Property Overview

Currently, there is minimal site specific, wildlife (white-tailed deer, eastern wild turkey, northern bobwhite quail) management activities being applied on the Client property (750 acres). Past management decisions have been limited to a timber harvest clear cut and standard hunting club style management practices. These activities have undoubtedly resulted in a moderate quality deer herd that will not continue to improve until intensive habitat improvement projects are initiated. The lack of site-specific wildlife management practices and generally poor habitat quality has led to a typical Georgia hunting property that I believe is functioning well below its maximum potential. When managing a property in this general way, we usually only have general results from our hunting experiences. Based on trail camera pictures and track count lines; deer population dynamics are fair and there was a presence of predators on the property. Interior dirt roads and existing fire breaks were used to collect track count data. Historically, track count lines are used to determine population densities but I have used them to determine which species have used the Client property. Track lines are dirt strips that help determine presence or absence of certain animals. This simple method can be helpful and replicated by the landowner with a track identification guide.

The productivity of the deer population on the Client property is directly tied to our ability to manage and improve the habitats of the upland soil type areas. Upland soil type areas can be defined as non-wet soil types. Wet soil sites are typically (Stream Side Management Zones [SMZs], Hardwood Bottoms, etc). In order for us maximize the potential of the deer population on the Client property we must maximize the potential of every acre and eliminate idle acres wherever possible. Idle acres are sections of a property that are providing little overall benefit but can be improved through proper management. The hunting success of SMZ's and food plots can also be tied to the habitat improvements associated with idle acres. The more intentional our management strategy is the more satisfying results we can expect. Site specific recommendations based on habitat conditions and wildlife populations needs to be the focus of all future management decisions. We need to place a purpose and objectives behind all wildlife and habitat management activities. This will allow us to achieve the consistent results a property like yours should produce.

My goal for the Client Management Plan is to improve hunting success, wildlife population quality, and the long-term land and recreational value of your property. The home range of a deer herd in Crawford County, Georgia is approximately 640 acres (1 square mile). Our goal is to create a property that will hold and grow a sustainable deer population and maximize mature buck numbers within this home range. Under normal management conditions your property accounts for a complete deer herd home range. Another important goal is to turn the Client property into separate core ranges (Management Sections) for the deer herd in your area. This smaller Management Section philosophy can shrink a deer's home range and solidify core ranges for mature bucks. Management Sections are also excellent ways to design quail courses, trap predators, and increase the overall huntability of the Client property.

A core range is defined as an area that wildlife may spend more of their time compared to the amount of land it covers. For example, a deer may spend 65% of their time in a core range that only occupies 35% of their normal home range. This core range strategy holds exceptionally true during different times of the year based on habitat and nutritional needs of all three species; deer, turkey, and quail. This management strategy will improve hunting success, increase the amount of wildlife your property can hold, and increase the number of huntable acres you have access to. This "core range" concept is a very obtainable goal over the next three to five years and can improve our ability to maximize buck numbers and antler growth rates on the Client property. Successfully implementing this core range plan will ensure that deer, turkey, and quail will spend a greater amount of time on your property in the future. Core ranges are created by providing high quality food and cover in strategically located areas throughout the property. On the Client property, the quality and location of food and cover is just as important as the amount we provide. Core ranges can be as small as 50 acres but typically should be between 100 and 250 acres in size.

The focus of this Management Plan is to reduce current limiting factors and implement long term solutions that will reap benefits for years to come. Limiting factors are parts of your property and the current management activities on it that are keeping it from producing the consistent, satisfactory results we expect. Currently, the main limiting factors on the Client property are a lack of high-quality food sources and poor habitat management/ arrangement. Habitat arrangement is also referred to as habitat juxtaposition, meaning forests should be

arranged at a ~30-50-60 acre scale. Cover and habitat diversity should be around and in these scales. Deer, turkey, and quail populations are grown and improved during the spring and summer months; they are maintained during the fall and winter.

The brunt of our management efforts needs to be focused on the "growing season". It is during these months that antler growth and population health are maximized. All hunting properties are a culmination of three different areas: Point A's (high quality food) Point B's (high quality cover) and Transition Areas (funnels, pinch points, and travel corridors). As we increase A's and B's on your property we will see an increase in wildlife population production, antler size, and a property that provides satisfactory hunting success each season. Transition areas will provide excellent hunting opportunities and the success of these areas can be directly related to the arrangement of food and cover around them. This management strategy purposely leaves undisturbed areas on the property as "safe zones/ sanctuaries" and transition areas that will naturally form once food plots and early successional (2 to 6 ft tall beneficial forage and cover plants) habitats are established on the Client property.

