

DEPARTMENT OF LANDS AND FORESTS
FORESTRY BRANCH

CONVENTIONAL SIGNS
AND
LEGENDS



PROVINCE OF ONTARIO

DEPARTMENT OF LANDS AND FORESTS, ONTARIO

HON. N. O. HIPEL,
Minister

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Division of Reforestation

CONVENTIONAL SIGNS
AND LEGENDS
IN USE BY THE
FORESTRY BRANCH

1934



ONTARIO

TORONTO:

PRINTED BY HERBERT H. BALL
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1934

CONVENTIONAL SIGNS
WORKS AND STRUCTURES

Trunk Road, Paved or Improved

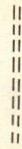


3

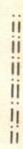
Secondary Road



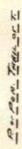
Local Road



Bush, Tote or Winter Road



Portage or Trail



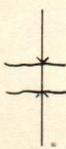
Bridge

M—Masonry I—Iron W—Wood

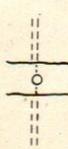


2

Foot Bridge

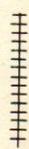


Ferry



Railroad—Single Track

12 cross lines per inch—Scale 1 mile to 1 inch



1

Railroad—Double Track



Electric Railroad



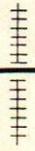
Level Crossing



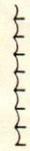
Viaduct



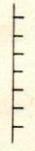
Overhead Crossing



Transmission Line, Steel Towers
6 to 1 inch—Scale 1/8 mile to 1 inch



Transmission Line, Wooden Poles



Church



School



Post Office



House, Barn, etc.



Electric Power Station



Sawmill—stationary



Sawmill—portable



Mine



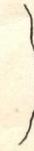
Mine Shaft



Railroad Station, Siding or Stop



Dock, Pier or Landing



Lighthouse or Lighted Beacon



Dam



S—Steel, C—Concrete, W—Wood.

City or Large Town



Town or Village



City, Town or Village, generalized



Lumber Camp—good condition



Lumber Camp—abandoned



Cabin or Building—good condition



Cabin or Building—abandoned



Game Warden's Cabin



Camp Site



Well



RELIEF



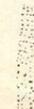
Depression or Pothole



Cliff or Bluff



Sand or Gravel



Sand Dunes



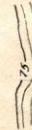
Slide Rock



Mountains or Hills



Contours



9

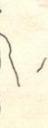
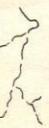
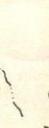
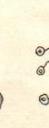
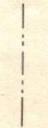
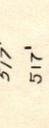
7

8

20

21

DRAINAGE

- River 
- Stream 
- Creek 
- Course undetermined 
- Non-perennial Stream 
- Lake 
- Lake, Shoreline undetermined 
- Non-perennial Lake 
- Springs 
- Rapids 
- Falls 
- Flooded Land 
- Main Height of Land 
- Secondary Watershed Boundary 
- Elevation of Water above Sea Level 
- Elevation of Land above Sea Level 
- Marsh or Swamp 

19

BOUNDARIES AND MONUMENTS

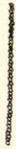
- Bench Mark 
- Triangulation Station 
- Survey Corner Searched for and not found 
- Survey Corner Found but not positively identified 
- Survey Corner positively identified 
- Survey Corner Re-established 
- Interprovincial Boundary 
- County or District Boundary 
- Township Boundary (surveyed) 
- Township Boundary (not surveyed) 
- Fire District Boundary 
- Chief Ranger Division Boundary 
- Deputy Chief Ranger Division Boundary 
- Provincial Forest or Forest Reserve Boundary 
- Indian Reserve Boundary 
- Ontario Forestry Branch Property—Reserved or Purchased 

6

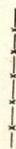
5

4

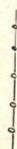
Stone Fence



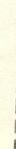
Barbed Wire Fence



Smooth Wire Fence



Rail Fence



ADMINISTRATIVE LEGEND

District Forester



Fire Inspector



Chief Ranger



Deputy Chief Ranger



District Forester
Fire Inspector
Chief Ranger
Deputy Chief Ranger



Radio Station



May be used in conjunction with other symbols to denote that a radio station is located at that point.

