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STEPHANIE GOWLER AND AMY LUBICK
DISCUSSION GROUP CO-CHAIRS

Archives Conservation Discussion Group 2019 Addressing Challenges from Workplace Change: Conservation and Collection Care Tales of Struggle and Success

INTRODUCTION

The Archives Conservation Discussion Group hosted a panel presentation and discussion session addressing current challenges that conservators, preservation administrators, and collections care professionals are facing in times of limited resources and shifting institutional priorities, and the tactics being employed to address those challenges. Four speakers presented talks on implementing new workflows, strategic planning and capacity building for preservation departments, and utilizing survey tools to set priorities for at-risk collections—a discussion with the audience following the presentations allowed for questions, comments, and sharing of experiences.

SUMMARY OF PRESENTATIONS

ALISON REPPERT GERBER
CREATING A CUSTOM SURVEY TOOL TO MAXIMIZE ADVOCACY EFFORTS FOR AUDIOVISUAL COLLECTIONS

Generating awareness for audiovisual preservation issues can be challenging. At the Smithsonian, many audiovisual collections are tucked into boxes with paper-based and photographic materials. They may or may not be item-level cataloged, and even when they are cataloged, the information about formats, duration, and content may not exist or be accurate. Questions pile up quickly: how many copies exist within a collection, and which copy is the best? Is playback equipment and digitization infrastructure available to create preservation-level files to preserve the content found in these collections? Does the institution have the staffing capability to care for these collections properly? Are the collections in optimal storage conditions for their specific audiovisual format?

The Smithsonian began a pan-institutional survey of collections in 2010, first with photograph collections and followed by born-digital materials (Smithsonian Institution Archives 2017). Both surveys were conducted using a custom-built survey tool running in Microsoft Access. The specific tool the Smithsonian was using had much built-in functionality for analyzing survey results, but it proved challenging to modify and customize for audiovisual collections. It did not capture the type of information required to build a comprehensive narrative regarding audiovisual preservation needs. The Smithsonian-based professional group Audiovisual Archivists Institutional Leadership decided on a new approach and developed a four-component survey, which included an inventory, condition assessment, multiple-choice questionnaire, and narrative interview with staff, that would bring together data on all of those overwhelming questions.

The first component of the survey was an inventory of the Smithsonian's audiovisual assets. With 24 defined fields, the inventory provided information regarding formats, locations, content description, format base substrates, estimated length, and visible media condition. The formats field is defined based on the PBCore-controlled vocabulary with a few slight modifications (PBCore, n.d.). Due to the sheer size of Smithsonian collections and the unique way units catalog their collections, the inventory was conducted at a group level. This meant that each format type within a collection was given a line item in the spreadsheet. If a collection contained both 1/4-in. audio tapes and compact audio cassettes, two line items would be recorded with the corresponding item count. The box range where these collections were housed was then recorded in the Box field. Contracted services were used to capture all of this information in an Excel spreadsheet. This provided the most control over the data, allowing surveyors to sort, filter, and modify as needed. The spreadsheet was prepopulated with information from each unit's content management systems.

This open discussion took place on May 17, 2019, during AIC's 47th annual meeting in Uncasville, Connecticut. The moderators organized and led the discussion and recorded notes. Readers are reminded that the moderators do not necessarily endorse all comments recorded, and although every effort was made to record proceedings accurately, further evaluation or research is advised before incorporating any observations into practice.

Media condition was recorded at the group level in the same spreadsheet. The condition was rated on a scale of 1 to 5, using 1 as a baseline; the number was increased by 1 with any sign of deterioration or damage within a grouping. Some of the condition factors noted were significant dirt and grime, vinegar odor, popped strands or weak wind, and anything else that was visible (no playback was performed as part of the survey). Acid-detecting (A-D) strips were used to test a handful of acetate collections; approximately 200 strips per unit were used within the Smithsonian (Image Permanence Institute, n.d.). Every strip level increased the condition ranking by 1; mold or an A-D strip reading of 3 received an automatic 5 rating.

The next component of the survey was the multiple-choice questionnaire, whose purpose was to provide a clearer picture of each unit's areas of strength and weakness in general audiovisual collections care; it also indicated areas where more data gathering might benefit the institution. The multiple-choice questionnaire was distributed using Google Forms, which allowed responses to be aggregated into an Excel spreadsheet. It also allowed the surveyors to generate graphs and charts based on the responses automatically.

The last component was the narrative staff interview. This in-person interview was conducted by the contractor, often on the first day of the inventory in a unit. The interview served a few purposes: it oriented the contractor with the unit's history, collections, and storage spaces, and it led organically to more extensive conversations about the methodology being used for the inventory. Considering that each unit documents and stores its collections in different ways, each unit's inventory had to take that information and standardize it into the spreadsheet, which often required an in-depth conversation about the best way to do that.

The speaker emphasized the importance of presenting data, once collected, in a meaningful way. One of the easiest ways to stir up interest in a project is to create a visually appealing guide that highlights important findings; this functions as an "elevator speech" in visible form. It is essential to focus on quantifiable data: numbers are empowering and eye opening for many people. One of the most successful parts of the Smithsonian survey project has been to provide numbers on various aspects of the collections. The speaker recommended developing charts and graphs that highlight the data, using color and interesting fonts. She also emphasized the importance of clarity: remember that people who are not collections staff will see this information, so make sure that it is easy for anyone in the institution to understand the narrative being conveyed.

