



## A Brief History of the Cartograsaurus

*By none other than our very own Cartograsaurus*

What is a "Cartograsaurus?" A Cartograsaurus is a nearly extinct sub-species of cartographer, perhaps resembling a Stegosaurus, usually identified by a baffled expression when confronted by a computer map screen, especially with GIS (Geographic Information System). Defense mechanism is to retreat into the "Olden Days" of Plane-Tables, Alidades, Theodolites, and Stadia Boards and other antique mapping equipment.

So, I am an old-school cartographer, learning my trade the hard way, boots-on-the-ground, first at Oklahoma U. School of Geology, Class of 1958, and later in carto school at ACIC (Aeronautical Chart & Information Center) in St. Louis, where I applied my mapping skills compiling, revising, editing U.S. Air Force navigation charts. Oh yes, and I constructed my own chart projections using a meter-bar and projection tables. The hard way. Using aerial stereo photo pairs and stereoscopes for photo interpretation, compiling/revising chart detail.

ACIC later evolved into a hi-tech mapping agency after reorganizations, mergers with other government agencies. Cartograsauruses would no longer be qualified to work there, sad to say. After retirement from the Federal mapping agency in St. Louis, I learned of USGS Earth Science Corps in 2003 now known as our familiar USGS TNMCorps. Earth Science Corps was another boots-on-the-ground operation where I cruised around the county (counties) in my pickup truck with the USGS 1:24000 Quadrangles, GPS on the dashboard, marking, annotating detail changes on the Quad, adding, revising or deleting symbols as noted. Also had a temporary USGS I-D badge, an "Official Business" placard for the vehicle. Very official looking!

Sometimes I got out of the pickup and tramped on foot to get to a structure such as an electronic communication tower. Even trespassing as needed! Oh dear. Never got caught but once I had to explain to a county deputy sheriff what I was doing! I can't recall how many Quads I did. That was fun and even a Cartograsaurus could handle that job! Then after Earth Science Corps I signed up with TNMCorps Volunteer program, concentrating on what I call the Oklahoma Earthquake Alley and the NMSZ in Missouri.

I'm 80+ years old but even now as I sit in comfort with the TNMC edit screens before me, I recollect olden days of Plane-Tables, Alidades and Stadia Boards. So it has gone full circle. There it is... a definition of a Cartograsaurus and job description.

Yours truly, Cartograsaurus

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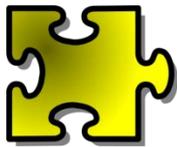
*The Cartograsaurus hard at work*

## Tricky Points and “Deep” Research

Sometimes you’ll come across points that are really, really difficult to research. This is particularly true for points located in rural areas or in areas where good imagery and street view are not available. These points can be frustrating, but they can also be a fun challenge and good practice for honing those digital sleuthing skills!

If you’ve carefully walked through each step of the research process but still can’t seem to locate the correct building in the imagery, you may have to get creative and dig a bit deeper. We’ll use the example of the [Tebbetts Post Office](#) in Tebbetts, MO, to illustrate this “deep” research process.

While doing a routine quality check on a sample of points, we encountered the Tebbetts Post Office. The name and address of this post office were correct, but the point appeared to be placed on a church. Sometimes post offices are located in unconventional buildings in small towns, so this wasn’t too unusual. But without a street view option, this building was hard to confirm. Using the phone number listed on the official usps.com website, we tried calling several times, but never got an answer. Time for more research!



After conducting a general internet search for the town of Tebbetts, MO, we came across the [Tebbetts Wikipedia page](#) which contained two photos: one of the Tebbetts, MO United Methodist Church (which appeared to match the building in the imagery), and one of the bank with a post office tucked in next to it. **A clue!**



[https://en.wikipedia.org/wiki/Tebbetts%2C\\_Missouri](https://en.wikipedia.org/wiki/Tebbetts%2C_Missouri)



The next trick was to locate this post office building in the imagery. This cluster of buildings resembles the structures from the Wikipedia image, but without more research, we couldn’t be sure if this was actually the post office.



