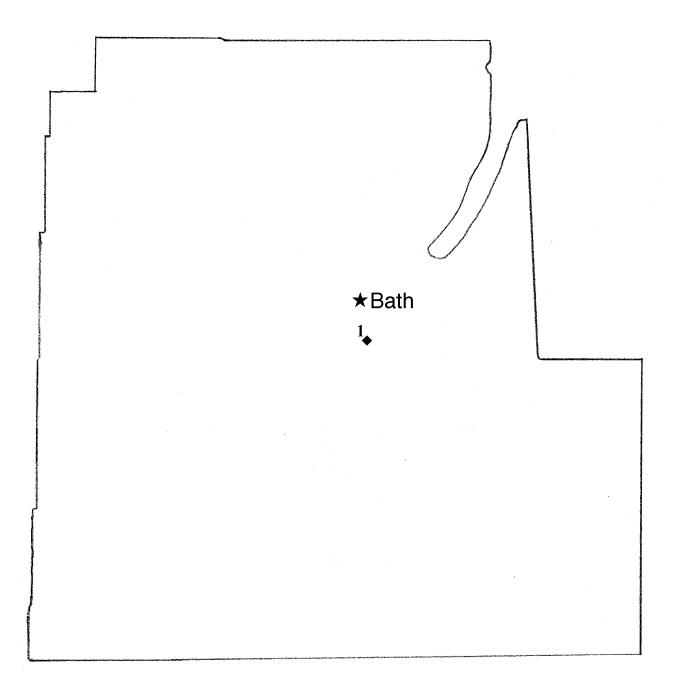
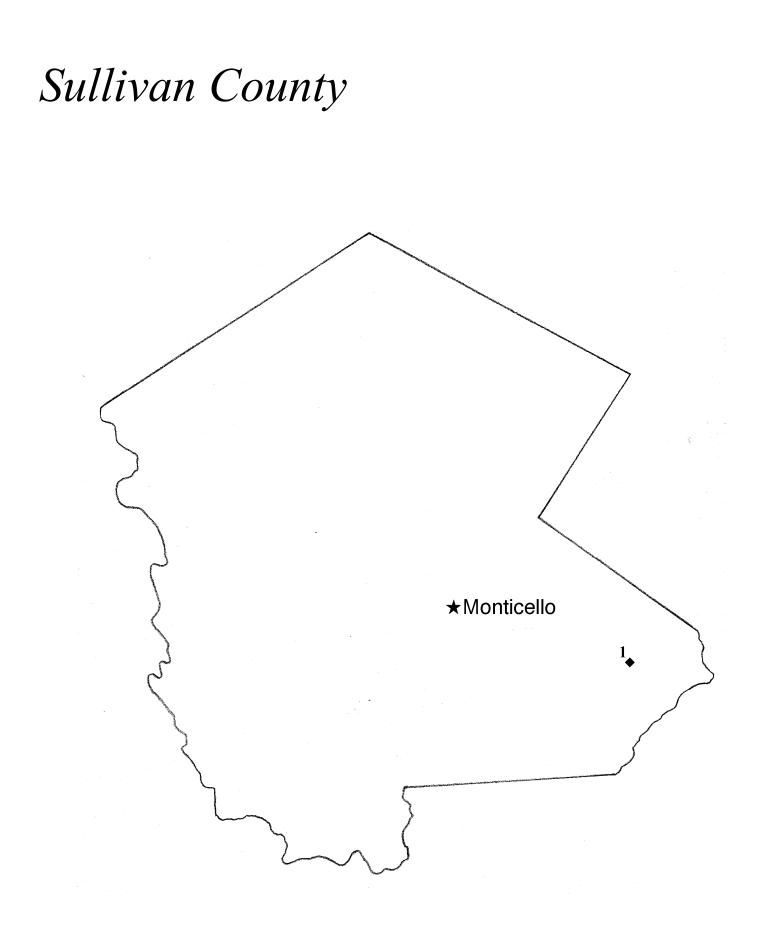
Steuben County



 Bath (Dewitt) Quarry (S). *Minerals:* Calcite. Southwest of Bath. Town of Bath. GPS: (42°19'12"N, 77°20'48"W) *Reference:*Unpublished



Calcite. Bath Quarry. 16 cm. NYSM18953. SN photo.

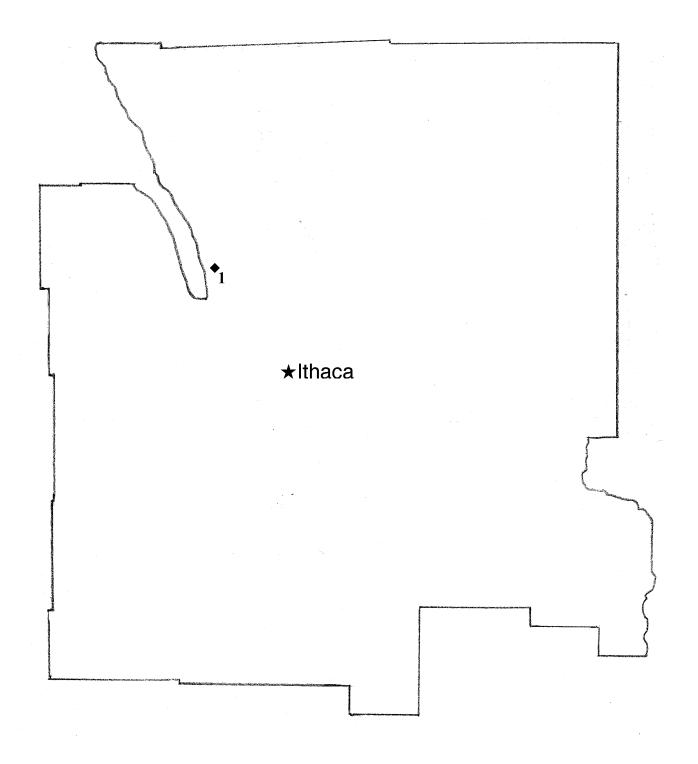


 Wurtsboro Lead Mine (Shawangunk Mine, Mamakating Mine, St. Nicholas Zinc Co. Mine) (C). *Minerals:* Barite, Cerussite, Chalcopyrite, Covellite, Galena, Gold, Malachite, Muscovite, Pyrite, Quartz, Sphalerite. Wurtsboro. Town of Mamakating. GPS: (near 41°37'N, 74°27'W) *References:* Dana, 1898; Whitlock, 1903; Newland, 1919; Sims and Hotz, 1951



Sphalerite, Galena. Wurtsboro Lead Mine. 6 cm. Christopher O'Neill specimen and photo.

Tompkins County



 Portland Point Quarry (Cayuga Crushed Stone Quarry) (S, C). *Minerals:* Calcite, Dolomite, chromium-rich Pyrope, Quartz. Lansing. Town of Lansing.
 GPS: (42°31'27"N, 76°31'29"W) *Reference:* Robinson & Chamberlain, 2007b

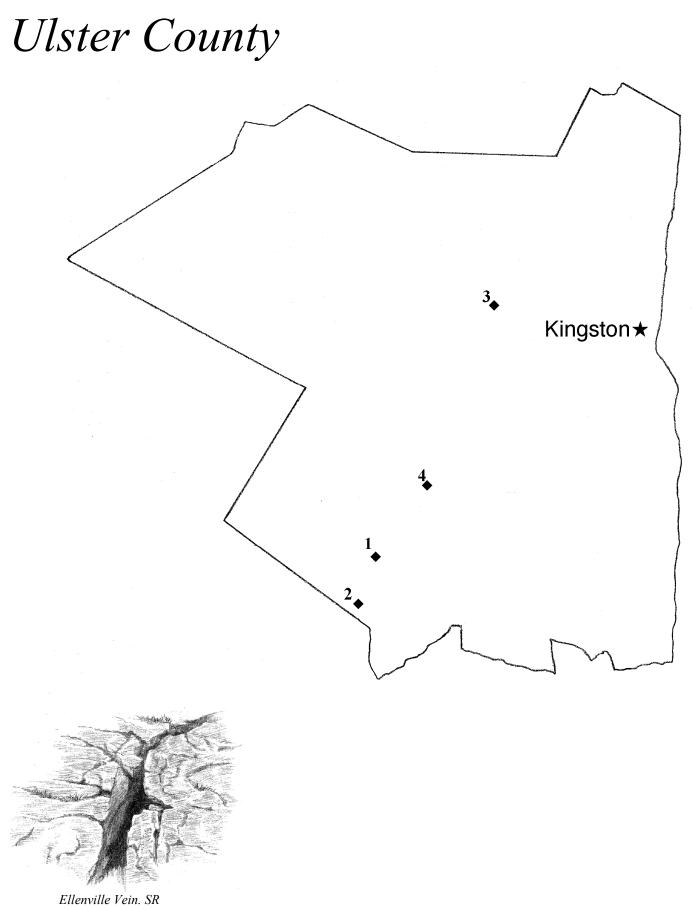
Localities without GPS coordinates (not shown on map)

Portland Point (S,A). *Minerals:* Alunogen, Epsomite, Melanterite (coatings on shale). Lansing. Town of Lansing. *Reference:* Robinson & Chamberlain, 2007b

Calcite Occurrence (S). *Minerals:* Calcite, Gypsum, Pyrite. Town of Lansing. *Reference:* Unpublished



Calcite. Lansing. 6 cm. NYSM23507. SN photo.



