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# A Review of Grey Literature Cited by Food Loss Law and Policy Scholarship

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## **A Review of Grey Literature Cited by Food Loss Law and Policy Scholarship**

In the United States, state and federal programs, rules, and legislation attempt to address the social, economic, and environmental impacts of food waste. Research on the efficacy of these interventions rely on a variety of grey literature resources. Grey literature is valuable to policy research but may be overlooked because it is not published commercially and is often deemed unauthoritative. This review focuses on the use of grey literature in food waste law and policy scholarship to identify the most used sources and to determine what, if any, archiving strategies authors use. Recommendations for librarians and researchers are discussed.

Keywords: content drift, food loss, food waste, grey literature, government, law, legal research, link rot, policy

### **Introduction**

The purpose of this study is to review the use of grey literature in scholarship on food waste law and policies in the United States between 2013 and 2019. This study aims to answer two questions. First, what grey literature publications does this scholarship cite most often and second, how do researchers ensure the integrity of citations to online resources in their work? Understanding what sources researchers tend to use can help librarians assist future scholars in locating and archiving grey literature resources that lack the indexing or bibliographic controls typical of other online resources, such as monographs, academic journals, or commercially published resources.

Scholarship that addresses food waste law and policy in the United States spans several topics, including federal, state, and local laws; food insecurity; climate change and environmental issues; consumer habits; business and institutional practices; and nonprofit

programs. This study indicates researchers interested in food loss law and policy rely on a variety of grey literature sources from governments, non-governmental organizations (NGOs), nonprofits, and other institutions. All of the scholarship reviewed for this paper cites various grey literature resources, including web pages, reports, and papers published by different actors and stakeholders in food loss reduction.

This work also re-emphasizes the perennial problem of link rot. Not only does link rot make it difficult for future scholars to retrieve cited grey literature, but the fleeting nature of the Web also contributes to the perception that grey literature lacks authority. Librarians can recommend reliable sources for grey literature and inform researchers about preservation strategies, including self-archiving services.

An examination of grey literature is timely because food loss, already a serious global issue, has only gotten worse since the 2020 COVID-19 outbreak in the United States, as food producers have been forced to dispose of significant amounts of otherwise edible food while food banks face shortages (Corkery & Yaffe-Bellany, 2020; Yaffe-Bellany & Corkery, 2020). This pandemic has exacerbated already significant shortcomings in the food supply chain and social safety net, so future researchers will benefit from searching and archiving strategies for grey literature produced in this moment.

### **Materials and Methods**

The dataset amassed during this research is comprised of citations to grey literature sources used by authors of journal articles on food waste law and policy in the United States. Journal articles were identified by searching for the phrases *food waste* and *food loss* in the databases HeinOnline, Westlaw Campus Research, and Nexis Uni. Searches were also conducted in PAIS

Index, Public Administration Abstracts, Google Scholar, and University at Albany's Library

Search using the following terms:

- “food waste” AND law
- “food waste” AND policy
- “food loss” AND law
- “food loss” AND policy

These searches were conducted in February 2020. In HeinOnline, Westlaw, and Nexis Uni, separate keyword searches of each phrase were conducted. In PAIS Index, Public Administration Abstracts, Google Scholar, and University at Albany's Library Search, keyword searches were conducted using the respective database's recommended syntax for Boolean searches for each of the terms listed above. For all searches, results were limited to a publication date range of 2013 to 2019.

HeinOnline, Westlaw, and Nexis Uni were selected because of their robust full-text availability of law journal and law review articles. PAIS Index and Public Administration Abstracts were selected because of their coverage of United States public policy and public administration scholarship. Google Scholar and University at Albany's Library Search were selected for their broad subject scope.

The terms food loss and food waste are sometimes used interchangeably, but depending on the author or context, may have distinct meanings. According to the Food and Agriculture Organization of the United Nations (FAO), food loss refers to the loss of edible food along the supply chain, while food waste refers to the loss of food in the retail, food service, or consumer stages (Food and Agriculture Organization of the United Nations, n.d.). The U.S. Department of Agriculture (USDA) makes a similar distinction between the terms in that food waste refers to

edible food lost at the retail, food service, and consumer stages; however, the USDA defines food loss as edible food lost anywhere in the supply chain, including food waste (Buzby et al., 2014, p. 1). The USDA modifies these definitions slightly, referring to the blanket term *food loss and waste* for the purpose of food loss reduction goals, acknowledging that some sources use the term food waste to refer to non-edible parts of food, such as peels, seeds, or pits (U.S. Department of Agriculture, n.d.). This modified term was not searched because it is narrowly defined by the USDA. Rather than discern how authors define either term, this study uses both terms to capture as many relevant articles as possible, but focuses solely on edible food and excludes articles about non-edible food components.

