

GENERALIZED BEDROCK GEOLOGIC MAP OF NEW HAMPSHIRE

EXPLANATION

IGNEOUS ROCKS

TRIASSIC-CRETACEOUS (245 - 150 Ma*)

 White Mountain Plutonic-Volcanic Succession

CARBONIFEROUS-PERMIAN (360 - 245)

 Dominantly two-mica granite

DEVONIAN (410 - 360)

-  a New Hampshire Plutonic Succession
- (a) Abundant two-mica granite
- (b) Quartz diorite and granodiorite
- (c) Quartz diorite

SILURIAN (440 - 410)

 Granite, tonalite, and granodiorite of the northern and coastal successions

ORDOVICIAN (500 - 440)

 Highlandcroft and Oliverian calc-alkalic plutonic successions

METAMORPHIC ROCKS

DEVONIAN (~400)

 Slate, phyllite, aluminous schist, local calc-silicate, granofels, and bimodal metavolcanic rocks

SILURIAN (~430)

 Aluminous schist, quartzite, calc-silicate granofels, and bimodal metavolcanic rocks

CAMBRIAN-SILURIAN (520 - 430)

 w Upper, phyllite and calcareous schist; lower, bimodal metavolcanic rocks in the west (w). Calc-silicate and biotite granofels, phyllonite, and local aluminous or carbonaceous phyllite and schist in the east (e)

UNDIFFERENTIATED METAMORPHIC AND IGNEOUS ROCKS

PRECAMBRIAN-ORDOVICIAN (>450)

 m Rocks of the Massabesic (m) and Rye (r) massifs. Migmatite, calc-silicate and biotite granofels, metavolcanic rocks, and phyllite and schist, locally intruded by calc-alkalic granite in (r), the rocks of the latter characteristically cataclastic compared to those of (m)