Our ability to maximize habitat production and increase land value is directly correlated to successful ground cover improvement projects, a road network, and the implementation of a long-term, high-quality food plot program. Restoring early successional habitats will also allow us to intensively manage the understory species and herbaceous vegetation that are beneficial to wildlife; thus, increasing deer herd health, buck antler size, and carrying capacity. A long-term food plot program will improve nutritional availability on the Client property while consistently holding and maximizing deer, turkey, and quail population potential.

Habitats

Creating and maintaining high quality habitat areas is the foundation for a healthy deer population and consistent hunting success on the Client property. It is imperative that we improve and increase desirable habitats before we expect to see an improvement in wildlife population quality or numbers. Not only is it important to provide the right type of habitats but it is equally important to arrange them in a way that allows total property use. This management plan arranges the habitats in a way that will maximize deer, turkey, and quail populations and most importantly it can maximize the potential of all 750 acres including SMZ's.

On a property the size of yours, we must target each section of property and eliminate idle acres wherever applicable. The term habitat refers to all natural/native components of a hunting property landscape. Habitats include forbs and browse, bedding cover, escape cover, turkey nesting cover, brood acres, food plots, wildlife travel corridors, thermal cover and sanctuaries. Keeping each of these habitat types in mind and providing the correct amount of them is a vital part of hunting land management. Edge is defined as an area or line where two habitat types come together. Deer and quail are considered edge species as well as turkey. In their current state, the habitats on the Client property are in poor to fair condition. As this plan is implemented, we will see a steady increase in habitat quality each year. A food plot program and a habitat restoration effort to eliminate idle acres are the techniques we will use to improve long term habitat quality on your property. Food plots benefit a tract of land and fill a niche' different than supplemental feeding.

Phase 1 (Jan 2025 – September 2025):

*Road Network Improvements and Expansion (Turkey travel and stand access)

*Food Plot Installation using Excavator, Bull Dozer, and Root Rake

*Food Plot Site Preparations and Summer Food Plot Planting

*Additional Timber Harvest Operation (per Management Plan)

*Supplemental Feed Program (Predators and Feral Hogs may be removed)

-The above food plot and timber harvest work may be weather dependent but necessary-

Phase 2 (September 2025 – January 2026):

*Plant Fall/ Winter (Harvest) Food Plots

*Tree (Pine) Planting Site Prep Herbicide Application

*Tree (Pine) Planting Site Prep Burn

Phase 3 (January 2026 -)

*Plant Pine Trees

*Finalize the Food Plot Program (Soil Samples, Additional Fertilizer, Lime, or Planting)

*Maintain Supplemental Feed Program (with seasonal trapping)

*Maintain the establishment of A Top-Notch Hunting Property

-----National Deer Association recommends No supplemental feeding -----

Pine Tree Planting Project

*Herbicide Site Prep (Preliminary Recommendation)

-Applications are on a per acre basis that will be broadcast sprayed using a forestry skidder or helicopter aerial application:

-40oz. Chopper BASF

-5qt RoundUp Pro Concentrate (50.2%)

-32oz. Methylated Seed Oil

Prescribed Burning (Site Prep)

Burn designated pine planting areas ~ 6 weeks post site prep herbicide application or until after deer season. Firebreaks should be installed completely around designated areas by the Georgia Forestry Commission.

The above forest herbicide mix was used to restore clearcuts that were abandoned for 2 years. Soil, vegetation composition, and precipitation matter.

-Tree Planting-

Loblolly pine or Longleaf pine seedlings should be planted on 10-foot row spacing with 10 feet between seedlings. Machine planting can increase seedling survival to greater than 90%. There are government incentive programs (Conservation Stewardship Program; Natural Resource Conservation Service) that will cost share with you, the landowner, on tree planting and other conservation projects. The Conservation Stewardship Program has a payout of $40,000 per year or $200,000 for a five-year contract. A NRCS representative and I can help with this. I, personally, have done this with Craig Bevan of the NRCS. I recommend the Conservation Stewardship Program over Environmental Quality Incentives Program (EQIP) when applicable.

The above tree planting recommendations were geared toward reforestation efforts on old woods sites. Planting pines as a solution in "abandoned or old field" management is different. Abandoned field areas should be intentionally managed for food and cover by establishing "fence rows." Disking or planting for a better growing season food response between the fence rows is encouraged. Trees are not required in old field management. An example is 15-yard-wide fence rows and 10-yard-wide vegetation management strips. Abandoned fields can also be used

for cover sanctuaries, this requires no immediate disturbance. Planting abandoned fields for merchantable timber acres needs to be coupled with periodic soil or vegetation disturbance.

