LANDIS-II Age Output v1.1 Extension User Guide

Robert M. Scheller
James B. Domingo

University of Wisconsin-Madison

Last Revised: June 5, 2006

Table of Contents

1 Introduction

This document describes the **Age Output** extension for the LANDIS-II model. For information about the model and its core concepts, see the *LANDIS-II Conceptual Model Description.*

1.1 What's new in version 1.1

This document describes the current version (1.1) of the extension. The differences between this version and the previous version (1.0) include:

- Modifications so that the extension is compatible with version 5.1 of the LANDIS-II model.

1.2 Acknowledgements

Funding for the development of LANDIS-II has been provided by the North Central Research Station (Rhinelander, Wisconsin) of the U.S. Forest Service. Valuable contributions to the development of the model and extensions were made by Brian R. Sturtevant, Eric J. Gustafson, and David J. Mladenoff.

2 Age Output

This extension produces output maps of the maximum cohort age at each active site on the landscape. There are two types of these max-age maps:

- Maps with the maximum age for all the cohorts at each site.

- Maps with the maximum age for all the cohorts of a particular species at each site.

2.1 Max Age Among All Cohorts

During each extension time step, the extension always generate this type of output map.

2.2 Max Age for Individual Species

During each extension time step, the extension generates this type of output map for species selected by the user (see section ?).

3 Input File

The input parameters for this extension are specified in one input file. This text file must comply with the general format requirements described in section 3.1 *Text Input Files* in the *LANDIS-II Model User Guide*.

3.1 Example File

```
LandisData   "Max Species Age"

Timestep     10

MapNames     output/{species}-{timestep}.gis

Species      pinubank
             acersacc
             tiliamer
```

3.2 LandisData

This parameter's value must be `"Max Species Age"`.

3.3 Timestep

This parameter is the extension's timestep. Value: integer > 0. Units: years.

3.4 MapNames

This file parameter is the template for the names of the age output maps. The parameter value must include the two variables "species" and "timestep" to ensure that the maps have unique names (see section 3.1.8.1 *Variables* in the *LANDIS-II Model User Guide*).

3.5 Species

This parameter is a list of one or more species for which the extension will create age output maps (see section 2.2 *Max Age for Individual Species*). The first species name must follow the parameter name on the same line. Each additional species name must be on a separate line.

For convenience, the user can use the special name "all" to indicate that the extension should provide maps for each species defined in the species input file (see chapter 5 in the *LANDIS-II Model User Guide*). If this special name is used, it must be the only name in the list.