 Ellenville Lead Mines (F). *Minerals:* Anatase, Brookite, Chalcopyrite, Galena, Pyrite, Sphalerite, Quartz. Ellenville. Town of Warwarsing. GPS: (41°42'44"N, 74°22'55"W)

References: Robinson, 1825; Whitlock, 1903; Robinson & Chamberlain, 2007b; Chamberlain & Robinson, 2013



Quartz, Chalcopyrite. Ellenville Lead Mine. 25 cm. NYSM specimen. SCC photo.



Chalcopyrite, Quartz. Ellenville Lead Mine. 11.5 cm. NYSM specimen. JS photo.



(L) Brookite, Quartz. Ellenville Lead Mine. 1-cm fov. Union College specimen. SCC photo.
(C) Brookite, Quartz. Ellenville Lead Mine. 7-mm xl. Harvard specimen. GWR photo.
(R) Brookite, Quartz. Ellenville Lead Mine. 1-cm fov. Union College specimen. SCC photo.



Quartz (Japan-law twin). Ellenville Lead Mine. 2.3 cm. SCC17890 and photo.



Sphalerite, Quartz, Chalcopyrite. Ellenville Lead Mine. 13-cm fov. SCC15328 and photo.



 Red Bridge Mine (F). *Minerals:* Gold, Quartz, Sphalerite. Spring Glen. Town of Warwarsing. GPS: (41°39'54"N, 74°24'38"W) *Reference:* Newland, 1919



Quartz. Red Bridge Mine. 5.5 cm. JB-1 and photo.

 Brown's Station (now submerged by Ashokan Reservoir) (F). *Minerals:* Quartz. Brown's Station. Town of Olive. GPS: (41°56'58"N, 74°12'17"W) *Reference:* Unpublished



Quartz. Brown's Station. 7.9 cm. SCC15732 and photo.

 4) Rte. 209 Clay Bank (S). *Minerals:* Gypsum. Kerhonkson. Town of Rochester. GPS: (41°46'28"N, 74°18'13"W) *Reference:* Robinson & Chamberlain, 2007b



Gypsum. Kerhonkson. 3.5 cm. JB76284 and photo.

Road Cut along Rte. 199 (S) *Minerals:* Quartz. Kingston. Town of Kingston. *References:* Unpublished

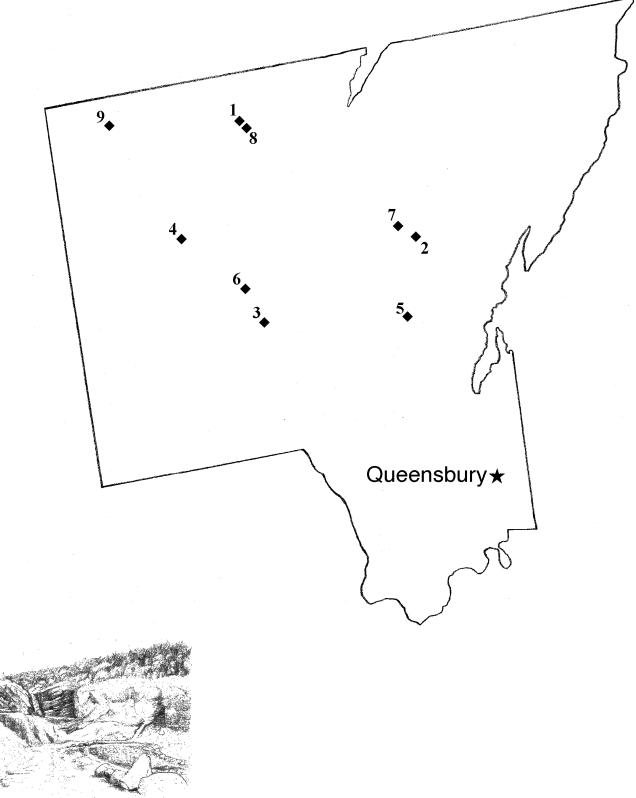


Quartz. Road Cut in Rte. 199. 5 cm. SCC12797 and photo.

Rosendale Deposit (S). *Minerals:* Calcite, Marcasite, Pyrite, Quartz. Rosendale, near Kingston. Town of Rosendale. *References:* Whitlock, 1903; Robinson & Chamberlain, 2007b

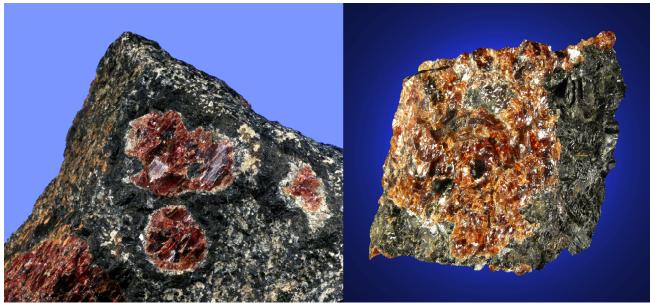
High Falls (S). *Minerals:* Pyrite. Town of Marbletown. *Reference:* Whitlock, 1903

Warren County

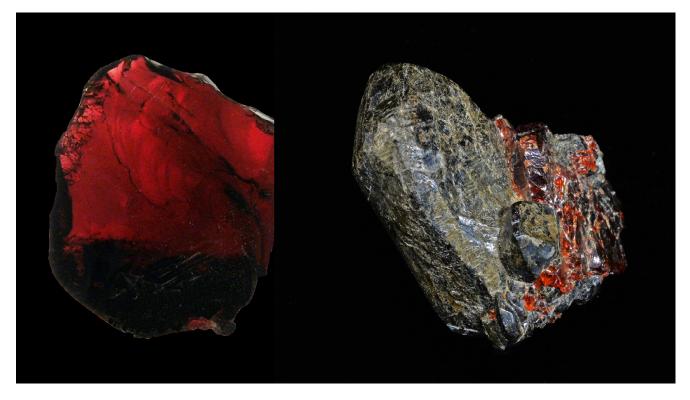


Barton Mine. SR

 Barton Garnet Mines (Gore Mountain Mine, Barton Mine, Ruby Mountain Mine, North Creek Mine (C). *Minerals:* Albite (Oligoclase), Almandine, Andesine, Anorthite (Labradorite), Apatite, Biotite, Cristobalite, Enstatite, Ilmenite, Magnetite, Olivine, Pargasite, Pyrite, Pyrope, Pyrrhotite. North Creek. Town of Johnsburg. GPS: (43°40'56"N, 74°02'51"W) *Reference:* Robinson & Chamberlain, 2007a,b



(L) Almandine, Enstatite, Pargasite. Barton Mine. 12 cm. GWR specimen and photo. (R) Almandine, Enstatite. Barton Mine. 9.5 cm. SCC17310 and photo.



(L) Almandine (gem rough). Barton Mine. 2.1 cm. GWR specimen. SCC photo. (R) Enstatite (Hypersthene), Almandine. Barton Mine. NYSM24831. SN photo



Almandine. Ruby Mountain Mine. 7 cm. SCC18671 and photo.

