

PODCASTING WITH AUDACITY

How to record your very own podcast!



WELCOME

Welcome to the Quick Reference Guide for creating a podcast using the Audacity software on a PC. If you plan on using Garage Band for the Macintosh computer systems see the guide labeled **Podcasting with Garageband** here in Gaskill.

These instructions are intended to help novices learn how to create a podcast; however, if you've created a podcast before and just need a refresher on how to do a few tasks or are new to Audacity then these instructions will still be able to help you.

To create a podcast in the Gaskill Learning Technologies Center you will need the following equipment:

- PC
- Snowball Microphone
- Audacity
- Your Creativity!



WHY PODCAST?

If you've never created a podcast and aren't sure how one would help you, here's a brief overview of why you might want to make one.

What's a podcast?

A podcast is a sound file that users can download from the internet. A podcast is created by a podcaster (you!) who usually has something he or she wants to share. Though the word podcast comes from Apple's iPod, a podcast can be listened to on any mp3 player as long as it is in the appropriate file format.

What are podcasts used for?

Podcasts are usually created by people who want to share something with the world. This can be either their opinion, new music, their opinion on new music, or any other ideas they have that can be distributed through audio format on the internet. Podcasts are also being used by many schools to put class lectures in a portable format.

Who can make podcasts?

Anybody! With the proper equipment, a microphone and sound editing program, anybody can sit down and create a podcast in no time.

If all I need is a microphone and a sound editing program, then why should I make my podcast in Gaskill?

While the sound editing program Audacity is free and available for any computer, access to a top-of-the-line microphone is not. The Blue Snowball microphone is one of the best microphones available for voice recording and most likely too expensive for the average student to purchase for home use. Also, the friendly staff at Gaskill is available only in the lab to answer any questions you may have. You won't get that at home!

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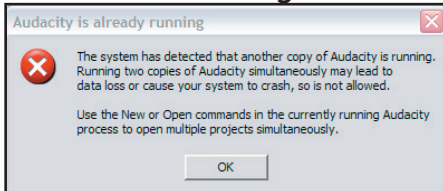
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AUDACITY SET-UP

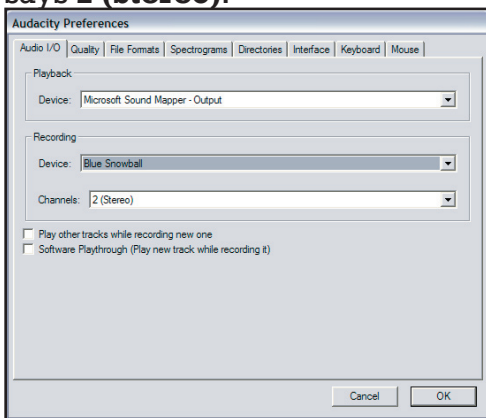
Audacity should be ready for use, but in case the settings were changed check to make sure Audacity is ready for recording.

1. Open Audacity by either clicking the **Start** button then **All Programs** then **Audacity** or double click the Audacity logo on the desktop.

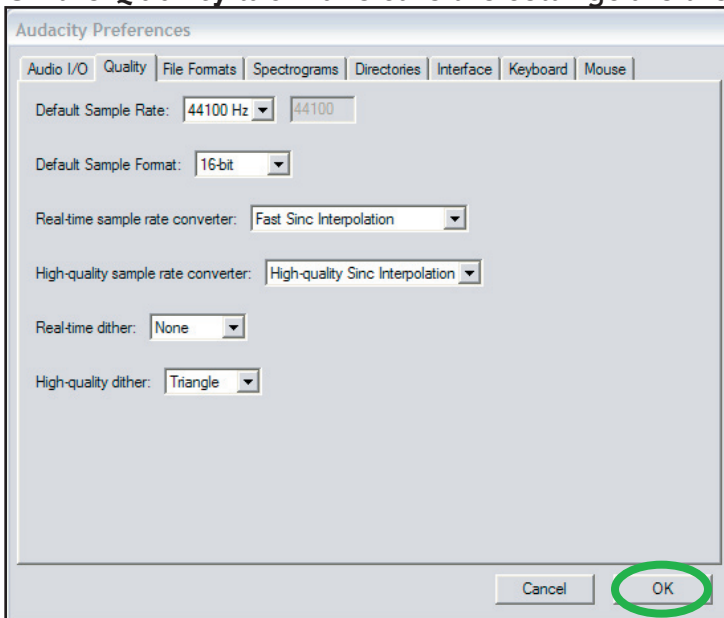
Note: if an error message opens then Audacity is already open on the computer. Click OK and then continue along.



