



The Web Page

► by **Angie Stump Denton**, director of Web marketing

Digital photography on the Web and in print

A week doesn't go by that I'm not asked about digital photography. The opportunity to have instant photos without the cost of film is exciting. With a digital camera, you can see immediately the images you take and choose the best for printing.

These are some of the more common questions I get asked: "What do I look for when buying a digital camera?" "How can I send you digital photos?" "Will the photos I take work in my print advertising or sale book?"

These all are great questions that need to be considered before buying a digital camera.

Choosing a camera

There are many options to consider when purchasing a digital camera. The first step should be determining how you want to use the captured images. Are they for Internet posting or printing purposes?

The quality of the image (also known as *resolution*) is an important factor to consider. Photographs are made up of tiny squares called *pixels* (short for *picture elements*). Computers and printers use pixels to display or to print the photograph.

The computer divides the screen or printed page into a grid of pixels, then uses the values stored in the digital photograph to specify the color and brightness of each pixel. In many ways, it's like painting by number.

The resolution depends upon the

number of pixels used to create the image. More pixels add detail and sharpen edges. If you enlarge a digital image too much, the pixels begin to show an effect called *pixelization*. The more pixels there are in an image, the more it can be enlarged before pixelization occurs.

According to *ConsumerReports.org*, in most cases a 1 megapixel camera will print a sharp 5-by-7-inch (in.) image; a 2 megapixel, up to an 8-by-10; and a 3 megapixel, an 11-by-14 image.

Besides resolution, a camera's color rendition, noise and tonal range are important features to investigate. You also should consider how much control you want when taking a picture, such as the ability to adjust manually the depth of field, shutter speed and focus. Many of the newer

cameras allow you to use lenses from SLR (single lens reflex) cameras. The software bundle needed to download the photos and how it connects to the computer system also vary among cameras.

Before buying a camera, do your research. Some companies may rent or loan you a camera if you want to try before you buy.

Prepping for publication

Most images taken by digital cameras are captured at 72 pixels/inch (ppi), or dots/inch (dpi). This is the standard resolution for computer screens, but in most cases, printed publications, such as the *Angus Journal* and the *Angus Beef Bulletin*, need images at 266-300 ppi.

Most cameras, if set to shoot at the highest quality, will capture images that can be increased to 300 ppi and still be of good enough quality to print. To determine if the images will work, open the photos in Adobe® PhotoShop® or a comparable program. Under the "Image" menu select "Image Size." Uncheck the "Resample Image" box and change the resolution to 300. Notice it will not change the pixel dimensions, but the document size (width and height) does change.

For example, if you want to use the picture as the predominant image (full-width of the page) in an ad in the *Angus Journal* (see ad on page 267), it will need to be approximately 7 in. wide at 300 ppi. If you are going to use multiple pictures (see ad on page 69), the size could be as small as 2 in. wide.

If an image does not have enough pixels to increase the resolution, the printed photo will look like it is out of focus and digitized (see the example).

Using photos online

The beauty of digital cameras is the speed with which you can take a photo and have it ready to post to your Web site. Since Web sites are viewed at 72 ppi, you can go straight from capture to posting.

It is important to remember that having no picture is better than having a bad picture. So, just because you've gotten an image with your new camera, it doesn't mean you have to use it. Be sure you're happy with the image you have and that it represents your operation at the desired level.

E-MAIL: astump@angusjournal.com



► If an image does not have enough pixels to increase the resolution, the printed photo will look like it is out of focus and digitized, as this one does.

NEXT MONTH: *how to send photos via e-mail*