MANITOBA DEPARTMENT OF MINES AND NATURAL RESOURCES
F.R.E.D. PROJECT
IN CO-OPERATION WITH THE CANADIAN WILDLIFE SERVICE

APPRAISAL of WETLANDS

capability for waterfowl production in the interlake (F.R.E.D.) area

by

G.D. Adams
Wildlife Biologist
(Canadian Wildlife Service)

R. C. Hutchison
Wildlife Technologist
(Canadian Wildlife Service)

E.D. Sieffert
Technician
(F.R.E.D. Project)

Winnipeg, Manitoba

September, 1971

abstract

In 1968, the F.R.E.D. administration commissioned the Canadian Wildlife Service (A.R.D.A.) to conduct an inventory and priority rating system for small wetlands in the Interlake F.R.E.D. special area. Ground and aerial surveys were carried out from June through October, 1968, resulting in more than 500 wetlands delineated and appraised on 16 1:50,000 scale maps. Wetlands were rated according to their natural capability for waterfowl production as outlined in the Canada Land Inventory classification for wildlife. Six capability classes were assigned to wetlands on the basis of criteria such as water permanence, wetland type, substratum, shoreline and water quality; but vegetation and waterfowl use were also considered. Wetlands were classified according to six types such as sedge meadow or marsh, according to four degrees of permanency, and according to five vegetative cover types. Descriptions of individual wetlands, including observed waterfowl species, follow in the inventory section. A list of common plant species and detailed water analyses of 59 sampled wetlands are also provided.

table of contents

list of figures

acknowledgements

This study was conducted and financed under the auspices of the F.R.E.D. Project in co-operation with the Canada Land Inventory of the Manitoba Department of Mines, Resources and Environmental Management. The Canadian Wildlife Service provided planning, technical assistance and analyses of the survey results. Other contributing agencies were the Freshwater Fisheries Institute and Ducks Unlimited.

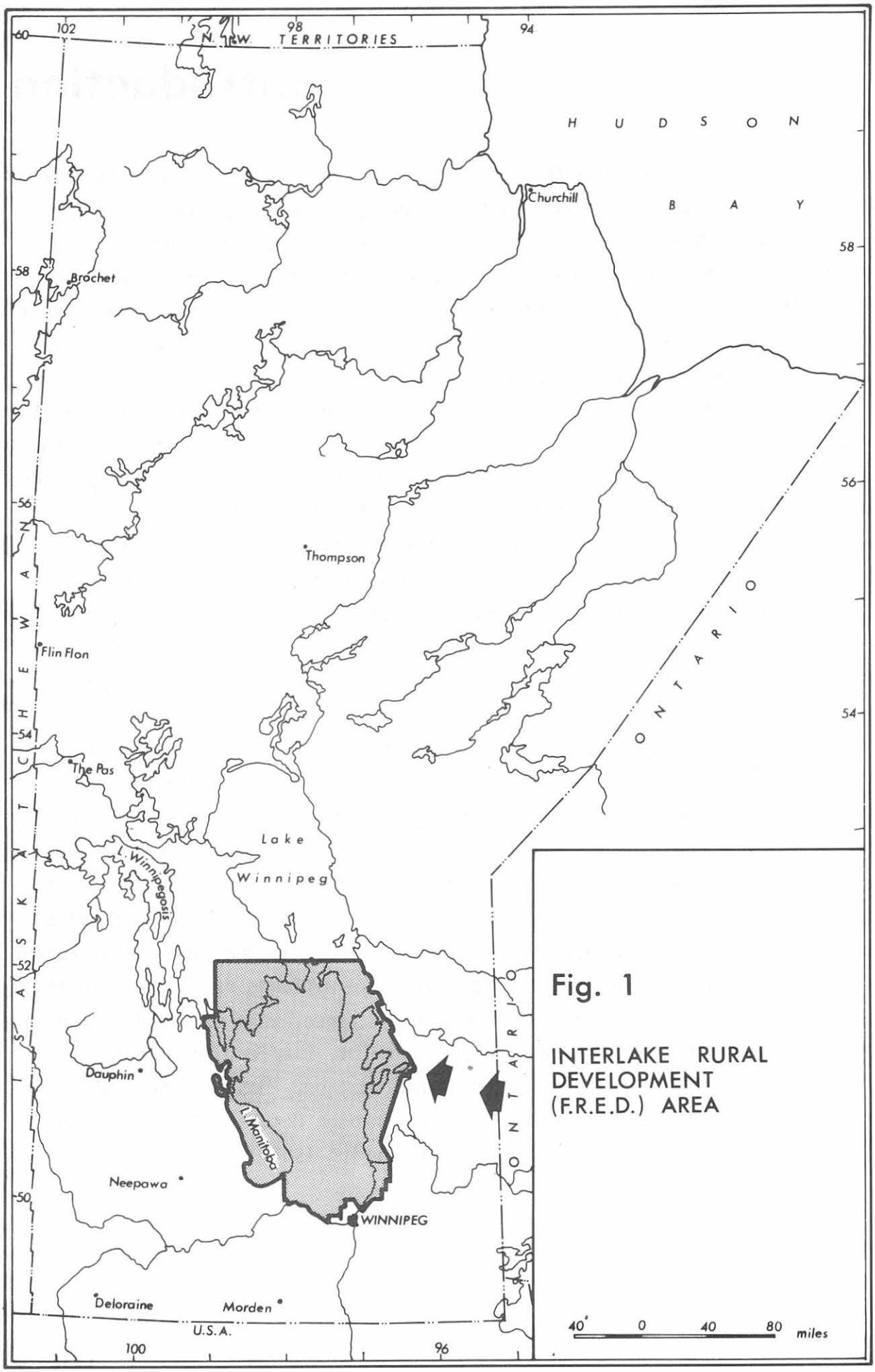
Most of the field operations and appraisals were conducted by Mr. E. D. Sieffert, under the direction of the senior author. The authors are also indebted to Mr. F. Armstrong and staff of the Freshwater Fisheries Institute for furnishing chemical analyses of water samples. Drafting services and computations were provided by Mrs. J. Windsor. Much credit is due Mr. C. Seifert, draftsman of the F.R.E.D. Land Adjustment Program, for the time consuming tasks of preparing the manuscript and drafting of the final maps. The assistance of Miss G. Phillips in typing of the manuscript is much appreciated.

introduction

In 1967, the Manitoba Interlake region (fig. 1) was designated a special area for social and land adjustment programs under the "Fund for Rural Economic Development," (F.R.E.D.), a Federal-Provincial cost-sharing arrangement. Under this agreement funds were approved for land acquisition for wildlife; and in August 1967, A.R.D.A. (Agriculture and Rural Development Act) provided $18,864 for wildlife studies and development in the Interlake Region (A.R.D.A. Catalogue, 1967-68).

Since the F.R.E.D. Programs are concerned with the full development of all resources in the Interlake, the wildlife resource with its associated recreational benefits is an important consideration. In order to provide adequate hunting and non-consumptive uses and to ensure the production of desirable populations of waterfowl, the securement of adequate breeding and migratory habitat is essential. An inventory or list of key areas of high value to waterfowl species is therefore a necessary prerequisite to any such program. Such wetlands occupying Crown lands would be reserved and others would be acquired for the purposes of water control and for wildlife production and utilization.

A priority rating system for small wetlands was required to complement an inventory of large marshes compiled by Ducks Unlimited (Lacey, 1963), and to accompany the Canada Land Inventory maps showing land capability for waterfowl production (Adams and Hutchison, 1969). Since these previous surveys had dealt with wetlands usually greater than 160 acres in area, there was a need to furnish information on those wetlands occupying the approximate size range from 40 to 200 acres. Therefore, in March, 1968, the senior author was asked to implement an inventory of Interlake wetlands falling within the above size classes. A vehicle and operating expenses were provided by the F.R.E.D. administration, with a contract to Mr. E. Sieffert to conduct the survey work under the direction of the senior author. Most of the field work was carried out during the period from June through October 1968, although the senior authors had made initial surveys during 1966.


102
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N. W. TERRITORIES
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Churchill
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Dauphin
L. Manitoba
Neepawa
50
WINNIPEG
Deloraine
Morden
U.S.A.
100
96
S A S K A T C H E W A N
O N T A R I O
Fig. 1
INTERLAKE RURAL DEVELOPMENT (F.R.E.D.) AREA
40 0 40 80 miles

objectives and scope

The primary purpose of the wetland inventory in the Interlake F.R.E.D. area was to locate, outline and appraise all wetlands which have areas ranging from 40 to 200 acres. Occasionally a few wetlands that occupied lesser or greater areas than the above size range were also appraised. It became apparent that a complete inventory was not practical in view of the large numbers of wetlands and the limited time and manpower allocated for the work. The previous Canada Land Inventory surveys had indicated where the most productive wetlands were situated - chiefly in the southern and western portions of the Interlake. These areas were also more accessible for ground surveys and they received more intensive mapping than the northern portions. Therefore, surveys were limited to 16 1:50,000 topographic sheets (fig. 2). Nevertheless, the coverage on these sheets probably shows more than 75 percent of all permanent and semi-permanent wetlands. More than 500 wetlands were appraised, and these are plotted on the accompanying Interlake maps. (fig. 2).

The wetlands were appraised for their relative capabilities for duck production according to the C.L.I. seven class system revised by Perret (1969). However, there were no subclass limitations assigned to the wetlands since the most common limitations were restricted nutrients and the lack of permanent water. A total of 6 classes was used, but only one area was designated class 1. These classes reflect waterfowl production potential, and they are usually comparable on a relative scale with the waterfowl capability classes assigned to other regions of Manitoba. The ratings were not correlated with ratings of the regional 5-class system used by Ducks Unlimited (Lacey 1963), and where overlap exists, there may be some disagreement. The two classifications differ, since the C.L.I. classification was more concerned with rating the natural capability rather than existing conditions. Both systems are often comparable, if the C.L.I. rating is raised by one class. The C.L.I. classification is indicative of potential breeding pair and brood use, with no consideration given to rating wetlands for migratory staging use. Many of the large wetlands have already been designated as migratory areas by the Wildlife Branch and Ducks Unlimited.

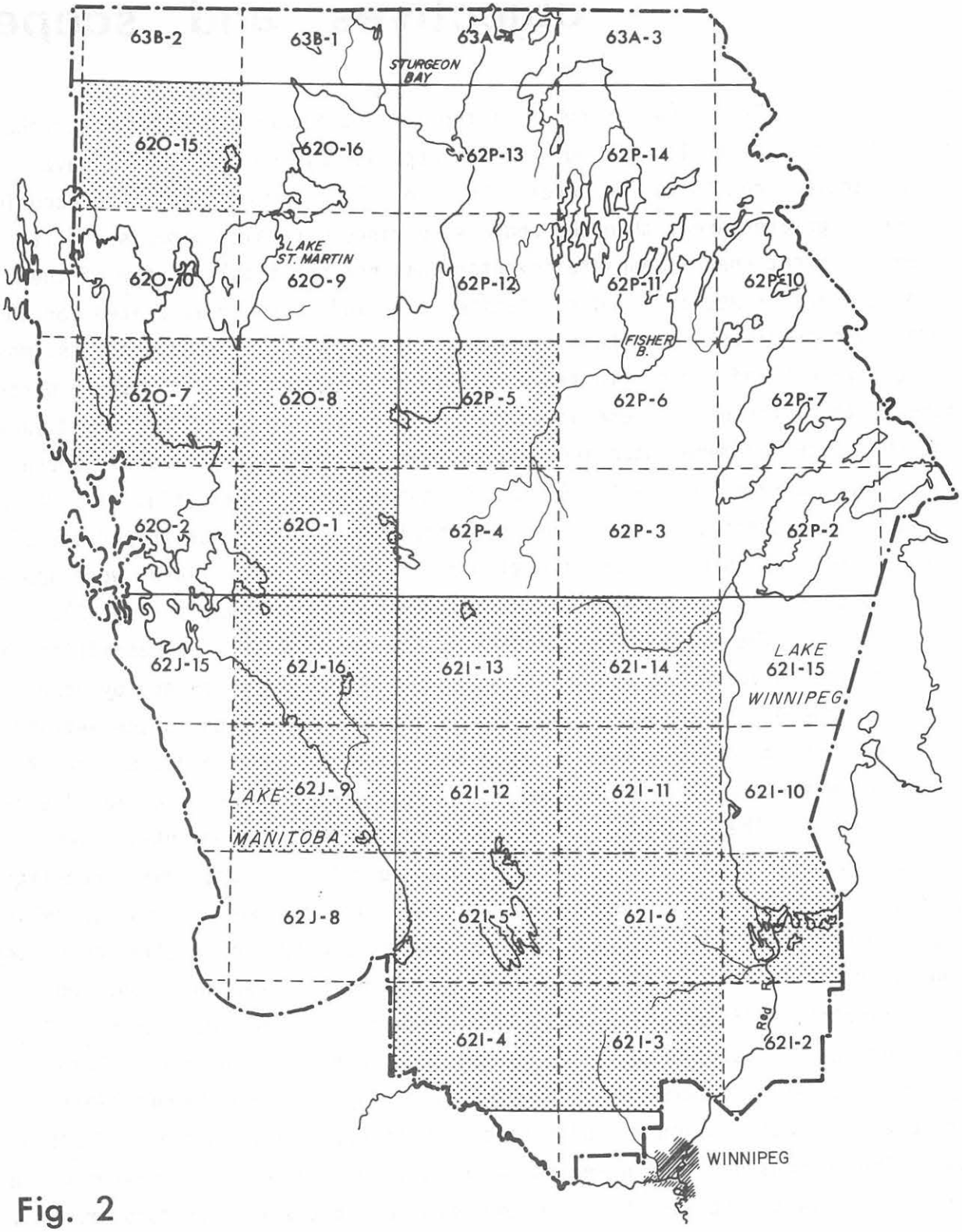

Fig. 2

▨ – 1:50,000 National Topographic System maps used for detailed waterfowl production potential classifications

considerations

In the context of the A.R.D.A. wildlife classification outline (Perret 1969), the term capability refers to the natural potential of the land or wetland unit, under the prevailing ecological conditions necessary for the maintenance of habitat for the primary purpose of producing waterfowl.

The capability ratings are applied to wetlands on the basis of physical characteristics such as size of wetland, amount and distribution of permanent water, water depths, substratum, soil fertility, water chemistry and shoreline features. Ecological factors such as abundance and interspersion of aquatic vegetation, and observed waterfowl use, are considered along with physical factors such as water depths and soil fertility, as indicators of wetland productivity. As such, these biotic factors seldom influence the capability rating unless they reflect the optimum conditions under which the potential waterfowl production is realized for that particular wetland unit. If present production equals natural capability, then there must be optimum water levels (usually high), with favourable developments of marsh edge and submerged plants, and adequate nesting situations, coincident with a breeding waterfowl population sufficient to occupy all niches. Conversely, it is possible for a wetland exhibiting very limited waterfowl use at present to receive a high capability rating. Due to the lack of adequate waterfowl breeding population data for the Interlake, the determination of these ratings remain interpretive and subjective.

Cultural land use changes do not usually influence the capability ratings but there are exceptions. Land clearings, livestock grazing and haying within dry wetland basins are not considered to affect the long-term capability for waterfowl production. Normally, drainage of wetlands does not affect the ratings unless such drainage is considered irreversible, resulting in a loss of a water supply and lowering soil moisture levels such that emergent vegetation cannot persist, with seasonal water draining away rapidly. Grant's Lake and portions of the St. Andrew's bog are examples of retrievable wetlands. A wetland placed under permanent cultivation is considered to show severe limitations that are irreversible, and the rating is correspondingly reduced.

The capability information provided on these Interlake wetlands does not assume management inputs in regard to artificial habitat improvements.

The construction of water control devices, dikes, supply ditches and artificial potholes are all possibilities that would enhance many of the Interlake wetlands especially those with limited natural basin capacities. These improvements would result in an upgrading of the class ratings on some wetlands, but the inherent restrictions of available nutrients would still be present. Very few of the Interlake wetlands could be expected to attain the waterfowl production levels shown on high class marshes in southwestern Manitoba.

For the purposes of land acquisition, the most benefit in terms of waterfowl production can be realized from those wetlands placed in capability classes of 4 or higher. Wetlands classed 1 to 3 show moderately high to high productivity, and are the most valuable. However, certain large class 4 marshes with adequate water levels should not be ignored, as they may be moderately productive, and also may be useful as staging areas. However, the class 5 and 6 wetlands are of low value, and the productivity can only be enhanced by raising and regulating water levels, or by creating depressions. This may reqire considerable management input such as various techniques discussed by Lacey (1963).

general description of interlake wetlands

For the purposes of this inventory, wetlands were defined as areas of predominantly organic or water-worked soils located in topographic depressions where soils are permanently or periodically saturated, often holding standing water of variable depth for a period of time.

Despite the low relief in the Interlake there is a pattern of elongated ridges and swales oriented in a northwest-southeast or north-south direction at right angles to the natural slope of the land. Surface drainage is impeded by these ridges and water collects in the swales. Under restricted drainage, layers of peat soils have accummulated to fill many of these depressions, forming sedge meadows. Marshes occur in the presence of exposed mineral soils, or where water levels fluctuate considerably. Elongated beach ridges also tend to dam surface waters and many wetlands are situated adjacent to them. In general, the most numerous Interlake wetlands are sedge meadows holding seasonal water.

Surface waters in the Interlake are usually clear to lightly stained and alkaline, as influenced by the associated peat soils and the underlying limestone or dolomite rocks. Total alkalinity readings usually range from 100 to 500 p.p.m. except in areas adjacent to Lake Manitoba or the Shoal Lakes complex where readings are as high as 1200 p.p.m. Measurements of specific conductivity show a similar range of values with the more saline waters indicating values as high as 3800 (micrommhos/cm^3). [Table 2]. The most productive Interlake wetlands usually exhibit a range of 400 - 2000 (micrommhos/cm^3).

Wetlands on the Interlake Till Plain are usually associated with peaty meadow, gleysolic soils and peat deposits of the Meleb, Clarkleigh, Marsh complex, Chatfield, and the shallow and deep peat series. On the Red River Plain, the Lake Winnipeg Terrace, and the Fisher-Icelandic River Plain, the wetlands are usually developed on peaty meadows and some peats of the Fyala, Osborne, Tarno, Balmoral, Foley, Malonton, Polson and shallow peat series (Pratt et al. 1961). The most productive wetland soils appear to be the Clarkleigh, Marsh complex, Osborne and Balmoral series, although many wetlands on Meleb soils are moderately productive of waterfowl.

Fig. 3 Class 1. Permanent open water with interspersed emergents such as cattail and softstem bulrush. Abundant submergents. Mineral soil bottom.

Fig. 4 Class 2. Permanent marsh with offshore interspersion of emergents such as hardstem bulrush, cattail, phragmites and whitetop. Abundant submerged plants. Slight fertility limitation.

wetland classification

WETLAND TYPES

The chief wetland types referred to in this report are the following: wet meadow, sedge meadow, marsh, fringed open water, swamp and bog. These are defined according to a classification proposed by Adams and Zoltai (1969).

WET MEADOW:

A temporarily flooded grassy area where the soil is waterlogged during part of the growing season, and where surface water is lost rapidly due to seepage or evaporation. There is no persistent open water and the vegetation of grasses and rushes forms a dense canopy. The substrate consists of mineral soils or well decomposed peat.

SEDGE MEADOW:

Fens or alkaline peatlands characterized by poorly or moderately decomposed peat, usually greater than 12 inches in depth, with a surface covering of sedges, associated grasses and reeds, and occasionally shrubs or trees. The water table usually persists at or near the surface, and standing water occurs in the spring. The sod covering is usually consolidated, but occasional open pools or burn-outs may occur.

MARSH:

Grassy wet areas holding up to 6 feet of surface waters with areas of sod interpsersed with open waters. Water levels fluctuate considerably, with occasional loss of surface waters during the season. The substrate is comprised of mineral soils or well decomposed peat, and the emergent vegetation consists of a variety of reeds and grasses such as cattail, bulrush, bluejoint, whitetop and phragmites. Submerged and floating aquatic plants such as water milfoil, bladderwort, pondweeds and water lily are common. See Table 1, for scientific terms and a more complete list of plant species.

FRINGED OPEN WATER:

A marsh or small lake with a central area of deep open water surrounded by a peripheral band of emergent vegetation. Submerged and floating aquatic plants are usually present.

SWAMP:

A wooded wetland with waterlogged soil, little standing water, and a substrate consisting of mixed mineral and organic sediments. The dominant vegetation is usually sedges and grasses, alders *(Alnus rugosa)*

Fig. 5 Class 2. Semi-permanent marsh with interspersed pools within a broad marsh zone of hardstem bulrush. Abundant submergents. Slight fertility and depth limitation.

Fig. 6 Class 3. Permanent, fringed open water with cattail and sweetflag. Limitations reflect reduced fertility and shoreline edge.

Fig. 7 Class 3. Semi-permanent marsh of sedges and whitetop with interspersed pools. Reduced submergent growths.

Fig. 8 Class 3. Semi-permanent marsh with broad fringe of hardstem bulrush and cattail.

willows *(Salix spp.)*, tamarack *(Larix laricina)* and black spruce *(Picea mariana)*.

BOG:

Acid peatlands with a surface carpet of mosses with the water table lying at or slightly below the surface. Bogs are usually covered by ericaceous shrubs, dwarf birch *(Betula glandulosa)*, tamarack and black spruce. Associated pools of water often support floating mat fringes and limited growths of aquatic plants.

The wetlands were assessed also according to their relative capacities for holding surface waters, and according to vegetative cover types. The water permanency and cover types are subject to yearly changes due to fluctuating water levels, but the vegetative component usually indicates conditions of the previous year. Drastic changes in vegetation and surface water area could result due to more than one year of drought or excessive runoff. These changes would cause problems in interpretation of permanency types, although most cover types are recognized as being transitory. However, water conditions in the summer of 1968 represented a recovery from a fairly dry summer in 1967 and water levels were judged to be optimum. The total precipitation for the period of May through August at Gimli, Manitoba was only 7.30 inches in 1967, compared to 15.97 inches in 1968 (Dept. of Transport).

PERMANENCY TYPES

TEMPORARY:

Very shallow sheetwaters or wet meadows that hold water for short intervals after heavy precipitation or spring runoff. Often cultivated. (Fig. 14, 15, 16).

SEASONAL:

Wetlands that usually hold surface waters until July during years of average runoff and spring precipitation. Usually the mean water depths do not exceed 2 feet. Includes most sedge meadows and shallow marshes. (Fig. 10, 11, 12).

SEMI-PERMANENT:

Wetlands that retain surface water throughout the year, except during summer droughts, when waters may be lost by September or earlier. The usual water depths are not in excess of 3 feet, and emergent vegetation is often interspersed with open water. Usually marshes or sedge meadows with small interspersed pools. (Fig. 5,7,8).

Fig. 9 Class 4. Permanent open water with a narrow emergent fringe of cattail surrounded by a broad sedge meadow. Peat substratum. Reduced fertility.

Fig. 10 Class 4. Seasonal marsh with a closed stand of hardstem bulrush, scattered phragmites and sedges, surrounded by a narrow wet meadow zone. Limited by shallow basin depth.

Fig. 11 Class 5. Seasonal, sedge meadow with closed stand of sedges. In spring flood stage. Limitations are reduced fertility and poor interspersion of permanent water.

Fig. 12 Class 5. Seasonal; sedge meadow with a closed stand of sedges. Reduced fertility and lack of open water.

PERMANENT:

Persisting surface waters, usually exceeding 3 feet in depth, and occurring as fringed open water or as small deep lakes or pools within a sedge meadow. (Fig. 3,4,6,9).

VEGETATION COVER TYPES

These cover types were adapted from a classification system proposed by Stewart and Kantrud (1969).

CLOSED STAND:

Closed canopy of emergents with open water forming less than 5 percent of the basin area. (Fig. 10, 11, 12).

INTERSPERSED POOLS:

A closed stand of emergents with scattered small pools or openings with open water occupying more than 5 percent of the basin area. (Fig. 5, 7).

OFFSHORE INTERSPERSION:

Scattered or clumped emergents offshore, occupying the central part of the marsh or wetland basin, and interspersed with open water. Wetlands with central closed stands of emergents surrounded by marginal open water also fall into this category. (Fig. 3, 4).

FRINGED OPEN WATER:

Large centrally located expanses of open water occupying between 5 and 95 percent of the basin area and surrounded by a solid or discontinuous margin of emergents more than 10 feet in average width. (Fig. 6, 8, 9).

BARREN SHORE:

Open water occupying more than 95 percent of the basin with little or no emergent fringe. If emergents are present, they occur as scattered patches or as a narrow fringe less than 10 feet wide.

CAPABILITY CLASSES

The wetlands were classified according to the following general guidelines to capability classes:

Fig. 13 Class 5. Seasonally flooded. Willow shrub encroaching on a sedge meadow. Ditch in foreground.

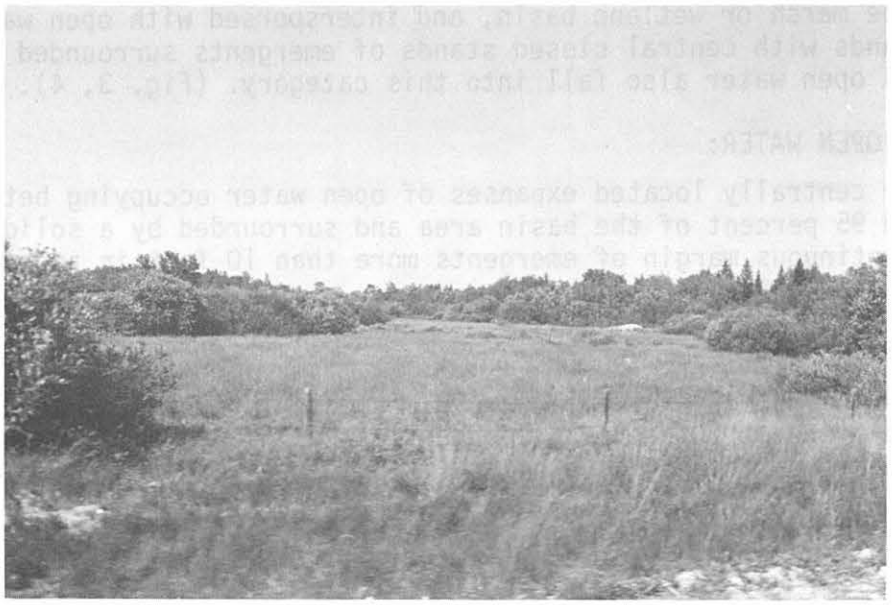

Fig. 14 Class 6. Temporarily flooded. Wet meadow with closed stand of sedges and grasses. Limited by shallow depth and poor water retention.

Class I Wetland

Class I wetlands include marshes developed on muck, thin peat or mineral soils, where total dissolved solids are high and water is moderately alkaline and fresh to brackish. Waters are fertile and submerged plants of a variety of species suitable for duck foods are abundant. Usually there is a high ratio of shoreline to area with at least two peripheral vegetation zones. Deep marsh emergents are usually interspersed throughout the center of the basin with a broad but discontinuous marginal band of emergents. The marsh should hold surface water throughout the summer at least, and a significant area of the marsh should not exceed 3 feet in depth. Breeding waterfowl and broods should be numerous. (Fig. 3).

Class II Wetland

Class II wetlands involve marshes or open waters with slight restrictions due to fertility, water depths or marsh edge. (Fig. 4, 5).

Class III Wetland

Class III wetlands include moderately fertile marshes or permanent open waters usually associated with a peat substratum and wide sedge meadow zones. Usually there are restrictions on marsh zonation, shallow or excessive water depths and a lack of interspersion of emergent plants. (Fig. 6, 7, 8).

Class IV Wetland

Class IV wetlands usually include seasonal or permanent deep bodies of water with surrounding sedge meadow or shrub swamp. Usually there is a relatively narrow band of emergent plants unless the basin is shallow and overgrown. Class IV wetlands are usually limited by water depths and a lack of nutrients. (Fig. 9, 10).

Class V Wetland

Class V wetlands chiefly are temporary or seasonally flooded sedge meadows, swamps or bogs. Emergent species, if present, usually occur in closed stands with sedges or grasses predominating. Occasionally, deeper infertile lakes with a floating peripheral mat may fall into this class. Submerged plants are usually scarce. (Fig. 11, 12, 13).

Class VI Wetland

Class VI wetlands have very severe limitations caused by irreversible drainage, permeable soil or shallow basin capacity. These wetlands are usually very temporary or sheetwater basins supporting only wet meadow grasses, unless cultivated. (Fig. 14, 15, 16).

Fig. 15 Class 6. Temporarily flooded. Wet meadow with closed stand of sedges and grasses occupying a swale. Low surface water retention.

Fig. 16 Class 6. Temporary type. Wet meadow with closed stand of grasses and invading willows.

waterfowl

Breeding waterfowl in the Interlake do not appear to attain the high densities attributed to areas in western Manitoba. Comparable 1969 figures relating stratum A (Southwest) to stratum B (Westlake and Interlake) give estimates of 18.3 compared to 8.2 breeding ducks per square mile, respectively (Smith, M. 1969). Aerial surveys conducted by the United States Fish and Wildlife Service in strata B and C of the Interlake resulted in estimated density indexes of 11.1 (1959), 11.0 (1960), 12.8 (1961), and 4.2 (1965) breeding ducks per square mile. According to Ducks Unlimited, breeding waterfowl species in the Interlake during the years of 1968 through 1970 can be ranked in the following declining order of abundance: Lesser Scaup *(Aythya affinis)*, Mallard *(Anas platyrhynchos)*, Blue-winged Teal *(Anas discors)*, Redhead *(Aythya americana)*, Ring neck *(Aythya collaris)*, Canvasback *(Aythya valisneria)*, Pintail *(Anas acuta)*, Gadwall *(Anas strepera)*, Shoveller *(Spatula clypeata)* and Ruddy *(Oxyura jamaicensis)*. Other species of scattered occurrence include American Widgeon *(Mareca americana)*, Green-winged Teal *(Anas carolinensis)*, American Coot *(Fulica americana)*, Common Goldeneye *(Bucephala clangula)* and Giant Canada Goose *(Branta canadensis maxima)*.

The shallow marshes, drainage ditches and flooded sedge meadows are utilized by breeding Mallard, Blue-winged Teal, Pintail, Gadwall and Shoveller. Pools in sedge meadows or open water with wooded fringes are frequented by Ring neck, Scaup, and occasionally Green-winged Teal. Permanent or semi-permanent marshes with offshore interspersion of emergents usually serve as good brood habitat for American Coot, Canvasback, Redhead and Mallard. The deeper, fringed open water areas are often favored habitat for breeding Lesser Scaup, Ruddy, Canvasback and Canada Goose.

methods

Prior to conducting field surveys, the inventory team located and delineated most wetlands on aerial photographs dated 1948, 1954 and 1961, transferring this information to 1:50,000 scale map sheets. There were few available 1:50,000 topographic prints on the 62P map series which contributed to an incomplete inventory on this area. The wetland outlines refer to full stage levels corresponding to the maximum extent of surface waters during flooding, including areas where the soils, usually peats, are periodically saturated. Usually there is a demarkation in vegetation that can be ascertained from aerial photographs. The former outlines of drained and cultivated wetlands were almost impossible to delineate but residual portions were mapped. Often the ratings apply to a relatively small portion of a larger peatland complex which was subdivided to indicate areas of more permanent water. Wetland acreages determined to full stage levels, were measured on the photographs utilizing dot grids and plaimeters, assuring an accuracy of $\pm$ 10 percent.

Field surveys were conducted with a four-wheel drive vehicle and attempts were made to visit all the accessible wetlands. Many of the more permanent and more fertile wetlands were sampled and described in more detail. Inaccessible wetlands were typed and described briefly from aerial reconnaissance. Flights were usually conducted at an altitude of 200 to 400 feet, along transects spaced at 4-mile intervals, with deviations from the flight path when necessary to afford complete coverage of all outlined wetlands. The descriptions of wetlands in this report were usually based upon a single field observation with little opportunity to revisit sites.

table I

list of frequently occurring wetland plant species[1] in the interlake region

GRASSES

Beckmannia syzigachne	- slough grass
Calamagrostis inexpansa	- northern reed grass
Calamagrostis canadensis	- bluejoint
Glyceria spp.	- manna grasses
Hordeum jubatum	- squirrel-tail grass
Phalaris arundinacea	- reed canary grass
Phragmites communis	- reed grass
Scolochloa festucacea	- whitetop
Spartina pectinata	- prairie cord grass

SEDGES

Carex atherodes	- broad leaf sedge
Carex aquatilis	- water sedge
Carex lacustris	- ripgut sedge
Carex lasiocarpa	-

RUSHES

Eleocharis palustris	- spike rush
Equisetum sp.	- horsetail
Juncus balticus	- baltic rush

REEDS

Scirpus acutus	- hardstem bulrush
Scirpus americanus	- three-square rush
Scirpus fluviatilis	- river bulrush
Scirpus paludosus	- bayonet grass
Scirpus validus	- softstem bulrush
Typha latifolia	- cattail

OTHER EMERGENTS

Alisma triviale	- water plantain
Potentilla palustris	- cinquefoil
Sagittaria cuneata	- arrowhead
Sium suave	- water parsnip
Triglochin maritima	- arrow grass

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[1] Nomenclature according to Scoggan, 1957, and Fassett, 1960.

