When Weyerhaeuser Company turns one hundred in January 2000, it will celebrate its centennial year as one of the world’s leading forest products companies, noted for its innovation in research, manufacturing and forest practices, and for its vision and endurance. Can a 100-year commitment to regeneration, waste reduction and environmental integrity be considered sustainable management? This article takes a brief look back as the Company eyes the future.

STILL GROWING AFTER 100 YEARS:

WEYERHAEUSER COMPANY CELEBRATES ITS CENTENNIAL

A few years ago, George H. Weyerhaeuser Jr., senior vice president of technology for Weyerhaeuser Company, spoke at the Global Conference on Paper and the Environment in Paris, France. “In North America, Weyerhaeuser is one of a small number of ‘multi-generational’ forest companies. I am the fifth generation of my family who has enjoyed the privilege of sharing in the company’s management and growth. Along the way, the company has been recognized for pioneering efforts in what is now called sustainable forestry.

“My great-great grandfather, Frederick Weyerhaeuser, one of the founders of Weyerhaeuser Timber Company, had a view of managing the forests that encompassed future generations. On the company’s founding in 1900, he is reported to have said ‘this is not for us, nor for our children, but for our grandchildren.’” Weyerhaeuser told the audience the company’s commitment to forest renewal, stewardship and research is deep and long-standing, supporting its social contract as well as reflecting a sound, long-term business strategy.

BY MARION SYNDER
THE BEGINNING OF STEWARDSHIP

The story of that stewardship began in 1900 when Frederick Weyerhaeuser and his partners made their historic purchase of 900,000 acres of forestland in Washington State and incorporated the Weyerhaeuser Timber Company. In an era when most forest product companies harvested their timber supplies and faded within a few decades, the founders planned an enterprise that would be sustained through future generations. The land was purchased from the Northern Pacific Railway for $6 an acre. James J. Hill, owner of the NPR, was a neighbor of Frederick Weyerhaeuser in Minnesota. Hill was looking for industry to settle in the Pacific Northwest, thereby creating a market for railroad transportation.

The company began without mills and without products—just vast, mostly unmapped tracts of forestland and a vision of future growth. The volume of timber on the newly purchased land, while difficult to estimate, was probably in excess of 40 billion board feet. During the company’s first 15 years, its only sawmill, at Everett, Washington, shipped less than 75 million board feet per year. Even with log sales to other mills, during its first two decades, the company harvested at rates that would allow a full rotation of trees to grow for more than 200 years.

Nonetheless, as early as 1909, general manager George S. Long began looking for ways to ensure that there would be “another new crop of timber ready to cut before the old one is gone.” Because at that time Douglas fir under natural conditions took up to 100 years to grow to harvest size, the two most important barriers to Long’s goals were wildfires and property taxes. These factors discouraged private landowners from keeping the land after harvest until a new crop of trees could reach maturity. As a result, U.S. Forest Service Chief Forester Gifford Pinchot predicted in 1907 that by 1940 the country would face a “timber famine.”

To help forestall the “famine,” Long led the company and industry in fire-protection efforts and lobbied for changes in tax policies. Believing that the real value of forestlands for the long term was not the trees, but the land that grew the trees, and convinced that timber could be grown in perpetual cycles, Long had employee surveyors, or ‘cruisers,’ find tracts suitable for reforestation experiments. In 1922, Weyerhaeuser donated 5,000 acres for Washington State reforestation experiments. The following summer, Long told the U.S. Senate’s Select Committee on Reforestation that the company was “exceedingly anxious to get into this reforestation game. We realize the necessity for it very keenly, and out here where the west ends, we want to begin to grow a new forest, and will do it when we have the slightest chance of making it a possible profitable enterprise.”

Long also showed the committee why only nature could afford it at the time: Over 22 years, the annual taxes on a 342,000-acre tract had increased from $25,128 to $583,490. Based partly on the committee’s findings, Congress passed the Clarke-McNary Act in 1924 that encouraged forest cooperative fire protection and changes in state taxation policies.

Hopeful, in 1924 Weyerhaeuser Timber Company turned over 200,000 acres to a new subsidiary—the Weyerhaeuser Logged Off Land Company. “When Weyerhaeuser’s management decided to hold and protect logged-off land for regeneration it was a radical concept,” observed Dr. Norman E. Borlaug, Nobel Peace Prize laureate and distinguished professor in International Agriculture at Texas A&M university.