Considering that one of the primary goals of the survey was to quantify the Smithsonian's audiovisual assets, that data is front and center on the infographic (fig. 1). These quantities are broken down by unit, but there is an overall total as well, which provides a picture of how many items need to be cared for and could facilitate movement toward pan-institutional initiatives. The speaker also emphasized the importance of having a hard copy of survey infographics on hand; she noted multiple occasions where having the graphic to pass out at a meeting or during a conversation made an immediate impact. Making the infographics publicly available, if possible, on a website or intranet is also very useful; be sure to assign authorship so that people know whom to contact with questions.

Effective advocacy can lead to institutional support in many different forms, including new initiatives, programs, and development of access tools. At the Smithsonian, survey results caught the eye of the Digitization Program Office, which typically focuses on the imaging of collections and provides access to those digital surrogates. In 2017, the office set up a committee of stakeholders to create a project for mass digitization of audiovisual materials. Due to the large quantity and risk to the format, 1/4-in. open reel audio tapes were chosen for the first digitization project. After developing workflows for asset preparation and shipping, metadata creation and integration of files into the content management system, the first shipment of tapes was sent out in May 2019 as a pilot project; the plan was to scale up to full mass digitization of tapes in fiscal year 2020.

Advocacy can bring funding in terms of equipment, staffing, and storage spaces. The survey has been used by staff across the institution as justification for funding needs during the grant application process. Advocacy also increases the visibility of audiovisual collections, which in turn facilitates research efforts with patrons. Last and most importantly, advocacy helps collections move to a more stable, preserved state. The bottom line is that if one does not know what he or she has, then it cannot be preserved. By developing tools specific to audiovisual collections and their specific needs, staff can gather asset information, as well as information about the mission, current workflows, and their preservation capabilities.

Alison Reppert Gerber, Preservation Coordinator, Smithsonian Institution Archives

SUE DONOVAN
THE ORANGE FLAG WORKFLOW AT THE UNIVERSITY OF VIRGINIA LIBRARY

To facilitate workflows and movement of materials needing treatment between the University of Virginia's special collections library and the small, off-site conservation department, Preservation Services developed a tracking system in 2017 to monitor and manage the needs of special collections. The tracking system is a paper flag that travels with the item (fig. 2). Orange was chosen to differentiate the flag from other color-coded flags being used and to suggest the need for immediate preservation review. The orange flag went through a review

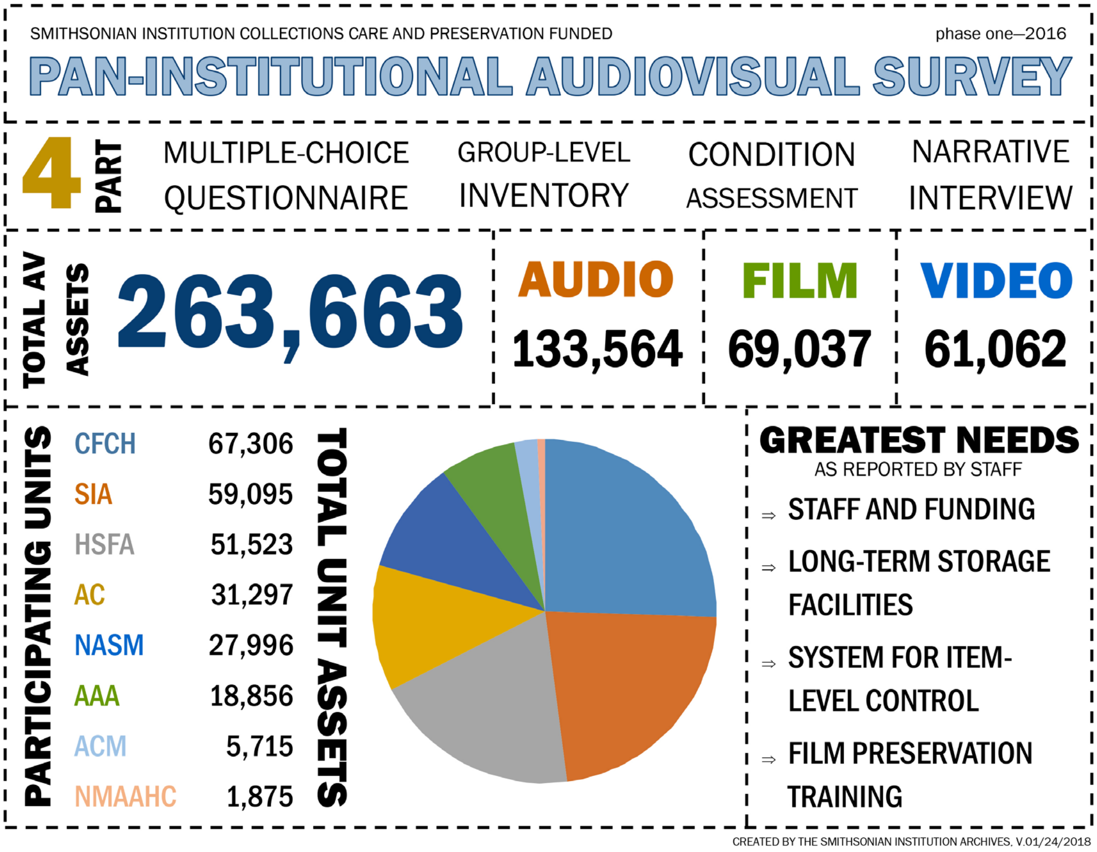

Fig. 1. Smithsonian Pan-Institutional Audiovisual Collections Survey Infographic, Smithsonian Institution Archives, v.01/24/2018

