GEORGIA FORESTRY C 0 M M I S S I 0 N

Wildlife Management and Habitat

Wildlife species have varying habitat requirements. Having a variety of different habitat types, sizes, shapes, and arrangements on a tract should help provide diverse cover and forage for various wildlife species. At least 10% of a tract's acreage should be in wildlife openings to provide good benefits for the wildlife. Open areas that already exist could be used for this purpose. These include areas such as fallow fields, agriculture fields, pastures, reverting areas, woods roads, right-of-ways, old home sites, firebreaks, log decks, skid trails, and etc. If there is not enough acreage in suitable open areas already, then openings should be created to reach a suitable level during the course of management. Openings generally should be located near the intersection of multiple habitat types to be most useful for wildlife.

Managing Field and Forest Borders: The management of field and forest borders as a "transition zone" is a useful tool in promoting many different species of wildlife. A zone of A zone of at least 30 feet but up to 120 feet (larger is better) between an opening and the forest can be easily managed for intermediate/transition vegetation types. The easiest way to manage borders is to mow or disk every 2 years and prevent vegetation from becoming too large. Forest edges may also be thinned inward 20-30 feet to promote the development of certain shrub species. Transition zones may also be planted with soft mast producing species such as: Chickasaw Plum (Prunus angustifolia), Hog Plum (Prunus umbellata), Hawthorn (Crataegus spp.) Huckleberry (Gaylussacia spp.) Yaupon Holly (Illex vomitoria), and American Holly (Illex opaca). These species provide food and an excellent source of cover for a large variety of wildlife.

Wildlife Openings and Food Plots: Structural diversity (horizontal and vertical) within a landscape benefits many species of game and non-game wildlife. Certain species of wildlife such as deer, turkey, quail, and rabbit, can be classified as "edge dependent" species. Some species are found exclusively in edge habitat. Edges provide food, nesting cover, and escape cover that may be unavailable in forest/field interiors. The creation and maintenance of wildlife openings is an excellent way promote edge dependent species. Wildlife often use openings for feeding, dusting, breeding, and loafing. In addition, openings may serve as wildlife viewing areas. Landowners are encouraged to establish and maintain at least 5 percent of their land for wildlife openings/food plots.

Size, Shape, and Distribution: Wildlife openings and food plots should be large enough to receive direct sunlight for at least 5 hours a day. Direct sunlight is essential for germination and growth of native and cultivated vegetation. Be sure to consider the potential growth of surrounding vegetation when you are choosing the size, shape, and location of wildlife openings.



For example, an opening may receive adequate sunlight in a 3 year old stand, but may become completely shaded out when the stand reaches 10+ years of age. A wildlife opening should be large enough to support the target species within the area (to prevent over browsing). The area should be large enough to support/benefit wildlife for the duration of the planned period.

Depending on the target species, wildlife openings should be between 1 and 5 acres in size (no more than 3 acres for deer). Openings that are considerably larger may not be utilized by wildlife over the entire area and remember that costs increase with size. Openings should be created in a manner that maximizes the amount of available "edge". Irregular shaped, narrow, and rectangular openings provide more "edge" than 40 round or square openings. Sections of firebreaks may be widened to 40-60 feet to create excellent wildlife openings. Openings should be distributed throughout the property and be accessible by wildlife from any portion of the tract. Particularly good locations are where two or more different habitat types meet (such as where a pine stand joins a hardwood stand). Also keep in mind the proximity to cover and current travel patterns. Other possible locations include beetle kill areas, loading decks, and right-of-ways.

Avoid areas that have a high erosion potential or may become flooded for extended periods. To discourage poachers, wildlife openings should not be visible from a public road or readily accessed by public road or right-of-way.

Management Techniques: Areas selected as permanent wildlife openings should be cleared, disked, soil tested, and fertilized/limed according to soil test results. Disking is especially important on compacted sites such as logging decks, skid trails, haul roads, or areas with thick/established root mats. Management techniques beyond this point depend on the objectives of the landowner. Openings may be left fallow to produce native vegetation or wildlife food plot plantings may be cultivated. Remember that permanent wildlife openings will require periodic maintenance such as burning, mowing, disking, reseeding, fertilizing, or a combination of techniques.

Planting a variety of different things would be more beneficial than planting just one. Plantings could range from perennial to annual varieties and could include both soft and hard mast species as well. The use of alternating strips of different plantings and/or maintenance techniques could help improve diversity. This would provide forage, cover, and diversity of habitat for various wildlife species. Various combinations, rotations, timings, and arrangements of maintenance through techniques such as disking, planting, mowing, prescribed burning, and leaving areas fallow could be used for maintaining these openings. A low cost and fairly low maintenance option would be to simply use alternating strips with some strips disked and some strips left



fallow. These strips could then be rotated on an annual or semi-annual basis. Disking during spring should favor lighter seeded plant species, and winter disking should favor heavier seeded plant species. Some areas should often simply be left alone, protected, and maintained only as needed for wildlife.

