



# LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

## Site 3286: Madeline, Ashland County. 1957-07-17

[s.l.]: [s.n.], 1957-07-17

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3286

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 3242

Name: *Madeline Is.*  
 County: *Ashland*  
 Date: *July 17, 1957*  
 Size of Stand: *120 Acres*  
 Forest Type: *Pine*  
 Topography: *level*

Locality: *ne of La Pointe*  
 T: \_\_\_\_\_ R: \_\_\_\_\_ Sec: \_\_\_\_\_  
 Observers: *Beals*  
 Size of Area Sampled: \_\_\_\_\_  
 Soil Type: \_\_\_\_\_  
 Slope: \_\_\_\_\_ Directions: \_\_\_\_\_

Condition of Stand: *A few small trees cut here & there — otherwise little evidence of human disturbance,*

Open Grown Trees:

% Canopy: *82%*

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              | ..... | ..... | ..... | ..... | ..... | ..... | .....     | .....    | .....  |

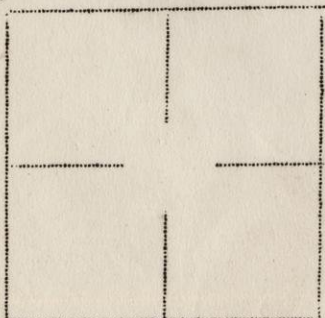
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

|                |                 |       |
|----------------|-----------------|-------|
| A <sub>0</sub> | <i>1 1/2"</i>   | ..... |
| A <sub>1</sub> | <i>1 1/2"</i>   | ..... |
| A <sub>2</sub> | <i>2 1/2"</i>   | ..... |
| B              | <i>red clay</i> | ..... |

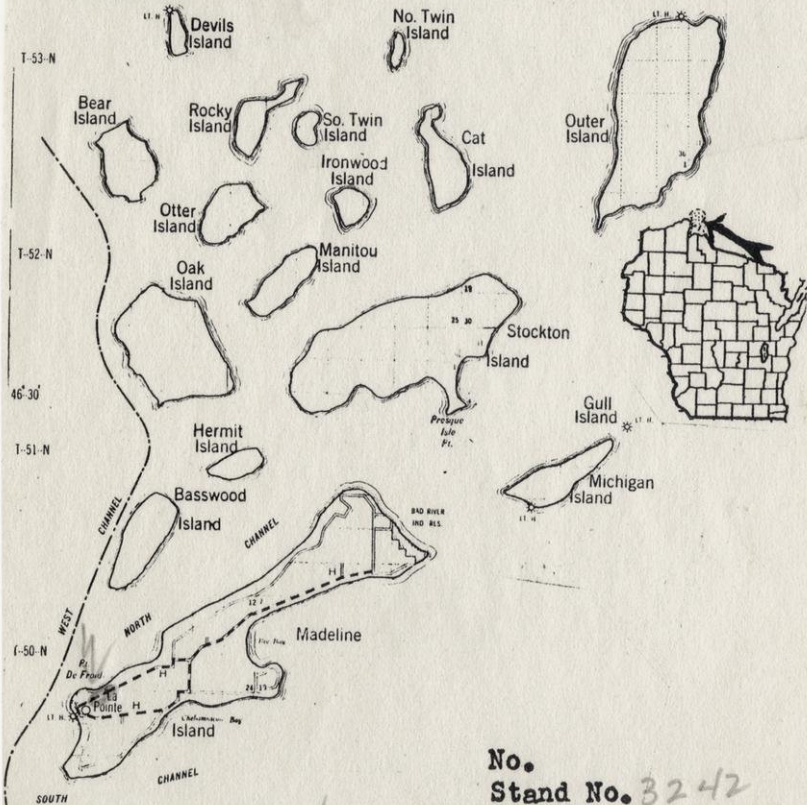
Parent Material:

Map:



**Northern WISCONSIN  
ASHLAND County**

**APOSTLE ISLANDS in  
LAKE SUPERIOR**



**No.**  
**Stand No.** 3242  
**Date:** July 17, 1957

**Collected by** Beals



## Northern Pine-Hardwoods

Station Number: 3242

| TREE        | # PTS | # TRS | DOM. CLASSES |      |     | TOT. DOM. | # SAP | D. % SAP | F. % SDL. | F. % TRS. | % SUM F. TR. | D. % TRS. | DOM% TRS. | DFD INDEX | C. I. |
|-------------|-------|-------|--------------|------|-----|-----------|-------|----------|-----------|-----------|--------------|-----------|-----------|-----------|-------|
|             |       |       | -80          | -320 | 321 |           |       |          |           |           |              |           |           |           |       |
| Abies bals  | 9     | 12    | 12           |      |     | 324       | 82    | 51.3     | 45        |           | 9.0          | 7.5       | 1.2       | 17.7      |       |
| Acer rubru  | 2     | 2     | 2            |      |     | 64        | 27    | 16.9     | 30        |           | 2.0          | 1.3       | 0.2       | 3.5       |       |
| A. sacchar  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| A. spicatu  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Betula lut  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| B. papyrif  |       |       |              |      |     |           |       |          | 10        |           |              |           |           |           |       |
| Carpinus c  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Fagus gran  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Ostrya vir  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Picea glau  | 8     | 9     | 4            | 3    | 2   | 1334      | 15    | 9.4      |           |           | 8.0          | 5.6       | 5.1       | 18.7      |       |
| Pinus Bank  | 1     | 1     |              | 1    |     | 170       |       |          |           |           | 1.0          | 0.6       | 0.6       | 2.2       |       |
| P. resinosa | 11    | 13    | 1            | 11   | 1   | 3090      |       |          |           |           | 11.0         | 8.1       | 11.8      | 30.9      |       |
| P. Strobus  | 34    | 76    | 7            | 59   | 10  | 17,044    | 1     | 0.6      |           |           | 34.0         | 47.5      | 64.9      | 146.4     |       |
| Populus ba  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| P. grandid  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| P. tremulo  | 13    | 16    | 9            | 7    |     | 1912      |       |          | 15.0      |           | 13.0         | 10.0      | 7.3       | 30.3      |       |
| Prunus pen  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Quercus el  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Q. rubra    |       |       |              |      |     |           | 1     | 0.6      | 10        |           |              |           |           |           |       |
| Tilia amer  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Tsuga cana  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Thuja occi  | 22    | 31    | 19           | 12   |     | 2297      | 31    | 19.4     |           |           | 22.0         | 19.4      | 8.8       | 50.2      |       |
| Ulmus amer  |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| U. fulva    |       |       |              |      |     |           |       |          |           |           |              |           |           |           |       |
| Amelanchier |       |       |              |      |     |           | 2     | 1.3      | 40        |           |              |           |           |           |       |
| Sorbus      |       |       |              |      |     |           |       |          | 5         |           |              |           |           |           |       |
| Crataegus   |       |       |              |      |     |           | 1     | 0.6      |           |           |              |           |           |           |       |
|             |       |       |              |      |     | 26        | 235   |          |           |           |              |           |           |           | 1496  |

