



Collins Pennsylvania Forest
Forest Management Plan Summary
Updated October 2011

The trees we grow extend our reach and influence
beyond a single lifespan. By growing trees, we
enrich the earth and touch the lives of the next
generation.

I INTRODUCTION

The history of the Collins Pennsylvania Forest (CPF) dates back to the 1850's when T.D. Collins came to NW Pennsylvania from the farm country of New York. T.D. Collins was involved in many business ventures but primarily logging, sawmilling and railroads. In 1855, Collins purchased a tract of forestland in Hickory Twp. Forest Co., which is still part of the CPF

today. Mr. Collins was a very religious man known for being more conservative in his logging and business practices than most of the lumbermen of the era. While many of the lumbermen were practicing “cut out and get out” logging, Collins maintained his ownership of many parcels of land. The last Collins sawmill of that era closed in 1917, but T.D. and the next generation of the Collins family had started forestry operations in California, Oregon and Washington. After the death of T.D. Collins and his son Everell, the Pennsylvania lands were put into a trust with the proceeds from management of the land going to the Methodist Church to support world missions. Twenty-three thousand acres are still managed under this arrangement.

After WW II, the Collins family decided to survey their Pennsylvania lands to gather information on their second growth forest. It was decided that the forest was recovering well and opportunities to purchase additional lands in Pennsylvania should be pursued. Subsequently, the first land purchase took place in 1950 and the Collins Pine Co. continued to purchase tracts of land. After some timber sales and a venture into the Christmas tree business, Collins Pine Co. bought a small sawmill and additional lands in McKean Co. in 1966. The Kane Hardwood sawmill was built in 1974 and facilities such as dry kilns, a dimension mill and other new innovations have been added over the last 35 years. The Kane Hardwood facility is currently one of the most modern mills in Pennsylvania utilizing laser scanning, optimization technology and computer controlled equipment.



The CPF currently includes 118,000 acres in 167 individual parcels scattered across a seven county area of northwestern Pennsylvania. Parcels range from small 10 acre tracts to large 5,000+ acre tracts. The CPF is almost entirely within the Allegheny Plateau ecoregion and the

Allegheny River watershed. A few tracts in Elk and Cameron Co. are in the Susquehanna River drainage. The forest cover is primarily second growth hardwoods, which resulted after the large-scale clearcutting of Pennsylvania's forest between 1880 and 1920. The main forest cover types are Northern Hardwoods, Allegheny Hardwoods and Oaks. Northern Hardwood stands are quite variable and include species such as sugar and red maple, beech, birch, and hemlock in combination with other species. Allegheny Hardwoods are a unique forest cover type of worldwide importance, which is primarily limited to the Allegheny Plateau ecoregion. Black cherry, white ash, yellow poplar and red maple are the major species. The oak cover type includes northern red oak, white oak and other oak species usually in combination with other northern hardwood species. Stands dominated by pioneer species (aspen, birch) and conifer cover types make up a relatively small percentage of the CPF.

Sustainable forestry and stewardship are the trademarks of the Collins Companies in all of their operations. In 1992, the Collins Pine Company decided to undergo an in-depth environmental audit of their Northern California forestlands under the strict guidelines set forth by the Forest Stewardship Council (FSC). These forests became the first private forestland in the US to receive certification under the FSC protocols. The CPF was evaluated in 1994 and became the first forestlands in PA to receive FSC certification. All Collins Companies' forestlands in California, Oregon and Pennsylvania totaling 287,000 acres are currently FSC certified. FSC certification requires annual audits to ensure guidelines are being followed. Complete in-depth evaluations are required every five years. In 2000, 2005 and 2010, the CPF was awarded re-certification. The auditors stated that the Collins Pine Company's "commitment to and implementation of sustainable forest management on the CPF has been abiding and substantial. The overall level and competency of the management program has been increased over the exemplary levels observed in 1994."



