Preserving and Sharing Our Past in Sound

Digitizing and Editing Oral History Interviews
In the late 20th century, when cassette recorders hit the market, many libraries and museums across the country began new oral history projects. Today, many of those interviews sit languishing on shelves, hidden and unheard in danger of deteriorating.

In 2011 four Hudson Valley organizations received a three-year grant from the Institute of Museum and Library Services to address this problem. “Voices of the Hudson Valley: Bringing New Technologies to Old Stories for 21st Century Listeners” worked with five organizations to evaluate approaches for a wider dissemination of these archival treasures. As we went through the process, these organizations provided invaluable feedback that created the model recommend here.

Preserving and Sharing our Past in Sound provides step-by-step instructions to a simple and low cost method of digitizing and preserving cassette recordings. It also shows you how to edit audio recordings into short stories that can be shared easily on the internet and in public programming. Whether you have one treasured recording or a box full of interviews, it is our hope that this guide will provide the inspiration and tools to share stories from our past with new generations.
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Digitizing Oral Histories

Plan for Digitizing

Digitizing is a time consuming process. Thinking about your goals and desired outcomes before you begin will help you gauge the time and resources needed to finish the project.

Define your goals
- Why are you considering reformatting? Is it primarily for preservation or for increasing access?
- What will happen if you do not digitize? Is equipment becoming obsolete? Is the media deteriorating or at the end of projected life span? Are you running out of physical storage space?
- Do your goals for the reformatting project fit with your institutions goals? Who are your champions?

Define the scope of the work
- Determine which collection/interviews you will digitize considering their condition, quality and copyright
- How many interviews will you digitize? What is the approximate length of the interviews? The answer to these questions will help you estimate the time it will take to complete your project.
- What specifications will you use for digitizing?
- How will you provide long-term storage?
- What will be the outcome of the project? Online access, circulating cds,
How will you fund the project?
- Determine a total project budget.
- Will you use institutional funds? Apply for a grant? Fundraise?

What file labeling and documentation protocols will you use?
- Determine a file labeling convention and stick to it! Use same convention on hard copies and digital files. Be consistent.
- Document your work and your process. Leave a record of what you have done and how you have done it.

What type of access will you provide?
- Will access be in-house, circulating, and online?
- Will online access be to the finding aids, the entire audio, segments
- What finding aids will you use? Cataloging? Metadata?

Who will do the work?
- Will the project be done in-house or will you outsource?
- What people power is available to do the work? Paid staff, volunteers, consultants, technical experts, content specialists? Even if you decided to outsource, you will still need someone to oversee the project. If you do an in-house project with volunteers, a project manager needs to be identified.
- How will you track your work?

What space is available to do the work?
- A designated workspace will allow for a smoother and more efficient workflow. Even if you outsource, there will be a flow of material and record keeping that will need to take place somewhere.

How will long-term maintenance be provided?
- Who will oversee storage and migration?
- How will knowledge about the collection be transferred to future staff and volunteers?
Once you have a plan in place you can begin to start digitizing the cassettes you’ve selected.

1. Choose Equipment for your Digital Work Station
Here’s a list of equipment you’ll need:

- **Cassette player to playback your tapes** - This is one of the most important components of your workstation. The sound captured from this machine will be the one you will be preserving. The quality of all future copies, all edited versions, will come from the digital file that you make from the audio cassette player you use to do the transfers. Don’t use the $25 cassette recorder you find in your basement or the back of your supply closet. Go for the best you can get. If you don’t have one or can’t find one to borrow, EBAY is a good source for old recording equipment.

- **Computer** – You’ll want to make sure the computer you use has a good sound card.

- **Audio editing software.** We recommend Audacity a free open source editing program you can download at http://audacity.sourceforge.net/download/

- **Cables** You’ll be connecting your audio cassette player to your computer with a cable. Most of you will need one with dual RCA plugs on one end and on the other a 1/8 inch stereo mini plug.

