



Minnesota Works Progress Administration:  
Writers Project Research Notes.

**Copyright Notice:**

This material may be protected by copyright law (U.S. Code, Title 17). Researchers are liable for any infringement. For more information, visit [www.mnhs.org/copyright](http://www.mnhs.org/copyright).

Baudette  
Lake of the Woods County  
Route one  
Industries

Earl Chapin

## THE BURBOT OIL

### INDUSTRY .....

Lake of the Woods waters are infested by a fish variously known as burbot, lawyer fish, and eel pout. A fresh water member of the codfish family (gadidae) the Burbot is the big, bad wolf of inland waters. A skin fish, it is characterized by a flabby, slimy appearance, an eel-like tail, and an enormous mouth commensurate only with its voraciousness. From a single burbot stomach have come 100 perchlings, pike over 15" long. It is conceded by Lake of the Woods fisher folk that from point of annual catch, the burbot is the better fisherman. Without substantial commercial value, the netted fish are dispatched with a "lawyer-hook", thrown overboard for the gulls. Burbot flesh is excellent, but the fish's appearance is not appetizing to housewives.

Around 1932 a young pharmaceutical chemist, Theodore Rowell, son of a Lake of the Woods fisherman, and onetime druggist at Baudette, set out to make a better mouse trap than his neighbor, and incidentally rid the lake waters of its predatory pest.

Another characteristic of the burbot, as of all the gadidae family, is the size of its liver, in proportion six time that of other fish. Gadidae livers are moreover unique to pharmacology as the only known source of a natural concentrate of vitamins A and D. Increasingly important in the minds of medicos since their discovery have become vitamins A (healings and bacterial resistance), and D (anti-rachitic.)

Lake of the Woods burbot apparently thrive under unexcelled conditions, are husky and healthy, and develop livers upward in weight to two and one half pounds. This was point one in favor of a burbot oil industry. More important was point two. Competing against the largest pharmaceutical houses in the world, it would not do to develop a product merely as good as those already on the market. But the University of Wisconsin in 1928 had cautiously announced that in certain tests on white rats, burbot oil had shown a vitamin D antirachitic potency eight times greater than that of cod liver oil.

Pharmacologist Rowell pottered for one year to develop the basic method of rendering the valuable oil, two years gathering indisputable clinical evidence that burbot oil has a greater therapeutic value than cod liver oil.

How much better burbot liver oil is may be demonstrated by these facts:

The laboratory of Vitamin Technology, duly recognized by the A.M.A., made tests to determine the comparative efficacy of the oils in healing rickets. To test the eight times potency estimate made by the University of Wisconsin the laboratory, working with rathitic albino rats, established a burbot oil ration of one eighth amount to standardized reference cod liver oil. Instead of showing 0 in degree of healing rickets as needed to establish the eight times estimate, the burbot oil showed from 1.0 to 2.0 plus healing over cod liver oil. The test established at least 640 U.S.Ps of vitamin D per gram of burbot oil against 95 U.S.P. units for the reference. Moreover, the daily dose of burbot oil during the four weeks test period caused an average weight increase of 31 grams to an average of 18.1 grams in weight of the rats administered reference oil.

The University of Minnesota (Ag school), experimenting on chickens, found that .25% burbot oil in ration produced 49.59 calcium phosphate in bones to 46.08 on .50% in rations of tuna oil and of sardine oil.

Case reports on the efficacy of burbot liver oil from doctors, hospitals and clinics over all the U. S. were invariably good.

The high vitamin content of the burbot oil gives it great potency in healing, stimulation of growth of new tissue. The oil is also a powerful germicide.  
liver  
Doctors, noting this, used burbot oil successfully for external application.

This fact prompted chemist Rowell in 1936, to create a burbot liver oil ointment. In addition to the oil (85%), the ointment contains phenol oil of Eucalyptus and other inactive volatile oils. The mild anesthetic action of the phenol combines with sterility and epithelial growth-promoting properties of the vitamin content of the burbot oil. Outstanding results with the ointment have been reported by physicians.

The information herein contained was obtained in an interview with Theodore Rowell. The veracity of the statements was established by a study of the report of the Laboratory of Vitamin Technology, Chicago: a study of the report of the University of Minnesota, Dairy and Food Division: "The Antirachitic Factor of Burbot-Liver Oil", in Industrial and Engineering Chemistry" (University of Wis. report); items in "The Journal-Lancet"...and case records.

CLEMENTSON  
POST OFFICE.

*James*  
*Lake of the Woods County*

Lake of the Woods County.  
Route One.

Clementson is situated on Trunk Highway No. 11, near the point where the rock bound Rapid River in the springtime flows with small thunder into the Rainy. The country in the vicinity, through its natural beauty, and the inducement its streams offer the angler, has long been a favored spot for outings. Housekeeping cabins are available, boats are for hire, and there is plenty of free camping space.

