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UNIVERSITY OF WISCONSIN-MADISON

## **Site 6090 (Boreal Stand 90): Pancake Bay, District of Algoma, Ontario. 1956-07-28**

[s.l.]: [s.n.], 1956-07-28

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## STAND RECORD

## FORESTS

Stand No. 90  
25 ypl. int.

Name: *Pancake Bay*  
 County: *District of Algoma, N. Ontario* T:  
 Date: *July 28, 1956* Observers: *PFM, JEM*  
 Size of Stand: *35 acres*  
 Forest Type: *Balsam-spruce*  
 Topography:

Locality: *Mile 5 1/2, Hy 17, N. Sault Ste Marie*  
 R: Sec:

Size of Area Sampled:  
 Soil Type: *Sand*  
 Slope: Directions

*level-stand  
 surrounding gently rolling*

## Condition of Stand:

*Previously logged & burned  
 young stand 65 yrs old - Ab bored - fairly even-aged  
 Mesic Site*

## Open Crown Trees:

## % Canopy:

## Stumps:

|    |    |    |     |
|----|----|----|-----|
| 1. | 4. | 7. | 10. |
| 2. | 5. | 8. | 11. |
| 3. | 6. | 9. | 12. |

## Soil Data:

|                | pH | N | P | K | Ca | Mg | Org. Mat. | Colloids | W.H.C. |
|----------------|----|---|---|---|----|----|-----------|----------|--------|
| A <sub>0</sub> |    |   |   |   |    |    |           |          |        |
| A <sub>1</sub> |    |   |   |   |    |    |           |          |        |
| A <sub>2</sub> |    |   |   |   |    |    |           |          |        |
| B              |    |   |   |   |    |    |           |          |        |

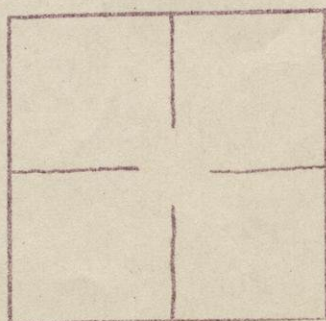
## DEPTH

## CHARACTERISTICS (Color, Texture, Structure, etc.)

|                | #1                                | #2                                            | #3                                        |
|----------------|-----------------------------------|-----------------------------------------------|-------------------------------------------|
| A <sub>0</sub> | <i>1/2" leaves &amp; needles</i>  | <i>2" needles &amp; leaves</i>                | <i>3" needles &amp; leaves</i>            |
| A <sub>1</sub> | <i>1/2-1" black</i>               | <i>1/2" black</i>                             | <i>1/2" black</i>                         |
| A <sub>2</sub> | <i>1-1 1/2 leached gray-brown</i> | <i>1/2 - as #1</i>                            | <i>1" as #1</i>                           |
| B              | <i>red-brown coarse sand</i>      | <i>reddish-brown coarse sand &amp; gravel</i> | <i>red brown coarse sand &amp; gravel</i> |

## Parent Material:

## Map:



25 yd. int

Panlake Bay  
 Mile 5 1/2, Hwy 17, N. of Sault Ste Marie, N. Ont.  
 District of Algoma.  
 July 28, 1956  
 35 acres

PPM, TEM.

Balsam-spruce

level - surrounding gently rolling

## Condition of Stand.

Previously logged &amp; burned

Young stand - 65 yrs old - Balsams bud. - Overaged.

Main site

Stand 150-

## Soil

A<sub>0</sub> - 1/2" leaves + needlesA<sub>1</sub> - 1/2" - 1" blackA<sub>2</sub> - 1-1 1/2" leached grayish-brown  
not heavily so

B - reddish brown coarse sand

A<sub>0</sub> - 2" needles + leavesA<sub>1</sub> - 1/2"A<sub>2</sub> - 1/2" sameB reddish brown coarse  
sand + gravelA<sub>0</sub> 3" needles + leavesA<sub>1</sub> - 1/2" blackA<sub>2</sub> 1"