Articles were selected for inclusion in this study if they focused on United States law or policy related to the loss or waste of edible food. Some articles appeared in the search results of more than one database. Search results from each database were sorted and de-duplicated using Excel. After removal of duplicates, the final list consisted of 34 journal articles. The reference lists or footnotes of these articles were reviewed for citations to grey literature and these citations were collected to form a database using Excel. The database then was analyzed to determine the kinds of grey literature cited by the research and the presence or absence of archiving strategies by the article authors or journals.

## **Background**

Grey literature encompasses a range of works that do not fit neatly into other publishing categories. Schöpfel (2010) says, “Grey literature stands for manifold document types produced on all levels of government, academics, business and industry in print and electronic formats that are protected by intellectual property rights, of sufficient quality to be collected and preserved by library holdings or institutional repositories, but not controlled by commercial publishers i.e.,

where publishing is not the primary activity of the producing body” (p. 18). For researchers or organization staff working in policy, it includes research and project reports, working papers, discussion papers, briefings, guides, conference papers, or data sets (Lawrence et al., 2015, p. 230; Mathews, 2004, p. 125). Regardless of format, grey literature is not distributed through traditional publishing channels, making it difficult to find and classify (Lawrence et al., 2015, p. 231).

Pinning down grey literature citations in this study’s database was straightforward for the most part. All of the scholarship used in this study was about U.S. law and policy, which raised the question of certain cited legal authority and whether it should be considered grey literature. Lines (2010, pp. 4-5) wondered if legal texts are grey literature and suggested that they are not because of their status and official nature but possibly are grey literature because of non-commercial publication, a lack of bibliographic controls, and because they are “records produced in the normal course of business”. Rucinski (2015) expanded on Schöpfel’s definition to describe grey legal literature, encompassing documents “produced by entities affiliated with the law, as part of, or in furtherance of the legislative, executive, and/or judicial administration of the law at the international, federal, state, and/or local level” (p. 555).

For the purpose of this study, the term grey literature refers to print or online texts or other media produced by governments, academic institutions, businesses, and other organizations or individuals that do not fall under the purview of traditional academic or commercial publishing. Contrary to Rucinski’s definition of grey legal literature, it does not include primary legal authority such as cases, regulations, or statutes. Nor does it include regular government publications, such as *Congressional Record* or *Federal Register*, that report on the legislative or rulemaking business of federal or state governments. While these are “materials that are

produced as part of the administration of the three branches of government at the international federal, state, and/or local level” (Rucinski, 2015, p. 555), these documents have an architecture and predictability that grey literature usually lacks and thus are excluded from the database. The present working definition skirts Schöpfel’s criteria that grey literature is “not controlled by commercial publishers,” opting to focus on the clarification, “where publishing is not the primary activity of the producing body.” The Government Publishing Office (GPO) “[p]roduce[s] and distribute[s] information products and services for all three branches of the Federal Government,” including “the official publications of Congress, the White House, and other Federal agencies in digital and print formats” (Government Publishing Office, n.d.-c). So, the GPO is not a commercial publisher, but publishing is its primary function. Even if state, county, or municipal governments do not have a dedicated publishing agency, primary legal authority at these levels is organized and stored somewhere, such as state libraries or county offices. The citation of otherwise uncollected, uncatalogued, or unorganized materials is more interesting in this regard than government information that is reliably organized and stored somewhere.

The second question of this study seeks to determine what, if any, strategies authors use to ensure their citations to online resources do not fall victim to link rot or content drift. Link rot refers to instances where linked information is no longer accessible because the information has been deleted from its original online source. Content drift (Jones et al., 2016; Klein et al., 2014) refers to instances where information found at a link has changed and includes instances where a URL redirects or has been archived (Zittrain et al., 2014, p. 91). Both of these problems arise when another person, organization, or administration takes control of a website or the organization originally hosting the content sells the domain name or ceases to maintain servers.

Web content is mutable, and a site owner may change information found at a URL without indicating if or when content has been edited or removed (Zittrain et al., 2014, p. 93).

