

summer or early fall (unless winter wheat is growing), pastures are most often overgrazed (leaving no cover for nesting or loafing), and hayfields consist of nonnative sod-grasses that provide poor structure for most wildlife species. The vast majority of fields that are not in crop

production are hayed (or mowed for aesthetic purposes) at least twice per year, usually once during the height of the nesting season for grassland birds, and once in late summer/early fall, which destroys any value as winter cover for wildlife.

Plant succession

Annual forbs such as common ragweed (shown below) and grasses with a few perennial species represent the **initial successional stage**.



Perennial forbs and grasses (such as broomsedge, goldenrod, ironweed (purple flower), and thoroughwort (white flower) shown below) and brambles represent the **second successional stage**.



Pioneering tree and shrub species, such as wild plum and winged sumac (shown below), winged elm, eastern redcedar, Virginia pine, birches, and black cherry, represent the **third successional stage**.



Hardwood forests dominated by species including oaks, hickories, red maple, and yellow-poplar typically represent the **fourth successional stage**. Of course, succession is determined by the plant species present. However, young forests (below, top) provide a different structure than older forests (below, bottom). Wildlife associated with forests that are only 2- to 4-years-old often are the same species associated with brushy cover provided in the third successional stage (such as eastern cottontail, northern bobwhite, brown thrasher).



8-year old mixed hardwood forest



80-year old mixed hardwood forest

Wildlife associated with Eastern Deciduous Forest

American woodcock
brown thrasher
eastern meadowlark
golden-winged warbler
great horned owl
mourning dove
northern bobwhite
ovenbird
wild turkey
wood duck
black bear
bobcat
eastern cottontail
eastern gray squirrel
gray fox
Indiana bat
white-tailed deer
eastern box turtle
timber rattlesnake
bluegill
American bumble bee
monarch butterfly

Eastern Deciduous Forest	American woodcock	brown thrasher	eastern meadowlark	golden-winged warbler	great horned owl	mourning dove	northern bobwhite	ovenbird	wild turkey	wood duck	black bear	bobcat	eastern cottontail	eastern gray squirrel	gray fox	Indiana bat	white-tailed deer	eastern box turtle	timber rattlesnake	bluegill	American bumble bee	monarch butterfly
Habitat Management Practices																						
Conservation Easement			X	X			X									X					X	X
Control Nonnative Invasive Vegetation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
Create Snags				X	X					X					X	X						
Delay Crop Harvest																						X
Edge Feathering	X	X		X	X		X		X		X	X	X		X		X		X		X	X
Field Borders		X			X		X		X			X	X				X	X			X	X
Forest Management	X	X		X	X		X		X	X	X	X	X	X	X	X	X	X	X			
Leave Crop Unharvested						X	X		X	X	X		X	X			X					
Livestock Management	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X
Nesting Structures										X						X						
Plant Food Plots						X	X		X	X	X		X	X			X					
Plant Native Grasses and Forbs			X			X	X		X				X				X	X			X	X
Plant Shrubs	X	X		X	X		X		X	X	X	X	X		X		X	X				
Plant Trees	X			X	X	X		X	X	X	X	X		X	X	X	X	X	X			
Repair Spillway/Levee						X				X										X		
Set-back Succession	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X			X	X
Soil Conservation Agriculture					X	X	X		X	X	X		X				X					
Water Control Structures						X				X										X		
Water Developments for Wildlife						X			X	X		X				X	X	X				
Population Management Practices																						
Decrease Harvest							X		X		X	X	X	X	X		X			X		
Increase Harvest									X		X	X	X	X	X		X			X		
Wildlife Damage Management					X				X		X	X	X	X	X		X		X			
Wildlife or Fish Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fish Pond/Stream Management Practices																						
Construct Fish Pond																				X		
Control Aquatic Vegetation																				X		
Fertilize/Lime Fish Pond																				X		
Reduce Turbidity in Fish Pond																				X		
Restock Fish Pond																				X		
Streams: Create Pools																						
Streams: Remove Fish Barriers																						