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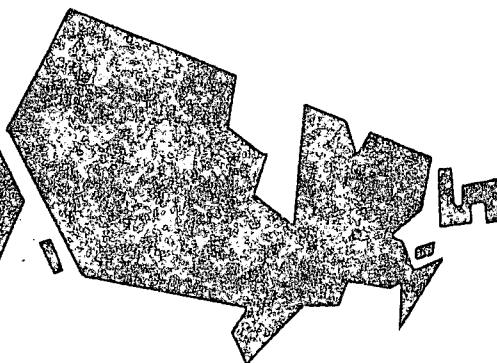
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# CANADA LAND INVENTORY



LAND CAPABILITY  
FOR AGRICULTURE

PRELIMINARY REPORT

The Canada Land Inventory

Report No. 10

1976

Reprinted 1977 , 1978

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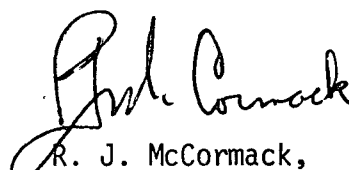
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## PREFACE

Although Canada has the second largest land area of any nation, only ten percent of that area is, in practical terms, suitable for agriculture. From this ten percent, the nation obtains a great variety of produce, including large quantities of food for the world market. Owing to the dependence of Canada on the produce of the land, it is essential to understand the limits of the land resource, the location of prime lands, and the forces that may affect the capability of the land resource to continue to serve Canada's needs.

After a decade of data collection and analysis, the Canada Land Inventory (CLI) is nearing completion. This publication details the preliminary results for the agriculture sector, as processed by the Canada Geographic Information System (CGIS) from CLI data. This will be followed by the publication of results for recreation, forestry, wildlife (both waterfowl and ungulates) and present land use. It is hoped that through a better understanding of the limits and capabilities of the land resource, sound and wise management will be realized.

  
R. J. McCormack,  
Director General,  
Lands Directorate.

LAND CAPABILITY FOR AGRICULTURE  
(A CLI-CGIS report on soil capability)

Approximately 10.3 percent of Canada's land can support economically viable agricultural production.<sup>1</sup> Only five percent of Canada's soils are free from severe physical limitations and can support crop production.<sup>2</sup> Just one half of one percent of Canada's land falls into the category of Class 1 soils.<sup>3</sup> These and other facts about the physical capability of Canada's land resource are now available from an analysis of Canada Land Inventory (CLI) data.

The CLI began in 1963 as a cooperative federal-provincial program; its purpose is to assess and document the physical capability and use of land within the settled areas of Canada. The complete inventory area covers approximately 1 million square miles and encompasses all of the regions of Canada that have significant agricultural capability; these include the Island of Newfoundland, the Maritime Provinces, and the settled parts of Québec, Ontario and the Western Provinces. (Refer to Map 1). Areas outside the present CLI boundaries, by reason of climate or topography, do not contain significant areas of land capable of sustained agricultural practice. (Refer to Table 1).

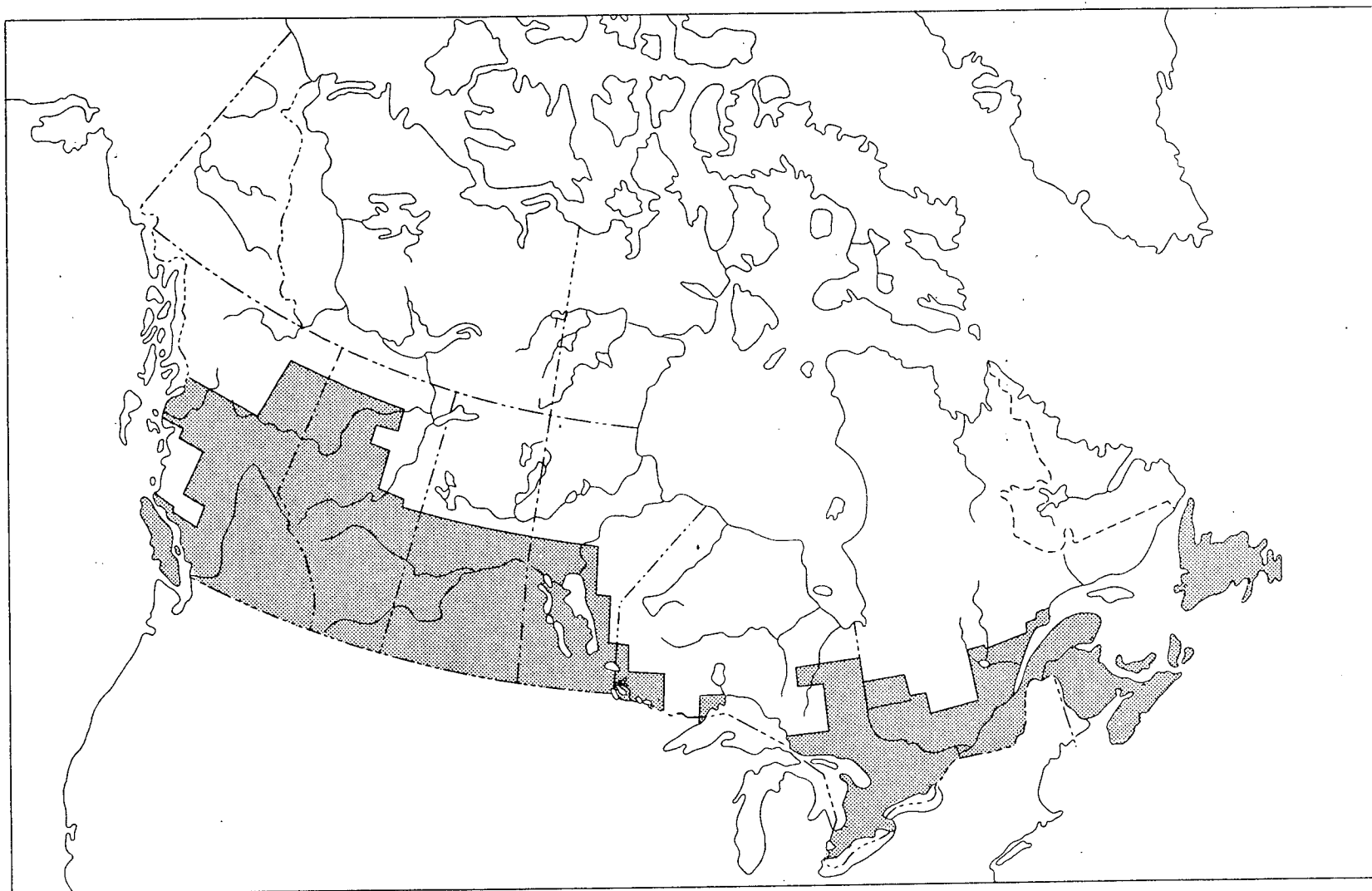
The CLI program consists of mapping and assessing the lands of Canada for agricultural capability, forestry capability, recreation capability, wildlife (waterfowl and ungulates) capability and present land use. Each province classifies its land according to the national classification systems; these have been prepared jointly by the provincial and federal government departments responsible for resource development. The agricultural capability data were derived primarily from the extensive work in soil surveys done over the last fifty years by the federal and provincial soil survey staffs.

