Canada Land Inventory (CLI)

CANADA LAND INVENTORY LEVEL-I DIGITAL DATA

SOIL CAPABILITY FOR FORESTRY

SCALE : 1:250,000 ATTRIBUTE LENGTH: 40 PROJECTION : Lat/Long RESOLUTION : .00024414 degrees DATUM : NAD27

ATTRIBUTE SCHEMA:

3 CLASS\_A CHAR (1),

- 3 MODIFIER\_A CHAR (1),
- 3 PERCENT\_A CHAR (1),
- 3 SUBCLASS\_A CHAR (3),
- 3 SPECIES\_A1 CHAR (4),
- 3 SPECIES\_A2 CHAR (4),
- 3 CLASS\_B CHAR (1),
- 3 MODIFIER\_B CHAR (1),
- 3 PERCENT\_B CHAR (1),
- 3 SUBCLASS\_B CHAR (2),
- 3 SPECIES\_B1 CHAR (4),
- 3 SPECIES\_B2 CHAR (4),
- 3 CLASS\_C CHAR (1),

3 MODIFIER\_C CHAR (1),

3 PERCENT\_C CHAR (1),

3 SUBCLASS\_C CHAR (2),

3 SPECIES\_C1 CHAR (4),

3 SPECIES\_C2 CHAR (4),

NOTE: THIS COVERAGE HAS NO CAPABILITY IN WATER.

VALID CLASSES

1. NO IMPORTANT LIMITATIONS, PRODUCTIVITY GREATER THAN 111 CUBIC FEET/ACRE/YEAR.

2. SLIGHT LIMITATIONS, PRODUCTIVITY OF 91 TO 110 CUBIC

FEET/ACRE/YEAR.

3. MODERATE LIMITATIONS, PRODUCTIVITY OF 71 TO 90 CUBIC

FEET/ACRE/YEAR.

4. MODERATELY SEVERE LIMITATIONS, PRODUCTIVITY OF 51 TO 70 CUBIC FEET/ACRE/YEAR.

5. SEVERE LIMITATIONS, PRODUCTIVELY OF 31 TO 50 CUBIC

FEET/ACRE/YEAR.

6. VERY SEVERE LIMITATIONS, PRODUCTIVITY OF 11 TO 30 CUBIC

FEET/ACRE/YEAR.

7. SEVERE LIMITATIONS PRECLUDING THE GROWTH OF COMMERCIAL FORESTS.

8. SEE NOTE ON SPECIAL CASES.

VALID LIMITATION SUBCLASSES

CLIMATE

- A DROUGHT OR ARIDITY
- C A COMBINATION OF CLIMATIC FACTORS
- H LOW TEMPERATURES
- U EXPOSURE

SOIL MOISTURE

**M - MOISTURE DEFICIENCY** 

W - EXCESSIVE MOISTURE

X - A PATTERN OF M AND W TOO INTIMATELY ASSOCIATED TO MAP SEPARATELY

Z - A PATTERN OF WET ORGANIC SOILS AND BEDROCK TOO

INTIMATELY ASSOCIATED TO MAP SEPARATELY

PERMEABILITY AND DEPTH OF ROOTING ZONE

D - PHYSICAL RESTRICTION TO ROOTING OTHER THAN BEDROCK

# **R - RESTRICTION TO ROOTING BY BEDROCK**

Y - INTIMATE PATTERN OF SHALLOWNESS AND COMPACTION OR OTHER RESTRICTING LAYERS.

OTHER SOIL FACTORS

# **E - ACTIVELY ERODING SOILS**

- F LOW FERTILITY
- I SOILS PERIODICALLY INUNDATED BY STREAMS OR LAKES
- K PRESENCE OF PERENNIALLY FROZEN MATERIAL
- L EXCESSIVE CALCIUM LEVELS
- N EXCESSIVE LEVELS OF TOXIC ELEMENTS
- P EXCESSIVE STONINESS
- S A COMBINATION OF SOIL FACTORS

NOTE: IN THE SPECIAL CASE WHERE CLASS\_A IS CODED AS'8', THE FIRST CHARACTER OF SUBCLASS\_A MAY BE CODED AS FOLLOWS:

BLANK UNMAPPED AREA

Z WATER AREA

- T FOREST PARKS
- O NATIONAL PARKS
- **B URBAN AREAS**
- W PROVINCIAL PARKS

NARRATIVE

IN THIS CLASSIFICATION ALL MINERAL AND ORGANIC SOILS ARE GROUPED INTO ONE OF SEVEN CLASSES BASED UPON THEIR INHERENT ABILITY TO GROW COMMERCIAL TIMBER. THE BEST LANDS OF CANADA FOR COMMERCIAL TREE GROWTH

WILL BE FOUND IN CLASS 1 AND THOSE IN CLASS 7 CANNOT BE EXPECTED TO YIELD TIMBER IN COMMERCIAL QUANTITIES; THESE REPRESENT THE EXTREMES, BECAUSE OF UNSUITABLE CLIMATE NO CLASS 1 LANDS WILL BE FOUND IN SEVERAL

REGIONS OF CANADA SNF IN CERTAIN REGIONS THE CLASS 2 AREAS WILL BE TOO SMALL TO SHOW AT THE CHOSEN SCALES OF MAPPING.

SOME OF THE IMPORTANT FACTORS ON WHICH THE CLASSIFICATION IS BASED ARE:

ALL KNOWN OR INFERRED INFORMATION ABOUT THE AREA INCLUDING SUBSOIL, SOIL PROFILE, DEPTH MOISTURE, FERTILITY, LANDFORM, CLIMATE AND VEGETATION.

ASSOCIATED WITH EACH CAPABILITY CLASS IS A PRODUCTIVITY RANGE BASED ON THE MEAN ANNUAL INCREMENT OF THE BEST SPECIES OF GROUP OF SPECIES ADAPTED TO THE SITE AT OR NEAR ROTATION AGE PRODUCTIVITY CLASSES ARE EXPRESSED IN GROSS MERCHANTABLE CUBIC FOOT VOLUME TO A MINIMUM DIAMETER OF FOUR INCHES. THINNINGS, BARK AND BRANCH WOOD ARE NOT INCLUDED. THE PRODUCTIVITY AS EXPRESSED IS THAT OF "NORMAL", I.E. FULLY-STOCKED STANDS. IT

MAY BE ASSUMED THAT ONLY GOOD MANAGEMENT WOULD HAVE PRODUCED STANDS OF THIS NATURE.

THE FOLLOWING ARE NOT CONSIDERED: LOCATION, ACCESS, DISTANCE TO MARKETS, SIZE OF UNITS, OWNERSHIP, PRESENT STATE OR SPECIAL CROPS SUCH AS CHRISTMAS TREES.

THE CLASSES ARE BASED ON THE NATURAL STATE OF THE LAND WITHOUT IMPROVEMENTS SUCH AS FERTILIZATION, DRAINAGE OR AMELIORATION PRACTICES, IT IS REALIZED THAT WITH IMPROVED FOREST MANAGEMENT THE PRODUCTIVITY MAY

CHANGE; TO THE EXTENT THAT THE LIMITATIONS SHOWN IN THE SUBSOIL MAY BE ALTERED, CLASS CHANGES MAY ALSO TAKE PLACE. HOWEVER, SIGNIFICANT CHANGES WILL ONLY BE ACHIEVED THROUGH COSTLY AND CONTINUING PRACTICES. CLASS 1 LANDS HAVING NO IMPORTANT LIMITATIONS TO THE GROWTH OF COMMERCIAL FORESTS. SOILS ARE DEEP, PERMEABLE, OF MEDIUM TEXTURE, MODERATELY WELL-DRAINED TO IMPERFECTLY DRAINED, HAVE GOOD WATER-

HOLDING CAPACITY AND ARE NATURALLY HIGH IN FERTILITY.

THEIR TOPOGRAPHIC POSITION IS SUCH THAT THEY FREQUENTLY RECEIVE SEEPAGE AND NUTRIENTS FROM ADJACENT AREAS. THEY ARE NOT SUBJECT TO EXTREMES OF TEMPERATURE OR EVAPO-TRANSPIRATION. PRODUCTIVITY WILL USUALLY BE GREATER THAN 111 CUBIC FEET PER ACRE PER YEAR. WHEN REQUIRE THIS CLASS MAY BE SUBDIVIDED ON THE BASIS OF PRODUCTIVITY INTO CLASSES: '1 ', (111 CUBIC FEET TO 130 CUBIC FEET); '1A', (131 CUBIC FEET TO 150 CUBIC FEET); '1B', (151 CUBIC FEET TO 170 CUBIC FEET); '1C', (171 CUBIC FEET TO 190 CUBIC FEET); '1D', (191 CUBIC FEET TO 210 CUBIC FEET); AND BY 20 CUBIC FOOT CLASSES THEREAFTER, AS NECESSARY, BY CODING THE APPROPRIATE ALPHABETIC CHARACTER IN THE MODIFIER POSITION.