Table I (Continued)

PONDWEEDS (Submergents)

Potamogeton gramineus	- variable-leaf pondweed
Potamogeton natans	- floating-leaf pondweed
Potamogeton pectinatus	- sago pondweed
Potamogeton pusillus	- ribbon leaf pondweed
Potamogeton richardsonii	- clasping leaf pondweed
Potamogeton vaginatus	- bigsheath pondweed
Potamogeton zosteriformis	flatstem pondweed

OTHER SUBMERGENTS

Ceratophyllum demersum	- coontail
Chara sp.	- muskgrass
Hippuris vulgaris	- mare's tail
Isoetes sp.	- water quillwort
Lemna spp.	- duck weed
Myriophyllum exalbescens	- water milfoil
Myriophyllum spp.	- water milfoil
Nymphaea tetragona	- water lily
Nuphar variegatum	- yellow water lily
Polygonum amphibium	- water smartweed
Sparganium fluctuans	- burreed
Ultricularia vulgaris	- bladderwort

table II

water analyses[1] conducted on sample wetlands within the interlake, 1968

Wetland No.	Date Sampled	Specific Conductivity µmmhos/cm.[3]	Mg/L Ca	Mg	Na	K	SO_4
62I/3-1	30-5	310	20.0	-	4.1	21.0	-
62I/4-1	27-5	730	49.0	22.0	34.0	11.0	-
2	28-5	430	30.0	-	6.3	4.7	-
3	28-5	370	29.0	-	3.4	6.1	-
4	29-5	1060	38.0	-	-	12.0	-
62I/5-1	20-6	1550	17.0	-	-	60.0	-
2	21-6	520	24.0	-	9.8	21.0	-
3	21-6	1210	25.0	-	101.0	39.0	-
4	10-10	658	39.6	91.0	22.1	18.3	108.0
62I/6-1	4-6	270	26.0	22.0	3.5	5.8	-
2	4-6	680	29.0	44.0	13.0	18.0	-
3	4-6	520	29.0	-	4.4	11.0	-
4	5-6	310	31.0	27.0	1.2	8.4	-
62I/11-1	6-6	430	27.0	-	5.8	13.0	-
2	7-6	430	23.0	-	3.0	12.0	-
3	7-6	520	18.0	-	12.3	16.0	-
62I/12-2	17-6	1190	29.0	-	107.0	32.0	-
3	17-6	3880	47.0	-	254.0	-	-
4	26-6	910	29.0	197.0	51.4	13.4	-
5	26-6	830	24.8	140.0	50.2	18.7	-
62I/13-1	17-7	390	15.3	58.3	5.2	10.3	-
2	17-7	360	17.4	64.6	29.5	29.2	-
3	17-7	480	25.9	145.0	29.6	23.2	-
4	18-7	700	37.2	163.0	17.7	18.4	62.0
5	18-7	580	30.0	75.4	25.6	13.4	-
6	18-7	790	33.7	142.0	40.9	12.4	-
7	18-7	610	41.0	134.0	15.9	10.3	10.0
8	24-7	540	39.0	52.3	4.7	16.1	20.0
9	23-7	550	22.4	110.0	4.8	9.9	10.0

[1] Water analyses determined by Freshwater Fisheries Institute, Fisheries Research Board.

Table II (Continued)

Wetland No.	Date Sampled	Specific Conductivity µmmhos/cm³	Mg/L Ca	Mg	Na	K	SO_4
62I/14-1	2-7	460	29.3	70.0	7.0	9.4	-
2	3-7	320	26.7	45.3	7.4	3.6	-
62J/9-1	12-6	680	31.0	-	-	13.0	-
2	12-6	1140	38.0	-	111.0	13.0	-
3	12-6	1640	35.0	-	116.0	34.0	-
4	12-6	810	29.0	-	-	18.0	-
62J/16-1	13-6	1320	51.0	-	41.0	19.0	-
2	13-6	770	34.0	-	21.0	19.0	-
3	13-6	1280	26.0	-	115.0	26.0	-
4	13-6	70	35.0	-	12.0	14.0	-
5	13-6	420	26.0	-	3.0	13.0	-
6	13-6	630	28.0	-	15.0	10.0	-
7	14-6	440	26.0	-	6.9	12.0	-
620/7-1	16-10	670	65.4	91.5	12.8	10.6	226.0
2	16-10	660	47.3	86.0	11.0	9.0	159.0
3	16-10	435	38.2	69.0	2.0	2.8	151.0
4	16-10	600	62.8	93.5	3.0	5.8	169.0
5	16-10	418	38.2	53.0	4.8	13.7	46.0
620/8-3	31-7	520	35.4	51.9	10.4	17.4	35.0
4	31-7	760	37.0	129.0	17.3	15.8	238.0
5	16-10	575	80.1	96.5	11.6	5.5	114.0
6	16-10	318	48.6	40.2	1.6	3.4	48.0
8	16-10	267	36.3	38.8	1.6	3.2	56.0
9	16-10	417	62.1	71.0	5.6	3.4	88.0
620/15-1	16-10	482	25.5	89.0	10.0	9.2	-
2	16-10	375	34.5	50.0	4.5	3.1	-
3	16-10	420	30.6	68.5	7.6	5.0	-
62P/5-1	11-7	480	22.0	72.9	11.2	10.3	-
2	11-7	460	23.0	69.0	6.9	10.3	-
3	11-7	810	22.9	167.0	29.2	13.4	-

literature cited

Adams, G.D. and R.C. Hutchison. 1969. Land Capability for Wildlife - Waterfowl. Selkirk 62I. Canada Land Inventory. Department Regional Economic Expansion.

Adams, G.D. and S.C. Zoltai. 1969. Proposed open water and wetland classification for the biophysical land survey. Guidelines for biophysical land classification. Progress Report. Department of Fisheries and Forestry. Canadian Forestry Service Publication No. 1264. p. 23-41.

A.R.D.A. Catalogue. 1967-1968. Agricultural and Rural Development Act. Department of Forestry and Rural Development, Canada.

Dept. of Transport. Meteorological Services Weather Data.

Ducks Unlimited. Unpublished waterfowl transect data.

Fassett, N.C. 1960. A Manual of Aquatic Plants. 405 p. University of Wisconsin Press. Madison.

Lacey, C. 1963. Preliminary evaluation of the wetlands of the Interlake section of Manitoba for waterfowl production. Ducks Unlimited (Canada) special report.

Perret, N.G. 1969. Land Capability for wildlife. Canada Land Inventory Report No. 7, Department of Regional Economic Expansion. 30 p.

Pratt, L.E., W.A. Ehrlich, F.P. Leclaire and J.A. Barr. 1961. Report of Detailed reconnaissance soil survey of Fisher and Teulon map sheet areas. Manitoba Soil Survey. Manitoba Department of Agriculture and Conservation.

Scoggan, H.J. 1957. Flora of Manitoba. National Museum of Canada. Bull. No. 140. Department of Northern Affairs and National Resources. 619 p.

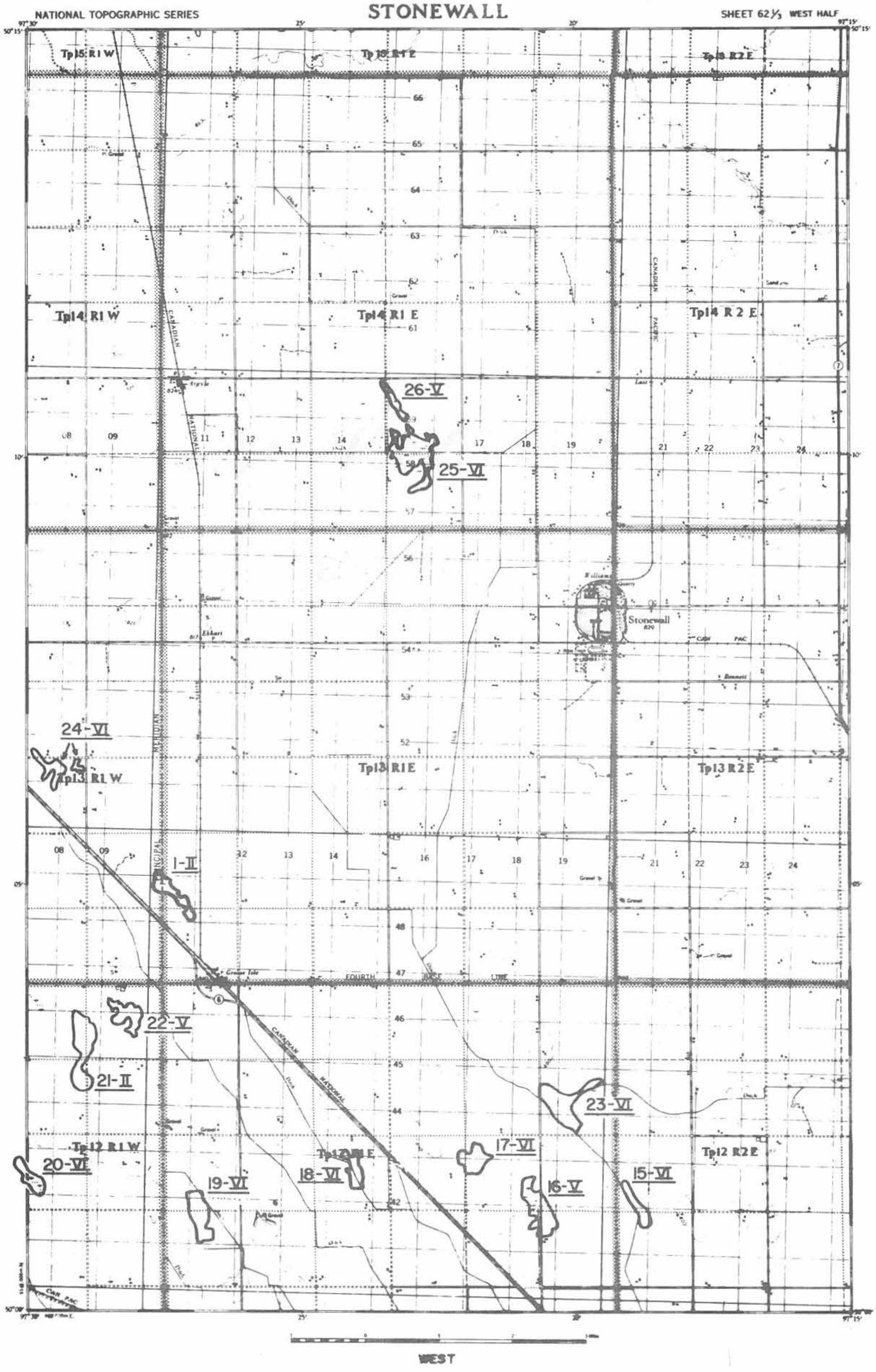
Smith, M. Waterfowl Breeding Pair Surveys for Southern Manitoba - 1959, 60, 61, 65 and 69. United States Bureau of Sport Fisheries and Wildlife. Unpublished data.

Stewart, R.E. and H.A. Kantrud. 1969. Proposed classification of potholes in the glaciated prairie region. Canadian Wildlife Service. Rep. Series 6:57-69.

inventory of interlake wetlands

STONEWALL

62 I/3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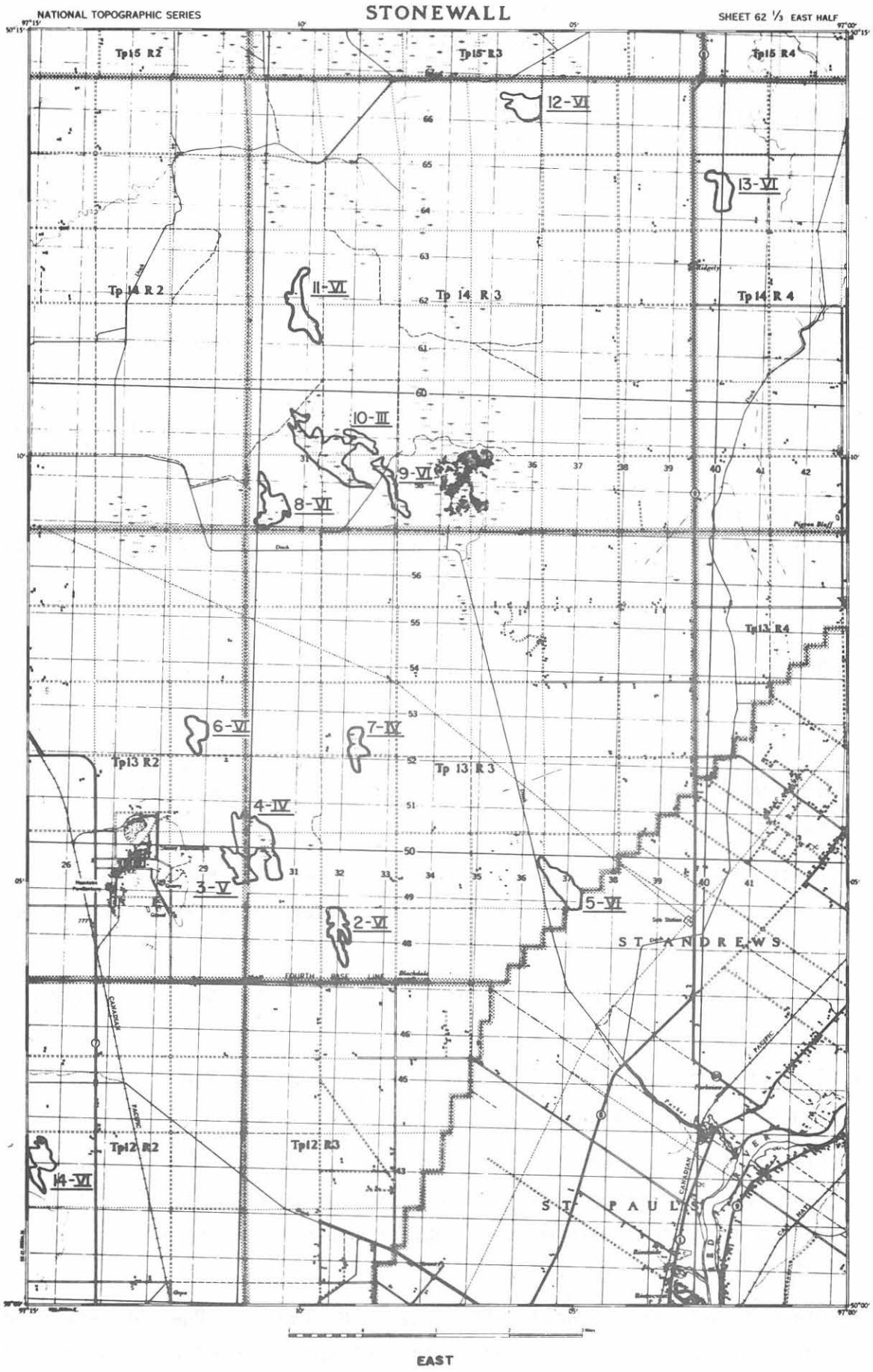
STONEWALL
SHEET 62 1/3 WEST HALF
Tp14 R1 W
Tp14 R1 E
Tp14 R 2 E
Tp13 R1 W
Tp13 R1E
Tp13 R2 E
Tp12 R1 W
Tp12 R2 E
26-V
25-VI
24-VI
1-II
22-V
21-II
23-VI
20-VI
19-VI
18-VI
17-VI
16-V
15-VI
Stonewall
WEST


NATIONAL TOPOGRAPHIC SERIES
STONEWALL
SHEET 62 1/3 EAST HALF
Tp15 R2
Tp15 R3
Tp15 R4
12-VI
13-VI
11-VI
Tp14 R2
Tp14 R3
Tp14 R4
10-III
9-VI
8-VI
Tp13 R4
6-VI
7-IV
Tp13 R2
Tp13 R3
4-IV
3-V
5-VI
2-VI
ST ANDREWS
Tp12 R2
Tp12 R3
14-VI
ST PAUL
EAST

1 - Class II wetland (65 ac.) SW¼ of Sec. 7, Twp. 13, Rge. 1E surveyed May 30/68. A semi-permanent marsh with interspersed pools within a wet meadow. Broad marsh zone greater than 50' in width.

EMERGENTS: sedges, whitetop, cattail, hardstem bulrush, horsetail.
SUBMERGENTS: frequent occurrence of bladderwort and water milfoil.
WATERFOWL: a valuable marsh for waterfowl.

2 - Class VI wetland (65 ac.) Sec. 5, Twp. 13, Rge. 3E surveyed June '68. Shallow basin depth and cultivated. Little present value to waterfowl.

3 - Class V wetland (40 ac.) E½ of Sec. 12, Twp. 13, Rge. 2E surveyed June '68. A marsh with a shallow basin. Limited value to waterfowl.

4 - Class IV wetland (70 ac.) NW¼ of Sec. 7, Twp. 13, Rge. 3E surveyed June '68. A seasonal marsh containing sedges and hardstem bulrush in a closed stand. Some dabblers observed but poor waterfowl capability.

5 - Class VI wetland (125 ac.) W½ of Sec. 11, Twp. 13, Rge. 3E surveyed June '68. Shallow basin depth and cultivated. Little present value to waterfowl.

6 - Class VI wetland (45 ac.) Sec. 24, Twp. 13, Rge. 2E surveyed June '68. Shallow basin depth containing only grasses. Little present value to waterfowl.

7 - Class IV wetland (40 ac.) S½ of Sec. 20, Twp. 13, Rge. 3E surveyed June '68. Temporary marsh with a closed stand of whitetop and cattail. Moderate value for waterfowl.

8 - Class VI wetland (95 ac.) W½ of Sec. 6, Twp. 14, Rge. 3E surveyed June '68. Cultivated.

9 - Class VI wetland (50 ac.) NE¼ of Sec. 5, Twp. 14, Rge. 3E surveyed June '68. Cultivated.

10 - Class III wetland (200 ac.) E½ of Sec. 7, Twp. 14, Rge. 3E surveyed June '68. A drained basin with a closed stand of grasses and sedges holding only temporary water. Dabblers observed. Present production poor.

11 - Class VI wetland (55 ac.) NE¼ of Sec. 18, Twp. 14, Rge. 3E surveyed June '68. A temporary wetland with a closed stand of grasses and sedges where not cultivated.

12 - Class VI wetland (50 ac.) NE¼ of Sec. 34, Twp. 14, Rge. 3E surveyed June '68. Cultivated.

13 - Class VI wetland (40 ac.) W½ of Sec. 30, Twp. 14, Rge. 4E surveyed June '68. Cultivated.

14 - Class VI wetland (60 ac.) Sec. 22, Twp. 12, Rge. 2E surveyed June '68. A shallow sheetwater basin which contains a closed stand of grasses. Drained.

15 - Class VI wetland (30 ac.) SW¼ of Sec. 19, Twp. 12, Rge. 2E surveyed June '68. Cultivated.

16 - Class V wetland (70 ac.) SE¼ of Sec. 23, Twp. 12, Rge. 1E surveyed June '68. Cultivated.

17 - Class VI wetland (50 ac.) NW¼ of Sec. 23, Twp.12, Rge. 1E surveyed June '68. Cultivated.

18 - Class VI wetland (40 ac.) Sec. 21, Twp 12, Rge. 1E surveyed June '68. Cultivated.

19 - Class VI wetland (50 ac.) N½ of Sec. 18, Twp.12, Rge. 1E surveyed June '68. Cultivated.

20 - Class VI wetland (55 ac.) Sec. 23, Twp. 12, Rge. 1W surveyed June '68 Cultivated.

21 - Class II wetland (245 ac.) Sec. 35, Twp. 12, Rge. 1W surveyed June 68. A semi-permanent wetland with a closed stand of whitetop and other grasses. A fertile marsh but drained.

22 - Class V wetland (50 ac.) Sec. 36, Twp. 12, Rge. 1W surveyed June '68. A temporary wetland covered by a closed stand of grasses.

23 - Class VI wetland (90 ac.) Sec. 25, Twp. 12, Rge. 1E surveyed June '68. Cultivated.

24 - Class VI wetland (30 ac.) Sec. 14, Twp. 13, Rge. 1W surveyed June '68. Cultivated.

25 - Class VI wetland (120 ac.) N½ of Sec. 3, Twp. 14, Rge. 1E surveyed June '68. Cultivated and grassland areas.

26 - Class V wetland (30 ac.) NW¼ of Sec. 10, Twp. 14, Rge. 1E surveyed June '68. A seasonal marsh with a closed stand of sedges and mare's tail. Limited waterfowl production.

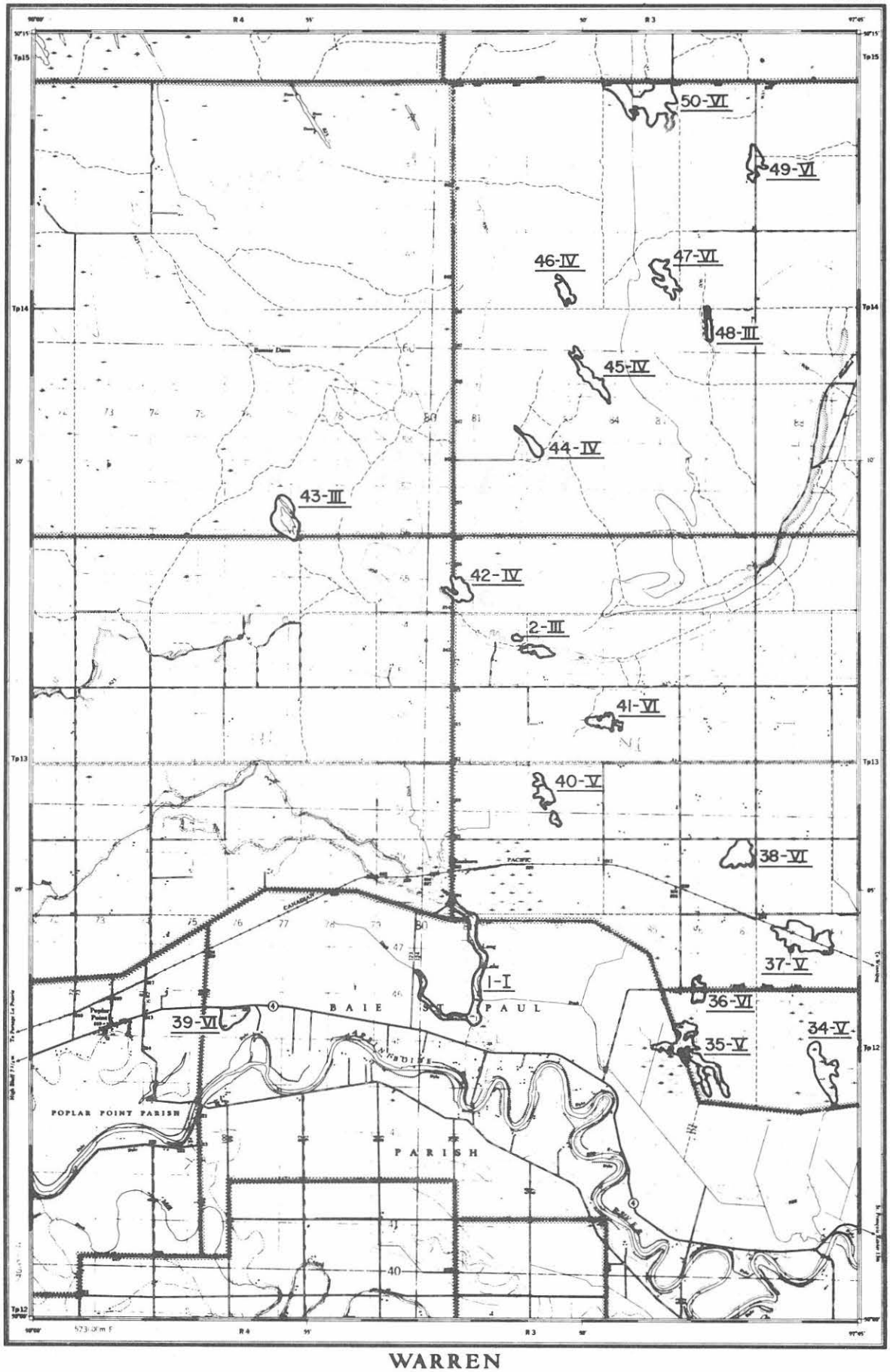
WARREN

62 I/4

NATIONAL TOPOGRAPHIC SYSTEM

CANADA

62 1/4 WEST

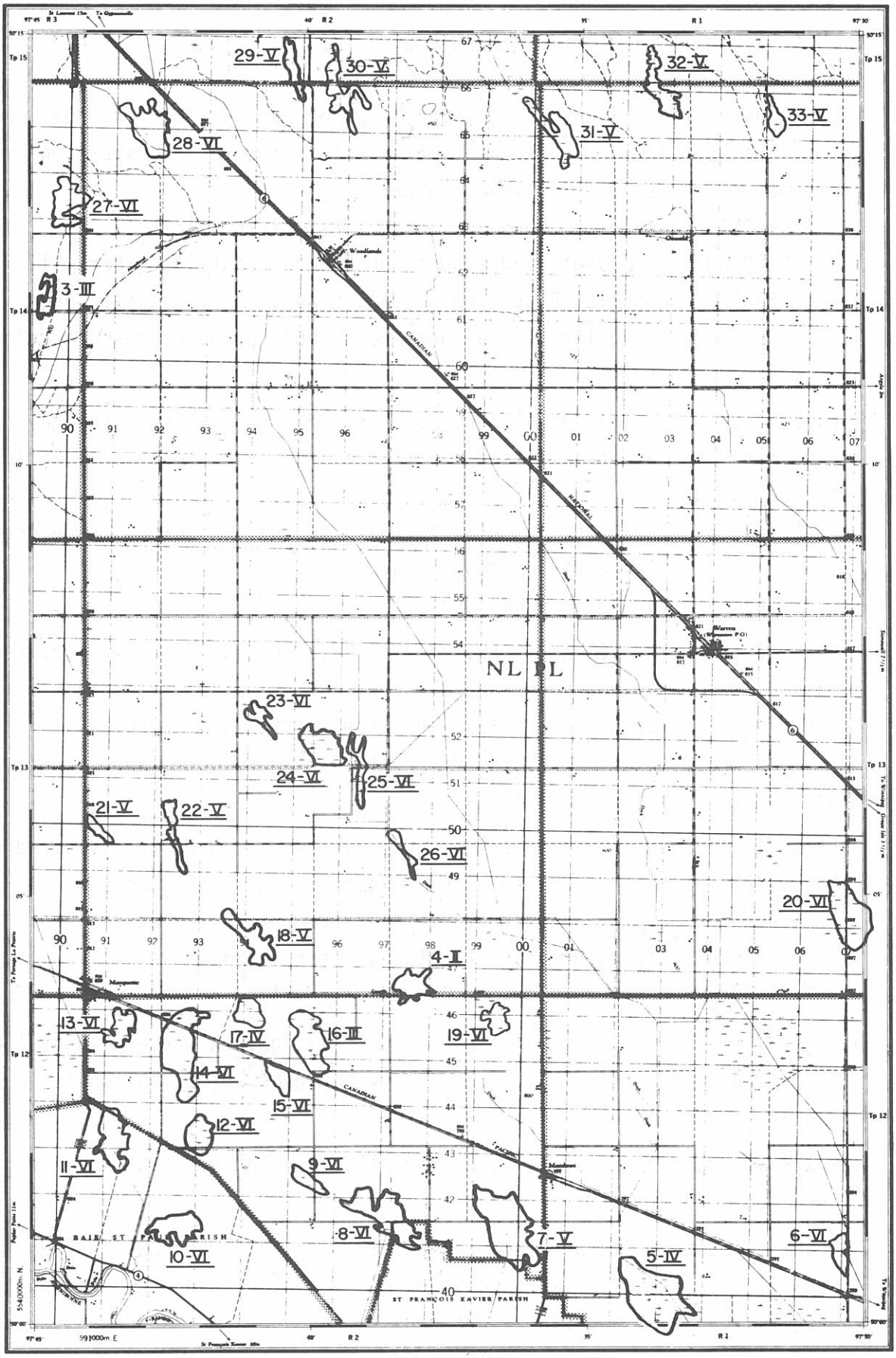


WARREN

MANITOBA

WEST OF PRINCIPAL MERIDIAN

WEST



WARREN

MANITOBA

WEST OF PRINCIPAL MERIDIAN

EAST

1 - LONG LAKE. Class I wetland (150 ac.) W½ of Sec. 6, Twp. 13, Rge. 4W Surveyed May 27/68. A permanent marsh with offshore interspersion of emergents. Marsh zone is 10-30' wide.

EMERGENTS: hardstem bulrush, phragmites, river bulrush.
SUBMERGENTS: frequent bladderwort, duckweed, coontail, water milfoil.
WATERFOWL: observed Blue-winged Teal, Scaup, Coot, Gadwall and Shoveller. A valuable marsh but in the process of being drained.

2 - Class III wetland (40 ac.) Sec. 29, Twp. 13, Rge. 3W surveyed May 28/68. A seasonal marsh with a closed stand of emergents surrounded by willows on the upland.

EMERGENTS: hardstem bulrush, cattail, sedges, whitetop, manna grass. A moderatley good marsh.
SUBMERGENTS: abundant - bladderwort.

3 - Class III wetland (60 ac.) SW¼ of Sec. 24, Twp. 14, Rge. 3W surveyed May 28/68. A semi-permanent marsh with a closed stand of emergents.

EMERGENTS: sedge, horsetail, whitetop, cattail, bulrush.
SUBMERGENTS: bladderwort and water milfoil.
Situated adjacent to a beach ridge.

4 - Class II wetland (40 ac.) SW¼ of Sec. 2, Twp. 13, Rge. 2W surveyed May 29/68. A seasonal marsh with a closed stand of emergents.

EMERGENTS: whitetop, horsetail, hardstem bulrush, sedge.
SUBMERGENTS: frequent bladderwort and water milfoil.
WATERFOWL: observed Widgeon, Shoveller, Mallard and Blue-winged Teal.

5 - Class IV wetland (320 ac.) Sec. 8, Twp. 12, Rge. 1W surveyed June '68. A seasonal marsh with a closed stand of emergents, i.e. phragmites and grasses. Drained.

6 - Class VI wetland (45 ac.) E½ of Sec. 15, Twp. 12, Rge. 1W surveyed June '68. Cultivated.

7 - Class V wetland (215 ac.) N½ of Sec. 13, Twp. 12, Rge. 2W surveyed June '68. A temporary marsh covered by a closed stand of whitetop and sedge. The shallow basin is drained.

8 - Class VI wetland (200 ac.) SE¼ of Sec. 22, Twp. 12, Rge. 2W surveyed June '68. Cultivated.

9 - Class VI wetland (45 ac.) Sec. 21, Twp. 12, Rge. 2W surveyed June '68. Cultivated.

10 - Class VI wetland (60 ac.) Sec. 17, Twp. 12, Rge. 2W surveyed June '68. A sheetwater meadow.

11 - Class VI wetland (180 ac.) Sec. 30, Twp. 12, Rge. 2W surveyed June '68. A sheetwater meadow.

12 - Class VI wetland (55 ac.) Sec. 29, Twp. 12, Rge. 2W surveyed June '68. Cultivated.

13 - Class VI wetland (65 ac.) Sec. 31, Twp. 12, Rge. 2W surveyed June '68. A sheetwater meadow. Drained.

14 - Class VI wetland (280 ac.) Sec. 32, Twp. 12, Rge. 2W surveyed June '68. A sheetwater meadow.

15 - Class VI wetland (60 ac.) E½ of Sec. 28, Twp. 12, Rge. 2W surveyed June '68. Cultivated.

16 - Class III wetland (160 ac.) SE¼ of Sec. 33, Twp. 12, Rge. 2W surveyed June '68. A seasonal marsh covered over by a closed stand of whitetop. Drained. Poor waterfowl production at present.

17 - Class IV wetland (45 ac.) NW¼ of Sec. 33, Twp. 12, Rge. 2W surveyed June '68. A temporary marsh with a shallow basin depth and covered by a closed stand of emergent whitetop and sedge. Dabblers observed.

18 - Class V wetland (65 ac.) NW¼ of Sec. 4, Twp. 13, Rge. 2W surveyed June '68. A temporary marsh with a closed stand of grasses.

19 - Class VI wetland (100 ac.) N½ of Sec. 36, Twp. 12, Rge. 2W surveyed June '68. Cultivated.

20 - Class IV wetland (190 ac.) SE¼ of Sec. 10, Twp. 13, Rge. 1W surveyed June '68. A seasonal marsh with a closed stand of grasses. Drained.