B same

## TREE DATA SUMMARY SHEET

spruce-fir, spruce-fir - mixed hardwoods.  
~~Northern Pine Hardwoods~~

Station Number: 6090

| TREE        | # PTS | # TRS | DOM. CLASSES |      |     | TOT. DOM. | # SAP | D. % SAP | F. % SOL. | F. % TRS. | % SUM F. TR. | D. % TRS. | DOM% TRS. | DFD INDEX | C. I. |
|-------------|-------|-------|--------------|------|-----|-----------|-------|----------|-----------|-----------|--------------|-----------|-----------|-----------|-------|
|             |       |       | -80          | -320 | 321 |           |       |          |           |           |              |           |           |           |       |
| Abies bals  | 30    | 105   |              |      |     | 3040      | 81    | 67.5     |           | 100.0     | 70.0         | 87.5      | 76.6      | 234.1     |       |
| Acer rubru  | 3     | 3     |              |      |     | 65        | 2     | 1.7      |           | 10.0      | 7.0          | 2.5       | 1.6       | 11.1      |       |
| A. sacchar  | 1     | 1     |              |      |     | 85        | 2     | 1.7      |           | 3.3       | 2.3          | 0.8       | 2.1       | 5.2       |       |
| A. spicatu  |       |       |              |      |     |           | 24    | 20.0     |           |           |              |           |           |           |       |
| Betula lut  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| B. papyrif  | 4     | 6     |              |      |     | 357       | 5     | 4.2      |           | 13.3      | 9.2          | 5.0       | 9.0       | 23.2      |       |
| Carpinus c  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Fagus gran  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Ostrya vir  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Picea glau  | 4     | 4     |              |      |     | 382       |       |          |           | 13.3      | 9.2          | 3.4       | 9.6       | 22.2      |       |
| Pinus Bank  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| P. resinosa |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| P. Strobus  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Populus ba  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| P. grandid  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| P. tremulo  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Prunus pen  |       |       |              |      |     |           | 4     | 3.3      |           |           |              |           |           |           |       |
| Quercus el  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Q. rubra    |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Tilia amer  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Tsuga cana  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Thuja occi  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Ulmus amer  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| U. fulva    |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Pyrus amer. | 1     | 1     |              |      |     | 45        | 2     | 1.7      |           | 3.3       | 2.3          | 0.8       | 1.1       | 4.2       |       |
|             |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
|             |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| TOTALS      | 43    | 120   |              |      |     | 3974      | 120   | 100.0    |           | 143.2     | 100.0        | 100.0     | 100.0     | 300.0     |       |

AVE. DIST. BTW N TREES:

8.1

AVE B. A.:

33.1

# TREES/ACRE:

664

DOM./ACRE:

21,978

## Stand No. 90 (1)

[illegible]

## POINT RECORD TREES

## NORTHERN PINE-HARDWOODS

Stand No. 90 (2)

[illegible]

## POINT RECORD TREES

## NORTHERN PINE-HARDWOODS

Stand No. 90(3)

| STATION NO.      | 1                             | 2                         | 3                                           | 4                                               | 5                                           | 6                                                                        | 7                                                | 8                                      | 9                                    | 10      |
|------------------|-------------------------------|---------------------------|---------------------------------------------|-------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------|--------------------------------------|---------|
| Abies balsam     | 7 1/2-24<br>12 1/2-35<br>5-70 | 13 1/2-21<br>6-25<br>8-50 | 8-45<br>16<br>7-45<br>8 1/2-30<br>14 1/2-50 | 2 1/2-23<br>3<br>11 1/2-17<br>8<br>3-24<br>7-35 | 6-24<br>9 1/2-27<br>12<br>5 1/2-60<br>16-65 | 7 1/2-40<br>6<br>4-60<br>12-14<br>10<br>10 1/2-24<br>10<br>7-40<br>21-18 | 3<br>7 1/2-24<br>11 1/2-27<br>14 1/2-22<br>13-35 | 3<br>10 1/2-25<br>14<br>12 1/2-22<br>9 | 2<br>3-24<br>10-13<br>12-15<br>11-35 | 8<br>4  |
| Acer rubrum      | 6-13                          |                           |                                             |                                                 |                                             |                                                                          |                                                  | 5-27                                   |                                      |         |
| A. sacchar.      |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| A. spicatum      | 9<br>8 1/2                    |                           | 2<br>8                                      | 3 1/2                                           | 5                                           |                                                                          | 8 1/2                                            | 18                                     | 4 1/2                                |         |
| Betula lut.      |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| B. papyrif       |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        | 21-30                                |         |
| Carpinus car     |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Fagus gran       |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Ostrya virg      |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Picea glau       |                               |                           |                                             |                                                 |                                             | 5-160                                                                    |                                                  |                                        |                                      |         |
| Pinus Bank       |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| P. resinosa      |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| P. Strobus       |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Populus bals     |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| P. grand         |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| P. trem          |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Prunus pen.      |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        | 7 1/2                                |         |
| Quercus ell      |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Q. rubra         |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Tilia amer       |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Tsuga can        |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Thuja occ        |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Ulmus amer       |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| U. fulva         |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Pyrus amer       |                               | 8 1/2-45                  |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |
| Canopy<br>litter | 75<br>1                       | 80<br>1 1/4               | 85<br>1                                     | 70<br>1 1/2                                     | 80<br>1                                     | 85<br>1 1/2                                                              | 70<br>1                                          | 60<br>1                                | 70<br>2                              | 55<br>1 |
| Distance         |                               |                           |                                             |                                                 |                                             |                                                                          |                                                  |                                        |                                      |         |

