#### TRI STATE CORNERS IN THE UNITED STATES

by

#### Jack Parsell

Third Edition, Fourth Revision, February 2002

Price \$7.50 including S & H

#### Available from:

J. C. Parsell Box 97, 1892 Main Street Beaver Falls, N Y 13305 email jparsell@northnet.org

This publication is also available for free down-load from Brian Butler's great web site "Corner Corner" at: www.bjbsoftware.com/corners

### TRI STATE CORNERS IN THE UNITED STATES

by

#### Jack Parsell

Third Edition, Second Revision, August, 2000

Price \$7.50 including S & H

#### Available from:

J. C. Parsell Box 97, 1892 Main Street Beaver Falls, N Y 13305 email jparsell@gisco.net

This publication is also available for free down-load from Brian Butler's great web site "Corner Corner" at: www.realmbuilder.com/tristate

#### **PREFACE**

Jack Parsell is the tenth person to have climbed to the highest point in each of the 50 States, and the first to have visited the lowest point in all 50 States. On about half of the highpoint climbs, and most of the lowpoint excursions, Jack was accompanied by Clark IIall of Buffalo, NY. Clark has reached the top of 49 States, lacking only Mt. McKinley in Alaska. Clark is also the second person to visit all of the State lowpoints. Jack's wife, Joyce Parsell, has accompanied him to 37 of the highpoints, and most of the low points.

When another goal was sought by these active travelers, the one selected was tri-State comers, places where three States come together at a common point. Almost everyone is familiar with Four Corners in the southwestern U.S., where Utah, Colorado, Arizona and New Mexico meet at a spot in the Navajo Indian Reservation. However, not many people realize that there are sixty-one other spots where three States join. Of this total of sixty-two, thirty-eight either have markers or should have markers on land. The rest are in the middle of rivers, streams or lakes where no identifying marker can be placed. Note that Four Corners is really four tri-State points in one location, but is counted as only one spot for our purposes. The District of Columbia at its twin junctions with Virginia and Maryland is counted as only one location. Also, one of the wet ones, Missouri - Kentucky - Tennessee actually consists of three separate locations because of an S bend in the Mississippi River which isolates a small area of Kentucky. See page ix in the addendum for a map of this interesting triple tri-point.

Our goal was to visit all of the dry land tri-points. The number has grown as research and actual visits sometimes enabled us to find markers at locations which earlier were assumed to be under water. Note that at three tri-points no markers were found but the locations could be defined. It appears that no markers have ever been erected at these spots. The current number of thirty-eight is probably final since it appears that the remaining watery tri-points could not have identifying markers (however, see Addendum page vi). On July 29, 1997 Jack and Clark reached the survey marker at tri-point #5 MT - ID - WY. For Jack this completes his visits to all 38 of the dry land tri-points. Clark still has one tri-point to reach and Joyce has missed going to five of them.

This endeavor could be extended to include tri-points along the U.S. - Canadian and U.S. - Mexican borders. There are eleven locations where two U.S. States meet a Canadian province, and seven more where one State hooks up with two provinces. Similarly, at three spots, two U.S. States join at a Mexican State, and at five other locations it is two Mexicans adjoining one U.S. State. This gives a grand total of twenty-six locations of which only ten are on dry land. While these border tri-points are of interest, we do not have any plans for trying to visit them. However, in the addendum at the end of this publication these points are identified and located, as well as the wet tri-points within the forty-eight States.

It is my hope that this guide book will encourage others to visit these geographical locations, many of which are of significant historical interest. They vary from the remoteness of #2, OR - ID - NV and the difficult access of #5, MT - ID - WY to the ease of finding others such as #20, OK - MO - AR and #21, TX - AR - LA.

An index listing each State's tri-points is on page xiii at the end of the Addendum section in the back of the book. This Revised Third Edition contains more information about the original surveys which established the tri-point locations. Also, several locations have been updated to include information and pictures of new monuments erected since the dates we originally visited the sites.

#### ACKNOWLEDGEMENTS

Much of the research on routes and access to the tri-points was greatly aided by Clark Hall's ability to borrow USGS maps from the University of Buffalo map library. Note that this was during a period when internet access to topo maps was not possible. Credit goes to Fran Combar, of Bridgewater, N. Y., for preparing the individual tri-point maps which accompany the directions and descriptive material. Also, Clark Hall provided some of the pictures of the tri-point markers, and Fran Combar made computerized black and white copies of most of the pictures for reproduction. I am indebted to Surveyor Paul Scherbel of Big Piney, WY for helpful information about the Wyoming tri-points. He also supplied some of the pictures used for the MT - ID - WY, ID - UT - WY and MT - WY - SD tri-points. Thanks to Brian Butler I have some better pictures for the IN - MI - OH and NC - GA - SC tri-points. Also, Richard Carey and Greg Weiler have each sent me updates on conditions at several tri-points they visited in 2000 and 2001.

#### **FORMAT**

A map of the United States is on page iv opposite a numbered list of the tri-points on page v. Following that, each tri-point is presented on two facing pages, with page numbers being the same as the tri-point numbers shown on pages iv and v. For each location the left page is a map of the area in the vicinity of the tri-point. The right page contains descriptive information and one or two pictures of the tri-State marker.

The numbering system arbitrarily starts at the western-most tri-point OR - CA - NV, and proceeds easterly, ending with CT - MA - RI. The designations depend on the configuration of the boundaries at each tri-point, and this determines the sequence of the State names used. Any

of the boundaries at each tri-point, and this determines the sequence of the State names used. Any tri-point in the \_\_\_\_\_\_\_ configuration has the sequence of names 
$$\frac{1}{3}$$
. For example, tri-point #2 is \_\_\_\_\_\_\_. The same reasoning applies to the other three possible configurations as follows:  $\frac{1}{2}$   $\frac{1}{3}$  or  $\frac{1}{2}$   $\frac{2}{3}$ . Some tri-points do not meet at right angles but for our purposes they are considered as right angles, and the closest configuration is used.

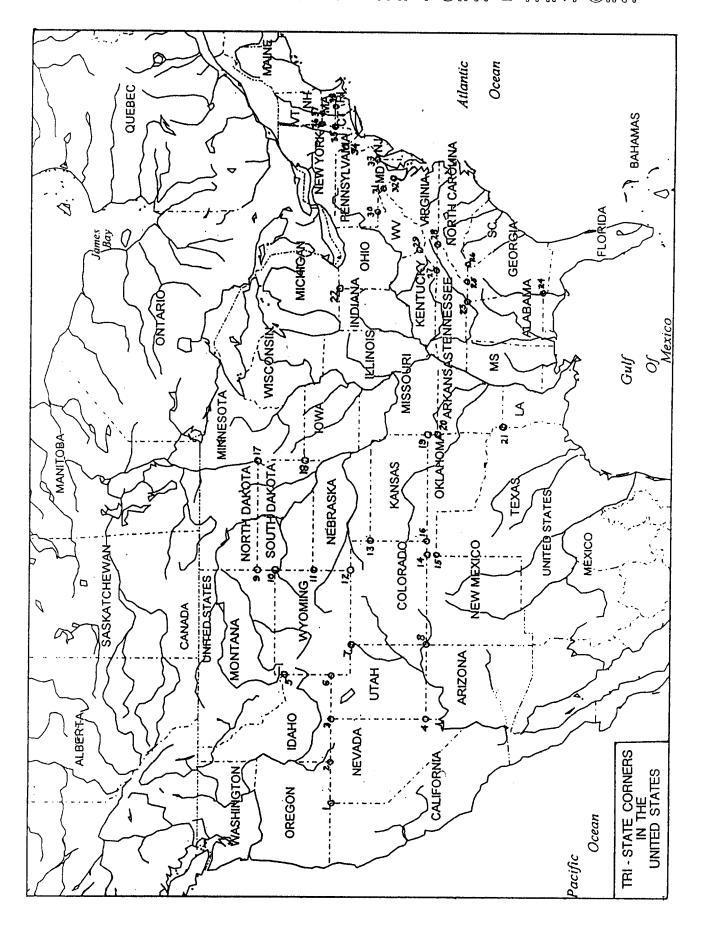
follows: 
$$\frac{1}{2 \mid 3}$$
,  $\frac{1}{2} \mid 3$  or  $1 \mid \frac{2}{3}$ . Some tri-points do not meet at right angles

but for our purposes they are considered as right angles, and the closest configuration is used.

Scale is shown in a box at the bottom of each map. The tri-point is marked by a box containing the coordinates given in degrees and minutes to the third decimal as determined from the DeLorme computer map program. Maps of tri-points which are near towns or major highways are enlarged to show more details near the tri-point, whereas remote tri-points are scaled to show distant towns and access routes.

The access to a tri-State point could be from any one of the three States involved. In some cases there is only one practical approach, but for many of the tri-points it is possible to reach them by two or more routes. The routes described represent the results of considerable map research to determine the most practical way to reach each of the tri-points using the itinerary that we were following at that particular time.

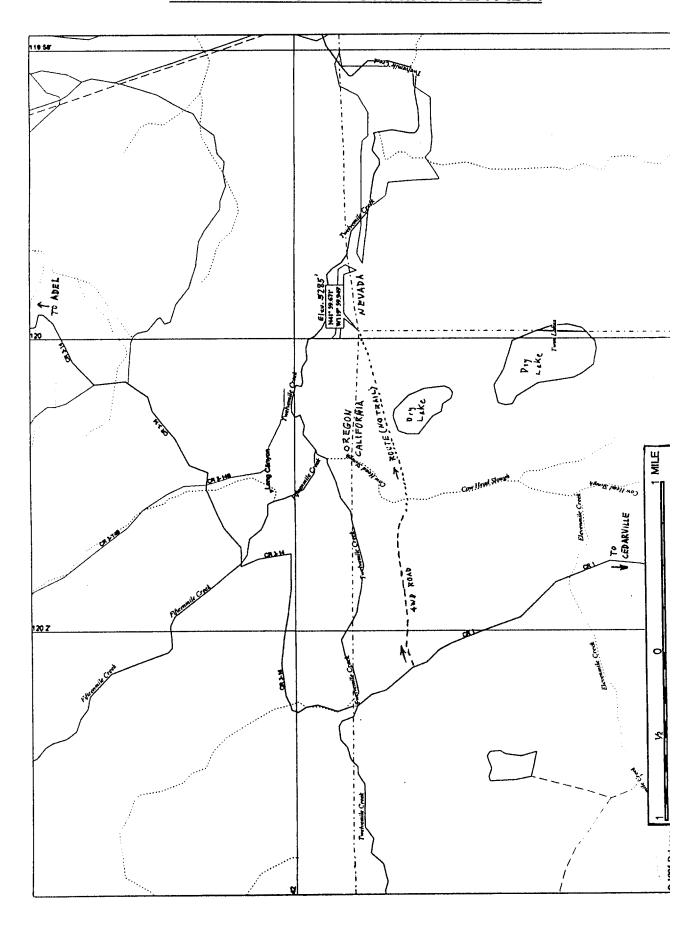
The date on which we visited each tri-point is given on its descriptive page. This is important only as a reference point in time. As time goes by, when new markers are installed or access routes change, we will attempt to keep this book and the website as up to date as possible. Such changes should be considered in advance of any attempt to reach a tri-point. For several of the tri-points, it is advisable to get permission from the land owner before proceeding, and information in this regard is given for some of the locations.



TRI - STATE CORNERS IN THE UNITED STATES

TRI-POINT NUMBER	STATES	TRI-POINT NUMBER	STATES
1	OR - CA - NV	21	TX - AR - LA
2	OR - ID - NV	22	IN - MI - OH
3	ID - NV - UT	23	TN - AL - GA
4	NV - UT - AZ	24	AL - FL - GA
5	MT - ID - WY	25	TN - NC - GA
6	ID - UT - WY	26	NC - GA - SC
7	WY - UT - CO	27	KY - VA - TN
8	UT - CO - AZ - NM	28	TN - VA - NC
9	MT - ND - SD	29	KY - VA - WV
10	MT - WY - SD	30	PA - WV - MD
11	WY - SD - NE	31	MD - WV - VA
12	WY - NE - CO	32	VA - DC - MD
13	CO - NE - KS	33	PA - MD - DE
14	CO - NM - OK	34	NY - PA - NJ
15	NM - OK - TX	35	MA - NY - CT
16	CO - KS - OK	36	VT - NY - MA
17	ND - SD - MN	37	VT - NH - MA
18	SD - MN - IA	38	CT - MA - RI
19	KS - OK - MO		
20	OK - MO - AR		

# OREGON - CALIFORNIA - NEVADA



# OR CA NV

#### OREGON - CALIFORNIA - NEVADA

DATE VISITED: July 4, 1991

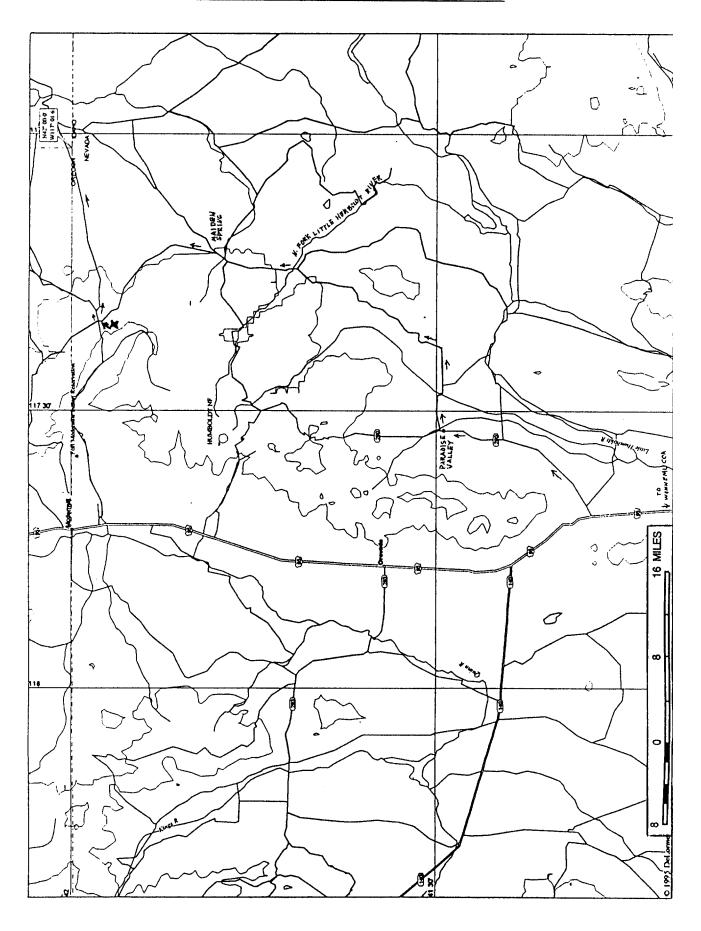
ACCESS ROUTE: From Adel, OR, go S 17 miles to the CA border. Continue about ½ mile S to a faint 4WD road heading E. With a high clearance vehicle you can drive in the first mile. Otherwise, leave car at the main road and hike to the end of the 4WD road, then continue down into Cow Head Slough and up the other side of the ravine. Then, heading slightly N of E, cross flat, open terrain, passing a small dry lake bed on your right. At about 1¼ miles from the end of the 4WD road, you will reach the CA - NV fence line. Note, there is no fence on the OR - CA line. After reaching the CA - NV fence line, follow it N to the Von Schmidt marker, which is a large stone caim dated 1872. This is on the Nevada side of the fence, with witness marker signs on several trees around the caim. A survey to determine the NE corner of CA was made by D. G. Major in 1868. In 1872-73 W. A. VonSchmidt surveyed the CA - NV boundary and found Major's corner about 3¼ miles too far W. VonSchmidt set the corner at the point he determined to be N 42°, W 120°. On the CA side of the fence, 117 ft. SW of the VonSchmidt post is a Geodetic Survey marker at N 41° 59.689', W 119°59.927'.

Mark your route on the way in, or take a compass heading, or GPS bearing. Otherwise, it is difficult to find the 4WD road on your return. If approaching from the South, from Cedarville, CA, go North 43 miles to the above mentioned 4WD path.



The 1872 Von Schmidt marker, at the then calculated Longitude 120°, Latitude 42°. The white between the rocks is mortar holding the cairn together. A cow's skull is hanging on the post set in the cairn.

# OREGON - IDAHO - NEVADA



# OR ID

#### **OREGON - IDAHO - NEVADA**

DATE VISITED: October 26, 1995

ACCESS ROUTE: This is the most remote of all the tri-points. Access is from Winnemucca, NV via either Paradise Valley or McDermott. We went in from Paradise Valley and returned via McDermott Indian Reservation. A high clearance vehicle is required, and for a few sections of the road a 4WD is advisable. Since it is over 200 miles round trip from Winnemucca, a full day should be planned for the trip.

From Winnemucca, drive 40 miles N to Paradise Valley. Continue E and N on gravel and dirt roads 49 miles to a signed junction (see X on map). Turn E and proceed on a poor road about 16 miles to the Nevada - Oregon fence line. Then turn right, and follow a very rough jeep track along the fence on the Oregon side, for about another mile to the tri-state monument which is on the Oregon side of the fence line.

The McDermott route leaves US 95 approximately 70 miles N of Winnemucca and 3.8 miles S of the Oregon line. Heading E you will cross the Indian Reservation and follow up the Quinn River valley. At about 23 miles from US 95 you will come to the signed junction mentioned above. From that point follow the directions already given.

Since this is a very sparsely traveled area it is advisable to be prepared for camping out in the event of vehicle problems. The best location for renting a 4WD pickup is the GMC dealer, Bosch Motors, 1205 E. Winnemucca Blvd., Winnemucca, NV, 89445.

#### SIGN BELOW MONUMENT

This monument marks the point established by Daniel G. Majors, U. S. Astronomer and Surveyor in December 1867, on the 42<sup>nd</sup> parallel north.

As determined from numerous observations of the stars for latitude this point is 124 miles, 17 chains and 2 links distance south of the initial point which was determined at the confluence of the Owyhee River with the Snake River.

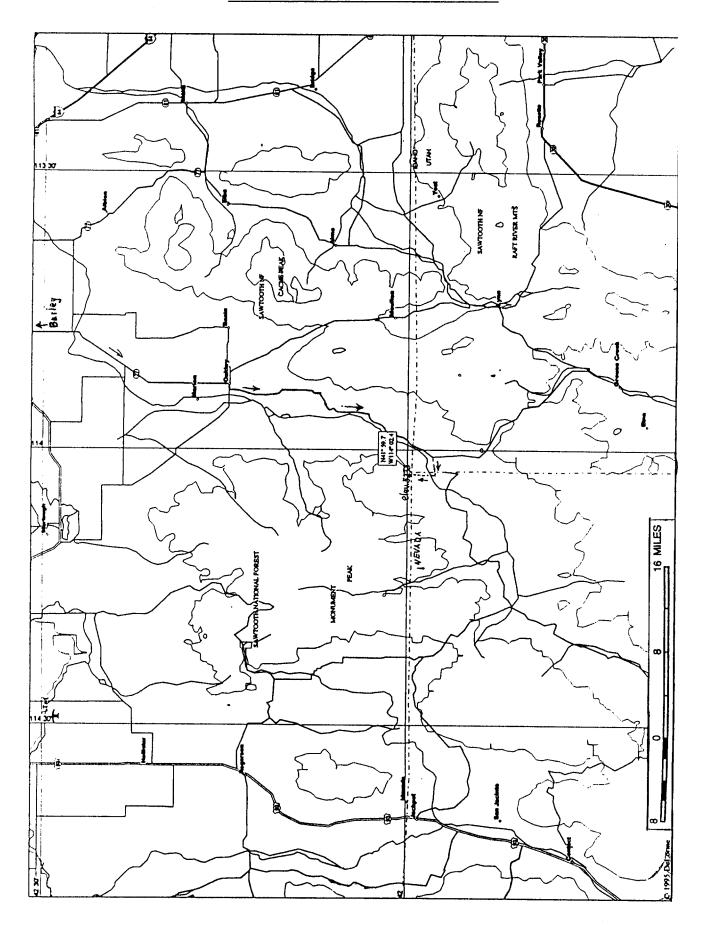
This position identifies the southwest corner of Idaho, the southeast corner of Oregon and the north boundary of Nevada.

Note the N is for Nevada. The other two faces of the triangular marker are marked O and I.

Fran, Jack and Clark at the tri-point.