period in consultation with curators and staff in special collections to ensure that it contained information relevant to both parties. Special collections staff fill out an orange flag with information concerning damage or housing needs and the origin of the request (circulation, classroom use, new acquisition, etc.). They also include their name and date, which is very important, as many of the flags need more background information for the conservators to determine treatment or housing. After the flag is filled out, the conservators assess the items, write down the actions needed, delegate as necessary, and follow up with the concerned curator when appropriate. After the intervention, the flags are removed and collected, so the flag is not in contact with collections items for a prolonged period. The overarching idea was to create a streamlined process, so conservators can triage items with preservation concerns as they arise and be able to prioritize their treatments efficiently. A stack of orange flags is kept at the reference desk for easy access; some staff members who work with cataloging and processing keep flags at their workstations and can print them on demand.

Like any new workflow, the Orange Flag Workflow (OFW) took some time to get its sea legs. The new workflow generated some confusion over how the flags should be filled out, as well as who would review them and when. Staff were creating flags and liked using them, but the process seemed to be creating unperceived stress points. Without express instructions regarding the steps following the actual flagging, the workflow began to feel like a burden to the stacks manager. In addition, the speaker took on sole management of the OFW in 2018 after the senior book conservator departed. This required a reassessment of the OFW workflow and reconsideration of the process that would account for a single conservator.

A significant change and improvement was a designated space for the conservator to triage the incoming orange flags. One cart in the stacks is labeled as the Orange Flag Workflow Cart, and each week at a specific day and time, the conservator goes through the items to determine what is needed. Some items are kept on the cart for a few weeks as the conservator ponders over next steps. Some books arriving on the cart only need housings, so the conservator notes the housing needed on the flag and puts them on the staging cart for housings. This was something that the stacks manager had done previously, but the conservator's

SPECIAL HOUSING or PRESERVATION REVIEW REQUESTED

Initials: _____ Date: _______

Item coming from:

_____ New acquisition
_____ Circulation
_____ Class
_____ Digitization
_____ Other: _____________

Special housing requested:
___ Encapsulate
___ Enclosure
___ Other
____

Preservation review requested (describe):

____
____
____

Stacks manager notes:

____
____

Conservator notes:

____
____
____

NB: This workflow is for catalogued/processed items only.

SPECIAL HOUSING or PRESERVATION REVIEW REQUESTED

Initials: _____ Date: _______

Item coming from:

_____ New acquisition
_____ Circulation
_____ Class
_____ Digitization
_____ Other: _____________

Special housing requested:
___ Encapsulate
___ Enclosure
___ Other
____

Preservation review requested (describe):

____
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Stacks manager notes:

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Conservator notes:

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____

NB: This workflow is for catalogued/processed items only.

SPECIAL HOUSING or PRESERVATION REVIEW REQUESTED

Initials: _____ Date: _______

Item coming from:

_____ New acquisition
_____ Circulation
_____ Class
_____ Digitization
_____ Other: _____________

Special housing requested:
___ Encapsulate
___ Enclosure
___ Other
____

Preservation review requested (describe):

____
____
____

Stacks manager notes:

____
____

Conservator notes:

____
____
____

NB: This workflow is for catalogued/processed items only.

Please print on orange paper. Flag last reviewed 12/2018.

Fig. 2. An orange flag used for special collections conservation workflow tracking at the University of Virginia Library

intervention at this step streamlined the process. Student workers take the books from the staging cart, check them out to a dummy patron, and place them in call number order on designated housing shelves in the stacks, where they wait to be treated. When the boxes are complete, the students return them to the other side of the cart, marked "preservation completed," where they wait to be discharged and moved to a reshelving truck. Other items may need a more complicated housing or a quick stabilization that can be done without moving to a designated treatment area. Items needed for classes, digitization, and research have a higher priority, and the conservator will always try to make something available for a researcher. Items that are being considered for an upcoming exhibition also come to the OFW cart.

Anything that needs more treatment is checked out to a conservation dummy patron and placed on designated staging shelves in the stacks. Items needing treatment stay on these shelves until there are enough items to bring to the laboratory for treatment. This is another change from when there were two conservators on staff, and some treatments were performed in situ. As sole manager of the OFW, focusing on triage instead of treatment in special collections helps the conservator move items off the truck and into appropriate workflows. Grouping items to bring to the laboratory, even items that only need small mends, is more efficient for the conservator.

As the OFW progressed, the conservator realized that items with orange flags that lived in the vault needed a slightly different approach. The vault is a small room where the most valued collections are housed. Student workers do not have access to this room, and even the university librarian would need an escort to get in. Considering that the space is so small, shelving and hold space is limited, so orange-flagged items could not wait for triage until the conservator could get to them. Instead, whoever returns the flagged item to the vault takes an extra flag from the front of the room and fills out a duplicate flag. The item is reshelved in its original location, and the duplicate flag is placed in a small box on the shelf where the conservator does triage regularly. Although items in the vault are some of the library's most valuable volumes, discussions with curators and special collections staff resulted in the acknowledgment that they do not inherently get higher priority in terms of treatment. Volumes selected for use in classes, research, digitization, and exhibitions always receive priority, so vault items with an orange flag may still have to wait a while for treatment.

