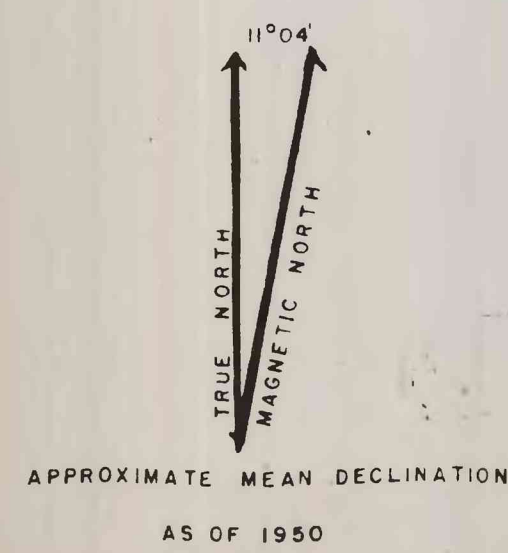


Base compiled from aerial photographs

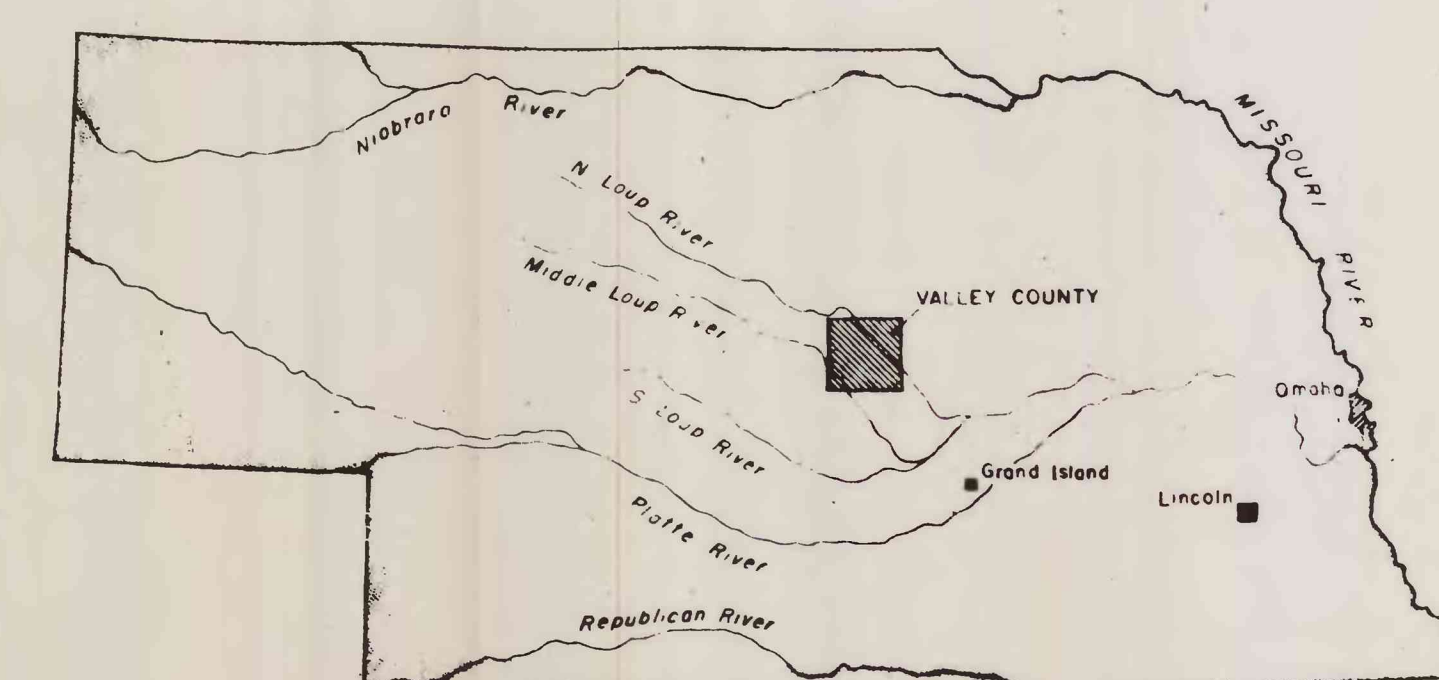
PRELIMINARY GEOLOGIC MAP
OF
VALLEY CO., NEBRASKAScale
1:48,000
0 1 2 MILESGeology mapped in 1950 by
R.D. Miller, assisted by A.C. Poole

U. S. Geological Survey
OPEN FILE REPORT

This map is preliminary and has
not been edited or reviewed for
conformity with Geological Survey
standards or nomenclature.

EXPLANATION

- Alluvium**
Interbedded sand and gravel in river channel and floodplain. Deposits may be over 100 feet thick under floodplain. Alluvium along smaller tributaries not shown on the map.
- Dune Sand**
Well-sorted fine to very fine light brown eolian sand. Overlies terraces along Middle Loup River. Dune sand averages 10 feet in thickness, but may be over 30 feet thick in dunes.
- Terrace Deposits**
Interbedded fine and coarse sand containing lenses of fine gravel along the major rivers. Fine sand and silt along tributaries. Terrace deposits along the smaller tributaries not shown on the map.
- Peorian Loess**
Yellowish-gray silt and clay. Very fine sand scattered throughout the loess and occasional lenses of very fine sand. Limestone staining and nodules common. Lower 25 feet of loess may be somewhat sandy.
- Sand Hills Deposits**
Well sorted light brown eolian sand. Dune sands range from 1 foot in thickness along the edges of the dune area to over 80 feet in thickness in the higher dunes.
- Loveland Formation**
Reddish-brown silt and clay. Massive for the most part, some stratification result of valley phase of deposition. Lower 10 feet sandy, in places a clean reddish-brown sand. Color is result of weathering during Loveland time.
- Sappa Formation**
Greenish-black, blocky clay. Locally grades into fine sand. Old lagoon and pond deposits.
- Pearlette Ash Member**
Clean, angular chards of volcanic glass. Some stratification. Sand scattered throughout. Local and lenticular deposits.
- Grand Island Formation**
Coarse sand to fine gravel containing lenses of coarse gravel. Light tan to pink in color; feldspar and quartz are dominant. Cross-bedding common. Eolian white sand, upper 30 feet of Grand Island, underlies uplands.
- Qallala Formation**
Predominantly pink to red silts and clays, and some white to greenish-tan sand-consolidated sands. Fine content usually high in deposits. Underlies entire county. Low cemented sandstone, "mortar beds", are exposed only along eastern bend of the North Loup River.
- Tunnel**
- Sample Location**
- Irrigation Canal**
- Geologic boundary dashed where approximately located**
- Contact between Peorian uplands and the Peorian covered terrace**
- State Highway Marker**
- Terrace Scarps**
- Undrained Depression**
- Reservoir**



OUTLINE MAP OF NEBRASKA SHOWING LOCATION OF VALLEY COUNTY