TNMCorps Map Editor 1 Year Anniversary!

Just over a year ago, The National Map Corps launched its brand new web map editor (some of you recent editors might not even know we had an “old” editor!). We first introduced the new editor in the June 2016 Newsletter, and unleashed it into the world two months later.

This was an exciting accomplishment for The National Map Corps, because our new editor was developed completely internally, here at the USGS! Not only is it more user friendly than the old editor with lots of extra bells and whistles, but it allows for a faster and more efficient process of moving edits into the National Structures Dataset (NSD). Since launching the editor in August of 2016, we’ve made even more improvements and still have some in the works.

Over the last year we’ve improved the editor by:

- Adding a ‘Comment’ field in the editing window
- Allowing you to search the edit history of any point (not just your own) by editor or structure name
- Shrinking the database sync time from 24 hours to 5 minutes or less

We hope these changes have made your editing experience much more enjoyable, because you (our awesome volunteers) are the gears that keep The National Map Corps running! Thanks again for making this project especially successful. If we could, we’d share a piece of anniversary cake with you, but we’ll just have to settle for a virtual toast in honor of our new editor’s one year anniversary! Thanks again!

TNMCorps News
Volunteer Spotlight: A Tale of Two Kents

In our July Newsletter we featured our tenacious volunteer, meyerkv (Kent), who had taken on a self-imposed mapping challenge to edit most of the data in Puerto Rico. This month we’d like to shine the spotlight on another Kent (KentRobert), an equally resolute volunteer who has done a significant amount of editing in North and South Dakota. To give you an idea of just how much editing he’s done, his total point count is well over 5000!

So why focus on the Dakotas? When asked, KentRobert replied, “As with everything, it’s the people.”

In his own words:

“I like to search for the best database(s) I can find to work from. Once I have a database that I can ‘prove out’ to be reliable, and then I will apply that to all the icons on map in the state no matter whom, or what level of edit has been done. That keeps me checking and digging when the differences come up. You never know which database or what part of the database is correct. When I can’t resolve the question from the databases, then the search begins, with a lot of phone calls at times, trying to reach someone on the ground with that firsthand knowledge.

Sometimes that leads to some rather strange paths. I remember one cemetery in North Dakota, the database being “Find a Grave”, but reaching out to find someone who had visited the cemetery from that database was not working out. So I took an approach of searching for an obituary listing that cemetery. Good luck, found just one, and current, six weeks old. Survivors, of course were listed, but was six weeks long enough to wait to call the spouse?”

Only in the Dakotas, I think can you find on the net, a clear listing for a person, with phone numbers, so I made the call, and had a wonderful conversation. Her husband knew he was dying, and wanted to be buried on the farm, and there was a church cemetery (no building) on their property, but not of their faith, but she had made the arrangements with the church in question, and he was buried in their cemetery on his land.

The cemetery was very visible on the map photos, but now I had a name. Finished up the conversation talking about crops she was growing, general state of farming in North Dakota, and how people were planting corn even further north, that could not make grain, but could make alcohol, a good day.”

*The text in quotes in this article was submitted by volunteer KentRobert and has been published with their permission and with no modification. Note: although phone calls can assist with research, the TNMCOrps does not require editors to make calls.

Credit: U.S. Geological Survey
Department of the Interior/USGS
U.S. Geological Survey/photo by Kathleen Macek-Rowland
Collaboration in a Disaster: TNMCorps-ER

With the eyes of the nation turned toward the devastation recently wrought by Hurricane Harvey, it might be easy to forget that just over a year ago, Louisiana was struck by a catastrophic 1000-year rain storm.

Soon after, the Federal Emergency Management Agency (FEMA) got to work identifying flooded buildings to determine appropriate amounts of assistance. In much of the disaster zone, this work was aided by FEMA’s access to parcel data. Unfortunately, for six of the impacted parishes, there was no parcel data available.

In order to quickly and efficiently locate structures that might have been damaged by the flooding, FEMA reached out to The National Map Corps to form a collaboration that became known as TNMCorps-ER (Emergency Response). TNMCorps-ER mobilized some of their most experienced volunteers to remotely collect and identify buildings in the six parishes that were missing parcel data.

No surprise, our volunteers really stepped up to the plate! In one month, they collected 67,000 data points. To highlight the USGS-FEMA collaboration and all of the great work the volunteers did, the USGS recently published a Story Map entitled “Collaboration in a Disaster.” For a list of the volunteers who participated, be sure to visit our Recognition page.

Rather than referring to an event that only happens once every 1000 years, the term 1000-year rain storm refers to the probability of such an event occurring in any given year.

Therefore, a 1000-year event only has a 0.1% chance of occurrence each year, and a 100-year event only has a 1% chance of occurrence each year.

Check out this USGS publication for more information on the history and statistical uncertainties associated with the terms 100-year and >500-year events.

“This map shows the data collected in each parish, as number of buildings per hexagon. Lighter colors indicate more buildings per hexagon. Per-hexagon numbers range from 1 to 1800. Light gray areas show flood extents, as estimated by FEMA and by the Louisiana Governor’s Office of Homeland Security & Emergency Preparedness.”

More Tips and Tricks

Here at The National Map Corps, we have many favorite tips and tricks for editing. So in advance of our soon-to-be new and improved “Tips and Tricks for Editing” webpage, we’d like to share a few of them with you!

