

EXPLANATION

- Late Triassic
 - Dd Diabase dike.
- E. Devonian
 - Dp Massive muscovite-biotite-garnet pegmatite.
 - Dg Light gray fine- to medium-grained binary granite and quartz monzonite, locally with garnet. Locally includes pegmatite stringers. Massive to moderately foliated.
 - Dgd Medium gray, fine- to medium-grained, strongly foliated quartz diorite.

OSV Vassalboro Formation: Medium dark gray massive to thin bedded medium dark gray quartz-plagioclase-biotite granofels and subordinate calc-silicate granofels.

WEST OF NEW MEADOWS RIVER

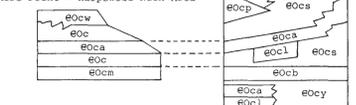
- JEWELL FORMATION
 - OEj Rusty and non-rusty weathering muscovite-biotite-chlorite-garnet-quartz schist locally with chloritoid, andalusite, and staurolite; rare quartzite and thin boudined amphibolite beds.
- SPURWINK LIMESTONE
 - OEsk Gray, thin bedded fine-grained metalimestone with biotite-quartz phyllite interbeds and minor calcitic amphibolite.
- SCARBORO FORMATION
 - OEsc Rusty and non-rusty weathering light to medium brownish and purplish gray muscovite-biotite-garnet-chlorite-quartz schist with sparing staurolite and andalusite; rare quartzite beds.
- SPRING POINT FORMATION
 - OEsf Light gray, thin bedded to massive quartz-plagioclase-biotite gneiss locally with minor garnet and amphibolite.
 - OEsb Mostly thin-bedded to massive hornblende-garnet-plagioclase amphibolite and cummingtonite-anthophyllite-plagioclase-quartz amphibolite with minor garnet-rich granofels.
- CAPE ELIZABETH FORMATION
 - OEce Thin-bedded to massive, light to medium gray quartz-plagioclase-biotite-muscovite + garnet schist with variable interbeds or intervals of muscovite-biotite-garnet + sillimanite + staurolite schist. Includes 1 to 6 inch lime-silicate lenses and rare 3 to 4 inch boudined amphibolite lenses.
 - OEceR Rusty weathering muscovite-biotite-garnet-staurolite schist with sparing andalusite in staurolite-andalusite zone; abundant sillimanite in sillimanite zones.

CUSHING FORMATION



- @Ocr: Richmond Corner Member: Heterogeneous association of a) quartz-plagioclase-biotite-garnet schist; b) reddish garnet-quartz-magnetite granofels (cotecule); c) marble; d) thin interbedded amphibolite and calc-silicate or marble; and e) rusty-weathering muscovite-biotite-quartz-graphite schist.
- @Ocm: Mount Ararat Member: Characteristically thin bedded alternating dark gray hornblende-biotite granofels and light gray quartz-plagioclase-biotite gneiss.
- @Ocr: Rusty two-mica schist.
- @Ocu: Light to medium gray quartz-plagioclase-biotite granofels and gneiss.
- @Ocm: Marble and amphibolite.

CUSHING FORMATION



- @Ocw: Wilson Cove Member: Very rusty to slightly rusty weathering dark gray garnet-biotite schist, quartz-biotite-garnet granofels, hornblende and cummingtonite amphibolite.
- @Ocp: Light to light medium gray plagioclase-quartz-biotite + muscovite granofels and schist locally with relict crystal tuff and agglomeratic structures; minor thin beds of green zoisite-rich calc-silicate granofels.
- @Oca: Hornblende-biotite amphibolite with fine uniform gneissic foliations; amphibolite with interbeds of green zoisite-rich calc-silicate; thinly banded alternations of phlogopitic biotite schist, labradorite-hornblende-cummingtonite-anthophyllite amphibolite, and calc-silicate granofels; coarse-grained white granoblastic marble.
- @Ocm: Merepoint Neck Member: Moderately to very rusty-weathering quartz-plagioclase-biotite-muscovite schist.
- @Ocb: Bethel Point Member: Very rusty-weathering quartz-plagioclase-biotite-muscovite schist with rare thin quartzite beds.
- @Ocs: Sebascodogan Island Member: Thinly interbedded association of quartz-plagioclase-biotite + garnet granofels; lime-silicate gneiss, and quartz-plagioclase-biotite-muscovite + sillimanite gneiss. Occasional relict agglomeratic structure present in first lithology.
- @Ocp: Non-bedded, weakly foliated coarse-grained hornblende-biotite-andesine amphibolite.
- @Ocr: Sulfidic, rusty-weathering plagioclase-quartz-biotite gneiss with subordinate lime-silicate gneiss.
- @Ocl: Quartz-plagioclase-microcline-dipside-hornblende-clinorosite gneiss.
- @Ocy: Yarmouth Island Member: Light gray plagioclase + quartz-cordierite-gedrite-garnet-biotite gneiss locally with sillimanite and staurolite; minor calc-silicate gneiss.

