



THISMIA

LOUIS O. WILLIAMS



Sixty years ago, in what were then prairies near Chicago, now a suburban area, one of the most curious plants of the world was first discovered by Norma E. Pfeiffer when she was a student at the University of Chicago. It excited the curiosity of botanists around the world and has been an enigma to Chicago's professional and amateur botanists ever since.

The reason is that the plant—*Thismia americana* it was named—belongs to the family Burmanniaceae, which is almost entirely tropical. There are about 125 species, found principally in the tropics of the world. Three or four kinds reach barely into temperate regions. Even today, *Thismia americana* is known from only about a dozen collections, made over a period of six years by Dr. Pfeiffer.

Thismia americana is a tiny plant. The part above ground, the flower, is barely ½ inch long. It is a saprophyte living from decaying plant material.

The nearest relative to Chicagoland's own *thismia* is *Thismia rodwayi*, a plant known only from Tasmania and North Island of New Zealand. Dr. Fredrik Pieter Jonker, who described the Burmanniaceae family in a monograph in 1938, speculated that the two species are closely related: "It is very

desirable that *T. americana* will be again collected, no American species of this affinity is known. The differences with *T. rodwayi* are very small, by examining more material it will appear perhaps that the two species are identical. It is hard to believe that Chicago is the normal area for this species, but I cannot give a satisfactory explanation why it occurs there."

How did a plant of tropical affinities get into the prairie near Chicago? It was not a fluke, for the plant is known to have been present for at least six years where it was originally found, so it withstood the cold winters.

How to account for two closely related species at nearly opposite poles on the earth? I have no theory. It is possible that our *Thismia americana* was or perhaps still is widespread on the prairies and similar ecological areas and that someday an astute collector may find this tiny little plant again.

We have in our collection what we assume is the type specimen, carefully preserved in liquid. Dr. Pfeiffer did not specify in her publication where the type was deposited. We have exhibited that specimen on Members' Nights along with a part of the story about it, so perhaps you have seen the plant I

Above: A specimen of *Thismia americana* collected in liquid by Dr. Norma A. Pfeiffer about 1912 and presented to Field Museum in 1972, along with its original storage container. Left: Enlarged drawings from specimen. Entire plant is at right; its stem-like structure lies below ground surface, with only the flowers above ground. In circle is a flower dissected to show the six tepals and six stamens with the short pistil at the base, plus one stamen drawn to show anthers on the inner face. Below at left is a flower as seen from above, the tepals spread to show the ring (annulus) formed by the base of the filaments.

write about, one of the rarest in the world.

Recently we received a letter from Dr. Pfeiffer saying: "There are still in my possession bits and pieces of the Burmanniaceous *Thismia americana* which I found in the Chicago area years ago." Would we like to have it? Would we!

A few days later Dr. Pfeiffer, now a spry octogenarian, came in with a carton and two old coffee cans containing the research material that had been the basis for her studies published in the *Botanical Gazette* in 1914. Her "bits and pieces" are certainly a grand gift. They increase the known material available to researchers twentyfold!

Dr. Louis O. Williams is Chairman of the Department of Botany, Field Museum.



Williams, Louis O. 1973. "Thismia." *Field Museum of Natural History bulletin* 44(2), 11-11.

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