*** For release sprays after thinning; 16-24oz of Arsenal (Imazapyr) per acre should be used. On sandy soil use 16 oz of Arsenal. Release sprays are done in August thru October. Spraying in August will kill more vegetation (grasses and broadleaf plants) before they go to seed. Spraying in October will allow more vegetation to remain viable (this is beneficial) and go to seed, killing mainly the existing plant. Release sprays are followed by prescribed fire in Jan. or Feb. of the next year. Simply put, release sprays kill undesirable woody stems and grasses then release desirable trees and ground cover; increasing their productivity. Not all thinnings need to be released sprayed, depending on the ground cover and wildlife objectives. Arsenal herbicide applications can be applied with a forestry skidder or helicopter.*

Prescribed Fire intervals following release spray October 2026:

- Jan./Feb. 2027 – Promote Legumes and Forbs

- March/April 2030 –Maintain Early Successional Habitats and Diversity

3 year ground cover rotations incorporate the benefit of 2 year intervals and provide deer cover.

Prescribed Fire Regime

If applied correctly, prescribed fire is an effective wildlife and habitat management tool that we should use on the Client property. Prescribed fire will increase food quality and can restore food and cover over time in the proper burn rotation. We will use fire to decrease mid story canopy closure, improve native forage as well as increase edge, especially for turkeys as edge relates to prescribed fire. They use these areas as travel corridors and are typically high usage areas that can create excellent hunting opportunities. Edge is not a necessity in growing target wildlife populations; however, it absolutely helps and will increase hunting success. Especially mature bucks along travel corridors, cover, and food plots.

Longleaf pine can be burned between years 1 and 7 after planting and loblolly pine can be safely burned at a height of 12 to 15 feet. Planted pine areas will have more cover in years 4 to 7 if burning or some type of disturbance does not occur. The Client property will be put on a 3 year burn rotation but burning needs to be done on a site-by-site basis. Stands of mature timber and thinning operations are still very important. Prescribed fire and the importance of early

successional habitats as ground cover cannot be understated. It is possible to extend burn rotations depending on the condition of the woods post timber harvest. Prescribed fire is also important for forbs and habitat for turkey populations.

A three year burn rotation means designated prescribed fire areas will be burned once every three years. Recently, I have recommended to landowners that prescribed fire areas should be put on a yearly fuel and ground cover assessment to determine if fire is necessary to meet and maintain the goals we have set forth on their property. Normally, there needs to be some type of disturbance done to stimulate new plant growth through undesirable grasses, dense pine needles or leaf litter layer. Examples of disturbance type are prescribed fire, strip disking, and mechanical disturbance. Without disturbance, the ground cover composition on the Client property with shift from a forb and browse state to a cover maximization state within five years, prescribed fire is a good disturbance that will more evenly balance the food and cover relationship on your property. Ironically, over time, dormant season fires on a short rotation can actually increase the percent of grasses on a landscape. This can have a negative effect on forbs and browse. On the Client property there should be a close relationship between upland habitat types and prescribed burn blocks. The goal of this prescribed fire program is to create a beneficial plant understory of uneven aged forage, legumes and browse while increasing timber quality and prescribed fire acreage over the next decade. Prescribed fire will more than likely be needed in some capacity each year. June burns may be very carefully considered. Fire breaks will need to be installed by the Georgia Forestry Commission prior to burn dates.

Food Plots

The food plot program is going to be the main draw for the wildlife on your property and will share responsibility for growing and maintaining the deer herd throughout the year. Food plots are necessary for providing a consistent high quality food source that will grow, hold and maximize the deer population on the Client property. Areas set aside as food plots must be managed in a way that gives the deer on the Client property an incentive to use them. Food plots need to have a utilization incentive for wildlife and provide a food source that is more attractive and nutritious than other food sources across the landscape. All food plots are not created equal. Plot effectiveness can depend on size, location, soil condition, and food plot plant species. The recommended food plot acreage is roughly 4 up to 7% of the total property acres. Landowners

like food plots, hunting properties have food plots, hunters like having options and different stand sites. Food plots and native forage are both important.

For the sake of this Management Plan food plots are divided in two categories: summer food plots and winter, deer hunting season food plots. The summer food plot plant species; Forage Soybeans and American Jointvetch have different establishment techniques but both are very effective. Unfenced forage soybeans cannot handle high deer density browsing pressure. American Jointvetch is, at worst, moderately sensitive to browsing pressure but historically does not do as well on well drained soils. Summer food plots are a growing season food plot and may range in size from 5 to 10 acres. I have seen smaller acreage summer food plots planted in forage soybeans and properly fenced be completely consumed too quickly. Tonnage is weather dependent. Forage soybean food plots are managed for growing season tonnage (~3 tons of leaf matter per acre) and can make up to 75% of your deer herds diet in July, August, and September. Hunting properties have food plots and food plot acreage; enough acreage to create beneficial edge buffers at times. For scale, a sunn hemp/ grain sorghum mix produces 3.5+ tons of total biomass per acre. Planted edge and soft edge buffers are both beneficial.

