

Part One – In The Camera

A Beginner's Guide to Improving Your Photography

by John Strung

New members to the club are often puzzled as to why their wonderful images score only 18s in the club competitions and want to know what it is that they have to do to score the magic 21 for a promotion point from bronze to silver. This tutorial, and the one to follow ("Part Two - In the Computer"), will try to help to answer those questions.

Obviously, experience and practice will help. It is very important to focus during the clinics on what images are getting higher marks than yours and try to figure out what it is the judges are looking for and finding. It is also very helpful to attend the critique workshops the club holds from time to time where you will be given tips on how to improve your photos. If you are a Flickr member, you can also submit your photos to the Trillium Group Pool <https://www.flickr.com/groups/trilliumphoto/pool/> and request a critique.

Common Beginners' Errors and Tips

We will first focus on the most common beginners' errors that result in an otherwise fine image being marked down and offer some tips to improve your photos:

1. Sharpness

One of the most common complaints made by judges is that beginners' photos are either not sharp enough, or are not sharp enough in the right places. In either case the image will not score well.

Landscapes typically need to be sharp from foreground to background. This requires a large depth of field. In order to achieve a large depth of field you need either a wide-angle lens (see *Wide Angle Lens PDF*) or a high f-stop. This will likely require you to set your camera to one of the program modes instead of using an automatic mode. How to do this will be discussed in "Taking Control of Your Camera" below. It also may require you to use a tripod in order to achieve a high enough f-stop without either reducing the shutter speed to the point where you get camera shake or increase the ISO to the point where you lose image quality.

Pictures of birds, flowers and people require the opposite approach. In those cases you want ONLY the bird, flower or person in focus and want the foreground and background out of focus. This requires a small f-stop



Landscapes require a large depth of field to make everything in the image sharp.



Bird images require a short depth of field to blur the background

If you can't get the whole of the bird, flower or person in focus, it is important to have the eyes of the bird or person and the stamen of the flower in focus, so when you focus the camera, set the focus point on the eye or stamen. You may wish to change your camera's setting to "point focus" to achieve this.

Having done all that, you may still have to do post-process sharpening in your computer. That will be one of the topics of Part Two of this article.

2. Exposure Errors

The most common exposure error is blown-out highlights. If you shoot raw instead of jpeg, you may be able to bring the highlights back in post processing.

Most cameras have a setting which will show blown-out highlights as flashing areas in the review screen on the camera. Set your camera so that this feature is activated and ALWAYS check your shot after taking it for flashing highlights. If the preview shows blown-out highlights, readjust your exposure and try again.

3. Mad Dogs and Englishmen

As the saying goes, "Only mad dogs and Englishmen go out in the midday sun." Photographers stay home. The midday light is very harsh and it is difficult to get a good shot at midday. Even postprocessing cannot usually save the situation. Try to do your photography in the early morning or late afternoon when the light is gentle, or on cloudy or even rainy days. Photography is all about light. Get the light right if you want a good photo.

As an example, the soft early morning light greatly adds to the impact of the image below.



4. Composition Errors and Tips

a) Multiple Subjects

A common beginners' composition mistake is to have more than one centre of attention in their image. This never works. The viewer's eye just bounces back and forth between the two topics and never settles down. Decide, either when you take the photo, or later when you edit it, what it is that you are trying to show.



Viewing the photo above, the eye can't decide whether the subject of the photo is the dramatic sky, the farm machinery, or the tree, resulting in a weak picture without a single focus. (The harsh midday light also detracts from this image.)

Another typical example would be a seascape with a dramatic sky. Are you trying to show the sea or the sky? If you try to show both, you will wind up with a weak picture. Pick one or the other and shift the horizon accordingly.

b) Rule of Thirds

Another common beginners' error is to centre the main focus of the image. A centred image is static and weak. Instead strive to have the main focus of the image a third of the way from one side of the image and a third of the way from the top or bottom. This will usually make for a more interesting image. This is often described as the "Rule of Thirds". You can see some examples here <https://digital-photography-school.com/rule-of-thirds/>.

Consider the Rule of Thirds only a guideline, rather than a hard and fast rule. Use it to remind yourself to consider moving the main subject off-centre. In particular try to avoid having the horizon in a landscape in the middle of the frame. Clara Parson's image "Man at Pyramids," below, is a much stronger as result of the man being posed at the 1/3rd point, rather than being centred in the frame.

