SOP – How a Landowner can work with the Triangle Prescribed Burn Association (TPBA) to Plan and Conduct a Prescribed Burn [Planning and Conducting a Burn with TPBA]

Planning and conducting a safe and effective prescribed burn is a complex process involving many steps and people. The rewards can be significant in terms of advancing land management objectives and promoting healthy and sustainable forests. There are risks which can be greatly mitigated (but never totally eliminated) by proper planning, site preparation, and burn execution.

The Triangle Prescribed Burn Association (TPBA) is a group of trained and experienced local volunteers who can assist landowners in determining their burn objectives, plan and prepare for a safe and effective burn, and conduct a burn under the proper conditions to achieve the intended objectives.

Below are the steps that a landowner would follow to plan and conduct a prescribed burn, along with some discussion of where and how TPBA can help.

1. Define your burn objectives. What are you trying to accomplish by conducting a prescribed burn? How do you expect a burn will help advance or achieve your land management or other goals? Prescribed fire can promote many goals including restoring natural ecosystems, improving wildlife habitat, reducing invasive species, reducing future wildfire risk, and promoting better forest management. In order to properly plan and conduct a burn, it is important to have a clear understanding of what you are intending the burn will accomplish.

This can be greatly informed by any forest management plans that you have developed, ideally in consultation with a licensed professional forester. Objectives should be written in clear language, ideally with SMART (specific, measurable, achievable, relevant, and time-bound) goals.

How can TPBA help? We can connect you with educational resources to help you learn about the benefits and risks of prescribed fire, to understand the possibilities of what can be accomplished by burning, and to introduce you to the steps and process of planning and conducting a safe and effective burn. We can also meet with you to review your land management plan and offer suggestions about how prescribed fire might help you achieve your objectives.

2. Work with a North Carolina Certified Burn Boss to develop a Burn Plan designed to achieve your objectives on your land. North Carolina has a program where individuals can become state-certified Burn Bosses with the necessary training and experience to plan and manage a safe and effective prescribed burn. Landowners may themselves take the training and become Burn Bosses, or they can find an available Burn Boss to work with them. Many consulting foresters and other contractors are certified Burn Bosses available for hire.

A Burn Plan is a standardized document tailored to your specific land and burn objectives. The Burn Plan documents the burn objectives, describes the burn site characteristics, defines the weather and fuel moisture conditions needed to conduct the burn safely while achieving the objectives, and provides other information needed to ensure a safe and effective burn. The Burn Plan includes maps of the area to be burned, 'safe' areas and escape routes, and areas and facilities of special concern which will require special protections (e.g. structures, utility lines, livestock areas, and other special cases).

How can TPBA help? TPBA has several Burn Bosses available to work on a voluntary basis with landowners to develop a Burn Plan which meets NC state guidelines and requirements and is designed to achieve your burn objectives on your land. The Burn Boss will sign off on the plan. All Burn Plans must be signed by a certified Burn Boss before a burn can be conducted.

- 3. **Prepare for the burn**. There are several important sets of work which need to be done before a burn can be conducted. Landowners are responsible for doing this work, and TPBA members may be available to guide and assist. Some of these steps can be done in parallel. Key steps include:
 - a. **Burn Unit preparation**. Mark the boundaries of the areas to be burned, i.e. the Burn Unit(s). Construct fire breaks (strips of bare/otherwise inflammable land) around all burn units consistent with the requirements of the Burn Plan. Clearly mark any hazards or special situations in the burn units including utility poles, structures, hazards, and areas requiring special attention. Clearly identify burn crew parking and staging areas, 'safety zones', and escape routes.

How can TPBA help? TPBA can provide advice on how to prepare the site and associated firebreaks. TPBA might also be able to provide some volunteers with tools to help with the labor; however landowners should be prepared to provide the majority of the labor needed to prepare the burn units.

b. Identify and contact potentially impacted neighbors (identified in the Burn Plan) via letter to let them know of plans to burn. Ask your neighbors to contact you if they want to be notified of the final burn date and time.

How can TPBA help? TPBA can advise on which neighbors may be affected by the burn and associated smoke, and therefore identify who should be notified in advance. TPBA can provide form letters which landowners can modify to meet their specific needs. TPBA can also assist in using public land ownership records to advise on how to gather names and addresses of potentially affected landowners.

c. Recruit willing friends, neighbors, or other volunteers to be available to assist on the day of the burn. This assistance will generally take the form of helping to patrol the perimeter of the active fire zone to notify the burn crew of any 'escapes' of fire outside the intended burn area, and to help quickly suppress any escapes. The more eyes and hands available, the better!

How can TPBA help? Ahead of the burn, TPBA can provide written descriptions of what the volunteers can be expected to do as well as a list of useful tools to bring along with necessary personal protective equipment needed for safety. On the day of the fire, experienced TPBA volunteers can provide a brief training and will be responsible to lead the teams of people (TPBA members and other volunteers) constituting the 'Hold Teams' charged with containing the fire in the burn units.

d. **Join the Triangle PBA!** The philosophy behind TPBA is 'Neighbors helping neighbors'. Your neighbors will be helping you to plan and conduct the burn, and the experience which you gain through this activity is valuable to others in the community.

How can TPBA help? TPBA can collect your name, email, phone and \$12 annual dues and add you to our roster and email list of TPBA volunteers. TPBA will email you future information about training opportunities as well as volunteer opportunities to assist other landowners in preparing and conducting future burns.

