Mead

Mead Publishing Paper Division Escanaba, Michigan 49829-0757

Copywriting by Doris Holmstrom, Communications Manager

Some photographs courtesy of Delta County Historical Society

Design and production by Stanaszek Design Partnerships Wheeling, Illinois

Paper stock is Mead Signature* Gloss Enamel 100# Text

Cover stock is Mead Signature Gloss Enamel 100# Cover

Printing by Lake County Press Waukegan, Illinois

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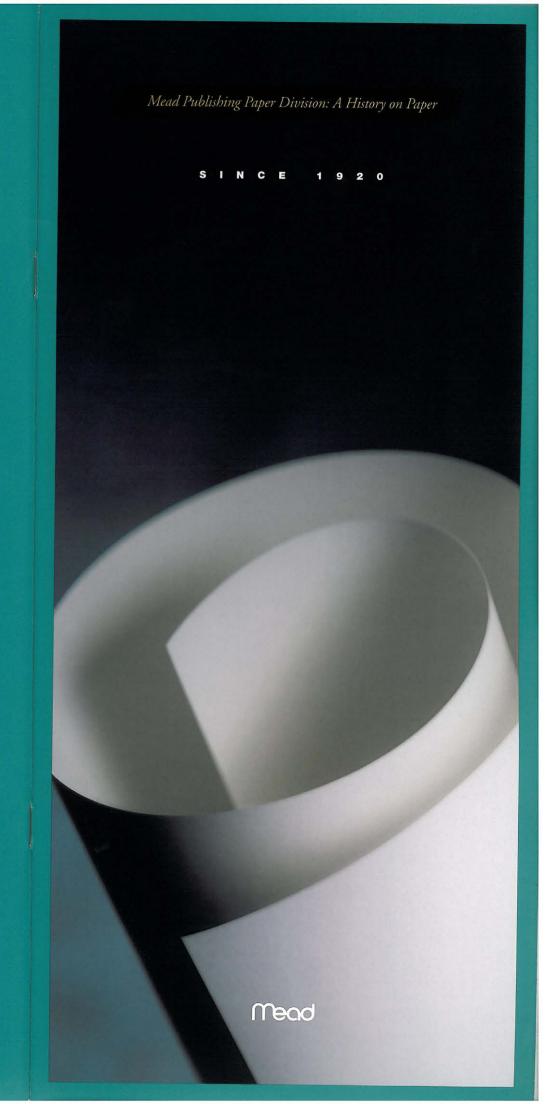




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"The Spirit of Escanaba"

North America's leading manufacturer of coated textbook paper celebrates three quarters of a century in the business in nineteen hundred ninety-five. Mead Publishing Paper Division (PPD) began making paper in Escanaba, Michigan January 17, 1920.

That little old mill has been dwarfed by the machines added since then, but it's never been dated.

Seventy-five years later, it's still making paper and still making history.

Number one mill's diamond jubilee was marked by the start of double-coating, a process comparatively new to the United States. It applies a first-coat and a top-coat to both sides of a sheet of paper. The result has been a premium quality, heavy-weight coated web paper superior to any on the domestic market today.

Double-coating represents an \$80 million investment in the mill, to rebuild the paper machine and add a second coater. It's the biggest single investment Mead Corporation has made in the division since number four paper machine was built in 1982. Mead's continuing commitment to the division has made the PPD Michigan's largest wood industry. The mill's annual pulp production is 60 times what it was in 1912, the year its predecessor began operation. The Escanaba mill makes and ships more than half a million tons of coated, publication-grade paper, and twice the coated textbook paper of its closest competitor — more than any other manufacturer in North America, maybe even the world.

That pulp- and paper-making operation today covers nearly half the 2,000-acre mill site, almost 30 acres of which are under roof. Together, its three paper machines produce in excess of 525,000 tons per year, most of it in the medium (45- to 105-pound) basis weight range. The paper ships to nearly every state in the union.

Mead Publishing Paper Division's growth and success is unequalled by any other company in Delta County. And it all started with a street car.



Discovery and Settlement of Escanaba and the Upper Peninsula

Prior to the 1600s, the Upper Peninsula (U.P.) was inhabited by members of the Chippewa and Ottawa tribes of American Indians. Big and Little Bays de Noc take their names from the Nocquet band of Chippewas living in the area now known as Rapid River. The Indians were discovered there by Jesuit missionaries from France.

 $\{1619\}$ 1619 is thought to be the year the first European explorer visited Delta County.

Etienne Brulé had traveled from France to Canada with Samuel de Champlain in 1608, when Champlain founded the city of Quebec. Champlain subsequently commissioned Brulé to explore westward, and it's Brulé who is credited with finding Lake Superior.

 $\{1634\}$ Jean Nicolet, another of Champlain's protégés, traveled through Delta County in 1634.

At Champlain's request, Nicolet was looking for a "northwest passage" to China through the Great Lakes.

Their visitations opened the way for a lucrative fur trade, which peaked during the early 1800s. People were drawn to the U.P. first from France, then from Great Britain and eastern North America.

 $\{1668\}$ Father Jacques Marquette founded a mission among the Indians at Sault Sainte Marie in 1668, making the Soo Michigan's oldest city.

{1783} Under the Treaty of Paris, which ended the American Revolution in 1783, the U.P.'s 10.5 million acres became part of the United States' Northwest Territory. Thirteen years later, Great Britain gave up all of its Great Lakes fur posts. Both the U.P. and the fur posts were recaptured during the British-American War of 1812, but reverted back to the U.S. when the war ended in 1814.



Chapter One: Discovery and Settlement of Escanaba and the Upper Peninsula

 $\{1830\}$ Trapper and fur trader Louis A. Roberts became the first recorded white person to homestead at Flat Rock, an area near the mouth of the Escanaba River, in the year 1830. Roberts' wife was an Indian.

Escanaba is an Algonquian word meaning flat rock. Both the river and the location apparently got their names for the flat rocks over which the river runs.

Ever since 1900, however, that part of Flat Rock where the paper mill now stands has been known as Groos. It was named for pioneer Peter Groos, from Luxembourg, who opened the limestone quarry across the road from the paper mill.

 $\{1837\}$ Michigan became the 26th state in the Union on January 26, 1837.

It was then that Congress awarded the U.P. to Michigan in exchange for the Toledo Strip, a sliver of land along the southern border of the state. The Toledo Strip went to the state of Ohio.

The Indians had turned over much of the eastern U.P. to the federal government on March 7, 1836. The remaining U.P. reservations were ceded August 2, 1855. The land was given in canal and railroad construction grants, homesteaded and sold.

{1841} Geologist Dr. Douglass
Houghton started the United States' first
mineral rush in 1841, when he reported
an abundance of copper on the U.P.'s
Keweenaw Peninsula. Population in the
county that took his last name peaked in
1910 at 88,098.

The U.P.'s second mineral boom started on the Marquette Iron Range in 1845, with the opening of the Jackson Mine in Negaunce. The Menominee Iron Range opened in 1877 and the Gogebic Range in 1881.

$\{1843\}$ Government surveying had started in Michigan's Lower Peninsula in 1814.

When Delta County was set off in 1843, it also included all of Menominee County and parts of Dickinson, Iron and Marquette Counties. The name came from its triangular shape, like the Greek letter Delta. Gena (now Masonville) served as the county seat from 1860 to 1864, when the county seat was moved to Escanaba.

$\{1844\}$ The area now known as Wells Township was surveyed by the U.S. General Land Office in 1844.

Deputy surveyor William A. Burt located the east boundary in October 1844, and the north, west and south boundaries in May 1845. Deputy surveyor Algernon Merryweather located the interior boundaries in October 1846. Meander lines on the Escanaba River were completed April 1, 1849.

 $\{1852\}$ Escanaba got its start in 1852. White pine cut from the present site of the Municipal Dock was used to build housing for lumberjacks working in the area.

By 1860, Escanaba was home to an estimated 1,200 people, or 68 percent of the population of Delta County.

1852 was also the year Delta County got its first post office, at Flat Rock. That first post office operated only seven months before being discontinued.

 $\{1853\}$ The second post office opened December 7, 1853, at the Flat Rock home of saw mill operator Alden Chandler.

He and later his wife Dorcas served as postmasters until 1858, the year Chandler died.

 $\{1862\}$ By 1862, Escanaba had become a company town: the N. Ludington Company, operators of a saw mill at the mouth of the Escanaba River.

Surveyor Elijah P. Royce that year laid out the town for the company's employees. He named the town Escanaba — rather than Sand Point, as it had originally been known — for the river. Escanaba's main street is named for Royce's employer and Royce Park for the town planner.

Incorporated as a village in 1866 and as a city in 1883, Escanaba had a population of 13,659 a little more than a century later, in 1990. In those early years, the village's name was spelled variously Esconawba, Escanauby and

Escanaubgh, according to one local historian. Escanaba settled on the current spelling in 1864.

 $\{1863\}$ Construction of the U.P.'s first rail line was started in 1863 to carry iron ore from Negaunee to the new Port of Escanaba.

