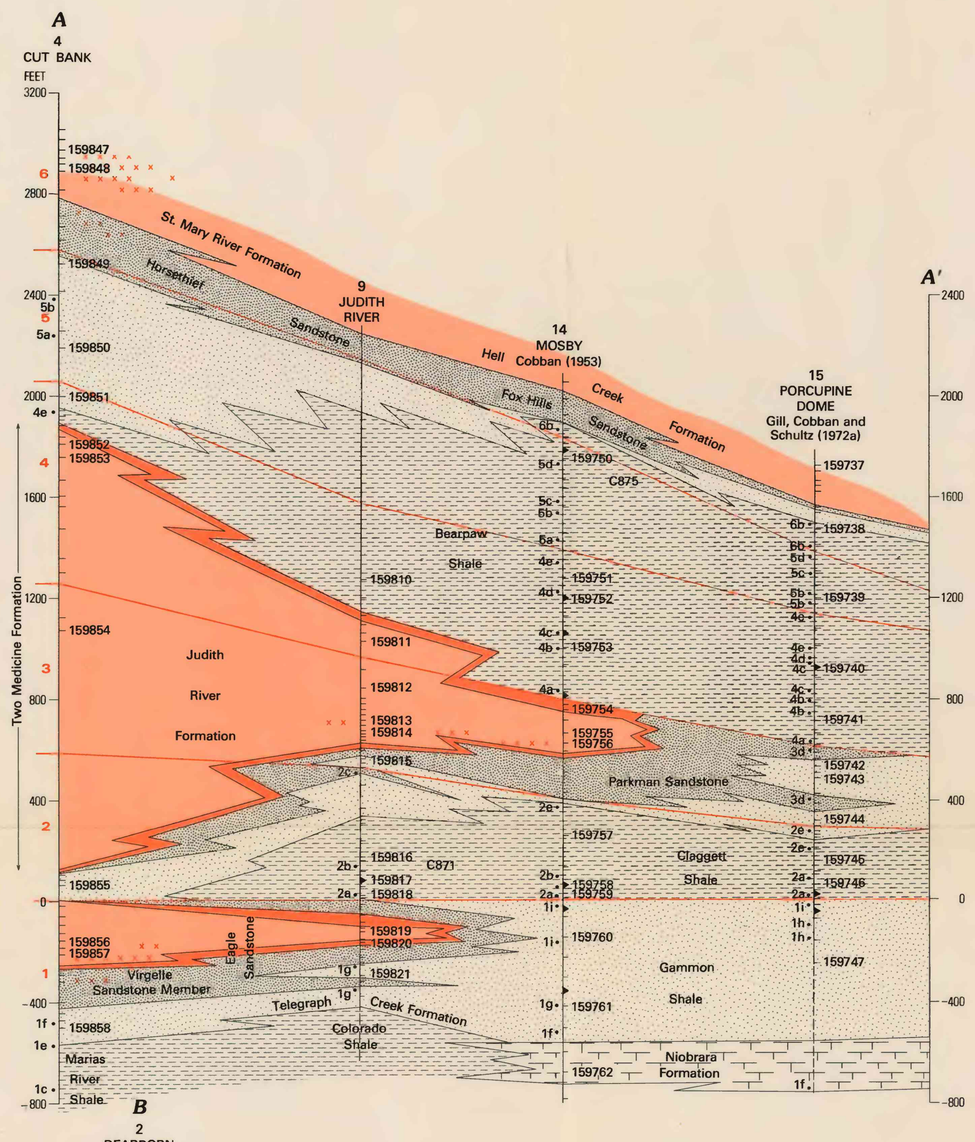

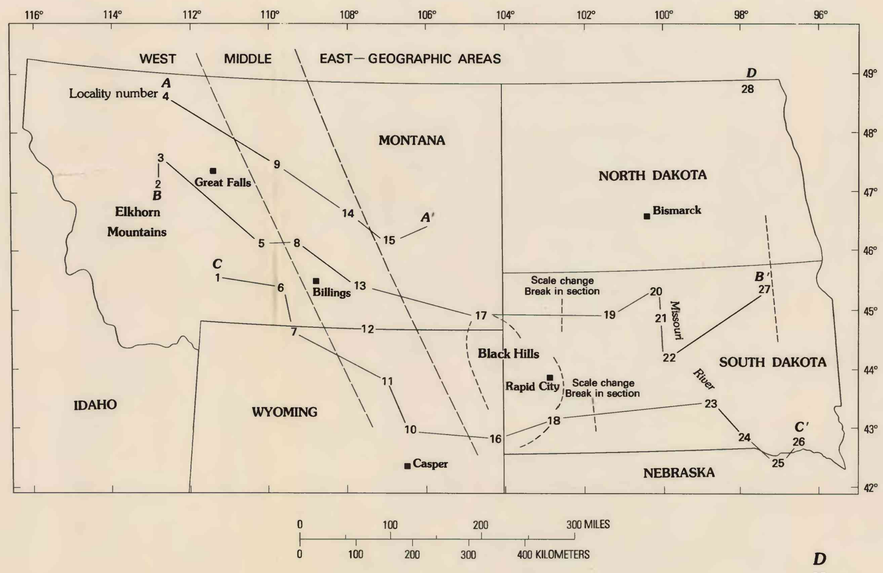

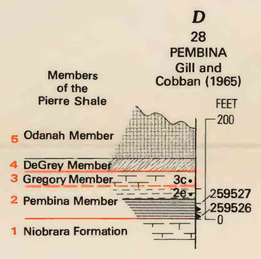

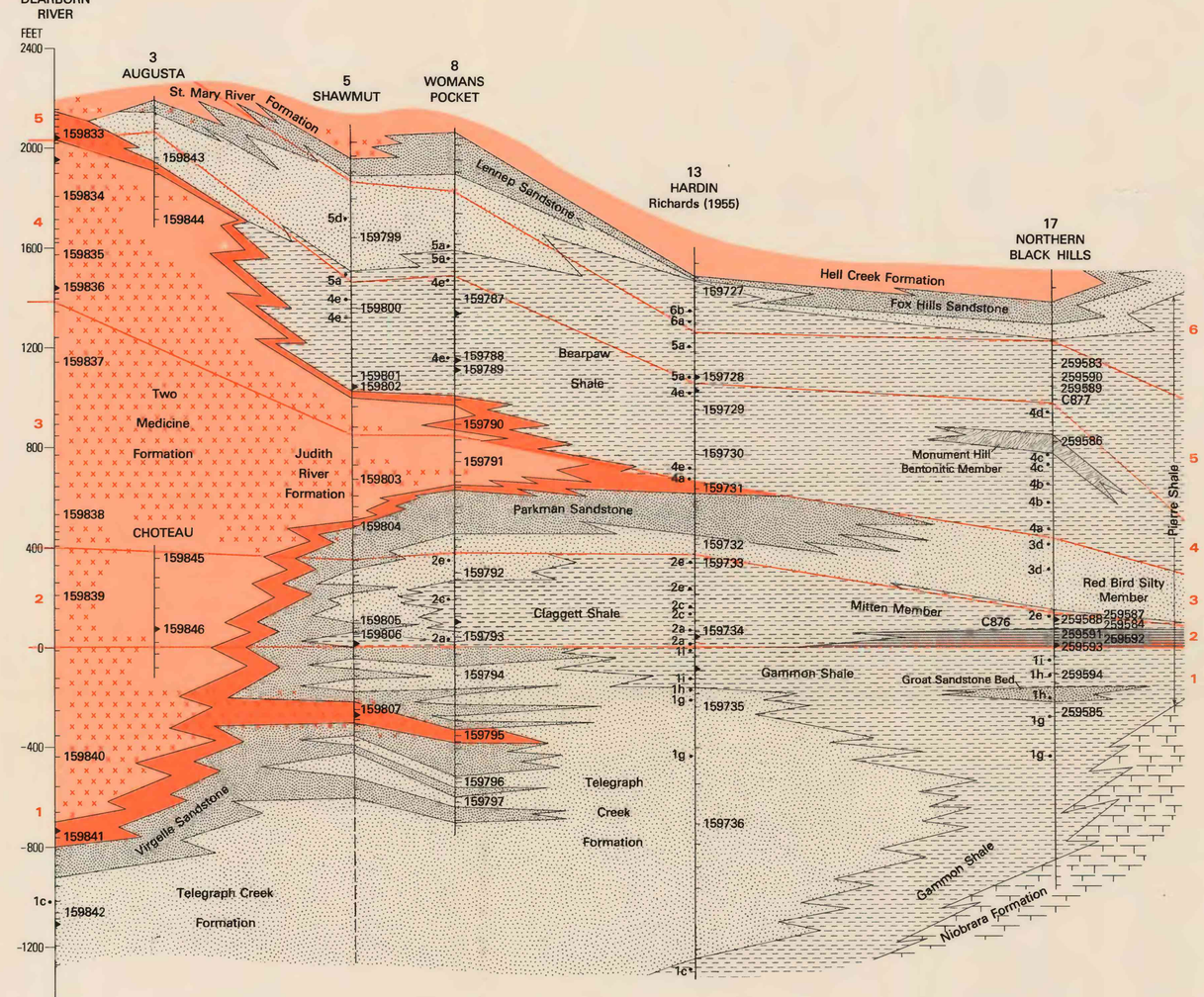

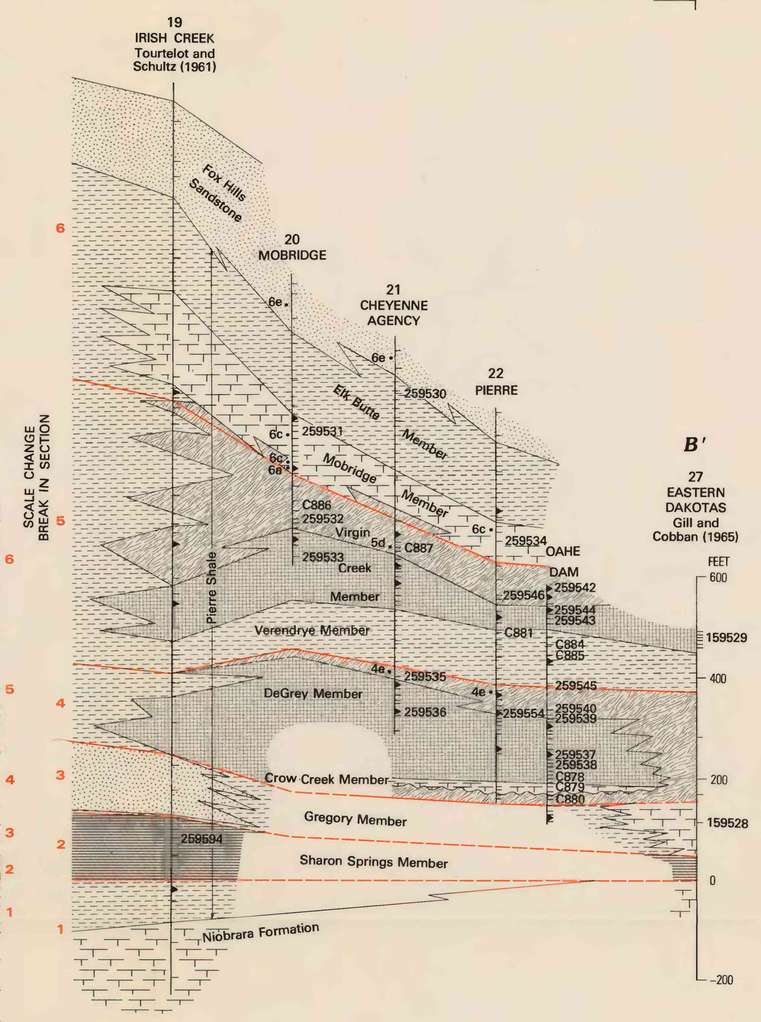

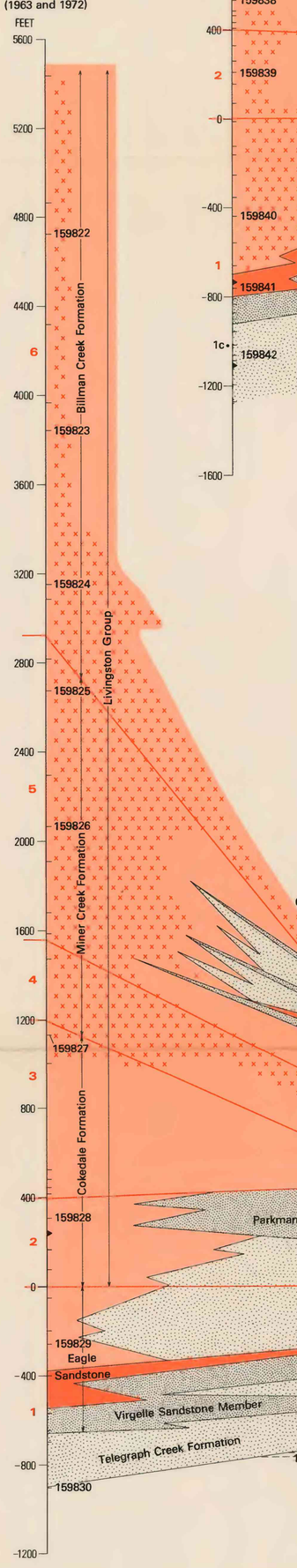

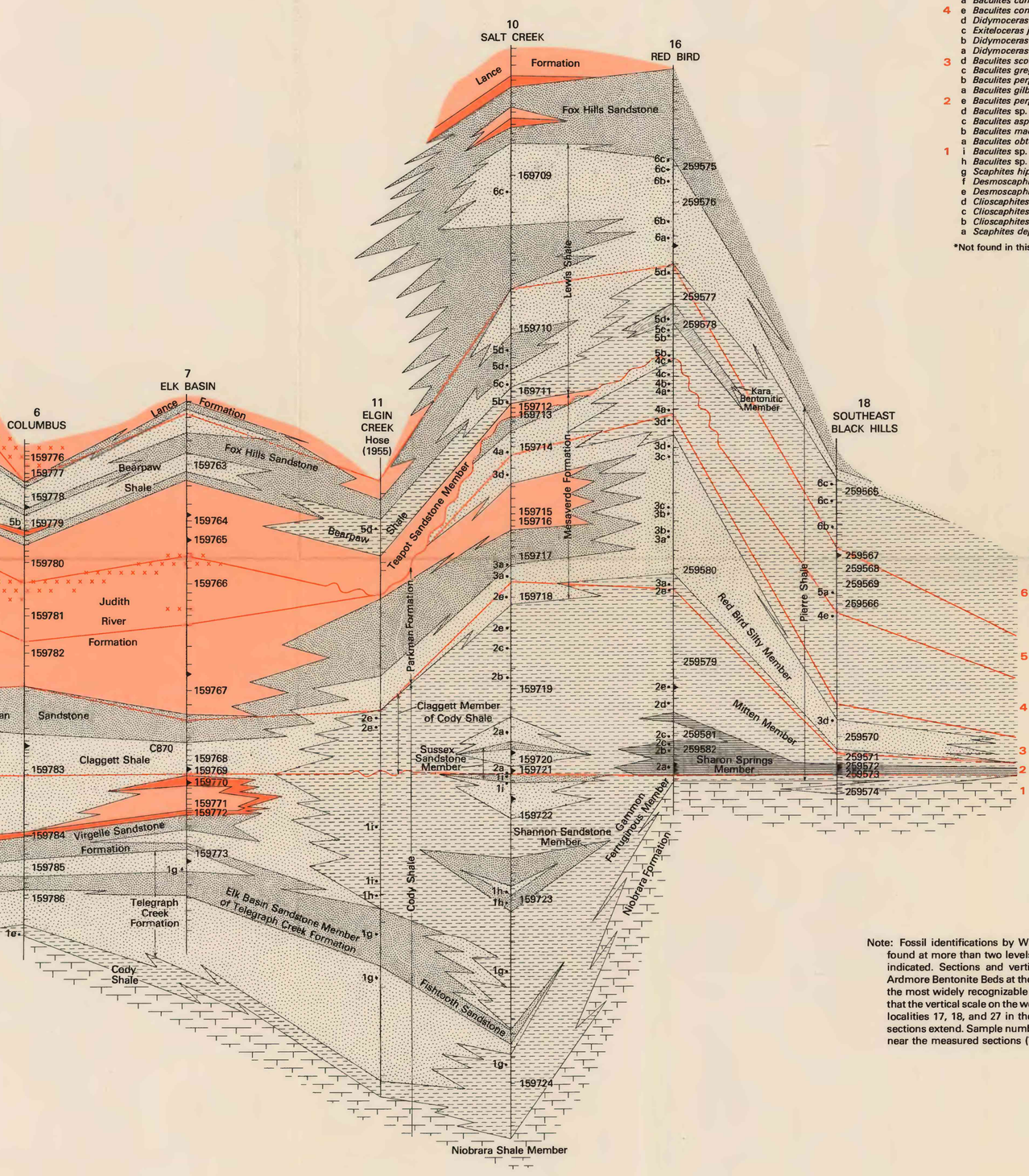

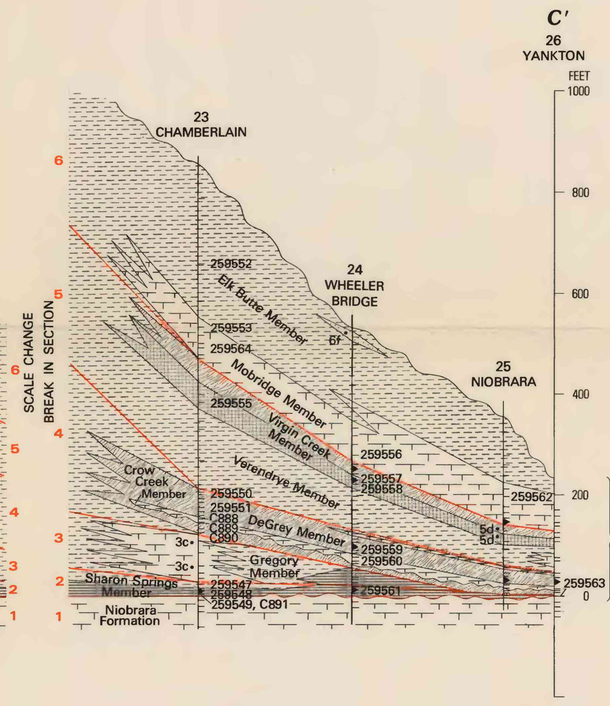

EXPLANATION

Modified from Gill and Cobban (1966, table 2)

Fossil zones		Diagnostic fossils
6	f	*Discoscaphites cheyennensis*
	e	*Hoploscaphites nicolleti*
	d	*Sphenodiscus (Coahuilites)**
	c	*Baculites clinolobatus*