AVE. DIST. BTW'N TREES: 11.64

AVE B. A.: 164.0

# TREES/ACRE: 374.2

DOM./ACRE:

" " " Sap 28.5'

sap 152.8 61,369

426.1



## POINT RECORD TREES APOSTLE ISLANDS

3242

| Point Number          | 1                    | 2                    | 3                    | 4                    | 5                    | 6                    | 7                    | 8                    | 9                    | 10                   |
|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Abies balsamea        |                      | 14                   | 19✓                  |                      |                      | 22                   | ✓                    |                      | 60                   |                      |
| Acer rubrum           | 2                    | 2                    | 2                    | 4                    | A                    | 2                    | 2                    | ✓ 3                  | 1                    | 2                    |
| <i>Amelanchier</i>    |                      |                      |                      |                      | ✓                    |                      | ✓                    |                      |                      | 1                    |
| Acer saccharum        |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| <i>Pop. trem.</i>     |                      |                      | 45                   |                      |                      | 115                  | 250                  |                      |                      | 35                   |
| Betula lutea          |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| <i>Picea alanca</i>   | 1                    |                      | 2                    | 350/100/4            | 10                   | 2                    |                      |                      | 2                    | 1                    |
| Betula papyrifera     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| Quercus rubra         |                      |                      |                      |                      |                      |                      | 1                    |                      |                      |                      |
| <i>Antennaria</i>     |                      |                      |                      |                      |                      |                      | 1                    |                      |                      |                      |
| Tsuga canadensis      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| Thuja occidentalis    | 90                   | 85                   |                      | 160                  |                      |                      | 60                   |                      | 95                   | 35<br>90             |
| <i>Pinus strobus</i>  | 100<br>290<br>300    | 1                    | 440<br>190           |                      | 220<br>150<br>130    | 370<br>220           | 100<br>530           | 150<br>250<br>360    | 200<br>230           | 395                  |
| <i>Pinus resinosa</i> |                      | 265<br>360           |                      | 100                  | 170                  |                      |                      | 310                  |                      |                      |
| Tree distance         | 12<br>14<br>5<br>14  | 15<br>7<br>2<br>13   | 11<br>12<br>11<br>14 | 10<br>8<br>11<br>23  | 2<br>6<br>2<br>4     | 5<br>18<br>8<br>13   | 10<br>26<br>14<br>12 | 8<br>12<br>11<br>18  | 7<br>12<br>12<br>11  | 12<br>13<br>10<br>22 |
| Sapling distance      | 22<br>30<br>31<br>31 | 33<br>36<br>19<br>31 | 48<br>17<br>32<br>19 | 36<br>44<br>23<br>25 | 40<br>13<br>15<br>48 | 19<br>50<br>43<br>65 | 20<br>28<br>19<br>50 | 34<br>44<br>19<br>48 | 11<br>20<br>20<br>12 | 17<br>64<br>50<br>30 |



3242

Data Form 106

Plant Ecology Research

University of Wisconsin

POINT RECORD TREES APOSTLE ISLANDS

| Point Number             | 1                    | 2                     | 3                     | 4                     | 5                    | 6                    | 7                    | 8                        | 9                    | 20                 |
|--------------------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|--------------------------|----------------------|--------------------|
| Abies balsamea           | ✓                    |                       | ✓                     |                       | ✓                    |                      | ✓                    |                          |                      | 25                 |
| Acer rubrum              |                      | I                     | II                    | III                   | III                  | I                    | ✓                    |                          | I                    | III                |
| <i>Amelanchier</i>       | 3                    | ✓                     | II                    |                       | ✓                    |                      | II                   | III                      | I                    |                    |
| Acer saccharum           |                      |                       |                       |                       |                      | I                    |                      |                          |                      | I                  |
| <i>Populus</i>           | 80                   | 40                    |                       |                       |                      | 70<br>210            | 77                   |                          | 35<br>40             |                    |
| Betula lutea             |                      |                       |                       |                       |                      |                      |                      |                          |                      |                    |
| <i>Betula papyrifera</i> |                      |                       | 105                   | 171                   |                      | I                    |                      |                          |                      |                    |
| Betula papyrifera        |                      |                       |                       |                       |                      |                      |                      |                          |                      |                    |
| Quercus rubra            |                      |                       |                       |                       | ✓                    |                      |                      |                          |                      |                    |
| Tsuga canadensis         |                      |                       |                       |                       |                      |                      |                      |                          |                      |                    |
| <i>Pinus strobus</i>     |                      |                       | 170                   |                       |                      |                      |                      |                          |                      |                    |
| Thuja occidentalis       | 35                   |                       | 95                    | 155                   | 83                   |                      | 75<br>65             |                          | 15                   | 80<br>18           |
| <i>Pinus strobus</i>     | 220<br>320<br>45     | 150<br>150<br>65      |                       | 300<br>270            | 310<br>190<br>250    | 35<br>275            | 11                   | 150<br>160<br>200<br>220 | 50                   | 390                |
| <i>Pinus resinosa</i>    |                      |                       | 320                   |                       |                      |                      | 310                  |                          |                      |                    |
| Tree distance            | 5<br>5<br>16<br>13   | 16<br>18<br>20        | 5<br>24<br>8          | 17<br>5<br>7          | 14<br>14<br>17<br>20 | 10<br>5<br>17<br>13  | 7<br>7<br>16<br>10   | 15<br>13<br>11<br>27     | 2<br>5<br>7<br>17    | 4<br>12<br>19<br>6 |
| Sapling distance         | 34<br>33<br>24<br>11 | 21<br>160<br>29<br>20 | 25<br>37<br>72<br>154 | 13<br>12<br>22<br>135 | 23<br>26<br>26<br>56 | 26<br>76<br>25<br>65 | 38<br>30<br>12<br>54 | 9<br>55<br>80<br>90      | 17<br>17<br>32<br>10 | 48<br>8<br>52      |

