Discovering America’s Rangelands
Local Knowledge Video Production Guide

By David Keto, Media Producer, University of Wyoming Extension

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Introduction

I begin many of my video production workshops with the simple question, “why make videos?”

Your answer to this question will dictate why you decide to read this book, or if you decide to read it at all. Answers tend to range depending on individuals and experience, but ultimately we tend to watch and make videos in order to tell stories. It may be our own stories, those of friends and family, or the world around us, but ultimately we tell stories to help make sense of the world. Most of us go home in the evening a share what our day was like with family or friends. This most basic form of storytelling is something we are all familiar with. We all understand story because it is so pervasive in our culture.

In terms of why video, we use video to tell our story because video is multi-sensory, image heavy, and allows us strong control of our story through the use of editing.

Think for a moment about your favorite TV show or a commercial that really stuck with you. Even a short commercial can have a major impact with a well told story.

https://www.youtube.com/watch?v=Lmf0F7JxxXE

Whether we’re sharing our day with family, trying to teach the world a new skill, or reveal a universal truth, story pervades our lives and video is a powerful platform to share our stories. In the last few years’ video production on mobile devices has exploded and made high quality video production available to anyone with a story to tell. Access to such powerful tools gives everyone a much louder voice and a great platform for telling their own stories without relying on media professionals.

This manual is designed to assist Extension educators and specialists and other natural resource professionals in telling local knowledge stories about rangeland management. There is a lot of local knowledge on the ground in rangelands across the West everyday. This knowledge resides with ranchers, resource professionals, and community members whose lives have been built around wise resource management. This guide will help share those stories with the world using a relatively easy and impactful format built around producing videos on an iPad or iPhone.

A few notes before we get started. While there are as many ways to tell stories as there are stories to be told, this manual focuses exclusively on producing videos on iPads and iPhones. While some of the information will be applicable for video production in general or on other mobile devices, iDevices offer the most options in terms of app availability and in many Extension Services iDevices are the standard recommendation for employees purchasing mobile equipment. Trade or brand names used in this publication are used only for the purpose of educational information. The information given herein is supplied with the understanding that no discrimination is intended, and no endorsement of products by the University of
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**Storytelling**

*Important considerations*

There are many different ways to tell a story. A story can be humorous or sad, truth or fantasy, ______.

No matter what kind of story you plan to tell or how you plan to tell it there are two critical considerations before you start the production process:

1. Audience
2. Purpose

Before you pick up a pen, schedule a shoot, or hit the record button you must consider these two components.

Audience is key to helping structure your story. Because storytelling is an integral part of all human societies, storytelling is culturally specific. Different cultures tell stories in their own ways. One of the overarching goals of video production is clear communication with your target audience so defining who you are trying to reach is critical. You want your film to reflect the culture of your audience. You might make a film about local foods for agricultural producers very differently than you might approach the same film with urban consumers as your audience. Similarly, if your target audience is youth, you’ll probably take a different approach to storytelling than you might with local government officials.

https://www.digitalgreen.org/

Be as specific as you can when defining your audience even if this might evolve later because the target audience will dictate the characters/talent in your movie, the language used in your film, the output platform, and the length. Because the goal with your video is to clearly communicate and connect with your audience, you’ll want on screen talent in your film to have some connection with your audience either as a trusted member of that audience or an expert who is respected by that community. For example, a film with 4-H youth members as the target audience should feature youth onscreen. Similarly, the language, tone, and talent in your film for a technical audience of scientists will be very different than a video used to connect with seasonal farm laborers, even if you want to cover the same topics with both audiences.

The purpose of your film is also important to consider at the beginning of the production process. If you’re trying to entertain your audience your film will look very different than if you’re trying to instruct them in some new technique or method.
Defining your purpose and audience will help drive your video production process and ensure maximum impact with your final product.

https://www.youtube.com/watch?v=D0foMKAxCww

Types of Stories
As mentioned previously, stories are culturally constructed, so storytelling history and structure vary by culture. A traditional western storytelling structure is beginning, middle, and end; and involves these components:

![Storytelling Paradigm Diagram](image)

Storytelling in non-Western and native cultures may take a very different structure:
[diagrams]
Since we’ve already settled on our audience and purpose, those considerations should help us when it comes to deciding on how we might best tell our story.

