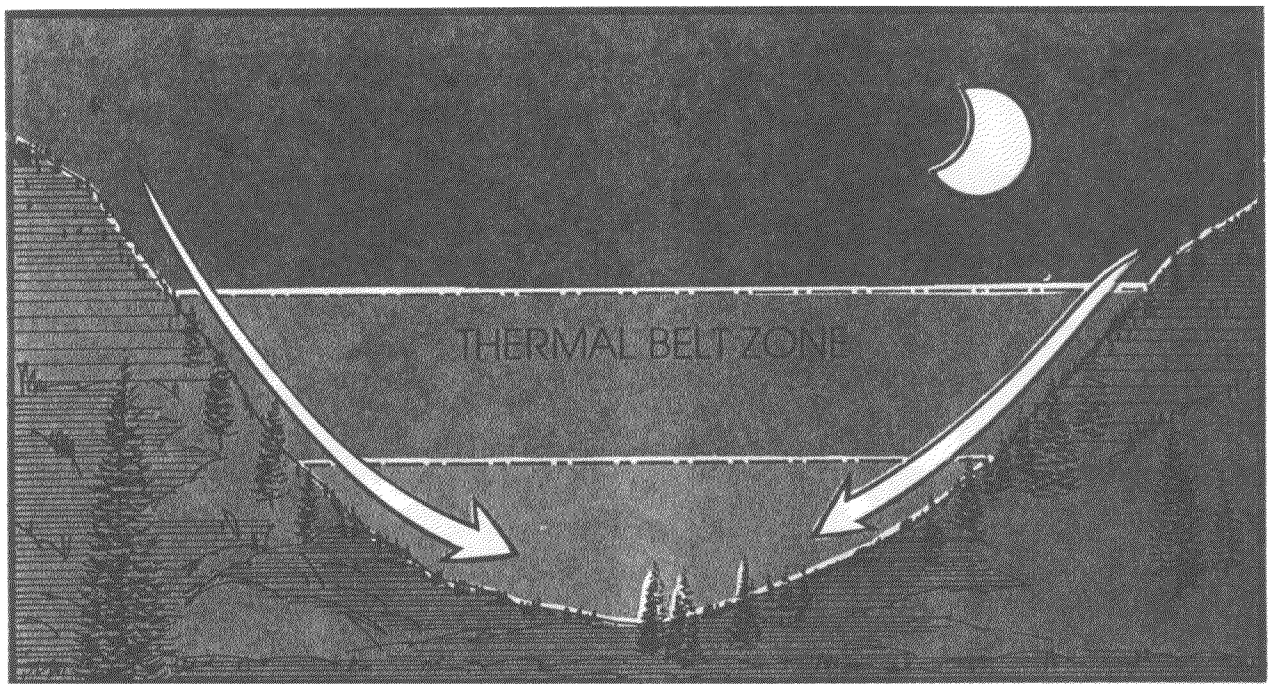
FIGURE 4 — THERMAL BELT DEVELOPMENT



THERMAL BELTS OCCUR AT NIGHT IN MOUNTAINOUS REGIONS.

