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GREAT PLAINS FIRE HISTORY

- Frequent fire shaped the landscape
 - Characterized by variable timing, intensity, and size
 - Short fire return interval
 - Started by lightning and natives

WILDFIRE <ul style="list-style-type: none">• UNPLANNED• UNCONTROLLED CONDITIONS• IMPACTS OFTEN UNDESIRABLE	PRESCRIBED FIRE <ul style="list-style-type: none">• PLANNED• CONTROLLED CONDITIONS• POSITIVE IMPACTS
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N EXTENSION

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BENEFITS OF PRESCRIBED FIRE

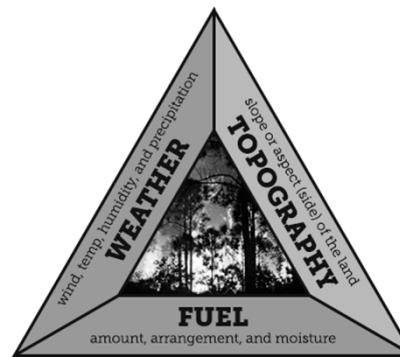
- Eastern Red Cedar
- Wildlife habitat
- Forage production and quality
- Manipulate plant species composition
- Wildfire



N EXTENSION

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FIRE BASICS



Fire Behavior Triangle

N EXTENSION

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NE FIRE LAW

- Statewide burn ban on all bonfires, outdoor rubbish fires, and fires for the purpose of clearing land
- Local fire chief may issue a burn permit to waive open burning
- Application for a permit must include:
 - Name of landowner
 - Name of burn boss if not landowner
 - Land management objective
 - Map of burn with firebreaks, natural and manmade



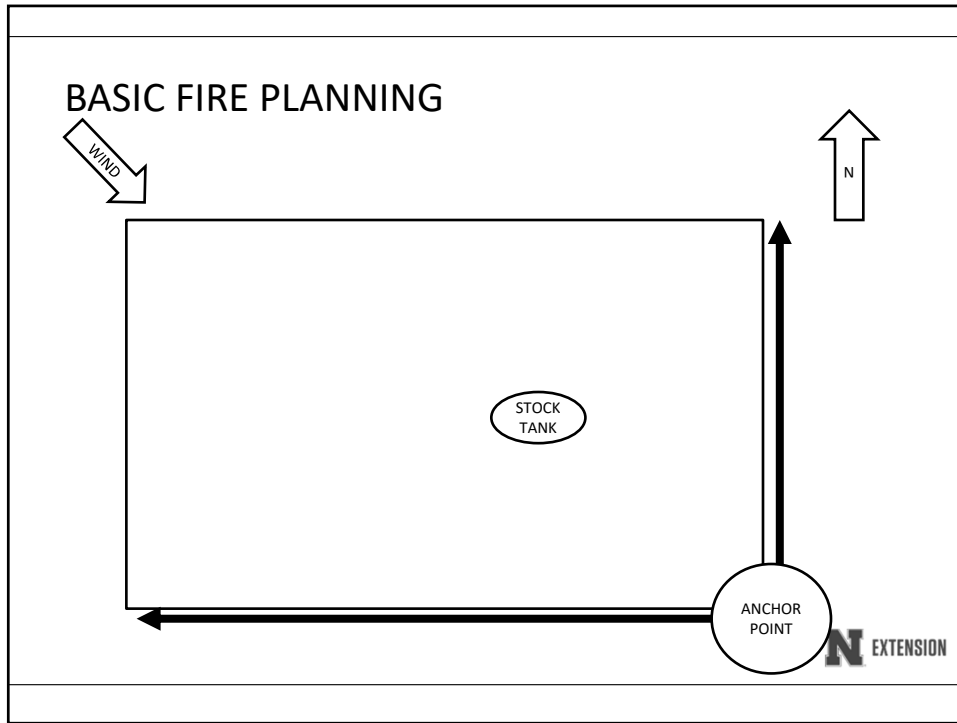
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NE FIRE LAW

- Procedures to be used to confine fire in areas without preexisting firebreaks
- List of equipment that will be on hand
- Type and condition of vegetation (burn and surrounding)
- Roads and homes affected by smoke
- Description of weather conditions believed to be necessary to safely and successfully conduct burn
 - Wind speed and direction, temperature, and relative humidity
- Other information required by the chief