In addition to cultural considerations we also want to think about the style of our video. In many cases, since our focus is on capturing local knowledge and we’re not looking to challenge our audience with new storytelling forms, we’ll probably stick with a fairly linear informational type of story. We might also consider some other story type if we have a particular reason to do so. Other types of videos we might make could include: music videos, something designed purely for entertainment purposes or something instructional. Each of these forms/approaches to video storytelling will come with specific expectations from our target audience about what they’ll see on screen and how we’ll move through the story.

Music video: https://www.youtube.com/watch?v=QWZjQ9hQFc
Instructional: https://www.youtube.com/watch?v=g52hAggxkU8

There are some other helpful ways to think about how we’ll tell our story and the type of story we’ll be telling.

If we think of storytelling from a journalistic tradition we would want to consider highlighting the who, what, where, when, and why in our story. If we think of storytelling like writing an essay we would want to clearly define a problem we’re intending to solve (think of this as a thesis statement), follow our characters/talent on a search for answers (methods), and arrive at a solution to our problem that includes supporting evidence (results and conclusion). Another way of structuring our story might be an advertising approach where we begin with a situation or product, describe why our audience might care and how our product can help solve a problem, and wrap up our video with a call to action.

The point is, there is no wrong way to tell a story or make a video as long as your overall objective is clear communication of purpose with a specific target audience. I like to take a hybrid approach to video storytelling:

1. Start with a hook. Why should the audience care?
2. Thesis. What’s the main point we want the audience to understand?
3. What’s the 3-5 main points or steps to reach our goal/solve a problem/prove our thesis.
4. Show us the solution/results.
5. Give a call to the action. What should the audience do with this information?

Thinking about story before you begin will result in a stronger video at the end of the production process.

Oral History History
Need details
Equipment

Overview
Your iDevice can be a powerful tool for video production, but there are few pieces of equipment that will really maximize its usefulness both as a camera and editing platform.

First off hardware. Everyone knows that both iPhones and iPads include a built in camera that works well for taking photos in many circumstances. But when it comes to video production without improved stabilization and audio capturing you’ll have a hard time recording high quality video. With some basic upgrades you can shoot broadcast and film quality video right from your phone or tablet.

Hardware
Stabilization
The first and most basic hardware component of your video production kit is a tripod. Whether you’re shooting video on your iDevice, a DSLR, or a professional video camera the most basic improvement you can make is to use a tripod. Steady shots without all the shaky camera of handholding are the first and most obvious mark of a professional product. When it comes to tripods find something to match your price range and check reviews. Even the cheapest tripod will work perfectly to record a stationary interview. If you plan to do a lot of action shooting or moving the camera (panning or tilting) during your shots, spending slightly more on a tripod is worthwhile. Where more expensive tripods set themselves apart is when it comes to camera movement.

Next we’ll need a way attach our iDevice to our tripod. There are a range of options here, so again find a combination of price and functionality that work for you. At the high end there are an assortment of cases built to attach phones and tablets to tripods. Many of these cases will also offer other types of attachments for accessories such as microphones, lights, added lenses, and filters. A cheaper option is to find a clip type bracket to connect with a tripod. These brackets come in a number of styles. Some will fit over your device with a case still one, most are removed when you don’t need to use the device as a camera.
There are a few other types of stabilization that can help with iVideo production. A basic handle can work wonders for steadying a shot. Just the difference of gripping your device with a handle, instead of the sides can help improve stability. GoPro adapter kits can allow you to attach your iPhone to the full range of GoPro straps and mounts. Dollys and sliders can be nice accessories to create following and tracking shots with plenty of smooth movement. A recent stabilization improvement is handheld gyroscopic stabilizers. These can be incredibly useful and versatile and are consumer versions of much higher end professional video products. A gyro stabilizer is the only type of stabilization that comes close to substituting for a tripod. The gyro will also allow you to capture a wide range of shots in varying conditions.

Stabilization is the single most critical component of your iDevice video production kit.

**Audio**

A close second in importance behind stabilization is audio quality. While the built in microphones on your device are suitable for general sound gathering, a microphone is particularly critical for interviews and for a considerable jump in sound quality.

The most basic type of microphone for interview and instructional work is the lapel mic. Lapel mics are available in both wireless and wired versions. Wireless are considerably more expensive and, particularly in low end models, audio interference is a serious issue. An excellent option to start with is a wired lapel mic like the Audio Technica 3354. Although the distance between the camera and the talent is limited by the length of the mic cable, a wired lapel mic minimizes the risk of interference, is easier to use, and works well in most situations.
There are many other options for microphone styles and brands, most of which you won’t need to consider unless you have a specific production necessity to do so. The only other microphone that can be useful for collecting generic background and environmental sounds (not interviews) is a shotgun mic. A shotgun is good for picking up a relatively narrow (and sometimes distant) sound source. A good place to start is the Audio Technica ATR 6550, a basic wired shotgun that will interface easily with your iDevice.