To facilitate the use of data for land planning and resource studies, a computerized data bank and analytical system were developed as part of the CLI program. This system, known as the Canada Geographic Information System (CGIS), permits all CLI data to be transformed to numeric data for analysis.

<sup>1</sup> Includes agricultural capability Classes 1 to 5.

<sup>2</sup> Includes agricultural capability Classes 1 to 3.

<sup>3</sup> These prime soils have no significant limitations and have high productivity for a wide range of crops.



Map 1 CLI area / région ITC

After twelve years of field studies and mapping programs, which have involved the cooperative participation of more than 100 provincial and federal agencies, several universities, non-governmental organizations and private companies, the CLI is nearing completion. As the map data are analyzed through the CGIS, a national picture of actual and potential land use emerges. The first results provided data concerning land capability for agricultural use. These data are available for all provinces except Newfoundland and British Columbia; for the latter, data compilation and input to the CGIS system are still in progress. Tables 2 to 5 present a summary of agricultural land capability information.<sup>1</sup> Knowledge of the CLI land classification system is required to fully understand the tables.

### THE AGRICULTURAL LAND CLASSIFICATION SYSTEM<sup>2</sup>

In the CLI classification system of land capability for agriculture, mineral soils are grouped into seven classes according to their potential and limitations for agricultural use. The most highly rated soils, those having no significant limitations for cropping, are designated Class 1. Soils with no agricultural potential are designated Class 7. Soils designated Classes 2 to 6 indicate, in declining order, capability for agriculture. A separate category has been established for organic soils, category 0. Summary descriptions of each agricultural capability class follow.

#### Class 1

Soils of this class have no significant limitations for crop use. They are generally level, or have very gentle slopes, deep, well-to-imperfectly drained and have good water-holding capacity.

#### Class 2

Soils of this class have moderate limitations that restrict the range of crops or require moderate conservation practices. Class 2 soils are deep and have good water-holding capacity. Limitations are moderate and crops can be grown on these soils with little difficulty. The limitations of the soils in this class may be for example, adverse regional climate, moderate erosion, poor soil structure or low fertility which is readily correctable.

<sup>1</sup> Internal CGIS Report, Version 001-X, October, 1975.

<sup>2</sup> Abstracted from CLI Report No. 2 "Soil Capability Classification for Agriculture" (1972) 5-7.