2. Click **Edit** at the top of Audacity and then **Preferences**.
3. On the **Audio I/O** tab make sure the **Recording Device** is **Blue Snowball** and **Channels** says **2 (Stereo)**.



4. On the **Quality** tab make sure the settings are the same as they are below:

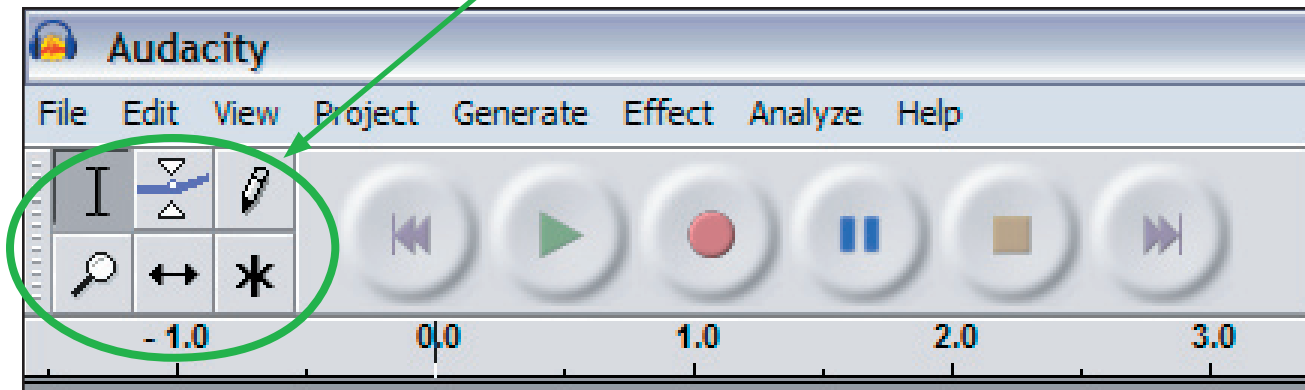


Click **OK** to go back to Audacity.

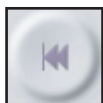
AUDACITY INTRO

In order to record your podcast you will be using the audio editing program Audacity. If you've never used Audacity don't worry about learning the software: it's as easy as editing a Word document. All the critical commands such as delete, copy, and paste are the same as they would be in a word document.

Editing Tools



In order to efficiently edit your document you will find the following buttons handy:



Skip to Start: goes to beginning of track; deselects selected portions of track



Play: plays track or selected audio

Shift + Play: pressing the shift button on your keyboard and clicking the play button at the same time will continuously play the selected audio track



Record: records voice; opens new audio track



Pause: pauses track during playback; if you pause the track while recording you will continue recording audio to the same audio track



Stop: stops recording or playback; if you stop recording you will open a new audio track if you click record



Skip to End: goes to end of track; deselects selected portions of track



Selection Tool: this tool allows you to select audio



Time Shift Tool: this tool allows you to move audio to different parts of the audio track

The four other tools on the toolbar are not covered; those tools are for more experienced users and aren't nearly as fun or easy to use. Check the Help menu.

Delete: to delete selected audio, hit the delete key on your keyboard

Copy: to copy selected audio, hold down the **Control Key** (ctrl) and hit the **C** key on your keyboard

Paste: to paste audio into your project hold down the **Control Key** (ctrl) and hit the **V** key on your keyboard

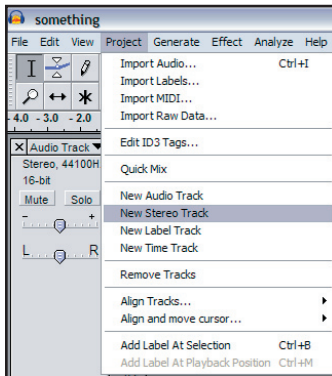
ADDING TRACKS

Tracks are what the audio you are recording are stored in. An empty track looks like this:



A new track is opened automatically for you if you stop recording and then click the Record button again.

