



## HISTORICAL MAP

### MINES

NAME/PROPERTY	COMMODITY	YEARS OF PRODUCTION
1 Agassiz (Macellan)	Au, Ag	1887/89
2 Anderson Lake	Cu, Zn	1878/88
3 Bickerton	Ni	1896/77, 1989
4 Centennial	Cu, Zn	1973/83, 1989/89
5 Central Manitoba	Ni, Ag	1927/37
6 Chisholm Lake (Mines, Open Pit)	Pb, Zn, Cu	1969/
7 Cyndrum	Ni	1901/32
8 Danforth	Ni, Cu	1969/73
9 Flin Flon	Cu, Zn, Pb, Te, Au, Cd	1930/
10 Fox Island	Ni	1901, 1923/24
11 Galt (Little Lake)	Pb, Zn, Cu	1972/88
12 Galt (Lake)	Pb, Zn, Cu	1972/88
13 Galt (Lake)	Pb, Zn, Cu	1972/88
14 Galt (Lake)	Pb, Zn, Cu	1972/88
15 Galt (Lake)	Pb, Zn, Cu	1972/88
16 Galt (Lake)	Pb, Zn, Cu	1972/88
17 Galt (Lake)	Pb, Zn, Cu	1972/88
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41 Galt (Lake)	Pb, Zn, Cu	1972/88
42 Galt (Lake)	Pb, Zn, Cu	1972/88
43 Galt (Lake)	Pb, Zn, Cu	1972/88
44 Galt (Lake)	Pb, Zn, Cu	1972/88
45 Galt (Lake)	Pb, Zn, Cu	1972/88
46 Galt (Lake)	Pb, Zn, Cu	1972/88
47 Galt (Lake)	Pb, Zn, Cu	1972/88

### COMMODITY ABBREVIATIONS

Beryllium	Be	Lithium	Li
Cadmium	Cd	Nickel	Ni
Cobalt	Co	Selenium	Se
Chromium	Cr	Silver	Ag
Copper	Cu	Tantalum	Ta
Gold	Au	Tellurium	Te
Iron	Fe	Zinc	Zn
Lead	Pb		

### FINAL BOUNDARY MONUMENT CEREMONY

The final survey monument marking the completion of the provinces land boundary surveys was dedicated February 25, 1967, near Kamuchawie Lake on the Manitoba-Saskatchewan boundary. It marked the culmination of ninety years of surveys over 1931 miles of provincial boundary, 847 of which were surveyed after 1946.

### MAP AND AIR PHOTO DISTRIBUTION

Through a network of 65 map outlets established throughout Manitoba approximately 65000 maps are sold each year. Aerial photographs covering the entire land mass are available at various scales and years from the air photo library. Remote sensing, upgraded since 1974, is now a management tool to monitor and map land cover through the utilization of satellite data.

### PASQUIA LAND SETTLEMENT PROGRAM

The Pasquia project covering an area of 100,000 acres started as an experimental program to provide information to aid in developing the balance of the Saskatchewan River Delta with a secondary purpose of providing agricultural lands suitable for resettlement. Preference was given to 30 settlers who were there prior to 1952. Up to 50% of the remaining available land was made available for resettling other farmers, preferably veterans. A Canada-Manitoba Agreement in 1953 provided for PRRA to undertake extensive dyking, draining & reclamation work in the Pasquia. Construction of the primary drains, roads & dykes was completed in 1961. Between October 2, 1962, when Manitoba gained full control of the project area from Ottawa and the 1970's Manitoba spent a further 3.7 million dollars on further construction. Manitoba has proceeded with limited development since 1980 with the opening of the Pasquia Lake drain pump anticipated in 1990. The suitable agricultural lands in the Pasquia project have been disposed of by long-term agreements for sale, most of which have been paid out, or by lease-option agreements.

### SWAN-PELICAN PROVINCIAL FOREST

Established in 1987 as a Provincial Forest covering 3,705 sq. km's. Up to 1989 its size has remained static.

### PORCUPINE PROVINCIAL FOREST

Established in 1906 as a Forest Reserve covering 1987 sq. km's, it became a Provincial forest in 1964. By 1989 it had expanded in size to cover 2,090 sq. km's.

### KETTLE STONES PROVINCIAL HERITAGE PARK

That is the local name of dozens of huge sandstone boulders or concretions, one of four sites in Canada.

### DUCK MOUNTAIN PROVINCIAL FOREST

Established in 1906 as a Forest Reserve covering 3,693 sq. km's, it became a Provincial forest in 1964 and by 1989 had expanded to 3770 sq. km's.