Scholarship that addresses food waste law and policy in the United States spans several topics, including federal, state, and local laws; food insecurity; climate change and environmental issues; consumer habits; business and institutional practices; and nonprofit programs. Grey literature is valuable to specific areas that have policy impact, such as climate change and public health (Crowe & Hodge, 2006, p. 134; Lawrence, 2017, p. 390). Legal scholarship also relies on grey literature, citing sources published by NGOs, nonprofits, trade and professional organizations, businesses, and government agencies (Hackstadt, 2019, pp. 10–13). For example, a significant number of policy workers in Australia reported that the use of grey literature is either important or very important to their work (Lawrence et al., 2015, pp. 235–236). Most organizations that produce grey literature do so in an effort to impact public policy and practice and to make information available in an understandable way to the public (Lawrence, 2017, p. 393; Lawrence et al., 2015, p. 237).

## **Results**

The database contains 701 citations to grey literature or other web resources, representing 540 unique sources. Cited grey literature includes reports, webpages, and other media produced by government agencies, nonprofits, NGOs, academic institutions, businesses, trade and professional organizations, and other sources.

There are four publications that 10 or more articles cite. One of the most cited is *The Dating Game: How Confusing Date Labels Lead to Food Waste in America* (hereafter *The Dating Game*), a 2013 report published jointly by the Natural Resources Defense Council (NRDC) and the Harvard Food Law and Policy Clinic. Fourteen of the 34 articles cite *The*

*Dating Game*. Fourteen articles also cite *The Estimated Amount, Value, and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the United States* (hereafter *Postharvest Food Losses*), a 2014 report by Jean C. Buzby, Hodan F. Wells, and Jeffrey Hyman of the USDA Economic Research Service (USDA-ERS). Eleven articles cite a 2015 press release, issued jointly by the USDA and Environmental Protection Agency (EPA) entitled “USDA and EPA Join Private Sector, Charitable Organizations to Set Nation’s First Goals to Reduce Wasted Food” (hereafter “USDA/EPA press release”). Ten articles cite a 2012 NRDC publication, *Wasted: How America is Losing Up To 40 Percent of Its Food from Farm to Fork to Landfill* (hereafter *Wasted*) by Dana Gunders.

The most-cited grey literature producer in this study is the USDA. Researchers cite 87 distinct publications by the USDA and 40 publications by the EPA. Forty-nine publications by the United Nations (UN) are cited: FAO is responsible for 24 of these; other UN agencies are responsible for the remaining 22. ReFED and NRDC are the most cited nonprofits, with scholars citing 20 and 14 individual titles, respectively. Other grey literature producers include state, municipal and foreign government agencies, think tanks, professional organizations, and academic institutions.

Most of the cited sources are openly available online and most citations include a URL. The inclusion or exclusion of a URL was evaluated across all 701 citations because in some cases, different citations to the same title may use distinct URLs. Of the total citations, 594 include a URL, 107 do not. The absence of a URL does not necessarily indicate an author consulted a print resource. For example, *The Bluebook: A Uniform System of Citation* (*The Bluebook*), the style guide used by most law journals, prefers print sources to electronic and only

recently described how URLs should be included in footnotes (Flyntz, 2015, p. 52; The Writing Center at Georgetown University Law Center, 2017).

Link rot and content drift are well documented issues (Jones et al., 2016; Klein et al., 2014; Zittrain et al., 2014) and the present study is no exception. Of the 594 citations that include a URL, one hundred twelve URLs return a 404-Not Found or other error message. The remaining citations (431) direct the user to a webpage or report with the same title as cited by the original author. Determining the extent of content drift is beyond the scope of this paper. However, content drift is obvious in some cases. Twenty-two URLs lead to pages that have obviously changed since cited. This is evident where pages note a recent update to the content or redirect the user to a new page that has replaced the cited content.

### **Discussion**

This work is limited by its narrow geographic scope. Food production, distribution, and consumption are issues that cross political boundaries, so this study's focus on the United States provides only a snapshot of the use of grey literature in law and policy scholarship.

Governments, academic institutions, and other groups and individuals produce and disseminate grey literature to provide accountability to funders and stakeholders, influence policy and its implementation, share information with the global community, and to educate the public. Allison (1987) describes what grey literature does:

Most grey literature does not contribute to the growth of fundamental knowledge.

It applies existing knowledge to real world problems. It digests and summarizes

knowledge for busy decision makers. It advocates particular policy choices based

on a combination of knowledge and group interest. It advertises the

accomplishments, collections and research capabilities of particular organizations.

It assesses feasibility and anticipates impacts. It aggregates statistics, compiles inventories and issues standards, guidelines, plans, and prognostications (pp. 244–245).

