Small Slash Pile Construction and Burning Procedures

Slash piles should be constructed no larger than 6 feet in diameter and 6 feet in height. Piles stack the best if green limbs and branches are used for the bottom layer. Keep the curvature of the branches in the same direction so that they nest on top of one another. Piles eventually burn the best if the inner portion of the pile is dense, with little void space. The outer portion of the pile can then be stacked with smaller dead material (as it does not nest as well as green limbs), small trunks, and larger branches. Logs over 13-14" in diameter are hard to burn.

Adequate burning conditions are usually dictated by a snowfall of at least 2 inches, with several days of cold weather forecasted. The South Dakota Wildland Fire Division requires a burn permit and will determine when safe burning conditions exist.

Proper clothing is an important part of the burning process. Flame resistant clothing is recommended. Synthetic fabrics are very flammable and will also melt easily. Wear boots that are waterproof and have good traction as it gets very slippery. Clear safety glasses are a good idea to prevent injury and burns from embers. Heavyweight leather gloves are a must.

Recommended tools to have on site are a shovel, a heavy-duty steel rake, and a hoe. A water source such as a garden hose or water tank is recommended to be close by for use.

A fuel mixture is generally needed to get the piles to start burning adequately. It is recommended to mix 25% gasoline with 75% diesel. This mixture will promote longer-term burning, as the diesel burns longer and less intensely than gasoline. The mixture is also less likely to "flash".

Burning Process

Once a person has an approved permit, notified their local dispatch center, obtained the proper clothing and equipment , pile burning can begin.

After a pile appears to be burning well, a person can move on to the next pile to ignite it. It is recommended to skip at least every other pile in an area to minimize heat intensity for the tree canopy and prevent snow melt. Once the initial flame intensity has subsided, adjacent piles can be lit. Piles will readily burn, even if covered by several inches of snow, as long as they have cured properly. Snow covered piles will create a great deal of smoke until the snow is burned off.

The next step in the process is to tend the piles that have burned down to the point where unconsumed material is left in the outer ring of the pile. This material should be moved into the center of the burning pile to ensure that it is eventually consumed. Piles should be rechecked several times until all of the material is eventually consumed. The last step is to rake the outer portion of the pile (and underlying ground litter such as pine needles and leaves) into the center to ensure that there is no smoldering material left on the perimeter. Once a pile has burned down to this point, it can be left for the night, if there was adequate snowfall. Burned piles should be checked and re-checked over the next several day(s) until they are cold to the touch. Take extra caution and ensure that stump holes are cold to the touch. Piles larger than 5' x 5' require significantly more tending as they increase in size, and may remain hot for weeks. Piles that were thought to be out have ignited a wildfire weeks after initial ignition.

Refer to Instruction Videos at:
https://www.youtube.com/@southdakotawildlandfire