Ranger Cabin



Lookout Point



Wooden Tower



Steel Lookout Tower



13

12

AVIATION LEGEND

Hose Drying Tower



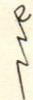
Food Supply or Cache



Stocked Tool Supply Box, Kiosk or Cache



Radio Receiving Station Only



Fire Guard



Aircraft Refueling Station



Aviation Base



Aviation Sub-base



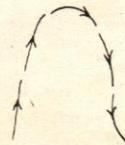
Gasoline



Beach for Aircraft

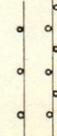
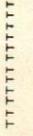


Aircraft Landing Field



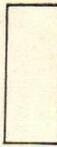
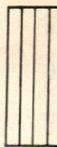
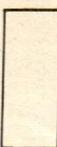
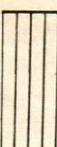
Aircraft Patrol Route

TELEPHONE DIAGRAM MAP LEGEND

| | |
|---|--|
|  | O.F.B. Grounded Circuit Metallic Circuit |
|  | Commercial Grounded Circuit Metallic Circuit |
|  | Association Grounded Circuit Metallic Circuit <small>(Owned in conjunction with another party).</small> |
|  | Double Metallic Circuit Switching Station |
|  | Double Metallic Circuit along Road |
|  | Denoting Change of Wire |
|  | Repeating Coil |
|  | Telephone Line along Road (General Symbol) <small>10 per inch—Scale 1 mi.—1 inch.</small> |
|  | Telephone Line (General Symbol) |
|  | Telegraph Station |
|  | Telephone Station |

FOREST COVER LEGEND

A. COVER TYPE

| | Colour Number | Symbol | Legend |
|-----------------------|---------------|--------|--|
| 1. CONIFEROUS | | | |
| (a) Mature | | | |
| (1) Virgin | 1 Green | C-1 |  |
| (2) Moderately Culled | 1a Green | C-2 |  |
| (3) Severely Culled | 1a Green | C-3 |  |
| (b) Immature | | | |
| (1) Second Growth | 1a Green | C-4 |  |
| (2) Young Growth | 1a Green | C-5 |  |
| 2. HARDWOOD | | | |
| (a) Mature | | | |
| (1) Virgin | 2 Brown | H-1 |  |
| (2) Moderately Culled | 2a Brown | H-2 |  |
| (3) Severely Culled | 2a Brown | H-3 |  |
| (b) Immature | | | |
| (1) Second Growth | 2a Brown | H-4 |  |
| (2) Young Growth | 2a Brown | H-5 |  |

16

15

14

FOREST COVER LEGEND—CONTINUED

C. GENERAL

| Recent Burn | Plantations— -Coniferous -Hardwood -Mixed | Water | Hay or Beaver Meadow | Alders | Open Muskeg | Dwarf Spruce | Windfall | Insect Killed or Diseased | Barren | Rock Outcrop | Cleared Land | Type Boundary | Type Number |
|-----------------|--|-------------|----------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Colour Number 4 | Colour Green Brown Mauve | Colour Blue | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured | Colour Uncoloured |
| Symbol RB | Symbol 1a 2a 3a | Symbol 5 | Symbol Uncoloured | Symbol Uncoloured | Symbol Uncoloured | Symbol C-4-S | Symbol Uncoloured | Symbol Uncoloured | Symbol BA | Symbol RO-% | Symbol CL | Symbol | Symbol 7 |
| Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend | Legend |

FOREST COVER LEGEND—CONTINUED

COVER TYPE

| COVER TYPE | Colour Number | Colour | Symbol | Legend |
|---|---------------|--------|--------|--------|
| 3. MIXED | 3 | Mauve | M-1 | |
| (a) Mature | | | | |
| (1) Virgin | | | | |
| (2) Moderately Culled | 3a | Mauve | M-2 | |
| (3) Severely Culled | 3a | Mauve | M-3 | |
| (b) Immature | | | | |
| (1) Second Growth | 3a | Mauve | M-4 | |
| (2) Young Growth | 3a | Mauve | M-5 | |
| B. AGE CLASS—TO BE USED ON MAPS WHERE AGE ONLY IS TO BE SHOWN | | | | |
| 1. Mature | 1b | Green | 1 | |
| 2. Second Growth | 2 | Brown | 4 | |
| 3. Young Growth | 3b | Mauve | 5 | |

(17)

(18)

The symbol C-1-S which was used formerly to designate virgin coniferous swamp stands, partially commercial, has been omitted. The various swamp conditions, not already covered may be indicated by combining the abbreviation for the most important tree species with a number to indicate the age class as in the following example. All swamps are uncoloured.