To add a track manually, click **Project** then **New Stereo Track** from the toolbar.



START RECORDING

RECORDING CHECKLIST

Before you set yourself up for a long stay in the recording booth make sure you have everything you'll need for creating your podcast:

- **Water** - make sure you keep your throat nice and ready to record your vocals
- **Extra audio clips** - if you need any extra audio clips in your podcast make sure you know how to get to them on the Gaskill computer
- **Outline of show** - prepare an outline for your podcast! You'll want to have at least a basic idea of what you'll be talking about to make the recording process much easier.

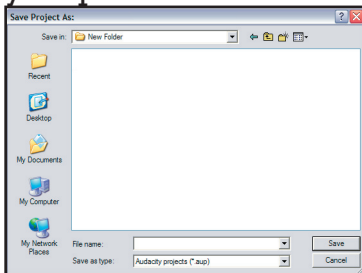
SAVING RECORDING

Before you record you will need to create your own folder on the desktop and save your Audacity file to it. To do this:

1. Open Audacity.
2. Click **File** then **Save Project As...**
3. On the left hand side click **Desktop**.
4. Click the **Create New Folder** icon on the top of the dialog box.
Name this folder something you will remember, like your name.



5. With your new folder selected, click **Open**.
6. In the **File Name** box, name your podcast something you will remember, like the topic of your podcast.



This will create a folder with the name you gave it that ends in **_data**. This will contain all the data that Audacity needs to edit your podcast. Do not delete anything from this folder or save anything into it. Let Audacity handle this folder.

WHAT'S NEXT?

Now you're ready to begin recording your podcast! But during your recording make sure to save often in case there is a computer glitch or some other unforeseen error.

RECORDING

This is when you will actually begin recording your podcast. Make sure you know what you plan to say before you begin recording: you won't impress anyone saying "umm" or "uh" every five seconds! But don't worry if you mess up any lines; you'll be able to edit these parts later on (see Editing Recording).

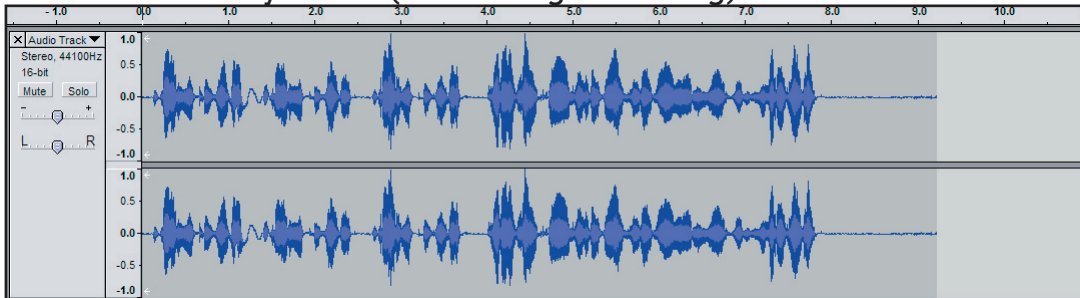
1. Press the red **Record** button on the Audacity toolbar.

Remember, this will automatically add a new audio track to the project that will contain your voice recording.

2. Speak into the Snowball microphone with the Blue logo facing you.



Play around with the microphone to see how loud you should speak and how far away from the microphone you need to be. You don't need to be right next to the microphone but a distance of about a foot should be close enough for the microphone to record everything you say. Ideally the levels in Audacity will be about half-way on the audio track (see below). If the levels aren't that high and you don't want to re-record your podcast you can always fix the volume when you edit (see Editing Recording).



There are two channels here because of how we set up the program in Audacity Setup.

