The Tornado Recovery Project at Tennessee Tech: A Case Study in Community Disaster Assistance by an Academic Archives

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Introduction

This article is a case study about what Tennessee Technological University Archives and Special Collections (Tech Archives) implemented as a disaster recovery effort for its local community following a devastating tornado. It is typical for library and archives disaster preparedness and disaster recovery efforts to include professionals in assisting their place of employment or a neighboring cultural institution or, sometimes, aiding the public directly after a natural disaster. In the case of the tornado that hit Putnam County, Tennessee in May of 2020, no cultural institutions sustained damage, so this placed Tech Archives in a position to provide direct, professional assistance to the public and local community.[1] This initiative included creating a single, online location to serve as a virtual lost and found to assist survivors and victims in their search for lost family archival materials — mostly photographs, but also personal documents and ephemera.[2]

Disaster Preparedness, Assistance, and Recovery: Libraries and Archives

Libraries and archives provide disaster assistance in mainly two ways: disaster preparedness and disaster recovery. The need to have disaster plans and preparation strategies in the case of a disaster, natural or otherwise, is well documented and a known priority for all cultural heritage institutions. The Preservation Committee from the Preservation Needs Assessment Project identified disaster preparedness in cultural institutions as the highest priority in both 1992 and 2001,[3] but many cultural institutions also provide disaster preparedness help information to their local communities through online resources such as the Council of State Archives publication, "Rescuing Family Records: A Disaster Planning Guide," or the "Preservation" section of the National Archives website.[4] Climate change is a growing topic of consideration for cultural institutions, as they prepare for larger and more frequent disasters in the future. Eira Tansey stated in 2015, "Climate change is one of the greatest contemporary

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[1] The Cookeville Doll Museum sustained exterior damage, but the collection was unharmed. As of this writing, the collection is in storage because Putnam County is not rebuilding the facilities.

[2] "Survivors" and "victims" are used for community members affected directly by the tornado. This is based on terminology used by the media, but also by survivors and victims' families. Emails received by the author from "survivors" included "I am a tornado survivor" or "family of tornado victim." Survivors created their own Facebook page including the language; see Katelyn Steakely, "About this Group," Cookeville/ Putnam Strong: TORNADO SURVIVORS GROUP, March 28, 2020, https://www.facebook.com/groups/2557231184498056/?ref=share.

[3] Central New York Library Resources Council Preservation Committee, *In the Face of Disaster: Preparing for Emergencies in Central New York*, Rev. ed. (New York: Central New York Library Resources Council, 2002), accessed September 18, 2020.

[4] "Disaster Response and Recovery," National Archives, September 12, 2017, https://www.archives.gov/preservation/disaster-response; David Carmicheal, *Rescuing Family Records: A Disaster Planning Guide*, 3rd ed. (Albany, NY: Council of State Archivists, 2012).

threats to archival repositories and the records in their custody," and goes so far as to suggest archives relocate to less-threatened geographic areas as a strategy to prevent potential destruction of collections.[5]

Public library disaster responses prioritize library staff safety, physical collection preservation, and an urgency in resuming public services, but following disasters, they also provide other services to their communities.[6] For instance, patrons use the internet to access disaster information and government assistance applications, often with library staff assistance.[7] After Hurricane Sandy in 2012, the New Jersey State Library created a toolkit designed for librarians acting as first responders. Library services in that context included food distribution, space for volunteer organizations, information and technology support, and general safety for all workers and volunteer community members.[8] The toolkit expressly stated that a librarian's skills of "customer service and effective communication" are attributes needed during a disaster scenario.[9] In 2019, the National Library of Medicine reiterated this sentiment in its 'Information Roles in Disaster Management' course, stating that "emergency managers need individuals, such as librarians, that can identify, organize, and deliver" disaster information to constituents.[10] Such skills apply to most library and archives professionals in the field.

Librarians and archivists regularly volunteer their experience, time, equipment, and facilities to other cultural institutions when disasters affect collections and facilities. After Hurricane Katrina in 2005, Louisiana State University assisted numerous New Orleans institutions in conservation, storage, and salvage.[11] Eyebeam Art + Technology Center in Brooklyn, New York, used Twitter to enlist professional and non-professional volunteers for audio-visual salvage after Hurricane Sandy.[12] Libraries and archives also combine their resources to aid in local and regional recovery efforts through larger networks, such as the New Orleans Preservation Coalition, the Texas Cultural Emergency Response Alliance, the California Alliance for Response, and the Western States and Territories Preservation Assistance Service.[13]

Archives have also assisted in disaster recovery through the creation of "disaster archives," continued and improved collection access online, and the dissemination of professional knowledge and preservation best practices.[14] Disaster archives, or archivists actively collecting materials following disasters, provide future researchers with primary source materials about the local impact of disaster experiences. Courtney J. Rivard's 2012 thesis suggests that disaster archives emerged following the September 11 attacks and Hurricane Katrina in the early to mid-2000s.[15] Similar projects continue to emerge in 2020, including

[5] Eira Tansey, "Archival Adaption to Climate Change," *Sustainability: Science, Practice, and Policy* 11, no. 2, (2015): 45.

