



Three types of fire behavior

Surface fire:
Fuels at or near the surface

Ground:
Subsurface organic fuels (duff, organic soils)

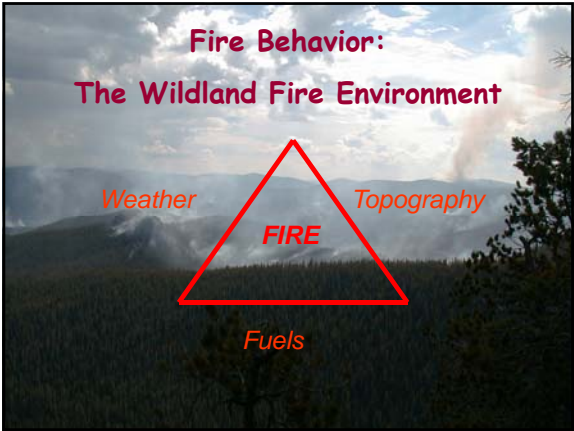
Crown:
Tree crowns

Categories of fires according to human management action:

Wildfire:
Suppression action is taken

Management ignited prescribed fire:
Ignited to meet a management objective

Prescribed natural fire:
Allowed to burn under a management plan to preserve natural role of fire



Components of the Wildland Fire Environment

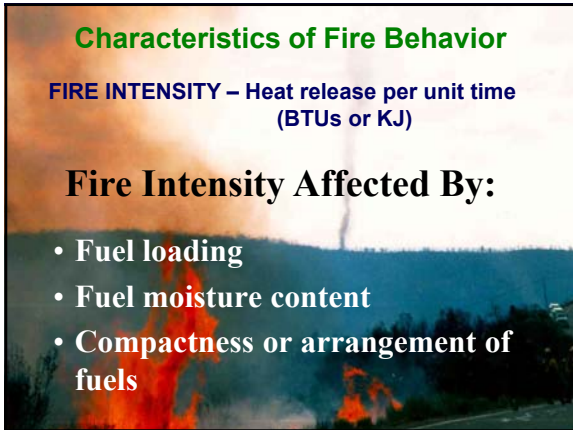
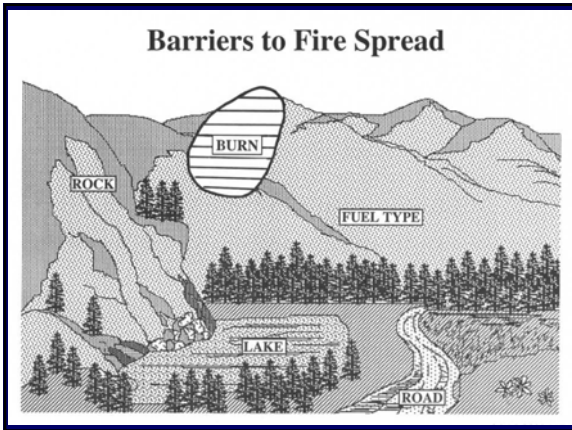
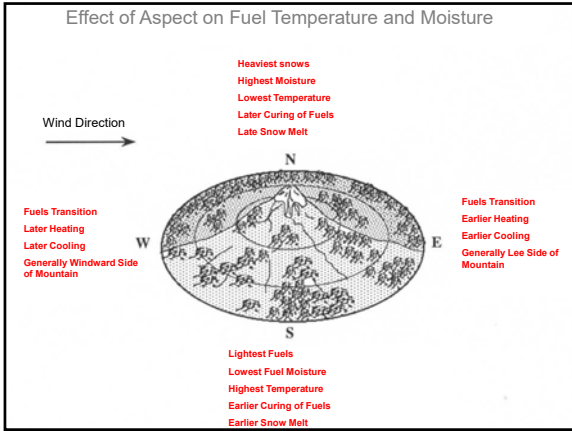
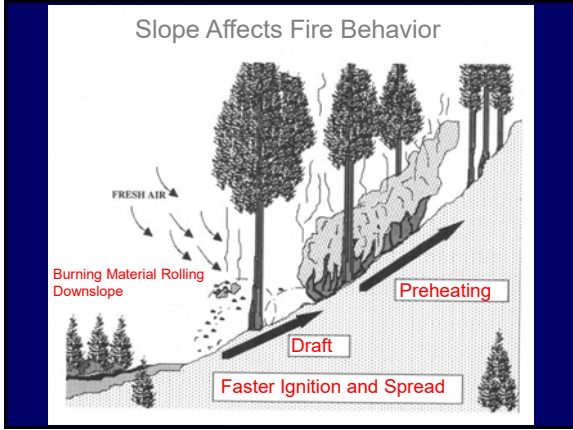
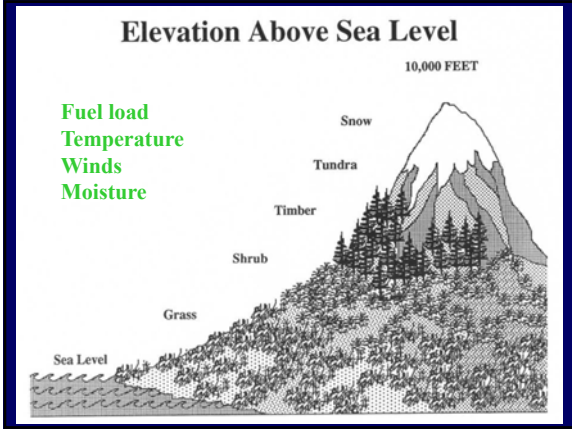
Weather