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- ### FIREBREAKS
- Permanent
 - Water bodies (lakes, rivers, etc.)
 - Roads
 - Temporary
 - Bare soil
 - Mowed
 - Wet-line
 - Black Line
 - Crops/Fields
 - Grazed
- N EXTENSION

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FIREBREAKS

- Should be about 10x fuel height
- Can be combined
- Don't have to follow fence lines or property boundaries



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PLANNING

- Ahead of time (1yr-6mo)
- May need to defer grazing
 - Find cost-share
 - Develop burn plan
 - Create firebreaks
 - Inform neighbors and fire chief
 - Remove tall fuels near firebreaks



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PLANNING

Pre-Fire (weeks)

- Recontact neighbors, fire chief, help
- Check firebreaks
- Open gates/fences
- Establish water sources
- Prep equipment
 - Vehicles
 - Pumps
 - Drip torches



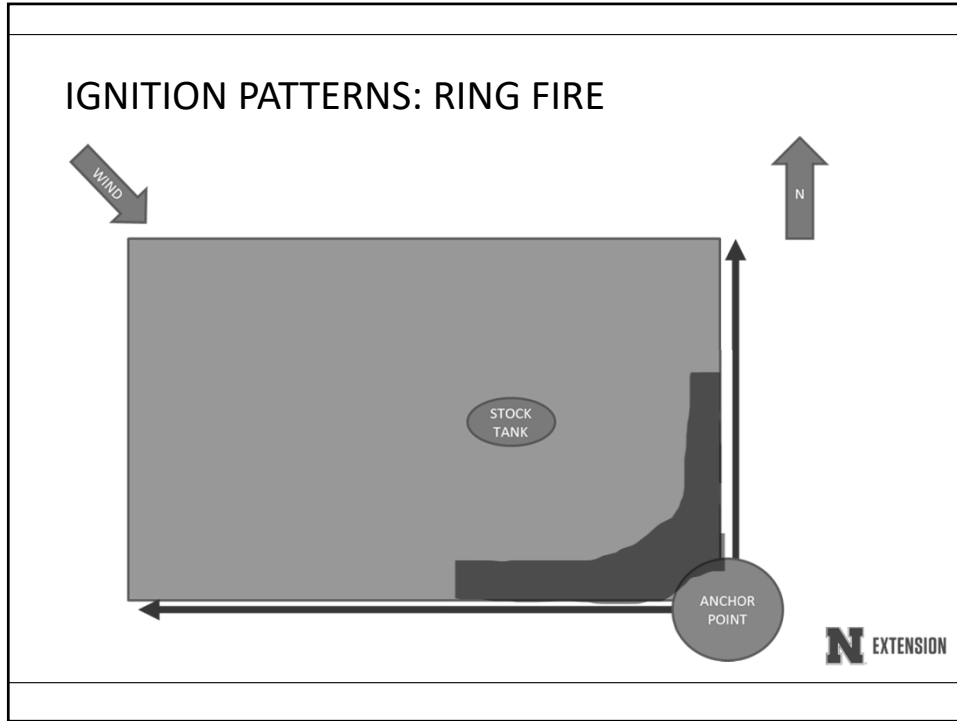
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TYPES OF FIRE

