

POTAMOGETON CRISPUS L. IN ALBERTA^{1, 2}

By HERBERT GROH

Division of Botany, Department of Agriculture, Ottawa

RECEIPT of specimens of curly muckweed or crisp pondweed (*Potamogeton crispus* L.), collected by Dr. G. H. Turner, Fort Saskatchewan, Alta., at Calgary, Alta., on Sept. 10, 1943, provides a notable extension of known range northwestward.

The type locality of this species is given as Europe. According to Tehon (*Torreya* 29: 42-46. 1929), "with the exception of the two Americas, it is of nearly world-wide distribution.....". The oldest dated American specimen is believed to be one from Philadelphia, 1841-2. (Bennett, Arthur, *Jour. Bot.* 39: 201. 1901). Introduction was probably from Europe, and Tehon (*loc. cit.*) offers the suggestion that it may have been brought, not by the hand of man, but by "such birds as the European Widgeon, which has been caught straying on this continent more than eighty times". Also, "Its subsequent spread westward might be attributed to a variety of agencies, but it seems to me most likely that aquatic birds have been the most important"; and he correlates records of the pondweed with migration routes of ducks. McAtee (*U.S. Dept. Agr. Biol. Survey, Bull.* 81. 1911) reported pondweeds to be an important part of the food of ducks.

The general range of the plant is from the Atlantic States to Lake Ontario, where it was collected by Wm. Scott on Ashbridge's Bay, Toronto, as early as June, 1896. In July of the same year it was collected by D. Griffiths far to the west in South Dakota. In 1901 it was found by Prof. Macoun above Niagara Falls, and in the same year also in east-central Oregon. Abrams (*Illustrated Flora of the Pacific States*) attributed it to southern California. The specimen from Calgary is the most significant later extension of range to come to the notice of the Division.

Canadian specimens in the National Herbarium (Can) and the Division of Botany (DAO) may be cited as follows:

ONTARIO: Ashbridge's Bay, Toronto, June 19, 1896, Scott (Can., DAO); pool above Niagara Falls, July 10, 1901, Macoun (Can.); Rideau River at Jones' Falls, 1905, Fletcher (DAO). ALBERTA: Calgary, in 2 feet of water, on left bank of Elbow River, ¼ mile above Mission Bridge (and extending for a mile), Sept. 16, 1943, Turner 3675 (DAO). In Quebec according to Marie-Victorin it is known only on the Richelieu River, where it was collected near Ste. Therese Island by Marcel Raymond (*Can. Field-Nat.* 48: 138. 1934).

In 1913 *P. crispus* was reported abundant in the lagoons of Jackson Park, Chicago, Ill., so much so that "much work is needed to keep it cleaned out in the spring, when its growth is most vigorous." (Hull, Edwin D., *Rhodora* 15: 171. 1913). Dr. Turner in reporting the Calgary occurrence suggests that "it has possibilities of becoming a serious weed of irrigation ditches." Common floating pondweed (*P. natans* L.), and other species, frequently clog slow streams and the shallow water of beaches right across the continent. Ducks foraging in beds of such vegetation frequently become carriers of fragments capable of continuing their growth when dropped in other waters at not too great a distance. Instances are given (Ridley, H. N., *The Dispersal of Plants Throughout the World*, page 539. 1930) in which, among others cited, is this by an English observer: "I have often seen ducks carrying fragments of water plants on their backs or around their necks. Twice, when shot in flight, the pieces have turned out to be *Elodea canadensis*, once another pondweed, *Potamogeton crispus*". Dispersal in this way to Calgary from any distant station is not suggested, but the probability of numerous infestations in little botanized waters between, along migration routes, will bear investigation. Long distance carriage of seeds of the pondweed will also suggest itself, but evidence of this has not been found. Seeds, unless of the previous year, would not be available to the birds at the time of migration from the Atlantic coast northwestward.

1. —Contribution No. 773 from the Division of Botany and Plant Pathology, Science Service, Department of Agriculture, Ottawa, Canada.

2. —Received for publication February 23, 1944.



Groh, Herbert. 1944. "Potamogeton crispus L. in Alberta." *The Canadian field-naturalist* 58(4), 126–126. <https://doi.org/10.5962/p.340730>.

View This Item Online: <https://www.biodiversitylibrary.org/item/89104>

DOI: <https://doi.org/10.5962/p.340730>

Permalink: <https://www.biodiversitylibrary.org/partpdf/340730>

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Ottawa Field-Naturalists' Club

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.