

SECTION 7
PHOTOGRAPHY CONSIDERATIONS
Revised: Mar 3, 2010

INTRODUCTION

Photos from many photographers are solicited. It would be advantageous to the selection committee to have a wide selection to choose from. The committee would, of course, especially like to receive photos of species where no photo is yet available. A listing of these species can be found on the chapter's Web site

TYPES OF IMAGES NEEDED

1. Digital photos, slides, and color negatives are all acceptable but digital photos are the preferred type.
2. Prints will be accepted but stand little chance of being used unless there is no other alternative.

BASIC REQUIREMENTS FOR DIGITAL PHOTOS

Since it is likely that most photographs taken specifically for the book will be taken using digital cameras, there are factors to consider before taking the photos.

For a photograph to work for book purposes it needs to meet some minimum quality requirements.

1. Get enough pixels in each shoot. It needs to be a minimum of 300 dpi [dots per inch], sometimes called resolution. [If your camera has a low megapixel (i.e. < 6MP) rating, check to see if the largest image it shoots is in the 1000 pixels by 650 pixels range for a picture like the plant identification pictures in the first book. *The rule of thumb with digital images is if you have enough pixels in the image you can adjust the dpi.*]
2. Do not add pixels on your computer. This degrades the image.
3. If at all possible, try not to use the .JPG format with your digital camera. If that is the only choice available with your camera use the highest pixel setting and JPG (meaning compress) the image as little as possible (i.e. use the highest number available).

JPG is a lossy file type meaning that it throws away pixels every time you save the file, so that the image quality is degraded with each subsequent generation of images that is saved from the original. The JPG number determines how much is lost. The lower the number used the more of the image is discarded. A JPG number of 3 means that roughly 30% of the image is saved with 70% being lost.

4. Preferred file types are RAW, DNG, TIFF, EPS, and PICT, although PICT is more difficult to work with because it does not convert well to other formats. These are lossless file types that don't throw picture information away.
5. Please don't resize or crop the image before submitting. We prefer doing that in post-production when we know what we need for the book.
6. Try to shoot each subject both in portrait and landscape orientations. We needed the "other" shot many times for the first book.
7. The best lighting for most plant identification purposes is a bright diffused light. Bright sunlight creates a lot of contrast and shadows. Using a flash sometimes helps. "Slave" flashes can also be helpful in removing shadows. Try to avoid backlight conditions.
8. Be careful with color shifts during the morning and afternoon golden hours. Plant colors can be shifted by the yellow-orange light.
9. Consider bracketing shots by varying the aperture or exposure time.
10. There will be a copy stand available in the studio for doing extensive macro work.

TYPES OF SHOTS NEEDED

Trees and Shrubs

- a. ___ Full solo tree
- b. ___ Bark
- c. ___ Branch
- d. ___ Dormant branch
- e. ___ Leaves (individual and variations)
- f. ___ Fall Leaves
- g. ___ Flower: ___ male, ___ female
- h. ___ Fruit
- i. ___ Other unique features
- j. ___ Habitat shots

Ferns

- k. ___ Full solo individual
- l. ___ Underside of frond
- m. ___ Fiddleheads form
- n. ___ Sori
- o. ___ Other unique features
- p. ___ Habitat shots

Grasses and sedges

- q. ___ Full solo individual
- r. ___ Seed Head/Inflorescences
- s. ___ Seeds
- t. ___ Other unique features
- u. ___ Habitat shots

FILE NAMING DIRECTIONS

To keep track of photos in a computerized database requires a naming process that assigns photos file names in an orderly fashion. This will prevent the time-consuming effort of having to search randomly through a large number of photos while looking for a specific photo. It will also help assure that the photographer is properly credited and the original photos returned to them. To do this, the filename of a photo needs to contain several pieces of information. The name needs to have genus and species, author, ID number and photo type information. Our previous book used 2 letters for the Genus and 3 letters for the species, then an underscore followed by the photographers initials. So if photographer Chet Blackburn submitted a photo of a California Poppy (*Eschscholzia californica*), under the old system he would have named it:

ESCAL_CB

The new convention adds a letter to both genus and species, and a dash replaces the underscore. The photographer's initials remain the same but they are to be followed by a three digit number assigned by the photographer and a lower case letter describing the plant photo type (a – j) [The plant photo types are listed in a previous paragraph under TYPES OF SHOTS NEEDED.] Therefore, using the new method, the same photo of *Eschscholzia californica* would now bear this file name:

ESCCALI-CB003a ← the “a” is for the whole plant, leaves, flowers and all.