3. When you're done recording press the yellow **Stop** button on the Audacity toolbar.

Note: You don't have to do all your recording in one take; if you need to take a break to rest your vocal chords then take it! When you are ready to get back to recording just press the Record button again and Audacity will create a new track so as not to disturb your first recording. The Editing Recording section will tell you how to combine different audio tracks into one audio file.

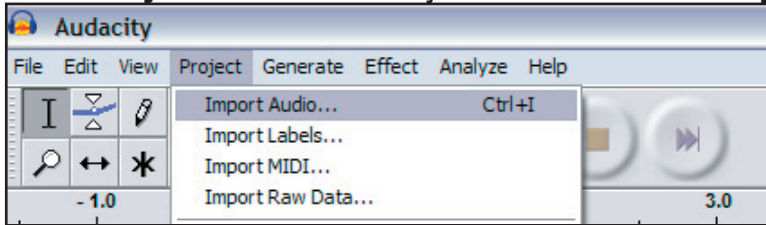
WHAT'S NEXT?

From here you can either import sounds into your podcast (Importing Audio section) or edit your podcast and send it out to the world (Editing Recording and Exporting sections).

IMPORTING AUDIO

Now that you've recorded your voice for your podcast it's time to add any extra audio files you may want into the project. If you do not want or need to add audio into your podcast continue to the section, Editing Recording (next page).

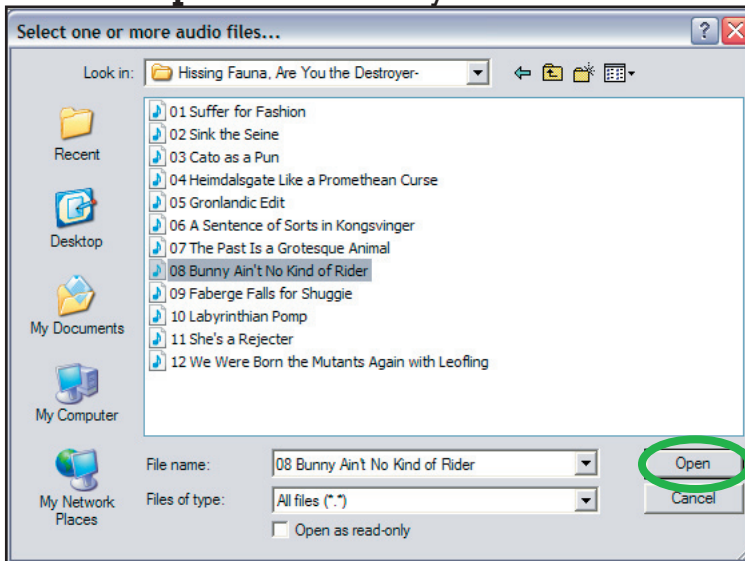
1. Click **Project** on the Audacity toolbar then click **Import Audio** from the toolbar.



This will open a dialog box asking you to find the audio you want to add into your podcast.

Note: Audacity can import .mp3, .wav, .au (note: do not use the .aup file that Audacity uses), .aif, and .ogg files.

2. Find where you saved your audio file onto the computer.
3. Click the **Open** button when you have selected the audio you want to import.



WHAT'S NEXT?

The Editing Recording section will give you tips on how to fit the imported audio into your podcast.

EDITING RECORDING

Next to brainstorming and outlining your podcast this will likely be the most time consuming part of creating it. You will need to find all the times you either had too large a break between words or sentences or said the wrong thing. This section will help make your podcast seem like you said everything correctly on the first try instead of stuttering every time you were faced with a tongue-twister. This section will also tell you how to place sounds you imported into your podcast so they are incorporated seamlessly.

CORRECTING GAPS IN SENTENCES AND DELETING EXTRA WORDS:

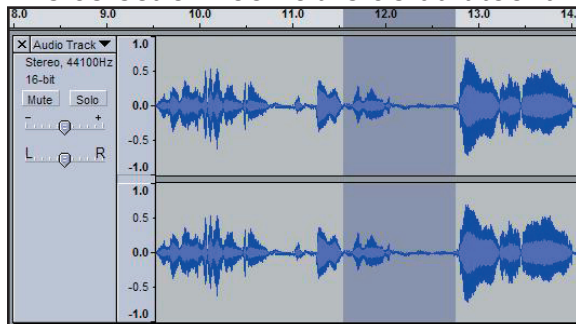
To do this you will need to find the places in your podcast where you may have meant to say something like, "This is my podcast," but you actually said, "This is my.....podcast." Also, you may not want filler words such as "uh" or "um" in your podcast.