# <u>IDAHO - NEVADA - UTAH</u>



# ID NV UT

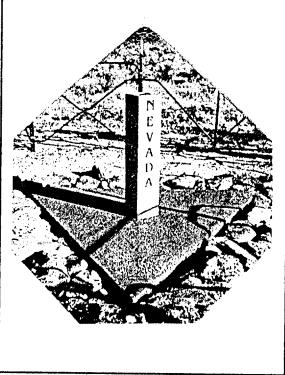
#### IDAHO - NEVADA - UTAH

DATE VISITED: June 27, 1991

ACCESS ROUTE: From Burley, Idaho take route 27 for 21 miles S to Oakley. Turn R(West) onto Main St., then L (South) on College St. which at 1.5 mi. becomes Goose Creek Rd. Bear left at the turnoff to Goose Creek Reservoir, then up to the top of a hill and on down to Goose Creek. Follow the creek to the UT line at about 21 mi. S of Oakland at a cattle guard (no sign). Stop about 1 mi. farther at the Fred Bedkey ranch and get permission tto go on the property. From the UT line it is 3.1 mi. to where a gate blocks a road at a bend in the main road. This farm road, which bears off to the right, is part of the old Emigrant/California Trail. Park and hike 0.7 mi. to the NV border. Then hike 2.1 miles N in Nevada to the tri-point along the NV-UT fence line, wading Goose Creek, shortly after starting out, or in high water, use the bridge about ½ mi. W, then return to the NV-UT line. Check with local residents for other possible routes

The state of Utah had a new granite monument made for this location in 1998. After much research the BLM cadastral survey office found the exact corner was beneath the old 1873 marker at the intersection of the state line fences. Evidence of burnt wood chips placed below the old marker by Mr. Majors were discovered. The new monument was installed and a dedication ceremony was held on October 2, 1999.

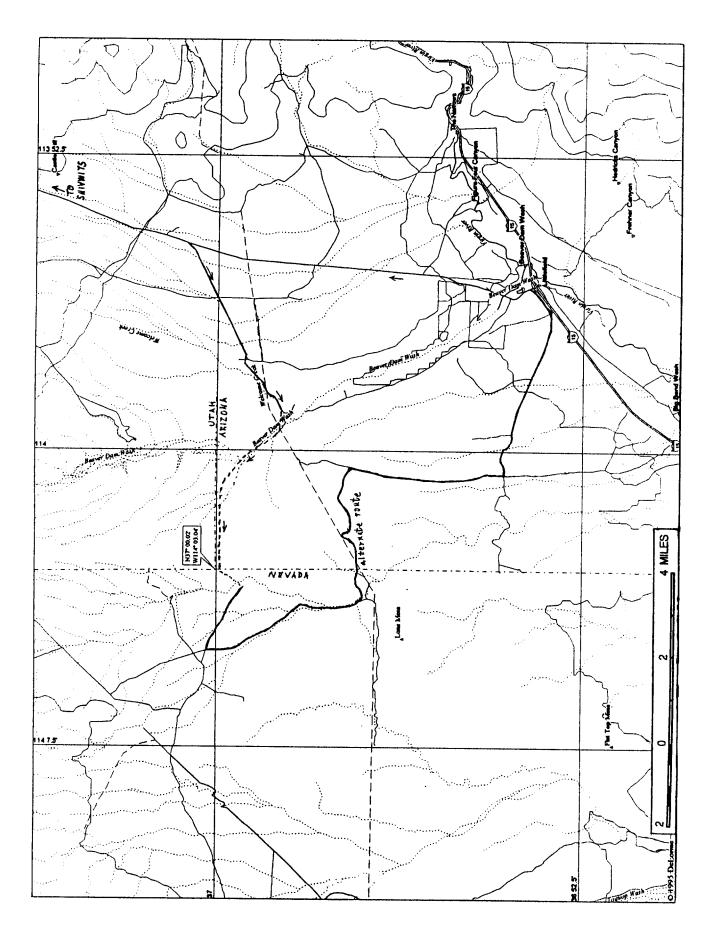




Jack and Clark shake hands after finding the old tri-point monument at the fence junction on June 27, 1991.

The new monument on October 2, 1999.

# NEVADA - UTAH - ARIZONA



# NV UT AZ

#### **NEVADA - UTAH - ARIZONA**

DATE VISITED: October 28, 1995

ACCESS ROUTE: From the Littlefield, AZ exit from Interstate 15 go N through the village of Beaver Dam on the route to Shivwits, UT. About 6½ miles N of Beaver Dam pass under a high-voltage power line. From the power line it is ¾ mile to the AZ - UT line, and another ¾ mile from the state line to an extreme L (SW) turnoff on a dirt road that goes back into AZ and down into Beaver Dam Wash. Park car just before reaching the wash. Wash may be completely dry, and except after heavy rains, there is usually little water in it.

Hike N and a little W in the wash a little more than 1½ miles to the UT fence line. Follow the fence line W about 2 to 3 miles depending on where you hit the fence on the first leg of your hike. A rough trail on the AZ side of the fence goes up and down the banks of several dry washes. Initial Mesa will be on your right, 200 ft. higher than the tri-point. Initial Monument set in 1901 is a red sandstone marker at the fence line where you enter NV. An earlier marker set in 1870 was 1.4 mi. too far N. A USGS bronze survey disc is about 750 ft. SE of Initial Monument.

For an alternate route, which allows driving a 4WD vehicle very close to the monument, contact Roger Bundy, 259 Prickley Pear Drive, Washington, UT 84780. This 20 mile drive leaves the road to Beaver Dam just N of Interstate 15 and proceeds W and N in Arizona and Nevada, finally cutting back SE to the tri-point.

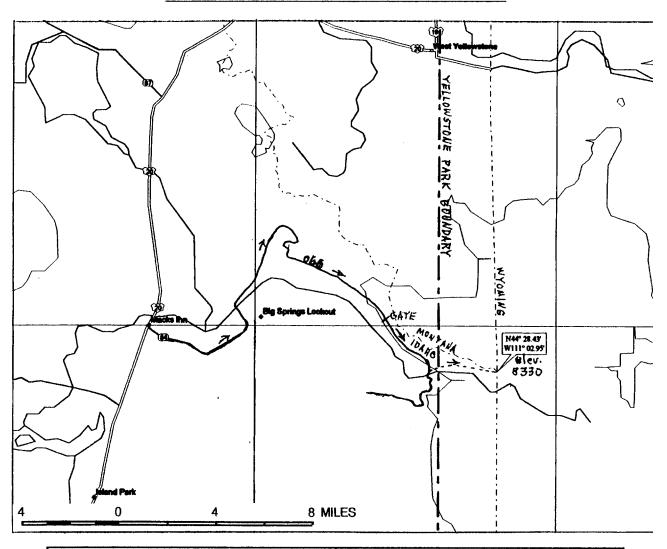


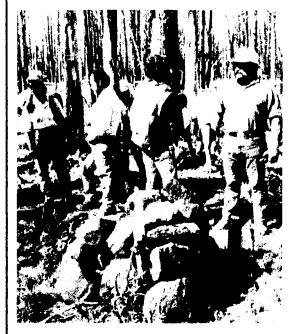


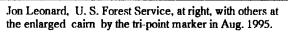
Fran at the red sandstone monument.

Clark, Jack and Fran at the USGS marker.

# MONTANA - IDAHO - WYOMING









Jack Parsell at the tri-point on July 29, 1997.

# MT WY

#### **MONTANA - IDAHO - WYOMING**

DATE VISITED: July 29, 1997

ACCESS ROUTE: This is a difficult location to reach. Park and National Forest Service Rangers and particularly Professional Surveyor Paul Scherbel and Forest Service Surveyor Jon Leonard, provided helpful information on the terrain and accessibility of this tri-point. Mr. Scherbel spearheaded a successful effort to accurately locate and restore all eight Wyoming corners. This includes six tri-State corners plus the NW and SW corners which are not tri-points. Scherbel and Leonard were at the MT-ID-WY tripoint on August 20, 1995 with a group of about 30 people. They had a difficult time finding the corner marker, but after locating it, they erected a rock cairn beside the marker post and put yellow metal Bearing Tree signs on a circle of trees around the corner (see p 39). They also set up a 12 channel Trimble Pro XL GPS receiver and collected data which was differentially corrected using input from base stations in Butte, MT and Jackson, WY, to obtain geographic coordinates estimated to be accurate to one meter. As reported by Jerry Messick, these coordinates, based on NAD83 Map Datum, are N 44° 28' 32.27", W 111° 03' 08.62". Elevation at the tri-point is approximately 8330 feet.

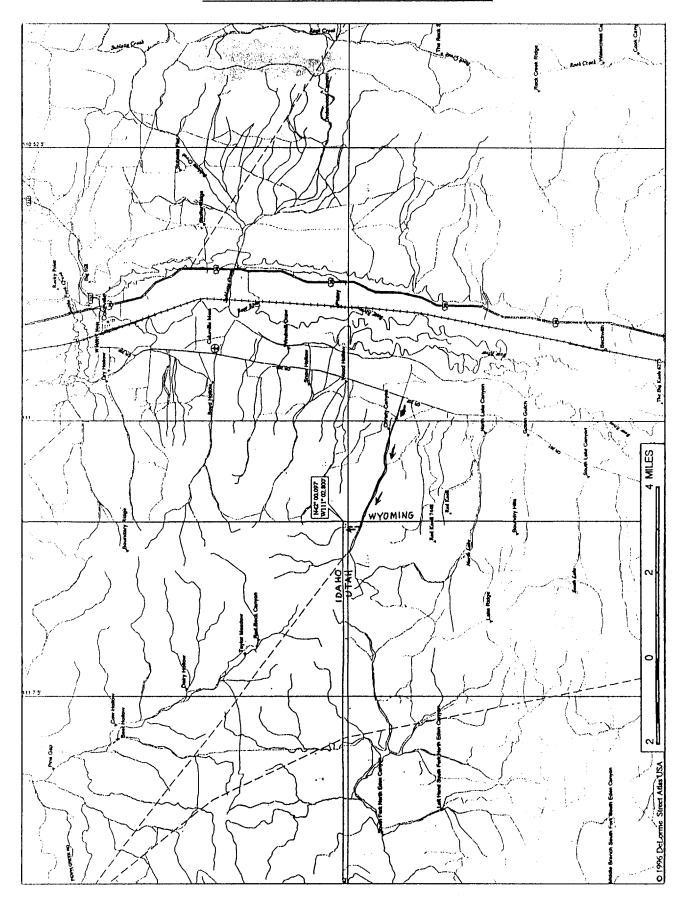
The 1874 survey of the ID - WY meridian boundary set a marker post at the assumed crest of the Continental Divide. A 1906 survey found the 1874 mark 6 miles too far north and replaced it with the marker at the present location.

This area was in the North Fork fire area, one of many parts of Yellowstone Park and the surrounding National Forest which burned in the devastating fires during the summer of 1988. The North Fork fire was very intense and destroyed the soil, so there are large areas with little regeneration yet, except for scattered patches of wild flowers, grasses along the stream, a few new trees and occasional trees which survived the fires. Travel is very difficult because of the large number of downed, partially burned trees criss-crossed on the ground.

From West Yellowstone, go W and S on US20 to Island Park Ranger Station. Check with the rangers for changes in the route and location of gates on the access road. Because of many road closures, the only possible route is via Forest Road 066. From Macks Inn on US 20, 6 miles N of the Ranger Station, go E 4.8 miles to Big Springs. At 0.9 mile beyond the Big Springs bridge turn R on FR 066. Proceed on 066 for 12¾ miles to a locked gate. Park and continue on foot for 3.8 miles to where the road crosses Thirsty Creek on a sharp bend in the road. At this point the coordinates are N 44° 28.3′, W 111° 06.0′ at elevation about 7860 feet. Note that closure of another gate 2.5 miles farther NW may be implemented later in 1997, thus involving a hike of 6.3 miles to the Thirsty Creek crossing. Bicycles are allowed but no motorized vehicles.

The route Clark Hall and I took from 066 was up Thirsty Creek on its N side to the fourth drainage coming in on that side. Normally Thirsty is dry by mid summer, but in 1997 it had a lot of water in it. However, all the side drainages were dry. Hike up the fourth drainage to the plateau above. Then proceed at approx. 80° True to the marker. While this may be done by compass, it is much easier with a GPS navigation unit. Just be sure you know how to use your GPS and have extra batteries so your unit won't go dead before you get back out to the road. Distance from 066 to the tri-point according to the GPS (straight line) is 2.37 miles, but actual hiking distance is probably closer to 4 miles. No permit is needed for day trips but is required for overnight camping in the National Park. Take plenty of water since above Thirsty Creek there is little water.

## **IDAHO - UTAH - WYOMING**



# ID WY

#### **IDAHO - UTAH - WYOMING**

DATE VISITED: June 26, 1991 and July 28, 1997

ACCESS ROUTE: From Kemmerer, WY take US 30 West for 24 miles, then N 20 miles to Cokeville. At Cokeville, go W over the RR, and over Bear River. Continue S on county road #231 7.4 miles to Christy Canyon road on the right. This is marked by an arrow shaped sign inscribed, MONUMENT 4 MILES. Go up this road to a gate at the WY - UT line at 3.2 miles (be sure to close the gate after passing). This is a rough road, barely passable for 2WD vehicle in good weather. Do not attempt it in bad weather. At 0.2 mile into UT another arrow directs you to the right, up a side canyon, for 1/3 mile, then the final arrow points to the right, up the steep hillside 0.1 mile to the monument.

When we were there in 1991 the marker had been knocked down by cattle. Paul Scherbel, Land Surveyor from Big Piney, WY, had found this same situation in 1990 and was instrumental in leading a field investigation project in July, 1991. New monuments were placed in July, 1992, with a sturdy fence around them, and a dedication cermony was held on August 28, 1992. The plaque mounted beside the new monument reads as follows:

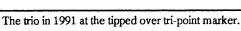
#### IDAHO, UTAH AND WYOMING INTERSECT POINT

THIS STONE MARKS THE INTERSECT POINT ESTABLISHED JUNE 15, 1874, BY A. V. RICHARDS, U.S. ASTRONOMER AND SURVEYOR, ON THE 34TH MERIDIAN WEST FROM THE CENTER OF THE OLD NAVAL OBSERVATORY DOME IN WASHINGTON, D.C. WITH THE STATE BOUNDARY OF IDAHO AND UTAH < THE 42ND PARALLEL NORTH >, SURVEYED BY DANIEL G. MAJOR, U.S. ASTROMOMER, ON AUGUST 29, 1871.

THE INITIAL POINT MONUMENT OF D. G. MAJOR FOR THE 42ND PARALLEL NORTH IS LOCATED 7/10 OF A MILE EAST.

CONTRIBUTIONS FOR THIS REMONUMENTATION WERE OBTAINED FROM THE FEDERAL GOVERNMENT, STATES, COUNTIES AND THE PRIVATE SECTOR.

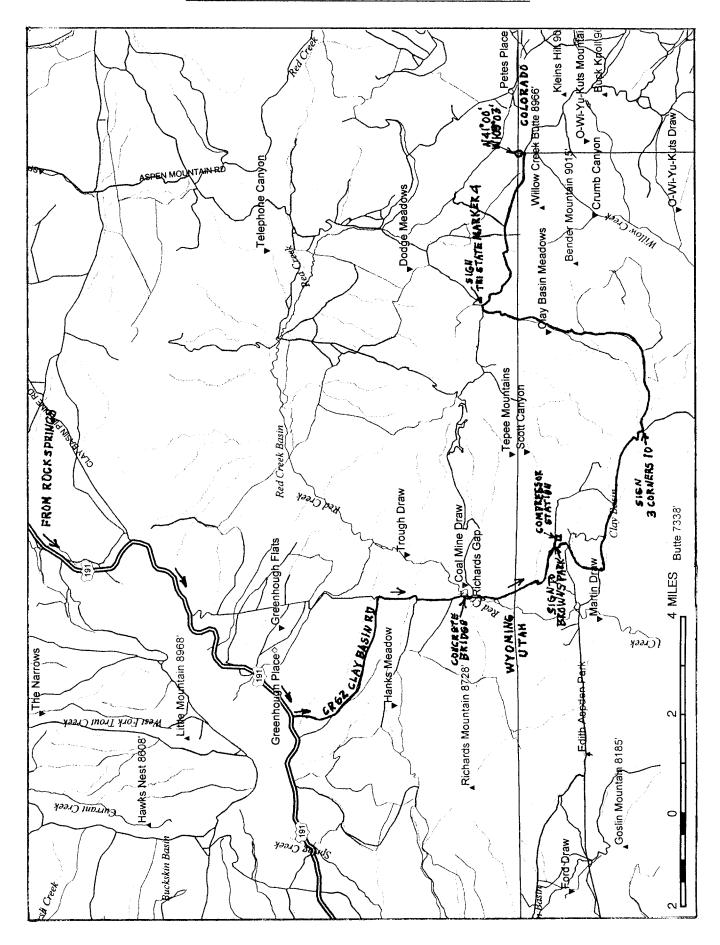






Workers at the new tri-point monument in 1992.

## WYOMING - UTAH - COLORADO



# WY UT CO

### WYOMING - UTAH - COLORADO

DATE VISITED: June 26, 1991

ACCESS ROUTE: From I80 in Rock Springs, WY go S on US 191 about 41 miles to CR62. Turn L on CR62, an excellent gravel road and proceed, crossing a concrete bridge at 5.6 mi. and the WY-UT line at 6.8 mi. At 7.5 mi. turn R and follow signs to Browns Park. At 12.8 mi.turn L at sign reading: "3 CORNERS 10 MI." After 5.6 mi. on this fair to good road, bear R at a backed-up sign at top of a hill that reads:"TRI STATE MARKER 4." Continue on this fair to good road to the marker which at 8402 ft. makes this the highest tri-point. This is a very scenic area so go early enough in the day to allow for lingering at the tri-point and along the access roads to enjoy the scenery. These roads are passable for 2WD drive vehicles, but if it is extremely wet or wintry, a 4WD is advisable, especially for the last 10 miles. There is a large billboard-like sign at the tri-point with the following text:

# PUBLIC LAND SURVEY MONUMENT Tri State Corner of the States of Wyoming, Utah and Colorado

(Lat. 41° 00' 42.616" N Long. 109° 02' 42.158" Elevation 8402')

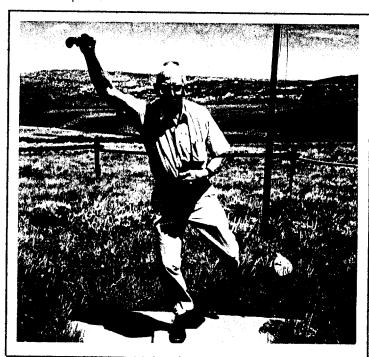
This point was monumented by surveyor Rolin J. Reeves on July 19, 1879, while completing the survey of the west boundary of the state of Colorado and the east boundary of Utah Territory. The boundary line separating Wyoming Territory from Colorado and Utah Territories was surveyed by US surveyor A. V. Richards in 1873..

The original monument was found to be disturbed in 1931, and was remarked by US Cadastral

Engineer E. V. Kimmel with a brass tablet seated in a concrete monument.

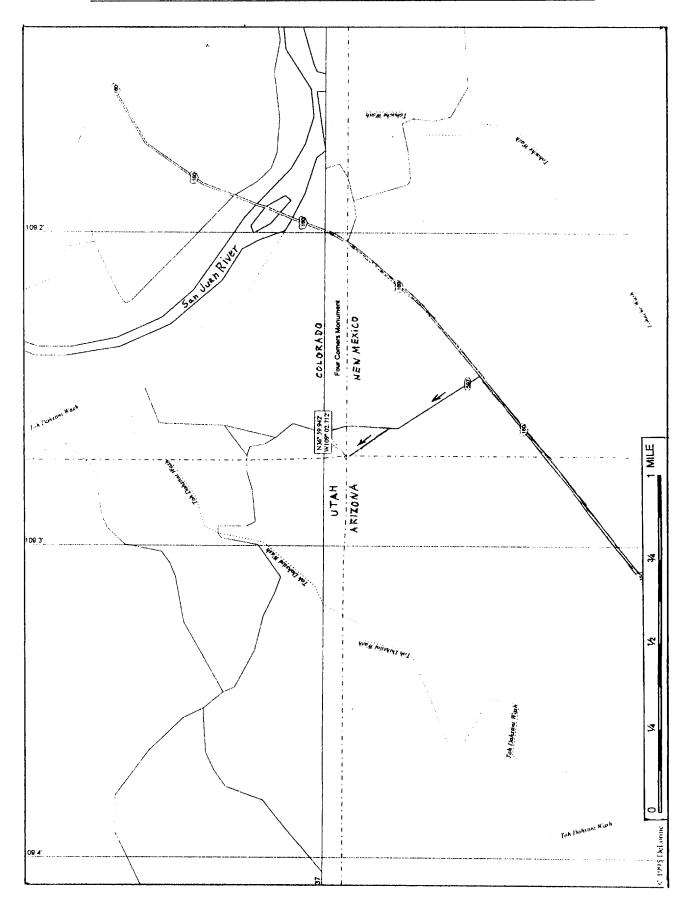
This monument is one of the corners of the National Rectangular Cadastral Survey System inaugurated in 1785, that has aided the development and orderly settlement of the public lands of the western states. From these monuments, State and Local Governments and private citizens are provided with easily identifiable boundaries. Such monuments serve as a base for the work of private surveyors in making accurate land sub-divisions and descriptions.

Erected by the Kiwanis clubs of Rock Springs, WY, and Craig, CO and the Lions club of Daggett County, UT in cooperation with the Bureau of Land Management, and dedicated on August 21, 1966. Imbedded in the concrete base of this monument are some of of the original stones which marked the location in 1879.