The 003 is a unique sequential number assigned by the photographer to prevent duplicate names.

Hopefully, along with the photo, Chet would have submitted a PHOTO INFORMATION TAG (described below), and **ESCCALI-CB003a** would be the photo ID used on the first line of the tag.

PHOTO INFORMATION TAGS

Although not a mandatory requirement, it would be very helpful if photo information tags were submitted along with the photos. The information on these tags would serve multiple purposes, being not only useful for the book, but in tracking species in the field for a variety of purposes. Contact Bill for a supply of tags. It is possible that you will not know every piece of information sought on the tag but even tags with partial information would be useful.

PHOTO IDENTIFICATION TAG

Photo Information	No: _____
Date Taken:	_____
Family:	_____
Genus:	_____
Species:	_____
ssp or var:	_____
Creator:	_____
Address:	_____
City:	_____ ST: _____
Postal Code:	_____
Phones:	_____
Emails:	_____
Photo Location:	_____ + _____
Habitat:	_____
County:	_____ Elev.: _____
GPS(Lat/Long):	_____ / _____
Description:	_____

Keywords:	_____

Where:

Photo information No: is the Photo ID described under FILE NAMING DIRECTIONS Above, e.g. **ESCCALI-CB003a**

Date Taken: is the actual date the photo was taken.

Family, Genus, species and ssp or var may require help to determine.

Creator: is the photographer.

Address, City, ST, Postal Code, Phones, Emails: are all photographer contact info.

Photo Location: is for nearest street and cross street, or any other information that would help pinpoint the location

Habitat: is an ecological description

County and Elevation: are necessary.

GPS(Latitude/ Longitude): GPS coordinates are becoming increasingly important. You may not be able to provide this information but if the photo location entry is complete and detailed, it can be determined through Google Earth and other means.

Keywords: are search words used in the photo metadata for searching.

SUBMISSION OF PHOTOS

Before submitting photographs please place all the photos to be submitted in folders labeled with their family names. This makes cataloging much easier.

Photographs in any format should be submitted to Bill Wilson. Contact Bill by e-mail at wilsonb@mjc.edu or by phone at 530-265-8040 for the best way to submit your particular type of photo.

SELECTION CRITERIA

Photos to be used in the book will be selected based on the criteria of photo resolution and quality, orientation need, and the image that best captures the characteristic of the plant. As illustrations in the plant description section, we are not necessarily looking for the “prettiest” or “artsy” photos, but photos that best capture the essence of the plant as a novice is likely to encounter it. However, the “pretty” or “artsy” photos may well be useful in other parts of the book

A desirable feature would also be single images that depict more than one feature of the plant, such as foliage and fruit, or foliage and flower, where both features are clearly visible and characteristic in nature.

LINE DRAWINGS

We will keep the option open to use line drawings from publications with expired copyrights or with permission from copyrighted publications when photographic images are either unavailable or inadequate. This would most likely occur in the grasses and sedges segment.

COPYRIGHT OWNERSHIP AND USAGE PARAMETERS

Regarding photo copyrights, the following items apply.

1. Photographers will retain full copyright ownership of all images submitted for consideration (whether they are selected or not).
2. Photographers will be granting a *donated* one-time usage of any image that is selected for use in the book.
3. All photos will be credited to the respective photographer.
4. Once image selection is finalized, photographers will be asked to sign a usage permission form for their selected images.
5. The usage permission form will allow for photographs to be used in promotional and advertising materials relating to the book unless photographers specifically request that they not be used in this manner.