4. Choose the final burn day and time. Once the site is prepared and neighbors are notified, we wait for a suitable day and time for the burn when the (1) weather and fuel conditions are expected to meet the parameters required in the Burn Plan and (2) sufficient TPBA or other volunteers are available to conduct a safe and effective burn.

How can TPBA help? The TPBA Burn Boss will monitor weather and fuel moisture conditions to identify suitable burn opportunities. When such opportunities arise, they will coordinate with the landowner to reach out to volunteers to ensure a sufficient number of people are available to help. When all conditions are met, the Burn Boss and Landowner will issue a final 'GO!' call via email to arrange for volunteers to meet at the appointed time and place to conduct the burn. Landowners should give the final notification to neighbors who have requested to be notified.

5. **Conduct the burn.** The day has arrived! Once the volunteers are assembled at the chosen time and place, the Burn Boss will conduct a briefing so that all volunteers understand the objectives, the Burn Plan, and their respective roles. The Burn Boss will divide the volunteers into different teams to handle different duties. The Burn Boss will conduct a final assessment of weather and fuel moisture conditions, to ensure they are within the intended parameters, and if so will conduct a small test burn to assess fire behavior. If any conditions are not satisfactory, the Burn Boss will cancel the burn and resume looking for a future opportunity. Assuming conditions are all good, the Burn Boss will notify appropriate state and local authorities that the burn will be commencing shortly.

When the various teams are in position, the Burn Boss will issue the final 'GO!' order to start the burn. The Burn Boss will monitor the burn and make adjustments to teams and assignments as needed. After the burn is complete, the Burn Boss will oversee the final 'mop up' operation to ensure that all active fire is out. Finally the Burn Boss will lead a Debriefing at the end to hear from all participants and will ensure that all volunteers are accounted for.

After the debriefing, Landowners may at their discretion host a small gathering to celebrate the successful burn. Landowners will also be asked to monitor the burn area over the next 24 hours and notify the Burn Boss and/or local authorities of any fire flare ups or persistent smoke.

How can TPBA help? A TPBA Burn Boss can serve in the Burn Boss roles described above. TPBA can provide specialized equipment such as drip torches and fuel for igniting the burn units, water pumps to support teams in containing the fire to the intended areas, equipment for monitoring weather conditions, and some radios to facilitate communication. Most importantly, TPBA can likely provide experienced volunteers to serve as leads and members of the various Burn Teams and Hold Teams needed to safely conduct the fire.

Frequently Asked Questions

Where does the Triangle Prescribed Burn Association operate?

The <u>Triangle Prescribed Burn Association</u> (TPBA) operates in the North Carolina counties of Alamance, Chatham, Durham, Orange, and Person. Lands outside these counties may be covered by another Prescribed Burn Association.

How do I join the TPBA?

To join the TPBA, <u>fill out this form</u>. You will be added to our mailing list and will receive an introductory email with links to more information about the TPBA and prescribed fire in general. Annual dues are \$12 and payment information is included in the introductory email.

How can I engage with TPBA to plan and conduct a burn?

To initiate a discussion about working with TPBA, please reach out via email to one of our officers:

Hope Horton Andy Gillespie
TPBA Chair TPBA Secretary

hopematrix@fastmail.com ajrgillespie@gmail.com

Is there a cost to work with TPBA?

The purpose of a PBA is to promote "Neighbors helping neighbors'. TPBA is not a private contractor, we do not charge for the services of helping develop Burn Plans, preparing sites, or conducting the burn. All TPBA labor is provided free of charge by volunteers interested in promoting the use of fire to restore and manage lands.

Landowners will be asked to cover the cost of consumable supplies such as fuel for drop torches, and stamps and stationary for contacting neighboring property owners. Landowners wanting to burn their land are required to be members of the Triangle PBA at a cost of \$12.00 per year. Collectively these costs are generally less than \$100 per burn.

What time of year does TPBA conduct burns?

Prescribed burns in our area are conducted when weather conditions are such that risk of fire escape is minimized and smoke can be managed to avoid public health risks. In the Triangle area of NC, our best windows for burning tend to occur between late September and early April. The summer months are used for volunteer training and development, and for preparing plans and sites for burning in the fall.

How long does it take to plan and conduct a burn?

The time needed to plan and conduct a burn varies greatly depending on the burn objective(s) and the size and complexity of the site to be burned. A Burn Plan can generally be developed in a week or two once a landowner has determined their burn objectives. Site preparation can take days or weeks depending on the amount of area to be prepared and the number of volunteers available to do the work. Finally, waiting for the proper weather and fuel conditions and availability of volunteers can take days or weeks depending on the time of year. Once a burn day is chosen, our practice is to conduct and complete a single burn in a single day. Large areas may require multiple burn days. A single property may be divided into multiple burn units. Burn units can be burned individually, sequentially, or in multiples based on the burning conditions and available manpower to complete the burn safely.

Note that the planning and site preparation processes can be completed outside the burn season window, i.e. from April to August. Once prepared, it is then simply a matter of waiting for the right weather and fuel conditions and availability of volunteers within the burn season to conduct the burn.

What are my potential legal liabilities as a landowner in conducting prescribed burns?

TPBA does not provide legal advice. We can point you to the North Carolina state laws which guide issues of landowner liability in conducting prescribed burns. You are encouraged to read that documentation carefully and discuss it with your legal advisor before making any decisions.

NC Prescribed Burning Act Link.