21 - Class V wetland (20 ac.) SW¼ of Sec. 18, Twp. 13, Rge. 2W surveyed June '68. A sheetwater meadow.

22 - Class V wetland (45 ac.) SW¼ of Sec. 17, Twp. 13, Rge. 2W surveyed June '68. A sheetwater meadow with grass cover. Very limited waterfowl use.

23 - Class VI wetland (35 ac.) NW¼ of Sec. 21, Twp. 13, Rge. 2W surveyed June '68. Cultivated.

24 - Class VI wetland (90 ac.) SW¼ of Sec. 22, Twp. 13, Rge. 2W surveyed June '68. Cultivated.

25 - Class VI wetland (25 ac.) SE¼ of Sec. 22, Twp. 13, Rge. 2W surveyed June '68. Cultivated.

26 - Class VI wetland (35 ac.) NW¼ of Sec. 11, Twp. 13, Rge. 2W surveyed June '68. Cultivated.

27 - Class VI wetland (110 ac.) E½ of Sec. 25, Twp.14, Rge. 3W surveyed June '68. A grass covered meadow, or sheetwater basin.

28 - Class VI wetland (115 ac.) E½ of Sec. 31, Twp. 14, Rge. 2W surveyed June '68. A grass covered meadow.

29 - Class V wetland (40 ac.) SE¼ of Sec. 4, Twp. 15, Rge. 2W surveyed June '68. A temporary sedge meadow. Very limited waterfowl production.

30 - Class V wetland (65 ac.) N½ of Sec. 34, Twp. 14, Rge. 2W surveyed June '68. A seasonal marsh with abundant sedge. Very limited waterfowl production.

31 - Class V wetland (90 ac.) W½ of Sec. 31, Twp. 14, Rge. 1W surveyed June '68. A seasonal basin with interspersed pools and emergents, predominantly sedge. Waterfowl production is limited.

32 - Class V wetland (50 ac.) S½ of Sec. 5, Twp. 14, Rge. 1W surveyed June '68. A temporary marsh with sedge predominating. Very limited waterfowl production.

33 - Class V wetland (25 ac.) W½ of Sec. 34, Twp. 14, Rge. 1W surveyed June '68. A temporary marsh with sedge predominating. Severely restricted waterfowl production due to limitations of nutrients.

34 - Class V wetland (80 ac.) SE¼ of Sec. 35, Twp. 12, Rge. 3W surveyed June '68. A grassy sheetwater basin with severely limited waterfowl production.

35 - Class V wetland (120 ac.) SW¼ of Sec. 34, Twp. 12, Rge. 3W surveyed June '68. Cultivated.

36 - Class VI wetland (20 ac.) S½ of Sec. 3, Twp. 13, Rge. 3W surveyed June '68. A grassy sheetwater basin.

37 - Class V wetland (140 ac.) N½ of Sec. 2, Twp. 13, Rge. 3W surveyed June '68. A temporary marsh with some hardstem bulrush. At present the marsh is grazed by cattle.

38 - Class VI wetland (55 ac.) E½ of Sec. 10, Twp. 13, Rge. 3W surveyed June '68. A sheetwater basin.

39 - Class VI wetland (45 ac.) Sec. 34, Twp. 12, Rge. 4W surveyed June '68. A grassy sheetwater basin.

40 - Class V wetland (40 ac.) W½ of Sec. 17, Twp. 13, Rge. 3W surveyed June '68. Seasonal marsh with a closed stand of emergents, i.e. whitetop, cattail.

41 - Class VI wetland (40 ac.) E½ of Sec. 20, Twp. 13, Rge. 3W surveyed June '68. A grassy sheetwater basin.

42 - Class IV wetland (45 ac.) N½ of Sec. 31, Twp. 13, Rge. 3W surveyed June '68. A temporary wetland covered by a closed stand of cattail. Dabblers noted, but limited waterfowl production.

43 - Class III wetland (105 ac.) SE¼ of Sec. 3, Twp. 14, Rge. 4W surveyed June '68. A semi-permanent marsh showing offshore interspersion of emergents (bulrush and cattail). A fairly good waterfowl area.

44 - Class IV wetland (30 ac.) SW¼ of Sec. 8, Twp. 14, Rge. 3W surveyed June '68. A semi-permanent marsh surrounded mainly by barren shorelines. Some moderate use by dabbling ducks.

45 - Class IV wetland (60 ac.) SE¼ of Sec. 17, Twp. 14, Rge. 3W surveyed June '68. A seasonal wetland covered by a closed stand of emergents and with limited potential for waterfowl production.

46 - Class IV wetland (30 ac.) S½ of Sec. 20, Twp.14, Rge. 3W surveyed June '68. A seasonal marsh with offshore interspersion of bulrush but very limited potential.

47 - Class VI wetland (55 ac.) Sec. 21, Twp. 14, Rge. 3W surveyed June '68. A temporary marsh containing a closed stand of sedges.

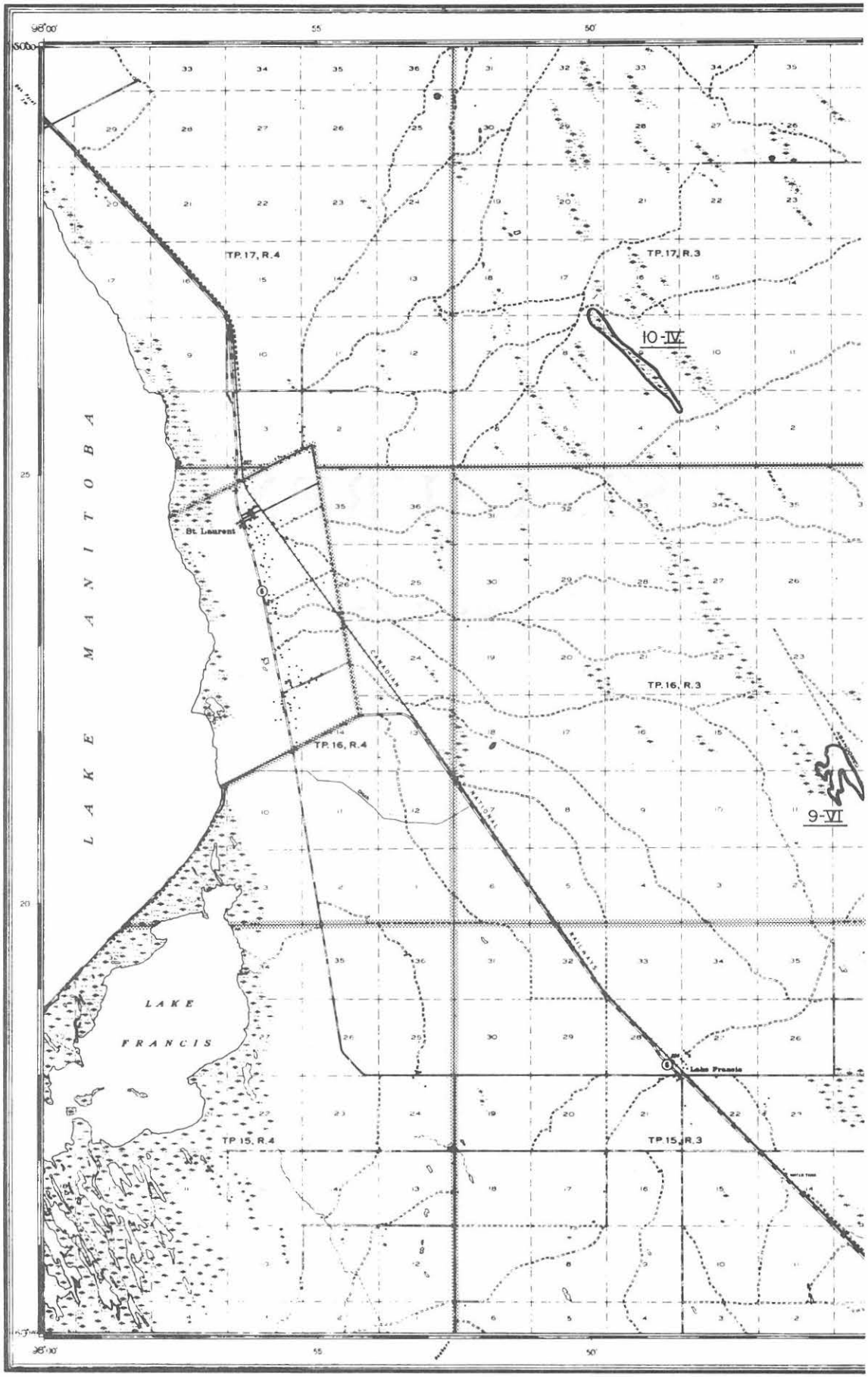
48 - Class III wetland (20 ac.) Sec. 15, Twp. 14, Rge. 3W surveyed June '68. A semi-permanent marsh with some offshore interspersion of sedges. Dabbler use noted. A moderately good wetland.

49 - Class VI wetland (45 ac.) Sec. 27, Twp. 14, Rge. 3W surveyed June '68. A sheetwater basin or sedge meadow with a closed stand of sedges.

50 - Class VI wetland (200 ac.) N½ of Sec. 33, Twp. 14, Rge. 3W surveyed June '68. A grassy sheetwater basin.

ST. LAURENT

62 I/5

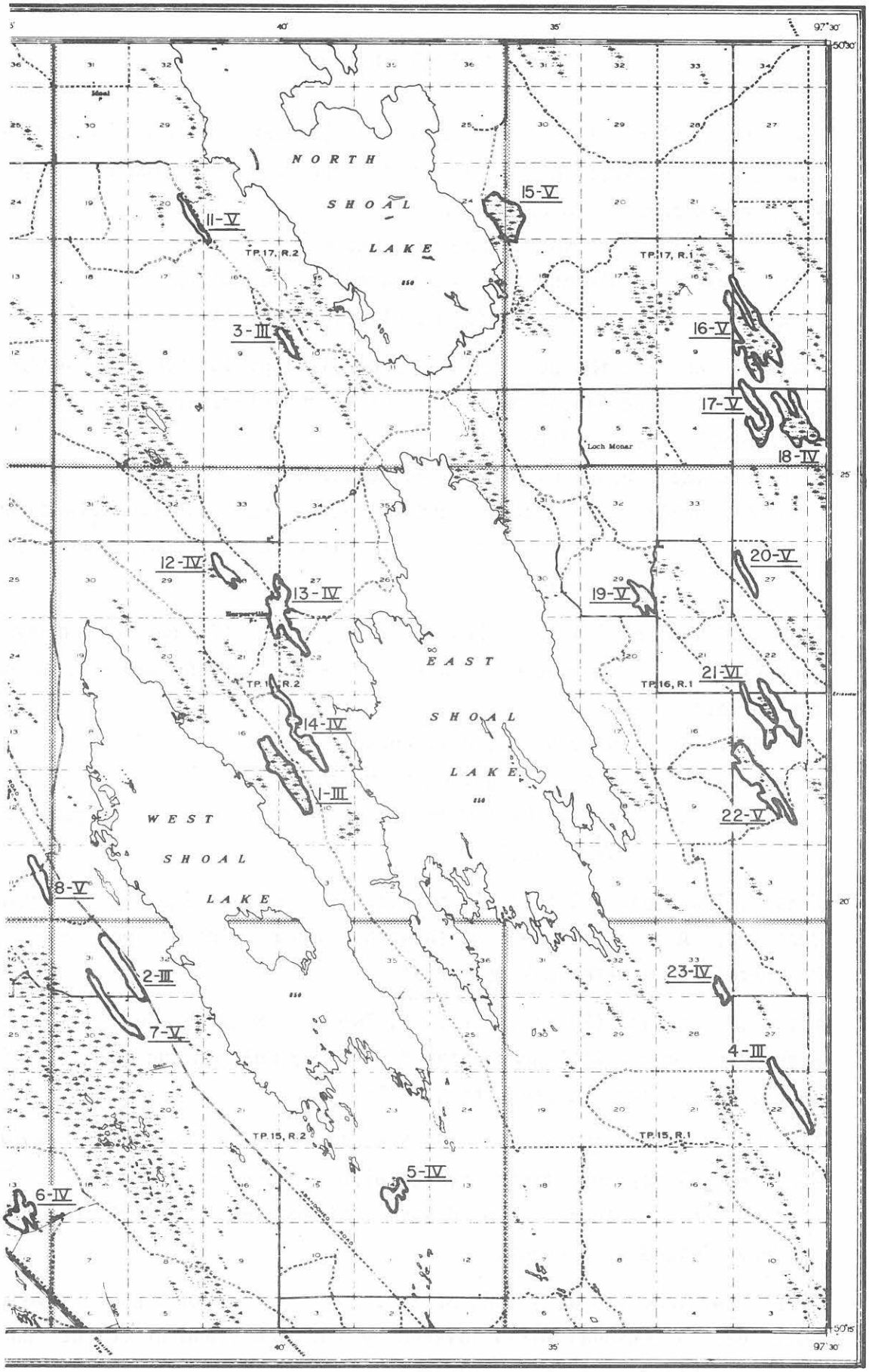


ST. LAURENT

WEST OF PRINCIPAL MERIDIAN

MANITOBA

WEST



ST. LAURENT

WEST OF PRINCIPAL MERIDIAN

MANITOBA

EAST

1 - Class III wetland (160 ac.) NW¼ of Sec. 10, Twp. 16, Rge. 2W surveyed June 20/68. A permanent marsh with offshore interspersion of emergents and a marsh zone 30 to 50' wide.

EMERGENTS: bulrush, phragmites, sedge.
SUBMERGENTS: infrequent sago pondweed, bladderwort.
WATERFOWL: Coots observed. Fairly good waterfowl potential.

2 - Class III wetland (80 ac.) SE¼ of Sec. 31, Twp. 15, Rge. 2W surveyed June 21/68. A permanent marsh with offshore interspersion of emergents and a marsh zone of 30 to 50'.

EMERGENTS: bulrush, phragmites, cattail.
SUBMERGENTS: infrequent burreed, floating leaf pondweed, bladderwort, water milfoil. Moderately good waterfowl production potential.

3 - Class III wetland (35 ac.) NW¼ of Sec. 10, Twp. 17, Rge. 2W surveyed June 21/68. A permanent marsh with fringed open water and a broad marsh zone greater than 50'.

EMERGENTS: Bulrush, cattail, phragmites.
SUBMERGENTS: frequent sago, water milfoil.
WATERFOWL: Pintail, Blue-winged Teal, Ruddy. Moderately good waterfowl production.

4 - Class III wetland (80 ac.) E½ of Sec. 22, Twp. 15, Rge. 1W surveyed June '68. A semi-permanent marsh with bulrush fringing open water. Moderately good waterfowl potential.

5 - Class IV wetland (20 ac.) Sec. 14, Twp. 15, Rge. 2W surveyed June '68. A permanent marsh with open water fringed by bulrush and cattail. Some dabbler use noted but production is limited.

6 - Class IV wetland (30 ac.) S½ of Sec. 13, Twp. 15, Rge. 3W surveyed June '68. A seasonal marsh covered with a closed stand of sedge. The shallow basin depth has allowed easy drainage and waterfowl production is very limited at present.

7 - Class V wetland (70 ac.) NE¼ of Sec. 30, Twp. 15, Rge. 2W surveyed June '68. A seasonal marsh covered by a closed stand of bulrush and cattail. Limited use by waterfowl.

8 - Class V wetland (60 ac.) E½ of Sec. 1, Twp. 16, Rge. 3W surveyed June '68. A seasonal marsh covered by a closed stand of bulrush and sedge and with very limited waterfowl production capability

9 - Class VI wetland (190 ac.) NE¼ of Sec. 12, Twp. 16, Rge. 3W surveyed June '68. A grassy sheetwater basin.

10 - Class IV wetland (135 ac.) Sec. 9, Twp. 17, Rge. 3W surveyed June '68. A semi-permanent marsh comprising interspersed pools surrounded by bulrush and sedge. Capability is moderate.

11 - Class V wetland (15 ac.) E½ of Sec. 20, Twp. 17, Rge. 2W surveyed June '68. A seasonal marsh overgrown by a closed stand of bulrush. Very limited potential.

12 - Class IV wetland (30 ac.) NW¼ of Sec. 28, Twp. 16, Rge. 2W surveyed June '68. A semi-permanent marsh with open pools and closed stands of phragmites and bulrush.

13 - Class IV wetland (120 ac.) NW¼ of Sec. 22, Twp. 16, Rge. 2W surveyed June '68. A semi-permanent marsh with open pools and stands of bulrush, cattail, and phragmites. Capability for waterfowl production is moderate.

14 - Class IV wetland (110 ac.) W½ of Sec. 15, Twp. 16, Rge. 2W surveyed June '68. A semi-permanent marsh largely overgrown by bulrush and phragmites.

15 - Class V wetland (85 ac.) SW¼ of Sec. 19, Twp. 17, Rge. 1W surveyed June '68. A seasonal marsh overgrown by a closed stand of bulrush and phragmites.

16 - Class V wetland (185 ac.) W½ of Sec. 10, Twp. 17, Rge. 1W surveyed June '68. A seasonal marsh with a closed stand of bulrush and sedge.

17 - Class V wetland (55 ac.) W½ of Sec. 3, Twp. 17, Rge. 1W surveyed June '68. A seasonal marsh with a closed stand of bulrush and sedge.

18 - Class IV wetland (120 ac.) E½ of Sec. 3, Twp. 17, Rge. 1W surveyed June '68. A semi-permanent marsh with an interspersion of bulrush and sedge in open water.

19 - Class V wetland (55 ac.) SE¼ of Sec. 29, Twp. 16, Rge. 1W surveyed June '68. A seasonal marsh with a closed stand of bulrush and sedge.

20 - Class V wetland (40 ac.) NW¼ of Sec. 27, Twp. 16, Rge. 1W surveyed June '68. A seasonal marsh overgrown by a closed stand of sedge and cattail.

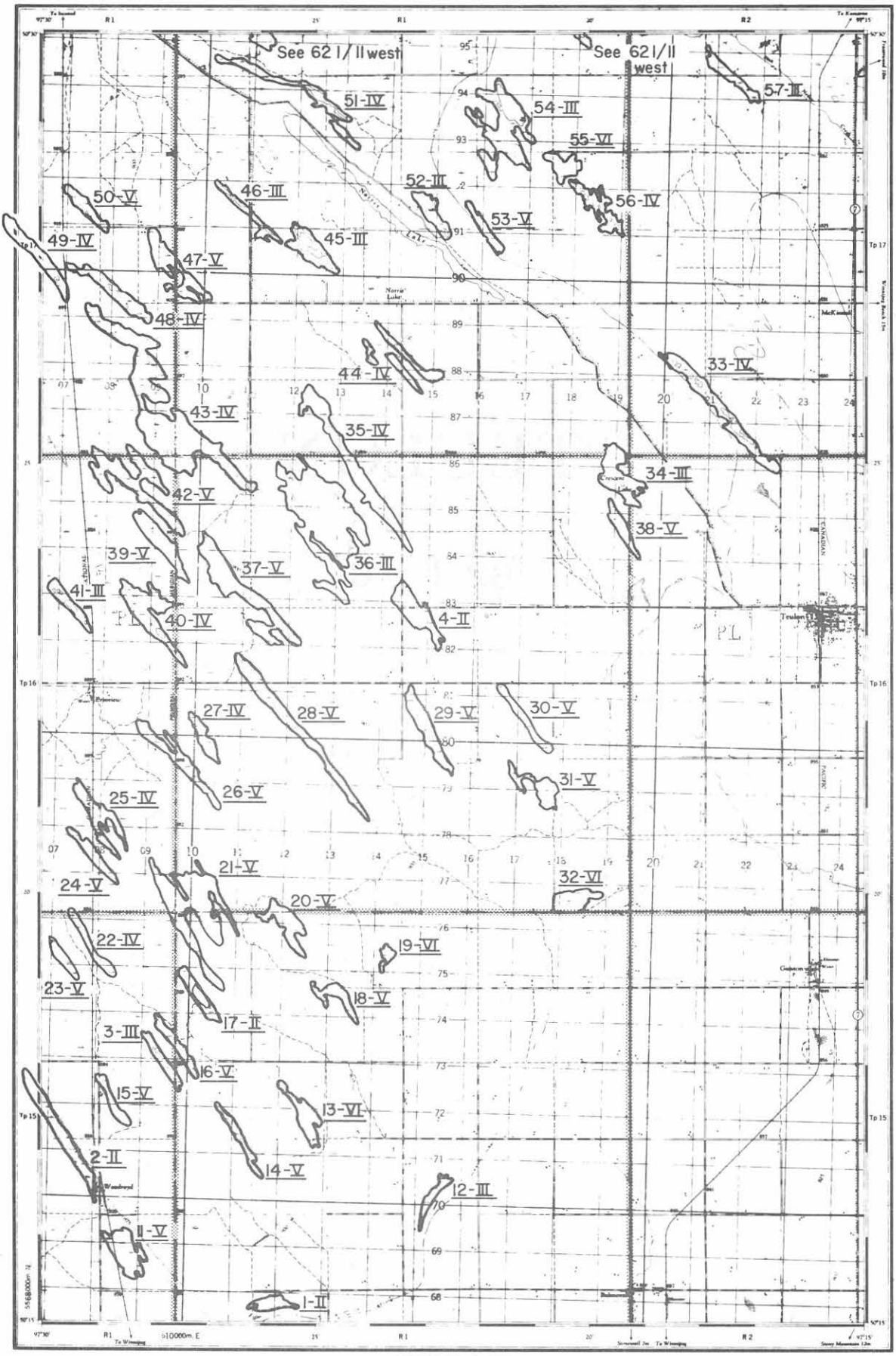
21 - Class VI wetland (100 ac.) N½ of Sec. 15, Twp. 16, Rge. 1W surveyed June '68. A sedge meadow.

22 - Class V wetland (120 ac.) Sec. 10, Twp. 16, Rge. 1W surveyed June '68. A temporary marsh containing a closed stand of emergent cattail and sedge.

23 - Class IV wetland (25 ac.) SE¼ of Sec. 33, Twp 15, Rge. 1W surveyed June '68. A seasonal marsh overgrown by a closed stand of bulrush and phragmites.

TEULON

62 I / 6



TEULON

MANITOBA

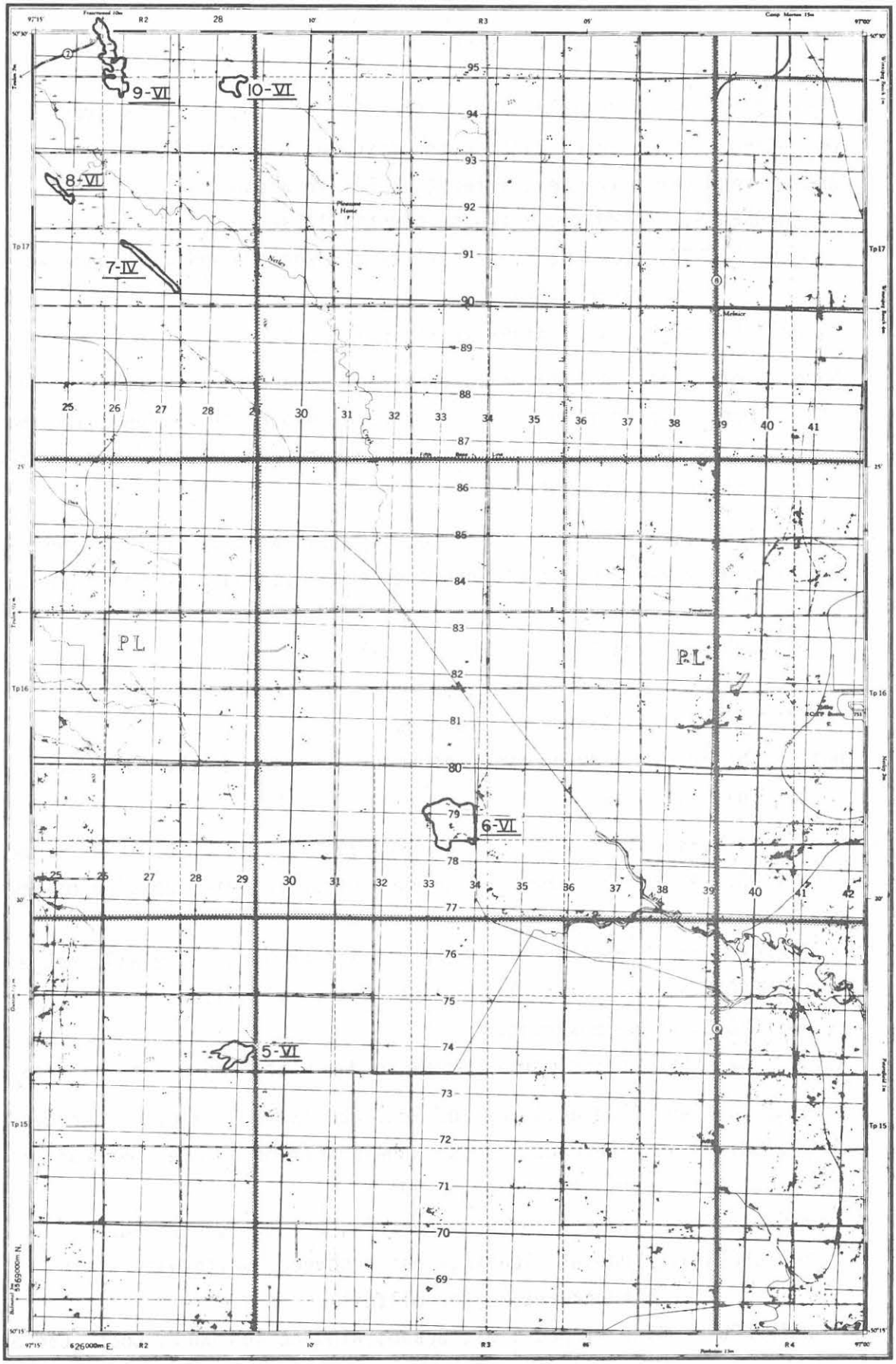
EAST AND WEST OF PRINCIPAL MERIDIAN

WEST

NATIONAL TOPOGRAPHIC SYSTEM

CANADA

62 1/6 EAST



TEULON

MANITOBA

EAST OF PRINCIPAL MERIDIAN

EAST

1 - Class II wetland (70 ac.) NW¼ of Sec. 5, Twp. 15, Rge 1E surveyed June 4/68. A permanent marsh with offshore interspersion of emergents and a broad marsh fringe greater than 50' in width.

EMERGENTS: hardstem bulrush, horsetail, sedge.

SUBMERGENTS: frequent floating-leaf pondweed, burreed, bladderwort, water milfoil.

WATERFOWL: Mallard, Blue-winged Teal, Coot.

Note: This marsh is located adjacent to a beach ridge. It is a catchment area but some seepage occurs through the ridge. The owner plans to drain the marsh if he cannot receive some form of compensation. A valuable marsh.

2 - Class II wetland (150 ac.) Sec. 14, Twp. 15, Rge. 1W surveyed June 4/68. A permanent marsh made up of interspersed pools and a marsh fringe greater than 50'.

EMERGENTS: hardstem bulrush, cattail.

SUBMERGENTS: frequent bladderwort, water milfoil, coontail.

WATERFOWL: abundant, many species.

Note: Cattle use reduced emergent cover somewhat at the south end. A valuable marsh.

3 - Class III wetland (85 ac.) SE¼ of Sec. 25, Twp. 15, Rge. 1W surveyed June 4/68. A semi-permanent marsh with offshore interspersion of emergents and a marsh fringe 30-50'.

EMERGENTS: hardstem bulrush, cattail, burreed, horsetail, sedge.

SUBMERGENTS: frequent bladderwort, water milfoil.

WATERFOWL: none observed.

Note: Road through the marsh serves to dam water improving the area.

4 - Class II wetland (130 ac.) NW¼ of Sec. 22, Twp. 16, Rge. 1E surveyed June 5/68. A semi-permanent marsh showing offshore interspersion of emergents and a marsh fringe of 30-50'.

EMERGENTS: hardstem bulrush, cattail, whitetop, burreed.

SUBMERGENTS: abundant floating-leaf pondweed, white water lily, bladderwort, water milfoil.

WATERFOWL: Blue-winged Teal, Scaup, Ring-necked Duck, Coot, Canvasback. An excellent marsh for waterfowl production.

5 - Class VI wetland (80 ac.) SE¼ of Sec. 25, Twp. 15, Rge. 2E surveyed June '68. Cultivated.

6 - Class VI wetland (210 ac.) S½ of Sec. 9, Twp. 16, Rge. 3E surveyed June '68. Cultivated.

7 - Class IV wetland (35 ac.) Sec. 14, Twp.17, Rge. 2E surveyed June '68. A seasonal marsh with a closed stand of sedges and cattail.

8 - Class VI wetland (30 ac.) Sec. 22, Twp. 17, Rge. 2E surveyed June '68. A grassy sheetwater basin.

9 - Class VI wetland (115 ac.) Sec. 35, Twp. 17, Rge. 2E surveyed June '68. A grassy sheetwater basin.

10 - Class VI wetland (40 ac.) Sec. 25, Twp. 17, Rge. 2E surveyed June '68. A grassy sheetwater basin.

11 - Class V wetland (140 ac.) Sec. 12, Twp. 15, Rge. 1W surveyed June '68. A temporary marsh with a closed stand of sedges and grasses.

12 - Class III wetland (50 ac.) Sec. 15, Twp. 15, Rge. 1E surveyed June '68. A permanent marsh with offshore interspersion of emergents (hardstem bulrush and sedge) and floating-leaf pondweed. A good marsh for waterfowl production.

13 - Class VI wetland (100 ac.) Sec. 20, Twp. 15, Rge. 1E surveyed June '68. A sheetwater basin and sedge meadow.

14 - Class V wetland (65 ac.) Sec. 19, Twp. 15, Rge. 1E surveyed June '68. A temporary marsh with a closed stand of sedge.

15 - Class V wetland (35 ac.) Sec. 24, Twp. 15, Rge. 1W surveyed June '68. A temporary marsh with a closed cover of cattail and sedge.

16 - Class V wetland (80 ac.) SW¼ of Sec. 30, Twp. 15, Rge. 1E surveyed June '68. A temporary marsh covered by a closed stand of sedge. Some dabbler use observed.

17 - Class II wetland (90 ac.) NW¼ of Sec. 30, Twp. 15, Rge. 1E surveyed June '68. A permanent marsh with open water fringed by hardstem bulrush, cattail, and sedge. Some dabbler use noted. A marsh with high capability for production.

18 - Class V wetland (75 ac.) NW¼ of Sec. 28, Twp. 15, Rge. 1E surveyed June '68. A temporary wetland with a closed stand of sedges.

19 - Class VI wetland (30 ac.) SE¼ of Sec. 33, Twp. 15, Rge. 1E surveyed June '68. A temporary wetland with a closed stand of sedges.

20 - Class V wetland (115 ac.) N½ of Sec. 32, Twp 15, Rge. 1E surveyed June '68. A temporary wetland with a closed stand of sedges.

21 - Class V wetland (400 ac.) SW¼ of Sec. 6, Twp. 16, Rge. 1E surveyed June '68. A temporary wetland with a closed stand of sedges.

22 - Class IV wetland (70 ac.) W½ of Sec. 36, Twp. 15, Rge. 1W surveyed June '68. A seasonal sedge meadow with a closed stand of sedges.

23 - Class V wetland (50 ac.) Sec. 35, Twp. 15, Rge. 1W surveyed June '68. A seasonal sedge meadow.

24 - Class V wetland (60 ac.) NE¼ of Sec. 2, Twp. 16, Rge. 1W surveyed June '68. A seasonal sedge meadow.

25 - Class IV wetland (120 ac.) S½ of Sec. 12, Twp. 16, Rge. 1W surveyed June '68. A seasonal sedge meadow.

26 - Class V wetland (110 ac.) S½ of Sec. 13, Twp. 16, Rge. 1W surveyed June '68. A seasonal marsh or sedge meadow.

27 - Class IV wetland (60 ac.) S½ of Sec. 18, Twp. 16, Rge. 1E surveyed June '68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge meadow.

28 - Class V wetland (210 ac.) Sec. 17, Twp. 16, Rge. 1E surveyed June '68. A seasonal marsh or sedge meadow.

29 - Class V wetland (145 ac.) Sec. 15, Twp. 16, Rge. 1E surveyed June '68. A temporary wetland with a closed stand of sedges.

30 - Class V wetland (80 ac.) Sec. 14, Twp. 16, Rge. 1E surveyed June '68. A sheetwater basin with no permanent open water. Chiefly sedges.

31 - Class V wetland (105 ac.) NE¼ of Sec. 11, Twp. 16, Rge. 1E surveyed June '68. A seasonal marsh or overgrown sedge meadow. Dabbler use noted.

32 - Class VI wetland (105 ac.) SW¼ of Sec. 1, Twp. 16, Rge. 1E surveyed June '68. Cultivated.