Av. canopy = 69.00

Av. litter = 1.2"

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|                                 | P. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total | No<br>Flora |
|---------------------------------|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|-------|-------------|
| Achillea millefolium            |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Actaea pachypoda                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Actaea rubra                    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Adiantum pedatum                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Agastache foeniculum            |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Agrimonia gryposepala           |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Agrostis perennans              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Allium tricoccum                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Alnus crispa                    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Alnus rugosa                    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Amphicarpa bracteata            |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Anaphlis margaritacea           |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Anemone canadensis              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Anemone cylindrica              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Anemone quinquefolia            |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Anemone virginiana              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Antennaria spp.                 |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Apocynum androsaemifolium       |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aquilegia canadensis            |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aralia hispida                  |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aralia nudicaulis               | ✓  |   |   |   |   |   | ✓ |   |   | ✓ |    | ✓  |    |    |    |    |    |    |    |    |    | 3     | 20          |
| Aralia racemosa                 |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Arctostaphylos uva-ursi         |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Arenaria lateriflora            |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Arisaema atrorubens             |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Asarum canadense                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Asclepias exaltata              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster acuminatus                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster ciliolatus                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster furcatus                  |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster lateriflorus              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster macrophyllus              | ✓  |   |   |   |   | ✓ | ✓ |   |   | ✓ | ✓  | ✓  |    | ✓  |    |    |    |    |    |    |    | 6     | 40          |
| Aster nova-angliae              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster paniculatus               |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster puniceus                  |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster sagittifolius             |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Aster umbellatus                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Athyrium filix-femina           |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Athyrium thelypteroides         |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Botrychium lanceolatum          |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Botrychium lunaria              |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Botrychium<br>matricariaefolium |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Botrychium multifidum           |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Botrychium virginianum          |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Brachyelytrum erectum           |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Caltha palustris                |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Calypso bulbosa                 |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Campanula rotundifolia          |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Carex arctata                   |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Carex aurea                     |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Carex brunnescens               |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |
| Carex canescens                 |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |       |             |

[illegible]

University of Wisconsin  
STAND NO. 90

[illegible]

|                         | P | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |   |    |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|---|----|
| Geum aleppicum          |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Geum canadense          |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Geum rivale             |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Glyceria striata        |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Goodyera obtusifolia    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Goodyera pubescens      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Goodyera repens         |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Goodyera tessellata     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Habenaria clavellata    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Habenaria hyperborea    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Habenaria obtusata      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Habenaria orbiculata    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Habenaria psycodes      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Habenaria viridis       |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hackelia virginiana     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Halenia deflexa         |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hamamelis virginiana    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Helianthus strumosus    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hepatica acutiloba      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hepatica americanum     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Heracleum maximum       |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Heuchera richardsonii   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hieracium aurantiacum   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hieracium canadense     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hieracium pratense      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Hieracium scabrum       |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Ilex verticillata       |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Impatiens capensis      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Iris lacustris          |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Isopyrum biternatum     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Juniperus communis      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Juniperus horizontalis  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lactuca canadensis      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Laportea canadensis     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lathyrus ochroleucus    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Ledum groenlandicum     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lichens spp.            | ✓ |   | ✓ |   |   | ✓ |   | ✓ | ✓ | ✓ |    | ✓  | ✓  |    |    | ✓  |    |    |    |    |    | 8 | 53 |
| Lilium michiganense     |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Linnaea borealis        | ✓ |   |   |   |   |   |   |   |   | ✓ | ✓  |    |    |    |    |    |    |    |    |    |    | 2 | 13 |
| Listera auriculata      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Listera borealis        |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Listera convallarioides |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Listera cordata         |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lobelia inflata         |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lonicera canadensis     | ✓ |   |   |   |   | ✓ | ✓ |   | ✓ |   |    | ✓  | ✓  | ✓  |    |    |    |    |    |    |    | 6 | 40 |
| Lonicera dioica         |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lonicera hirsuta        | ✓ |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   | 1  |
| Lonicera involucrata    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lonicera oblongifolia   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lonicera prolifera      |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Lonicera villosa        |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |
| Luzula acuminata        |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |    |

