

CHRONOLOGY OF EVENTS LEADING TO THE ARGYLE FIRE PHENOMENA

July 6-17, 1974

I. Character and Extent of Preceding Fire Weather Conditions and Events

From January 1, 1974, on through the following months, Black Hills weather was characterized by above normal temperatures and below normal precipitation. The Black Hills experienced extreme fire weather conditions with temperatures in the high nineties and very little moisture during the month of June. This is significant because June is normally one of the wettest months of the year.

On June 19-20, the Black Hills experience severe local thunderstorms. A rash of lightning fires occurred on both the State Protection Unit and the Forest Service Protection Unit. (Refer to the Cooperative Fire Control Agreement Between Forest Service--U.S. Department of Agriculture and State of South Dakota--Department of Game, Fish and Parks.) Total number of fires reported was twenty-six lightning fires and sixty railroad fires on the State Protection Unit, and sixty-eight lightning fires on the Forest Service Protection Unit.

The largest of these fires was the Pilger Mountain Fire. It started June 20 on the Forest Service Protection Unit and spread onto the State Protection Unit. The total area burned was 1,782 acres. A request for Federal Disaster Assistance was initiated on June 21 but was denied. The primary reasons for the request was the multiple fire situation and the appropriations in the "Fire Suppression Fund" had been obligated to other fires. The request was denied because the multiple fire situation did not constitute a disaster. If several of the fires had burned together as one large fire, then the State would have qualified. Lack of proper communication and misunderstandings of the program, by the State, precluded any federal aid on the Pilger Mountain Fire.

Shortly after the multiple fire situation on and about June 20, the Black Hills weather continued to be hot and dry. Several temperature records were set, the most significant of which was the twenty-two consecutive days above ninety degrees. (The old record was thirteen consecutive days in 1936.) As of July 1, total precipitation for the year was only forty-five percent of normal. The two wettest months normally, May and June, were some of the driest on record.

On July 6, the Black Hills again experienced locally severe thunderstorms, most of which were dry with heavy lightning. During the four-day period of July 6-9, a total of fifty-five lightning fires were fought on State and Forest Service Protection Units. The Argyle Fire and the Flag Pole Mountain Fire were judged to have large fire potential. Both fires started on the State Protection Unit.

During this rash of fires, the firefighting resources in the Black Hills were totally committed. The Argyle Fire at peak mobilization had six hundred and eighteen fire fighters employed. Agencies with men on the Argyle Fire were: Game, Fish and Parks, U.S. Forest Service, South Dakota National Guard, U.S. Air Force, and local volunteer firemen. In addition to the Argyle Fire, there were six hundred fifty-five fire fighters on other fires in both protection units. With a total of one thousand two hundred seventy-three fire fighters, a multitude of pumpers, tankers, tractors, and aircraft, all resources in the Black Hills were committed to fighting fires.

II. Chronology of the Argyle Fire July 6-17, 1974

The Argyle Fire started at about 1600 on July 6 and was first discovered by Battle Mountain Lookout at 1700 the same day. Initial attack was made at 1720 with a pumper and six men. The first reinforcements arrived at 1800 and consisted of a tanker and forty men. At this point in time, the fire was highly resistant to control. Control action continued throughout the night and into the next burning period on July 7. While in the second burning period, the fire was lost. Contributing factors were: high temperature of ninety-eight degrees, low humidity of fifteen percent, and gusty winds at fifteen to twenty miles per hour from the north changing to the south.

By late afternoon, the fire made its major run and had burned onto the Forest Service Protection Unit. The night of July 7, the decision was made to turn the fire over to the Forest Service at 0600, July 8. Control action was aided by a timely thundershower on the evening of July 8. As a result, the fire was called controlled at 1800 on July 9. It was then declared out at 1700 July 17.

The request for Federal Disaster Assistance was made the morning of July 8. Resources destroyed at that time were: 3,318 acres of timberland, 1,422 acres of pasture and rangeland, and various ranch improvements. No live-stock or structures were lost.

Resources that were threatened consisted of: six ranch homes and their surrounding out buildings, several hundred livestock, farm machinery, and several vehicles. The Custer County Sheriff was notified and actually did evacuate the residents from the six ranches.

Actual damages were based on figures of: \$1,000 per acre for timberland, \$207 per acre for rangeland, and \$500,000 to the watershed. A figure of \$125,000 structural damage was reported as destroyed in the fire but was not. This figure was taken from the threatened figure. Actual structural loss was not given because it was not known at the time.

III. Summary of the Argyle Fire Phenomenon July 6-17, 1974

Weather conditions preceding the Argyle Fire were certainly the worst that the Black Hills had experienced for several decades. The drought conditions created a fuel moisture regime far below normal for early July. With the dry fuels and the dry lightning storms, a disastrous fire was not unexpected. The Argyle Fire did occur along with fifty-four other fires during a four-day period. The combination of the multiple fire situation with one large project fire utilized all manpower, equipment, and monetary resources. As a result, Federal Disaster Assistance was requested and approved.