33 - Class IV wetland (210 ac.) Sec. 5, Twp. 17, Rge. 2E surveyed June '68. A permanent marsh with an interspersion of emergents and open water.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: infrequent floating-leaf pondweed, water lily.

34 - CRESCENT LAKE. Class III wetland (200 ac.) NE¼ of Sec. 36, Twp. 16, Rge. 1E surveyed June '68. A semi-permanent marsh with offshore interspersion of emergents (hardstem bulrush and sedge). Frequent occurrence of floating-leaf pondweed. Quite a good waterfowl production area.

35 - Class IV wetland (230 ac.) Sec. 33, Twp. 16, Rge. 1E surveyed June '68. A semi-permanent marsh with interspersed pools containing floating-leaf pondweed and surrounded by a sedge meadow.

36 - Class III wetland (450 ac.) SE¼ of Sec. 32, Twp. 16, Rge. 1E surveyed June '68. A semi-permanent marsh surrounded by hardstem bulrush and sedge. Has good waterfowl potential.

37 - Class V wetland (275 ac.) Sec. 30, Twp. 16, Rge. 1E surveyed June '68. A seasonal marsh or sedge meadow.

38 - Class V wetland (70 ac.) SE¼ of Sec. 36, Twp. 16, Rge. 1E surveyed June '68. A temporary wetland with a closed stand of sedges.

39 - Class V wetland (130 ac.) NE¼ of Sec. 25, Twp. 16, Rge. 1W surveyed June '68. A temporary wetland with a closed stand of sedges and horse-tail.

40 - Class IV wetland (180 ac.) NE¼ of Sec. 24, Twp. 16, Rge. 1W surveyed June '68. A seasonal marsh covered by a closed stand of cattail and sedge.

41- Class III wetland (75 ac.) SE¼ of Sec. 26, Twp. 16, Rge. 1W surveyed June '68. A permanent marsh with interspersion of sedges and open water.

42 - Class V wetland (225 ac.) Sec. 36, Twp. 16, Rge. 1W surveyed June '68. A seasonal sedge meadow with no open water.

43 - Class IV wetland (620 ac.) SE¼ of Sec. 1, Twp. 17, Rge. 1W surveyed June '68. A semi-permanent marsh with interspersed pools surrounded by a sedge meadow.

44 - Class IV wetland (110 ac.) SW¼ of Sec. 10, Twp. 17, Rge. 1E surveyed June '68. Semi-permanent marshes with scattered open pools and closed stands of sedges and cattail.

45 - Class III wetland (115 ac.) NE¼ of Sec. 17, Twp. 17, Rge.1E surveyed June '68. A permanent marsh with offshore interspersion of emergents (cattail and sedges) and some floating-leaf pondweed submergents.

46 - Class III wetland (65 ac.) Sec. 19, Twp. 17, Rge. 1E surveyed June '68. A permanent marsh with interspersed pools surrounded by cattail and sedges.

47 - Class V wetland (145 ac.) SW¼ of Sec. 18, Twp. 17, Rge. 1E surveyed June '68. A sheetwater basin covered by a closed stand of sedges.

48 - Class IV wetland (110 ac.) SW¼ of Sec. 13, Twp. 17, Rge. 1W surveyed June '68. A semi-permanent marsh with interspersed pools surrounded by sedge meadow.

49 - Class IV wetland (135 ac.) Sec. 14, Twp. 17, Rge. 1W surveyed June '68. A seasonal marsh with interspersed pools surrounded by a sedge meadow fringe.

50 - Class V wetland (60 ac.) SE¼ of Sec. 23, Twp. 17, Rge.1W surveyed June '68. A seasonal marsh containing a closed stand of cattail and sedge.

51 - Class IV wetland (150 ac.) N½ of Sec. 29, Twp. 17, Rge. 1E surveyed June '68. A semi-permanent marsh with a closed stand of whitetop and sedges and open pools.

52 - Class III wetland (70 ac.) S½ of Sec. 22, Twp. 17, Rge. 1E surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and cattail.

53 - Class V wetland (60 ac.) NW¼ of Sec. 14, Twp. 17, Rge. 1E surveyed June '68. A sheetwater basin containing a closed stand of cattail and sedges.

54 - Class III wetland (260 ac.) Sec. 26, Twp. 17, Rge. 1E surveyed June '68. A permanent marsh with offshore interspersion of emergents (hardstem bulrush, cattail, sedge). A moderately good marsh for waterfowl production.

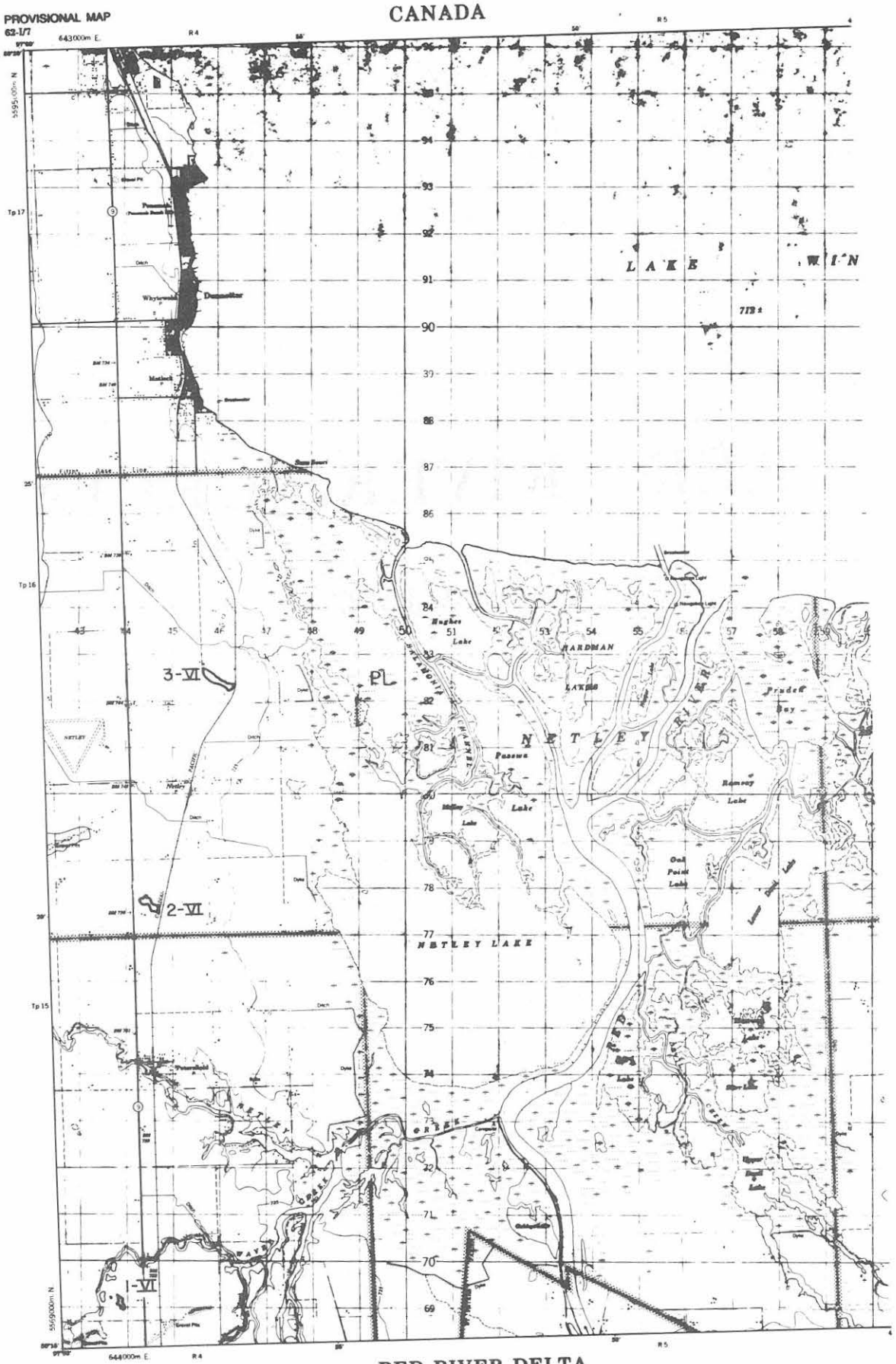
55 - Class VI wetland (40 ac.) NW¼ of Sec. 24, Twp. 17, Rge. 1E surveyed June '68. Cultivated.

56 - Class IV wetland (110 ac.) SE¼ of Sec. 24, Twp. 17, Rge. 1E surveyed June '68. A seasonal marsh with a closed stand - sedge meadow, with small open pools.

57 - Class III wetland (65 ac.) SW¼ of Sec. 32, Twp. 17, Rge. 2E surveyed June '68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and cattail. A marsh with high capability but presently being drained.

RED RIVER DELTA

62 I/7



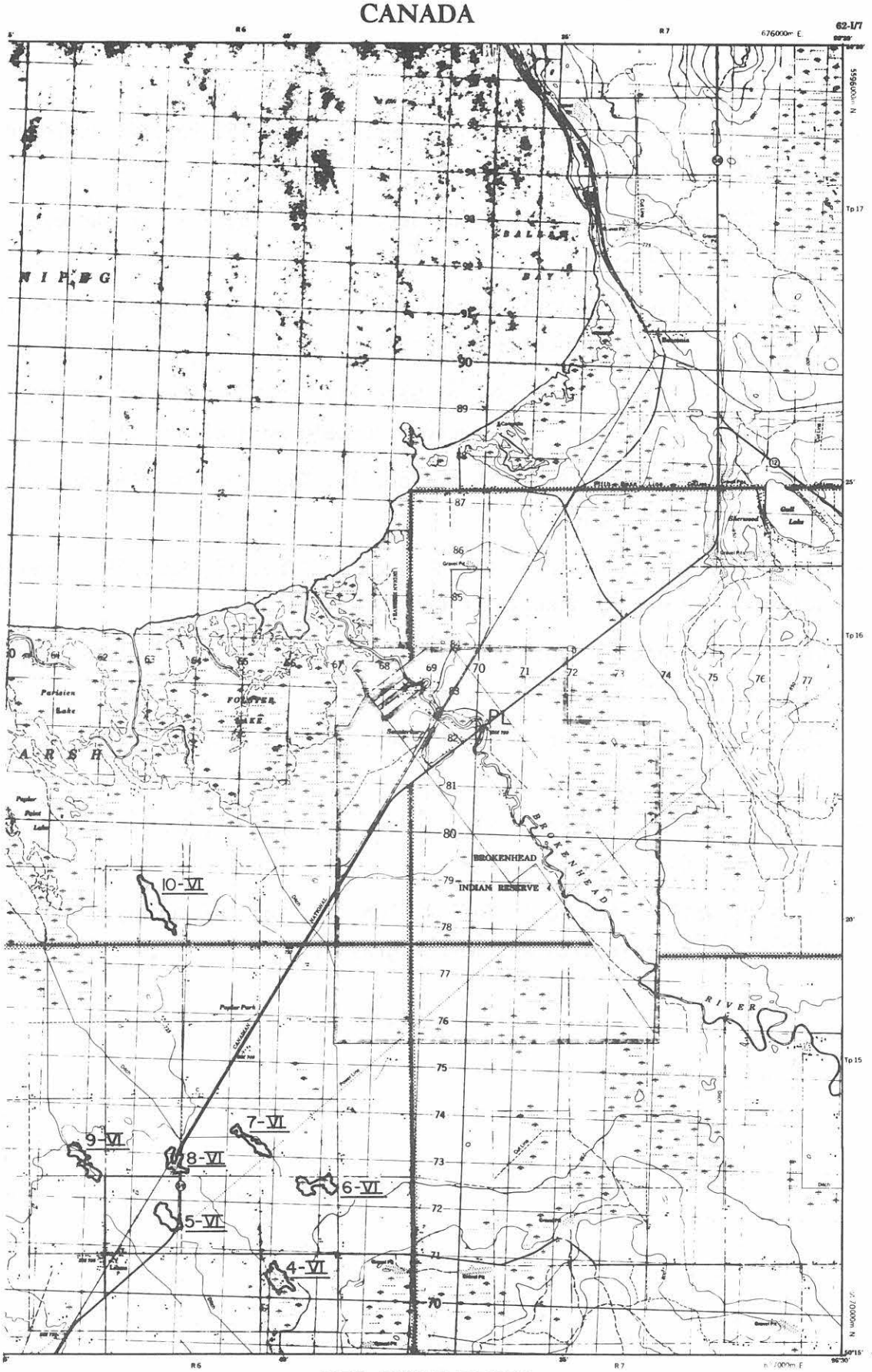
RED RIVER DELTA

MANITOBA

EAST OF PRINCIPAL MERIDIAN - EST DU MÉRIDIEN PRINCIPAL

WEST

CANADA



RED RIVER DELTA

MANITOBA

EAST OF PRINCIPAL MERIDIAN - EST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class VI wetland (10 ac.) SE¼ of Sec. 9, Twp. 15, Rge. 4E surveyed July '68. A grassy sheetwater basin or wet meadow.

2 - Class VI wetland (15 ac.) W½ of Sec. 3, Twp. 16, Rge. 4E surveyed July '68. Cultivated.

3 - Class VI wetland (20 ac.) SW¼ of Sec. 23, Twp. 16, Rge. 4E surveyed July '68. A grassy sheetwater basin.

4 - Class V wetland (70 ac.) NW¼ of Sec. 11, Twp. 15, Rge. 6E surveyed July '68. A temporary sedge meadow containing a closed stand of sedges.

5 - Class VI wetland (65 ac.) E½ of Sec. 16, Twp. 15, Rge. 6E surveyed July '68. A wet meadow

6 - Class VI wetland (80 ac.) NE¼ of Sec. 14, Twp. 15, Rge. 6E surveyed July '68. A grassy sheetwater basin.

7 - Class VI wetland (55 ac.) E½ of Sec. 22, Twp. 15, Rge. 6E surveyed July '68. Cultivated.

8 - Class VI wetland (40 ac.) SE¼ of Sec. 21, Twp. 15, Rge. 6E surveyed July '68. Cultivated.

9 - Class VI wetland (55 ac.) SE¼ of Sec. 20, Twp. 15, Rge. 6E surveyed July '68. Cultivated.

10 - Class VI wetland (65 ac.) Sec. 4, Twp. 16, Rge. 6E surveyed July '68. A sheetwater basin with wet meadow grasses.

GIMLI

62 I / 11

NATIONAL TOPOGRAPHIC SYSTEM

CANADA

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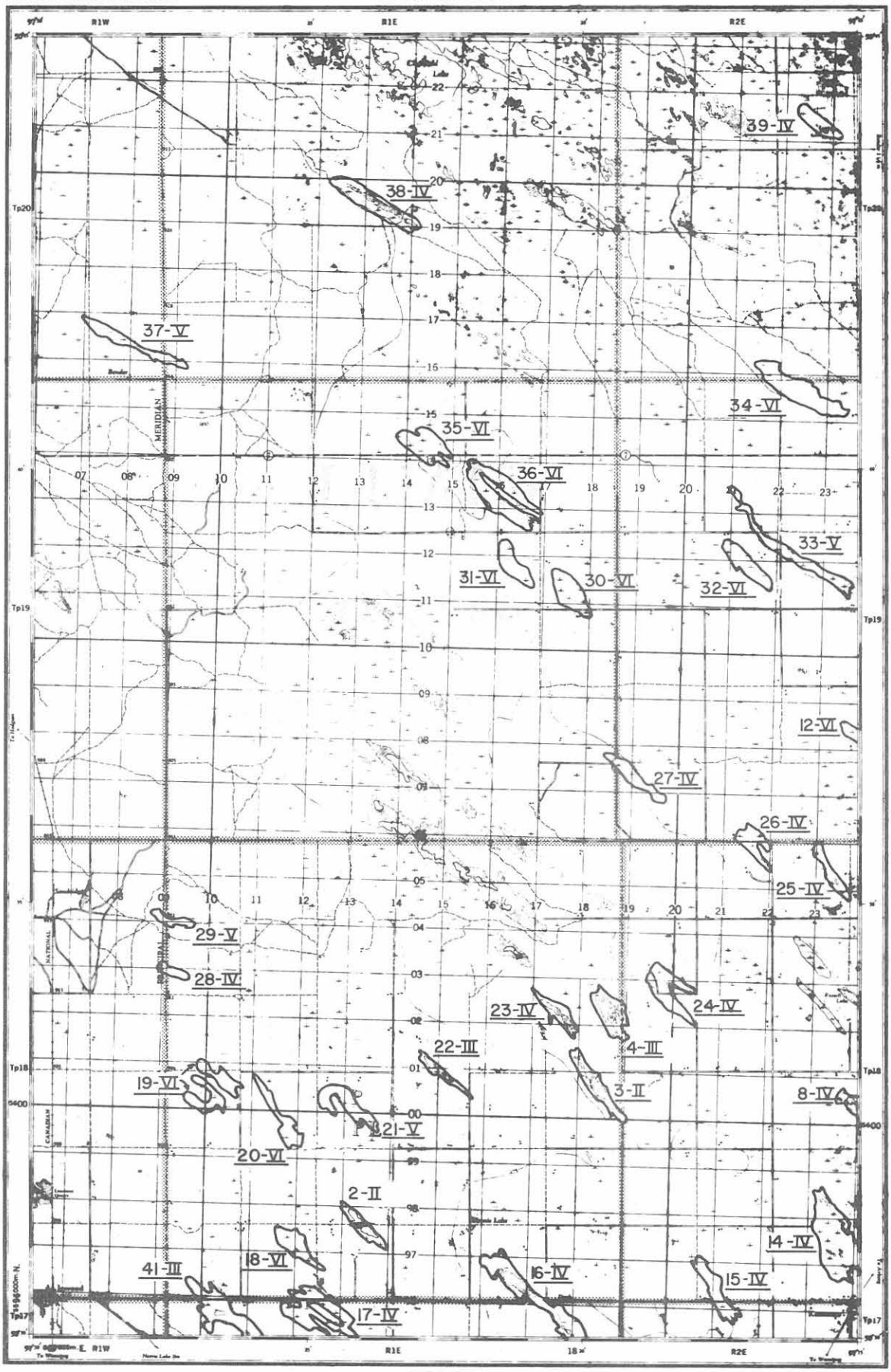
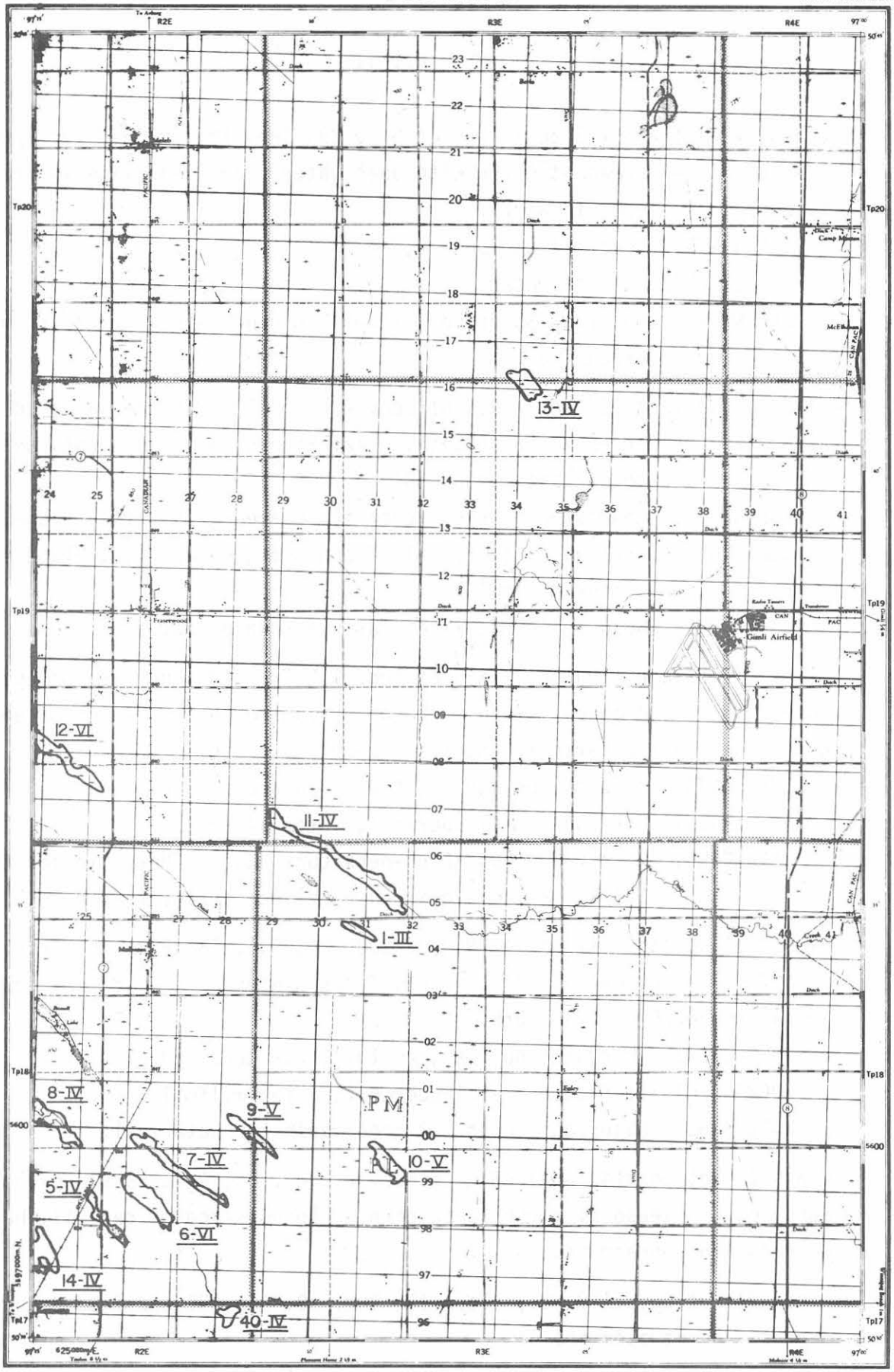


GIMLI

MANITOBA

EAST AND WEST OF PRINCIPAL MERIDIAN

WEST



GIMLI

MANITOBA

EAST OF PRINCIPAL MERIDIAN

EAST

1 - Class III wetland (15 ac.) NW¼ of Sec. 29, Twp. 18, Rge. 3E surveyed June 6/68. A permanent marsh with open water. The shoreline is fringed by emergents 10-30' in width.

EMERGENTS: cattail, horsetail, sedge.

SUBMERGENTS: scarce water lily.

WATERFOWL: Observed Shoveller, Scaup. A good marsh for waterfowl production

2 - Class II wetland (80 ac.) NE¼ of Sec. 4, Twp. 18, Rge. 1E surveyed June 7/68. A permanent marsh showing interspersion of emergents and a broad marsh fringe, greater than 50'.

EMERGENTS: hardstem bulrush, cattail, burreed, whitetop, sedge.

SUBMERGENTS: frequent floating-leaf pondweed, water lily, bladderwort, water milfoil.

WATERFOWL: Scaup. An excellent marsh for waterfowl.

3 - Class II wetland (100 ac.) NE¼ of Sec. 13, Twp. 18, Rge. 1E surveyed June 7/68. A permanent marsh with good offshore interspersion of emergent plants and a marsh fringe from 30-50' in width.

EMERGENTS: hardstem bulrush, cattail, burreed.

SUBMERGENTS: frequent - bladderwort, water milfoil.

WATERFOWL: Observed Scaup, Ring-neck Duck, Coot. Very similar to 62I/11 2 and again an excellent area for waterfowl.

4 - Class III wetland (115 ac.) NE¼ of Sec. 24, Twp. 18, Rge. 1E surveyed June 7/68. A permanent marsh with offshore interspersion of emergents and a fringe 30-50' in width.

EMERGENTS: hardstem bulrush, cattail, burreed, sedge.

SUBMERGENTS: infrequent - bladderwort, water milfoil.

WATERFOWL: Observed - none. A good marsh for waterfowl.

5 - Class IV wetland (40 ac.) NW¼ of Sec. 2, Twp. 18, Rge. 2E surveyed June '68. A seasonal marsh containing a closed stand of cattail, hardstem bulrush, and phragmites.

6 - Class VI wetland (110 ac.) Sec. 11, Twp. 18, Rge. 2E surveyed June '68. A grassy sheetwater basin.

7 - Class IV wetland (75 ac.) NE¼ of Sec. 11, Twp. 18, Rge. 2E surveyed June '68. A seasonal marsh containing a closed stand of cattail and hardstem bulrush.

8 - Class IV wetland (85 ac.) Sec. 15, Twp. 18, Rge. 2E surveyed June '68. A seasonal marsh with interspersed pools separated by cattail, phragmites and sedge meadow.

9 - Class V wetland (60 ac.) SE¼ of Sec. 13, Twp. 18, Rge. 2E surveyed June '68. A sedge meadow with temporary standing water and a closed stand of sedges and willows.

10 - Class V wetland (50 ac.) NE¼ of Sec. 8, Twp. 18, Rge. 3E surveyed June '68. A temporary marsh containing a closed stand of sedges and cattail.

11 - Class IV wetland (155 ac.) Sec. 32, Twp. 18, Rge. 3E surveyed June '68 A seasonal marsh containing a closed stand of sedges and cattail.

12 - Class VI wetland (120 ac.) NE¼ of Sec. 3, Twp. 19, Rge. 2E surveyed June '68. A sheetwater basin overgrown with sedges.

13 - Class IV wetland (55 ac.) N½ of Sec. 34, Twp. 19, Rge. 3E surveyed June '68. A seasonal marsh containing a closed stand of cattail and a peripheral sedge meadow.

14 - Class IV wetland (280 ac.) E½ of Sec. 4, Twp. 18, Rge. 2E surveyed June '68. A seasonal marsh with interspersed pools containing floating-leaf pondweed and water lily and surrounded by cattail and sedge meadow.

15 - Class IV wetland (65 ac.) SW¼ of Sec. 5, Twp. 18, Rge. 2E surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

16 - Class IV wetland (240 ac.) SE¼ of Sec. 2, Twp. 18, Rge. 1E surveyed June '68. A seasonal marsh containing a closed stand of hardstem bulrush and phragmites.

17 - Class IV wetland (160 ac.) N½ of Sec. 32, Twp. 17, Rge. 1E surveyed June '68. A seasonal marsh with a closed stand of sedges and little open water.

18 - Class VI wetland (60 ac.) N½ of Sec. 5, Twp. 18, Rge. 1E surveyed June '68. A temporary marsh with a closed stand of sedges.

19 - Class VI wetland (100 ac.) N½ of Sec. 18, Twp. 18, Rge. 1E surveyed June '68. A temporary marsh with a closed stand of sedges.

20 - Class VI wetland (40 ac.) Sec. 17, Twp. 18, Rge. 1E surveyed June '68. A sheetwater basin overgrown with sedges.

21 - Class V wetland (100 ac.) Sec. 16, Twp. 18, Rge. 1E surveyed June '68. A temporary marsh overgrown with sedges.

22 - Class III wetland (40 ac.) S½ of Sec. 22, Twp. 18, Rge. 1E surveyed June '68. A permanent marsh with good offshore interspersion of hard-stem bulrush and cattail. Submergents were floating-leaf pondweed and water lily. A moderately good marsh for waterfowl production.

23 - Class IV wetland (80 ac.) NW¼ of Sec. 24, Twp. 18, Rge. 1E surveyed June '68. A permanent marsh containing floating-leaf pondweed and water lily and with interspersion of emergents such as hardstem bulrush and sedges.

24 - Class VI wetland (85 ac.) N½ of Sec. 19, Twp. 18, Rge. 2E surveyed June '68. A grassy sheetwater basin.

25 - Class IV wetland (35 ac.) E½ of Sec. 33, Twp. 18, Rge. 2E surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush, cattail, and sedges.

26 - Class IV wetland (50 ac.) NE¼ of Sec. 32, Twp. 18, Rge. 2E surveyed June '68. A semi-permanent marsh with interspersed pools separated by hardstem bulrush, cattail and sedge areas.

27 - Class IV wetland (65 ac.) NW¼ of Sec. 6, Twp. 19, Rge. 2E surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush, cattail and sedge.

28 - Class IV wetland (40 ac.) SW¼ of Sec. 30, Twp. 18, Rge. 1E surveyed June '68. A permanent marsh with interspersion of hardstem bulrush and sedges.

29 - Class V wetland (40 ac.) NW¼ of Sec. 30, Twp. 18, Rge. 1E surveyed June '68. A semi-permanent marsh with poor interspersion of hardstem bulrush and sedges.

30 - Class IV wetland (85 ac.) S½ of Sec. 24, Twp. 19, Rge. 1E surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and cattail.

31 - Class VI wetland (50 ac.) E½ of Sec. 23, Twp. 19, Rge. 1E surveyed June '68. A grassy sheetwater basin.

32 - Class VI wetland (70 ac.) N½ of Sec. 20, Twp. 19, Rge. 2E surveyed June '68. A grass covered temporary marsh or wet meadow.

33 - Class V wetland (95 ac.) Sec. 21, Twp. 19, Rge. 2E surveyed June '68 A temporary marsh with a closed cover of cattail and sedge.

34 - Class VI wetland (170 ac.) N½ of Sec. 33, Twp. 19, Rge. 2E surveyed June '68. A temporary marsh with a closed cover of sedges.

35 - Class VI wetland (110 ac.) S½ of Sec. 34, Twp. 19, Rge. 1E surveyed June '68. A sedge covered sheetwater basin.

36 - Class VI wetland (160 ac.) Sec. 26, Twp. 19, Rge. 1E surveyed June '68. A sedge covered sheetwater basin.

37 - Class V wetland (90 ac.) Sec. 1, Twp. 20, Rge. 1W surveyed June '68. A temporary marsh with a closed stand of sedges.

38 - Class IV wetland (145 ac.) S½ of Sec. 16, Twp. 20, Rge. 1E surveyed June '68. A semi-permanent marsh with an interspersion of sedge meadow and phragmites.

39 - Class IV wetland (40 ac.) S½ of Sec. 21, Twp.20, Rge. 2E surveyed June '68. A semi-permanent marsh with interspersion of hardstem bulrush and sedges.

40 - Class IV wetland (30 ac.) Sec. 36, Twp. 17, Rge. 2E surveyed June '68 A seasonal marsh containing a closed stand of cattail and sedges.

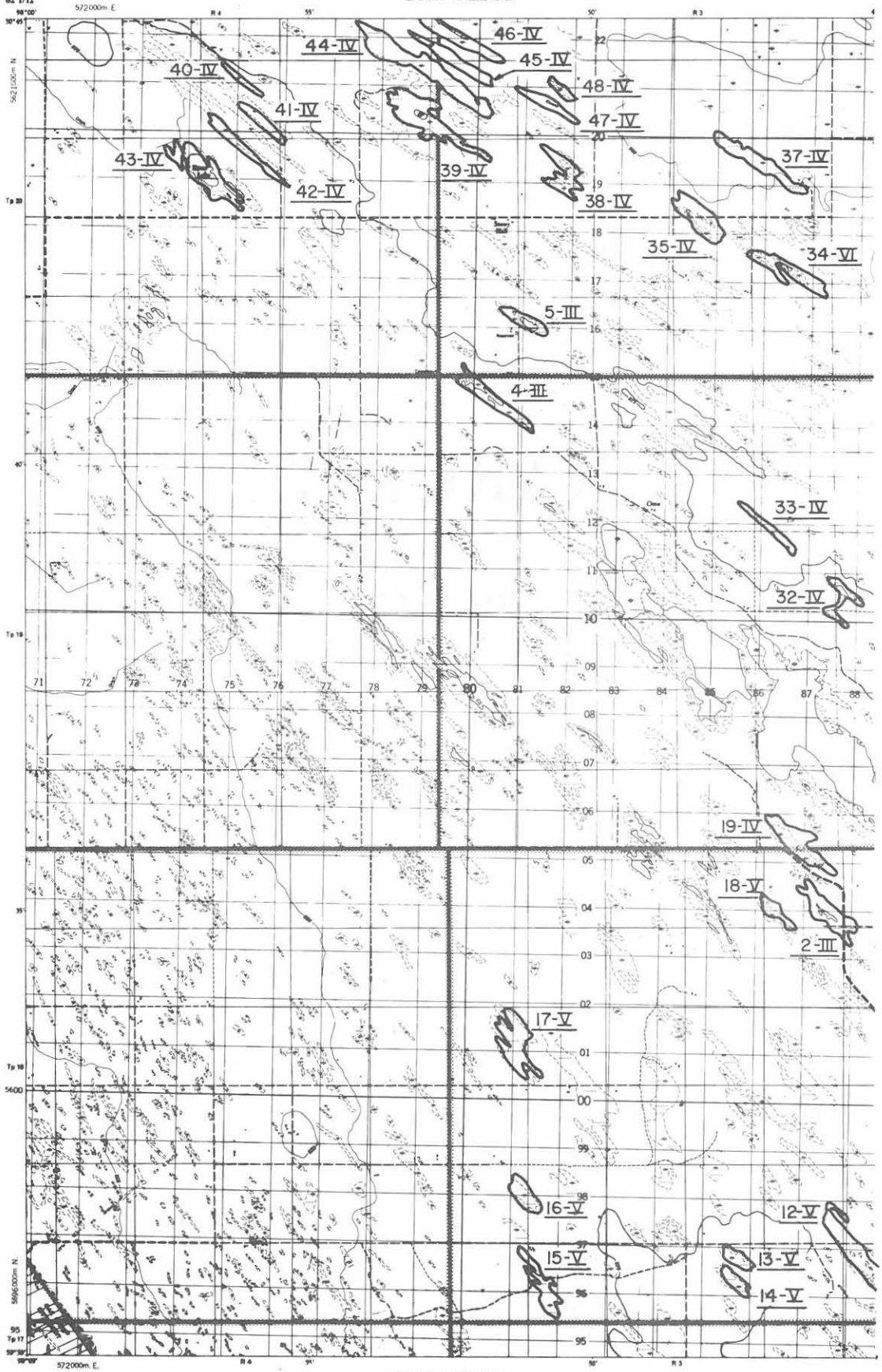
41 - Class III wetland (230 ac.) NE¼ of Sec. 31, Twp. 17, Rge. 1E surveyed June '68. A semi-permanent marsh with interspersed pools, a broad sedge meadow, and hardstem bulrush.