[6] Joyce Hill Stoner, "Connecting to the World's Collections: Making the Case for the Conservation and Preservation of Our Cultural Heritage," *International Journal of Cultural Property* 17, no. 4 (2010): 653-654.

[7] Robin Featherstone, "Section 3: Professional Roles for Librarians and Information Specialists," *Information Roles in Disaster Management, an Online, Self-Paced Course* (Bethesda, MD: National Library of Medicine, 2019), accessed September 18, 2020, https://www.nlm.nih.gov/dis_courses/info_roles/index.html.

[8] *The Librarian's Disaster Planning and Community Resiliency Guidebook: Librarians Fulfilling Their Role as Information First Responders* (Trenton, NJ: New Jersey State Library, 2013), http://www.njstatelib.org/wp-content/uploads/2013/01/The-Librarian-Guidebook-Sept-10-Final-2.pdf.

[9] *The Librarian's Disaster Planning and Community Resiliency Guidebook*, 2.

[10] Featherstone, 2019.

[11] Tara Laver and Elaine Smyth, "After Katrina," *Southwestern Archivist* 28, no. 4 (November 2005): 18-19.

[12] Kara Van Malssen, "Recovering the Collection, Establishing the Archive: A case study on the recovery of Eyebeam Art+Technology Center's Multimedia Collection Following Superstorm Sandy," *AudioVisual Preservation Solutions* (April 2013), https://www.weareavp.com/wp-content/uploads/2013/05/RecoveringTheEyebeamCollection.pdf.

[13] "Regional Level Resources," Society of American Archivists, accessed September 18, 2020, https://www2.archivists.org/groups/regional-archival-associations-consortium-raac/regional-level-resources.

[14] Tennessee Tech Archives created a "disaster archive" for the March 3rd tornado event, including the community and university's personal stories. The collection grew to include the COVID-19 pandemic.

[15] Courtney J. Rivard, "Archiving Disaster: A Comparative Study of September 11, 2001 and Hurricane Katrina" (PhD diss., University of California, Santa Cruz, 2012), 1-2, https://escholarship.org/uc/item/1kt0v0q8.

documentation around the ongoing COVID-19 pandemic. After Hurricane Sandy, New Jersey's Township of Brick Archives offered homeowners disaster recovery assistance by providing access to the property records necessary for filing of insurance claims.[16] Archivists of the Houston Area (AHA) provided informational social media posts and emails about recovering storm-damaged family archives after Hurricane Harvey in 2017, and the AHA president made television appearances, providing information on various recovery methods for those affected.[17] Just two weeks after Harvey, at the Houston Archives Bazaar, the AHA and the Texas Collections Emergency Response Alliance provided consultations with conservators.[18] Like Tech Archives after the Spring 2020 tornado in Putman County, major archival institutions suffered little to no severe damage, resulting in an opportunity to share their professional preservation expertise to locals who did experience destruction. The growing frequency of superstorms and climate change-related disasters continues to open a larger and still unresolved discourse on ways the archives profession can provide hands-on assistance within and for their communities after these catastrophic events.

Background

Tech Archives is located in the Angelo and Jennette Volpe Library at Tennessee Technological University in Cookeville, Tennessee. Its thirty-three hundred cubic feet of collections includes materials relating to the university and Tennessee's Upper Cumberland. Full-time employees at Tech Archives include two professionals (a university archivist and an assistant archivist) and one paraprofessional (an archives assistant). Other employees include two interns every year, one volunteer, and five to six paid student workers, contributing about forty hours a week in work time on archival projects.

On March 3, 2020, a critical moment in Putnam County history occurred when an E-4 tornado landed in Cookeville, Tennessee. The tornado killed nineteen people, destroyed hundreds of homes, and damaged countless others. The tornado ended before reaching Cookeville Regional Medical Center, one mile from the Tennessee Tech University campus. A late evening supercell thunderstorm on March 2 formed this tornado and numerous others throughout Missouri, Kentucky, and Alabama. The storm produced a total of ten tornadoes, ranging from EF-1 to EF-4s, and seven of these impacted Middle Tennessee.[19]

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[16] Bryan J. Dickerson, "Recovering from Hurricane Sandy: A Municipal Government Archives Role in Disaster Recovery," *Provenance, Journal of the Society of Georgia Archivists* 35, no. 1 (2018): 91.

[17] Emily Vinson, "Applying an Established Format to the Houston Archives Bazaar," *Preservation, Digital Technology & Culture,* 48, no. 1 (2013): 51.

[18] Vinson, 52.