Either make a mental note of where these gaps are or write down what times they occur at on a sheet of paper. You can also go through your podcast from the beginning to the end and fix the problems as you spot them. If you plan to add extra sounds make sure you catch all the places you need to delete sounds before rearranging your tracks. Your podcasting life will be much easier if you catch all your mistakes now rather than later.

DELETING AUDIO:

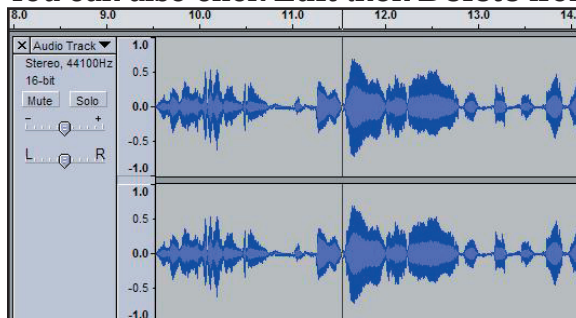
1. Using the **Selection Tool**, select the audio segment you want to erase.

The **Selection Tool** is the default tool and should already be selected.



2. Hit the delete key on your keyboard.

You can also click **Edit** then **Delete** from the toolbar.



3. Repeat on all audio segments you need to delete.

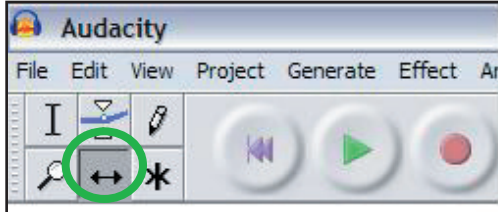
Note: there's no formula for how long of a gap to leave in between words. Listen to the edited copy by rewinding the track and clicking the green **Play** button to see if it sounds natural. If it doesn't then click **Edit** then **Undo** and try again.

Sometimes you just need to re-record a certain sound bite.

MOVING AUDIO:

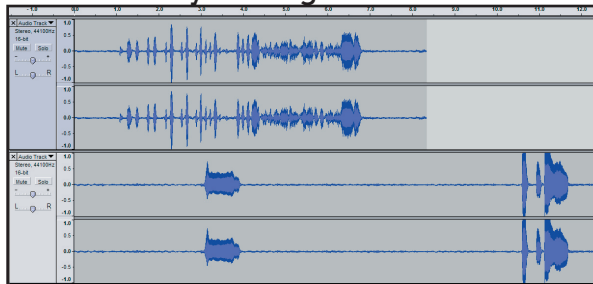
If you added in sound clips or needed to re-record a certain part of your podcast read this. If your podcast flows evenly then go ahead to the Further Editing section (p. 11) or Exporting Podcast (p. 12).

1. Click the **Time Shift Tool** button on the Audacity toolbar.



2. Click the audio track you want to move.
3. Holding the left mouse button, slide the audio track to where you need it.

To slide the audio track, click the audio track you want to move and hold down the left mouse button while you drag the mouse left or right.



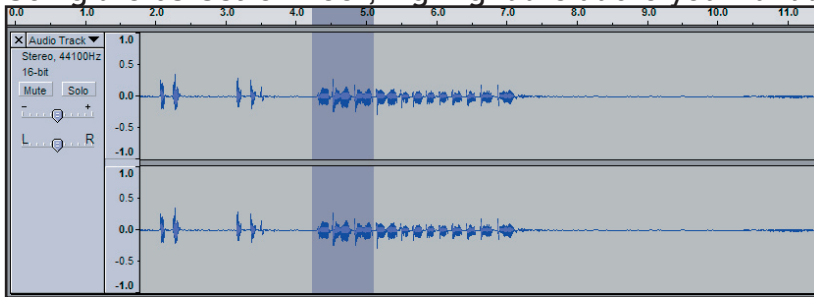
The above graphic shows the audio in its original position while the graphic below shows the audio when it has been dragged to the right.



