Communications in Agriculture

Communications in Agriculture is designed to introduce students to topics related to promoting agriculture through a variety of media sources. It is a specialized course for students interested in pursuing a career in communications. This product features a full-color student and teacher edition. The Teacher Resource CD, available separately, includes activities and assignments, along with PowerPoints and tests in Word and RTF (for use with ExamView) formats.

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- Photographic Journalism
- Business Writing and Resumes
- Journalistic Writing
- Broadcasting Media
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- New Media
- Creating Presentations
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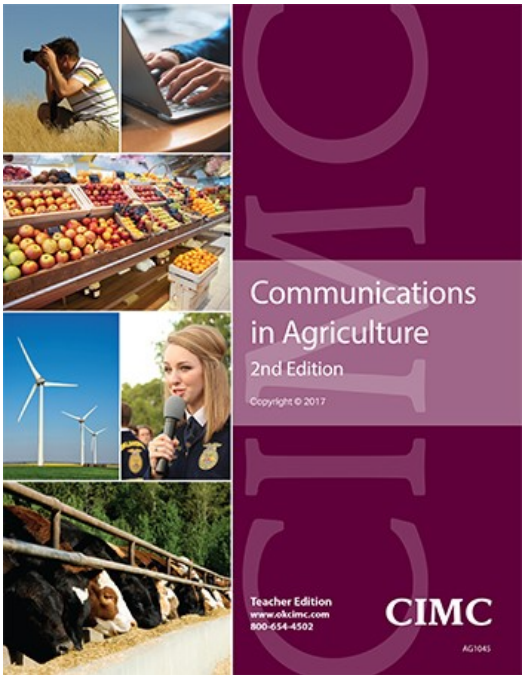

Communications in Agriculture
2017
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2 Photographic Journalism

OBJECTIVES

- Define digital camera terminology.
- Determine the elements of good photographs.
- Explain the types of photographs.
- Demonstrate how to crop a photo.
- Recall characteristics of photo captions.
- Describe how audience affects photojournalism and how photography affects the agricultural industry.
- Explain the uses and characteristics of photography in agricultural communications.
- Discuss guidelines for legal and ethical practices in photojournalism.

KEY TERMS

action photos
aperture
candid photos
caption
composition
cropping
digital zoom
exposure
focal point
formal portraits
informal portraits
landscape view
lighting
optical zoom
photo credit
pixels
point-n-shoot camera
portrait view
resolution
Rule of Thirds
single lens reflex (SLR) camera

Camera technology has changed dramatically in the last decade. However, one thing remains constant: the impact and importance of the visual image when telling a story. Photographic journalism is an old concept, but the elements and need for good photographs continues to hold true. A photojournalist may work directly for news sources as a full-time employee as a freelancer selling photographs to a variety of print media. Whatever the job may be, photos play an important role in drawing interest to a story. This unit will focus on basic principles of photography along with ethical practices a photojournalist must consider.

Digital Camera Terminology

When an electrical engineer working for the Eastman Kodak Company created the first digital camera in 1975, he could not have imagined how quickly the invention would develop into a product that many consumers now use on a regular basis. While both film and digital cameras use light to create photographs, the digital camera saves the image as ***pixels***, which are the tiny squares of a digital photo. Memory cards, rather than film, record the images. Digital cameras are differentiated by how many pixels the camera records in a square inch, which is known as ***resolution***. The higher the resolution, the more pixels the camera records per inch, which allows the image to stay crisp when enlarged to jumbo sizes.

Photographers should shoot photos with a resolution great enough that photos will appear sharp and clear in the publication for which they are intended. Resolution is typically noted as pixels per inch (ppi) or dots per inch (dpi). Magazines require photos with a higher dpi than newspapers, and newspapers require a larger dip than Web publications. The higher the pixel dimensions of a photo, the larger the image files, which require more storage space. With technology today, storage space is easy to come by. However, when sending photos electronically, minimizing the file size based on use is important.

Optimal Resolution

Magazine	300 dpi
Newspaper	150 dpi
Web	72 dpi

Whether film or digital, a camera is nothing more than a lightbox, and a captured image is dependent upon several variables that let light hit the film strip or digital sensor. There are three elements that dictate how light enters the camera. These three elements create the photographic light triangle. The sides of the triangle include ISO, aperture and shutter speed. A balance of these three sides of the triangle indicates a correct or optimum ***exposure***.