II SILVICULTURAL METHODS

The management of the Collins PA Forest is guided by the following biological goals:

- Maintain the health and productivity of the forest in all aspects
- Maintain and improve the timber quality and production for maximum sustainable yield
- Maintain diverse ecological systems of the forest compatible with the production of the primary commodity – timber
- Protect water quality on the forest
- Protect and enhance biodiversity and wildlife habitat

The CPF forestry staff currently employs nine professional foresters and forestry technicians to manage the CPF. They are responsible for all land management activities on the CPF, the sale of veneer logs and pulpwood, and all timber harvesting. All harvesting and hauling of timber products, road construction and road maintenance is done by local logging and excavating contractors, under the supervision of the forestry staff. Local forestry consultants are contracted for some forestry activities such as data collection, boundary maintenance and timber marking.

All timber stands, roads, watercourses, etc. on the CPF are mapped using aerial photography, ground surveys and Global Positioning Systems (GPS). All mapping and associated data are tracked using a computerized Geographic Information System (GIS).

The Annual Allowable Harvest for the CPF is calculated using a computer based, timber management and growth model (*Remsoft Spatial Planning System* software or *WOODSTOCK*). *WOODSTOCK* utilizes GIS spatial data, timber inventory and growth data combined with management goals and priorities to model how various harvest strategies will affect the age structure and forest condition over time. The model can project the condition of the forest into the future under the various harvest strategies. This analysis allows for a sustainable harvest strategy to be developed which can be broken down to goals for acres to be harvested and a resulting volume of timber products. The GIS can then use annual harvest data to monitor progress toward long-term management goals.

The CPF forestry staff examined the implications of many different management scenarios and their effects through the year 2150. This forward looking analysis reflects the long range view of forest management of the Collins Companies.

Reflecting the logging history of the Allegheny Plateau, the CPF consists of primarily even-aged, second growth hardwood stands, which originated after the large-scale clear cutting around the turn of the last century. Many of the stands are reaching maturity. Some have been logged using a variety of partial harvests. Timber management in these mature stands focuses on natural regeneration and on threats to stand health. Natural

regeneration is naturally occurring seedlings and saplings growing in a forest. They generally originate from seeds of the mature overstory trees in the stand. These seedlings and saplings will grow and become the next forest stand if the larger overstory trees die or are harvested.

The greatest threats to forest health on the CPF are insect infestation, disease, windthrow, overbrowsing by white tail deer and a lack of natural regeneration. Insects, disease and windthrow can kill or blow down mature trees either individually, in small groups or over large areas. If the trees are not salvaged within 1-2 years, they will deteriorate and will not be usable for forest products. If natural regeneration is not present on the site prior to the loss of mature trees (seed source), the area may not grow new trees without substantial investment in planting or artificial regeneration.

High deer populations have been present in most of Pennsylvania since the 1930's. White tail deer are preferential browsers eating primarily woody seedlings and some herbaceous plants and wildflowers. Deer generally will not eat grass, ferns and some undesirable woody species. Where deer populations are high, they can have a significant negative impact or even eliminate desirable natural regeneration from the forest.

Timber management on the CPF focuses on regenerating the mature stands, which are the most susceptible to or affected by these threats. Mature timber stands are evaluated on health, quality, past history and threat to the seed source. The most threatened stands are prioritized for harvesting. The first objective is to establish a healthy, diverse, vigorous understory of desirable seedlings and saplings (natural regeneration) which will ensure that the forest will remain productive and well stocked with trees when the overstory trees are harvested.

As previously stated, most of the CPF timber stands are even aged. Even age stands lack much of the structural diversity present in stands with multiple age classes of trees.

When stands on the CPF are to be regenerated, the overstory trees are carefully evaluated. Less common species and wildlife trees are individually marked to be protected. Vigorous, good quality, desirable trees are also marked for retention. Important features within stands such as spring seeps and vernal pools are protected.

When a healthy, diverse understory of seedlings and saplings is present and when wildlife trees, less common species and vigorous, good quality trees are protected, then other trees can be harvested. Species composition and density of the protected trees in the new stands will be variable and will depend on individual stand and site characteristics. The

new stands created by this management system will be healthy, vigorous stands with good species diversity and structural diversity. **The focus is on what is being left in the forest, not on what is being harvested.**

Decisions on timing and location of harvest areas are based on more than just in-stand conditions. Harvesting decisions must be made in the context of the larger landscape. CPF foresters consider tract size, harvest area size, adjacent land ownership, adjacent land use, connectivity, wildlife habitat, water quality and other factors. All of these factors are weighed when making decisions on the timing and location of harvest areas on the CPF.