EAST OF NEW MEADOWS RIVER

- FORMATIONAL ASSIGNMENT UNCERTAIN - Georgetown area*
- OEug: Heterogeneous association of a) non to slightly rusty-weathering biotite-muscovite-sillimanite schist (similar to OEsc); b) very rusty-weathering muscovite + graphite + biotite schist; c) very rusty-weathering amphibolite; d) quartz-plagioclase-muscovite-biotite schist (similar to OEce); e) garnet-biotite schist; and f) skarn-like calc-silicate rock.
 - OEugA: Dark gray, evenly fine- to medium-grained amphibolite.
 - OEugB: Thinly interbedded garnet-quartz granofels (cotecule) and dark medium gray quartz-plagioclase-biotite-garnet granofels. Some cotecule has dense flint-like texture.
 - OEugC: Rusty muscovite + graphite + biotite schist.
 - OEugM: Non to slightly rusty muscovite-biotite-garnet-andalusite or sillimanite + staurolite schist.

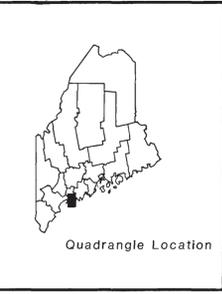
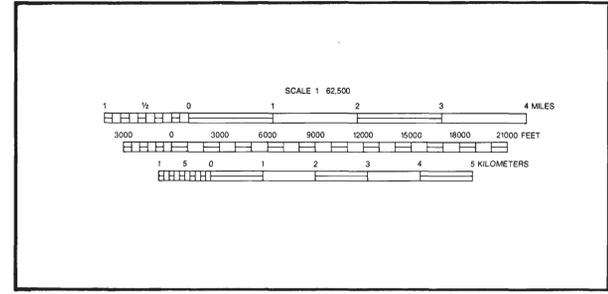
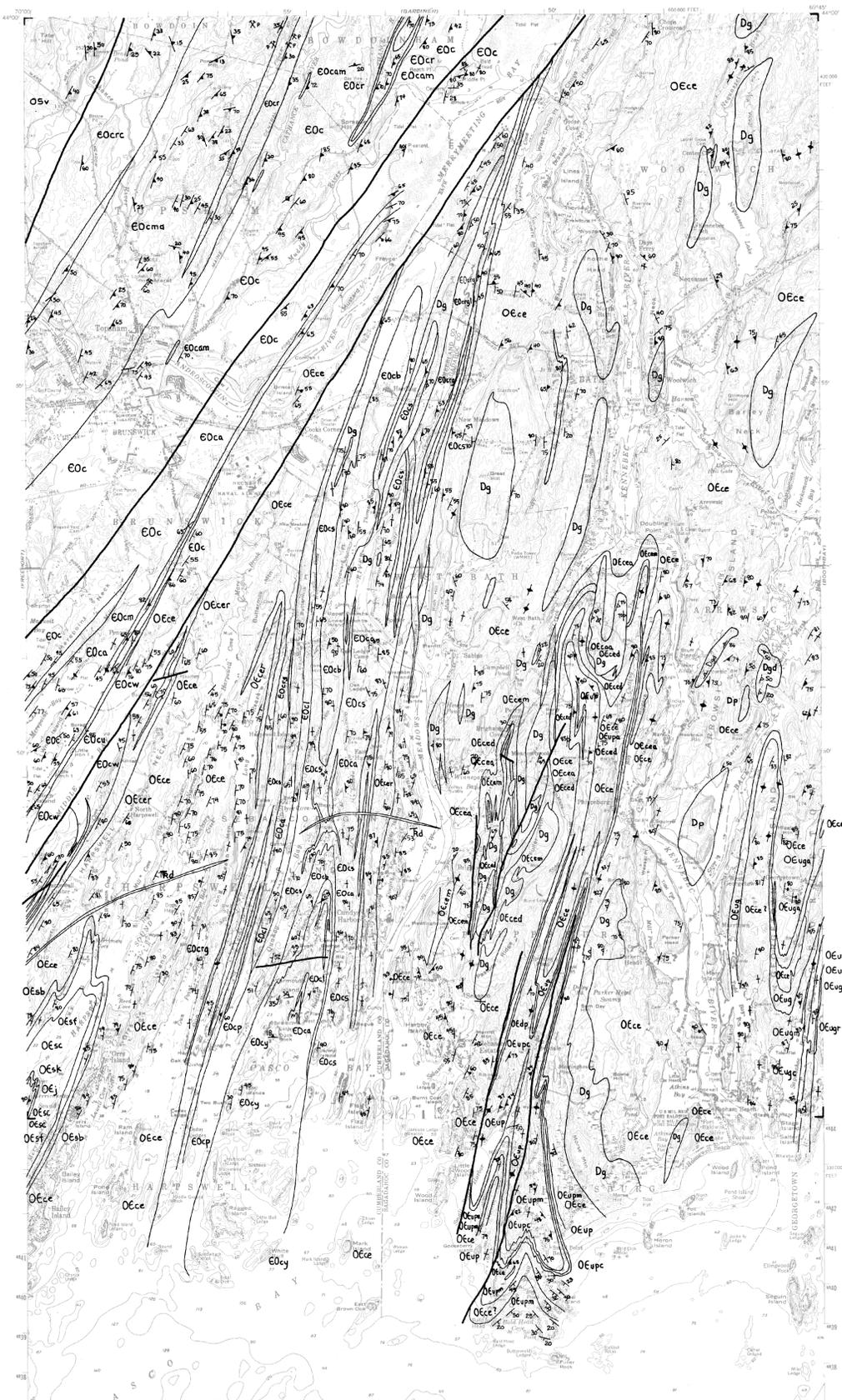
- FORMATIONAL ASSIGNMENT UNCERTAIN - Phippsburg area*
- OEup: Heterogeneous association of a) non to slightly rusty-weathering biotite-muscovite-sillimanite schist (similar to OEsc); b) very rusty-weathering muscovite + graphite + biotite schist; c) very rusty-weathering amphibolite; d) quartz-plagioclase-muscovite-biotite schist (similar to OEce); e) garnet-biotite schist; and f) skarn-like calc-silicate rock.
 - OEupA: Thinly interbedded dark gray quartz-plagioclase-biotite granofels and medium greenish gray calc-silicate granofels.