The most cited titles in this study exemplify these characteristics. *The Dating Game* is a 2013 report that makes “recommendations for how different stakeholders can take action to improve current practices and foster policy changes to begin to remedy the negative impacts of date labeling on food waste in the United States” (Leib et al., 2013, p. 5). *Postharvest Food Losses* estimates the value of food lost, hoping to “serve as quantitative baselines for policymakers and the food industry to set targets and develop initiatives, legislation, or policies to minimize food waste, conserve resources, and improve human nutrition” (Buzby et al., 2014, p. iii). *Wasted* “provides the latest recommendations and examples of emerging solutions” (Gunders, 2012, p. 4), describing actions that governments, producers, and retailers can take to reduce food loss. Other cited reports, guides, and toolkits perform similar descriptive or solutions-oriented functions.

Grey literature encompasses a variety of resources and is not published by the usual commercial or scholarly publishing channels. Therefore, it has not been subject to peer review or other editorial control, leading some researchers to limit their use of grey literature or decline to use it at all (Cooper et al., 2019, p. 11; Mathews, 2004, p. 125). However, disciplinary experts and specialized organizations contribute to grey literature, which some authors may find sufficient to meet certain information needs. Emily Broad Leib, lead author of *The Dating Game*, is a Clinical Professor of Law and Director, Food Law and Policy Clinic of the Center for Health Law and Policy Innovation at Harvard Law School. Leib has written extensively on food law and is a recognized leader in the field (Harvard Law School, n.d.). Dana Gunders, lead author of

*Wasted*, has written and contributed to several policy resources published by NRDC (NRDC, n.d.-a) and currently serves as the Executive Director of ReFED, a nonprofit organization dedicated to food waste reduction (ReFED, 2020). The USDA ERS, the agency responsible for *Postharvest Food Losses*, provides data and statistics and produces reports pertaining to food, agriculture, nutrition, and rural issues in the United States (United States Department of Agriculture Economic Research Service, n.d.).

“USDA/EPA press release” differs from the other top-cited sources because it is the only web page to be cited by 10 or more authors. This press release announces the joint effort between the USDA and EPA to reduce food waste by 50% by 2030. Government websites explain laws or regulations to the public or share other important information, such as how to apply for certain benefits, where to vote, or when garbage is collected. While valuable for the public, they can be useful to scholars as well. In this study, researchers rely heavily on information published on websites. Citations to USDA and EPA titles are predominantly to web pages rather than other documents: 33 of the USDA titles and 13 of the EPA titles are reports, handbooks, guides, or fact sheets available as downloadable PDFs, while 57 USDA titles and 31 EPA titles are web pages.

Political agendas shape the availability and presentation of government information online. Immediately upon President Trump’s inauguration in January 2017, Obama-era information about climate change policies and lesbian, gay, bisexual, and transgender issues was removed from the official White House website (Davenport, 2017). An August 2017 blog post by the Environmental Defense Fund (EDF) stated over 1,900 items about climate change had been removed or changed on the EPA’s website (Environmental Defense Fund, 2017). Another EDF blog post reported that Scott Pruitt, EPA Administrator at the time, was directly involved in not only removing information about President Obama’s Clean Power Plan, but also instructed

his staff to make sure any searches for “Clean Power Plan” redirected to President Trump’s Executive Order on Energy Independence (Levitan, 2018). Scott Pruitt resigned from the EPA early in July 2018 (Davenport et al., 2018).

Politics aside, the way grey literature is produced and disseminated online contributes to issues with accessing cited information in the future. Policy information users encountered link rot frequently (Lawrence et al., 2015, p. 244). Crowe and Hodge (2006) studied the prevalence of link rot in grey literature and found that some URLs had disappeared within a week. Numerous studies have concluded the problem only worsens over time (Crowe & Hodge, 2006, p. 134; Klein et al., 2014; Zittrain et al., 2014, p. 92). Almost all the URLs cited for EPA resources appear to point to the intended content. One URL returned a 404-Not Found error message, but 11 URLs redirected the user to a new landing page that says, “We want to help you find what you are looking for” (United States Environmental Protection Agency, 2020). These URLs once directed the user to EPA-published information about climate change or greenhouse gases. From this new page, users can view a snapshot of the EPA’s homepage as it appeared on January 19, 2017 – the last day of the Obama Administration. It is common for agency websites to undergo noticeable changes when a new President takes office. If a researcher uses online information from a government source, such as the EPA, the content may be moved when the administration changes hands. The information cited may still be available online, but it will not necessarily be located at the cited URL. A more recent example of content drift is found in the fast-paced information environment around COVID-19. Language that described how COVID-19 spreads changed on the CDC’s “How COVID-19 Spreads” webpage over the course of just a few days. A September 18, 2020 update to the page states the disease may be airborne (Centers for Disease Control and Prevention, 2020a). Then, a September 21, 2020 update removed information about

airborne transmission; a banner was added to the page explaining that a draft version of recommendations related to airborne transmission of the disease was posted in error (Centers for Disease Control and Prevention, 2020c; Gumbrecht et al., 2020). Finally, as of October 5, 2020, the agency stated again that COVID-19 may be airborne (Centers for Disease Control and Prevention, 2020b; Gumbrecht, 2020). This mutability does little to make grey literature look at all authoritative or reliable, especially alongside the “gravitas and tradition and permanence” afforded traditional scholarship (Castan & Galloway, 2017, p. 196).