It was built by the Peninsula Railroad of the Chicago and North Western Railway System. The line was completed in 1865 and the first ore moved in the spring of that year.

The ore was both shipped to Lake Erie smelters and barged across Big Bay de Noc to Fayette, a furnace town on the Garden Peninsula. The town was founded by Fayette Brown, general manager of the Jackson Iron Company in Negaunee.

Escanaba was then and is today the only ore shipping port on Lake Michigan. In 1900, when Michigan led the country in production of iron ore, it was also the largest in the world.

$\{1881\}$ The Escanaba and Lake Superior (E&LS) Railroad was established in 1881.

In 1898, it laid down about 26 miles of track from Escanaba to Watson to transport wood to the saw mills in Flat Rock. The line was extended 37 miles to Channing in 1900.

 $\{1887\}$ Land for the town of Gladstone was acquired by the Minneapolis, Sault Ste. Marie and Atlantic Railway in April 1887.

The railway is now known as Wisconsin Central Limited, an important Mead carrier. Gladstone was platted as Minnewasca, registered and incorporated as a village, all within the space of four months.

The town had previously been known as Saunders' Point, for Captain Nate Saunders, who came up from Green Bay and Bailey's Harbor, Wisconsin, every summer to fish. It began with a fishing shanty, a hunting shanty and the Jones and Eichorn saw mill. Minnewasca took the name Gladstone — for William Ewart Gladstone, four times prime minister of England — when it was incorporated as a city in 1889.

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The railway project was organized in 1883 by a group of Minneapolis business people, three-quarters of whom were millers, to transport their products for less than what they were paying other railroads. Gladstone was created as a port and equipped to handle their flour and other commodities. By December 10, 1887, 251 buildings had been constructed at a value of \$425,000, and the population was estimated at 1,200.

The 1990 population of Gladstone was 4,565.

$\{1900\}$ American Telephone and Telegraph (AT&T) opened an office in Escanaba in about 1900.

Cushman telephones, called "Hello-machines," had been introduced to the area in the early 1890s by the private telephone company of George Finch. There were few subscribers, mainly business places, and the phones were used primarily for long-distance calls. The telephones also reportedly made it easier for lumber companies in Escanaba, Wells and Ford River to contact their camps.

The 1904 sale of the local AT&T holdings to the Michigan Bell Telephone Company put Finch's company out of business.

One of the first telephones was installed at the executive offices of both the Escanaba Power and Traction Company and the Escanaba Pulp and Paper Company, at 120 Stephenson Avenue. The telephone number was 49.

$\{1902\}$ The village of Wells was built in 1902 by the I. Stephenson Company.

The company was one of the Midwest's largest wood industries, cutting 110 million board feet of lumber per year. It employed 1,000 people.

The village was named for Milwaukee lumber dealer Daniel Wells Jr., who once owned an interest in the saw mill.

Development of the Wood Industry in the Escanaba Area

By the early 1800s, it was becoming clear that the economic future of the U.P. lay in it forests as well as in its mineral wealth.

$\{1757\}$ A pioneer saw mill was built to cut pine at Detroit in 1757.

Lumbering moved to the U.P. 75 years later, after downstate forests were mostly harvested. It didn't become a truly viable industry until 1856, however, the year steam sawing succeeded water milling on the Menominee River.

The first lumberjacks were immigrants from Europe and Canada. Local newspaper editor and historian Jean Worth, whose father was a lumberjack, wrote: "They lived in logging camps operated by the big mill companies or by contractors for them while cutting the forest. In the summers they worked in the mills sawing lumber and then went back to the forest in the fall to make another winter's cut of sawlogs."

$\{1832\}$ Logging started in the U.P. in 1832 on the Menominee and Whitefish rivers.

Some of the pine taken in 1832 went to the U.P.'s first saw mill. The saw mill was built that year on the Menominee River by fur traders William Farnsworth and Charles Brush.

More than half the forest was pine, and most of that white. Because pine floats, the rivers could be used for transportation. Log drives were held in the spring, when the rivers crested.



According to the 1936 Progress Edition of the *Escanaba Daily Press*, "During the winter the logs were skidded to the landings along the river banks, and in the spring they were catapulted down the rollways to be carried away by the rushing waters...to the [saw] mills at the mouth of the river..."

By 1900, most of the pine was gone.

The second period of logging in the U.P., railroad logging, lasted from about 1870 to 1930 and took the dense hardwoods that wouldn't float. State lumber production peaked in the late 1800s at more than four billion board feet annually.



Chapter Two: Development of the Wood Industry in the Escanaba Area

By 1935, most of the U.P.'s original hardwood forest was gone.

$\{1836\}$ In 1836, Alden Chandler built the first water-powered saw mill on the Escanaba River.

It was located on the north bank opposite the south end of an island about 500 feet above the present paper mill bridge.

The area's first white settler, Louis Roberts, may have helped in construction and operation of Chandler's mill. Roberts later operated a waterpowered saw mill on the Whitefish River.

From Chandler's mill, oxen pulled cars loaded with lumber along a tramway on the north bank of the Escanaba River to below the last falls, where the lumber was transferred to boats.

$\{1844\}$ Brothers John and Joseph Smith built Smith's Lower Saw Mill in 1844 at the first rapids above the mouth of the Escanaba River.

Between 1844 and 1846, government surveyors reported two Smith saw mills on the Escanaba River.

$\{1850\}$ The Smiths sold their Lower Saw Mill in 1846 to Jefferson Sinclair and Daniel Wells Jr.

Four years later, in 1850, brothers Nelson and Harrison Ludington bought into the lower mill and the firm became known as the N. Ludington Company. (Harrison Ludington later went on to become governor of Wisconsin.) In 1851, the N. Ludington Company acquired both Smith mills and built one huge saw mill at the mouth of the Escanaba River.

$\{1860\}$ The Chandler saw mill was sold to the N. Ludington Company in 1860 and closed.

Two years earlier, Isaac Stephenson had bought a quarter-interest in the Ludington mills at Escanaba and Marinette. Stephenson was from New Brunswick, Canada; he'd worked as a skidder, foreman and timber cruiser for Sinclair and Wells.

$\{1862\}$ In 1862, the N. Ludington Company was reorganized as the I. Stephenson Company.

When the saw mill burned in 1890, it was hurriedly rebuilt.

Stephenson went on to build another big saw mill and a hardwood flooring plant at the mouth of the river in Wells. By 1902, he owned 140,000 acres of land and was a millionaire.

$\{1867\}$ The U.S. paper industry was already 377 years old when papermaking started in Michigan.

The Kalamazoo Paper Company, the state's first paper mill, was established in Kalamazoo in 1867. That's where many of the early downstate papermakers got their training before going off to build and operate other mills in the early 1900s.

$\{1880\}$ Here in the U.P., the first pulp and paper mill was built in 1880 by the Marinette Paper Company on the Menominee River in Menominee.

It used the dam on the first rapids in the river for its energy. The dam had been built in 1879 by the Menominee River Boom Company, which handled log drives on the river until the drives ended in 1917. The paper machine produced a sheet 74 inches wide.

 $\{1890\}$ In his 1890 book, *City of Escanaba*, Walter R. Nursey suggested that Escanaba would be an ideal site for a paper mill, both because of the abundance of pulpwood there and because of its port.

That paper mill indirectly got its start when John K. Stack Sr., James B. Moran and James Lillie organized the Escanaba Electric Street Railway Company in 1890.

The company was located at the east end of Ludington Street.

Stack and Moran both operated other businesses locally. Another that was common to them was the Escanaba and Gladstone Transportation Company, a passenger boat

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service between those and other communities in the area. Years later the *Delta Reporter* quoted Carl "Pike" Johnson as saying that, before the road along the lake was built in 1908 or 1909, "the only road to Escanaba from Gladstone was over the bluff: a long trip by horse and buggy."



$\{1891\}$ The Escanaba Electric Street Railway Company started operating in 1891.

It purchased power from the Escanaba Lighting Company steam electric generating plant.

The lighting company was started in 1889. In 1902, with more than 700 incandescent bulbs and 14 miles of wire, the company was sold to the city of Escanaba.

$\{1907\}$ Founders of the Escanaba Electric Street Railway Company organized the Escanaba Power Company in 1907 to supply power to both the railway and the city of Escanaba.

The Escanaba Power Company rebuilt the N. Ludington Company dam on the first rapids above the mouth of the Escanaba River in Wells, and constructed a hydroelectric plant there. The project cost the company \$200,000.

The hydroelectric plant was 25 feet square and had a gabled roof. It was expanded in 1923, but the original structure is still in use. The complex is now known as the number one dam and hydroelectric plant.

Construction of the hydroelectric plant put an end to spring log drives down the Escanaba River to the I. Stephenson Company saw mill in Wells. It started another era, however: that of the dam operators.

When that first hydroelectric plant was built, the company converted a nearby boarding house to a duplex to house its dam operators. The duplex was replaced by three houses in 1938. Over the years, another nine homes were built near the company's dams on the Escanaba River. Each of the operators got free rent, free electricity and a street car pass in addition to his wages.

