Photographing Caged Birds

by Robert G. Travnicek, M.D.
Wilber, Nebraska

Good pictures do not just happen. They are the culmination of years of experience and studying and hours of work. This is an article designed to acquaint the average fancier to the possibility of photography at cage bird exhibitions. Many different techniques and equipment can be used to take accurate and artistic pictures of exhibition birds in their cages. They will be discussed in some detail. Examples of pictures taken using the various techniques described will accompany the script. These illustrations will depict good and bad results and the shortcomings of each type of technique. It is hoped that this elemental article will stimulate more fanciers to capture their own and others' exhibits for all time using the magic medium of photography.

If one assumes that exhibition budgerigars, canaries, or finches or any caged bird are works of art on display, then their correct photographic reproduction is itself art. It is the obligation of the photographer to correctly record the exhibit. The artist may, however, choose to enhance the strong points of any given bird and minimize its weaknesses. This can be done by the angle of shot, shooting slightly above or below the bird, etc. This requires an intimate knowledge of the bird as a living thing and as an art form.

When looking at photographs taken by one experienced in the field it can be seen exactly what type of bird he or she likes and in what pose. Taking pictures of these birds is a great deal like judging them — one shoots the bird he likes in the attitude he prefers. To show a picture of a bird in less than his optimal posture or form is a real dis-service to the bird and indirectly to the owner.

When approaching the photography of an entire show it is best to allow at least 3-4 hours to see almost all the birds for yourself. This may be accomplished while the judging is in progress as one takes pictures of those birds rejected from higher awards and returned to their classes. One frequently finds birds that on other days might have won the show to be in 3rd or 4th place in their class or out of the running completely.

When the judging is over it is time to shoot the winners, hoping to capture the form that brought them to distinction.

Photographic Reproduction of Exhibition Budgerigars in Show and Aviary

The problems encountered in photographing exhibition budgerigars are twofold, 1) technical capability of your equipment and 2) management of the bird to be photographed.

Beginning with the management of exhibit birds there are several different types of problems presented by the birds. One is a bird in constant motion. These birds may be approached in one of three ways. An assistant can be sought who might be able to steady the bird (it's owner is the most likely candidate) or the bird can be left alone for a few minutes to an hour. If a telephoto lens is part of your equipment (200mm is often very useful) you can shoot 6-10 ft. away from the cage without sacrificing image, size, quality, etc. Even the most nervous birds usually settle down within 5-10 minutes if no one is stimulating them.

The most frequent problem bird is one which goes to the floor of his cage and refuses to perch. These birds again can be left for several minutes to an hour. If time is not available, these birds frequently perch if the cage is placed in the highest possible position, say 5½-6 ft. off the floor. The bird can no longer see his domain from the floor of his cage. Being basically inquisitive they frequently perch, just to see what's happening. Birds in general feel safe at the higher elevation. They will frequently perch when all the usual prodding and coaxing fails.

A frequent problem is that of a bird which refuses to show the characteristics you know are present by either lying over the perch or dropping its tail. This problem might be solved by an assistant (again the owner frequently helps moving the bird while you take the picture). Also a noise such as something dropping will occasionally bring these birds to attention. This is a trick frequently used by cat and dog photographers.

General Recommendations:

1.) Record keeping in photography is absolutely essential in remembering your technique and the facts concerning the bird being photographed. This is most important if you are attempting any type of experimental shooting or taking a large number of pictures of many birds at a single setting. A small note pad is fine. Note particularly the owner, film speed and type, F-stop and shutter speed and lighting condition.

2.) Prior to photographing at an exhibition it is wise to check with the show chairman and the owner of the birds particularly if a flash attachment is used.

3.) Keep both eyes open when shooting. This is most particularly helpful when a long day of shooting is contemplated and if a single bird is particularly restless.

4.) Take along twice as much film as you think you'll use in several assortments of speeds as one never knows what the lighting situation will be.

5.) Be careful to manage your camera strap so as not to let it dangle and thus frighten the bird. Once this happens you might be in for a long wait. A black strap has frequently been preferred by wildlife photographers as color and a wild pattern tend to alarm the subject being photographed.