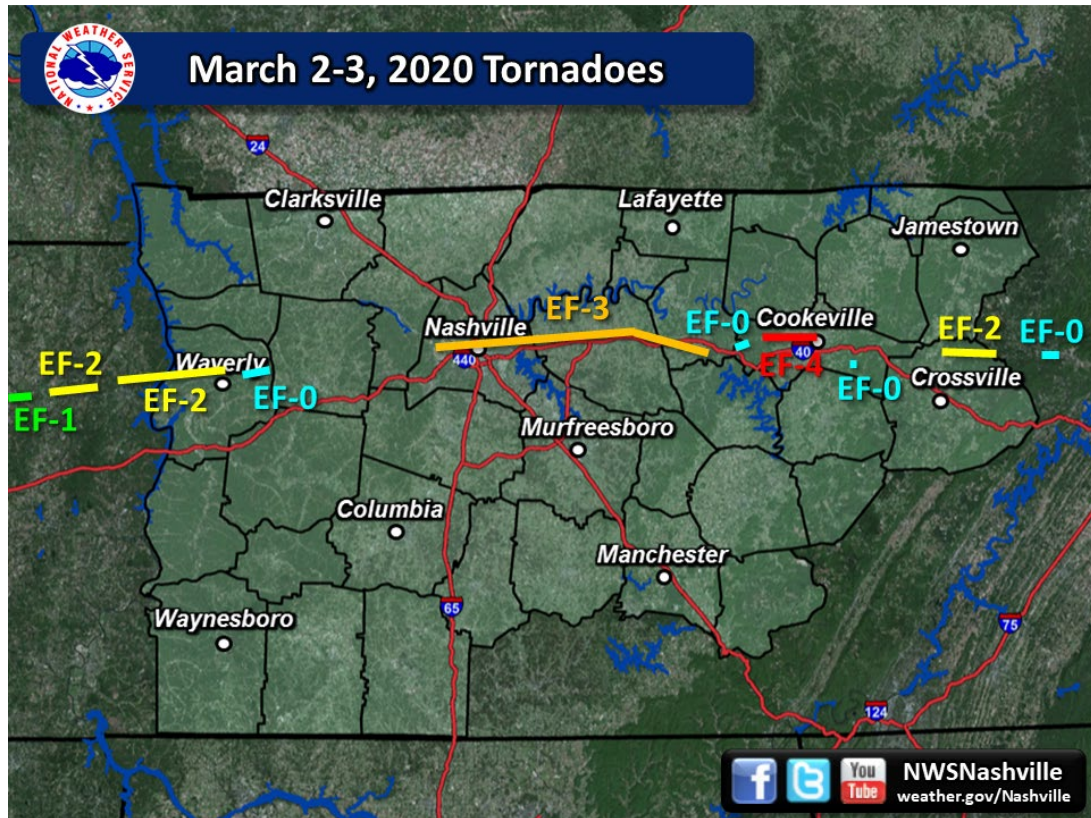[19] "March 2-3, 2020 Tornadoes and Severe Weather," National Weather Service, June 2, 2020, https://www.weather.gov/ohx/20200303.

Figure 1. National Weather Service. https://www.weather.gov/ohx/20200303

In the daylight hours of March 3, many Middle Tennesseans woke up to find debris in their yards, including photographs and documents belonging to survivors and victims from miles away. They took found materials to locally established drop-off sites, such as Soul Craft Coffee, the Cookeville Community Center, the Putnam County Fairgrounds, and other locations around the county, where materials were being displayed for people seeking lost items. Community members also posted their finds on Facebook.

Like in-person lost and found centers, Facebook is a community tool for finding lost belongings during disasters and in more normal times as well. Community members act as "digital volunteers" to reunite owners with items, such as pets or photos, lost in a disaster.[20] For instance, Patty Bullion established a Facebook page, "Pictures and Documents found after the April 27, 2011 Tornadoes," for photographs found after a series of tornadoes in Alabama.[21] Betty Siegel-Harty created "PHOTOS found from Nov 17, 2013 Illinois Storms/Tornadoes" after a tornado hit Washington and Diamond, Illinois.[22] And, in Alto, Texas, in 2019, Jason Ashworth created "The Tornado of 4/13 Lost and Found."[23] In Cookeville, TN a community member and volunteer, Sadie Christenson Barrientos, created a Facebook group called "Found in the Storm:

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[20] Mario Barrenechea, Kenneth M. Anderson, Leysia Palen, and Joanne White, "Engineering Crowdwork for Disaster Events: The Human-Centered Development of a Lost-and-Found Tasking Environment," (paper presented at 48th Hawaii International Conference on System Sciences, Kauai, Hawaii, January 5-8, 2015), 182-91.

[21] Crystal Bonvillian, "Facebook Page That Reunited Victims with Photos, Documents Shutting Down," Al.com, April 28, 2012, https://www.al.com/breaking/2012/04/facebook_page_that_reunited_vi.html. This Facebook page is now gone, but the photographs still remain in Bullion's possession as of May 5, 2020.

[22] Lauren Zumbach, "Scattered by Storm, Mementos Find Their Way Home through Facebook," *Chicago Tribune*, September 8, 2018, https://www.chicagotribune.com/news/ct-xpm-2013-11-18-ct-met-tornado-facebook-page-20131119-story.html.

