Small-Scale Digitization Projects For State and Local Publications

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There is no question that libraries of all sizes, no matter how small, have an important role to play in preserving and facilitating the discovery of government publications. This is especially true for documents issued at the state and local level, precisely because they are less-well known nationally and therefore less likely to be included in larger national digitization projects. By focusing on what might as well be called *small* government publications, little libraries and small selective depository libraries can enter the digitization arena by undertaking small-scale digitization projects that, despite their diminutive scale, can achieve digital preservation successes in the range of minor to major. For inspiration, we should recall the hero of Robert Walser's now celebrated novel from 1909, *Jakob von Gunten*, who adopts the motto "To be small and to stay small."

The reasons for this move towards digitization should by now be familiar to most government documents librarians and their library directors, but we can summarize them here. At the federal level, approximately 97 percent of all government information is now born-digital. No one knows how much born-digital government information has been created or where it all is, and almost all of it is now essentially fugitive—that is, it was not processed by the Government Publishing Office (GPO), and so it is not to be found in FDLP libraries, at govinfo.gov, or in LOCKSS-USDOCS, and is therefore at risk of being lost.³ We are reminded of Robert Darnton's often-cited expression, "...all texts 'born digital' belong to an endangered species."4 At the state and local level, the problem may be even more fractious. In 2005 the Library of Congress oberved "...there has never been a national focus placed on how state libraries and archives can work together to preserve significant information."5

These are issues of digital preservation, rather than digitization per se, but the distinction between the two may be fuzzy at best. When it comes to small-scale digitization, I certainly have digital preservation in mind. Susanne Caro reminds us, at the beginning of her handy guide, *Digitizing Your Collection*, why we need to be involved with digitization on some level. Caro argues that library users increasingly *expect* library materials and information in general to be available digitally. Digitizing materials therefore serves to expand *access* by making them available online. Caro's third general reason for digitization, *preservation*, brings us right back to the risk of losing government information.

To counteract the problem of disappearing government information, two leading government information advocates, James A. Jacobs and James R. Jacobs, recommend a variety of simple strategies. Three of their suggested strategies more or less inform the rationale at work in this article, which I have adapted for the purposes of small-scale digitization projects. They are:

- Keep track of your favorite agency's publications/ data. Make sure those URLs are saved in the Internet Archive's Wayback Machine.
- Save documents to your library's web servers and upload them to the Internet Archive.
- Build digital collections that support the needs of communities you support.

By acting on any one of these strategies, or more if possible, essentially anyone can embark on their own endless adventure of preserving valuable government information while also making it more discoverable. The trick is:

- Begin monitoring the circulation of new, born-digital state/local government publications as a matter of practice;
- Be on the lookout for hidden treasures in your legacy print collection that are similarly at risk of being lost and/or in need of increased accessibility.

One needs to make sure those documents are cataloged in your library *and* captured in the Internet Archive.

How to Save URLs and Upload Documents to Internet Archive

Saving URLs to the Wayback Machine and uploading documents to the Internet Archive is a good warmup exercise to practice before building your own digital collections. Of course, if you have an Internet Archive account, which you can create for free, when you save URLs to the Wayback Machine, you can also have them added to your collection, which is arguably one way to begin building your own digital collection. If we follow the principle of preservation that says to keep multiple copies of a single item in multiple different locations, then once you have saved important online documents to the Internet Archive, you might also consider printing them and adding a physical, cataloged copy to your library collections. Alternatively, if you find compelling physical documents in your library collection, and you obtain copyright permission (more about this later), you can scan and upload them to the Internet Archive; just remember to add a link for the digital copy to your library catalog, and ideally WorldCat as well, to enhance discoverability.