Sometimes nearby landmarks can give us good clues, so instead of searching for the post office again, we did an internet search for the Tebbetts, MO bank. That led us to some other photos of the bank and post office from different angles:



<http://www.waymarking.com/gallery/image.aspx?f=1&guid=fa7ee94c-09f5-4da8-aad2-4adc6f38e3a8>



<http://barktrek2015.blogspot.com/>

Both images show the bank and post office across from the Turner Katy Trail Shelter:



After doing a little extra research on the Turner Katy Trail Shelter, we learned that it was correctly labeled in Google maps, and could serve as a great reference point for locating the post office building. Using what we had learned about the bank and the trail shelter we were able to confirm the post office building in the imagery and move the point to the correct location.

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*With tricky points you'll have to access a variety of resources so you can start piecing the puzzle together. Don't rely on a single secondary source for all of your information though! Cross reference the information you get from one source, with information from other sources.*

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So when doing “deep” research on tricky points, keep these tips in mind:

1. Check out unconventional sources and cross reference them with other sources
2. Identify and research nearby landmarks for clues as to the structure’s whereabouts
3. Do an image search and start piecing the clues together



And remember, if you ever get really stuck, we’re happy to help you out. Just send us a message at [nationalmapcorps@usgs.gov](mailto:nationalmapcorps@usgs.gov).

## Displaying One Structure Type

When using the map editor to edit points, you may want to focus on looking at only specific structures such as post offices or schools. With our new editor you can filter the map to show only certain types of points. To do so, click on the edit tab and then click on the drop down menu:

The screenshot shows the USGS map editor interface. On the left is a vertical toolbar with icons for home, user profile, search, edit (highlighted with a red box), undo, redo, and help. The main area displays a grid of structure type categories with icons: College / University, Elementary School, Technical/Trade School, General School, High School, Middle School, Ambulance Service, Fire Station / EMS, Law Enforcement, Prison / Correctional Facility, Post Office, Hospital / Medical Center, and Cemetery. At the bottom, a dropdown menu is open, showing a list of all available structure types. A red arrow points to this dropdown menu.

**This drop down list is a list of all of the feature types that can be selected**

For example, if you wanted to only view post offices, you could do so by using the drop down menu and selecting post offices.

**The Post Offices are the only thing selected here.**

After you’ve made your selection, zoom in to the map and you will only see post office icons.

The screenshot shows a zoomed-in view of a residential area on the map. The map is filtered to show only post office icons, which are represented by envelope symbols. A dropdown menu is visible on the left side of the map, with 'Post Offices Only' selected. The map shows a street grid with several post office icons placed at various locations.

If you decide that post offices are no longer the structure type you wish to work with, you can change the type again by clicking on a different one in the drop down menu. If you would like to view all of the structure types select “All Points”.

Regardless of what structure type you choose to edit, remember these important rules when editing:

1. Always use an [authoritative source](#) to verify the name and address of a point!
2. Ensure that any icon you edit is located on the center of the correct building or facility. Don’t forget to zoom all the way in!

## Moving vs. Deleting Points

A question The National Map Corps Staff often gets is: "When do I move a point and when do I just delete it?" Here are some general guidelines:

Move a point when...	Delete a point when...
The point is located on the wrong building or it is in an obviously incorrect location (such as the middle of a road). Using the aerial imagery background layers in the editor, and additional imagery sources such as Google street view or Bing bird's eye view, check to ensure the icon is located on the right building.	You're doing research on a point, and an authoritative source (website, contact, etc.) informs you that the facility is no longer in operation. If you need to delete a point, write a note in the comment box informing us why the point is being deleted and then delete the point.

### What about moving points long distances?

While editing you have probably come across a point that needed to be moved a long distance. This can be challenging because as soon as you move the imagery or zoom out, the point snaps back into place. In this case you may have wondered if it's worth trying to move the point, or if you should just delete it and recreate it in the correct location. There are three methods for dealing with this issue:

**1** First, you can try the mouse method developed by KentRobert, a long-standing editor with TNMCorps. For a description of this method, please see page 4 of our September 2016 [newsletter](#).