Prescribe burning serves a cost effective method used to maintain wildlife openings and also promotes many different species of native vegetation. Mowing can be utilized to encourage seed and insect production, and maintain structural diversity. Alternate mowing on a three year rotation serves to maximize the available edge and habitat diversity. Consider strip mowing combination plots of ryegrass, rye, oats, wheat, and clovers (Red, Arrowleaf, and Crimson) when seedheads mature. This will enhance broad-rearing habitat for turkey and quail as well as promote reseeding the following year. Strip mowing will also leave some seeds intact for wildlife use. When conducting mowing practices, start in the center and spiral outwards to lower the incidence of harming nesting birds. Small-grains such as wheat and rye mixed with clovers will provide excellent grazing opportunities as well as highly palatable seed. Rye and wheat have to be replanted each year. Ryegrass seed on the ground for fall sprouting and to reduce weed competition for the clover. Note: the above clovers are considered perennial or reseeding annuals but typically will have to be reestablished every 2 to 4 years.

Disking is a simple and quick method used to establish native vegetation, food plot crops, or areas of early successional habitat for wildlife. The timing of soil disturbance will determine what types of native vegetation that will emerge. Rotational disking during the winter months (October- February) helps promote the most desirable native vegetation used by wildlife. Disking may also be conducted at other times of the year. However, summer disking typically promotes undesired species such as Sicklepod (Senna obtusifolia) and Showy Crotalaria (Crotalaria spectablis).

When disking to promote early successional vegetation, only disturb the top 2-3 inches of soil, exposing approximately 50% bare ground. Light disking will encourage vegetation growth and allow bird species to access exposed seeds and insects. A 2-3 year rotation is commonly used to manage wildlife openings and field borders (disk 1/3 of the area each year). Avoid disking on areas with high erosion potential. Also, avoid using rotational/light disking on areas with Bermuda or Bahia grass. The removal of these grasses will be necessary to achieve optimal results (repeated treatments of approved herbicides will help control these pests). Prescribed fire or spot treatments with an approved herbicide can be used to reduce unwanted hardwoods within



the area. Periodic fertilization can be used to promote growth and increase palatability of the vegetation.

Winter disking (October-February) will encourage the following: Lespedezas (Lespedeza spp.), Beggarweeds (Desmodium spp.), Milk peas (Galactia spp.), Butterfly Pea (Centrosema virginianum), Partridge pea (Cassia fasiculata), Ragweed (Ambrosia artemisiifolia), Panic grasses (Panicum spp.) and Foxtail grass (Setaria spp.) Spring disking (April-September) will encourage the following: Florida Pusley (Richardia scabra), Pokeberry (Phytolacca americana), Doveweed (Croton glandulosus), Wooly Croton (Croton capitatus), and Morning Glory (Ipomoea spp.). <u>If Northern Bobwhite Quail is a primary focal species for management, do not disk in the spring as it will disrupt the nesting season and promote herbaceous vegetation that is not beneficial to quail.</u>

Wildlife openings planted to benefit white-tailed deer and turkey can provide either warm-season or cool season nutritional benefits. Warm-season typically refers to the period of late spring, summer, and early fall. Cool-season typically refers to the period of late winter and early spring. Warm-season food plots are important to deer and turkey (especially fawns and poults) as they are putting on fat reserves for the upcoming fall and winter. Cool-season food plots are even more important because they provide a supplemental food source while the supply of natural browse is at its lowest point. Mating quickly depletes energy reserves in deer, thereby increasing the need for a dependable supply of food during late winter. Turkeys also need dependable food supplies in preparation for the upcoming spring mating period. However, in any case wildlife plantings are by no means a substitute for sound management of existing native vegetation (trees, shrubs, vines, forbs and grasses).

Common Cool Season Food Plots

Crimson Clover Plot: Crimson Clover is a leafy, reseeding, winter annual legume that grows 10-15 inches tall and is foraged by deer, turkey, rabbits, and quail. Native to the Mediterranean region, it is distinguished by crimson flowers with round yellow seed. It is generally available for a shorter period of time than other clovers, but is more acid-tolerant than most legumes, and has an excellent soil building capacity. Improved varieties are Tibbee, Chief, and Dixie. Production periods are from late November to early April.