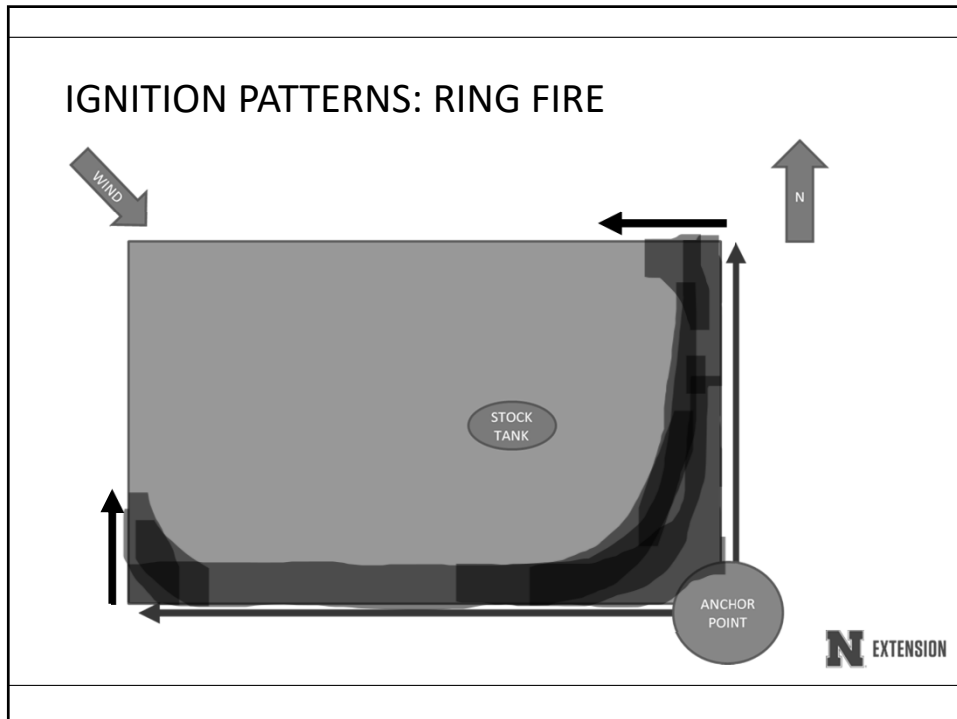
- Head Fire
 - Moves with wind direction
 - Moves quickly with long flame lengths/high intensity
- Flanking Fire
 - Moves perpendicular to wind direction
 - Spread determined by topography and fuel
- Backing fire
 - Moves against wind direction
 - Low intensity