- Chesterown Pegmatite Quarry (C). *Minerals:* Apatite, Dravite, Muscovite, Quartz. Chestertown. Town of Chester. GPS: (43°36'59"N, 73°46'52"W) *Reference:* Robinson & Chamberlain, 2007b
- Asbestos Mine (C). *Minerals:* Antigorite (Bowenite), Chrysotile, Serpierite. Thurman. Town of Thurman. GPS: (43°31'33"N, 73°54'16"W) *Reference:* Robinson & Chamberlain, 2007a,b
- 4) Armstrong Farm (C). *Minerals:* Albite, Allanite-(Ce), Almandine, Anorthite (Labradorite), Apatite, Augite, Biotite, Calcite, Chlorite, Diopside, Dravite, Enstatite, Fluorite, Grandidierite, Graphite, Hedenbergite, Hornblende, Magnetite, Microcline, Muscovite, Phlogopite, Pyrrhotite, Quartz, Rutile, Scapolite, Serendibite, Serpentine, Sinhalite, Spinel, Talc, Titanite, Tremolite. Town of Johnsburg. GPS: (43°37' N, 73°58'W)

References: Larsen & Schaller, 1932; Bailey et al., 2019



Serendibite. Armstrong Farm. 13 cm. SCC14797 and photo

- 5) Kornerupine Occurrence (C). *Minerals:* Amphibole, Graphite, Kornerupine, Pyroxene, Scapolite, Tourmaline. Warrensburg. Town of Warrensburg.
 GPS: (43°32'37"N, 73°49'35"W) *References:* Robinson & Chamberlain, 2007b; Bailey et al., 2019
- 6) North River Garnet Co. Mine (C). *Minerals:* Almandine. sd Oven Mountain, 4 miles south of North Creek. Town of Johnsburg. GPS: (43°35'N, 73°59'W) *References:* Whitlock, 1903; Newland, 1919
- 7) Peckham Materials Corp. Quarry (F). *Minerals:* Chamosite, Clinochlore, Epidote, Quartz. Rte. 9, Chestertown. Town of Chester. GPS: (43°37'33"N. 73°48'20"W) *Reference:* Unpublished



Quartz. Peckham Materials Corp. Quarry. 3.4 cm. SCC26166 and photo

 Hooper Mine (C). *Minerals:* Albite, Almandine, Cristobalite, Ilmenite. North River. Town of Johnsburg. GPS: (43°40'55"N, 74°02'50"W) *Reference:* Walter, 1999



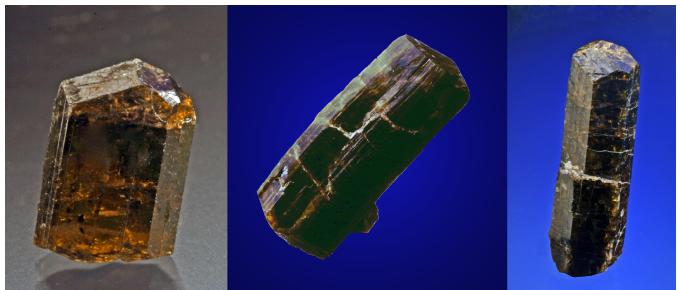
Almandine, Enstatite. Hooper Mine. 11 cm. SCC18986 and photo.

 9) North River Garnet Mine (C). *Minerals:* Albite, Almandine, Cristobalite, Ferro-hornblende, Ilmenite, Rutile. Thirteenth Lake, Bullhead Mountain. Town of Johnsburg. GPS: (43°41'N, 74°08'W) *Reference:* Newland, 1919

Localities without GPS coordinates (not shown on map)

Arsenopyrite Locality (C). *Minerals:* Arsenopyrite (in marble). Road Cut on County Rte. 26, northwest end of Brant Lake. Town of Horicon. *Reference:* Unpublished

Brant Lake (C). *Minerals:* Apatite, Calcite, Fluor-uvite, Graphite, Muscovite, Mica ps. Diopside, Pyrite, Rutile. North end of Brant Lake; now covered by cottages. Town of Horicon. *Reference:* Robinson & Chamberlain, 2007b



(L) Fluor-uvite. Brant Lake. 1 cm. CMN specimen. GWR photo.
(C) Fluor-uvite. Brant Lake. 4 cm. SCC specimen and photo.
(R) Fluor-uvite. Brant Lake. 3 cm. NYSM specimen. GWR photo.

Caldwell (C). *Minerals:* Feldspar. 2 miles west of the village of Caldwell (now Lake George). Town of Lake George. *References:* Beck, 1842; Dana, 1898

Diamond Point and Diamond Island (S). *Minerals:* Calcite, Dolomite, Quartz. Lake George. Town of Bolton. *References:* Dana, 1898; Whitlock, 1903; Robinson & Chamberlain, 2007a,b; Walter, 2014

Eagle Point Campground (C). *Minerals:* Allanite, Epidote. U.S. Rte. 9, Schroon Lake, north of Pottersville. Town of Chester. *References:* Robinson & Chamberlain, 2007a,b

Glens Falls Calcite Occurrence (S). *Minerals:* Calcite, Dolomite (in Trenton Limestone). Town of Queensbury. *Reference:* Whitlock, 1903

Hague Graphite Occurrence (C). *Minerals:* Apatite, Garnet, Graphite. 4 miles west of Hague. Town of Hague. *Reference:* Whitlock, 1903

Loon Lake Chalcopyrite Locality (C). *Minerals:* Chalcopyrite, Pyrite, Rutile, Tourmaline. Loon Lake. Town of Chester. *Reference:* Whitlock, 1903

Moore's Mine (C). *Minerals:* Diopside (Coccolite), Garnet (in Hornblende schist). Gore Mountain. Town of Johnsburg. *Reference:* Whitlock, 1903

North of Eagle Point Campground (C). *Minerals:* Albite, Allanite, Epidote, Quartz. U.S. Rte. 9, 4 miles north of Eagle Point campground, Schroon Lake, Town of Schroon. *Reference:* Rowley, 1957

Parker Mine (C). *Minerals:* Garnet. Southwest of Dagget Pond and 4.5 miles northwest of Warrensburg. Town of Thurman. *Reference:* Newland, 1919

Rexford Mine (C). *Minerals:* Garnet. 1.3 miles south of North Creek. Town of Johnsburg. *Reference:* Newland, 1919

Rogers Rock Campground (C). *Minerals:* Augite, Diopside, Feldspar, Graphite, Grossular, Titanite, Wollastonite. Rte. 9N, on Lake George. Town of Hague. *Reference:* Dana, 1898

Rowland Graphite Company Mine (C). *Minerals:* Graphite, Quartz. Johnsburg. Town of Johnsburg. *Reference:* Jaszczak et al., 2009

Rutile Occurrence (C). *Minerals:* Chalcopyrite, Pyrite, Rutile, Tourmaline. Town of Chester. *Reference:* Dana, 1898

Sabbath Day Point Locality (C). *Minerals:* Epidote, Scapolite, Titanite. Sabbath Day Point. Town of Hague. *Reference:* Whitlock, 1903

Schroon Lake Road Cut (F). *Minerals:* Allanite, Chabazite, Chalcopyrite, Chrysocolla, Clinochlore, Datolite, Epidote, Malachite, Microcline, Prehnite. Road Cut in US. Rte. 9, Schroon Lake. Town of Schroon Lake. *Reference:* Robinson & Chamberlain, 2007b

Serendibite Occurrence (C). *Minerals:* Phlogopite, Serendibite. Johnsburg. Town of Johnsburg *References:* Robinson & Chamberlain, 2007a,b

Serpentine Locality (C). *Minerals:* Chrysotile, Serpentine. Stony Creek. Town of Stony Creek. *Reference:* Robinson & Chamberlain, 2007b

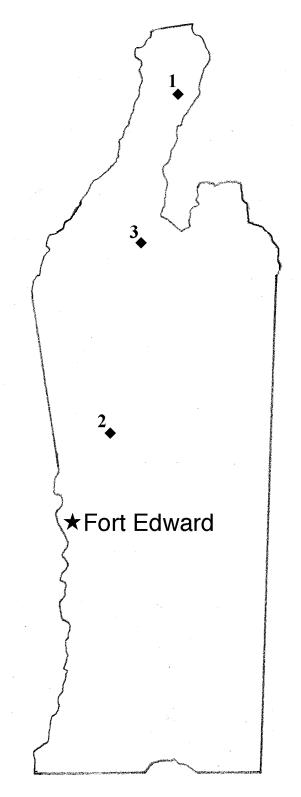
Spherical Graphite Locality (C). *Minerals*. Graphite (spherical) in granular Grenville Marble. Bed of Hudson River, adjacent to Rte. 40, near Warrensburg. Thurman-Warrensburg Township line. *Reference*: Unpublished

Thurman Graphite Occurrence (C). *Minerals:* Fluorite, Garnet, Graphite, Pyrite, Quartz, Serpentine, Zircon. Town of Thurman. *Reference:* Whitlock, 1903

Warrensburg Iron Mine (C). *Minerals:* Magnetite. Town of Warrensburg. *Reference:* Whitlock, 1903

Zircon Occurrence (C). *Minerals:* Fluorite, Graphite, Pyrite, Serpentine, Zircon. Johnsburg. Town of Johnsburg. *Reference:* Dana, 1898

Washington County



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 Graphite Prospect (C). *Minerals:* Calcite, Graphite, Quartz (rose). Pulpit Point Road, Putnam. Town of Putnam. GPS: (43°44'15"N, 73°23'49"W) *References:* Robinson & Chamberlain, 2007b; Jaszczak et al., 2009



Graphite (Epimorph after Calcite). Putnam. 7.5 cm. SCC15710 and photo.



