

## The Indiana Michigan Boundary

The Indiana-Michigan boundary was surveyed in 1827 by Eleazer P. Kendrick, with mile posts set along its entire 105 mile length. This was 11 years after the U. S. Congress approved the current border as part of the enabling legislation for Indiana's admission into the Union in 1816.

In 1785, the Continental Congress needed to deal with two issues in the western lands. They were, disposal of land and governance. The disposal issue was settled by the Act of May 20, 1785, better know as the Land Ordinance of 1785. The Land Ordinance of 1785 established the rectangular survey system used in the United States today.

The governance issue was finalized by the Act of July 13, 1787, better know as the Northwest Ordinance. It defined the future divisions of the Northwest Territory, the three stages of passage to statehood, and a statement of rights guaranteed to settlers of the region.

The right of statehood was guaranteed "whenever any of the said states shall have sixty thousand free inhabitants therein..." A state was at first governed by appointed officials, progressing to partial self-government and non-voting Congressional representation when it had a population of 5,000 free adult males. The personal rights guaranteed, were those traditionally held by Englishmen – including unlawful restraint by the state, trial by jury, security of property, and religious freedom. Slavery was also prohibited. Education was advocated, as a section of land was reserved for a school in the Land Ordinance of 1785.

Settlers began moving into the Northwest Territory ignoring and over-running Indian treaty lines. The Indians resisted and a series of fights and battles took place. President Washington appointed General Anthony Wayne to take command in 1792. The troops under General Wayne fought and decisively defeated the Indians in 1794 at the Battle of Fallen Timbers, south of Fort Miamis (near present day Toledo). The Indians ceded nearly all of Ohio to the United States in 1795 at the Treaty of Greenville.

With no barriers remaining settlers poured into Ohio and beyond. The Northwest Territory population grew to over 5,000 free adult males by 1798 making it eligible for advancement to the second stage to statehood under the Northwest Ordinance.

Ohio was admitted to statehood by the Act of November 29, 1802. Edward Tiffin, a medical doctor elected the first governor in 1803, was to become Surveyor General of Ohio and the Territories of Indiana, Michigan, Illinois, and Missouri in 1814.

The Enabling Act for Ohio also separated the remaining northerly part of the Northwest Territory north of the Ordinance Line and attached it to Indiana Territory which was the name given to all the remaining part of the Old Northwest Territory.

On February 3, 1809, the Illinois Territory was organized out of Indiana Territory. In 1811 the Indiana territorial legislature petitioned Congress for statehood leading to a resolution March 31, 1812, to do so when the population met the requirements.

Indiana conducted a census in 1815 which showed a population of 63,897 and presented a formal petition for admission on December 28, 1815. On January 5, 1816, the House committee reported an enabling bill for Indiana with the north boundary line to be the Ordinance Line. The Ordinance Line surveyed by Wm Harris in 1817, was a direct line running from the southerly extreme of Lake Michigan to the most northerly cape of the Miami Bay of Lake Erie. The bill was amended and finally on April 4<sup>th</sup> the north boundary was defined as "an east and west line drawn through a point ten miles north of the southern extreme of Lake Michigan."

For ten years the north boundary of Indiana received no attention. There was much activity on both sides of the line to acquire lands from the Indians. Two treaties in 1821 and 1826 (Chicago and Mississinewa) ceded the 10 mile strip between the Ordinance Line and the North boundary of Indiana.

The Act of March 2, 1827 authorized that the Surveyor General have the north boundary line of Indiana surveyed. Surveyor Tiffin contracted with Eleazer P. Kendrick as Deputy Surveyor to perform this survey.

Eleazer Kendrick is listed as a member of the 1821 staff for Edward Tiffin, Surveyor General. He remained in that position until the Fall of 1827, being forced out to make room for Tiffin's son-in-law. At that time Kendrick was given the contract to survey the Michigan-Indiana State Line, a job that took him six weeks.