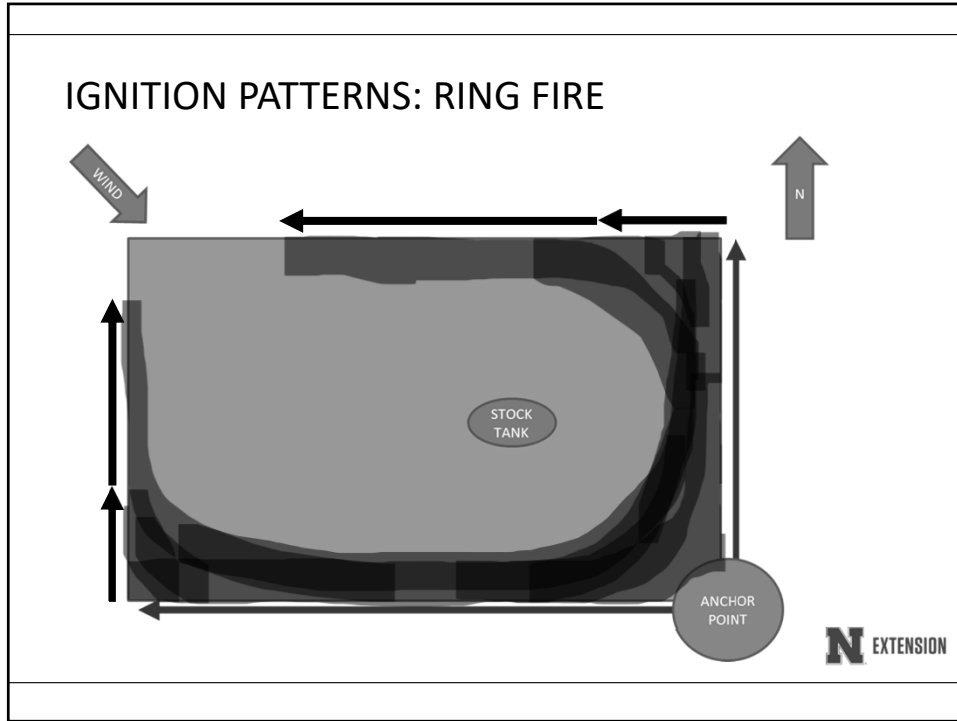
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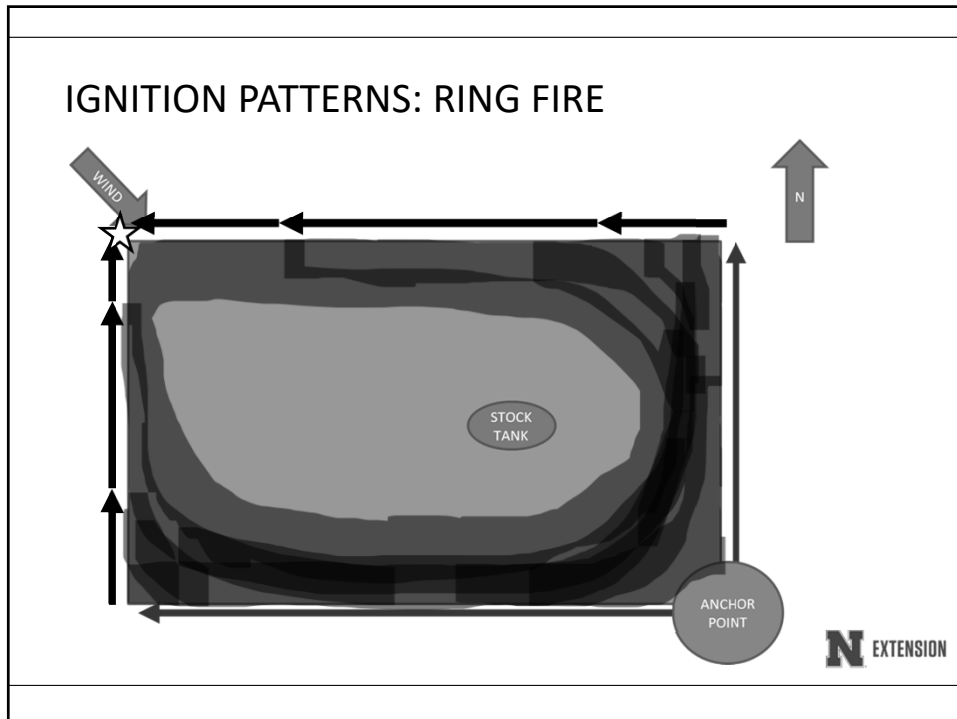
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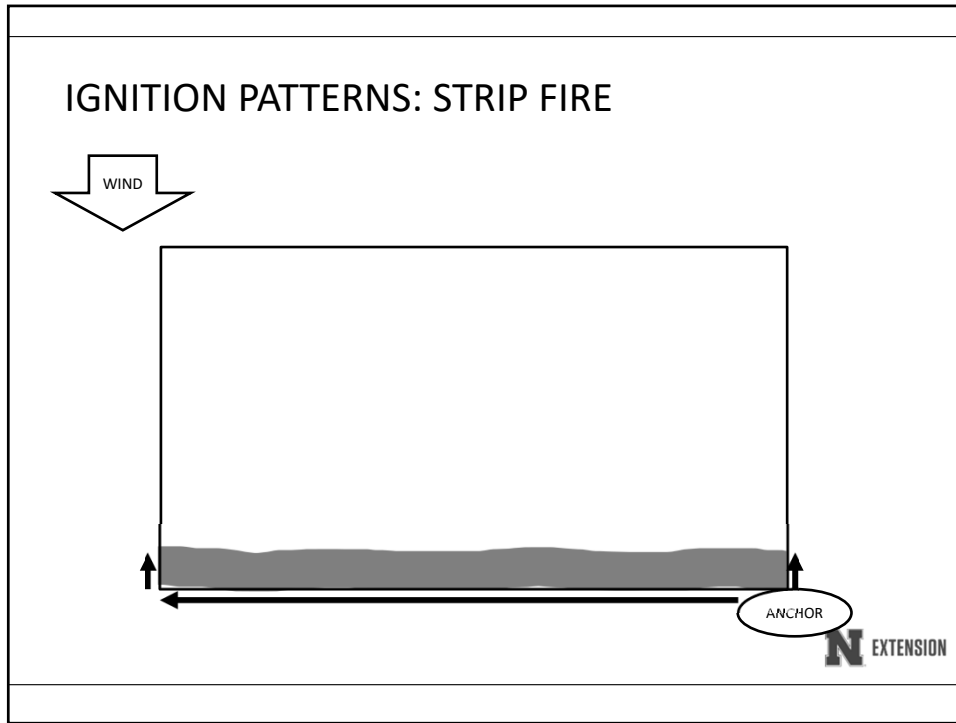
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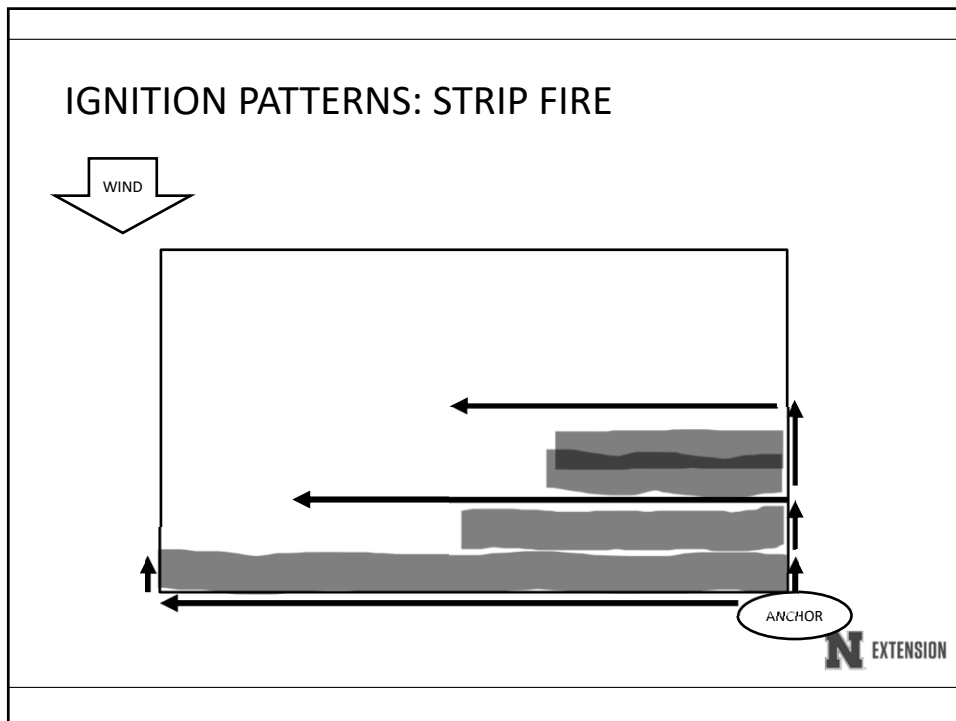