NARCISSE

62 I/12

PROVISIONAL MAP
62 I/12

CANADA



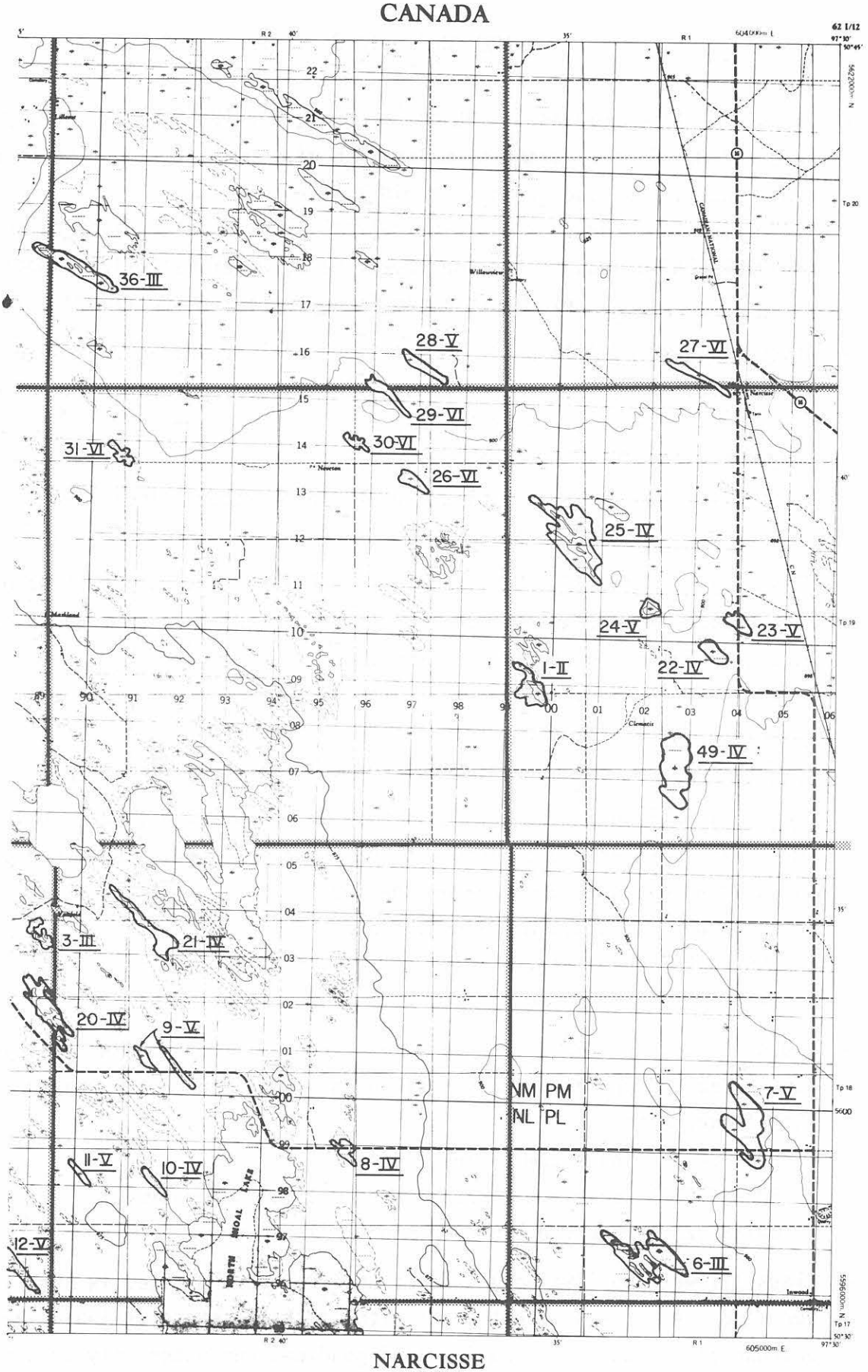
NARCISSE

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

WEST

CANADA



NARCISSE

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class II wetland (70 ac.) SW¼ of Sec. 18, Twp. 19, Rge. 1W surveyed June 21/68. A semi-permanent marsh with offshore interspersion of emergents and a marsh edge 30-50' in width.

EMERGENTS: hardstem bulrush, cattail, phragmites, whitetop, sedge.

SUBMERGENTS: abundant - smartweed, sago, water milfoil, bladderwort. An excellent marsh for waterfowl production.

2 - Class III wetland (115 ac.) SE¼ of Sec. 35, Twp. 18, Rge. 3W surveyed June 26/68. A semi-permanent marsh with offshore interspersion of emergents and a fringe width of 10-30'.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: frequent - bladderwort, sago, water milfoil, water quillwort.

3 - Class III wetland (30 ac.) NE¼ of Sec. 25, Twp. 18, Rge. 3W surveyed June 26/68. A permanent marsh with interspersed pools surrounded by more than 50' of emergent vegetation.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: frequent - water milfoil, bladderwort, sago.

WATERFOWL: Observed - Blue-winged Teal, Widgeon.

4 - Class III wetland (30 ac.) NE¼ of Sec. 36, Twp. 19, Rge. 3W surveyed June 26/68. A permanent marsh with offshore interspersion of emergents and a broad marsh fringe greater than 50'.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: frequent - water milfoil, bladderwort, sago.

WATERFOWL: Observed - Mallards.

5 - Class III wetland (65 ac.) NE¼ of Sec. 5, Twp. 20, Rge. 3W surveyed June 26/68. A permanent marsh with open water fringed by greater than 50' of emergents.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: frequent - sago, water milfoil, bladderwort.

WATERFOWL: Observed - Blue-winged Teal, Scaup.

6 - Class III wetland (195 ac.) NE¼ of Sec. 5, Twp. 18, Rge. 1W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and containing floating-leaf pondweed and water lily in the open water.

7 - Class V wetland (175 ac.) W½ of Sec. 15, Twp. 18, Rge. 1W surveyed June '68. A seasonal marsh with a closed stand of sedge.

8 - Class IV wetland (30 ac.) NE¼ of Sec. 10, Twp. 18, Rge. 2W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush.

9 - Class V wetland (50 ac.) S½ of Sec. 20, Twp. 18, Rge. 2W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

10 - Class IV wetland (25 ac.) W½ of Sec. 8, Twp. 18, Rge. 2W surveyed June '68. A permanent marsh with a barren shore and some cattail.

11 - Class V wetland (15 ac.) Sec. 7, Twp. 18, Rge. 2W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

12 - Class V wetland (185 ac.) Sec. 1, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of sedge and cattail.

13 - Class V wetland (30 ac.) NE¼ of Sec. 3, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with hardstem bulrush and sedge in a closed stand.

14 - Class V wetland (35 ac.) Sec. 3, Twp. 18, Rge. 3W surveyed June '68. A temporary wetland with a closed stand of sedge.

15 - Class V wetland (88 ac.) Sec. 5, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of sedge and cattail.

16 - Class V wetland (65 ac.) E½ of Sec. 7, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of sedge and cattail.

17 - Class V wetland (130 ac.) E½ of Sec. 19, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with interspersed pools surrounded by hardstem bulrush and phragmites.

18 - Class V wetland (42 ac.) SW¼ of Sec. 35, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush.

19 - Class IV wetland (120 ac.) N½ of Sec. 35, Twp. 18, Rge. 3W surveyed June '68. A semi-permanent marsh with open water fringed by hardstem bulrush and phragmites.

20 - Class IV wetland (100 ac.) E½ of Sec. 24, Twp. 18, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

21 - Class IV wetland (55 ac.) Sec. 29, Twp. 18, Rge. 2W surveyed June '68. A permanent marsh with open water fringed by hardstem bulrush and phragmites. Divers observed.

22 - Class IV wetland (50 ac.) NE¼ of Sec. 16, Twp. 19, Rge. 1W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

23 - Class V wetland (35 ac.) NW¼ of Sec. 15, Twp. 19, Rge. 1W surveyed June '68. A seasonal marsh with interspersed pools surrounded by cattail and sedge.

24 - Class V wetland (20 ac.) E½ of Sec. 20, Twp. 19, Rge. 1W surveyed June '68 A seasonal marsh with a closed stand of hardstem bulrush and cattail.

25 - Class IV wetland (260 ac.) NE¼ of Sec. 19, Twp.19, Rge. 1W surveyed June '68. A permanent marsh with a barren shoreline and fringes of hardstem bulrush and phragmites.

26 - Class VI wetland (20 ac.) NE¼ of Sec. 26, Twp. 19, Rge. 2W surveyed June '68. A sheetwater basin with a closed stand of sedge.

27 - Class VI wetland (35 ac.) S½ of Sec. 4, Twp. 20, Rge. 1W surveyed June '68. A temporary marsh with a closed stand of sedge.

28 - Class V wetland (45 ac.) SE¼ of Sec. 2, Twp. 20, Rge. 2W surveyed June '68. A temporary marsh with a closed stand of sedge.

29 - Class VI wetland (25 ac.) SW¼ of Sec. 2, Twp. 20, Rge. 2W surveyed June '68. A temporary marsh with a closed stand of sedge.

30 - Class VI wetland (20 ac.) SE¼ of Sec. 34, Twp. 19, Rge. 2W surveyed June '68. A temporary marsh with a closed stand of sedge and cattail.

31 - Class VI wetland (20 ac.) SE¼ of Sec. 31, Twp. 19, Rge. 2W surveyed June '68. A temporary marsh with a closed cover of sedge.

32 - Class IV wetland (100 ac.) SW¼ of Sec. 24, Twp. 19, Rge. 3W surveyed June '68. A permanent marsh with an interspersion of pools surrounded by a fringe of hardstem bulrush.

33 - Class IV wetland (55 ac.) NW¼ of Sec. 23, Twp. 19, Rge. 3W surveyed June '68. A semi-permanent marsh with an interspersion of pools surrounded by a hardstem bulrush fringe.

34 - Class VI wetland (85 ac.) Sec. 11, Twp.20, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of sedge.

35 - Class IV wetland (115 ac.) NW¼ of Sec. 10, Twp. 20, Rge. 3W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and sedge.

36 - Class III wetland (125 ac.) W½ of Sec. 7, Twp. 20, Rge. 2W surveyed June '68. A semi-permanent marsh surrounded by sedge meadow.

37 - Class IV wetland (115 ac.) Sec. 14, Twp. 20, Rge. 3W surveyed June '68. A permanent marsh with offshore interspersion of hardstem bulrush and cattail.

38 - Class IV wetland (80 ac.) Sec. 17, Twp. 20, Rge. 3W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

39 - Class IV wetland (260 ac.) SE¼ of Sec. 24, Twp. 20, Rge. 4W surveyed June '68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge meadow.

40 - Class IV wetland (25 ac.) N½ of Sec. 22, Twp. 20, Rge. 4W surveyed June '68. A permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge.

41 - Class IV wetland (60 ac.) S½ of Sec. 22, Twp. 20, Rge. 4W surveyed June '68. A permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge.

42 - Class IV wetland (70 ac.) N½ of Sec. 15, Twp. 20, Rge. 4W surveyed June '68. A permanent marsh with interspersed pools surrounded by a fringe of hardstem bulrush and sedge.

43 - Class IV wetland (175 ac.) SW¼ of Sec. 15, Twp. 20, Rge. 4W surveyed June '68. A permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge meadow.

44 - As 39 except (255 ac.) S½ of Sec. 25, Twp. 20, Rge. 4W.

45 - As 39 except (85 ac.) NW¼ of Sec. 19, Twp. 20, Rge. 3W.

46 - As 39 except (140 ac.) SW¼ of Sec. 30, Twp.20, Rge. 3W.

47 - As 38 except (50 ac.) S½ of Sec. 20, Twp. 20, Rge. 3W

48 - As 38 except (30 ac.) N½ of Sec. 20, Twp. 20, Rge. 3W.

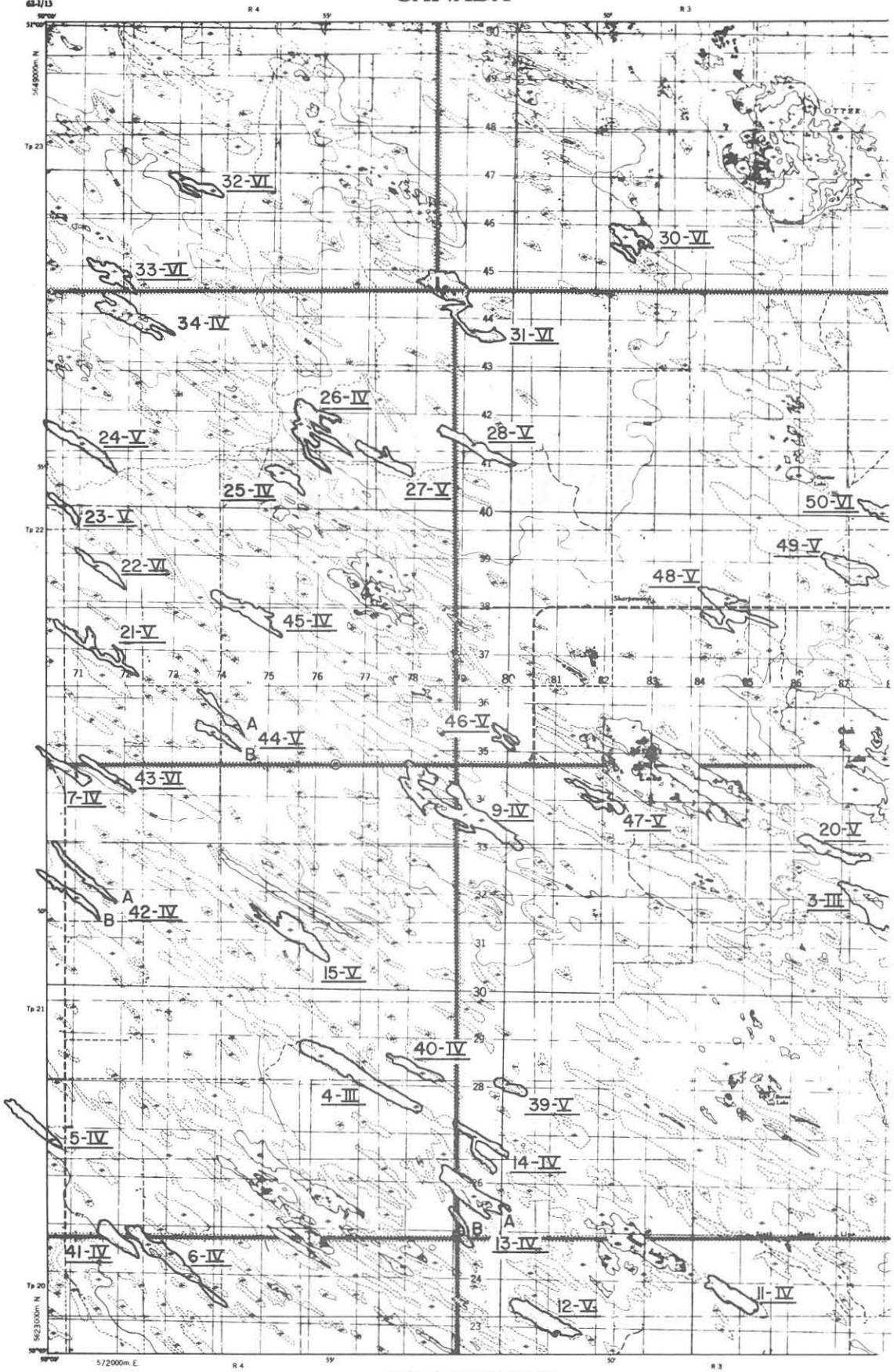
49 - Class IV wetland (190 ac.) Sec. 4, Twp. 19, Rge. 1W surveyed June '68.

POPLARFIELD

62 I / 13

PROVISIONAL MAP
63-1/13

CANADA



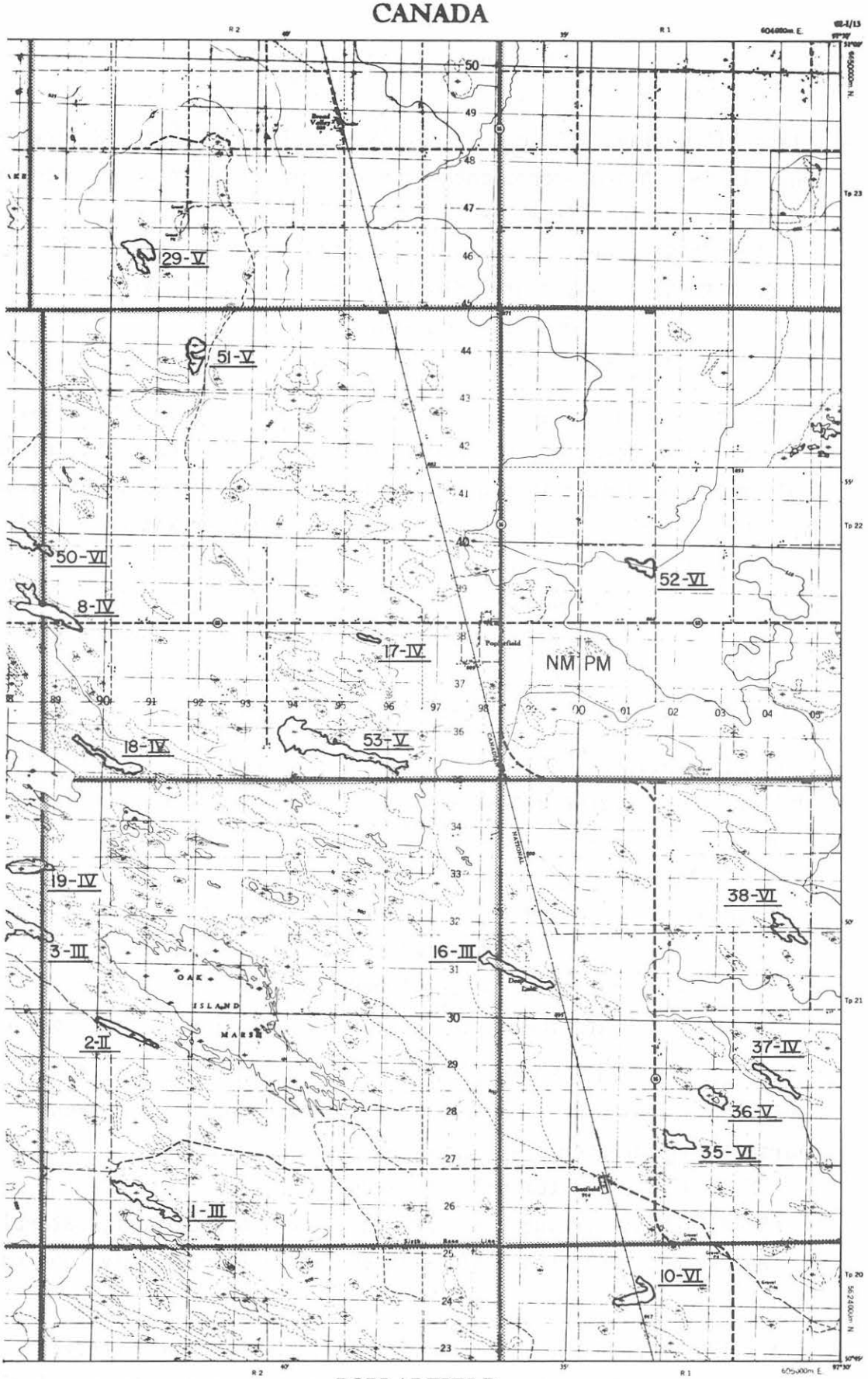
POPLARFIELD

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

WEST

CANADA



POPLARFIELD

MANITOBA

WEST OF PRINCIPAL MERIDIAN · OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class III wetland (95 ac.) S½ of Sec. 5, Twp. 21, Rge. 2W surveyed July 17/68. A semi-permanent marsh with offshore interspersion of emergents and a marsh fringe from 30-50' wide.

EMERGENTS: hardstem bulrush, cattail, whitetop, sedge.

SUBMERGENTS: abundant - floating-leaf pondweed, water lily, sago, bigsheath pondweed.

WATERFOWL: Observed - Mallard. A moderately good waterfowl area.

2 - Class II wetland (40 ac.) N½ of Sec.17, Twp. 21, Rge. 2W surveyed July 16/68. A permanent marsh with open water fringed mainly by hardstem bulrush. Emergent fringe development is 10-30' with a 10' drawdown zone in 1968, but this drawdown was inundated by higher water in 1969.

EMERGENTS: hardstem bulrush, whitetop, sedge.

SUBMERGENTS: abundant - bigsheath pondweed, water lily, water milfoil.

WATERFOWL: Observed - Gadwall, Blue-winged Teal, Green-winged Teal, Mallard, Pintail, Scaup. Definitely one of the best marshes in the Interlake. Presently posted by the owner.

3 - Class III wetland (180 ac.) S½ of SEc. 25, Twp. 21, Rge. 3W surveyed July 17/68. A permanent marsh with interspersed pools surrounded by a broad fringe of emergents.

EMERGENTS: sedge, hardstem bulrush, phragmites

SUBMERGENTS: frequent - bigsheath pondweed, floating-leaf pondweed, burreed, smartweed.

WATERFOWL: observed - Blue-winged Teal, Mallard. A moderately good waterfowl area but surprisingly low bird use observed.

4 - Class III wetland (180 ac.) S½ of Sec. 14, Twp. 21, Rge. 4W surveyed July 18/68. A permanent marsh with interspersed pools surrounded by a marsh fringe greater than 50' wide.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: frequent - smartweed, sago, bladderwort, waterplantain.

WATERFOWL: observed - Blue-winged Teal. A moderately good marsh for waterfowl production.

5 - Class IV wetland (60 ac.) Sec. 7, Twp. 21, Rge. 4W surveyed July 18/68. A semi-permanent marsh with interspersed pools and a fringe of 30-50'.

EMERGENTS: hardstem bulrush, three-square bulrush, sedge.
SUBMERGENTS: waterplantain, bladderwort, water milfoil.
WATERFOWL: No waterfowl observed.

6 - Class IV wetland (120 ac.) NW¼ of Sec. 33, Twp. 20, Rge. 4W surveyed July 18/68. A semi-permanent marsh with offshore interspersion of emergents and a fringe of 30-50' wide.
EMERGENTS: hardstem bulrush, three-square bulrush, sedge.
SUBMERGENTS: infrequent - bigsheath pondweed, bladderwort.
WATERFOWL: observed - Ruddy.

7 - Class IV wetland (40 ac.) SE¼ of Sec. 6, Twp. 22, Rge. 4W surveyed July 18/68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush, cattail and sedge.
SUBMERGENTS: frequent - floating-leaf pondweed, water lily.
WATERFOWL: no ducks observed.

8 - Class IV wetland (90 ac.) SW¼ of Sec. 18, Twp. 22, Rge. 4W surveyed July 24/68. A semi-permanent marsh with a closed stand of emergents.
EMERGENTS: hardstem bulrush, cattail, arrowhead, sedge.
SUBMERGENTS: frequent - floating-leaf pondweed, smartweed, water lily, water milfoil, bladderwort.
WATERFOWL: observed - Pintail.

9 - Class IV wetland (250 ac.) Sec. 36, Twp. 21, Rge. 4W surveyed July 23/68. A permanent marsh with interspersed pools.
EMERGENTS: hardstem bulrush, cattail, sedge.
SUBMERGENTS: frequent - sago, water lily, bladderwort, water milfoil.
WATERFOWL: no waterfowl observed.

10 - Class VI wetland (55 ac.) S½ of Sec. 32, Twp. 20, Rge. 1W surveyed August '68. A temporary marsh containing a closed stand of sedge.

11 - Class IV wetland (75 ac.) S½ of Sec. 34, Twp. 20, Rge. 3W surveyed August '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and containing floating-leaf pondweed and water lily submergents.

12 - Class V wetland (100 ac.) SE¼ of Sec. 31, Twp. 20, Rge. 3W surveyed August '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

13 - Class IV wetland (A= 130 ac.; B = 20 ac.) W½ of Sec. 6, Twp. 21, Rge. 3W surveyed August '68. Semi-permanent marshes with offshore interspersion of emergent hardstem bulrush and sedge.

14 - Class IV wetland (60 ac.) SW¼ of Sec. 7, Twp. 21, Rge. 3W surveyed August '68. A semi-permanent marsh with offshore interspersion of sedge.

15 - Class V wetland (100 ac.) NE¼ of Sec. 22, Twp. 21, Rge. 4W surveyed August '68. A seasonal marsh with open water fringed by sedge. Water lily occurs in the open water.

16 - Class III wetland (65 ac.) Sec. 19, Twp. 21, Rge. 1W surveyed August '68. A permanent marsh with offshore interspersion of hardstem bulrush, sedge, and cattail, and containing floating-leaf pondweed and water lily in the open water.

17 - Class IV wetland (10 ac.) NW¼ of Sec. 11, Twp. 22, Rge. 2W surveyed August '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge.

18 - Class IV wetland (100 ac.) SW¼ of Sec. 5, Twp. 22, Rge. 2W surveyed August '68. A semi-permenent marsh with offshore interspersion of emergent hardstem bulrush and sedge. Some floating-leaf pondweed and water lily in the open water.

WATERFOWL: Dabbling ducks observed

19 - Class IV wetland (50 ac.) NE¼ of Sec. 25, Twp. 21, Rge. 3W surveyed August '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

20 - Class V wetland (70 ac.) NE¼ of Sec. 26, Twp.21, Rge. 3W surveyed August '68. A seasonal marsh with a closed stand of sedge.

21 - Class V wetland (75 ac.) Sec. 8, Twp. 22, Rge. 4W surveyed August '68. A seasonal marsh with open water fringed by sedge meadow.

22 - Class VI wetland (45 ac.) Sec. 17, Twp. 22, Rge 4W. surveyed August '68. A temporary marsh with a closed stand of sedge.

23 - Class V wetland (20 ac.) SW¼ of Sec. 20, Twp. 22, Rge. 4W surveyed August '68. A temporary marsh with a closed stand of sedge.

24 - Class V wetland (80 ac.) SW¼ of Sec. 29, Twp. 22, Rge. 4W surveyed August '68. A seasonal marsh with a closed stand of sedge.

25 - Class IV wetland (50 ac.) NE¼ of Sec. 22, Twp. 22, Rge. 4W surveyed August '68. A seasonal marsh with interspersed pools surrounded by sedge meadow.

26 - Class IV wetland (125 ac.) SW¼ of Sec. 26, Twp. 22, Rge. 4W surveyed August '68. A seasonal marsh with interspersed pools surrounded by sedge meadow.

27 - Class V wetland (65 ac.) NW¼ of Sec. 24, Twp. 22, Rge. 4W surveyed August '68. A temporary marsh with a closed stand of sedge.

28 - Class V wetland (67 ac.) SW¼ of Sec. 30, Twp. 22, Rge. 3W surveyed August '68. A seasonal marsh with a closed cover of sedge.

29 - Class V wetland (60 ac.) N½ of Sec. 5, Twp. 23, Rge. 2W surveyed August '68. A temporary sedge meadow with no open water.

30 - Class VI wetland (70 ac.) N½ of Sec. 4, Twp. 23, Rge. 3W surveyed August '68. A temporary sedge meadow with no open water.

31 - Class VI wetland (160 ac.) SW¼ of Sec. 6, Twp. 23, Rge. 3W surveyed August '68. A temporary marsh with a closed stand of sedge.

32 - Class VI wetland (50 ac.) SE¼ of Sec. 9, Twp. 23, Rge. 4W surveyed August '68. A temporary marsh with a closed canopy of sedge.

33 - Class VI wetland (60 ac.) SE¼ of Sec. 5, Twp. 23, Rge. 4W surveyed August '68. A temporary marsh with a closed canopy of sedge.

34 - Class IV wetland (110 ac.) NE¼ of Sec. 32, Twp. 22, Rge. 4W surveyed August '68. A permanent marsh with interspersed pools surrounded by sedge and containing floating-leaf pondweed and water lily.

35 - Class VI wetland (35 ac.) W½ of Sec. 9, Twp. 21, Rge. 1W surveyed July '68. A temporary marsh with a closed stand of sedge.

36 - Class V wetland (35 ac.) NE¼ of Sec. 9, Twp. 21, Rge.1W surveyed July '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

37 - Class IV wetland (40 ac.) S½ of Sec. 15, Twp. 21, Rge.1W surveyed July '68. A semi-permanent marsh with a closed stand of hardstem bulrush cattail and sedge.

38 - Class VI wetland (50 ac.) S½ of Sec. 27, Twp. 21, Rge. 1W surveyed July '68. A temporary marsh with a closed stand of sedge.

39 - Class V wetland (35 ac.) N½ of Sec. 7, Twp. 21, Rge. 3W surveyed July '68. A temporary marsh with a closed stand of sedge.

40 - Class IV wetland (50 ac.) S½ of Sec. 13, Twp. 21, Rge. 4W surveyed July '68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and cattail.

41 - Class IV wetland (60 ac.) S½ of Sec. 5, Twp. 21, Rge. 4W surveyed July '68. A semi-permanent marsh with a closed stand of hardstem bulrush and sedge.

42 - Class IV wetland (A= 45 ac.; B= 55 ac.) W½ of Sec. 29, Twp. 21, Rge. 4W surveyed July '68. Semi-permanent marshes with interspersed pools surrounded by a fringe of hardstem bulrush and cattail.

43 - Class IV wetland (30 ac.) N½ of Sec. 32, Twp. 21, Rge.4W surveyed July '68. A seasonal marsh with a closed stand of sedge.

44 - Class V wetland (A= 30 ac.; B= 35 ac.) W½ of Sec. 3, Twp. 22, Rge. 4W surveyed July '68. Temporary marshes with closed stands of sedge.

45 - Class IV wetland (80 ac.) N½ of Sec. 10, Twp. 22, Rge. 4W surveyed July '68. A seasonal marsh or sedge meadow with no open water.

46 - Class V wetland (30 ac.) SE¼ of Sec. 6, Twp. 22, Rge. 3W surveyed July'68. A temporary marsh with a closed stand of sedge.

47 - Class V wetland (50 ac.) NE¼ of Sec. 32, Twp. 21, Rge. 3W surveyed July '68. A temporary marsh with a closed stand of sedge.

48 - Class V wetland (110 ac.) N½ of Sec. 10, Twp. 21, Rge. 3W surveyed July '68. A seasonal marsh with a closed stand of sedge.

49 - Class V wetland (105 ac.) W½ of Sec. 13, Twp. 22, Rge. 3W surveyed July '68 A temporary marsh or sedge meadow with a closed stand of sedge.

50 - Class VI wetland (80 ac.) SE¼ of Sec. 24, Twp. 22, Rge. 3W surveyed July '68 A grassy sheetwater basin.

51 - Class V wetland (40 ac.) Sec. 33, Twp. 22, Rge. 2W surveyed July '68. A temporary mrash with a closed stand of sedge.

52 - Class VI wetland (30 ac.) NE¼ of Sec. 17, Twp. 22, Rge. 1W surveyed July '68. A temporary marsh with a closed stand of sedge.

53 - Class V wetland (195 ac.) Sec. 3, Twp. 22, Rge. 2W surveyed July '68. A seasonal marsh with a closed stand of cattail and sedge.