Clementson post office is named after the brothers who established homesteads here in the early days as two of the country's first settlers. The post office was established in 1900. During the lumbering days the community boasted two stores and a hotel. Now the country store and post office by the roadside adequately serves the summer tourists and the farmers in the vicinity.

Information from Mr. Helec Clementson and Mr. Oscar Clementson.

CLEMENTSON  
POST OFFICE.

Lake of the Woods County.  
Route One.

Clementson is situated on Trunk Highway No. 11, near the point where the rock bound Rapid River in the springtime flows with small thunder into the Rainy. The country in the vicinity, through its natural beauty, and the inducement its streams offer the angler, has long been a favored spot for outings. Housekeeping cabins are available, boats are for hire, and there is plenty of free camping space.

Clementson post office is named after the brothers who established homesteads here in the early days as two of the country's first settlers. The post office was established in 1900. During the lumbering days the community boasted two stores and a hotel. Now the country store and post office by the roadside adequately serves the summer tourists and the farmers in the vicinity.

Information from Mr. Helec Clementson and Mr. Oscar Clementson.

CLEMENTSON  
POST OFFICE.

Lake of the Woods County.  
Route One.

Clementson is situated on Trunk Highway No. 11, near the point where the rock bound Rapid River in the springtime flows with small thunder into the Rainy. The country in the vicinity, through its natural beauty, and the inducement its streams offer the angler, has long been a favored spot for outings. Housekeeping cabins are available, boats are for hire, and there is plenty of free camping space.

Clementson post office is named after the brothers who established homesteads here in the early days as two of the country's first settlers. The post office was established in 1900. During the lumbering days the community boasted two stores and a hotel. Now the country store and post office by the roadside adequately serves the summer tourists and the farmers in the vicinity.

Information from Mr. Heles Clementson and Mr. Oscar Clementson.

Hiwood post office.  
Lake of the Woods Co.  
Inland towns.

## HIWOOD POST OFFICE.

Hiwood is one of a number of inland post offices in Lake of the Woods county embraced by the Beltrami Island Forest, to be abandoned as a part of the Government's rehabilitation program. The history of Hiwood contains the elements of the history of all these little communities which are seen to be only names on old maps.

The land in this territory was first opened for settlement by the Chippewa Land Act of Jan. 14, 1839. The country was then even more primitive and heavily timbered than it is today, and was at first occupied only by hunters, trappers and timber men. In carrying on their activities these men often built cabins on the heights, most of which were destroyed by the fire of 1910.

Some time after the Great Fire had ravaged the country, adventurers again returned to the Hiwood country, the this time they were adventurers of a different sort- men and women who, taken by the beauty of the pine crowned heights, and the bountifulness of nature here, decided to make this their homeland.

The establishment of ~~the~~ ~~the~~ the 111 mile long Judicial ditch No. 62 created a number of useful ditch-dump roads, and also successfully drained some areas subject to inundation, but the ensuing high taxes caused a great portion of landowners to default on their property.

Beltrami Islanders found a friend in neither water nor fire. The vernal green ran too often to lily pads and high swamp grass; the motley of autumn was like a leopard lying in wait. Above the autumnal haze and smoke the first rickety pole fire tower peered questingly from the heights of the Morris farm in Clear River,

on the lookout for sparks before the wind. Today a modern 125 foot steel fire tower serves from the same vicinity, and through the efficient functioning of the Forestry Service the fire terror of yesteryear is only a memory.

Hilwood post office was established March 23, 1919. A rural route of 30 miles from this office was established December 2, 1921, with 72 families patronizing, which indicates a considerable settlement in the territory by that time. Neal Bliss, postmaster and storekeeper at Hilwood these many years, arrived in the country in 1913, and at that time the only <sup>settlers</sup> ~~residents~~ in the immediate vicinity of Hilwood were ~~these~~ William and O. S. Larson, Charles Mc Coy, Andrew Swanson and Henry Winst.

A quarter of a mile east of Hilwood ran the old Stephens trail which was used by moose and caribou hunters from the Red River valley. Indications of the trail are practically obliterated today. Three miles east are several large beaver colonies, one dam impounding a pool of water a half a mile long.

The country here is of uneven contour, with pine on the heights, aspen, Bals of Gilad, ~~and~~ black spruce and cedar on the lowlands. Peat has formed on the bottoms, and the hills are of sand or sand loam. The chief agricultural <sup>and</sup> activities are dairying, sheep and turkey raising. The settlers are of mixed nationalities.