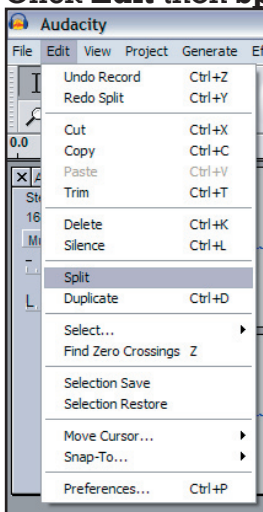
SPLITTING AUDIO:

If there is a section of audio you want to use but it was somehow recorded in the wrong place or you've decided you want to move it to another section of your podcast then you may find it easiest to split the audio track. Splitting the track will take the selected piece of audio out of its current audio track and place it into a new track without affecting any of the other audio pieces around it.

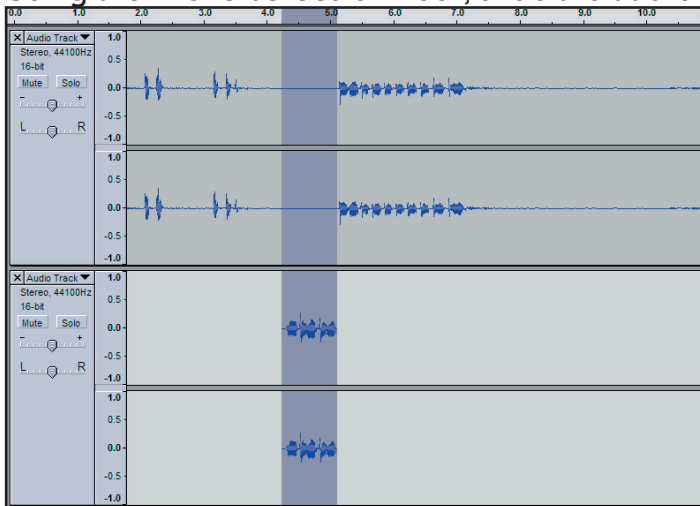
1. Using the **Selection Tool**, highlight the audio you want to split out of the current track.



2. Click **Edit** then **Split** from the toolbar.



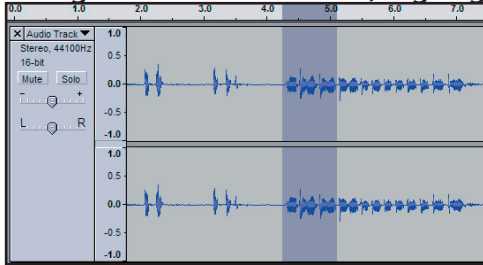
3. Using the **Move Selection Tool**, slide the audio to where you want it to be in your podcast.



TRIMMING AUDIO:

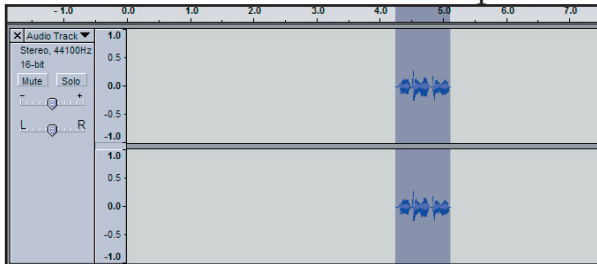
If you imported audio into your podcast but you only want to use a certain part of it you will want to use the trim feature. This feature cuts the audio that is not selected out of the podcast.