In digital photography, ISO is the sensitivity of the camera sensor to light. The higher the ISO number, the more sensitive the sensor is to light. Bryan Peterson in his book *Understanding*

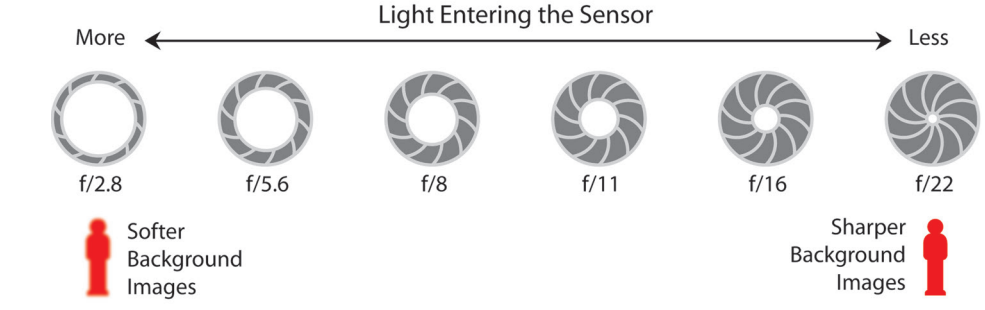
Exposure describes ISO using worker bees as an analogy. If you have an ISO of 100, imagine 100 worker bees capturing light. If we use an ISO of 200, we would have 200 worker bees capturing the same light, which means we could collect the same light in half the time as 100 ISO.

Aperture is the size of the opening inside the lens attached to the camera. The aperture opening in a lens is describe as an f-stop. The f-stop value is a fraction, which describes the diameter of the aperture. The good news is that the math behind figuring out this opening size isn't as critical as knowing how the size of the opening dictates. Typically, the larger the opening, the less the area of sharpness or focus in a photo. This is call a shallow depth of field. A narrow aperture opening would result in deep depth of field or area of focus.

Shutter speed controls how long the light coming through the lens hits the digital sensor. You can think of the shutter like a blind on a window. When the blind opens, light enters a room through the window. When the shutter opens, light enters the camera through the aperture and hits the sensor. Shutter speed is important when capturing different types of images. As an example, a fast shutter speed is needed to stop action such as shooting sports photography. A slow shutter speed would be necessary to capture motion such as water rolling over rocks or streaming car lights.

There are some other important parts of a digital camera:

- A glass or plastic lens captures an image by gathering light and focusing a subject.
- A body provides the light-proof housing for the camera.
- A viewfinder can be either through a frame or a lens that allows the photographer to see the subject of the photograph. Digital cameras also have a video screen to see the image before it is taken and to review the image after it is recorded.



Just as with film cameras, digital cameras come in two basic types: point-n-shoot and single lens reflex (SLR). A ***point-n-shoot camera*** provides the user with the simplest way to capture a photograph. This type of camera has a built-in lens, fixed aperture and automatic flash. This camera typically determines the correct exposure and focus automatically as it records an image. More advanced versions have specialty settings to allow the user to take different types of photos. As an example, the photographer may be able to take a close-up photo using the macro setting on a camera. Many also allow the photographer to zoom in one of two ways, optically and digitally.

Optical zoom is superior to digital zoom because it allows the photographer to maintain picture quality. When using an optical zoom, the photographer adjusts the lens to magnify or expand the area in the picture, but the resolution (number of pixels) and, therefore, the picture quality, remain the same. The range of the optical zoom is indicated by a magnification number such as 3X or 4X.

A ***digital zoom*** enlarges the subject by magnifying the center of a picture. As a result, the center of the picture appears larger, but image quality is reduced. Through digital zoom software, the camera adds pixels to create the larger image. In effect, it crops, or edits, the picture while it is still in the camera and reduces the picture's resolution. A digital zoom adds convenience, but it limits the ability to enlarge a picture because of the lower image resolution. If available, optical zoom is the best option to use.

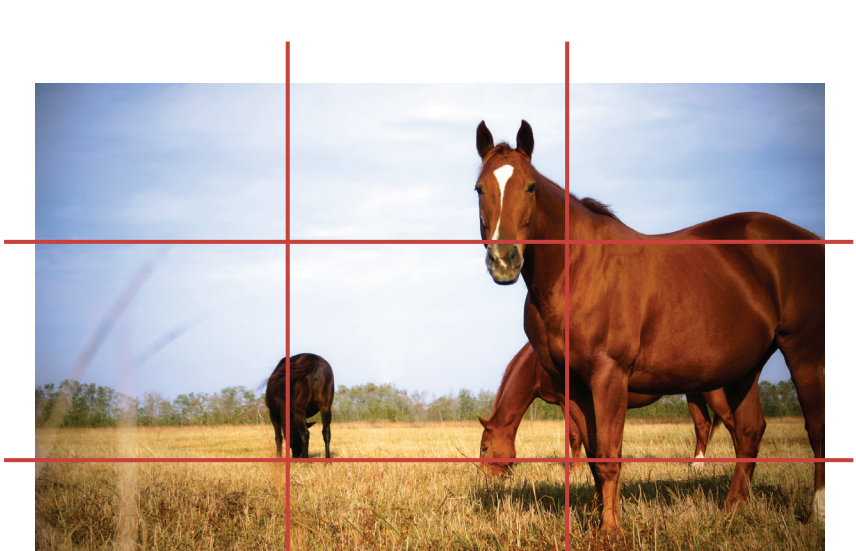
An ***SLR camera*** (so named because the same lens is used to view and take the photo) has interchangeable lenses (normal, close-up, telephoto or zoom, wide angle, etc.) and allows the user to have more control of the recorded image. To take full advantage of either camera type, the camera user should review the owner's manual before taking any photographs.