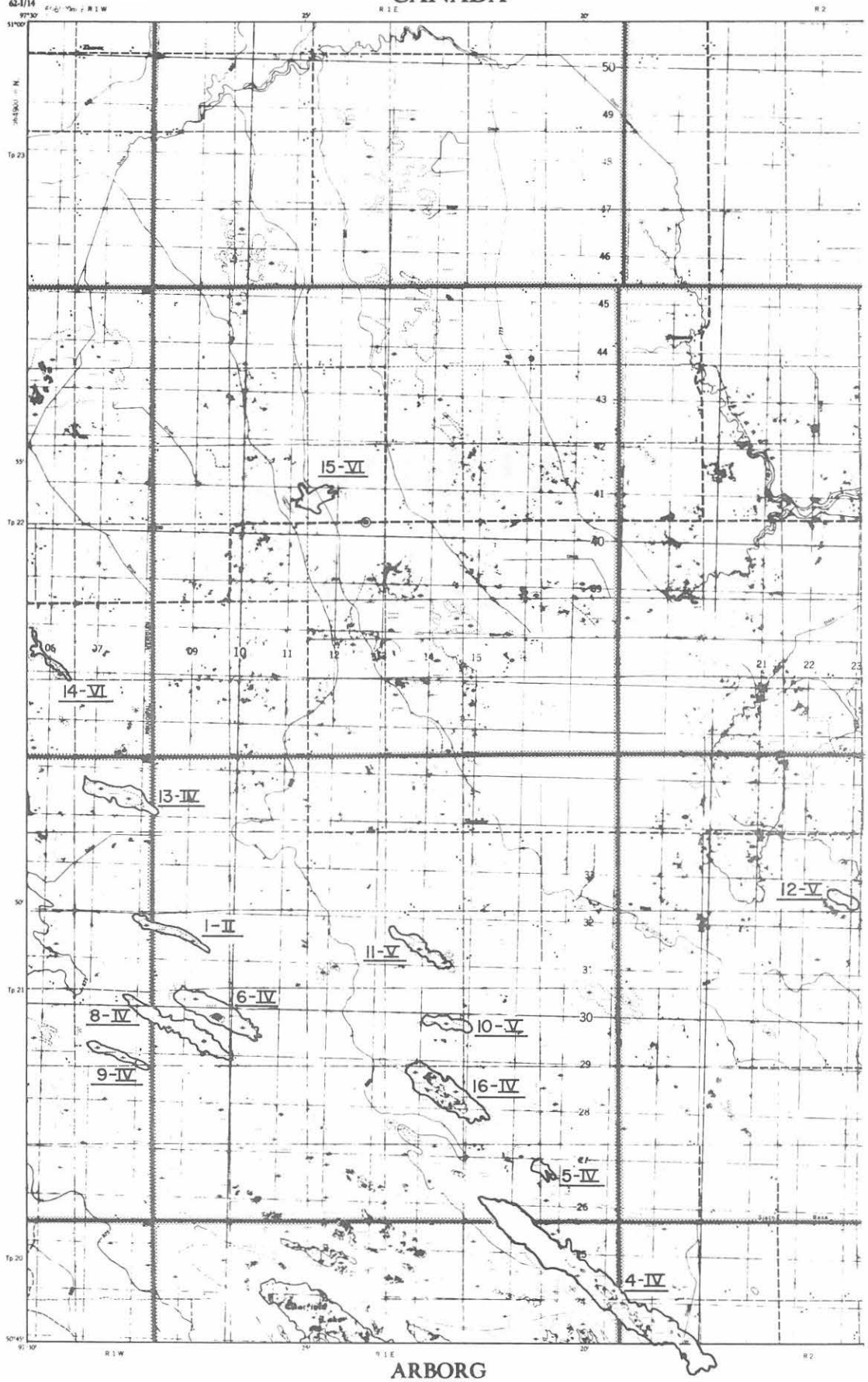
ARBORG

62 I / 14

PROVISIONAL MAP

62-1/14

CANADA

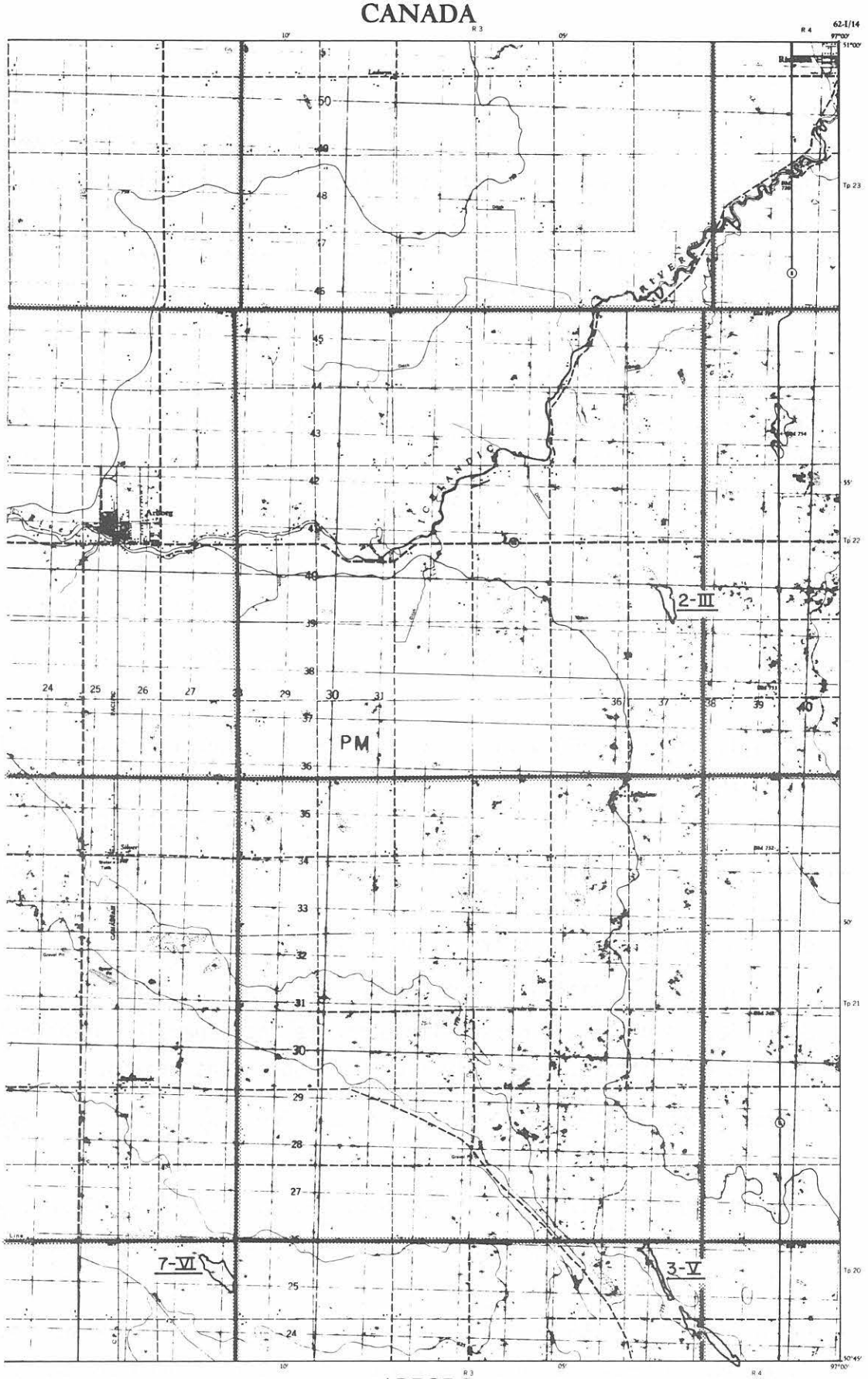


ARBORG

MANITOBA

WEST

CANADA



ARBORG
MANITOBA
EAST

1 - Class II wetland (75 ac.) NW¼ of Sec. 19, Twp.21, Rge. 1E surveyed July 2/68. A permanent marsh with offshore interspersion of emergents and a broad fringe 30-50' wide.

EMERGENTS: hardstem bulrush, cattail, horsetail, sedge.
SUBMERGENTS: abundant - sago, muskgrass, bladderwort, water milfoil.
WATERFOWL: observed - Mallard, Coot. A very good marsh.

2 - Class III wetland (30 ac.) S½ of Sec. 13, Twp. 22, Rge. 3E surveyed July 3/68. A permanent marsh with open water fringed by an emergent zone more than 50' wide.

EMERGENTS: cattail, whitetop, sedge.
SUBMERGENTS: frequent - water milfoil, bladderwort, water lily.
WATERFOWL: observed - No waterfowl observed but the marsh has moderately good capability for waterfowl production.

3 - Class V wetland (60 ac.) NW¼ of Sec. 36, Twp. 20, Rge. 4E surveyed July '68. A temporary marsh with a closed stand of sedge.

4 - Class IV wetland (300 ac.) Sec. 36, Twp. 20, Rge. 1E surveyed July '68. A permanent marsh with offshore interspersion of hardstem bulrush and sedge. Dabbler use observed. Limitations in nutrient supply.

5 - Class IV wetland (25 ac.) W½ of Sec. 1, Twp. 21, Rge. 1E surveyed July '68. A permanent marsh with offshore interspersion of hardstem bulrush and sedge. Dabbler use observed.

6 - Class IV wetland (175 ac.) NE¼ of Sec. 18, Twp.21, Rge. 1E surveyed July '68. A permanent marsh with offshore interspersion of hardstem bulrush and cattail. Severely limited submergent growth.

7 - Class VI wetland (55 ac.) E½ of Sec. 36, Twp. 20, Rge. 2E surveyed July '68. A grassy sheetwater basin.

8 - Class IV wetland (170 ac.) S½ of Sec. 18, Twp. 21, Rge. 1E surveyed July '68. A semi-permanent marsh with a closed stand of hardstem bulrush cattail and sedge.

9 - Class IV wetland (55 ac.) S½ of Sec. 13, Twp. 21, Rge. 1W surveyed July '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

10 - Class V wetland (55 ac.) E½ of Sec. 15, Twp. 21, Rge. 1E surveyed July '68. A temporary marsh with a closed stand of hardstem bulrush and sedge.

11 - Class V wetland (75 ac.) Sec. 22, Twp. 21, Rge. 1E surveyed July '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail

12 - Class V wetland (35 ac.) S½ of Sec. 28, Twp. 21, Rge. 2E surveyed July '68. A temporary marsh with a closed stand of sedge and cattail.

13 - Class IV wetland (120 ac.) Sec. 36, Twp. 21, Rge. 1W surveyed July '68. A semi-permanent marsh with a closed stand of sedge.

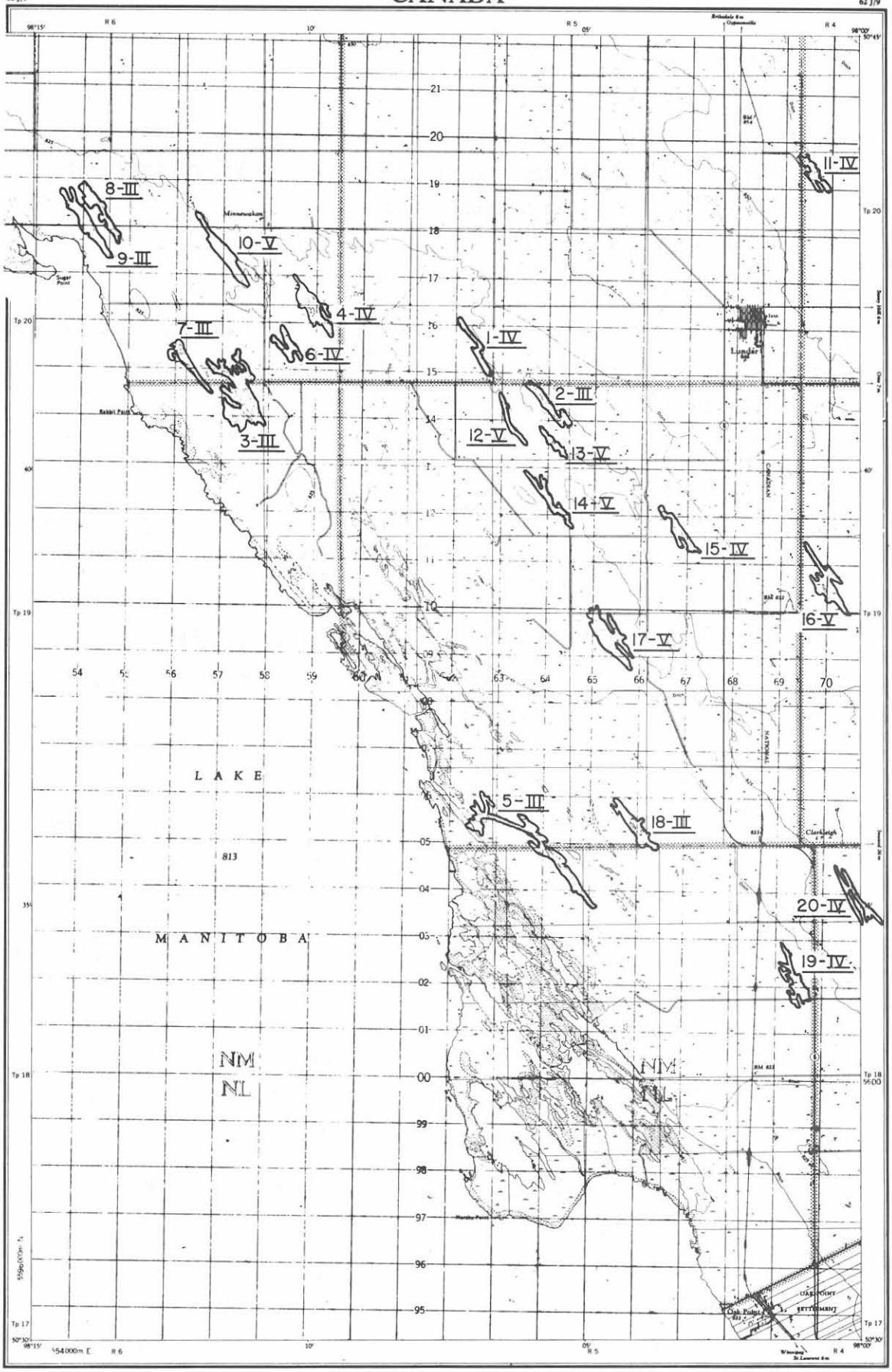
14 - Class VI wetland (30 ac.) Sec. 11, Twp. 22, Rge. 1W surveyed July '68. A grassy sheetwater basin.

15 - Class VI wetland (45 ac.) W½ of Sec. 21, Twp. 22, Rge. 1E surveyed July '68. A grassy sheetwater basin.

16 - Class IV wetland (200 ac.) Sec. 10, Twp. 21, Rge. 1E surveyed July '68. A permanent marsh.

LUNDAR

62 J/9



LUNDAR

MANITOBA

WEST OF PRINCIPAL MERIDIAN-OUEST DU MÉRIDIEN PRINCIPAL

1 - Class IV wetland (35 ac.) Sec. 5, Twp. 20, Rge. 5W surveyed June 12/68. A permanent marsh with open water fringed by 10-30' of emergents.

EMERGENTS: hardstem bulrush, sedge.
SUBMERGENTS: scarce to absent.
WATERFOWL: observed - Ruddy.

2 - Class III wetland (65 ac.) NE¼ of Sec. 33, Twp. 19, Rge. 5W surveyed June 12/68. A semi-permanent marsh with open water fringed by a marsh zone more than 50' wide.

EMERGENTS: hardstem bulrush, phragmites, sedge.
SUBMERGENTS: frequent - bladderwort, water milfoil.
WATERFOWL: observed - Blue-winged Teal. A moderately good marsh which could easily be improved by blocking a drainage ditch.

3 - Class III wetland (200 ac.) Sec. 35, Twp. 19, Rge. 6W surveyed June 12/68. A permanent marsh with open water fringed by more than 50' of emergents.

EMERGENTS: hardstem bulrush, phragmites, sedge, whitetop.
SUBMERGENTS: infrequent.
WATERFOWL: observed - Blue-winged Teal, Scaup, Redhead, Shoveller. This area is located partly within the Marshy Ponnt Refuge and has possible migratory use by geese.

4 - Class IV wetland (80 ac.) NE¼ of Sec. 1, Twp. 20, Rge. 6W surveyed June 12/68. A permanent marsh with offshore interspersion of emergents and a broad marsh fringe of more than 50' in width.

EMERGENTS: hardstem bulrush, phragmites, sedge.
SUBMERGENTS: scarce - water milfoil, bladderwort.
WATERFOWL: observed - Blue-winged Teal. Presently being surveyed for drainage.

5 - Class III wetland (125 ac.) NE¼ of Sec. 33, Twp. 18, Rge. 5W surveyed July '68. A permanent marsh with open water fringed by cattail and sedge. Some dabblers observed.

6 - Class IV wetland (40 ac.) Sec. 1, Twp. 20, Rge. 6W surveyed July '68. A seasonal marsh containing a closed stand of hardstem bulrush, cattail and sedge.

7 - Class III wetland (45 ac.) SW¼ of Sec. 2, Twp. 20, Rge. 6W surveyed July '68. A permanent marsh with open water fringed by hardstem bulrush, cattail, and sedge. A moderatly good marsh for waterfowl production.

8 - Class III wetland (50 ac.) SE¼ of Sec. 16, Twp. 20, Rge 6W surveyed July '68. A permanent marsh with offshore interspersion of sedge, hardstem bulrush and cattail.

9 - Class III wetland (70 ac.) S½ of Sec. 16, Twp. 20, Rge. 6W surveyed July '68. A permanent marsh with offshore interspersion of emergents such as sedge, hardstem bulrush and cattail.

10 - Class V wetland (70 ac.) Sec. 11, Twp. 20, Rge. 6W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

11 - Class IV wetland (65 ac.) NW¼ of Sec. 18, Twp. 20, Rge. 4W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush phragmites and sedge.

12 - Class V wetland (25 ac.) W½ of Sec. 33, Twp. 19, Rge. 5W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

13 - Class V wetland (25 ac.) SE¼ of Sec. 33, Twp. 19, Rge. 5W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

14 - Class V wetland (45 ac.) E½ of Sec. 28, Twp. 19, Rge. 5W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

15 - Class IV wetland (50 ac.) S½ of Sec. 26, Twp. 19, Rge. 5W surveyed June '68. A semi-permanent wetland.

16 - Class V wetland (85 ac.) W½ of Sec. 19, Twp. 19, Rge. 4W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

17 - Class V wetland (105 ac.) N½ of Sec. 15, Twp. 19, Rge. 5W surveyed June '68. A temporary marsh with a closed stand of hardstem bulrush and sedge.

18 - Class III wetland (45 ac.) SE¼ of Sec. 3, Twp. 19, Rge. 5W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and sedge.

19 - Class IV wetland (40 ac.) SE¼ of Sec. 25, Twp. 18, Rge. 5W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

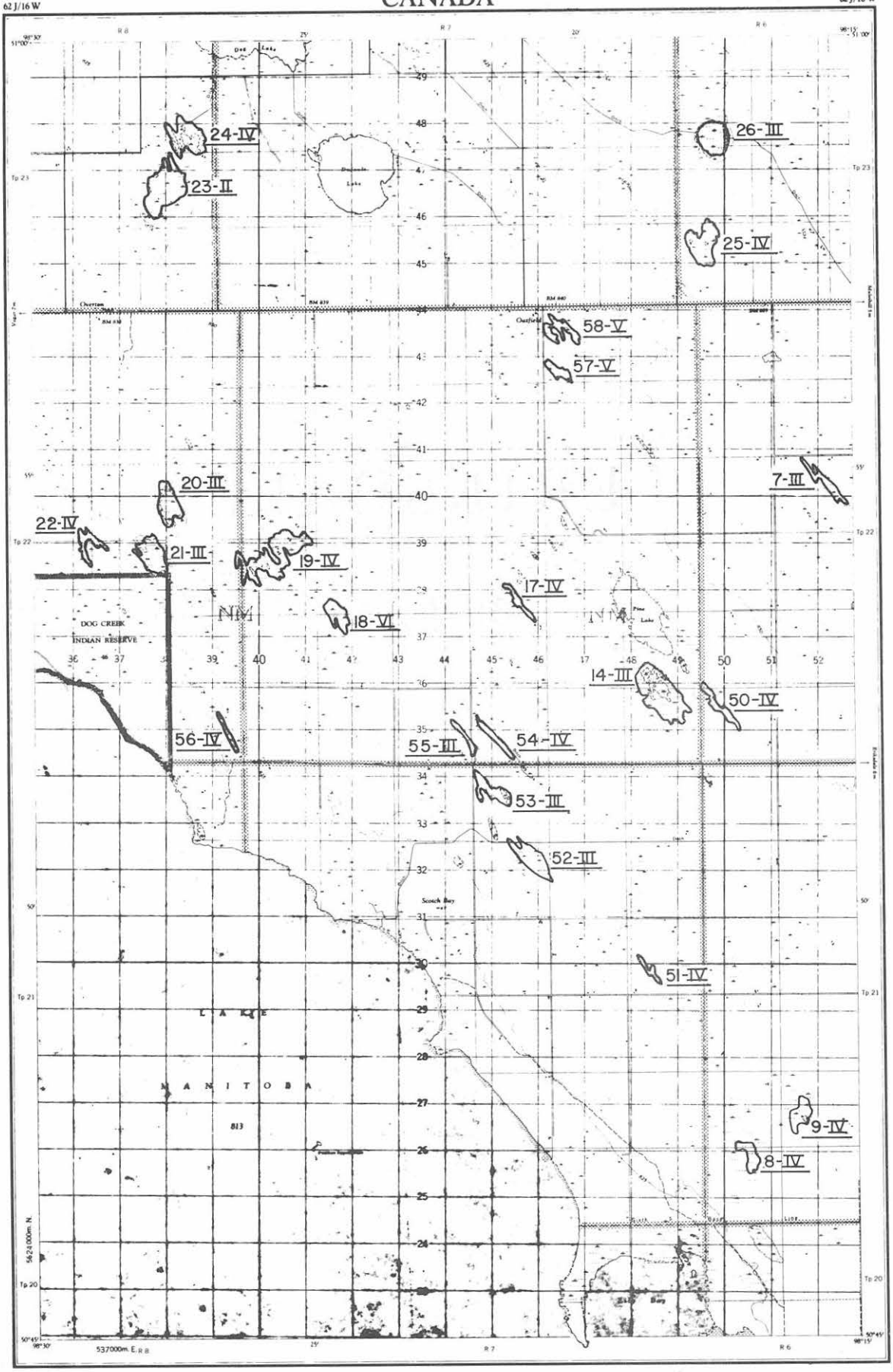
20 - Class IV wetland (35 ac.) SW¼ of Sec. 31, Twp. 18, Rge. 4W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

ERIKSDALE

62 J / 16

CANADA

62 J/16 W

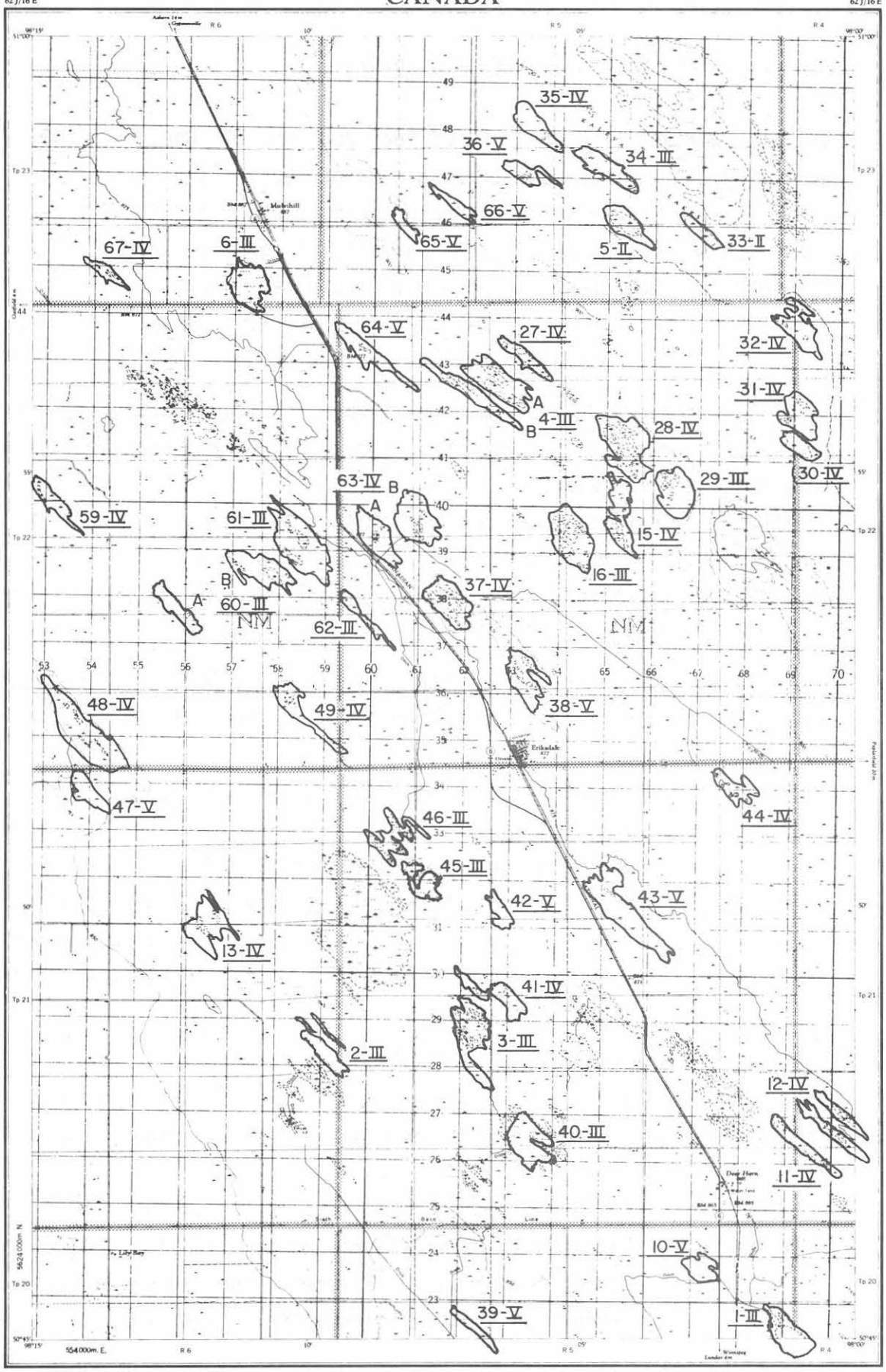


ERIKSDALE

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

WEST



ERIKSDALE

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class III wetland (160 ac.) E½ of Sec. 25, Twp. 20, Rge. 5W surveyed June 13/68. A semi-permanent marsh with offshore interspersion of emergents and a broad marsh fringe of more than 50' in width.

EMERGENTS: hardstem bulrush, cattail, phragmites, sedge.

SUBMERGENTS: frequent - bladderwort, water quillwort.

WATERFOWL: observed - Blue-winged Teal, Coot. This marsh is capable of moderately high production of waterfowl.

2 - Class III wetland (120 ac.) Sec. 13, Twp. 21, Rge. 6W surveyed June 13/68. A permanent marsh with interspersed pools with a peripheral band of emergents more than 50' wide.

EMERGENTS: hardstem bulrush, phragmites, sedge.

SUBMERGENTS: infrequent - water milfoil, bladderwort.

WATERFOWL: observed - Coot, Ruddy, Scaup. Moderately good capability.

3 - Class III wetland (215 ac.) E½ of Sec. 17, Twp. 21, Rge. 5W surveyed June 13/68. A permanent marsh with offshore interspersion of emergents and a very broad peripheral marsh zone. The basin soil varies from rocky areas to silty mud.

EMERGENTS: hardstem bulrush, phragmites, cattail, sedge.

SUBMERGENTS: scarce to absent in local sites with water smartweed, and water quillwort occurring.

WATERFOWL: observed - Coot, Scaup, Redhead, also a pair of giant Canada Geese with a brood of three. A valuable marsh limited somewhat by its rocky bottom and restricted growth of submerged plants.

4 - Class III wetland (4A= 195 ac.; 4B= 130 ac.) NW¼ of Sec. 28, Twp. 22, Rge. 5W and NE¼ of Sec. 29. Surveyed June 13/68. A permanent marsh with offshore interspersion of emergents and a marsh fringe from 10-30' wide.

EMERGENTS: hardstem bulrush, phragmites, cattail, sedge.

SUBMERGENTS: infrequent - bladderwort, water milfoil.

WATERFOWL: observed - Coot only. A marsh with good potential for waterfowl production, particularly divers.

5 - Class II wetland (110 ac.) NE¼ of Sec. 3, Twp. 23, Rge. 5W surveyed June 13/68. A semi-permanent marsh with offshore interspersion of

emergents and a marsh fringe greater than 50'.

EMERGENTS: hardstem bulrush, phragmites, cattail, sedge.

SUBMERGENTS: frequent - burreed, water smartweed, bladderwort, water milfoil. An excellent marsh with high capability for waterfowl production.

6 - Class III wetland (280 ac.) SW¼ of Sec. 1, Twp. 23, Rge. 6W surveyed June 13/68. A permanent marsh with offshore interspersion of emergents and more than 50' of marsh fringe development.

EMERGENTS: hardstem bulrush, sedge.

SUBMERGENTS: frequent - water smartweed, bladderwort, water milfoil. A valuable marsh with a rocky bottom and some restrictions in nutrients.

7 - Class III wetland (45 ac.) Sec. 20, Twp. 22, Rge. 6W surveyed June 14/68. A permanent marsh with open water surrounded by a broad emergent fringe 30-50' in width.

EMERGENTS: hardstem bulrush, cattail, sedge.

SUBMERGENTS: infrequent - water smartweed, bladderwort.

WATERFOWL: observed - Ruddy, Coot. Moderately good for duck production.

8 - Class IV wetland (45 ac.) NE¼ of Sec. 6, Twp. 21, Rge. 6W surveyed July '68. A seasonal marsh with interspersed pools surrounded by hardstem bulrush and sedge.

9 - Class VI wetland (70 ac.) N½ of Sec. 8, Twp. 21, Rge. 6W surveyed July '68. A temporary marsh with a closed stand of sedge.

10 - Class V wetland (80 ac.) E½ of Sec. 35, Twp. 20, Rge. 5W surveyed July '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

11 - Class IV wetland (105 ac.) NW¼ of Sec. 6, Twp. 21, Rge. 4W surveyed July '68. A semi-permanent marsh with interspersion of hardstem bulrush, cattail and sedge.

12 - Class IV wetland (A= 100 ac.; B= 65 ac.) Sec. 7, Twp. 21, Rge. 4W surveyed July '68. Semi-permanent marshes with interspersion of hardstem bulrush and cattail. Dabbler use noted.

13 - Class IV wetland (160 ac.) N½ of Sec. 23, Twp. 21, Rge. 6W surveyed July '68. A wet meadow with a small area of open water and marsh with offshore interspersion of hardstem bulrush and sedge. Submergents observed were floating-leaf pondweed and water lily.

14 - Class III wetland (185 ac.) N½ of Sec. 1, Twp. 22, Rge. 7W surveyed July '68. A permanent marsh with offshore interspersion of hardstem bulrush, sedge and cattail. A moderately good marsh.

15 - Class IV wetland (155 ac.) E½ of Sec. 22, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

16 - Class III wetland (220 ac.) SW¼ of Sec. 22, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

17 - Class IV wetland (25 ac.) S½ of Sec. 15, Twp. 22, Rge. 7W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge and containing some submergents such as floating-leaf pondweed and water lily.

18 - Class VI wetland (50 ac.) NW¼ of Sec. 8, Twp. 22, Rge. 7W surveyed July '68. A temporary marsh or sedge meadow.

19 - Class IV wetland (170 ac.) N½ of Sec. 18, Twp. 22, Rge. 7W surveyed July '68. A semi-permanent marsh with interspersed pools containing floating-leaf pondweed and surrounded by hardstem bulrush, cattail and sedge.

20 - Class III wetland (85 ac.) W½ of Sec. 24, Twp. 22, Rge. 8W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge. A moderately good waterfowl area.

21 - Class III wetland (95 ac.) NE¼ of Sec. 14, Twp. 22, Rge. 8W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and cattail.

22 - Class IV wetland (45 ac.) NE¼ of Sec. 15, Twp. 22, Rge. 8W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and a bordering sedge meadow.

23 - Class II wetland (150 ac.) Sec. 12, Twp. 23, Rge. 8W surveyed July '68. A permanent marsh with open water fringed by hardstem bulrush, cattail,

and sedge. Dabbler use observed. An excellent area for waterfowl production.

24 - Class IV wetland (110 ac.) SE¼ of Sec. 13, Twp. 23, Rge. 8W surveyed July '68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge.

25 - Class IV wetland (90 ac.) W½ of Sec. 6, Twp. 23, Rge. 6W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

26 - Class III wetland (90 ac.) S½ of Sec. 18, Twp. 23, Rge. 6W surveyed July '68. A permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge. Dabbler use observed and production capability is moderately high. Drained.

27 - Class IV wetland (75 ac.) S½ of Sec. 33, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge and containing such submergents as floating-leaf pondweed and water lily.