[23] Brenna Burger, "Alto Tornado Victims Take to Social Media for Help Finding Lost Items," https://www.kltv.com (Gray Television, April 23, 2019), https://www.kltv.com/2019/04/22/alto-tornado-victims-take-social-media-help-finding-lost-items/.

Putnam County Tornado," which provided a single social media site for Middle Tennesseans to share images of the items they found after the March 3, 2020, tornado in the hopes of returning them to their owners.[24] Users tagged potential owners and shared the posts on other Facebook pages and in messages to get the work out.

The "Found in the Storm: Putnam County Tornado" Facebook group and numerous drop-off points were effective for reuniting materials with their owners; however, each had some drawbacks. Facebook's algorithm, the sheer volume of these posts, the duplication of posts through multiple shares, and a lack of updates about items that were successfully homed were all problems. In addition, some owners were simply not on Facebook. Numerous physical drop-off points compelled survivors and their families to travel to multiple places and return periodically as these sites collected more materials over time. Tech Archives, witnessing these various challenges, devised a more ideal plan on March 4, which included physically aggregating the materials from all locations in a single local and bringing them to Tennessee Tech for cleaning, digitization, description, preservation, storage, and hosting on a private Flickr account so as to make them viewable on the web to anyone. Moving quickly, on March 5 and 6, Tech Archives advertised itself as a centralized, long-term site to store and provide access to the found materials in the wake of the tornado destruction, and secured the necessary support of numerous community organizers and leaders for this work, including the county mayor and county archivist.[25] The Flickr page went live on March 6. Tech Archives distributed informational fliers and shared the service with numerous Facebook communities to make sure as many people as possible were informed.[26] After implementation of the Flicker page, the county mayor sent a text message about this service to survivors through an established notification system.

Setting Things in Motion: The Cookeville Community Center

The Cookeville Community Center was already an active disaster assistance site and received many lost and found items in the time between the storm and the creation of the Flicker site. An agreement between the archives and the community center established the continued use of the community center as a drop-off and retrieval location early in the project, due to its easier access, familiarity within the community, and its established disaster assistance activities. Tech Archives diverted their employees, students, and volunteers to the community center to assist with the lost and found materials.[27]

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[24] Sadie Christenson Barrientos, "I created this group as a place to post all photos or lost items found in the debris of the storm.," Facebook, March 3, 2020, 3:38 pm. (Link no longer available).

[25] The Putnam County Archives, under the County Mayor Randy Porter, also worked tornado recovery and assistance in lost items found in the storm, because their department manages the Putnam County Fairgrounds, a site for disaster assistance.

[26] Tennessee Technological University Archives and Special Collections, "Tennessee Tech University Archives recognizes the loss this community has felt…," Facebook, March 5, 2020, 11:34 a.m. https://www.facebook.com/TennTechArchives/posts/758317118026594; There is little evidence of other social media being used for lost and found items for the tornado.

[27] Working at the established volunteer location enabled Tech Archives to work as a "Donated Resource" as per FEMA policy DAP9525.2. The hours logged assisted the community in offsetting the non-federal costs of recovery. For more information, see FEMA's Disaster Assistance Policy: https://www.fema.gov/pdf/government/grant/pa/9525_2.pdf.

Figure 2. The initial stages of Cookeville Community Center's lost and found photographs displayed on March 7, 2020. Photograph by the author.

Volunteers displayed materials on the community center walls for survivors to browse. Materials lining a few walls at the start of the project eventually covered most walls of the center. Volunteers dried and bagged materials, preparing them for display and later storage at Tennessee Tech, and left damaged photographs and albums for archives employees to handle, placing them in an on-site freezer.[28] Volunteers also took shifts to display the materials and assist people dropping items off. For long-term storage, Tech Archives planned to retrieve the materials incrementally and bring them to the archives facility for processing and digitization.

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[28] The on-site freezer was already on location and not secured specifically for this purpose.

Figure 3. The walls of the Cookeville Community Center lined with photographs on March 8, 2020. Photographs lined most walls in the facility. The initial numbering scheme is seen on the right wall, depicting "A" and "B" sections on construction paper above the photographs. Photograph by the author.

News outlets and individuals filmed and reported on the powerful display on the community center's walls,[29] and this, in turn, created privacy concerns. Volunteers reminded viewers that the community center was for tornado survivors, and that displays included personal photographs not necessarily intended for public viewing. Individuals, hoping to assist friends and family in recovery, took photographs off the wall that may or may not have belonged to their friends or family. Volunteers observed this behavior as some photographs were later returned. Other items may not have been recovered by their original owners at all.

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[29] Gentry Estes, "Blown miles away by a tornado, photos and memories are being rediscovered in Putnam County," *The Tennessean*, March 5, 2020, https://www.tennessean.com/story/news/local/2020/03/05/blown-away-tornado-photos-memories-found-again-cookeville/4958805002/; Sergio Martínez-Beltrán, "A Putnam County Project Is Helping Tornado Survivors Recover Lost Photos," WPLN News, Nashville Public Radio, March 12, 2020, https://wpln.org/post/a-putnam-county-project-is-helping-tornado-survivors-recover-lost-photos/.