Barney Thompson, himself a second generation dam operator, told a story about the man who used to operate numbers one and three dams. Thompson said, "He used to travel back and forth between them on a handpede on the E&LS track. It was pretty rough getting up to number three, but it was all downhill coming home again! It used to finish off the day in great style."

As the hydroelectric plants were automated — number one in 1969, number three in 1970, and number four in 1985 — the companyowned houses were sold to Mead employees. The last one, at Boney Falls, went in 1985.

 $\{1909\}$ In 1909, the Escanaba Electric Street Railway Company and the Escanaba Power Company were consolidated under the name of the Escanaba Power and Traction Company.

Escanaba's Ludington Street had been doubletracked for street cars in 1904, and operations peaked in 1910 when the company built an interurban trolley line to Gladstone.

Tracks were extended to present-day Groos in 1913 and called the Flat Rock Line. "Workingman's Tickets" sold for 12-and-a-half cents apiece.

With 18 miles of tracks in all, the company maintained 15-minute service in the business section of Escanaba and hourly service between Escanaba and Gladstone, and between Escanaba and Groos. By 1912, the company had 35-40 employees and a payroll of \$20,000 a year.

{1911} Building on his success in the power and street car businesses, John K. Stack Sr. joined other business partners and local entrepreneurs to organize the Escanaba Pulp and Paper Company on October 15, 1911.

Stack was president, John J. Cleary vice president, Matthew N. Smith treasurer, and Philip L. Utley secretary and general manager.



The Escanaba Power and Traction Company that year started construction of a second dam on the Escanaba River in Groos. The dam was built to deflect the flow of water from the natural river bed through a mile-long canal to operate a pulp mill planned by the Escanaba Pulp and Paper Company. Water backed-up behind the dam would provide the necessary pressure to turn the three wood grinders in the stone groundwood pulp mill. A sluice would send the water rushing to the mill.

Ninety thousand cubic yards of earth were removed in excavating the canal, and 10,000 cubic yards of concrete were used in construction of the dam and the head gates. The dam was completed in 1912 and rebuilt in 1994. Number two is the only one of the PPD's four dams that has never generated electricity.

{1912}

The Escanaba Pulp and Paper Company
stone groundwood pulp mill was built in 1912
to use surplus electricity generated by the
Escanaba Power and Traction Company's
hydroelectric plant.

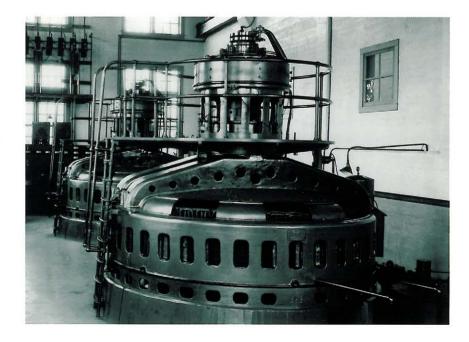
Rock blasted from the riverbed in order to build the tailrace was crushed and used in the concrete for construction of the pulp mill. The building measured 40 by 89 feet and the operation occupied 15 acres of land.

The mill started up July 5, producing an average of 20 tons of pulp per day for shipment to paper mills in the U.P. and northern Wisconsin. It employed about 40 people working 11- and 13-hour shifts, and required 7,000 cords of spruce and balsam pulpwood annually. Most of it was supplied by producers along the Escanaba and Lake Superior Railroad line.

The wood was delivered in 100-inch lengths and then cut down into two-foot blocks and fed into the grinders. Inside each water-powered grinder, the blocks were pressed against an abrasive, revolving stone with such force that the wood was reduced to fibers.

A 1913 souvenir edition of the *Escanaba Journal* said the "...three grinding machines, driven by hydraulic power...reduce the wood to a pulp which is rolled out in great sheets about one-fourth inch in thickness. These sheets are folded and packed in bales of 100 pounds each for shipment to the paper mills."

The landfill that opened on the site in 1912 was finally closed and capped 80 years later, in 1992; it had grown to 48 acres. That old landfill was replaced in 1991 by a new eight-acre landfill costing \$3 million. An aggressive recycling program has kept the new landfill open well beyond its original one and a half-year life expectancy.





Chapter Two: Development of the Wood Industry in the Escanaba Area

 $\{1914\}$ A third dam and a hydroelectric plant were built by the Escanaba Power and Traction Company in 1914 to supply additional power to the pulp mill, the street car operation, the city of Escanaba and the surrounding area.

The complex is located at Chandler Falls, formerly one of the most treacherous spots for log drivers on the Escanaba River. The falls were named for saw mill operator and postmaster Alden Chandler.

Additional grinders were installed in the pulp mill that year as well, and the name of the Escanaba Pulp and Paper Company was changed to the Escanaba Wood Fibre Company. By 1917, pulp production had increased to an average of 50 tons per day.

$\{1916\}$ The first female office worker was employed by the Escanaba Wood Fibre Company in 1916.

Some of her male counterparts worked in an old streetcar body perched over the Escanaba River. The November 1950 edition of the *Hiawathian* says: "Oldtimers jokingly remarked that if you dropped your pencil it would likely fall between the cracks in the floor and land in the river which flowed beneath."

$\{1919\}$ By 1919, office workers on the mill site had moved to a tar paper shed attached to the side of the building.

Overall employment had risen to 200 people — more during "high water" in the spring — many of them itinerant papermakers from Canada. That year both a steam plant and additional groundwood capacity were added, boosting pulp production to about 120 tons per day.

 $\{1921\}$ In 1921, the Escanaba Power and Traction Company built its fourth and final dam and hydroelectric plant on the Escanaba River about 25 miles north of the city, at Boney Falls.

$\{1930\}$ Disaster struck the Boney Falls dam at 2:20 a.m. June 25, 1930, when about 400 feet of the west embankment washed out.

The ensuing flood carried away the embankment at number three dam 19 miles downstream, shut down the mill for several weeks and interrupted electrical service in Escanaba, Gladstone and several smaller communities. The failure was blamed on a structural flaw and the dam was repaired. There was no damage to the hydroelectric plant.

Boney Falls dam served another 56 years before being rebuilt in 1986-1989. Number two dam underwent extensive repairs in 1994.

The Geological Survey has been keeping flow records on the Escanaba River since 1903. During the week of April 22, 1985, river flow reached an all-time high. The level was in a flow bracket expected only once every several hundred years. It was attributed to a late snow melt and a three-inch snowfall in the Ishpeming-Negaunee area April 19.

$\{1932\}$ By 1932, growing use of automobiles in the Escanaba-Gladstone area put the street cars out of business. In May, the tracks were removed.

That same year, the Escanaba Power and Traction Company changed its name to the Upper Peninsula Power and Light Company, a subsidiary of the Escanaba Paper Company.

 $\{1950\}$ Although the steam plant was expanded in 1950 to meet the increasing electrical needs of the mill and the surrounding community, the Escanaba Paper Company would soon be out of the electrical business.

$\{1954\}$ In 1954, the Upper Peninsula Power and Light Company stopped selling electricity to Gladstone.

The following year, it quit selling to Escanaba and the surrounding area.

$\{1958\}$ When the Escanaba Paper Company was liquidated in 1958, so, too, was the Upper Peninsula Power and Light Company.

Its net assets became part of the Escanaba Division of the Mead Corporation, the descendant of a company formed in Dayton, Ohio 112 years earlier.

The Mead Connection

Mead has been involved with the Publishing Paper

Division almost from the beginning.

 $\{1846\}$ Daniel E. Mead, who is said to have been a colonel in the National Guard, helped establish the Dayton paper manufacturer Ellis, Chafflin and Company in 1846.

Ten years later, he bought the business and joined a friend to form Weston and Mead. The company changed its named to Mead and Weston in 1861, to Mead and Nixon in 1866, and to The Mead and Nixon Paper Company in 1873.

{1881} When Col. Mead became sole owner of The Mead and Nixon Paper Company in 1881, he rebuilt it and renamed it The Mead Paper Company. At that time, production was about three tons per day and the annual payroll was \$18,000.

{1890} Col. Mead was 73 in 1890, when The Mead Paper Company bought the Ingham Mills and Company pulp and paper mill in Chillicothe, Ohio.

He died November 10, 1891 and the company soon began to experience financial difficulties.

 $\{1905\}$ in 1905, George Houk Mead, the 28-year-old grandson of Col. Mead, was called upon to help reorganize The Mead Paper Company and save it from bankruptcy.

A 1900 graduate of the Massachusetts Institute of Technology, Mead was given the title vice president and general manager. He became president in 1910 and chairman of the board of directors in 1937.

George Mead's leadership meant immediate change: production was narrowed from 15 or more grades of paper down to one high-quality grade; the name of the organization was changed from The Mead Paper Company to the Mead Pulp and Paper Company on September 14, and ownership of the Mead Pulp and Paper Company went public through sale of common and preferred stock.