Remember to obtain soil test results before planting! Soil pH should be between 5.8 and 6.5. Phosphorus and potassium levels should be maintained per soil test recommendations. An application of one pound of boron with a phosphorus and potassium fertilizer will increase seed



production. Apply 60-80 lbs of phosphorus and potassium per acre after plants are established. Planting does well with 300-400 lbs of 0-10-20 or 0-20-20 per acre. Planting dates are from September 15 through October 15. Be selective about planting dates. Try to target planting times when soil moisture is adequate for seed germination. Be sure to inoculate clover with the appropriate inoculant or buy pre-inoculated seed stock. Broadcast 20-30 lbs of inoculated seed per acre. Be sure to use reseeding varieties. Cover seeds to ¹/₄ inch with a cultipacker or drag. Clover may be used alone or in a mixture with wheat and/or ryegrass. If seeding with wheat or ryegrass mixtures use 20 lbs/acre and plant mid-September to mid-October.

Ryegrass Plant: This grass September through early November. It is of course best on fertile soils, but will tolerate just about anything, including poorly drained areas. Broadcast about 20-40 lbs/acre of seed. In mixtures, use 10-15 lbs/acre. Cover seed lightly with ¼ inch of soil. Apply fertilizer and lime according to soil test or broadcast 400-500 lbs/acre of 10-10-10 at planting. A second application at 40 lbs/acre of nitrogen may be necessary in February. Maintain a soil pH of 6.0 by applying 1-2 tons of lime per acre.

Ryegrass and Crimson clover make a good fall to spring combination planting on well-drained soils, and can be readily maintained by disking or mowing and fertilizing each September. Other annual clovers, winter peas, and small grains also do well with ryegrass.

Rye: Rye is a small-grain annual which is utilized by quail, turkey, deer, and rabbit. Rye can be established on a wide variety of soils especially well drained upland types. Planting dates range from September through December and will provide browse and cover into the following spring.

Prepare seedbed by disking and drill or broadcast plant 40 lbs/acre. Cover seed with 1 inch of soil and roll/cultipack. Apply 500 lbs/acre of 10-10-10 before or soon after planting to increase production and nutrient levels. Annual cool-season clovers, winter peas, and other small-grains may be planted in conjunction with Rye. Mowing and food plot herbicide applications may be used to combat weed pests.

Alfalfa: Alfalfa is a perennial legume which provides a highly nutritional and palatable browse used by deer and rabbits. Alfalfa also provides ideal nesting habitat, insect production, seeds, and foliage for turkey. This plant is considered drought tolerant and can be established on well drained fertile soils. Planting dates range from September to October.

Start preparing soil in early to mid-summer and allow area to remain fallow until time of planting. Plant 20 lbs/acre using a cultipacker-seeder. Fertilize and lime according to soil test results, as Alfalfa requires a strict line of management to reach peak production potential. Alfalfa



will not tolerate acidic soils, so be sure to maintain pH levels above 6.5. Alfalfa performs best as a stand-alone planting.

Australian Winter Pea: Australian Winter Pea is an annual legume originating from the Mediterranean region. Deer will readily browse the young/tender shoots and foliage. Dove, quail, and turkey will eat the seeds. This plant may be easily established in loam or sandy loam soils.

Prepare a sound seedbed by harrowing. Broadcast and disk in 40 lbs/acre and cover with approximately 1 inch of soil. Follow soil test results to obtain desired results. Maintain pH levels between 5.8 and 6.2. Australian Winter Peas may be planted in conjunction with any small-grain species.

Common Warm Season Food Plot Crops

Alyce Clover: Alyce Clover is a warm-season tropical annual, erect legume 12-24 inches tall with pink flowers that are highly preferred by deer in late summer and early fall. This is also excellent forage for turkeys and rabbits. Seasonal production is best from July through September. The high nutritional quality is maintained well into late summer. Establishment is slow and weed competition may be a problem.

Best planting dates are May through June. Alyce Clover does well on most sites but is best suited for moderately well drained sandy loam soils. Summer rainfall produces the best stand. This plant will tolerate acidic soils. Broadcasting by hand is not recommended. Use an inoculant to increase nitrogen fixation, yields, and crude protein. Plant 15-20 lbs/acre and cover with ¹/₄ inch of soil by rolling/ or cultipack.

Follow soil test and apply a fertilizer with low or no nitrogen since the plant is a nitrogen-fixing legume. Without a soil test apply 300 lbs of 0-20-20 or an equivalent fertilizer per acre, and 1 ton of lime per acre to obtain a soil pH near 6.2. Alyce Clover requires lime and fertilizer at least every other year. It will not tolerate competition from grasses and weeds during germination and early growth. Nematodes may also be a problem. To overcome grass and weed pests, the plot may need to be mowed off until clover gets established. Stands can be expected to persist for several years if the crop is allowed to produce seed each year. In early spring, disk to control weed growth and to provide good soil conditions for germination of seeds that were produced in the fall.