Graphite. Putnam. 5 cm. JB56934 and photo.



(L) Graphite. Putnam. 4.5 cm. SCC8423 and photo.
 (R) Quartz (rose), Graphite. Putnam. 5.9 cm. SCC15897 and photo.

- Keenan Lime Quarry (S,F). *Minerals:* Calcite. Smith's Basin. Town of Kingsbury. GPS: (43°21'39"N, 73°29'45"W) *Reference:* Unpublished
- Hooper Graphite Mine (C). *Minerals:* Grossular, var. Tsavorite (contains V₂O₅ 1.13%, Cr₂O₃ 0.28%). Town of Dresden. GPS: (43°33'N, 73°28'W) *Reference:* Unpublished

Clemons (C). *Minerals:* Calcite, Graphite. Town of Dresden. *Reference:* Alling, 1917



Graphite. Clemons. 10 cm. SCC23274 and photo.

Epidote Occurrence (C). *Minerals:* Epidote, Microcline, Pyroxene. Town of Granville. *References:* Dana, 1898: Whitlock, 1903

Fort Ann (C). *Minerals:* Graphite, Pyroxene, Quartz, Serpentine. 1 mile north of Fort Ann. Town of Fort Ann. *References:* Dana, 1898; Whitlock, 1903

Fort Ann Mines (Fort Ann, Mt. Hope, Potter) (C). *Minerals:* Magnetite. 7 miles west of Fort Ann. Town of Fort Ann. *Reference:* Smock, 1889

Fort Ann Quarry (C). *Minerals:* Allanite, Apatite, Microcline. Fort Ann. Town of Fort Ann. *Reference:* Robinson & Chamberlain, 2007b

Interstitial Calcite Locality (F,S). *Minerals:* Calcite (cementing Pleistocene gravel). Clemons-Dresden Area. Town of Dresden. *Reference:* Robinson & Chamberlain, 2007b

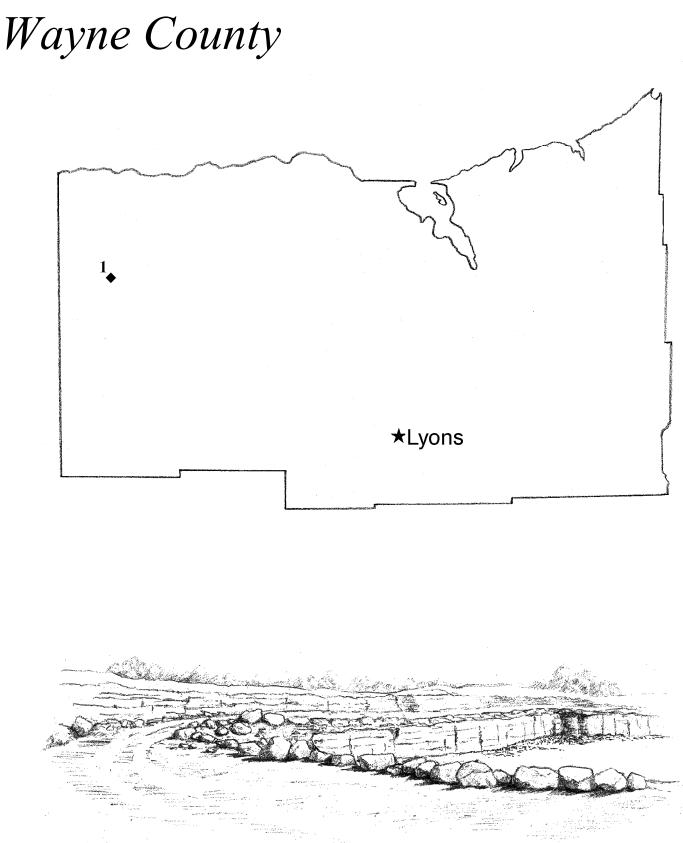
Pyrolusite Occurrence (F). *Minerals:* Pyrolusite (dendrites) in quartzite and slates. Middle Granville. Town of Granville. *Reference:* Whitlock, 1903

Serpentine Occurrence (C). *Minerals:* Serpentine (yellow-green, translucent) in marble. Shelving Rock. Town of Fort Ann. *Reference:* Whitlock, 1903

South Bay (F). *Minerals:* Epidote, Quartz. Whitehall (abandoned quarry near bridge). Town of Dresden. *Reference:* Robinson & Chamberlain, 2007a,b



Epidote. South Bay. 7.3 cm. SCC18026 and photo.



Walworth Quarry. SR

 Walworth Quarry (S). *Minerals:* Calcite, Celestine, Dolomite, Fluorite, Galena, Gypsum, Sphalerite. Walworth. Town of Walworth. GPS: (43°10'06"N, 77°19'04"W) *References:* Robinson & Chamberlain, 2007a,b



(L) Fluorite. Walworth Quarry. 4.1 cm. SCC14466 and photo.(R) Sphalerite, Dolomite. Walworth Quarry. 2-cm xl. SCC13937 and photo.



Fluorite. Walworth Quarry. 5-cm xl. NYSM specimen. MH photo.



Fluorite. Walworth Quarry. 2.4 cm. JB61864 and photo.



(L) Fluorite. Walworth Quarry. 1.6 cm. JB61865 and photo. (R) Fluorite. Walworth Quarry. 1.7 cm. JB61866 and photo.



Calcite, Dolomite. Walworth Quarry. 10 cm. JB specimen and photo

Furnaceville Mines (S,B). *Minerals:* Hematite (oolitic, fossiliferous). Ontario Center. Town of Ontario. *Reference:* Robinson & Chamberlain, 2007b

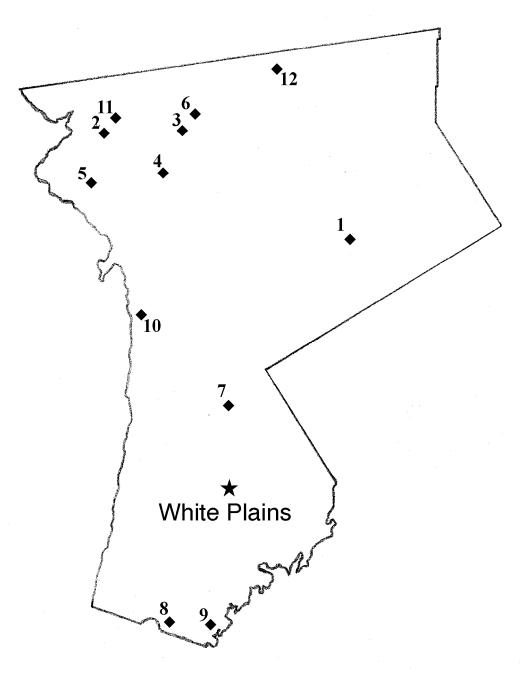
Ontario Mines (Bennet, Jones, Bean, Hurley, LeFrois, Bundy) (S,B). *Minerals:* Hematite. Ontario. Town of Ontario. *References:* Smock, 1889; Whitlock, 1903

Wolcott Barite Occurrence (S). *Minerals:* Barite. Near the stratum of lenticular iron ore, on the south side of the Mohawk River, opposite Little Falls, Wolcott. Town of Wolcott. *References:* Dana, 1850; Dana, 1898

Wolcott Hematite Occurrence (S,B). *Minerals:* Hematite. Town of Wolcott. *Reference:* Smock, 1889

Wolcott Mine (S). *Minerals:* Barite, Hematite. Town of Wolcott. *Reference:* Whitlock, 1903

Westchester County



 Bedford Quarries (Kinkel, Baylis, Hobby Hill, Clinchfield, Colgate, Golding, Buresch, Speranza) (C). *Minerals:* Albite, Almandine, Autunite, Bertrandite, Beryl (golden and aquamarine), Biotite, Bismuthinite, Columbite-(Fe), Epidote, Epistilbite, Ilmenite, Microcline, Molybdenite, Muscovite, Meta-autunite, Opal, Orthoclase, Pyrite, Pyrolusite, Quartz (rose, smoky, milky, colorless), Rutile, Schorl, Schröckingerite, Torbernite, Uranophane, Zircon (Cyrtolite). Bedford. Town of Bedford. GPS: (41°11'50"N, 73°38'01"W)

References: Tan, 1966; Lupulescu, 2007; Robinson & Chamberlain, 2007a,b



(L) Columbite. Bedford Quarries. 9 cm. NSYM specimen. GBG photo.
 (R) Muscovite, Quartz. Bedford Quarries. 6.0 cm. SCC specimen and photo.