{1907} In 1907, the Dayton and Chillicothe papermaking operations were combined, and all of the Dayton equipment was moved to Chillicothe. Mead's headquarters remained in Dayton, as the corporation's does to this day. Its offices occupy the 28-story Mead world headquarters building in downtown Dayton, which opened in 1977.

 $\{1911\}$ George Mead entered the newsprint business in 1911 by helping organize a paper mill in Canada and by starting to sell Canadian newsprint under his own name.

In the next few years, he founded several companies including the Mead Investment Company and the G.H. Mead Company, which was described as a newsprint-selling organization. It was probably the Mead Investment Company that later put up half the money to build the Escanaba paper mill, and the G.H. Mead Company that arranged to sell the product.

Roy Webber, mill manager from 1970 to 1973, said it was "Barker Mike" who convinced Mead to invest. He told the story in a 1970 speech to the Management Club.



Chapter Three: The Mead Connection

"Some of you might remember Barker Mike as the fellow with the wooden leg who kept it a secret from the company until four years after he was hired," Webber said. "The secret came out on that day when the Mead investors watched Barker Mike trying to pull the barker chain back on the pulley.

"The Mead investors saw Barker Mike step in a puddle of freezing water that covered the foot of his artificial limb and froze his pants leg stiff. But that didn't seem to bother him in the least. He couldn't get the chain back on the pulley by hand, so he swung his artificial leg under it, raised it and forced the chain back on the pulley with that artificial leg of his.

"Well, as he forced that chain over," Webber said, "his frozen pant leg slid up toward his knee and the Mead executives could see the chain was gouging his leg, but there was no pain and no blood. The Mead investors were amazed as they watched Barker Mike work, and said, 'If you have any more men here that work like that, we can't help but make money!"

{1919} The Escanaba Paper Company was incorporated in 1919 and purchased the Escanaba Wood Fibre Company.

Its president was John K. Stack Sr., its vice president John G. Sutherland, secretary and general manager Philip L. Utley, and treasurer Matthew N. Smith. On June 3, the company broke ground for construction of a paper mill to produce newsprint from groundwood pulp made in the adjacent pulp mill.

Harry L. Balenger, a stenographer who later retired as comptroller, remembered that "originally, it was intended as a one-machine mill." He said, "Ideas changed during the erection of number one machine," and a second one was added.

$\{1922\}$ In 1922, the Escanaba mill was leased to the Mead Pulp and Paper Company.

Eight years later, on February 17, 1930, the Mead Corporation was formed to include Mead Pulp and Paper Company and all of the other, smaller Mead companies. $\{1942\}$ The Mead Corporation purchased controlling interest in the Escanaba mill in 1942, and the Escanaba Paper Company became a subsidiary of the corporation.

$\{1958\}$ December 18, 1958, the Escanaba Paper Company was liquidated.

It became the Escanaba Division of the Mead Corporation, a wholly Mead-owned operation.

 $\{1968\}$ The name was changed back again in 1968 to the Escanaba Paper Company, a wholly-owned subsidiary of the Mead Corporation.

$\{1976\}$ In 1976, the Escanaba Paper Company became a separate division of the Mead Paper Group, formed in 1972.

The corporation's reorganization brought sales, marketing and additional administrative personnel from Dayton to Escanaba. The Escanaba Paper Company is now known as the Publishing Paper Division, headquartered in Escanaba.

$\{1986\}$ George Mead had gradually reduced his involvement with the corporation prior to resigning in 1948.

He died January 1, 1963. When his son, Nelson Strobridge Mead, retired in 1986, the company was left, for the first time in its 140-year history, with no member of the Mead family in an important leadership position. Nelson S. Mead worked on the sales service staff in Escanaba for a time; he died November 16, 1991.

 $\{1994\}$ By the end of 1994, Mead businesses encompassed paper, pulp and lumber, coated paperboard, containerboard, packaging, distribution, and school and office products.

The corporation's assets totaled more than \$4 billion and the corporation had 16,100 employees and 16,700 shareowners worldwide.

Organized Labor

About 76 percent of Publishing Paper Division employees are represented by labor unions.



{1919} International Brotherhood of Pulp, Sulphite and Paper Mill Workers Local 110 became, in 1919, the first labor organization chartered at the Escanaba mill.

The charter was rescinded a year later, however, "primarily due to jurisdictional dominance by the paper machine operators" (*The Paperworker* March 1993).

That led to organization of the International Brotherhood of Papermakers and Paperworkers Local 209. Its original charter was issued February 2, 1920.

Records show that, by 1927, starting wage for a yard laborer was 40 cents an hour; the highest paid mill worker was the boss machine tender, at \$1.41 an hour; and the average workday was nine hours.

 $\{1933\}$ Local 110 was chartered for the second time on September 18, 1933. Membership dues were 60 cents a month.

$\{1937\}$ International Brotherhood of Electrical Workers (IBEW) Local 979 was organized at the mill in 1937.

By 1950, the base rate for a mill worker was \$1.29 an hour for a 40-hour week. By comparison, the average in Michigan, Wisconsin and Minnesota then was about \$1.21 an hour.

{1972} Two of the labor organizations represented in the mill — the International Brotherhood of Pulp, Sulphite and Paper Mill Workers, and the International Brotherhood of Papermakers and Paperworkers — merged to form the United Paperworkers International Union (UPIU) in 1972. The UPIU was joined in 1993 by the Allied Industrial Workers.

Chapter Four: Organized Labor

$\{1975\}$ In 1975, IBEW Local 979 joined UPIU Locals 110 and 209 in a sixmonth strike over a corporate pension plan issue.

It was apparently only the fourth work stoppage ever at the Escanaba mill. A brief strike is said to have occurred during a union organization attempt in the 1920s. The second work stoppage came as the result of a company lockout in 1971, and the third took the form of a wildcat strike over safety issues in 1973.

1975 was also the year that Teamsters, Chauffeurs, Warehousemen and Helpers Union Local 328 was organized for mill clerical workers.

$\{1993\}$ The time clocks that had been used to record work hours for bargaining unit employees were removed from the mill October 4, 1993.

They were replaced by an honors system, as Mead began to stress individual accountability for employees at all levels of the organization.

The division also that year adopted stringent new entrance requirements effectively limiting new hires to those with at least two years' advanced education and promotions to those with four-year degrees. The PPD had earlier, in 1989, helped start a two-year pulp and paper technology program at Bay de Noc Community College in Escanaba. It was all part of Mead's "Great Company" goal "to be number one in customer satisfaction in the markets we choose to serve."

To that end, 1993 also saw introduction of some self-managed work teams.

$\{1994\}$ UPIU Locals 110 and 209 merged in 1994 to form a new Local given the UPIU's lowest available number: 21.

The new Local 21 purchased the Jehovah's Witnesses Kingdom Hall on Sheridan Road in Escanaba for a union hall that same year.

$\{1995\}$ The PPD now has about 1,300 on its payroll, including the 1,000 bargaining unit employees in operations, maintenance and administration.

The company provides jobs for another 500 in wood harvest and transportation.

The highest paid bargaining unit employee today is a machine tender on number four, making \$22.35 an hour. The average bargaining unit employee earns \$15.96 an hour.

Shift workers in the number one paper machine system decided in 1995 to switch from a counterclockwise to a clockwise shift rotation, considered to be more healthy. Regular training time was incorporated into theirs and all shift schedules throughout the mill.

That same year, Mead Union Retirees became the PPD's first retirement organization for bargaining unit employees. The organization was chartered by the UPIU.

Enterprise

Of course, there's more to the mill than work.

$\{1920\}$ The first company-sponsored employee picnic was held at the Escanaba River Park, now Pioneer Trail. in 1920.

Every one of the picnics since have taken place at that same location, except for those in 1922-1957, when the picnic site was moved to Beauchamp's Grove in Flat Rock. (There were no picnics in 1975 or 1989.)

 $\{1929\}$ The mill's first men's baseball team was formed in 1929 at the encouragement of president Matthew N. Smith. Team colors were green and white.

$\{1931\}$ Formation of a men's fast pitch softball team followed in 1931. The game was called "kittenball" until the ball was downsized in 1933.

Tom F. Elegeert, one of the mill's early players, said, "Softball was a hotbed of enthusiasm at that time. The city of Escanaba had eight diamonds and they were full every night. When the paper mill would play, you couldn't get a parking space. The mill was pretty famous because of it."

Many employees were recruited for their ballplaying abilities, and mill teams took several U.P. championships.

$\{1936\}$ A men's bowling league was organized with six teams in 1936: the Night Owls, Paper Makers, Power House, Wreckers and Yard.

The league played at the Arcade Alleys, on the upper level of the Delft Theatre building on Ludington Street in Escanaba. There are 16 teams in the league in 1995.

$\{1941\}$ Two hundred thirty-one employees joined the newly formed Escanaba Paper Company Employees' Federal Credit Union in 1941.

They had \$3,294.13 in assets and operated out of an office in the mill.