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Data Form No. 84f  
TABULATION FORM

Plant Ecology Research  
SPRUCE - FIR, SPRUCE - FIR MIXED HARDWOODS

University of Wisconsin  
STAND NO. 90

[illegible]

[illegible]

[illegible]

[illegible]

## PRESENCE LIST

## SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 90

## TREES

✓ *Abies balsamea*  
*Acer pensylvanicum*  
 ✓ *Acer rubrum*  
 ✓ *Acer saccharum*  
 ✓ *Acer spicatum*  
 ✓ *Amelanchier* spp.  
*Betula lutea*  
 ✓ *Betula papyrifera*  
*Carpinus caroliniana*  
*Crataegus* spp.  
*Fagus grandifolia*  
*Fraxinus americana*

*Fraxinus nigra*  
*Fraxinus pennsylvanicum*  
*Larix laricina*  
*Ostrya virginiana*  
 ✓ *Picea glauca*  
*Picea mariana*  
*Pinus banksiana*  
*Pinus resinosa*  
 ✓ *Pinus strobus*  
*Populus balsamifera*  
*Populus grandidentata*  
*Populus tremuloides*

*Prunus nigra*  
 ✓ *Prunus pensylvanica*  
*Prunus serotina*  
*Prunus virginiana*  
 ✓ *Pyrus americana*  
*Pyrus decora*  
*Quercus rubra* var. *borealis*  
 ✓ *Thuja occidentalis*  
*Tilia americana*  
*Tsuga canadensis*  
*Ulmus americana*  
*Ulmus rubra*

## SHRUBS

*Alnus crispa*  
*Alnus rugosa*  
*Arctostaphylos uva-ursi*  
*Celastrus scandens*  
*Chamaedaphne calyculata*  
*Comptonia peregrina*  
*Cornus alternifolia*  
*Cornus racemosa*  
*Cornus rugosa*  
*Cornus stolonifera*  
*Corylus americana*  
 ✓ *Corylus cornuta*  
 ✓ *Diervilla lonicera*  
*Dirca palustris*  
*Empetrum nigrum*  
*Gaylussaccia baccata*  
*Hamamelis virginiana*  
*Ilex verticillata*  
*Juniperus communis*  
*Juniperus horizontalis*  
*Ledum groenlandicum*  
 ✓ *Lonicera canadensis*  
*Lonicera dioica*

✓ *Lonicera hirsutum*  
*Lonicera involucrata*  
*Lonicera oblongifolia*  
*Lonicera villosa*  
*Parthenocissus quinquefolia*  
*Parthenocissus vitacea*  
*Prunus pumila*  
*Pyrus melanocarpa*  
*Rhamnus alnifolia*  
*Rhus glabra*  
*Rhus typhina*  
*Ribes americanum*  
*Ribes cynosbati*  
*Ribes glandulosum*  
*Ribes hirtellum*  
*Ribes lacustre*  
*Ribes oxycanthoides*  
*Ribes triste*  
*Rosa* sp.  
*Rubus allegheniensis*  
*Rubus* (blackberry)  
*Rubus* (dewberry)  
*Rubus* (raspberry)