The Beltrami Island abounds with game, and provides one of the best deer hunting grounds in Minnesota. Grouse and partridges are also plentiful. Nature here has also been bountiful here with fruitage. Raspberries grow heavily on peat and burnt over grounds, and highbush cranberries grow in great confusion on the heavy soil lowlands. And last but not least, the blueberries here are unexcelled in abundance in a territory famous for them.

Graceton post office.  
Lake of the Woods County.  
Route One.

GRACETON  
POST OFFICE.

When the railroad was built through to the Rainy River, a section house was built at what is now Graceton, and around this point a community <sup>grew up -</sup> ~~was built~~. Incidentally, Graceton has remained a section station ever since.

The station was named after a railway official's daughter, Grace. More about the lady, Graceton does not remember; nor, perhaps, does the lady remember Graceton.

The first man to build a place of business near the Graceton depot was one J.C. Conlin who, according to old timers, was an amiable scamp who never let his right hand know what his left hand was doing. The Conlin building served the frontier trine purpose of hotel, restaurant and saloon. As Conlin was also in the lumbering business, and employed a number of men, this establishment was very handy in keeping the payroll money close to home.

Among the first permanent settlers in the Graceton area were Joe Ferguson and Tony Mc Laren. The succeeding people to settle this section, however, were predominantly Swedes. As a symbol, a large Swedish Lutheran church commands the little village.

Graceton is composed of a church, school, and several business buildings, including Chevrolet Service and Ford Sales.

The wide-awake community spirit of this small village is indicated by the existence of a Community Club, and an active woman's organization for study and recreation (K.Y.N. Club), organized in April 1934, and having a membership of 25.

Graceton p.o.  
L. of the W. County.  
Route One.

-2-

Earl Chapin.

Graceton is situated in the midst of a very fertile agricultural district. Eight miles directly north from the village is the Lake and Graceton Beach. By this route Morris Point is also readily accessible.

South from Graceton, gravel-surfaced S.A.R. 4 provides an all-weather road to the Beltrami Island Forest. Near the southern terminus of this road, about nine miles from Graceton, is Peppermint Lake, a bottomless floating bog, a remnant and a reminder of what much of the southern portion of the county was like only a few years ago. Four miles south on the same highway is the Winter Road River, where ski slides are maintained during the winter.

Information from Mrs. Joe Ferguson and Mrs. Thos. Dopp of Graceton.

Hiwood post office.  
Lake of the Woods Co.  
Inland towns.

HIWOOD POST  
OFFICE.

Hiwood is one of a number of inland post offices in Lake of the Woods county embraced by the Beltrami Island forest, to be abandoned as a part of the Government's rehabilitation program. The history of Hiwood contains the elements of the history of all these little communities which are soon to be only names on old maps.

The land in this territory was first opened for settlement by the Chippewa Land Act of Jan. 14, 1889. The country was then even more primitive and heavily timbered than it is today, and was at first occupied only by hunters, trappers and timber men. In carrying on their activities these men often built cabins on the heights, most of which were destroyed by the fire of 1910.

Some time after the Great Fire had ravaged the country, adventurers again returned to the Hiwood country, the this time they were adventurers of a different sort- men and women who, taken by the beauty of the pine crowned heights, and the bountifulness of nature here, decided to make this their homeland.

The establishment of ~~that~~ the 111 mile long Judicial ditch No. 62 created a number of useful ditch-dump roads, and also successfully drained some areas subject to inundation, but the ensuing high taxes caused a great portion of landowners to default on their property.

Beltrami Islanders found a friend in neither water nor fire. The vernal green ran too often to lily pads and high swamp grass; the motley of autumn was like a leopard lying in wait. Above the autumnal haze and smoke the first rickety pole fire tower peered questingly from the heights of the Morris farm in Clear River,

on the lookout for sparks before the wind. Today a modern 125 foot steel fire tower serves from the same vicinity, and through the efficient functioning of the Forestry Service the fire terror of yesteryear is only a memory.

Hiwood post office was established March 28, 1919. A rural route of 50 miles from this office was established December 2, 1921, with 72 families patronizing, which indicates a considerable settlement in the territory by that time. Neal Bliss, postmaster and storekeeper at Hiwood these many years, arrived in the country in 1915, and ~~th~~ at that time the only <sup>settlers</sup> ~~families~~ in the immediate vicinity of Hiwood were ~~these~~ William and O.S. Larsen, Charles Mc Coy, Andrew Swanson and Henry Winat.

A quarter of a mile east of Hiwood ran the old Stephens trail which was used by moose and caribou hunters from the Red River valley. Indications of the trail are practically obliterated today. Three miles east are several large beaver colonies, one dam impounding a pool of water a half a mile long.