(L) Microcline. Kinkel Quarry. 16.5 cm. NYSM specimen. ER photo. (R) Beryl, Microcline. Bedford Quarries. 8.0 cm. JB58091 and photo.

- Peekskill Meteorite, fell 9 October 1992. (E). *Minerals:* H-6 Chondrite. Town of Peekskill. GPS: (41°17'N, 73°55'W) *Reference:* Robinson & Chamberlain, 2007b
- Yorktown Meteorite, fell September 1869 (E). *Minerals:* Olivine (Hypersthene) L-5 Chondrite. Yorktown. Town of Yorktown. GPS: (41°17'N, 73°49'W) *Reference:* Robinson & Chamberlain, 2007b

- 4) DiRubbo Emery Quarry (C). *Minerals:* Analcime, Calcite, Cordierite, Corundum, Högbomite, Magnetite, Sapphirine. Cortlandt Emery Belt, Town of Cortlandt. GPS: (41°14'40"N, 73°52'06"W) *References:* Smock, 1889; Robinson & Chamberlain, 2007b
- 5) Crugers Emery Mine (C). *Minerals:* Albite (Oligoclase), Amphibole, Biotite, Calcite, Chlorite, Corundum, Garnet, Graphite, Hercynite, Hornblende, Kyanite, Magnesiohögbomite-6N6S, Magnetite, Muscovite, Opal, Pyroxene, Quartz, Sillimanite (Fibrolite), Spinel (Ceylonite), Staurolite, Tournaline. Montrose, Cortlandt Emery Belt. Town of Cortlandt. GPS: (41°15'14"N, 73°55'18"W) *References:* Whitlock, 1903; Manchester, 1931; Robinson & Chamberlain, 2007b
- Strang Emery Pit (C). *Minerals:* Analcime, Corundum, Magnetite, Opal. Toddville, Cortlandt Emery Belt. Town of Cortland. GPS: (41°17'30"N, 73°52'15"W) *Reference:* Robinson & Chamberlain, 2007b
- 7) Valhalla (Kensico) Quarry (C). *Minerals:* Albite (Oligoclase, Peristerite), Biotite, Dumortierite, Fluorite, Garnet, Graphite, Hornblende, Microcline (Amazonite), Muscovite, Quartz (amethyst, milky, smoky). Valhalla. Town of Mount Pleasant.
 GPS: (41°04'29"N, 73°46'32"W) *References:* Manchester, 1931; Robinson & Chamberlain, 2007a,b



Microcline (Amazonite). Valhalla Quarry. 9.0 cm. SCC14773 and photo.

 Eastchester Occurrence (C). *Minerals:* Chalcopyrite, Dolomite, Pyrite, Sphalerite. Town of Eastchester. GPS: (40°53'18"N, 73°49'43"W) *Reference:* Dana, 1898

- 9) Davenport Neck (C). *Minerals:* Actinolite, Antigorite, Bowenite, Enstatite (Bronzite), Brucite, Calcite, Chalcedony, Chromite, Deweylite, Garnet, Hornblende, Magnesite, Quartz, Serpentine, Titanite, Tremolite. Town of New Rochelle. GPS: (40°53'53"N, 73°46'18"W) *References:* Dana, 1898; Whitlock, 1903; Manchester, 1931
- 10)Sparta Mine (F,A). *Minerals:* Anglesite, Azurite, Calcite, Cerussite, Chalcopyrite, Galena, Malachite, Pyrite, Pyromorphite, Silver, Vanadinite, Vauquelinite, Wulfenite. About 1 mile south of the Ossining railroad station. Town of Ossining. GPS: (41°08'44"N, 73°52'04"W) *References:* Stearns, 1852; Whitlock, 1903; Manchester, 1931
- 11)Croton Lake Occurrence (C). *Minerals:* Magnetite, Monazite, Sillimanite, (Fibrolite). Yorktown. Town of Yorktown. GPS: (41°17'44"N, 73°48'30"W)
 References: Dana, 1898; Whitlock, 1903

12)De Luca (McCoy) Mine (C). *Minerals:* Corundum, Magnetite. Peekskill. Town of Peekskill.
 GPS: (41°22'01"N, 73°41'44"W)
 Reference: Rocks & Minerals (1942) 17:107.

Localities without GPS coordinates (not shown on map)

Anthony's Nose (C). *Minerals:* Apatite, Calcite, Pyrite, Quartz. Town of Peekskill. *Reference:* Dana, 1898

Harrison Serpentine Occurrence (C). *Minerals:* Biotite, Brucite, Chlorite, Feldspar, Hornblende, Quartz, Serpentine, Tourmaline, Tremolite. Harrison. Town of Harrison. *Reference:* Manchester, 1931

Hastings (C). *Minerals:* Pyroxene, Tremolite. Town of Greenburgh. *References:* Dana, 1898; Manchester, 1931

Hudson River Railroad Tunnel (F). *Minerals:* Calcite, Quartz. Anthony's Nose, East Shore of Hudson River. *Reference:* Betts, 2009



Quartz on Calcite. Hudson River Railroad Tunnel. 12.0 cm. JB785589 and photo.

New Croton Aqueduct (F). *Minerals:* Stilbite. Shafts 3 & 4, New Croton Aqueduct, 4 miles southeast of Croton Landing. Town of Ossining. *Reference:* Whitlock, 1903

New Rochelle Serpentine Occurrence (C). *Minerals:* Chromite, Garnet, Magnesite, Mica, Quartz, Serpentine, Tremolite. New Rochelle. *Reference:* Dana, 1898

Pleasantville Muscovite Occurrence (C). *Minerals:* Magnetite (as inclusions), Muscovite. Town of Mt. Pleasant. *Reference:* Whitlock, 1903

Port Chester Serpentine Occurrence (C). *Minerals:* Amphibole, Brucite, Chlorite, Serpentine, Tourmaline. 1 mile west of Port Chester, Town of Harrison.

Rolling Meadow Lane Pegmatite (C). *Minerals:* Bertrandite. East of Pound Ridge. Town of Pound Ridge. *Reference:* William Henderson, Jr. – personal communication

Rye Serpentine Occurrence (C). *Minerals:* Chlorite, Serpentine, Tourmaline, Tremolite. Rye. Town of Rye. *Reference:* Dana, 1898

Sing Sing Prison Quarry (C,F). *Minerals:* Barite, Beryl, Calcite, Chrysotile, Diopside (Malacolite), Dolomite, Galena, Graphite, Harmotome, Heulandite, Pectolite, Pyrite, Pyrolusite, Pyroxene, Quartz (Chalcedony), Rutile, Serpentine, Silver, Stilbite, Talc, Tremolite, Tourmaline. Ossining. Town of Ossining. References: Whitlock, 1903; Manchester, 1931; Robinson & Chamberlain, 2007b



Diopside. Sing Sing Prison Quarry. 6.0 cm. SCC15091 and photo.

Staurolite Occurrence (C). *Minerals:* Amphibole, Graphite, Staurolite. Peekskill. Town of Cortlandt. *References:* Dana, 1898; Whitlock, 1903

Verplanck Point (C). *Minerals:* Actinolite, Calcite, Chrysotile, Garnet, Phlogopite, Pyroxene, Quartz, Serpentine, Staurolite. Verplanck Point (south side), Town of Cortlandt. *References:* Whitlock, 1903; Manchester, 1931

Verplanck Point Quarry (C,F). *Minerals:* Calcite. Verplank. Town of Cortlandt. *Reference:* Whitlock, 1903

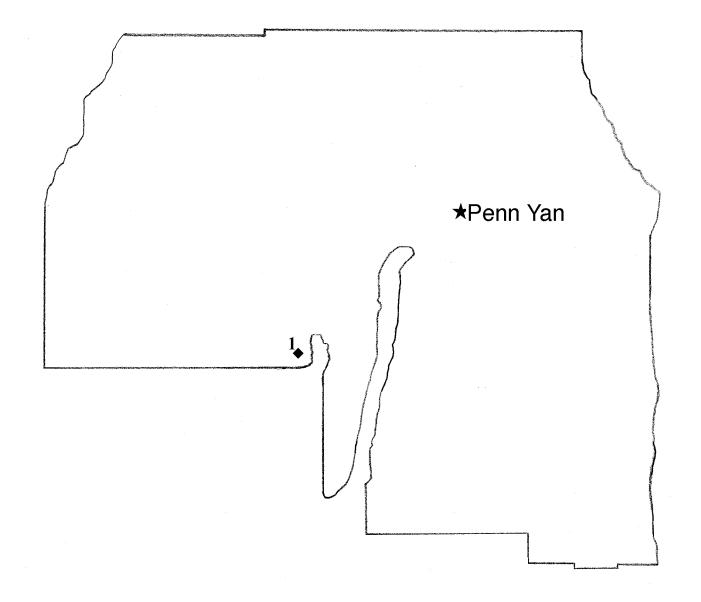


Calcite. Verplanck Point Quarry. 4.5 cm. SCC24804 and photo.