✓ *Rubus idaeus*  
*Rubus parviflorus*  
*Salix* sp.  
*Sambucus canadensis*  
*Sambucus pubens*  
*Shepherdia canadensis*  
*Smilax tamnoides* var. *hispida*  
*Spiraea alba*  
*Spiraea latifolia*  
*Symphoricarpos albus*  
*Symphoricarpos occidentalis*  
 ✓ *Taxus canadensis*  
 ✓ *Vaccinium angustifolium*  
*Vaccinium myrtilloides*  
*Vaccinium vitis-idaea*  
*Viburnum acerifolium*  
*Viburnum cassinoides*  
*Viburnum edule*  
*Viburnum lentago*  
*Viburnum rafinesquianum*  
*Viburnum trilobum*  
*Vitis vulpina*  
*Zanthoxylum americanum*

## HERBS

*Achillea millefolium*  
*Actaea pachypoda*  
*Actaea rubra*  
*Adiantum pedatum*  
*Agrimonia grypsossepala*  
*Agrostis perennans*  
*Allium tricoccum*  
*Amphicarpa bracteata*  
*Anaphalis margaritacea*  
*Anemone canadensis*  
*Anemone cylindrica*  
*Anemone quinquefolia*  
*Anemone virginiana*  
*Antennaria* sp.  
*Apocynum androsaemifolium*  
*Aquilegia canadensis*  
 ✓ *Aralia nudicaulis*  
*Aralia racemosa*  
*Arisaema atrorubens*  
*Asarum canadense*  
*Asclepias exaltata*  
*Aster furcatus*  
 ✓ *Aster macrophyllus*  
*Aster nova-angliae*  
*Aster paniculatus*

*Aster puniceus*  
*Aster sagittifolius*  
*Aster umbellatus*  
*Athyrium filix-femina*  
*Athyrium thelypteroides*  
*Botrychium lunaria*  
*Botrychium matricariaefolium*  
*Botrychium multifidum*  
*Botrychium virginianum*  
*Calypso bulbosa*  
*Campanula rotundifolia*  
*Carex arctata*  
*Carex intumescens*  
*Carex pensylvanica*  
*Carex woodii*  
*Carex* spp.  
*Chimaphila umbellata*  
*Chrysanthemum leucanthemum*  
*Chrysosplenium americanum*  
*Cinna latifolia*  
*Circaea alpina*  
*Claytonia caroliniana*  
*Claytonia virginiana*  
*Clematis virginiana*  
*Clematis verticillaris*

✓ *Clintonia borealis*  
*Comandra richardsiana*  
*Comandra umbellata*  
 ✓ *Coptis groenlandicum*  
*Corallorhiza maculata*  
*Corallorhiza striata*  
*Corallorhiza trifida*  
 ✓ *Cornus canadensis*  
*Corydalis sempervirens*  
*Cynoglossum officinale*  
*Cypripedium acaule*  
*Cypripedium calceolus* var. *pubescens*  
*Cystopteris fragilis*  
*Dalibarda repens*  
*Desmodium glutinosum*  
*Dicentra canadensis*  
*Dicentra cucullaria*  
*Dryopteris cristata*  
*Dryopteris disjuncta*  
*Dryopteris goldiana*  
*Dryopteris marginalis*  
*Dryopteris phegopteris*  
 ✓ *Dryopteris spinulosa*

## PRESENCE LIST

## SPRUCE-FIR - MIXED HARDWOODS

S-90

*Epigaea repens*  
*Epilobium angustifolium*  
*Epilobium glandulosum*  
*Epilobium strictum*  
*Equisetum pratense*  
*Equisetum sylvaticum*  
*Erigeron annuus*  
*Erigeron philadelphicus*  
*Erigeron strigosus*  
*Erythronium albidum*  
*Erythronium americanum*  
*Fragaria vesca*  
*Fragaria virginiana*  
*Galium aparine*  
*Galium boreale*  
*Galium concinnum*  
*Galium lanceolatum*  
*Galium triflorum*  
*Gaultheria hispidula*  
*Gaultheria procumbens*  
*Gentiana andrewsii*  
*Gentiana crinata*  
*Gentiana quinquefolia*  
*Geocaulon lividum*  
*Geranium bicknellii*  
*Geranium maculatum*  
*Geum rivale*  
*Goodyera repens*  
*Goodyera tessellata*  
*Habenaria hyperborea*  
*Habenaria orbiculata*  
*Habenaria psycodes*  
*Habenaria viridis*  
*Halenia deflexa*  
*Helianthus strumosus*  
*Hepatica acutiloba*  
*Hepatica americanum*  
*Hieracium aurantiacum*  
*Hieracium canadense*  
*Hieracium scabrum*  
*Impatiens capensis*  
*Iris lacustris*  
*Isopyrum biternatum*  
*Lathyrus ochroleucus*  
*Linnaea borealis*  
*Lobelia inflata*  
*Lycopodium annotinum*  
*Lycopodium clavatum*  
*Lycopodium clavatum var. megastachyon*  
*Lycopodium complanatum*  
*Lycopodium inundatum*