Jack Parsell on one foot in three states.

## <u>UTAH - COLORADO - ARIZONA - NEW MEXICO</u>



 UT
 CO
 UT
 UT
 CO

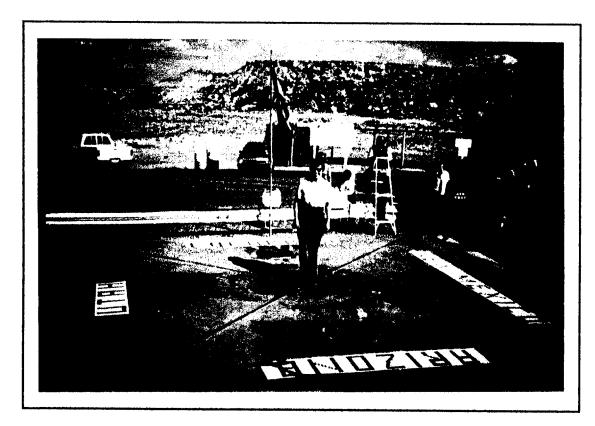
 NM
 AZ
 NM
 AZ
 NM
 AZ

#### **UTAH - COLORADO - ARIZONA - NEW MEXICO**

**DATE VISITED: October 1988** 

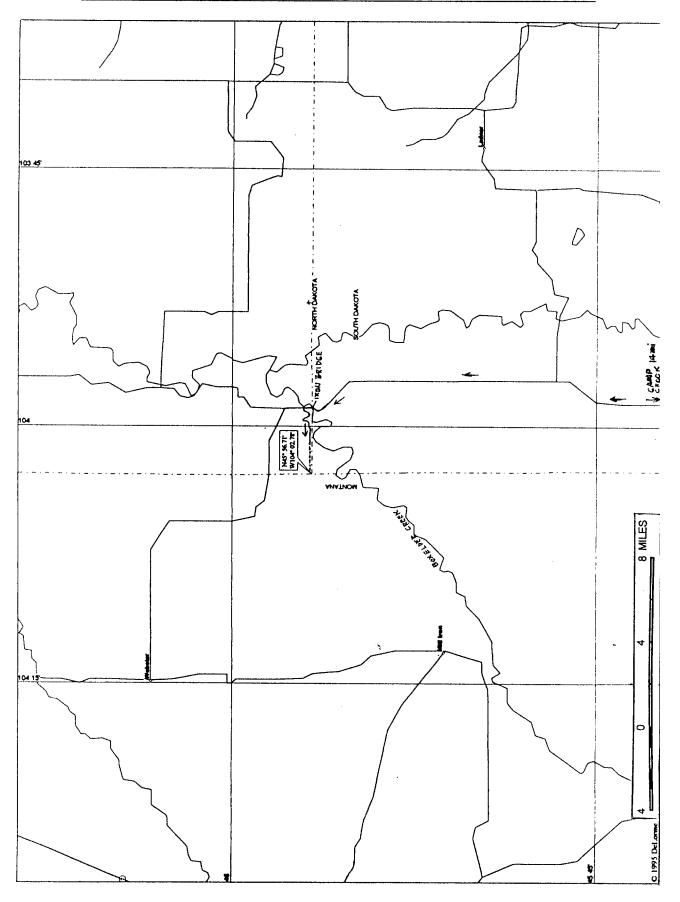
ACCESS ROUTE: This is Four Corners, the only spot where four States come together. As shown above, it can be considered as four tri-State corners at one location. However, it is the same spot in each case, so it is simpler to count it only once.

Four Corners is located on the Navajo Indian Reservation less than ½ mile off US 160. A fee is charged to enter the property. The Four Corners point was established by C. Robbins as the closure of the CO - NM line in 1875. A new stone was set in 1899. In 1931 Everett H. Kimmell, General Land Office Surveyor, replaced the stone with the concrete monument now there. In 1962 a 28 foot square ornamental concrete slab was placed around the monument.



Joyce Parsell standing on the Four Corners junction.

# MONTANA - NORTH DAKOTA - SOUTH DAKOTA



### **MONTANA - NORTH DAKOTA - SOUTH DAKOTA**

DATE VISITED: June 25, 1991

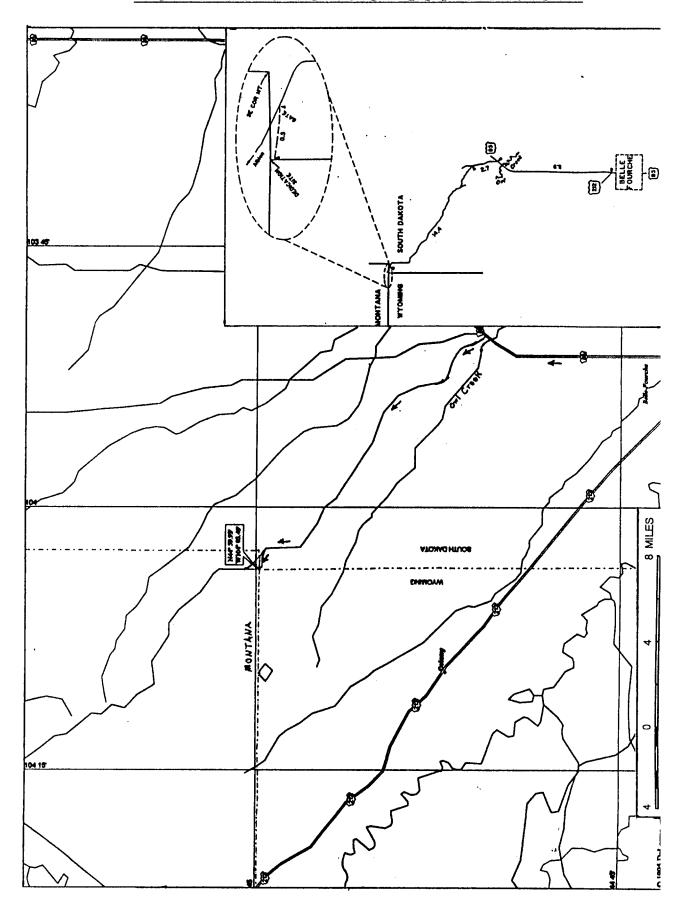
ACCESS ROUTE: From Buffalo, SD go W 24 miles to Camp Crook, SD. Then go 28 miles N, on a good dirt road, to the ND line, where a double span iron bridge crosses Boxelder Creek. Continue ½ mile beyond the bridge, up on the bench above the creek, where a faint farm road goes left into the pasture. Follow the farm road, along the edge of the bench, and along the edge of fields, heading generally W, for about 2½ miles. The last ½ mile is along the ND - SD fence, in ND, to boundary marker #359. Park and hike due W, past marker #360, to the red granite tri-State marker post dated 1892 about 1.6 miles from marker #359.

The boundary line between ND and SD which is the seventh standard parallel north, of the public land survey, was surveyed in 1891-92 from the Bois de Sioux River, (see also page 17B), to the MT line. Snyder Hill, in Montana, is a prominent landmark WSW about ¼ mile and 150 feet higher than the tri-point.



Joyce Parsell, Clark Hall and Jack Parsell at the tri-point marker. Snyder Hill is in the background.

# MONTANA - WYOMING - SOUTH DAKOTA



# MT WY SD

#### MONTANA - WYOMING - SOUTH DAKOTA

DATE VISITED: June 24, 1991

ACCESS ROUTE: From Belle Fourche, SD at the intersection of US 212 and US 85, go N on US 85, 11.9 miles to a turn-off L, which is around the first bend in US 85, and across Owl Creek. Then go NW about 15 miles to where the road turns due N. Continue 1 3/4 miles N and then about 0.4 mile NW to a gate on the left, just before reaching the MT - SD line. The tri-State monument is 0.5 mile W of this gate. See inset map on page 10 A for details in this area.

Note that the NE corner of WY and the SE corner of MT do not coincide. The 27th meridian survey from the south brought the line up 23.3 seconds too far west. The survey south from the Canadian border broght the line 41.6 seconds too far east at the same latitude. The combined error is 70.68 chains or about 0.88 mile. The original 1877 marker was replaced in 1904 by a stone post. When we were there the post was found to be tipped over. This was subsequently repaired, and a joint dedication ceremony was held on July 16, 1994 for the tri-point and also for the monument at the Southeast corner of Montana.

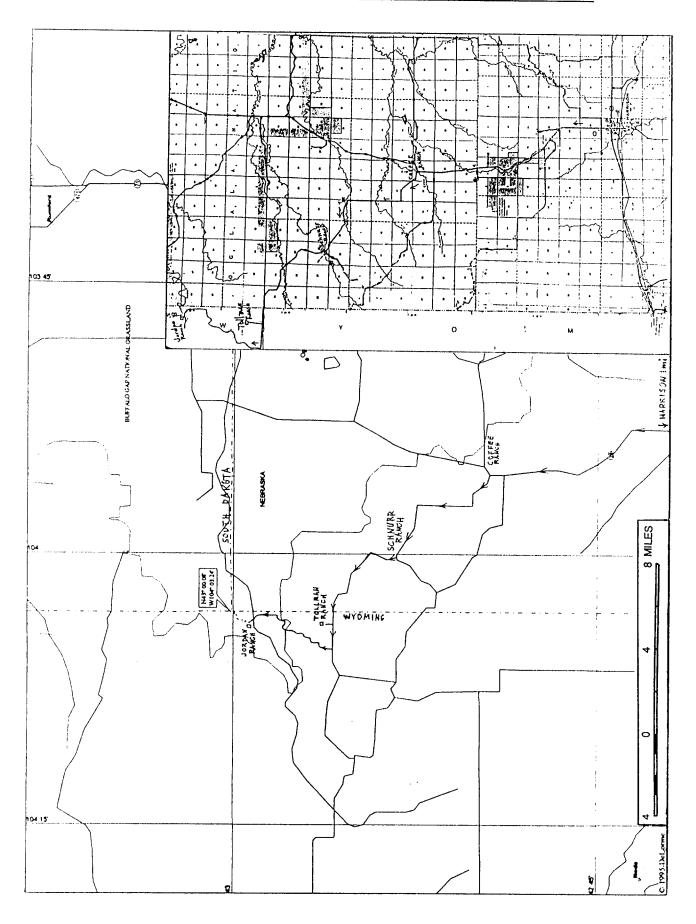


1994 Marker
The dedication ceremony highlights included: history of the Dakota - Wyoming boundary survey; history of the Dakota - Montana boundary survey; signing of the field notes and plat; history of settlement in the area; and the importance of boundary identification and land tenure system.



1991 photo of Clark Hall with Joyce and Jack Parsell at the tipped over tri-point marker.

# WYOMING - SOUTH DAKOTA - NEBRASKA





# WYOMING - SOUTH DAKOTA - NEBRASKA

DATE VISITED: June 24, 1991

ACCESS ROUTE: From Harrison, Nebraska, go N on route 29 about 10 miles to the Coffee ranch. Turn L under the ranch sign, cross a creek, and continue W and N past the Schnurr ranch. At about 12 miles beyond the Coffee ranch, the road crosses into WY. The first turn off right in WY is to the Tollman ranch. Take the second turn off to the right about 11/2 miles W of the WY - NE line. Follow this road N and E with several bends in the road. The road finally turns due N very close to the WY - NE line. Continue about 1 mile, then the road bends left, crosses Indian Creek and goes up to the Jordan ranch.

Visitors should stop at the ranch house and get permission and directions for proceeding the remaining mile across the fields to the tri-state point. The low white limestone Chaffee monument is next to the taller quartzite Jenkins monument. A bronze plaque (see text below) is mounted near the monuments.

### THE COMMON CORNER TO NEBRASKA AND SOUTH DAKOTA ON WYOMING LINE

The Survey for the boundary between Nebraska and Wyoming territory began August 17th 1869 at the intersection of the 41st Parallel of Latitude and the 27th degree of Longitude W of Washington, DC. Oliver N. Chaffee, Astronomer and Surveyor and his crew surveyed North on the 27th Meridian 138 miles, 22 chains and 67 links, and set a white limestone monument here on September 6th 1869.

In 1874, beginning at the Keya Paha River and ending at the Chaffee monument, Chauncey Wiltse surveyed the 43rd Parallel of Latitude between Nebraska and Dakota Territory.

In 1893, Joseph Jenkins retraced the Wiltse Survey and set a quartzite monument here and at ½ mile intervals from the Chaffee monument to the Missouri River.

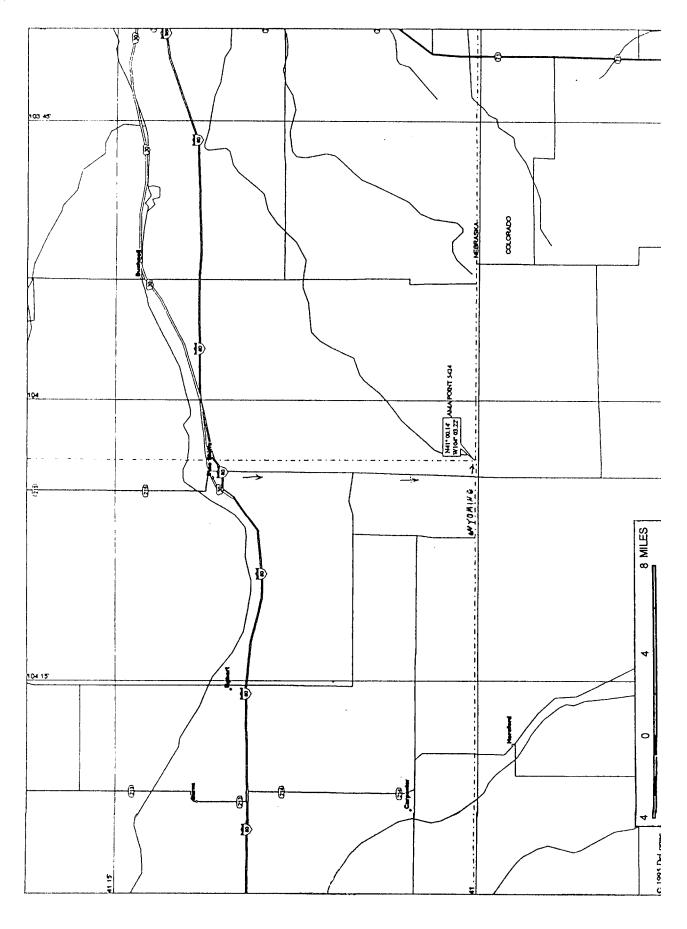
In 1908, Edward F. Stahle retraced the Wyoming-Nebraska boundary and set granite posts at mile intervals and brass caps at closing corners.

In recognition of those early Surveyors, the skills they demonstrated and the hardships they endured, we dedicate this Plaque on September 6, 1989.

The geographic position of the Chaffee monument is based on NAD1983 and determined by the Global Positioning System. Latitude N 43° 00' 02.251", Longitude W104° 03' 11.315", Elevation 1198.4 Meters (3931.70 feet).

Clark Hall, Jack and Joyce Parsell with Dan Jordan, land owner, at the tri-point. As with many of the tri-points, the area is fenced to protect the markers from cattle.

## WYOMING - NEBRASKA - COLORADO





#### WYOMING - NEBRASKA - COLORADO

DATE VISITED: July 9, 1991

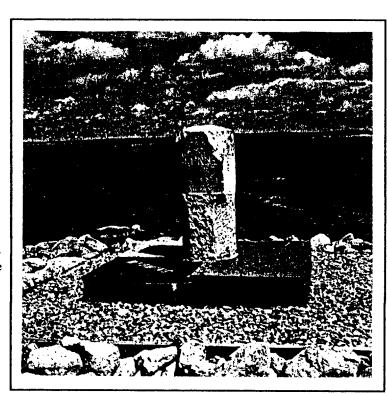
ACCESS ROUTE: Leave Interstate 80 at exit #401 at Pine Bluffs, WY. Go N to 8th Street, then E on 8th Street for 0.6 mile to Beech Street. Go S on Beech 12 miles to the CO line. Turn E and drive ¾ mile on a pasture road along the WY-CO border past a wind mill to the tri-State marker. The Nebraska high point, Panorama Point, at elevation 5424 feet, is 1.3 miles ENE of the tri-point.

A ceremony was held on August 16, 1997 to dedicate the restored corner marker. The information given concerning the monument is as follows:

# CORNER COMMON TO NEBRASKA AND WYOMING ON THE COLORADO STATE BOUNDARY

Oliver N. Chaffee, U.S. Astronomer and Surveyor, established this corner monument August 17, 1869 at the intersection of the forty-first parrallel of north latitude with the twenty-seventh degree of west longitude (west of Washington, D.C.). Mr. Chaffee continued the survey northerly to a termination point on the forty-third parallel, marking the first boundary survey of Wyoming Territory.

Art Henrickson and Howard Kieler rehabilitated the monument in 1981. A brass disk was drilled into the top center of this corner stone in 1990. Federal, State and Local organizations coordinated additional preservation in 1997.



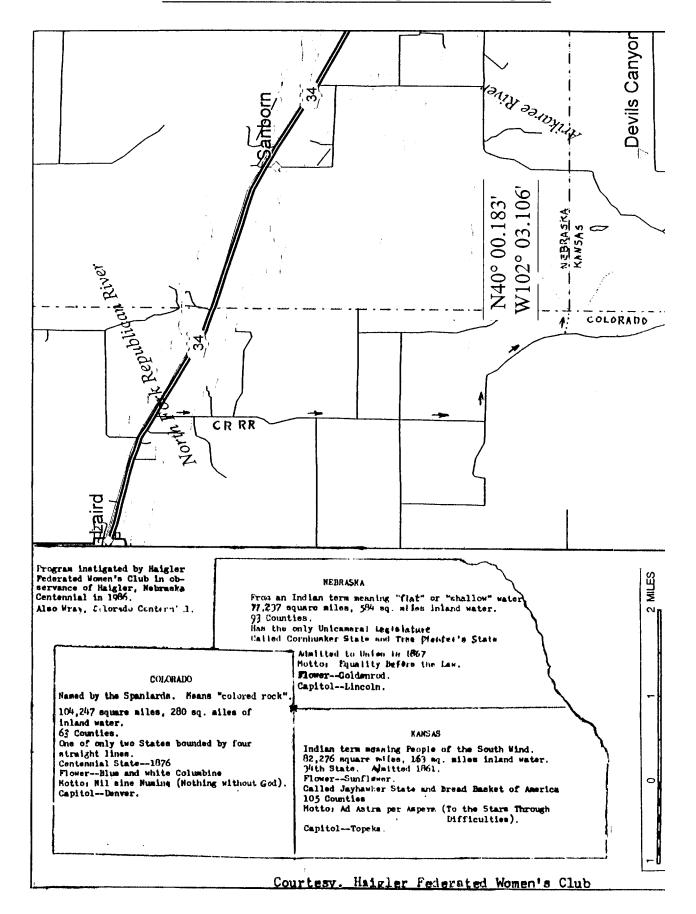
1869 stone monument now protected by a three colored stone base.

COLORADO - right - red slate

NEBRASKA - upper left - white sandstone

WYOMING - lower left - black slate

#### **COLORADO - NEBRASKA - KANSAS**





#### COLORADO - NEBRASKA - KANSAS

DATE VISITED: June 23, 1991

ACCESS ROUTE: Our 1991 route to this point is difficult to follow. Here is an easier route sent to me by Timothy Sheehan of Farmington, CT. From US 34 about 1.5 miles W of the CO - NE line, turn S on "County Road RR" which is 100 yards E of mile marker #254 on US 34. Go S about 4 miles, then E and SE about 1 3/4 miles to a left turn into a farm lane which goes in to the tri-point. There is a sign where the farm lane turns off from the road.

The mail box at the site contained information leaflets like the one shown as an inset on map 13A. The bronze plaque displays the following information:

#### THE CORNER COMMON TO NEBRASKA AND KANSAS ON THE COLORADO LINE

The survey of the base line of the 6th principal meridian, which also marks the boundary between Nebraska and Kansas, was extended from the Alma, Nebraska area to the summit of the Rocky Mountains by Jarret Todd and James Withrow in 1859.

In 1869 Oliver N. Caffee [sic] surveyed the western boundary of Nebraska, and failing to locate the baseline, set the limestone monument 621.7 feet South of this position.

In 1872 John J. Majors surveyed the boundary between Kansas and Colorado, commencing at Chaffee's monument.