- **External hard drive** - Audio files are big. You can quickly use up the space on your computers hard drive. Get yourself an external hard drive to store your sound files.
2. Connect the components of your digital workstation.
   • Plug the RCA cables into the line out of your cassette player.
   • Insert the stereo mini plug into the audio or microphone line in on your computer.
   • Next connect your external hard drive.

RCA plugs in back of cassette player. Red is right.

USB from hard drive    Stereo mini from cassette player
3. Set-up Audacity
To begin, you’ll need to go to preferences and tell Audacity where the interview you’ll be digitizing is coming from. On this version of Audacity, Preferences is located in the Audacity drop down menu. It may be different on your version of Audacity, but look around and you’ll find it.

- Open Audacity on your computer.
- In the preference window, select devices and pick your input. Select built-in input. Yours may say mic-in if that is the type of audio line-in you have on your computer. Click ok.

- Next go to Quality to choose your sample rate and bit depth. Choose the recommended standard for preserving audio – 44.1 khz and 16 bit . Click ok.
4. Check your levels
Before you begin digitizing, you want to make sure your levels – how your computer is hearing the volume from your audio cassette player – are maximized. If your levels are too high your interview will sound distorted. If they are too low, it will be hard for people to hear them. Checking your levels is an important step to getting a quality transfer to preserve.

• Load your cassette. Push the red record button on Audacity and then the play button on your cassette player.
• You'll see that audacity makes a new track for your recording. And you can see the wave files representing the audio being recorded.
• Watch the levels meter. The red meter in the tool bar. Yours may be in a slightly different spot.

• You want the levels to be around -6. You can adjust the volume on your recorder or you can adjust the level meter in audacity by moving the slider left or right until the recording level settles at about -6 dB. If you increase the levels too high a red indicator appears to the right of the meter.
Once your levels are checked, stop your cassette player and stop the recording on audacity.
Delete this test track by simply clicking the little x in the window to the left of the track.

5. Begin digitizing
- Rewind your tape back to the beginning.
- Press record in Audacity and play on your cassette player.
- Analog conversion happens in real time. If the cassette is 25 minutes, it will take 25 minutes to convert it.
- It’s best to monitor the recording with a least one ear. Sometimes the volume on an interview gets louder or softer. You’ll want to adjust the levels if that happens.

6. Name your tracks
It’s easier to keep track of which cassettes and sides of cassettes you recorded if you name your tracks as you go along. If you come back to the project at a later date you will know exactly where you left off. When side one is finished name your track and save your project.
- To name your track, go to the little triangle in the window to the left of your track. Click and select name from the drop down menu.

- Give it a name that corresponds with your actual cassette. I’ll name this Smith for the interviewee’s name and T1S1 for tape one side one.
7. Save your Audacity Project

Saving your Audacity Project allows you to continue digitizing the interview or edit your files.

- Go to File/ Save Project As
- A pop up window will warn you that saving the project saves files that only Audacity can read.

This allows you to save your Audacity project so you can open this session again and continue recording or editing this interview.
Click OK and you can save and name your project

Navigate to the external hard drive and select or create an oral history folder. Create a folder with the interviewee’s last name. Within that folder put another folder called Audacity Project. And click save.

Let’s take a look at where audacity put that project. If I navigate to the folder you’ll see that audacity has created a number of files. These are files you can only listen to in audacity. You can open up the session again by clicking the file with the audacity icon.
8. Export your tracks for future listening
But you’re also going to want to listen to the interview you just digitized on your computer or burn it to a CD. To do that you must export that track.

- If you have more than one track, select the track you want to export by clicking in the window to the far left of the track. You can see that the track is highlighted indicating it has been selected.
- Go to file export.

- Navigate again to your external hard drive, your oral history folder and the interviewee’s last name. Another save screen will come up. Make a new folder within that folder called audio.

Create an audio folder for the audio files you export.