1

6

2

1

9

19

2

953

2909



## POINT RECORD TREES APOSTLE ISLANDS

| Point Number               | 1              | 2                    | 3                  | 4                   | 5                   | 6                   | 7                   | 8                    | 9                    | 30                    |
|----------------------------|----------------|----------------------|--------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|-----------------------|
| <i>Abies balsamea</i>      | 20             |                      |                    |                     |                     |                     | ✓                   |                      | 21                   | 27<br>21<br>25<br>111 |
| <i>Acer rubrum</i>         | 111            | 11                   | 111                | 11                  | 111                 | 111                 | 111                 | 11                   | ✓                    |                       |
| <i>Acer saccharum</i>      |                |                      |                    |                     | ✓                   | ✓                   | ✓                   | 11                   |                      |                       |
| <i>Populus tremuloides</i> | 165            | 230                  | 200<br>170         |                     |                     |                     |                     |                      |                      |                       |
| <i>Betula lutea</i>        |                |                      |                    |                     |                     |                     |                     |                      |                      |                       |
| <i>Betula papyrifera</i>   |                |                      |                    | 50                  |                     | 310<br>37           | 180                 |                      |                      |                       |
| <i>Quercus rubra</i>       |                |                      |                    |                     |                     |                     |                     |                      |                      |                       |
| <i>Tsuga canadensis</i>    |                |                      |                    |                     |                     |                     |                     |                      |                      |                       |
| <i>Thuja occidentalis</i>  |                | 60                   | 30                 |                     | 110                 |                     | 170<br>29           | 135<br>100           |                      |                       |
| <i>Pinus strobus</i>       | 80<br>180      | 180<br>230           | 225                | 330<br>320<br>200   | 100                 | 130<br>145          | 140                 | 145<br>270           | 175<br>195<br>320    |                       |
| <i>Pinus resinosa</i>      |                |                      |                    |                     | 240<br>250          |                     |                     |                      |                      | 75                    |
| Tree distance              | 9<br>6<br>13   | 5<br>7<br>13<br>10   | 6<br>7<br>15<br>11 | 7<br>15<br>7<br>4   | 8<br>10<br>9<br>12  | 9<br>14<br>9<br>16  | 15<br>11<br>8<br>23 | 7<br>9<br>14<br>10   | 8<br>10<br>15<br>11  | 16<br>9<br>12<br>17   |
| Sapling distance           | 14<br>24<br>12 | 19<br>12<br>16<br>39 | 2<br>9<br>23<br>37 | 10<br>5<br>32<br>49 | 5<br>13<br>11<br>50 | 3<br>10<br>42<br>21 | 9<br>8<br>5<br>12   | 27<br>24<br>12<br>23 | 25<br>17<br>15<br>24 | 8<br>8<br>8<br>13     |

5

4

4

7

17  
12340

3

1370



## POINT RECORD TREES APOSTLE ISLANDS

| Point Number              | 1                   | 2                 | 3                   | 4                   | 5                   | 6                   | 7                 | 8                    | 9                        | 10                 |      |
|---------------------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------------------|-------------------|----------------------|--------------------------|--------------------|------|
| <i>Abies balsamea</i>     | V                   |                   | V                   |                     |                     |                     |                   |                      |                          | 50<br>20           | 2    |
| <i>Acer rubrum</i>        | ///                 |                   |                     | /                   | ✓                   |                     |                   |                      | /                        |                    | 2    |
| <i>Acer saccharum</i>     |                     |                   | ✓                   |                     |                     |                     |                   |                      |                          |                    |      |
| <i>Betula lutea</i>       |                     |                   |                     |                     | 85                  |                     | 105               |                      |                          |                    | 2    |
| <i>Betula papyrifera</i>  |                     |                   |                     |                     |                     |                     |                   | 55                   |                          |                    | 1    |
| <i>Quercus rubra</i>      |                     |                   |                     |                     |                     |                     |                   |                      |                          |                    |      |
| <i>Tsuga canadensis</i>   |                     |                   |                     |                     |                     |                     |                   |                      |                          |                    |      |
| <i>Thuja occidentalis</i> | 14<br>13<br>80      |                   |                     |                     |                     | 70<br>55            | 55                | 75<br>63             |                          |                    | 8    |
| <i>Pinus strobus</i>      | 585                 | 315<br>170<br>270 | 122<br>175<br>225   | 215<br>160<br>77    | 40<br>370           | 135<br>160          | 85<br>260         |                      | 115<br>150<br>225<br>220 | 300<br>230         | 22   |
| <i>Pinus resinosa</i>     |                     | 140               |                     |                     | 310                 |                     |                   | 240                  |                          |                    | 3    |
| Tree distance             | 5<br>11<br>13<br>13 | 5<br>8<br>14      | 26<br>13<br>8<br>27 | 2<br>12<br>10<br>18 | 17<br>8<br>17<br>17 | 7<br>11<br>17<br>14 | 9<br>9<br>9<br>11 | 11<br>10<br>8<br>14  | 12<br>13<br>19<br>17     | 4<br>6<br>17<br>13 | 1863 |
| Sapling distance          | 9<br>17<br>38       | 24<br>22<br>33    | 28<br>38<br>25      | 19<br>36<br>35      | 22<br>52<br>33      | 7<br>27<br>35       | 14<br>17<br>30    | 20<br>32<br>20<br>24 | 18<br>19<br>26<br>30     | 4<br>3<br>12<br>17 | 4562 |