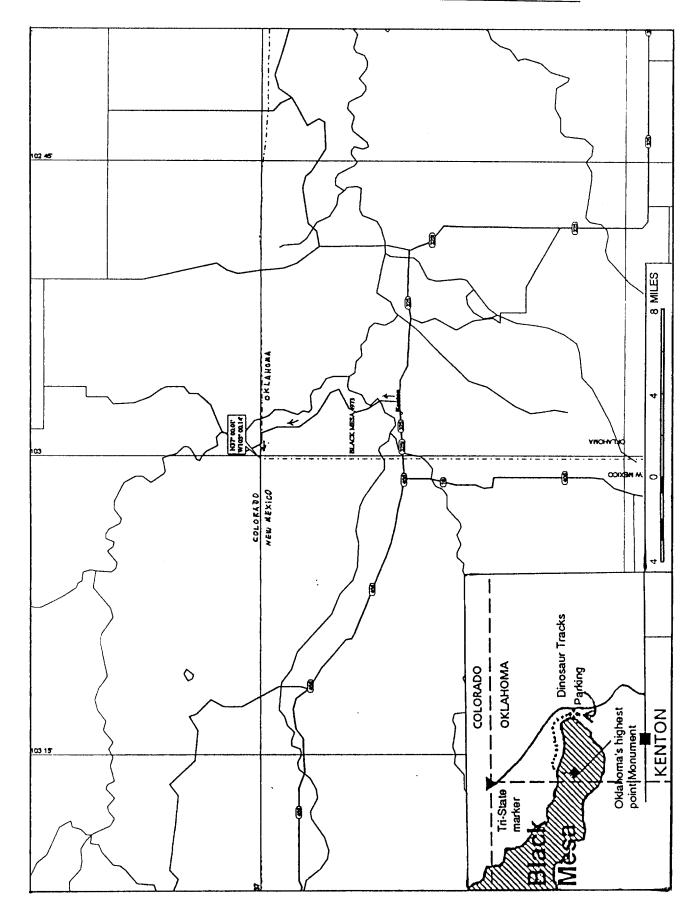
On June 15, 1873 Edwin Burwell intersected the baseline with Chaffee's state line and established the corner of Nebraska and Kansas on the Colorado line.

On October 17, 1990 the Bureau of Land Management re-monumented this tri-state corner. In recognition of those early Surveyors, the skills they demonstrated and the hardships they endured, we dedicate this Plaque on June 1, 1991.



Joyce Parsell and Clark Hall at the Tri-Point.

# COLORADO - NEW MEXICO - OKLAHOMA



# CO NM OK

## COLORADO - NEW MEXICO - OKLAHOMA

DATE VISITED: November 20, 1990

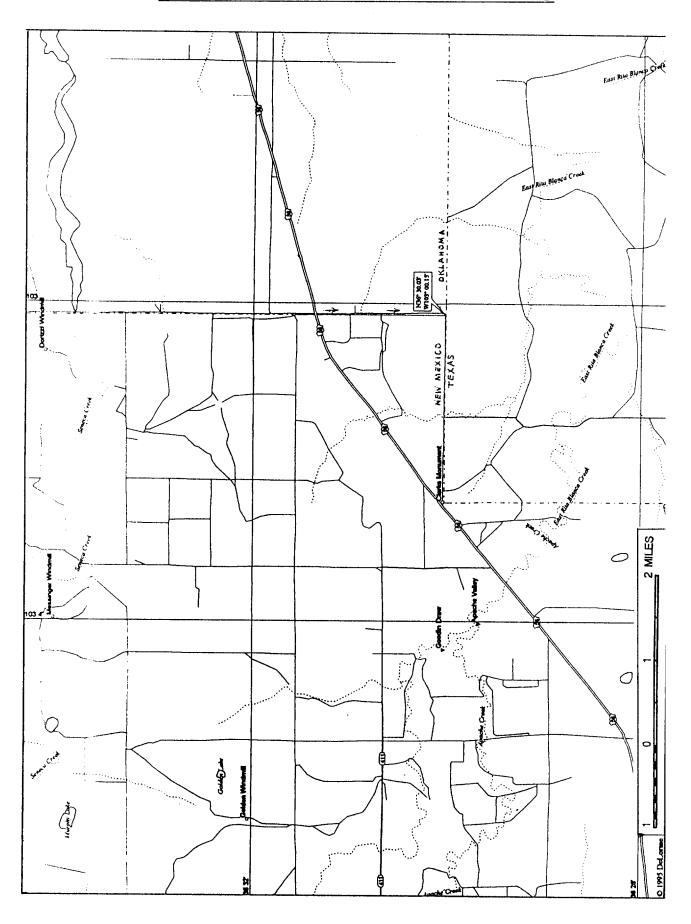
ACCESS ROUTE: From the Kenton, OK post office, go E on County Road 325 for 0.6 mile. Turn Left (N) on a county road, crossing the Cimarron River, and then following a tributary stream to the CO line, about 8.7 miles from route 325. At the Baca County, Colorado line turn L and proceed about 1 mile on a good dirt road which follows close to the OK - CO line and leads to the tri-State marker. A much older survey post is about 200 yards N over a knoll from the new marker. As with many of the tri-points, this one has been resurveyed and relocated several times. The present marker was installed in 1928 and confirmed in 1968, but recent satellite mapping shows it to be off by 4 feet.

The route to this tri-point from Kenton, OK, passes the Nature Conservancy parking lot, which is the access point for climbing to the Oklahoma high point, 4973 feet elevation on top of Black Mesa.



Clark, Joyce and Jack at the tri point monument.

# NEW MEXICO - OKLAHOMA - TEXAS



# NM OK

### **NEW MEXICO - OKLAHOMA - TEXAS**

DATE VISITED: November 20, 1990

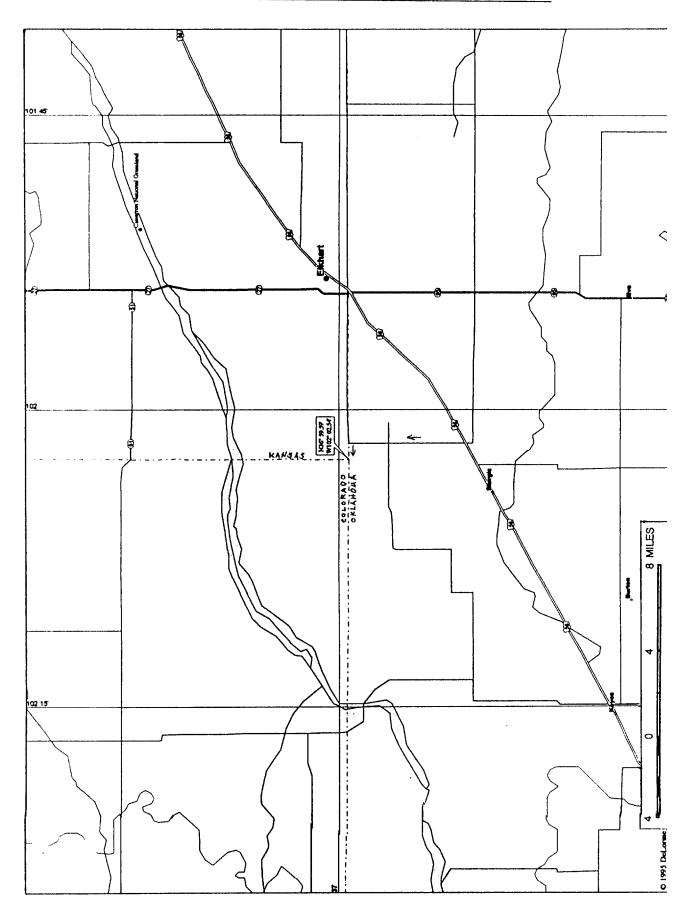
ACCESS ROUTE: From US 56 at the NM - OK line go S on a boundary-line road 1.5 miles to a tee in the road at the TX border. The tri-State marker is in the field just S of the tee in the road.

Note the jog in the TX - NM boundary at the NW corner of TX. John H. Clark surveyed the W boundary of Texas on the 103rd meridian up to N 36° 30' latitude in 1859. Later it was found that Clark's corner was a little over 2 miles W of the true 103rd meridian, which became the W boudary of the OK Public Land Strip. In 1911 a joint congressional resolution declared the line as marked by Clark to be the true boundary between Texas and New Mexico. The original Clark's Monument at the edge of route US 56 is no longer there due to a road widening project.



Jack, Joyce and Clark at an easy one to find.

## COLORADO - KANSAS - OKLAHOMA



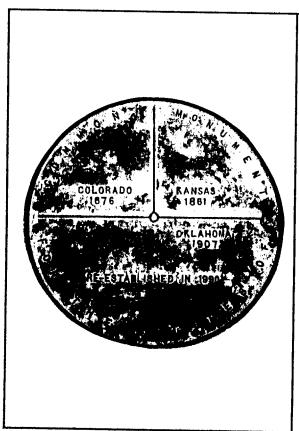
# CO KS

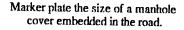
### COLORADO - KANSAS - OKLAHOMA

DATE VISITED: November 20, 1990

ACCESS ROUTE: From the junction of routes 95 and 56 near Elkhart, KS go N on 95 for 0.1 mile, then turn L (west) onto signed Road A. Procede W on this road which becomes a good dirt road and after 7.7 miles reach the tri-point. The marker is a large, round metal plate set in the middle of the road in 1990. There is also a windmill marker in a small fenced-in park on the N side of the road.

On Jan. 29, 1861, when Kansas was admitted to the Union, the 25th meridian W of Washington, DC was established as the W boundary of KS. Colorado was organized as a territory on Feb. 28, 1861 with the same boundaries as at present, being made up from parts of the Territories of UT, NM, KS and NE. Earlier in 1858 a concerted attempt had been made to organize the "State of Jefferson" in this area, but by popular vote in 1859 it was decided to organize a Territorial government instead. The S boundary on the 37th parallel had been established by the Macomb survey of 1858-59. The CO - OK portion of the 37th parallel was resurveyed by John G. Major in 1873-74. Dates on the tri-point marker are the years each of the states was admitted to the union.

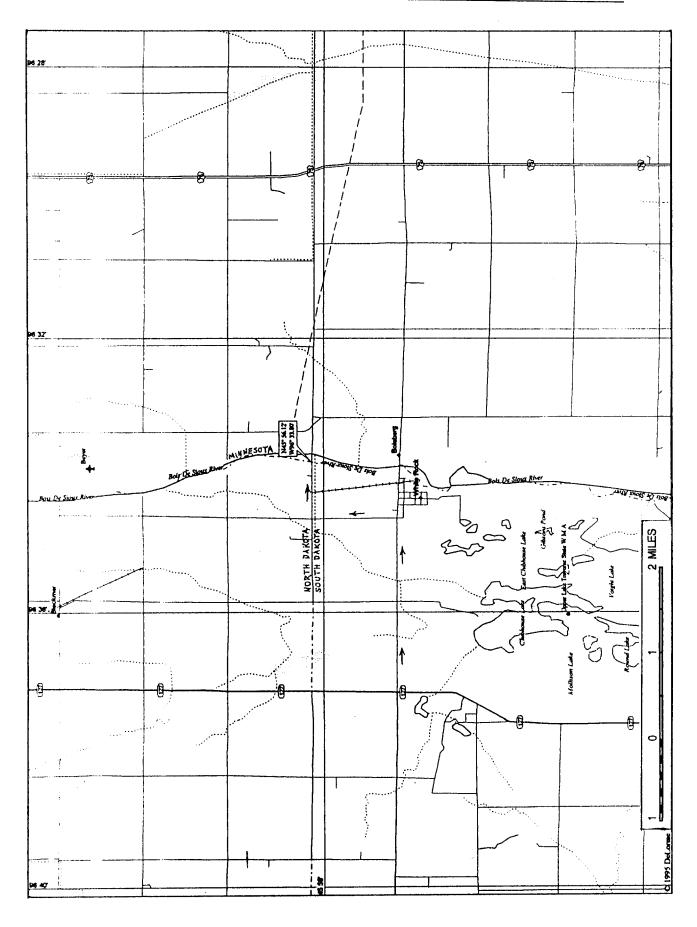






The three tri-pointers standing on the tri-point plate in the road, with the windmill tower marker in the background.

# NORTH DAKOTA - SOUTH DAKOTA - MINNESOTA



ND MN

#### NORTH DAKOTA - SOUTH DAKOTA - MINNESOTA

DATE VISITED: August 25, 1993

ACCESS ROUTE: The original survey of the ND - SD boundary line was on the 7th standard parallel north, and was surveyed in 1891-92. The first marker was placed 9 chains W of the Bois de Sioux River bed. The U.S. Corp of Engineers changed the channel of the river leaving MN land on the W side of the river at the ND - SD line, so the tri-point is not in the middle of the river.

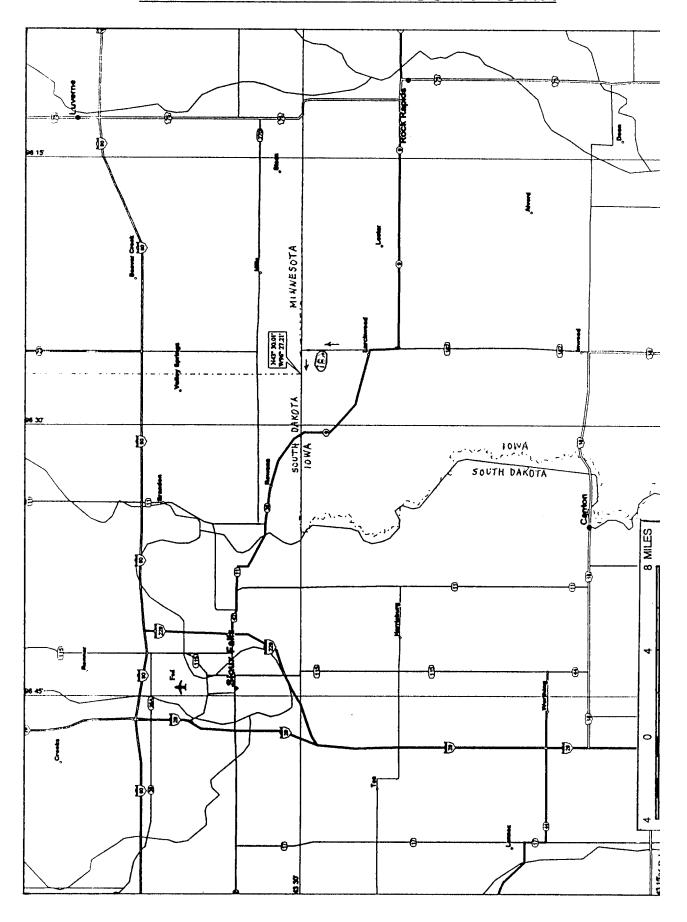
From Interstate 29 in SD, use exit 246 and go E and then N on route 127 to White Rock Road, which is 1 mile S of the ND - SD line. Lakeview Cemetery is at the NE corner of this intersection. Go E for 2 miles on the White Rock Road, then 1 mile N to the ND state line. Turn E and go a little over ½ mile on a farm lane to the ND - SD stone marker #1. There is a drainage ditch along the right (S) side of this road. The tri-point should be between the ND - SD marker and the river but no monument or marker could be found in that area. The Boise de Sioux River is a little over 0.1 mile E of the ND - SD marker.

If approaching from the N, take route 127 S from Wahpeton, ND to the White Rock Road corner described above. Note that the hamlet of White Rock, although it shows on most maps, is a ghost town with a population of 2 in 1993.



Joyce Parsell at the 1891 ND-SD marker with Clark Hall in the background. According to the topo map, the tri-point should be between Joyce and Clark. The diked Bois de Sioux River is in the background. Water behind Joyce is a drainage ditch running to the river.

### SOUTH DAKOTA - MINNESOTA - IOWA



# SD MN

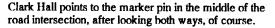
#### **SOUTH DAKOTA - MINNESOTA - IOWA**

DATE VISITED: July 10, 1991

ACCESS ROUTE: From Interstate 29 in SD, take US 18 East about 20 miles to Inwood, IA Then go N out of Inwood to Larchwood on route 182, which joins route 9 before reaching Larchwood. Coming into Larchwood, leave route 9 and continue straight N about 3 miles on rte K 16 to the MN line. Turn left (W) on a boundary-line road and proceed about ¾ mile to the tri-point in the middle of the road at a tee intersection. There is a brass pin in the middle of the road, and a plaque on a monument in SD beside the road.

The inscription on the plaque reads, "TRI-STATE MARKER 1859 SET AT THE JUNCTION OF THE STATES OF MINNESOTA, IOWA AND DAKOTA TERRITORY BY FEDERAL LAND OFFICE SURVEY OF MINNESOTA'S WESTERN BOUNDARY". The plaque goes on to report that after being damaged by vandalism in the early 1900's, it was restored in 1938. Then, after damage by vehicular traffic in 1979, it was restored at its present site in 1981.

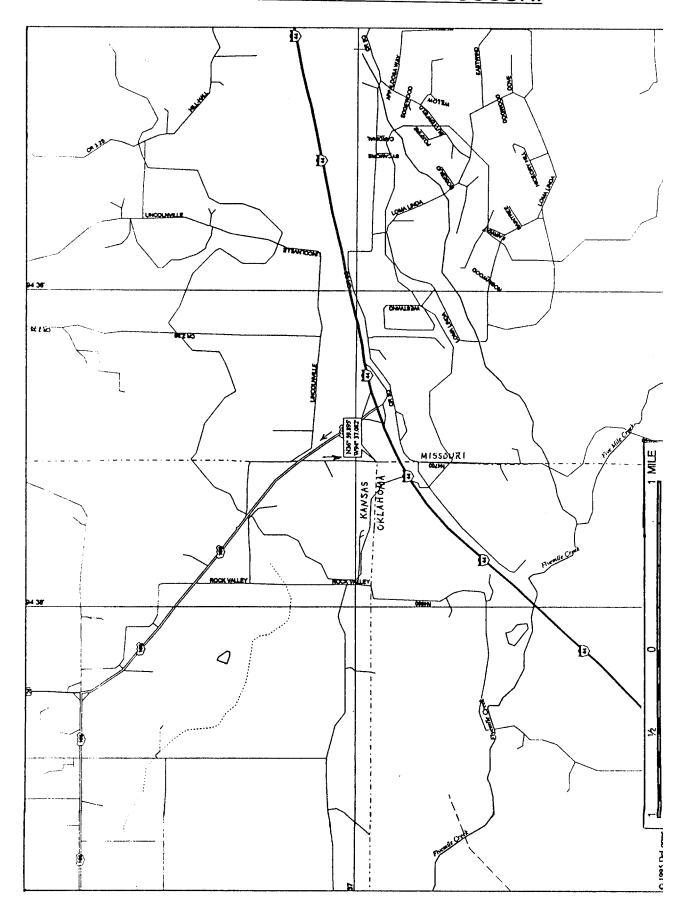






The tri-point monument and plaque.

## KANSAS - OKLAHOMA - MISSOURI



KS MO

#### KANSAS - OKLAHOMA - MISSOURI

DATE VISITED: June 21, 1991

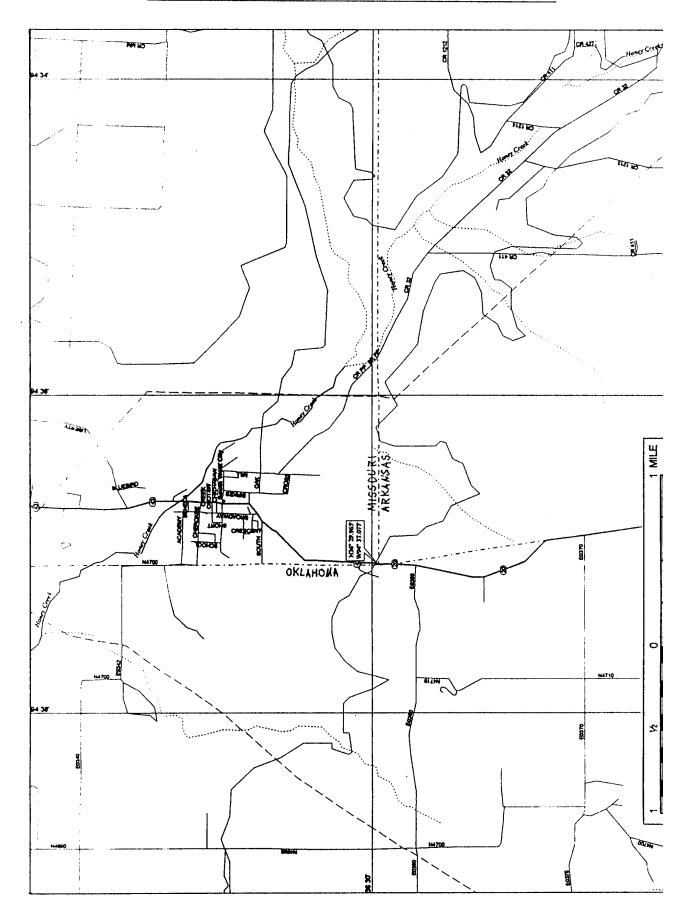
ACCESS ROUTE: From Interstate 44 in Missouri, get off at the exit for US 166. Go NW on US 166 a little over ½ mile. Just before entering Kansas, turn sharp L and go S on SE 118th St., a dead-end road, on the KS - MO line, for about 0.3 mile to a large stone cairn on the KS - OK side of the road. A brass pin in the center of the broken up pavement, near the cairn is presumed to be the actual tri-point. However, the most recent report (June 2000) from this site is that the pin is missing, leaving only a large pothole at the spot where the pin was presumed to be.

