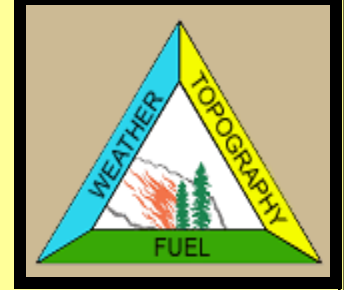




TOPIC 53
RELATIVE HUMIDITY



RELATIVE HUMIDITY is a comparison of the actual amount of water vapor in the air compared to what it could hold at the same temperature and pressure, expressed as a percentage. Fuels are continually exchanging moisture with the atmosphere.

As a general rule, as temperature increases, relative humidity decreases, and as relative humidity decreases, the amount of moisture in wildland fuels decreases.

Anything which prevents the RH from recovering overnight contributes to increased fire activity at an earlier than usual time -

Relative Humidity (RH)	Description (ease of ignition and spotting, general burning conditions)
>60%	Very little ignition; some spotting may occur with winds above 9 kph.
45-60%	Low ignition hazard – campfires become dangerous; glowing brands cause ignition when relative humidity is <50%.
30-45%	Medium ignitability – matches become dangerous, “easy” burning conditions.
26-40%	High ignition hazard – matches always dangerous; occasional crowning, spotting caused by gusty winds; “moderate” burning conditions.
15-30%	Quick ignition, rapid buildup, extensive crowning; any increase in wind causes increased spotting – crowning, loss of control; fire moves up bark of trees igniting aerial fuels; long distance spotting in pine stands; dangerous burning conditions.