Some of our favorites include:

**Authoritative sources**

- When doing research on a structure and comparing various online sources, a key question to ask yourself is “Who created the website containing this information?” The answer to this question will provide insight into whether or not it is authoritative.

**Facebook as an authoritative source**

- Sometimes a Facebook page serves as an authoritative source. See Page 6 of our July 2017 Newsletter for an informational graphic on how to recognize official Facebook pages.

**“On-the-ground” views are priceless:**

- Use a commercial mapping service with “on-the-ground” views to virtually “walk” the street and inspect signage and/or building facades. Doing so will also help indicate which building the point should be centered on.

**Moving points a long distance:**

- When a structure relocates, we ask users to move the point to the new location, rather than delete and recreate it. Deleting the point also deletes important information attached to it, such as a GNIS ID. To move a point long distances, insert a special character in one of the fields and save frequently. This will prevent the system from locking you out while the database syncs. See Page 5 of our March 2017 Newsletter for more on Moving vs. Deleting Points.

**Deleting duplicate points:**

- When a single structure has duplicate points and both of them have a GNIS ID, delete the point with the higher GNIS ID. e.g. If point A has the ID 12345, and point B has the ID 56789, delete point B.
- If one point has a GNIS ID and the other doesn’t, delete the point with no GNIS ID. If neither point has a GNIS ID, then either one can be deleted.

Got any favorites of your own? If so, feel free to add them to our Q&A page, or send us an email at nationalmapcorps@usgs.gov. Your tips may be featured in the next newsletter or on our soon-to-be-updated “Tips and Tricks for Editing” webpage! As always, Happy Mapping!
Aerial Photo Interpretation Part 1: Cemeteries

You may not realize it, but every time you participate in TNMCorps you are conducting aerial photo interpretation. This part of the process of editing structures can be quite fun and interesting. In order to identify the correct building associated with a structure point, you must do a little bit of detective work by searching for clues in the imagery. You may be an expert at this, or you may be new to it. Either way, here are some helpful tips and tricks for interpreting the aerial photography background layers and identifying building types.

Cemeteries:
Cemeteries can be one of the trickiest structure types to edit: If they are very small, old, or in thick tree cover, it can be almost impossible to pinpoint the exact location. However, for many cemeteries, looking for specific clues on the aerial imagery will help you locate them.

**A defined border / landscaping different from the surroundings:**

**Headstones are often visible as small white dots, frequently in rows:**
Larger cemeteries will often have the same characteristics described above, but will also contain walking paths, roads, and buildings:

...which is a good reminder: don’t forget to zoom in all the way and check the other imagery background layers! Often times this will reveal details that you couldn’t see at a smaller zoom level, and imagery quality will vary depending on the background layer and location.

Zooming in reveals the tombstones of the cemetery above more clearly:
In areas with tree cover, sometimes certain imagery will have been collected “leaf off”, which will allow you to see cemeteries more easily. If you are having trouble seeing the cemetery on the aerial imagery, don’t forget to check Google Street View™ and/or Bing Streetside™ view to see if they can help confirm the exact location.
Shadows are often very helpful in aerial photo interpretation for a variety of structure types. In the case of cemeteries, often you can confirm that the small white dots are tombstones or monuments by the shadow they cast, which reveals their true shape and size:

Some families will also have their own section of a cemetery, which may be enclosed by a small fence or gate, as pointed out by the green arrows in the image above.
New Mapping Challenge!

Our Illinois Post Office Mapping Challenge is finished and it was a huge success! Over 1,280 unique Post Office points were updated, verified, added, or removed, so thank you to everyone who contributed. Your contributions will be making it onto the upcoming revision of the US Topo maps for Illinois!

As you’ve probably figured out by now, summer break is over. But it’s back to school with our new mapping challenge! Our current Mapping Challenge is focused on updating schools in Illinois and we have over 3,000 points that need to be edited and peer reviewed!

Because this mapping challenge involves schools, please reference our structures list for more information on the different types of schools we collect and how they are defined.

If you have any questions about using the Illinois Schools Mapping Challenge, please feel free to contact us at nationalmapcorps@usgs.gov

TNMCorps Word Search: Total Eclipse

Alignment  Astronomy  Atmosphere  Baily’s Beads  Corona  Diamond Ring  Eclipse  Glasses  Lunar  Moon  Orbit  Partial  Penumbra  Planet  Safety First  Solar  Star  Three Minutes  Totality  Umbral Shadow

See the next page for the solution to the puzzle and more information about this year’s solar eclipse!
TNMCorps Word Search: Total Eclipse (Continued)

TOTAL SOLAR ECLIPSE: Monday • August 21, 2017
This will be the first total solar eclipse visible in the continental United States in 38 years.

[Diagram of solar eclipse]

Not to scale:
If drawn to scale, the moon would be 30 Earth diameters away from Earth. The sun would be 400 times that distance.

https://eclipse2017.nasa.gov/how-eclipses-work
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.

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.

New Recognition Category Members

- Squadron of Biplane Spectators (6000-6999)
- Family of Floating Photogrammetrists (3000-3999)
- Theodolite Assemblage (2000-2999)
- Stadia Board Society (500-999)
- Ring of Reconnaissance Rocketeers (5000-5999)
- Flock of Winged Witnesses (4000-4999)
- Alidade Alliance (1000-1999)
- Circle of the Surveyor’s Compass (200-499)
- Pedometer Posse (100-199)
- Society of the Steel Tape (50-99)
- Order of the Surveyor’s Chain (25-49)

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