## FOREST DILEMMA BACKGROUND INFORMATION SHEET #1

The intentional, planned use of fire is known as prescribed burning. Forest managers will prescribe burn an area to reduce a build-up of fire fuels or to maintain vegetation to benefit wildlife. Should prescribed fires be started or should nature be allowed to take its course?

## FIRE AS A NATURAL FORCE

Fires burn in a patchwork pattern called a mosaic. This vegetation mosaic results in diverse habitat for wildlife. People benefit from the availability of wildlife whether they hunt, fish, photograph, or simply observe them. When fire is excluded from fire-dependent ecosystems, the ecosystem's diversity, productivity, and stability are reduced.

## PRESCRIBED BURING AS A MANAGEMENT TOOL

Research has taught us much about the behavior of fire. By analyzing weather conditions, fuel types, and the topography of an area, a professional fire manager can begin to predict how fast a fire will spread, how high the flames will go, and how intensely the fire will burn the area.

Prescribed burning is the intentional, planned use of fire. It can be used to duplicate the historic cycle of natural fire. The **fire interval** is the length of time that passes between natural fires in a given area. The fire interval for Interior Alaska is as often as every 50-100 years.

Prior to setting a prescribed burn, managers complete a burn plan. These plans consider such things as the purpose of the burn, fuel load of the area, public notification plans, ignition source and patterns, pre-fire surveys, and manpower and equipment needed. Sometimes prescribed burns "escape" and cause damage. This is usually due to an unexpected change in the weather.

Prescribed burning can benefit wildlife. The mosaic patchwork pattern of a fire creates many **edges** between vegetation. These **edges** are often preferred by wildlife for feeding areas and travel corridors. Prescribed burning on lake margins in the fall removes dead vegetation and promotes regrowth of grass and sedge shoots desired by waterfowl for food and nesting materials.

Prescribed burns can be used to create fire breaks. **Fire breaks** are areas where fuels have been removed to stop a fire from spreading. Fire breaks are often used to protect privately owned lands and developed areas from fire.

## EFFECTS OF SMOKE

Smoke produced by fires can have a variety of effects on residents and visitors. Long lasting fires can lead to disruption of air service due to smoke density problems and can pose serious aviation safety problems for aircraft. Smoke can interfere with the tourism industry. It can also cause health problems for elderly residents and those with respiratory ailments. For most people, however, smoke is an irritation rather than a health hazard.