But what documents will you save? State and local government documents are notoriously difficult to find and access, as Shari Laster and Aimée Quinn have noted in their article on capturing local government publications. Through some combination of directly following the activity of your state or local government, reading about them in select news sources, managing email and web alerts, as well as following the activity of advocacy organizations, and social media accounts, you should be able to identify important state and local government publications that are endangered precisely because they were born-digital. Depending upon an assessment of their importance, some of these may need to be cataloged and preserved. To save a copy of these kinds of publications in the Internet Archive's Wayback Machine, follow these steps:

- Copy the URL of the publication to be saved
- Direct your web browser to the Wayback Machine (https://archive.org/web/)

- Paste the URL into the box called Save Page Now
- Click on the button called Save Page

Now you have created a backup copy of the document, which you just saved to the Internet Archive. When and if its originating URL stops working, you can paste the broken URL into the Wayback Machine and voila, you can access the saved version. To see examples of some of the state and local documents I have been saving in the Wayback Machine, please consult the resources section at the end of this article. It is important to recall, "The average life of a Web page is about a hundred days." ¹⁰

From Saving Links to Building a Digital Collection

We do not need anyone's permission to save a URL in the Way-back Machine. But when it comes to scanning physical documents in our collections, that is when copyright comes into play because state and local government publications generally do have some form of copyright protection. The process of cultivating the habit of saving links and documents to the Internet Archive over the course of several years began changing my perception of the value of my library's legacy print collection. Confronted with its relative rarity and inaccessibility, I increasingly found myself compelled to want to digitize more of our state and local documents than I had noticed before I began saving URLs.

A variety of environmental issues in the news kept catching my personal and professional attention:

- The so-called blight in the form of apparently messy front yards;
- The rising costs of hauling trash and recyclables across the state and beyond;
- The effects of impervious surfaces and stormwater runoff; and
- The dangers of unchecked carbon emissions from increasing vehicle miles traveled by cars and trucks in the state.

Eventually I determined that all of these issues were addressed in a little-known state periodical entitled *Citizens' Bulletin* (1973–1991).¹² There was virtually no information online about this publication. After reflecting on its potential research value, as well as its potential significance to our institutional history, I spoke with colleagues who expressed interest in learning more about it, as it seemed like a good fit for our library's already solid holdings in environmental studies.¹³ It



Connecticut College student Rachel Haines (class of 2020) scans an issue of *Citizens' Bulletin* in Shain Library.

was clear enough that I needed to contact the publisher to see if I could have their permission to move forward with digitizing it. As our librarian who fields copyright questions suggests, "you need to figure out who holds the copyright, get in touch with [them], and ask!"¹⁴

With a few emails and a phone call, the Connecticut Department of Energy and Environmental Protection (DEEP) gave their permission to digitize their legacy publication and post it online in the public domain. So I convened a small team that in one summer scanned and digitized the whole series in a user-friendly and publicly accessible format that is now available in the Internet Archive. Generally speaking, there were 11 issues per year for 18 years (October 1973–June 1991), and each issue had about 20 pages. That makes for an approximate total of 3,960 pages. We found that we could easily scan about four issues per hour (80 pages), which meant that we should have no problem scanning the whole thing in one summer.

It turns out, however, that our library's print holdings of *Citizens' Bulletin* only go back to 1979. Having received permission from DEEP to digitize the entire print run meant we would need to find the rest of the back issues in another library. Fortunately, according to WorldCat both the Connecticut State Library and UConn's Library hold collections of back issues, and the State Library was happy to let us scan from theirs. So began the effort to scan the State Library's issues from 1973 to 1979, and Shain Library's issues from 1979 to 1991.

Our digitization team consisted of myself; Lori Looney, Technical Services and E-Resources Specialist; and Rachel Haines, a senior in the Connecticut College class of 2020. I knew Rachel as an outstanding student prior to formally working with her, and I knew she loved reading and writing. When

I heard there was an opportunity to hire her for special projects, we met and discussed the possibility of her contributing to the *Citizens' Bulletin* digitization project. Her enthusiasm for the project was wonderful and it resonates with Josh Sopiarz' observation "...that library student employees are eager for higher order work assignments and experiences." ¹⁷

Rachel and I shared the job of scanning every issue on either a Scannx Book ScanCenter 6167 flatbed scanner in readable (OCR) form at the Connecticut State Library, or a KIC Bookeye 4 V2 scanner set to 400 DPI at our own Charles E. Shain Library. We named the files with numerical values for year and month and loaded them all into a shared drive where they were sorted chronologically. Then Lori and I went through the process of uploading them and cataloging them in the Internet Archive. Once you have uploaded 50 items or more, Internet Archive lets you request to have the items turned into a collection. 18 The benefits of building a collection are numerous. These include, for example, bringing all individual issues of a periodical together visually, where their contents can be seen, searched, and/or browsed. Take a look at The Magazine Rack on the Internet Archive for thousands of examples. Without a collection, there would be no obvious way to search an entire periodical in one click.