In reference to forage soybeans; 30 adult deer will consume 1 ton per week of summer food plot leaf matter. This means 60 adults consume 2+ tons per week. The goal is to have 3+ months of available tonnage. The minimum summer food plot acreage I recommend is one, 5 acre food plot on 300 acres. I recommend at least 30 tons of leaf forage per 640 acres. Forage soybeans should be planted after the last frost of April in (60 degree soil temp.) in Georgia and fenced with electric exclusion fencing until June 15 - July 15 at the latest. Plot assessments must be done and planting dates may change to satisfy this planting and tonnage period. Forage soybeans can grow leaves for up to 150 days. Once the exclusion fencing is removed the plots will provide high protein nutrition in tonnage during the critical antler growing months and high stress time of the year. Exclusion fencing materials can be reused each year. Borderline forage soybean philosophies are: (1) 10-acre plot is sufficient for 60 adults and a 3-acre plot will be sufficient on 300 acres. I beseech you to begin incorporating summer food plots into your hunting property program. Summer food plots are important, do not give up on them. Summer food plot crop rotations are important for soil health and productivity.

5-to-10-acre plots double as excellent hunting opportunities during the rut because of their size and a hunter's ability to hunt maximum acres from one stand. Summer food plot acreage is important for a multitude of reasons. They should be correctly located and overlay two management sections that are between 150 and 200 acres each; this prioritizes bedding areas (cover) at the center of each section. The large acreage plots are more important for increased huntability and forage soybeans. On 200 acres, a standard food plot distribution is 1 large plot and 2 or 3 winter plots. The flip side is 640 acres; 1, 10-acre plot and fewer winter plots. I do not like this theory; Food plots are good for the hunting industry. One large food plot and two smaller food plots on 200 acres will typically result in a forested sanctuary. Forage Soybeans require more landowner "work days" but less herbicide application than American Jointvetch. Forage Soybeans need a pre-emergent treatment of Trifluralin, proper application rates must be followed to coincide with acreage requirements. Trifluralin should be applied at 10 gallons of water per acre and 2 pints per acre. A 55 gallon tank will cover a 5 acre field with 10 pints of herbicide. Trifluralin needs to be sprayed prior to a rain and incorporated into the soil with fertilizer ~7 days prior to planting. Exclusion fencing will reduce weed competition inside forage soybean food plots. American Jointvetch requires only a glyphosate treatment pre-planting. Trifluralin can also be used as a pre-emergent with American Jointvetch. Post-emergent herbicides are helpful. This may include glyphosate on forage soybeans and clethodim and 2,4-D mixed with crop oil to remove competing grasses and broadleaf weeds in American Jointvetch. Herbicides should be used only as needed.

Winter (Harvest) food plots are smaller in size (1 to 3) acres and are located in or directly next to high quality deer habitat areas (areas we anticipate to have a high rate of deer traffic during the hunting season; Cover and or Travel Corridors). It is important to create and maintain cover near food plots to encourage daylight use from your deer herd. The winter plots are in place to boost deer herd nutrition and improve hunting success. The recommended clover types are great sources of winter/spring protein for deer; planting a part of these plots with American Jointvetch can increase their productivity as a transition into growing season food plots for deer and habitat for your turkey or quail population. American Jointvetch can be better on newly installed food plot sites with more soil compaction and established on smaller plots, only if necessary. Fall/winter food plots planted in American Jointvetch as a summer food plot should be located toward the center of the property.

In the Southeast United States, food plots should be about productivity, nitrogen fixation, and potential conversion to habitat types for turkey and quail. The recommended fall/winter mix is excellent for deer, turkey, and quail. Exterior winter food plots are in place to increase the huntable acres associated with your property and maintain an interior sanctuary. Increasing huntable acres also increases the number of wildlife you can hunt. If landowners are interested in increasing huntable acres, exterior food plots with cover buffers can provide that. The goal of the growing season food plot program on the Client property is to increase herd nutrition, maximize buck antler growth, and reduce environmental stressors. Deer feed up to a handful of times during a 24 hour period. Herd health and antler growth are directly correlated to the quality of food they consume during their feeding periods. The productivity of food plots will increase as the amount of preferred deer habitats around them increases. Mature bucks will consume 10-20lbs of food a day while adult does will consume 5-10lbs of food a day. Hunting properties that have consistent growing and hunting success have large acreage growing season food plots that double as huntable acres during deer season. Summer food plots can be cover cropped in oats or Austrian Winter Peas (50lbs/ acre) to increase their huntability and productivity during deer season. I recommend summer food plots over June burns. Food plots are always acceptable depending on their purpose for each property.