The Best-Laid Plans of Mice and Men: Developing a More Realistic Plan

Figure 4. A local volunteer group, the Upper Cumberland Grotto, assisted with cleaning and photographing the photographs prior to the pandemic. The process included two individuals cleaning, one photographing, and one (not shown) finalizing and uploading the images to Flickr. Photograph by the author.

Tech Archives initiated involvement because it saw a potential need for the professional skills of archivists, including cleaning, preservation, digitization, description, access, and retouching of digital photographs.[30] However, with the increasing volume of photographs, it was apparent that some archival processes were unmanageable, and what was most needed was access. High-quality scanning was time consuming, so a method of photographing the materials and the identifier in the same image was devised, which produced lower-quality images, but completed digitization faster (see Figure 5). Initially the archives cleaned all images, but later, this was performed after images were claimed instead of upon arrival. Tech Archives also initially provided descriptions of the images, but learned the effort was not beneficial to users. Users browsed images visually on the site and did not search descriptions.

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[30] Some insurance policies include photograph recovery. This is important for survivors to know, because their materials can be sent to professional conservators. The author does not know of specific providers but is aware that some survivors received this as a service.
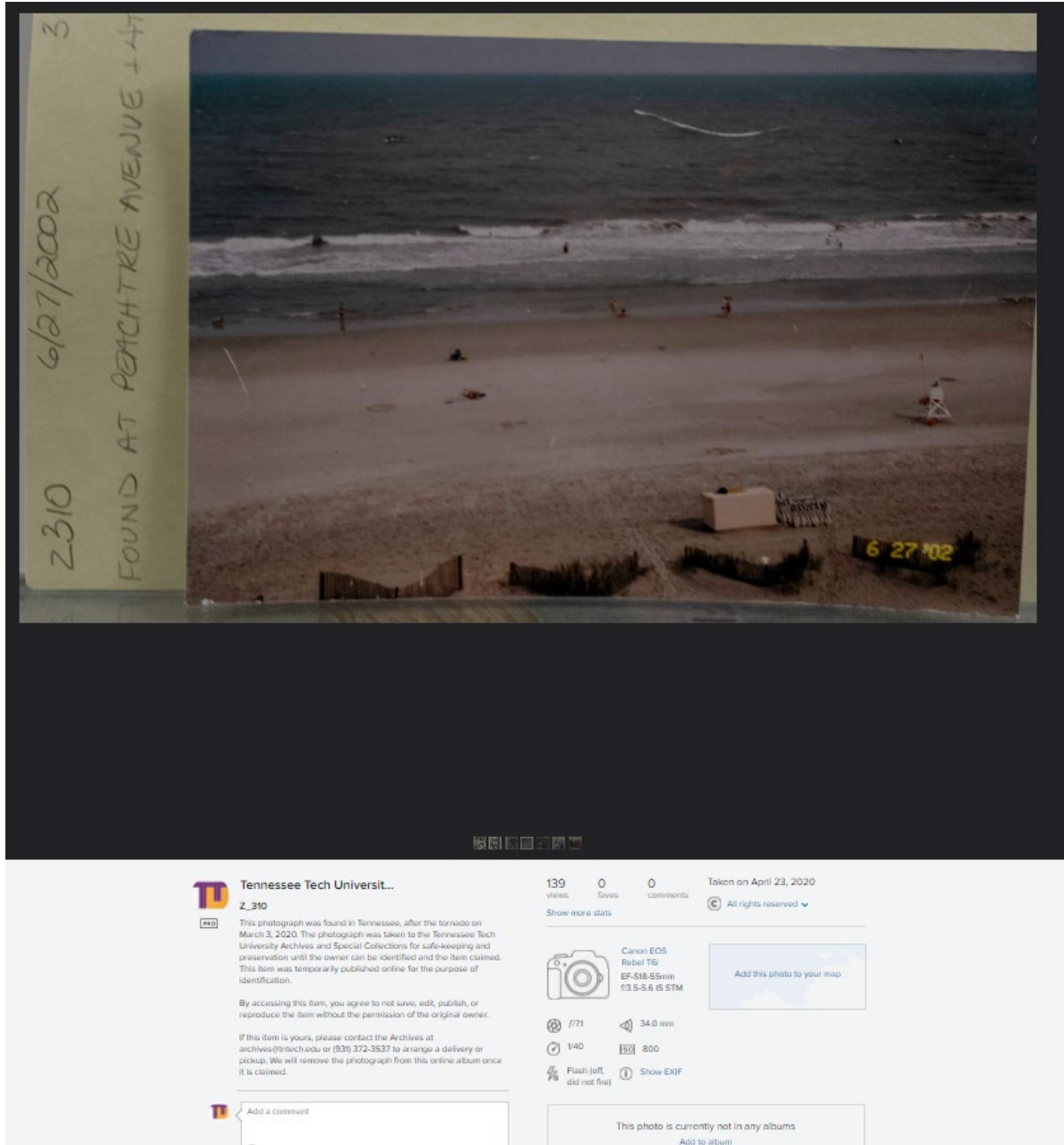
Figure 5. Example of low-quality image taken with camera, displayed with identifier. Some users did not recognize identifiers included in the descriptions on Flickr, so displaying them in the images assisted the users.

