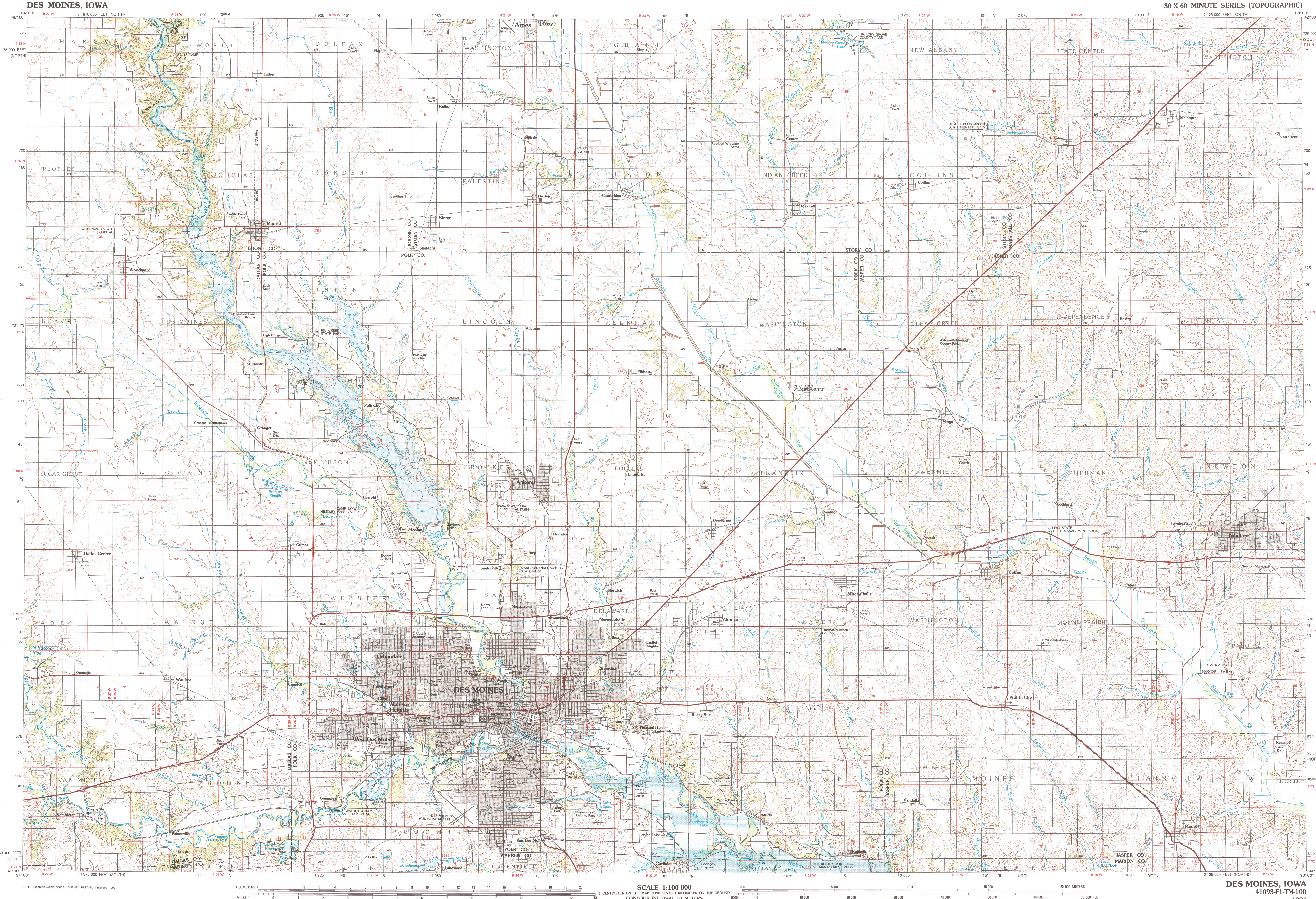
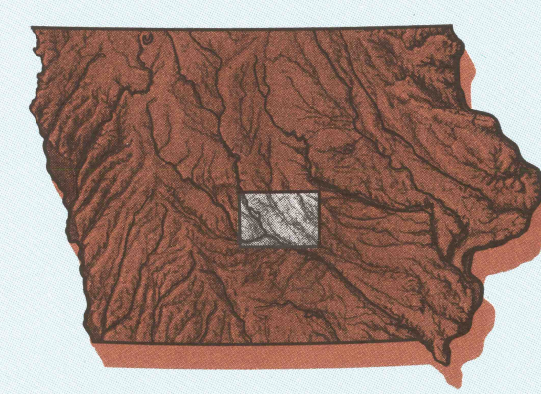




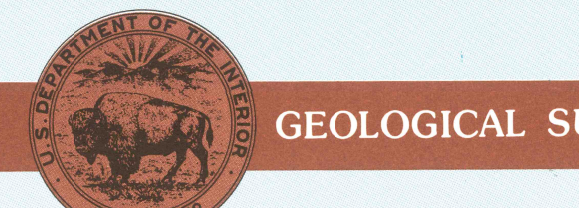
Des Moines IOWA

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



1984
PHOTOINSPECTED 1990

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 1983 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
No major culture or drainage changes found
Map photorevised using 1990 photographs
No major culture or drainage changes found
CONTOUR INTERVAL 10 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	
1	3.2808		1	2	3	
2	6.5617		4	5	6	
3	9.8425		7	8	9	
4	13.1234		10	11	12	
5	16.4042		13	14	15	
6	19.6850		16	17	18	
7	22.9658		19	20	21	
8	26.2467		22	23	24	
9	29.5275		25	26	27	
10	32.8084		28	29	30	
To convert meters to feet multiply by 3.2808		UTM grid convergency (GN) and 1984 magnetic declination (MD) at center of map diagram is approximate		1 Carroll 2 Ames 3 Marshalltown 4 Guthrie Center 5 Grinnell 6 Creston 7 Indianola 8 Oskaloosa		

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, 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 gauge, narrow gauge
- Bridge: overpass, underpass
- Tunnel: road, railroad
- Built up area; locality, elevation
- Airport: landing field; landing strip
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U.S. public lands survey: range, township, section
- Range, township, section line: protracted
- Power transmission line; pipeline
- Dam; dam with lock
- Cemetery; building
- Well; water well; spring
- Mine shaft; adit or cave; mine, quarry; gravel pit
- Campground; picnic area; U.S. location monument
- Ruin; cliff dwelling
- Distorted surface: strip mine, lava, sand
- Contours: index; intermediate; supplementary
- Bathymetric contours: index; intermediate
- Stream, lake; perennial; intermittent
- Reeds, large and small; silt, 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

DES MOINES, IOWA
41093-E1-TM-100
1984
PHOTOINSPECTED 1990