## HERB FREQUENCY

## NORTHERN PINE-HARDWOODS

Stand No. 3242  
Quadrat No. 1-10

*pinnate leaf* 7  
 Actaea pachypoda  
 Actaea rubra  
 Adiantum pedatum  
 Allium tricoccum  
 Anemone quinquefolia  
 Aquilegia canadensis  
 Aralia nudicaulis 1  
 Aralia racemosa  
 Arisaema atrorubens  
 Aster macrophyllus 1, 3, 7, 9  
 Aster sagittifolius  
 Athyrium angustum  
 Botrychium virginianum  
 Brachyelytrum erectum  
 Carex albursina  
 Caulophyllum thalictroides  
 Chimaphila umbellata  
 Circaea alpina  
 Circaea latifolia  
 Clintonia borealis  
 Coptis trifolia 3  
 Corallorrhiza maculata  
 Cornus alternifolia  
 Cornus canadensis 5, 7  
 Cornus rugosa  
 Corylus americana  
 Corylus cornuta  
 Cypripedium acaule  
 Diervilla lonicera 5  
 Dirca palustris  
 Dryopteris linnaeana  
 Dryopteris phegopteris  
 Dryopteris spinulosa  
 Epifagus virginiana  
 Epigaea repens

*Rubus?* 1, 3, 5  
*Ranunculus?* 9  
*Large tooth* 9

*Hieracium* 9  
 Fragaria virginiana 7  
 Galium lanceolatum 3  
 Galium triflorum 3, 5  
 Gaultheria procumbens  
 Gaylussacia baccata  
 Geranium maculatum 3  
 Geum canadense  
 Gnaphalium obtusifolium  
 Helianthemum sp.  
 Helianthus strumosus  
 Hepatica acutiloba  
 Hepatica americana  
 Impatiens biflora  
 Linnaea borealis 5, 9  
 Lonicera oblongifolia 3  
 Lupinus perennis  
 Lycopodium annotinum  
 Lycopodium complanatum  
 Lycopodium lucidulum  
 Lycopodium obscurum  
 Lysimachia quadrifolia  
 Maianthemum canadense 1, 3, 5, 9  
 Mitchellia repens  
 Mitella diphylla  
 Mitella nuda  
 Monotropa uniflora  
 Myrica asplenifolia  
 Onoclea sensibilis  
 Oryzopsis asperifolia  
 Osmorhiza claytoni  
 Oxalis montana  
 Phryma leptostachya  
 Polygala pauciflora  
 Polygonatum commutatum  
 Polygonatum pubescens

Potentilla simplex  
 Prenanthes alba  
 Pteridium aquilinum 5, 7  
 Pyrola elliptica  
 Pyrola rotundifolia  
 Pyrola secunda  
 Ranunculus recurvatus  
 Rhus radicans  
 Ribes americanum  
 Rosa sp.  
 Rubus parviflorus 7  
 Rubus (blackberry)  
 Rubus (dewberry)  
 Sambucus pubens 9  
 Sanguinaria canadensis  
 Sanicula gregaria  
 Smilacina racemosa  
 Smilacina stellata  
 Smilax ecirrhata  
 Solidago ulmifolia  
 Streptopus roseus  
 Taxus canadensis  
 Thalictrum dioicum  
 Trientalis borealis  
 Trillium grandiflorum  
 Uvularia grandiflora  
 Uvularia sessilifolia  
 Vaccinium angustifolium  
 Vaccinium pennsylvanicum  
 Viburnum acerifolium  
 Viola canadensis  
 Viola cucullata  
 Viola pallens  
 Viola pubescens  
 Waldsteinia fragarioides

*Viola sp.* 3, 7



## HERB FREQUENCY

## NORTHERN PINE-HARDWOODS

Stand No. 3242  
Quadrat No. 11-20

*palmate leaf 17, 19*  
 Actaea pachypoda  
 Actaea rubra  
 Adiantum pedatum  
 Allium tricoccum  
 Anemone quinquefolia  
 Aquilegia canadensis  
 Aralia nudicaulis 19  
 Aralia racemosa  
 Arisaema atrorubens  
 Aster macrophyllus 13, 15, 17  
 Aster sagittifolius  
 Athyrium angustum  
 Botrychium virginianum  
 Brachyelytrum erectum  
 Carex albursina  
 Caulophyllum thalictroides  
 Chimaphila umbellata  
 Circaea alpina  
 Circaea latifolia  
 Clintonia borealis 15  
 Coptis trifolia 13, 15, 19  
 Corallorrhiza maculata  
 Cornus alternifolia  
 Cornus canadensis 15, 19  
 Cornus rugosa 15  
 Corylus americana  
 Corylus cornuta  
 Cypripedium acaule  
 Diervilla lonicera  
 Dirca palustris  
 Dryopteris linnaeana  
 Dryopteris phegopteris  
 Dryopteris spinulosa  
 Epifagus virginiana  
 Epigaea repens