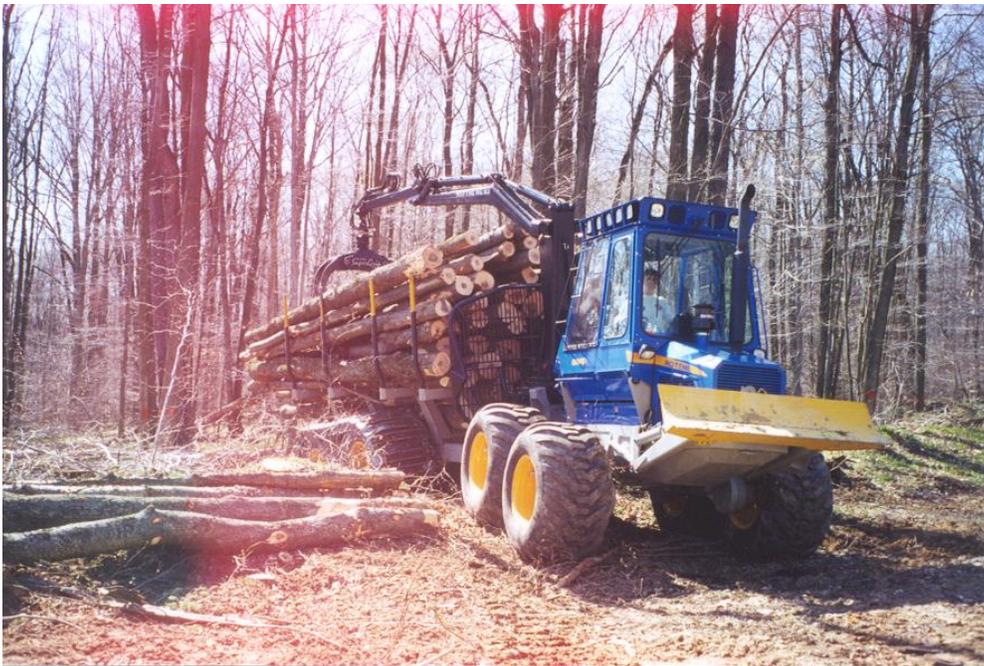


III HARVESTING

As previously stated, logging contractors under the supervision of the CPF forestry staff do all harvesting and hauling of forest products on the CPF. All logging contractors and their employees must meet the training and education requirements of Sustainable Forestry Initiative of PA, INC (SFI). SFI requires training in Logging Safety, First Aid\CPR, Business Management, Sustainable Forestry and Environmental Logging. Advanced courses are offered and continuing education is required to

maintain logging certification. Contractors and their employees must also attend training sessions held by the CPF forestry staff.

While hand felling of trees with chainsaws is still common on the CPF, many contractors are now using tracked or rubber tired mounted feller bunchers for increased efficiency and operator safety. The most common equipment used for moving the forest products to a roadside landing area are rubber tired skidders. Some of the skidders are equipped with low ground pressure tires for use where stand and soil conditions warrant. Other specialized skidding equipment used on the CPF include low ground pressure forwarders (pictured below), tracked machines and horses. Self-loading tri-axle log trucks are usually used to haul products from the landing.



While harvesting takes place year round on the CPF, soils and seasonal weather place constraints on operations. March, April and November are usually the wettest months. December, January and February usually have frozen conditions and July, August and September are generally the driest months. The CPF forestry staff strives to match the logging contractor, harvesting equipment, operating season, soil conditions and weather to minimize the impact to the harvest site. Haul roads, skid trail design, water quality and silvicultural objectives affect the timing and equipment used to harvest timber on the CPF.

Timber products produced on the CPF fall into two categories: Logs and pulpwood. Pulpwood is usually produced as 22'-24' bolts. These are low quality stems, which do not meet specifications for sawlogs. Pulpwood is

sold to five primary customers for the production of firewood, paper, particleboard and medium density fiberboard.