CLASS 2 LANDS HAVING SLIGHT LIMITATIONS TO THE GROWTH OF COMMERCIAL FOREST. SOILS ARE DEEP, WELL-DRAINED, TO MODERATELY WELL-DRAINED, OF MEDIUM TO FINE TEXTURE AND HAVE GOOD WATER-HOLDING CAPACITY. THE MOST COMMON LIMITATIONS (ALL OF A RELATIVELY SLIGHT NATURE) ARE: ADVERSE CLIMATE, SOIL MOISTURE DEFICIENCY, RESTRICTED ROOTING DEPTH, SOMEWHAT LOW FERTILITY, AND THE CUMULATIVE EFFECTS OF SEVERAL MINOR ADVERSE SOIL CHARACTERISTICS. PRODUCTIVITY WILL USUALLY BE FROM 91 TO 110 CUBIC FEET/ACRE/YEAR.

CLASS 3 LANDS HAVING MODERATE LIMITATIONS TO THE GROWTH OF COMMERCIAL FORESTS. SOILS MAY BE DEEP TO SOMEWHAT SHALLOW, WELL TO IMPERFECTLY DRAINED, OF MEDIUM TO FINE TEXTURE WITH MODERATE TO GOOD WATER-HOLDING CAPACITY. THEY MAY BE SLIGHTLY LOW IN FERTILITY OR SUFFER FROM PERIODIC MOISTURE IMBALANCES. THE MOST COMMON LIMITATIONS ARE:

ADVERSE CLIMATE, RESTRICTED ROOTING DEPTH, MODERATE

DEFICIENCY OR EXCESS OF SOIL MOISTURE, SOMEWHAT LOW

FERTILITY, IMPEDE SOIL DRAINAGE, EXPOSURE (IN MARITIME

AREAS) AND OCCASIONAL INUNDATION. PRODUCTIVITY WILL

USUALLY BE FROM 71 TO 90 CUBIC FEET/ACRE/YEAR.

CLASS 4 LANDS HAVING MODERATELY SEVERE LIMITATIONS TO THE GROWTH OF COMMERCIAL FOREST.

SOILS MAY VARY FROM DEEP TO MODERATELY SHALLOW, FROM

EXCESSIVE THROUGH IMPERFECT TO POOR DRAINAGE, FROM COARSE THROUGH FINE TEXTURE, FROM GOOD TO POOR MOISTURE HOLDING CAPACITY, FROM GOOD TO POOR STRUCTURE AND FROM GOOD TO LOW NATURAL FERTILITY. THE MOST COMMON LIMITATIONS ARE:

MOISTURE DEFICIENCY OR EXCESS, ADVERSE CLIMATE,

RESTRICTED ROOTING DEPTH, POOR STRUCTURE, EXCESSIVE

CARBONATES, EXPOSURE, OR LOW FERTILITY. PRODUCTIVITY

WILL USUALLY BE FROM 51 TO 70 CUBIC FEET/ACRE/YEAR.

CLASS 5 LANDS HAVING SEVERE LIMITATIONS TO THE GROWTH OF COMMERCIAL FORESTS. SOILS ARE FREQUENTLY SHALLOW TO BEDROCK, STONEY, EXCESSIVELY OR POORLY DRAINED, OF COARSE OR FINE TEXTURE, MAY HAVE POOR MOISTURE HOLDING CAPACITY AND MAY BE LOW IN NATURAL FERTILITY. THE MOST COMMON LIMITATIONS (OFTEN IN COMBINATION: ARE: MOISTURE DEFICIENCY OR EXCESS, SHALLOWNESS TO BEDROCK, ADVERSE REGIONAL OR LOCAL CLIMATE, LOW NATURAL FERTILITY, EXPOSURE PARTICULARLY IN MARITIME AREAS, EXCESSIVE STONINESS AND HIGH LEVELS OF

CARBONATES. PRODUCTIVITY WILL USUALLY BE FROM 31 TO 50

CUBIC FEET PER ACRE PER YEAR.