Some journals utilize Perma.cc, a web archiving service that captures a snapshot of a webpage at the user’s request and creates a permanent link. One hundred thirty-seven citations from six of the original articles include a permalink. Such archiving strategies can ensure the integrity of an author’s citations by providing future readers with a reliable way to access the author’s sources. *The Bluebook* recommends archiving online resources and including the archival link alongside the original URL (The Writing Center at Georgetown University Law Center, 2017, p. 8). Perma.cc is a service created by the Harvard Library Innovation Lab that is free to academic libraries and courts (Perma.cc, n.d.-a). Other archiving services include the Wayback Machine and archive.today. The Wayback Machine is a service of the Internet Archive that allows a user to save individual web pages and create a permanent link (Internet Archive, n.d.-c). Archive.today, a similar service to Perma.cc and the Wayback Machine, is privately funded with datacenters in Europe (archive.today, n.d.). All of these services allow a researcher to create a unique, permanent URL to a saved version of a webpage (archive.today, n.d.; Internet Archive, n.d.-c; Perma.cc, n.d.-b). A researcher can then use that permanent URL to direct users to the source of information as it existed at the time it was cited. These services are available to anyone but access to Perma.cc is limited. Academic libraries or courts can join Perma.cc for free

and make the service available to their faculty, students, or staff. Perma.cc offers a limited number of permalinks or a paid subscription option to users who are not affiliated with an academic library or court (Perma.cc, n.d.-a). Perma.cc also offers users more options, such as the ability to organize permalinks into folders and to annotate permalinks (Perma.cc, n.d.-c). Unlike the Wayback Machine or archive.today, Perma.cc does not offer the ability to search preserved webpages. Perma.cc and the Wayback Machine come with the name recognition of the Harvard Law Library and the Internet Archive, respectively. All three offer a browser extension that makes web page preservation at the time of use easy.

Authors should have a consistent, reliable web archiving strategy. The services described above provide an easy solution for researchers who need to cite grey literature or other web content created by nonprofit organizations, NGOs, or other organizations that do not maintain web archives themselves. Sharing information on their own websites is a cost-effective option for institutions but the instability of this practice only contributes to the problem of link rot. Only 26% of organizations that produce grey literature have a strategy to prevent link rot; among those that do not have such a plan, approximately one third do not have the time or resources to contribute to a solution and another third either had not considered the problem or do not think it is important (Lawrence, 2017, p. 399). Relying on information posted on web pages is risky because this information can change or disappear completely. As demonstrated in this study, link rot and content drift have made cited sources in the original articles difficult, if not impossible, to retrieve. Self-archiving web pages and providing permanent links in the citations are highly recommended.

Federal agencies in the United States use different services to ensure their publications can be found online. The USDA ERS uses Archive.It, another service of the Internet Archive

(Internet Archive, n.d.-a). Documents and webpages available in a searchable web archive, such as Archive.It, are limited to what an agency chooses to preserve. Archive.It is a great solution for some organizations, like government agencies, academic institutions, or nonprofits, because it provides support for metadata and documentation. It also allows users to browse and search full-text (Internet Archive, n.d.-b). The GPO collects and archives U.S. Government websites through the Federal Depository Library Program (FDLP) Web Archive in collaboration with the Internet Archive (Federal Depository Library Program, 2018). The FDLP Web Archive project relies on web crawlers that periodically archive websites at different points in time. This is useful for preserving government web pages but does not guarantee every version of a web page is captured.

The Catalog of U.S. Government Publications (CGP) is a valuable resource for scholars who wish to cite federal government information. The CGP is “the finding tool for electronic and print publications from the legislative, executive, and judicial branches of the U.S. government” and provides direct links to information that is available online, as well as information about where to find print publications in nearby FDLP libraries (Government Publishing Office, n.d.-a). For instance, *Postharvest Food Losses*, one of the most-cited reports in this study, is a USDA-ERS publication included in the CGP. The CGP record provides a persistent URL (PURL), or permanent link, to this publication. Researchers can also try MetaLib, GPO’s federated search of multiple U.S. government databases, including the CGP (Government Publishing Office, n.d.-b).

