

Wildlife Session

Georgia's Forestry for Wildlife Partnership Program: Conserving Wildlife on Industrial Forests

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Abstract: Georgia, like much of the Southeast, is faced with increasing pressures on its natural resources including forests. The predominant forces being imposed on Georgia's forests are development due to human population expansion and increasing demand for forest products. In 1996, the Georgia Department of Natural Resources, Wildlife Resources Division, began working with 14 corporate forest owners operating in Georgia to develop a partnership program that would recognize companies for their efforts in natural resources conservation. The Forestry for Wildlife Partnership Program has been functional for 3 years and has facilitated improvements in communication, operations, training, and resource conservation by participating companies. After 5 years of implementation, the partnership program provides a model from which many lessons can be learned relative to the role of private corporations, especially the forest industry, in conserving natural resources.

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In an era when state fish and wildlife agencies are faced with static or declining operating budgets, innovative means of managing natural resources are becoming necessary. In Georgia, an emphasis on public/private partnerships as an avenue to accomplish natural resources management more efficiently and effectively has been en-

couraged by past and present gubernatorial administrations. One example of these partnerships is the Georgia Department of Natural Resources, Wildlife Resources Division's (WRD), effort to work with forest industry and corporate owners of Georgia forestland to improve wildlife habitat on companies' lands. The program, while still growing and developing, has met with success and acceptance by WRD and the forest industry. WRD expects the successes to continue and expand as more companies join the partnership program and looks forward to beneficial long-term relationships with all of the companies interested in participating in the program.

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The Problem

Georgia is blessed with an abundance of forest types providing a diversity of wildlife habitats across all of its physiographic regions. However, Georgia's forests are being subjected to increased pressures due to a rapidly expanding human population and increasing demand for forest products, especially softwood products. These pressures potentially could lead to decreasing landscape-level forest diversity and negatively affect certain wildlife species that rely upon habitat diversity and forest canopy continuity.

The decade from 1990 through 2000 saw Georgia's human population grow from 6.5 million to 8.2 million people, an increase of 26.4% or 171,000 people per year (U.S. Census Bur. 2001). The economic boom of the 1990s accompanied the population growth in Georgia providing more people with expendable resources or capital investment opportunities. The economic climate served as a catalyst for suburban sprawl into rural areas of the state, often causing habitat degradation and fragmentation.

At the same time, forest industry sought ways to meet the increasing demand for southern wood products. Analysis of the timber market in the Southeast indicated that future timber supplies would be adequate to meet expected demand only if the acreage of pine plantations is increased, stand level management is intensified, and technology is improved (Dangerfield and Hubbard 2001). Current approaches to managing forests more intensively include conversion of other vegetation types to pine plantations, planting genetically improved pine trees, fertilization of pine stands, and more effective control of competitive vegetation, usually with chemical applications. These techniques are designed to grow more wood fiber faster by eliminating competition for nutrients to planted pines during the rotation and causing canopy closure to occur earlier. Some techniques, such as chemical site preparation, result in decreased vegetative diversity that may negatively impact some wildlife species (Santillo et al. 1989, O'Connell and Miller 1994).

The Response

The focus of the forest industry and other Georgia landowners on intensified forest management led WRD to seek innovative means of encouraging better integration of wildlife and timber management. This ultimately resulted in the development of the Forestry for Wildlife Partnership Program (FWP), a public/private partnership between WRD and the forest industry in Georgia. FWP provides public recognition and third-party credibility to participating companies for incorporating fish and wildlife conservation into their overall land management goals and taking a stewardship approach toward their land ownership.

WRD targeted the forest industry and other corporate forest owners in Georgia for the FWP because 32% of Georgia's forests were in those ownerships (Thompson 1998) and because of pressures placed on industry to meet immediate demands for forest products. In 1997, of Georgia's 9.6 million ha of timberland, 12.0 million ha were under industrial management and another 1.1 million ha were owned by other corporate entities (Thompson 1998). Consequently, FWP had the potential to positively impact wildlife habitat on 7.6 million ha of forestland across Georgia.

Developing the Program Framework

In 1996, WRD invited representative from the forest industry, other corporate forest landowners, research and educational institutions, as well as associations and agencies connected to forestry in Georgia to participate in a "common ground" meeting. The purposes of the meeting were to enhance communication and coordination and to begin developing a wildlife habitat partnership program. Products of that initial meeting included a discussion specifying WRD's goals and objectives and the development of a survey for industry representatives which would detail their needs for a partnership program. Upon completion of the survey by interested parties, a committee was formed to develop the program parameters to meet common needs of the companies as identified in the survey responses.

