

TPE Prescribed Burn Best Practices Document

Crew Requirements on Broadcast Burns

- 1) Every burn has a qualified Burn Boss in charge of the burn.
- 2) Every burn has a qualified Crew Leader in charge of each crew on the burn. Each crew leader may oversee a crew that does not exceed 6 individuals in size. On small burns with 8 or fewer people, the Burn Boss may also function as a Crew Leader.
- 3) No more than 25% of the total personnel on burn may be in the Apprentice category. Every Apprentice must be paired with an experienced Crew Member.
- 4) Burns associated with The Prairie Enthusiasts Burn School must be conducted with a burn plan, go-no go checklist, post-burn report, crew sign in, and any other documentation the Burn Policy requires for the site. Burn School burns must have enough qualified personnel to implement the burn. Burn School trainees may participate in addition to the qualified personnel. These burns do not count as apprentice burns for trainees. Any such burns conducted in association with Burn School must be small (<4 acres in size) and simple.
- 5) There may be no more than three Observers present on a burn. Observers may not be given assignments in the conducting of the burn. They may, however, help with loading and carrying equipment and supplies. Observers must be assigned to an experienced crew member, who they must shadow and observe at all times.

General Safety Equipment for Broadcast Burns

The following must be present at every burn:

- 1) Access to a telephone
- 2) Two-way radios when Burn Boss and Crew Leaders are not within speaking distance of each other. When radios are required, there should be at least be one radio each for the Burn Boss and each Crew Leader.
- 3) First aid kit
- 4) Fire suppression equipment as outlined in the burn plan

Required Personal Safety Gear:

- 1) Leather boots – 6" high tops minimum. Crew members may wear rubber boots if operations will include work in inundated areas.
- 2) Gloves – Leather work gloves
- 3) Clothing – Non-synthetic natural fibers or aramid fibers (e.g., Nomex) only. Long-sleeved shirts and long pants are required, and pants made of natural fibers must not be frayed (especially around the ankles).
- 4) Drinking water on site
- 5) Hardhat or Hat – Hats must be non-synthetic natural fibers only. Long hair must be covered up.
- 6) Before using a chain saw, see Chainsaw Safety Policy for safety gear and procedure requirements.

- 7) Hearing protection when using loud equipment

Suggested Personal Safety Gear:

- 1) Nomex or equivalent fire-retardant clothing (highly recommended)
- 2) Leather boots with minimum of 8" high tops
- 3) Eye protection – goggles, safety glasses, or face shields
- 4) Air filter mask or bandana
- 5) Hardhat (highly recommended)
- 6) Radio for every crew member
- 7) Neck shroud
- 8) Drinking water on every person

Physical Fitness Requirements (Volunteer Release)

Volunteers must be asked to do a self-assessment of their physical ability. They must be asked to read a self-assessment release statement and waiver of liability provided on the volunteer sign-in sheet and be informed that signing the form is acceptance of the waiver. The release statement and waiver language must be approved by the TPE board. All participants must be 16 years of age or older. Those under 18 years of age must have parent/guardian signature on the release form.

Annual Refresher (Lessons Learned)

Each chapter that conducts burns offers to their burn volunteers once a year a refresher or lessoned learned meeting to go over examples of burns where things have gone wrong, and to get updates on prescribed burn issues and changes in TPE burn policies and procedures. These can be refreshers put on by TPE or conservation partners such as TNC, State DNRs, and others, so long as any changes in TPE burn policies and procedures are covered at the meeting. Volunteers should be encouraged to attend, but attendance is not required to stay qualified. Volunteers that do attend should sign in to document their participation. Chapters must provide, to all volunteers that do not attend, a summary of the refresher's content.

Road Signage & Traffic Control

If a burn is near a road, signs should be placed along the road informing passersby that a prescribed burn is in progress. If you anticipate the need to control traffic, all state regulations and rules for traffic control signage and procedures must be followed. Contact the appropriate State DOT and local police authority to learn what is required or allowed.

Pumps and Engines

- 1) All operators of pumps and engines receive training on the use and operation of comparable equipment before the burn.
- 2) All crew members on a burn receive orientation on the day of the burn to the equipment present at the burn.

Brush Pile Burns and Brush Piles Within Broadcast Burn Units

The Prairie Enthusiasts allows its volunteers or staff to burn brush piles when the piles are surrounded with snow, wet vegetation, or fuels too thin to carry a fire. No burn plan is required for brush pile burns, but brush pile burns are subject to the considerations and requirements described below.

Burning piles of brush and slash creates large flames and may launch cinders that travel long distances. After the flames have subsided coals often continue burning for several days with layers of ash or soil hiding them from view. A wetting rain or layer of snow prevents sparks from igniting fine ground fuels. To prevent a brush pile fire from creeping into adjacent fuel, the moisture must linger in the fine fuels for as long as the pile burns. If the wind increases while coals linger, flames might rise again and spread to unburned fuels. Select locations and times that minimize the above risks, and consider the weather forecast for the days following pile ignition.

- 1) A burn boss must give approval for any burn pile when there will not be sufficient snow cover on the ground to safely contain the fire for the full duration over which coals might remain hot (e.g., burning piles in the absence of snow when surrounding fuels are wet or with large buffers with fuels too thin to carry fire).
- 2) Only clean woody or herbaceous (e.g., invasive species material like parsnip or garlic mustard to be disposed of) material may be burned in piles.
- 3) If conditions become or are forecast to become dry or windy enough to risk ignition of surrounding fuels while coals might remain, piles must be checked and any remaining hot coals fully extinguished.
- 4) A cell phone and first-aid kit must be with workers/volunteers on-site. No one can work alone except to monitor or check on piles already burned down coals and to which no material is being added.
- 5) Local requirements (e.g. ordinances) and permitting procedures must be checked and followed.

Brush Piles Within/Near Broadcast Burn Units: Burn piles within or near broadcast burn units that will not be burned prior to the prescribed burn need to be addressed in the burn plan.

The following safety gear is required of all participants within 20 feet of burn piles:

- 1) Gloves – leather work gloves
- 2) Clothing – Non-synthetic natural fibers or aramid fibers (e.g., Nomex) only. Long-sleeved shirts and long pants are required, and pants made of natural fibers must not be frayed (especially around the ankles). Hats or hoods made of natural fibers are recommended if not wearing a hardhat.
- 3) Before using a chain saw, see Chainsaw Safety Policy for safety gear and procedure requirements.
- 4) Hearing protection when using loud equipment
- 5) Eye protection

The following safety gear is highly recommended and must be offered to volunteers:

- 1) Hard hat