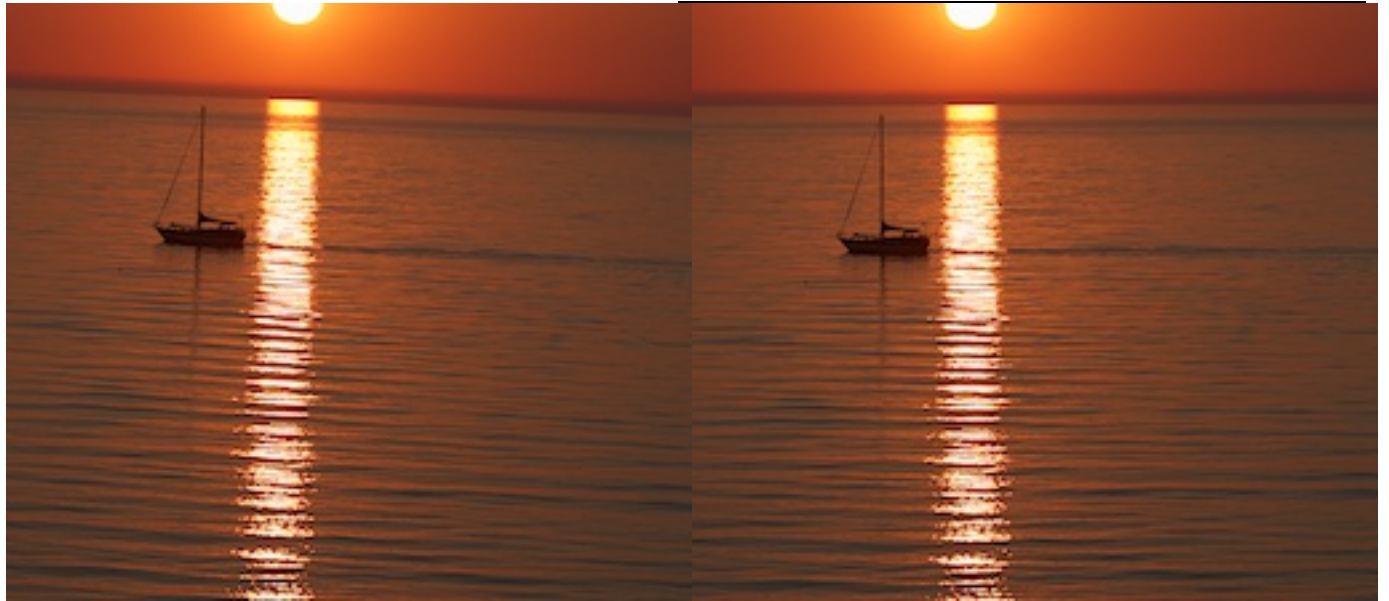


However, the vertical symmetry of the image bellows demands the horizon be in the centre, contrary to the rule.



c) Peg-Leg Pete

Be very careful to make sure your camera is absolutely level when you take a photo. Nothing is more grating to a judge's eye than an off-kilter horizon that makes it look like the photo was taken by someone with one leg shorter than the other. If your horizon isn't level in the camera, you MUST correct this in post processing.



d) Distracting Light Areas and Hot Spots

The viewer's eye is automatically drawn to the brightest point in an image. If the bright area is not the area you intended the viewer to focus on, this can ruin a good shot. Try to avoid light areas around the edge of the photo. If you can't do that in the camera, try to remove these areas afterwards by cropping or by darkening them. The use of a polarizing filter on the camera can often help avoid "hot spots" in the photo.

The image below of a trout lily below is spoiled by the bright object at the bottom.



e) Distracting Foreground and Background

Of course the classic example of a distracting background is the post or tree apparently growing out of a person's head. But even less egregious background or foreground "noise" can spoil a picture. Try to move around to compose the picture to avoid distracting details, or remove these in postprocessing. Also control your depth of field to try to throw the background or foreground out of focus in an appropriate situation.

Note how much better the image of the nuthatch on the right is without distracting the distracting foreground and background of the image on the left



f) Leading Lines

You can substantially improve a landscape image by composing it with diagonal lines that help lead the viewer's eye into the photo. This technique also tends to add depth to the image.

g) Adding Depth

In addition to using leading lines to add depth to an image, you can add depth by deliberately composing with an object in the foreground. This technique works best with wide-angle lenses PDF, ([links to page Why Your Next Lens Should Be a Wide Angle](#)) which have a great depth of field.

In the photo below, the railing adds depth as a foreground object and at the same time serves as a diagonal line leading the viewer's eye into the photo.



A Note on Landscapes, Children and Pets

Beginners are often surprised at the low marks given to something like a spectacular sunset image. This is because the judges feel that the beauty is in the scene itself, not in the photograph. Anyone standing in the same place at the same time would have got the same picture. You don't get marks for just showing up. In order to get good marks for landscape, you have to add something extra to the photo by way of an especially good composition or an unusual viewpoint or mood. Your photo must be more than a "snapshot" to score well.