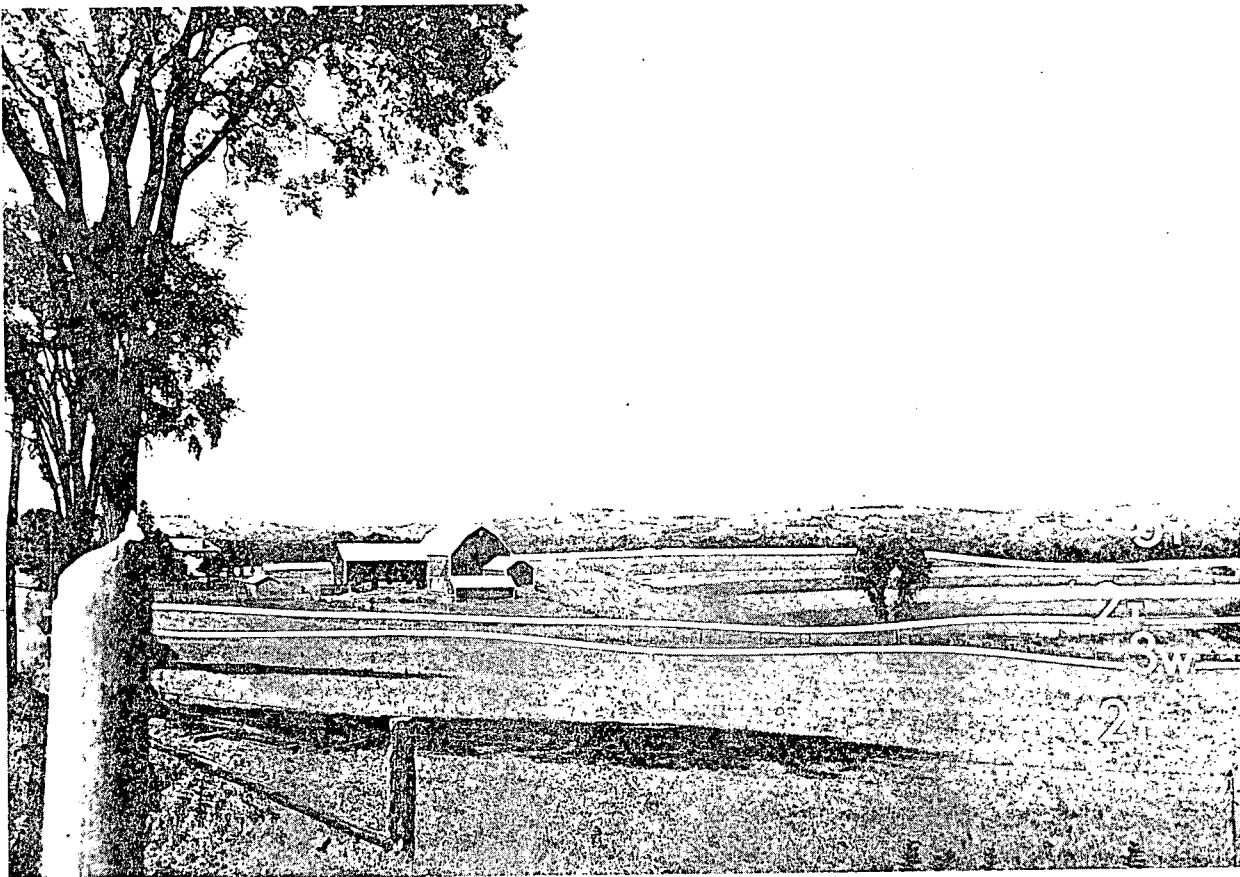


FIGURE 1: Classes 2, 3, and 5 are present in this illustration. Class 2 has moderate slopes, indicated by subclass T, that require some soil conservation measures for sustained use for arable crops. Class 5 has steep slopes which make this area unsuitable for arable field crops but it is capable of improvement for production of perennial forage crops. Class 3 has a continuing limitation of wetness that restricts its use for field crops.

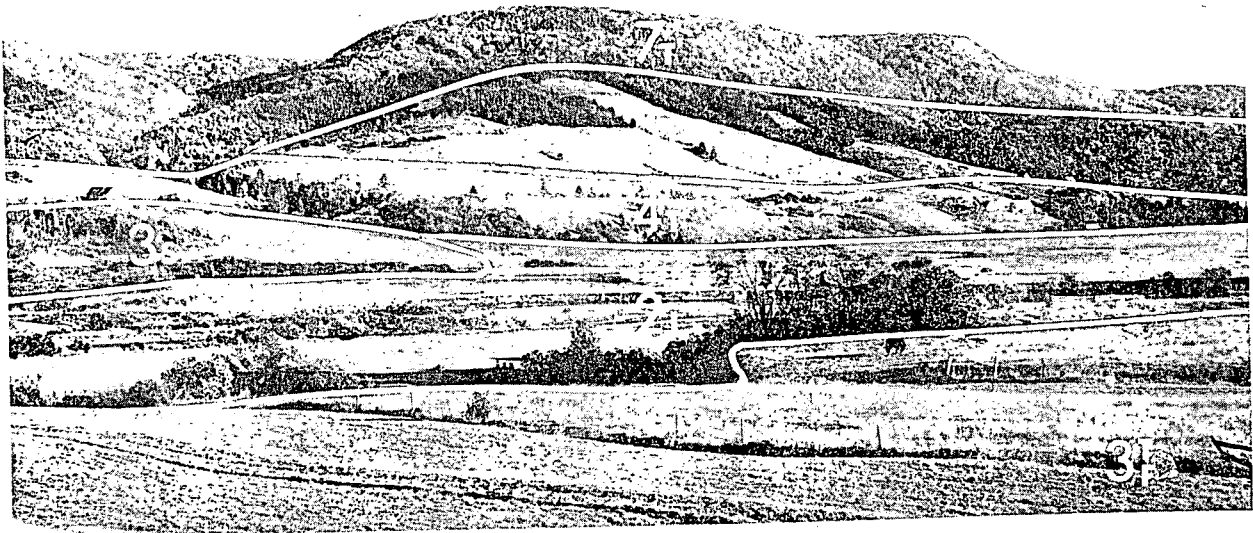


FIGURE 2: Classes 2, 3, 4, 5, and 7 are illustrated. The Class 2 area has a moderate limitation because of occasional damaging overflow; the Class 3 areas are affected by topographic and fertility limitations; the Class 4 and 5 areas are downgraded from Class 3 because of steepness of slope. The Class 7 area is considered to be non-agricultural because of steepness of slopes and generally rough topography.

### Class 3

Soils of this class have moderately severe limitations that restrict the range of crops or require special conservation practices. Although these soils have more severe limitations than those in Class 2, they are still fair to moderately high in productivity for a fairly wide range of field crops adapted to the region. Limitations may be a combination of those described under Class 2, or are of the following; moderate climatic limitations, moderately severe erosion, intractable soil mass or very slow permeability, correctable low fertility, moderate to steep slopes, frequent runoff accompanied by crop damage, stoniness necessitating some clearing, etc.

Classes 1 to 3 are considered to be capable of sustained annual production of common cultivated crops. Map 2 indicates the location of all soils in Canada classified as agricultural capability Class 3 or better.

### Class 4

Soils of this class have severe limitations that either restrict the range of crops or require special conservation practices or both. Soils in Class 4 have such limitations that they are suitable for only a few crops, or the yield for a range of crops is low, or crop failure is high. These soils are low to medium in productivity for a narrow range of crops but may have higher productivity for a specially adapted crop. Limitations may include steep slopes, severe past erosion, frequent surface runoff - with severe effects on crops, severe salinity, extreme stoniness, or severe aridity.