1. Using the **Selection Tool**, highlight the audio you want to keep in the current track.



2. Click **Edit** then **Trim** from the toolbar.

3. Use the **Move Selection Tool** to place the trimmed audio where you want it in your podcast.

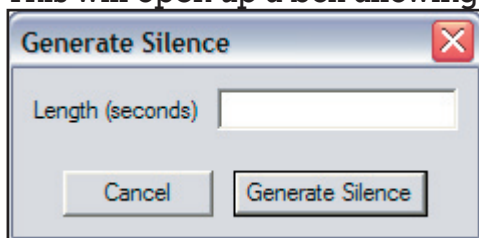


GENERATING SILENCE, TONE, AND WHITE NOISE

Sometimes you need to add a pause into your podcast or you need extra space for certain sound effects, such as echo, to work properly. Other times you may need to add a high pitched sound (Tone) or static (White Noise) into your podcast.

There are three ways Audacity adds these effects to a project. 1) One way is to add the effect where you last clicked the project. 2) The second way is to replace selected audio, and 3) the third is to add the effect into a new audio track if you have not clicked anywhere on an audio track or do not have audio selected.

1. Using the **Selection Tool**, click where you want to generate a sound.
2. Click **Generate** then **Silence**, **Tone**, or **White Noise** from the toolbar.
This will open up a box allowing you to determine how much audio to add.



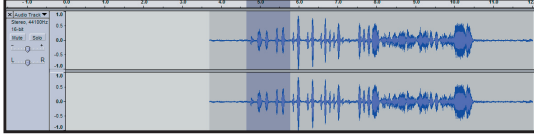
3. In the **Length (seconds)** dialog box, insert the desired length of the effect you wish to generate. Click **Generate Silence**.

FURTHER EDITING

AMPLIFYING

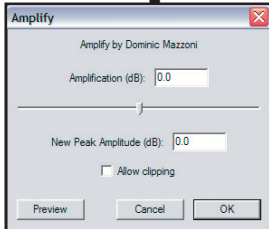
If there was a certain part of your podcast that you were speaking too softly in and for whatever reason you don't want to rerecord it, here's how you amplify a sound in Audacity.

1. Using the **Selection Tool**, highlight the part of the audio track you want to amplify.



2. Click **Effect** then **Amplify** from the Audacity toolbar.

3. Determine the proper Amplification level to make your recording sound just right. In the **Amplification (dB)** box type your desired amplification. Click **OK** to amplify.



Negative amplification (-dB) will lower the volume while positive amplification (+dB) will increase the volume.

Do not allow clipping. If your podcast becomes too loud and you allow clipping then your podcast will sound crackly, like an old record.

OTHER USEFUL EFFECTS

The editing capabilities of Audacity are not limited to delete, move, split, trim, and amplify. You can also use the program for many other sound effects, all of which are created exactly the same way you amplify a sound. Here's a brief overview of the many sound effects available in Audacity.

Changing Pitch - this changes the pitch or frequency of the selected audio track. You can make your voice deep or high pitched depending on the settings.

Change Speed - this changes the speed of the selected audio and makes the track shorter if you speed the track up or longer if you slow the track down.

Echo - this adds an echo effect to your audio track. However, if you use this effect make sure you have extra room at the end of the audio track for the echo to fade out.

Noise Removal - this effect removes unwanted audio from your recording.

Reverse - this effect will reverse your audio and make you talk backwards.

Repeat - this effect repeats the selected audio as many times as you put in the info box.

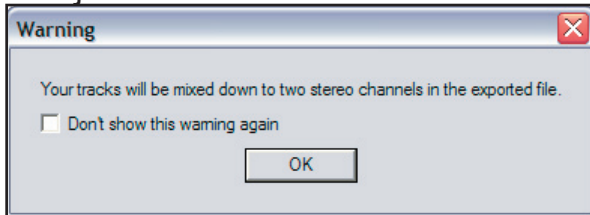
Wahwah - this effect makes it seem as if your voice is going back and forth between your listener's speakers.