The country here is of uneven contour, with pine on the heights, aspen, Balm of Gilead, ~~and~~ black spruce and cedar on the lowlands. Peat has formed on the bottoms, and the hills are of sand or sand loam. The chief agricultural <sup>and</sup> activities are dairying, sheep and turkey raising. The settlers are of mixed nationalities.

~~The~~ Beltrami Island abounds with game, and provides one of the best deer hunting grounds in Minnesota. Grouse and partidges are also plentiful. Nature here has also been bountiful here with fruitage. Raspberries grow heavily on peat and burnt over grounds, and highbush cranberries grow in great confusion on the heavy soil lowlands. And last but not least, the blueberries here are unexcelled in abundance in a territory famous for them.

VILLAGE OF

WILLIAMS..

Williams.

Population: 262.

Altitude: 1,153.

Location: Trunk Highway No. 11. S.A.R. #2 to Niammiller's Resort, Birch Beach and Lake Side.

Hotels: Williams Hotel. 8 rooms, \$1 per day, board and room.

Tourist camp: Two-acre tourist camp north of the school house. Equipped with stoves, etc.

Williams, situated amid surroundings of striking natural beauty, is a substantially built village which serves chiefly as a trade center for the rich agricultural area surrounding it. A recently established <sup>a</sup>creamery is the chief industry here, and several portable saw mills still operate in the vicinity.

The history of the village dates back to 1900 when William Mason and George Williams came into the territory after timber and flipped <sup>a</sup>coin to determine who should have the homestead on the south side of the track. The die fell Mason; but it was on the north side of the track that the town developed, and was consequently named for Mr. Williams who first held the land by right of homestead.

Williams, like the <sup>others</sup> ~~rest~~ in this county, was originally a "timber town," this era being inaugurated by the first shipment of cedar posts by rail to Baudette in 1901. Records reveal that Hugh Mc Cormick, John Francisco and Billy Winters put up the first three buildings in Williams, all of logs. The first store, established by J. L. Williams was <sup>likewise</sup> ~~also~~ of logs. This building also housed the post office which was established in 1902 with Billy Duer as postmaster. Duer

Williams.  
Lake of the Woods County.  
Route One.

-2-

Earl Chapin.

soon bought out William's interest and the establishment became known as Duer's Store.

While the early history of Williams differs little in color from that of its sister towns on the C.N.R., it is distinguished from them by the fact that its development, altho slow, has been a continuously substantial and steady one, with a smoother transition from the lumbering to the agricultural era.

In fact, the tendency toward domestic solidarity here can be traced as far back as 1901 when John Mason brought the first cat to Williams, carrying it all the way from Warroad, a distance of some eighteen miles. John Eden is remembered as the unique and prophetic figure who, before 1910, when timber cutting was at its height, saw the real future of the country in agriculture, and was ridiculed for tilling the soil.

In 1905 the first frame store was built by a Mr. Eklund. The depot was not erected until 1908. During this time when Williams was a rowdy, rapidly-growing ~~lumber~~ lumbering town, the "Augur Hole Saloon" was a notorious rendezvous.

But while Williams suffered growing pains, the people did not forget the need of churches and schools. In 1905 primary education was undertaken, and a year later two churches were built.

Today four congregations are served by churches in Williams,- Lutheran, Catholic, Adventist and Congregational. A two-story consolidated school was erected in 1916; today it has an accredited high school department, with an enrollment of 160 served by a faculty of six teachers and a superintendent. Two motor buses are used in transporting rural students. The school district celebrated a bond-burning two years ago. The occasion was all the more memorable because it marked the end of all village indebtedness.

Of unusual interest to the outsider are the numerous flowing wells, of which there are 19 within or in the immediate vicinity of the village. Supplied, experts say, by hydrostatic pressure from the swamps to the south, some of these wells have

Williams village.  
Lake of the Woods County.  
Route One.

-3-

Karl Chapin.

been flowing continuously for 25 years without any appreciable diminution of water. In some instances this natural pressure has been employed to supply plumbing to buildings. Unusual too is the fact that some of these flows have been struck at a depth of only 35 feet. The water is 99% pure by test.

As early as 1912, John Edes faith in agriculture had its first vindication when a threshing rig was shipped into the country, and the Williams territory has been forging ahead ~~as a leading farming territory~~ as a leading farming territory ever since.

The village is served by the Williams Northern Light, a paper established in 1916 by Sam Sherman, and now edited by Robert Norris.

Williams lists an I.O.O.F. and Royal Neighbors lodge,, and American Legion post, and a very active Farm Bureau unit.

Sources:

"History of Williams," by Dorothy M. Bridges. Williams Northern Light, July 13, 20 and 27, 1933; Vol. 13, Nos. 24, 25 and 26.

Vol. 1, No. 1, Williams Northern Light; contemporary account of Williams by editor Sam Sherman, 1916.