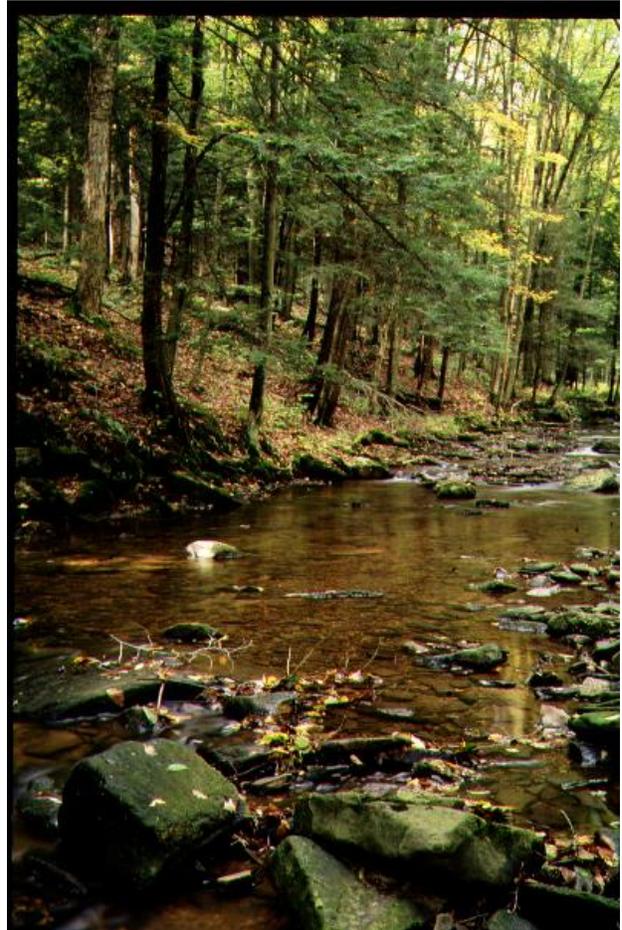
Sawlog production includes low-grade logs, mill grade logs and veneer logs. All veneer and mill grade logs are hauled to the Kane Hardwood log yard. Veneer logs are the top quality logs of selected species, which are in demand for slicing or peeling into veneer. These are the highest value logs produced and are sorted and sold from the Kane Hardwood log yard. Mill grade logs are generally sawn at the Kane Hardwood mill. Low-grade logs are logs which do not meet minimum standards for the Kane Hardwood mill. These logs and some low value species are sold and trucked directly to sawmills that specialize in these logs and species.

V ECOSYSTEM MAINTENANCE

Forest management on the CPF focuses on protecting water quality, enhancing wildlife habitat, protecting biodiversity, balancing age class distribution and maintaining public access.

High Conservation Value Forests and Protected Areas

The CPF has been assessed for the presence of High Conservation Values and areas that require special protection. The most recent assessment took place in 2011. This assessment included a review of Pennsylvania's Natural Heritage Program for information on Rare, Threatened and Endangered species and habitats. County Natural Heritage Inventories, the NatureServe database and other sources of information were also used. Experts from universities, conservancies and state and federal agencies were consulted for input. Archeologists and tribal entities with historic presence in Pennsylvania were also consulted.



The results of this assessment were to designate sections of the CPF as High Conservation Value Forests and Permanent Reserve areas. The total acreage of these designations is 8,935 acres or 7.6% of the CPF.

High Conservation Value Forests

The results of the assessments and consultations were to identify the following areas as High Conservation Value Forests. Thirty three cases of rare, threatened or endangered species and/or their potential habitats were identified on the CPF. There are six streams which are classified as Exceptional Value on the CPF. This is the highest ranking of water quality for streams in Pennsylvania. There are parts of three municipal watersheds and three cases of deeded water rights on the CPF.

Before any management activities are considered on any of the High Conservation Value Forest areas, CPF forestry staff will research the species and habitats, work with watershed managers and consult with biologists, conservationists or others to make sure any proposed management activities will protect or enhance the high conservation values. These areas will not be considered for timber harvest unless a harvest could enhance the High Conservation Value or enhance the habitat for the rare, threatened or endangered species. The CPF forestry staff will monitor these areas to make sure the conservation values are protected.