Introducing Citizens' Bulletin¹⁹

Citizens' Bulletin was a monthly publication (11 issues per year) of the newly formed Connecticut Department of Environmental Protection (CT DEP) that was established in 1971. Significantly, like CT DEP, which in 2011 became CT DEEP, the Bulletin also began in the heyday of environmentalism in 1973, just three years after the first Earth Day.²⁰ The reason this start date is significant is because that was the year of a major international oil crisis that fueled an explosion of creative environmental thinking in North America.²¹ That environmental thinking is well documented in library catalogs nationwide, and, as we struggle to respond to the threats of climate change on the 50th anniversary of the first Earth Day, it remains no less relevant today. In October 1973, the inaugural issue of Citizens' Bulletin laid out the publication's mission: "...to give you the information you need to participate in decisions affecting the quality of our environment."22

Following Rachel Carson's 1962 publication of *Silent Spring*, and fresh on the heels of the 1968 circulation of the influential Earthrise photos of planet earth from outer space, the environmental movement, and, in turn, the pages of *Citizens' Bulletin*, present us with an inspiring array of new ideas about how to live on a changing planet.²³ From air pollution, cars, and land trusts, to recycling, solar energy, and wetlands

protection, virtually all of the major environmental issues and policies of today can be traced back to the now decades-old pages of *Citizens' Bulletin*, which here in Connecticut gives us a local, on-the-ground view of these global issues. By digitizing it, we are providing access to a state document that provides the critical context we need to confront the energy and environmental challenges before us.

Building Local Interest and Community Support

One of the three main strategies listed above for counteracting disappearing local government information is to build digital collections that support the needs of our communities. Susanne Caro adds that "One of the most important issues to consider when looking for a collection to digitize is if the material is unique, rare, or of strong local interest." Digitizing *Citizens' Bulletin* was compelling for us not just because our library already has special collections with strong environmental themes, but also because *Citizens' Bulletin* itself reflects those collections and enriches the institutional history they record.

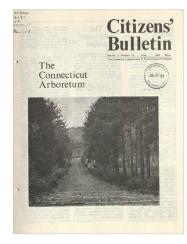
In fact, environmental conservation efforts at Connecticut College are documented in the pages of *Citizens' Bulletin*. In addition to a cover story on The Connecticut [College] Arboretum in the June 1984 issue that makes the College's presence in the *Bulletin*'s history explicit, wetlands protection is a topic addressed throughout the *Bulletin*'s history, from the first issue to the last, leaving the College's role implicit throughout.²⁵ The implicit role can be understood better by recognizing the environmental leadership of Connecticut College Professor Emeritus William Niering (1924-1999), who was an internationally recognized expert on the ecology of wetlands and tidal marshes, and who advocated for the passage of landmark legislation to protect Connecticut's wetlands, no doubt adding to the local

inspiration that gave rise to *Citizens' Bulletin* in the first place. ²⁶

Niering testified publicly in support of Connecticut's 1969 Tidal Wetlands Act that helped raise national awareness about the importance of protecting wetlands. ²⁷ In 1972, just a year before the launch of *Citizens' Bulletin*, Niering advocated for the passage of the Inland Wetlands and Watercourses Act (IWWA), considered by the Connecticut Department of Energy and Environmental Protection (DEEP) to be one of

the top 40 environmental accomplishments of the past 40 years.²⁸ In celebrating the 50th anniversary of this Act (in 2019), DEEP paid special tribute to Niering's "significant contributions to the study and understanding of wetlands systems."²⁹

In 1987, when the IWWA was amended, just a few years before the *Bulletin* would cease publication, Niering testified again on behalf of wetlands protection.³⁰ Hence, important wetlands legislation that was



The June 1984 issue of *Citizens'*Bulletin features a cover story on The Connecticut [College]

Arboretum.

championed at Connecticut College pervades the entire printrun of *Citizens' Bulletin*. Over the years, there were cover stories on wetlands in the March 1976, December 1977, January 1978, May 1984, and the February 1987 issues, which all bear a trace of Niering's impact.³¹ Not only did the *Bulletin* share Niering's advocacy for wetlands protection, it also promoted some of his collaborative Arboretum publications by featuring them within its pages.³²

