

## RUSLE2

### Soil Loss or Removal from Tree Nurseries

Trees grown for landscape markets may encourage the removal of soil from the property. If the trees are marketed as bareroot stock there is no significant loss other than normal erosion losses from the site. Trees that are sold as ball and burlap trees (B&B stock) or field potted can remove a significant amount of soil. Soil erosion losses for the field shall be predicted using the RUSLE2 model and accounting for groundcover changes through the entire year.

Use the following procedure to estimate the effect on soil loss from harvesting trees:

- 1) Locate the nursery worksheet and open the Excel file entitled “RUSLE2\_Nurseries\_Soil Loss.xls”
- 2) Select the appropriate tab along the bottom of the worksheet based on the type of plants grown and removed. The choices are:
  - shade trees
  - small trees
  - multi-stem trees
  - dwarf and tender deciduous shrubs
  - intermediate-tall deciduous shrubs
  - spreading and compact evergreens
  - pyramidal evergreens
  - columnar evergreens
  - sheared evergreens
- 3) Enter the average number of plants per acre that are removed annually, based on the stem size (stem caliper). This number is entered in the yellow box at the top of the worksheet. The spreadsheet will automatically calculate the soil loss based on the amount entered.
- 4) Match the row that corresponds to the desired plant size or sizes with the column that corresponds to the soil type and harvest cycle.
- 5) The soil loss number in tons per acre per year is shown at the intersection of the column and row.
- 6) Total the soil loss for each size of stock that is removed and enter the total in the “Wind and Other Erosion” box of the Soil Conditioning Index (SCI) in the RUSLE2 model.