6.) No matter how steady the bird, it is recommended that you take not less than 6 views — 1, right profile - whole body: 2, left profile - whole body: 3, a ¾ upper body close up: 4, frontal view: 5, back view either slightly above the bird or with the bird's head turned toward and looking at you: 6, view of the head only.

This group of slides gives one an excellent idea of the true quality of the specimen. Needless to say any questionable shots should be repeated. One had best count on 8-10 shots for a complete study of any given bird and extras for his owner. It is far easier to get them now than to go through the difficulty of reproduction.

Some birds lend themselves to being photographed. These specimens, if they are of outstanding quality, should be taken advantage of. The possibility of producing truly outstanding photographs both technically and artistically is then possible.

7.) After the judging is complete the photographer can take advantage of the full spectrum fluorescent or vital lights of the judging stand to take pictures with the show chairman and individual exhibitors' permission. Frequently exhibitors will call your attention to a
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Analysis per 3.5 grams (approximately one teaspoon)

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specific exhibit that may have escaped your notice. As so few people seem to be interested in this segment of the fancy, a photographer's contribution can be significant.

Equipment:

With a single lens reflex camera system you actually look through the lens with the use of a mirror. This mirror swings out of the way just prior to exposure, thus allowing the image to be focused on the film plane.

New single lens reflex cameras with lens opening and shutter speed preferred automated systems are the ones most often used. Such camera companies as Pentax, Canon, Minolta, Olympus, Konica, Nikon and many others make these cameras. These cameras are good choices because of their ability to measure light and automatically set the shutter speed for good exposure under most situations (except in extremely low or high light). In addition many types of lenses are available to fit the better known brands of SLR's. One most probably should avoid a camera which only offers one lens fixed to the camera as the types of and conditions under which pictures can be taken are then limited.

Lenses:

Most people will be sold a standard 50mm (F1.4-@f) lens with the camera body. This lens is quite satisfactory for full body portraits of budgerigars and shots of larger birds, however, 18" is usually the limit to how close you can get to your subject. Close up of head and ¾ views are out of the question. These lenses have excellent light gathering qualities. They are able to take pictures in low light situations especially when combined with high speed film. It is noteworthy that the difference of each F stop in a lens is double the light required to the film plane. Example: F5.6 requires 2 x the light as 4.5 for the same exposure. Ultimately one uses a blend of F settings and shutter speeds to obtain the type of picture desired and proper exposure at the film plane.

Also to be noted, the higher the F setting, the smaller the aperture and the greater the depth of field in focus, i.e., more objects between and behind you and your subject will be seen. This is due to the complexities in optics which will not be dealt with in this format. If detail in every part of the picture is required then a high F setting and relatively slower shutter speed is used.

At F16-22 a bird can be virtually any place in the cage, at any given angle and it will be in focus, as will be the cage, including the bars. If low F stops are used, the depth of field in focus can be quite narrow and therefore careful focusing will be required to obtain reasonable detail in the bird. (Virtually all lens systems indicate on the lens itself the depths of field at any given focal length and F setting.) For an examination of the depth of field at any given F stop a preview button is provided in most SLR systems. It allows you to see depth of focus in the picture at that F setting.

Information is also available in the literature that accompanied your lens, or from the company directly by request indicating depth of field at any stop and distance from the subject. Therefore, if a wide open aperture, e.g. low F stop of F1.4 or F2, is used the bird must be at nearly a right angle to the camera or part of it will be out of focus. This is due to the limited depth of field at the lower F stop as discussed earlier. Because of the high light attainable at low F stop settings a faster shutter speed will be needed which can be a real advantage, particularly in nervous subjects.

Flash Attachments:

Most modern flash attachments, Vivitar, Sun-Pack, Nikon, etc., are fitted with an automatic sensor when used in combination with proper focal length, F stop setting and shutter speeds and will take nearly perfect pictures. Unfor-
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Unfortunately they mostly take perfect pictures of bars (the chrome bars on the show cage). To avoid this, a diffuser which mounts on top of the flash or a bounce attachment is available. The wide angle diffuser seems to give the best picture at close angle with minimum but not total elimination of glare from the bars.