A high-quality food plot program is a key part in the future success of the wildlife management strategy on your property. Heat stress has an impact on wildlife and vegetation quality in the summer. Food plots, cover, and reducing how far a deer has to travel for nutrition will increase population production. This means higher fawn recruitment and antler growth rates. Food plots and native forage increase the primary production of a landscapes' carrying capacity. This management plan also uses food plots to concentrate the deer herd during hunting season on the Client property; increasing hunting success and the hunters' ability to kill big mature bucks. When a hunting property plants every acre possible (firebreaks and small plots) stand sits may be less productive, causing a decline in hunter satisfaction. As food plots are established, I will conduct soil tests and analysis allowing us to more properly condition the soil with lime and fertilizer. It is very difficult to have a high production food plot on a poor-quality soil. As a rule of thumb, soil pH needs to be between 6.2-6.8. Forage soybeans should be fertilized with 800lbs of 5-10-15 per acre. American Jointvetch at 400lbs of 5-10-15 per acre. The recommended winter mix will fix their own nitrogen however 300 lbs per acre of 17-17-17 will usually suffice.

Soybeans, Peas, Clovers, and American Jointvetch should be inoculated prior to the first planting. Inoculation aids in nitrogen fixing. *Growing season food plots can be successful.*

Plant Species	Seed Rate (Alone)	Seed Rate (In a Mix)	When to Plant
Buck Forage Oats	100lbs/ Acre	50lbs/ Acre	Late September
Crimson Clover	15lbs /Acre	5lbs/ Acre	Late September
Yuchi Arrowleaf Clover	10lbs/ Acre	4lbs/ Acre	Late September
Austrian Winter Peas	Not Alone	20lbs/Acre	Late September
Iron Clay Cow Peas	Not Alone	15-30lbs/ Acre	Late September
American Jointvetch	12-15lbs/ Acre	Not in a Mix	Mid April
Eagle Forage Soybeans	50lbs/ Acre	Not in a Mix	Mid April

Food plots add 10,000+ lbs of high-quality forage per 100 acres to a landscape.
Iron Clay Cow Peas will be browsed down before the first frost. Fall / Winter plots should not be seeded heavy. Planting heavier rates should be done with caution.
**I believe this is the best food plot mix in the Southeast, USA. **

Supplemental Feeding

Feed locations can be implemented and maintained only if habitat and food plot projects have been confirmed. This is a response to the needs of herd nutrition and reducing the stigma of social stress at feed locations. Supplemental feeding may encourage deer to over browse native plant communities. Supplemental feeding may be delayed a year as native plants are established. Supplemental feeding should never be the backbone of a hunting properties food program. However, it can be a necessary component that ensures a healthy deer population can reach its maximum potential. On the Client property, we are going to implement a supplemental feed program that is based on the current and future nutritional needs of your deer herd. Depending on the current deer population, all supplemental feed locations may not be necessary at this time. Ultimately, these locations will be in place to help support a deer density of approximately 65 to 85 deer per square mile or 1 adult per 12 to 10 acres. Hardwood bottoms and SMZ's provide thermal (shade) cover in the summer, this is why these acres may be used to estimate a properties summer carrying capacity.

Supplemental feeding is not a requirement. I recommend one feeder per 50 – 100 acres. Feed locations need to be 440+ yards away from the property line. One feeder per 100 acres works with the Jacobson Survey and has a ~ 350 yard radius. Areas of sustained high-quality habitats may support higher feeder densities (1 per 50 acres). Supplemental feeders are evenly

distributed on the Client property. During the fall and winter months we want deer feeding in food plots, not out of supplemental feeders. A corn/ protein pellet blend may be needed to get your deer herd accustomed to these sites after deer season. Trail cameras can be set up on feed sites to determine deer use and which predator/ nuisance species need to be removed. Our goal for the Client property is to be feeding a protein pellet of at least 17% in May. The feeder type I recommend is a Banks 600 gravity feeder or a high-capacity trough feeder with a high overhanging roof. At peak supplemental feeding, 12 adult deer will consume up to 1,500 lbs. of feed per month per 100 acres. This is a high carrying capacity deer density and should only happen in core range scenarios and matched with forest management and food plots.