The first thing that Kendrick did was to traverse northeasterly along the shore of Lake Michigan from the beginning point of the Wm. Harris survey of 1817 (the Ordinance Line). The following are comments from the beginning of Kendrick's notes:

"October 8, 1827, commenced at the southern extremity of Lake Michigan established by Wm. Harris in June 1817, which had it's bearings as follows: an Aspen 9 inches in dia., S56W, 200 lks. And an Aspen 12 inches in dia., S42E, 184 lks."

"The Lake coast so far as I traverse it is a continual chain of hills formed of beautiful white sand in most places very high and little or no vegetation. Back of these sand hills it is generally swamp and marsh, therefore there are but few places that the Lake can be approached without difficulty. No harbor or islands are to be seen."

"From commencement at low water mark ran East 2.50 chains to a Pine tree 10 inches in dia. on top of first bank. Which marked on N. side M.L. and on south side I.L. and from which a Pine 14 inches in dia. S37W, 123 lks., a Pine 15 inches in dia., S11W, 44 lks., a Cedar 8 inches in dia., S10E, 75 lks., and a Pine 15 inches in dia., S25E, 22 lks., and a Pine 20 inches in dia., N75 1/4E, 124 lks."

"On the evening of October 11<sup>th</sup>, I formed by observation the variation to be 6 degrees 10 minutes E. On the 12<sup>th</sup> I commenced at the corner before mentioned and ran East carefully observing my back sight."

East	on the 1 <sup>st</sup> mile
31.14	a W. Oak 14 in dia
52.50	a stream 12 lks wide N
58.25	a Y. Oak 5 in dia
65.84	a W. Oak 10 in dia
80.00	mile post from which a
	a W. Oak 15 in dia S8E 83 lks &
	a Y. Oak 8 in dia N20E 18lks, uneven
	from sandy land, Pine, W and Y Oak
	small and scrubby Hackberry

Kendrick goes on in a similar manner from mile post 1 to 105. I have transcribed these notes, but will not fill up space to put them here. See a copy of his plat attached. Michigan began seeking admission to statehood in 1833, always insisting on the Ordinance Line as its southern boundary. Settlement of the northern boundary of Ohio and Indiana and admission of Michigan into the Union were inseparable questions. They were combined into a compromise, enabling act on June 16, 1836. Ohio got the Toledo Strip and Indiana got the north line surveyed by Kendrick.

Immediately upon establishment of the north boundary of Indiana the surveys in Michigan and Indiana were contracted to close upon this line. The Deputy Surveyors were instructed to make note of and measure the falling distance of the range lines to the nearest Mile Post set by Kendrick on the State Line.

There are about a dozen such references in the Deputy Surveyor's field notes in the office of the St. Joseph County Surveyor. An example of the Deputy Surveyors records for St. Joseph County Indiana shows the following by William Brookfield Deputy Surveyor in the summer of 1829: "North

between Sections 10 and 11, T38N , R1E 2<sup>nd</sup> Meridian, 44.28 chains intersected State line 742 lks. East of a Hickory Station 6 inches in dia. on the 23<sup>rd</sup> mile from Lake Michigan.”

Also, “North between Sections 8 and 9, T38N, R1E, 43.94 chains Intersected Stateline on the 24<sup>th</sup> Mile and a raised mound.”

There are numerous mentions in the field notes of the Deputy Surveyors of this intersection with the State line and ties to the original mounds etc. set by Kendrick. The work of the Deputy Surveyors was done between 1827 and 1832 in St. Joseph County. The records show the Deputy Surveyors were William Brookfield, Thomas Brown, and Thomas Henderson.

There has been much discussion between the States of Indiana and Michigan in the past two years about a project to re-establish the State line. Mr. Jack N. Owens, PS from Flint, Michigan has put together a suggested approach to retracing the Indiana-Michigan Boundary. The following is taken from his report to the Michigan Society of Professional Surveyors.