American Joint Vetch: This plant is a tropical reseeding annual that tends to be "picky" about where it is planted. Also known as Aeschynomene, Joint Vetch is not a true vetch but a warm



season legume. Ideally, sites with loamy sands are preferred (neither too wet nor too dry). Joint Vetch is used heavily by deer in late summer and early fall. It is slow to establish the first year. Browsing by deer usually begins in June, peaks in August to September, and ends in November. This plant is rapidly gaining popularity, but has a disadvantage of being more expensive than other seeds. Weed competition may also present problems.

Be sure to obtain soil test results before planting. Prior to the final disking to prepare the seedbed and if soil tests are not available, broadcast 400 lbs of 0-10-20 per acre plus the necessary trace elements. Apply low nitrogen fertilizer at a rate of 15-30 lbs per acre again after plants are 15 inches high. Plant 10-20 lbs/acre if hulled seed or 20-25 lbs/acre if unhulled at any time between April 15 and July 4 (cover with ½ inch of soil). Broadcasting by hand is not recommended since this tends to bunch the seed and promotes weed competition. Proper inoculant, like those used for Peanuts, Cowpeas, or Alyce Clover should be applied to the seed immediately before planting. Joint Vetch may also be mixed with Cowpeas and Alyce Clover. Plant peas first at 40 lbs/acre and then drag in Joint Vetch at 5 lbs/acre and Alyce Clover at 10 lbs/acre.

Browntop Millet: Browntop Millet is an annual panic grass native to Asia. It produces a yellowbrown, openpanicle seedhead. This plant will provide mature seeds in 60-70 days. Browntop Millet is valued by quail, dove, ducks, turkey, and non-game birds. Browtop Millet can thrive on a variety of soil types (July through September).

For best results prepare a good seedbed by harrowing. Be sure to obtain soil tests or use ~ 500 lbs/acre of 10-10-10. Lime areas to maintain a target pH of 5.5-6.5. Drill or broadcast 20-25 lbs/acre to benefit a wide variety game species. Planting dates for waterfowl fields range from July-August. For dove field target May 15-July 15. Consider multiple plantings at two to four weeks apart. Cover seeds with ¼ to ½ inches of soil. For waterfowl, flood fields to a depth of 2-10 inches and leave flooded until spring. Plot sizes: 5 acres for waterfowl, ¼ acre for quail, 3-5 acres for dove, 3-5 acres for turkey. Other Millets, Sunflowers, Cowpeas, and Corn may be used in combination with this species.

Grain Sorghum: Sorghum species are annual small-grain crops native to Africa. There are many different varieties of sorghum. Sorghum is considered very drought tolerant and provides a high nutritional benefit for dove, quail, turkey, and ducks. Sorghum species may be cultivated on well drained soils to include clay loams and sandy loams.

Use disking methods to prepare seedbed and drill or broadcast plant 7-10 lbs/acre from midApril through July. Cover seeds with approximately 1 inch of soil. Follow soil test results or apply ~



90 lbs/acre of nitrogen before or just after planting. Lime may be required to maintain a pH >5.8, as Sorghum does not tolerate acidic soils. Corn, Soybeans, reseeding Soybeans, Cowpeas, and Singletary Peas may be planted with Sorghum.

Soybeans: Soybean is an annual legume originating from China. Soybeans are utilized by dove, ducks, quail, turkey, deer, and rabbit. Primary production period ranges from July through August. Soybeans may be established on a wide variety of soils. Areas with high soil fertility are preferred.

Well prepared seedbeds will provide the best results. Follow soil test recommendations. 30 lbs/acre of phosphate and 60 lbs/acre of potash or 300 lbs/acre of 0-10-20 are commonly used to establish Soybeans. Broadcast 1 bushel of inoculated seed per acre and cover with 1 inch of soil pH levels should be maintained just above 6.0. Consider planting different varieties to support extended use by wildlife. Soybeans are commonly planted with Corn or Sorghum.

Corn: Corn is a grain crop originating from Mexico. Corn produces a food source known as "ears". Corn is utilized by bear, deer, squirrel, raccoon, quail, dove, turkey, ducks, and non-game species. Corn provides a mature food source in 160-180 days, depending on variety. Corn also provides ideal cover during times of wildlife use. Corn typically does well on upland soils. Ideal planting dates range from March through April.

Create a seedbed by disking or no-till plant within legume or small grain food plots. Plant 15 lbs/acre in rows about 38 inches apart and cover with 1 inch of soil. For successful corn production, be sure to follow soil test results. Corn is commonly incorporated with Browntop Millet, pea, Soybean, and legume plantings.

Sunflower: Sunflower is an annual small grain crop. The seeds produced by this plant are rich in oil and are utilized by dove, quail, turkey, songbirds, and squirrel. Sunflower also provides an excellent source of cover for wildlife and browse for deer. Planting dates span form April to May. Seeds mature in 110-120 days depending on variety.