COVER TYPE

1. Black Spruce Swamp

(a) Mature

- (1) Virgin
- (2) Moderately culled
- (3) Severely culled

(b) Immature

- (1) Second Growth
- (2) Young Growth

Many other combinations are possible, as SbCw-1, a virgin mature black spruce-cedar swamp.

Where the scale of the map permits the more important species composing a type may be indicated together with the type and age class symbols. This is a distinct advantage when using the map in the field or even in the office, as the necessity of consulting bulky tables to ascertain the species is eliminated.

The symbols may be indicated on the map by enclosing within a circle as follows:

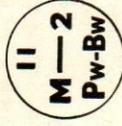
COVER TYPE

1. Mature Jack Pine-Black Spruce



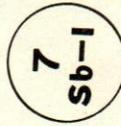
Type Number
Cover Type
Principal Species

2. Moderately culled White Pine-White Birch

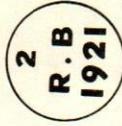


Species underlined
culled.

3. Mature Black Spruce Swamp



4. Recent burn



Date

DEFINITIONS

COVER TYPE

CONIFEROUS—Eighty per cent. or more of main stand composed of conifers.
HARDWOOD—Eighty per cent. or more of main stand composed of hardwoods or broad-leaved species.

MIXED—All other stands.

AGE CLASS

MATURE—Stands which have attained commercial maturity.

SECOND GROWTH—Stands approaching maturity and varying in age from about 25 years for fast-growing species on good sites to about 70 years for slow growing species on poor sites.

YOUNG GROWTH—Stands which vary in age up to 50 years with a maximum diameter breast high not exceeding 4 inches.

RECENT BURN—An area that has been burned over within a ten-year period or, better, an area where reproduction is not established sufficiently to permit of C-5, H-5, or M-5 classification.

COLOUR RECIPES

| Colour Number | Colour | Recipe |
|---------------|-------------|--|
| 1 | Green | 60 drops Japanese Sap green to 2 ounces distilled water. |
| 1a | Green | Hatching with undiluted Higgins' green ink. |
| 1b | Light Green | 20 drops Japanese Sap green to 2 ounces distilled water. |
| 2 | Brown | 100 drops Higgins' brown ink to 2 ounces distilled water. |
| 2a | Brown | Hatching with undiluted Higgins' brown ink. |
| 3 | Mauve | 50 drops Higgins' violet ink to 2 ounces distilled water. |
| 3a | Mauve | Hatching with undiluted Higgins' violet ink. |
| 3b | Light Mauve | 50 drops Higgins' carmine, 10 drops Higgins' blue ink to 2 ounces distilled water. |
| 4 | Carmine | Hatching with undiluted Higgins' carmine ink. |
| 5 | Blue | 40 drops Higgins' blue ink to 2 ounces distilled water. |

The inks specified are Higgins' waterproof drawing inks.
Hatching is spaced ten lines to the inch.

ABBREVIATIONS FOR TREE SPECIES

| | Common Name | Botanical Name |
|----------|------------------|-------------------|
| Al | Alder | Alnus |
| As | Ash | Fraxinus |
| Ab | " black | " nigra |
| Aw | " white | " americana |
| B | Balsam | Abies |
| Bf | " fir | " balsamea |
| Bd | Basswood | Tilia glabra |
| Be | Beech | Fagus grandifolia |
| Bi | Birch | Betula |
| Bp or Bw | " paper or white | " papyrifera |
| By | " yellow | " lutea |
| Bn | Butternut | Juglans cinerea |

