UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 1340
PLATE 1

Base from U.S. Geological Survey: Moosehead Lake, 1957; First Roach Pond, Jo-Mary Mountain, 1952; and Sebec Lake, 1950

The geology of this part of the Greenville quadrangle is described by Espenshade and Boudette (1964, 1967)

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1972—G71022

Geology mapped in 1963 and 1964

APPROXIMATE MEAN DECLINATION, 1972

SCALE 1:62 500

1 ½ 0 1 2 3 4 5 MILES

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

EXPLANATION

DEVONIAN

Dm

Quartz monzonite and granodiorite
Biotite quartz monzonite and granodiorite, containing garnet locally near borders of intrusion

Dg

Quartz monzonite and granodiorite
Small dikes or sills in mafic rock. Granitic to fine pegmatitic texture

Dd

Diorite and quartz diorite
Biotite-amphibole diorite containing from about 1 to 20 percent quartz; pyroxene is commonly present where quartz content is low. Lamination, marked by subparallel plagioclase crystals, is widespread

Dt

Troctolite, norite, and gabbro
Mafic mineral content ranges from mainly olivine to mainly pyroxene; orthopyroxene is usually more abundant than clinopyroxene. Amphibole and biotite are commonly present. Lamination, marked by subparallel plagioclase crystals, is widespread

Ds Df Dsf

Slate, siltstone, sandstone, and felsite
Ds, *dark-gray slate, siltstone, and fine-grained sandstone. Perhaps mostly equivalent to the Seboomook Formation*
Df, *medium-green to gray dense felsite in Little Boardman Mountain area*
Dsf, *mainly dark-gray slate, siltstone, and sandstone accompanied by a few thin layers of gray dense felsite in Farrar Mountain area*

Dw

Whisky Quartzite
Coarse-grained and conglomeratic quartzite

SILURIAN

Sc

Capens Formation
Red and green slate, accompanied by calcareous siltstone and sandstone

Sls

Calcareous siltstone, sandstone, and conglomerate
Green-gray silty dolomite, fossiliferous calcareous siltstone, conglomerate composed of greenstone pebbles in calcareous silty matrix, and calcareous red shale and sandstone

CAMBRIAN OR ORDOVICIAN

O€m

Mafic volcanic rocks
Greenstone, composed mostly of breccia-tuff and fine diabase

Hornfels
Contact metamorphosed sedimentary and volcanic rocks that generally contain andalusite, and locally sillimanite or cordierite, near intrusion, and biotite in a zone that extends farther from intrusion

Granitic dikes and sills in hornfels
Contact metamorphosed rocks intruded by abundant garnet-bearing granitic dikes and sills as much as several feet thick

Outcrop
Not shown where structure symbol is used

Local boulders
Large angular blocks of rock that seem to be of local origin

Contact
Long dashed where approximately located; short dashed where inferred; dotted where concealed. Contact of Moxie pluton beneath Moosehead Lake partly inferred from aeromagnetic survey

55

Fault, showing dip
Dotted where concealed

Anticline
Showing crestline, approximately located. Dotted where concealed

45

Syncline
Showing troughline, approximately located, and plunge where known. Dotted where concealed

FA 30

Minor fold axis, showing plunge

55
Inclined Vertical
Strike and dip of beds
Dot is in direction of tops of beds, known from graded bedding

65

Strike and dip of overturned beds
Direction of tops of beds known from graded bedding

60
Inclined Vertical
Strike and dip of beds
Direction of tops of beds unknown

30
Inclined Vertical
Strike and dip of schistosity and cleavage

30
Inclined Vertical
Strike and dip of flow structure in mafic igneous rocks

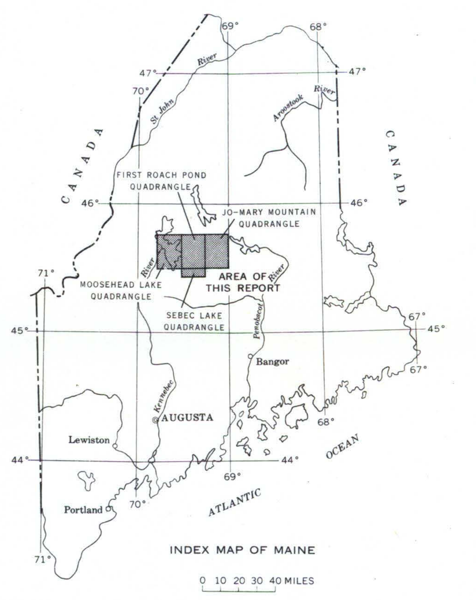
F

Fossil locality

674

Number and location of sample of mafic igneous rock used for modal analysis

Traverse line
Traverse followed in geologic mapping



INDEX MAP OF MAINE

GEOLOGIC MAP OF THE MOOSEHEAD LAKE–JO-MARY MOUNTAIN AREA, PISCATAQUIS COUNTY, MAINE