Some of the flash attachments also have manual modes. These make it possible to reduce flash energy by $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$, $\frac{1}{64}$. This allows one many combinations of F settings and shutter speeds at close range not generally available before. The secret to success in the use of a flash unit is experimental shooting at various angles above or below the subject, differencing light intensity in combination with various F stops, plus the use of light diffusers and bouncers until you come to an exact setting for perfect pictures every time.

At present only one camera (OM-2) meters with the mirror in open position and adjusts shutter speed within $\frac{1}{1000}$ sec. shutter speed. Others such as Nikon F3, newer '81 models of Canon and Minolta are coming on the market with dedicated flash systems that accomplish the same purpose. There may be others.

Most camera manufacturers sell their own flash units designed for their particular camera system. However, several independent manufacturers feature flash attachments of high quality that are compatible with most well known systems (Sun-Pack and Vivitar are two examples). As mentioned earlier, modern flash attachments have a sensor which reads the light returning from the subject and alters the output of the strobe. When combined with prior calibration for film speed and subject distance, this allows for good to excellent exposure every time. As mentioned earlier, the problem is that an unattractive reflection is given by the chrome bars on most show cages when a flash is used. This detracts greatly from the artistic quality of the exposure and usually frightens the bird. Many photographers therefore use low F settings with high speed film instead of flash attachments. In addition these flashes do not function automatically for work under 2 ft. from the subject.

Therefore, adaptations for closer work will be necessary. Among those available are: 1. diffusers which allow for wide angle photography and wide dispersal of light. 2. power controls that gear the flash down to $\frac{1}{64}$ of original energy are available and necessary particularly if low F stops are to be used and 3. neutral density filters of $2 \times$ or $4 \times$ are available for both flash units and camera lenses. 4. bounce attachments are available and minimize glare, eliminate shadows, reduce intensity, and bring light in from other angles.

To avoid reflected glare from the bars, the flash may be held in one hand or placed on a tripod at an angle above the subject and set off by cord attachments to the camera thus reducing reflection from the chrome bars to a minimum. If the flash is set on the same plane as the cage, bar glare will not be reduced. This is a result of the circular nature of the bars reflecting light at any angle. If, however, the flash is held above the cage or both camera and flash are $30^\circ$ or more above the subject, the bar glare is reduced markedly. If the focusing distance is under $10^\circ$ with a camera attached flash, no glare is seen as the lens is virtually touching the bars and the flash effect is bounced off the bird and back of the cage.

Technique:

The best of all worlds occurs when outdoor light is available for your work. This allows one to use high shutter speed settings, slower film speed, say ASA 64 and virtually any F stop — perfect colors will be the natural result. Example: A shutter speed of $\frac{1}{100}$ and F stop compatible with desired exposure, say F2.8-3.5 with careful focusing allows you to take a picture free from cage bars or back drop. (If the bird is at a right angle to the film plane, he alone will be in focus.)

On the other hand, low shutter speed, say $\frac{1}{50}$-1 sec. and relatively high F setting, ex., F16-22, would be available. This combination allows you to put the bird in virtually perfect focus every time with little effort because of the great depth of field involved at higher F stops. Depending on the quality of lenses used, the bird could be projected at 100 x life size with every feather or lack thereof in complete detail.

With natural light you may use low film speeds, ASA 50-64 (outdoor) which many consider best for most accurate reproduction of color. Nothing compares to the sun for full spectrum wave length and exposure of high color quality. To accomplish this, window light may be used or the bird might actually be taken outdoors with precaution not to expose it to direct continuous sunlight for any period of time.

Indoor Shooting:

Unfortunately, most shows in the USA are held in enclosed quarters devoid of any natural light. Therefore, two methods of photography are available.

1) High film speed ASA 200-400 with a lens.,(F1.4-2) and the proper matching
Light green cinnamon opaline hen. Detailed exposure using F16 taken from above. Feather detail approx. 6'0M-2 macro, F16 with flash, note shadow in left side of exposure.