Thinking Globally and Acting Locally

What environmentalism and small-scale digitization projects have in common is that they both require a creative and engaged response to the world around us. Environmentalism was the result of people thinking and acting differently about the quality of their environment. As we read above, the Connecticut Department of Environmental Protection was formed



Wetlands were an important and regular focus in the pages of *Citizens' Bulletin* as can be seen, for example, in the cover stories on wetlands in the March 1976, May 1984, and February 1987 issues.

as a result of people taking to the streets for demonstrations to mark the first Earth Day in 1970. Prior to the existence of laws protecting the environment, grassroots movements coordinated by volunteers demanded the attention of governments. In response, governments passed environmental protection laws, such as the clean air and water acts, and they created state publications like *Citizens' Bulletin* to communicate these new developments.

Small-scale digitization projects provide an opportunity for individuals and organizations to carefully monitor the state and local publications that makeup their own unique milieu, and to capture, catalog, and preserve some portion of those documents in ways that support their communities. Something like the civic energy that motivated the environmental movement can be directed towards protecting at-risk documents born in the fragile digital system that is our information environment. Such efforts can be small-scale and diffuse complements to the larger, national (and international) digitization projects taking place. The easiest way to get started is by saving an individual link in the Wayback Machine. It might not seem like much at first, but as my latest literary love Robert Walser would say, "everything small and modest is beautiful and pleasing." 33

Resources

Examples of some of the state and local documents I have saved in the Wayback Machine include the following (please note I also include the publications of local and state nonprofits that receive financial support from the government):

- State of Connecticut Solid Waste Management Plan, 2006 (https://tinyurl.com/yanj3oe3)
- Plan of Conservation and Development, City of New London, Connecticut, 2007 (https://tinyurl.com/ ybgtcn9s)
- Fort Trumbull Vision, 2011 (https://tinyurl.com/ya4kwpfm)
- Nourishing Change: The New London County Food System Baseline Report, 2013 (https://tinyurl.com/ y8cqu929)
- SEAT Bus Study: Final Report, 2015 (https://tinyurl. com/yc3b2p83)
- Community Connectivity Program: New London: Route 32 (Mohegan Avenue) Road Safety Audit, 2016 (https://tinyurl.com/y7n2xnfq)
- Resource Assessment on the Economic Viability of the Millstone Nuclear Generating Facilities, 2017 (https://tinyurl.com/y9pbqssy)

- Connecticut Transportation by the Numbers: Meeting the State's Need for Safe and Efficient Mobility, 2017 (https://tinyurl.com/ycvxx7ht)
- New London Downtown Transportation and Parking Study, 2017 (https://tinyurl.com/yadm63ll)
- Southeastern Connecticut Regional Bike and Pedestrian Plan, 2019 (https://tinyurl.com/y9nlmywk)
- Building Connections: Hodges Square Village, New London, CT, 2019 (https://tinyurl.com/ydf4bxot)

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Notes

- Big Ten Academic Alliance, "Google Book Search Project: Government Documents," Big Academic Alliance, March 2013, https://tinyurl.com/y9kbgvlk; Heather Christenson, "Building a US Federal Government Documents Collection in HathiTrust," Collaborative Librarianship 28, no. 3 (2016): 124–29, https://tinyurl.com/ya9lr2o3. Heather Christenson, "HathiTrust U.S. Federal Documents Program Update," DttP: Documents to the People 48, no. 1 (Spring, 2020): 6–7, https://tinyurl.com/y7zmtnvu.
- 2. Benjamin Kunkel, "Still Small Voice: The Fiction of Robert Walser," *The New Yorker*, July 30, 2007, https://tinyurl.com/yahkov2o.
- 3. James A. Jacobs, "Born-Digital US Federal Government Information: Preservation and Access," Center for Research Libraries: Global Resources Collections Forum, Leviathan: Libraries and Government Information in the Era of Big Data, Chicago, March 17, 2014, https://tinyurl.com/y9ykj23a.
- 4. Robert Darnton, *The Case for Books: Past, Present, and Future* (New York: PublicAffairs, 2009), 37.
- 5. Library of Congress, Preservation of State Government Digital Information: Issues and Opportunities: Report of the Library of Congress Convening Workshops with the States, October 2005, https://tinyurl.com/y8qbqjnf. See also Library of Congress, Preserving State Government Information, https://tinyurl.com/yaxy9fzb.
- Trevor Owens, "All Digital Objects Are Born Digital Objects," Library of Congress, May 15, 2012, https://tiny url.com/ycrzgw2l.
- 7. Susanne Caro, Digitizing Your Collection: Public Library Success Stories (Chicago: ALA Editions, 2016), ix-xii.

