

Contact Sheet

Journal of the Eastern Idaho Photographic Society
Volume 15, Number 12 – December 2003

Telephoto Lens Shooting Wildlife

At the November lecture series of the Eastern Idaho Photographic Society, **Tim Sommers** gave members reasons why he has selected the lenses he likes to use when he is out on a photo shoot. Because Tim enjoys wildlife images, he has to use telephoto lenses for almost all of his images. No matter how quiet or stealthy we think that we are behaving when out in the field, animal survival instincts counter most of our attempts to get very close to their location. Their senses of smell, visual acuity, hearing abilities are what allow them to survive in an environment where almost every species has some predator that is above them in the food chain.

Even though the telephoto lens allows you to get closer to the moose or elk, there are some things that the photographer must know to get the proper image. As you go to higher numbers in mm (100 mm going to 400 mm, for example), the lenses get much longer and heavier unless the manufacturer of the lenses have used special materials in the lens make up. Any of these light weight materials greatly increase the cost of the lens production. Also, some of these materials add optical distortions that have to have other optical lenses in the telephoto barrel to overcome. Our only salvation in keeping the cost down in some of these modern lenses is the use of the computer to make the appropriate calculations in the manufacture of the lens.

One of the other factors in the size of the lens is trying to get enough light through these longer pieces of glass. For example, with the 100 mm lens with an $f/2$ opening, this is a diameter of 50 mm (100 divided by 2). For the 400 mm lens to let in the same amount of light at $f/2$, the opening must be 200 mm (an opening that is $7 \frac{7}{8}$ inches in diameter) creating a massive lens. This is much of the reason that the longer lenses use $f/4 - f/5.6$ maximum apertures.

These larger openings also play a major effect on depth of field and sharpness of images. From the Time-Life series on photography, on page 120 of *The Camera*: “Apertures of the same f -stop – whatever their actual diameter – create equally bright images on the film. To maintain this equal brightness, a 100 mm lens needs a hole double the diameter – four times the area – of one of a 50 mm lens, since it must spread the image over an area four times as great. But this larger hole affects the sharpness of things in the foreground and background – it is one of the reasons why long lenses have less depth of field than shorter lenses do.”

This would even show up at $f/22$ types of settings. With a 20 mm lens at $f/22$, the opening is 0.9 mm in diameter (which is about a pinhole in size) whereas in the 400 mm lens at $f/22$, the opening is still 18.1 mm (almost $\frac{3}{4}$ inches) in diameter. As you can see, this would make even maximum depth of field much more limited in the telephoto lenses.

Therefore, we have larger, heavier lenses to lug around – and tripods to boot. And the wildlife has no compassion for that fact and constantly wants to move quickly out of our shallow depth of field. And then we just can't get enough light on our film. This is why some of the newer higher film speed with good resolving power has been a godsend to photographers since some of the 400 speed film is as good as the 100 speed film of a few years ago. We start to get back a couple of those f-stops we lost by going to our telephoto lenses.

Thank you, Tim, for giving us some of the insights in the difficulty of mastering wildlife photography. However, the next time you may have to give us a talk on how we can get enough strength to carry all of our longer lenses with us. Or maybe we will just have to enroll in the Apple Athletic Club to get in better shape!

Club Notes

At the last meeting we had further discussions of switching to a different meeting location since we have somewhat outgrown our current meeting room - - a good event. Also, there was a feeling that we might be able to get even better attendance if we did not have to go up a flight of steps to our meeting room. For these reasons several members have been evaluating other locations.

At the November Advancement Program we had some feed back from our appointed group who looked at possible sites. They reported that we could use the facility at the Church of the Nazarene at 1900 Grandview. They said that it was a good facility on the

ground floor with good parking around the structure. This suggestion was brought before the members at the Advancement Program and was passed. Since there will be a use charge of about \$20 per month levied by the church for the use of the room - - and we have never had to pay a facility fee before in our fifteen years of existence, we will not be able to go that route unless we keep our membership around forty people - - and we are barely at that level of participation at present. Also, the printers of the newsletter have informed us that their fees will have about a 30% rate hike. A discussion ensued and a motion was passed that we increase our EIPS entry fees to \$25 per year. This is actually the first fee increase in our 15 years of existence.

We have asked that the board of the Nazarene Church allow us to use their facilities. We will find out whether this is acceptable to them at the December meeting.

At the Advancement Program we also set up a committee to select officers for 2004. Several suggestions were made to accommodate the larger size of our group. Since there are times when one of the club officers may not be present - - especially the office of president - - we are looking into the possibility of having an office such as president – elect so that there will always be someone to lead the group.

Also, there has not been a formal secretary since the person doing the newsletter has been an informal secretary keeping the notes before the group in the form of the newsletter. But with our expansion we would be better served if we had someone to write thank you notes to our sponsors, thank you notes to our juried show judges, etc.

Since writing the newsletter takes several hours out of each month, there is some reticence on the newsletter writer (namely me) to also take on these extra responsibilities. Already there have not been many people who want to write the newsletter for our group. The officer's selection committee is going to address this possibility. Both of these offices could be added to our constitution at the next meeting.

We also discussed the need to create a continuing photo shoot type of schedule. With the increase of membership we should be able to have a larger number of participants at any shoot - - and these are incredible learning tools for all who attend. We have such an incredible area with photo possibilities not to be out with our cameras more often.

We also want to have more workshops such as still life, flash photography, macro sessions, etc. which should be easier to accomplish at a larger facility. Since this is your club, we need your input on what types of lectures we need to have. We have used our own members as resources along with some video sessions on specialized topics. At the beginning of next year we will pass around a sheet for people to put down their suggestions. Even if you do not feel comfortable about giving a session, it is incredible how much you will learn while you are preparing the lecture - - or you can get some other member of our photographic community to give your lecture for you. We have had several talks by members of the Post Register photo department give us talks. Several wedding photographers have spoken - - commercial photographers have given us their input. We have had

sessions on matting and framing. We had lectures on darkroom tricks, Photoshop hints, etc. The list is almost limitless since our field continues to expand, and our need for further knowledge grows exponentially for the same reasons.

Advancement Program

The last theme for this year is: **Curves.** Please bring your three best slides / prints and join us on December 18 at 7:30 p.m. at the Dome Technologies Conference Room at 3007 East 49th North.

And now what you have been waiting for with baited breath, next year's themes. We hope you use these for the purposes that they were selected in that each one should be a good learning tool for your improvement in photography. We have also asked in the past that you try new images and not dip into the archives of your photography files too far. This is supposed to get you out shooting more film with your camera - - or putting some light on that digital chip in your camera body. The topics for next year are as follows:

January – Advancement Banquet
February – Photographer's Choice
March – **Texture**
April – Photographer's Choice
May – **Snow**
June – Photographer's Choice
July – **Motion**
August – Photographer's Choice
September – **Water Falls**
October – Photographer's Choice
November – **Sports**
December – Photographer's Choice

Monthly Meeting

Time: 7:30 p.m.
Date: Dec. 4, 2003
**Location: Dome
Technologies Conference
Room at 3007 North 49th
East**

Program: Roger Heng wants to give members information on some of the things that are on our web page. He needs some of our input as well as some of our photos for inclusion on our site.

Graffiti

The Eastern Idaho Photographic Society is a group of amateur and professional photographers who have banded together to further the art of the photograph. We meet on the first and third Thursday of each month at the Dome Technologies Conference Room. However, starting in January 2004, we will be meeting in a different location. This newsletter will come out in time in late December to make sure that you will know the exact location. Please join us and have some fun with your photography.

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