[shotgun]

In order to connect a microphone to your iDevice you’ll need some sort of interface and/or adapter. Since phones and tablets are not made primarily for video production, they are built more for getting audio in than out. An audio interface/amp helps improve sound quality and provide improved volume control for the audio being collected by the mic. Interfaces and amps may connect to your device either through the headphone jack or through the lightning input. Either approach works, although devices that connect through the lightning port provide more options for control and better quality overall. Depending on the components you choose you may also need an adapter if your device doesn’t include a lightning plug built in. Although some of the components are slightly dated, I prefer an audio setup that uses the Tascam iXJ2 with a 30-pin to lightning adapter. The Tascam iXJ2 allows you to attach 2 separate microphones to your iDevice, monitor the audio input with a set of headphones, and adjust the volume across a wide range of levels. This particular interface also includes a space to plug in a USB power supply to keep the device charging while you shoot. You will need an adapter since the Tascam only offers a 30-pin plug.
The last audio component is headphones, any pair from earbuds to studio types will work. The headphones give you a chance monitor your recording or, depending on the app, at least listen clearly during playback of your clips.

Other Hardware
There are many other accessories and devices available to improve your filmmaking on your iDevice. Many of these products are marketed towards specific user groups such as action sports, scuba divers, etc. Be sure to watch for other devices that might be helpful, but you can produce quality videos with the items mentioned above.

Apps
There are hundreds of apps available for video production on iDevices and new apps become available daily. Just as you should develop a set of hardware to meet your particular needs, you should find a specific set of apps that meet your needs as well. The right hardware will help insure professional quality particularly when this hardware is used with quality filmmaking apps. The apps that follow are a mix of free and paid, some will come pre-installed on your iDevice others will need to be downloaded from the App Store.

Evernote & Penultimate

Evernote and Penultimate are made by the same app developers and they offer notes, tables, and storyboarding tools that are cloud based and can be

Camera

Camera is your default photo and video app that comes with your device. The camera has improved through the development of successive iOS updates. This app will be your primary production tool in the field and can be used to record video in most circumstances.

FilmicPro

If you’re looking for manual control for shooting videos FilmicPro gives you plenty of options. FilmicPro will have a slightly steeper learning curve than Camera, but it functions much more
like the manual controls in DSLRs and other cameras. The controls in FilmicPro give you the chance to adjust everything from bit rates and resolution to white balance and audio formats. The critical controls that you’ll want to become familiar with are focus, exposure, and white balance.

Dropbox

Dropbox is an easy to use cloud-based storage app. If you plan to move photo and video files between devices (iDevice, computers, etc.) dropbox is a great way to sync all of your content.

PhotoSync

If you plan to shoot videos on your phone and edit on your iPad PhotoSync allows you to quickly and easily sync footage between the devices, in the field without an internet connection. PhotoSync relies on a Bluetooth connection rather than wifi, which is required for Dropbox to sync.

iMovie

iMovie is the basic editing app that will allow you to quickly and easily assemble your videos. Newer iDevices come with iMovie as one of the pre-installed apps. On older devices it will cost $5 in the App Store. For the price and the fact that we’re on a mobile device iMovie is a phenomenal editing tool. Using iMovie means that you won’t need to download your clips and edit on a computer. iMovie also allows you to create simple, professional quality, movie trailers in a simple template interface.

Pinnacle Studio Pro

If you’re willing to spend a little more ($12), or you need an editing platform with more features (particularly text options) Pinnacle Studio is a good option. The learning curve will be slightly higher than iMovie.
Pre-production & Planning

Storyboarding and Story Planning
Mobile devices have changed our lives in countless ways both large and small. The ability to shoot and edit high definition broadcast and theatrical quality video without ever needing a computer and using only a few dollars worth of equipment is nothing short of amazing. What would have taken tens of thousands of dollars worth of equipment just ten years ago is now accessible to everyone. This rapid expansion of video production access to anyone and everyone makes a focus on quality more critical in such a media rich landscape.