Fragaria virginiana 15  
 Galium lanceolatum  
 Galium triflorum 13, 15, 19  
 Gaultheria procumbens 13, 17  
 Gaylussacia baccata  
 Geranium maculatum  
 Geum canadense  
 Gnaphalium obtusifolium  
 Helianthemum sp.  
 Helianthus strumosus  
 Hepatica acutiloba  
 Hepatica americana  
 Impatiens biflora 19  
 Linnaea borealis 11, 15, 17, 19  
 Lonicera oblongifolia  
 Lupinus perennis  
 Lycopodium annotinum  
 Lycopodium complanatum  
 Lycopodium lucidulum  
 Lycopodium obscurum  
 Lysimachia quadrifolia  
 Maianthemum canadense 11, 13, 15, 17  
 Mitchella repens 19  
 Mitella diphylla 13, 15  
 Mitella nuda  
 Monotropa uniflora  
 Myrica asplenifolia  
 Onoclea sensibilis  
 Oryzopsis asperifolia  
 Osmorhiza claytoni 13  
 Oxalis montana  
 Phryma leptostachya  
 Polygala pauciflora  
 Polygonatum commutatum  
 Polygonatum pubescens  
*Carex 13*  
*Lilac? 13, 19*

*Pumella 19*  
 Potentilla simplex  
 Prenanthes alba  
 Pteridium aquilinum 15, 17  
 Pyrola elliptica  
 Pyrola rotundifolia  
 Pyrola secunda  
 Ranunculus recurvatus 19  
 Rhus radicans  
 Ribes americanum  
 Rosa sp.  
 Rubus parviflorus 15  
 Rubus (blackberry)  
 Rubus (dewberry)  
 Sambucus pubens 15  
 Sanguinaria canadensis  
 Sanicula gregaria  
 Smilacina racemosa  
 Smilacina stellata  
 Smilax ecirrhata  
 Solidago ulmifolia  
 Streptopus roseus  
 Taxus canadensis  
 Thalictrum dioicum  
 Trientalis borealis 13, 15, 17  
 Trillium grandiflorum  
 Uvularia grandiflora  
 Uvularia sessilifolia  
 Vaccinium angustifolium 15  
 Vaccinium pennsylvanicum  
 Viburnum acerifolium  
 Viola canadensis  
 Viola cucullata  
 Viola pallens  
 Viola pubescens 13, 19  
 Waldsteinia fragarioides  
 X 19  
*Taraxacum 19*



## HERB FREQUENCY

## NORTHERN PINE-HARDWOODS

Stand No. 3242  
Quadrat No. 21-30

*Actaea pachypoda*  
*Actaea rubra*  
*Adiantum pedatum*  
*Allium tricoccum*  
*Anemone quinquefolia*  
*Aquilegia canadensis*  
*Aralia nudicaulis*  
*Aralia racemosa*  
*Arisaema atrorubens*  
*Aster macrophyllus* 25, 27, 29  
*Aster sagittifolius*  
*Athyrium angustum*  
*Botrychium virginianum*  
*Brachyelytrum erectum*  
*Carex albursina*  
*Caulophyllum thalictroides*  
*Chimaphila umbellata*  
*Circaea alpina*  
*Circaea latifolia*  
*Clintonia borealis*  
*Coptis trifolia* 24, 25  
*Corallorrhiza maculata*  
*Cornus alternifolia*  
*Cornus canadensis* 27, 29  
*Cornus rugosa*  
*Corylus americana*  
*Corylus cornuta*  
*Cypripedium acaule*  
*Diervilla lonicera*  
*Dirca palustris*  
*Dryopteris linnaeana*  
*Dryopteris phegopteris*  
*Dryopteris spinulosa*  
*Epifagus virginiana*  
*Epigaea repens*

*Fragaria virginiana* 21, 29  
*Galium lanceolatum*  
*Galium triflorum* 21, 23, 25, 27, 29  
*Gaultheria procumbens* 23, 25, 27  
*Gaylussacia baccata* 29  
*Geranium maculatum*  
*Geum canadense*  
*Gnaphalium obtusifolium*  
*Helianthemum sp.*  
*Helianthus strumosus*  
*Hepatica acutiloba*  
*Hepatica americana*  
*Impatiens biflora* 23, 27  
*Linnaea borealis* 25, 29  
*Lonicera oblongifolia*  
*Lupinus perennis*  
*Lycopodium annotinum*  
*Lycopodium complanatum*  
*Lycopodium lucidulum*  
*Lycopodium obscurum*  
*Lysimachia quadrifolia*  
*Maianthemum canadense* 21, 25, 27  
*Mitchella repens*  
*Mitella diphylla*  
*Mitella nuda*  
*Monotropa uniflora*  
*Myrica asplenifolia*  
*Onoclea sensibilis*  
*Oryzopsis asperifolia*  
*Osmorhiza claytoni* 21, 25, 27  
*Oxalis montana*  
*Phryma leptostachya*  
*Polygala pauciflora*  
*Polygonatum commutatum*  
*Polygonatum pubescens*