CLASS 6 LANDS HAVING SEVERE LIMITATIONS TO THE GROWTH OF COMMERCIAL FORESTS.

THE MINERAL SOILS ARE FREQUENTLY SHALLOW, STONEY,

EXCESSIVELY DRAINED, OF COARSE TEXTURE AND LOW IN

FERTILITY. A LARGE PERCENTAGE OF THE LAND IN THIS CLASS

IS COMPOSED OF POORLY DRAINED ORGANIC SOILS. THE MOST

COMMON LIMITATIONS (FREQUENTLY IN COMBINATION) ARE:

SHALLOWNESS TO BEDROCK, DEFICIENCY OR EXCESS OF SOIL

MOISTURE, HIGH LEVELS OF SOLUBLE SALTS, LOW NATURAL

FERTILITY, EXPOSURE, INUNDATION AND STONINESS.

PRODUCTIVITY WILL USUALLY BE FROM 11 TO 30 CUBIC FEET/

ACRE PER YEAR.

CLASS 7 LANDS HAVING SEVERE LIMITATIONS WHICH PRECLUDE THE GROWTH OF COMMERCIAL FORESTS.

MINERAL SOILS ARE USUALLY EXTREMELY SHALLOW TO BEDROCK, SUBJECT TO REGULAR FLOODING, OR CONTAIN TOXIC LEVELS OF SOLUBLE SALTS. ACTIVELY ERODING OR EXTREMELY DRY SOILS MAY ALSO BE PLACED IN THIS CLASS. A LARGE PERCENTAGE OF THE LAND IS VERY POORLY DRAINED ORGANIC SOILS. THE MOST COMMON LIMITATIONS ARE: SHALLOWNESS TO BEDROCK, EXCESSIVE SOIL MOISTURE, FREQUENT INUNDATION, ACTIVE EROSION, TOXIC LEVELS OF SOLUBLE SALTS, AND EXTREMES OF CLIMATE OR EXPOSURE. PRODUCTIVITY WILL USUALLY BE LESS THAN 10 CUBIC FEET PER ACRE PER YEAR.

SUBCLASS DESCRIPTIONS

CLIMATE

DENOTES A SIGNIFICANT ADVERSE DEPARTURE FROM WHAT IS

CONSIDERED THE MEDIAN CLIMATE OF THE REGION, THAT IS, A

LIMITATION AS A RESULT OF LOCAL CLIMATE; ADVERSE REGIONAL CLIMATE WILL BE EXPRESSED BY THE CLASS LEVEL.

A DROUGHTY OR ARID CONDITIONS AS A RESULT OF CLIMATE.

C A COMBINATION OF MORE THAN ONE CLIMATIC FACTOR OR WHEN IT IS NOT POSSIBLE TO DECIDE WHICH OF TWO OR MORE FEATURES OF CLIMATE IS SIGNIFICANT.

H LOW TEMPERATURES, THAT IS TOO COLD.

U EXPOSURE.

SOIL MOISTURE

DENOTES A SOIL MOISTURE CONDITION LESS THAN OPTIMUM FOR THE GROWTH OF COMMERCIAL FORESTS BUT NOT INCLUDING INUNDATION.

M SOIL MOISTURE DEFICIENCY.

W SOIL MOISTURE EXCESS.

X A PATTERN OF 'M' AND 'W' TOO INTIMATELY ASSOCIATED TO MAP SEPARATELY.

Z A PATTERN OF WET ORGANIC SOILS AND BEDROCK TOO INTIMATELY ASSOCIATED TO MAP SEPARATELY.

PERMEABILITY AND DEPTH OF ROOTING ZONE

DENOTES LIMITATIONS OF SOIL PERMEABILITY OR PHYSICAL

LIMITATION TO ROOTING DEPTH.

D PHYSICAL RESTRICTION TO ROOTING BY DENSE OR CONSOLIDATED LAYERS, OTHER THAN BEDROCK.

R RESTRICTION OF ROOTING ZONE BY BEDROCK.

Y INTIMATE PATTERN OF SHALLOWNESS AND COMPACTION OR OTHER RESTRICTING LAYERS.

OTHER SOIL FACTORS

DENOTES FACTORS OF THE SOIL WHICH, INDIVIDUALLY OR IN COMBINATION, ADVERSELY AFFECT GROWTH.