- 8. James A. Jacobs, and James R. Jacobs, "Government Information: Everywhere and Nowhere," Livestream web-based presentation to Government Publications Librarians of New England (GPLNE), October 24, 2017, *Free Government Information*, updated April 7, 2020, https://tinyurl.com/y8vrxvcj.
- Shari Laster and Aimée C. Quinn, "Capturing the Moment: Local Government Publications," *DttP: Documents to the People* 44, no. 2 (Summer 2016): 10–11, https://tinyurl.com/y8wx76hq.
- 10. Jill Lepore, "The Cobweb: Can the Internet be Archived?," *The New Yorker*, January 19, 2015, https://tinyurl.com/yckdswl2.
- 11. See Caro, "Digitizing Copyrighted Materials," 25–49. See also Brett Currier, David Hansen, and Anne Gilliland, "Copyright and the Digitization of State Government Documents: A Preliminary Analysis," University of Texas Arlington Research Commons, 2015, https://tinyurl.com/ybce9828. For those interested in getting involved with advocacy around the copyright of state documents, please see Free State Government Information (FSGI), https://tinyurl.com/yawtfsc2. The April 27, 2020, US Supreme Court decision in the case of Georgia v. Public.Resource.Org, Inc. ruled in favor of state publications belonging in the public domain. See Ben Amata, "Win for Public Domain Information," Free Government Information, April 30, 2020, https://tinyurl.com/yb5goabj.
- 12. Like many periodical publications, Citizens' Bulletin went through a number of name changes over the course of its 18 years in print—DEP Citizens' Bulletin (October 1973–December 1975), Citizens' Bulletin (January 1976–June 1988), and finally Connecticut Environment: The Citizens' Bulletin of the Connecticut Department of Environmental Protection (July 1988–June 1991). Along the way, the Bulletin endured several brief print stoppages and continued publication until its end in 1991 due to state budget cuts. We have chosen to refer to the publication in general as Citizens' Bulletin, since that name is present in each of the three variant tiles.
- 13. The Connecticut College Libraries' collections include the Linda Lear Collection of Rachel Carson Books and Papers; Nature Conservancy papers; Connecticut College Arboretum Bulletins and records; and the faculty papers of the ecologist William A. Niering, the conservationist Richard Hale Goodwin, and the ornithologist Robert A. Askins.

- 14. Fred Folmer, "Copyright Essentials: How Can I Ask Permission to Use Something?," *Copyright Resources at Connecticut College*, January 31, 2020, https://tinyurl.com/ybh7gomv.
- 15. Chris Collibee (Director of Communications, Connecticut Department of Energy and Environmental Protection), email message to author, January 8, 2019.
- 16. See the *Citizens' Bulletin* digitized collection here: https://tinyurl.com/y7y8j9h3.
- 17. Josh Sopiarz, "Enriching the Experience for Government Documents Student Workers," *DttP: Documents to the People* 44, no. 2 (Summer, 2016): 19–22, https://tinyurl.com/ycdd5ykw.
- 18. Internet Archive, "Collections: A Basic Guide," https://tinyurl.com/ybvmhc9q.
- 19. See the *Citizens' Bulletin* digitized collection here: https://tinyurl.com/y7y8j9h3.
- 20. See Connecticut, "History of Connecticut's Department of Energy and Environmental Protection," Department of Energy and Environmental Protection, https://tinyurl.com/ybt4henu.
- 21. A dynamic range of responses to the 1973 oil crisis was documented in the Canadian Center for Architecture exhibition and accompanying catalog *Sorry, Out of Gas: Architecture's Response to the 1973 Oil Crisis* (Montréal: Canadian Centre for Architecture, 2007). A companion website is available: https://tinyurl.com/ydf2okou.
- 22. Connecticut, Department of Environmental Protection, *DEP Citizens' Bulletin* 1, no. 1 (October 1973): 1, https://tinyurl.com/yb4vpegr.
- 23. Dennis Overbye, "Apollo 8's Earthrise: The Shot Seen Round the World: Half a Century Ago Today, A Photograph from the Moon Helped Humans Rediscover Earth," *The New York Times*, December 21, 2018, https://tinyurl.com/yb7jrux3.
- 24. Caro, Digitizing Your Collection, 3.
- 25. For the cover story on the Connecticut College Arboretum, see Connecticut, Department of Environmental Protection, *Citizens' Bulletin* 11, no. 10 (June 1984): 1, https://tinyurl.com/y7vjn925. Environmental conservation efforts at Connecticut College were also documented in Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin Co., 1962), see specifically page 312, where one of the notes for page 70 refers to an Arboretum Bulletin, and other notes refer to the works of William Niering and other Connecticut College faculty. For evidence of the college's implicit influence on the *Bulletin* via a focus on wetlands from the first issue to the last, see for