*Potentilla simplex*  
*Prenanthes alba*  
*Pteridium aquilinum* 21, 27, 29  
*Pyrola elliptica* 25, 29  
*Pyrola rotundifolia* 29  
*Pyrola secunda*  
*Ranunculus recurvatus* 27, 29  
*Rhus radicans*  
*Ribes americanum*  
*Rosa sp.*  
*Rubus parviflorus*  
*Rubus (blackberry)*  
*Rubus (dewberry)*  
*Sambucus pubens* 21, 29  
*Sanguinaria canadensis*  
*Sanicula gregaria*  
*Smilacina racemosa*  
*Smilacina stellata*  
*Smilax ecirrhata*  
*Solidago ulmifolia*  
*Streptopus roseus*  
*Taxus canadensis*  
*Thalictrum dioicum*  
*Trientalis borealis*  
*Trillium grandiflorum*  
*Uvularia grandiflora*  
*Uvularia sessilifolia*  
*Vaccinium angustifolium*  
*Vaccinium pennsylvanicum*  
*Viburnum acerifolium*  
*Viola canadensis*  
*Viola cucullata*  
*Viola pallens*  
*Viola pubescens*  
*Waldsteinia fragarioides*

*Carex* 27, 29  
 LT 29

*Viola* 21, 25, 27



## HERB FREQUENCY

Actaea pachypoda  
 Actaea rubra  
 Adiantum pedatum  
 Allium tricoccum  
 Anemone quinquefolia  
 Aquilegia canadensis  
 Aralia nudicaulis 31  
 Aralia racemosa  
 Arisaema atrorubens  
 Aster macrophyllus 33, 35, 37  
 Aster sagittifolius  
 Athyrium angustum  
 Botrychium virginianum  
 Brachyelytrum erectum  
 Carex albursina  
 Caulophyllum thalictroides  
 Chimaphila umbellata  
 Circaea alpina  
 Circaea latifolia  
 Clintonia borealis 35  
 Coptis trifolia 31, 33, 35  
 Corallorrhiza maculata  
 Cornus alternifolia  
 Cornus canadensis 33, 37, 39  
 Cornus rugosa  
 Corylus americana  
 Corylus cornuta 31, 35  
 Cypripedium acaule  
 Diervilla lonicera  
 Dirca palustris  
 Dryopteris linnaeana  
 Dryopteris phegopteris  
 Dryopteris spinulosa  
 Epifagus virginiana  
 Epigaea repens

Acer sp. 33  
 X 35

## NORTHERN PINE-HARDWOODS

Fragaria virginiana 33, 35, 37  
 Galium lanceolatum  
 Galium triflorum 31, 33, 35  
 Gaultheria procumbens  
 Gaylussacia baccata  
 Geranium maculatum  
 Geum canadense  
 Gnaphalium obtusifolium  
 Helianthemum sp.  
 Helianthus strumosus  
 Hepatica acutiloba  
 Hepatica americana  
 Impatiens biflora  
 Linnaea borealis 31, 33, 35, 37  
 Lonicera oblongifolia 31, 35  
 Lupinus perennis  
 Lycopodium annotinum  
 Lycopodium complanatum  
 Lycopodium lucidulum  
 Lycopodium obscurum  
 Lysimachia quadrifolia  
 Maianthemum canadense 31, 33, 35, 37  
 Mitchella repens 31, 39  
 Mitella diphylla  
 Mitella nuda  
 Monotropa uniflora  
 Myrica asplenifolia  
 Onoclea sensibilis  
 Oryzopsis asperifolia  
 Osmorhiza claytoni  
 Oxalis montana  
 Phryma leptostachya  
 Polygala pauciflora  
 Polygonatum commutatum  
 Polygonatum pubescens

L/G 31, 39  
 Carex 31, 35  
 X 35

Stand No. 3242  
 Quadrat No. 31-40

Prunella 31  
 Potentilla simplex  
 Prenanthes alba  
 Pteridium aquilinum 33, 37  
 Pyrola elliptica  
 Pyrola rotundifolia  
 Pyrola secunda  
 Ranunculus recurvatus 33  
 Rhus radicans  
 Ribes americanum  
 Rosa sp.  
 Rubus parviflorus 39  
 Rubus (blackberry)  
 Rubus (dewberry)  
 Sambucus pubens 39  
 Sanguinaria canadensis  
 Sanicula gregaria  
 Smilacina racemosa  
 Smilacina stellata  
 Smilax ecirrhata  
 Solidago ulmifolia  
 Streptopus roseus  
 Taxus canadensis  
 Thalictrum dioicum  
 Trientalis borealis 31, 33, 37  
 Trillium grandiflorum  
 Uvularia grandiflora  
 Uvularia sessilifolia  
 Vaccinium angustifolium  
 Vaccinium pennsylvanicum  
 Viburnum acerifolium  
 Viola canadensis  
 Viola cucullata  
 Viola pallens  
 Viola pubescens  
 Waldsteinia fragarioides

Viola sp. 31, 33, 35, 37



## PRESENCE LIST

## NORTHERN PINE-HARDWOODS

STAND NO. 3242

✓ *Abies balsamea*  
 ✓ *Acer rubrum*  
*Acer saccharum*  
 ✓ *Acer spicatum*  
 ✓ *Amelanchier* sp.  
*Betula lutea*  
 ✓ *Betula papyrifera*  
*Caprinus caroliniana*  
*Carya cordiformis*  
 ✓ *Crataegus* sp.  
*Fagus grandiflora*  
*Fraxinus americana*  
*Fraxinus nigra*

*Fraxinus pennsylvanica*  
*Juglans cinerea*  
*Larix laricina*  
*Ostrya virginiana*  
 ✓ *Picea glauca*  
 ✓ *Pinus banksiana*  
 ✓ *Pinus resinosa*  
 ✓ *Pinus strobus*  
 ✓ *Populus balsamifera*  
 ✓ *Populus grandidentata*  
 ✓ *Populus tremuloides*  
*Prunus pennsylvanica*  
*Prunus serotina*

*Prunus virginiana*  
*Quercus alba*  
*Quercus ellipsoidalis*  
*Quercus macrocarpa*  
 ✓ *Quercus rubra*  
 ✓ *Sorbus decora*  
*Thuja occidentalis*  
*Tilia americana*  
*Tsuga canadensis*  
*Ulmus americana*  
*Ulmus fulva*