By the end of 1994 that credit union was one of the largest in the U.P., with 7,193 members and assets totaling nearly \$45 million.

Renamed the Mead Associated Federal Credit Union in 1984, it now occupies the former woodlands department office building on the side of the Escanaba River opposite the mill. The credit union first moved into the building in 1964 and purchased it in 1994. The building has been expanded twice in those 30 years.

 $\{1946\}$ Office Christmas parties started in 1946. The tradition has continued under the sponsorship of the Management Club.





Chapter Five: Enterprise

 $\{1948\}$ An Athletic Fund was opened in 1948 with receipts from the mill's first vending machines; the machines were installed that year to dispense milk. The fund is still in existence, underwriting various sports teams and employee events.

$\{1949\}$ The Management Club, also known variously as the Foremen's Club and the Supervisors' Club, was formed in 1949.

The Club's original 46 members met for the first time at the Delta Hotel on Ludington Street, where Hereford and Hops is now located.

1949 is also the year the mill began publishing a monthly magazine for employees. First called the *Escanaba Paper Company News*, it was soon renamed the *Hiawathian*. Although the name and the format changed several times in the years following, the publication survived until 1993, when it was finally overtaken by the 20-year-old daily *Bulletin*. In 1995 the mill will launch its own closed-circuit television network, after having produced a videotaped news program for employees for 11 years.

{1956} Eighty-three of 316 employees tested positive for exposure to tuberculosis when the tests were conducted at the mill in July of 1956; 450 were vaccinated against swine flu in November 1976.

Those are just two of the special health programs that have been offered employees; medical staff also regularly test workers' hearing and lung capacity. To counter the ill effects of tobacco use, cigarette vending machines were removed from the mill in 1987, and smoking was banned in 1994.

$\{1958\}$ Fifty-two employees got together to form the Mead Rod and Gun Club in 1958.

The group erected a clubhouse in 1965 and built a pavilion over its old concrete volleyball court in 1988. The clubhouse, pavilion, trapshooting and archery ranges belonging to what is now known as the Mead Sportsmen's Association sit on the east bank of the Escanaba River, next to County Road 420, on land leased from Mead.

 $\{1960\}$ The first men's basketball team was formed in 1960.

 $\{1965\}$ On November 10, 1965, the mill celebrated two million work hours — 542 calendar days — without a single lost time accident; it was only the fourth time in corporate history that a Mead location had done so.

The Escanaba mill has hit the million-hour mark 13 times in the last 38 years. The PPD received the National Safety Council's first place award for paper mills in 1975.

$\{1979\}$ In 1979, the company built a two-story lodge overlooking the Escanaba River, on the east bank midway between numbers two and three dams.

The hall on the upper level of the 90 by 90-foot building seats 500 people. The lower level, which was finished in 1988, contains conference and recreational facilities. Although the lodge is still owned by the PPD, it has been managed by an outside contractor since 1994.

 $\{1982\}$ The Mead Women's Bowling League was organized with six teams in 1982: the Alley Girls, Chicklets, Paper Bags, Paper Dolls, Paper Mates and Paper Roses.

 $\{1983\}$ Formation of a women's fast pitch softball team followed in 1983.

$\{1987\}$ In 1987, a log cabin was constructed adjacent to the grass volleyball courts at the Mead lodge.

The building was donated to the company in 1982 by number four paper machine manufacturer Valmet of Finland. It was intended for use as a pavilion during summer sports outings. The cabin was moved to the mill's rail marshalling yard in 1993 and remodeled for use as an office building by the switch engine crew.

 $\{1989\}$ A fire hall was built near the back entrance to the mill site in 1989, and a rope rescue training tower was constructed nearby in 1992.

The Maturing of That First Pulp and Paper Mill

Escanaba had been a member of the Mead family for just one year when it entered the papermaking business.

{1920}

The first newsprint rolled off number one machine at 8:15 p.m. January 17, 1920.

Shipments started January 24 to the *St. Louis Globe-Democrat* in St. Louis, Missouri; Harry L. Balenger wrote the first order. The newspaper paid \$138 per ton.

Number two paper machine came on line in June. Like number one, it had a trim size of 156 inches. Together, they employed about 100 people and produced about 300 tons of paper per day.

Papermakers used hand signals to communicate with coworkers at the opposite end of the machines. If sheet weight was light, for example, they made the motion of lighting a match. If it was correct, or "right on the head," they pointed to the tops of their heads. Telephones have largely outmoded the signals.

In September of 1920, death took pulp and paper mill manager Philip L. Utley. Escanaba Paper Company president John K. Stack Sr. died three days later. Utley was succeeded by Henry M. Stack, and John K. Stack Sr. by Matthew N. Smith. In the many years since, there have been just four presidents and eight mill managers.

The presidents are: John K. Stack Sr., 1911-1920; Matthew N. Smith, 1920-1951; Ernest G. Bennett, 1951-1955; Robert P. Arvold,

1970-1973; Samuel S. Benedict, 1976-1991; and Gary L. Butryn, 1991-present. The mill managers are: Philip L. Utley, 1911-1920; Henry M. Stack, 1920-1922; J.H. Slater, 1922-1935; Ernest G. Bennett, 1935-1953; George S. Douglas, 1953-1968; Oliver C. Christiansen, 1968-1970; Roy P. Webber II, 1970-1973; Jimmie M. Owens, 1973-1980; Gary L. Butryn, 1980-1988; and Wallace H. Goode, 1988-present.

 $\{1923\}$ A wooden office structure was built next to the paper mill in 1923.

$\{1940\}$ In 1940, a personnel department was created at the mill.

The intent was to hire people to replace those called to serve in the armed forces at the outset of World War II.

 $\{1943\}$ A temporary crew of about 50 women was employed in 1943 to help box large orders of 8½- by 11-inch railroad manila copy paper for the U.S. government.

It was the first time women had been employed in the mill proper; most left when the war ended.

 $\{1944\}$ The first full time female mill worker was employed as a pulp tester in 1944.

In 1995, the number of women employed in the mill and the offices approached 200.





$\{1945\}$ The years 1945-1947 saw considerable construction on the mill site.

A riffler building was erected in 1945, adjacent to the Escanaba Paper Company's other pulp mills. The company built a river water intake system to bring cooling water in for the turbine condensers in the old power house, and a new brick office building went up at the west end of the machine room. The office building was expanded in 1969.

$\{1946\}$ Construction of a first aid station followed in 1946.

It was centrally located in the basement under the paper machines and staffed by a registered nurse. The first aid station, now called the medical section, moved to expanded quarters in 1979, when the old riffler building was converted to offices.

A color building was added to the paper mill in 1946, as well. It would serve 35 years before being rebuilt in 1981 to reduce energy costs.

{1947}

Two on-machine roll coaters, supercalenders and rewinders were installed during a complete rebuild of number one paper machine in 1947. That marked Mead's and the Escanaba Paper Company's entry into the coated papermaking field.

The expansion also reportedly included a groundwood bleach plant and sulphite storage facility, a paper warehouse and finishing room extension.

$\{1959\}$ An off-machine coater was installed in the finishing room in 1959.

It was removed in 1971, when a new offmachine coater was built adjacent to the number one mill. The old on-machine coaters were also taken off number one paper machine in 1971. $\{1962\}$ In 1962, about a dozen control rooms, storage areas and motor centers in the mill were designated fallout shelters by the Department of Defense Civil Preparedness Agency.

That was the year of the Cuban missile crisis, when the United States and Russia were said to be on the brink of nuclear devastation. The shelters were marked with signs, some of which are still visible today, and equipped with emergency supplies. By 1970, all the shelters had been dismantled.

{1968}

On Tuesday, January 9, 1968, Mead
Corporation made what was probably the most
important announcement in the history of the
Escanaba Paper Company. In a front-page
headline two-and-a-half inches high, the
Escanaba Daily Press told the news: "Mead
announces \$56 million mill expansion
project for Escanaba."

The story carried with it an artist's sketch of the building that would house a third paper machine so big it would dwarf the two in the building beside it.

Author William Carr called it the "largest single capital expenditure ever made by Mead up to that time." He said the decision was based on the abundant supply of good, low-cost pulpwood available in the U.P. The project was financed by a Cornell Township Industrial Revenue Bond issue.

During construction, the dike impounding the Escanaba River at the mill site, the original pulp mill and much of the 1919 pulp mill addition were removed. The area was filled to open a site for the northwest corner of the number three machine room and to create additional parking space. Used, circular grinding stones were stacked along the riverbank to help control erosion, as they had been since the '20s; some are still visible on the east bank north of the bridge. The railroad bridge across the Escanaba River was converted to one for vehicular and pedestrian traffic only, and the

Mead Road was built to link the east side of the mill with highway US-2 & 41.

The company hired its first security guards in 1968 to monitor the more than 1,000 construction workers on site and to prevent vandalism to vehicles in the mill parking lots.

 $\{1971\}$ Three refiners were installed in the old purchased pulp storage building at the east end of number one mill in 1971 and the Escanaba Paper Company began to make refiner mechanical pulp (RMP) in addition to stone groundwood pulp.