Grey green cock. Shot with Vivitar 283 flash with UM2 on auto. F16, note feather detail and shadow due to flash. This is an example of higher resolution of feather detail available with high F stops and depth of field. Of course bars are necessarily included in this type of exposure. (A.M. Moss, owner).

Peking robin. Caged bird show in Louth, England. 13mm K ring, with a Fl.4, 50mm lens (Nikon). Shot at 1.4 with ASA 400, 1/200 sec. natural light.

Side shot head turned—focus point on mask. Note loss of focus in eye and feet. Depth of field approx. 1/4". Nikon 30mm with 13mm K ring, 10" focal length, ektachrome ASA 400 at 1/30 sec. (Hugh Wilson, owner).

Frontal view—sky cinnamon cock. Focus is in the cere. Depth of field approx. 1/4". Note the loss of focus on cage. Detail of mask is excellent. 50mm Nikon, 13mm extension ring—distance 10", ASA 400 1/30 sec. (Hugh Wilson, owner).

Tanagers at Louth All-Bird Show (England). ASA 400 natural light, 1/250 sec. Fl.4 Nikon 50mm. Fl.4 lens with 8mm K ring. Note loss of focus of bill and eye. Depth of field 1/2". Note faint shadow of black bars used on foreign bird cages in England.
filter is the easiest method (explained under filter section). Only 50mm lenses are useful for this type of exposure as they are the only ones which have the low F stop settings needed, F2-1.4. This does not allow for focusing distance under 18" although it does permit focusing the bars out of the picture with relative ease. A typical setting with ASA 400 might be F1.4 at ½₅₀/₅₆ seconds for manual cameras. Automatic SLR cameras set shutter speed based on light available and F setting used. Unfortunately the color quality of these pictures is always at question as most of the show halls have mixed lighting (fluorescent, cool-white, warm-light, full spectrum, etc., and/or incandescent light). Filters help but do not completely solve the problem and the color reproduction of the birds is seldom accurate or uniform.

2) A second option is the use of strobe type flash unit. Under these conditions two things occur: first the color will be corrected to very acceptable limits, and secondly, bar glare must be accounted for. Thirdly, manual modifications in the flash energy or F settings must be made for exposures under 2 ft. This may bring the entire bird and cage bars into focus.

Filters:

In color photographs, filters can be a photographers trick to correct daylight film to other than the lighting situation for which it was designed. At best they are helpful in modifying and partially correcting color and at worst you lose light available for exposure.

There are basically 4 filters which are useful to photographing birds. One is the 80A type of blue filter used with incandescent light to remove the orange tint seen with outdoor film shot in that type of light. Unfortunately, this decreases light available by a factor of 4 or 2 F stops. Therefore, it is seldom helpful even with very fast film. Second, the ordinary filter FLD used for fluorescent light is helpful but more times than not it does not prevent a green overlay to the picture. Tiffen has recently introduced a filter (CC3DR) used for underwater photography which is satisfactory for conversion of daylight film for use under most fluorescent light conditions. Still, colors are not accurate and light available is reduced by ½ F stop. Finally, there is a neutral density 2-4 for use with flash to allow a decrease in F stops at close range.

Film Type:

The type of film you use is a personal preference based on the equipment one has available and the type of exposures you are planning to make. Essentially two films are available for transparencies, Ektachrome and Kodachrome. Ektachrome is a red based film giving it somewhat more warmth of color. It requires a complicated developing technique and such equipment is available at only a few laboratories. Therefore, generally four to ten days developing time is required. Many photographers feel that the color quality of Kodachrome film and processing is generally better than that of Ektachrome.

ASA rating is a crucial factor in film purchase. The higher the number on the film the less light needed for exposure and therefore the faster shutter speed allowed or greater F setting or both. If ASA 200 film can be shot at F1.4  at ½₅₀ sec using ASA 400 the exposure time at 1.4 with identical light would be ½₅₀. In addition, if your film processor is aware that the film was underexposed or so called "pushed," he can overdevelop the film. With these pre-set conditions ASA settings to 800 for color and 3200 for black and white are available. Check with your processing lab to see what they are able to do with respect to "pushed film."