Since the implementation of the OFW and the subsequent modifications, the conservator has noticed that items needing treatment or housings move along quickly and transparently. Special collections staff add things to the cart and check things out from the other locations in the workflow, leaving tracking slips. Doing this indicates that they know where to find items they are looking for, even within the workflow.

A benefit of using flags is that it includes information about where the item is coming from, which allows the conservator to prioritize treatments. The workflow has reduced the onus on the stacks manager. The workflow also helps the conservator keep up with incoming collections that are often inherently damaged, such as the Dust Jacket Collection. New additions to this collection receive an orange flag because the rare book cataloger knows there is an ongoing treatment project with the dust jackets.

There are still some issues to address with the workflow, however. The stacks manager and the conservator are still trying to figure out how to use the orange flags to help with the stacks manager's statistics. New acquisitions frequently come to the truck, even when they simply need to go straight to the shelves, which can add time to the triage step. Some staff have trouble filling out the flag entirely and legibly, which can mean having to chase down an answer. The conservator is still having to learn about other existing workflows and the limitations of catalog search engines. The special collections department is currently rolling out the AEON tracking system, which will check out books to the specific shelf numbers and other locations associated with the OFW using unique transaction numbers instead of barcodes, and which may have an impact on the OFW.

Sue Donovan, Conservator for Special Collections, University of Virginia Library

LIZ DUBE
NURTURING A FRUITFUL PRESERVATION PROGRAM BY DISTRIBUTING INFLUENCE

The speaker has been at Notre Dame for 20 years and spoke about how the institution and her own thinking have evolved over that time. She began by amending the title of her talk to "nurturing a fruitful preservation program by *allowing and trusting* influence," in recognition that influence cannot be distributed because it is by definition inherently distributed. From a perspective of openness, the speaker has come to see that her role as a preservation and conservation professional is to strategically promote and coordinate the influence that exists within her institution.

The speaker began her career in preservation in the 1990s and recalled that one of the messages she took away from her early mentors was the idea that we, as preservation professionals, must care about preservation on behalf of our institution, and that it is our responsibility to convince others of its importance. Over time, the speaker has questioned such assumptions about our role as preservation professionals, coming to view this version of responsibility as burdensome, outdated, and even counterproductive. Considering that most of our organizations articulate preservation within their mission statements, preservation is instead an institutional responsibility that is therefore shared by all library staff. As librarians educated today enter the profession with an awareness and appreciation for preservation, we are able to more naturally join them in the shared responsibility of preservation rather than perceiving that it is our burden to convince others of its value.

Framing our role as influence rather than responsibility provides access to a wealth of influence that exists naturally in our institutions. Although influence is intangible and cannot be owned like responsibility or authority, it exists naturally within all of our relationships and is inherently more dynamic and powerful. As such, the challenge is one of empowering and facilitating this influence through relationships. As part of this process, the speaker carefully examined her expectations, eliminating the word *should* from her vocabulary, focusing instead on the service imperative of preservation. Rather than viewing those in preservation as responsible for determining what needs to be done, she fosters an approach that emphasizes open questions, such as "how might we be helpful?" and listens carefully. Her unit's response is collaborative and solution focused, with an emphasis on the transparent sharing of information, expertise, and options. Priorities and strategies can then be imagined and developed in collaboration.

When administrative support was not available, the speaker returned over and over to nurturing horizontal relationships, collaborating with colleagues across the institution to identify creative ways to work toward meeting preservation needs. As limited resources are the rule, she noticed that many of her colleagues across the library were also struggling with such limits, and that rather than becoming discouraged, she found that it was often possible to work together to develop small creative solutions that over time tended to build into something significant. Notre Dame Preservation has at times further struggled with feeling disconnected both organizationally and physically: the laboratory is in a separate building. Over time, the speaker has come to see that critical work happens in informal hallway conversations and has invested heavily in relationships across the libraries to ensure that preservation staff are involved in both informal and formal conversations.

The speaker acknowledged that many of us in conservation are perfectionists by nature, and as such it can be very challenging to shift from a perspective of certainty, expectations, and goals toward one of service, transparency, and vulnerability. She found it helpful to practice recognizing and letting go of the illusion of control and instead focuses on seeing reality more clearly, letting go of ideas and stories that prove no longer valid or useful when held up to scrutiny. She described control as a paradox: by releasing the illusion of control, one achieves more profound and more powerful influence than is possible through attempts to control. She has been pleasantly surprised by the fruits of this approach at Notre Dame, where over time the preservation of the collections have become significantly more assured: staff are engaged with preservation across the institution, administrative support for preservation has grown, preservation staff are more connected and fulfilled, and there is a trust that library staff can and will work together to address preservation needs.