**2** Second, you can try moving the point in small increments, saving as you go until you've reached the correct location. To prevent the 5 minute data sync lock from being applied, you'll need to save the point with an error. You can add a symbol, such as '%' or '\$' in the name or address field to get an error. You should continue to move the point through the imagery as far as you can, saving the feature as you go. When you've moved the point to the correct location, clean up the attributes (remove those self-inflicted errors) and save your edits.

The screenshot shows a form with the following fields:

- Name:** Northern Arizona \$\$University%Police Departme
- GNIS ID:** 2672282
- Address 1:** Pine Knoll [truncated]
- Address 2:** Building 98A

A red callout box with a black border contains the text: "If you add a '%' or a '\$' to the Name or Address field, you will get an error. Save the point and keep moving it." Two red arrows point from the callout box to the '\$\$' and '%' characters in the Name field.

**3** Lastly (and *only* as a last resort!), you can delete the point in question and recreate it in the correct location. Be sure to record all of the attributes for the point you delete so you can re-enter them for the new point. Be very, very, careful to make sure that all of the information has been accurately transferred from the old point to the new point. We'd also appreciate it if you took note of the GNIS ID from the old point and entered it into the comment field for the new point.

## Finding Unedited Data

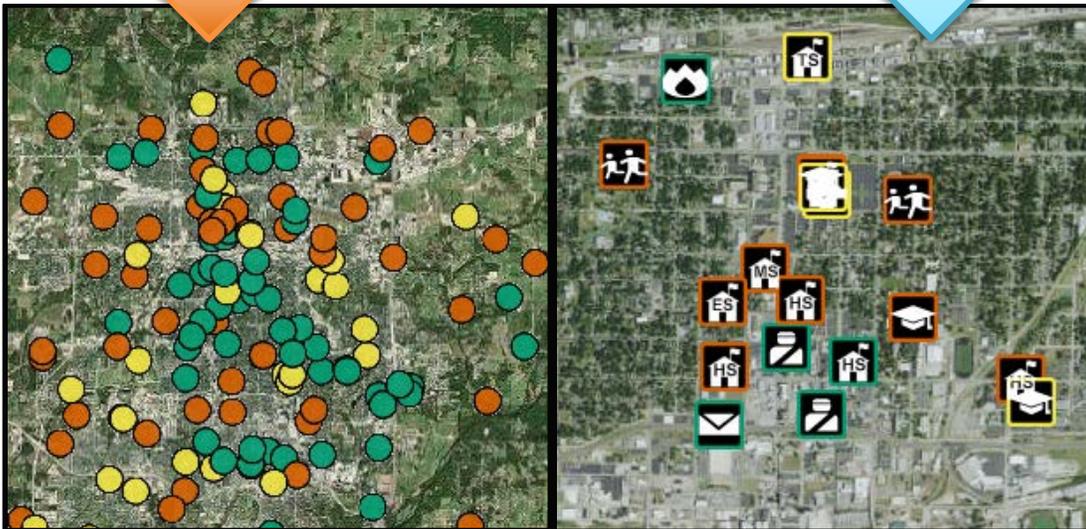
As a new volunteer you start out with the Standard Editor role. Standard Editors are responsible for verifying and updating points with a red border. Points with a red border have not yet been edited: 

However, sometimes finding unedited data can be elusive, especially in big cities like Denver or Washington D.C. which are popular places to edit.

When you first log in and you're looking for some red points, start in the city where you live. If you aren't finding any unedited points there, it's time to do a little travelling. Think of another place you've visited or a place you'd like to visit and start hunting down those red dots. (Hint: Louisiana has a bunch of unedited data!)

The best way to scan an area for unedited data is to zoom out far enough so you see the colored dots.

Once you've identified some red points, zoom in further until the structure icons appear.