       Volunteers added unique identifiers to each individual item early on at the Cookeville Community Center (Figure 2) following a simple system (i.e., A_001, A_002...B_001, B_002, etc.). This numbering scheme began at the community center to keep track of incoming and outgoing photographs, and the archives continued the same organization during processing. After the materials came to the archives, volunteers put identifiers on the acid-free sleeves storing the materials. Archives staff arranged materials in boxes alphabetically, then chronologically, making it easier to pull requested items. The simplified identifiers were also easier for creating Flickr image file names, for arranging files, and for users requesting images.

Tech Archives established procedures for the Flickr site that mitigated some privacy concerns created by the previously-established community center display. To begin the process, owners requested access to the Flickr site to initiate the return of their photographs. Archives responded to email requests for access with the following language:

> *…the site has private and personal photographs of many tornado victims. Please do not share it with anyone other than those seeking photographs. By accessing the site, you agree to not save, edit, publish, or reproduce any items that do not belong to you or your family without the permission of the original owner. If you have other family members also seeking pictures, combine what you found in a single email. Please pick a designated family member to have the photographs sent to.*[31]

Individual items on the Flickr page included the same language. Tech Archives gave access to the Flickr account through a private URL and removed images from the site as they were claimed. Owners requested photographs using the identifiers and listed the identifiers for Tech Archives though emails, handwritten notes, and sometimes just screenshots. Users without technological skills or internet access were invited to browse the collection in person at the Archives. Tech Archives personnel did redact some materials before uploading them on the Flickr site. This included items such as sonograms, personal journal entries, and nude photographs. Documents containing sensitive and/or personally identifiable information were turned over to the Cookeville Police Department.

The Pandemic Immediately Following the Tragedy

Tech Archives began volunteering at the Cookeville Community Center on March 6, but that operation soon closed due to the COVID-19 pandemic and necessary social distancing protocols. The pandemic hastened the move of materials to Tech Archives, with all materials arriving on March 12 abruptly, instead of incrementally as planned. Tech Archives solicited volunteers on social media and among personal friends to inventory and digitize the items, while media coverage drew additional volunteers. Shortly after this, Tennessee Tech University closed due to the pandemic, and volunteers worked on the project at home. At-home volunteers received a carton with an assigned a letter (for instance "G" or "H" labeled boxes) and volunteers working on a box labeled individual items in the box accordingly (So box "H" would have items labeled: H_001, H_002, etc.). Completed portions of the project were brought to the home of the university archivist in order to continue returning materials to owners, until closures at the University ended.

While pandemic closures created a need for a different approach and a greater workload sooner than expected, it did not hinder the overall project. The Flickr page created a virtual space for survivors that was unaffected by pandemic shutdowns, unlike the physical community center space. University employees and other individuals also found themselves without enough work duties to perform at home and reached out to help us during unexpected downtime.[32] For instance, numerous library employees normally working in interlibrary loan or cataloging had fewer responsibilities during the closure and they contributed to the project. Likewise, sports medicine staff assisted, because they did not have athletes to attend to regularly during the closure.

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[31] Email between tornado survivors and family members with Tennessee Tech University Archives and Special Collections, March 2020.

[32] These individuals were still paid wages by the university and performed these tasks on the job.

Try This at Home?

If Tech Archives repeated this process, some improvements would make it easier and more successful. Tech Archives did not anticipate the sheer quantity of materials that arrived during the tornado recovery project. Knowing now that the project has the potential to receive a large quantity of material (many linear feet), Tech Archives would begin with the simpler approach of just photographing, providing online access to, and storing found materials, instead of trying to clean, perform complete digitization, and provide full description and preservation activities on each item. Furthermore, all images on Flickr might in the future include the identifier in the description and also in the photographed image itself, because unique identifiers were an unknown concept for many users, despite available explanation, and somewhat hidden in lower level metadata fields for those visually browsing. However, users did tend to recognize identifiers included in image snapshot without problems (see Figure 5), and some users provided only screenshots with their requests, which made the presence of the identifier in the image itself necessary to fulfill their requests. Another complication was that Tech Archives also implemented unique identifiers immediately at the community center in addition to in-house at the Archives. So, tracking the photographs being dropped off, taken, and sometimes returned at the community center resulted in some problems with duplication of identifiers and sometimes missing sequences of identifiers. Adding identifiers to collected items from the community center *after* securing the materials internally at the Archives would eliminate problems with duplicate identifiers and sequence gaps.

