

Prescribed Burning

APPROPRIATE FOR:

- ❖ modifying vegetative communities/structure (succession) without the use of herbicides;
- ❖ accelerating nutrient cycling, spring green-up, sprouting, forage availability;
- ❖ modifying soil temperatures; and
- ❖ modifying soil moisture conditions.

NOTE:

- ⊙ Burning accelerates soil movement; wetland topography and habitat diversity may complicate burn.
- ⊙ A prescription describing the fuel load and weather windows in which the burn can take place is required; contact the local cooperating fire-control entities for more information.

BACK FIRE

DEFINITION:

- ✘ A fire that moves into the wind or downslope

APPROPRIATE FOR:

- ❖ conditions when control is important (least intense because of slow rate of spread; wind speed has little effect on rate of spread);
- ❖ conditions in which high winds prevail (to assist with smoke dispersal);
- ❖ conditions characterized by heavy fuels; and
- ❖ situations where most complete burning is desired (slow rate of spread allows preheating of fuels).

HEAD FIRES

DEFINITION:

- ※ A fire that moves with the wind

NOTE:

- ⊙ This type of fire is the most difficult to control.

APPROPRIATE FOR:

- ❖ situations where control is not critical (fast fires, wide burn zones, greatest flame length, most intense, greatest spotting potential);
- ❖ situations in which low cost/area is a consideration;
- ❖ situations which call for rapid smoke dispersal (convection is greatest);
- ❖ situations in which burning of small size-class fuels is desired; and
- ❖ situations in which a low rate or proportion of fuel consumption is desired.

STRIP HEAD FIRES

DEFINITION:

- ※ A series of fire lines ignited progressively into the wind or downslope; a back fire meets a head fire from the next line.

NOTE:

- ⊙ Maximum intensity occurs where head and back fires meet; the wider the strip, the greater intensity the head fire achieves before it meets the back fire.

APPROPRIATE FOR:

- ❖ situations that can afford more time than head firing requires;
- ❖ situations where ample personnel is available;
- ❖ situations affording good access across ignition lines for igniters;
- ❖ situations in which ample fuel for ignition is available;
- ❖ situations requiring rapid smoke dispersal;
- ❖ situations requiring good control of fire intensity; and
- ❖ conditions in which fuel moisture content is high.

FLANK FIRE

DEFINITION:

- ※ A fire that moves at a right angle to the wind

APPROPRIATE FOR:

- ❖ establishing flanks of fires ignited by other methods;
- ❖ situations which afford close coordination of experienced crews;
- ❖ conditions where steady wind prevails; and
- ❖ low fuel conditions.

SPOT FIRES

DEFINITION:

- ※ A series of small spot fires ignited to burn in all directions until they come together, minimizing the possibility that any one fire will achieve sufficient momentum to start a hot run

NOTE:

- ⊙ Experience is required, as timing, spacing, and access for personnel are key to success.

APPROPRIATE FOR:

- ❖ open burning in light and variable winds;
- ❖ quick ignition;
- ❖ situations which call for control of intensity (by spacing of ignition points); and
- ❖ situations in which variable intensity is desired (as each spot burns outward into the wind and with the wind at various intensities, and spacing can be varied throughout burn site).

