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EXPLANATION

POST-DEVONIAN

db

Diabase dike

Maximum thickness 200 feet; located chiefly by aeromagnetic survey. Intrudes Chiputneticook Quartz Monzonite

DEVONIAN THROUGH PENNSYLVANIAN CARBONIFEROUS

PDs

Conglomerate and quartzite

White, gray, and red quartzite conglomerate, red calcareous conglomerate, and white and gray quartzite. Believed of Late Devonian[1] through Pennsylvanian age (Clark, 1961)

MDs

Conglomerate and siltstone

Red, calcareous conglomerate and siltstone, sheared, and downfaulted into Sk. Believed of Late Devonian[1] and Mississippian age (Clark, 1961)

DEVONIAN

Dcp

Quartz monzonite at Center Pond

Gray, medium-grained, biotitic, slightly foliated quartz monzonite

Db, Dt

Bottle Lake Quartz Monzonite

Gray or pink, coarse-grained, porphyritic, biotitic or hornblendic quartz monzonite

Dt, Topsfield facies, red or pink, medium- to coarse-grained leucocratic granite or quartz monzonite; gray near north contact on Tomah Mountain

Dc

Chiputneticook Quartz Monzonite

Light gray, porphyritic, biotitic granite or quartz monzonite; rapakivi texture common

Dw

Wabassus Quartz Monzonite

Gray or pink, medium-grained, biotitic quartz monzonite; leucocratic on Amazon Mountain

Dl

Love Ridge Quartz Monzonite

Light gray, fine-grained, biotitic quartz monzonite

Dp

Pocamoonshine Gabbro-Diorite

Medium gray-green to black, fine to coarse-grained rock. Believed older than other Devonian intrusive rocks

SILURIAN

Sb

Slate at Baskahegan Stream

Gray slate and metasiltstone, silty quartzite, and thin-bedded slightly-metamorphosed sandstone

Sd

Daggett Ridge Formation

Chloritic quartzite, quartzite metaconglomerate, gray and gray-green slate and metasiltstone, magnetite-bearing black slate and metasiltstone. Meager paleontologic evidence indicates Silurian age[2]

Ss

Metasiltstone and slate

Interbedded, medium gray, sericitic, carbonate-bearing metasiltstone and darker gray slate, sandy metasiltstone and silty quartzite, tuffaceous metasiltstone, and thin granule metaconglomerate

Sc

Limestone metaconglomerate at Croperly Turn

Light gray metamorphosed limestone and black metasiltstone pebbles and cobbles as much as 6 inches in diameter; rock contains crinoid stems and cobbles of coral. Paleontologic evidence indicates post-Ordovician age[3]

Sk, Sks

Kellyland Formation

Interbedded, medium gray, sericitic, carbonate-bearing metasiltstone and slate, sandy metasiltstone, and silty quartzite. Few beds of tuffaceous metasiltstone, and thin granule metaconglomerate. Might be equivalent of Ss

Sks,-gray, partly silicified metachert facies in faulted part of Nicatous Lake area

SILURIAN (?)

Os, Oss

Black slate, metachert, and tuff at Snow Mountain

Gray slate, black graptolite-bearing slate and metachert; white-weathering, light gray rhyolite metatuff in places containing lenses and balls of gray metachert. Contains climacograptus and monograptus of Middle Ordovician age.[4]

Oss, thick black slate unit

ORDOVICIAN

Ocd

Dark Argillite Division of Charlette Group of Alcock (1946)

Dark gray to black, biotitic phyllite and schist; quartzite; thin, medium to dark gray non-carbonate bearing metasiltstone, in places tuffaceous, gray slate, and black carbonaceous slate of Lower Ordovician age[5]

CAMBRIAN OR ORDOVICIAN

O€u

Cambrian or Ordovician metasedimentary rocks, undivided

Chloritic silty quartzite, green slate, and thin red and purplish slate

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1/ Cumming, L. M., written communication, December 11, 1962.

2/ Neuman, R. B., and Cloud, P. E., written communication, November 12, 1957.

3/ Oliver, W. A., Jr., written communication, August 18, 1961.

4/ Neuman, R. B., written communication, December 9, 1960.

5/ Cumming, L. M., Neuman, R. B., and Walmsley, V. G., written communication, October 2, 1962.

Radiometric Age Determinations

Rock	Map Symbol	Area	Lead-alpha	Potassium-argon
Quartz monzonite	Dcp	Center Pond	340 m.y.	360 m.y.[1]
			370 m.y.	349 m.y.[2]
" "	Db	Bottle Lake	410 m.y.	342 m.y.[2]
" "	Db	Oxbrook Lake	380 m.y.	370 m.y.[1]
" "	Dt	Topsfield	400 m.y.	372 m.y.[1]
" "	Dc	Greenland Pt.	515 m.y.	400 m.y.[1]
" "	Dw	Wabassus Mtn.	Not determined	
" "	Dl	Love Ridge	" "	
Gabbro-Diorite	Dp	Pocamoonshine Lake	" "	

1/ Faul and others, 1963.

2/ Thomas, H., Marvin, R., and Elmore, P., written communication. July 2, 1962.

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_____ 1963b, Geologic map and section of the Kellyland and Vanceboro quadrangles, Maine: U. S. Geol. Survey Mineral Inv. Map MF-269, scale 1:48,000.

_____ 1963c, Bedrock reconnaissance map of the Mattawamkeag quadrangle, Maine: U. S. Geol. Survey open-file map, scale 1:48,000.

_____ 1963d, Bedrock reconnaissance map of the Nicatous Lake quadrangle, Maine: U. S. Geol. Survey open-file map, scale 1:48,000.

_____ 1963e, Bedrock reconnaissance map of the Scraggly Lake quadrangle, Maine: U. S. Geol. Survey open-file map, scale 1:48,000.

_____ 1963f, Bedrock reconnaissance map of the Springfield quadrangle, Maine: U. S. Geol. Survey open-file map, scale 1:48,000.

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_____ 1963h, Bedrock reconnaissance map of the northern one-third of the Wesley quadrangle, Maine: U. S. Geol. Survey open-file map, scale 1:48,000.

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Outcrop or group of outcrops

Contact

Solid line where observed or approximate; in part located by aeromagnetic survey or glacial float. Dashed line used where inferred

Fault or shear zone

Long dashed where observed or approximately located; short dashed where inferred. In Wabassus Lake area, some faults inferred from lineaments on aerial photographs

Anticline

Showing approximate crest of fold and plunge of axis. Dashed where inferred

Syncline

Showing approximate trough of fold and plunge of axis. Dashed where inferred

Glacial striae or grooves

Abandoned quarry

Abandoned gold prospect

F

Fossil locality

X

Location of quartz monzonite sampled for age determination

Oil well; dry hole

o

Water well

Shown where geologic information was obtained

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~~Maine (Grand Lake area). Geol. 1:250,000. 1964R.~~ sheet 2, cop. 1.

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