- example pages 2, 4, and 6 of the October 1973 issue (https://tinyurl.com/ycnkuzxp), while the entire issue of June 1991 was devoted to rivers and water (https://tinyurl.com/y9kp84cz).
- William A. Niering, Lucretia L. Allyn Professor of Botany and Research Director of the Connecticut College Arboretum, Connecticut College, https://tinyurl.com/y9vcnkr6.
- 27. On the Tidal Wetlands Act, see Connecticut, Department of Energy and Environmental Protection, "Living on the Shore: Tidal Wetlands," https://tinyurl.com/y/z wj9qh; Kenneth J. Metzler and Ralph W. Tiner, Wetlands of Connecticut, State Geological and Natural History Survey of Connecticut, US Fish and Wildlife Service National Wetlands Inventory, 1992, https://tinyurl.com/yc8gmr29; Glenn D. Dreyer and William A. Niering, Tidal Marshes of Long Island Sound: Ecology, History and Restoration, The Connecticut College Arboretum, Bulletin no. 34, December 1995, https://tinyurl.com/yxsb2znm. For Niering's testimony, see Legislative History for Connecticut Act, Public Act 695, 1969, https://tinyurl.com/y896o629.
- 28. On the IWWA, see Connecticut, Department of Energy and Environmental Protection, "Inland Wetland and Watercourses Act Enacted (1972)," https://tinyurl.com/ydam65mz. For Niering's testimony, see Legislative History for Connecticut Act, Public Act 155, 1972, https://tinyurl.com/y8j8vt3u.

- 29. Connecticut, Department of Energy and Environmental Protection, "Celebrating the 50th Anniversary of Connecticut's Tidal Wetlands Act," *Sound Outlook*, no. 62 (October/November 2019), https://tinyurl.com/y9dxjwpu.
- 30. For Niering's testimony, see Connecticut General Assembly, *Public Hearings on Environment* (Hartford: Connecticut State Library, 1987), 323–32.
- 31. Connecticut, Department of Environmental Protection, "Save Our Wetlands," *Citizens' Bulletin*, 3, no. 7 (March 1976): 1, https://tinyurl.com/yb5hx7tr; "The Army Corps, 404, and Wetlands," 5, no. 4 (December 1977): 1, https://tinyurl.com/ycxeau8m; "Wetlands Protection Increased," 5, no. 5 (January 1978): 1, https://tinyurl.com/ydfgzzfy; "Preserving Our Wetlands," 11, no. 9 (May 1984): 1, https://tinyurl.com/y8b4karg; "The Wetlands: A Critical Link in a Delicate System," 14, no. 6 (February 1987): 1, https://tinyurl.com/yb362p2f.
- 32. Search the *Citizens' Bulletin* digitized collection for Niering or Arboretum Bulletin here: *Citizens' Bulletin*, https://tinyurl.com/y7y8j9h3. All Connecticut College Arboretum Bulletins have been digitized and are available online in the Digital Commons at Connecticut College, https://tinyurl.com/y43cns5t.
- 33. Kunkel, "Still Small Voice."