If another institution wanted to repeat this project in a post-disaster community, the ability to prioritize the recovery project over normal job functions would be the first and ultimate deciding factor. Tech Archives prioritized assisting the local community instead of performing metadata creation, processing, and cataloging on other projects and collections. Laver and Smyth expressed a similar sentiment regarding Louisiana State University's work after Hurricane Katrina: "To many of us, getting that new finding aid posted, that collection cataloged, or the next exhibit planned suddenly seemed irrelevant. We wanted to do something to help."[33]

This project model may be sustainable for smaller scale disasters but could prove unsustainable for a smaller archives in a larger disaster. Workload on this project was initially large, but as of 2021, it required less time as less and less material was found, and as workflows were improved. This study may also not be practical for larger institutions with a far-reaching community. Tennessee State Library and Archives, based in Nashville's Davidson County (approximately seven hundred thousand people), promoted a similar effort at tornado assistance sites, community centers, and churches, but received no community response.[34] A smaller community, such as Putnam County (approximately eighty thousand people), may be able to provide better means of promoting a project of this nature and scale if it maintains ties with its smaller close-knit community. The project's expenses included acid-free sleeves and any costs associated with delivering the materials to survivors and victims via mail, most of which the archivist and library incurred.

One Year Later and Future Needs

Beginning with approximately one hundred photographs, the operation became much larger over time. Initially, only a few photographs were turned over, but through the project over

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33 Laver and Smyth, 19.

34 Tennessee State Library and Archives, "The Tennessee State Library and Archives would like to express our deepest sympathies for those affected by the recent tornadoes," Facebook, March 6, 2020, 5:09 p.m. https://www.facebook.com/TNStateLibraryArchives/posts/1882301908568191 ; Messenger conversation between Tennessee State Library Archivist and author, September 16, 2020.

thirty-seven hundred photographs were collected, and over one thousand of these were returned to their owners.[35] The work provided by the Archives, volunteers, and the community was time-consuming, but rewarding and much-needed for the community to heal after such a devastating tragedy. As of March 2021 (a year after its first implementation), the Flickr site included more than twenty-six hundred photographs, with materials still arriving at the archives even at the one-year mark (anniversary media coverage of the storm created an uptick of incoming materials even a year later). The physical collection, as of April 2022, was nine cubic feet.

Future work for the tornado recovery project includes outreach efforts to Tennessee communities west of Putnam County affected by the tornado. Survivors told of photographs found as far away as Kentucky, and Tech Archives confirmed that some materials in their holding landed as far as one hundred and thirty miles east, based on collected data. Tech Archives returned items as far as Mount Juliet, Tennessee, which is seventy miles west of Cookeville. Analyzing Facebook posts from western areas' tornado recovery Facebook sites, Nashville and Mount Juliet residents found materials more than one hundred miles east of their location, in Hilham, Tennessee.[36] Therefore, evidence suggested the archives needed stronger promotion of the collection in these other areas, because even after multiple large media outlets reported about the recovery project in March 2021, these areas still remain relatively untapped and unengaged.[37] The failure of the larger media promotion further suggests that being a small archives in a small community made the project more viable, affording better internal communication with individuals in the community on a personal basis. In the future, the archives plans to have a dedicated student assistant onsite to assist in communicating with western areas that have been somewhat neglected in terms of outreach and networking.
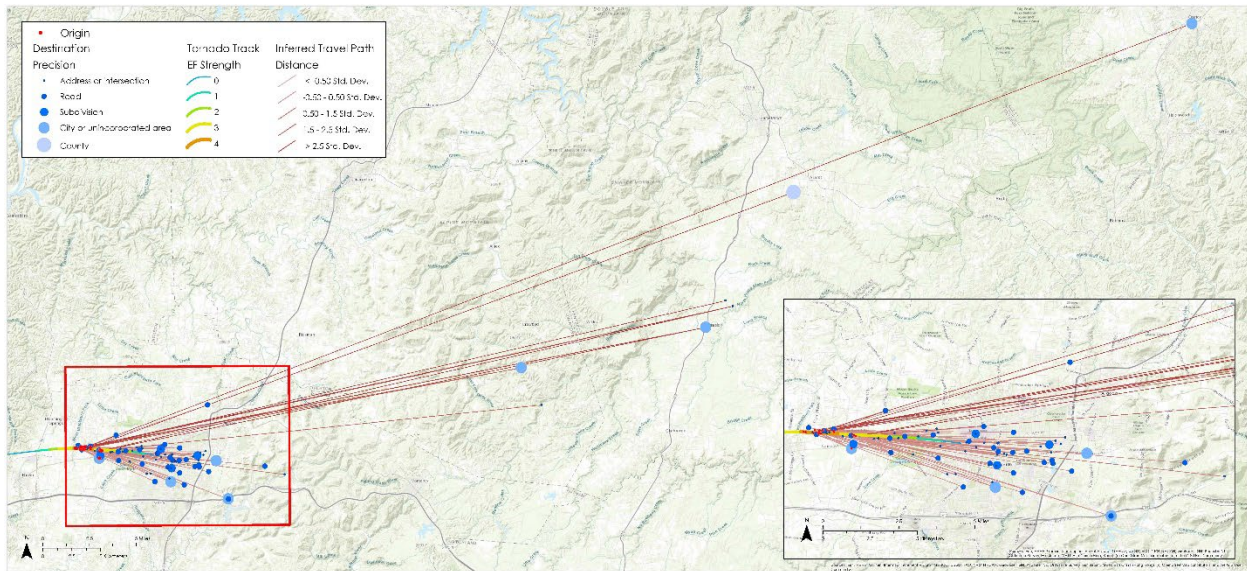