Thoroughly harrow the area to prepare seedbed. Plant 10 lbs/acre and cover with 1 inch of soil. Follow soil test recommendations for best results. 300 lbs/acre of 13-13-13 may be used in lieu of soil test. Maintain pH levels just above 6.0. The use of boron at a 1 lb/acre rate will help improve seed production. Sunflower seeds may be planted in conjunction with Browntop Millet and Corn.



Chufa: Chufa is a sedge with grass-like leaves. Chufa produces seeds that are utilized by many different species of songbirds. The underground tubers are readily eaten by turkey, ducks, deer, raccoon, squirrels, and feral hogs. However, you may need to pull up several plants to expose tubers buried in the soil to attract turkeys, especially if they have not been grown in the area in the past. Chufa may be planted from April through July in a wide variety of well-drained soils.

Prepare the seedbed by harrowing. Row or broadcast plant 30 lbs/acre and use lime to maintain a pH level near 6.0. 500 lbs/acre of 10-10-10 is commonly used to manage Chufa plots. Chufa performs best as a stand-alone food plot crop and on new soils but be sure to practice rotating plot areas as it will deplete soils nutrients. Disking Chufa plots in early to mid-spring will promote reseeding for subsequent years.

Buckwheat (North Georgia Counties only): Buckwheat is an annual small-grain crop which produces seeds utilized by quail, dove, turkey, ducks, and deer. Seeds mature in approximately 50 days. Buckwheat also serves as an excellent deer browse. Buckwheat may be established on almost all soil types.

Use harrowing methods to prepare seedbed. Planting dates range from April through March. Drill or broadcast 50 lbs/acre and cover with 1 inch of soil. Maintain pH levels between 6.0 and 6.5. Use 10-10-10 at a rate of 500 lbs/acre to satisfy nutrient requirements. Buckwheat may be used in combination with Sunflower, Millets, and Sorghum.

Cowpea: Cowpea is an annual vine-like legume originating from Ethiopia. Cowpeas mature and produce seeds in 80-110 days depending on variety. The seeds are used by quail, dove, and turkey. Deer and rabbit use browse on the tender foliage and shoots until first frost. Cowpeas can be established on a wide variety of sites (especially well drained and fertile soils).

Prepare seedbed by harrowing. Drill or broadcast 20 lbs/acre and cover with 1 inch of soil. Conduct soil tests on site and follow soil test recommendations. Maintain pH levels between 6.0 and 6.5. Cowpeas are commonly planted with Browntop Millet, American Jointvetch, and Alyce Clover.

Eastern Gamagrass (Tripsacum dactyloides Highlander variety) (Native Warm Season

Grass): Eastern Gamagrass is a warm season perennial grass that can grow on a wide variety of sites (moist sites preferred) with heights ranging 5-9 feet tall.

Create a seedbed by disking or no-till plant within legume plantings. Plant 5 lbs/acre in drill row or broadcast and cover with ³/₄ inch of soil. For successful production, be sure to follow soil test



results. Avoid mixing with Gamagrass with other grass plantings. This planting will provide benefits for Northern Bobwhite Quail, Eastern Wild Turkey, Sparrows, Cottontail rabbits, and many other small mammals and ground nesting birds.

Big Bluestem (*Andropogon Gerardii Earl, Kaw*, and *Roundtree* varieties) (Native Warm Season Grass): Big Bluestem is a native perennial warm season bunchgrass that grows best on moist, welldrained soils. Big Bluestem reaches heights of 3-6 feet.

Plantings of 3.5 lbs/acre should be made on a firm seedbed and covered with no more than ¹/₄ inch of soil. If seeding is made with a spreader, de-bearded seed may be mixed with a carrier to prevent seed from bridging the spreader. Big Bluestem may be established in combination with Indiangrass or Little Bluestem. This planting will provide benefits for Northern Bobwhite Quail, Eastern Wild Turkey, Sparrows, Cottontail rabbits, and many other small mammals and ground nesting birds.

Indiangrass (*Sorghastrum nutans Lometa* and *Americus* varieties) (Native Warm Season Grass): Indiangrass is a native, warm season perennial bunchgrass which can reach heights of 3 to 5 feet.

Indiangrass does well on dry medium-heavy to light textured sandy soils. Plant 3.5 lbs/acre on a firm seedbed using a drill with a special seed box, mixed with a carrier, or use de-bearded seed. This planting will provide benefits for Northern Bobwhite Quail, Eastern Wild Turkey, Sparrows, Cottontail rabbits, and many other small mammals and ground nesting birds.

