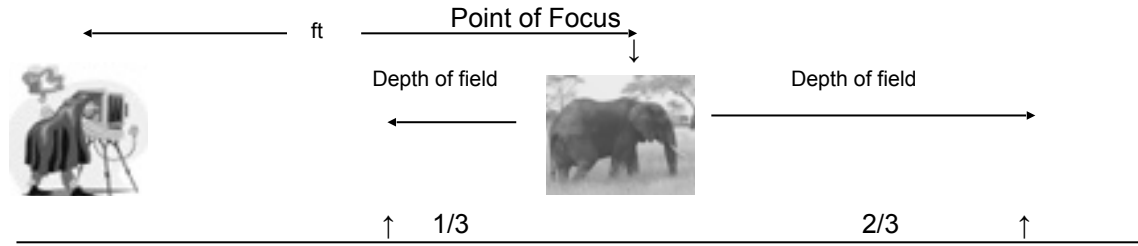


Intro to Depth of Field



When you focus a lens you set a distance where the focus is sharpest. But this does not mean that this distance is the only point in the image that will look in focus. Areas in front of and behind the point of sharpest focus can also look acceptably sharp. These areas comprise the depth-of-field in your image. Of the total depth of field in any image the sharpness range is distributed with 1/3 in front of the subject and 2/3 behind the subject. The three controls of the sharpness are the aperture used to take the picture, the focal length of the lens used, and the distance from the subject. These are illustrated on the three enclosed sheets.

Small apertures like $f/11$ will have more depth of field than wider apertures like $f/2.8$. Short focal length lenses (wide-angle) have more depth of field than long-focus (telephoto) lenses when used at the same aperture. The closer you stand to a subject the less depth of field you will get at any focal length and aperture.

Hyperfocal distance

Hyperfocal settings maximize the area of sharply rendered image in your picture. Hyperfocal settings allow sharp rendition of everything from the nearest point in the image to infinity. This is especially useful in landscape photography when shooting the grand vistas with wide-angle lenses. With knowledge of hyperfocal technique you can sharply render two subjects at different distances. The attached sheet shows typical aperture scales.

Depth of field markings are found on manual focus, single-focal-length lenses but are not usually found on zooms and auto focus lenses. Use this chart to set hyper focus on a lens that has distance markings. Use a tripod and set your focus *manually* after choosing the composition. Using the DOF preview control on your camera you can visually adjust and check the DOF. This chart applies to full frame sensors.

Hyperfocal distance in feet						
<i>f</i> -stop	20mm	24mm	28mm	35mm	50mm	100mm
5.6	9'5"	14'	18'	29'	59'	235'
8	6'8'	9'6"	13'	20'	41'	164'
11	4'10"	7'	9'6"	15'	30'	120'
16	3'4"	4'10"	6'6"	10'	21'	82'
22	2'6"	3'6"	4'9"	7'5"	15'	60'