Nothing is perfect and the disadvantages of high speed film are coarseness (lack of detail of subject as compared to slower film) and perhaps a little distortion of color accuracy as compared to slower film. Only experimental shooting on your part will demonstrate the differences if they can be detected at all. Recently Kodak and others have improved the ASA process and film dramatically and there is now little difference between the fast and the lower speed films.

Rings and Things:

Extension rings are devices which shorten the focusing distance of a lens. This allows you to convert your 50mm lens to a close up lens with focal length of 4" or less.

As the rings have no lens material and merely increases the distance the lens is from the film plane by various lengths, they neither improve a poor lens nor detract from a good one. There is no distortion of image in using them and if you can get within four to six inches of a bird consistently they are a fine option.

Rings may be sold separately or in sets. Before investing in a set of rings try them out on your camera to see if they can be of help to you. (Nikon sells an 8mm, 14mm, and 27mm, which can be purchased separately or as a set.) Each manufacturer of quality photographic equipment provides them in their
catalogs. Extension tubes for manual cameras have no moving parts and are quite inexpensive. However, automatic SLR requires a linkage mechanism between lenses and camera body therefore these ring attachments are much more expensive. They are used with macro lenses to enlarge the image from ½ life size to 1:1 reproduction. With them the head only of a bird may be taken by getting right up to the bars. A 27.5mm ring combined with a 50mm lens that I have used will not allow focusing on the rear of the cage 6" away. The focal range of the lens is severely curtailed with ring attachments, although the amount they alter the focus is inversely proportional to the focal length of the lens.

Rings can be used in conjunction with zoom lenses. The focusing is then done with the zoom mechanism itself or at the highest power (e.g. 200mm on an 80-200 zoom) it can be done with the focus ring itself. So far as picture quality is concerned, limited if any aberration has been noted by this observer. The rings give you the ability to get closeups of your subject without sacrificing F stops as you must with a macro type lens. This quality is very useful particularly in low light conditions.

2 x and 3 x teleconverters are quite a different story. They are lenses themselves which double the focal length of the lens and the F stop setting at the same time. A 1.4 50mm lens with a 2 x adapter, for example, becomes a 100mm with minimum F stop of 2.8. They gobble up ½ the light as the cost for doubling your image size. Why use them? They are an inexpensive way to have two lenses in one. Therefore you can get twice as far away from the bird and get the same image size. But unfortunately you may not get the same picture. Why? Quite probably no 2 x teleconverter is of the quality of the best standard lens. There is some distortion especially at the edge of the field. New 'matched multipliers' and their lenses have tested very favorably by national test firms with lenses of the same focal length so you may want to give them a serious look. The multipliers double ones F setting. With increasing F stops there is a concomitant increase in depth of field. The bars will begin to appear even at closer ranges. So whether a teleconverter is in your plan is a matter between you and the guy trying to sell it.

It is hoped that in a general way the preceding points will give those interested in preserving their birds on film a starting place for experimentation and eventual satisfaction through the art and science of photography.

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Additional budgie photos for "Photographing Cage Birds" article ending on page 39.

Grey pied cock. Shot with Nikon 8-200 zoom at 6 ft., F4.5 at 1/90 sec., with SB flash unit. Bird seen unobstructed but bar relief is not totally eliminated. (E. Collins, owner).

Close-up of light green cock. Fl.8 giving slightly more feather detail. Nikon 50mm, 1.4, ASA 400, 1/130 sec., K ring, 9" focal length. (E. Collins, owner).

Light green cock. Shot with OM-2, 50mm macro, F11, 1/90 sec. with Vivitar 283 flash. Bar glare cannot be eliminated with flash units that are camera mounted owing to the rounded nature of the bars. There is some glare at any angle. Note completeness of form and feather detail seen at Fl1 and above. (Norman Beyer, owner).

Light green cock, best breeder at '77 World Show. Shot with OM-2, macro Fl6 with top mounted flash unit. Note shadow caused by flash. Camera is held normally to gain full body exposure. This focal length is approx. 15". Film type is not known. (Tom & Chris Howitt, owners).