Figure 6. Map showing a sample trajectory of photographs originating in Cookeville, and their location after the tornado. Created by Chuck Sutherland.

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[35] These numbers do not include countless materials returned from the community center efforts.

[36] Tennessee Tornado Lost and Found, "Found all in Hilham alot of address from Mt. Juliet would like to get pictures back to their families," Facebook, March 7, 2020, 7:17 a.m. (Link no longer available).

[37] Without citing each individual article, the author specifically promoted awareness of the project to the west in more than two in-person interviews by major news agencies in Nashville in March of 2021. Example: Julia Palazzo, "Tennessee Tech Archivists Reuniting Tornado Survivors with Precious Memories," *wkrn.com* (Nashville), March 3, 2021, https://www.wkrn.com/news/nashville-tornado/tennessee-tech-archivists-reuniting-tornado-survivors-with-precious-memories/.

Community Collaboration Success

The combination of the lost and found Facebook group, efforts from drop-off sites, particularly the Cookeville Community Center, countless volunteers, and the dedicated archival professionals and resources of Tennessee Tech Archives made this community-based tornado recovery project successful in Cookeville, Tennessee. Many survivors located their lost items through Facebook and Flickr, at drop-off sites, and at the local community center. The resourcefulness and efforts of others to create early first-responder solutions for lost family artifacts helped Tech Archives recognize the post-disaster needs of its community, acknowledge what was working and not working in the lost and found retrieval process, and fill in service gaps where they existed so as to be of most help. Furthermore, the community center and Facebook community contributed to the successful promotion of Tech Archives' recovery assistance program, providing a grassroots approach to successful implementation.

Whether one method could have accomplished the recovery effort alone is unknown. Feedback from survivors regarding the recovery effort indicated that most deeply appreciated the lost and found online groups and posts.[38] And while some experienced no difficulties using Facebook to identify their belongings, others had difficulty managing deluge of posts and content in that online space; one survivor mentioned avoiding social media altogether. Many survivors assigned family and friends to assist in locating photographs on Facebook and at drop-off sites with success. The community center, a resource for all aspects of recovery, and its volunteers provided needed assistance and an optimal location, which enabled Tech Archives to easily begin assisting with the project. Unfortunately, the location and its volunteers were unsustainable during the COVID-19 pandemic. Importantly, survivors mentioned that regular disaster recovery efforts, such as cleaning up home sites, filing insurance claims, and working with FEMA (Federal Emergency Management Agency), made the extra steps of trying to recover lost personal effects difficult or near impossible, and therein appreciated the archives' providing a single point of access to found materials which could be reviewed and identified at their leisure.

Tech Archives was successful in reaching its community, despite the project's various complications, and continues to support the recovery of personal items found in nearby tornado sites. Furthermore, this case study presents a repeatable project for other like institutions facing disaster response scenarios. Though the project has become greater in scale and size than originally anticipated, especially due to the more recent inclusion of western areas affected by the tornadoes, the future help of a student assistant and the continued project management work and expertise of the Tennessee Tech Archives will ensure that this important community service is maintained. Tech Archives, with the support of the county archives, decided on a three-year retention and disposition policy for the recovered materials housed at Tennessee Tech.

A Possible Future of New Community Disaster Recovery

Disaster preparedness and recovery take many forms for museums and libraries, each providing necessary resources to their own institutions, other institutions, or the community. Preparedness and recovery both have a purpose at a specific time or place, but the increasing number of disasters due to climate change effects poses a new challenge and opportunity for archival institutions' disaster recovery efforts in service to their communities. In this case study, Tech Archives used its professional skills and institutional resources to provide access and discovery pathways to family materials found in the wake of a devastating tornado. More than that, its efforts to aid in recovery work alongside and in network with community members and

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[38] Email correspondence with survivors and author, September 10-16, 2020.

trusted local institutions served to promote and organize the larger effort, and even mitigate future problems by creating and implementing a sustainable plan. Importantly, Tech Archives received a higher community profile from the goodwill project and built trust and ongoing relationships with many community members. This project has also changed the perception of Tech Archives as a community resource, especially during a disaster. If or when another natural disaster occurs in the area, the archives team and larger institution will once again be part of the recovery effort, both early on and for the long term.

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