Additional information from Robert Norris, present editor of the Northern Light.

## LAKE OF THE WOODS

### COUNTY;

its topography,  
agriculture, climate,  
natural resources, etc.

Lake of the Woods County is one of the top tier of three northernmost counties in Minnesota. It has a total land area of 1,515 square miles or 940,520 acres, which fall into three natural divisions, the mainland, the Northwest Angle, and the islands. Of the total land area, 1,181 square miles is mainland, south of the lake of the Woods. The larger islands, Oak, Garden, Flag, Brush, Pine, and Magnusson's, range from 100 to 1,600 acres in size, and these are supplemented by 25 or more smaller islands. Entirely isolated from the American mainland, and surrounded on three sides by Canada, in the Northwest Angle, which has the unique distinction of being the northernmost portion of land in the United States. *See Islands and Northwest Angle.*

There are some 14,000 islands in the lake of the Woods which divides the Angle from the mainland. The <sup>lake</sup> name is a literal translation from the Indian "Kashtic Shagagan" which the French in turn rendered lac du Bois.

760! With the obvious exception of the Great Lakes, the lake of the Woods is the largest inland body of water to touch upon the United States, covering an area of nearly 1,300 square miles. The watershed tributary to the lake comprises an area of 26,736 square miles, of which 58% is located in Canada and 42% in the United States.

Geologically, Lake of the Woods is ~~not~~ a remnant of the glacial Lake Agassiz, and the land area of the county is former lake bottom.

#### Topography:

The mainland of the county is generally flat, with a gentle north and east slope of about 5 feet to the mile. There are a few higher areas, islands and ridges, which in some instances attain an elevation as much as 50 feet higher than the surrounding land. The largest of these areas runs through Park, Cloverdale, Eugene, Morris and Beaver Dam townships, and is known to geologists as Beltrami Island of Lake Agassiz. "Sparsely distributed over the county are narrow gravel ridges marking ancient beaches of the receding lake. One of these ridges traverses almost the entire breadth of the county, rising in central Chilgren township, and running uninterruptedly to east central Spooner township below Dunette. Beltrami Island marks one of the limits of the Lake of the Woods watershed, and is also the source of the Roanoke River ~~which flows west~~ into the Red River. Elevations in the county range from 1,510 to the lake level of 1,065 feet.

#### Flora and Fauna:

Lake of the Woods County was originally heavily covered with timber. Lumbering and forest fires have decimated the stand, yet some virgin patches remain, and much of the burn over and slashing has sprung up again in heavy second growth. Lake of the Woods county is still one of the great forest areas of the United States.

On the lowlands black spruce, tamarack, and occasionally cedar are the dominant trees, while alder, dwarf birch, mountain maple and willow constitutes the shrubbery. On the more open bogs shrubbery is sparse: here grow the mosses sphagnum and Hyssop, leather-leaf, Labrador tea, canadensis, dwarf Malina, low bush cranberry,

lingonberry, snowberry, pitcher plant and cotton grass. Where high water tables occur, rushes, cattails and tall swamp grasses ~~occur~~ *are predominant.*

Norway, white and jack pines grow on the highlands along with other conifers as spruce, balsam, some cedar and tamarack, and the hardwoods, birch, elm, maple, and basswood. Following logging and fires these original stands have generally given way to a second growth consisting largely of poplar, birch, with jack pine on the sandier soils.

The forests of Lake of the Woods County abound in wild game. (See Recreation) Deer range the forest in great numbers, moose are common in the swamps, and the Beltrami Island Preserve harbors the only herd of caribou in the United States.

Small game is likewise abundant in good years. Black bear are not uncommon. A large number of wolf bounties are collected annually, and beavers are so plentiful as to be a nuisance in agricultural areas. Fur bearing animals are trapped extensively during the winter.

#### Agriculture:

Agriculture in the Lake of the Woods region long antedates the coming of the white man. While the aborigines of this territory did not practice agriculture to any great extent, they at least harvested what nature sowed- the wild rice. In fact, this natural crop was of vital importance to the Lake Indians, and was one of the principal causes of the constant warfare between them and the <sup>Indians of the plains.</sup> ~~Plains Indians.~~

La Verendrye purchased wild rice from the Indians, ~~and wild oats also,~~ which "enabled him to save the wheat he had brought." We learn from La Verendrye's memoirs that he induced two Indian families to sow corn. This is the first record of actual cultivation of the soil in the Lake region. Later we find the Indians raising corn and potatoes on what was subsequently known as Garden Island. This is mentioned in a narrative written in 1845.

The traders that followed LaVerendrye early found the Lake region soil extremely productive, and gardens were to be found at almost every post <sup>and</sup> ~~or~~ settlement.