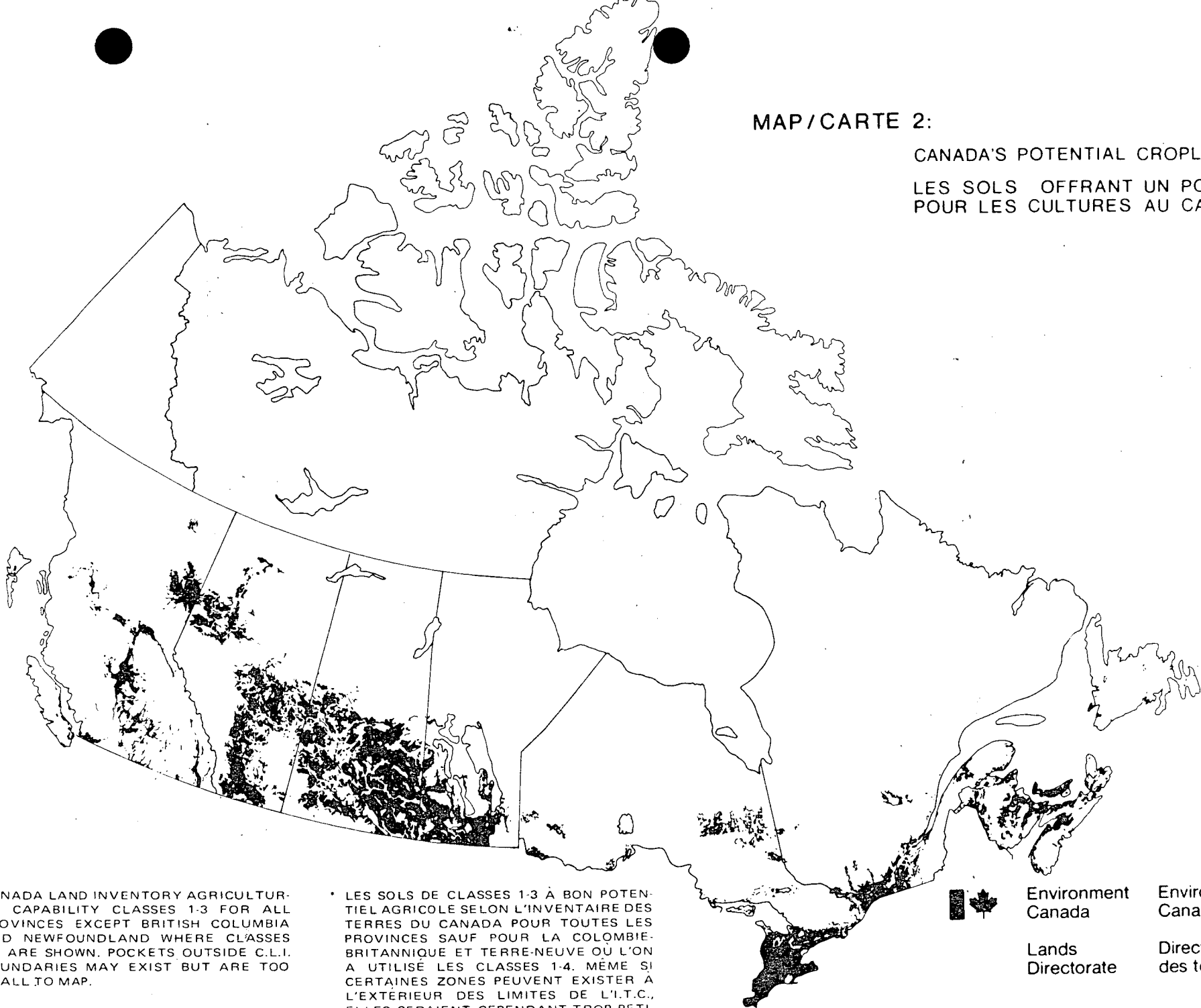
### Class 5

Soils of this class have very severe limitations that restrict their capability to produce perennial forage crops. Class 5 soils have such serious physical, climatic or other limitations that they are not capable of use for sustained production of annual field crops. Class 5 soils are amenable, however, to improvement and, with intensive management practices, may be used for permanent pasture. The limitations described in Classes 2 to 4 may be present for Class 5 areas. Cultivated field crops may be grown in Class 5 areas where adverse climate is the main limitation but crop failures will occur under average conditions. Soils of Classes 4 and 5 are considered suitable for most varieties of forage crops.

## MAP/CARTE 2:

CANADA'S POTENTIAL CROPLAND

LES SOLS OFFRANT UN POTENTIEL  
POUR LES CULTURES AU CANADA.



CANADA LAND INVENTORY AGRICULTURAL CAPABILITY CLASSES 1-3 FOR ALL PROVINCES EXCEPT BRITISH COLUMBIA AND NEWFOUNDLAND WHERE CLASSES 1-4 ARE SHOWN. POCKETS OUTSIDE C.L.I. BOUNDARIES MAY EXIST BUT ARE TOO SMALL TO MAP.

• LES SOLS DE CLASSES 1-3 À BON POTENTIEL AGRICOLE SELON L'INVENTAIRE DES TERRES DU CANADA POUR TOUTES LES PROVINCES SAUF POUR LA COLOMBIE-BRITANNIQUE ET TERRE-NEUVE OÙ L'ON A UTILISÉ LES CLASSES 1-4. MÊME SI CERTAINES ZONES PEUVENT EXISTER À L'EXTÉRIEUR DES LIMITES DE L'I.T.C., ELLES SÉRAIENT CEPENDANT TROP PETITES POUR ÊTRE CARTOGRAPHIÉES.



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### Class 6

Soils of this class are capable only of producing perennial forage crops, and improvement practices are not feasible. Class 6 soils have some natural, sustained grazing capacity for farm animals, but they have such serious climatic or other physical limitations that the application of improvement practices is impractical. Although Class 6 soils are marginal for any agricultural use, they can often support periodic rough grazing.

### Class 7

Soils of this class have no capability for arable culture or permanent pasture. Combinations of severe climatic and physical limitations preclude economic use of the land for agriculture. All classified areas, except organic soils, and soils not designated as Classes 1 to 6, are placed in this class. Class 7 therefore includes areas of exposed rock and bodies of water too small to delineate on maps.

### Subclasses

A series of subclasses designate the specific nature of limitations inherent in each soil class. (Refer to Appendix 1 for details of subclassifications and an example of the information available for subclassifications).

### SOME SIGNIFICANT FACTS RESULTING FROM CLI DATA ANALYSIS

Tables 1 to 5 reveal a number of significant facts about the extent and location of land that is capable of supporting Canadian agricultural production.

1. Eighty-eight percent of Canada's land area has no agricultural capability whatsoever.
2. Ten and one-half percent of Canada's land area (250 million acres) has some agricultural capability. This figure represents Class 1 to 5 soils.
3. One and one-half percent of Canada's land area is marginal for agricultural production (Class 6 soils).

