

Instructional Scenario



TITLE: Conducting an Understory Burn

Course/Duty Area: Practicing Silviculture: 8042:99; Examine the role of fire in forest systems. 8042:100; Explain prescribed burning.

Scenario:

A local farmer owns a 20-acre tract of loblolly pines that were recently thinned. He would like to conduct an understory burn to clear debris and enhance wildlife habitat. He is unsure how best to accomplish this safely, and who he needs to notify prior to proceeding.

Focused Questions:

1. What should be included in the prescribed-burn plan?
2. What specific safety precautions should be considered prior to the burn?
3. Who needs to be notified prior to conducting the burn?
4. On the day of the burn, what should be considered to ensure the burn goes according to the plan?

Project-Based Assessment: Create a prescribed burn plan for this landowner that will ensure a safe and effective burn that adheres to all local and state laws and notifies the proper agencies/authorities.

Teacher Resources:

Virginia Department of Forestry: <https://dof.virginia.gov/wildland-prescribed-fire/>

Virginia Forest Landowner Education Program: <https://forestupdate.frec.vt.edu/>

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Answers to Focused Questions:

1. This plan should outline the objectives of the burn, the specific area to be burned, and the conditions under which the burn will take place. The farmer should also assess the current state of the forest, including the amount and type of fuel present, the topography of the land, and any potential hazards. This information will help determine the appropriate timing and method for the burn.
2. Safety is paramount when conducting a prescribed burn. The farmer should assemble a team of trained personnel to assist with the burn and ensure that all necessary equipment, such as firebreaks, water sources, and communication devices, are in place. It is also important to have a contingency plan in case the fire behaves unexpectedly. This plan should include procedures for extinguishing the fire and contacting emergency services if needed.
3. The Virginia Department of Forestry (VDOT) and the local fire department should be notified prior to the burn. The VDOT can provide guidance on the legal requirements for prescribed burns and may offer assistance or resources to help ensure the burn is conducted safely and effectively. Additionally, it is courteous and often required to inform neighboring landowners about the planned burn. This communication helps prevent misunderstandings and allows neighbors to prepare for any potential impacts, such as smoke.
4. The farmer should carefully monitor weather conditions to ensure they align with the parameters outlined in the burn plan. The burn should be initiated in a controlled manner, starting with a test fire to observe how the fire behaves under current conditions. If the test fire indicates that conditions are safe, the burn can proceed according to the plan. Throughout the burn, the team should maintain constant communication and be prepared to adjust tactics as needed. Once the burn is complete, the area should be monitored to ensure that all embers are extinguished and that the fire does not reignite.