Temperature Inversion and Smoke

Smoke from prescribed burns, wildfire or wood burning stoves may hang low to the ground at night and in the early morning due to a phenomenon known as a temperature inversion. A temperature inversion is when warm air “caps” cooler air, causing smoke to become trapped in valley bottoms at night and in the early morning. The trapped smoke generally begins to lift after the sun rises and heats the earth’s surface. Heat released from the earth’s surface warms the air near the ground which begins to rise and mix with cleaner air above.