The March 1971 *Hiawathan* explained that "RMP is produced by grinding chips between revolving discs..." The process used only peeled aspen.

Number two machine was converted to a pulp dryer in order to dry surplus pulp for sale to other paper manufacturers. The number two pulp dryer produces a sheet of pulp 155 inches wide. The sheet is cut into five 31- by 30-inch pieces and the pieces are packaged in 500-pound bales.

 $\{1972\}$ Following startup of the kraft mill in 1972, the remaining groundwood pulping operation was shut down, ending 61 years of stone grinding.



$\{1976\}$ Seventy people were temporarily laid off in 1976 as the result of a destructive line shaft failure on number one paper machine.

No one was injured in the April 15 incident, but the next day's *Bulletin* reported that "some areas beneath the dryer section look like the site of an explosion."

$\{1979\}$ In 1979, most of the riffler building constructed in 1945 was converted to offices; that structure is now known as the auxiliary office building.

Another two-story office complex was built in the paper finishing warehouse in 1988 to house the engineering department. The warehouse had most recently been used to store miscellaneous spare parts.

The main and auxiliary office buildings have since been extensively remodeled, and most of the rest of the auxiliary office building is being finished in 1995.

$\{1982\}$ The number one RMP mill was converted to a 100-tons-per-day chemical mechanical pulp (CMP) mill in 1982 at a cost of about \$1.5 million.

The CMP mill put chips through a moistureremoving process, then impregnated them with a mild cooking liquor and fed them into refiners.

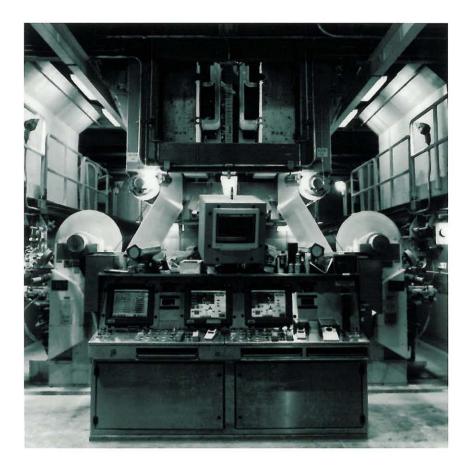
$\{1983\}$ The CMP mill was shut down May 1, 1983 and the equipment has since been sold.

Also deactivated for the last time in 1983 was the steam whistle that was installed in the old steam plant when it was built in 1919. Over the years, the whistle was used to call people to work, signal fires, indicate starting and quitting times, and call area farmers home for lunch; it could be heard as far as two miles away. The whistle has been replaced largely by electronic forms of communication.

A new winder replaced two installed in the number one mill in 1947. It completed computerization of the number one paper machine system.



Chapter Six: The Maturing of That First Pulp and Paper Mill



 $\{1990\}$ In 1990, number one system became the first in the mill to convert from acid- to alkaline-based papermaking. Number three system followed in 1991 and number four in 1992. Alkaline-based paper is more enduring.

That same year marked completion of a \$35 million modernization of number one paper machine system. The project helped pave the way for double-coating by enabling the system to handle jumbo-sized logs of paper.

$\{1995\}$ Number one paper machine system began double-coating paper for the first time Tuesday, January 31, 1995.

The accomplishment signaled the end of a two-year, \$80 million construction project that included rebuilding number one paper machine and adding a second coater. It was Mead's biggest single investment in the division since number four paper machine was built in 1982. Reducing volatile organic compounds in the system at the same time earned the division the American Forest and

Paper Association's first-ever pollution prevention award.

The modernization and double-coating projects coincided with a world-wide recession that prompted a reorganization of the Mead Corporation. The reorganization led to some job cuts and consolidations, and to increased accountability for all employees.

The PPD was finally able to raise the price of its paper in 1994, after six years of decline. By March of 1995, paper was again selling for \$945 a ron.

The division also went on allocation in 1994, for the first time since 1990. Allocation manages the amount of paper customers can get from the division each month.

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The Mill's Changing Product Line

The mill's shift from newsprint to coated

papermaking was a gradual one, prompted largely

by the economics of the time.

$\{1930\}$ One of the two paper machines was rebuilt in 1930 in direct reaction to falling newsprint prices.

The rebuild allowed the mill to begin producing hanging raw stock (wallpaper) in addition to novel (white and colored) newsprint. Most of the wallpaper was sold to printing plants in the Chicago area.

 $\{1931\}$ The Escanaba paper mill further diversified in 1931, adding tablet paper, writing paper, poster stock and manila drawing paper to its list of products. Sheet finishing equipment was installed to cut the rolls of paper down to size.

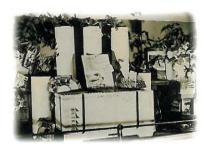
$\{1937\}$ Production of cedar paper, a fragrant shelf paper made from ground cedar, began in 1937.

It was replaced in the mill's product line by bogus board in 1938.

Bogus board was a heavy building paper made from waste paper. It was still so wet when it was shipped out of the mill that, in the winter, it often froze in the rail cars before reaching its destination. Production of bogus board was discontinued in 1941.

Kraft wrapper was added to the list of products made at the Escanaba mill in 1943, cover stock in 1944, printing paper in 1945, and mimeograph paper in 1952.

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{1947} When on-machine coaters were installed on number one paper machine in 1947, the mill began making a line of medium-weight coated grades and dropped production of its poster stock. Cover stock, writing paper and kraft wrapper were discontinued in 1948, wallpaper in 1950, and manila drawing paper in 1951.

 $\{1956\}$ In 1956, after 36 years in the business, the Escanaba Paper Company quit making newsprint altogether. Mimeograph paper followed in 1961.

$\{1959\}$ Briefly during the mid-1960s, gift wrap paper was added to the product line.

But an off-machine coater had been installed in the finishing room in 1959, further strengthening the company's commitment to coated paper production.



Chanter Seven: The Mill's Changing Product Lin

 $\{1960\}$ The number two paper machine started making base stock for the offmachine coater in 1960.

 $\{1969\}$ Mead Corporation's Fine Paper mills had been supplying paper to most of the book publishing industry since before 1950.

When number three paper machine started up in 1969, all coated book paper production was transferred to Escanaba.

 $\{1971\}$ Grades from number one paper machine were moved to number three, when number two machine was converted to a pulp dryer in 1971.

Grades from number two machine were moved to number one.

 $\{1979\}$ The sheet finishing department was shut down in 1979, because the industry was going to rolls.

Immediately prior to shutdown, the department had been sheeting Mead Offset Enamel® made by the Printing and Writing Paper Division in Chillicothe, Ohio. Escanaba's sheet finishing workers were assigned to other departments.

Shutdown of the mill's print shop followed when the printing press was removed in 1995. The PPD had been test-printing its paper for at



least 30 years, until more sophisticated, laboratory-based quality control tests replaced the press.

 $\{1993\}$ The PPD effectively doubled its grade line in 1993, by offering recycled grades of paper to match every one of its conventional grades.

The recycled fiber is purchased externally, consistent with a 1990 paper industry goal to recover 40 percent of all paper consumed annually in the U.S.

The PPD sells to printers and publishers out of offices in New York, Chicago and Atlanta, and to paper merchants through Mead's Fine Paper Division. Most of the paper remains here in the east north central region of the U.S., encompassing Illinois, Indiana, Michigan, Ohio and Wisconsin.

Startup of Number Three Paper Machine and Kraft Pulp Mill

The first big paper mill expansion was finished 21 months after the announcement appeared in the papers.

$\{1969\}$ Number three paper machine started up at 11:59 p.m. Tuesday, October 21, 1969.

It's said that the machine was built on solid rock "as smooth as a table." The Beloit machine measured 25 by 550 feet and was housed in a building a quarter of a mile long. The building was so big, in fact, that mill workers began using bicycles to travel from one place to another.

The paper machine was almost entirely computer-controlled, reportedly necessitating the most intensive training ever undertaken by Mead to that time.

With a trim size of 259 inches, number three had the capacity to produce more than 100,000 tons of lightweight publication, letterpress and offset grades of paper per year. That's 15,000 tons more than the numbers one and two paper machines were making together. In the beginning, it used mostly purchased pulp from Canada, the southern U.S. and Scandinavia.

"Also part of the multi-million dollar expansion [are] pulp makedown equipment and finishing and warehousing facilities. Extensive effluent treatment and disposal facilities, new offices, and a new quality control laboratory are included," reported the February, 1968 edition of the *Hiawathan*. An off-machine coater, boiler and turbine generator were added as well.

And there was more to come. No sooner had the machine started up than Mead announced plans to replace the old groundwood pulp mill with a kraft pulp mill and a refiner mechanical pulp mill. The processes would permit the use of all hardwood species and give the Escanaba Paper Company enough production capacity to end the use of purchased pulp.