FAULTS

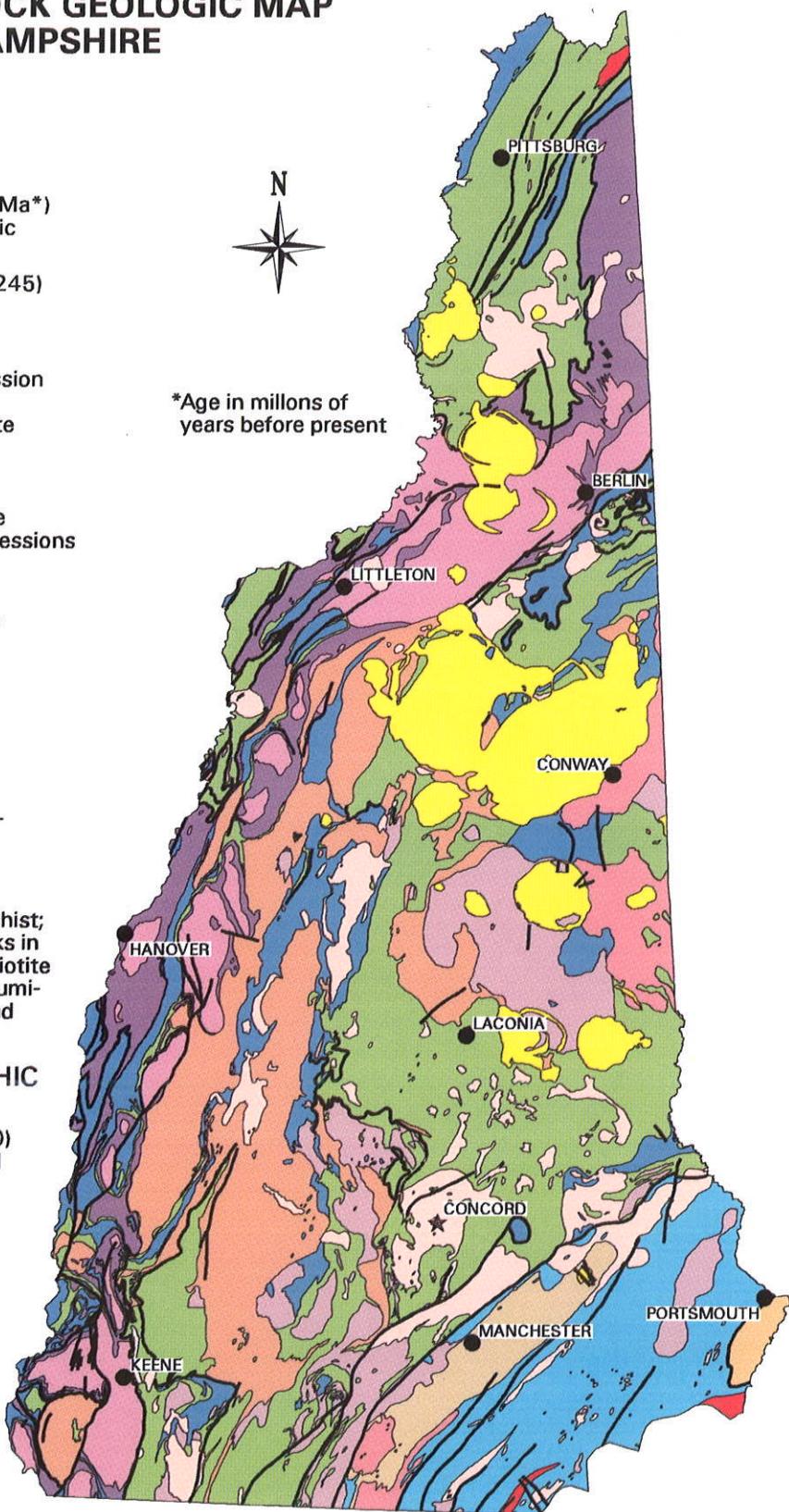


CONTACTS

Adapted from Lyons and others, 1997,
Bedrock geologic map of New Hampshire:
U.S. Geological Survey, Reston, VA,
State Geologic Map, 2 sheets, scale
1:250,000 and 1:500,000, by W.A.
Bothner and E.L. Boudette.



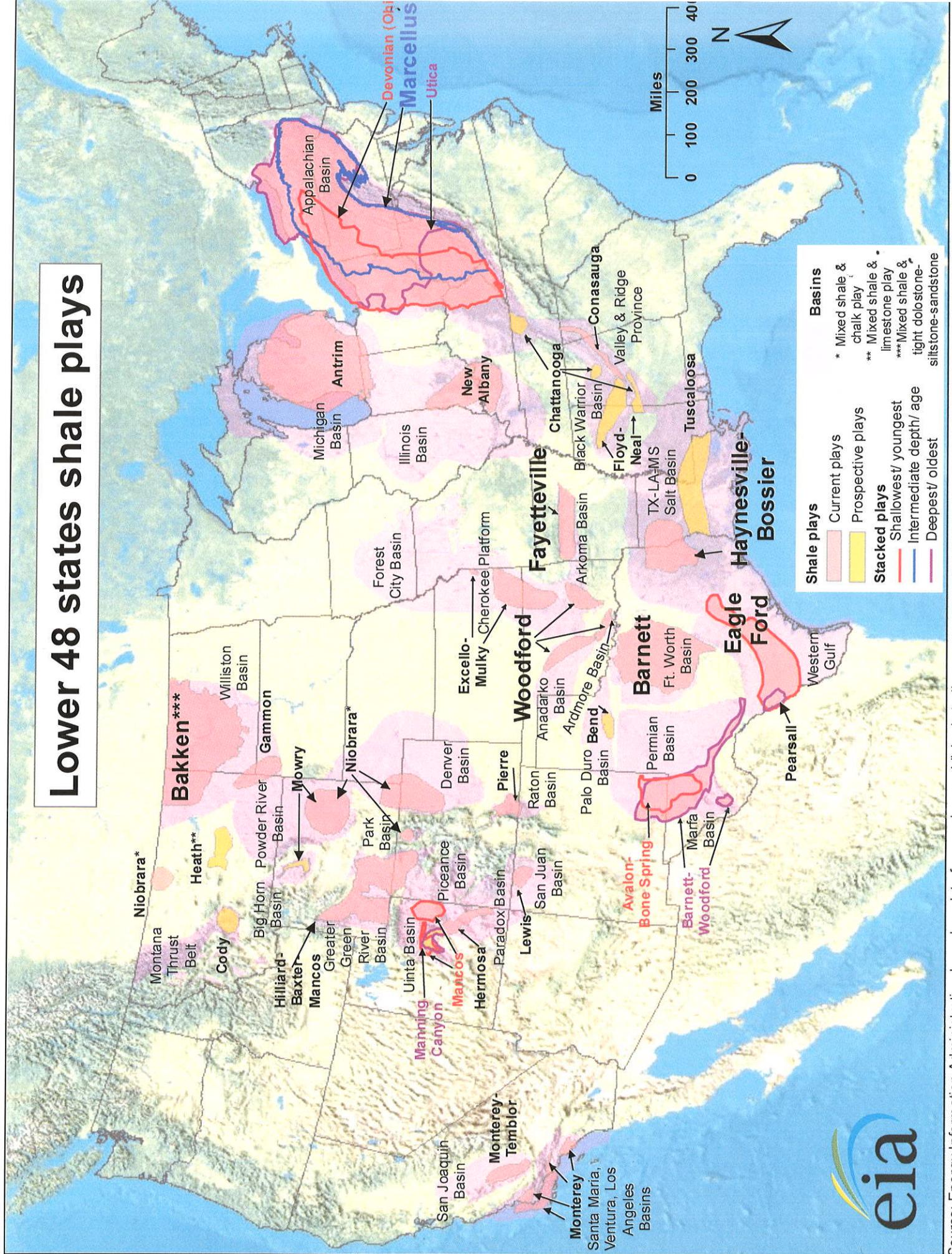
*Age in millions of years before present



SCALE 1:1,250,000
0 10 30 50 MILES
0 25 50 75 100 KM



Lower 48 states shale plays



Source: Energy Information Administration based on data from various published studies.
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