The name of the Territory of Louisiana was changed in 1812 to Territory of Missouri. At that time the Territory included all of the original Louisiana Purchase except the State of Louisiana. Missouri became a State on Aug 10, 1821. The western boundary of MO was established to be the meridian that passes through the middle of the mouth of the Kansas River where it enters the Missouri River. This was surveyed in 1823, resurveyed and marked in 1844-45. The KS - OK boundary was surveyed in 1857 on the 37th parallel.



Clark, Joyce and Jack by the big stone caim near the tri point.

## <u>OKLAHOMA - MISSOURI - ARKANSAS</u>



# OK MO

#### OKLAHOMA - MISSOURI - ARKANSAS

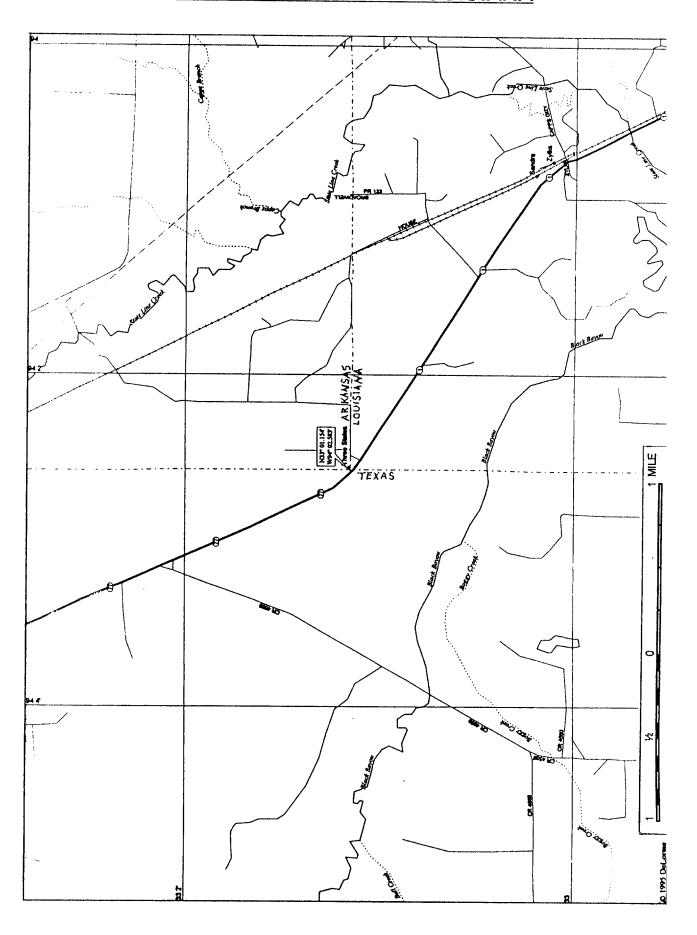
DATE VISITED: June 21, 1991

ACCESS ROUTE: From South West City, MO, go S about 1 mile on route 43 which becomes OK route 20. The monument is on the W side of the highway just off the shoulder. When the west boundary of Missouri was surveyed in 1823, a large stone post was set to mark the SW corner of the State at a point on latitude N 36° 30'. In 1906 this position was determined to be lat. N 36° 29.267', long W 94°37.048'. The present monument was erected by the Ozark Culture Club in 1915 with part of the old marker post embedded in it. The whole assembly was installed on a new base in 1955. It is not known whether the present monument assembly was moved to its present location to allow for widening the highway.



Joyce and Clark at the monument.

## TEXAS - ARKANSAS - LOUISIANA



# TX = AR LA

#### TEXAS - ARKANSAS - LOUISIANA

DATE VISITED: June 21 1991

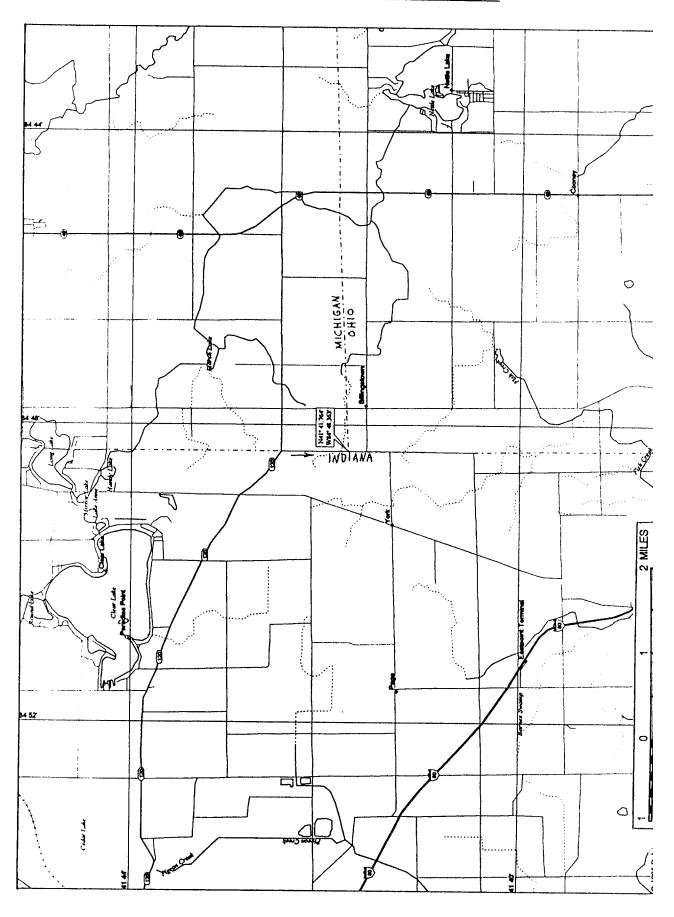
ACCESS ROUTE: From Rodessa, LA, go NW on LA route 1 for 4½ miles to the Three States monument on the E side of the road. This road becomes Texas route 77. The USGS bronze disc is mounted on the top of the 1895 monument.

The N boundary of the Territory of Orleans (now the State of Louisiana) was surveyed first in 1806 along the 33rd parallel. Portions of this line were resurveyed at various times with the most westerly six miles being resurveyed in 1895. At that time a stone post was placed on the Texas line to mark the NW corner of Louisiana.



Clark Hall points to the USGS bronze marker disc set in the top of the tri-State monument.

## INDIANA - MICHIGAN - OHIO



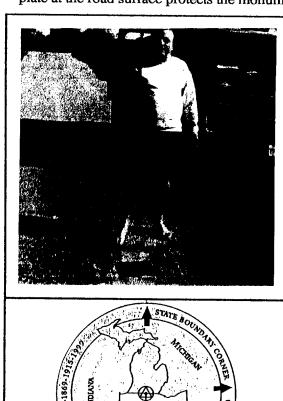
# IN MI OH

#### **INDIANA - MICHIGAN - OHIO**

DATE VISITED: July 12, 1991

ACCESS ROUTE: From Fremont, IN, go E on route 120 to the MI line, then S on the line road for 0.8 mile. A stone monument on a knoll on the E (Michigan) side of the road is inscribed as follows: 130 FEET SOUTH IS THE POINT WHERE INDIANA, MICHIGAN AND OHIO MEET. THIS MARKER WAS ERECTED BY THE HILLSDALE COUNTY HISTORICAL SOCIETY – 1977 –.

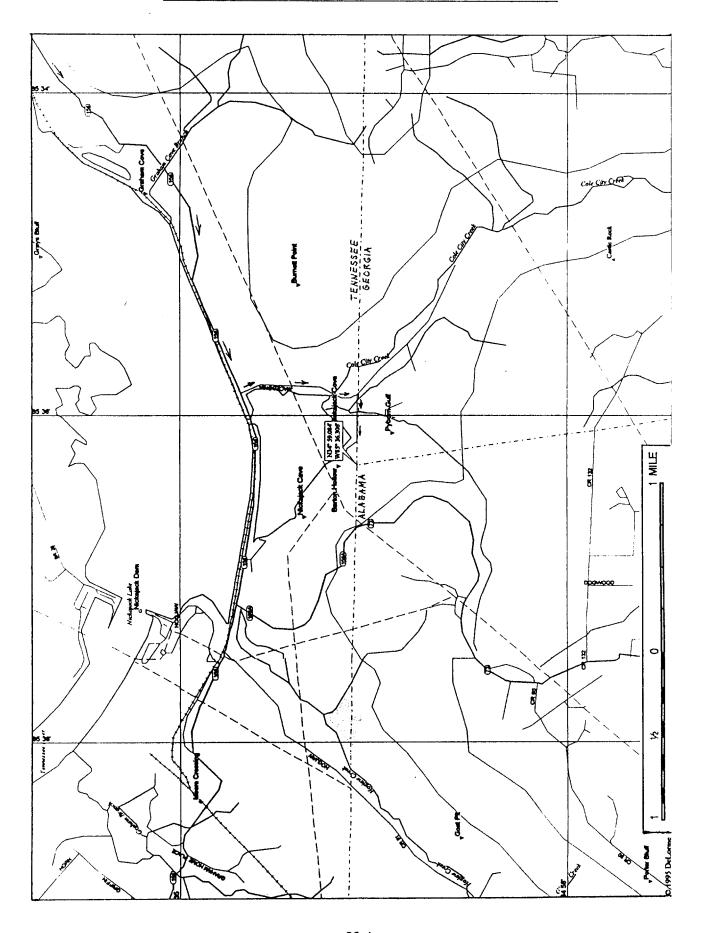
Off the E side of the road, in line with the tripoint, is an old witness post with markings indicating that the corner is in the center of the road. William Harris set a wood stake at the tripoint in 1817 when he surveyed the west and north boundaries of Ohio. A brown stone replaced the stake in 1869. During a joint OH - MI resurvey of the line in 1915, the brown stone was replaced by a block of granite set in a bed of concrete buried 2.5 feet deep in the center of the road. Finally, on August 28, 1999, 30 surveyors from the three state societies dedicated a new plaque which was mounted on top of the 1915 stone. This plate is in a crypt about a foot below the road surface at the center of the road. A steel cover plate at the road surface protects the monument and allows access.





Above: Clark, Jack and Joyce at the witness post in 1991. Upper L: Mike Donner at the tripoint crypt in 1999. Lower L: Sketch of new marker plate in the crypt.

### TENNESSEE - ALABAMA - GEORGIA



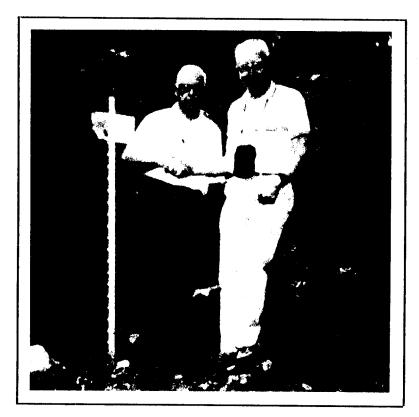
## TN AL GA

#### **TENNESSEE - ALABAMA - GEORGIA**

DATE VISITED: May 19, 1991

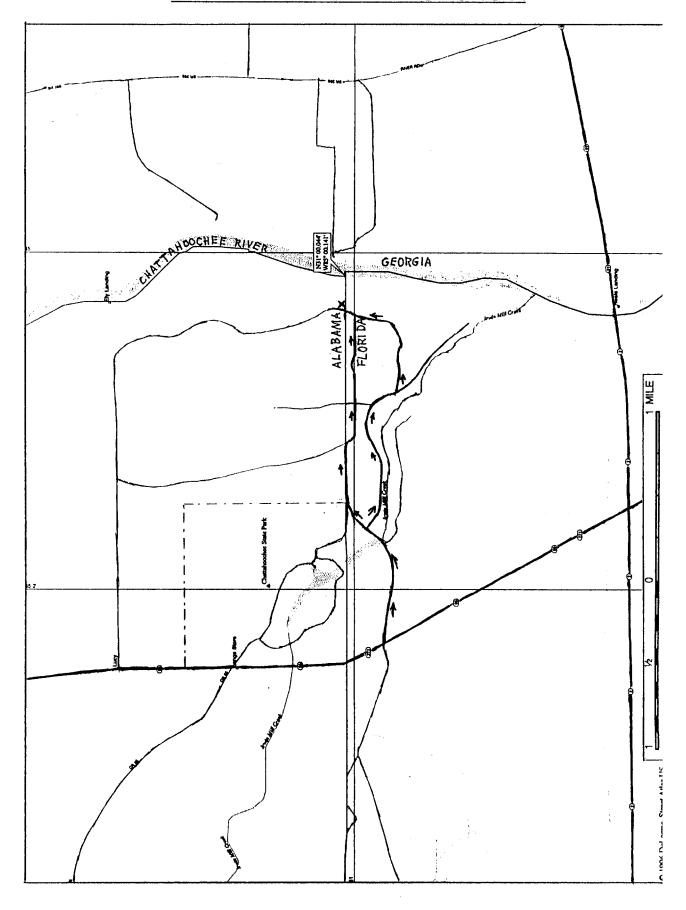
ACCESS ROUTE: From Chattanooga, TN, go W on I 24 to route 156 (about 7 miles W of the junction of I 59 and I 24). Go about 5 miles W on 156, and then turn S at corner by the Macedonia Church, just before the causeway over Nickajack Reservoir. Continue S to the first right (W) after crossing Cole City Creek, then keep R across a plank bridge over a small stream. Continue W to State Line Cemetery. Park at the W end of the cemetery, and hike about 200 yards farther W up a hill with about 50 feet gain in elevation. In the woods, and poison ivy, find an iron post and cement marker with TVA data on it. About 25 feet S (left), find an iron sign-post above some yellow painted rocks. The sign-post and yellow painted rocks are assumed to be the tri-State point.

The N terminous of the AL - GA boundary is at Nickajack on the TN line and by statute at the 35th parallel. Boundaries in this area were the source of much contention and many surveys were run over the years. The NE corner of AL as now marked is more than 1 mile S of the 35th parallel, A survey in 1818 locates the corner one mile and 28 poles from the S bank of the Tennessee R. and due S from the center of the old Indian Town of Nickajack, and near the top of Nickajack Mountain.



Clark Hall and Jack Parsell standing on the yellow rocks.

### ALABAMA - FLORIDA - GEORGIA



#### ALABAMA - FLORIDA - GEORGIA

DATE VISITED: February 12, 1997

ACCESS ROUTE: Georgia claims all of the Chatthoochee River between Georgia and Alabama, so the tri-point is at the high water mark on the Alabama shore at the Florida line

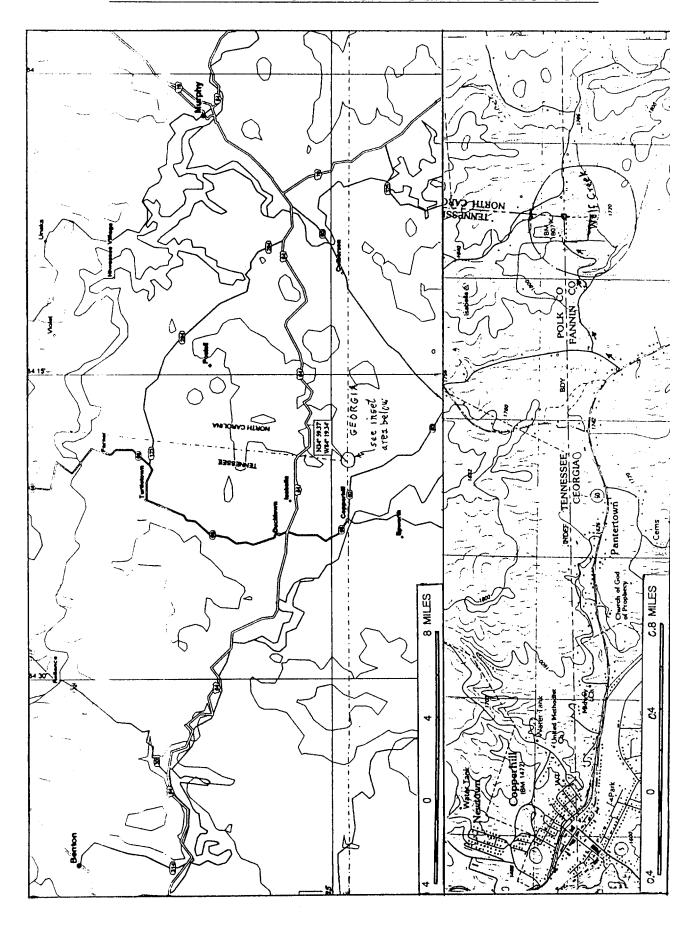
The State of Alabama Code Book describes the boundary as follows: "The boundary line between AL and GA commences on the W side of the Chattahoochee R. at the point where it enters Florida; from thence up the river, along the western bank thereof to the point on Miller's Bend." Continuing, "Between AL and FL is a line commonly known as the "mound line" or "Ellicott's line", (surveyed 1795-1799), as distinguished from a blazed line known as the "upper" or "Coffee" line, (surveyed in the 1820's), commencing at a point on the Chattahoochee R. near a place known as "Irwin's Mills"; and from thence to the Perdido R., marked the whole distance by blazes on trees and by mounds of earth, at distances of about one mile."

From Dothan, AL go about 18 miles E on US 84, then S 10 mi. on route 95 to the FL line. Note that AL 95 becomes FL 164. At 0.3 mile into FL stop at the first house (#5958) on the left (E) to get permission to drive in on private farm roads to point x (see map). Follow either of the routes marked on the map. The more northerly was recommended by Greg Weiler, of Birdsboro, PA and may be better than the more southerly route which we took. Drive in about 2½ mi., then walk the short remaining distance. Point x is less than ¼ mile from the river. The fence line termination at the river bank was assumed to be the tri-point. No markers were found in the vicinity but Michael Donner reports finding an old, overgrown "Welcome to Florida" sign a few hundred feet north of the fence line. No markers were found at this location either.



Jack Parsell at the tri-point on the Chattahoochee river bank,

### **TENNESSEE - NORTH CAROLINA - GEORGIA**





#### **TENNESSEE - NORTH CAROLINA - GEORGIA**

DATE VISITED: May 18, 1991

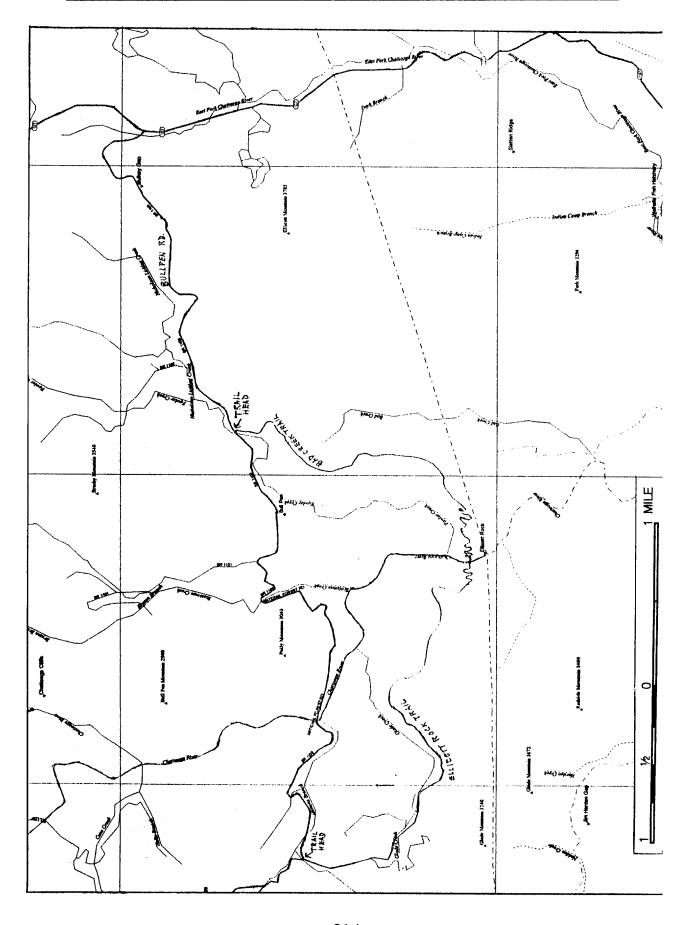
ACCESS ROUTE: From the center of Copperhill, TN, go 2.2 miles E through Pantertown, and around a gradual curve to the S, to Harris Road off to the L. Go 0.15 mile on Harris Rd., then turn R on Jasper Rd. and follow the most traveled way for 0.3 mi., going down a hill, passing a house on the L. A short distance past the house, turn L and follow along the N side of Wolf Creek for 0.4 mi. The road bends around and approaches another house, and turns sharp R. This house is in TN, but the S side of their lot is the TN-GA line. Get permission to go on the property and follow the TN-GA line on the GA side for about 200 yds, going down hill to a dry creek bed and then uphill to a 4-way fence intersection which is the tri-point. The USGS marker was buried in dirt, and under a rock. We finally located it after digging around in the area.

The location of the TN - NC line has caused many disputes. Geological Survey Paper 909 (see Addendum, p. vi) gives the approximate position for the SW corner of NC and the SE corner of TN at N 34° 59.28′, W 84° 19.32′.



Clark Hall points to the USGS survey marker at the intersection of the fence lines.