This is your digitized file. You can make mp3s or cds from this file, but keep this originial .wav file as your preservation copy.
• Then name your file. I like to use _year month day of the interview underscore interviewee's last name and again T1S1 for tape 1 side 1. This is really important to help you find your files and sessions later.
• Once you click save, another screen will come up that allows you to put in additional information or metadata that will be embedded in your audio file.
• If you create a file structure and naming convention as describe it will be very easy for you to keep track of what you have completed and have it correspond with your actual tapes. Naming in a consistent way is very important.
• Let's go back and take a look again at where your digitized audio files live. Go to your hard drive, oral history folder, name of the interviewee. There you have two folders. One is your audacity session which only audacity can read. The other contains the audio wav file for preservation. This is also the file you can use to make mp3s or cds.

Congratulations! You’ve converted and saved your first digital file in .wav format.

Now you are ready to begin the process again. Simply turn the audiocassette over and start again from the beginning.
One of the challenges with oral histories is that very few people will invest the time to listen to an hour-long interview – a daunting task even for the most motivated listener. Yet these interviews contain a valuable source of historical information with stories possibly found nowhere else. You can reach a wider audience, by choosing the most compelling sections of the interviews and editing them into audio clips that people will want to listen to. This guide will show you how to find the nuggets of gold in your long oral history interviews, how to edit them using Audacity a free audio editing software and how to share them on the internet and in programming.

1. Choosing an Interview to Edit

Editing a long interview will take time so before you begin consider the following:

- Does your attention shift during the interview? As you listen to the oral history interview or read the transcript be on the alert for when your ears perk up or you get a slight tingling sensation up your spine. This is the first sign that here is a story you want to share.

- Can you understand the interviewee? Remember that people will probably not be reading a transcript of the story so the audio will have to stand-alone. If you have listened to the interviewee a number of times you may have become accustomed to their voice. Ask someone else to listen to a few minutes. If they find it hard to understand this is probably not the right interview to edit. Listeners generally will not invest time in poor audio.

- Is the narrator/interviewee a storyteller? We all know a storyteller when we hear one. They have a way of telling the story that pulls us in and takes us down a path. When you find someone like this, go for it. These interviews are usually the easiest to edit.
• Is it relevant to a current event or is a well know person part of the story? These stories often attract people’s attention and are more easily picked up by search engines on the internet.
• Does it capture part of our human nature? Love stories, humorous tales, ridiculous adventures and hopeful narratives appeal to listeners of all ages.
• Does it convey a story about your mission or goals? These stories can be useful to help people understand your organization and helpful for marketing and fundraising.

2. Structuring The Story
Now that you have found a piece of the interview you think will make an interesting story you can begin editing the audio to make a more interesting narrative. Of course you must be faithful to the content and intent of the original narrator, but by slightly editing the flow of the story you will increase the likelihood that people will listen to it.

Before you begin the actual editing, think about how the story could be constructed. What will be the beginning, middle and end?
• Beginning – The first thing a person hears should catch their attention. Use the most exciting piece of audio at the beginning. Think about what’s going to make someone stick around and listen.
• Middle – Here is the bulk of the story – the details. Look for the audio that moves the story along and helps to paint images for the listener. Don’t be afraid to edit out sections that do not add to the story or are repetitive. It’s ok to edit, edit, edit.
• End – Look for some audio that brings closure to the story. It could be a short summary, a laugh or a comment that gives meaning to the story - the so what.

The stories that you find will be short – sometimes only a minute long – and probably more like audio anecdotes then fully realized narratives. These stories can stand-alone or you may want to consider ways to embellish them
• Add narration to the story to help set the stage and move the narrative along.
• Consider putting a few stories together from different interviewees that have similar themes.
• Include sounds, music, or photos to help tell the story and add interest.