By adding the marginal land to the total area of arable land, a figure of about 12% of Canada's total land area results. According to Agriculture Canada figures and the results of CLI land-use mapping, approximately 60% of this arable land is currently in agricultural use. The unused area includes Class 5 and 6 soils.



FIGURE 3: The main limitation in the Class 2 and Class 3 land shown here is topography. The Class 2 land requires some special conservation measures to prevent damage from water erosion while the Class 3 area, owing to its greater slopes, requires more intense conservation measures to control water erosion. The Class 5 area, while severely eroded, may be used for perennial forage crops.



FIGURE 4: The soil areas marked as Class 6 are so rough and eroded as to be capable of being used only as wild pasture. Regeneration of trees on the cleared areas will be very slow so that the areas will provide wild pasture for many years. The area classified as 7, if cleared, would also provide wild pasture. However, areas that require land clearing must have a higher capability than Class 6 to be rated other than Class 7.

4. Cropland (Class 1, 2 and 3 soils) constitutes slightly more than 5% of Canada's total land area or 115 million acres. This figure includes the CLI categories 1 to 3 and an additional estimate of 6 million acres of Class 1 to 3 soils for British Columbia.
5. Less than one-half of one percent (0.45%) (10,192,980 acres) of Canada's land area is Class 1 agricultural land according to the CLI. If the estimated area of Class 1 soils in British Columbia is added, the total rises to approximately one half of one percent. There is no Class 1 or 2 agricultural land in Newfoundland.
6. About one-half of Canada's Class 1 agricultural land (5.3 million acres) is located in Ontario - most of it in the urbanizing southern part of the province.
7. The three Prairie Provinces contain 67% (77 million acres) of Canada's potential cropland (Class 1 to 3 soils). If Ontario's Class 1 to 3 soils (18 million acres) are added, these four provinces account for 82% of Canada's potential cropland.
8. No Class 1 agricultural land is found in the Atlantic Provinces but, approximately 75% of Prince Edward Island (nearly 1 million acres) is good cropland (Classes 2 and 3) and over one-half of New Brunswick's land area falls into agricultural capability Classes 2, 3 and 4. Thirty percent of Nova Scotia falls into Classes 2 to 4.
9. Only 1.5% (5.4 million acres) of Québec is classified as Class 1, 2 or 3 soils. Over 95% of Québec's land area is incapable of supporting any agriculture.

From preliminary data, publications of Agriculture Canada have detailed the agricultural productivity of several areas, based upon the CLI agricultural capability classification. (For details, refer to Appendix 3). These preliminary figures differ from the CGIS compilation because they were prepared by manual procedures rather than computerized inventory. In both cases, data were derived from generalized maps at the 1:250,000 scale. Because of generalization, data may exhibit inconsistencies when used for areas smaller than those for which they were designed.

# CANADA'S HIGH CAPABILITY AGRICULTURAL LANDS

## LES SOLS À GRANDES POSSIBILITÉS POUR L'AGRICULTURE AU CANADA

### C.L.I. AGRICULTURAL CAPABILITY CLASSES

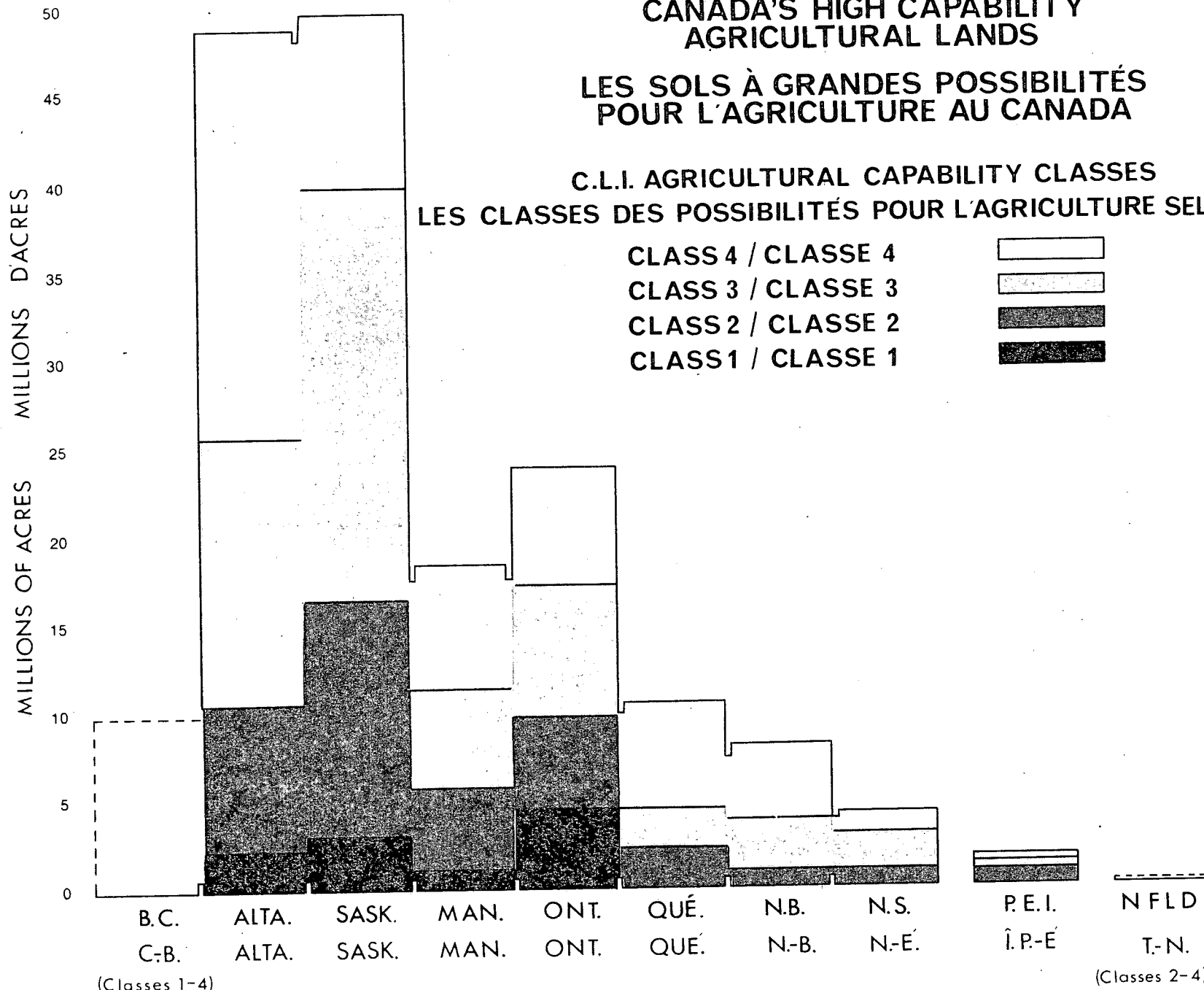
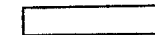
### LES CLASSES DES POSSIBILITÉS POUR L'AGRICULTURE SELON L'I.T.C.