E ACTIVELY ERODING SOILS.

F LOW FERTILITY.

I SOILS PERIODICALLY INUNDATED BY STREAMS OR LAKES.

K PRESENCE OF PERENNIALLY FROZEN MATERIAL.

L NUTRITIONAL PROBLEMS ASSOCIATED WITH HIGH LEVELS OF CARBONATES.

N EXCESSIVE LEVELS OF TOXIC ELEMENTS SUCH AS SOLUBLE

SALTS.

P STONINESS WHICH AFFECTS FOREST DENSITY OR GROWTH.

S A COMBINATION OF SOIL FACTORS, NONE OF WHICH, BY THEMSELVES WOULD AFFECT THE CLASS LEVEL BUT CUMULATIVELY LOWER THE CAPABILITY CLASS.

### EXAMPLES

THE FOLLOWING ARE ILLUSTRATIONS OF SYMBOLS WHICH WILL BE USED TO DENOTE THE CLASSES, SUBCLASSES, RATIOS AND INDICATOR SPECIES FOR ALL MAPS.

A) SINGLE CLASS WITH NO SUBCLASS AND ONE INDICATOR

SPECIES:

1\*\*\*\*RP

B) SINGLE CLASS WITH NO SUBCLASS AND TWO INDICATOR

SPECIES:

1\*\*\*\*RP\*\*WP

C) SINGLE CLASS WITH ONE SUBCLASS AND ONE INDICATOR

SPECIES:

3\*\*M\*\*RP

D) SINGLE CLASS WITH TWO SUBCLASSES AND TWO INDICATOR

SPECIES:

3\*\*RM\*P\*\*\*WP

YIELD THE MAXIMUM COMMERCIAL VALUE:

4\*6R\*\*P\*\*\*\*\*4\*4W\*WS

E) SINGLE CLASS WITH TWO SUBCLASSES AFFECTING DIFFERENT

PARTS OF THE AREA AND FOR WHICH DIFFERENT SPECIES WILL

F) A COMPLEX OF TWO CLASSES, ONE OCCUPYING 60 PERCENT OF THE AREA AND THE OTHER OCCUPYING 40 PERCENT OF THE AREA WITH SUBCLASSES AND INDICATOR SPECIES:

3\*6R\*\*P\*\*\*\*\*4\*4\*4RMWS

G) A COMPLEX OF THREE CLASSES WITH VARIOUS COMBINATIONS OF SUBCLASSES AND INDICATOR SPECIES:

4\*6RM\*WS\*\*\*\*\*2\*2F\*RP\*\*\*6\*2W\*BS

NOTE: ALL ASTERISKS (\*) REPRESENT BLANKS.

THE FOLLOWING POINTS SHOULD BE NOTED:

1. FOR CLASS 1 NO SUBCLASSES WILL BE SHOWN. WHEN THE

HIGHEST CAPABILITY CLASS ON THE MAP SHEET DOES NOT SHOW SUBCLASSES, REGIONAL CLIMATE WILL BE ASSUMED AS THE LIMITATION.

2. A COMPLEX MAY CONSIST OF TWO OR EVEN THREE OCCURRENCES OF THE SAME CLASS WHEN THE SUBCLASSES OR INDICATOR SPECIES ARE CHANGED.

3. IN A COMPLEX, CAPABILITY CLASSES WILL BE SHOWN IN THE

ORDER OF THEIR RELATIVE PROPORTION IN THE UNIT; THE

CAPABILITY CLASS OCCUPYING THE GREATEST PERCENTAGE OF

THE AREA OF THE UNIT WILL APPEAR FIRST AND SO ON.

4. THE SYMBOL WILL CONSIST OF:

A) A CAPABILITY CLASS FROM 1 TO 7

B) A MAXIMUM OF 3 SUBCLASSES BUT GENERALLY NOT MORE

THAN 2; IN A COMPLEX A MAXIMUM OF 2 SUBCLASSES WITH EACH SEPARATE CLASS;

C) A MAXIMUM OF 2 INDICATOR SPECIES WITH EACH
CAPABILITY CLASS; AT THE 1:250,000 SCALE GENERALLY
NO MORE THAN ONE SPECIES SHOULD BE SHOWN WITH EACH
CLASS OF A COMPLEX;

D) A MAXIMUM OF 3 CLASSES IN A COMPLEX, BUT GENERALLY

NOT MORE THAN 2, AND,

E) THE PROPORTION OF EACH CLASS OF A COMPLEX TO THE NEAREST 10 PERCENT.