Fourteen corporations responded to the survey and elected to participate actively on the committee to develop the FWP. In addition to the participation of the private companies, WRD representatives coordinated committee activities. Committee members included representatives from Bowater Inc., J. M. Huber Corporation, Champion International, Temple-Inland Forest, Georgia Pacific, International Paper, Georgia Power Company, Mead Coated Board, Gilman Paper Company, Stone Container Corporation, Georgia Timberlands, T&S Hardwoods, John Hancock, Union Camp Corporation, Weyerhaeuser, and the WRD. Assisting in program development were The Nature Conservancy, Joseph W. Jones Ecological Center, the Georgia Forestry Association, Georgia Forestry Commission, and the University of Georgia D. B. Warnell School of Forest Resources.

During the fall 1996, WRD hosted a partnership meeting to present and discuss results of the common needs survey. The discussion resulted in a list of commonalities among companies. The common general recommendations were to recognize current wildlife conservation accomplishment, develop a non-competitive program,

simplify guidelines, establish standards by physiographic province, create a single level of partnership for recognition, recognize the industry as a whole, and develop a training process for industry employees that provides credibility and recognition for the companies. Also arising from the meeting was a list of recognition services that could be conveyed upon partnership companies by WRD. These services were later ranked in a survey of the companies and included press releases, partnership designation, press tours, and conferences, public service announcements, advertisements in annual hunting and fishing regulations booklets, publications, signage, awards program, television spots, Partners in Flight Education Centers' recognition, and recognition on WRD displays.

At the same meeting, WRD was charged with developing the first draft of a partnership program process and a set of forest/wildlife management guidelines for consideration by the full committee. In December 1996, the first draft was mailed out for review along with a survey to the companies to rank the recognition services that WRD could supply for achieving partnership status in the program.

Through 1997, the committee developed and revised several drafts of the partnership program. WRD insisted that a program be adopted that required the companies to conserve wildlife beyond what was required by law, current industry standards and policies, and state forestry best management practices (BMPs). Otherwise, FWP would not advance the state of wildlife habitat diversity in Georgia. The industry insisted that the program be flexible to provide equal opportunities for companies to achieve partnership regardless of land ownership, current management philosophy, or the companies' targeted product(s). Companies asked to eliminate any competitive aspects of the program to avoid comparisons among them. Also, the industry wanted participation in FWP to be voluntary and for the program to be compatible with the American Forest and Paper Association's Sustainable Forestry Initiative.

The last major issue to be resolved by the committee was confidentiality. Much of the information to be provided to WRD by the companies was considered proprietary. The companies were reluctant to surrender information to a public agency and possibly make that information a matter of public record and subject to retrieval through the Freedom of Information Act. The matter was resolved by housing all pertinent information in a facility provided by one of the companies involved in the FWP.

The content and format of FWP was finalized in September 1997, and in December 1997 companies indicated their intentions of participating in the program. In April 1998, WRD hosted an FWP kickoff celebration that was attended by Georgia's Governor Zell Miller and forest industry representatives from across the state.

How the Program Works

Any company wishing to attain partnership status must file a written wildlife conservation plan with WRD. The plan must detail the company's approach to blending forestry and wildlife management and requires the input of a professional wildlife biologist during plan writing and implementation. A company may still initiate participation in FWP without a completed plan, but will not be eligible for part-

Table 1. FWP categories for wildlife conservation accomplishments and associated points for scoring company reports.

Category	Sub-category	Points
Education and outreach	Land manager training	20
	Forest and wildlife conservation outreach	
Wildlife management practices	Site preparation	30
	Regeneration	
	Herbaceous and/or woody competition control	
	Prescribed burning	
	Thinning	
	Opening management	
	Riparian areas	
	Buffers	
	Snags and hardwood clumps	
	Dead or down woody debris	
Sensitive sites and special concerns	Priority riparian areas	25
	Neotropical migrants	
	Reptiles and amphibians	
	Long rotation pine forests and/or longleaf pine (LLP) conservation	
	Priority isolated wetlands and depressional wetlands	
	Threatened and endangered species	
	Communities, species, and special land forms	
	Tracked by Georgia Natural Heritage Program (GNHP)	
Wildlife recreation	DNR, Wildlife Resources Division (WRD)-leased land options	15
	Hunt clubs or other recreational groups	
	Company-managed recreation sites	
	Law enforcement	
	Management assistance	
Partnerships	Formal agreements	10
	Informal agreements	

nership recognitions until a plan is accepted by WRD. This concession allows companies to begin compiling report data and writing a conservation plan to expedite the process of becoming a partner in FWP.