CLASS 4 / CLASSE 4

CLASS 3 / CLASSE 3

CLASS 2 / CLASSE 2

CLASS 1 / CLASSE 1



Caution should be used in comparing land classes from province to province as each province was classified independently. The classifications, while standardized nationally, are essentially a comparable series of regional ratings; for example, Class 1 soils on the Prairies are not necessarily equivalent in terms of potential productivity to Class 1 soils in Ontario, especially when compared for particular crop use. In some cases, action by users to alter the drainage, slope, or physical quality of a soil may be adequate to change the rating of that soil. Data should be used with care. These characteristics of the CLI agricultural classification system should be considered before use is made of CGIS data output.

Canada Land Inventory information on land capability for uses in the other land resource sectors (forestry, outdoor recreation and wildlife) is being compiled and processed through the CGIS. As processing is completed, the data will be released through Environment Canada's Information Service. For additional information on the CLI, the CGIS and land capability data for the various resource sectors contact:

Information Officer  
Lands Directorate,  
Environmental Management Service,  
Environment Canada,  
Ottawa, Ontario. K1A 0H3 or  
Telephone (819) 997-2010.

TABLES

TABLE 1

CLI AGRICULTURAL CAPABILITY COVERAGE OF CANADA, DECEMBER 1975

By Province

Province	A. Total Land Area		B. Available Coverage <sup>(2)</sup>	C. Percentage (B/A)
	(sq. mi.) (1)	(acres)	(acres)	(%)
Newfoundland	143,045	91,548,800	N.A. <sup>(3)</sup>	N.A.
Prince Edward Island	2,174	1,391,233	1,391,233 <sup>(4)</sup>	100
Nova Scotia	20,449	13,087,208	13,087,208 <sup>(4)</sup>	100
New Brunswick	27,587	17,655,693	17,655,693 <sup>(4)</sup>	100
Québec	523,860	335,270,400	74,678,154 <sup>(4)</sup>	22.3
Ontario	344,092	220,218,880	68,029,915 <sup>(4)</sup>	30.1
Manitoba	211,775	135,536,000	47,634,999 <sup>(4)</sup>	35.2
Saskatchewan	220,182	140,916,480	85,140,506 <sup>(4)</sup>	60.4
Alberta	248,800	159,232,000	118,350,659 <sup>(4)</sup>	74.3
British Columbia	359,279	229,938,560	N.A. <sup>(5)</sup>	N.A.
Yukon	205,346	131,421,440	-- <sup>(6)</sup>	--
N.W.T.	1,253,438	802,200,320	-- <sup>(6)</sup>	--
CANADA	3,560,027	2,278,417,014	425,968,367 <sup>(3)(5)</sup>	18.7 <sup>(7)</sup>

(1)

Areas of provinces from Canada Year Book 1974, except for N.B., N.S., and P.E.I. where CLI data were used.

(2)

Figures for all CLI agricultural coverage, Classes 1-7, 0, and unclassified land areas within CLI boundaries, from provincial data available to 1975. A total area of 425,968,367 acres was on the CGIS system by December 1975.

(3)

Newfoundland figures: total CLI area to be covered: 26,304,960 acres (28.8% of the provincial land area). Data are not yet available.

(4)

Coverage of the CLI territory is complete within these provinces.

(5)

British Columbia figures: total CLI area to be covered: about 160,000,000 acres (approximately 70% of the provincial land area). Data are not yet available.

(6)

The Yukon and N.W.T. are not covered by the CLI.

(7)

When complete, the CLI will have classified approximately 27% of Canada's total land area for agricultural capability. Small pockets of land with some agriculture potential may occur outside CLI boundaries but are too small to map and should not significantly affect national totals for high capability lands.

TABLE 2

## CLI CLASSIFICATION OF SOIL CAPABILITY FOR AGRICULTURE

Province	Class	By Province and by CLI Class						Organic Soils (0)	Unclassified Land in CLI Area
		1	2	3	4	5	6	7	
		(in acres)							
Newfoundland <sup>(1)</sup>		--	--	--	--	--	--	--	--
Prince Edward Island		0	645,791	349,700	122,998	187,877	0	68,378	16,489
Nova Scotia		0	410,821	2,427,617	1,048,319	203,080	35,387	8,674,795	287,189
New Brunswick		0	397,312	2,846,772	5,023,626	4,202,813	28,538	4,544,329	327,486
Québec		48,266	2,247,767	3,165,413	6,388,113	4,100,406	26,368	51,310,434	3,774,044
Ontario		5,329,320	5,480,036	7,189,177	6,488,284	4,733,138	2,817,523	27,727,064	6,333,899
Manitoba		401,552	6,252,181	6,030,356	5,908,745	5,529,607	5,152,752	2,555,549	10,990,338
Saskatchewan		2,470,292	14,512,689	23,276,642	9,347,635	21,059,390	7,215,335	87,911	4,387,862
Alberta		1,943,550	9,485,953	15,097,711	22,943,417	27,430,124	9,720,922	10,357,377	14,807,901
British Columbia <sup>(1)</sup>		--	--	--	--	--	--	--	--
N.W.T. & Yukon <sup>(2)</sup>		--	--	--	--	--	--	--	--
CANADA <sup>(3)</sup>		10,192,980	39,432,550	60,383,388	57,271,137	67,446,435	24,996,825	105,325,837	40,925,208
									19,994,008

<sup>(1)</sup> Data not yet available.<sup>(2)</sup> Not covered by the CLI.<sup>(3)</sup> Does not include B.C., Nfld., N.W.T. and Yukon.