The supplemental feed program will consider the future nutritional outputs of your property; as our management activities improve over the next 3 years, so will the nutritional outputs. Most landowners that supplemental feed develop their own population inventories over time. Deer densities based on supplemental feeding will reflect a false carrying capacity for that property. Supplemental feeding is not the top priority in terms of how to grow the best deer herd possible. The list of priorities are native forage management, food plots, and then a supplemental feed/feeder program. Supplemental feeding is a landowner decision not a recommendation. In times of drought, extreme heat, or higher than expected deer herd numbers the supplemental feed program may be ramped up to meet the specific demands on the deer herd at that time. Supplemental feeding is an acceptable management practice on deer hunting properties and I will continue to allow it as long as the proper parameters are in place.

Wildlife Populations

A current estimate of the deer population on the Client property is unknown at this time. Over the next 6-18 months we can use trail camera surveys and observational data to establish a baseline number for the deer population on your property. Our goal is a mature buck driven structure with 50% to 70% fawn recruitment and up to a 2:1 buck to doe ratio. Shooting does is a herd maintenance activity and should be responsibly done each season. 3 fawns recruited per 100 acres. This is realistic and removing coyotes may be necessary. Some mid-acreage properties may experience a 7:5 buck to doe ratio; this is a higher deer density and probably be considered my limit. Deer herds can be managed on 5 to 7 year intervals called a generation. Habitat management and nutrition programs should be evaluated after each generation. A ratio of more

bucks than does can be accomplished during and after the first "generation". On a normal hunting property landscape, a buck to doe ratio up to 2:1 will produce a deer population of ~75 deer (bucks, does, fawns) per square mile. In core range scenarios this number may be slightly higher. On 500 acres, a target growing season deer density on a tract in Crawford County Georgia is 30 bucks and 20 does. Again, this density requires a food plot program and may allow it to be slightly higher. Typically, it takes 7 or 8 bucks to have one 4+ year old buck. Well managed properties have more bucks than does during the growing season and pull more deer in during the fall and winter; recruiting more deer for the next growing season.

Coyotes, bobcats, fox, raccoons, and other predators can have a detrimental impact on deer fawns, turkey and quail nests reinforcing the need for quality cover to be available throughout the Client property. Monitoring and trapping predators is an important part of hunting property management and when coupled with habitat improvements it has been shown to increase deer, turkey, and quail numbers. Quality cover across a landscape is not only good for hunting success but it also protects the wildlife populations we are managing for. However, high quality food and cover must be accurately scaled to maximize the potential of your hunting property. Realistically, the minimum acreage for multiple reproductive quail coveys is between 150 and 250 acres. Four coveys on 200 acres would be an acceptable indicator that your quail population is growing. Eight coveys would be a target. Populations can be supplemented with flight conditioned, pen raised birds during the hunting season to aid in successful quail hunting opportunities. Quail course designs that feature edge, covey headquarters, food plots, and forested habitats can cross into multiple management sections.

Yes, creating early successional habitats (i.e timber harvest) helps increase carrying capacity. However, quality wildlife populations are directly correlated to the quality of habitats; especially on sites with no supplemental feeding, increasing the number of deer, turkey, or quail a property can reasonably hold and grow. Carrying capacity is defined as the maximum population size of a wildlife species (deer, turkey, quail) that a property can sustain without irreversible damage to habitats given the amount of food, cover, and water on the landscape. The Client property Management Plan does an excellent job of implementing Best Management Practices (BMP's). BMP's are property specific recommendations that will maximize deer herd

potential despite the current condition of the property or population. BMP recommendations take an if we build it, they will come approach to hunting land management.

Deer are an umbrella species, meaning the deer habitat improvements will trickle down to other species of interest. Reducing dense/ woody cover acreage, a beneficial food plot program and increasing native forage production will undoubtedly improve habitat and wildlife populations on the Client property. In some areas we are implementing intensive deer management strategies but on a property wide scale all species of interest will benefit. It is important to remember the property with the most deer isn't always the property with the healthiest deer. In one generation, we will see an average increase in antler size of 25 to 35 inches on bucks in the 3.5 to 5.5 age classes. For example, a 115 inch 5.5 year old grown on mainly genetics could have been a 150 inch 5.5 year old with the proper nutrition. I prefer your property to have a deer herd within carrying capacity but have access to high quality food and cover at all times. Doing this will buffer against marginalized population results. Most hunting properties try to maintain a deer density of at least 60 deer per 640 forested acres at all times. The habitat carrying capacity should be for a deer density of 90+ deer per 640 forested acres.

