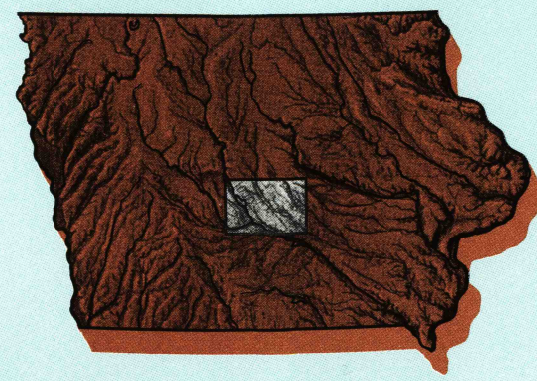


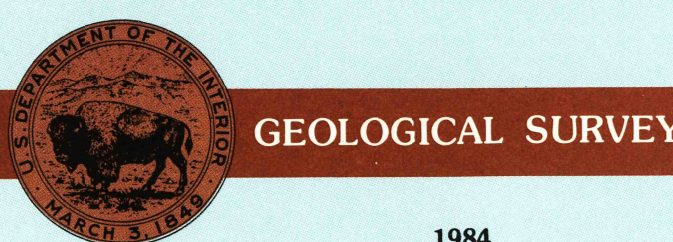
Des Moines IOWA

1:100 000-scale
planimetric map



30 X 60 MINUTE QUADRANGLE
SHOWING

- Elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



Produced by the United States Geological Survey

Compiled from USGS 1:24 000-scale topographic maps dated 1965-1976. Planimetry revised from aerial photographs taken 1985 and other source data. Revised information not field checked. Map edited 1984.
Projection and 10 000-meter grid, zone 15, Universal Transverse Mercator
25 000-foot grid ticks based on Iowa coordinate system, south and north zones
1927 North American Datum
To place on the predicted North American Datum 1983, move the projection lines 4 meters north and 18 meters east
There may be private inholdings within the boundaries of the National or State reservations shown on this map

NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.2808

To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM

The diagram shows a vertical line representing True North (TN) and a line representing Magnetic North (MN) that is tilted to the right. The angle between them is labeled 41°. Below the lines, there is a scale from 0° to 90° and a distance of 80 miles.

UTM grid convergence (GN) and 1983 magnetic declination (MN) at center of map Diagram is approximate

ADJOINING MAPS

1	2	3
4	5	
6	7	8

- 1 Carroll
- 2 Ames
- 3 Marshalltown
- 4 Guthrie Center
- 5 Grinnell
- 6 Creston
- 7 Indianola
- 8 Okaloosa

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80295
OR RESTON, VIRGINIA 22092

Topographic Map Symbols

Primary highway, hard surface	
Secondary highway, hard surface	
Light duty road, principal street, hard or improved surface	
Other road or street, trail	
Route marker, Interstate, U.S., State	
Railroad: standard gage, narrow gage	
Bridge: overpass, underpass	
Tunnel: road, railroad	
Built up area, locality, elevation	
Airport: landing field; landing strip	
National boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundary	
U.S. public lands survey: range, township, section	
Range, township, section line: pre-traced	
Power transmission line: pipeline	
Dam; dam with lock	
Cemetery; building	
Windmill; water well; spring	
Mini-shaft; well or cave; mine, quarry; gravel pit	
Campground; picnic area; U.S. location monument	
Ruins; cliff dwelling	
Distorted surface: strip mine; lava, sand	
Contours: index; intermediate; supplementary	
Bathymetric contours: index; intermediate	
Stream; lake; perennial; intermittent	
Rapids, large and small; falls, large and small	
Area to be submerged; marsh, swamp	
Land subject to controlled inundation; woodland	
Scrub; mangrove	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request

RETURN TO:
USGS AND HISTORICAL MAP ARCHIVES