Elements of Good Photographs

Photos preserve memories – great friends, great places and great times. Throughout the world, thousands of photographers take billions of photos of everyday events and special subjects. Are they all good photos? Absolutely not! In fact, only a tiny percentage of those photos are good. So, what characteristics do the "good" photos share?

First and foremost, a good photo is in focus – the image is clear and sharp. Out-of-focus photos look unprofessional. Getting a proper focus occurs by focusing the camera correctly and by holding the camera steady while pushing the shutter release button to take a photo.

Next, a good photo is well composed so the subject, also known as the ***focal point***, attracts attention. ***Composition*** describes the arrangement of objects in the photo. In a well-composed photo, the subject will fill the frame so the photo does not have empty, useless space. Good photographs will have simple, uncluttered backgrounds when possible. Taking the photo from an unusual angle may also improve the final product.



A helpful concept for improving composition is the ***Rule of Thirds***. According to this guideline, the brain prefers images where the main subject is slightly off-center. Therefore, the photographer should position the subject inside the edge of the frame by approximately one-third. If the frame is divided into thirds both horizontally and vertically (imagine a tic-tac-toe grid), the points where the lines intersect are good positions for the subject of the photo. The photographer should avoid placing the subject in the exact center, at the very top or bottom, or in the corner. By using the Rule of Thirds, a beginning photographer can learn to create nicely balanced pictures.

Another important compositional technique is to move the horizon line around in a photo. Most amateur photographers will shoot a photograph with the horizon line directly in the middle of the photo. It is often better to move the horizon line up or down in the photo depending on whether the sky or foreground is most interesting.

The subject or event being photographed should be appealing and interesting for the photo to be considered good. Good photos also convey or suggest emotion through their content, and they provide information for the target audience of an image.

Some Photo Tips

- Show action
- Get close to the subject
- Tell a story
- Keep subjects in proportion
- Don't let subjects "walk" out of the photo
- Be creative with angles and framing (using other objects in a photo to surround or frame the subject)

A good photo will have proper exposure or optimal lighting. Proper exposure ensures the photos are neither too light nor too dark. In some cases, this will mean using a flash, which usually provides front lighting. ***Lighting*** refers to the direction of the light in relation to the photo's subject. Other options are back lighting (creating a silhouette), side lighting, or top lighting for varying effects.

Too Dark

Too Light

Just Right

Types of Photographs

Quality photographs can be important in communicating your message to an audience. They can be either ***portrait view*** (vertical) or ***landscape view*** (horizontal). To keep subjects interesting, photographers take a wide variety of images: formal portraits, informal or environmental portraits, still-life photos, action photos and candid photos.

Formal portraits are taken in a photography studio, often in front of a portrait backdrop. The subjects are posed and look directly at the camera. These photos most frequently are for personal use, such as school pictures or professional headshots.

Informal portraits, or environmental portraints, also have the subject look toward the camera. The difference, however, lies in the surroundings. In an environmental portrait, the subject is photographed in a natural setting, such as her office, his garden, or another scenic location. These images are useful for profile stories about agricultural producers, companies and organizations.

Photos of subjects such as crops, scenic landscapes, antiques, architectural details, etc. create ***still-life*** photos. Other still-life examples might be photos of shadows, footprints or equipment. These artistic photos can be used in a variety of ways.