Addition of the kraft pulp mill also called for construction of a new woodroom, chipping and wood-handling facilities, and a new power house. The power house would have a recovery boiler, to burn recycled chemicals from the kraft pulping process, a bark boiler and a turbine generator. The kraft mill project was financed by Litton Industries.

At the same time, the American Cyanamid Company built a plant to supply the new number three paper machine complex with the necessary chemicals. The plant is located on riverfront land adjoining mill property, which American Cyanamid purchased from Mead.

$\{1972\}$ The kraft mill started up in May 1972 with the capacity to produce 600 tons of pulp per day.

The first shipment of Red Buck brand (hard-wood) pulp went to Wisconsin Tissue Mills in Menasha.

The number three machine and kraft mill additions boosted employment from 600 to 1,100 and pushed the mill payroll over the \$12 million mark.



Chapter Eight: Startup of Number Three Paper Machine and Kraft Pulp Mill

$\{1974\}$ The kraft mill startup was not without controversy, however; area residents expressed concern over the resultant air quality.

But in 1974, the Escanaba Paper Company became the first to win an American Paper Institute Environmental Improvement Award for its kraft mill installation.

Twenty years later, the Michigan Department of Natural Resources recognized the PPD for minimizing dioxin from its kraft pulp bleaching process. Thanks to recent changes in the process, dioxin is no longer detectable in mill effluent.

 $\{1983\}$ Briefly in 1983, number three coater and supercalender crews were curtailed for lack of coated paper orders.

$\{1985\}$ A \$37 million kraft mill improvement project was completed in 1985.

The project included adding two digesters, upgrading the blow heat recovery system, adding more brown stock washing, modifying the recovery boiler, and replacing the control system with the newest computer technology.

The changes paid off in reduced chemical and energy consumption, improved pulp quality and better environmental controls. Production increased by 10.25 percent. Further improvements to the kraft mill were undertaken in 1988 and 1994.

A weak order situation forced the temporary shutdown of number three paper machine in July 1985. It affected about 90 people.

$\{1987\}$ A new bleaching process was introduced to the kraft mill in 1987.

Called oxidative extraction, it replaced some chlorine-based bleaching compounds.

Number three paper machine underwent a major rebuild in 1987. The rebuild was successful in improving quality, uniformity, efficiency and yield, and in reducing production costs.

Previously, a tri-nip press had been installed on number three machine in 1980, an air foil had been installed on the coater in 1984, process

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control changes had been made in 1984 and 1985, and a single drum winder was added to the system in 1985.

$\{1988\}$ 1988 saw installation of two steam deicing conveyors between the woodyard and the woodroom.

The conveyors thaw pulpwood before it's debarked, for increased digester yield and improved pulp performance.

$\{1989\}$ A new chip screening operation was built south of the woodroom in 1989, for better chip uniformity.

A new purchased-chip dumper was added to the woodyard then, as well.

$\{1994\}$ The company spent another \$15 million on number three machine in 1994.

Equipment and process changes led to introduction of Vision™, a revolutionary new grade of groundwood-containing paper equal in print quality to the best groundwood-free grades in the middle quality range.

$\{1995\}$ The mill currently consumes 42 million gallons of water per day.

All of it is treated, and 98 percent of the waste material removed, before the water is returned to Little Bay de Noc.

The mill uses four times more electrical power than the city of Escanaba, all of which is generated internally. The division's three hydroelectric dams now supply just two percent of the total. The four boilers in the power plant are fueled by black liquor (a by-product of the kraft pulping process), waste wood, coal, natural gas and oil.

A line connecting the mill to the Upper Peninsula Power Company was completed October 8, 1986; it's used as a backup for exchange of emergency and maintenance power. The mill's power distribution system was upgraded in 1994.

Increasing the Company's Land Base and Its Timber Resource

Mead's is the largest private forest in the state of

Michigan. It's been growing and supplying pulpwood

to the Escanaba mill for 50 years.

{1922} Sawyer-Stoll Timber Company became a major supplier of pulpwood to the Escanaba Paper Company with the first shipments of "water wood" in 1922. Its boat, the Mindemoya (said to mean "Old Woman" in Ojibwa), carried about 730 cords per trip from Canadian ports in Lake Huron. The wood was dumped into a boom in the bay at the Merchant's Dock in downtown Escanaba, then elevatored onto E&LS flatcars and switched to the mill. By 1927, the mill was paying \$15 a cord for spruce, and \$10 a

When Sawyer-Stoll sold the boat about the time of World War II, the Escanaba Paper Company contracted for Canadian water wood with the Kimberly-Clark Corporation. Boat shipments ended in 1947, but the mill continued to buy wood from Kimberly-Clark's Canadian operations until 1952, moving the wood to Escanaba by rail.

cord for balsam.

 $\{1933\}$ Sawyer-Stoll Timber Company built the first of its temporary docks at the E&LS spur at the quarry opposite the mill in 1933.

Pulpwood was loaded onto E&LS flatcars there and transferred across the railroad bridge to the mill.

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Sawyer-Stoll later built a permanent fivecar dock near the present site of the Mead Associated Federal Credit Union. Within two or three years, the dock was sold to the Escanaba Paper Company so trucks from all suppliers could load pulpwood onto flatcars for switching to the mill. It wasn't until 1946 that E&LS agreed to allow trucks to cross the Escanaba River bridge to deliver pulpwood directly to the mill.

Pulpwood was purchased by the cord and "scaled" at the loading site as it was delivered. Scaling involved measuring the amount of wood on a truck for the purpose of paying the logging contractor. In 1953, the pulpwood scaling shack was moved to the mill side of the river. Pulpwood was no longer stored in two-foot lengths, but in 100-inch lengths to avoid staining and deterioration.

Some of the pulpwood being cut for use by the mill today was planted in 1933. That's when the Civilian Conservation Corps (CCC) was formed and regeneration of the U.P. forest began in earnest. In the CCC's nine years of operation, 102,000 men — 13,000 of them at 65 camps in the U.P. — planted 485 million trees in Michigan. The trees were mostly red and jack pine, which today stand as tall as 65 to 75 feet.





 $\{1945\}$ The Escanaba Paper Company embarked on a timberland acquisition program in 1945 by purchasing 17,000 acres from the Bay de Noc Company of Nahma.

$\{1948\}$ Ten thousand acres of land, owned by the Cleveland-Cliffs Iron Company in the Round Lake area, were added in 1948.

Use of aspen pulpwood began in 1948. It made up 10 percent of the paper machine furnish. Aspen is important because it has less lignin (binder) than other hardwoods, it's white after pulping and it has long fibers. A naturally occurring species, aspen is also cheap and fast-growing.

The millsite pulpwood storage area was increased by filling in along the river.



 $\{1949\}$ The Escanaba Paper Company pledged to develop its land base in 1949, when it joined the American Tree Farm System⁸.

In so doing, it became one of the first 18 timberland owners in Michigan to get Tree Farm® certificates from Governor G. Mennen Williams.

 $\{1951\}$ Another 108,000 acres were transferred to the Escanaba Paper Company from the Manistique Pulp and Paper Company in 1951.

The acreage represented the newsprint maker's entire land holdings.

The Manistique Pulp and Paper Company was started in 1919 by the *Minneapolis Tribune*. Mead purchased the mill and the Manistique Light and Power Company in 1943. The corporation sold the power company in 1951 and the mill in 1952. The mill went to the owner of *The Trenton Times*.

It was during the 1950s that satellite offices were established in Manistique and Newberry to oversee operations on company land.

 $\{1957\}$ Over a period of two years, 1957 and 1958, the Escanaba Paper Company bought the 102-acre town of Fayette on the Garden Peninsula.

The company paid a reported \$50,000 for it.

 $\{1959\}$ In 1959, Fayette was traded to the State of Michigan for about 2,449 acres of timberland of equal value. Fayette was subsequently converted to a state park.

 $\{1960\}$ An underground scale and a brick office building were constructed on the west side of the Escanaba River in 1960 to house the weigh station and the woodlands department offices.

Their opening marked the first time that pulpwood was purchased on a weight basis, rather than by the cord.

{1966} The Escanaba Division of the Mead Corporation, as it had come to be known, bought 240,000 acres of land in the U.P. from the Celotex Corporation in 1966.

The purchase brought the division's total holdings to about 360,000 acres.

 $\{1971\}$ Following addition of the number three paper machine and startup of the kraft pulp mill, wood needs would increase from 35,000 to 440,000 cords per year.

In preparation, six concentration yards were established in 1971 at strategic places in the U.P. Their purpose was to gather pulpwood from the U.P. and northeastern Wisconsin for scheduled delivery to the mill.

 $\{1972\}$ The woodlands department moved its millsite offices from the brick building on the west side of the river to a Quonset hut behind the mill in 1972.

The hut had been used by the building contractor during the paper machine and kraft mill construction projects.

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Woodlands offices moved again in 1979, when the old riffler building was converted to a twostory office building.

 $\{1975\}$ The Escanaba Paper Company bought 90,000 acres of land in the U.P. in 1975, some from the Ford River Timber Company and some from the Sawyer-Stoll Timber Company.