FOR FURTHER INFORMATION SEE 'THE CANADA LAND INVENTORY, LAND CAPABILITY CLASSIFICATION FOR FORESTRY', REPORT NO. 4, 1970.

A LIST OF SPECIES CODES FOLLOWS.

CODE SPECIES

A ASPEN

AI ALDER

mAI MOUNTAIN ALDER

rAI RED ALDER

sAI SITKA ALER

spAI SPECKLED ALER

wAI WHITE ALDER

Ap APPLE

pAp PACIFIC CRAB APPLE

sAp SWEET CRAB APPLE

wAp WILD CRAB APPLE

Ar ARBUTUS

As ASH

bAs BLACK ASH

blAs BLUE ASH

gAs GREEN ASH

nAs NORTHERN RED ASH

rAs RED ASH

wAs WHITE ASH

**B** BIRCH

**bB BLUELEAF BIRCH** 

sB SWEET BIRCH

wB WHITE BIRCH

awB ALASKA WHITE BIRCH

gwB GASPE WHITE BIRCH

IWB LARGE-FRUITED WHITE BIRCH

mwB MOUNTAIN WHITE BIRCH

nwB NORTHWESTERN WHITE BIRCH

wwB WESTERN WHITE BIRCH

wewB WEEPING WHITE BIRCH

waB WATER BIRCH

wiB WIRE BIRCH

yB YELLOW BIRCH

**yuB YUKON BIRCH** 

Ba BASSWOOD

Be BEECH

**BI BLUE-BEECH** 

**Bu BUTTERNUT** 

C CEDAR

eC EASTERN WHITE CEDAR

wC WESTERN RED CEDAR

yC YELLOW CEDAR

Ch CHERRY

bCh BLACK CHERRY

biCh BITTER CHERRY

cCh CHOKE CHERRY

ecCh EASTERN CHOKE CHERRY

wcCh WESTERN CHOKE CHERRY

bcCh BLAACK CHOKE CHERRY

pCh PIN CHERRY

Che CHESTNUT

Co COTTONWOOD

Cof COFFEE-TREE

Cu CUCUMBER-TREE

D DOUGLAS FIR

bD BLUE DOUGLAS FIR

Do DOGWOOD

aDp ALTERNATE-LEAF DOGWOOD

## eDo EASTERN FLOWERING DOGWOOD

rDo ROUGHLEAF DOGWOOD

wDo WESTERN FLOWERING DOGWOOD

### E ELM

re ROCK ELM

sE SLIPPERY ELM

WE WHITE ELM

EI ELDER

F FIR

aF AMANBILIS FIR

alF ALPINE FIR

bF BALSAM FIR

brF BBRACTED BALSAM FIR

gF GRAND FIR

G GUM

H HEMLOCK

eH EASTERN HEMLOCK

mH MOUNTAIN HEMLOCK

WH WESTERN HEMLOCK

#### Ha HACKBERRY

Haw HAWTHORN

bHaw BLACK HAWTHORN

cHaw COLUMBIA HAWTHORN

rHaw ROUNDLEAF HAWTHORN

Hi HICKORY

aHi ASHLEAF SHAGBARK HICKORY

bHi BITTERNUT HICKORY

mHi MOCKERNUT HICKORY

miHi MICHIGAN RED HICKORY

pHi PIGNUT HICKORY

rHi ROUNDNUT RED HICKORY

sHi SHAGBARK HICKORY

shHi SHELLBARK HICKORY

Ho HOP-TREE

Hon HONEY-LOCUST

I IRONWOOD

J JUNIPER

rJ RED JUNIPER

**roJ ROCKY MOUNTAIN JUNIPER** 

L LARCH AND TAMARACK

aL ALPINE LARCH

tL TAMARACK

wL WESTERN LARCH

LO BLACK LOCUST

M MAPLE

bM BROADLEAF MAPLE

bIM BLACK MAPLE

dM DOUGLAS MAPLE

mM MANITOBA MAPLE

moM MOUNTAIN MAPLE

rM RED MAPLE

sM SUGAR MAPLE

siM SILVER MAPLE

stM STRIPED MAPLE

vM VINE MAPLE

Mo MOUNTAIN ASH

aMo AMERICAN MOUNTAIN ASH

sMo SHOWY MOUNTAIN ASH

Mu MULBERRY

O OAK