Permanent Reserves

Other areas protected on the CPF include riparian zones, steep slopes, archeological sites and special habitats such as wetlands and unique rock outcrops. These areas are not managed for timber production to protect water quality or the unique habitats and characteristics.

Water Resources

All watercourses, which originate on or flow through the CPF, are protected. All best management practices (BMP) recommended for Pennsylvania forest management are followed as a minimum standard. Often protection measures exceed BMP's. Vernal pools, spring seeps and watercourses in and adjacent to harvest areas are protected from erosion and sedimentation. Thermal cover is also maintained. A series of 18 water monitoring stations are maintained on the CPF. Measurements are taken in the fall by an independent consultant with 8-12 stations remeasured each year

VI TRANSPORTATION AND RECREATION

Transportation System

Proper management and monitoring of the CPF requires an extensive road system. All roads are mapped in the GIS system and classified by maintenance standard and intended use. Proper road maintenance is focused on controlling and reducing erosion and sedimentation to protect watercourses. Most roads are gated to prevent dumping, littering and timber theft. The road system is surveyed and maintenance needs are documented and prioritized. Annual maintenance plans are then developed and scheduled. All road construction and maintenance work is done by local contractors under the supervision of the CPF forestry staff. Most of this work is done between May and October.

Recreation and Hunting

It has been and will remain our policy to keep the CPF open to the public for dispersed, non-motorized recreation such as hiking, skiing and camping. All CPF land is enrolled in the PA Game Commission Forest-

Game Cooperative Program, which ensures that all the land is open to the public for hunting, fishing and trapping. Many of our gated roads are open during hunting seasons to provide access for hunters. In accordance with PA state law, ATVs, snowmobiles and other off-road vehicles are prohibited throughout the CPF.

VII SOCIO-ECONOMIC IMPACTS OF CPF MANAGEMENT

Management of the CPF and operation of the Kane Hardwood Division manufacturing facilities has substantial socio-economic impacts on the local communities of northwestern Pennsylvania. The CPF staff monitors these impacts and welcomes input and consultation from local stakeholders.

The Kane Hardwood Division provides quality job opportunities for local residents through direct employment and by purchasing materials and services from local (within 80 miles of Kane, PA) vendors, timber owners and contractors whenever possible. Kane Hardwood employees participate on local economic development boards such as chamber of commerce and regional planning and development commissions. Local non-profit organizations are supported financially and by encouraging employees to give volunteer time.

Kane Hardwood Division has monitored these impacts as summarized below from 2010 data:

- The number of people employed directly: 118
- Total dollars paid in wages: \$3,395,241
- Total dollars paid in benefits: \$1,688,038
- The number of local contractors hired: 40
- The dollars paid for contractor services: \$6,209,884
- The number of timber sales purchased: 6
- The total dollars paid for timber sales: \$1,249,900
- The number of local (within 80 miles) vendors and suppliers: 210
- Property taxes paid \$660,000
- Participation in local socio-economic development groups: 35
- The number of volunteer hours by employees: 550
- Financial support (dollars) donated to local non-profit groups: \$9612

VIII MONITORING THE COLLINS PA FOREST

Managing the CPF is a dynamic, adaptive process. The CPF forestry staff remains up-to-date on research and trends in forest management through continuing education and participation in organizations promoting sustainable forestry. Field surveys and data collection is a continuous process on the CPF. The GIS system is the primary tool for monitoring

and managing data collected on all aspects of the CPF. Standing timber inventory, annual harvests, regeneration development, water quality monitoring and many other factors are monitored.

The comprehensive, forest-wide inventory of the CPF is continually updated using a system of rolling inventory plots with data collected annually. Both overstory and understory data are used to determine silvicultural prescriptions. Natural regeneration development is monitored after all harvests to ensure long-term sustainability. Monitoring for insect and disease problems consists of a combination of field surveys and communication with public and private landowners in the region. The forestry staff will monitor regional trends through annual meetings with state agencies specializing in forest insects and diseases.