3. Map out story
Before you begin editing your interview in Audacity, map out the story on paper first using a previous created log or transcript. As you select the main components of your story, note the time stamp so you will be able to find them easily in the interview. When you are done you’ll have something like this:

0:10 - :20    Introduction
1:56 – 2:33  Names variety of all fish in river
4:23 – 4:55  Why he thinks fish population declined
6:02 – 6:25  What he thinks the future holds
3:45 – 3:55  Sad about changes in river
4. Edit audio using Audacity
Following are some basic audio editing techniques for producing short stories from your oral history interviews. There are many detailed Audacity guides on the web should you want to do more complex editing. This guide is using a Mac computer to illustrate the process. Your version may look slightly different, but the basic commands will remain the same.

Before you start editing your oral history interview, read our guide to creating stories from oral histories. Hopefully you have created, as suggested in the section Map Out Story, a log with time stamps of the interview segments you want to use at the beginning, middle and end.

- **Download Audacity**
  Audacity is a free, open source audio editing software program. The latest version of Audacity, can be downloaded at audacity.sourceforge.net.

- **Import Audio**
  In order to edit your story you must import your audio file into the Audacity program. Import WAV files because they are uncompressed and will yield a higher quality audio. If you are importing audio from a hard drive, you will need that same source the next time you want to edit your interview. We do not recommend working off a thumb drive.

If you are working on a PC or in a different version of Audacity, your menus may look slightly different. But if you look around you'll find the import/audio command.
Audacity will automatically create a track for the audio. It will look like this:

In this example you can see the wave image is very close together and will be difficult to edit. In order to edit, you’ll need to zoom in and expand the wave image.

By clicking on the zoom in tool, you can expand your view of the wave image. Note the length of the interview that is now visible in the workspace.

- **Save Your Audacity Project**
  Saving your Audacity Project allows you to continue editing your interview at a later date.
A pop up window will warn you that saving the project saves files that only Audacity can read. Click ok. Later on you will export your stories so you can listen to them on different devices.

- **Create Story**

Now you are ready to begin creating your story. Begin by creating a new track for the edited story. This is where you will build the story from the pieces of audio you cut from the main track. To create a new track, go to tracks/add new/audio.

Your "new track" command might be in a different place, but if you browse through the menus you’ll find it.
Next name that new track so you can easily identify the contents of each track.

Now begin a process of copying and pasting to create the beginning, middle and end of the story. Perhaps you want to begin with the interviewees introduction. Push the play button to identify where that piece of audio is and then select it using the select tool. Then copy and paste it just as you would in a word document.

Scroll through and find the piece of the story that you want to come next. Select it, copy and paste it on the story track in order. Place the selection tool right next to the audio you will pasting it against. You don't want any gaps.
Continue this process until you have lined up on your story track all the pieces of your story.

- **Clean up the track**
  When you play back the story you may notice some additional edits or cleaning up you want to do. If you hear gaps in the audio, you can use the time shift tool to close that gap. If you zoom in more you will be able to see where the gap is. Use the time shift tool to move the tracks together and create a smoother sound to the audio.
There may be other audio that distracts from the story like a dog barking, someone hitting the mic or an excessive amount of pauses and ums. You can simply select that audio on your story track and delete it by using the delete key on your keyboard or select delete from the Audacity menu. Audacity automatically moves the audio after the selection to the left to fill in the gap left.

There are many other features in Audacity that can improve the quality of the audio and allow for more complex creation of stories.

- **Export your tracks for future listening**
  In order to share the story, you’ll have to export it. Select the track you want to export by clicking in the window to the far left of the track. You can see that the track is highlighted indicating it has been selected.

- **Go to file export.**

You’ll export your audio as a .wav file. You can then use iTunes to create an mp3 version or burn an audio CD.
Sharing Stories

Your short compelling audio stories are now ready to be shared across the internet, become the focus of a new exhibit or enhance a special event.