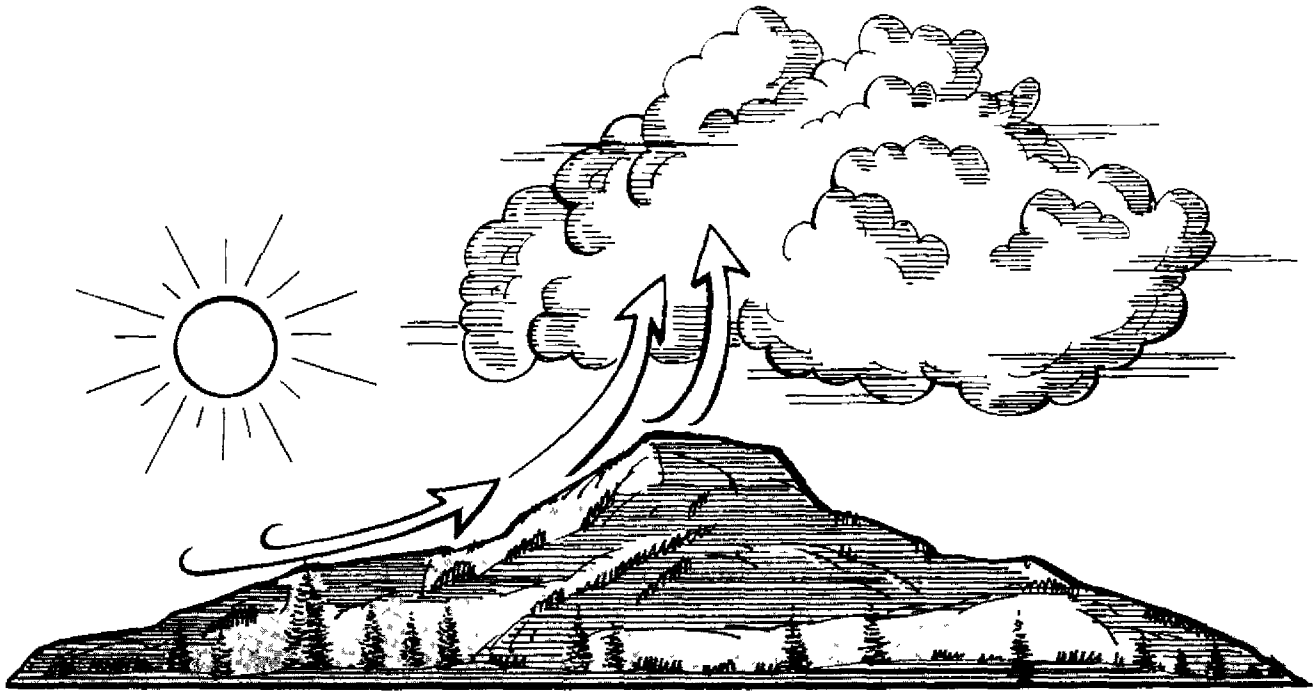
- The thermal belt has the highest average temperatures, the lowest average relative humidity, and the highest average fire danger.
- At night, cool, heavy air from higher elevations slides down slope into the valley.
- The warm air in the valley is replaced and pushed upward by the cooler air.
- The midslope zone cools less rapidly than other portions of the slope, and is referred to as the thermal belt.
- The thermal-belt effect is most prominent during clear days and nights.

QUESTION 1

Which elevation has the highest temperatures and lowest relative humidity during the day?