TABLE 3

## PERCENTAGE DISTRIBUTION OF SOIL CAPABILITY FOR AGRICULTURE

Province	Class	By Province and by CLI Class								Outside CLI <sup>(2)</sup>	Total Provincial Land Area	
		1	2	3	4	5	6	7	Organic			Unclass'd <sup>(1)</sup>
(percentages)												
Newfoundland (est.) <sup>(3)</sup>	0	0	.01	.2	1.0	7.8	10.1	9.3	0	71.6	100	
Prince Edward Island	0	46.4	25.1	8.8	13.5	0	4.9	1.2	0	0	100	
Nova Scotia	0	3.1	18.6	8.0	1.6	0.2	66.3	2.2	0	0	100	
New Brunswick	0	2.3	16.1	28.5	23.8	0.2	25.7	1.9	1.6	0	100	
Québec	0.01	0.6	0.9	1.9	1.2	0.01	15.3	1.1	1.1	77.9	100	
Ontario	2.4	2.5	3.3	2.9	2.1	1.3	12.6	2.9	0.9	69.1	100	
Manitoba	0.3	4.6	4.4	4.4	4.1	3.8	1.9	8.1	3.6	64.8	100	
Saskatchewan	1.8	10.3	16.5	6.6	14.9	5.1	0.1	3.1	2.0	39.6	100	
Alberta	1.2	6.0	9.5	14.4	17.2	6.1	6.5	9.3	4.1	25.7	100	
British Columbia (est.) <sup>(4)</sup>	<1	(-----< 4-----)			(---< 5---)		(-----> 90-----)					100
Yukon <sup>(5)</sup>	--	--	--	--	--	--	--	--	--	--	--	
N.W.T. <sup>(5)</sup>	--	--	--	--	--	--	--	--	--	--	--	
CANADA <sup>(6)</sup>	0.5	1.8	2.8	2.7	3.0	(----- 89.2-----)					100	

(1) Includes urban areas, national parks, and military reserves not included in the CLI agricultural classification.

(2) All areas outside CLI boundaries (see map) - nearly all Classes 6, 7, and organic (Class 0).

(3) Source: estimated areas from CLI maps not yet published.

(4) Source: British Columbia Land Commission, Keeping the Options Open, Burnaby, B.C., March 1975.

(5) Not included in CLI area.

(6) Adjusted for the estimates.

TABLE 4

CANADA'S SOIL CAPABILITY FOR AGRICULTURE: A PERCENTAGE SUMMARY

By CLI Class<sup>(1)</sup>

Agricultural Classes	Class Areas as a Percentage of Canada's Total Land Area	Cumulative Total of Class Area as a Percentage of Canada's Land Area <sup>(2)</sup>
	(%)	(%)
Class 1	0.45	0.45
Class 2	1.73	2.18
Class 3	2.65	4.83
Class 4	2.51	7.34
Class 5	2.96	10.30
Class 6	Includes some land outside CLI area and is marginal for any agricultural activity except open range.	
Class 7	Includes the bulk of land outside the CLI area and is not suitable for any agricultural activity.	
Class 0	Includes large areas of land outside the CLI area.	

(1) The CLI soil capability data for British Columbia and Newfoundland not available and not included in the table.

(2) Percentages shown represent addition of raw percentages in order of land class. For example, 2.18% of Canada's land area is Class 2 or better, 4.83% of Canada's land area is Class 3 or better.

TABLE 5

DISTRIBUTION OF CANADA'S AGRICULTURAL LANDS<sup>(1)</sup>  
By CLI Agricultural Capability Class and by Province

Province	Class 1 (Best Land)		Classes 1 to 3 Total (Good Land)		Classes 1 to 5 Total (Arable Land)	
	(acres)	(%)	(acres)	(%)	(acres)	(%)
Newfoundland <sup>(3)</sup>	N.A.	--	N.A.	--	N.A.	--
Prince Edward Island	0	0	995,491	0.9	1,306,366	0.5
Nova Scotia	0	0	2,838,438	2.6	4,089,837	1.6
New Brunswick	0	0	3,244,084	2.9	12,470,523	5.3
Québec	48,266	0.5	5,461,446	5.0	15,949,965	6.8
Ontario	5,329,320	52.3	17,998,533	16.4	29,219,955	12.5
Manitoba	401,552	3.9	12,684,089	11.5	24,122,441	10.3
Saskatchewan	2,470,292	24.2	40,259,623	36.6	70,666,648	30.1
Alberta	1,943,550	19.1	26,527,214	24.1	76,900,755	32.9
British Columbia <sup>(3)</sup>	N.A.	--	N.A.	--	N.A.	--
Yukon & N.W.T. <sup>(4)</sup>	--	--	--	--	--	--
CANADA <sup>(5)</sup>	10,192,980	100	110,008,918	100	234,726,490	100

(1) Canada's lands capable of sustaining improved agriculture.

(2) Class 1 is the best land. Classes 1 to 3 can be classified as good crop land. Classes 1 to 5 include all land capable of sustaining any improved agriculture.

(3) Area of classified land excludes B.C., Nfld., and regions of other provinces outside CLI boundaries. Addition of B.C. and Nfld. data (not yet available) will cause only minor changes in the percentages, as Class 1 to 3 constitute less than .01% of the area of Nfld., and less than 5% of the area of B.C.

(4) Not included in CLI area.

(5) Rounding results in percentages not totalling 100%.