Before you begin, make sure you have

• Converted the audio stories to mp3 files or another compressed file. This can be done easily in iTunes. These smaller files will make it much easier and quicker to share.
• Choose your most compelling stories
• Relate the stories to national or local holidays, celebrations or anniversary of important events. Post a story about WW II on Veteran’s Day, an environmental story on Earth Day or a story about the local library during National Library Week.
• If your story talks about a well-known person or event, be sure to include that in the title of the story and post. Not only will it spark listener interest, but it is also more likely to be picked up by search engines.
SoundCloud is a social media site for listening to and sharing audio. Think youtube for sound. Originally designed for music, it now has a growing spoken word audience and is a great place to share your stories on your own branded page.

Sound and Story page on Soundcloud

The standard SoundCloud package is free and allows for six hours of uploads. The SoundCloud User's Guide shows you how to optimize your audio and build your audience. [http://on.soundcloud.com/creator-guide](http://on.soundcloud.com/creator-guide/) They also have a free app that your collection of audio will automatically appear on. [https://soundcloud.com/mobile](https://soundcloud.com/mobile).

Like youtube videos, soundcloud audio players can be easily embedded on your site with multiple options on how you would like the player to look. And SoundCloud keeps statistics on the total number of listeners for each track when it is played in any location – on SoundCloud, your website, Facebook or the app.

Here’s two examples of the embedded players:

Embedded Soundcloud players on Nyack Library oral history page
Facebook

Facebook uses a complex and changing algorithm to determine the reach of each of your posts. One study found that in February 2014 the average posts were reaching only 6% of fans. This number will probably continue to decline as Facebook continues with its pay to play model. Monitor your Facebook posts to determine that continuing with Facebook is worth your investment. Consider paying to extend the reach of your posts.

SoundCloud makes it easy to post a story on your Facebook page. Just copy the SoundCloud URL for your story or track and paste into your Facebook post. The player will automatically appear and your followers can listen right on Facebook.

There are numerous other social media sites where you can share your stories such as History Pin at https://www.historypin.org/ or Cowbird at http://cowbird.com/. Remember that using social media effectively involves a commitment of time. Before you begin, clarify your goals and monitor success to ensure it is worth your effort.

Exhibits

It is easier than ever to provide mobile access to listening. Consider using an iPad in a stand with headphones. Or directional speakers that limit the sound to a particular location. Combine an intriguing visual to draw attention.
We live in a visual world. We rarely take the time to just sit and listen. But listening without visuals can be a very intimate experience and engage your audience in new ways. Think of a modern day campfire circle by creating an inviting listening environment. Some ideas for a successful event:

• Check your sound before hand in the room you will be using to ensure that it can be heard. You will need external speakers as you computer speakers will probably not be loud enough for even a small room.
• Choose you audio stories carefully to make sure they can be understood. If the audio is not clear, consider providing a transcript of the story.
• Decide on a logical order to your listening and put the stories in that order in an itunes playlist to make it seamless for you to select and play through.
• Put the clips in context before playing. Give any background information necessary to understand the clip and introduce the narrator. You may want to give the year the story was recorded, something about the interviewee and the subject that is being discussed.
• Develop discussion questions before hand and ask for audience reactions.
• Build in time for participants to tell their own stories. Listening to the oral histories will bring back memories for those attending and they’ll want to share them. Consider recording the event to capture the new stories that will be shared.
**Events and presentations**

Enhance your presentations and add interest to your events by playing one of your stories. Whether it’s an annual meeting, fundraising event or a special celebration hearing stories from local residents told in their own voice can grab attention and raise awareness.

**Audio tours**

If you have interviews that relate to a physical location, you can put them together in a collection and promote them as a tour.

You could create a play list on soundcloud or embed the audio together on your website.

Signs can be permanent or temporary for a special event. You can use a cell phone service to host your stories and give you a common phone number or you could use a QR code that links to your story track. Be creative when you select locations for your stories. Signage in unexpected places allows for a serendipitous experience.

**Contact Us**

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