1. Ridgetops
2. Midslope or thermal belts
3. Lower slopes
4. Flat bottom lands

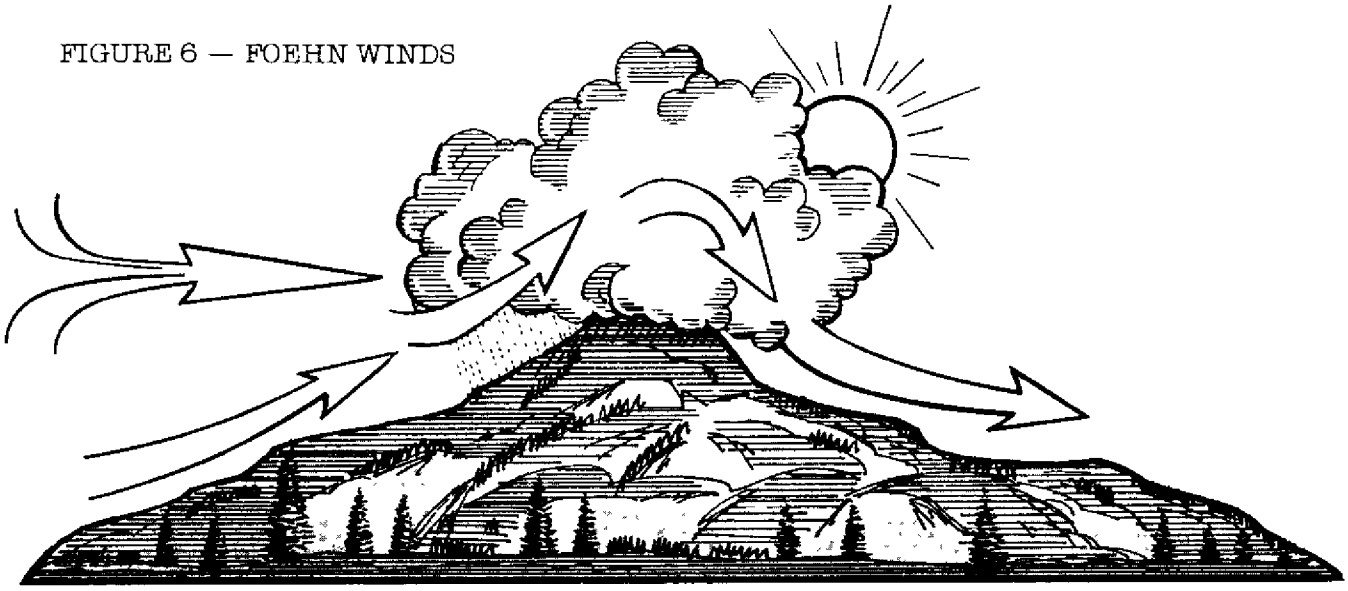
FIGURE 5 — OROGRAPHIC THUNDERSTORMS



OROGRAPHIC THUNDERSTORMS OCCUR IN MOUNTAINOUS REGIONS.

- Moist, unstable air is forced aloft by a prominent mountain range.
- As the air is lifted, it cools and condenses into clouds.
- A rapid buildup of cumulus occurs which sometimes reaches the thunderstorm stage.
- These "thunderheads" usually remain stationary, but they can move after development.
- The downdraft winds from the thunderhead could reach your fire.

FIGURE 6 — FOEHN WINDS



FOEHN WINDS ARE DRY WINDS WITH A DOWNWARD COMPONENT.

- They occur when heavy stable air is forced over a mountain range.
- The cooling of rising air on the windward side of the mountains might produce clouds and precipitation.
- As air decends on the leeward side it becomes warmer and drier.
- The resulting gravity or foehn wind can be more pronounced where the air is channeled through saddles or passes.
- Foehn winds in various areas of the west have local names, such as Chinook, Santa Ana, Mono, North, or East winds.

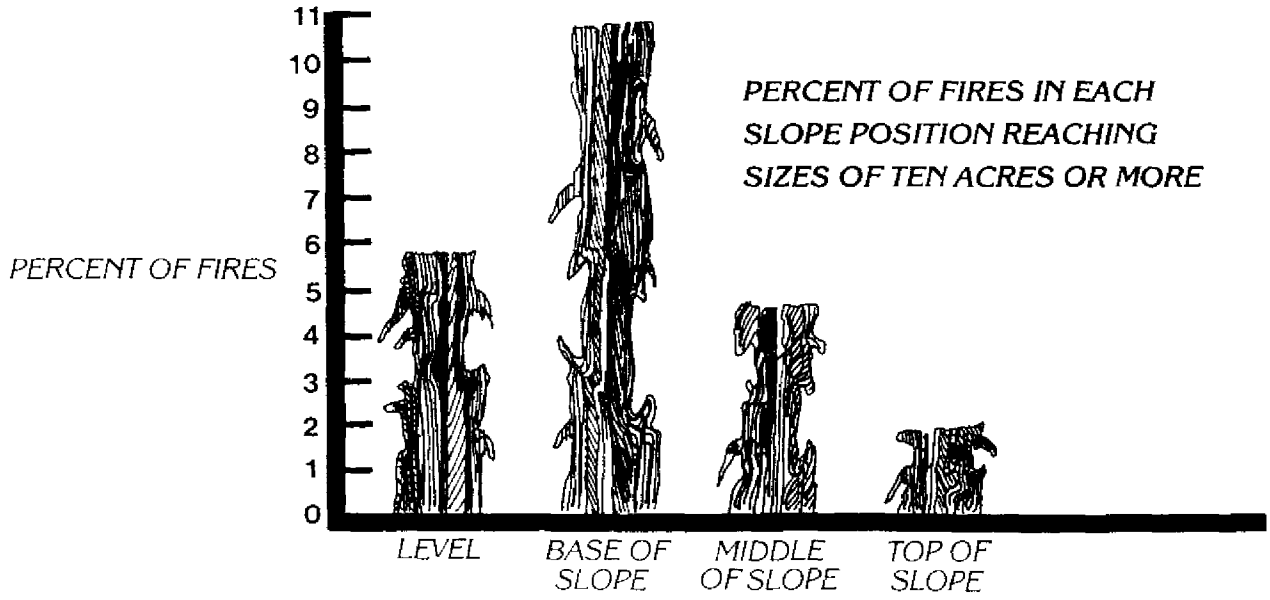
D. THE ELEVATION ABOVE SEA LEVEL INFLUENCES THE GENERAL CLIMATE OF AN AREA AND VARIES:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