Yonkers Aqueduct (C). *Minerals:* Analcime, Apatite, Calcite, Epidote, Garnet, Muscovite, Pyrite, Stilbite, Tourmaline, Tremolite. 2.5 miles north of Yonkers on Aqueduct. Town of Yonkers. *References:* Dana, 1898; Whitlock, 1903

Zeolite Occurrence (C). *Minerals:* Apatite, Chabazite, Epidote, Garnet, Heulandite, "Stilbite", Titanite, Tremolite. West Farms. *References:* Dana, 1898; Whitlock, 1903; Manchester, 1931

Yates County



 Branchport (S). *Minerals:* Calcite. Town of Branchport. GPS: (42°35'57"N, 77°09'15"W) *References:* Unpublished



Calcite. Branchport. 25 cm. NYSM18308. SN photo.

Localities without GPS coordinates (not shown on map)

Calcite Locality (S). *Minerals:* Calcite (in septarian concretions). Vine Valley and Bare Hill. Town of Middlesex. *Reference:* Robinson & Chamberlain, 2007b

Pearl (freshwater) (S). *Minerals:* Calcite-Aragonite. Flint Creek. Town of Potter. *References:* Jensen, 1978; Robinson & Chamberlain, 2007a

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Author Biographies

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Born: Everett, PA, 1946

Education: Central Dauphin High School, Harrisburg, PA; Massachusetts Institute of Technology, Cambridge, MA – B.S.; Syracuse University, Syracuse, NY – Ph.D.

Employment: Syracuse University – 1968 to 1970; US Army Security Agency – 1970-1973; Syracuse University – 1973-2006; Retired 2006-present.

Scholarly Work: Co-authored 3 books; published 374 papers (175 in mineralogy, 171 in neuroscience, 28 in horticulture), including 3 in *Science* and 2 in *Nature*: Originated, named, and published 75 new *Hosta* cultivars; published 66 "In the Earth" columns in the regional newspaper, *The Eagle Bulletin*, on natural history; consulting editor for *Rocks & Minerals*, 1980-present; chaired the Rochester Mineralogical Symposium, 1986-2017.

Honors: Sigma Xi, MIT Chapter, Syracuse Chapter; US Army Commendation Medal; US Army Meritorious Service Medal; US Army Vietnam Service Medal; President's Award for Teaching by Sharing, EFMLS; Friends of Mineralogy Best Paper Award; Eminent Engineer, Tau Beta Pi; First Prize, Slide Competition, 37th Tucson Gem & Mineral Show; Outstanding Achievement in Earth Science, AFMS; Fellow, Rochester Academy of Science; Rockhound Hall of Fame.

Other Interests: Mineral collecting, horticulture

George Willard Robinson

Born: Glens Falls, NY, 1946

Education: South Glens Falls Central High School, South Glens Falls NY; SUNY Potsdam, Potsdam, NY – B.S.; Queen's University, Kingston, ON, Canada – Ph.D.

Employment: Earth science teacher, Parishville and Heuvelton, NY High Schools - 1968 - 1974; mineralogy lab instructor, Queen's University, Kingston, ON, Canada – 1974 to 1978; mineral dealer, 1978 to 1982;

curator/senior collections specialist at Canadian Museum of Nature, Ottawa, ON, Canada, 1982 to 1996; Curator, A.E. Seaman Mineral Museum and professor of mineralogy, Michigan Technological University, Houghton, MI – 1996 to 2013. Retired 2013 to present.

Scholarly Work: authored or coauthored several hundred popular and scientific papers on minerals, including 10 books; consulting editor for the *Mineralogical Record, Rocks & Minerals,* and *Canadian Gemmologist;* abstractor for *Mineralogical Abstracts;* organized "What's New in Minerals" sessions at Rochester Mineralogical Symposium.

Honors: In 2012, the rare mineral, georgerobinsonite, was named in my honor; 2013 Carnegie Mineralogical Award recipient.

Other: Research Associate, Dept. of Geology, St. Lawrence University 2013-present; Research Associate New York State Museum 2013 – present, featured in *Earth Magazine* (<u>https://www.earthmagazine.org</u>); numerous honorary memberships with various amateur rock and mineral clubs.

Hobbies, Interests: Mineral collecting, playing the piano, bird watching.

Susan Marguerite Robinson

Born: Alexandria, VA

Education: Watertown High School, Watertown, NY; Jefferson Community College, Watertown, NY – A.A.; SUNY Potsdam, Potsdam, NY – B.A.; art and art history courses at Queen's University, Kingston, ON, and Carleton University, Ottawa, ON, Canada.

Employment: Self-employed artist; Honorary Curator, Seaman Mineral Museum, Houghton, MI.

Scholarly Work: Published ~140 articles in *Rocks & Minerals* magazine (1987-2022) as well as provided illustrations for the Who's Who column and for several New York State locality articles; self-published "Is This an Agate?" book, 2001 (7 printings); many illustrations for the "Rochester Mineralogical Symposium Program Notes", *The Canadian Gemmologist*, and several children's books.

Honors: First prize, Ottawa Art and Manotick Art Associations and second prize at the Remington Art Museum Show; featured artist at Mineralientage München, largest mineral show in Europe - 1997, and in a group exhibit at the Tucson Gem and Mineral Show - 2010.

Other Interests: Birdwatching, gardening.

NYS Mineral Species and Varieties This informal listing contains names of likely interest to the reader. Mineral species are shown in **bold**. Check <mindat.org> for current information on species status. Mineral groups, varieties, superceded historical names and discredited names are listed in plain text. We have also included terms like meteorites, sunstones, etc. which may be more properly classified as rocks, but which are of interest to mineral collectors. "Many" indicates many listings.

Name	<u>Number</u>	
Achroite:	1	
Actinolite:	24	
Adularia:	2	
Afghanite:	1	
Åkermanite:	1	
Alabandite:	1	
Albite:	85	
Albite (antiperthite):	1	
Albite (labradorite):	3	
Albite (oligoclase):	20	
Albite (peristerite):	11	
Albite (plagioclase):	2	
Albite (sunstone):	1	
Albite ps. Marialite:	1	
Allanite:	18	
Allanite-(Ce):	15	
Allanite-(Y):	1	
Almandine:	27	
Alunogen:	1	
Amazonite:	1	
Amber:	1	
Amianthus:	5	
Amphibole:	48	
Analcime:	5	
Anatase:	2	
Andesine:	1	
Andradite:	4	
Anglesite:	2	
Anhydrite:	12	
Ankerite:	1	
Anomite:	1	
Anorthite:	10	
Anthophyllite:	7	
Antigorite:	9	
Anthraxolite:	8	
Apatite:	38	
Apophyllite:	6	
Aquamarine:	1	
Aragonite:	17	
Arsenopyrite:	12	
Artinite:	1	

Asbestos:	7	Clinohu
Augite:	15	Clinopy
Aurichalcite:	2	Clino-s
Automolite:	1	Clinozo
Autunite:	3	Clinton
Axinite:	3	Coccoli
Axinite-(Fe):	1	Colopho
Azurite:	6	Columb
Babingtonite:	1	Columb
Barite:	81	Copiapi
Barite crystal cavities:	1	Copper
Barite ps. Witherite:	3	Cordier
Bastnaesite:	1	Corund
Bertrandite:	2	Corund
Beryl:	11	Covellit
Beryl (aquamarine):	1	Crocido
Beryl (golden):	1	Cristob
Biotite:	31	Cuming
Bismuthinite:	1	Cuprite
Bornite:	3	Cyrtolit
Bournonite:	2	Danbur
Bowenite:	2	Datolite
Braunite:	2	Davidite
Brewsterite-(Ba):	1	Davidia
Brochantite:	4	Deweyl
Bronzite:	1	Diallage
Brookite:	2	Dimagn
Brucite:	8	Dinagn
Busholzite:	0	Diopsid
	1	Dissaki
Byssolite: Cacoxenite:	1	Dissaki
~	-	
	nany	Donpea
Calcite (travertine):	2	Dravite
Carbonate-rich fluorapatite:	31	Dravite-
Celestine:		Dufrén
Cerussite:	4	Dumort
Cervantite:	2	Edenite
Ceylonite:	1	Enstati
Chabazite:	16	Epidote
Chabazite-(Ca):	2	Epidote
Chalcocite:	4	Epistilb
Chalcopyrite:	62	Epsomi
Chamosite:	3	Erythri
Chernikovite:	1	Eupychi
Chevkinite-(Ce):	1	Euxenit
Chlorite:	11	Fayalite
Chondrodite:	27	Feldspa
Cr-rich Fluoro-tremolite:	1	Ferguso
Chromite:	8	Ferguso
Chromo-alumino-povondrait		Ferro-a
Chrysoberyl:	6	Ferro-e
Chrysocolla:	7	Ferro-h
Chrysotile:	13	Ferro-p
Clinochlore:	12	Feruvit
Clinochlore (Fe-deficient):	1	Fibrolite
Clinoenstatite:	1	Fluobo