Little Bluestem (*Schizachyrim scoparium Aldous, Cimarron*, or *Pastura* varieties) (Native Warm Season Grass): Little Bluestem is a native warm season bunchgrass which can reach heights of 3 feet. Little Bluestem grows well on deep, shallow, sandy, fine textured, and rocky soils. Plant 3.5 lbs/acre on a firm seedbed using a drill with a special seed box, mixed with a carrier, or use de-bearded seed. This planting will provide benefits for Northern Bobwhite Quail, Eastern Wild Turkey, Sparrows, Cottontail rabbits, and many other small mammals and ground nesting birds.

Switchgrass (*Panicum virgatum Alamo* and *Cave-in-Rock* varieties) (Native Warm Season Grass): Switchgrass is a native warm season perennial bunchgrass that ranges in height from 3-6 feet. Switchgrass grows well on deep soils with good water-holding capacity, including well-drained to poorly-drained soils.



Plant 2 lbs/acre on a firm seedbed as outlined for other native warm season grasses above. This planting will provide benefits for Northern Bobwhite Quail, Eastern Wild Turkey, Sparrows, Cottontail rabbits, and many other small mammals and ground nesting birds.

<u>Combination Plots</u>: The most effective food plots provide supplemental vegetation and cover for wildlife during the warm and cool seasons. For example, combination plots may provide winter grazing for deer, turkey, and rabbit and then provide brood-rearing habitat for turkeys or quail in the summer. Crops or native vegetation may be managed in adjacent strips within a single wildlife opening. For example, plant a strip of corn 20 feet wide, followed by a 20-foot fallow strip, followed by a strip of cowpeas 20 feet wide, followed by a fallow strip, followed by a strip of partridge peas, etc. (warm season plot). Repeat this sequence over the width of the wildlife opening to create horizontal structural diversity. Any combination of plantings may be used, just remember to plant and fertilize according to soil test results. The local Cooperative Extension Service or Natural Resource Conservation Service can help obtain and process soil tests. Be sure to follow recommendations concerning planting dates and techniques specific to the crop planted.

Consider strip mowing combination plots of ryegrass, rye, oats, wheat, and clovers (Red, Arrowleaf, and Crimson) when seedheads mature. This will enhance broad-rearing habitat for turkey and quail as well as promote reseeding the following year. Strip mowing will also leave some seeds intact for wildlife use. When conducting mowing practices, start in the center and spiral outwards to lower the incidence of harming nesting birds. Small-grains such as wheat and rye mixed with clovers will provide excellent grazing opportunities as well as highly palatable seed. Rye and wheat have to be replanted each year. Ryegrass will re-seed after spring mowing but at a lower density. Mow again in late summer to put ryegrass seed on the ground for fall sprouting and to reduce weed competition for the clover. Note: the above clovers are considered perennial or reseeding annuals but typically will have to be re-established every 2 to 4 years.

Common Wildlife Game Plantings:



Crop	Planting Date	Rate	Method	Availability
Florida Beggarweed	April-May	10-15lbs/acre	Broadcast	Late Summer-Fall
Buckwheat	April-August	40-50lbs/acre	Broadcast	Summer-Fall
Crimson Clover	Mid September-Mid October	20-30lbs/acre	Broadcast	Winter
Subterranean Clover	Mid August-Mid November	15-20lbs/acre	Broadcast	Late Winter-Early Spring
White Clover	September-November	8-10lbs/acre	Broadcast	Winter
Corn	March-April	12-15lbs/acre	Drill in 36" rows	Fall-Winter
Cowpea	May-June	20-25lbs/acre	Broadcast	Summer
Browntop Millet	July-August	20-30lbs/acre	Broadcast	Fall-Winter
Pearl Millet	April-June	25-30lbs/acre	Broadcast	Summer
Patridge Pea	February-March	5-10lbs/acre	Plant in 36" rows	Fall-Winter
Sesame	May-June	5-6lbs/acre	Plant in 36" rows	Fall-Early Winter
Sorghum	Mid April-Mid July	4-7lbs/acre	Broadcast	Fall
Sunflower	March-August	6-8lbs/acre	Plant in 36" rows	Late Summer-Fall
Vetch	September-November	25-40lbs/acre	Broadcast	Fall-Winter
Wild reseeding Soybean	Mid April-June	20-25lbs/acre	Broadcast	Late Summer-Fall