TOPOGRAPHY AFFECTS FUELS' AVAILABILITY

THE POSITION ON A SLOPE OR THE RELATIVE ELEVATION INFLUENCES THE TYPES AND LOADINGS OF FUELS AND THEIR AVAILABILITY.

FIGURE 7 — FIRE DANGER BY SLOPE POSITION

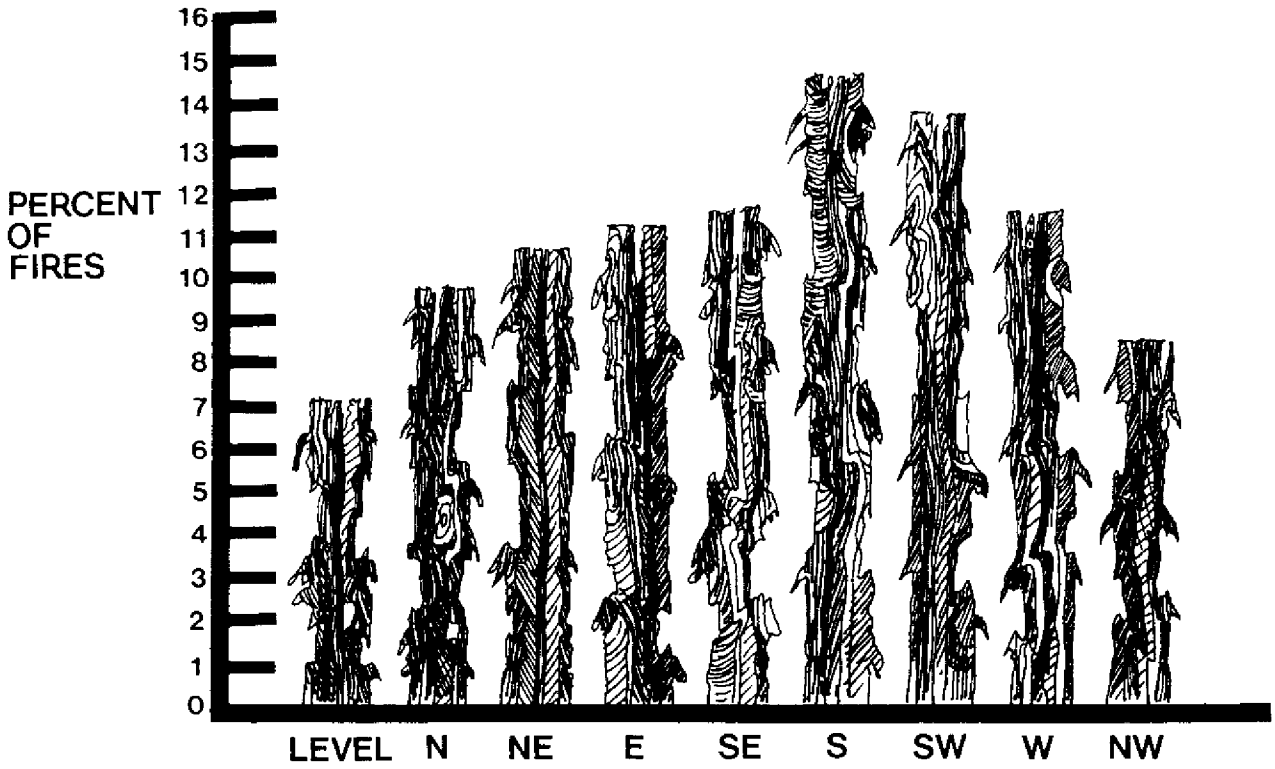


QUESTION 2

Why do fires starting at the base of a slope typically get larger in size?

1. The highest percent of man-caused fires occur here.
2. Daytime fire danger is highest in this zone.
3. A greater fuel area is available for spread of fire.
4. Fuels are heaviest in this zone.

FIGURE 8 — FIRE OCCURRENCE BY ASPECT