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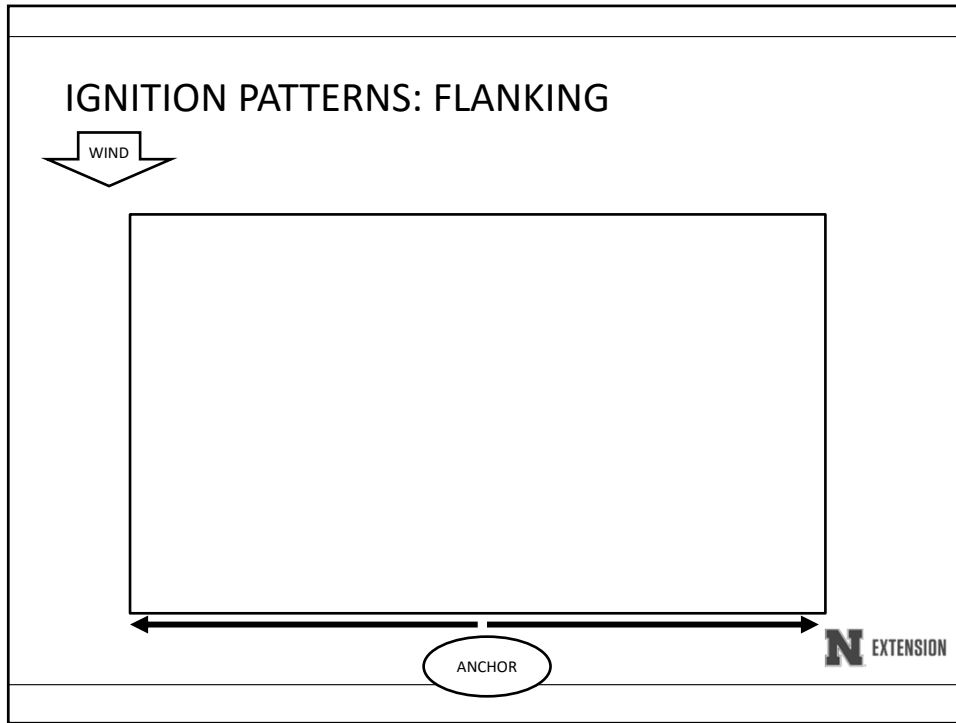
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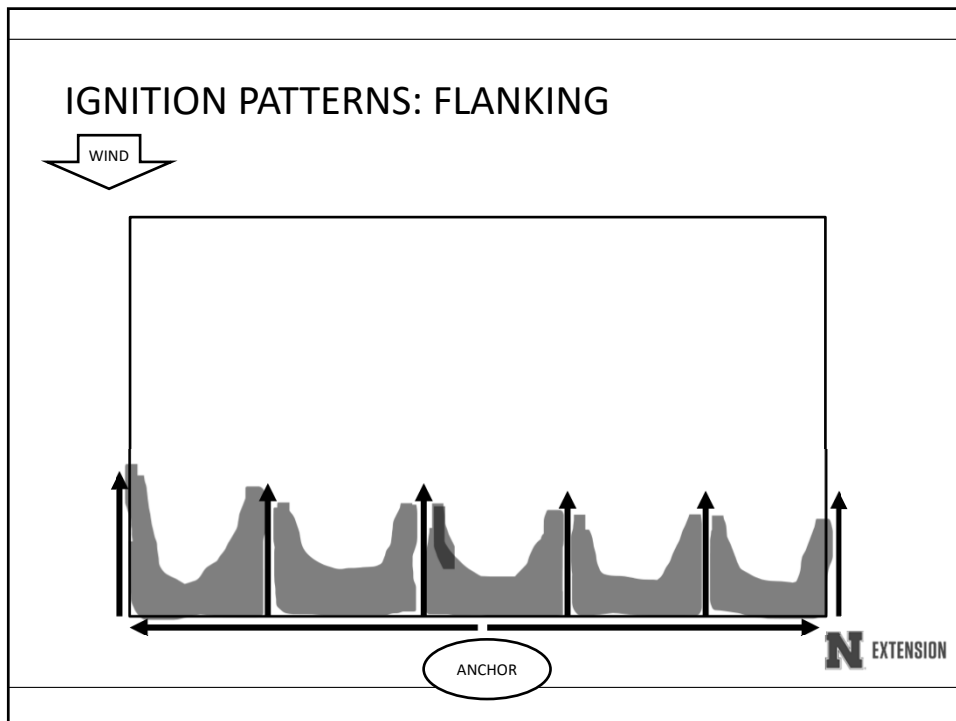
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IGNITION

