

1014-62-1532

**G Jay Kerns\*** ([gkerns@ysu.edu](mailto:gkerns@ysu.edu)), One University Plaza, Department of Mathematics and Statistics, Youngstown State University, Youngstown, OH 44555. *Data Augmentation for the Analysis of Coarse Woody Debris in an Old-Growth Riparian Forest*. Preliminary report.

Data were collected this past summer concerning Coarse Woody Debris (CWD) in Zoar Valley, NY, one of the few remaining old-growth stands in the northeastern United States. However, the species of nearly half of the CWD could not be determined, resulting in prohibitively complicated posterior distributions. A two-stage Gibbs sampler is implemented on the associated finite mixture model to provide asymptotic posterior simulations, which are then used to perform the ecologically relevant estimation and inference. (Received September 28, 2005)