Giuliano, W. M., C. L. Elliott, and J. D. Sole. 1994. Significance of Tall Fescue in the Diet of the Eastern Cottontail. Prairie Naturalist 26(1):53-60.

**ABSTRACT--**The significance of tall fescue (*Festuca arundinacea*) to the diet of cottontail rabbits (*Sylvilagus fIoridanus*) was examined on five wildlife management areas in Kentucky from 1 June 1988 to 31 May 1990. Food use was determined by microhistologically analyzing the contents of 356 stomachs. Plant biomass availability was estimated seasonally by harvesting. Tall fescue was the most utilized food, followed by clover (*Trifolium* spp.), sedges (*Carex* spp.), corn (*Zea mays*), and *Rhus* spp. Although fescue was the most utilized food, it was used less than expected based on availability. The majority of tall fescue in Kentucky is infected with the fungal endophyte *Acremonium ceonophialum*, an organism known to reduce reproduction in mammals. High consumption of tall fescue has generated the concern that infected fescue may limit rabbit populations by reducing survival and reproductive performance.

**Key words:** cottontail rabbit, food, grass, *tallfescue, Acremonium ceonophialum, Sylvilagus floridanus, Festuca arundinacea.*