

Permanent Wildlife Plantings

MPWP012304

PURPOSE: Permanent wildlife plantings improve wildlife forage and edge effect in woodlands by removing tree cover. Openings established in protected areas will lessen wildlife vulnerability to poaching. Often, wildlife openings are created in controlled southern pine beetle spots, logging decks and unproductive areas in a timber stand. Wildlife openings should not be used for livestock grazing.



METHOD: Wildlife openings should be from 1 – 5 acres or 10% of the timbered acres. In general, they should be irregularly shaped to create maximum edge and should follow natural contours. Establish openings on level sites or slopes less than 10% at lower elevations. Some existing mast trees such as cherry, dogwood, persimmon and oak, and shrubs such as plum may be retained when clearing. The tree canopy must not cover more than 25% of the opening.

- Plan clearing operations to coincide closely with dates of desired plantings to establish a cover crop as soon as possible to stabilize the soil. If this is not possible, seed with a seasonal annual to control potential erosion.
- Plant openings in annual or perennial grasses and legumes, shrubs or selected tree plantings or allow reverting to native weeds and grasses.
- Manage some of each opening in native weeds and grasses to provide habitat for turkey, quail, other birds and rabbits. Two techniques are: 1) allowing a 20-foot or wider border of native weeds and grasses to grow around the edge of the opening and 2) rotating native and planted areas every few years anywhere on the plot. Rotating will yield benefits to both the native crop by residual fertilizer/lime use, and to the planted crop through disease/parasite reduction.
- Apply 200 pounds per acre of 13-13-13 fertilizer in early spring (March) and again in the fall (September). Apply ammonium nitrate (34-0-0) at a rate of 100 pounds per acre at 60-day intervals beginning in April and ending in August. Apply lime according to a soil analysis.
- Periodic disturbance is essential to maintain preferred vegetation and prevent the invasion of trees. Mow, disk or burn openings every three years in late fall or winter.
- Planting dates for central Alabama are March 15-July 15 (warm-season plantings) and September 1-October 15 (cool-season plantings).
- Cover seed no more than ¼ inch deep at planting.
- When more than two grasses are in a mixture, reduce the seeding rate of each by ½.

Wildlife Plants	Spacing Rates Planting Time	Comments
Native Vegetation:		
Broomsedge	Warm season perennial bunchgrass.	Managed best with prescribed fire and light winter disking
Ragweed	Warm season annual	Drought tolerant. Withstands wide range of conditions. Established by light winter disking.
Illinois Bundleflower	Warm season legume	Prefers clay to clay-loam soil but grows well on

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		sandy loam soils. Managed with prescribed fire and light winter disking.
Native sunflowers	Warm season annual or perennial.	Managed with light disking
Beggarweeds		Prefers full sun to partial shade and well-drained soil with pH level of 5.5-7.0; tolerates poor, dry, sandy soil. Managed with light disking and prescribed fire
Partridge pea	Warm season annual legume	Grows best on well-drained soils although it survives well on alkaline clay soils. Seeds eaten by variety of wildlife. Managed with light winter disking and prescribed fire.
Crotan species	Warm season annual	Erect freely branched annual.
Smartweed.	Warm season annual	Usually found in moist soils. Flowers usually white or pink.
Composite species (all others in Asteraceae family)	Winter or summer annual, may occur in large clumps of many plants.	Flowers usually white, pink or yellow. Adapted to a wide range of soils.
Primroses	Annual or biennial	Tall, erect with yellow flowers.
Panicum species	Native summer annual and perennial grasses.	Excellent drought tolerance; performs well on infertile sites. Managed with light disking and prescribed fire.
Grasses/Other:		
Big bluestem	7 lbs. Warm season perennial	Vigorous bunchgrass which grows well on most soils. More drought tolerant than other warm season native grasses except for little bluestem.
Little bluestem	4 lbs. Warm season perennial	Black belt soils. Bunchgrass growing to 3 feet. Good drought tolerance. Grows well on deep, shallow, sandy, fine textured and rocky soils. Cover for ground nesting birds, seed eaten by songbirds.
Indiangrass	5 lbs. Warm season perennial	Bunchgrass with good drought tolerance. Well adapted to medium-heavy to light, sandy textured soils. Seed stalk may be up to 3 feet.
Switchgrass	10 lbs. Warm season perennial	Vigorous, tall grass well-adapted to deep soils with good water holding capacity, including well drained to poorly drained soils. Tolerates flooding for long periods and will grow on sandy soils. Lowland types may grow to 6 feet on moist, fertility sites.
Dallisgrass	10 lbs. Warm season	Moist bottom soils. Seed and associated insects eaten by turkeys and songbirds. Can be toxic to