Just because you can pull a mobile device out of your pocket and hit record is no excuse for not taking the time to plan and execute a quality video. Spending some time planning your video before you start shooting will greatly improve your final product. We need to start thinking about how we can tell an effective story (see previous sections) that speaks to our audience and purpose (discussed earlier).

There are two different ways to start thinking about the details of our film and either approach works equally well and comes down to personal preference. Your two options to build your films framework are outlining or storyboarding.

Outline
The outline approach to pre-production is very much like outlining a paper. Since we’ve already considered story and purpose we can begin to construct a spreadsheet to outline our film. Using an outline to plan your production is a useful approach if you think more in words than images. Here’s a sample outline to get you started:

<table>
<thead>
<tr>
<th>Image</th>
<th>Audio</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host in front of chicken coop, med</td>
<td>host introducing chicken care and why important</td>
<td>1min</td>
</tr>
<tr>
<td>Host in coop, CU</td>
<td>discussing coop design and important elements</td>
<td>2min</td>
</tr>
<tr>
<td>Host with chickens on table, coop in back, med</td>
<td>diseases and problems to watch for</td>
<td>2min</td>
</tr>
<tr>
<td>Host walking across backyard, wide</td>
<td>thanks for more info contact extension</td>
<td>30sec</td>
</tr>
</tbody>
</table>

Notice that the outline includes the two main modes of communication used in video—image and sound—clearly separated. The image and the audio of your film work together in the final product, but it is useful to break them apart for planning purposes and focus on what each of
them can do separately to strengthen your video. The other import element is time; we need to be sure we’re telling our story and conveying information as succinctly and efficiently as possible. The outline will help us break the film down into major sections (if you’re taking a more narrative film approach you’ll want to be thinking beginning, middle, and end here). Within each section we’ll think in terms of scenes, sequences, and shots. Scenes will be the largest chunks that take place in a single place and time, you could think of these as paragraphs of a paper. Sequences are analogous to sentences, adding detail around a single idea. Shots are the words that form our basic building blocks of story.

Storyboard
A storyboard is a great way to plan your production if you are visually inclined or like to draw. A storyboard relies on the same levels of detail, from scenes to shots, as an outline, but rather than rely on a 3 column spreadsheet the storyboard requires you to sketch your ideas so you can begin to visualize sequences and shots. Here’s an example:

The storyboard tends to emphasize the visual track of your film, but it’s still important to make notes below each frame about the audio track and the duration of each shot, scene, and sequence.

You can make an outline or storyboard as detailed as you like, but if you can get to the level of detail where you are focused on individual shots you will have plenty of detail to use as a guide when you beginning shooting. A more detailed outline will also help ensure that you don’t forget to record some critical footage in the field.
Whether you outline or storyboard, pre-production documents will be invaluable when you begin shooting your video. If you take time to plan before your shoot you won’t be focused on thinking about your story when you should be focused on other recording elements. Once you start the production phase of your video don’t be afraid to deviate from your pre-production plan. The outline and storyboard are meant to act as guides. If you find more interesting characters or want to take a different line of questioning based on what your talent tells you, don’t be afraid to follow the story wherever it takes you. Your pre-production guides are what helped get you to the point where the real story is developing.

Logistics
The other element of planning that you’ll want to focus on in pre-production is logistics. While some elements of video logistics may seem obvious, if you don’t plan and make arrangements in advance any of these items can cause problems in the production phase of your video.

Talent
Early in pre-production you should start to identify who you’ll need on camera in your video, make contact and start to plan and schedule with the appropriate individuals. Depending on your video you’ll likely be including experts in a particular field, researchers, landowners and land managers, members of your target audience, and/or actors. No matter who you choose to include your talent will need time in advance to schedule and prepare for your video.

Crew
Unless you are producing your film solo from start to finish, you are going to need help with shooting, editing, transportation, etc. Just like your talent these people are going to need advanced notice be involved in your project.

Budget
Your budget may turn out to be a limiting factor depending on the scope of your video so it is a good idea to nail that down fairly early on. If you’re going to need to pay your talent, buy a lot of equipment, and travel extensively you’ll want to know that early in your pre-production and adjust the scope of your video to match your budget.

Permits
Since we’re talking about a visual medium location is an important pre-production consideration. You want to be sure you have access to the appropriate locations to capture relevant visuals to tell an effective story. For private land access landowner permission is a must and it’s much more likely you’ll get access if you ask in advance rather than arriving with a large film crew on the day of your shoot. For any sort of public lands or facilities you should check with the appropriate agency involved, but in many cases access will require paper in advance that can take weeks to process.