- Never carry fire outside of the burn unit
- Don't light fire heading up steep slopes
- Several ignition tools
 - Drip torch
 - Uses gasoline diesel mix
 - Propane torch (weed burner)
 - Bulky and heavy



N EXTENSION

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HAND TOOLS

- Flapper
- Council Rake
- Rogue Hoe
- Shovel
- Pulaski



N EXTENSION

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BURN JOBS

- Burn Boss
 - In charge, usually landowner
 - Familiar with burn unit and fire
- Line Boss
 - Controls activities on half the fire
- Igniter
 - Carries the drip torch
 - Reports to line boss
- Engine Driver
 - Works with Hose Operator
 - Familiar with pump operation & water sources
 - Communicate with line boss when leaving to refill
- Hose Operator
 - Monitor water level



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BURN JOBS

- ATV Patrol
 - Familiar with ATV and pump operation
 - Patrol line for escapes and spots
- Hand Crew
 - Patrol Fireline
 - Stop escapes
 - Move cow pies and other burning fuels interior (mop up)
- Lookout
 - Monitor and report weather
 - Watch for escapes and spotting
 - High enough to see entire burn unit
 - May be the burn boss



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EQUIPMENT

- Engine/pumper truck
- ATVs
- Hand tools
- Water tenders
- Weather device
 - Kestrel or belt kit
- Radios
- PPE
 - Leather gloves and boots
 - Full length pants (cotton or Nomex)
 - Long sleeve shirt (cotton or Nomex)
 - Hat or helmet
 - Eye protection



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