bO BUR OAK

bIO BLACK OAK

cO CHESTNUT OAK

chO CHINQUAPIN OAK

gO GARRY OAK

nO NORHTERN PIN OAK

rO RED OAK

so swamp white oak

scO SCARLET OAK

wO WHITE OAK

P PINE

jP JACK PINE

IP LODGEPOLE PINE

**IIP LIMBER PINE** 

**pP PONDEROSA PINE** 

piP PITCH PINE

rP RED PINE

sP SHORE PINE

scP SCOTS PINE

wP WHITE PINE

ewP EASTERN WHITE PINE

wwP WESTERN WHITE PINE

whP WHITEBARK PINE

Pa PAPAW

**PI PLUM** 

cPI CANADA PLUM

wPI WILD PLUM

Po POPLARS IN GENERAL

A ASPEN

IA LARGETOOTH ASPEN

tA TREMBLING ASPEN

Co COTTONWOOD

bCo BLACK COTTONWOOD

eCo EASTERN COTTONWOOD

ICo LANCELEAF COTTONWOOD

nCo NARROWLEAF COTTONWOOD

pCo PLAINS COTTONWOOD

Ро

bPo BALSAM POPLAR

cPo CAROLINA POPLAR

gPo GRAY POPLAR

giPo GILEAD POPLAR

IPo LOMBARDY POPLAR

sPo SILVER POPLAR

**R REDBUD** 

S SPRUCE

**bS BLACK SPRUCE** 

eS ENGELMANN SPRUCE

**nS NORWAY SPRUCE** 

rS RED SPRUCE

sS SITKA SPRUCE

wS WHITE SPRUCE

weS WESTERN WHITE SPRUCE

Sa SASSAFRAS

Se SERVICEBERRY, SASKATOON, JUNEBERRY

aDe ALLEGHENY SERVICEBERRY

dSe DOWNY SERVICEBERRY

pSe PACIFIC SERVICEBERRY

rSe ROUNDLEAF JUNEBERRY

sSe SASKATOON

Su SUMAC

Sy SYCAMORE

yW YELLOW WILLOW

wW WHIPLASH WILLOW

sitW SITKA WILLOW

siW SILKY WILLOW

seW SERVICEBERRY WILLOW

scW SCOULER WILLOW

saW SANDBAR WILLOW

sW SHINING WILLOW

puW PUSSY WILLOW

paW PACIFIC WILLOW

pW PEACHLEAF WILLOW

nW NORTHEWESTERN WILLOW

**hW HOOKER WILLOW** 

**fW FELTLEAF WILLOW** 

dW DUSKY WILLOW

coW COULTER WILLOW

cW COYOTE WILLOW

beW BEBB WILLOW

baW BALSAM WILLOW

**bW BLACK WILLOW** 

W WILLOW

T TULIP-TREE

Wa WALNUT

Wi WITCH-HAZEL

Y YEW

X SPECIES WHICH DO NOT WARRANT DIFFEREN-

TIATION FOR THE PURPOSE AT HAND.

sX UNDIFFERENTIATED SOFTWOOD SPECIES

hX UNDIFFERENTIATED HARDWOOD SPECIES

NOTE:

FOR COMPUTER INPUT, ALL SPECIES CODES WILL BE COMPRISED

ENTIRELY OF CAPITAL LETERS AND WILL BE LEFT JUSTIFIED WITHIN THE 4-CHARACTER SPECIES FIELD. FOR EXAMPLE, SILVER MAPLE (siM)

WILL BE CODED AS 'SIM'.

AS A CONSEQUENCE TO USING ONLY ONLY CAPITAL LETTERS, SEVERAL INSTANCES ARISE WHERE TWO DIFFERENT CODES BECOME INDISTINGUISHABLE.

THESE CASES ARE:

1. ALDER (AI) AND ALPINE LARCH (aL) BECOME 'AL'.

2. CHESTNUT OAK (cO) AND COTTONWOOD (Co) BECOME 'CO'.

3. PIN OAK (pO) AND POPLARS IN GENERAL (Po) BECOME 'PO'.

4. SLIPPERY ELM (sE) AND SERVICEBERRY (Se) BECOME 'SE'.