Schedule
In order to maximize your budget and maximize the efficiency of everyone involved in your video a detailed schedule is a necessity. Just like your other pre-production documents your
schedule may need to be adjusted once you start production for circumstances such as weather, but having a schedule will help you better plan and organize everyone’s time. If you haven’t made videos before, you’ll want to overestimate the time involved in all your stages since you’ll be learning the process as you. Especially for interviews with landowners and other clientele and collaborators, you want to adequately value the talents time and anticipate that once they start talking interviews may go much longer than anticipated.

Question list
If your video is based on interviews you’re going to want to have a complete list of questions for each interview before you begin shooting. Of course you’ll come up with follow-up questions as your filming an interview, but you should know your basic questions in advance. In some cases, if your talent is going to need to do some research to answer your questions adequately you’ll want to share the questions with them in advance.

Production
If you’ve spent time pre-producing your video and focused on audience, purpose, storytelling, and you have robust pre-production documents, the production stage should be the easiest and shortest stage of your video. Production may also be the most fun portion of video production where you get the chance to go into the field and learn from your talent. This is also the most interactive part of video production.

In the Field
All of your pre-production should ensure that your production stage goes as smoothly as possible. Use your pre-production materials to guide your work in the field. A few tips to consider:

• Be sure to bring all the equipment you’ll need including backup power, batteries, etc.
• Free up space your device so you have plenty of recording time available
• Be prepared for weather and scheduling variables
• Bring all necessary forms such as video releases and location access forms
• Use your time as efficiently as possible using your schedule as a reference

Equipment Assembly
Once you arrive on location you’ll need to setup your equipment and prepare to shoot. Start by setting up your camera. You’ll want to switch your device to airplane mode so text messages and phone calls don’t interrupt your video recording.
Attach your iDevice to your tripod. Prepare and assemble any lights and lighting equipment you plan to use. Next setup your scene. Decide where your talent will be and adjust the scene accordingly. Remove any background distractions and be sure the space looks the way you want it to. Be sure that the soundscape is acceptable, no loud or distracting sounds in the background. Turn off air handling appliances and refrigerators if you can. Place your talent, or a stand-in, where you want them. Frame your shot and adjust your lighting as desired. Assemble your audio equipment and mic your talent. At this point you should be ready to shoot. Take a beat and make sure the frame looks good (including the edges and background of your shot). Check the talents audio make sure the levels are acceptable and there are no background distractions. You’re ready to roll!

**Shooting Basics**
There’s a few basics ideas and tips that might help you when executing the instructions above.

**Framing**
When we talk about framing a shot there is a long history of visual tradition from painting to photography that can guide our ideas about framing. One of the older elements of visual tradition is an idea called rule of thirds:

Rule of thirds helps us create pleasing compositions and “normal” shots that the audience will expect to see in most videos. It allows us to emphasize the important elements of the image while creating a shot that is dynamic and pleasing to the eye.
When we’re framing our shots we also want to focus on variety. We want to consider angles and shot types. Shooting a wide variety of shots covering both our talent and b-roll will help keep our video interesting and better tell our story.

Angles
When we talk about angles we are often thinking about high and low angle:

**Camera angles**
Creating meaning by positioning the camera

- Straight on/eye level
- Canted/Dutch angle
- Bird’s eye view
- Worm’s eye view
- Low angle
- High angle

Varying the angle of our shot can help convey emotion and suggest power relationships between the subject and the camera.

We can also consider over the shoulder (OTS) and point of view (POV) shots when we think about angles. OTS and POV can help our audience see the world from our subject’s point of view and draw the audience in.

Shot types
Shot types also help us connect with our subject in different ways and convey certain emotions. Wide shots are important for providing context to a scene and subject. Close up shots let us see the details of a process or a location and connect with our subject on an emotional level as we see their facial expressions in great detail. Combining a variety of shot types and a variety of angles can really help tell a story in a unique and unexpected way, but that ultimately these decisions should be driven by audience and purpose.

**Lighting**

All of the concepts discussed in this manual, including lighting, can be explored in much more detail using the links found in Appendix ______. In its most basic iteration lighting should be used as a way to draw focus and emphasis towards the subject or the most important part of the image. We want our audience to easily connect with our subject and see details in their face and expressions. The basic rule of thumb is that the subject should be the most well lit/brightest part of the image. We don’t want our subject shrouded in a mysterious silhouette, we want to know who they are.

