



Bedrock geology of the Partridge Crop Lake area, central Manitoba (parts of NTS 63P11, 12)

Legend

- Paleoproterozoic**
- 15: Granitic pegmatite–spite: pink pegmatitic and aplitic granite dikes occur in most outcrops, but rarely at a mappable scale
 - 14: Quartz monzonite–granite: light pink, coarse grained, seriate and foliated to mylonitic; contains K-feldspar, chlorite up to 5 cm and 3–7% mafic minerals including hornblende and biotite; occurs in north-central Bryce Bay
 - 13: Winterville Lake intrusion: pink to pinkish grey, coarse grained, seriate and foliated; contains K-feldspar, chlorite up to 2.5 cm and 3–7% biotite
 - 12: Tonalite–granodiorite: light grey to pinkish grey, medium grained and foliated; contains 3–10% biotite, occurs along west shore of Bryce Bay
 - 11: Mafic to ultramafic dikes
 - a: Gabbro and diabase dikes: typically amphibolized, dark green, medium to coarse grained and massive to foliated; contains 30–40% plagioclase and 60–70% hornblende; unmetamorphosed dikes more common towards east and contain 40–50% plagioclase and minor amounts of orthopyroxene, clinopyroxene and hornblende, and up to 5% magnetite
 - b: Ultramafic dikes: brown grey to dark green, medium to coarse grained and massive; vary from pyroxenitic to peridotitic; may contain up to 20% hornblende and minor plagioclase
 - 10: Syenite: grey-pink to pinkish grey, coarse grained and foliated; contains 7–10% biotite and 20–30% dark green amphibole; mafic enclaves common; locally forms an intrusion breccia cut by a stockwork of more leucocratic syenite phases
- Archean**
- 10: Two-mica granite: light pink, coarse grained, foliated and weakly gneissic; contains trace sulphide, 3–5% muscovite and 7–10% chlorite; gneissosity is defined by interbedded coarser-grained leucosome and finer-grained mesosome
 - 9: Leucotonalite–leucogranodiorite: white to light pink, medium to coarse grained and foliated; relatively homogeneous, displays a weak gneissosity defined by the attenuation of schistosity and diffuse coarse-grained veins and pools of leucotonalite; typically contains 2–7% biotite, locally contains hornblende or rarely orthopyroxene
 - 8: Schollen-bearing tonalite–granodiorite gneiss: pink to grey, coarse grained, foliated and weakly gneissic; contains 3–5% biotite as flattened aggregates; exposures contain 2–20% xenolithic rafts dominated by mafic gneiss, but also including ultramafic and tonalitic gneiss, calc-silicates and anorthosite
 - 7: Diorite gneiss: grey, medium grained, weakly gneissic and locally mafic; contains 10–30% mafic minerals as varying proportions of biotite, amphibole, clinopyroxene and orthopyroxene, along with minor magnetite and quartz
 - 6: Tonalite–granodiorite gneiss: light grey to light pink, medium to coarse grained and foliated to strongly foliated; contains 10–20% mafic minerals as varying proportions of hornblende and biotite and rare orthopyroxene and clinopyroxene
 - 5: Garnet wacke: grey to purplish grey, medium grained, foliated and banded on a 1–15 cm scale; unit is quartz and plagioclase rich with 20–30% biotite and 3–7% garnet; associated with units 1a, 1f and 1g
 - 4: Serranite: grey to pinkish grey, coarse grained and strongly foliated to mylonitic; contains variable proportions of biotite, K-feldspar, muscovite, plagioclase and quartz; muscovite is pseudomorphous after sillimanite knots; associated with units 1a, 1f and 1g
 - 3: Pelite: purplish grey to grey brown, coarse grained, foliated, compositionally banded on a 1–50 cm scale; contains variable proportions of biotite, cordierite, garnet, K-feldspar, orthopyroxene, plagioclase, quartz and sillimanite, although assemblages are typically retrogressed; contains local bands of units 1a, 1f and 5
 - 2: Gabbro: dark grey, fine to coarse grained, foliated and banded; consists of plagioclase and 40–50% orthopyroxene; plagioclase occurs as fine-grained aggregates and 1 cm local garnet-rich bands up to 20 cm
 - 1: Mafic volcanic assemblage
 - a: Mafic volcanic rocks: grey to dark green, medium grained, foliated and banded on a 1–5–20 cm scale; plagioclase, 40–50% clinopyroxene and orthopyroxene in roughly equal proportions and minor magnetite and garnet; weakly amphibolized to an assemblage of plagioclase and hornblende; contains local bands of units 1b, 1c, 1d and 1e
 - b: Ultramafic volcanic rocks: dark green-grey to brown green, medium to coarse grained, massive to banded and locally strongly magnetic; varying proportions of clinopyroxene and orthopyroxene, 10–20% hornblende, minor magnetite, pyroxene, plagioclase and rare garnet; occurs as lenses and bands in unit 1a
 - c: Garnet-rich hydromagmatically altered rock: dark red to green, fine to coarse grained, crudely banded, foliated and variably magnetic; contains 7–20% orthopyroxene, 10–30% quartz, 20–30% plagioclase, 30–40% garnet and minor sulphide and magnetite; occurs as bands within unit 1a
 - d: Garnetite: dark red, medium to coarse grained, foliated and banded on a scale of 1–100 cm; consists of garnet with 5–7% orthopyroxene and 20–40% quartz; local sulphide is suggested by gossanous zones; contains rare bands of unit 1a; occurs as bands within unit 1a
 - e: Iron formation: dark grey to green to gossanous, medium to coarse grained, foliated, laminated and strongly magnetic; discontinuous chert laminae separated by layers containing variable proportions of magnetite, Fe-orthopyroxene, garnet, pyrite and quartz; occurs as bands within unit 1a and less commonly in unit 2; associated with unit 4
 - f: Calc-silicate: pale green, medium to coarse grained and massive to locally banded on a 1–10 cm scale; consists of epidote with minor amphibole, biotite and plagioclase and rare cordierite, scapolite and sulphide; locally in direct contact with unit 1a; rarely occurs grading into impure marble associated with unit 4
 - g: Aluminous hydromagmatically altered rock: grey-brown to rusty brown, medium to coarse grained and foliated; contains variable proportions of biotite, garnet, plagioclase and quartz/sillimanite, kyanite, staurolite, Fe–Mg amphibole and cordierite; associated with unit 1a

Symbols

- Fold axis (S asymmetry): generation 2
- Fold axis (symmetric): generation 2
- Fold axis (Z asymmetry): generation 2
- Foliation: generation 2, 3
- Foliation: mylonitic
- Gneissosity: generation 1
- Dike margin
- Stretching lineation
- Igneous layering, tops unknown
- Joint
- Mineral lineation
- Rodding
- Slicken striae
- Shear zone: sense unknown, dextral, sinistral, normal, reverse
- Faults
- Limit of mapping
- Contacts: approximate, assumed
- Late carbonate veins
- Cordierite
- Gossan
- Marble
- Sillimanite
- Staurolite

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 This map is a provisional summary of work carried out during the summer field season and is produced directly from the geologist's manuscript. It is not to be regarded as a final interpretation of the geology of the area.
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SUGGESTED REFERENCE:
 Couëslan, C. G., 2014: Bedrock geology of the Partridge Crop Lake area, central Manitoba (parts of NTS 63P11, 12). Manitoba Mineral Resources, Manitoba Geological Survey, Preliminary Map PMAP2014-2, scale 1:20 000.

