Glenville Bedrock Geology Map 13 w/Explanation

Explanation

Maps

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BRIEF DESCRIPTIONS OF ROCK UNITS IN THE GLENVILLE QUADRANGLE, CONNECTICUT

Autochthonous Rocks

Oma - Manhattan Schist, Member A - Dark-gray or gray, fissile, sillimanite-garnet-muscovite-biotite schist that is rusty-weathering in places. Contains dark-bluish-gray quartzite beds; calcareous schists and phlogopitic marble beds are locally present at the base.

Omam - Manhattan Schist, Marble Member - Tan-weathering phlogopitic calcite marble and some white calcite marble beds.

UNCONFORMITY

O€i - Inwood Marble - Various clean dolomitic marbles.

€l - Lowerre Quartzite - Tan or buff-weathering feldspathic quartzite and granulite, micaceous quartzite and glassy quartzite. Dark-gray, brownish-weathering granulite and schists that commonly contain sillimanite are locally present at the base and resemble rocks in Member C of the Manhattan Schist.

UNCONFORMITY

p€y - Yonkers Gneiss - Pink biotite quartz microcline gneiss that is locally hornblendic. Amphibolite layers are locally present. Possibly intrusive granite or metamorphosed felsic volcanics.

p€fg - Fordham Gneiss, Garnet-Biotite Gneiss Member - Interbedded gray, garnet-biotite gneiss, biotite-hornblende gneiss and amphibolite.

p€famp - Fordham Gneiss, Amphibolite-Gneiss Member - Predominantly amphibolite with some gray biotite-quartz-feldspar gneiss beds.

p€fcs - Fordham Gneiss, Calc-silicate Member - Light-gray, brown, or white calc-silicate rocks which contain abundant green diopside and varied amounts of calcite, marble beds are present locally.

p€fam - Fordham Gneiss, Amphibolite Member - Black amphibolite.

p€fhg - Fordham Gneiss, Hornblende Gneiss Member - Gray to dark-gray biotite-hornblende-gneiss with amphibolite beds commonly present. Pink granitic gneisses are present and are extensive enough to be mapped separately in some places.

p€f - Fordham Gneiss - Undivided gneisses.

Allochthonous Rocks West of Caeron's Line

?€mc - Manhattan Schist, Member C - Predominantly brown-weathering, feldspathic, sillimanite-garnet-muscovite-biotite schist or schistose gneiss, sillimanite nodules are common. Although siliceous beds are present in places bedding is typically difficult to identify.

?Cmb - Manhattan Schist, Member B - A discontinuous unit of amphibolite with some interbedded schist. It occurs within Member C of the Manhattan Schist and locally at the base of Member C.

Allochthonous Rocks East of Cameron's Line

OChr - Harrison Gneiss - Dark-gray biotite and/or hornblende-quartz-feldspar gneiss with subordinate quartz. Megacrysts of feldspar are abundant locally.

OChts - Hartland Formation, Schist and Granulite Member - Brown to brownish-tan-weathering, garnet-muscovite-biotite-quartz-feldspar schist and muscovite-biotite-quartz-feldspar gneiss and granulite. The schist commonly contains sillimanite and/or kyanite.

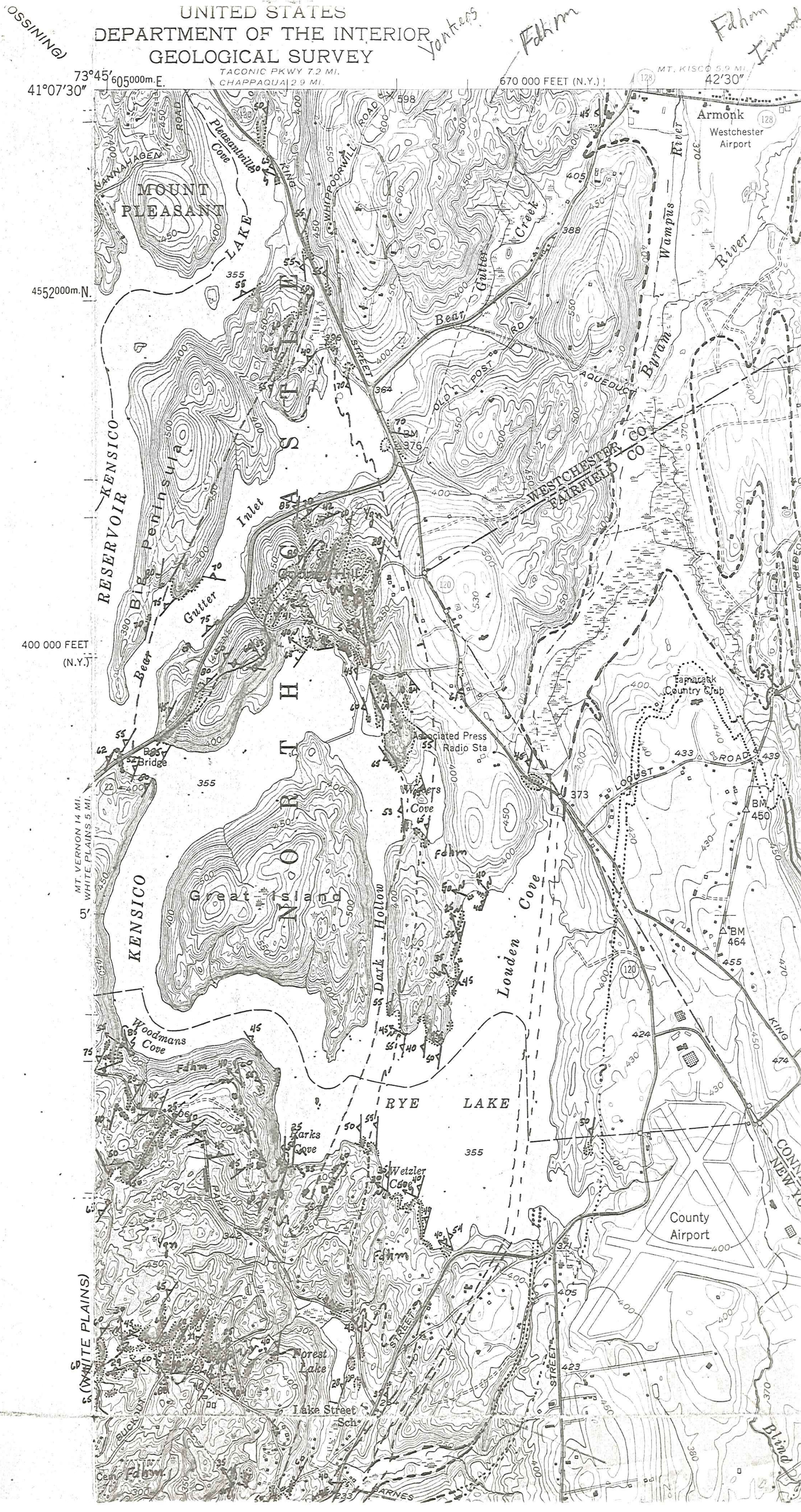
Ou - Green serpentinite bodies that are within the Schist and Granulite Member.