## NORTH CAROLINA - GEORGIA - SOUTH CAROLINA



## NC GA SC

#### NORTH CAROLINA - GEORGIA - SOUTH CAROLINA

DATE VISITED: February 9, 1997 and July 22, 1998

ACCESS ROUTE: From Sylva, NC go S on route 107 about 27 miles to Cashiers. From there continue on 107 almost 7 miles to a R (west) turn on Bull Pen Road which has two trailheads for Ellicott Rock. On the E side of the Chattooga R. is the Bad Creek trail, starting at about 2.6 miles in on Bull Pen road. Farther west, about 1.0 mile beyond the bridge over the Chattooga is the other trail head. Both trails are about 7 miles round trip to the tri-point on the Chattooga. The point where the trails cross the river is about 0.1 mile N of the tri-point rocks. The trails are easy walking, but become steep as they descend into the Chattooga gorge. Since the stones are near the E side of the river, access is easier from that side, especially in the winter when the river is too cold and swift for wading. Bull Pen road can also be accessed from the west from Highlands, NC.

At first, we thought this tri-point was in the Chattooga R. with no marker, but the USGS topo map shows "Ellicott Rock" at this location. Research disclosed that Ellicott Rock was considered by some to be the tri-point. Ten feet upstream from Ellicott Rock is Commissioner Rock and a little farther upstream is Chattooga Rock which has a bronze marker disc on top. Ellicott Rock bears the inscription: "Lat 35 AD 1813 NC + SC". Another 0.1 mile downstream from the Rocks in the middle of the river is another large boulder with tripoint markings scratched on the top. It is suspected that this is graffiti. No one of these four rocks is at the exact tripoint, but Ellicott and Commissioner come closest.



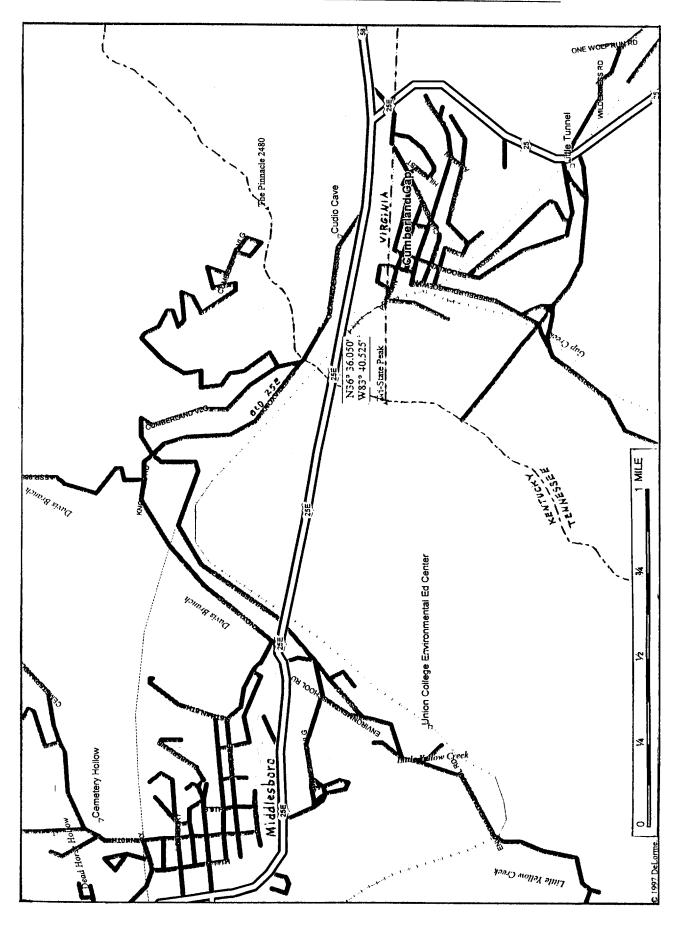
Brian Butler at Ellicott Rock in 1999. Coordinates are N 35° 0,077', W 83° 6.513'



Daniel Butler, in front, points at Commissioner Rock while his father, David, points at Ellicott Rock.

1998 photo by Gregg Butler

## **KENTUCKY - VIRGINIA - TENNESSEE**



# KY VA TN

### **KENTUCKY - VIRGINIA - TENNESSEE**

DATE VISITED: May 20, 1991

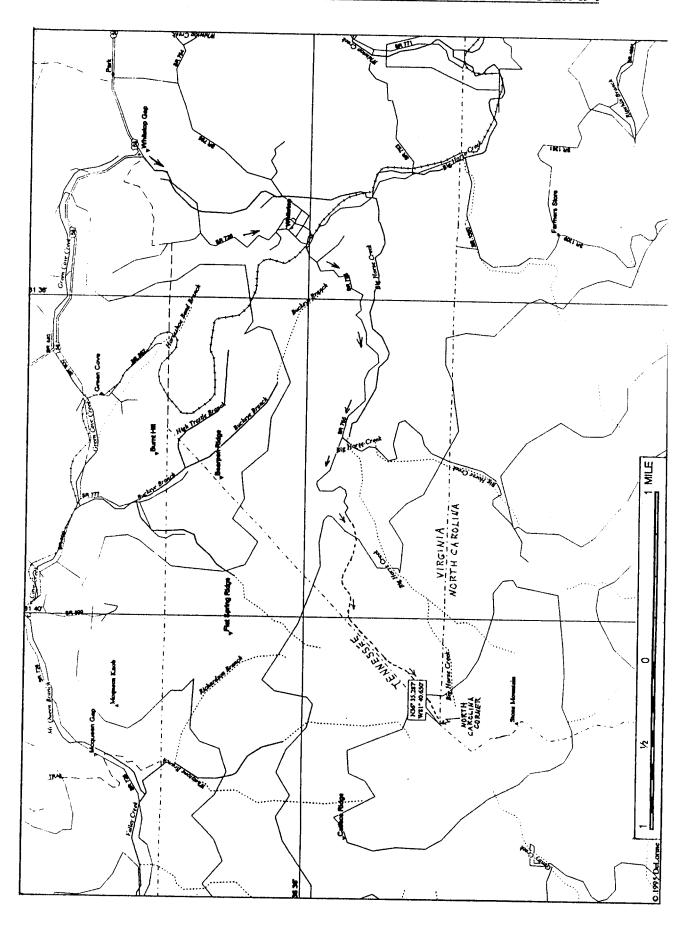
ACCESS ROUTE: This site is close to Cumberland Gap. Route 25 has been rerouted and goes through a tunnel under the Gap. Park Service personnel told Richard Carey in May 2000 that old Route 25 will be torn up, the power lines removed and the old trail restored to its 1775 condition. From the visitors center drive E toward Pinnacle Overlook for 1.3 mi. to a right turn at a junction toward Sugar Run. Park at the concrete barricade about 100 yds from the junction. Walk about 1/3 mile up to the gap and the sign for the tri-point trail. The trail does not show on the accompanying map. Continue on to the tri-State point which is in a park-like setting. There are long strips of concrete coming together in a slightly off 90 degree tee, the junction being at the tri-point. There is also a bronze plaque certifying this point as a National Historic Civil Engineering Landmark. This point was on the Royal Colonial Boundary of 1665. The first survey began at the Λtlantic Ocean in 1728, and reached the Mississippi R. in 1819.

On your way to or from this tri-point, there is an interesting side trail which will take you to the remains of a Civil War fort.



Joyce Parsell straddling the intersection of the long concrete strips marking the tri point junction.

## TENNESSEE - VIRGINIA - NORTH CAROLINA



# TN VA

#### **TENNESSEE - VIRGINIA - NORTH CAROLINA**

DATE VISITED: May 17, 1991

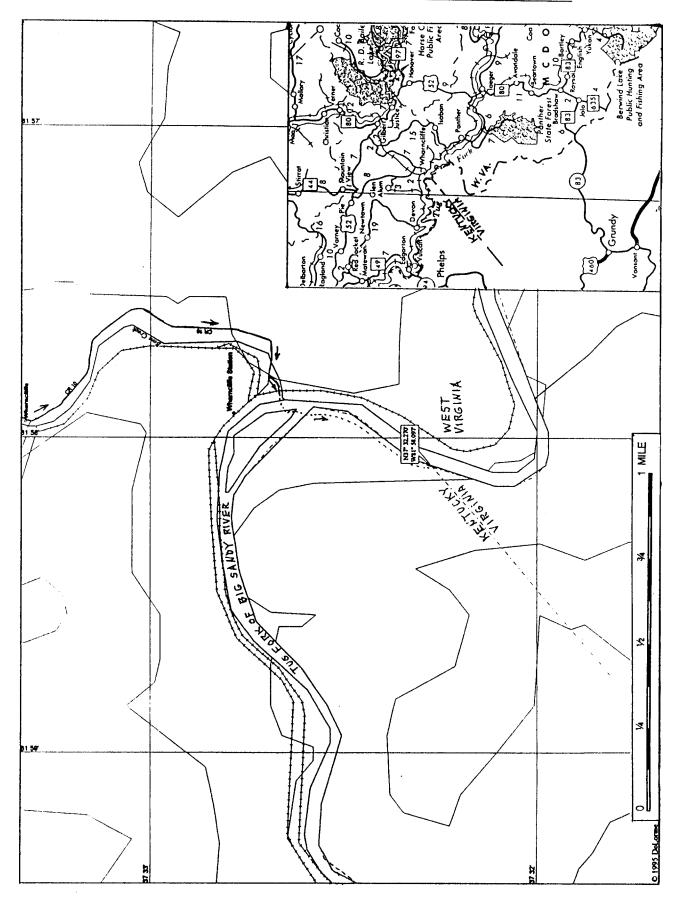
ACCESS ROUTE: From Abingdon, VA, go E on rte. US 58, passing through Damascus and continuing thru Konnarock. Beyond Konnarock, turn right (S), and go to White-top on route 726. Then take route 755 SW of Whitetop following up Big Horse Creek to fork in the road about 1¾ miles from Whitetop. Ask permission at farm house on the left fork, just across a creek, then continue on the right fork, thru two usually open gates, and up a steep, rocky road for another 0.8 mile. With 4WD you can continue to the tripoint. Otherwise, hike up the road 1½ miles to the North Carolina Corner. Where the road reaches NC, go W about 100 feet up to where the TN - VA line comes in. The marker is close to where the fences intersect. Elevation at the tri-point is 4650 ft.

Because of imperfect instruments and poor understanding of compass variations, there were significant errors in the early surveys. In 1779 VA and NC could not agree on the location of parallel 36° 30', so they ran two parallel lines two miles apart, on the north run by NC known as Henderson's line and on the south by VA known as Walker's line. In 1789 TN was formed from NC territory W of the Allegheny Mountains, so it then also became a dispute between VA and TN. After many failed compromises the U. S. Supreme Court decreed that a line half way between Henderson's and Walker's lines as surveyed in 1803 to be the true boundary.



Joyce and Jack Parsell at the North Carolina Corner tri point.

## **KENTUCKY - VIRGINIA - WEST VIRGINIA**

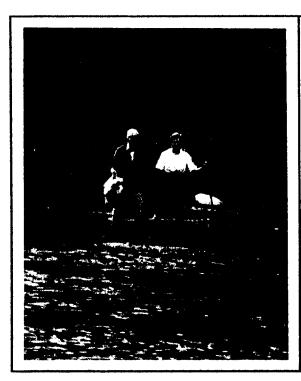


#### **KENTUCKY - VIRGINIA - WEST VIRGINIA**

DATE VISITED: October 16, 1992

ACCESS ROUTE: West Virginia claims the entire width of the Tug Fork of Big Sandy River, so this is an instance of a tri-state corner being on land instead of in the middle of the river. We tried to approach this point in May, 1991, but the river was raging with spring run-off, and was much too high to ford. When we returned in October, 1992, it was only knee deep.

From Gilbert, WV, go NW on US 52 about 2 miles to a turn L across a bridge on the Gilbert Creek Road. Then, after 1.8 miles, turn R, avoiding the road to Baisden. Continue up over the height of land, past a mine operation, to Wharncliffe, which stretches out for some distance along the narrow valley of Bens Creek. Pass a turnoff road to the right, which is another route back to US 52, and continue on a poor dirt road down to Wharncliffe Station. When you approach the RR tracks, take a left turnoff that goes down under the tracks to a parking area by the river. Ford the river to an island, and then ford the main branch from the upstream tip of the island. You will then be in KY on the W shore of the river. Hike S along the bank on a poor trail which used to be a jeep road, for 0.6 mile to the tri-state point, which is a USGS survey marker on the top of a 2 foot high iron pipe at the high water mark above the river.

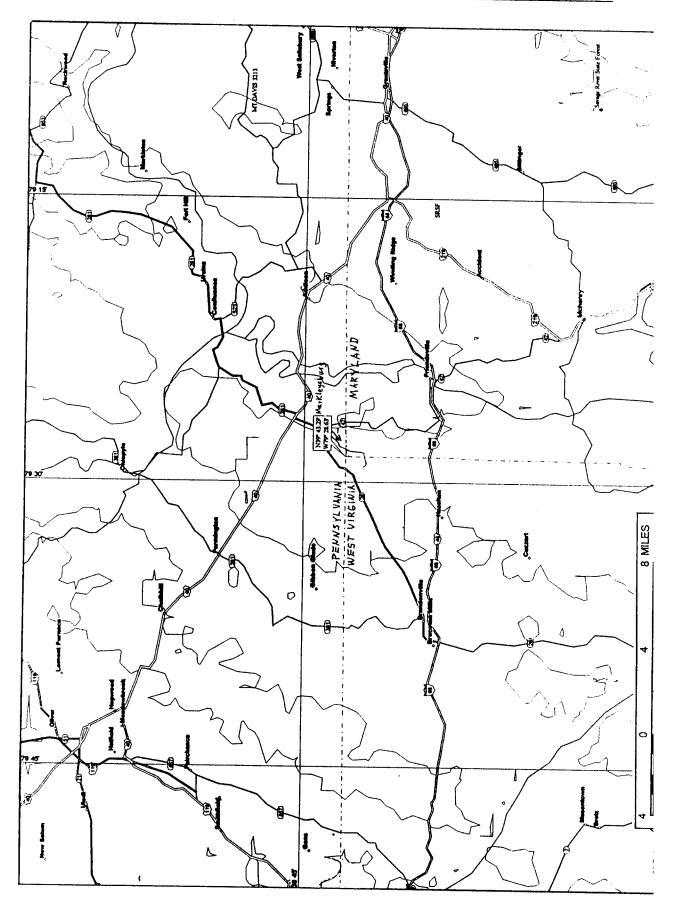




Jack and Joyce Parsell fording the river.

Clark and Jack point to the USGS survey marker.

# PENNSYLVANIA - WEST VIRGINIA - MARYLAND



## PA WV MD

#### PENNSYLVANIA - WEST VIRGINIA - MARYLAND

DATE VISITED: May 21, 1991

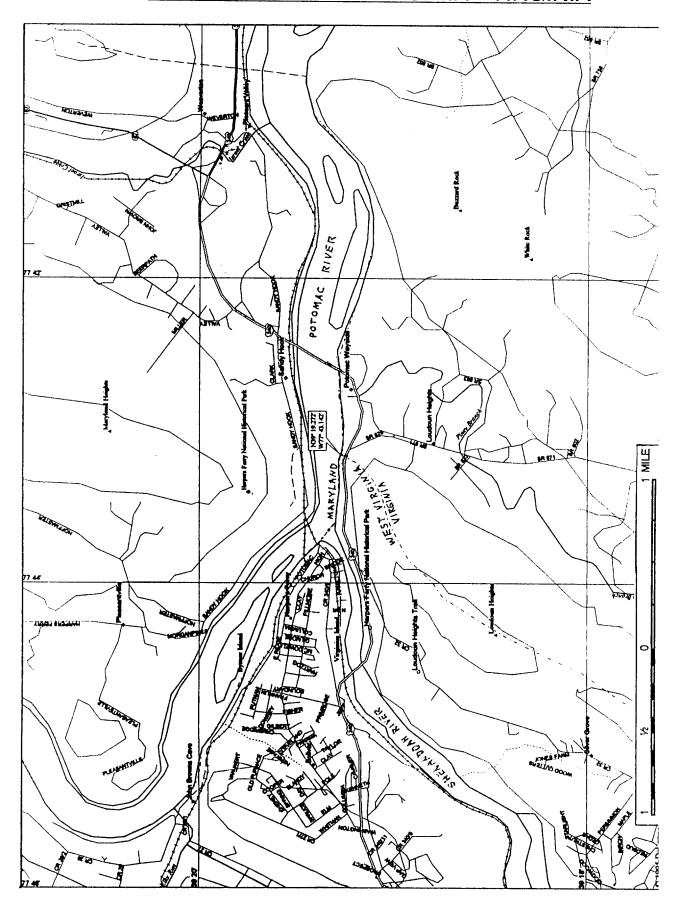
ACCESS ROUTE: From Markleysburg, PA, where route 281 makes a right angle turn, go S on Brown Hill Road, (not on route 42). Disregard the "No Outlet" sign. Brown Hill Road angles off to the SW, then goes W and finally S just before crossing into MD at about 1½ miles from the corner of route 281. The last ½ mile is a very rough gravel section. At the MD-PA boundary, which is the Mason and Dixon Line, hike due W 0.2 mile along a pipeline maintenance road which parallels the MD-PA line. Where this road passes under a high-voltage power line, look to the 10 o'clock position about 100 ft. to a small clearing where the 1910 tri-State monument is located. In addition to the tri-State monument there is another monument put there by the Boy Scouts in 1967 commemorating the bicentennial of the establishment of the Mason and Dixon line.

The Mason and Dixon line survey started in 1763 and reached the NW corner of MD in 1767. This was not on a particular latitude, but was based on complicated measurements which determined the arc at the N. end of Delaware. (See page 33B for more information on Mason and Dixon).



Jack and Joyce Parsell at the tri-point monument.

## MARYLAND - WEST VIRGINIA - VIRGINIA





#### MARYLAND - WEST VIRGINIA - VIRGINIA

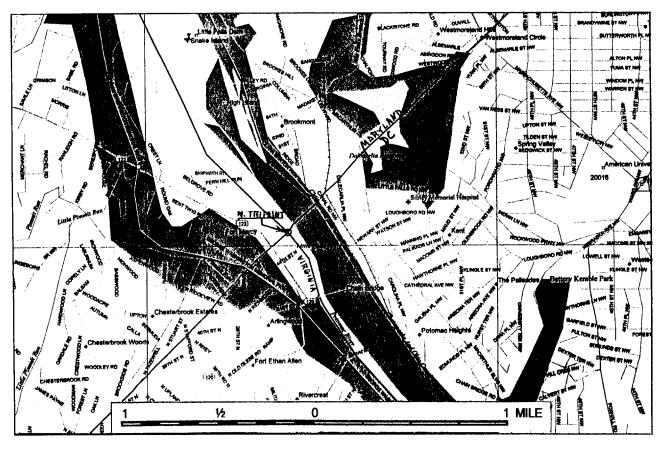
DATE VISITED: April 17, 1993

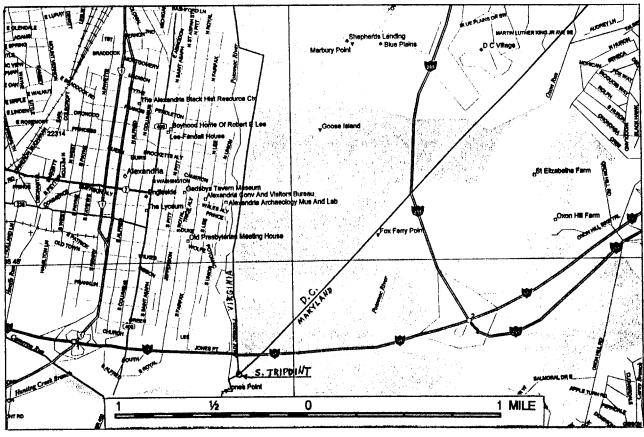
ACCESS ROUTE: On US 340, follow the S bank of the Potomac River to the WV - VA State line. Maryland claims all of the Potomac River, so the tri-State corner should be located at the low water mark where the WV - VA line reaches the river. No marker was found despite diligent searching along the narrow strip between the highway and the river. A US Park Service worker at Harpers Ferry said there used to be a WV - VA State line marker on the river bank, but vandals had removed it. This point is also the low point of WV.



Joyce Parsell at the low point of West Virginia. If a tri-point marker existed, it would be at about this point on the WV - VA line.

### VIRGINIA - DISTRICT OF COLUMBIA - MARYLAND





VA DC MD

# VIRGINIA - MARYLAND - DISTRICT OF COLUMBIA VIRGINIA - DISTRICT OF COLUMBIA - MARYLAND

DATE VISITED: February 17, 1997

ACCESS ROUTE: Congress, in 1790 established the District of Columbia. In 1791, President Washington issued a proclamation defining the bounds of the District. The starting point for the defined area was at Jones Point on the Virginia side of the Potomac. Originally 100 sq. miles in area, it was reduced to 68 sq. miles in 1846 when the portion west of the Potomac was ceded back to Virginia. The boundary between the District and Virginia was finally set at the mean low water mark on the Virginia side of the river and following the pierhead allignment shown on the map. This is the same situation as MD - WV - VA where all of the Potomac River is claimed by Maryland However, in this case, it is a double tri-point since DC has both a northern and a southern junction with VA and MD.

