



Grinnell

IOWA

1:100 000-scale metric topographic map

30 X 60 MINUTE QUADRANGLE SHOWING

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

GEOLOGICAL SURVEY

1984

Produced by the United States Geological Survey
Compiled from USGS 1:24 000-scale topographic maps dated 1965-1980. Planimetry revised from aerial photographs taken 1963 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 3 meters north and 15 meters east.
There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM	ADJOINING MAPS			
Meters	Feet		1	2	3	4
1	3.2808		1	2	3	4
2	6.5617		5	6	7	8
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

UTM grid convergence (GN and 1984 magnetic declination 1984) at center of map
Diagram is approximate

1 Ames
2 Marshalltown
3 Anamosa
4 Des Moines
5 Iowa City
6 Indianola
7 Okaloosa
8 Muscatine

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

MAY 13 1989

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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 gauge, narrow gauge	—————
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	—————
U.S. public lands survey: range, township, section	—————
Range, township, section line: protracted	—————
Power transmission line: pipeline	—————
Dam: dam with lock	—————
Cemetery: building	—————
Windmill: water well; spring	—————
Mine shaft: adit 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	—————