	b	*Baculites grandis*
	a	*Baculites baculus*
5	d	*Baculites eliasi*
	c	*Baculites jenseni*
	b	*Baculites reesidei*
	a	*Baculites cuneatus*
4	e	*Baculites compressus*
	d	*Didymoceras cheyennense*
	c	*Exiteloceras jenneyi*
	b	*Didymoceras stevensoni*
	a	*Didymoceras nebrascense*
3	d	*Baculites scotti*
	c	*Baculites gregoryensis*
	b	*Baculites perplexus* (late form)
	a	*Baculites gilberti*
2	e	*Baculites perplexus* (early form)
	d	*Baculites* sp. *(smooth)**
	c	*Baculites asperiformis*
	b	*Baculites maclearni*
	a	*Baculites obtusus*
1	i	*Baculites* sp. (weak flank ribs)
	h	*Baculites* sp. (smooth)
	g	*Scaphites hippocrepis, Baculites aquilaensis*
	f	*Desmoscaphites bassleri, Haresiceras mancosense*
	e	*Desmoscaphites erdmanni*
	d	*Clioscaphites choteauensis**
	c	*Clioscaphites vermiformis*
	b	*Clioscaphites saxitonianus**
	a	*Scaphites depressus*

*Not found in this study.

LITHOLOGY

- Marine shale
- Marine siliceous shale
- Marine frothy-weathering shale
- Marine marl
- Marine organic-rich shale
- Marine siltstone and silty shale
- Marine sandstone
- Brackish-water deposits
- Freshwater deposits
- Volcanic-rich sediments
- Unconformity
- 5 Fossil-zone number

SAMPLE LOCALITY

- 20 Locality number
- 159745 Analytical sample (chemically analysed)
- Nonanalytical sample
- Bentonite
- 4d Fossil collection

Note: Fossil identifications by W. A. Cobban. Where the same key ammonite was found at more than two levels at any one section, only the lower and upper are indicated. Sections and vertical scales are constructed from the base of the Ardmore Bentonite Beds at the base of fossil zone 2, because these bentonites are the most widely recognizable contemporaneous beds throughout the area. Note that the vertical scale on the west is twice that on the east. Dashed lines adjacent to localities 17, 18, and 27 in the index map indicate wide areas over which these sections extend. Sample numbers beginning with the letter "C" are from localities near the measured sections (Tourtelot, 1962, p. 14).

SAMPLE LOCALITIES AND STRATIGRAPHIC RELATIONS SHOWING POSITIONS OF SAMPLES IN SIX FOSSIL ZONES, PIERRE SHALE AND EQUIVALENT ROCKS, NORTHERN GREAT PLAINS REGION

☆ U.S. GOVERNMENT PRINTING OFFICE: 1980—677-129/63