Web and document archiving lend some credibility to grey literature and may elevate its status somewhat. For instance, the classification of grey literature in the Indigenous Law Portal provides “information-based recognition” to Indigenous communities that have previously gone unacknowledged by outside institutions (Davis-Castro, 2017, p. 94). The Library of Congress

reported in 2012 that it would archive Tweets related to the confirmation of Supreme Court Justice Sonia Sotomayor (Banks, 2012, pp. 56–57). Through the FDLP, libraries make government reports available in their online catalogs. The UN has its own archive and searchable database of documents (United Nations, n.d.-a, n.d.-b). The NRDC has a searchable Policy Library that includes issue briefs, policy briefs, and other publications (NRDC, n.d.-b). Theses, dissertations, and conference papers can find a home in an academic institutional repository. These are just a few examples of preservation efforts and they are all done by large institutions. Grassroots NGOs and smaller nonprofits may not have the funding or staff to carry out preservation work on this scale, if it is even one of their priorities. It is important that researchers acknowledge the limits of web archiving and that they are knowledgeable about self-archiving strategies to fill in the gaps. Grey literature can add a valuable dimension to scholarship. To paraphrase Allison (1987) above, it applies, advocates, advertises, assesses, and aggregates.

### **Conclusion**

Scholars in law, public policy, public administration, and other disciplines rely on grey literature. Grey literature “should be considered at the forefront of the digital publishing and open access revolution, but because it is not managed or produced in a systematic way, and not counted in academic reward systems, it has often been invisible, undervalued as a resource and underappreciated as an influence on policy and practice decisions” (Lawrence, 2017, p. 390). This study demonstrates that grey literature is valuable to scholarship that spans environmental, public health, and law and policy issues related to food loss and waste in the United States. Grey literature is created by subject experts, organizations, governments, and academic institutions. It informs policy, the public, and scholarship.

Providing online access to reports, research, conference papers, data, and other publications has become easier and less expensive than providing the same in print. However, link rot and content drift continue to plague grey literature in the absence of shared web publishing standards across institutions or a collective repository. Librarians and researchers can work together to find the most reliable sources for grey literature to ensure future readers can retrieve the same information. Archiving and link preservation practices ensure varying degrees of citation integrity for scholars. Authors can be proactive about preserving web content with the help of free or institutional services.

### References

- Allison, P. (1987). Stalking the elusive grey literature. *College & Research Libraries News*, 48(5), 244–246. <https://doi.org/10.5860/crln.48.5.244>
- archive.today. (n.d.). *FAQ*. Retrieved October 12, 2020, from <http://archive.vn/faq>
- Banks, M. (2012). Blog posts and Tweets: The next frontier for grey literature. *The Grey Journal*, 8(1), 54–59.
- Buzby, J. C., Farah-Wells, H., & Hyman, J. (2014). *The Estimated amount, value, and calories of postharvest food losses at the retail and consumer levels in the United States (EIB-121)*. U.S. Department of Agriculture, Economic Research Service. <https://perma.cc/37AV-2LPT>. [https://www.ers.usda.gov/webdocs/publications/43833/43680\\_eib121.pdf](https://www.ers.usda.gov/webdocs/publications/43833/43680_eib121.pdf)
- Castan, M., & Galloway, K. (2017). Re-evaluating legal citation in a digital landscape. *Legal Information Management*, 17(3), 190–205. <https://doi.org/10.1017/S147266961700038X>
- Centers for Disease Control and Prevention. (2020a, September 18). *How COVID-19 Spreads (September 18, 2020 Update)*. Archive.Is. <http://archive.is/pWPSC>
- Centers for Disease Control and Prevention. (2020b, September 21). *How COVID-19 Spreads (October 5, 2020 Update)*. <https://perma.cc/N2TZ-TTBJ>. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>
- Centers for Disease Control and Prevention. (2020c, September 21). *How COVID-19 Spreads (September 21, 2020 Archive)*. <https://perma.cc/7JMH-5CYB>. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>