EXPORTING PODCAST

After you've edited your podcast you're ready to send the file out to the world, right? Nope! First you need to save your podcast as a file that everyone will be able to access. The .aup file extension (Audacity Project) allows you to edit your recording but you won't be able to play it back on an mp3 player or open it in any program except for Audacity. To ensure everyone can listen to your podcast you'll need to save it as an mp3 by:

1. Click **File** then **Export as MP3**.

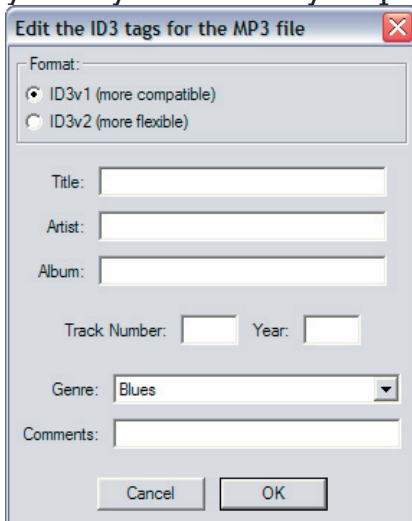
If a warning saying "Your tracks will be mixed down to two stereo channels in the exported file" just click OK.



2. Save your mp3 on the desktop.
3. Name your file in the **File Name** box and click **Save**.

Do not save your mp3 in the folder that ends in **_data**. This folder contains the files Audacity needs to edit your recording. Your mp3 should be separate from these.

3. Click on **ID3v1** and give your podcast a **Title**, **Artist**, and **Album** name. If your podcast falls under any genre select one from the drop down menu and enter any additional comments you may have about your podcast in the **Comments** box.



Once you've exported your podcast make sure to save it to your netDisk account or on your personal web space so others can listen to it using their media player. Or save your mp3s onto a CD or DVD (to save to a CD/DVD, use **Roxio Burner** [DVD-R+ for PCs; DVD-R- for Macs]). In order to make the file available for download you may have to use a web editor program such as Macromedia Dreamweaver.

WHAT'S NEXT?

All that's left to do is come back and create another podcast episode so your legion of fans can listen to whatever it is you have to say in your next podcast!

SNOWBALL MICROPHONE SET-UP

The Snowball microphone should already be set up and ready for use, but just in case a previous user in the lab unplugged or changed the settings take a quick look at them to avoid any problems with recording.

To check if the microphone is plugged into the computer:

1. Check to see if the USB cable is plugged into the microphone.

If the USB cable is not plugged into the microphone then insert the thick end into the port on the back of the microphone.



The USB cable is the grey cable that fits in the back of the microphone. If it is not plugged into the microphone and not in the computer lab, ask a Gaskill employee where it might be found.

2. Check to see if the USB cable is plugged into the computer.

If the USB cable is not plugged into the computer then put the thin end into one of the USB ports of the computer.

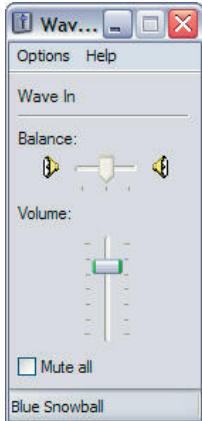
CHECKING MICROPHONE SETTINGS

To check the Snowball pre-sets on the computer you will need to check the computer's audio settings. To do this:

1. Click the **Start** button then click **Control Panel**. Double click the **Sounds and Audio Devices** icon.
2. On the **Audio** tab check to make sure the **Sound recording: Default device:** says **Blue Snowball**. The microphone is correctly connected to the computer.



3. Click the **Volume** button underneath **Blue Snowball** and check to make sure the microphone is not muted and the volume is at about $\frac{3}{4}$ power.



4. On the **Voice** tab check to make sure the **Voice recording: Default device:** says **Blue Snowball**.
5. Click the **Volume** button underneath **Blue Snowball** and check to make sure the microphone is not muted and the volume is at about $\frac{3}{4}$ power.
6. Close the volume windows by clicking the red X's in the top right hand corner so the desktop isn't cluttered while you record and edit your podcast.

RECORDING SETTINGS

If you are wondering what those three settings on the back of the microphone are for, they are the different settings the Snowball can capture audio using.



- **Setting 1** is best used by someone who is speaking in front of the microphone (your best bet for podcasting).
- **Setting 2** is best used by someone who is speaking in front of the microphone but might have an extra loud voice.
- **Setting 3** is best used by someone who hopes to capture sound from all over the room. If you have a large group, this setting may work best for you.