The early settlers made little effort toward cultivation of the soil save to plant gardens and raise enough feed for their horses used in logging. With the exception of a fringe of land near the lake, and the high areas in regions of natural drainage, there was little arable land in the early days, the rainfall being disproportionate to the natural drainage system to accommodate it. Most of the territory was heavily timbered. South, between Soudette and Soudiji lay leagues upon leagues of muskeg, humorously referred to as the Beltrami prairie. An early settler, Mr. Halse Clementson, tells of crossing this bog to Soudiji in August, 1911, on snowshoes, an expedient designed to keep him on the top side of the mire.

Sometime around 1911, at the southwest extremity of this swamp, near Chief River Falls, the first attempt at drainage was made. The actual success of these first ditches is a matter of controversy. At any rate, by a fortuitous conjunction of favorable seasons, the land thus made arable by drainage yielded heavily. The appearance of evident success was magnified by the primitive state of communications in the territory: one or two roads carried a most impressive quantity of produce into Chief River Falls. At once the whole country plunged into a frenzy of ditching, the greater part of which proved not only ill-advised, but disastrous. Much of the land could not be adequately drained, and much of it was not fit for agriculture even after it was drained. Ditch taxes on some quarters rose from \$700 to \$1,000. Under these intolerable conditions farmers were forced to abandon their lands. As tax delinquency mounted, the burden fell increasingly heavier on those who were farming good <sup>land</sup>.

Fortunately, adjustments were forthcoming. Part of the swamp territory was made a game preserve, taxes were revised, and recently, under the Federal Resettlement Program, Beltrami Island Forest was created, providing a final step in the resurgence ascendancy of agriculture in Isle of the Woods and Beltrami counties.

Time has proven the two bane of this territory- fire and ditches- to be boons instead. The drainage system greatly benefited the really arable lands in the county, and reworked which was best turned back to the ducks. Ditches also helped to dry out peat lands which were subsequently burned over and put to cultivation with excellent results. Fire, in spite of its destructiveness, has been one of the county's greatest aids to agriculture by its efficiency and inexpensiveness in clearing land of slash, and transforming peat into valuable ash.

The natural drainage system of the county is termed "lacustrine" by geologists, consisting of small streams with little tributary development, confined to narrow valleys which often lose themselves in broad, flat boglands. However, the fall here is excellent, varying from one to ten feet per mile, with a seven foot average. Consequently drainage, except in the swamps, is a <sup>very</sup> small problem.

A soil survey of the county made by the U.S.D.A. in 1926 reported 6% of the land area covered by peat, ranging from a 2-foot "shallow phase" to 15 feet in depth. Most of the peat land is in the area now taken up by the newly created Beltrami Island Forest. Incidentally, in the decade since the survey was made, a large acreage of peatland has been put to the torch, and is now raising crops successfully.

The other soils of the county are silty clays, clay loams, sandy loams, fine sandy loams and sand, all weatherings from glacial till or lacustrine deposits. Practically all the land lying outside the State Forest area is excellent for agriculture, and the claim is justifiably made that some lake of the Woods soils are the most productive in the state. This is perhaps due to the high lime carbonate content of the heavier loams, which in some cases is as high as 40% below a depth of 2 or 3 feet. Consequently the soil is unexcelled for all kinds of root crops, and especially adapted to the raising of clover and alfalfa.

A fair average of clover hay to the acre is estimated at 2 tons, alfalfa at 5 tons. Fifty cars of alfalfa and clover seed were raised in 1932, and about 60

barlands valued at \$500,000 in 1933. Flax yields as high as 20 bushels to the acre have been reported, oats at 50 bushels, and rye at 60 bushels. Alsike clover has yielded 9 bushels of seed per acre, alfalfa 10 bushels, timothy 20 bushels. Average yields between 150 and 200 bushels of potatoes per acre are common, and yields as high as 600 bushels per acre are reported.

Excellent results have been experienced with reclaimed post lands where proper care and foresight has been exercised. A single instance of 35 bushels of barley, 20 bushels of oats and 10 bushels of alsike to the acre of burnt-over land will serve as an illustration.

Lake of the Woods County farmers have gone into seed raising extensively of late years, and dairying is in the ascendency. Creameries have been established at Spooner and Williams. The Co-operative Creamery at Spooner listed 225 patrons in 1933, and manufactured approximately 152,000 pounds of butter during the year. Barley and oats are raised extensively, and potatoes for certified seed. Farmstand prices in the county are very low in view of the excellent lands which are still purchasable.