Management Implications

This Management Plan is a foundation for the future wildlife and habitat management practices that will create successful hunting opportunities on the Client property. There are no shortcuts in this plan; we are implementing long term solutions that will reap benefits for years to come. The best land and wildlife management involves accurate evaluations and adjustments. There is no doubt when your property reaches its maximum potential it will be a showcase property for mid and large acreage tracts in Middle Georgia. The three key parts in successful hunting land management are habitat management, population management, and hunter management. All three must work together to create a premier hunting property.

The Client property Management Plan is centered around successful food plot and habitat restoration programs that will increase high quality habitat acres over time. We can put all the high-quality food in the world on your property but we must accurately scale cover that holds deer, turkey, or quail at all times of the year. If not, the benefit of your food plan will be minimal. Food plots will share responsibility for localizing these populations on your property throughout the year. Supplemental feeding (for deer) can also aid in this objective for maximum use of your

summer resources. On a property that does not use supplemental feeder sites, multiple cameras around food plots may be used to collect deer herd inventory. On average, an adult deer has a ~70 to ~120 acre growing season core range. For population assessments and management recommendations the Jacobson survey can also be used. Supplemental feeding will be left up to the landowner only. Early successional habitats, specifically cover, and supplemental feeding may increase the number of predator/ nuisance animals a landowner will have on their property. Removing these populations is a priority of many hunting properties. The traps I recommend are dog proof marshmallow traps for raccoons and the Boarbuster trap may be required for feral hogs. Predator and nuisance animals do impact deer, turkey, and quail populations and movement. Over abundant predator/nuisance animals (includes coyotes) must be removed.

High quality food and cover go hand in hand and both should be present on a hunting property. Loading docks and some skid trails can be planted in a warm season grass like Alamo Switchgrass or Big Blue Stem; these warm season grasses should be seeded on a light seed rate as to maintain cover all year and provide fuel source for prescribed fire. The seed rate I recommend is 4lbs per acre. This will create winter edge while providing enough sunlight for forbs and other native vegetation to grow within the warm season grasses during the spring and summer months. Another option for loading docks is American Jointvetch; only if the location is near the center of the property. The cover in old field areas will eventually need to be maintained on some type of disturbance rotation. Alamo Switchgrass and American Jointvetch can be established by broadcast seeding, I have seen this to be true. Cover helps hunting properties and cover sanctuaries can be up to 10 acres in size, larger sanctuaries that are skewed toward cover will eventually need to have early successional ground cover restored within a 5-year window.

While attending Auburn as a graduate student Clint McCoy found that a bucks' home range can be as small as ~60 acres. During the growing season there must be a high-quality food source (native forage, food plot, supplemental feed) within those 60 acres to see an increase in antler growth as it relates to nutrition and not genetics. Over time, age and nutrition can trump poor genetics. This management plan locates a bedding area within ¼ mile (440 yards) or less of high-quality food sources throughout the growing season. This distance is a standard I use to encourage consistent use of growing season food sources. Depending on deer densities and food plot layout; one 3-acre food plot per Management Section can serve as a summer food plot and

the large plot can be in the recommended fall/winter mix. The summer is the highest stress time on deer. Hunting properties have food plots and cover.

There are four factors that impact deer herds: age, nutrition, stress, and genetics. I do not believe genetics is an issue of concern at this time and we should focus on the bigger picture of habitat quality, wildlife population monitoring, and harvest recommendations. Hunting property managers intensively manage their food plots once they are installed and their woods after they are thinned. Please consider this approach. High quality habitats are the foundation of this Management Plan and will be the foundation of your property for years to come. It is difficult to have a high-quality wildlife population on a property with poor quality habitats. At the end of the day, deer are still "browsers" but more importantly, they feed on a preference scale; this means they "browse" on the food that is highest on their preference scale at any given time. This is true and this is why certain food sources {Growing Season Food Plots} are such a high percentage of their diet. Forage soybean advocates swear by their preference and summer tonnage. Ryan Basinger of Westervelt Wildlife Services states American Jointvetch can make up ~35% of a deer's diet in the summer months and I know at least 50% of a deer's diet is a planted summer food source with supplemental feed, when made available. Forage soybeans rank the highest on a deer's preference scale and deer may consume more of this food plot plant type than any other. Also, distance from bedding and time of year will influence forage consumption.