~~*Lycopodium lucidulum*~~  
~~*Lycopodium obscurum*~~  
*Lycopodium obscurum var. dendroideum*  
*Lycopodium selago*  
*Lycopodium tristachyum*  
*Lysimachia ciliata*  
*Lysimachia quadrifolia*  
*Lysimachia terrestris*  
~~*Maianthemum canadense*~~  
*Malaxis unifolia*  
*Medeola virginiana*  
~~*Melampyrum lineare*~~  
*Mitchella repens*  
*Mitella diphylla*  
*Mitella nuda*  
*Moneses uniflora*  
~~*Monotropa hypopithys*~~  
~~*Monotropa uniflorus*~~  
*Onoclea sensibilis*  
*Orchis spectabilis*  
*Osmorhiza claytoni*  
*Osmorhiza longistylis*  
*Osmunda cinnamomea*  
*Osmunda claytoniana*  
*Oxalis montana*  
*Oxalis stricta*  
*Panax quinquefolius*  
*Panax trifolius*  
*Petasites palmatus*  
*Phlox divaricata*  
*Poa compressa*  
*Poa pratensis*  
*Polygala paucifolia*  
*Polygonatum biflorum*  
*Polygonatum pubescens*  
*Polymnia canadensis*  
*Polypodium virginianum*  
*Potentilla norvegica*  
*Potentilla simplex*  
*Potentilla tridentata*  
*Prenanthes alba*  
*Primula mistassinica*  
*Prunella vulgaris*  
~~*Pteridium aquilinum*~~  
*Pyrola asarifolia*  
*Pyrola elliptica*  
*Pyrola minor*  
*Pyrola rotundifolia*  
~~*Pyrola secunda*~~  
*Pyrola virens*  
*Ranunculus abortivus*

*Ranunculus acris*  
*Ranunculus pensylvanicus*  
*Ranunculus recurvatus*  
*Ranunculus repens*  
*Ranunculus septentrionalis*  
*Rhus radicans*  
*Rubus pubescens*  
*Sanguinaria canadensis*  
*Sanicula marilandica*  
*Satureja vulgaris*  
*Schizachne purpurascens*  
*Scutellaria epilobiifolia*  
*Scutellaria lateriflora*  
*Smilacina racemosa*  
*Smilacina stellata*  
*Smilacina trifolia*  
*Smilax herbacea*  
*Solidago canadensis*  
*Solidago flexicaulis*  
*Solidago graminifolia*  
*Solidago ulmifolia*  
*Stellaria calycantha*  
*Streptopus amplexifolius*  
~~*Streptopus roseus*~~  
*Taraxacum officinale*  
*Thalictrum dioicum*  
*Thalictrum polygamum*  
*Tiarella cordifolia*  
~~*Trientalis borealis*~~  
*Trillium cernuum*  
*Trillium erectum*  
*Trillium grandiflorum*  
*Trillium undulatum*  
*Uvularia grandiflora*  
*Uvularia sessilifolia*  
*Vicia americana*  
*Viola adunca*  
*Viola blanda*  
*Viola canadensis*  
*Viola conspersa*  
*Viola cucullata*  
*Viola incognita*  
*Viola nephrophylla*  
*Viola pallens*  
*Viola papilionacea*  
*Viola pubescens*  
~~*Viola renifolia*~~  
*Viola selkirkii*  
*Viola sororia*  
*Waldsteinia fragarioides*

Additional species

*Morpha*  
*fulgens*

FREQUENCY DATA  
(Common Species)

## SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 90 (1)

## TREE SEEDLINGS

0987541 Abies balsamea  
Acer pensylvanicum  
5 Acer rubrum  
Acer saccharum  
98731 Acer spicatum  
Betula lutea  
Betula papyrifera

