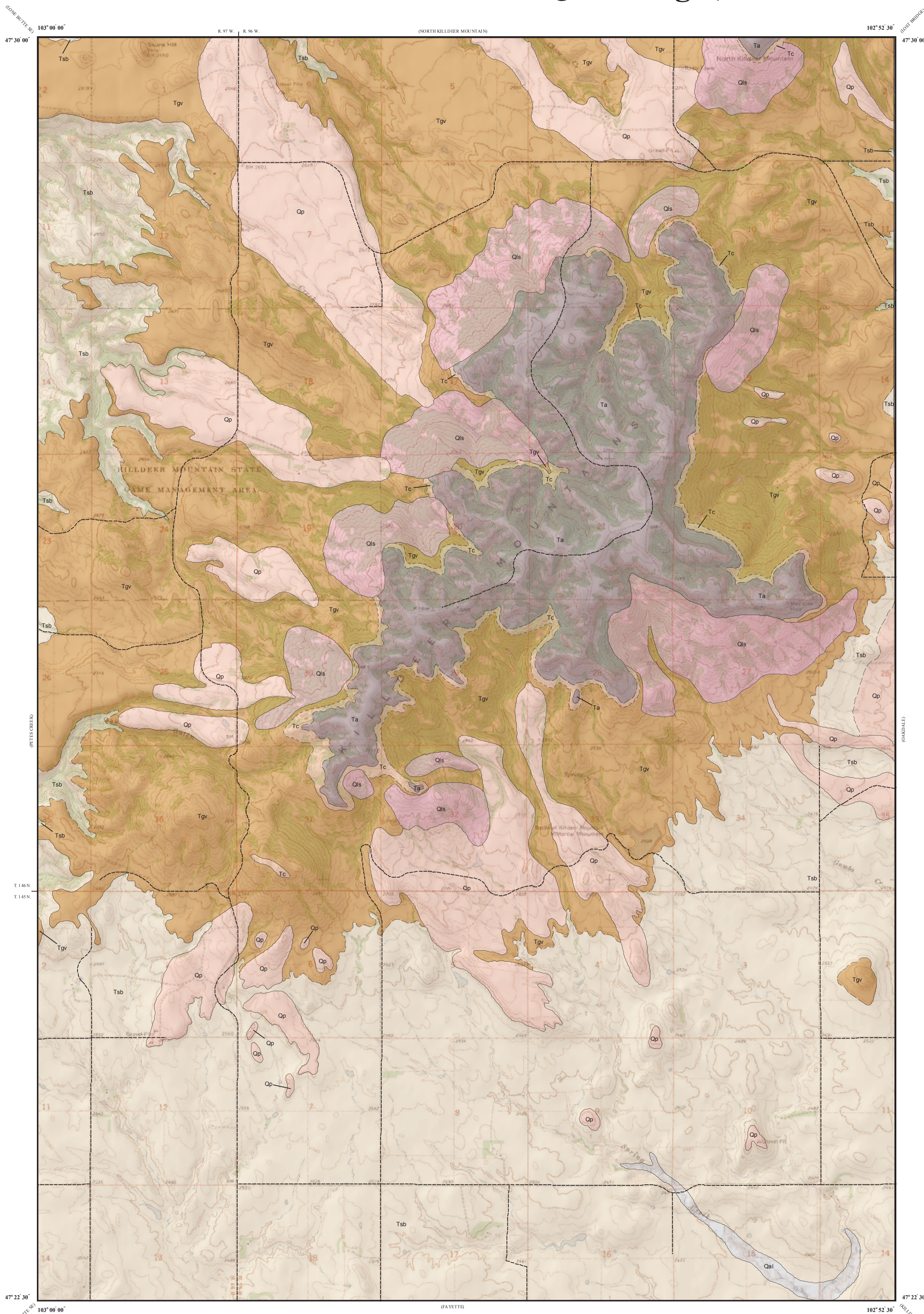


Surface Geology

Killdeer Mountains Quadrangle, North Dakota

Edward C. Murphy
2004



UNIT DESCRIPTIONS

QUATERNARY SYSTEM

RECENT

OAHE FORMATION

Qal Alluvium
Brownish gray to black sand, silt, clay, and lenses of gravel; floodplain deposits (typically less than 30 feet thick) along recent drainages. Not differentiated where it overlies Qac.

RECENT/PLEISTOCENE

Qls Landslide Deposits
Variable mixture of strata and deposits that have slid to the base of steep slopes.

PLEISTOCENE

COLEHARBOR GROUP

Qp Pediment Deposits
Slopes inclined away from the Killdeer Mountains, capped with layers of gravel consisting primarily of carbonate and chert cobbles and gravel.

TERTIARY SYSTEM

MIOCENE-OLIGOCENE

Ta ARIKAREE FORMATION
Buff-colored tuffaceous sandstone, siltstone, and fresh water carbonate.

EOCENE

Tc CHADRON FORMATION
Sandy and pebbly mudstone and clayey sandstone.

EOCENE-PALEOCENE

Tgv GOLDEN VALLEY FORMATION
Camels Butte Member:
Alternating beds of yellowish brown to brown, micaceous sandstone, siltstone, mudstone, claystone, and lignite.
Bear Den Member:
Brightly colored, kaolinitic claystone, mudstone, and sandstone typically overlain by a thin siliceous bed (siltcrete) or lignite.

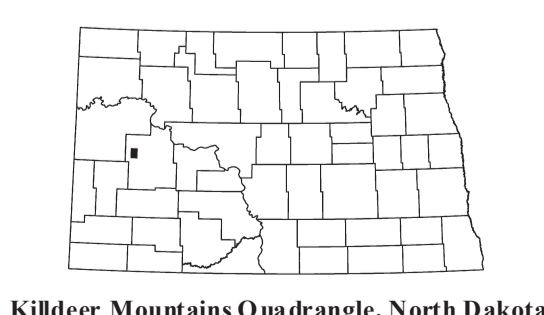
Tsb SENTINEL BUTTE FORMATION
Alternating beds of grayish brown to gray sandstone, siltstone, mudstone, claystone, and lignite.

Geologic Symbols

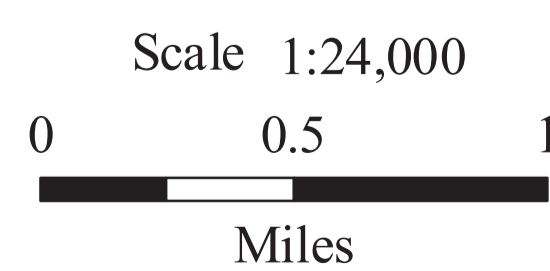
- Known contact between two geologic units.
- - - Approximate contact between two geologic units.
- Inferred (unknown) contact between two geologic units.

Other Features

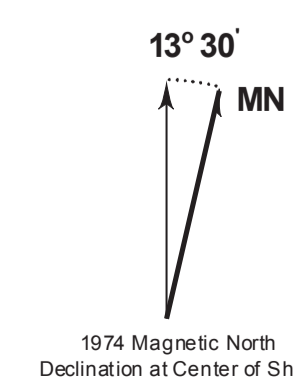
- - - Unpaved Road



Killdeer Mountains Quadrangle, North Dakota



Lambert Conformal Conic Projection
Standard Parallels 47° 22' 30" and 47° 30' 00"



This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program.