Forbs and browse are classified differently and some cover is left on the landscape, even with the release spray application for wildlife habitat. I believe your property is only functioning at 20% of its overall potential. In two or three years, I am confident we can get this number up to ~ 4,500lbs. of beneficial plant matter per acre during the growing season. The previous statement relates property potential to beneficial ground cover; this is from a forest management standpoint. Only ~300 lbs. per acre of this ground cover is above average native deer forage. One adult deer consumes ~ 2,000+ lbs. of forage from a landscape during a growing season. A deer herd right at or over carrying capacity can over browse forbs over time. Native forbs that are preferred by deer experience intense browsing pressure. Many of these forbs have a short-term seed bank, like clover; hence the need for over-seeding or reseeding clover after a period of time. This can have a long-term negative impact on deer, turkey, and quail and changes the quality of forage on a landscape. I believe seed banks are just as important as soil type. As forest ground

cover approaches 3 tons per acre it favors more cover. I like cover. This is one reason deer rely heavily food plots and supplemental feeders at times. One adult deer per 8 managed (~Non SMZ) acres or (60 adults) 80 deer per square mile should be a target deer density in Crawford County Georgia. The spring carrying capacity of a hunting property is often higher than the summer carrying capacity. The longevity of forage is reduced in poor soils. Higher deer density hunting properties need an adequate food plot program, especially in the summer.

Food plots are not supplemental, they are essential. Multiple spring and summer food plots may take browsing pressure off native plant species and many landowners choose to supplemental feed. We are converting idle acre areas of your property into long term habitat solutions that will increase its ability to hold and grow deer and increase hunting success. Prescribed fire and recommended disturbances will be used periodically to increase diversity on the landscape and the abundance of early successional plants like ragweed, greenbrier, partridge pea, goldenrod, and American beautyberry. Dense cover areas also provide edge next to SMZ's and food plots; this can encourage deer movement but early successional cover (4+ ft tall.) will hold deer on the Client property for extended periods of time. Cover sanctuaries are helpful and vegetation height in these areas can be between 4 and 7 feet tall, they must remain accessible and impenetrable thickets should be avoided. Acceptable impenetrable thicket types are pockets of blackberry, muscadine, chickasaw plums, and Japanese honeysuckle.

High quality cover can buffer against detrimental predator impacts on the deer, turkey, and quail populations on your property. Ground cover for these three may have a 40 % woody stem (i.e southern red oak regeneration on wild quail plantations) component. High thermal cover percentages decrease carrying capacity for deer; aerial cover protects poults and chicks from birds of prey (hawks), this is important. Closed canopy forests that are not along streams or in low lying areas should be managed for wildlife habitat improvements. Standard thermal cover percentages for deer are 10 to 15% in shade and ~30% in winter cover (Three year ground cover rotations are not void of forage and provide different cover types for deer, turkey, and quail).
I have seen successful hunting properties have slightly different percentages of both. Multiple food plots can decrease hunting pressure and increase edge; stand ingress and egress should be carefully considered. Habitat improvements take a proactive approach to land management while improving food plots and managing native vegetation.

Deer are the driving force of a forests' carrying capacity. The diversity they require will also improve turkey and quail populations. Higher population sizes improve hunter success and increase land value. Dr. William Moore of Abraham Baldwin Agricultural College teaches deer are edge species and I believe this to be true. The ideal percent ground cover that should be in native grasses is 25%. High grass percentages across a landscape may be an indicator of poor deer management and should be treated with a mechanical disturbance and/or a forest herbicide release spray (Imazypyr in late July) in serious instances. I believe in managing for grasses but keeping them at 25-30 % of a landscape, if possible. We need to make the most of all Management Sections to increase total property success. Food and cover improvement areas must be monitored each year to determine productivity and evaluate its ongoing benefit to our goals. We must improve food and cover on the right scale and over the same period of time. *With a forestry skidder, an October application of Triclopyr (Garlon) in stands of mixed pine/ hardwood one to three years after the thinning can effectively reduce undesirable ground cover and keep those stands productive for wildlife the following years with prescribed fire.*

On the Client property, cover located next to or near a preferred food source increases the likelihood of a mature buck accessing it during daylight hours. Quail courses and deer and turkey populations can be managed on 100 to 200-acre scales. There is no problem with this philosophy. The Client property Management Plan ensures future hunting and land value success only if it is implemented correctly. Scott Smith, one of my mentors at The Jones Center at Ichauway told me the best deer management is right before a property gets out of control; I have always tried to maintain cover on a landscape. Populations must be monitored and deer densities kept in check. All the information in this literature is considered accurate and leads me to this: hunting properties that have cover dominant areas may need to have areas that are on a two year prescribed fire interval close to cover; only on good soil sites. This also applies in quail and turkey management. Overall, I believe this Management Plan can be a very effective asset for your hunting property and needs to be given proper consideration.

Written by: Matthew R. Shurley, Associate Wildlife Biologist ®

On August 20th 2025 I earned a three-year extension on my biologist certification with The Wildlife Society. The above literature was part of my supporting documentation.

Track Identification Guide

Fox

Bobcat