Fagus grandifolia  
Larix laricina  
Ostrya virginiana  
7 Picea glauca  
Picea mariana  
Pinus banksiana  
Pinus resinosa

Pinus strobus  
Populus tremuloides  
Prunus pensylvanica  
Prunus serotina  
Thuja occidentalis  
Tilia americana  
Tsuga canadensis

## SHRUBS

Alnus rugosa  
Arctostaphylos uva-ursi  
Comptonia peregrina  
Corylus americana  
05 Corylus cornuta  
096 Diervilla lonicera  
Dirca palustris  
Ilex verticillata  
Ledum groenlandicum  
865 Lonicera canadensis

Prunus pumila  
Pyrus melanocarpa  
Ribes cynosbati  
Ribes glandulosum  
Ribes lacustre  
Rosa sp.  
Rubus (blackberry)  
Rubus (dewberry)  
Rubus (raspberry)  
Rubus idaeus

Rubus parviflorus  
Sambucus pubens  
Shepherdia canadensis  
Spiraea alba  
Symphoricarpos occidentalis  
087654321 Taxus canadensis  
Vaccinium angustifolium  
Vaccinium myrtilloides  
Viburnum acerifolium  
Viburnum trilobum

## HERBS

Actaea pachypoda  
Actaea rubra  
Adiantum pedatum  
Anaphalis margaritacea  
Anemone cylindrica  
Anemone quinquefolia  
Anemone virginiana  
Antennaria spp.  
Apocynum androsaemifolium  
Aquilegia canadensis  
96 Aralia nudicaulis  
Arisaema atrorubens  
0965 Aster macrophyllus  
Athyrium filix-femina  
Botrychium virginianum  
Carex pensylvanica  
Chimaphila umbellata  
Chrysanthemum leucanthemum  
Circaea alpina  
Claytonia caroliniana  
Claytonia virginiana  
0975431 Clintonia borealis  
Coptis groenlandicum  
Corallorhiza maculata  
09753 Cornus canadensis  
Cystopteris fragilis  
Dicentra canadensis  
\* Dicentra cucullaria  
Dryopteris disjuncta  
Dryopteris phegopteris

Dryopteris spinulosa  
Epigaea repens  
Epilobium angustifolium  
Equisetum sylvaticum  
Erythronium americanum  
Fragaria vesca  
Fragaria virginiana  
Galium aparine  
5 Galium triflorum  
Gaultheria hispidula  
Gaultheria procumbens  
Gentiana quinquefolia  
Geranium maculatum  
Goodyera repens  
Habenaria obtusata  
Halenia deflexa  
Hepatica acutiloba  
Hepatica americana  
Hieracium aurantiacum  
09 Linnaea borealis  
Lycopodium annotinum  
Lycopodium clavatum  
Lycopodium complanatum  
Lycopodium lucidulum  
Lycopodium obscurum  
097431 Maianthemum canadense  
Medeola virginiana  
Melampyrum lineare  
Mitchella repens  
Mitella diphylla

Mitella nuda  
Monotropa uniflora  
Osmorhiza claytoni  
Oxalis montana  
Oxalis stricta  
Polygala paucifolia  
Polygonatum pubescens  
Prenanthes alba  
7 Pteridium aquilinum  
Pyrola elliptica  
Pyrola rotundifolia  
Pyrola secunda  
Ranunculus acris  
Rhus radicans  
Rubus pubescens  
Sanguinaria canadensis  
Smilacina racemosa  
Smilacina stellata  
5 Streptopus roseus  
Tiarella cordifolia  
7 Trientalis borealis  
Trillium erectum  
Trillium grandiflorum  
Uvularia sessilifolia  
Viola canadensis  
Viola cucullata  
Viola pallens  
Viola pubescens  
Viola renifolia  
Waldsteinia fragarioides

Additional species

Mosses 12356789  
Lichens 25789

FREQUENCY DATA  
(Common Species)

## SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 90(2)

## TREE SEEDLINGS

32 *Abies balsamea*  
*Acer pensylvanicum*  
 31 *Acer rubrum*  
*Acer saccharum*  
 2 *Acer spicatum*  
*Betula lutea*  
*Betula papyrifera*

*Fagus grandifolia*  
*Larix laricina*  
*Ostrya virginiana*  
*Picea glauca*  
*Picea mariana*  
*Pinus banksiana*  
*Pinus resinosa*

