

Crown Point Limestone¹

Middle Ordovician: Eastern New York and west-central Vermont.

Original reference: H. P. Cushing, 1905, New York State Mus. Bull. 95.

W. M. Cady, 1945, Geol. Soc. America Bull., v. 56, no. 5, p. 524 (table), 548-550. Chazyan succession (Chazy group) in west-central Vermont comprises (ascending) Crown Point limestone, Beldens limestone with Weybridge member (both new), and Middlebury limestone (new). Crown Point limestone consists of lead-gray compact massive rock that weathers to gray surface. Thickness 0 to 150 feet. Overlies upper Beekmantown Bridport dolomite (new) at the meridian of Shoreham and west. Lies on Bascom formation (new) and is gradationally overlain by Beldens formation east of meridian of Cornwall.

Marshall Kay and W. M. Cady, 1947, Science, v. 105, no. 2736, p. 601. Inasmuch as Crown Point limestone (Cady, 1945) is structurally separated from Crown Point limestone of type locality and other outcrops in New York and is succeeded by Beldens formation rather than Valcour limestone, it is proposed here that "Crown Point" formation east of Champlain thrust in west-central Vermont be designated Burchards limestone.

Philip Oxley, 1950, (abs.) Geol. Soc. America Bull., v. 61, no. 12 pt. 2, p. 1492. Discussion of Chazyan stratigraphy west of Champlain thrust, New York and Vermont. Lower Middle Ordovician sequence is Day Point (oldest), Crown Point and Valcour limestones. Day Point basal quartz sands and succeeding crosslaminated, locally reefy calcarenites and shallow water deposits of transgressing sea. Southward-lapping Crown Point limestones are preponderately deeper water argillicalcilitites, but locally, and particularly toward top, are *Stromatocerium* reefs. Lower limestones of offlapping Valcour tend to match facies of underlying Crown Point. Upper Crown Point reefs are most widespread, forming roughly linear, discontinuous trend from near Isle La Motte, Vt., south of Essex, N.Y.

Philip Oxley and Marshall Kay, 1959, Am. Assoc. Petroleum Geologists Bull., v. 43, no. 4, p. 820, 825 (fig. 4), 828 (fig. 6), 830-833, measured sections. Discussion of Ordovician Chazyan series of Champlain Valley, N.Y. and Vt. Series is divided into three stages: Dayan, Crownian, and Valcourian. Crown Point substage (Cushing, 1905) was division B of Brainerd and Seely (1888, Am. Geologist, v. 2) originally described southwest of Chazy, N.Y., from exposure of original Chazy limestone

(Emmons, 1842). Sequence is 250 feet of dark-blue-gray massive argillicalcilsiltites, gray-weathering, with buff silty crenulated laminae at intervals up to 4 inches; a 20-foot zone of lighter gray medium to coarse calcarenite lies about 50 feet above base. The Crown Point becomes more argillaceous and thinner bedded toward top. Calcarenites of Fleury member (new) of Day Point underlie with slight disconformity and succeeding is a 2-foot light-yellowish-gray fine-textured dolomite, the base of Hero member (new) of Valcour formation. Has normal or basinal facies and reef facies.

Probably named for exposures at or near Crown Point, Essex County, N.Y.

Crown Point limestone.

Lower Ordovician: Eastern New York (Champlain Valley).

H. P. Cushing, 1905 (N. Y. State Mus. Bull. 95), adopted the subdivisions of the Chazy proposed by E. Brainerd and H. M. Seely in 1888 (Am. Geol., vol. 2, pp. 323-330), as explained under *Chazy group*, and proposed *Crown Point ls.* for group B or middle Chazy, probably from exposures at or near Crown Point, Essex Co.

Crown Point Ls.

1961

Fisher, D. W., and others, Geologic map of New York: New York Geol. Survey Map and Chart Ser. No. 5 (1:250,000)

Map Sheet 4, 5

Text p.

Chazy Gp.
Middle Ord.

New York State

Crown Point mbr.
(Chazy ls.)

1961

Doll, C. G., Geologic map of Vermont (1:250,000): Vermont
Geol. Survey

Explanation

Chazy gr.
Mid. Ord.

Vermont

Crown Point ls.

1961

Welby, C. W., Bedrock geology of central Champlain
Valley of Vermont: Vermont Geol. Survey, Bull. 14
p. 15-16, 126-138, pl. 1-B (213)
B

Chazy
Ordovician

Vermont

Crown Point Ls.

1962

Fisher, D. W., Correlation of the Ordovician Rocks
in New York State: New York State Mus. and Sci.
Ser., Map & Chart Ser. No. 3.

Chazy Gp.

Whiterock-Ashby Stage

M. Ord.

New York

Crown Point Ls.