 - OEupB: Amphibolite.
 - OEupM: Non to slightly rusty muscovite-biotite-garnet schist locally with abundant andalusite or sillimanite, and staurolite (similar to OEugM). May be in part Cape Elizabeth, in part Scarboro equivalents.

- CAPE ELIZABETH FORMATION
- OEce: Same as OEce west of New Meadows River, except extensively migmatized in most areas.
 - OEceA: Interassociated hornblende amphibolite, coarse skarn-like calc-silicate, and marble.
 - OEceB: Dark gray, generally massive but occasionally weakly thin bedded, evenly fine-textured biotite-quartz-plagioclase-sillimanite schist.
 - OEceM: Non to somewhat rusty weathering muscovite-biotite-garnet + sillimanite-quartz schist.

* Relative stratigraphic relations of these rocks uncertain. They may include thinned equivalents of several of the Upper Casco Bay Group Formations.

SYMBOLS

- Contact
- Gradational contact
- High angle post-metamorphic fault
- Thrust fault (teeth on upper plate)
- Dip and strike of bedding
- Dip and strike of upright bedding (tops in direction of ball)
- Dip and strike of overturned bedding.
- Dip and strike of schistosity or gneissic foliation.
- Quarry
- p - pegmatite
- r - rock
- l - lime



RECONNAISSANCE
 BEDROCK GEOLOGY
 OF THE
 BATH AND SMALL POINT
 QUADRANGLES, MAINE
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 1981
 Maine Geological Survey
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 OPEN FILE NO. 81-32