



## Digital Image Processing

Written by Bob Horton, 4-H Extension Specialist

Use this two-page publication as the starting place for your 4-H Self Determined Project. You may choose to do a little or a lot depending on your level of interest in this topic. Use in conjunction with our 4-H 365, Self Determined Project Guide; available through your county OSU Extension office or by visiting our web page at [www.ag.ohio-state.edu/~idea](http://www.ag.ohio-state.edu/~idea). Be sure to register your Self Determined Project with your county OSU Extension office.

### Background

Understanding the digital imaging process is as simple as understanding the principles **Shoot**, **Enhance**, and **Share**. Whether you shoot digitally or on film, the basic techniques and skills of creating a quality image remain the same. All that's needed is a willingness to try and a lot of practice.

### Shoot

Presumably, these skills have been developed through your involvement in one of the three 4-H Photography projects. Use this Idea Starter as a companion to your existing 4-H Photography project. Take photographs that give you "plenty of potential" for digital processing, especially when attempting to communicate a particular idea, feeling, or mood.

### Enhance

Once in digital form, images can be loaded into a computer, where image-processing software can perform a large number of functions, such as changing the brightness, contrast, or color of the images. This allows you to retouch them, or manipulate the content, by swapping elements around, for example.

### Share

Images need to be stored, perhaps on CD, and in such a way that they can be easily retrieved in the future. Finally, you will want to output your images, probably as prints, but also perhaps as part of a web page or multimedia production.

Use this Idea Starter as your "next step" towards creating your own Digital Photography project. Follow the planning steps on the next page along with the sample activities for conducting a successful self determined project. Be sure to visit the recommended web pages for additional information on digital photography or go to your library for additional reading on the subject. Those who explore this topic as a self determined project will need access to a digital or film-based camera, computer, and digital image software. You will also need to decide how best to "show off" your project accomplishments and personal growth in this project area during project review and/or project competition.

## Planning Your Self Determined Project

Every Self Determined Project can be broken down into areas of interest. These are the specific things members wish to address during their project adventure. Using your Self Determined Project Guide, identify at least three areas of interest with at least three activities per area to explore. Activities may be added or modified to fit your needs.

## Areas of Interest and Things to Do

### Enhancing Your Photos

(using your digital image software ...)

- Adjust the brightness and contrast of a photograph
- Sharpen the image of an existing photograph
- Manipulate the depth of field of a digital image

### Retouching Your Photos

(using your digital image software ...)

- Retouch an old photograph
- Correct dust and scratches on a photograph
- Enhance or correct the eyes of a subject in a photograph
- Restore an old photograph

### Adding Color or Monochrome

(using your digital image software ...)

- Use color as a special effect
- Try working with sepia toning
- Try working with split toning

## Creating Special Effects

(using your digital image software ...)

- Use a digital mask and filter
- Retouch a photograph for special effects
- Use a digital image to create an atmosphere or feeling
- Use a series of digital images to create a panorama
- Use a series of digital images to create a montage

## Sharing Images

(using your computer and printer ...)

- Combine text and image in your message
- Determine the best way for storing and cataloging your images
- Post your images to the net
- E-mail an image to a friend or publisher

## Helpful Web Sites

- Adobe Digital Kids Club:  
[www.adobe.com/education/digkids/main.html](http://www.adobe.com/education/digkids/main.html)
- Digital Photography, Surfing the Net:  
[www.surfnetkids.com/digitalphoto.htm](http://www.surfnetkids.com/digitalphoto.htm)
- 4-H Digital Photography Project:  
[www.cahe.nmsu.edu/4h/photography](http://www.cahe.nmsu.edu/4h/photography)

Visit our web page at [www.ag.ohio-state.edu/~idea](http://www.ag.ohio-state.edu/~idea) for more project idea starters along with additional information about exhibiting your Self Determined Project at the Ohio State Fair.

OSU Extension embraces human diversity and is committed to ensuring that all educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, age, gender identity or expression, disability, religion, sexual orientation, national origin, or veteran status.

Keith L. Smith, Associate Vice President for Agricultural Administration and Director, OSU Extension

TDD No. 800-589-8292 (Ohio only) or 614-292-1868