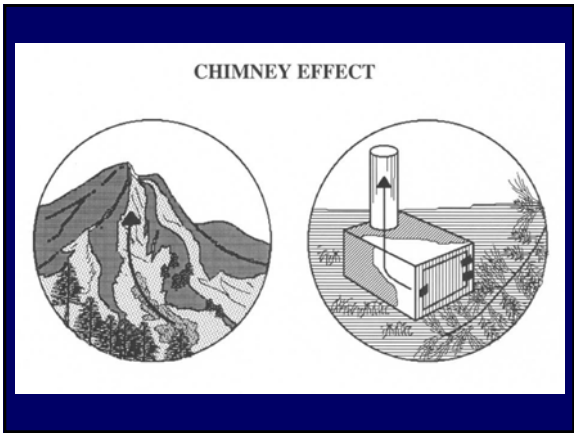
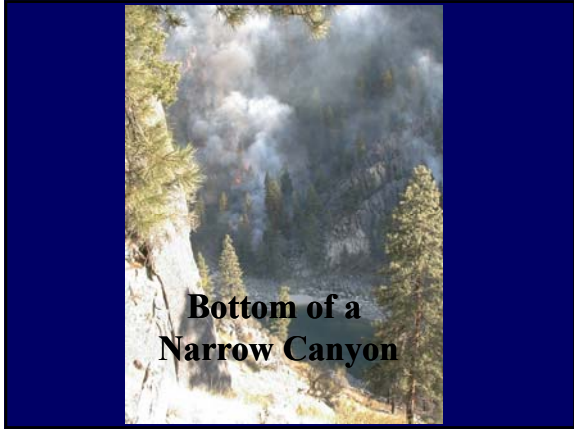
- Temperature
- Relative Humidity
- Atmospheric Stability
- Windspeed and Direction
- Precipitation

Components of the Wildland Fire Environment

Topography

- Elevation
- Position on Slope
- Aspect
- Shape of Country
- Steepness of Slope





- Types of fire behavior**
- Running** – spreading quickly
 - Creeping** – spreading slowly with low flames
 - Smoldering** – burns without flames; barely spreading
 - Spotting** – sparks/embers carried by wind or combustion column or moved by gravity
 - Spot fires** – new ignition points
 - Fire brand** – a piece of burning material

Types of extreme fire behavior

Torching – surface fire moves into crowns of individual trees

Crowning – spreads from tree crown to tree crown
(dependent, active, or independent)

Flareup – sudden acceleration of fire spread or intensity
(short duration, for portion of fire)

Blowup – dramatic change in the behavior of the whole fire
(rapid transition to a severe fire)

Fire Whirls – vortex (gas mass with rotational motion)



Safety

Have all required Support, Tools and Equipment before igniting your fire.

Don't light more fire than you can manage.

Don't light fire with people above or in front of the fire.

Don't light fire while walking into your plot.
instead, light fire as you walk out.

Don't pour ignitable liquids onto a pile that you have already tried to ignite.

Dress appropriately.

Safety

Monitor the expected weather for the day/days you plan on burning.

Don't burn on really windy or hot and dry days.

Monitor your fire. Have back up when necessary
(i.e. lookout, holding forces).

Have a plan.

Communications