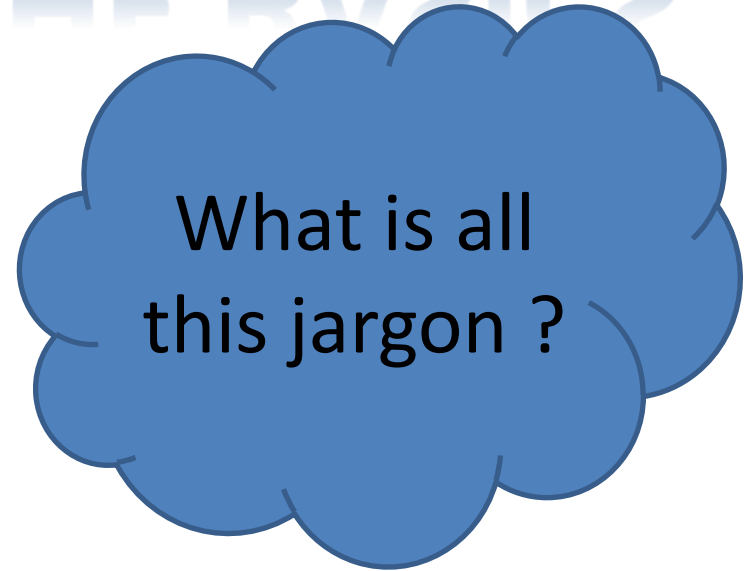




Kawartha Camera Club

BACK TO THE BASICS



These are some important terms that will help you understand

Exposure

The quantity, duration and intensity of light captured by the image sensor. Exposure is controlled by three elements: ISO, Aperture and Shutter Speed

ISO

The feature that controls the sensitivity of the image sensor in your camera. Low ISO is not very sensitive and good for sunny days when you don't need a lot of light captured. At a high ISO means your image sensor is more sensitive when you need a lot of light – this is good for shooting in low light.

Aperture

The feature that controls the size of the lens opening when a picture is taken. If you need a lot of light you want to have a big opening (a low aperture). Measured in F-stops and often referred to as such.



Large Aperture

f/2



Medium Aperture

f/8



Small Aperture

f/22

F-stop (see aperture)

Technically refers to the numbers that represent the size of your lens opening. A low number gives you a large lens opening. A high number gives you a smaller lens opening.

Shutter Speed

Shutter speed controls the length of time the shutter is open to allow light to pass through the aperture. The longer the time (slow shutter speed) the more light can pass & vice-versa. This is critically important and often used in direct inverse relation with that of aperture. The larger the aperture the faster the shutter speed must be to give proper exposure and vice versa.

Faster shutter speeds are required when you want to freeze action, such as shooting a surfer riding the swells or maybe when you want to capture the moment a batter hits a home run. Slower shutter speeds are actually used for more dramatic results such as when you need to create a silky smooth effect of moving water or emphasize action.



Underexposed

A condition in which not enough light reaches the image, making it look dark.

Overexposed

A condition in which too much light reaches the sensor, making it look too light, washed or blown out.



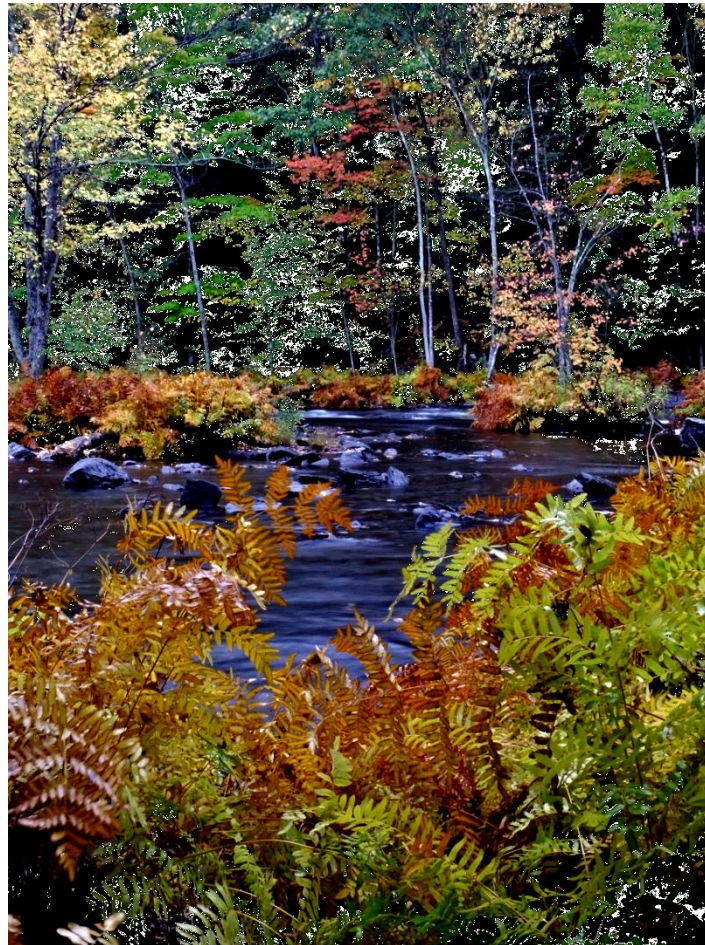
Depth of Field (DOF)

The zone of sharpness in front of, and behind, the subject on which the lens is focused. Depth-of-Field (DOF) is affected by Aperture. A low aperture value (small number) will give you a very shallow or short depth of field – so the foreground and background which bracket your area of focus will be blurred. A wider or longer DOF can be achieved by a higher Aperture setting (large number). This will bring more of the area bracketing your subject into focus.



Saturation

The percentage of hue in a colour. Saturated colours are called vivid, strong, or deep. Desaturated colours are called dull, weak, or washed out.



Useful links:

Camera simulator:

<https://cam.gm.ws/>

Using ISO:

<https://youtu.be/ssGGt7fXuMY>

Shutter:

<https://youtu.be/zmWRW4GExqw>

Aperture:

<https://youtu.be/YZ-xwPegXeA>

Understanding exposure:

<https://youtu.be/ftpck5xPlyk>

Image Sharpness:

https://youtu.be/YzEjeR4_D6M

Basics:

<https://www.youtube.com/watch?v=ixRKeQMa7Nc>

<https://www.youtube.com/watch?v=tovy7hpnA7k>

<https://www.youtube.com/watch?v=-lwrkGuvVMs&t=11s>