

***Daphnia longispina* var. *hyalina* forma *arctica* nova forma.**

Six plankton catches (vertical hauls) obtained from big lake (see fig. 3) at Bernard harbour, Northwest Territories, between September 30, 1915, and June 12, 1916, contain a diminutive form of the variety *hyalina* which is characterized chiefly by its small size. The crest of this form is small and regularly rounded so that the eye is situated near the anterior margin and only a little below the middle of the head. The ventral margin of the head is slightly concave and the dorsal margin of the shell shows a slight concavity just above the heart. (See figures 1 and 2.)

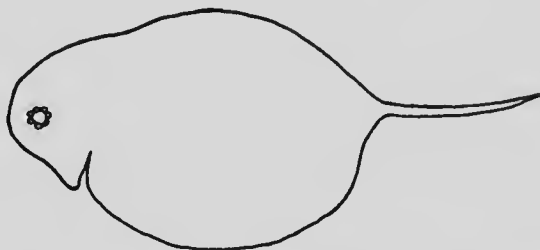


FIG. 1.—*Daphnia longispina* var. *hyalina* forma *arctica* nov. forma.
Big Lake, Bernard harbour, Northwest Territories,
September 30, 1915. Length, exclusive of spine, 0.97
mm.

The egg-bearing females obtained in September range in length from 0.9 mm. to 1.0 mm., exclusive of the spine, while the February specimens vary from 0.7 mm. to a little more than 0.8 mm. The spine is from a half to two-thirds as long as the body. No ephippial females were noted in any of the catches from this lake, but six of the samples contained parthenogenetic females; the majority of the latter carried only two eggs while a few bore as many as three, and others only one. Wesenberg-Lund also found that the parthenogenetic females of *Daphnia longispina* belonging to the *microcephala-galeata* group, in plankton material from Thingvallavatn lake, Iceland, carried but two or three eggs.

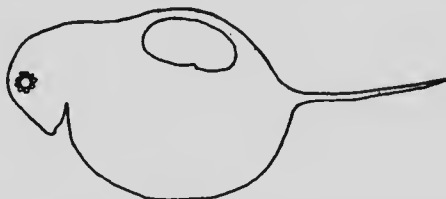


FIG. 2.—*Daphnia longispina* var. *hyalina* forma *arctica*. Big
Lake, Bernard harbour, Northwest Territories,
February 12, 1916. Length, exclusive of spine,
0.77 mm.

Egg-bearing females were noted in catches obtained from the lake at Bernard harbour on the following dates:—

1. September 30, 1915. Ice eight inches, depth of water 19 feet. Many.
2. November 28, 1915. Ice about two feet. Temperature of water at surface 32° F., below surface 32.5°. Few.
3. February 12, 1916. Ice 5.5 feet, depth of water 20 feet. Temperature of water at surface 32° F., air 20°. Few.