The northern tri-point is on a very steep bank above the Potomac rapids. Access is by permission from home owners, and descending the steep bank to the river. This was not attempted, but permission was obtained to take pictures of the gorge in this area.

Acess to Jones Point, the southern tri-point is very easy since it is in a public park. From exit 1 off I 95 just W of the Woodrow Wilson bridge, go N into Alexandria, VA on US 1 a short distance. Turn R on Franklin St. then R on S. Lee St. Follow around under the Woodrow Wilson bridge to a parking area. From there a short walk will bring you to the marker. The actual tri-point is about 200 feet NE of the marker in the river.

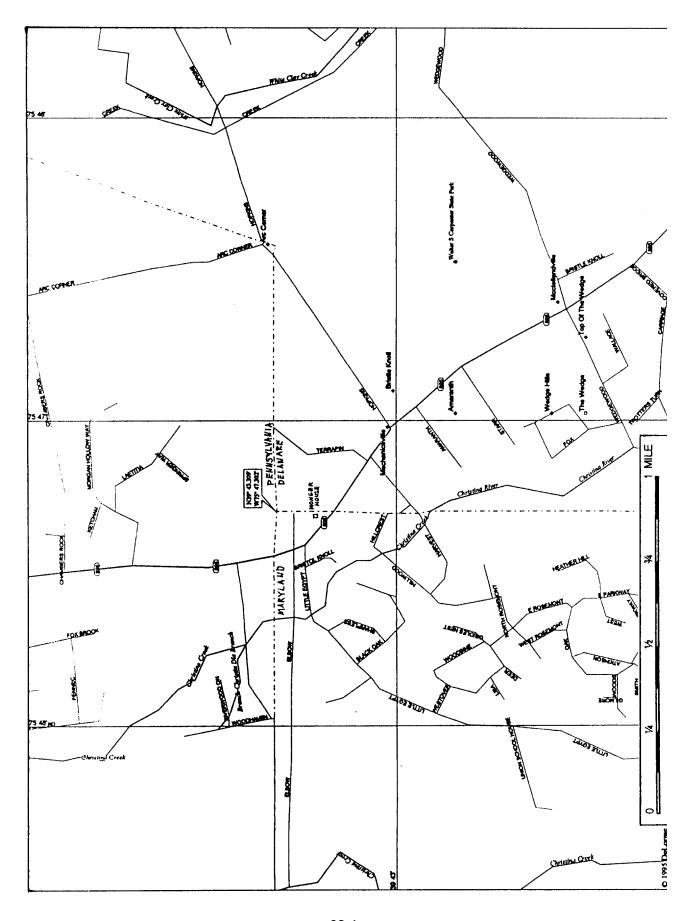




Northern tri-point from about 100 feet above the Potomac River which is about 200 ft, wide here.

Jack Parsell at the southern marker which is inscribed, " DC - VA BOUNDARY 1947."

### PENNSYLVANIA - MARYLAND - DELAWARE



## PA MD DE

#### PENNSYLVANIA - MARYLAND - DELAWARE

DATE VISITED: May 15, 1991

ACCESS ROUTE: From Newark, DE, go NW on route 896 about 3 miles to the MD line. Just in MD on the right is Larry Monger's home. Get permission to go on his property. From the Monger house, go N about 800 ft., passing Mr. Monger's shop, then bear E to an old stone post. This 1849 post is now only a mark on the DE - MD boundary and is not a tri-State corner. The tri-point is marked by a USGS survey marker a little north of the old monument. There are also USGS witness markers aimed at the tri-point.

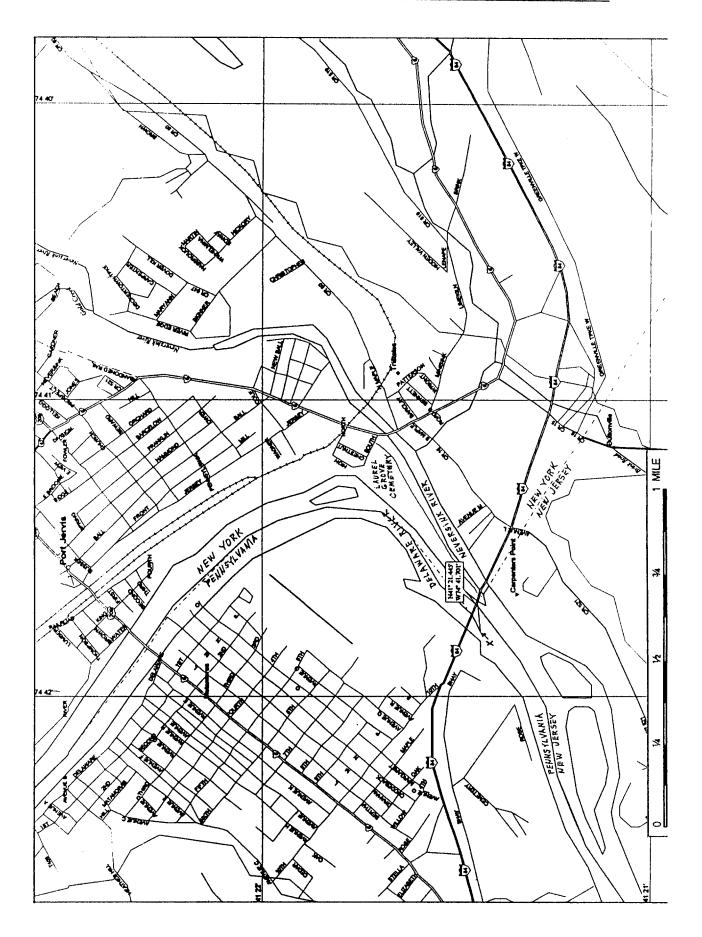
In 1760 commissioners and surveyors were appointed to establish the base line and tangent line between MD and DE. This involved the N boundary of DE which is an arc of a circle having a radius of 12 English statute miles measured from the center of the town of New Castle, DE. After several years of trying to establish these boundaries, the proprietors became discouraged with the delays and sent from England two famous mathemeticians, Charles Mason and Jeremiah Dixon, who verified the earlier work and ran the line between PA and MD ever since called the Mason and Dixon line. A resurvey 200 years later showed the location of the NE corner of MD to be in error by only 1.9 seconds of latitude. Arc Corner is 0.8 mi E of the tri-point.



Landowner, Larry Monger, with Jack and Joyce Parsell at the USGS marker.

The 1849 monument is a little to the south from this point.

# **NEW YORK - PENNSYLVANIA - NEW JERSEY**



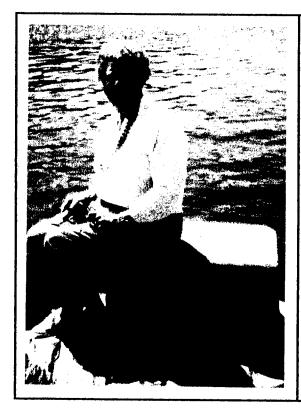
# NY PA NJ

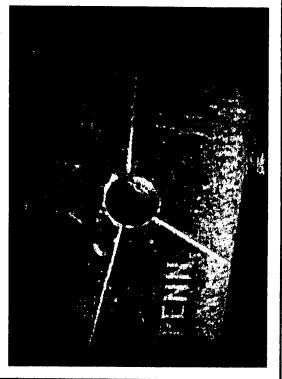
### **NEW YORK - PENNSYLVANIA - NEW JERSEY**

DATE VISITED: April 24, 1994

ACCESS ROUTE: From Interstate 84, exit #1, in Tristates, NY, proceed N on US 6 across the bridge over Neversink River. Just after the bridge, turn L on South Street, and L again into Laurel Grove Cemetery. Proceed on gravel and dirt roads to the parking area at the extreme W end of the peninsula, beyond the cemetery. A large NY - NJ boundary monument is on high ground, under the Interstate bridge. Tri State Rock is at the water's edge.

The inscription on the NJ side of the 1882 monument is as follows: "SOUTH 64° WEST 72 ¼ FEET FROM THIS IS THE TRI STATE ROCK WHICH IS THE NORTHWEST END OF THE NEW YORK AND NEW JERSEY BOUNDARY, AND THE NORTH END OF THE NEW JERSEY AND PENNSYLVANIA BOUNDARY". On the NY side it says, "THE CORNER BETWEEN NEW YORK AND PENNSYLVANIA IS IN THE CENTER OF THE DELAWARE RIVER 475 FEET DUE WEST OF THE TRI STATE ROCK". This latter point is marked X on the map.

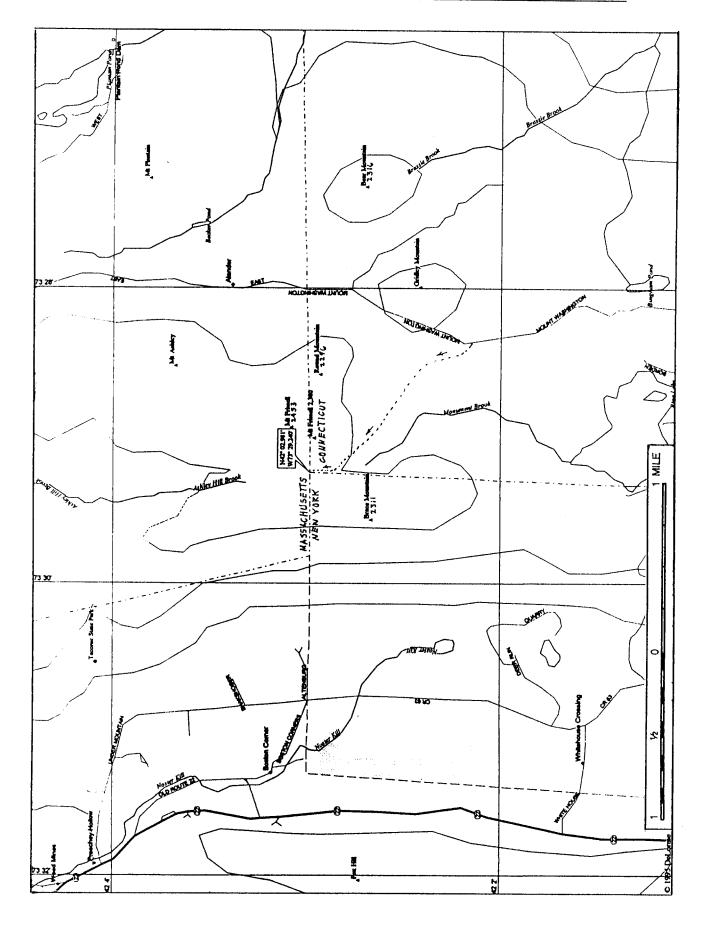




Joyce Parsell sitting on the tri-state stone.

The tri-state stone with USGS marker at the center.

# MASSACHUSETTS - NEW YORK - CONNECTICUT



# MA NY CT

#### MASSACHUSETTS - NEW YORK - CONNECTICUT

DATE VISITED: November 1, 1991

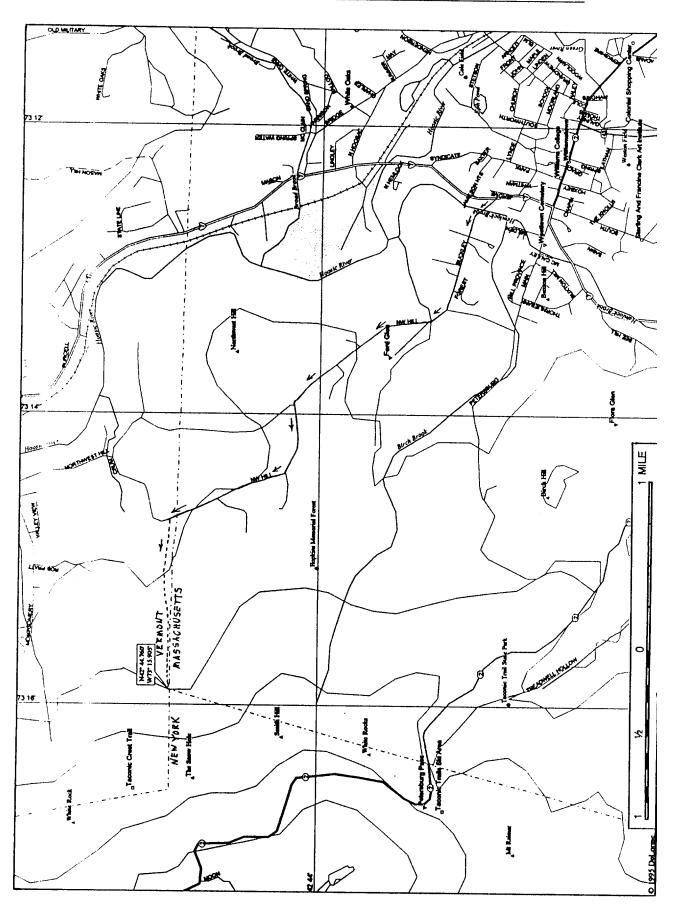
ACCESS ROUTE: The easiest route to this tri-point is via the Mount Riga Road from Salisbury CT. From Salisbury go NW on Washinee Street for 0.7 mile, then L on Mount Riga Road for 2.9 miles to its junction with Mount Washington Road, near the SE end of South Pond. Turn R and proceed on Mount Washington Road 2.2 miles to a small clearing on the left, with a metal gate across a jeep road which starts at this point. Park in the clearing and hike NW 1.2 miles on the jeep road to a trail off to the R marked by a small stone cairn. This point is just before the second stream crossing on the jeep road.

From the cairn, go N 0.3 mile to the tri-state marker stone. On this trail, you will pass a NY - CT line marker shortly after leaving the jeep road. There are inscriptions on both NY and MA sides of the tri-point marker, but no identification on the CT side. From the tri-point, it is only 0.3 mile E to a point on the shoulder of Mt. Frissell that is the highest point in CT. The true summit of Mt. Frissell is only a short distance N in MA.



Jack Parsell taking notes at the 1898 tri-point monument.

# **VERMONT - NEW YORK - MASSACHUSETTS**



# VT NY MA

## **VERMONT - NEW YORK - MASSACHUSETTS**

DATE VISITED: October 31, 1991

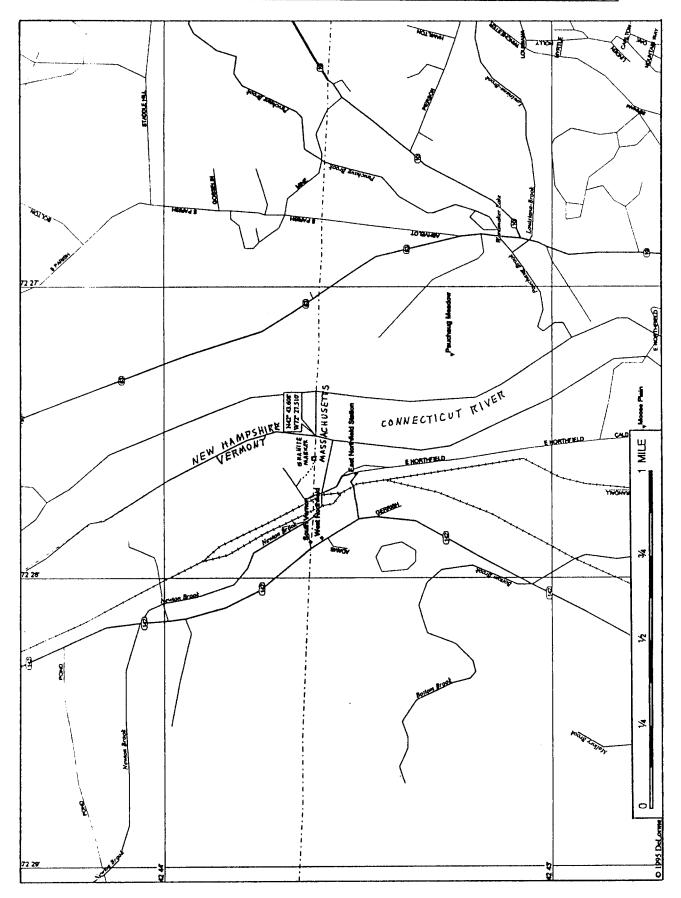
ACCESS ROUTE: From Williamstown, MA, go N on route US 7 a short distance to Buckley Street. Go L (West) on Buckley for 0.7 mile, then R on Northwest Hill Road for 2.2 miles to the MA - VT line. Proceed about 200 yards into VT and look for a jeep road, that starts out as a driveway by a house on the L. Park here and walk W on the jeep road. After crossing a bridge over a creek, the road bears back toward the SW and comes close to the MA - VT line. Leave the jeep road and look for Williams College posting signs on the MA - VT line. These are easier to see when the trees are bare. Follow the posting signs and paint markers W, dropping down to cross a small stream, then climb steeply up the hill. Just before reaching the tri-point, the line crosses a tote road, which runs generally N-S. From where you parked, it is slightly over 1 mile to this point. The tri-state monument is about 100 feet W and above the tote road. South of the marker, just off the tote road is a Williams College lean-to. Also scattered thruout the area area are many marked and numbered corners, locating study plots in this area of forest owned by Williams College.

An alternate means of access is a rough trail along the MA - VT line from the highway. About half way in to the tri-point you will intersect the above route.



Jack Parsell points to the junction of the scribed lines on the top of the monument

# <u>VERMONT - NEW HAMPSHIRE - MASSACHUSETTS</u>



# VT NH MA

#### **VERMONT - NEW HAMPSHIRE - MASSACHUSETTS**

DATE VISITED: July 6, 1993

ACCESS ROUTE: New Hampshire claims all of the Connecticut River along the VT - NH border so the tri-state point should be at the low-water mark, at the MA line. It is, but now it is under water because the water level was raised in the 1960s, when the height of a dam downstream in Turner's Falls, MA was raised. Set high on the bank, above the river, is a large granite monument inscribed, "ERECTED BY THE STATES OF MASSACHUSETTS, NEW HAMPSHIRE AND VERMONT, 1897". But, as shown by the picture below, there is indeed a tri-state marker in the river.

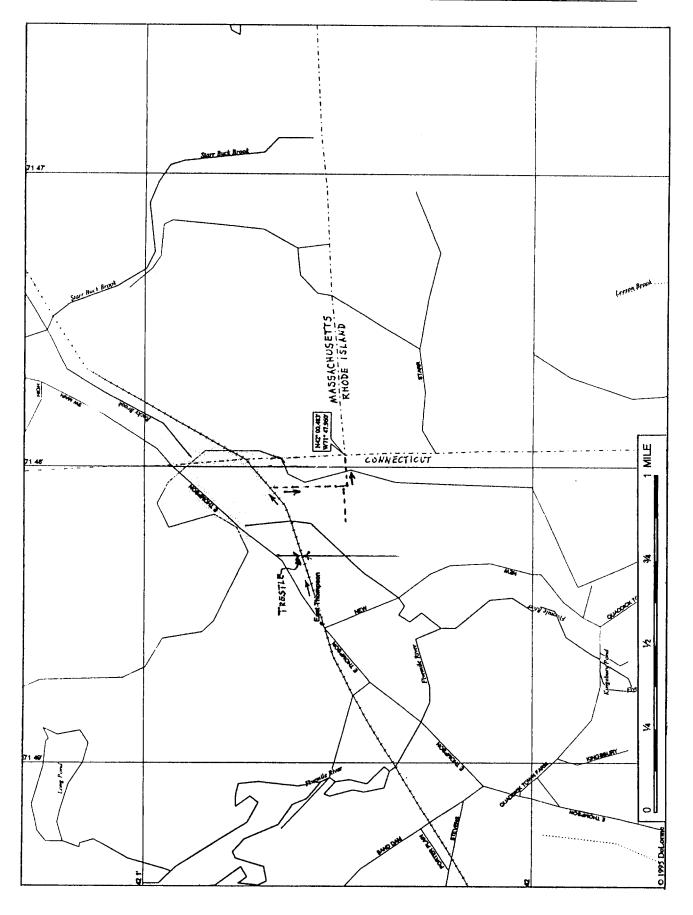
To reach this tri-point, take route 142, from either MA or VT to a point 0.15 mile S of the VT - MA line, then turn E, and go over a RR overpass. The road bends to the R toward East Northfield Station, but watch for a turn very sharp to the Left (almost 180°), just after the R turn. Take this sharp L, and drive N on a gravel road along the RR tracks to a bend in the road to the R (East), after crossing into VT, (no sign). Turn R into the first driveway, and ask permission from the Murray family to walk to the monument, which is E of their house at the top of the long sloping river bank. The actual tri-state "Mud Turtle" cannot be seen, even from close to the water, since it is now under water. See picture below. Anyone desiring more information on this interesting tri-point should contact Mr. R. P. Johnston, Maple Street, POB 159, Northfield, MA 01360.