### DUCK MOUNTAIN PROVINCIAL NATURAL PARK

Part of the Manitoba Escarpment, it offers excellent fishing and the best elk hunting in the province. Baldy Mountain (832 metres), in the southeast corner, is the highest spot in Manitoba.

### ASSESSIPPI PROVINCIAL NATURAL PARK

A beautiful valley with a large lake reservoir, the park is named for the river of Assessippi which was built in the late 1800's.

### RIDING MOUNTAIN NATIONAL PARK

Established in 1895 as a Timber Reserve covering 2,885 sq. km's, in 1906 it became a Forest Reserve and finally in 1964 a Provincial forest. By 1989 it had expanded to cover 3,706 sq. km's.

### SPRUCES WOODS PROVINCIAL FOREST

Established in 1895 as a Timber Reserve covering 589 sq. km's. In 1906 it became a Forest Reserve and finally in 1964 a Provincial forest. By 1989 it had expanded to cover 601 sq. km's.

### TURTLE MOUNTAIN PROVINCIAL FOREST

Established in 1895 as a Timber Reserve covering 282 sq. km's. In 1906 it became a Forest Reserve and finally in 1964 a Provincial forest. By 1989 it had decreased in size to cover 181 sq. km's.

### GRAND VALLEY PROVINCIAL RECREATION PARK

A one kilometre long sand beach was once the site of a buffalo jump where Indians of the Black Duck Culture came to hunt buffalo for years.

### PETROLEUM OCCURRENCES

1 Custer Field	1902
2 Daly Field	1901
3 Kirkfield Field	1902
4 Lake Lake Field	1902
5 Pearson Field	1904
6 South Humber Field	1902
7 South Pearson Field	1901
8 Tison Field	1902
9 Waskada Field	1902
10 Whitewater Field	1903
11 Virden Field	1903

### INTERNATIONAL/PROVINCIAL BOUNDARY

At the intersection of the International Boundary and the Manitoba-Saskatchewan Boundary on June 25, 1970, a ceremony was held dedicating a special monument and plaque as a tribute to labours of defining the boundaries and to the two nations sharing this undisputed border.

### BIRDS HILL PROVINCIAL NATURAL PARK

The park boasts a large population of white-tailed deer, several species of rare orchid, sandy beaches on a man-made lake, horseback riding, group hikes, and a network of cross-country skiing trails.

### DATA AND COMPUTATIONS

The Province established a digital parcel mapping program within the City of Winnipeg in 1988.

NAME	CLASSIFICATION	ESTABLISHED	AREA (HECTARES)
Atikaki	Wilderness	1985	471,607
Heritage Parkway	Heritage	N.A.	N.A.
Hecla	Heritage	1969	86,350
Beaudry	Heritage	1975	881
Spruce Woods	Heritage	1965	24,864
Elk Island	Heritage	1974	1,001
Kettle Stones	Heritage	1990	405
Nopiming	Natural	1976	143,744
Grand Beach	Natural	1962	2,460
Whiteshell	Natural	1961	273,503
Turtle Mountain	Natural	1967	18,907
Birds Hill	Natural	1964	3,522
Clearwater Lake	Natural	1963	59,570
Grass River	Natural	1963	229,955
Assessippi	Natural	1964	2,460
Duck Mountain	Natural	1961	127,468
Grindstone	Recreation	1969	25,821
Paint Lake	Recreation	1961	22,642
Grand Valley	Recreation	1961	29
Patricia Beach	Recreation	1961	62
Pew Falls	Wildlife	1974	93

### MANITOBA GOVERNMENT AIR SERVICES

During the period 1932/46 M.G.A.S. was a branch of the Manitoba Forest Service administered by the Provincial Forester. The first Director of M.G.A.S. was J.C. (Jim) Uhlman (1942/62) after whom Uhlman Lake was named. Lac du Bonnet was the main base and headquarters from 1932/71. In their first years 1932/33 they used the facilities of the R.C.A.F. moving to their newly erected hangar and workshop in 1934. The present modern Air Service building was erected in 1945/50. In 1971 the M.G.A.S. headquarters was moved to Winnipeg.

### MANITOBA-ONTARIO BOUNDARY COMPLETION

The Manitoba-Ontario Boundary Survey was completed during 1947/48 and the final survey monument #457A was constructed in August, 1950.

### MAPPING

The Survey Branch published its first base map of Manitoba in 1931 at a scale of 25 miles to the inch. From this hand lettered map, the operation has evolved to a fully automated digital data mapping program of today.