The appointment of John Philip Weyerhaeuser Jr., Frederick’s grandson, as executive vice president in 1933 marked a turning point for sustainable forestry at Weyerhaeuser Timber Company. As part of the National Recovery Act of 1933 and the Lumber Code that followed, forest product companies were required to submit plans for restocking harvested land. Of the more than 100 companies that submitted such plans, only Weyerhaeuser Timber Company and its subsidiaries followed through, leaving seed trees and protecting cutover lands from fire while they regenerated.

Sustained yield practices made the Logged Off Land Company obsolete and it was absorbed into Weyerhaeuser Timber Company in 1936. It transferred 150,000 acres to a new Reforestation and Land department. The same year, Phil Weyerhaeuser announced, “We will hereby be launching on a program of growing trees.” And in 1938, the Snoqualmie Falls Washington operation created a small seedling nursery.

Convinced that sustainable forestry would pay, company foresters and leaders set out, in the words of forester and director C. Davis Weyerhaeuser, “to demonstrate forestry off somewhere apart from any logging operation.” They chose 130,000

Frederick Weyerhaeuser, patriarch of the family and a founder of Weyerhaeuser Timber Company in 1900 based on 900,000 acres in western Washington.
acres of prime tree-growing land in Grays Harbor County, Washington. Most of the area had been harvested, and repeated fires had prevented all but brush from growing back. Here, company researchers began a reforestation project that began as “Operation Rehab” and would soon become known as Clemons Tree Farm.

TREE FARMERS

The tree farm idea caught on with the public, and local officials and community organizations expressed their approval for “this great, farsighted enterprise.” A newspaper editorial observed, “At last a start is to be made in practical reforestation. The Weyerhaeuser Company points the way and makes a beginning.” The site was named after Charles H. Clemons, a pioneer logger and the owner of the Clemons Logging Company before it became a Weyerhaeuser Timber Company subsidiary.

The Clemons Tree Farm was formally dedicated on June 12, 1941, receiving official recognition as Tree Farm Number 1. Eventually, more than 5 million acres in the state would become part of the American Tree Farm System. As the 20th century comes to a close, more than 70,000 U.S. Tree Farm members are managing more than 93 million acres of forestlands nationwide.

Once the Clemons Tree Farm Forestry was established, forestry research began in earnest. Fires were brought under control, and Weyerhaeuser forest researchers began testing soil-preparation techniques, seed germination and seedling survival. Most of the company’s existing second growth sprouted naturally, but that sometimes took up to seven years. Soil-preparation techniques were tested in order to find a viable substitute for natural regeneration. So researchers began looking for a substitute for natural regeneration by experimenting with seed distribution and planting tools. Insect and disease protection, thinning, brush control, the application of nutrients to the soil, and pruning soon joined the list of experimental forest practices. Along with the Clemons Tree Farm, the St. Helens Tree Farm in Washington became a center for Weyerhaeuser forestry research. As techniques for planting, thinning or other forest management practices were proved at Clemons or other tree farms, much of the industry followed.

In 1941, U.S. loggers were harvesting 20 percent more timber than nature regenerated each year, and the annual loss from fires totaled 26 million acres. Twenty-five years later, the nation was growing 60 percent more than it harvested, and fire losses had dropped to 4 million acres a year. By 1959, Weyerhaeuser crews planted nearly 10 million seedlings per year. The company still expected the trees to take 80 to 100 years to mature into good sawtimber, however. That time frame wouldn’t shrink until the following decade, with the inception of High Yield Forestry.

HIGH YIELD FORESTRY

Soon after George H. Weyerhaeuser Sr. was elected president and chief executive officer in 1966, he set in motion a new method of intensive forest management. Using one of the company’s new computers, and making use of 25 years of research and field experience, researchers projected growth from forests under different regeneration, fertilization and thinning scenarios. The result was a theoretical model called the target forest. On paper, the target forest demonstrated that by assisting nature with additional tree planting, thinning and nutrient application, the company could substantially increase the amount of wood grown on each acre. If reality matched the simulations, the results of intensive forestry would definitely justify the costs. At Weyerhaeuser’s urging, the board of directors approved the High Yield Forestry plan in 1996.