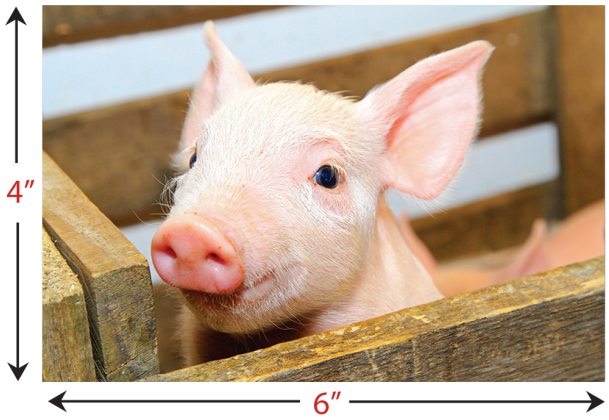
Think action photos only occur in sports? Think again. Action in agriculture can occur in the field as combines empty golden grain into a waiting semi-truck or when ranchers vaccinate and brand cattle. ***Action photos*** draw readers and viewers into a story because of the emotion they often show.

Candid photos are those in which the subjects are not posed. News photos most often fall into this category. Subjects in candid photos are not looking at the camera and may not be aware they are being photographed. These photos also can provide an honest look at the subjects of a news or feature story.

Photograph Cropping

Although photographers work to compose the perfect photo, they often must crop a photo before it is published. ***Cropping*** trims part of the original photo, giving it a new top, bottom and/or sides. Cropping also eliminates unwanted clutter or background, resulting in attention to the subject or area of emphasis.

To crop a photo, an individual determines the placement of the subject using the Rule of Thirds. Then, two edges of the finished print are chosen and the remaining two are determined by the dimensions of the required finished print, such as a 4 x 6 or 5 x 7. When cropping, square images should be avoided. Digital photos are cropped in photo-editing software, such as Adobe Photoshop or Adobe Lightroom. Other adjustments can be made to an image using these software programs much like adjustments in film processing can be made in a dark room.



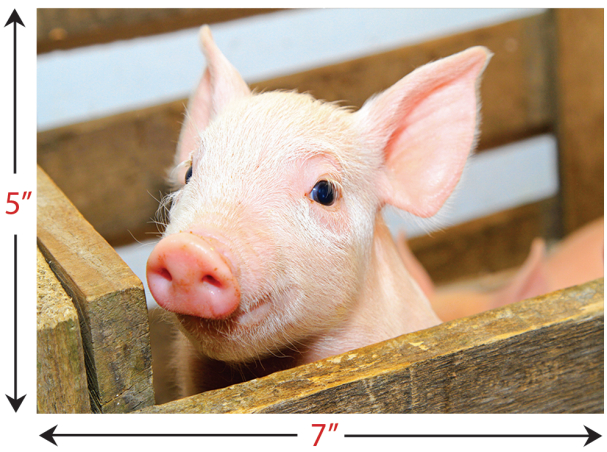


Photo Captions

If a photo is published in a newspaper or magazine, it needs a ***caption***, or label, to provide additional information for the reader. After headlines, photo captions are the most often read information in a publication. As such, captions demand tight writing that is easy to read and informative. Captions should not duplicate material in the accompanying story, but they should identify who is pictured in a photo and/or details about where a photo was taken. The caption should also include a ***photo credit*** indicating who shot the picture.

Many newspapers use a caption style in which the first sentence is written in the present tense and following sentences are written in past tense. The first sentence explains what is occurring in the photo, and the following sentences provide context and background. Although brief, captions are written with complete sentences, including articles and conjunctions.

Additional Guidelines for Writing Captions

- Identify people left to right or clockwise.
- Identify what is happening in the photo or graphic without trite phrases such as "pictured above," "looks on" and "is shown."
- Use present tense, active voice verbs when possible.
- Include pertinent details not found in the story.
- Write the caption to stand alone so reading the story is not required.
- Avoid editorializing and making judgments. Stick to the facts.
- Check the caption against the finished photo. People or objects may have been cropped out of the photo.
- Check spelling, punctuation and grammar in captions.

Students attending FFA Alumni Leadership Camp reflect on their day during a small group session. FFA Alumni Leadership Camp was established in 1973.

Ag Ed Division Photo

Audience and the Agriculture Industry

Agricultural photography reaches a diverse audience. Within this audience are those who have direct experience in agriculture but also included are those with no agricultural experience. A photographer's knowledge of the audience for specific photos will direct the type of photos he or she captures, as well as the caption written for each published photo.

Photography plays an important role in agriculture, especially in the purebred livestock industry. Breeders across the world rely on photos to showcase their animals in marketing and sales publications. Additionally, photos provide information to agricultural producers concerning new equipment and related products, as well as examples of diseases and pests.

For non-agriculturalists, photos depicting agricultural practices are very important in giving a visual to the production process. Many consumers do not understand where their food comes from today. A photograph can be very impactful in sharing the story of agriculture.

