Sound Recording and Design Tips

Why not just download and use a music track….?

- Copyright!
- You are surrendering control of part of the creative process…
- Unless the music is uniquely yours it may already have associations outside of your control.
- You are not making a music video
- It's kind of lame….

Recording

- Use .wav or .aiff files formats NOT compressed formats mp3, wma or aac etc.
- Use a sample rate of 48kHz and bit depth of 24bit or 16bit if that is not available.
- Always monitor (with headphones) what you are recoding **while** you are recording it.
- Always keep and eye on input levels, adjust them correctly before recording.
- The distance between the microphone and source has a significant impact on the recording. Generally your microphone should be around 30cm from the sound source.
- Try to record in a noise free environment. Record LOTS of takes!

Asset Management

- Copy all audio files to a correctly labeled project folder and the label the files **prior** to importing them into software.
- When editing audio files in software, make sure that you know if the edits are destructive or not. If they are, make copies of the audio files prior to editing.

Editing

- Trim the front of the clips so there is no dead space before the sound begins, this will make it easier to sync to picture.
- Generally fades are a good idea at the end of clips or crossfade between clips. Sudden or hard cuts are "unnatural" and dramatic (which can be a good thing when used for effect)

Sound Processing and Manipulation (effects)

- The two fundamental manipulations are REVERSE (playing the sound backwards) and PITCH SHIFT (decreasing or increasing the relative pitch of the sound)

- REVERB can make a sound like it was recorded in a range of acoustic spaces. Along with volume it can help create different aural perspectives or it can dramatically alter the sound. Very fun to experiment with!. (too much and can be bad though)

- DELAY (echo) effects create repetitions of the sound wave and can create interesting rhythmic textures.

- PHASING and FLANGING use phase interference to create swirling, shimmering type of sounds (depending on how much is used) Think 60s psychedelic music. Now days it tends to be kind of cheesy.

- EQ allows to alter the frequency response of the sound by boosting or cutting frequency ranges present in the sound. Simple manipulations like making a sound "brighter" by boosting high frequencies or making it duller by cutting them is an example of the use of EQ

- In most software audio you can add processing in two ways. One is to apply processing on a clip by clip basis. This will write the effect onto the clip is not processed in the real time. The other is to add an INSERT to the track that the clip is on. This will apply the effect in real time to any clip present on that track and only if the clip is on the track.

You can create a huge pallet of sounds using these tools. Remember you can create quite complicated sounds by layering simple sounds.

Mixing

- Mixing is essentially concerned with having all the sounds play well together. Volume is the most important parameter; a mix lives and breathes with the creative use of volume. Sounds can become louder or softer in relation to other sounds.

- PAN controls the placement of the sound within the stereo field. A sound can move with this field or remain in a fixed position. Too many sounds placed in the same place in the stereo field and sounding at the same time will result typically in masking of one or more of those sounds. Do much fast PANNING can be quite confusing and sometimes nauseating.

- Listen to your mix through speakers not just headphones. Have others listen to it as well.

How to Start…

As we know the creative process can be a mysterious thing and we don't always begin with an inspired thought. Here are some thoughts on getting started.

- Think about what you are trying to say. Art is communication. What sound potential might be suggested by the image.

- Create a pallet of sounds, not necessarily thinking too much about the image. Go crazy! Sometimes you never know what might work or where the process will take you.

- Throw some sound on the timeline and see what sticks. Trash those sounds and try again. The more you work on it the better the sound design will be.

- Look for meaningful points of synchronization and use these as starting points.

- Don't over think or second guess every decision until you are truly ready to review the complete work.