On faith, the company put money behind its scientists’ calculations. Before High Yield Forestry, Weyerhaeuser planted a few million seedlings a year. Later, the number would reach as high as 200 million annually. By 1975, the company’s high-yield forests in the Pacific Northwest were growing more than twice as much wood as unmanaged stands and trees reached harvest size at 50 rather than 100 years of age. High Yield Forestry proved even more valuable in the South, where Weyerhaeuser’s southern forests yield up to four times more wood than an unmanaged forest, with trees reaching harvestable age at 35.

The full extent of Weyerhaeuser’s contribution to intensive forest management remains to be realized. As Steven Anderson, president of the Forest History Society, suggests “The Company’s commitment to high yield forestry may be Weyerhaeuser’s single greatest contribution to society.” Others agree. “High Yield Forestry will become increasingly important as we move into the future, recognizing that more wood
will have to be produced on a shrinking land base,” observed David Thorud, dean of the College of Forest Resources as the University of Washington. John Gordon, Pinchot professor at the Yale University School of Forestry and Environmental Studies, confirms: "As we move toward a world of 10 billion people, what [Weyerhaeuser] and the few like-minded others have done will increasingly be seen to be vital to a brighter future for humankind.” At the very least, more wood from managed forests will allow more forestland to be available for other varied uses demanded by American society.

THE ENVIRONMENTAL ERA

In the early 1960s, public concern about the environment began to grow. In 1962 came publication of Rachel Carson’s 1962 Silent Spring, which stirred environmental concerns that increased over the decade. New understanding and awareness of chemical impacts led Congress to pass federal clean air and water legislation in the mid-1960s.

In 1970, the Weyerhaeuser annual report noted, "The nation is entering an environmental era in which ecology is recognized as playing an important role.” In the 1971 annual report the company recognized the environment as the "social priority with the greatest implications for Weyerhaeuser today.” The growing list of regulations was one factor that prompted creation in 1971 of a corporate environmental department and an environmental policy to help mill operations understand and comply with new laws.

Weyerhaeuser’s leadership in sustainable forestry and pollution control gave it a large measure of credibility—and a head start. In 1971 Business Week magazine gave the company one of five national Business Citizenship Awards for efforts to improve the environment. “The key to Weyerhaeuser’s success,” the magazine pointed out, “has been a long-standing

The Clemons Tree Farm initiated the nationwide American Tree Farm Program in 1941. At a rededication of the Tree Farm ten years later, Mrs. Clemons accepts a plaque from Chapin Collins, a reporter; John Phillip Weyerhaeuser, Jr.; and Colonel William B. Greeley, former Chief of the U.S. Forest Service. Chapin Collins, honored as “Chairman of the Day” at the anniversary celebration, was editor of the local Motesano Vidette and was the one who suggested naming the tract “The Clemons Tree Farm” in honor of pioneer logger Charles H. Clemons. Collins later served as managing director of the American Forest Products Industries, Inc. during the 1940’s.
campaign, emphasizing research and recycling, to couple environmental protection with production savings.”

During the 1970s, even detractors acknowledged Weyerhaeuser’s environmental leadership. In 1974, John Mitchell, writing for the magazine of the National Audubon Society, dubbed the company “the best of the S.O.B.s.” Mitchell ended by stating, “Perhaps it is not too late for environmentalists and timbermen to strive for constructive accord.”

Yet accord would prove difficult to come by as the Clean Water Act, the Endangered Species Act, and other new legislation affected company operations. Looking for solutions, the company shifted its research focus from pollution control to pollution prevention in its manufacturing processes. “As a company we believe that basic changes of the manufacturing processes will provide the best solutions to environmental cleanup,” George Weyerhaeuser wrote in the company’s 1975 annual report.

Meanwhile, tree planting continued. During the 1970s, Weyerhaeuser planted more than a billion seedlings, lending weight to its “The Tree Growing Company” tag line. The company’s forest research group changed its name to forest environmental sciences” and added experts on wildlife, fisheries, and water.

Company leaders recognized that public opinion would play an increasing role in corporate decisions. “There is no doubt at all that the public interest may override our economic objectives in certain areas,” noted the 1972 annual report. “That is as it should be; we do business by license of the societies in which we operate.” At the same time, supported by ever-increasing demand for wood products, the company held firm to its belief that commercial forestry was not only compatible with environmental protection but also crucial to long-term environmental integrity.