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	perennial	livestock.
Bahiagrass	20 lbs. Warm season perennial	Moist sandy bottoms to dry uplands. Seed and associated insects eaten by turkeys.
Millet (panicgrass), sorghum, sudangrass, & corn	15 to 30 lbs. Warm season annual	Leave corn standing after mature. Burn fields to attract doves. Sorghum choice seed for quail and turkey. High nutritional value. Sudangrass is drought resistant.
Coastal panicgrass	20 lbs. Warm season perennial	Drought tolerant. Well adapted to very sandy sites. Does well on back dune areas along coast.
Eastern gamagrass	2 lbs. Warm season perennial	Well adapted to deep bottomland soils with good water holding capacity. Will tolerate flooding and somewhat poorly drained soils but is not adapted to highly alkaline soils.
Chufa or nutgrass	50 lbs. Warm season grass	Songbirds eat seeds; tubers are a choice food for turkey, waterfowl, deer, raccoon and squirrels. Avoid clay soils.
Side-Oats Grama	5 lbs.	Adapted to many soil types. Does well on well-drained uplands, shallow ridges, and rocky areas; however, performs poorly on dense clays and very loose sands. Does best on chalky and moderately alkaline soils and is well adapted to the eroded soils of the Black Belt.
Orchardgrass, fescue, & Timothy	8 - 20 lbs. Cool season perennial	Shade tolerant. Not tolerant of competition. Well-drained soils.
Oats, wheat, barley, rye, ryegrass	30 - 80 lbs. Cool season annuals	Adapted to all textured soils except deep sandy soils and heavy clay soils. Choice food of doves, ducks, quail, turkey and deer in early stages of growth. Heavily browsed by deer. Provides forage, insects and nesting habitat for turkey. Oats are not as cold hardy as wheat, ryegrass and rye.
Legumes:		
Soybean	60 lbs. Warm season annual	Well-drained soils. Excellent wildlife food. Plots must be fairly large, or will be eaten before mature.
White clover, Ladino clover, Osceola clover	8 lbs. Cool to warm season perennial	Moist but not wet bottomland and fertile uplands. Foliage eaten by deer, rabbit, and turkey. Seed eaten by quail and songbirds. Long season. Requires inoculate.
Arrowleaf clover	8 lbs. Cool to warm season annual	Grows to 50" tall. Grows rapidly in spring. Seed inoculation is required. Foliage eaten by deer, rabbit and turkey
Lespedeza (Bicolor &	¼ to ½ lb. (drill on	Well-drained soils. Avoid deep sands and limey