28 - Class IV wetland (260 ac.) SE¼ of Sec. 27, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge.

29 - Class III wetland (160 ac.) Sec. 23, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

30 - Class IV wetland (65 ac.) SW¼ of Sec. 30, Twp. 22, Rge. 4W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and cattail, and containing floating-leaf pondweed and water lily.

31 - Class IV wetland (140 ac.) NW¼ of Sec. 30, Twp. 22, Rge. 4W surveyed July '68. A seasonal marsh with interspersed pools surrounded by sedge meadow.

32 - Class IV wetland (140 ac.) NE¼ of Sec. 36, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with interspersed pools surrounded by sedge meadow and containing floating-leaf pondweed and water lily.

33 - Class II wetland (55 ac.) NE¼ of Sec. 2, Twp. 23, Rge. 5W surveyed July '68. A permanent marsh with open water containing floating-leaf pondweed and water lily and fringed by hardstem bulrush, sedge and cattail. A marsh with high capability.

34 - Class III wetland (120 ac.) N½ of Sec. 10, Twp. 23, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and cattail. Open water plants are floating-leaf pondweed and water lily. Good waterfowl production capability.

35 - Class IV wetland (110 ac.) SE¼ of Sec. 16, Twp. 23, Rge. 5W surveyed July '68. A semi-permanent marsh with interspersion of hardstem bulrush and cattail. Open water contains floating-leaf pondweed and water lily.

36 - Class V wetland (75 ac.) E½ of Sec. 9, Twp. 23, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of sedges.

37 - Class IV wetland (160 ac.) S½ of Sec. 17, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

38 - Class V wetland (145 ac.) S½ of Sec. 9, Twp. 22, Rge. 5W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

39 - Class V wetland (55 ac.) NE¼ of Sec. 29, Twp. 20, Rge. 5W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

40 - Class III wetland (160 ac.) S½ of Sec. 9, Twp. 21, Rge. 5W surveyed June '68. A permanent marsh with open water fringed by hardstem bulrush and sedge. Dabbler use noted. A moderately good wetland.

41 - Class IV wetland (115 ac.) SW¼ of Sec. 21, Twp. 21, Rge. 5W surveyed June '68. A semi-permanent marsh with open water fringed by hardstem bulrush and sedge.

42 - Class V wetland (50 ac.) SW¼ of Sec. 28, Twp. 21, Rge. 5W surveyed June '68. A temporary marsh with a closed stand of hardstem bulrush and sedge meadow.

43 - Class V wetland (270 ac.) S½ of Sec. 27, Twp. 21, Rge. 5W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush, cattail and sedge.

44 - Class IV wetland (90 ac.) W½ of Sec. 36, Twp. 21, Rge. 5W surveyed June '68. A semi-permanent marsh with interspersed pools containing floating-leaf pondweed and surrounded by hardstem bulrush, phragmites and cattail.

45 - Class III wetland (110 ac.) W½ of Sec. 29, Twp. 21, Rge. 5W surveyed June '68. A permanent marsh with offshore interspersion of emergents.

46 - Class III wetland (140 ac.) SE¼ of Sec. 31, Twp. 21, Rge. 5W surveyed June '68. A permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge.

47 - Class V wetland (90 ac.) E½ of Sec. 33, Twp. 21, Rge. 6W surveyed June '68. A temporary marsh with a closed stand of hardstem bulrush and sedge.

48 - Class IV wetland (315 ac.) Sec. 4, Twp. 22, Rge. 6W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

49 - Class IV wetland (115 ac.) Sec. 1, Twp. 22, Rge. 6W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and sedge.

50 - Class IV wetland (55 ac.) NW¼ of Sec. 6, Twp. 22, Rge. 6W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush, phragmites and sedge.

51 - Class IV wetland (20 ac.) SW¼ of Sec. 24, Twp. 21, Rge. 7W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and cattail.

52 - Class III wetland (95 ac.) NE¼ of Sec. 27, Twp. 21, Rge. 7W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and phragmites. Presently being drained.

53 - Class III wetland (50 ac.) NW¼ of Sec. 34, Twp. 21, Rge. 7W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge. Presently being drained.

54 - Class IV wetland (25 ac.) S½ of Sec. 3, Twp. 22, Rge 7W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and sedge. This potential can be realized if the drainage is blocked.

55 - Class III wetland (25 ac.) SE¼ of Sec. 4, Twp. 22, Rge. 7W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and phragmites. Presently being drained.

56 - Class III wetland (25 ac.) E½ of Sec. 1, Twp. 22, Rge. 8W surveyed June '68. A semi-permanent marsh with a closed stand of hardstem bulrush and phragmites.

57 - Class V wetland (30 ac.) SW¼ of Sec. 35, Twp. 22, Rge. 7W surveyed June '68. A seasonal marsh with a closed stand of sedge.

58 - Class V wetland (45 ac.) NW¼ of Sec. 35, Twp. 22, Rge. 7W surveyed June '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

59 - Class IV wetland (80 ac.) Sec. 21, Twp. 22, Rge. 6W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

60 - Class III wetland (60A= 85 ac.; SE¼ of Sec. 15, Twp. 22, Rge. 6W and 60B= 160 ac. NE¼ of Sec. 14, Twp. 22, Rge. 6W) surveyed June '68. Semi-permanent marshes with a closed stand of hardstem bulrush and sedge.

61 - Class III wetland (280 ac.) N½ of Sec. 13, Twp. 22, Rge. 6W surveyed June '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and sedge.

62 - Class III wetland (55 ac.) N½ of Sec. 7, Twp. 22, Rge. 5W surveyed June '68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and sedge.

63 - Class IV wetlands (63A= 135 ac.; 63B= 195 ac.) S½ of Sec. 19, Twp. 22, Rge. 5W. surveyed June '68. Semi-permanent marshes with a closed stand of hardstem bulrush, phragmites and sedge.

64 - Class V wetland (125 ac.) Sec. 31, Twp. 22, Rge. 5W surveyed June '68. A temporary marsh with a closed stand of hardstem bulrush and sedge meadow.

65 - Class V wetland (35 ac.) NW¼ of Sec. 5, Twp. 23, Rge. 5W surveyed June '68. A temporary marsh with a closed stand of sedge meadow.

66 - Class V wetland (50 ac.) SE¼ of Sec. 8, Twp. 23, Rge. 5W surveyed June '68. A temporary marsh with a closed stand of sedge.

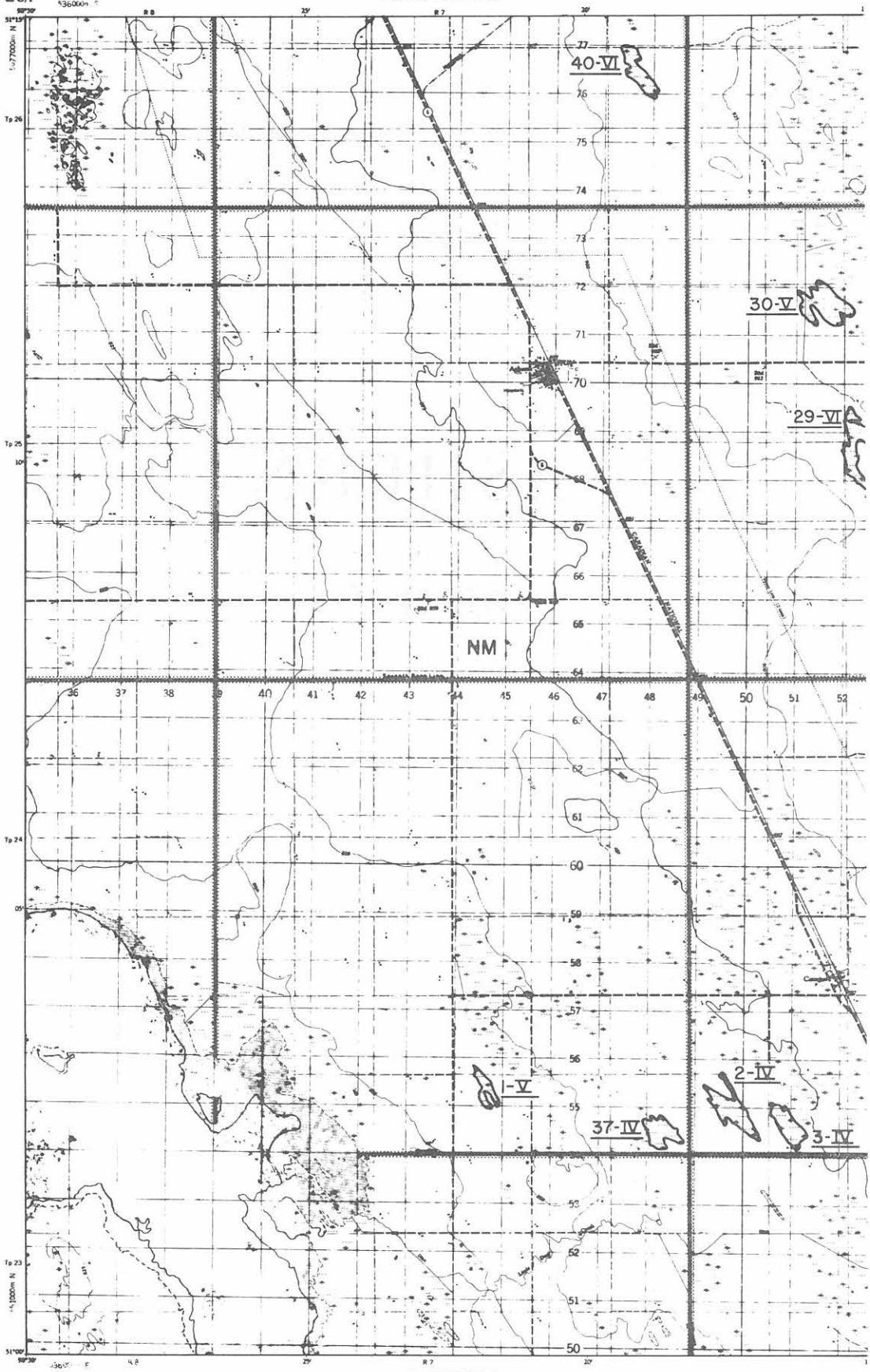
67 - Class IV wetland (50 ac.) S½ of Sec. 3, Twp. 23, Rge. 6W surveyed June '68. A semi-permanent marsh with offshore interspersion of hard-stem bulrush and sedge.

ASHERN

62 O / 1

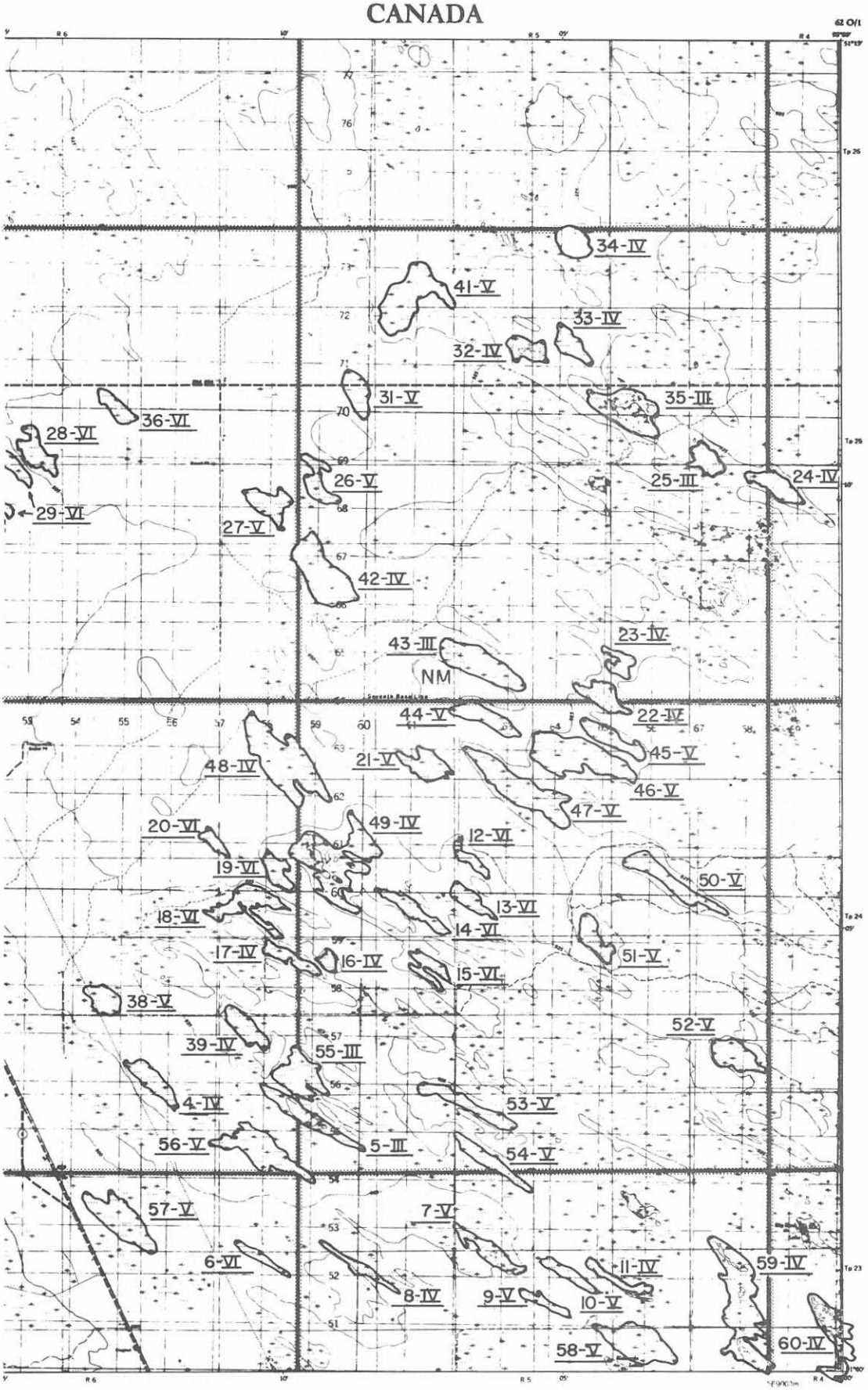
PROVISIONAL MAP
62 O/1

CANADA



ASHERN
MANITOBA
WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL
WEST

CANADA



ASHERN

MANITOBA

WEST OF PRINCIPAL MERIDIAN · OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class V wetland (25 ac.) N½ of Sec. 3, Twp. 24, Rge. 7W surveyed Sept 7/68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

2 - Class IV wetland (115 ac.) Sec. 6, Twp. 24, Rge. 6W surveyed Sept. 7/68. A semi-permanent marsh with interspersed pools surrounded by sedge. Dabbler use noted.

3 - Class IV wetland (50 ac.) W½ of Sec. 5, Twp. 24, Rge. 6W surveyed Sept. 7/68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush, cattail and sedge with frequently occurring submergents.

4 - Class IV wetland (85 ac.) SE¼ of Sec. 11, Twp. 24, Rge. 6W surveyed Sept. 7/68. A semi-permanent marsh with offshore interspersion of hardstem bulrush. Open water contains floating-leaf pondweed and water lily.

5 - Class III wetland (130 ac.) NW¼ of Sec. 6, Twp. 24, Rge. 5W surveyed Sept. 7/68. A permanent marsh with interspersed pools surrounded by hardstem bulrush, cattail and sedge and containing water lily. A moderately productive marsh.

6 - Class VI wetland (30 ac.) N½ of Sec. 25, Twp. 23, Rge. 6W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

7 - Class V wetland (85 ac.) S½ of Sec. 33, Twp. 23, Rge. 5W surveyed Sept. 7/68. A semi-permanent marsh with open water containing water lily and fringed by cattail and sedge meadow.

8 - Class IV wetland (55 ac.) NE¼ of Sec. 30, Twp. 23, Rge. 5W surveyed Sept. 7/68. A semi-permanent marsh with offshore interspersion of hardstem bulrush, sedge and cattail.

9 - Class V wetland (35 ac.) SW¼ of Sec. 27, Twp. 23, Rge. 5W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

10 - Class V wetland (75 ac.) N½ of Sec. 27, Twp. 23, Rge. 5W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

11 - Class IV wetland (45 ac.) W½ of Sec. 26, Twp. 23, Rge. 5W surveyed Sept. 7/68. A permanent marsh with interspersed pools containing water lily and hardstem bulrush.

12 - Class VI wetland (50ac.) NW¼ of Sec. 21, Twp. 24, Rge. 5W surveyed Sept. 7/68. A temporary wetland with a closed stand of sedge meadow.

13 - Class VI wetland (80 ac.) W½ of Sec. 21, Twp. 24, Rge. 5W surveyed Sept. 7/68. A temporary wetland or sedge meadow.

14 - Class VI wetland (70 ac.) Sec. 20, Twp. 24, Rge. 5W surveyed Sept. 7/68. A seasonal marsh or sedge meadow.

15 - Class VI wetland (60 ac.) E½ of Sec. 17, Twp. 24, Rge. 5W surveyed Sept. 7/68. A temporary marsh or sedge meadow.

16 - Class IV wetland (25 ac.) W½ of Sec. 18, Twp. 24, Rge. 5W surveyed Sept. 7/68. A seasonal marsh or sedge meadow with no open pools.

17 - Class IV wetland (55 ac.) NE¼ of Sec. 13, Twp. 24, Rge. 6W surveyed Sept. 7/68. A seasonal sedge meadow with closed stands of emergents.

18 - Class VI wetland (130 ac.) S½ of Sec. 24, Twp. 24, Rge. 6W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

19 - Class VI wetland (55 ac.) NE¼ of Sec. 24, Twp. 24, Rge. 6W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

20 - Class VI wetland (35 ac.) SE¼ of Sec. 26, Twp. 24, Rge. 6W surveyed Sept. 7/68. A seasonal marsh or sedge meadow.

21 - Class V wetland (110 ac.) S½ of Sec. 32, Twp. 24, Rge 5W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

22 - Class IV wetland (85 ac.) SE¼ of Sec.3, Twp. 25, Rge. 5W surveyed Sept. 7/68. A seasonal marsh with offshore interspersion of emergents sedge and hardstem bulrush.

23 - Class IV wetland (55 ac.) W½ of Sec. 2, Twp. 25, Rge. 5W surveyed Sept. 7/68. A seasonal marsh with offshore interspersion of emergent sedge and hardstem bulrush.

24 - Class IV wetland (80 ac.) W½ of Sec. 18, Twp. 25, Rge. 4W surveyed Sept. 7/68. A semi-permanent marsh with offshore interspersion of hardstem bulrush and phragmites and containing water lily.

25 - Class III wetland (80 ac.) SW¼ of Sec. 24, Twp. 25, Rge. 5W surveyed Sept. 7/68. A permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge and frequent submergent vegetation. A moderately good waterfowl production area.

26 - Class V wetland (70 ac.) NW¼ of Sec. 18, Twp. 25, Rge. 5W surveyed Sept. 7/68. A seasonal sedge meadow.

27 - Class V wetland (120 ac.) Sec. 13, Twp. 25, Rge. 6W surveyed Sept. 7/68. A seasonal sedge meadow.

28 - Class VI wetland (75 ac.) SE¼ of Sec. 21, Twp. 25, Rge. 6W surveyed Sept. 7/68. A seasonal marsh or a closed stand - sedge meadow.

29 - Class VI wetland (85 ac.) SW¼ of Sec. 21, Twp. 25, Rge. 6W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

30 - Class V wetland (110 ac.) NE¼ of Sec. 29, Twp. 25, Rge. 6W surveyed Sept. 7/68. A seasonal wetland or a sedge covered meadow.

31 - Class V wetland (90 ac.) NE¼ of Sec. 19, Twp. 25, Rge. 5W surveyed Sept. 7/68. A seasonal marsh with a closed stand of sedge.

32 - Class IV wetland (80 ac.) E½ of Sec. 28, Twp. 25, Rge. 5W surveyed Sept. 7/68. A semi-permanent marsh with interspersed pools containing water lily and floating-leaf pondweed and surrounded by hardstem bulrush, cattail and sedge.

33 - Class IV wetland (120 ac.) Sec. 27, Twp. 25, Rge. 5W surveyed Sept. 7/68. A semi-permanent marsh with scarce submergents and open water pools fringed by sedge.

34 - Class IV wetland (95 ac.) N½ of Sec. 34, Twp. 25, Rge. 5W surveyed Sept. 7/68. Permanent open water with offshore interspersion of hardstem bulrush and sedge. Submergents include water lily and floating-leaf pondweed, but these plants are scarce.

35 - Class III wetland (150 ac.) Sec. 23, Twp. 25, Rge. 5W surveyed Sept. 7/68. A permanent marsh, open water with offshore interspersion of bulrush and a sedge meadow fringe.

36 - Class VI wetland (40 ac.) N½ of Sec. 22, Twp. 25, Rge. 6W surveyed July '68. A sedge and willow covered meadow.

37 - Class IV wetland (45 ac.) S½ of Sec. 1, Twp. 24, Rge. 7W surveyed July '68. A seasonal marsh with a closed stand of hardstem bulrush and cattail.

38 - Class V wetland (75 ac.) S½ of Sec. 15, Twp. 24, Rge. 6W surveyed July '68. A temporary marsh with a closed stand of sedge.

39 - Class IV wetland (90 ac.) N½ of Sec. 12, Twp. 24, Rge. 6W surveyed July '68. A seasonal marsh with a closed stand of hardstem bulrush and sedge.

40 - Class VI wetland (65 ac.) N½ of Sec. 12, Twp. 26, Rge. 7W surveyed July '68. A wet grassy meadow.

41 - Class V wetland (250 ac.) S½ of Sec. 32, Twp. 25, Rge. 5W surveyed Sept. 7/68. A seasonally flooded sedge meadow.

42 - Class IV wetland (200 ac.) Sec. 7, Twp. 25, Rge. 5W surveyed Sept. 7/68. A seasonal marsh with a closed stand of hardstem bulrush and sedge, and surrounded by a sedge meadow.

43 - Class III wetland (190 ac.) Sec. 4, Twp. 25, Rge. 5W surveyed Sept./68 A semi-permanent marsh with interspersed pools. Emergents are phragmites, bulrush and sedges. Moderately good potential.

44 - Class V wetland (100 ac.) N½ of Sec. 33, Twp. 24, Rge. 5W surveyed Sept./68. A sedge meadow - lacking open pools.

45 - Class V wetland (120 ac.) W½ of Sec. 35, Twp. 24, Rge. 5W surveyed Sept./68 A meadow with a closed stand of sedge.

46 - Class V wetland (290 ac.) S½ of Sec. 34, Twp. 24, Rge. 5W surveyed Sept./68. A seasonally flooded sedge meadow.

47 - Class V wetland (230 ac.) NE¼ of Sec. 28, Twp. 24, Rge. 5W surveyed Sept./68. A seasonally flooded sedge meadow.

48 - Class IV wetland (270 ac.) Sec. 36, Twp. 24, Rge. 6W surveyed Sept./68. A sedge meadow with semi-permanent pools.

49 - Class IV wetland (350 ac.) Sec. 19, Twp. 24, Rge. 5W surveyed Sept./68 A permanent marsh with interspersed pools containing floating-leaf pondweed and water lily, and fringed by hardstem bulrush, cattail and sedge. Moderate potential especially for divers.

50 - Class V wetland (150 ac.) N½ of Sec. 23, Twp. 24, Rge. 5W surveyed Sept./68. A seasonal sedge meadow. Low potential.

51 - Class V wetland (95 ac.) NE¼ of Sec. 15, Twp. 24, Rge. 5W surveyed Sept./68. A seasonal sedge meadow.

52 - Class V wetland (135 ac.) Sec. 12, Twp. 24, Rge. 5W surveyed Sept. /68 A seasonal sedge meadow.

53 - Class V wetland (110 ac.) N½ of Sec. 4, Twp. 24, Rge. 5W surveyed Sept./68. A sedge meadow.

54 - Class V wetland (90 ac.) S½ of Sec. 4, Twp. 24, Rge. 5W surveyed Sept./68 A closed stand sedge meadow.

55 - Class III wetland (100 ac.) W½ of Sec. 7, Twp. 24, Rge. 5W surveyed Sept. /68. A permanent marsh with a surrounding sedge meadow. Moderately good capability.

56 - Class V wetland (160 ac.) S½ of Sec. 1, Twp. 24, Rge. 6W surveyed Sept./68. A seasonal wetland with a closed stand of sedge.

57 - Class V wetland (150 ac.) Sec. 34, Twp. 23, Rge. 6W surveyed Sept./68. A seasonal sedge meadow.

58 - Class V wetland (180 ac.) N½ of Sec. 23, Twp. 23, Rge. 5W surveyed Sept./68. A seasonal sedge meadow.

59 - Class IV wetland (340 ac.) E½ of Sec. 25, Twp. 23, Rge. 5W surveyed Sept./68. A large sedge meadow with interspersed permanent pools surrounded by a fringe of emergents. Moderate capability.

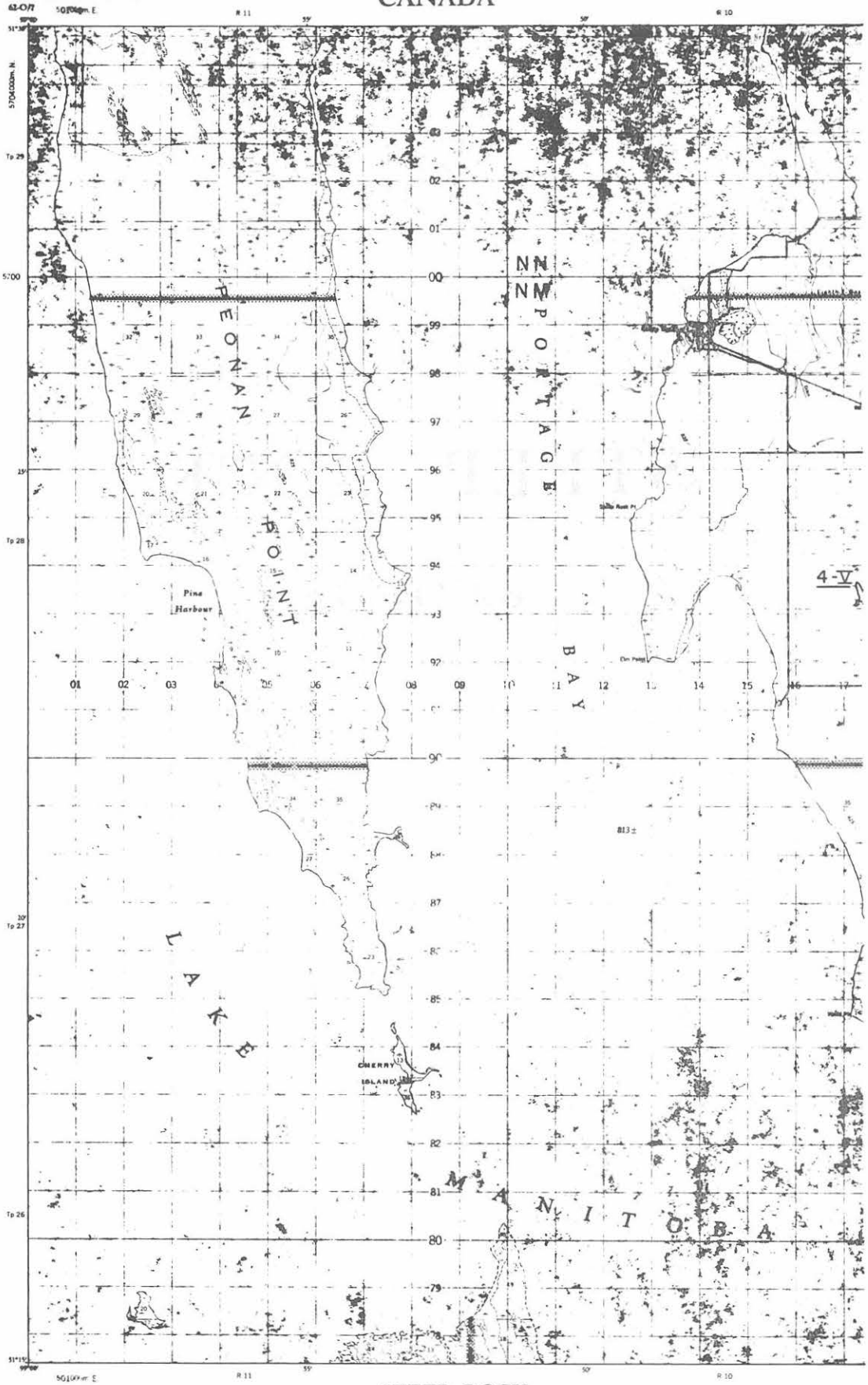
60 - Class IV wetland (190 ac.) SE¼ of Sec. 30, Twp. 23, Rge. 4W surveyed Sept./68. A sedge meadow with interspersed pools surrounded by a fringe for emergents. Moderate capability.

STEEP ROCK

62 O/7

PROVISIONAL MAP

CANADA



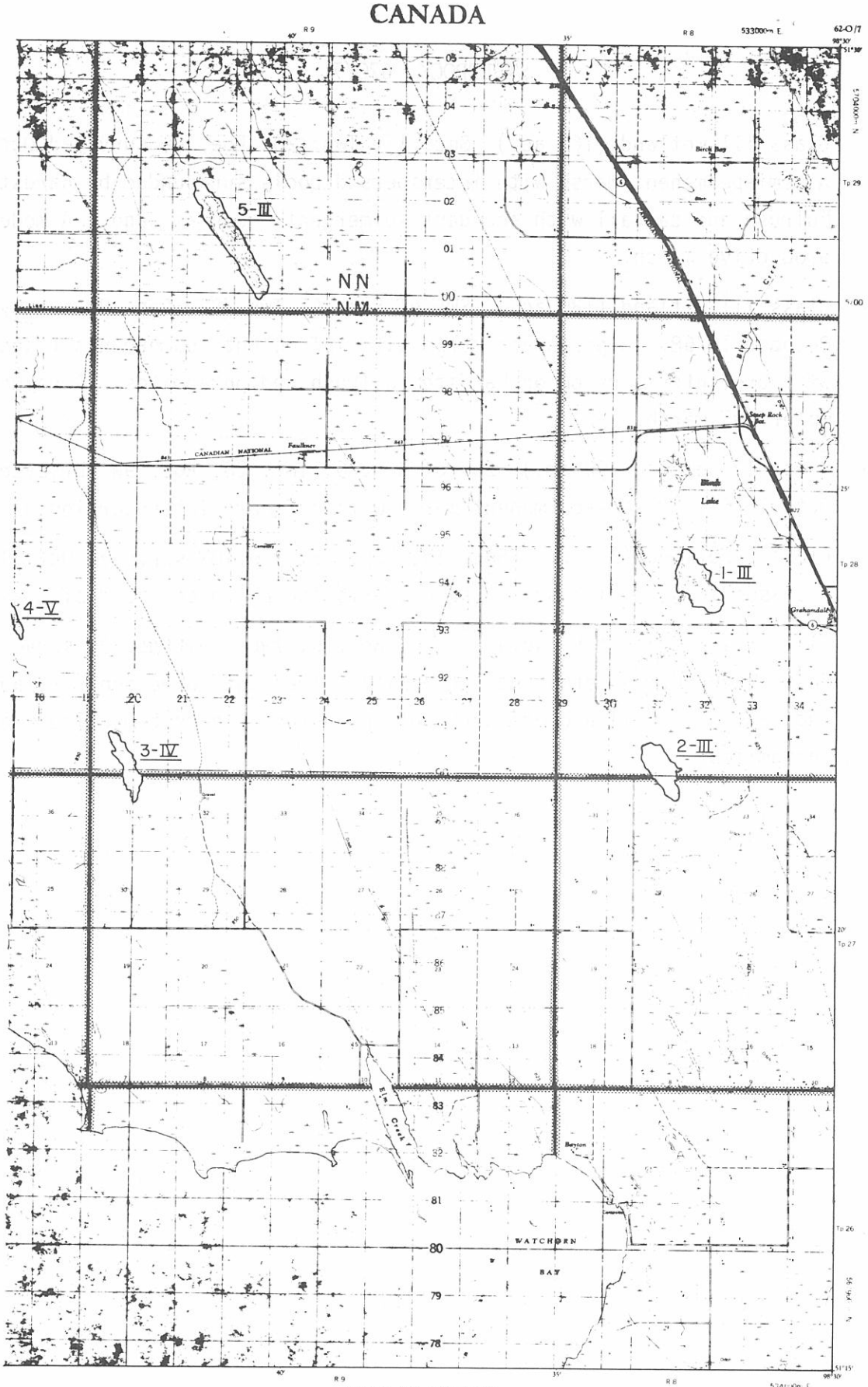
STEEP ROCK

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

WEST

CANADA



STEEP ROCK

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class III wetland (165 ac.) Sec. 17, Twp. 28, Rge. 8W surveyed Oct. 16/68. A semi-permanent marsh with interspersed pools surrounded by hardstem bulrush and cattail with abundant submergents such as sago. A moderately productive marsh.