#### Climate.

The climate of Lake of the Woods County is temperate, with ample rainfall. The yearly precipitation is 20.6 inches, with an average of 5.06 inches for June, July and August. The mean growing season temperature is 63.25 degrees. The highest temperature recorded at Soudette in the past 20 years is 110; the lowest, -49. The average length of the growing season is 115 days. The air is dry and invigorating, summer and winter, and for this reason extreme winter temperatures are noticed less than the damp cold of more southerly latitudes.

#### Highways.

The road system of Lake of the Woods County has developed rapidly since county division in 1923. It <sup>includes</sup> ~~has~~ 91.8 miles of State Aid roads, 201.1 miles of County Aid

roads, <sup>about</sup> ~~approximately~~ 600 miles of township roads, and approximately 70 miles of Trunk Highway.

Of the 91.3 miles of S.A. roads, 65 miles are graded and passable at all times; 25.8 miles are dirt roads and are maintained so they are passable except in extremely wet weather. Of the 201 miles of County Aid roads, 125.4 miles are graveled and passable at all times; 64.9 miles are dirt roads and are passable most of the time; 12.8 miles are not improved. Of the 600 or so miles of township roads, approximately 50% of them are passable in dry weather. The Trunk Highways are all graveled.

During the year of 1935 the county spent \$35,000 on County and State Aid roads; \$357,000 has been spent on county roads since county division in 1925. The county owns two Caterpillars, one truck, three blade graders, one elevating grader, and a number of maintenance graders. The county undertakes snow removal on their roads during the winter.

#### Schools.

The total enrollment in Lake of the Woods County schools in 1935 was 1147; 451 of this total were enrolled in village schools, 696 in rural schools. Twenty village schools and 50 rural schools are listed. Two new two-teacher type schools are being built under WPA. Architecturally <sup>these</sup> ~~the~~ buildings are of the cottage type with hall rooms on the ground floor, and with a community room in the basement. The name of the Woods County school system includes three of the northernmost schools in the United States, one at Oak Island, and two on the Northwest Angle. (See Northwest Angle.)

References:

Topography and Soils:

"International Joint Commission Report." Washington, 1917.  
"Reconnaissance Soil Survey of Lake of the Woods County, Minnesota," by  
Mark Baldwin. U.S.D.A. No. 8, Series 1926.

Agriculture:

"Soil Survey..."  
Interview with County Agent, Lake of the Woods County.  
Information regarding productivity of burned-over land from Mr. Halseo Clementson.  
Information from the Bullock, "Allen Land Co., Baudette, Minn."

Roads:

Report of County Highway Engineer V. E. Grabtree to the Baudette Commercial Club.

Schools:

From County Superintendent of Schools, Lake of the Woods County.

Weather:

"Climatic Summary of the United States, Dec. 24, Northern Minnesota. U.S.D.A.  
Weather Bureau."

..... "Saudette and Spooner took on the aspect of ruin and abandonment."

Between 1926 and '27 only two of a number of fine business buildings erected in Spooner during its heyday, remained tenanted. Then came the upswing.

Long before 1926, across the river, the sister town of Saudette had begun to show signs of a business convalescence which was to suddenly and almost miraculously rehabilitate the wasted and fire-ravaged timber country which <sup>was</sup> ~~the~~ Lake of the Woods County. An immediate cause was the increase in business activity consequent to county division in 1922; but the great underlying force of recovery was the emergence of agriculture.

For years far-seeing men had been cultivating the more favored areas in the territory, and had found the soil in many places to be unusually fertile. With the collapse of the timber industry the great horde of transient laborers and fortune hunters moved on, leaving a place of industrious, frugal home builders. Thus the stage was set for recovery.

Several well-defined reasons may be seen in the sudden rise to importance of agriculture in Lake of the Woods County.

Fundamental, of course, is the unusual fecundity of much of the loamy lands around the lake, where receding waters had been depositing fertility for ages. But of major importance are two <sup>additional</sup> ~~other~~ factors.

Foremost is the paradox of man's worst enemy being his best friend. The fires that had ravaged the country were equally impartial in wiping out human life and habitation, slash, stump land and peat flats. After the country was once burnt over, farmers could protect life and habitations, and let the fire go to work on slash and peat flats. Some burned over lands have been made ready for the plow simply by gathering up the residue in winrows with a hay rake and re-burning. Farmers have opened up from 40 to 80 acres in a season with very little cash outlay.

The other factor, important particularly in the continued rise of agriculture in the county, was the Depression.

The lands in this territory were first acquired by homesteaders, the majority of whom were transient laborers following the lumber industry, <sup>who</sup> ~~and~~ had no interest in farming, but took the land because it was easy to obtain. These lands eventually fell into the hands of speculators scattered thruout the country, many of whom never saw their property. Hard times caused these speculators to sell their land at a sacrifice or else relinquish it to the state which subsequently sold it to bidders at public auction. The virtual end of speculation in the county, brought on by the lean years, the fact that most other agricultural sections were harder hit by adverse conditions, stimulated land buying in the county, and brought in a class of people that would contribute to the future prosperity.