Bobwhite Quail plantings

Crop	Planting Date	Rate	Method	Availability
Chufa	April-July	40-60lbs/acre	Broadcast	Fall-Winter
Arrowleaf Clover	Sept-November	10-15lbs/acre	Broadcast	Late Spring-Early
				Summer
Subterranean Clover	Mid August-Mid November	15-20lbs/acre	Broadcast	Late Winter-Early Spring
White Clover	September-November	2-4lbs/acre	Broadcast	Late Winter-Spring
Corn	March-April	12-15lbs/acre	Drill in 36" rows	Fall-Winter
Pearl Millet	April-June	25-30lbs/acre	Broadcast	Late Summer
Patridge Pea	February-March	5-10lbs/acre	Plant in 36" rows	Fall-Winter
Peanuts	Mid April-Mid May	30-40lbs/acre	Drill in 30-38"	Late Summer-Fall
			rows	
Perennial Peanut	December-March	60-80 bushels/acre	Drill	Fall
Ryegrass	September-December	20-40lbs/acre	Broadcast	Winter-Early Spring
Oats	September-November	4lbs/acre	Broadcast or drill	Winter-Spring
Winter Wheat	October-November	3lbs/acre	Broadcast or drill	Winter-Spring
Soybeans	May-July	1bushel/acre	Broadcast or drill	Fall-Winter
Grain Sorghum	July	6-8lbs/acre	Drill in 36" rows	Fall-Winter

Turkey plantings



Сгор	Planting Date	Rate	Method	Availability
Alyce Clover	May-June	15-20lbs/acre	Broadcast	Late Summer-Early Fall
Arrowleaf Clover	September-November	10-15lbs/acre	Broadcast	Late Spring-Early
				Summer
Berseem Clover	September-October	20lbs/acre	Broadcast	Winter-Early Spring
Subterranean Clover	Mid August-Mid	15-20lbs/acre	Broadcast	Late Winter-Early Spring
	November			
American Jointvetch	April-July	15-25lbs/acre	Broadcast	Late Summer-Early Fall
Buckwheat	April-August	40-50lbs/acre	Broadcast	Late Summer-Early Fall
Chufa	April-May	40-60lbs/acre	Broadcast	Fall-Winter
Cowpea	May-June	20-25lbs/acre	Broadcast	Late Summer-Early Fall
Peanut	Mid April-Mid May	30-40lbs/acre	Drill in 30"-38" rows	Late Summer-Early Fall
Perennial Peanut	December-March	60-80 bushels/acre	Drill in 30"-38" rows	Fall
Sorghum	Mid April-Mid July	4-7lbs/acre	Broadcast	Fall-Winter
Soybean	May-July	1bushel/acre	Broadcast	Late Summer-Fall
Velvet Bean	After last frost	10lbs/acre	Plant 15" apart	Summer
Vetch	September-November	25-40lbs/acre	Broadcast	Fall-Winter

Whitetail Deer	r plantings
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Establish wildlife orchards: Make orchards a minimum of 5-10 or more trees at 20 foot spacing. DO NOT disc or burn these areas. They can be placed along interior roadsides, within the bigger openings as hedgerows or on the ends of the fields. Plant pears (Kieffer or Trophy), crabapples (Craven or Translucent variety), sweet apples (Yates, Arkansas Black, Limbertwig, Blacktwig, Enterprise and Horse apple varieties are adapted to your area), Sawtooth oak, White oak, Live oak, Red oak, Chinese chestnuts and Common persimmons.

Dove Field Recommendations: When managing Dove fields, one of the most important things which may limit the success is clean bare ground, with seed available to dove year-round. Providing supplemental feeding areas for doves is a great way to attract and keep doves during the off season. One method for providing supplemental feeding is to clear a portion of the field (~5% or more) and broadcast seed such as bird seed mixes, feed millet, feed wheat, etc. It will be necessary to apply herbicides in this field to prevent seed from germinating and to maintain clean bare ground. Large 39 tarps can be used to broadcast seed onto which could then be collected before hunting season.

Another method to provide supplemental feeding would be to growing winter wheat (plant in November) and mowing it once it has matured. Mow, disk, or spray herbicides, as needed, to ensure that seeds are not germinating and to maintain clean, bare ground. It is important to that



all seed is removed or cover and not available for consumption at least 2 weeks prior to hunting season to ensure that baiting laws are not violated.

Before planting any type of crop, it is a good idea to get a soil test and add recommended any soil amendments. Taking soils test in the fall provides time to determine soil quality and add and fertilizers before planting season begins. Ag Extension can assist with getting soil test.

When planting any row crop, disking, plowing, herbicides etc. it will be necessary to remove any existing vegetation before crops are planted. Herbicides will need to be re-applied as needed to maintain bare ground as the crops are growing. Plant strips of millet, corn, and/or sunflowers starting in the spring as early as March or April and continue to plant through June to August, staggering when planting occurs to aid in producing a good supply of seed before the hunting season and to carry through to the later season hunts. Do not mix crops but plant continuous strips in the field alternating crops allowing multiple crops to span across the field.

Begin mowing or burning portions of the crops starting in August to break up the plants and scatter the seed. Start with the older crops first and stagger mowing into September or later to ensure a constant supply of fresh seed for later season hunts. If planting sunflowers, mowing in not necessary unless you want to create open strips within these crops.

