

A NEW SPECIES OF *GYRAULUS* FROM CANADA

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*Gyraulus hornensis* nov. sp.

*Gyraulus arcticus* Baker, Fresh Water Mollusca of Wisconsin, Vol. 1, p. 381, plate xxii, Fig. 34-37, 1928, Bul. 70, Wis. Geol. Nat. Hist. Surv.; Baker and Cahn, Freshwater Mollusca from Central Ontario, Annual Report, National Museum of Canada, 1929 p. 59, 1931 (part). Not *Planorbis arcticus* (Beck MS) Möller, Index Moll. Greenland, p. 5, 1842.

Shell depressed, the periphery rounded; colour light corneous, surface shining; sculpture of fine, oblique lines of growth with very fine spiral lines, more or less conspicuous; nuclear whorls small, rounded, spirally striate in sculpture; whorls about four, rapidly enlarging, the last somewhat expanded near the aperture, roundly angled at the periphery of the last whorl, the upper part of the body whorl slightly flattened; spire flat, the whorls coiled in the same plane; the body whorl may be nearly in line with the spiral turns or it may be deflected about a third of the distance from the aperture; sutures deeply channelled; base concave exhibiting all of the whorls, the umbilical region wide, but the body whorl well rounded, not flattened or having a reamed-out appearance; aperture obliquely, ovately rounded; lip thin, sharp, simple, or slightly thickened with a callus deposit; parietal wall with a white callus.

Height	Gr. Diameter	Aperture height	Diameter in mm.	
1.5	4.5	1.2	1.5	Holotype
1.3	4.2	1.0	1.2	Paratype
2.0	4.6	1.5	1.6	Paratype

The last specimen with deflected body whorl.

**TYPE LOCALITY:** Birch Lake, Horn River, about 75 miles above the Mackenzie River, Mackenzie District, Canada. Collected by Mr. E. J. Whittaker, July, 1921.

**TYPES:** Museum of Natural History, University of Illinois, No. Z13072a.

This small planorbid was erroneously referred to *arcticus* in the Fresh Water Mollusca of Wisconsin. An examination of a specimen of *Gyraulus arcticus* from Greenland named by Mörch, in the U. S. National Museum, shows that the Greenland species is more nearly related to *Gyraulus deflectus* and not like any member of the *parvus* group. This specimen is shown at D in the figures. The new species, *hornensis*, is distinguished from its relatives by the rounded periphery of the body whorl and the rounded umbilical whorls of the base, especially the body whorl, these being

flattened or excavated in related species such as *altissimus* and *parvus*. In *altissimus* the body whorl is flattened near the upper part and the aperture is very oblique and deflected (B in figure); in *cyclostomus* the aperture is large and rounded, not oblique, the shell is much larger (see C in figure), and the body whorl is almost round.

*Hornensis* is common in the Mackenzie River region west of Great Slave Lake as reported by Mr. Whittaker. It is also abundant in western Ontario and specimens are in the Natural History Museum from Wisconsin and North Dakota. It has been confused with *Gyraulus altissimus* which appears to be a composite species as usually recorded, including the true *altissimus* which was first known from Pleistocene deposits, and a flatter form with strongly reamed-out umbilical region. The relationships of these Pleistocene forms has not yet been satisfactorily worked out.

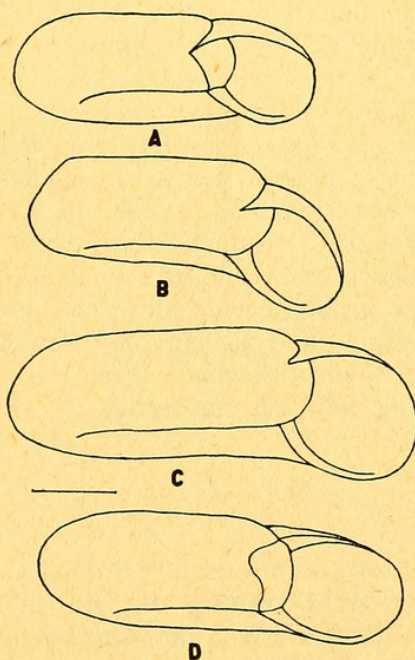


FIG. A. *Gyraulus hornensis* F. C. Baker, sp. nov., holotype, Birch Lake, Horn River, Mackenzie District.

FIG. B. *Gyraulus altissimus* (F. C. Baker) holotype, Urbana, Illinois, Pleistocene.

FIG. C. *Gyraulus cyclostomus* F. C. Baker, paratype, Rosetown, Saskatchewan, Pleistocene.

FIG. D. *Gyraulus arcticus* ('Beck' Möller), named by Mörch, from Julianehaab, Greenland (U.S. Nat. Mus., 180297). All figures enlarged, the line indicating one mm.





Baker, Frank Collins. 1934. "A New Species of *Gyraulus* from Canada." *The Canadian field-naturalist* 48(8), 135–135. <https://doi.org/10.5962/p.339582>.

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