County  
Division.

Deemed one of the most important steps in the history of the territory was the creation of Lake of the Woods County in 1922, which incidentally makes this county the youngest in the state.

It was only by concerted action and energetic pursuit of the task once assumed, that county division was made possible. W. F. Zauche and E. C. Middleton were the leading spirits in the struggle that was bitterly pursued to every far corner of Beltrami County, from which Lake of the Woods County eventually seceded. As a result of the political re-organization, Lake of the Woods County tax burdens are now much lighter, roads and schools, townships and villages have been improved, and property all over the county has steadily increased in value.

County  
Fair.

The year following county division, a County Agent was employed, and the first County Fair was held. Since then the annual county fair has been a rapidly growing institution, both from the standpoint of attendance, and the number and

quality of the exhibits displayed.

Entertainment of recent years at the fair, has taken on a distinctly individual tone with the presentation of pageants depicting incidents in the early history of the region. Locally written and staged by Stoddard Robinson, a Baudette business man, these pageants have been very popular, drawing spectators from many counties around.

Baudette and Spooner  
today.....

Today the lumber industry is only a memory in Lake of the Woods County. A considerable quantity of posts and poles is still shipped out, much of this cutting being a winter occupation of farmers working their own property, but the amount is inconsequential compared to the industry of former years. In 1955, 197 cars of posts, poles and ties, and 22 cars of pulpwood were shipped <sup>by rail</sup> out of Baudette, - which represents about 50% of the timber products, the balance being hauled out by truck.

Agriculture is now the dominant industry, and a progressive one with substantial background which is rehabilitating the country.

The business buildings of Spooner are once more occupied. The old brick auditorium has become the Cloverleaf Co-op Creamery, the fine brick structure on the corner has been taken over by a government rehabilitation staff, and the other buildings house stores, and commercial and truck garages.

Spooner offers the tourist a fine camping ground a short distance east of the village on the Rainy River. The park is supplied with grills, benches, swings and toilets. In the village there is a Chevrolet service which carries a full line of parts.

Baudette is a thriving village of 822 persons, according to the 1950 census, and is the county seat of Lake of the Woods County.

Baudette has a municipal power plant, furnishing city owned lights and water. The water, taken from the Baudette River, goes thru a chlorinating process.

At the edge of the village is the municipal airport, which includes a hangar.

A skating rink is maintained by the village during the winter.

Baudette is the shipping point for a large number of fish taken in the Lake of the Woods. Over 634,000 pounds of fish was shipped out from this point in 1935.

The school history of Baudette began in 1903 when a school was established with Esther Thomas as teacher of 12 pupils. Today Baudette is served by a fine modern high school. Built in 1916 at the cost of \$60,000, it is still an outstanding example of excellent school construction, and could not be duplicated today at \$100,000.

The school is conducted on the 8-4 plan. There are approximately 120 students in the high school, 240 in the grades. Spooner has combined with Baudette, and sends its children to the Baudette school. 50% of the high school students are non-resident.

Baudette is justly proud of their newspaper "The Baudette Region," edited by epigramatist Billy Noonan, whose "Noonanisms" are reprinted in <sup>newspapers</sup> all over the state and beyond.

Baudette's Rex Hotel is rated by the travelling public as ~~the~~ one of the finest hotels in Northern Minnesota. The Rex Hotel is a three-story brick building, situated in the midst of Baudette's business section. The Rex has 48 guest rooms, 22 with bath; all rooms having hot and cold water, steam heated, electric call bells, fire escapes on all floors. An excellent dining room is maintained in connection.

The Pepin Hotel also enjoys a large volume of business. It has 12 rooms at rates from 75c and up.

The Baudette Tourist Camp, on the south side of Trunk Highway No. 11 <sup>where</sup> it enters the village from the west, is now supplied with city water. In all other respects the camp is fully equipped for the convenience of tourists.

Near the Tourist Camp, across the road, are the Green Arrow tourist cabins. These are log cabins completely furnished with dishes, linens, lights, stoves, etc.

Rates are \$1.00 for single occupancy and up.

Baudette is on the Canadian National Railway connecting Winnipeg with Duluth. It is on Trunk Highway No. 11, and near the junction of that road with T. H. 72, to Duluth and the Twin Cities.

Sources:

Interviews with Mr. E. T. Elde, business man of Spooner, former county commissioner; Mr. Clark Dodds, mayor of Baudette; Mr. Greenan, president of the Baudette Chamber of Commerce. Information about shipments of timber and fish obtained from the C.N.R. office at Baudette.