*Pinus strobus*  
*Populus tremuloides*  
*Prunus pensylvanica*  
*Prunus serotina*  
*Thuja occidentalis*  
*Tilia americana*  
*Tsuga canadensis*

## SHRUBS

*Alnus rugosa*  
*Arctostaphylos uva-ursi*  
*Comptonia peregrina*  
*Corylus americana*  
*Corylus cornuta*  
 1 *Diervilla lonicera*  
*Dirca palustris*  
*Ilex verticillata*  
*Ledum groenlandicum*  
 321 *Lonicera canadensis*

*Prunus pumila*  
*Pyrus melanocarpa*  
*Ribes cynosbati*  
*Ribes glandulosum*  
*Ribes lacustre*  
*Rosa* sp.  
*Rubus* (blackberry)  
*Rubus* (dewberry)  
*Rubus* (raspberry)  
*Rubus idaeus*

*Rubus parviflorus*  
*Sambucus pubens*  
*Shepherdia canadensis*  
*Spiraea alba*  
*Symphoricarpos occidentalis*  
 54 321 *Taxus canadensis*  
*Vaccinium angustifolium*  
*Vaccinium myrtilloides*  
*Viburnum acerifolium*  
*Viburnum trilobum*

## HERBS

*Actaea pachypoda*  
*Actaea rubra*  
*Adiantum pedatum*  
*Anaphalis margaritacea*  
*Anemone cylindrica*  
*Anemone quinquefolia*  
*Anemone virginiana*  
*Antennaria* spp.  
*Apocynum androsaemifolium*  
*Aquilegia canadensis*  
 1 *Aralia nudicaulis*  
*Arisaema atrorubens*  
 31 *Aster macrophyllus*  
*Athyrium filix-femina*  
*Botrychium virginianum*  
*Carex pensylvanica*  
*Chimaphila umbellata*  
*Chrysanthemum leucanthemum*  
*Circaea alpina*  
*Claytonia caroliniana*  
*Claytonia virginiana*  
 54 31 *Clintonia borealis*  
*Coptis groenlandicum*  
*Corallorhiza maculata*  
 1 *Cornus canadensis*  
*Cystopteris fragilis*  
*Dicentra canadensis*  
*Dicentra cucullaria*  
*Dryopteris disjuncta*  
*Dryopteris phegopteris*

*Dryopteris spinulosa*  
*Epigaea repens*  
*Epilobium angustifolium*  
*Equisetum sylvaticum*  
*Erythronium americanum*  
*Fragaria vesca*  
*Fragaria virginiana*  
*Galium aparine*  
*Galium triflorum*  
*Gaultheria hispidula*  
*Gaultheria procumbens*  
*Gentiana quinquefolia*  
*Geranium maculatum*  
*Goodyera repens*  
*Habenaria obtusata*  
*Halenia deflexa*  
*Hepatica acutiloba*  
*Hepatica americana*  
*Hieracium aurantiacum*  
*Linnaea borealis*  
*Lycopodium annotinum*  
*Lycopodium clavatum*  
*Lycopodium complanatum*  
*Lycopodium lucidulum*  
*Lycopodium obscurum*  
 431 *Maianthemum canadense*  
*Medeola virginiana*  
*Melampyrum lineare*  
*Mitchella repens*  
*Mitella diphylla*

*Mitella nuda*  
*Monotropa uniflora*  
*Osmorhiza claytoni*  
*Oxalis montana*  
*Oxalis stricta*  
*Polygala paucifolia*  
*Polygonatum pubescens*  
*Prenanthes alba*  
 1 *Pteridium aquilinum*  
*Pyrola elliptica*  
*Pyrola rotundifolia*  
*Pyrola secunda*  
*Ranunculus acris*  
*Rhus radicans*  
*Rubus pubescens*  
*Sanguinaria canadensis*  
*Smilacina racemosa*  
*Smilacina stellata*  
 1 *Streptopus roseus*  
*Tiarella cordifolia*  
*Trientalis borealis*  
*Trillium erectum*  
*Trillium grandiflorum*  
*Uvularia sessilifolia*  
*Viola canadensis*  
*Viola cucullata*  
*Viola pallens*  
*Viola pubescens*  
*Viola renifolia*  
*Waldsteinia fragarioides*

Additional species

More 12345  
 subsp 125