Clinohumite:	3
Clinopyroxene:	1
Clino-suenoite:	5
Clinozoisite:	2
Clintonite:	3
Coccolite:	10
Colophonite:	3
Columbite:	1
Columbite-(Fe):	3
Copiapite:	2
Copper:	1
Cordierite:	4
Corundum:	10
	10
Corundum (ruby):	-
Covellite:	1
Crocidolite:	1
Cristobalite:	3
Cumingtonite:	1
Cuprite:	2
Cyrtolite:	4
Danburite:	3
Datolite:	8
Davidite:	1
Devilline:	1
Deweylite:	2
Diallage:	1
Dimagnetite:	2
Diopside:	116
Diopside ps. Wollastonite:	1
Dissakisite-(Ce):	1
Dolomite:	92
Donpeacorite:	1
Dravite:	32
Dravite-Uvite:	
Dufrénoysite:	2 2 9
Dumortierite:	9
Edenite:	7
Enstatite:	8
Epidote:	52
Epidote (Ce-rich):	1
	1
Epistilbite:	8
Epsomite:	0 1
Erythrite:	-
Eupychroite:	1
Euxenite-(Y)	1
Fayalite:	3
Feldspar:	34
Fergusonite:	1
Fergusonite-(Y):	3
Ferro-actinolite:	4
Ferro-edenite:	2 5 1
Ferro-hornblende:	5
Ferro-pargasite:	1
Feruvite:	3
Fibrolite:	2
Fluoborite:	1

Fluorapatite:	65	Hyalite: 2	2	Meta-autunite:	1
Fluorapophyllite-(K):	1	Hydromagnesite: 3	3	Meteorite:	11
Fluor-dravite:	3	Hydrophite: 1	1	Mica:	19
Fluorite:	69	Hydrotalcite: 3	3	Mica ps. Diopside:	1
Fluoro-edenite:	4	Hydrotalcite-2H: 1	1	Microcline:	79
Fluoro-pargasite:	1	Hydrous anthophyllite: 2	2	Microcline (sunstone):	1
Fluoro-tremolite:	2	Hydroxyapatite: 1	1	Millerite:	2
Fluor-uvite:	22	Ilmenite: 28	8	Minium:	1
Fourmarierite:	2	Ilvaite: 2	2	Molybdenite:	18
Forsterite:	4	Isokite: 1	1	Monazite:	6
Freibergite:	1	Jarosite: 1	1	Monazite-(Ce):	6
Gahnite:	1	Jenkinsite: 2	2	Monrolite:	1
Galena:	41	Jordanite: 1	1	Monticellite:	1
Garnet:	47	Kainosite-(Y): 1	1	Montmorillonite:	2
Geerite:	1	Kanoite: 1	1	Mountain Leather:	3
Geikielite:	1	Kaolin: 1	1	Muscovite:	36
Geochronite:	1	Kaolinite: 1	1	Myelonite (rock):	1
Gibbsite:	1	Kasolite ps. after Uraninite: 2	2	Namuwite:	1
Gieseckite:	2	Kornerupine: 1	1	Nantokite:	1
Glaucophane:	1	Kyanite: 4	4	Natrolite:	5
Goethite:	79	Labradorite: 11	1	Necronite:	1
Goethite ps. Dolomite:	2	Langite: 2	2	Nelsonite:	1
Goethite ps. Marcasite:	4	Lanthanite: 2	2	Nemalite:	1
Goethite ps. Pyrite:	17	Laumontite: 4		Nepheline:	1
Goethite ps. Siderite:	4	Lazulite: 1	1	Norbergite:	2
Gold:	3		2	Nuttalite:	1
Grandidierite:	1	Lepidocrocite: 2		Olivine:	7
Graphite:	91	Leuchtenbergite: 2	2	Olivenite:	1
Greenockite:	2	Leucopyrite: 1		Opal:	10
Grossular:	5	Leucoxene: 1	1	Opal-AN:	2
Grossular-Andradite:	1	Lignite: 1	1	Orientite:	1
Groutite:	1	Linarite: 1	1	Orpiment:	4
Gurhofite:	2	Linnaeite: 1	1	Orthoclase:	34
Gypsum:	43	Lizardite: 14	4	Oxy-chromium-dravite	1
Gypsum (selenite):	3	Lizardite ps. Enstatite: 1	1	Palygorskite:	1
Halite:	10	Lizardite ps. unk. mineral: 1		Paratacamite:	1
Harkerite:	2	Löllingite: 1		Pargasite:	9
Harmotome:	8	Loxoclase: 2		Parvo-mangano-edenite:	1
Hastingsite:	7	Magnesio-ferri-hornblende: 2		Parvo-mangano-tremolite:	1
Haüyne:	1	Magnesio-hastingsite: 5		Pearl (freshwater):	2
Hedenbergite:	7	Magnesiohögbomite-6N6S: 1		Pearl spar:	1
Hematite:	62	Magnesio-hornblende: 3		Pecoraite ps. millerite:	1
Hematite ps. Quartz:	1	Magnesite: 5		Pectolite:	6
Hematite ps. Siderite:	1	Magnetite: 99		Pentlandite:	5
Hemimorphite:	3	Magnetite ps. Hematite: 2		Phlogopite:	97
Hercynite:	2	Magnetite ps. Ilmenite: 2		Plagioclase:	1
Heulandite:	4	Malachite: 22		Platinum:	1
Heulandite-(Ca):	4	Malacolite: 22		Plessite:	1
Hexagonite:	3	Manganese-rich Edenite: 1		Polycrase-(Y):	2
Hexahydrite:	1	Manganese-rich Tremolite: 1		Posnjakite:	- 1
Hisingerite:	1	Manganese-rich Uvite: 1		Potassic-chloro-hastingsite	: 1
Högbomite:	1	Manganocummingtonite: 5		Potassic-fluoro-hastingsite:	
Hornblende:	36	Marcasite: 27		Potassic-pargasite:	4
Hortonolite:	2	Marcaste: 27 Marialite: 12		Prehnite:	12
Houghite:	3	Mainance. 12 Meionite: 20		Prismatine:	12
Hudsonite:	1	Melanterite: 6		Prochlorite:	1
Humite:	1	Mesolite: 1		Proustite:	1
munnu.	1	inconte. I	•	- i ouguite.	1

