; protect axe on Pulaski)

**McLeod** (moving ground cover and loose or lightly packed matter; shaping tread and slopes; stroke, don't chop)

**Shovel** (for moving loose material – not for making tread)

**Rock bar** (grubbing; breaking rock; loosening and shifting medium to large rocks; employ fulcrum: employ three bars on large rocks, assure other workers are clear of fall lines, keep hands clear)

**Rock cradles** (only explain when actually used)

**Buckets** (½ full) & **Blankets**

## DO IT

### monitoring during work

**Interact** with all crew members – coach, demonstrate, assist, **praise**, troubleshoot, **hydration**, **breaks** and candy treats

**Use** *Joy of Trail Work* or other **illustrations** when needed

**DO NOT** get absorbed in doing the work at the expense of your crew

**Contact Technical Advisor** to resolve technical problems

Take note of **prospective crew leaders** in your crew

# WRAP UP

## completion of work section

**Clear** with Technical Advisor

**Walk through** and review with crew,  
give more **praise**

## at last section of day

review construction notes and set work  
strategy in light of available time;  
consult with Technical Advisor

# & EXIT

## on trail

**Begin shutdown** about 20 minutes before  
start of walkout

**Clean tools**

**Volunteer evaluations**

**“Thank-you”** and treats

**Ask prospective crew leaders** if you  
may recommend them for leadership  
training

**Review and note remaining work** in  
construction notes

**Gather tools** for walkout, **appoint sweep**

## staging area

Return tools to main tool cache,  
group by type, help load

Read evaluations

Return construction-notes and  
evaluations to Technical Advisor

Return CL Kit and radio to tool  
manager

# SAFETY NET

## is injury/illness serious?

If so, do the following:

**Stop all work** in crew

Ensure others not at risk, including yourself (**never create 2nd victim!**)

**Maintain calm** within crew

Send runners (who *walk!*) to adjacent crews for **additional assistance**

Send runners (who *walk!*) to **inform Safety Officer** of problem:

- What caused injuries

- How many injured

- Severity of injuries

- Crew Leader name

Tell runners to return to crew after delivering message

**Stay with injured person** until transferred to Safety Officer or EMS

Do not move injured person – only EMS or certified Wilderness First Responder moves injured person

Obtain permission from conscious injured person before assisting

## emergency exit

If the Safety Officer determines an Emergency Exit is required due to extreme weather or other circumstance:

- Gather entire crew

- Explain situation and how to exit

- Gather tools – if any are not practical to carry out, cache and note location

- Appoint lead and sweep

- Walk to destination determined by Safety Officer

Additional copies of this **Crew Leader Safety & Tool Check List** may be obtained by sending a check or money order to Volunteers for Outdoor Arizona. Price includes postage and handling: \$5.00 for one; \$10.00 for three

*The Joy of Trail Work: a Field Guide for Trails in Arid Lands*, June 2009, Second Edition.  
\$9.95 includes postage and handling.

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# VOAZ

## **VOLUNTEERS FOR OUTDOOR ARIZONA**

The mission of VOAz is to engage community volunteers in the critical work of environmental stewardship. We realize our mission through projects, training, and support of other organizations – public and private – that share our mission. In addition to its own web site, VOAz operates [OutdoorVolunteer.org](http://OutdoorVolunteer.org) which connects environmental stewardship volunteers and the agencies that need their help.

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