Willis Parker, Paul Murray and Ernest Murray who uncovered the "Mud Turtle" with the aid of Robert Johnson, surveyor, in Oct. 1969. This marks the precise spot in the Connecticut River where New Hampshire & Vermont meet Massachusetts. The boundary is beneath river waters and was seen beneath the sandy river bottom when the river was lowered for work on the Turners Falls dam. High on the bank stands a dignified polished granite marker featuring the official location of the "Mud Turtle".

from: Rivertown Review, Northfield, Massachusetts, 1973



# CONNECTICUT - MASSACHUSETTS - RHODE ISLAND



#### **CONNECTICUT - MASSACHUSETTS - RHODE ISLAND**

DATE VISITED: November 1, 1991

ACCESS ROUTE: From E. Thompson, CT, the best route to this tri-point is via the old Putnam, CT to Blackstone, MA railroad grade. Park in E. Thompson, and follow the RR grade east. After about ¼ mile you will pass under a wooden trestle carrying an old farm road over the RR bed. Procede another ¼ mile on the elevated RR bed across wetlands to where the RR bed regains the natural grade of the area. At this point turn south (R) on a fairly distinct trail. After ¼ mi on this trail another trail comes in from the west. Continue south for another 25 yards, then turn sharp left (E) and follow the trail up the steep hillside to the engraved stone post which marks the tri-State corner. About 35 ft SW of the monument is a USGS survey marker set in the bed rock. Two witness markers were found, one in CT and one in MA.

There are several other possible routes to this tri-point, but this route, sent to me by Timothy Sheehan of Farmington, CT, is the shortest and easiest way to the corner. I have been there by two different routes, both of which were more difficult to follow than this one. Anyone interested in trying still another route might look into going in from the Buck Hill Wildlife Management Area in the extreme NW corner of Rhode Island



Jack Parsell relaxing at the 1888 tri-point monument.



#### **BEARING TREE SIGN**

Yellow metal signs, like the above full size reproduction, are placed on several trees close to a corner marker. If the corner becomes disturbed or lost for any reason, it can be repositioned accurately by reference to these signs. The signs also offer a quick visual aid in locating a corner marker which may be close to the ground or covered with snow. Examples of locations where we found signs like this are at the OR - CA - NV and MT - ID - WY tri-point corners.

#### **ADDENDUM**

As mentioned in the Preface, this guide is mainly concerned with the thirty-eight dry land tri-points. The remaining twenty-four U.S. tri-points are in rivers or lakes where no markers or other detectable identification is practical. The map on page vii, and list of wet tri-points on page viii, locate these points. The MO - KY - TN tri-point is of particular interest since it occurs at three separate locations as a result of a geographical accident caused by the KY south boundary location. A 10 square mile section of Kentucky is isolated from the rest of the state. See page ix for a map showing this unique triple tri-point. Also, on pages ix and x are maps of some of the other wet tri-points.

Another wet spot which is of interest is OH - WV - PA. Although this tri-point is now in the Ohio River, (because of a dam downstream), there is in interesting monument on the OH - PA line at the side of PA route 68 (OH route 39). The monument, together with two explanatory signs, documents a historic surveying reference point. The inscription indicates that a spot 1112 feet south of the monument, and at what at that time was the edge of the Ohio River, was the point of beginning for surveying the public lands of the United States. There, on September 30, 1785, Thomas Hutchins, First Geographer of the United States, began the Geographers Line of the Seven Ranges. The original marker, which has been long lost, was on the colonial boundary between Virginia and Pennsylvania on the N bank of the Ohio River.

Following the wet U.S. tri-points the reader will find a map on page xi and listing on page xii of tri-points shared with Canada and Mexico. Nine of the twenty-six are on dry land, and reaching these joint tri-points would make an interesting project. Getting to the AK - YU - BC tri-point would be a challenging hike, but probably to no avail, since it appears to be under a glacier and thus must be considered as under water. The tri-point shared by British Columbia, Alberta and Montana is located on the continental divide in Waterton - Glacier International Peace Park. U.S. - Canadian boundary marker # 272 marks the spot. This is only about ½ mile W of the south end of Cameron Lake, which is the closest approach point, but 2000 feet higher than the lake. This sounds like a challenging climb..

Readers who desire more information on the manner by which the boundaries of the States were established can refer to the following publications:

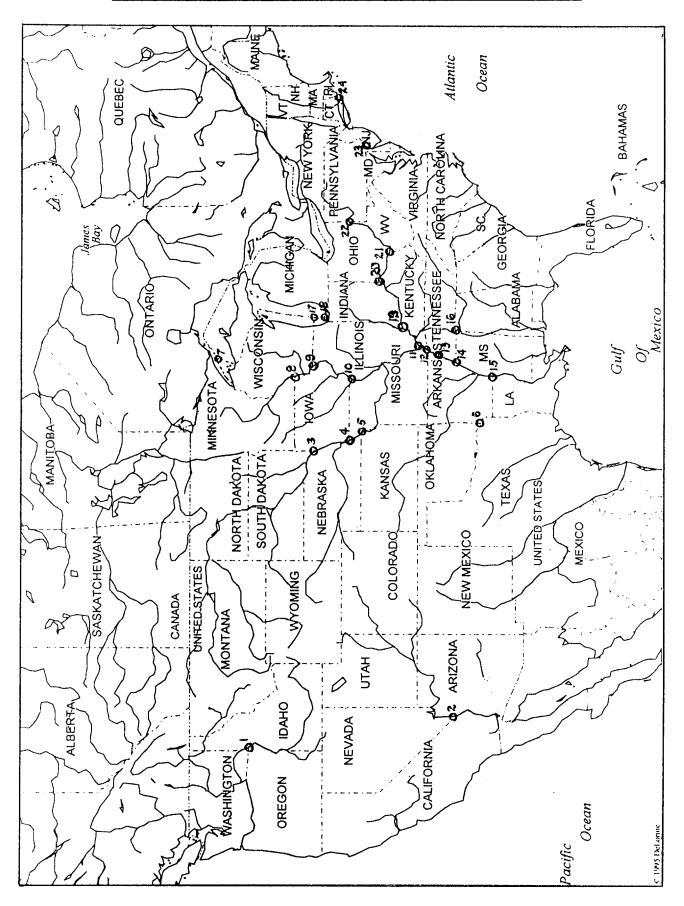
Van Zandt, Franklin K., Boundaries of the United States and the Several States: U.S. Geological Survey Professional Paper 909, U.S. Government Printing Office, 1976, 191 p.

White, C. Albert, Initial Points of the Rectangular Survey System: Produced for Professional Land Surveyors of Colorado, Inc.by The Publishing House, Westminster, CO 80030, 1996, 576p.

For additional tri-point information and free download of this publication check out Brian Butler's web site titled, "Corner Corner" at www.bjbsoftware.com/corners

It should also be mentioned that Brian Butler's brother, Gregg, has visited all but one of the dry tri-points. Gregg has also come as close as he could figure to most of the wet tri-points by canoe or motor boat.

## U.S. TRI-STATE JUNCTIONS IN WATER

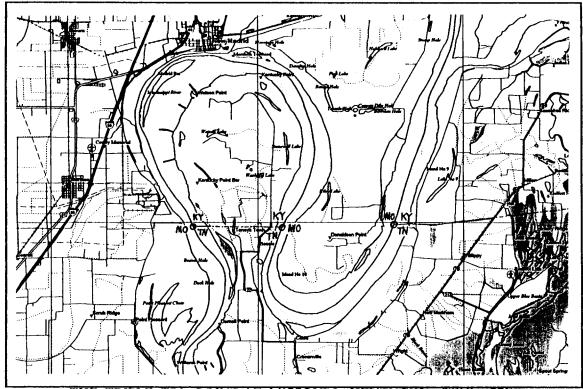


## U.S. TRI-STATE JUNCTIONS IN WATER

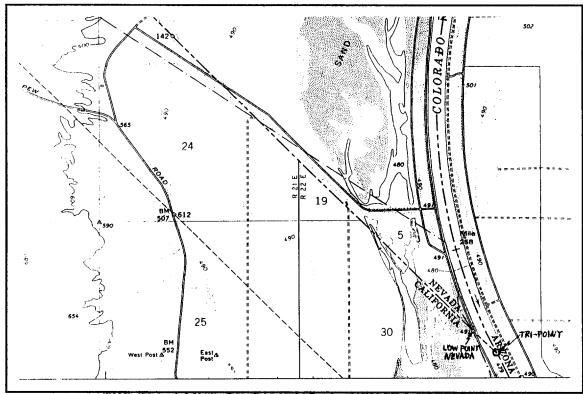
TRI-POINT NUMBER	STATES	LOCATION
1	WA - OR - ID	SNAKE RIVER
2	CA - NV - AZ	COLORADO RIVER (see map p. ix)
3	SD - NE - IA	BIG SIOUX AND MISSOURI RIVER
4	NE - IA - MO	MISSOURI RIVER
5	NE - KS - MO	MISSOURI RIVER
6	OK - AR - TX	RED RIVER
7	MN - WI - MI	LAKE SUPERIOR
8	MN - IA - WI	MISSISSIPPI RIVER
9	IA - WI - IL	MISSISSIPPI RIVER
10	IA - MO - IL	DES MOINES AND MISSISSIPPI RIVERS
11	IL - KY - MO	MISSISSIPPI AND OHIO RIVERS (see map p. x)
12	MO - KY - TN	MISSISSIPPI RIVER AT 3 PLACES (see map p. ix)
13	MO - AR - TN	MISSISSIPPI RIVER
14	AR - TN - MS	MISSISSIPPI RIVER
15	AR - LA - MS	MISSISSIPPI RIVER
16	TN - MS - AL	TENNESSEE RIVER, PICKWICK LAKE
17	WI - IL - MI	LAKE MICHIGAN
18	IL - MI - IN	LAKE MICHIGAN
19	IL - IN - KY	WABASH AND OHIO RIVERS
20	IN - OH - KY	GREAT MIAMI AND OHIO RIVERS
21	OH - KY - WV	BIG SANDY AND OHIO RIVERS
22	OH - WV - PA	OHIO RIVER
23	PA - DE - NJ	DELAWARE RIVER
24	CT - RI - NY	LONG ISLAND SOUND (see map p. x)



## **SOME WATERY TRI - STATE JUNCTIONS**



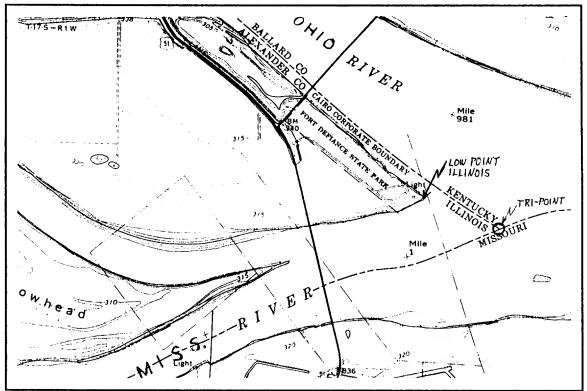
THE TRIPLE TRI - POINT AT MISSOURI - KENTUCKY - TENNESSEE



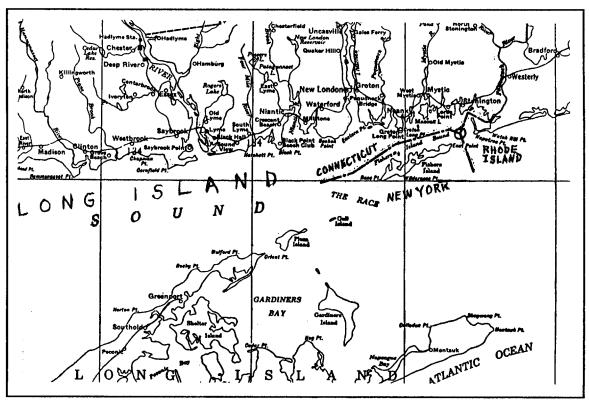
THE TRI - POINT OF CALIFORNIA - NEVADA - ARIZONA



## **SOME WATERY TRI - STATE JUNCTIONS**

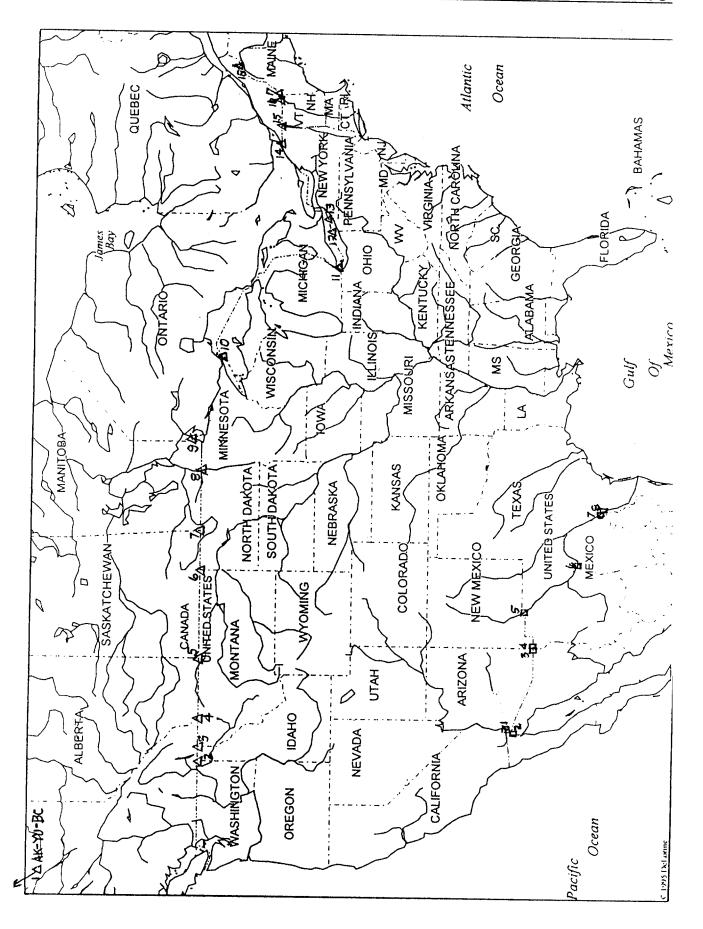


THE TRI - POINT OF ILLINOIS - KENTUCKY - MISSOURI



THE TRI - POINT OF CONNECTICUT - RHODE ISLAND - NEW YORK

# TRI POINT U.S. JUNCTIONS WITH CANADA & MEXIC



## TRI-POINT U.S. JUNCTIONS WITH CANADA

TRI-POINT NUMBER	LOCATION		TRI-POINT NUMBER	LOCATION	
					·
1	AK - YU - BC	Under glacier	10	ONT - MN - MI	Lake Superior
2	BC - WA - ID	On dry land	11	MI - ONT - OH	Lake Erie
3	BC - ID - MT	On dry land	12	ONT - OH - PA	Lake Erie
4	BC - ALB - MT	Cont. divide	13	ONT - PA - NY	Lake Erie
5	ALB - SAS - MT	On dry land	14	ONT - QUE - NY	St. Lawrence R.
6	SAS - MT - ND	On dry land	15	QUE - NY - VT	Lake Champlain
7	SAS - MAN - ND	On dry land	16	QUE - VT - NH	Halls Stream
8	MAN - ND - MN	Red R. of N.	17	QUE - NH - ME	On dry land
9	MAN - ONT - MN	Angle Inlet	18	ME - QUE - NB	St Francis River

## TRI-POINT U.S. JUNCTIONS WITH MEXICO

TRI-POIN' NUMBER		ON	
1	CA - BAJA - AZ	Colorado River	
2	BAJA - AZ - SON	Colorado River	
3	AZ - NM - SON	On dry land	
4	NM - SON - CHI	On dry land	
5	NM - TX - CHI	Rio Grande River	
6	TX - CHI - COA	Rio Grande River	
7	TX - COA - NL	Rio Grande River	
8	TX - NL - TAM	Rio Grande River	
KEY:	BAJA = BAJA CALIF. SON	= SONORA CHI = CHIHUAHUA	

## INDEX TO U.S. TRI-STATE POINTS

DRY LAND TRI-POINTS IN **BOLD** TYPE; WET TRI-POINTS IN *ITALIC* TYPE PAGE NUMBERS LISTED AFTER EACH TRI-POINT

STATE	TRI-POINTS
ΑΙ.ΑΒΛΜΑ	TN-GA, 23 FL-GA, 24 TN-MS, viii
ALASKA	none
ARIZONA	NV-UT, 4 UT-CO-NM, 8 CA-NV, viii
ARKANSAS	OK-MO, 20 TX-LA, 21 OK-TX, viii MO-TN, viii TN-MS, viii LA-MS, viii
CALIFORNIA	OR-NV.1 NV-AZ. viii
COLORADO	WY-UT, 7 UT-AZ-NM, 8 WY-NE, 12 NE-KS, 13 NM-OK, 14 KS-OK, 16
CONNECTICUT	MA-NY, 35 MA-RI, 38 RI-NY, viii
DELAWARE	PA-MD, 33 PA-NJ, viii
DIST. COLUMBIA	VA-MD, 32
FLORIDA	AL-GA, 24
GEORGIA	TN-AL, 23 AL-FL, 24 TN-NC, 25 NC-SC, 26
HAWAII	none
IDAHO	OR-NV, 2 NV-UT, 3 MT-WY, 5 UT-WY, 6 WA-OR, viii
ILLINOIS	IA-WI, viii IA-MO, viii KY-MO, viii WI-MI, viii MI-IN, viii IN-KY, viii
INDIANA	MI-OH, 22 IL-MI, viii IL-KY, viii OH-KY, viii
IOWA	SD-MN, 18 SD-NE, viii NE-MO, viii MN-WI, viii WI-IL, viii MO-IL, viii
KANSAS	CO-NE, 13 CO-OK, 16 OK-MO, 19 NE-MO, viii
KENTUCKY	VA-TN, 27 VA-WV, 29 IL-MO, viii MO-TN, viii IL-IN, viii IN-OH, viii OH-WV, viii
LOUISIANA	TX-AR, 21 AR-MS, viii
MAINE	none
MARYLAND	PA-WV, 30 WV-VA, 31 VA-DC, 32 PA-DE, 33
	NY-CT, 35 VT-NY, 36 VT-NH, 37 CT-RI, 38
MICHIGAN	IN-OH, 22 MN-WI, viii WI-IL, viii IL-IN, viii
MINNESOTA MISSISSIPPI	ND-SD, 17 SD-IA, 18 WI-MI, viii IA-WI, viii
MISSOURI	AR-TN, viii AR-LA, viii TN-AL, viii
MONTANA	KS-OK, 19 OK-AR, 20 NE-IA, viii NE-KS, viii IA-IL, viii IL-KY, viii KY-TN, viii AR-TN, viii ID-WY, 5 ND-SD, 9 WY-SD, 10
NEBRASKA	WY-SD, 11 WY-CO, 12 CO-KS, 13 SD-IA, viii IA-MO, viii KS-MO, viii
NEVADA	OR-CA, 1 OR-ID, 2 ID-UT, 3 UT-AZ, 4 CA-AZ, viii
NEW HAMPSHIRE	
NEW JERSEY	NY-PA, 34 PA-DE, viii
NEW MEXICO	UT-CO-AZ, 8 CO-OK, 14 OK-TX, 15
NEW YORK	PA-NJ, 34 MA-CT, 35 VT-MA, 36 CT-RI, viii
NORTH CAROLINA	TN-GA, 25 GA-SC, 26 TN-VA, 28
NORTH DAKOTA	MT-SD, 9 SD-MN, 17
OHIO	IN-MI, 22 IN-KY, viii KY-WV, viii WV-PA, viii
OKLAHOMA	CO-NM, 14 NM-TX, 15 CO-KS, 16 KS-MO, 19 MO-AR, 20 AR-TX, viii
OREGON	CA-NV, 1 ID-NV, 2 WA-ID, viii
PENNSYLVANIA	WV-MD, 30 MD-DE, 33 NY-NJ, 34 OH-WV, viii DE-NJ, viii
RHODE ISLAND	CT-MA, 38 CT-NY, viii
SOUTH CAROLINA	NC-GA, 26
SOUTH DAKOTA	MT-ND, 9 MT-WY, 10 WY-NE, 11 ND-MN, 17 MN-IA, 18 NE-IA, viii
TENNESSEE	AL-GA, 23 NC-GA, 25 KY-VA, 27 VA-NC, 28 MO-KY, viii MO-AR, viii AR-MS, viii MS-AL, vii
TEXAS	NM-OK, 15 AR-LA, 21 OK-AR, viii
UTAH	ID-NV, 3 NV-AZ, 4 ID-WY, 6 WY-CO, 7 CO-AZ-NM, 8
VERMONT	NY-MA, 36 NH-MA, 37
VIRGINIA	KY-TN, 27 TN-NC, 28 KY-WV, 29 MD-WV, 31 DC-MD, 32
WASHINGTON	OR-ID, viii
WEST VIRGINIA WISCONSIN	KY-VA, 29 PA-MD, 30 MD-VA, 31 OH-KY, viii OH-PA, viii
WYOMING	MN-MI, viii MN-IA, viii IA-IL, viii IL-MI, viii MT-ID, 5 ID-UT, 6 UT-CO, 7 MT-SD, 10 SD-NE, 11 NE-CO, 12
** 10111110	