1967

Toomey, D. F., Additional Occurrences and
Extension of Stratigraphic Range of the
Problematical Micro-organism Nuia: Jour.
Paleont., v. 41, no. 6, Nov. G(200)
p. 1457-60 J83p

M. Ord.

N. N.Y.-W. Vt.

Crown Point Ls.
(Chazy Gp.)

1968

Fisher, D. W. ~~and others~~, Bedrock Geology of the
Plattsburgh and Rouses Point Quadrangles, New
York and Vermont: New York Univ., Mus. & Sci.
Service & Geol. Survey, no. 10, pl. 1.

text in
(221)

p. 1-51 map only

22, 29 (Fig. 28)

qN45mc

or

(213)

S 632

#1

M. Ord.

NE. N.Y.

NW. Vt.

Crown Point Fm.
(Chazy Gp.)

1968

Shaw, F. C., Early Middle Ordovician Chazy
Trilobites of New York: New York. State Mus.
and Sci. Service, Mem. 17, Nov. (221)

p. 1-163

qN45m

Fig. 2

7

M. Ord.

N. Y.

Crown Point Mbr.
(Chazy Ls.)

1969

*Cady, W.M., Regional Tectonic Synthesis of
Northwestern New England and Adjacent Quebec:
GSA Mem. 120. p. 1-181 G(200)
pl. 2 G29m

N. Champlain V.
N.Y.-Que.-Vt.

Low. Ord.

Crown Point Fm.
(Chazy Gp.)

1969

Shaw, F. C., Stratigraphy of the Chazy Group (Middle Ordovician) in the Northern Champlain Valley: New York. Geol. Assoc. 41st Ann. Mtg., Guidebook, May, Trip E. p. 81 - 92
85 (Fig.3)

G(221)

q N42 fg

84

Crown Point

1970

Bird, J. M. and Dewey, J. F., Lithosphere Plate-
Continental Margin Tectonics and the Evolution of
the Appalachian Orogen: GSA Bull., v. 81, no. 4,
Apr. p. 1031-1060 G(200)

Fig 5 - opp. 1039 (see append., p. 1052) G29

M. Ord.

W. New Eng.

Crown Point Fm. [Correlation w/ w.TX]

1970

Toomey, D.F., An Unhurried Look at a Lower Ordovician
Mound Horizon, Southern Franklin Mountains, West
Texas: Jour. Sed. Pet., v.40, no.4, Dec.

p. 1318-1334

G(200)

1333

J84

of Pitcher, '64

& Finks & Toomey, '69

to show continued use

Chazyan
Ord., M.

ne. N.Y + w. VT

Crown Point Ls.
(Chazy Gp.)

1970

Isachsen, Y.W. and Fisher, D.W.; Geologic Map
of New York (Adirondock Sheet): New York. State
Mus. and Sci. Service, Map at scale of 1:250,000

M.Ord.

NE. N.Y.

Crown Point Ls.
(Chazy Gp.)

1972

Finks, R. M.; Shaw, F. C.; Toomey, D. F., Ordovician
Paleontology & Stratigraphy of the Champlain Islands
New Eng. Intercoll. Geol. Conf. Gdbk. #64, Oct.

Trip P-1.

p. 429-472

431 (F. 2)

434

G(210)

N42gf

M. Ord.

NW. VT

Crown Point Fm.
(Chazy Gp.)

1974

Kapp, U. S., Mode of growth of Middle Chazyan (Ordovician)
stromatoporoids, Vermont: J. Paleont., v. 48, no. 6,
Nov. G(200)
p. 1235-1240 J83p

under: Valcour Fm.
over: Day Point Fm.

Lake Champlain,
Isle La Motte
VT

Ord.

Crown Point Fm
(Chazy Gp)

1975

Kapp, U. S. and Stearn, C. W., Stromatoporoids of the
Chazy Group (Middle Ordovician), Lake Champlain, Vermont
and New York: J. Paleont. v. 49, no. 1. G(200)

p. 163-186

J83p

164(F.1)..strat. col

164-166..areas of exp. (see D. W. Fisher map 10, '68)

under: Valcour Fm, Chazy Gp

over: Day Point Fm, Chazy Gp

M. Ord. (all units)

VT, NY

Crown Point ls

1977

Fisher, D. W., Correlation of the Hadrynian [U.Precamb],
Cambrian, and Ordovician Rocks in New York State: NY
State Mus Map & Chart Ser 25 (221)
plates 1-4..corr charts (separate fr text) qN45mc
pl. 2, 4

M.Ord

NY

Crown Point Fm [not assigned]

1987

Chisick, S.A., Washington, P.A., & Friedman, G.M.,
Carbonate-clastic synthems of the middle Beekmantown
Group in the central & southern Champlain Valley, in
Westerman, D.S., ed, Guidebook for Field Trips in
Vermont, Vol 2: NEIGC, 79th Ann Mtg, Oct 1987
p. 406-442

G(210)
N42gf

disconf under: Isle LaMotte Fm
unconf over: Providence Island Fm

Mid Ord

w. VT