A company participates in FWP by providing a report to WRD detailing the company's activities in 5 major categories over the previous 2-year period. The 5 categories include education and outreach, wildlife management practices, sensitive sites and special concerns, wildlife recreations, and partnerships. Each of the categories has an associated maximum score that totals 100 points when all 5 categories are summed (Table 1). In addition, WRD can award up to 10 discretionary points to

Table 2. Landscape level silvicultural practices reported by participants.

Practice	Technique
Acres harvested	Complete
	Partial (thinned)
Acres regenerated	Natural
	Artificial
Acres site prepared	Chemical
	Mechanical
	Total
Acres released	Herbaceous
	Banded or spot
	Broadcast
	Woody
	Banded
Acres prescribed burned	Broadcast
	Site preparation
	Intermediate
	Thinned
	Unthinned

any company for exceptional performance in any of the categories, or a combination of categories. A company must score at least 75 points to achieve partnership status. A company's partnership status is retained for 2 years, at which time the company must submit another report to WRD for partnership determination.

While the format of the company reports remains flexible to accommodate each company's reporting preference, WRD requires that each report contain at least 3 separate sections: 1.) landscape level silvicultural practices (Table 2), 2.) silvicultural assessment for newly established stands (Table 3), and 3.) program narrative. The program narrative must follow the outline and include the separate categories listed in Table 1. The narrative also should include any other activities the company wishes to submit for consideration that may or may not be adequately covered by the program categories and to make a case for acquiring discretionary points during the scoring process.

Another aspect of scoring is on-site visits conducted on company lands to see and review the practices detailed in the report. Companies are asked to coordinate a 1-day tour highlighting representative samples of each of the reporting categories. Each company also has the option of showcasing particular aspects of their management during the field tour.

Agency Investment

Two WRD biologists worked over a 2-year period developing the program with assistance from the program development committee. Over that 2-year period, no at-

Table 3. Factors considered for silvicultural assessment of newly established stands by participants.

Factor	Assessment
Adjacency	% of newly established stands adjacent to stands with a minimum of 3 growing seasons
Buffers	Streamside management zones % adequate (meets BMPs) % enhanced (exceeds BMPs) Shrub edge structure % of total sites with a shrub buffer
Snags/recruitment trees	% of total sites that avg >1 snag/acre
Woody debris	Percent of total sites with: unburned windrows slash piles unburned logging debris
Openings	% sites with roads, roadside, log decks and stream crossings stabilized with native vegetation or wildlife friendly plantings
Hardwood leave trees	Percent of sites with: hardwood clumps live cull trees
Corridors of mature trees	Percent of sites with: upland corridors priority riparian corridors
Missed opportunities	Allows for a summary of feedback from newly established stands on which gains could have been made but were missed.

tempt was made to account for the time and effort expended by those biologists. Countless hours went into meeting coordination, program draft writing, editing, and review. During the first 2 years, training programs were developed and provided, but effort was not recorded for those activities.

Since companies have been submitting reports, some records on costs and time have been kept allowing WRD to compile a total program cost and effort estimates annually to administer FWP. Two biologists work a combined average total of 400 hours annually on different aspects of the program. One public relations specialist devotes 40–50 hours annually on press releases, media events, articles, and awards. Displays and materials presented a 1-time cost of approximately \$2,000 with annual printing costs averaging \$200. Advertisements in WRD hunting and fishing regulations booklets total \$11,000 each year.

Results

Company reports are due on 1 June of each year. Because partnership status is conveyed for a 2-year period, not all participating companies file a report in any given year. This process has created a staggered reporting schedule among participating companies making annual program administration by WRD more easily managed.

In 1999, 5 companies submitted reports to WRD based upon activities performed during the 1998 calendar year. After reviewing the reports and conducting on-site verification visits to company lands, WRD awarded Georgia Power Company and Weyerhaeuser the 1999 FWP Awards. The awards were presented personally to company officials by the governor of Georgia. In 2000, 7 companies submitted reports for review by WRD. Again, after on-site visits were conducted, Champion International, Georgia Power, Mead Coated Board, and Weyerhaeuser were honored in the governor's office with the 2000 FWP Awards. In 2001, 2 additional companies submitted reports to WRD. Georgia Power, International Paper, Mead Coated Board, Temple-Inland Forest, and Weyerhaeuser were honored in the governor's office with the 2001 FWP Awards.