- Cooper, K., Marsolek, W., Riegelman, A., Farrell, S., & Kelly, J. (2019). Grey literature: Use, creation, and citation habits of faculty researchers across disciplines. *Journal of Librarianship and Scholarly Communication*, 7(1). <https://doi.org/10.7710/2162-3309.2314>
- Corkery, M., & Yaffe-Bellany, D. (2020, May 2). ‘We had to do something’: Trying to prevent massive food waste. *The New York Times*.  
<https://www.nytimes.com/2020/05/02/business/coronavirus-food-waste-destroyed.html>
- Crowe, J., & Hodge, G. (2006). Grey lit repositories: Tools for NGOs involved in public health activities in developing countries. *Grey Journal*, 2(3), 133–139.
- Davenport, C. (2017, January 20). With Trump in charge, climate change references purged from website. *The New York Times*. <https://www.nytimes.com/2017/01/20/us/politics/trump-white-house-website.html>
- Davenport, C., Friedman, L., & Haberman, M. (2018, October 3). E.P.A. Chief Scott Pruitt resigns under a cloud of ethics scandals. *The New York Times*.  
<https://www.nytimes.com/2018/07/05/climate/scott-pruitt-epa-trump.html>
- Davis-Castro, C. (2017). Bridging the knowledge gaps: What grey literature does for the Library of Congress’ Indigenous Law Portal. *Grey Journal (TGJ)*, 13(2), 91–100.
- Harvard Law School (n.d.). *Emily M. Broad Leib*.  
<https://hls.harvard.edu/faculty/directory/11185/BroadLeib/>
- Environmental Defense Fund. (2017, August 11). *Environmental Defense Fund obtains information on over 1,900 climate-related items removed from or modified on EPA website*. Environmental Defense Fund. <https://www.edf.org/media/environmental-defense-fund-obtains-information-over-1900-climate-related-items-removed-or>
- Federal Depository Library Program. (2018, March 6). *Web archiving*.  
<https://www.fdlp.gov/377-projects-active/2020-web-archiving>
- Flyntz, M. E. (2015). Ever onward: Expanding the use of Perma.cc. *Legal Reference Services Quarterly*, 34(1), 39–59. <https://doi.org/10.1080/0270319X.2015.1013846>
- Food and Agriculture Organization of the United Nations. (n.d.). *Technical platform on the measurement and reduction of food loss and waste*. <http://www.fao.org/platform-food-loss-waste/en/>
- Government Publishing Office. (n.d.-a). *About the catalog of U.S. government publications*.  
[https://catalog.gpo.gov/F/NCUN98DN374QDUXERMPD6PIK2DDTJETGRBBSFPQ74DQTC96QVG-21199?func=file&file\\_name=about-gpo01&local\\_base=GPO01PUB](https://catalog.gpo.gov/F/NCUN98DN374QDUXERMPD6PIK2DDTJETGRBBSFPQ74DQTC96QVG-21199?func=file&file_name=about-gpo01&local_base=GPO01PUB)
- Government Publishing Office. (n.d.-b). *MetaLib*. <https://metalib.gpo.gov/V?RN=932909983>
- Government Publishing Office (n.d.-c). *Mission, vision, and goals*. <https://www.gpo.gov/who-we-are/our-agency/mission-vision-and-goals>