In some cases, crops such as sesame or sunflowers may be over-browsed by White-tailed Deer. In this case you could deter deer by constructing a fence or applying milorginite granular fertilizer. Apply milorginite by broadcasting 36- 72lbs around the entire planted immediately following germination of seed. To continue to deter deer, follow up application at a lower rate should be applied following every significant rainfall event prior to producing full seed heads.

Monitor the site to ensure that you are getting a good plant response. Any invasive species will need to be treated as soon as detected. Treat invasive species on a spot basis to protect native grasses, forbs, legumes that benefit native pollinators and other wildlife. Planting seed is typically not needed, however may be needed if disking alone doesn't produce quality vegetation.

Create a Backyard Habitat: If you are hoping to enjoy watching wildlife from the comfort of your home, there are some simple things you can do to attract and retain all sorts of animals, insects, and birds. Use any of the native plant, tree, and pollinator species mentioned throughout this page to supply food and cover for wildlife. Another important component for wildlife is access to water. If you aren't lucky enough to have water naturally on your property, you can just



add something as small as a bird bath to as big as garden pond. All of these items combined in your backyard should increase your wildlife viewing and enjoyment. Georgia Department of Natural Resources as a great website for more tips creating

your backyard habitat: https://georgiawildlife.com/create-backyard-habitat

Federally Threatened and Endangered Species throughout the state by eco-

regions: Endangered species are those plants and animals that have become so rare they are in danger of becoming extinct. Threatened species are plants and animals that are likely to become endangered within the foreseeable future throughout all or a significant portion of its range. It is important to know if these species are found on or near your property in order to help in their much needed protection.

GEORGIA FORESTRY C O M M I S S I O N



Species	Southwest Appalachians	Ridge and Valley	Blue Ridge	Piedmont	Southeastern Plains	Southern Coastal Plain
Alabama leather flower		Х		Х		
Alabama moccasinshell		Х				
Altamaha Spinymussel					Х	X
Amber darter						
American chaffseed		Х	Х	Х		
Anthony's riversnail	Х					
Black-spored quillwort			Х	Х		
Blue shiner		Х				
Canby's dropwort				Х	Х	Х
Cherokee darter				Х		
Conasauga logperch		Х	Х			
Cooley's meadowrue					Х	
Coosa moccasinshell	Х	Х				
Cumberland monkeyface	X					
Eastern indigo snake					Х	Х
Etowah darter			Х	Х		
Fat threeridge					Х	
Finelined pocketbook	X	Х	Х	Х		
Florida torreya					Х	
Fringed campion				Х	Х	
Frosted flatwoods salamander				X	X	X
Georgia pigtoe		X	Х			
Georgia rockcress		X		X	X	
Goldline darter		Х	Х			
Gray bat	X	Х	Х			
Green pitcher-plant			Х			
Gulf moccasinshell				Х	X	
Hairy rattleweed						X
Harperella				X		





Species	Southwest Appalachians	Ridge and Valley	Blue Ridge	Piedmont	Southeastern Plains	Southern Coastal Plain
Indiana myotis	Х	Х	Х			
Interrupted rocksnail	Х	Х				
Kral's water plantain	Х					
Large-flowered skullcap	Х	Х				
Little amphianthus				Х		
Mat-forming quillwort				Х	Х	
Michaux's sumac				Х	Х	
Mohr's Barbara's buttons	Х	Х				
Northern long-eared bat	Х	Х	Х	Х		
Ochlockonee moccasinshell					Х	
Oval pigtoe				Х	X	
Ovate clubshell			Х			
Persistent trillium			Х			
Pink mucket	Х					
Pondberry				Х	Х	
Purple bankclimber				Х	Х	Х
Red-cockaded woodpecker			Х	Х	Х	Х
Relict trillium				Х	Х	
Reticulated flatwoods salamander					x	
Rock gnome lichen			Х			
Shinyrayed pocketbook				Х	Х	
Small whorled pogonia		Х	Х			
Smooth coneflower			Х	Х		
Snail darter	Х	Х				
Southern acomshell		Х	Х			
Southern clubshell		Х	Х			
Southern pigtoe		Х	Х			
Suwannee moccasinshell					Х	Х
Swamp-pink			Х			
Tennessee yellow-eyed grass		Х	Х	Х		
Triangular kidneyshell		Х	Х			
Trispot darter	Х	Х	Х	Х	Х	Х
Tubercled blossom	X	Х				
Virginia spirea	X	Х				
White fringeless orchid	X	Х	Х	X		
Whorled sunflower		Х				
Wood stork				X	X	X

Federally Threatened and Endangered Species by eco-regions