Photography in Ag Communications

Photos are an important element in agricultural communications because they give the reader or viewer a visual image of the story. These images also help convey content and meaning while making a publication more pleasing to the eye. Photographs are used when realism is the goal. A photograph may show an item in its natural setting or in a studio. A series of photos can show the steps in a process.

One important characteristic of photography in agriculture is timeliness. Harvesting photos can be taken only during the harvest season. The photographer must decide what images he or she will need and prepare to capture those images during that season. For example, the harvesting photos taken this year may be used in pre-harvest news next year.

Another critical element in photography is the time of day for taking photos. The best, most appealing light appears at daybreak and sunset, often referred to as the golden hours. The harshest light occurs at midday, providing shadows and other challenges to the photographer.

Legal and Ethical Practices

Photographers should practice ethical standards when taking and publishing photographs. Because a photojournalist's job is to take pictures that capture the viewer's attention, he or she often takes pictures of people in emotional, embarrassing or revealing situations. In general, a photographer should get permission from anyone who appears in a photo.

Legal guidelines. Contrary to popular belief, there is no "right to privacy" guaranteed to American citizens in the United States Constitution. There are, however, commonly recognized rights or principles of privacy that have resulted from years of court cases concerning the photographer's rights versus the rights of the subject. The following provides legal guidelines for photojournalists regarding invasion of privacy.

Taking photographs on private property. In cases where photographers have entered homes using false identities, taking pictures secretly, the courts have ruled in favor of the individuals being photographed. Photographers, however, frequently enter private property when covering spot news.

Thinkstock Photo

Using a photograph of a person to sell a product without his/her permission. Publishing someone's photograph in a magazine or newspaper is legal without obtaining permission from the subject, as long as the picture is obtained ethically. Using a person's picture to sell a product without his permission, however, is not legal. To sell a picture for advertising purposes, the photographer must get written permission from the subject.

Harassment courts. These courts have placed restrictions on some photographers' access to their subjects when they were judged to be overly intrusive into the lives of the people being photographed.

Using a photograph to give a false or negative impression of the person. Courts have ruled in favor of individuals who sued after their photograph was used in a way that they felt was unfair, false or misleading.

Taking photographs in a public place. A photographer can generally take pictures in any public place or on private property with permission. There are restrictions, however. Photographs, even taken in public places, should not embarrass or make a joke of a private person. A photographer may take pictures of children in schools and public parks, unless the picture could be considered

embarrassing or demeaning. For example, in the case of special needs children, the parents may consider the photos too embarrassing or insensitive to the child. The photographer should, in this case, get permission from the parent or legal guardian before publishing the photo. IMPORTANT: Because newspapers, magazines and Web sites can be a source of information for child predators, never reveal detailed personal information about a child in a caption or story without permission from a parent or guardian.

Ethical practices. Beyond legal considerations, photojournalists have a responsibility to make ethical decisions when choosing to photograph subjects and events. Although there are no strict rules for making these decisions, the photojournalist should be sensitive to human suffering and be careful not to create fraudulent photographs.

Posing photographs. A photojournalist should never pass off a posed photograph as being candid, especially a news photograph.

Distorting a photograph. A photojournalist should not distort a photograph to achieve a certain goal that conveys a personal bias. Computer software, which allows significant manipulation with digital photos, has raised ethical concerns for news photography. The National Press Photographers Association (NPPA) has stated:

> *"... it is wrong to alter the content of a photograph in any way that deceives the public ... altering the editorial content of a photograph, in any degree, is a breach of the ethical standards recognized by the NPPA."*

Taking photographs of tragedies. The photojournalist should be sensitive to those who are undergoing a tragic situation. He or she should keep a distance when people are grieving or suffering. To avoid being intrusive, a telephoto lens may be used.

Livestock photography. Many photographers in the agricultural industry shoot photos of sale animals for association web sites or sale catalogs. Photographers should not use computer software to digitally enhance or alter the appearance of an animal, misleading a potential buyer.

Unit Summary

Photography is a useful skill for today's agricultural journalists and communicators. Beginning photographers learn about digital cameras and the characteristics of good photographs. Agricultural photographers take different types of photos: formal portraits, informal or environmental portraits, still-life, action and candid. After photos are taken, they must be cropped, or edited, for use in publications, and accompanying captions must be written. As agricultural photographers capture the essence of rural life, agricultural business and those involved in producing America's food and fiber, they should act in an ethical and legal manner.

Unit Review

1. What is the difference between a point-and-shoot and SLR camera?
2. Name the elements of a good photograph.
3. Explain the Rule of Thirds.
4. What are the different types of photographs?
5. Why are photo captions important?
6. How does photography impact understanding of agriculture?
7. What are some unethical practices photographers should avoid?