**SILVAH QUICK REFERENCE GUIDE**

**Regeneration plot (6-ft. radius plot)**

**Competitive Oak**: Stump sprouts or stems >3 feet tall OR with a root collar diameter (RCD) >0.75 inches. Weight count by site index (see table, right).

**Established Oak**: Count all stems 0.5–3 feet tall OR with a RCD 0.25–0.75 inches.

**New Oak**: Count all stems <0.5 foot tall and a RCD <0.25 inches.

**Aggregate Oak Height** (Optional): Sum of the height of all oak seedlings on a milacre plot, recorded in ½ foot increments.

**Black cherry**: Count all seedlings ≥2 inches tall with 2 normal-sized leaves. Stems > 1 foot tall count twice.

**Conifers**: Count any hemlock, pine, or spruce seedling with 2 whorls OR 0.5-1 foot tall. Stems w/ ≥3 whorls or >1 foot tall are counted twice.

**Yellow-poplar**: Same as black cherry. Ignore if oak site index <65.

**Other desirables**: Same as black cherry. Maples must pass the tug test. (NOTE: For hickory and walnut, count all stems meeting established oak criteria – Stems meeting competitive oak criteria are counted twice.)

**Saplings**: 2 stems 1-2” dbh or 1 stem 3-5” dbh of a younger age class. Record species code.

**Residuals**: Good quality stems 6-10 inches dbh that are the same age as main canopy and will be retained after final harvest. Record species code.

**Tall woody interference**: Undesirable species more than 6’ tall rooted in or near the plot. Record species code of the dominant stem.

**Interference Plot** (26-foot radius plot)

**Low Woody Interference**: Visually group foliage of shrubs and undesirable trees less than 6’ tall together. Estimate cover by 5% increments. Record percent cover and code of the dominant species.

**Fern (bracken, hay-scented, New York)**: Estimate percent cover by 5% increments. For other fern species, report half the cover. If >50% coverage, record in 10% increments.

**Grass and Sedge**: Estimate percent cover by 5% increments. Record 1% even if only a trace of grass or sedge is present.

**Grapevine**: Record the number of grapevines rooted in the plot.

**Site limitations**: Record if present anywhere on the plot. 1= poor drainage, 2= rocky/thin soil, 3= thick duff.

**Deer Impact Level**: Assessed in plots and between plots. One Value assigned to the entire stand.

1) No impact – found only inside well-maintained woven-wire deer-exclusion fences


3) Moderate impact – desirable regeneration present but with little height variability. Herbaceous plants rare. No stump sprouts. Non-preferred browse and browse-resilient plant species are noticeably common and widespread

4) High impact – desirable regeneration rare to absent. Non-preferred and browse-resilient vegetation limited in height growth by deer browsing.

5) Very high impact – desirable regeneration absent. Abundance of non-preferred vegetation is also reduced by browsing, browse-resilient plants show signs of heavy repeated browsing and a browse line is readily evident.

AGS = desirable species that contain at least one grade 3 log or will in the future, likely to persist another 15 years.

UGS = trees that do not contain at least one grade 3 or better log and never will, or are not likely to persist another 15 years.

<table>
<thead>
<tr>
<th>Deer Impact Index</th>
<th>Black cherry</th>
<th>Yellow-poplar</th>
<th>Other desirables</th>
<th>New Oak</th>
<th>Est. Oak</th>
<th>Comp. Oak site class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
<td>15</td>
<td>25</td>
<td>12</td>
<td>L 1 2 3</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>5</td>
<td>30</td>
<td>25</td>
<td>12</td>
<td>1 2 3</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>10</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>1 2 3</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td>50</td>
<td>1 2 3</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>200</td>
<td>100</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

**Weighting factors for competitive oaks**

<table>
<thead>
<tr>
<th>Regen Height RCD</th>
<th>High &gt;75’ (1)</th>
<th>Medium 55-75’ (2)</th>
<th>Low &lt;55’ (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ht 3-7’ RCD 0.75-1”</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ht 7-10’ RCD 1-1.5”</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Ht &gt;10’ RCD &gt;1.5”</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Maianthemum spp.

Trillium

Indian cucumber root

---

<table>
<thead>
<tr>
<th>Stocking criteria for species and species groups (numbers are weighted counts per plot)</th>
<th>Deer Impact Index</th>
<th>Black cherry</th>
<th>Yellow-poplar</th>
<th>Other desirables</th>
<th>New Oak</th>
<th>Est. Oak</th>
<th>Comp. Oak site class</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS = desirable species that contain at least one grade 3 log or will in the future, likely to persist another 15 years.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UGS = trees that do not contain at least one grade 3 or better log and never will, or are not likely to persist another 15 years.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Non-native Invasive Species: Record presence on any understory plot or presence in or near the stand in the comments section of the tally form. Some species of particular interest include:

**Trees:**
- Tree-of-heaven (*Ailanthus* spp.)
- Norway maple (*Acer platanoides*)
- Japanese barberry (*Berberis thunbergii*)
- Japanese stilgrass (*Microstegium vimineum*)
- Japanese knotweed (*Polygonum cuspidatum, P. sachalinense*)

**Trees:**
- Buckthorn (*Rhamnus* spp.)
- Japanese honeysuckle (*Lonicera japonica*)

**Shrubs:**
- Bush honeysuckles (*Lonicera* spp.)
- Autumn or Russian olive (*Elaeagnus* spp.)
- Russian olive (*Elaeagnus angustifolia*)
- Japanese honeysuckle (*Lonicera japonica*)

**Forbs/Grasses:**
- Garlic mustard (*Alliaria pertiolata*)
- Japanese honeysuckle (*Lonicera japonica*)
- Oriental bittersweet (*Celastrus orbiculatus*)

**Vines:**
- Multiflora rose (*Rosa multiflora*)
- Japanese knotweed (*Polygonum cuspidatum, P. sachalinense*)
- Japanese honeysuckle (*Lonicera japonica*)

Photos from PA BOF website at http://www.dcnr.state.pa.us/forestry/invasivetutorial/. See site for full photo credits.