THE ERUPTION OF MOUNT ST. HELENS

In 1980, nature challenged the Weyerhaeuser Company. On Sunday, May 18, Mount St. Helens, in southwestern Washington, erupted. The volcano sits less than 50 miles from the company’s Longview facilities amid 473,000 acres of Weyerhaeuser’s oldest and richest Douglas fir forests.

The blast demolished 68,000 acres—more than 100 square miles—of prime Weyerhaeuser timber. In the aftermath of the eruption, the company collaborated with state, federal, and private groups to address safety risks, plan emergency responses, and help turn part of the blast zone into a national monument.

Employees began salvaging the millions of Weyerhaeuser trees that had been stripped of their branches and scattered like toothpicks. At peak periods during the next summer, 600 truckloads a day hauled the ash-coated logs to mills for processing. The salvage harvests kept the Longview mills busy for the next three years. The company’s foresters followed the logging crews, delving into uncharted territory—trying to grow a new forest in volcanic ash. Accepting the financial risk of replanting in the blast zone, Weyerhaeuser spent more than $10 million to replant 67 square miles. The balance of the company’s forestland in the blast zone became part of the Mount St. Helens National Volcanic Monument.

Six years after the eruption, formal completion of St. Helens Tree Farm reforestation was recognized when George Weyerhaeuser planted the company’s two-billionth seedling since the inception of High Yield Forestry. The historic seedling and 18 million others took root in the blast zone and stunned observers by thriving. Less than 20 years after the blast, the new forest has grown to a height of more than 40 feet. In an area once devoid of life, elk and 130 other known wildlife species flourish.

The decade following the eruption of Mount St. Helens tested Weyerhaeuser’s environmental commitment in new ways. “In the forest products industry, the onslaught of the decade following the first Earth day in 1970 was difficult,” said Charlie Bingham, who retired as executive vice president of Timberlands, Raw Materials and External Affairs in 1995. “But the general level of prosperity in the industry meant you could afford most of the changes. The 1980s were just a disaster.” Poor markets and low profits left much less money for environmental research or capital investment. However, “Through the lean years and through the good years, we have always spent the money necessary to reforest our lands,” noted Arkansas forester Kenny White.

In the late 1980s and early 1990s Weyerhaeuser generally found success in ensuring sustainable operations through cooperative efforts. The company collaborated on the Washington State’s landmark Timber, Fish and Wildlife Agreement in 1987; developed a formal habitat conservation plan for the spotted owl on more than 200,000 acres around Coos Bay, Oregon; and participated with the National Wildlife Federation, universities and public agencies in research and habitat-management agreements. In some areas, when it became clear that...
ecological concerns made intensive forestry impractical, Weyerhaeuser donated or traded hundreds of thousands of acres of forestland to public agencies and conservation groups. In one such swap, the company donated 10,000 acres of wetlands to North Carolina’s Great Dismal Swamp wildlife refuge.

As the 1990s arrived, Weyerhaeuser leaders recognized the necessity of expanding the company’s long-held environmental ethic. For most of the century, the company had acted on the belief that waste reduction, forest regeneration and pollution control increased efficiencies and ensured sustainable operations, as well as improved the environment. In the 1990s, public debate and better scientific understanding gave Weyerhaeuser increased perspective on the past and on its place in the larger social and ecological system. “The assumptions of the past don’t necessarily work anymore,” said Joe Hughes, environmental forester in the company’s North Carolina operations. High Yield Forestry evolved to maximize wood yields while acknowledging that wood production is not the only important function of a forest. “It means backing off on our long-held practice of maximizing the return from every acre.”

By the close of the 20th century, the company has adopted an ever-more comprehensive view that considers soil, air, watersheds, animals, and plants as well as trees. This more comprehensive approach to ecosystems also applied to the company’s manufacturing operations, where conservation of resources and waste reduction were pushed to the logical con-
In 1986, 20 years after George Weyerhaeuser, Sr. announced High-Yield Forestry, he and John McMahon planted the Company's 2 billionth seedling through the ash left from the Mount St. Helen's eruption on May 18, 1980.

Reid Kenady measuring a young stand that has been pruned, thinned and fertilized; management techniques commonly employed in high-yield forestry. Current research efforts focus on many aspects of forestry including forest health, wood quality, silviculture, soil productivity, seedling production and biotechnology.

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