“As licensed land surveyors in either Indiana or Michigan, we can retrace the original G.L.O. surveys which were terminated on the State Line with two sets of closing corners corresponding to the layout of the townships and their subdivisions into sections from the 2<sup>nd</sup> Principal Meridian for Indiana and the Michigan Meridian for Michigan. Accordingly, since these corners are better known and perpetuated or re-established from collateral evidence of the adjacent section corners, the first step should be to recover or re-establish these corners. The County Surveyors in Indiana feel they have good records on many of these

corners. I would suggest that as many as possible of any of the missing Indiana Closing Corners be repositioned so as to have as complete an alignment as possible of the State Line according to these corners. I have looked at a limited amount of the Indiana County Survey records from the 1800's. They obviously had a similar law to the one in Michigan stating that the lines would be retraced and the monument set to perpetuate and/or re-establish the corners would be described along with the measurements of the survey being recorded. They even have sworn chainmen making the measurements as do the Michigan records, also very likely being the owners for whom the survey was being made. These retracement surveys seem to be closer in time to the original surveys, 1850's-1860's and 70's. Many of the similar Michigan County Surveyor records I've seen date from the 1870's-1880's. The Indiana County Surveyors seem to have perpetuated many corners with stones, and these should be recovered because of their close proximity to the original corners (20-30 years). Stones, of course, make very durable monuments for the corner positions; they're just hard to find. Locators don't help and digging is the best method by far to find them"

"I suggest that, for each state, we as licensed land surveyors volunteer to help retrace the closing corners to the State Line from the last section corner to the north or south of the respective closing corners. This would need to include recovery of the corners per any records and measurements between the corners to verify positions or restore the positions by proportional measurements. The County Surveyors in the counties can assemble the dossier of records for the corners. As in Indiana, a search for stone monumentation should be made as it signifies a survey procedure 120 years old. Records of all measurements and monumentation can be provided to the County Surveyors for

their county records. Each county can set up a procedure to best fit their individual program records, etc. This would be step one to establish the best reasonable location for the State Line. From this point a search for evidence of the Original Mile Posts can begin.”

“Once nearly all the closing corners are re-established we can retrace the State Line. These closing corners, like the closing corners on township lines, are the junior corners. As with a township line the corners first established control both the alignment and proportional measurement along the line which is regarded as having been fixed in position by the senior survey, and the senior corners on the State Line would be the Mile Posts set by Kendrick. Undoubtedly, the two sets of corners, if each is held as the line without regard to the other set, will show two lines close together but not coinciding. Once the final line is determined, the Closing Corners can be handled by the Amended Monument procedure in the BLM Manual. By this point, if not before, they should be located by GPS procedures, probably RTK. Static GPS should be used to establish control points every three miles to facilitate the use of RTK procedures and equipment. Using both sets of Closing Corners and their respective tie distances given in the original G.L.O. notes for each township, proportionate positions for the Mile Posts can be determined. It is then very simple to use the stake out routine available with RTK GPS equipment to quickly navigate to the location determined for each Mile Post. A thorough search can be made for evidence of the Original Mile Post. This should include digging for the corner. Much of the area is sandy soil and discolored decayed stakes are seen much more readily than in clay soils. I have also looked for evidence of the bearing trees as well the few times I’ve recovered an original decayed G.L.O. corner post. In some cases the decayed roots of the trees are seen and



identifiable as such since they radiate further outward from a central point as one digs deeper. Close agreement with the original witness distance from a decayed corner post to the center point for the decayed roots of a bearing tree considerably strengthens such finds. As surveyors we are better qualified than most anyone else to make such recoveries and evaluations. Any such recovered Mile Post would not be lost and can be proudly perpetuated for the program.”

Mr. Owens goes on to recommend paper work etc., but I won't get into his procedures any further. You can see his method and it seems to make sense to me. I have contacted the County Surveyors from LaPorte, Elkhart, LaGrange, and Steuben Counties and most have agreed that the retracement is a worthwhile project. The State Highway has also agreed to participate since some of the Indiana Toll Road runs along the State Line.

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