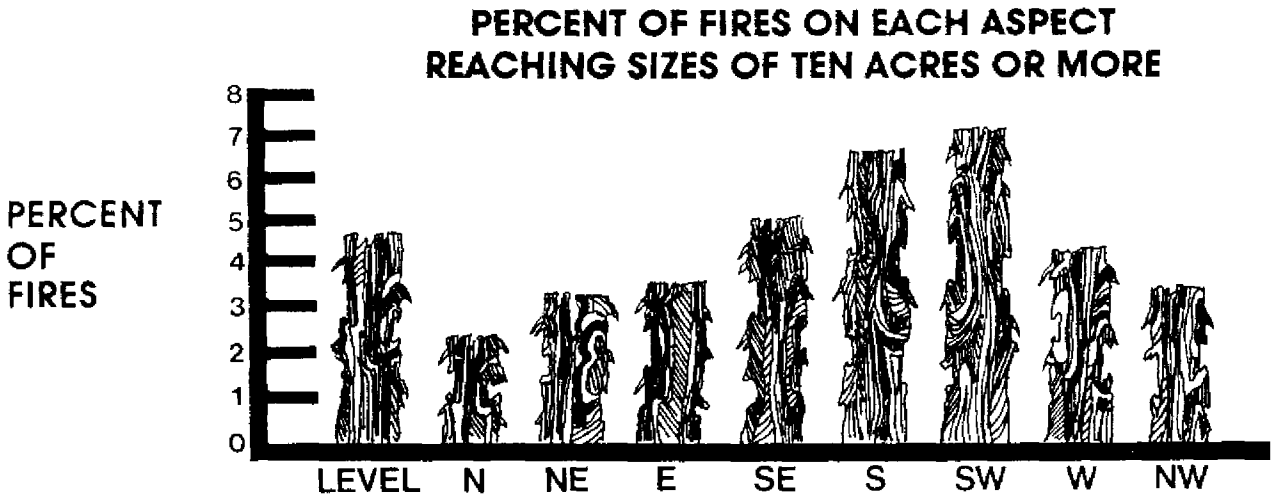


QUESTION 3

More fires start on south and southwest aspects because

1. Fuels cure earlier.
2. Average relative humidity is lower.
3. Fuels are smaller and drier.
4. Average temperatures are lower.

FIGURE 9 — ASPECT AFFECTS SIZE OF FIRES



QUESTION 4

Why do fires starting on southwest facing slopes get larger in size than on other aspects?

E. THE TYPE AND AVAILABILITY OF FUELS CAN BE AFFECTED BY MICROCLIMATE (CLIMATE OF A SMALL AREA) CONDITIONS DUE TO:

1. _____

2. _____

3. _____