These lighting diagrams can provide basic guidance to setup similar scenes in a few different ways:
In general, you want the subject facing towards (or slightly off angle from) the strongest light source. You may have to play with the angles to make the subject comfortable and minimize how much they are squinting. But you’ll be surprised how much light it takes to emphasize a subject particularly in bright environments. Having some basic improvised tools along can help you direct light and potentially used indirect light on your subject. A white sheet, white poster board, or a foil window shade can be great tools for directing light outdoors. Indoors a basic clip type shop light can help provide a simple option for controlling light.

It is possible to rely on all natural light and shoot amazing video, but the tools mentioned above can make it easier to get the shots you want.

**Sound**

As we’ve discussed earlier the best thing you can do to get quality sound for your video is use a microphone. When you’re actually recording in the field just be sure you’re recording the sounds you want and minimizing or eliminating the sounds you don’t. As mentioned above, when you’re setting up pay attention to the soundscape and change locations or control sound sources to record a clean audio track. In the field pay attention to wind noise across your microphone. It is usually best to have your subject put their back to the wind and perhaps bury the microphone in a layer or two of clothing (don’t worry the mic should still pick up the subject’s voice). Wind problems are not something you can fix later so pay particular attention to the wind when recording.

As you’re setting up the best way to check the audio is to set the appropriate levels then record a short clip of the subject talking about what they had for breakfast. We don’t actually care what they ate, but you can play the clip back to check that recording levels are adequate and there is no wind or background sound on the recording.

**Shooting Process**

**Interviews**

When shooting interviews a few additional tips can help:

Have the subject address an interviewer positioned just off camera. This makes the video more conversational and less intimidating since the subject won’t need to look directly into the lens. Looking slightly off camera creates an acceptable visual that audiences will accept as standard for this style of filmmaking. The interviewer should be asking the questions while a second person focuses on running the camera/audio and monitoring the recording.

Since we’ll only be asking the questions once and we still want some shot variety it’s best to start an interview with a wide shot, then switch to a close up (this may require moving the camera physically closer if you don’t have lenses) about half way through the questions. Note that you should only move the camera to readjust your shot while the interviewer is asking a question. We want our iDevice perfectly still while a subject is speaking.
You’ll also want to explain to your subject before you start that in the final video the interviewers voice will be removed so the subject needs to rephrase the question in their answer. Another way to put this is that they should respond in complete sentences.

Instructional and Direct Address Productions
If your video includes an expert on camera explaining a process or instructing the audience (such as a how to film) we’ll use a slightly different approach than our interview setup.

For an instructional film we’ll actually record the video 2.5 times.

The first time through we’ll want our subject framed in a wide shot. On the second run through we’ll record everything in close up. Depending on how much the talent moves this may require that the camera person pan or tilt to keep the subject in frame. On the last half recording we’ll want to get cutaways of the process being demonstrated. This might be close-ups of measuring forage production or doing calculations on a whiteboard. Having 2.5 recordings of our video will ensure we have plenty of material to create a smooth edit.

Another difference in a direct address type video is that the subject will be looking directly into the lens rather than at an interviewer. This may require more practice and coaching to make the talent comfortable in front of the camera.

A few more tips
- Match shots to story
- Hold each shot for at least 5 seconds
- Try to get action in the frame without having to move camera
- Use pan and tilt sparingly, NO ZOOM

While this may seem like a lot of information to remember once you’ve had the chance to try making a few videos, many of these instructions will become second nature.

Here’s the 7 filmmaking to remember during your shoot:
- Tell a story
- Think before you film
- **Use a tripod**
- **Use a microphone**
- Light subject well
- Shot variety
- Think screen presence

*Production wrap up*
Once you’ve completed shooting don’t forget to:
Get a signed video release
Get a signed location release
Turn the fridge (or other appliances) back on
Check that you’ve collected all your gear
Thank talent for their time

**Postproduction**

Once you’ve finished field production you’re ready to start editing and actually pull your story together. You will again want your pre-production materials nearby, particularly your storyboard/outline, to help guide your story building process during editing.

