PRESCRIBED BURNING OF PINYON-JUNIPER RANGELANDS

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Approximately 6,000 acres of pinyon-juniper rangeland were burned at the Corona Range and Livestock Research Center during April and May. The area was divided into four blocks, complete with fire lanes. A burn plan was developed in conjunction with the Cibola National Forest to insure safety and compliance with regulations. After backfiring the fire lanes, the four blocks were aerially ignited with Forest Service equipment. Following the aerial ignition in mid-April, drip torches were used to increase the amount of area burned. A second aerial ignition was conducted in mid-May to complete the prescribed burn.

The burn was conducted to develop vegetative uniformity of the understory grasses, reduce juniper overstory and young trees, open the area for wildlife habitat and to provide a base laboratory for future studies. Prior to the burn, forage production and composition of overstoryed. Tree mortality is being determined at this time. Partially burned trees will be studied for several years to determine the effect of fire on long term mortality.

Herbaceous vegetation changes will also be monitored, using both pre-burn data and unburned controls. Differences in growth responses of different plant species to fire will be evaluated. Wildlife and livestock preference for burned areas will also be evaluated. Additional work on timing of burn, acceptable environmental parameters for effective control, techniques to increase fuel load and ways to alter species composition of the understory will be conducted.