Central to the collaborative and distributed approach at Notre Dame has been 20 years of monthly meetings between curators, archivists, and conservators. In these meetings, curators and archivists can raise any preservation-related questions and concerns—from storage issues to environmental control to single-item treatment needs. Solutions are proposed and negotiated, and work priorities are determined as a group. Detailed investigations may be deferred for further consideration outside the meeting, and over time various ongoing workflows have been established by this group, thereby enabling appropriate investigations and developing routines where possible while ensuring strategic use of the meeting time. Because treatment capacity is always limited relative to the vastness of all potential preservation concerns, the meetings provide a process for collectively discussing needs, determining which concerns are most pressing overall, conceiving solutions, and negotiating to ensure that implemented preservation services are broadly conceived. When staff contact conservation with direct requests for service, such requests may be referred to this meeting to ensure that needs are credibly vetted and prioritized. The meetings also provide a shared mentoring experience: new curators and archivists can observe more senior curators, and archivists engaging with preservation can practice engaging their responsibility for preservation within the support of the group. The same mentorship and professional growth process occurs on the conservators' side of this important ongoing conversation, and over time we all continue to grow more skillful and helpful at engaging our collective responsibility to advance the preservation of the collections.

With resources ever limited, Notre Dame Preservation looks for creative ways to invest its limited resources for more significant gains. Locally, they engage opportunities to showcase their expertise. They promote their services each year through online and in-person exhibits during National Preservation Week, and they have hosted Valentine's Day open houses that draw community members to the laboratory, where they demonstrate the range of services offered and promote engagement with books through an interactive station where visitors can create takeaway Valentine cards. They have also successfully applied for project funding from outside organizations. Recent awards have enabled them to host a 1-year Kress-sponsored postgraduate fellowship and to build relationships with campus facilities staff and others across campus via a National Endowment for the Humanities Sustaining Cultural Heritage Grant. Most recently, the library director took notice of preservation services' need for more resources and invited them to apply for Gladys Brooks funding, which, with the creative addition of local funds, has ultimately resulted in the creation of an ongoing postgraduate 2-year Gladys Brooks Conservation Fellowship.

A collaborative strategic planning process across the libraries has raised awareness of preservation needs across the institution. As part of broader campus-wide strategic planning, the library has been compelled to demonstrate how it serves the university's mission, and the speaker notes that preservation as a strategy must similarly align in service of teaching and research. Although preservation is a part of the libraries' mission statement, on its own it is a challenging sell. Preservation needs are most compellingly articulated by tying preservation needs to the more directly compelling mission in support of teaching and research. How can this be accomplished? At Notre Dame, a collaborative strategic planning process was useful for clearly articulating the link between supporting preservation and advancing teaching and research.

In response to an invitation to engage in strategic planning, the speaker collaborated with a special projects librarian to lead a highly collaborative and extended planning process for preservation. In keeping with trends at similar institutions, the preservation unit had observed that as the acquisition of e-publications went up, demand for traditional general collections preservation services such as commercial binding, in-house repair, and reformatting had declined. At the same time, tremendous growth in the special collections landscape meant dramatically increased demand for higher-level preservation expertise to support increased collecting and use of the collections, which was clearly shown in dramatically increased numbers associated with acquisitions, teaching use of collections, exhibitions, and digitization.

Co-leading the strategic planning process with a non-preservation librarian provided a critical measure of objectivity to the strategic planning process. The co-leaders emphasized that they were not creating a strategic plan for the preservation unit per se, but rather the goal was to collaboratively develop a preservation strategic plan for the libraries overall. Over 6 months, 23 individual interviews were conducted, followed by three focus groups with 17 subject specialists. These discussions centered around the following questions: Which preservation services are most valued? What goals and services does this valued work enable? What preservation needs are not being met? What goals and services are hindered by these preservation needs not being met?

They sought to learn what they were doing well and to learn—from the subject specialist's view—what the impact of that work was. Conversely, they wanted to hear what needs were not being met, from the subject specialist's view, and the impact of not meeting those needs. Challenging collections specialists to identify their needs and goals and articulate why preservation is important was useful. They were able to speak directly to the impact of preservation to the goals of faculty and students, explicitly highlighting which services were valued, where the gaps were, and the impact of not meeting those needs. Data gathered during this survey revealed broad appreciation for the unit's services and expertise while also pointing to the need for a significant increase in preservation staff resources, particularly additional specialized treatment capacity in support of increased usage of special collections for teaching, exhibitions, digitization, and specialized treatments.

As part of the strategic planning process, the unit was also asked to document workflows and decision-making criteria in conjunction with efforts to grow and streamline digitization and digital preservation workflows. This effort allowed Notre Dame Preservation to showcase its long experience in negotiating and establishing workflows and priorities in collaboration with subject specialists, and the data generated proved useful to project managers developing digitization workflows, as well as clarifying and evolving workflows as part of the planning process for analog preservation.

Although the final strategic planning report has yet to be written, results have been presented to library administration, and the planning process has already borne significant fruits in the form of enhanced support for preservation. Most fundamentally, the process of inviting library staff to explicitly think and talk about preservation in groups resulted in them articulating and confirming preservation needs publicly. These discussions have allowed preservation to take a more prominent seat in the zeitgeist of the libraries and affirmed preservation's place on the administration's radar, which has resulted in preservation being consulted in planning discussions earlier on, and in garnering more support generally. By demonstrating the capacity for openness and flexibility in serving the libraries broadly, including shifting some its staff capacity to the digitization unit as one outcome of this process, the preservation unit has gained greater legitimacy as a well-informed team player, which has helped bolster its case to upgrade an open position within the unit, as well as its case to secure additional funding to enable the new Gladys Brooks fellowship to become an ongoing 2-year position at a professional salary. The subtle but fundamental changes in the approach described here have led to more influence in the library-wide strategic planning process, more support for campus-wide initiatives such as environmental control and emergency response, and more people stepping up and helping out to advance the preservation of collections.