**Managing Footage**

Before we start actively editing it’s important to understand how your iDevice manages footage. In order to use iMovie for editing we need all of our media—video files, photos, audio files—in one place. Our iDevice automatically recognizes the photos app/camera role (default app comes loaded on your device) as the repository of all photo and video files. If you’ve used any specialty photo or video apps for recording such as SloPro or FilmicPro you’ll need to export/copy the files out of those apps into the photos app. If you plan to use material recorded on other devices you can use dropbox or icloud (among other apps) to sync the material to your iDevice, but you’ll still need to copy the files into the camera roll. Once all your material is in the photos app you can setup folders to help better organize the footage by project. On the audio side you’ll be using itunes as your storage app. For any music or narration files you’ll need to sync then to itunes before you start your edit. It’s also important that you don’t move or rename files once they are in the photos/camera roll/itunes. iMovie will develop a link to these files to allow you to edit the videos without altering the actual footage, but in order for the linkage to work files cannot be moved or renamed.

**Editing Basics**

For the cost, iMovie is an amazingly powerful editing system at your fingertips.

To start, a basic tour is in order:

During the editing process we should be focused on storytelling. It will take practice and experimentation to get our story just the way we want it, but as mentioned above we can undo and redo things as much as we might need to and our original video files are not altered during editing. So spend some time just trying things and moving footage around, you can always go backwards.

When you first open iMovie you’ll need to make some choices:
If you haven’t played with iMovie trailers I highly recommend it as an exercise to get you more comfortable with the app. Trailers are fun and easy to make, you won’t need a lot of familiarity with the app to start, and best of all you’ll have a professional looking trailer for your video when you’re done. (Trailers are explained further in appendix ___)

If you’re working on a regular video you’ll select Movie. You’ll need to select a theme style that will affect the look of your transitions, default music, and titles. You can preview the styles to get a better sense of what they look like, but I suggested using the “simple” template, and you can always change the style after you start editing by tapping the settings wheel in the upper right corner.
The iMovie editing interface contains the same elements as most video editing software you would find on your desktop.

There’s a bin. This is where all of your media is stored by type. These are the files that we previously synced to the photo itunes apps to make them accessible to iMovie.

There’s a viewing window. This is where you can watch your video as you edit and where you can preview clips.

The last component is the timeline. This is where you will do most of your editing and where you’ll see the clips that are creating your video. The white bar in the timeline is called the playhead. The clip or clips below the playhead are the edit point, so any editing action taken will affect the material under the playhead.
Another important element of the editing interface to be aware of is the help menu. Help can be accessed by tapping on the question mark in the upper right corner. When help is enabled it explains all the important elements of the iMovie editing interface and gives you links to more detailed explanations. This is the first place to try if you get lost while you are editing.

*Rough Cut*

The first stage of editing is the rough cut. In the rough cut stage you should focus on connecting larger chunks of your story together and start to put clips in order. We’ll start by listening through the clips and making notes about what we think we want to use to build our video. We will want to remove portions of the clips where questions are being asked (in the case of an interview) and any misstatements or false starts. During the first stages of cutting we are only focused on putting together clips of our talent/interview subject, we will worry about b-roll later.
It’s important that you watch the video as you piece clips together in the timeline to be sure the story is flowing and makes sense. By the time you finish editing you will have watched various parts of your video many times over.

Once you’ve pieced together the clips you want to tell your story and watched it all the way through you can begin tightening the story and adding b-roll.

One of our goals in video production is to be as succinct and engaging as possible. A video can always be shorter, so think about which clips are helping tell your story and which are not, cut the clips that are not helping your story. A shorter story clearly told will have the best chance of being watched and having impact.

Adding B-roll
Once you have the initial stages of your rough cut on the timeline, you’ll notice when you watch through that there are jump cuts like this between clips:

Jump cut example

B-roll will serve two important functions in our video, one of which is to cover jump cuts. Convention dictates that while we are editing we are trying to cover our tracks. We don’t want to distract the audience from our story by distracting them by leaving our editing process visible. Jump cuts are part of this editing process that we would like to hide and b-roll helps us do that. We can add b-roll as a second track to cover our jump cuts.
The other purpose b-roll serves is to further advance our story and help visually show what our talent is talking about, so we can also build b-roll sequences to break up the talking heads being interviewed and to add more relevant visuals to the story we are telling. As we build b-roll we want to start thinking beyond individual shots to thinking in sequences. We want our story to flow smoothly and logically.

There is one exception to covering jump cuts. If we are cutting from a wide shot to a close up of our talent or vice versa there is enough change in our composition that our audience will not be distracted by the cut:

Demo

This is why we like to have a mix of wide and close up shots available. In an instructional video if we’ve shot using the 2.5 shooting method mentioned above we could theoretically cut the video with no b-roll at all. However, this is not recommended.