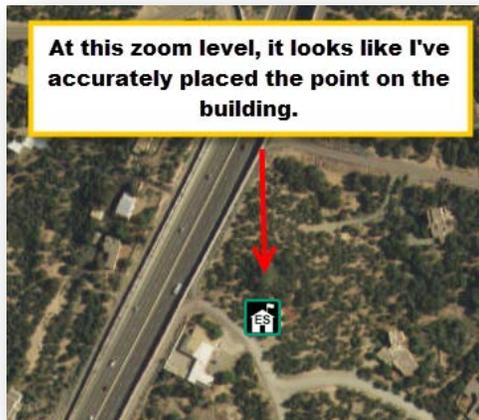
After zooming in, find an icon with a red border, click on it to open the editing window, and get to work!

## Editing Quick Tips and Reminders

### 1. ZOOM IN!

When you're ready to either move a point or add a new one to the map (after doing careful research of course!), don't forget to zoom in all the way before placing the point on a building in the imagery. If you're not zoomed in far enough, your point might not end up on the center of the structure or within the building footprint.

At this zoom level, it looks like I've accurately placed the point on the building.



But when I zoom in I see that the point was not actually placed on the center of the building



## 2. KEEP AN EYE OUT FOR DETAILS!

They say the devil is in the details, and that's certainly true when it comes to verifying and updating structures data. Some common mistakes we find most likely occur because small details get overlooked. These mistakes might be an extra digit in a street address (e.g. *17890 West Main Street* instead of *7890 West Main Street*), the wrong city entered for a point, or an icon that wasn't changed to correctly represent the structure (e.g. a middle school should not be labeled with an elementary school or general school icon).

Another detail that is easy to overlook is the GNIS ID. For most editing, you don't have to worry about the GNIS ID. However, if you encounter duplicate points and you plan to delete one of them, you need to look closely at this number. If one point has a GNIS ID and one point does not have a GNIS ID, delete the point that does not have a GNIS ID. If both points have a GNIS ID, delete the point with the larger GNIS ID.



Name	Desert Montessori School
GNIS ID	685942

**This point has the larger GNIS ID number, it can be deleted**

Name	Desert Montessori School
GNIS ID	682419

**This point has the smaller GNIS ID number, it should be updated and saved.**

## 3. GET THOSE POST OFFICES OFF THE STREET!

Many of the post offices that are loaded into the map editor do not have geographic coordinates. Instead, they are geocoded by address, which is why many of the post office points end up on a road, and not on a building. Since [usps.com](http://usps.com) makes it pretty easy to verify the name and address, but not necessarily the location of a post office, it might be tempting to fill out the information but leave the post office point in the road. Don't do it! Do the extra research to identify the correct building in the imagery, and move the post office point to that building. Consult the [user guide](#) if you need a refresher on doing the research to find the correct feature location.



## Linking Old and New Editor Accounts

Shortly after we launched our new map editor back in August 2016, we spent a significant amount of time and effort linking up the accounts of volunteers who had transitioned from the old editor to the new editor. This process only linked the accounts of people who made the transition to the new editor by September 2016. Since this task was extremely time consuming, we decided from then on to just link old and new accounts on a case-by-case basis.

So if you volunteered with us in the past using our old editor (prior to August 2016), but didn't set up an account with our new editor until *after* September 2016, there is a good chance your accounts have not yet been joined together. If you don't think your old and new accounts have been linked, send us an email at [nationalmapcorps@usgs.gov](mailto:nationalmapcorps@usgs.gov) and we'll remedy that for you. Once your accounts have been conflated, your recognition will reflect your combined point total from both the old and new editors. Unfortunately, your point totals listed in the profile dashboard of the new editor will still only reflect your contributions made in the new editor. If you volunteered before we made the switch, and you want to see your points from the old editor, you can view them [here](#).



