

# POTAMOGETON ILLINOENSIS, NEW TO MACKENZIE DISTRICT<sup>1</sup>

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There are some groups of plants which are poorly represented in our herbaria. This may be because they belong to 'difficult' genera, because they often occur in areas which are not readily accessible or because they do not make good specimens when collected. One group of plants which fits all three of these criteria is the genus *Potamogeton*, the pondweeds.

Several years ago, a *Potamogeton* was sent by H. R. Webster, Canadian Wildlife Service, to the Canada Department of Agriculture, for identification. It had been collected in connection with waterfowl studies being carried out along the Mackenzie River west of Great Slave Lake in southern Mackenzie District. Data is as follows: MACKENZIE DISTRICT, confluence of Horn and Mackenzie Rivers, Mills Lake; submergent with floating leaves; this species with *P. vaginatus* most common and abundant of submergents in all slack water and also encroaching onto main channels of rivers, *H. R. Webster* 5, 11 Sept. 1957 (DAO). The specimen was at first identified as *P. gramineus*, to which it was certainly closely related. During a review of the genus in Mackenzie District, this specimen was sorted out as being incorrectly placed, but it could not be matched with specimens of any other species which occurred in Mackenzie District or in adjacent Alberta and Saskatchewan. Consequently, it was sent to Dr. E. C. Ogden, New York State Museum, for his opinion. He determined the plant as *Potamogeton illinoensis* Morong.

A map of the distribution of *P. illinoensis* was given by Dr. Ogden (1943) in his monograph of the broad-

leaved species of *Potamogeton*. In Canada he showed it as occurring on the Gatineau River in Quebec, in southern Ontario, and as single collections from southern Manitoba and southern British Columbia. The Manitoba collection was made by J. M. Macoun in 1883 along the Souris River about 20 miles southwest of Brandon. The British Columbia specimen was also collected by J. M. Macoun. He gathered it in 1901 at Sumas Lake in the lower Fraser River drainage, where it occurred in slow-flowing water.

This new station for *P. illinoensis* in southern Mackenzie District is a major extension of the known range of the species, being some 1100 miles northwest of Souris River, Manitoba and 800 miles northeast of Sumas Lake, British Columbia.

Moss (1959) included *P. illinoensis* in Flora of Alberta, but stated "no Alta. plants seen, but expected". It is not included in the catalogues of the flora of Saskatchewan by either Breitung (1957) or Fraser and Russell (1954). Scoggan (1957) in Flora of Manitoba included it on the basis of Ogden's report and a specimen collected by B. J. March from Bissett (DAO) which has since been revised to *P. amplifolius*. He gave the general distribution "southern British Columbia to southern Manitoba . . .". The presence of this plant in southern Mackenzie District would indicate that it should be searched for in suitable habitats in the western Canadian provinces.

A detailed description of *Potamogeton illinoensis* can be found in Ogden (1943) or Fernald (1950). It may be distinguished from closely related species by its usually simple stem; floating leaves with stout petioles mostly shorter than the blades, the

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FIGURE 1

*Potamogeton illinoensis*  
(approx. ¼ size)

blades 4-19 cm long and 2-6.5 cm wide; submersed leaves with 9-17 nerves, three to five times as long as broad, sessile or petiolate; and the 1-8 cm long prominently keeled stipules.

A habit drawing of *P. illinoensis* is given in Figure 1.

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