Adding photos
Both video and still photos can be used as b-roll, but they will have to be added differently. While video can easily be added as a second track, photos will require a more complex series of steps to add them to your sequence.
**Fine Cut**
Once we have the basic structure of our story laid down and some b-roll added to cover our cuts and enhance our story we can transition to our fine cut stage.

During fine cutting we are much more focused on making smaller changes to improve the pacing and flow of our story. We will continue to tighten our edit and cut down our overall length, but we should be focused on small changes that make our video “feel right”.

By this time, you will have watched your video a lot, so a fine cut stage is a great time to get a fresh set of eyes looking at your video. Sharing your video with project collaborators or other colleagues and clientele who can offer feedback will be critical to ensure that your story makes sense. Reviewers who are seeing your video for the first time without the benefit of knowing all the footage you cut out while editing will be invaluable in helping you make further decisions about how to tell your story. Be sure to take this feedback to heart and don’t be afraid to make adjustments if they make sense.

At the fine cut stage we also want to start laying down any narration we need to help complete our story and we can start playing with music to enhance our story.

Demo VO
Demo music

**Final Cut**
As you work towards the final cut you will be making minor adjustments to add the final polishing touches to your video. The final cut is the time to finalize your narration and music if need be. Make sure all transitions look the way you want them. You’ll want to make sure that your audio is balanced to your liking and that the volume of your talent, music, and voiceover all blend together well. The final cut is also the time to add any logos, graphics, and credits you’ll need.
Once you’ve nailed down a final cut you can export the project directly to YouTube or vimeo or send it to your photos/camera or sync it to dropbox.

**Wrap up**

*Additional thoughts*
- Don’t shoot vertical video — https://www.youtube.com/watch?v=Bt9zSfinwFA
- Leave all your clips on your iDevice while you are editing
- Once you’ve output your final product you can delete the footage, but it’s still a good idea to sync it to your computer first in case you need to use the footage for something else later
- You can leave the iMovie project on your device and if you needed to re-edit later you could always resync your footage back to the photos/camera roll app if necessary

*Copyright*
It is important to remember that using someone else’s footage, photos, or music without proper permission, licensing, and/or providing credit is unethical and potentially illegal. Copyright can get complicated rapidly, but the basic rule of thumb is that you need at least one if not multiple licenses to use someone’s music in your video. When it comes to music your best bet is to find someone to record an original track from an original score. If you plan to use clips of famous Hollywood movies, don’t! In most cases, even if the use is educational, using clips from your favorite film, no matter how short, is not allowed. Unless you are a copyright expert stay away from trying to walk the line around fair use and educational use.

A better way to find useable footage and photos for your video is to look for creative commons content. Be sure to read about creative commons first and understand the various levels of
licensing, but in most cases you can use creative commons content, just by providing proper credit.

*And finally...*  
Have fun. Producing videos should be a fun experience especially after you conquer the initial learning curve associated with using the equipment and software. Practice the process in low risk situations such as making home movies. Video production is a combination of art and science, and while this manual provides an introduction to the nuts and bolts, developing the artistic side of video production will take time and practice. There are many ways to accomplish the same tasks throughout video production and in many cases you can use trial and error and work backwards if need be. Good luck and don’t be afraid to experiment.
Sample Questions

Interview Questions for Ranchers:
1. How long has your family been on the land and involved in land management?
2. Can you provide a brief description of your operation?
3. What type of practices or management strategies have you tried on your property?
   a. What has worked and what hasn’t?
4. What do you feel like are/were the greatest rewards and greatest challenges you have experienced as a steward of your land?
5. What would you tell a new BLM or Forest Service range conservationist about your property/operation and the management of it?
6. What type of knowledge would you pass along to the next generation of landowners? Any specific advice you would give them?
7. How do you incorporate technology into your operation? What tools do you or have you used?

Interview Questions for Agency Representatives:
1. How long have you been working in natural resource management?
2. Can you provide a brief description of your overall experience during your time in the organization?
3. Generally, what are some the main activities you have done while working for the organization? Specifically, the work you have done with Wyoming landowners.
4. What do you feel like are/were the greatest rewards and greatest challenges you have experiences during your service in the organization?
5. What would you tell a new landowner that has come to your organization for help with their operation?
6. What advice would you give someone that is new to your organization regarding your experience in the natural resource management field?
7. How do you incorporate technology (tools you have used?) into the work you do regarding natural resource management?
Hollywood, NM
Video Production

Storyboard/Script

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