

Welcome to SPBLOB

SPBLOB is a package of three computer codes that simulate the joint population dynamics between **Loblolly Pine** and the **Southern Pine Beetle (SPB)**, from time of tree planting until stand harvest.

This package contains the **three codes**, their **Documentation** and other **supporting information** related to use of this simulation package:

- The **Source Code (spblob_4_24_2008)** -- Represents the basic **SPBLOB** model and generates two codes for users
- The **Interactive** user code -- Simulates individual stands according to user-specified instructions
- The **Multiple** simulations code -- Simulates a user-specified number of independent, randomly generated stands, each of which possesses particular user-chosen characteristics

Whichever of the latter two codes is used, each individual stand simulation produces two output files, one reporting overall stand statistics at the end of each growing season, the other giving individual tree data at harvest.

****** IMPORTANT** -- These codes will run correctly only if they are kept intact in their original folders. For proper results, do not remove, mix or separate the contents of the **Interactive** and/or **Multiple** folders.

- The **SPBLOB Documentation** -- Separate chapters describe uses of the three codes, including user input requirements and the output data that code simulations produce. **For best results, consult this Documentation before using the codes.**
- The **supporting information** files -- contain detailed explanations of some of the most complex formulas and computational routines included in the source code. Useful for anyone who wishes to modify and recompile the source code

The authors welcome comments or suggestions you may have. Contact any of us at these addresses --

John Bishir
Department of Mathematics
North Carolina State University
Box 8205
Raleigh, NC 27695-8205
bishir@math.ncsu.edu

James H. Roberds
USDA Forest Service
Southern Research Station
Harrison Experimental Forest
23332 Highway 67
Saucier, MS 39574
jroberds@fs.fed.us

Brian L. Strom
USDA Forest Service
Southern Research Station
Alexandria Forest Center
2500 Shreveport Highway
Pineville, LA 71360
brianstrom@fs.fed.us

Xiaohai Wan
Lilly Corporate Center
Eli Lilly and Company
Indianapolis, IN 46285
wan_xiaohai@lilly.com