

Barrens Management and Restoration: A Kentucky Example

Joyce Bender¹

The Kentucky State Nature Preserves Commission is charged with the responsibility to inventory the state for rare species and unique ecological communities and to protect them in perpetuity in a system of nature preserves.

Presently, there are thirty-nine state nature preserves and nine of them protect barrens communities. Barrens can be described as sparsely wooded ecological communities with thin rocky soils underlain by sandstone or limestone. Barrens

are characterized by tree cover ranging from 25 to 60 percent and a ground cover dominated by perennial grasses and prairie forbs, some of which are listed as rare species in Kentucky. Protecting these preserves in perpetuity requires active management to maintain open habitat which sustains the grasses and forbs. Years of fire suppression have resulted in canopy closure and the disappearance of some species. Efforts in Kentucky are focused on restoration of overgrown barrens. Prescribed fire is one tool to reduce canopy and midstory cover. Fire also removes litter that can inhibit seedling establishment and limit plant growth.

Examples of barrens communities in Kentucky will be presented along with agency goals for restoration and management.

¹Kentucky State Nature Preserves Commission, 801 Schenkel Lane, Frankfort, KY 40601, ph.: 502-573-2886, email: Joyce.Bender@mail.state.ky.us