APPENDICES

APPENDIX 1

CLI SOIL CAPABILITY FOR AGRICULTURE SUBCLASSES

The CLI has a detailed subclassification system for agricultural land which defines the limitations inherent in a land area. Each area is classified according to its capability, e.g. "5"; additional symbols indicate limiting factors, e.g. "5 FD". Thus 5 FD would be Class 5 because of fertility limitations (F) and soil structure (D). The subclass categories covered by the CLI are the following:

- C - adverse climate
- D - undesirable soil structure and/or low permeability
- E - erosion (and gully land)
- F - low fertility correctable by careful management and fertilizer use
- I - inundation by streams or lakes
- M - moisture limitation, usually due to soils' low water-holding capacity
- N - salinity
- P - stoniness
- R - consolidated bedrock near surface
- S - adverse soil characteristics in general
- T - topography
- W - excess water
- X - cumulative minor adverse characteristics

EXAMPLE: PRINCE EDWARD ISLAND

Class	1	2	3	4	5	6	7
Subclass (principal first)	(in acres)						
S	0	645,791	207,629	40,257	3,748	0	12,292
SW	0	0	67,641	54,375	110,141	0	13,415
I	0	0	47	0	0	0	23,736
W	0	0	0	486	54,397	0	7,828
T	0	0	74,227	25,519	19,591	0	11,107
TS	0	0	156	2,220	0	0	0
ST	0	0	0	141	0	0	0
Total	0	645,791	349,700	122,998	187,877	0	68,378

Thus, 25,519 acres of land in P.E.I. have been classified as Class 4T, principally because of adverse topographic conditions, while 2,220 acres have been classified as Class 4 TS, principally because of a combination of adverse topographic and soil conditions.

For a detailed explanation of each class and subclass refer to The Canada Land Inventory: Soil Capability Classification for Agriculture, CLI Report No. 2, 1965 (reprinted 1969, 1972).

APPENDIX 2

"UNCLASSIFIED" AREAS

TABLE A: BREAKDOWN OF SOILS "UNCLASSIFIED" FOR AGRICULTURAL CAPABILITY

Area (2) \ Prov. (1)	P.E.I.	N.S.	N.B.	QUE.	ONT.	MAN.	SASK.	ALTA.
	(in acres)							
Urban (3)	0	0	7,820	166,010	358,769	42,161	58,183	144,186
Provincial parks	0	0	0	0	1,570,947	295,384	122,857	1,131,437
National parks	0	0	0	0	0	737,890	905,922	4,108,374
Forest reserves	0	0	0	0	0	572,775	1,684,184	10,294
Unmapped (4)	0	0	276,967	3,451,333	1,758	3,165,709	11,605	1,169,415
Total	0	0	284,787	3,617,343	1,931,474	4,813,919	2,782,751	6,563,706

(1) Data for Nfld. and B.C. not yet available.

(2) The definition of each of these areas and the inventory methodology may vary from province to province for CLI purposes.

(3) Those major areas expressly excluded from classification for agricultural capability because the land fell within the confines of those designated urban areas during the CLI agricultural capability mapping program.

(4) These areas may include parks, urban areas, etc., according to the method used by each province for reporting. They may also include all those lands outside the CLI boundaries but within the 1:250,000 N.T.S. sheets' boundaries.

TABLE B: TOTAL OF ACTUAL AREAS OF URBAN LAND USE

Area (2) \ Prov. (1)	P.E.I.	N.S.	N.B.	QUE.	ONT.	MAN.	SASK.	ALTA.
	(in acres)							
Designated urban (3)	0	0	7,820	166,010	358,769	42,161	58,183	144,186
Built-up (4)	6,207	130,282	123,525	374,251	653,036	49,937	101,104	241,334
Total	6,207	130,282	131,345	540,261	1,011,805	92,098	159,287	385,520

(1) Data for Nfld. and B.C. not yet available.

(2) As in Table A, definition of each of these two types of areas and the inventory methodology may vary from province to province for CLI purposes.

(3) Those same areas designated as "urban" in Table A above, and hence, not classified during the CLI agricultural capability mapping program.

(4) Built-up areas discovered outside the designated urban areas during the CLI present land use program (PLU).

APPENDIX 3

PUBLICATIONS ON LAND CAPABILITY

From CLI, Lands Directorate, Environment Canada, Ottawa K1A 0H3 (free of charge):

- Report No. 1 Objectives, Scope and Organization  
66 pp. Revised 1970 Reprinted 1972
- Report No. 2 Soil Capability Classification for Agriculture  
16 pp. Reprinted 1972
- Report No. 3 The Climates of Canada for Agriculture (being reprinted)  
24 pp. 19 maps 1966
- Report No. 4 Land Capability Classification for Forestry  
(2nd Edition) 36 pp. Revised 1970 Reprinted 1972
- Report No. 5 The Economics of Plantation Forestry in Southern Ontario  
D.V. Love and J.R.H. Williams 46 pp. 1968
- Report No. 6 Land Capability for Recreation  
70 photographs, 2 map examples, 110 pp. 1970
- Report No. 7 Land Capability for Wildlife  
Half-tone, stereo and colour illustrations  
29 pp. 1970 Reprinted 1973
- Report No. 8 Soil Capability for Agriculture in Nova Scotia  
Maps and tables 45 pp. 1970
- Report No. 9 Landowners and Land Use in the Tantramar area, New  
Brunswick 195 pp. 1968

The Canada Geographic Information System - Overview, 8 pp. 1973

From the Research Branch, Agriculture Canada, Ottawa K1A 0C7:

- Hoffman, D.W. 1970, Land-use capability for agriculture. ARDA, Toronto 59 pp.
- Nowland, S.L. 1975, The agricultural productivity of the soils of the Atlantic Provinces, Can. Dep. Agric. Monograph No. 12, 19 pp.
- Nowland, S.L. 1975, The agricultural productivity of the soils of Ontario and Québec, Can. Dep. Agric. Monograph No. 13, 19 pp.
- Shields, J.A. and W.S. Ferguson, 1975, Land Resources, Production Possibilities and Limitations for Agricultural Production in the Prairie Provinces. Proceedings of conference on oil seeds and pulse crops in Western Canada.
- Shields, J.A. and S.L. Nowland, (Land Reserves - Overview) in preparation.



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