## HERBS AND SHRUBS

*Actaea pachypoda*  
 ✓ *Actaea rubra*  
 ✓ *Adiantum pedatum*  
*Agrimonia gryposepala*  
*Allium tricoccum*  
*Alnus rugosa*  
*Amphicarpa bracteata*  
*Anemone canadensis*  
*Anemone quinquefolia*  
*Antennaria* sp.  
*Apocynum androsaemifolium*  
*Apocynum cannabinum*  
*Aquilegia canadensis*  
*Aralia nudicaulis*  
*Aralia racemosa*  
*Arctostaphylos uva-ursi*  
*Arisaema atrorubens*  
*Asarum canadense*  
*Asclepias phytolaccoides*  
*Aster cordifolius*  
*Aster lateriflorus*  
*Aster macrophyllus*  
*Aster prenanthoides*  
*Aster sagittifolius*  
*Aster shortii*  
*Aster umbellatus*  
*Athyrium angustum*  
*Aureolaria pedicularia*  
*Boehmeria cylindrica*  
*Botrychium virginianum*  
*Brachyelytrum erectum*  
*Bromus purgans*  
*Campanula americana*  
*Carex albursina*  
*Carex pensylvanica*  
*Caulophyllum thalictroides*  
*Celastrus scandens*  
*Chimaphila umbellata*  
*Chiogenes hispidula*

*Circaea alpina*  
*Circaea latifolia*  
*Claytonia caroliniana*  
*Claytonia virginiana*  
*Clintonia borealis*  
*Convolvulus spithameus*  
*Coptis trifolia*  
 ✓ *Corallorrhiza maculata*  
 ✓ *Corallorrhiza striata*  
*Cornus alternifolia*  
*Cornus canadensis*  
*Cornus femina*  
*Cornus rugosa*  
*Corylus americana*  
*Corylus cornuta*  
*Cryptotaenia canadensis*  
*Cypripedium acaule*  
*Cypripedium pubescens*  
*Cystopteris fragilis*  
*Danthonia spicata*  
*Dentaria diphylla*  
*Desmodium glutinosum*  
*Desmodium nudiflorum*  
*Dicentra canadensis*  
*Dicentra cucullaria*  
*Diervilla lonicera*  
*Dirca palustris*  
*Dryopteris linneana*  
*Dryopteris phegopteris*  
 ✓ *Dryopteris spinulosa*  
*Epifagus virginiana*  
*Epigaea repens*  
*Equisetum arvense*  
*Erythronium americanum*  
*Fragaria virginiana*  
*Galium aparine*  
*Galium boreale*  
*Galium circaezans*  
*Galium concinnum*

*Galium lanceolatum*  
*Galium triflorum*  
*Gaultheria procumbens*  
*Gaylussacia baccata*  
*Geranium maculatum*  
*Geum canadense*  
*Gnaphalium obtusifolium*  
*Goodyera pubescens*  
*Goodyera repens*  
*Habenaria bracteata*  
*Hamamelis virginiana*  
*Helianthus strumosus*  
*Hepatica acutiloba*  
*Hepatica americana*  
 ✓ *Hieracium canadense*  
*Hydrophyllum virginianum*  
*Hystrix patula*  
 ✓ *Impatiens biflora*  
*Lactuca canadensis*  
*Laporteia canadensis*  
*Lappula virginica*  
*Lathyrus ochroleucus*  
*Ledum groenlandicum*  
 ✓ *Linnaea borealis*  
*Lonicera canadensis*  
*Lonicera hirsuta*  
*Lonicera oblongifolia*  
*Lonicera prolifera*  
*Luzula multiflora*  
*Lycopodium annotinum*  
*Lycopodium clavatum*  
*Lycopodium complanatum*  
*Lycopodium lucidulum*  
*Lycopodium obscurum*  
*Lycopodium tristachyum*  
*Lycopus americanus*  
*Lycopus uniflora*  
*Lysimachia quadrifolia*  
*Maianthemum canadense*



Melampyrum lineare  
 Mitchellia repens  
 Mitella diphylla  
 Mitella nuda  
 Monarda fistulosa  
 Moneses uniflora  
 Monotropa uniflora  
 Myrica asplenifolia  
 Onoclea sensibilis  
 Oryzopsis asperifolia  
 Osmorhiza claytoni  
 Osmunda cinnamomea  
 Osmunda claytoniana  
 Oxalis montana  
 Panax quinquefolia  
 Parietaria pennsylvanica  
 Parthenocissus vitacea  
 Pedicularis lanceolata  
 Phyrma leptostachya  
 Podophyllum peltatum  
 Polemonium reptans  
 Polygala pauciflora  
 Polygonatum commutatum  
 Polygonatum pubescens  
 Potentilla simplex  
 Prenanthes alba  
 Pteretis nodulosa  
 Pteridium aquilinum

Pyrola elliptica  
 Pyrola rotundifolia  
 Pyrola secunda  
 Ranunculus abortivus  
 Ranunculus recurvatus  
 Ranunculus septentrionalis  
 Rhus radicans  
 Rhus typhina  
 Ribes americanum  
 Ribes cynosbati  
 Ribes lacustre  
 Ribes triste  
 Rubus idaeus  
 Rubus parviflorus  
 Rubus hispidus  
 Rubus - blackberry  
 Rubus - dewberry  
 Rubus - raspberry  
 Sambucus canadensis  
 Sambucus pubens  
 Sanguinaria canadensis  
 Sanicula gregaria  
 Schizachne purpurascens  
 Scutellaria lateriflora  
 Shepherdia canadensis  
 Smilacina racemosa  
 Smilacina stellata  
 Smilax ecirrhata