Similarly, images of children and pets seldom score well, no matter how adorable they may be, unless the photo itself is very well done.

Take Control of Your Camera

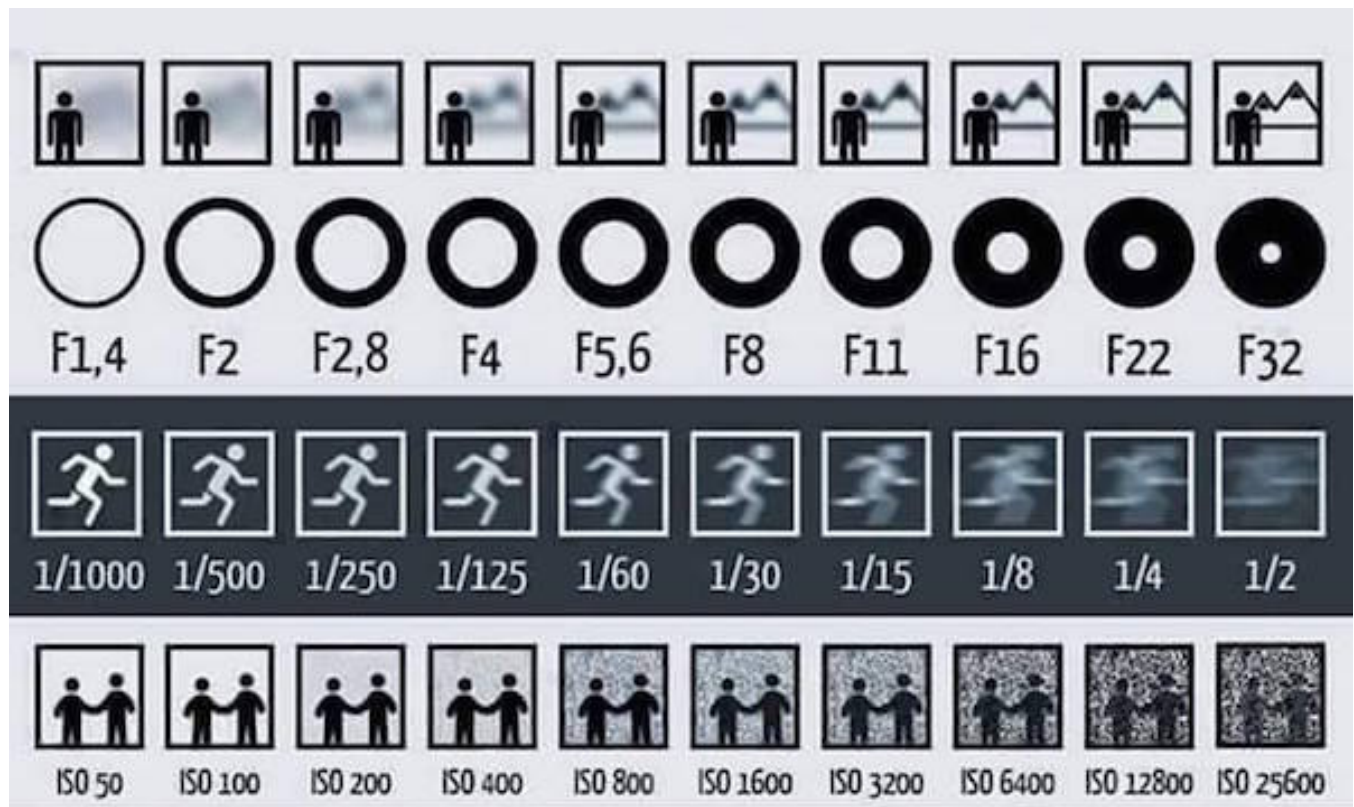
If you are going to take good pictures, you are going to have to learn to use the Av, Tv and M (Canon) or A, S and M (Nikon) modes of your camera. You simply do not have enough control of the camera if you leave it in one of automatic modes and allow the computer to guess at what you really want.

1. The Exposure Triangle

In order to understand how to use the Av, Tv, and M or A, S and M modes of your camera, you need to understand the "exposure triangle".

There are three interrelated settings on your camera that determine the exposure - Aperture (f-stop), Shutter Speed, and ISO. If your exposure is right and you change one of these, you have to change one or both of the others to compensate. So, for instance, if you increase the f-stop you have to lower the shutter speed or increase the ISO to

compensate. The trick is to know what the effect of changing each of these settings is so you know how to set the three settings to optimize your image. This effect of changing these settings is illustrated below in the graphic below by Anthony DeJolde.



a) Aperture (f-stop)

A lower f-stop lets more light into the camera and lets you shoot at a higher shutter speed or lower ISO. A higher f-stop allows less light into the camera and forces you to drop your shutter speed or increase your ISO.