- Gumbrecht, J. (2020, October 5). *CDC again updates guidance to say Covid-19 can spread by aerosol*. CNN. <https://www.cnn.com/politics/live-news/trump-covid-19-updates-monday/index.html>
- Gumbrecht, J., Christensen, J., Cohen, E., & Thomas, N. (2020, September 22). *CDC abruptly removes guidance about airborne coronavirus transmission, says update “was posted in error.”* CNN. <https://www.cnn.com/2020/09/21/health/cdc-reverts-airborne-transmission-guidance/index.html>
- Gunders, D. (2012). *Wasted: How America is losing up to 40 percent of its food from farm to fork to landfill* (NRDC Issue Paper No. 12-06-B). Natural Resources Defense Council. <https://www.nrdc.org/food/files/wasted-food-ip.pdf>
- Hackstadt, A. (2019). Food waste legislation scholarship: A mapping study. *University Libraries Faculty Scholarship*, 113. [https://scholarsarchive.library.albany.edu/ulib\\_fac\\_scholar/113](https://scholarsarchive.library.albany.edu/ulib_fac_scholar/113)
- Internet Archive. (n.d.-a). *About the Internet archive*. <https://archive.org/about/>
- Internet Archive. (n.d.-b). *Archive-It blog: About us*. <https://archive.org/details/IntroToAIT>
- Internet Archive. (n.d.-c). *Save pages in the Wayback Machine*. Internet Archive Help Center. <https://help.archive.org/hc/en-us/articles/360001513491>
- Jones, S. M., Sompel, H. V. de, Shankar, H., Klein, M., Tobin, R., & Grover, C. (2016). Scholarly context adrift: Three out of four URI references lead to changed content. *PLOS ONE*, 11(12), e0167475. <https://doi.org/10.1371/journal.pone.0167475>
- Klein, M., Van de Sompel, H., Sanderson, R., Shankar, H., Balakireva, L., Zhou, K., & Tobin, R. (2014). Scholarly context not found: One in five articles suffers from reference rot. *PLoS ONE*, 9(12), 1–39. <https://doi.org/10.1371/journal.pone.0115253>
- Lawrence, A. (2017). Influence seekers: The production of grey literature for policy and practice. *Information Services & Use*, 37(4), 389–403. <https://doi.org/10.3233/ISU-170857>
- Lawrence, A., Thomas, J., Houghton, J., & Weldon, P. (2015). Collecting the evidence: Improving access to grey literature and data for public policy and practice. *Australian Academic & Research Libraries*, 46(4), 229–249. <https://doi.org/10.1080/00048623.2015.1081712>
- Leib, E. B., Ferro, J., Nielsen, A., Nosek, G., & Qu, J. (2013). *The dating game: How confusing food date labels lead to food waste in America* (Policy Brief R: 13-09-A). Natural Resources Defense Council and Harvard Food Law and Policy Clinic. <https://www.nrdc.org/sites/default/files/dating-game-report.pdf>
- Levitan, B. (2018, February 1). *Emails indicate Scott Pruitt directed removal of climate info from EPA website*. <http://blogs.edf.org/climate411/2018/02/01/emails-indicate-scott-pruitt-directed-removal-of-climate-info-from-epa-website/>
- Lines, M. (2010). Are legal texts grey literature? Toward a definition of grey literature that invites the preservation of authentic and complete originals. *The Grey Journal*, 6(2), 83–87.

Mathews, B. S. (2004). Gray literature: Resources for locating unpublished research. *College & Research Libraries News*, 65(3), 125–129. <https://doi.org/10.5860/crln.65.3.125>

NRDC (n.d.-a). *Dana Gunders*. <https://www.nrdc.org/experts/dana-gunders>

NRDC (n.d.-b) *Policy Library*. <https://www.nrdc.org/policy-library>

Perma.cc. (n.d.-a). *FAQ*. Perma. <https://perma.cc/docs/faq>

Perma.cc. (n.d.-b). *Perma.cc user guide*. Perma. <https://perma.cc/docs>

Perma.cc. (n.d.-c). *Perma.cc user guide: Perma records & links*. Perma. <https://perma.cc/docs/perma-link-creation>

ReFED. (2020). *About*. <http://www.refed.com>

Rucinski, T. (2016). The elephant in the room: Toward a definition of grey legal literature. *Law Library Journal*, 107(4), 543-549.

Schöpfel, J. (2010). Towards a Prague definition of grey literature. *Twelfth International Conference on Grey Literature: Transparency in Grey Literature. Grey Tech Approaches to High Tech Issues*. Prague. 11-26. [https://archivesic.ccsd.cnrs.fr/sic\\_00581570/](https://archivesic.ccsd.cnrs.fr/sic_00581570/)

The Writing Center at Georgetown University Law Center. (2017). *Bluebook rule 18: Citation to Internet and electronic resources*. <https://perma.cc/QE5K-XMGG>.  
<https://www.law.georgetown.edu/wp-content/uploads/2018/07/Rule-18-Handout-1.Secara-1.pdf>

United Nations. (n.d.-a). *About the Archives*. Archives and Records Management Section. <https://archives.un.org/content/about-archives>

United Nations. (n.d.-b). *Official document system of the United Nations*. <https://documents.un.org/prod/ods.nsf/home.xsp>

United States Environmental Protection Agency. (2020, September 14). *Help finding information*. <https://www.epa.gov/sites/production/files/signpost/cc.html>

United States Department of Agriculture Economic Research Service (n.d.). *About ERS*. <https://www.ers.usda.gov/about-ers/>

U.S. Department of Agriculture. (n.d.). *Food Waste FAQs*. Retrieved September 16, 2020, from <https://www.usda.gov/foodwaste/faqs>

Yaffe-Bellany, D., & Corkery, M. (2020, April 11). Dumped milk, smashed eggs, plowed vegetables: Food waste of the pandemic. *The New York Times*. <https://www.nytimes.com/2020/04/11/business/coronavirus-destroying-food.html>

Zittrain, J., Albert, K., & Lessig, L. (2014). Perma: Scoping and addressing the problem of link and reference rot in legal citations. *Legal Information Management*, 14(2), 88–99. <https://doi.org/10.1017/S1472669614000255>