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thunbergii)	1.5 x 3' spacing or broadcast in 15x150' seedbeds) Full sun perennial.	soils. Provides cover for quail. Seed is good winter food for quail. Can become invasive if burned, especially on clay soils. Can grow up to 8 feet tall.
Subterranean clover	15 lbs. Cool season annual	Very tolerant to shade. Well-drained soils.
Crimson clover	20 lbs. Cool season annual	Tolerant of acid soils. Grows in heavy clay soils. Does poorly in sandy soils. Seed inoculation is required. Foliage eaten by deer, rabbit, and turkey. Enhance reseeding by lightly disking the following fall after seeding.
Red clover	12 lbs. Cool season perennial	Tolerant of acid soils. Grows in heavy clay soils but does best in highly fertile soils. Does poorly in sandy soils. Seed inoculation is required. Foliage eaten by deer, rabbit and turkey. Reseeding can be enhanced by lightly disking the following fall after seeding.
Alfalfa	20 lbs. Cool season perennial	Well-drained soils. High nutritional value with long production season. Drought tolerant. Used by deer, turkey and rabbit.
Vetch	25 (Hairy) - 60 (Common) Cool season annual	Can be invasive in young pine plantations. Good soil builder. Vines. Hairy vetch is more adaptable to the cold.
Birdsfoot trefoil Vetch	Cool season perennial	Up to 30" tall. Used by deer, turkey and quail.
Shrubs:		
Blackhaw		A shrub up to 20 feet tall. Well adapted to dry sites and alkaline soils. Grows well in full sun.
Serviceberry	8' x 8' Full sun - partial shade	Deciduous branching shrub. Adapted to deep loam to clay soils, semi-arid ridges, and rocky slopes in full sunlight or partial shade; also moist, deep soils in riparian zones. Fruit eaten by songbirds and squirrel.
Wax myrtle		A small to large evergreen shrub. Grows in sandy or sterile, often acid soil.
Blackberry		Perennial plants with erect, stout, ridged stems 4 - 8 feet tall. Prefers moist but well-drained situations with an abundance of light.
Yaupon		A large evergreen shrub. Prefers dry, well-drained soils and full sunlight. Grows well in sandy soils.
Elderberry		A large shrub. May reach tree size. Adapted to a variety of soils and sites but is most common on moist to wet, well-drained sites. Will grow in full

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		sun or under shade.
American Beautyberry		A medium size native shrub. Grows around openings and sunny woodland edges. Produces clusters of bright violet berry-like fruits that ripen in the fall.
Autumn olive	8 x 8' Full sun	Fruit eaten by songbirds, quail, deer and other mammals. Can be invasive. Plant along edges.
Chickasaw plum	3 x 4' Full sun	Deciduous shrub, growing up to 10 feet. Performs well on well-drained, loamy to sandy soils. Excellent escape cover for quail and rabbit. Fruit eaten by variety of mammals. Does not tolerate fire.
Trees:		
Hawthorn	8 x 8' Full sun	Dense branching offers nest sites. Fruit eaten by songbirds.
Black cherry	25 x 25' Full sun - partial shade	Fruit and buds eaten by songbirds. Fruit eaten by many mammals. Foliage and twigs browsed by deer and rabbits.
Crab apple	8 x 8' Full sun	A large shrub or small tree. Prefers moist, well-drained soils. Fruit and buds eaten by songbirds. Fruit eaten by many mammals. Foliage and twigs browsed by deer and rabbits.
Flowering dogwood	8 x 8' Partial shade	Fruit and buds eaten by songbirds. Important food for turkey and squirrel. Foliage and twigs browsed by deer.
Mulberry	25 x 25' Full sun - partial shade	Fruit is relished by a wide variety of songbirds and mammals. Can become invasive through seed spreading.
Pines	Full sun - partial shade	Seeds are an important food source for quail, turkey, songbirds and squirrels.
Oak	25' x 25' Full sun	Many varieties of oaks rate high as producers of wildlife food. Sawtooth oak bears acorns in less than ten years. Sawtooth is a small variety of the oak family, reaching only about 50 feet.
Persimmon	8 x 8' Full sun - partial shade	Fruit is important fall food for many mammals, songbirds, quail and deer.
American beech	Partial shade	Nuts and buds eaten by a variety of animals.
Hickory & pecans	Full sun - partial shade	Nuts provide food source from late summer to early spring. Favor shagbark and mockernut hickories, and pecans.
Sweetgum	Full sun - partial shade	Songbirds and quail eat seeds. Some birds eat buds. Deer eat sprouts. Preferred food of beaver.

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Yellow-poplar	Full sun - partial shade	Prolific seed bearer. Seed persist in cone and used by many birds and mammals in winter. Deer browse seedlings.
Red maple	Shade	Seeds preferred by squirrels and quail in early spring. Widespread occurrence.

Sources: Managing Wildlife, Alabama Wildlife Federation; Integrating Wildlife Considerations with Hardwood Forest Management, Mississippi State Department of Wildlife; Southern Forages, D.M. Ball, et al.

Photo Credit: Alabama Forestry Commission



This information is provided by the Alabama Forestry Commission
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