## The National Map Corps Word Search!

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Y L S W S E T A N I D R O O C J Y N V A
M E A T N L C E M E T E R Y M T I Y U S
I C V X A E O P V R I E P R Z O J T A U
D I M R R N R O L N C U E K L P H F A R
D F A Y U I D A H O Z E M R B O L P C U
L F Y W S S J A G C T X O P R M B O F A
E O A O X D L N R N S T R I L A K M G S
S T N Z A V I A U D I H T S M P F N F A
C S N A W T E L C D E A G G A S O K R R
H O C H I C O M E I T D Q I X A J R G G
O P V O O V I D P I G H I S H F U K O O
O E N Q X S E X V R M O E T E L E D O T
L T Z J R C P E O R M D L T O I S B M R
W F J G N R W I Q U H H G O Z R S C O A
C M P A Y E M Z T P V M H V E V V Q T C
G Z V Y B S A X S A E O X G E G I B X A
X D A S A E K Z Z Q L D S J C V S A E P
A N I S T R U C T U R E S D A T A U K I
P T R R G A K K N Z M R Q E I Z N S G G
E S P R O C P A M L A N O I T A N E H T
  
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ADVANCED EDITOR  
CEMETERY  
HIGH SCHOOL  
POST OFFICE  
SAVE  
THE NATIONAL MAP CORPS

AUTHORITATIVE WEBSITE  
COORDINATES  
HOSPITAL  
PRISON  
STANDARD EDITOR  
TOPO MAPS  
VOLUNTEER

CARTOGRASAUROS  
DELETE  
MIDDLE SCHOOL  
RECOGNITION  
STRUCTURES DATA  
US GEOLOGICAL SURVEY

## Name that App!

We've been calling the new editor, "new editor" or "TNMCORPS Map Editor". But we could really use some help in coming up with a creative name! If you have any suggestions for a name for our online editor, please email your suggestions to [nationalmapcorps@usgs.gov](mailto:nationalmapcorps@usgs.gov).

## Have a story or photo you'd like to share?

We want them! This could be anything from a photo of you verifying a structure or an interesting story that you discovered while editing. Photos, graphics, and stories may be used in future news releases and social media posts. All materials submitted become part of the "public domain," and can be used by USGS in the future unless otherwise specified.

Please email them to [nationalmapcorps@usgs.gov](mailto:nationalmapcorps@usgs.gov)

## New Recognition Category Members



Squadron of Biplane Spectators (6000-6999)

- 



Ring of Reconnaissance Rocketeers (5000-5999)

- 



Family of Floating Photogrammetrists (3000-3999)

- Cassie Tammy Wang
- geo163



Flock of Winged Witnesses (4000-4999)

- 



Theodolite Assemblage (2000-2999)

- 



Alidade Alliance (1000-1999)

- 



Stadia Board Society (500-999)

- Dart12kb
- Ashish D'Souza
- GeoND
- tmp21038



Circle of the Surveyor's Compass (200-499)

- Dart12kb
- GeoND
- Megalania
- USGSTaylor
- tmp21038
- mdmoe
- DoeringSA\_AICP



Pedometer Posse (100-199)

- Dart12kb
- GeoND
- tmp21038
- affyviz
- bstockd2
- Lilitleet
- DoeringSA\_AICP
- Ikurilla
- bmorales55
- ammejia16



Society of the Steel Tape (50-99)

- Pavani Reddy
- Nalladimmu
- affyviz
- brendadoler
- bstockd2
- panepoo2717
- tmp21038
- savhannahcarpenter
- moreenna
- rzolla
- Ikurilla
- millerma2
- Majid Mohamod
- ammejia16
- The Cat
- bmorales55



Order of the Surveyor's Chain (25-49)

- Azimuth
- ehayman
- rzolla
- savhannahcarpenter
- jkbarber99
- daveydvd
- tmp21038
- Izabela
- bstockd2
- kageipel
- Ikurilla
- millerma2
- The Cat
- Majid Mohamod
- ammejia16
- bmorales55
- Pavani Reddy
- Nalladimmu
- Lapunta8
- moreenna
- th3\_azfar
- panepoo2717
- Calvin
- Animainia
- affyviz
- brendadoler

CONTACT US AT: [nationalmapcorps@usgs.gov](mailto:nationalmapcorps@usgs.gov) for suggestions, questions, additions to the next newsletter, or if you would like to be removed from the email list.