The forestry staff will seek out opportunities to partner and share information with adjacent landowners on landscape level concerns such as reserves, habitat connectivity and harvests to enhance overall forest structure and wildlife habitat regardless of ownership boundaries.



IX CONCLUSION

The long-term goal of management on the Collins Pennsylvania Forest is to create a diverse forest with a balance of age classes to provide for a sustainable flow of high quality forest products. The CPF forestry staff will remain knowledgeable and up-to date on all aspects of forest management and will maintain positive relationships with experts, agencies and landowners that support sustainable forestry. All management activities will be monitored and tracked using the GIS system. The CPF will remain open for recreation and the public has the opportunity to enjoy this privilege. Habitat conditions will exist for the full

range of wildlife species present on the CPF. All watercourses and unique wildlife habitats will be protected. Rare, threatened and endangered species will be protected and their habitat enhanced where possible.

All divisions of The Collins Companies are committed to the responsible conversion of their natural resources into useful products, to continual improvement of their products and services to meet the customer's needs, and to the perpetuation of each entity as a strong and profitable enterprise.



Our Kane Hardwood facility consists of a sawmill, 10 traditional dry kilns and one solar dry kiln, a shipping department and a dimension mill. There are presently 118 people that are employed here, encompassing many different career fields. In addition, there are approximately 40 local independent contractors employed in the forest.

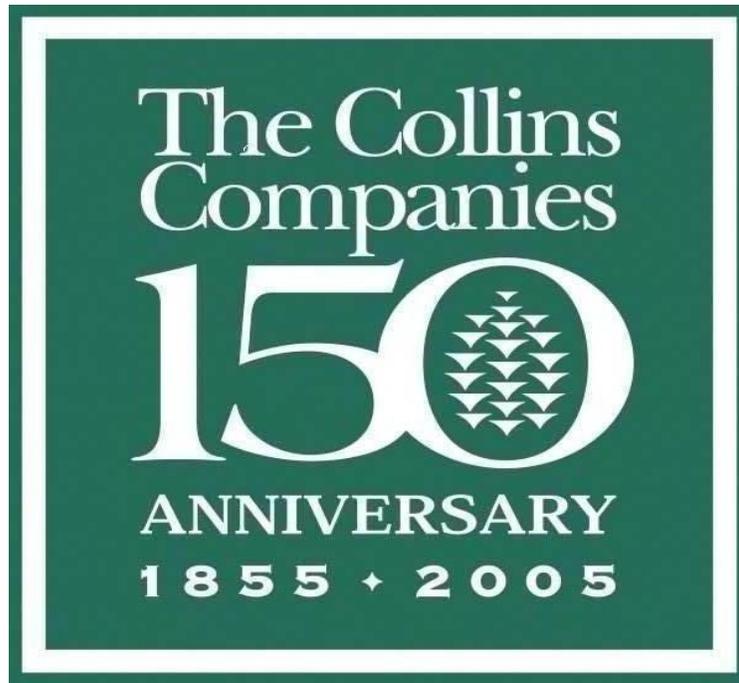
CollinsWood® is the registered name of our line of FSC certified wood products. Hardwood products manufactured include rough and surfaced lumber 4/4 through 12/4, dimension products; edge-glued panels, stair rail components, flooring, moulding, and veneer logs. When you see the FSC logo or a CollinsWood® hangtag on a piece of furniture or wood product you can be assured that it was harvested from a sustainably managed forest. We provide our customers with the assurance that our products are processed with the same attention to detail that we use to manage our forests.

When we focus on the environment, we realize that forest products, which are renewable when sustainably managed, have a positive role to play in meliorating the problems of future generations. Our management philosophy and FSC certification have brought us to the table with

environmental organizations, scientists and experts on a wide variety of land management issues. We believe that the hope for the future rests on visionary companies, scientists, and environmentalists who are willing to work together to make the world a better place for the twenty-first century and beyond.

Additional information can be found at: www.collinswood.com

Comments and inquiries on issues related to the management of the Collins Pennsylvania Forest can be sent to:
CPFcomments@collinsco.com



Dependent on the Past

Responsible for the Future