A high f-stop increases the depth of field, so, for instance, for a landscape you will want to use a high f-stop (although f-stops above f11 tend to reduce sharpness of the image, so be careful).

A low f-stop reduces the depth of field and is useful in blurring backgrounds when photographing people, birds or flowers.

If what is important to you in a particular photo is the depth of field, then use the **Aperture Priority Mode (Av on Canon or A on Nikon)** of the camera. This setting lets you set the aperture and the auto-exposure feature of the camera will automatically adjust the shutter speed to obtain the correct exposure. (But check to make sure it doesn't set the exposure so low that you get camera shake on a handheld shot.) The Av or A setting is often used for landscapes.

If you have an iPhone or an iPod, a depth of field calculation app, like **Simple Depth of Field** <https://itunes.apple.com/ca/app/simple-dof-calculator/id301222730> is very useful to help you determine the aperture you need to get the depth of field you require.

b) Shutter Speed

Unless you are using a tripod, you have to make sure the shutter speed is set fast enough that you do not get blurry pictures from camera shake. With a full-frame camera, the rule of thumb is that you can handhold a shot at a shutter speed that is the reciprocal of the focal length of the lens. So, for instance, you should be able to handhold a shot with a 100 mm lens at 1/100th of a second. With a crop frame DSLR (which most non-professionals use), you have to increase that by 50%, so you would need to shoot at 1/150 with a 100 mm lens. If your lens or camera has image stabilization, you can shoot at lower speeds.

However, if you are shooting things that are moving, you need a higher shutter speed. Even though you could handhold an 18 mm lens at 1/25 of a second or so, you would still need to shoot at 1/100th or 1/150th if you are shooting people. Sports or nature photography may require higher speeds, perhaps 1/1000 th of a second.

If your primary concern in photography is your shutter speed, for instance for sports photography, use the **Shutter Speed Priority Mode (Tv on Canon, S on Nikon)** which allows you to set the shutter speed and will let the camera change the aperture to ensure you get the correct exposure. However check to see what the camera is proposing to do by way of exposure and if it cannot open the aperture wide enough to get a proper exposure at the shutter speed you want, you may have to increase the ISO.

c) ISO

ISO trades off exposure for picture quality. Always shoot at the lowest ISO you can, usually 100 or 200. Only increase the ISO if you can't otherwise get the right exposure by adjusting the aperture and shutter speed. In other words, increase the ISO only when you need to in order to get the aperture and shutter speed you need (and consider a tripod as an alternative to bumping the ISO for static images).

How high you can push the ISO without a noticeable loss of quality depends on your camera (some are better than others at high ISO), whether you need to crop the image and how well exposed the image is in the first place. If you push the ISO too high, the image will look grainy, particularly if it was a bit underexposed to begin in.

d) The M (Manual) Setting

The M setting is the completely manual setting. You have to set the f-stop, shutter speed and ISO all manually. This is useful when you need ultimate control over the exposure or in situations where your camera's auto-exposure would be fooled. Bird photographers (DDR) tend to use the manual setting. When shooting in the M setting, you have to guess at the exposure, take test shots and re-adjust as necessary.

e) Exposure Compensation

A compromise between using Aperture Priority or Shutter Priority Mode and using M is to use Aperture Priority Mode or Shutter Priority Mode with exposure compensation. Most cameras allow you to set an offset to the metered exposure setting. So if you are shooting in Aperture Priority or Shutter Priority mode and find your photo is coming out over-exposed, you can offset the exposure to the left to reduce the exposure to compensate. If it is underexposed, offset the exposure to the right.

The image below shows a Canon 6D set to Av mode with exposure compensation set to underexpose the image by 2/3rds of a stop.



Learn Your Camera

Camera manuals tend to be impenetrable, but you can probably find a third party book on your particular make and model of camera that will explain the settings more clearly and give you tips on getting the most from your camera. Check your local brick-and-mortar bookstore, or browse on-line.

Further Reading

Naturescapes - <https://www.naturescapes.net>

Luminous Landscape - <https://luminous-landscape.com>

A Final Note

Take more time on each photo. Don't just snap and leave. Take time to compose your photos. Look for distracting foregrounds and backgrounds and change your vantage point to avoid them.

Review your photo in the camera immediately after taking it to check for exposure, levelness and composition. Think of ways to improve it and try again.

And above all, practice, practice, practice.