 $\{1979\}$ In 1979, Mead-Escanaba bought the Johnson Lumber Company in Cunard from Associated Forest Resources of West Virginia.

The 34-year-old saw mill was largely a wholesale operation, processing more than 7.5 million board feet of lumber per year and employing about 30 people.

The division's softwood reforestation program also dates its beginning to 1979. That was the year the first woodlands greenhouse was built and crews planted 1,226 acres of company land in the U.P. The ultimate goal was to produce all of the seedlings used in division plantings.

The company that year traded 1,500 acres in Chippewa County to the state for inclusion in the Tahquamenon Falls State Park. The acreage contained some Lake Superior beach.

 $\{1980\}$ The first crop of seedlings was harvested from the woodlands greenhouse, which had a capacity of 650,000 per year, in 1980.

That year the company planted 836 acres. As greenhouse capacity increased, so did the number of acres planted.

In 1994, the greenhouse produced four crops totaling 5 million seedlings. Of those, 3.5 million were planted on 3,700 acres of Mead land in the U.P., more than that planted in the U.P. by anyone else. The remainder were used in research, sold or given away.

Mead PPD bought a part of Pioneer Trail Park from the Michigan Department of Natural Resources in 1980. The land, located along the Escanaba River on the west side of US-2 & 41, was used to build a road to handle the increased truck traffic that came with expansion in 1982.

 $\{1981\}$ The PPD made two other large land purchases in 1981 and 1982.

It bought 94,000 acres from the U.S. Steel Corporation the first year, and 121,210 acres from the Copper Range Company the second. The purchases brought total Mead acreage in the U.P. to 676,000.

In 1994, Mead land in the U.P. yielded 384,127 tons of pulpwood and 10,124,000 board feet of saw logs. With wood chip and pulpwood trucks crossing the scales at a rate of about 125 per day, the land supplied 19.4 percent of the more than 1.6 million tons of wood needed to keep the paper machines running.

 $\{1982\}$ The 1981 Copper Range Company acquisition included a hardwood saw mill, a dimension parts plant and other associated equipment at South Range, near Houghton, on the Keweenaw Peninsula.

Mead Corporation created the Northern Hardwoods Division in July of 1982 to include the Copper Range Company properties, 13,142 acres of the U.S. Steel Corporation land and 119,646 acres of other PPD-owned land in the western U.P., as well as the Johnson Lumber Company.

Johnson Lumber became a separate division of the Mead Corporation in 1984, reporting to the PPD's woodlands department head. It was returned to the Northern Hardwoods Division in 1988 and modernized in 1989. Fire destroyed the saw mill in February 1992 and it has not been rebuilt. Northern Hardwoods has been reporting to the PPD's vice president of woodlands since 1993.

Number four paper machine and the new refiner mechanical pulp mill started up in 1982. Wood needs correspondingly jumped from 500,000 to about 675,000 cords of pulpwood and 100,000 cord equivalents of fuel wood per year. The cost for pulpwood in 1981 was \$46.50 a cord for spruce and \$40.50 a cord for balsam. The wood harvest is highly mechanized and nothing is wasted; tree tops, leaves and bark are chipped and burned for fuel.

The PPD also converted some of its riverfront land near Boney Falls to a campsite in 1982. The campsite had a boat launch and a picnic area.

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Chapter Nine: Increasing the Company's Land Base and Its Timber Resource

{1985} Completion of a kraft mill improvement project increased the mill's pulpwood consumption by another 60,000 cords per year in 1985.

The PPD that year bought 9,760 acres from the American Can Company to add to its U.P. acreage. The land was mostly in Menominee, Delta and Marquette counties; a smaller portion was in Alger and Dickinson counties.

The company also donated 4.5 acres of land to Delta County for addition to Pioneer Trail Park. The land is located on the Escanaba River near the park's entrance.

It was Mead land near Champion that received the first moose from Algonquin Provincial Park in Canada in 1985. The 29 moose were brought in by the Michigan Department of Natural Resources (MDNR), in an attempt to reestablish the moose herd on the mainland U.P. Another 30 moose were released on Mead land in the same area in 1987. The MDNR is so far calling the experiment a success.

$\{1987\}$ In 1987, Mead Publishing Paper Division donated 880 acres of forestland to Michigan State University.

The land sits next to the U.P. Tree Improvement Center established by MSU in 1986. It's located about five miles west of Escanaba, in Pine Ridge.

The Center is used for mass production of superior tree seeds, and serves as a tree testing and demonstration site. The Mead donation made it twice as large as the Kellogg Forest near Battle Creek.

 $\{1988\}$ Another 4,300 acres of timberland in Marquette County were added to division holdings in 1988.

Purchased from Nekoosa Papers, Incorporated, they brought the PPD's total to about 439,000.

Some of the company's land west of Gladstone was used to create the River Bluff Interpretive Hiking Trail in 1988, and some at Wetmore Pond north of Marquette for an interpretive trail in 1991.

 $\{1990\}$ In 1990 the PPD gave 360 acres of its U.P. wetlands to The Nature Conservancy, 200 acres in Wells Township to the City of Escanaba for a cross-country ski trail, and 45 acres near Ontonagon to Rockland Township for preservation of the Old Victoria copper mining ghost town.

 $\{1992\}$ Mead's Forest Auto Tour route opened on PPD land near Thompson in 1992. That was the same year the division got out of the pulpwood trucking business.

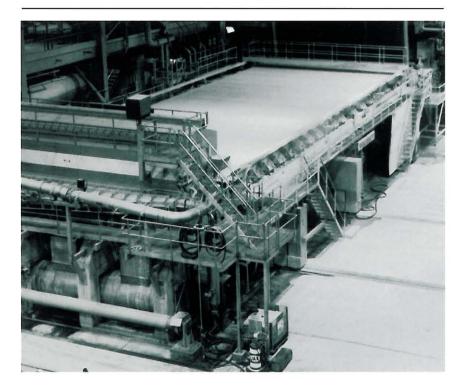
 $\{1993\}$ PPD foresters and outside consultants have been working since the 1980s to determine how best to balance wood harvesting and forest and wildlife conservation.

Their forest research program, called TEMS, was recognized in 1993 by the President's Commission on Environmental Quality. TEMS is an acronym for Total Ecosystem Management Strategies.

{1995} In 1995, Mead is the largest private landowner in the state of Michigan. It owns 694,000 acres in the U.P. alone, 435,000 of which are managed by the PPD.

"The Spirit of Escanaba"

Escanaba's number four paper machine was the last of the three to come on line.



{1980} Mead Corporation again made headlines on April 24, 1980, when it announced plans to further expand the Publishing Paper Division at a cost of \$285 million, about \$25 million of that for environmental controls. Ground was broken in May.

The E-4 project was the largest single capital investment ever made by Mead. It not only doubled the mill's production capacity, it made the Escanaba mill the largest papermaking facility in the Mead Corporation.

{1982}

Number four paper machine started up to cheers from the 100 or so people who'd gathered to watch. It went on line at 4:55 p.m.

Wednesday, May 12, 1982.

The machine was soon christened "The Spirit of Escanaba," the name chosen from among those entered in an employee contest. It had a trim size of 305 inches and the capacity to produce 200,000 tons of medium-weight coated paper per year, almost doubling the mill's output.



Chapter Ten: "The Spirit of Escanaba'

A new warehouse, roll wrapper, water treatment plant, boiler and turbine generator, coating preparation and additive area, waste treatment plant, refiner mechanical pulp mill, pulp makedown area, off-machine coater and rereeler, supercalenders and rewinders, stock preparation area, and a coal and wood waste handling area started up also. One of the winders was replaced already in 1988.

It was during the number four mill construction project that the old water tower, which for so many years identified the mill as the Escanaba Paper Company, was dismantled.

The Spirit of Escanaba made two logs of paper on its first day of operation. Some went into a special supplement to the Escanaba *Daily Press* about the number four mill project. Forty-four startup rolls were sold to the Sabin Robbins Paper Company in Cincinnati, Ohio.

Startup came in the midst of a recession. The Harnischfeger Corporation Construction Equipment Division announced its closure in 1982. The company had started making mobile cranes in Escanaba in the late 1940s. At one time it was the largest employer in Delta County, with 1,700 people on the payroll; by 1987, it had been completely phased out.

Eight thousand people applied for work at the newly-expanded Escanaba paper mill; there were jobs for only 285. Of those hired, about a dozen were from Harnischfeger. The expansion resulted in new jobs for about 80 percent of the PPD's workforce.

 $\{1984\}$ A one-sixteenth scale model of the number four paper machine and auxiliary equipment was donated to Michigan Technological University at Houghton in 1984.

The model, which measured 60 by 100 feet, had been used in place of blueprints to aid in construction of the number four paper machine system. It cost \$2.5 million to build and was exact in every detail.

The best way to see number four mill and the rest of the PPD's huge pulp- and paper-making complex nowadays is by videotape. Mill tour videotapes and other information about the division are available by contacting the Communications and Government Affairs Department.