Liz Dube, Head of Preservation, Hesburgh Libraries, University of Notre Dame

ALLISON OLSON
A FUTURE FACING PRESERVATION PROGRAMS AT THE NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

The responsibility of the National Archives and Records Administration (NARA; https://www.archives.gov/) is to preserve and provide access to federal government records with continuing value. NARA retains 2% to 3% of federal records deemed permanent, currently amounting to more than 15 billion pages of textual records, billions of electronic records, and millions of records in many other formats. NARA has three types of facilities around the country: archives that hold the accessioned permanently valuable records; federal record centers, where federal agencies pay to store both temporary and permanent records; and presidential libraries and museums that maintain official government papers of the presidents and other donated materials. There are 43 NARA Preservation Programs staff members located in three offices: College Park, Maryland; Washington, DC; and St. Louis, Missouri.

Even with NARA's large size and distribution of facilities to contend with, the agency faces the same challenges as other institutions, such as regularly changing technology, shifts in researchers' expectations, the impact of climate instability, and fulfilling its mission with limited resources. In response to these challenges, NARA has been proactive and hired an outside preservation expert (Nancy Bell, formerly of the UK National Archives) to evaluate the program and help inspire NARA to meet these challenges. During the past year, NARA has developed a new preservation strategy and started revising its archival storage standards.

NARA's new preservation strategy has four goals. The first goal is to predict, understand, and act to mitigate the risks to NARA's holdings. To meet this goal, NARA will establish a Preservation Strategy Board led by the agency's chief operating officer and coordinated by the director of Preservation Programs. The board will include executives with preservation responsibilities such as custodial unit heads and business support leaders with control over facilities. A variety of Preservation Risk Guidance Groups will be established on specific topics such as guidance and training, exhibits, and environmental management. Each guidance group will be led by a preservation staff member and include people needed in decision making on that topic. In addition, environmental performance at select NARA facilities will be evaluated under the first goal. This has already been done at Archives II in College Park, Maryland, to reduce energy consumption while improving the preservation environment. Last, NARA's at-risk dynamic media will be managed to prevent loss in audio, video, and motion picture film holdings.

The second preservation strategy goal will deliver products and services to stakeholders to support access to NARA's holdings. Preservation staff will deliver practical, risk-based guidance and best practices by revising the NARA website and rebranding it as the Preservation Commons. This will result in a single source where NARA staff and the wider archival community can access the information they need. NARA's preservation program will support access through conservation, exhibition, and digitization. Conservation project planning will include a 2-year cycle to ensure that institutional priorities are addressed. Instead of large series projects spanning 10 to 15 years, a few select large projects will be completed in shorter periods. In their daily work, archival staff indicate the preservation actions that a series requires and the priority level. To meet this second strategy goal, conservators will review and validate urgent priority–level needs for planning purposes. To grow NARA's capacity to support digitization, the St. Louis facility, which primarily has been focused on creating records from a 1973 fire, will begin treating and digitizing materials from field archives. An additional supervisory conservator will be hired to support that effort.

The third goal of NARA's preservation strategy is to exploit science and technology for improved practice. NARA will hire a new head of science and build the agency's research profile. Research collaborations will be supported and built to magnify staff impact. NARA currently has three scientists and does not expect additional hires soon, so identifying new funding opportunities is critical in meeting program goals. In addition, NARA is taking a leading role in developing a Washington, DC, Heritage Science Network. Scientists in the area have been getting together to establish a database of scientific equipment at various institutions and discuss topics for possible collaboration between members. NARA's own Heritage Science Research Strategy will be finalized and will result in support from management on NARA research topics. Accelerating research knowledge to practice and translating research findings into the right language for the appropriate audience will aid NARA decision makers in understanding the impact on holdings. NARA scientists are working as part of established networks for material testing standards to share research and gain. Last, to enhance NARA's reputation, there will be a renewed focus on publishing in peer-reviewed journals.

The final goal of the strategy is to define the competencies and skills NARA's Preservation Programs staff need to deliver the strategy. These might include areas such as conservation techniques, digitization, preservation risk management, project management, communications, and data analysis. NARA has a talented staff, but they are being asked to take on new and different roles, requiring skills that may need to be refreshed or acquired.

The new preservation strategy was distributed for agency-wide comment until May 15, 2019, and has already been approved by NARA's Executive Leadership Team. The Preservation Programs staff have been working on developing implementation steps for each year of the strategy. Steps will be assigned to specific staff members to lead and complete.

The review of NARA 1571: Archival Storage Standards is still under way, updating the standard based on research published since the last revision in 2002. Changes include consideration of holdings' significance when standards cannot be met. There is also the addition of explanations for requirements and the inclusion of a bibliography. The standard always allowed for fluctuations within the temperature and relative humidity range, but this was not well communicated or understood. Rewriting the standard to make the language clearer and easier to interpret, as well as updating and revising charts in the standard, has been a priority. A change has been made in the standard to the required relative humidity for black-and-white prints, polyester negatives, electronic media, and audiovisual media. The standard used to require a range of 30% to 40% RH, but it has been updated to the same range required for textual materials (30% to 50% RH). The published literature was reviewed, and the potential change of NARA holdings over 500 years with an expanded range was considered and deemed acceptable. NARA recognizes this may not be appropriate for other institutions. Another significant change to the standard recommends color prints for cold storage based on significance. The standard no longer reads that all color prints must be kept in cold storage. Most color photographic prints at NARA are interfiled with textual records and are not separated to maintain the archival association. NARA does not have enough space to store all color photographs and associated textual materials

in cold storage. Last, the revised standard raised air pollutant thresholds for acetic acid and removed specification for formaldehyde. Research since 2002 has shown these pollutants pose less of a risk to paper-based holdings than believed previously. Nitrogen dioxide is NARA's biggest concern for paper-based holdings. Focusing on nitrogen dioxide allows NARA to get more tailored air filters to meet the agency's needs. When NARA's preservation strategy and archival storage standard are finished, they will be posted to https://www.archives.gov/.
Allison Olson, National Archives and Records Administration