| | Common Name | Botanical Name |
|-----|-----------------------|------------------------|
| C | Cedar | Thuja |
| Cw | " white | " occidentalis |
| Ch | Cherry | Prunus |
| Chp | " pin | " pennsylvanica |
| Chb | " black | " serotina |
| E | Elm | Ulmus |
| Es | " slippery | " fulva |
| Ew | " white | " americana |
| H | Hemlock | Tsuga |
| He | " eastern | " canadensis |
| I | Ironwood | Ostrya virginiana |
| L | Larch | Larix |
| Lt | " tamarack | " laricina |
| M | Maple | Acer |
| Mh | " hard or sugar | " saccharum |
| Mm | " mountain | " spicatum |
| Mn | " Manitoba | " negundo |
| Mr | " red | " rubrum |
| Ms | " silver | " saccharinum |
| Mst | " striped | " pennsylvanicum |
| Ma | Mountain Ash | Sorbus americana |
| O | Oak | Quercus |
| Obr | " bur | " macrocarpa |
| Or | " red | " borealis |
| Ow | " white | " alba |
| P | Pine | Pinus |
| Pj | " jack | " banksiana |
| Pr | " red | " resinosa |
| Pw | " white | " strobus |
| Po | Poplar | Populus |
| A | " aspen | " tremuloides |
| Pla | " large toothed aspen | " grandidentata |
| Pb | " balsam | " balsamifera |
| Ser | Service berry | Amelanchier canadensis |
| S | Spruce | Picea |
| Sb | " black | " mariana |
| Sw | " white | " glauca |
| Wn | Walnut | Juglans nigra |
| W | Willow | Salix sp. |

These symbols should not be used in the text of reports.
Names of species not noted here should be given in full.

SCALE EQUIVALENTS

| Miles to one inch | Feet to one inch | Chains to one inch | Meters to one inch | Ratio (inches to one inch) |
|-------------------|----------------------|--------------------|--------------------|----------------------------|
| 0.019 | 100 | 1.515 | 30.480 | 1: |
| 0.038 | 200 | 3.030 | 60.960 | 1: |
| 0.057 | 300 | 4.545 | 91.440 | 1: |
| 0.076 | 400 | 6.061 | 121.920 | 1: |
| 0.095 | 500 | 7.576 | 152.400 | 1: |
| 0.125 | 660 | 10. | 201.168 | 1: |
| 0.152 | 800 | 12.121 | 243.840 | 1: |
| 0.158 | 833 $\frac{1}{3}$ | 12.626 | 253.995 | 1: |
| 0.189 | 1,000 | 15.152 | 304.801 | 1: |
| 0.250 | 1,320 | 20. | 402.337 | 1: |
| 0.379 | 2,000 | 30.303 | 609.601 | 1: |
| 0.473 | 2,500 | 37.879 | 762.002 | 1: |
| 0.5 | 2,640 | 40. | 804.674 | 1: |
| 0.631 | 3,333 $\frac{1}{3}$ | 50.505 | 1,016.0 | 1: |
| 0.710 | 3,750 | 56.818 | 1,143.0 | 1: |
| 0.947 | 5,000 | 75.758 | 1,524.0 | 1: |
| 0.986 | 5,208 $\frac{1}{3}$ | 78.914 | 1,587.5 | 1: |
| 1. | 5,280 | 80. | 1,609.3 | 1: |
| 1.263 | 6,666 $\frac{2}{3}$ | 101.010 | 2,032.0 | 1: |
| 1.420 | 7,500 | 113.636 | 2,286.0 | 1: |
| 1.578 | 8,333 $\frac{1}{3}$ | 126.263 | 2,540.0 | 1: |
| 1.973 | 10,416 $\frac{2}{3}$ | 157.828 | 3,175.0 | 1: |
| 2. | 10,560 | 160. | 3,218.7 | 1: |
| 3.157 | 16,666 $\frac{2}{3}$ | 252.525 | 5,080.0 | 1: |
| 3.946 | 20,833 $\frac{1}{3}$ | 315.657 | 6,350.0 | 1: |
| 4. | 21,120 | 320. | 6,437.4 | 1: |
| 6. | 31,680 | 480. | 9,656.1 | 1: |
| 7.891 | 41,666 $\frac{2}{3}$ | 631.313 | 12,700.0 | 1: |
| 12. | 63,360 | 960. | 19,312.2 | 1: |
| 15.783 | 83,333 $\frac{1}{3}$ | 1,262.626 | 25,400.0 | 1:1,000,000 |