Smilax herbacea  
 Smilax hispida  
 Solidago latifolia  
 Solidago ulmifolia  
 ✓ Streptopus amplexifolius  
 Streptopus roseus  
 Taxus canadensis  
 Thalictrum dioicum  
 Tiarella cordifolia  
 Trientalis borealis  
 ✓ Trillium cernuum *sp. subseriale rhombic*  
 Trillium grandiflorum  
 Uvularia grandiflora  
 Uvularia sessilifolia  
 Vaccinium angustifolium  
 Vaccinium pennsylvanicum  
 Viburnum acerifolium  
 Viburnum affine  
 Viburnum lentago  
 Viola canadensis  
 Viola cucullata  
 Viola incognita  
 Viola pallens  
 Viola pubescens  
 Vitis aestivalis  
 Vitis riparia  
 Waldsteinia fragarioides  
 Zanthoxylum americanum

Additional Species:



## DEER DAMAGE REPORT FORM

Stand No. 3242

115 308 550 827

| Pt. No. | Sp | Dis | Con | Sp | Dis | Con | Sp | Dis | Con | Sp | Dis | Con |
|---------|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|
| 1       | AB | 4   | L   | CC | 4   | M   | CC | 8   | L   | AM | 6   | M   |
| 2       | AB | 3   | O   | AB | 2   | L   | AB | 2   | O   | CC | 2   | L   |
| 3       | LC | 0   | M   | LC | 0   | M   | LC | 1   | M   | LC | 8   | L   |
| 4       | CC | 1   | M   | BB | 6   | O   | LC | 8   | L   | PT | 1   | M   |
| 5       | DL | 1/2 | M   | DL | 1   | A   | AM | 1   | L   | AM | 1   | M   |
| 6       | AB | 2   | O   | AB | 2   | O   | LC | 1   | H   | CC | 3   | M   |
| 7       | AB | 2   | O   | AB | 3   | O   | LC | 3   | M   | LC | 3   | H   |
| 8       | CC | 3   | H   | LC | 2   | T   | AM | 2   | M   | CR | 14  | L   |
| 9       | AB | 4   | O   | AM | 8   | L   | LC | 7   | H   | LC | 9   | H   |
| 10      | RP | 5   | L   | AM | 5   | M   | LC | 15  | H   | LC | 17  | H   |
| 11      | LC | 6   | H   | LC | 3   | H   | AM | 4   | M   | PT | 6   | M   |
| 12      | PT | 3   | M   | LT | 2   | L   | CR | 11  | M   | LC | 19  | L   |
| 13      | PT | 5   | L   | PT | 1   | M   | LC | 5   | H   | LC | 6   | M   |
| 14      | LC | 0   | M   | LC | 0   | L   | LC | 0   | H   | LC | 6   | L   |
| 15      | AM | 0   | H   | AB | 3   | O   | AB | 3   | O   | LC | 4   | M   |
| 16      | RP | 2   | L   | CC | 2   | M   | AB | 1   | O   | AB | 3   | O   |
| 17      | AB | 6   | M   | CC | 15  | L   | AB | 6   | H   | CR | 9   | H   |
| 18      | RP | 2   | L   | RP | 13  | O   | RP | 1   | M   | RP | 2   | M   |
| 19      | X  | 1   | L   | LC | 2   | M   | X  | 8   | M   | RP | 8   | M   |
| 20      | LT | 1   | H   | AB | 2   | O   | LC | 3   | M   | AB | 7   | L   |
| 21      | LC | 6   | H   | AB | 4   | M   | AB | 4   | L   | CC | 15  | M   |
| 22      | LC | 1/2 | M   | LC | 2   | L   | LC | 1   | L   | LC | 4   | H   |
| 23      | RP | 8   | M   | CC | 12  | L   | LC | 27  | O   | RP | 8   | M   |
| 24      | AM | 4   | L   | LC | 5   | L   | AM | 4   | L   | LC | 3   | L   |
| 25      | AB | 3   | O   | AB | 6   | L   | AM | 14  | O   | LC | 16  | H   |
| 26      | LC | 1   | M   | LC | 1   | H   | LC | 3   | H   | X  | 2   | M   |
| 27      | CC | 1   | M   | PT | 11  | H   | LC | 5   | M   | CC | 9   | M   |
| 28      | RP | 3   | T   | RP | 5   | H   | RP | 5   | M   | RP | 5   | H   |
| 29      | AB | 2   | O   | AB | 2   | O   | AB | 5   | L   | AB | 3   | O   |
| 30      | LC | 3   | M   | PT | 9   | H   | LC | 6   | M   | LC | 6   | L   |
| 31      | RP | 6   | L   | PT | 3   | H   | LC | 5   | M   | LC | 11  | L   |
| 32      | PT | 0   | L   | AM | 9   | L   | CC | 4   | H   | LC | 4   | H   |
| 33      | LC | 4   | H   | LC | 7   | M   | LC | 7   | M   | CC | 3   | H   |
| 34      | RP | 1   | M   | LC | 8   | O   | RP | 3   | O   | RP | 2   | M   |
| 35      | LC | 1/2 | H   | LC | 0   | M   | LC | 6   | M   | X  | 0   | M   |
| 36      | AR | 4   | H   | AB | 3   | O   | LT | 15  | M   | LC | 17  | M   |
| 37      | CC | 3   | O   | LC | 8   | M   | AM | 3   | L   | LC | 8   | M   |
| 38      | LC | 3   | L   | AM | 16  | M   | LC | 16  | L   | AM | 21  | H   |
| 39      | RP | 1   | M   | LC | 2   | L   | AM | 3   | M   | AM | 5   | M   |
| 40      | LC | 6   | H   | LC | 8   | L   | LC | 4   | O   | AR | 6   | M   |

BB Barberry

LT Largetooth?

X CR Cornus rugosa

X

L. Zoster?

L?