DISCUSSION SUMMARY

After the last presentation, the moderator opened the floor for questions and comments. The contents of the discussion are summarized and paraphrased in the following.

Commenter: Question for Olson. How are you monitoring acetic acid and formaldehyde in the air?

Olson: Our scientists conduct periodic testing. We can provide additional information on equipment upon request.

Commenter: Question and comment for Dube. We noticed a trend we would like to take advantage of in the use of primary resources in undergraduate research and teaching. There is an interest in conservation's knowledge of the object's history, the object's materials, and our treatment records. With the possibility of our treatment records becoming part of the catalog, have similar institutions experienced similar trends and found ways of responding in a positive way to these opportunities?

Dube: I am also interested in what others are doing. Teaching has brought greater emphasis to us at Notre Dame and has resulted in our department bringing in a lot of undergraduates and graduate students. Graduate students are helping process the collections. It will be interesting to see where that goes. We are not sharing treatment records, but we are being asked to give presentations on the history of the book and similar topics. There is a sense we will be asked to do more of that. Does anyone else have answers to the documentation question?

Commenter: I have a comment regarding the flag system. We have a similar flagging system at our library. Initially, every staff member could flag something and bring it to the laboratory. We discovered that staff members were not talking to each other, so different staff from the same division might bring us multiple copies of the same edition. As a result, we moved to a triage system. Staff now have to approach their division heads, and the division heads decide what needs to go to the laboratory. I am the only conservator, so we would often end up with a year's worth of backlogged books. We do not know the value of the items brought to the laboratory, and we would have books that could be replaced for $30. As conservators, we do not often know the context. Librarians know the context, so our new system has meant that individual librarians and department heads became the funnel points instead of conservation.

Commenter: Is this a circulating collection? Is the orange flag used for special collections?

Commenter: Yes, one of the tricks to this system is that the books do not go to the laboratory. That was why Donovan put the map in her presentation. The choke point is in the special collections stack area. The stack manager takes the orange-flagged item from the circulation desk and places these books into different piles. If a reader comes and requests a book with an orange flag, the stack manager can go find it and pull it out of a pile. The book stays accessible until the very minute it goes to the laboratory. The majority of the books remain in special collections stacks because most need housing and will require follow-up discussion with the curators. I also wanted to follow on to the point of the earlier commenter regarding documentation. At our university, one of the archivists started archiving the conservation documentation. The laboratory keeps a paper copy for reference, but we were given our own record group. There is a note in the item record that states it received conservation treatment and that the documentation is available. If a reader wants to see it, someone can pull the documentation. The digital imaging staff captured the photodocumentation, and so it was part of their workflow. The raw images and associated files were given the same metadata as every other digital image in the digital image library. This was part of the more extensive process where the documentation was backed up, made available, and became part of the library collection. If anyone wants access to the images besides library staff, it could be made available.

Commenter: Yes, I do want to comment on this. I have not done this yet, but I intend to do something similar. I talked to our university archivist, and these are essentially university records, so we have a pathway to move our treatment documentation to our university archives. We have a series for the library, and there may already be a preservation subseries. You may want to investigate this if you are part of a university.

Question for Liz Dube: We recently reorganized our whole library. We have been working on more strategy-focused projects and big picture matters for preservation throughout the library. Do you have any comments on the location of the preservation department within the library organizational structure? How have you felt it has affected your strategy and your ability to be nimble to respond? Has it helped or hindered this ability? If you could be in a different part of the organizational structure, would you? Do you like where you are? I am also interested in where other preservation departments are located within their organizational structure if you are in a library or archives.

Dube: It can be hard to tell. I love where we are and the way we ended up there. Part of me thought we should be higher in the organization and have our own reporting line to the university librarian or associate leader to the librarian, but this has worked out well in our situation. Every place is a little different. There were two phases of reorganization. During the first phase, I was not so happy with where we were. During the second phase, they looked deeper into the organizational chart and got into the interstices. They did not know where to put us initially. During the second phase, they asked everyone whom we work most closely with, and we ended up exactly where we needed to be, with the people we serve most directly. There was some thought we should be in technical services, but in the end, we ended up with the folks who are our constituents, our direct stakeholders, which is a nice fit for what we are doing. It has allowed us to be integrated into their work and be seen as necessary for their work. We are working collaboratively and really having good conversations about what we are doing. It has been great.

Commenter: Our preservation department is under collection services, although previously we were under special collections. It has been under collection services since I started, and I have heard it is a better fit.

Dube: I like our situation. We are horizontal with special collections, and with digitization, it is ideal.