2 - Class III wetland (130 ac.) SW¼ of Sec. 5, Twp. 28, Rge. 8W surveyed October 16/68. A permanent marsh with infrequent submergents (sago) and offshore interspersion of hardstem bulrush and phragmites. A valuable waterfowl marsh.

3 - Class IV wetland (90 ac.) SW¼ of Sec. 6, Twp. 28, Rge. 9W surveyed Oct. 16/68. A semi-permanent marsh with offshore interspersion of sedge.

4 - Class V wetland (25 ac.) Sec. 13, Twp. 28, Rge.10W surveyed Oct. 16/68. A seasonal marsh with scarce submergents and a closed stand of grasses.

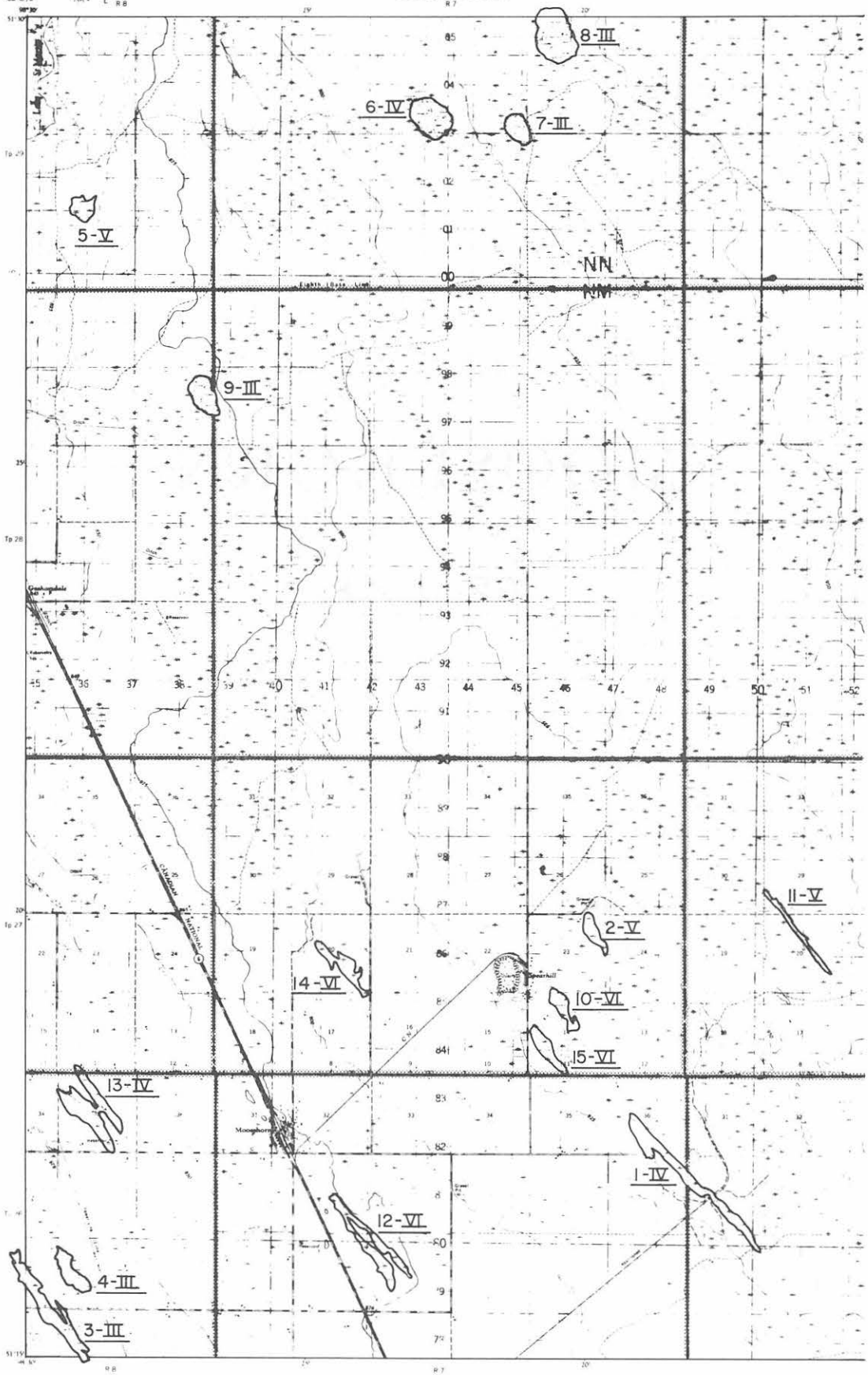
5 - Class III wetland (260 ac.) NE¼ of Sec. 5, Twp. 29, Rge. 9W surveyed October 16/68. A permanent marsh with infrequent submergents (bladderwort and water milfoil) and offshore interspersion of hardstem bulrush and phragmites.

MOOSEHORN

62 O/8

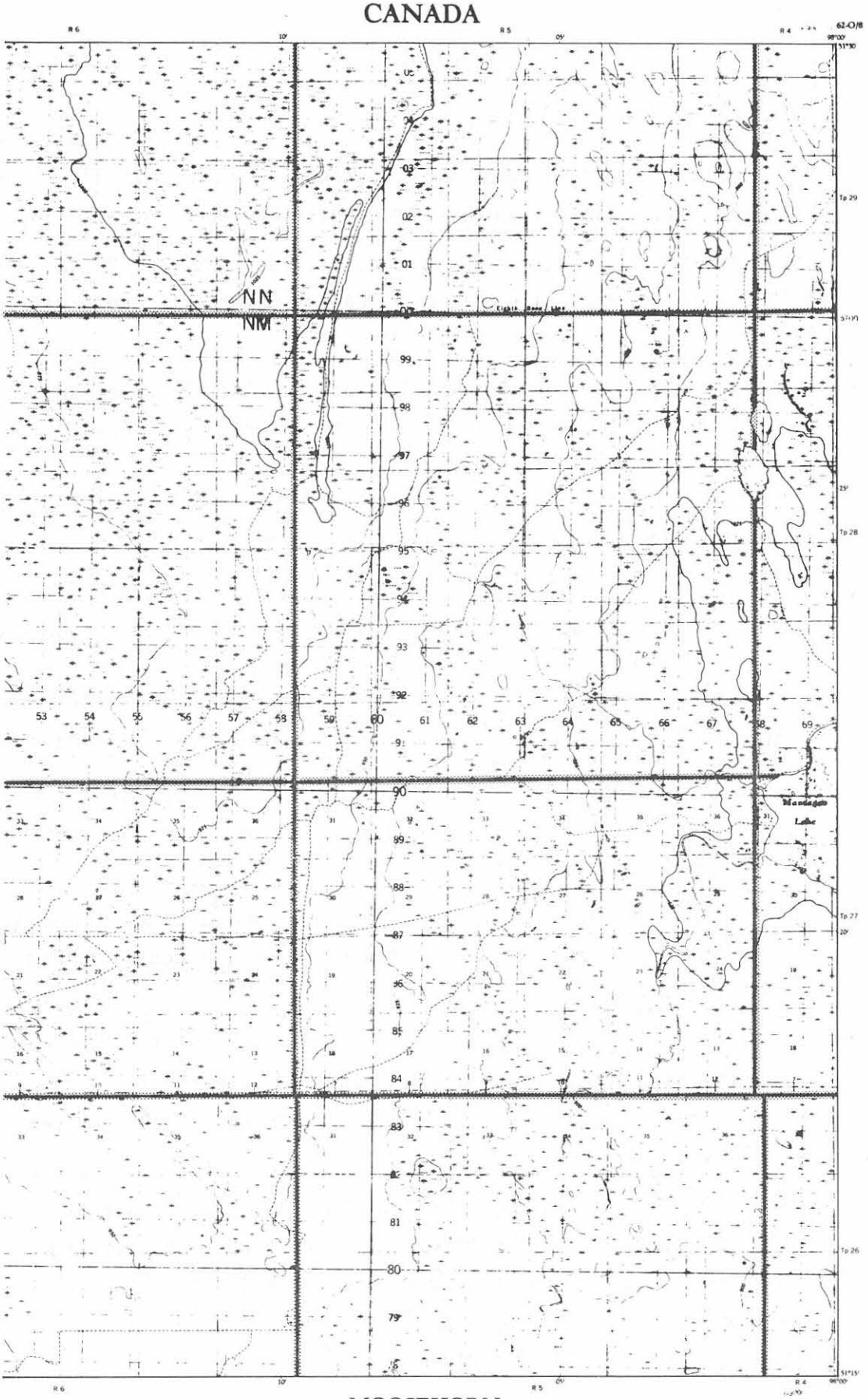
PROVISIONAL MAP
62-O/8

CANADA



MOOSEHORN
MANITOBA
WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL
WEST

CANADA



MOOSEHORN

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class IV wetland (170 ac.) NE¼ of Sec. 25, Twp. 26, Rge. 7W surveyed July 3/68. A seasonal marsh with a closed stand of cattail, sedge, hardstem and softstem bulrush. Frequent submergents such as sago.

2 - Class V wetland (40 ac.) NE¼ of Sec. 11, Twp. 27, Rge. 7W surveyed July 31/68. A seasonal marsh with scarce submergents and a closed stand of sedge.

3 - Class III wetland (185 ac.) SE¼ of Sec. 22, Twp. 26, Rge. 8W surveyed July 31/68. A semi-permanent marsh with interspersed pools surrounded by a marsh fringe 30-50' in width.

EMERGENTS: whitetop, hardstem bulrush, cattail, phragmites, sedge.

SUBMERGENTS: frequent - bladderwort, sago.

4 - Class III wetland (65 ac.) W½ of Sec. 23, Twp. 26, Rge. 8W surveyed July 31/68. A permanent marsh with open water fringed by a band of emergent vegetation greater than 50' in width.

EMERGENTS: whitetop, hardstem bulrush, cattail, phragmites, sedge.

SUBMERGENTS: frequent - sago, bladderwort.

5 - Class V wetland (60 ac.) NW¼ of Sec. 2, Twp. 29, Rge. 8W surveyed Oct. 16/68. A semi-permanent marsh with a closed stand of hardstem bulrush and sedge.

6 - Class IV wetland (125 ac.) SE¼ of Sec. 16, Twp. 29, Rge. 7W surveyed Oct. 16/68. A permanent marsh with open water fringed by hardstem bulrush and sedge.

7 - Class III wetland (60 ac.) SE¼ of Sec. 15, Twp. 29, Rge. 7W surveyed Oct. 16/68. A permanent marsh with abundant submergents (floating-leaf pondweed) and offshore interspersion of hardstem bulrush and phragmites. A valuable wetland for waterfowl.

8 - Class III wetland (200 ac.) Sec. 23, Twp. 29, Rge. 7W surveyed October 16/68. A permanent marsh with offshore interspersion of emergent hardstem bulrush, phragmites and sedge. Submergents are abundant such as floating-leaf pondweed and water lily. Diver use observed. Water is exceptionally clear for the area.

9 - Class III wetland (80 ac.) E½ of Sec. 25, Twp. 28, Rge. 8W surveyed Oct. 16/68. A permanent marsh containing sago in the open water and fringed by hardstem bulrush and sedge.

10 - Class VI wetland (45 ac.) N½ of Sec. 2, Twp. 27, Rge. 7W surveyed Aug. 24/68. A temporary marsh with a closed stand of sedge.

11 - Class V wetland (35 ac.) Sec. 8, Twp. 27, Rge. 6W surveyed Aug. 24/68. A temporary marsh with a closed stand of sedge.

12 - Class VI wetland (120 ac.) NW¼ of Sec. 21, Twp. 26, Rge. 7W surveyed Aug. 24/68. A grassy wet meadow.

13 - Class IV wetland (160 ac.) Sec. 35, Twp. 26, Rge. 8W surveyed Aug. 24/68 A semi-permanent marsh with a closed stand of hardstem bulrush and sedge. This rating indicates potential since this wetland has been drained.

14 - Class VI wetland (60 ac.) Sec. 8, Twp. 27, Rge. 7W surveyed Aug. 24/68. A temporary marsh with a closed stand of sedge.

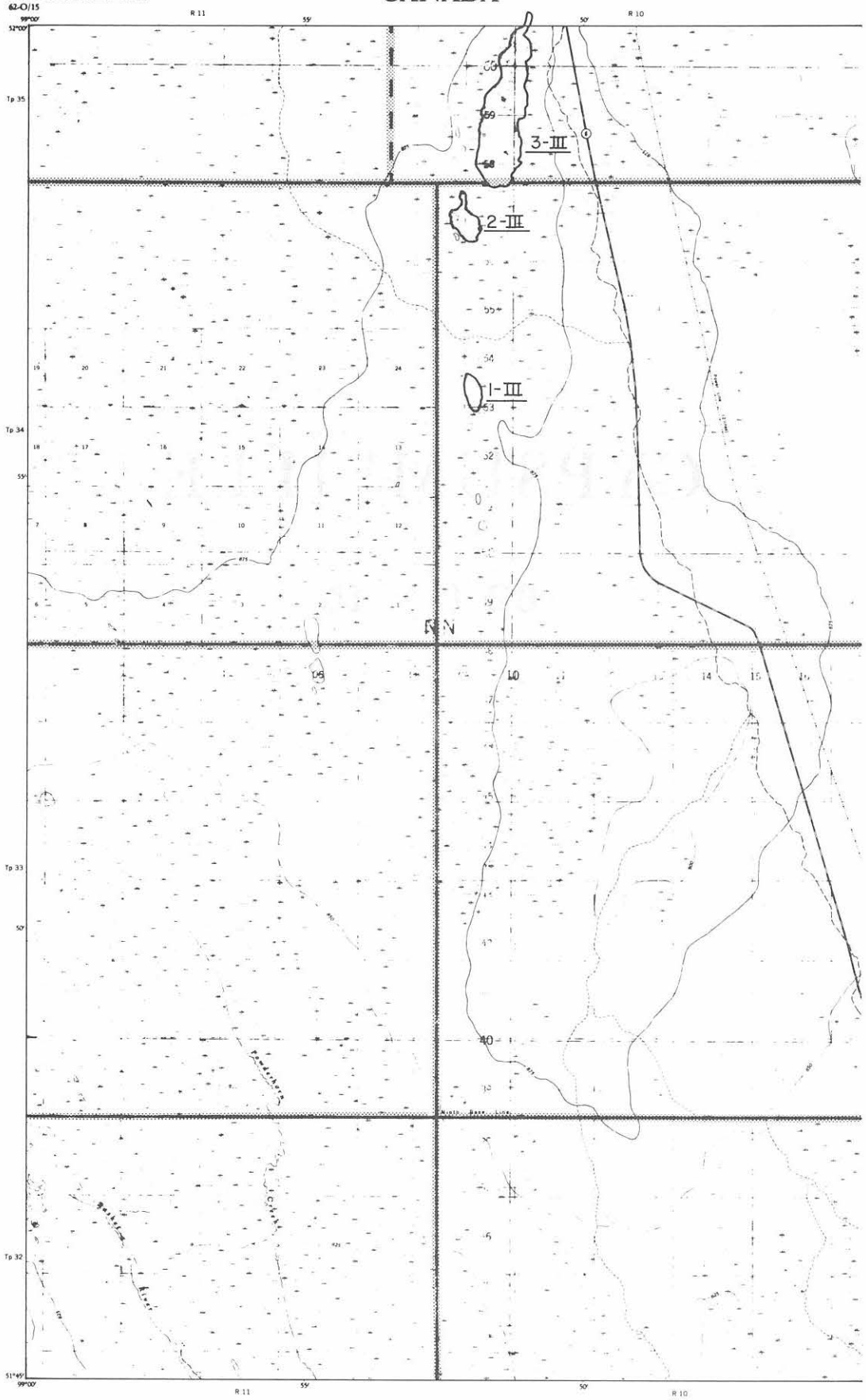
15 - Class VI wetland (60 ac.) W½ of Sec. 2, Twp. 27, Rge. 7W surveyed Aug. 24/68. A seasonal marsh with a closed stand of sedge.

GYPSUMVILLE

62 O / 15

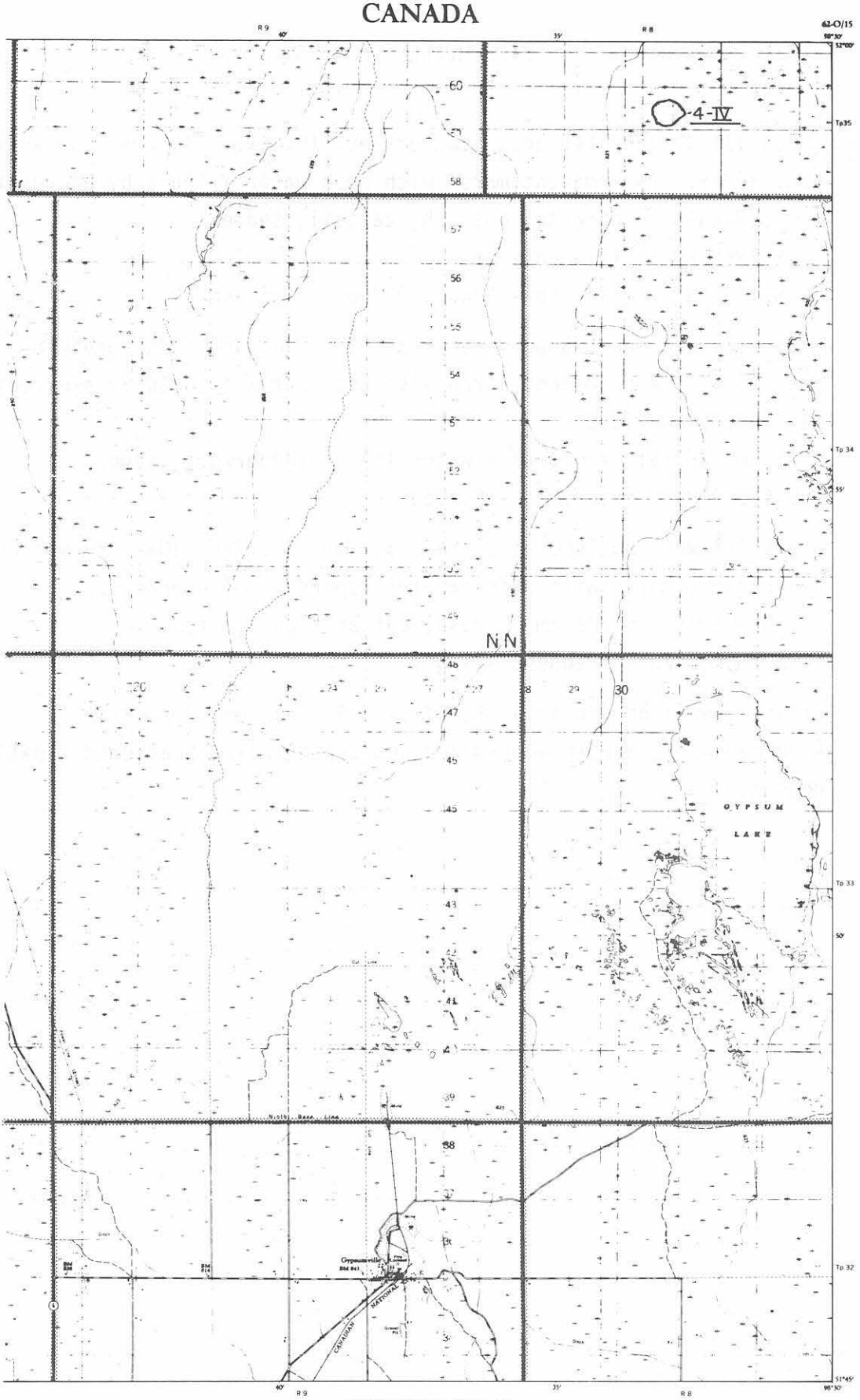
PROVISIONAL MAP
62-O/15

CANADA



GYPSUMVILLE
MANITOBA
WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL
WEST

CANADA



GYPSUMVILLE

MANITOBA

WEST OF PRINCIPAL MERIDIAN - OUEST DU MÉRIDIEN PRINCIPAL

EAST

1 - Class III wetland (45 ac.) SW¼ of Sec. 19, Twp. 34, Rge. 10W surveyed Oct. 16/68. A permanent marsh with open water fringed by emergents.

EMERGENTS: hardstem bulrush, cattail, sedge.

SUBMERGENTS: frequent- sago.

WATERFOWL: observed - Scaup, Redhead, Canvasback.

2 - Class III wetland (75 ac.) Sec. 31, Twp. 34, Rge. 10W surveyed Oct. 16/68. A permanent marsh with open water fringed by emergent cattail and phragmites.

SUBMERGENTS: frequent - water lily, bladderwort, sago.

WATERFOWL: observed - Scaup.

3 - Class III wetland (480 ac.) Sec. 5, Twp. 35, Rge. 10W surveyed Oct. 16/68. A permanent marsh with offshore interspersion of emergents.

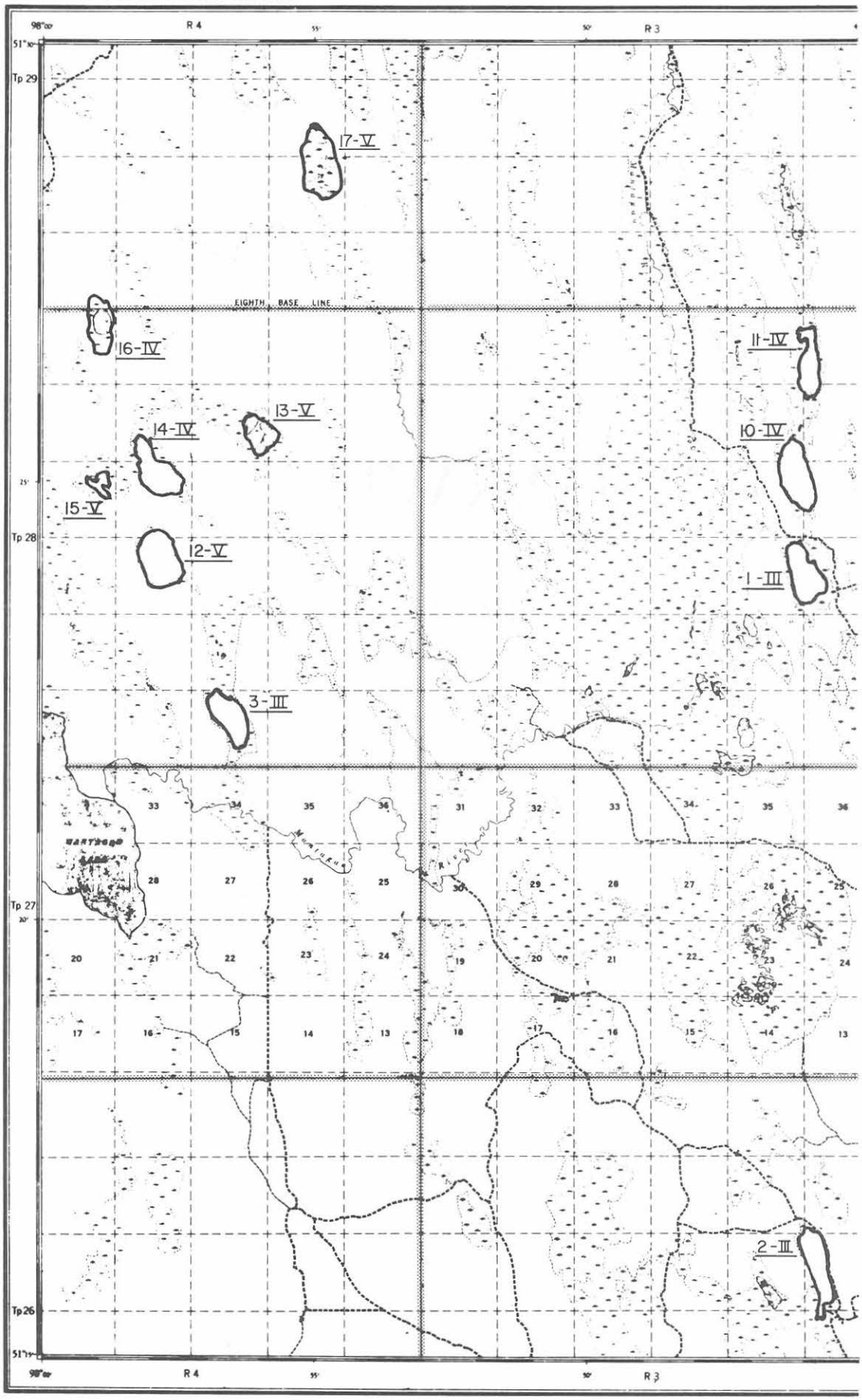
EMERGENTS: hardstem bulrush, cattail, phragmites.

SUBMERGENTS: frequent - sago.

4 - Class IV wetland (66 ac.) S½ of Sec. 9, Twp. 35, Rge. 8W. A permanent lake with wooded and bog shorelines. Scattered floating-leaf pondweed.

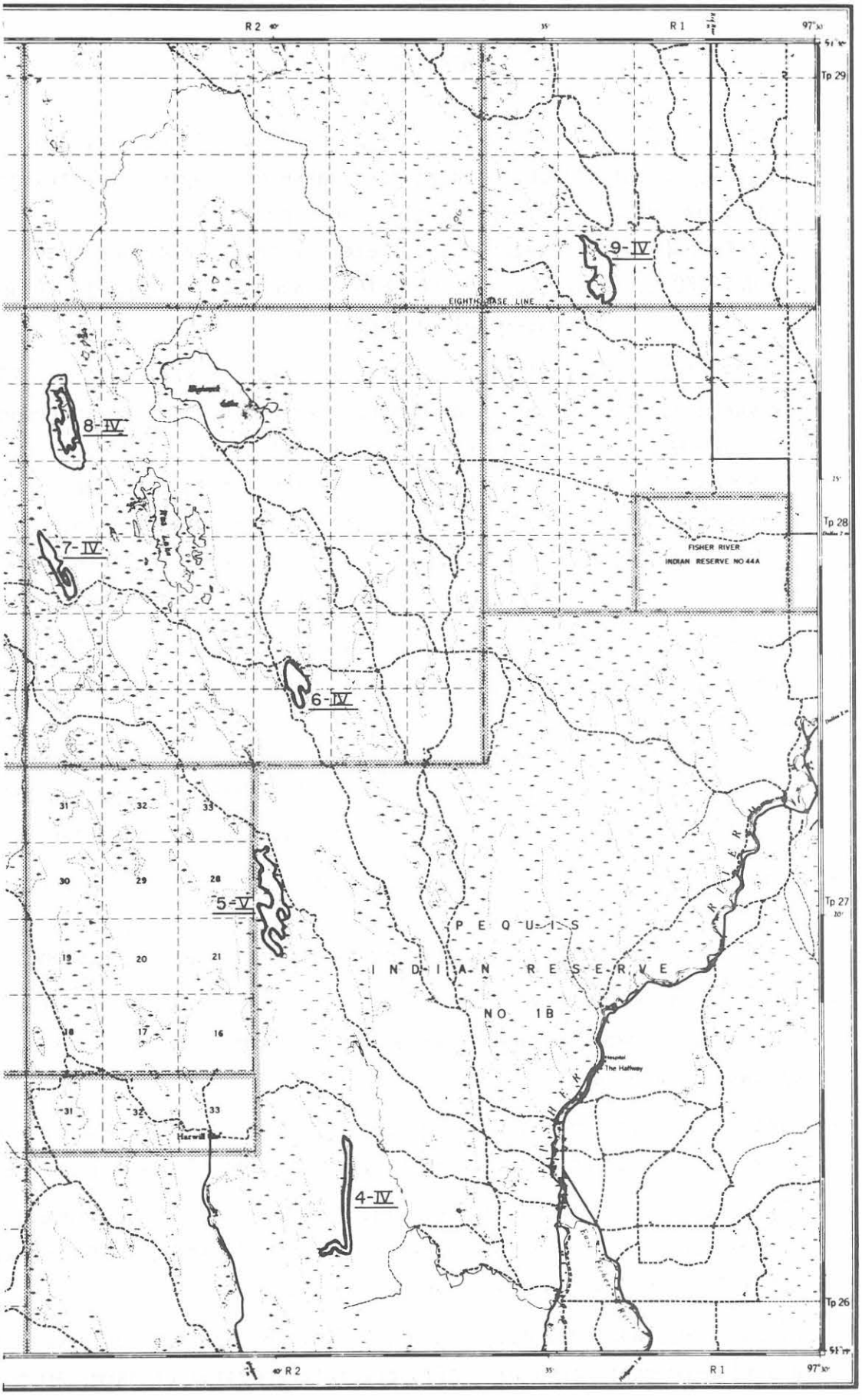
HARWILL

62 P/5



WEST

HARWILL



EAST

HARWILL

1 - FEATHER LAKE. Class III wetland (130 ac.) W½ of Sec. 13, Twp. 28, Rge. 3W surveyed July 11/68. A permanent marsh with open water fringed by a zone from 10-20' in width, (cattail and phragmites).

SUBMERGENTS: frequent- sago, water milfoil, water smartweed.

WATERFOWL: observed - Scaup, Blue-winged Teal, Gadwall. A good area for waterfowl production.

2 - POPLAR LAKE. Class III wetland (190 ac.) W½ of Sec. 24, Twp. 26, Rge. 3W surveyed July 11/68. A permanent marsh with offshore interspersion of emergents and a marsh fringe from 30-50' wide.

EMERGENTS: hardstem bulrush, phragmites, cattail, sedge.

SUBMERGENTS: frequent - sago, water milfoil, water lily.

WATERFOWL: observed - Blue-winged Teal, Scaup. A marsh with moderately good capability for waterfowl production.

3 - CRUISER LAKE. Class III wetland (140 ac.) W½ of Sec. 3, Twp. 28, Rge. 4W surveyed July 11/68. A permanent marsh with open water fringed by a 30-50' zone of emergents.

EMERGENTS: hardstem bulrush, cattail, phragmites, sedge, whitetop

SUBMERGENTS: frequent - water milfoil, bladderwort, water lily.

WATERFOWL: observed - Scaup. A moderately good marsh for the area.

4 - Class IV wetland (60 ac.) W½ of Sec. 26, Twp. 26, Rge. 2W surveyed July '68. A permanent marsh with open water containing floating-leaf pondweed and water lily, and surrounded by hardstem bulrush and sedge.

5 - Class V wetland (230 ac.) W ½ of Sec. 27, Twp. 27, Rge. 2W surveyed July '68. A semi-permanent marsh with interspersed pools surrounded by cattail and sedge meadow.

6 - Class IV wetland (60 ac.) S½ of Sec. 10, Twp. 28, Rge. 2W surveyed July '68. A permanent marsh with interspersion of cattail and sedge.

7 - Class IV wetland (140 ac.) Sec. 18, Twp. 28, Rge. 2W surveyed July '68. A permanent marsh with open water containing floating-leaf pondweed and water lily and surrounded by sedge meadow.

8 - Class IV wetland (215 ac.) Sec. 30, Twp. 28, Rge. 2W surveyed July '68. A semi-permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge.

9 - Class IV wetland (95 ac.) Sec. 5, Twp. 29, Rge. 1W surveyed July '68 A permanent marsh with offshore interspersion of hardstem bulrush, cattail and sedge.

10 - Class IV wetland (170 ac.) NE¼ of Sec. 23, Twp. 28, Rge. 3W surveyed July '68. A permanent marsh with offshore interspersion of hardstem bulrush. Submergent vegetation includes water lily and floating-leaf pondweed.

11 - Class IV wetland (115 ac.) W½ of Sec. 36, Twp. 28, Rge. 3W surveyed July '68. A permanent marsh with open water containing floating-leaf pondweed and surrounded by cattail and sedge.

12 - Class V wetland (225 ac.) N½ of Sec. 16, Twp. 28, Rge. 4W surveyed July '68. Permanent open water fringed by hardstem bulrush and cattail.

13 - Class V wetland (100 ac.) E½ of Sec. 27, Twp. 28, Rge. 4W surveyed July '68. A semi-permanent marsh with offshore interspersion of sedge and containing floating-leaf pondweed and water lily.

14 - Class IV wetland (180 ac.) N½ of Sec. 21, Twp. 28, Rge. 4W surveyed July '68. A permanent marsh with offshore interspersion of sedge and containing floating-leaf pondweed and water lily.

15 - Class V wetland (60 ac.) NE¼ of Sec. 20, Twp. 28, Rge. 4W surveyed July '68. A semi-permanent marsh with offshore interspersion of sedge and containing floating-leaf pondweed and water lily.

16 - Class IV wetland (110 ac.) NE¼ of Sec. 32, Twp. 28, Rge. 4W surveyed July '68. A permanent marsh with offshore interspersion of cattail and sedge and containing floating-leaf pondweed.

17 - Class V wetland (225 ac.) NE¼ of Sec. 11, Twp. 29, Rge. 4W surveyed July '68. Permanent open water containing water lily and fringed by cattail and hardstem bulrush.