OChtw - Hartland Formation, White Gneiss Member - Light-gray or white biotite-muscovite quartz-feldspar gneiss with local garnet. Probably a granitic intrusive sheet.

OChtcp - Hartland Formation, Carrington's Pond Member - Brown- or rusty-weathering, garnet-muscovite-biotite schist with local sillimanite and or kyanite. Amphibolite beds are fairly common.

OChta - A mappable amphibolite horizon (or horizons?) within the Carrington's Pond.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



STATE OF CONNECTICUT
HIGHWAY DEPARTMENT
(MT. KISCO)

GLENVILLE QUADRANGLE
CONNECTICUT-NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 STAMFORD 15' QUADRANGLE

BEDFORD N.Y. 5.9 MI.
40'
350 000 FEET (CONN.)
73°37'30"
BM 459
N STANWICH RD
Wilshire Pond
Knapp Cem
ROUND HILL
CLOSE
Wilshire Pond
LAKE AVE
Topping Pond
LOWER CROSS ROAD
Converse Pond Brook
STREET
Brook
Closes Pond
Cem
ST
BM 529
Round Hill
Round Hill
Carringtons Pond
AQUEDUCT
Wolf Swamp
Horseneck
NORTH
Lake
Rockwood
100 000 FEET (CONN.)
MERRITT
PARKWAY
OLD MILL ROAD
Pond
BM 399
BM 355
BM 331
Putnam Lake
NORTH STREET
SPILLWAY 303
LAKE AVENUE
East Branch
PORCHUCK ROAD
Converse
PARKWAY
G R E E N W I C H
BM 291
BM 309
ROUND HILL
BM 312
Close Cem
RD
RIDGE
CLAPBOARD
Cem
BM 338
GRAHAMPTON LANE
LANE
Pecks Cem
MERRITT
ROAD
BM 336
Howe Cem
Cem
BM 263
Putnam Cem
Riversville
Hebrew Cem
Round Hill Club
Cem
Witherell Hospital
Toll Gate
BM 223
Brook
HUSTED
(STAMFORD)
River

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, USCE, and Connecticut Geodetic Survey

Topography from aerial photographs by multiplex methods
Aerial photographs taken 1949. Field check 1950-1951
Hydrography from USC&GS charts

Polyconic projection. 1927 North American datum
10,000-foot grids based on Connecticut coordinate system and New York coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in blue

Red tint indicates areas in which only landmark buildings are shown

11½°
MAGNETIC NORTH
TRUE NORTH
APPROXIMATE MEAN DECLINATION, 1951

1000

FOR SA
A FOLDER DES

SCALE 1:24000

1 0 1 2

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET

DATUM IS MEAN SEA LEVEL

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER

THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 7.5 FEET

11½°

MAGNETIC NORTH

TRUE NORTH

APPROXIMATE MEAN DECLINATION, 1951

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1959
MR 3999

1 MILE

5000 6000 7000 FEET

1 KILOMETER

FEET

EL

UM IS MEAN LOW WATER
LINE OF MEAN HIGH WATER
MATELY 7.5 FEET

CCURACY STANDARDS
Y, WASHINGTON 25, D. C.

ROAD CLASSIFICATION

Heavy-duty ——— 4 LANE 6 LANE Light-duty ———

Medium-duty ——— 4 LANE 6 LANE Unimproved dirt =======

U. S. Route State Route

CONNECTICUT

QUADRANGLE LOCATION

GLENVILLE, CONN.-N.Y.

SW/4 STAMFORD 15' QUADRANGLE

N4100—W7337.5/7.5

1951