Pumpellyite:	1	Schorl (Microcline cores)	: 1	Talc ps. Quartz:	4
Pyrargyrite:	1	Schröckingerite:	1	Talc ps. Unknown:	1
Pyrite:	many	Scorodite:	2	Talc ps. Wollastonite:	2
Pyrolusite:	3	Sepiolite:	5	Tennantite:	5
Pyromorphite:	1	Serendibite:	3	Tetrahedrite:	5
Pyrope:	1	Sericite:	3	Thomsonite:	2
Pyrope (chromium-rich):	1	Serpentine:	50	Thomsonite-(Ca):	1
Pyrope-Almandine:	1	Serpentine ps. Olivine:	1	Thorianite:	1
Pyrophyllite:	3	Serpentine ps. Serpentine:	1	Thorite:	4
Pyrosmalite-(Fe):	1	Serpentine ps. Spinel:	2	Thucolite:	1
Pyroxene:	87	Serpierite:	1	Tirodite:	5
Pyroxmangite:	1	Seybertite:	1	Titanite:	110
Pyrrhotite:	37	Siderite:	24	Torbernite:	1
Quartz:	many	Siegnite:	1	Tourmaline:	64
Quartz (agate):	1	Sillimanite:	10	Tremolite:	99
Quartz (amethyst):	7	Silver:	4	Tsavorite:	1
Quartz (beta form):	1	Silvery mica:	1	Turgite:	1
Quartz (black):	1	Sinhalite:	1	Turneaureite:	1
Quartz (bloodstone):	1	Sklodowskite:	2	Uralite:	2
Quartz (chalcedony):	3	Smithsonite:	4	Uraninite:	6
Quartz (chlorite inclusions): 1	Sodalite:	2	Uranophane:	3
Quartz (milky):	4	Spessartine:	4	Uranophane-β:	1
Quartz (rose):	7	Sphaerosiderite:	1	Uranopolycrase:	1
Quartz (sand crystals):	1	Sphalerite:	60	Uranothorite:	1
Quartz (black-std scepter):	3	Spinel:	46	Uvite:	10
Quartz (skeletal):	2	Spionkopite:	2	Uvite-Dravite:	6
Quartz (smoky):	14	Staurolite:	9	Vanadinite:	1
Quartz ps. Barite:	1	Steatite:	2	Vauquelinite:	1
Quartz ps. Calcite:	1	Stellerite:	1	Vermiculite:	2
Quartz ps. Danburite:	1	Stevensite:	1	Vesuvianite:	14
Quartz ps. Diopside:	2	Stibiconite:	2	Vivianite:	1
Quartz ps. Wollastonite:	1	Stichtite:	1	Vonsenite:	2
Ranciéite:	1	Stilbite:	32	Wad:	3
Rastolite:	1	Stilbite-Ca:	1	Wagnerite:	1
Realgar:	2	Stillwellite-(Ce):	1	Warwickite:	5
Rensselaerite:	1	Stilpnomelane:	1	Willemite:	1
Rhodonite:	2	Strontianite:	15	Wilsonite:	1
Richterite:	1	Sulphur:	8	Witherite:	6
Riebeckite:	1	Sunset Stones:	2	Wollastonite:	16
Ripidolite:	1	Sunstone:	2	Wulfenite:	2
Rossmanite:	1	Svabite:	1	Wurtzite-2H:	1
Rutile:	32	Sylvite:	1	Xenotime:	3
Samarskite-(Y):	1	Synchysite-(Ce):	2	Xenotime-(Y):	5
Sanidine (sunstone):	1	Synchysite-(Y):	1	Yttrocerite:	1
Sapphirine:	1	Talc:	47	Zircon:	69
Sartorite:	2	Talc ps. Diopside:	1	Zoisite:	2
Scapolite:	59	Talc ps. Quartz:	2		
Scheelite:	2	Talc (steatite) ps. Apatite:	1		
Schorl:	24	Talc ps. Phlogopite:	1		

Comments on Mineral Species and Varieties Listing

Most common minerals

Three species, calcite, pyrite, and quartz, are nearly ubiquitous in locality listings. We did not count them, but indicated their status with "many". All three minerals have widespread occurrence at localities in sedimentary rocks (S), igneous and metamorphic rocks (C), and mineralized fractures (F).

Graphite

Fossil hydrocarbons are common in the rocks of NYS. In western NY, and along the thruway to the east, mineral localities occur in unmetamorphosed limestones and dolostones and hydrocarbons as brown coatings (often fluorescent) and as the black tar-like material, anthraxolite, frequently found in cavities containing quartz crystals (Herkimer diamonds). Where these rocks were metamorphosed into marbles, the noncrystalline hydrocarbons were converted to the mineral, graphite. Graphite is common in the meta-sedimentary crystalline rocks of the portion of the Precambrian Grenville Province that extends into St. Lawrence and adjacent counties. It is also widespread in the Franklin Marble in southeastern NY, in Orange County. In the eastern Adirondacks, mineable deposits of graphite have been exploited in the past.

World-class graphite specimens have been found in these crystalline rocks and some are illustrated in this book. In addition, since graphite is chemically inert in groundwater and low-temperature hydrothermal solutions, it serves as a marker in veins in crystalline rocks that formed from descending groundwaters. In these veins, silica from metastable silicates in overlying marble was briefly held in solution by organic acids from the soil zone and then deposited, often as quartz with graphite inclusions or accessories, in fractures. Ascending hydrothermal solutions typically do not produce mineralization that includes graphite.

Iron Sulfides – Pyrite, Marcasite, Pyrrhotite

All three of these iron sulfides are found in NYS. At lower temperatures, marcasite forms from acidic solutions and pyrite forms otherwise (see Garrels & Christ, 1965). Marcasite, for example, is a common accessory to dolomite and calcite in the cavities of the Lockport Dolostone that were originally filled with anhydrite, but pyrite is less common. In the mineralization inside the septarian concretions commonly found in shales of central New York, pyrite is common, but marcasite is rare. In the crystalline rocks of northern and southeastern New York, pyrite is abundant, but marcasite only infrequently occurs. Pyrrhotite is largely found in higher-temperature formation environments and is much less common than pyrite, but more common than marcasite in NYS.

Tourmaline

In 1985, Brown and Ayuso published the results of their survey of the occurrence of tourmaline in a study area in St. Lawrence County. They found that the species dravite, uvite, and schorl were unexpectedly abundant in the crystalline rocks of northern NY. Since then, numerous species have been added to the tourmaline group, including feruvite, fluor-uvite, fluor-dravite, and rossmanite, that occur in NYS. A better estimate of the abundance of tourmaline group minerals must therefore include six species. Instead of 66 localities for dravite+uvite+schorl, there are 94 localities if all six tourmaline species are included. Tourmaline is relatively abundant in the crystalline rocks of NYS, but careful chemical analysis is now required to specify which species is present in a specimen.

Metalliferous Ores

Occurrences of galena, sphalerite, hematite, and magnetite are well represented in our tabulation of mineral names. There are two reasons for this. One is the richness of actual occurrences of these minerals in parts of NY. The other is that significant mining occurred of deposits of each of these minerals, which, in turn, drove further field work to identify additional localities. One early mining operation in St. Lawrence County began at the Rossie Lead Veins in 1836 and continued until 1876. The ore was galena with only minor sphalerite. Two of these veins, the Coal Hill Vein and the Victoria Vein, were important sources of lead in the nineteenth century. Iron (magnetite) was mined at the Tilly Foster Mine near Brewster in Putnam County from 1853 to 1895 producing a very large open pit. The magnetite and hematite ps. magnetite ore body at the Benson Mines near Star Lake in St. Lawrence County was discovered in 1810 and mined from 1890 to 1978 resulting in a huge open pit. The mines of the Balmat District in St. Lawrence exploited SEDEX (sedimentary exhalative) deposits of sphalerite and first began at the Edwards Mine after 1915 and eventually included the Hyatt Mine, the Pierrepont Mine, and the Balmat Mines No. 2, 3, and 4. This district was once the major zinc producer in North America and the Empire State No. 4 Mine is still operating.

All of the major mines mentioned above produced large volumes of excellent mineral specimens, some of them rare species. In addition, the resulting exploration for iron ores resulted in the discovery of numerous small surface deposits of hematite such as the Dodge Mine in the Town of Edwards in St. Lawrence County. These were modest producers of iron ore, but significant producers of excellent mineral specimens of hematite, quartz, calcite, and barite.

Goethite

Goethite is typically a late-stage mineral produced by the oxidative weathering of pyrite or marcasite. Sometimes distinct pseudomorphs result, but more often goethite forms brown stains and coatings on other minerals. More rarely, goethite forms as a primary mineral in the form of sprays of brown to black acicular crystals. The Cicero Clay Pits in Onondaga County is an example hosted in sedimentary rocks. The Toothaker Pond Prospect in the Town of Pitcairn in St. Lawrence County is an example hosted in crystalline rocks.

Scapolite

Scapolite minerals are a common constituent of metasediments in NY. Probably because they are easy to identify by visual examination, most of the recorded localities only give the group name (59) rather than the species name meionite (20) or marialite (12). Analysis is required to determine the correct species identification because, for example, both the calcium-scapolite, meionite, and the sodium-scapolite, marialite, occur as isolated crystals in marble or lining the walls of calcite-filled veins.

Additional References Cited

Brown, C.E. & Ayuso, R. A. (1985) Significance of tourmaline-rich rocks in the Grenville complex of St. Lawrence Counthy, New York. US Geological Survey Bulletin 1626-C. 33 pp.

Garrels, R.M & Christ, C.L. (1965) Solutions Minerals and Equilibria. Harper and Row, New York. 450 pp.

Upper Left: Quartz, Treasure Mountain, Herkimer County. SCC Upper Right: Almandine, Gore Mountain, Warren County. SCC Lower Left: Fluorite, Penfield Quarry, Monroe County. SCC Lower Right: Fluorapatite, Albite, Rose Road, St. Lawrence County. MW



This is the first comprehensive mineralogy of New York State published since 1978. It contains both historical and new localities. The mineral listings include the most recent discoveries and identifications and use the current nomenclature.