Discussion

The time and effort expended by industry and agency representatives who developed and participated in FWP since 1996 has resulted in a formal and comprehensive wildlife conservation partnership that is voluntary, flexible, non-competitive, and participant driven. Some keys to the success of FWP have been a willingness on the part of both the industry and WRD to identify common ground, pursue compromise where suitable, and to agree to disagree on some matters.

Flexibility has been a key component to program success. WRD has changed some aspects of the program to accommodate changing needs expressed by the industry. When FWP was developed, companies were required to file their reports to WRD no later than 31 March. At the participants' request, WRD changed the due date to 1 June to provide adequate time to the companies to complete other responsibilities prior to compiling the report. Also, the original purpose of conducting on-site visits after scoring company reports was to verify that reported activities were indicative of actual on-the-ground effects, and site visits would not affect the score earned on the report. However, at the urging of the companies, WRD agreed to give weight in the scoring process to the on-site visits. Another change occurred when the reporting schedule and duration of the awards were changed from annually to biennially. The reasoning was that effects of management practices would be present for at least 2 years and that as the program grew it would be easier to administer if the reporting deadlines for companies were staggered over a 2-year period.

One of the most positive outcomes of the partnership program was the communication which developed between the WRD and many of the companies that participated in FWP. The communication between WRD and the industry is occurring at all levels and among all sections of the department. Department and division leadership

have met repeatedly with company officials to discuss the direction of the program, WRD's commitment to the partnership, and ways to improve relationships between WRD and some of the companies.

Since FWP was initiated, WRD believes that wildlife habitat has improved on company lands. Reports submitted by the companies indicated an increase in percentage of shrub buffers (+5.9%) being maintained around 1- to 2-year-old pine plantations, and increase in percentage of acreage being chemically treated for herbaceous weed control through branded or spot application methods (+16.6%), an increase in percentage of pine stands with snag recruitment and retention (+3.9%), and increase in pine stand thinning, a greater number of upland wildlife travel corridors being established, identification of several priority riparian corridors, and an increase in number of management plans written for specific unique sites, species, or communities. In addition, wildlife management considerations enjoyed a higher profile in both landscape and stand-level planning during the planning process for 5 of the 7 companies involved in the reporting process. Also, streamside management zones were given greater consideration during the planning process, and some internal policies were changing to widen these zones, in part because of their value to wildlife and overall landscape diversity.

Many of these positive changes took place because of the training aspects of FWP. WRD game biologists, nongame biologists, and natural heritage biologists, ecologists, and botanists provided an array of training topics to company foresters and forest managers. Training topics have included management in industrial forests for game species, neotropical migrant birds, reptiles and amphibians, and threatened and endangered species. The training has facilitated dialogue with company employees and has fostered an atmosphere in which foresters are finding ways to incorporate wildlife management into the daily operations of forest management. Company employees have begun to participate more in WRD survey efforts including breeding bird point counts, the Georgia Breeding Bird Atlas, and the Georgia Herp Atlas.

All 5 current FWP partner companies entered into formal data use agreements with our Natural Heritage Inventory since the inception of the partnership program. The agreements provide for a 2-way exchange of digital data on company lands that identifies sensitive or unique sites and rare, threatened, or endangered plants, animals, or communities. Agreements have an effective life of 2 years, and by 2002, WRD was working under a second consecutive agreement with some of the partner companies.

The public recognition of partners in FWP was rated by the companies as the most valuable service that the program could provide. As such, WRD hosts an awards presentation annually in the governor's office. Television news media and print media are invited to attend the ceremony and report on their coverage. The agency has hosted press conferences and media tours of positive practices on company lands, provided advertisements in our hunting and fishing regulations booklets, issued press releases and public service announcements, provided individual company achievement awards, and purchased a traveling taxidermy display that features the names of all current and past partners.

All partner companies with multi-state land holdings have been so satisfied with FWP that they have approached WRD about expanding the program to include other states. The companies maintain that it benefits them to employ operational standards that are consistent across regional ownerships, and they are willing to operate in other states as they are in Georgia. In an effort to comply with these requests, WRD personnel presented FWP at the 2001 Southeastern Association of Fish and Wildlife Agencies Spring Director's Meeting in Charleston and offered to assist agency biologists in other southeastern states in developing similar programs.

Many of the companies who participated in development and implementation of the program donated funds to publish a booklet detailing the FWP program. Copies of this booklet are available in limited quantities to agency and company representative by contacting the authors.

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