### LEGEND

- Each symbol represents one million seedlings.
- Fish Hatchery
- Principal Spawning Camp
- Wildlife Management Area
- Mine Site
- Oil Field
- Municipal Groundwater System
- Major Control Structures and Dams
- Hydro Generating Stations
- High Voltage Transmission Lines
- Provincial Waterways
- 1950 Flooded Area
- Present Detachment Headquarters
- Past Detachment Headquarters

### SILICA SAND

One of the purest silica sand deposits in North America, averaging 95.5 to 97.5% silica oxide, before processing, is located on the south side of Black Island in Lake Winnipeg. The deposit has produced since 1956.

### SAN ANTONIO MINE

Manitoba's most important gold mine produced over 1 million Troy ounces of gold and almost 200,000 ounces of silver from 1932 to 1968 and from 1982 to 1983.

### FISH HATCHERIES AND PRINCIPAL SPAWN CAMPS

Hatchery	Period of Operation	Spawn Camp	Period of Operation
1 Selkirk	1893/1913	1 Clearwater	1902/1912
2 Snake Island	1902/1912	2 Whitemouth	1942/1962
3 Galt Harbour	1914/1915	3 Muddy Point	1981/1981
4 Douglas River	1911/1924, 1968/1976, 1975/1980	4 Tontons Lake	1962/1978
5 Wapiti Lake	1930/1930	5 Wapiti Lake	1962/1978
6 Duck Bay	1930/1930	6 Limestone	1963/1980
7 Elk and Bow	1930/1930	7 Lake St. Martin	1974/1980
8 Whiteshell	1942/1942	8 Baskin Creek	1982/1982
9 Grand Rapids	1962/1962	9 Beaver Creek	1983/1983

### ANNUAL SEEDLING PLANTING

Year	Trees Planted (Thousands)	Area Planted (Hectares)	Year	Trees Planted (Thousands)	Area Planted (Hectares)
1931-44	4,568	503	1967	2,579	1,436
1945	259	38	1968	4,854	2,356
1946	260	75	1969	6,000	3,621
1947	508	163	1970	5,436	3,137
1948	453	48	1971	4,939	2,743
1949	292	89	1972	3,074	1,244
1950	424	68	1973	4,351	2,628
1951	617	121	1974	2,929	1,226
1952	622	130	1975	2,729	1,484
1953	670	136	1976	2,600	1,322
1954	700	151	1977	2,591	1,191
1955	216	194	1978	1,619	1,220
1956	1,007	348	1979	1,568	570
1957	1,127	355	1980	1,564	762
1958	1,550	313	1981	1,750	1,851
1959	1,002	451	1982	4,796	2,078
1960	1,149	473	1983	4,584	1,820
1961	732	332	1984	4,275	1,817
1962	2,010	1,202	1985	4,424	4,169
1963	2,938	1,537	1986	10,211	4,146
1964	2,533	1,410	1987	13,396	5,694
1965	3,383	1,918	1988	15,669	6,870
1966	3,628	2,075	1989	13,811	5,978
			1990	15,365	6,688
GRAND TOTAL:				172,036	78,491
					*(Projected)

### WILDLIFE MANAGEMENT AREAS

Wildlife Management Areas provide an abundance and diversity of wildlife habitat. This habitat supports a variety of wildlife species for the use and enjoyment of Manitobans.