Commenter: At my university library, it is a bit of a split. I am a tenure track librarian. As the head of preservation/conservation, I am part of tenured support services. Through me, the department reports to our associate deans, who also oversee shared collections storage and digitization. We are two separate groups, but not part of collection services in any way. The collections report through a different associate dean. I have seven libraries that I am responsible for and pay attention to all equally.

Question for Allison Gerber: Is your audio survey attached to CMS (Cataloguing and Metadata Services) in some way, or is it completely separate? Is this functional, or do you see it causing problems down the road for reformatting things based on the survey that are not reflected in CMS? Did you find anything interesting or unexpected across the repositories during the survey?

Gerber: The data was kept separate from CMS. We formatted the survey in a standard way. We pulled information out of each unit's CMS and then codified it to our needs. We have to go back through the data and do that. The units each got a copy of their own data. They were kept separately and aggregated into one spreadsheet. There is flexibility in that individual units do what they want with that data. There was no institutional effort to integrate that data back into CMS. Everybody has a different CMS at the Smithsonian, so it would be impossible to do that. The numbers, in general, were an interesting find. Many people were surprised since the archives are not cataloged at the item level. I would love for that to change. Typically, they are not. Now we have the numbers and a breakdown of the formats. Even the media types were eye opening for people, as they just had no idea how much they had. We also discovered we have 60 different formats in our collections. What are we going to do with 60 individual formats that require specific playback equipment, specific workflows, and specific conservation treatments? It definitely started a big conversation.

Commenter: A comment about the organizational chart issue. We have moved any number of times in my 11 years at my university. We started under a collection development umbrella that included subject specialists. The department was later changed and moved under the head of a particular library's special collections, but not all special collections. Now we are part of a new division that includes collections development. This includes folks who oversee the budget and are involved in a lot of high-level negotiating. It is interesting to hear Liz Dube state that you are in a group you regularly work with. I am not. We do not interact with any of those groups much at all. That is an interesting thing to think about in terms of an organizational chart.

Dube: You want to keep your stakeholders close to you.

Commenter: Question for anyone using a flag or some identification method where others, like archivists or librarians, are identifying things for you. Do you have any kind of program to create a shared understanding about what and what is not a preservation priority? That is something we struggle with, and I feel we need to take a more active role engaging in the dialogue to define. Does anyone have any ideas or ways that you are dealing with that?

Commenter: At our university, some people get things right away and have enough to do that they check the boxes and let you do the rest. Other people get very engaged and require a conversation regarding low processing priorities they have made into an emergency preservation priority. We are not going to preserve it until it has been cataloged. We try to get that sense of emergency dialed back a little bit. Sometimes it is a particular staff person, and meetings and training do not help. You just have to keep trying and hope the other people in the room are staying consistent and engaged.

Commenter: We do not actually have a flag program for special collections. There are multiple flags for circulating collections. For general and special collections, we built this understanding that if people think there is a problem, my door is open and they can send me whatever they want. Ultimately, my department has the final authority on what is and is not a priority and what will and will not get treated. For circulating collections, it is harder to agree because new books can be purchased or there is data to support a book that did not circulate for 10 years and can be let go. For special collections, I have told the curators to talk to me before they send me anything. We are in a temporary space and do not have a lot of storage. I do not want objects piling up for 5 years like they have in the past. I do not know if there is a way to indicate information on the flag itself, but there should be a conversation when you are building a system to ask the intended use. Why do you think this is an emergency? We have many things that need repair, so that cannot be the only reason why we are going to treat something. Are you using it for a class next week, or is there an exhibit next month? We have so many big picture issues to focus on right now. We have been doing an archives survey of all accessions that have not been processed for years. A team of students is going through all the boxes and capturing information on what state the description is in, the state of the housing, and the preservation issues. At first, the students started putting things aside to be looked at by a conservator. We then told them to note issues, and we would look at the information later and develop a strategic approach. This will help us identify problems in groups.

Commenter to Allison Olson: My experience at my institution is that the power of precedent is strong among state archives, and many are looking to NARA. When I need to advocate for preservation and conservation, it behooves me to have examples I can point to at other archives and NARA to illustrate what others are doing. Will you all be able to make portions of your final preservation strategy and other plans public? It would be great to set NARA up as a leader and enable some discussions.

Olson: Absolutely. The preservation strategy will be on our website and is pretty much final. The archival storage standard has only been reviewed in preservation programs. It will also be on our website once it has gone through the review process. It may take some time, but we are very interested in sharing our work.

Dube: To the previous question, we have some standard workflows that have routine processes that can be left off discussing during the monthly meeting. The conversation regarding flags is always happening. The curators keep learning more about what is appropriate after seeing the work that comes back and gaining a better understanding of what is possible.

Commenter: Our workflows for both special and open general collections are triggered by use. We do not go through the stacks and pull things because they are in poor condition. The items must be used. The work generated can be for a class or a patron, but it must be someone other than a curator looking at an item and stating it is in need of repair.

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REFERENCES

Image Permanence Institute. n.d. "A-D Strips." Accessed July 01, 2019. https://www.imagepermanenceinstitute.org/imaging/ad-strips/.

PBCore. n.d. "PBCore Metadata Standard." n.d. . Accessed July 01, 2019. http://pbcore.org/.

Smithsonian Institution Archives. 2017. "Smithsonian Pan-Institutional Survey of Audiovisual Collections." Accessed July 01, 2019. https://siarchives.si.edu/about/smithsonian-pan-institutional-survey-audiovisual-collections/.

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