



Ecological determinants of herpetofaunal assemblage structure in the longleaf pine ecosystem

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Dissertation Defense

September 29, 2011

1:30 pm, Room 215 AIME

The longleaf pine ecosystem represents one of the most threatened habitat types in North America. Up to 98 percent of the original coverage of this ecosystem has been eliminated through the combined effects of timber harvesting and fire suppression, with restoration efforts being implemented in only the past few decades. This work combines recently-developed bioinformatic tools with traditional observational studies and field experiments to investigate herpetofaunal responses to restoration efforts in an unstudied, remnant portion of the longleaf ecosystem. These studies found a complex response of herpetofauna to restoration efforts that spans local, landscape, and regional scales through effects on behavior and abundance. I will provide a discussion of the implications of this research for longleaf restoration and introduce potential tools for gauging herpetofaunal responses to fire management in the field.