W.M.A.	ACREAGE	PURPOSE	ESTABLISHED
1 Alonsa	26,000	White-tailed Deer/Sharp-shinned Grouse/Hunting	1974
2 Atikaki	4,148	Wildlife Habitat/Recreation Park/Conservation	1974
3 Baskin Lake	17,700	Wildlife Habitat	1974
4 Bernice	160	Wildlife Habitat	1974
5 Brandon Hills	2,780	Wildlife Habitat/Deer Wintering	1974
6 Broad Valley	6,320	Deer & Grouse Habitat	1969
7 Brundage	800	Grouse Habitat	1969
8 Cape Churchill	4,638,720	Abundance & Diversity Wildlife Habitat	1978
9 Cape Tatum	1,290,000	Hunting, Viewing, Trapping & Com. Grouse Hunting	1973
10 Catla Creek	15,320	Wildlife Habitat/Endangered Species (Great Grey Owl)	1968
11 Caves	1,360	White-tailed Deer/Wintering Area	1984
12 Clearwater	12,000	White-tailed Deer/Sharp-shinned Grouse	1974
13 C. Stuart Stevenson	320	Wildlife Habitat	1974
14 Clearwater	352	White-tailed Deer/Wintering Area	1974
15 Dog Lake	80,000	Nesting Grouse Migration Stopover	1968
16 Elbow	160	Deer & Upland Birds Habitat	1974
17 Gerald W. Mahler	148	Wildlife Habitat	1974
18 Goshawk	3,000	Wildlife Habitat	1974
19 Gravel Lake	95	Increased Habitat Cover	1974
20 Copswood	6,090	White-tailed Deer, Waterfowl, Grouse & Mink	1969
21 Harperville	1,600	White-tailed Deer, Ruffed Grouse & Elk	1969
22 Hecla	3,174	White-tailed Deer, Ruffed Grouse & Elk	1969
23 Holmfield	160	Wildlife Habitat	1974
24 Inwood	5,600	White-tailed Deer & Ruffed Grouse	1974
25 Langruth	4,400	White-tailed Deer, Sharp-shinned Grouse & Waterfowl	1965
26 Leau Samuels	7,740	White-tailed Deer/Wintering	1971
27 Lee Lake	17,200	Nesting Area for Waterfowl (Canada Goose)	1964
28 Little Bel	54,000	White-tailed Deer, Elk & Sharp-shinned Grouse	1969
29 Little Bel	54,000	White-tailed Deer, Elk, Sharp-shinned Grouse & Waterfowl	1969
30 Lund	2,720	White-tailed Deer & Sharp-shinned Grouse	1969
31 Manitou Lake	124,137	Elk, White-tailed Deer & Moose	1968
32 Maple Lake	160	Wildlife Habitat/Birds Habitat	1974
33 Muskrat Point	3,600	Canada Goose Nesting Habitat	1974
34 Moose Creek	195,000	Moose Habitat	1974
35 Moosehorn	400	Giant Canada Goose Nesting Area	1974
36 Narrows	29,230	White-tailed Deer & Grouse	1969
37 Oak Hammock Marsh	6,000	Increase Waterfowl Production	1973
38 Orono	1,440	Wildlife Habitat	1974
39 Otter Lake	160	Wildlife Habitat	1974
40 Parkland	2,240	Wildlife Habitat	1974
41 Penikese Valley	5,400	Big Game, Upland Game & Waterfowl	1974
42 Peonon Point	5,700	Food Cover for Game (White-tailed Deer)	1969
43 Person	440	Deer & Grouse Habitat	1974
44 Portage	1,320	White-tailed Deer/Wintering Area	1974
45 Portage Sandhill	3,200	Desert-like Vegetation/Grouse/Deer	1974
46 Portage	6,160	Wildlife Habitat	1974
47 Proven Lake	4,000	Waterfowl & Mink Habitat	1974
48 Rye Lake	2,400	Wildland Area	1974
49 Rye Lake	3,400	Ruffed Grouse Habitat	1974
50 St. Malo	426	White-tailed Deer/Wintering Habitat	1973
51 Sandhill	3,025	White-tailed Deer	1974
52 Siskiwit	236,005	Wildlife Habitat	1941
53 Sparrowhawk	4,400	White-tailed Deer, Grouse, Elk & Moose	1969
54 Steep Lake	8,960	White-tailed Deer	1969
55 South River Bend	5,125	White-tailed Deer	1969
56 Stonewall	728	Land Wildlife, Elk, Deer & Upland Birds	1968
57 Steeprock	4,673	Foraging Animals	1957
58 Narrows	1,760	Moose Habitat	1974
59 Tiger Hills	475	Wildlife Habitat & Deer Wintering	1974
60 Twin Lakes	529,520	Nesting Area for Waterfowl & Other Aquatic Life	1937
61 Turtle Mountain	440	Deer & Ruffed Grouse	1974
62 Upperville	3,000	Deer & Ruffed Grouse	1974
63 Upperville	3,000	Deer & Ruffed Grouse	1974
64 Wapiti Bay	1,440	Waterfowl Staging Area	1969
65 Wapiti Bay	1,440	Deer Habitat	1969
66 Wapiti Bay	1,440	Deer Habitat	1969
67 Wapiti Bay	1,440	Deer Habitat	1969
68 Wapiti Bay	1,440	Deer Habitat	1969
69 Wapiti Bay	1,440	Deer Habitat	1969
70 Wapiti Bay	1,440	Deer Habitat	1969

Total Acreage - 7,536,619 represents 51% of the area of Manitoba

\* Manitoba's first Wildlife Management Area

### RED RIVER