The vegetation of the Canadian Prairie Provinces
III. Aquatic and semi-aquatic vegetation, Part 2
Freshwater marshes and bogs

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with 5 photos and 5 tables

Abstract. In this paper the semi-aquatic freshwater vegetation of the Canadian Prairie
Provinces is described. Three classes are recognized: Isoetum-Nanojuncetea Br.-Bl.
et Tx. 1943; Sclochlooo-Phragmitetea Looman 1981, and Parvocaricetea capitatae cl. nov. In these classes three orders, 6 alliances, 13 associations
and 12 subassociations are proposed. The synecology and distribution of the units are dis­
cussed. The biocenoses, created by the freshwater marshes and bogs, including the faunal
component, are described and discussed.

Introduction

Freshwater marshes and bogs in the Canadian Prairie Provinces can be divided
into three types, which differ primarily in the depth of standing water and duration
of flooding. Because of the variation in annual and seasonal precipitation,
considerable overlap can occur between the types.

The most constant of the three types is what MOSS (1953) called "reed-
swamp" or "very wet marsh". This type includes the vegetation of lakeshores
and riverbanks. Although the depth of the water may vary from year to year or
season to season, the soil surface is always wet.

MOSS (1953) defined marsh as "grass-sedge-rush" communities, in which the
soil surface was flooded for one or more months during the growing season. This
definition included the meadow types, described elsewhere (LOOMAN 1981a),
consequently, in this paper, the term marsh will be used for grass-sedge-rush
communities "... with little peat and much standing or slow moving water"
during most of the growing season (HEINSELMAN 1968), i.e., usually until middle
or late August.

The third type is flooded until mid-July; although surficial water is not usually
present later except after heavy rains, a high soil water table keeps the surface
moist or even wet until after the end of the growing season. This vegetation can
best be described as "mud vegetation". It occurs only in the Prairie zone and
Parklands.