

The following is the fire weather forecast for Jefferson, NC which is located in the northwest corner of the state for Tuesday, February 8, 2022. Listed are the expected conditions and values for air temperature, moisture content, atmospheric stability, winds, air masses/fronts, clouds and precipitation, and thunderstorms and how they will impact fires in this town.

Air temperature: The air temperature for Jefferson, NC ranges from 30°F at 12:00 am on the 8th to a low of 25°F around 6:00 am and a high of 40°F around 3:00 pm. Because of the cold air temperatures, it will be more difficult to start an Rx fire due to the low fuel temperature, and more heat will be needed to cause ignition.

Moisture content: The relative humidity ranges from 80% at midnight to a low of 38% around 3:00 pm as expected due to the inverse nature of high temperature and low RH. The risk of wildfire and the possibility of an Rx fire is low at these high humidities, but an Rx fire could occur from the hours of 10:00 am to 6:00 pm when the humidity ranges from 38-50%.

Atmospheric stability: The Haines Index ranges from a 3 from 12:00 am to 2:00 am and then drops to a level 2 for the rest of the day. Level 2 indicates an Rx fire would not generally be possible as the fire growth potential is not high enough.

Winds (general and convective): Surface winds out of the northwest are expected at around 10mph most of the day, with 20-25mph gusts expected from midnight to 8:00 am with transport winds of approximately 30mph most of the day. Surface winds and gusts will contribute to the drying of fuels, although Rx fires shouldn't be conducted early in the day due to the expected wind gusts.

Air masses and fronts: The weather for February 8th is stable with no expected fronts which indicate no abrupt or unexpected changes in fire weather.

Clouds and precipitation: No precipitation is expected and there will be very little cloud cover which will assist in the drying of fuels.

Thunderstorms: No thunderstorms are expected and should not affect fire weather for 2/8/2022.

While the ventilation rate in the afternoon of 80,000-112,000 produces a burning category 4 allowing for burning at any time, the above factors, combined with the KBDI of 0, indicate that prescribed fire is not possible.

