

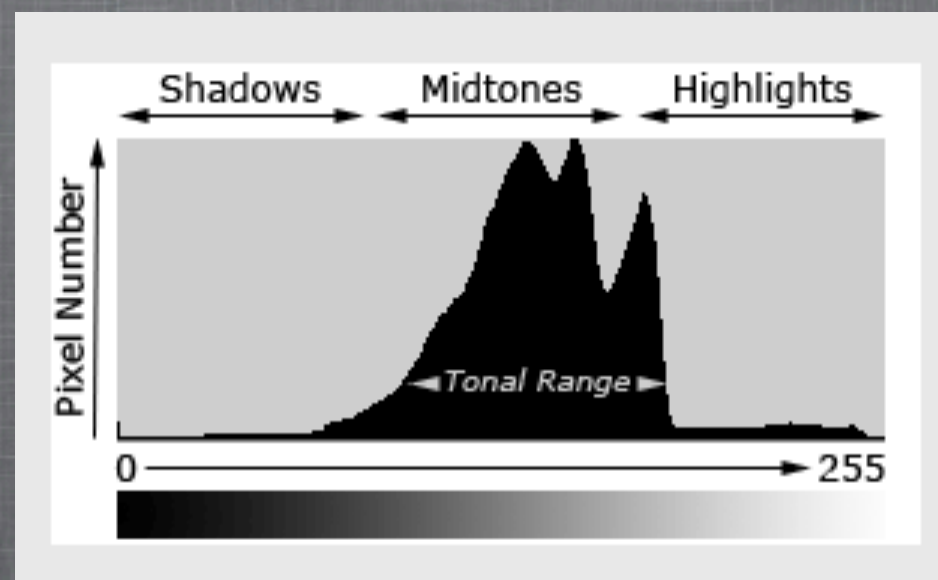
# THE HISTOGRAM



HISTOGRAM ON LCD DISPLAY  
(KNOW HOW TO TURN IT ON)



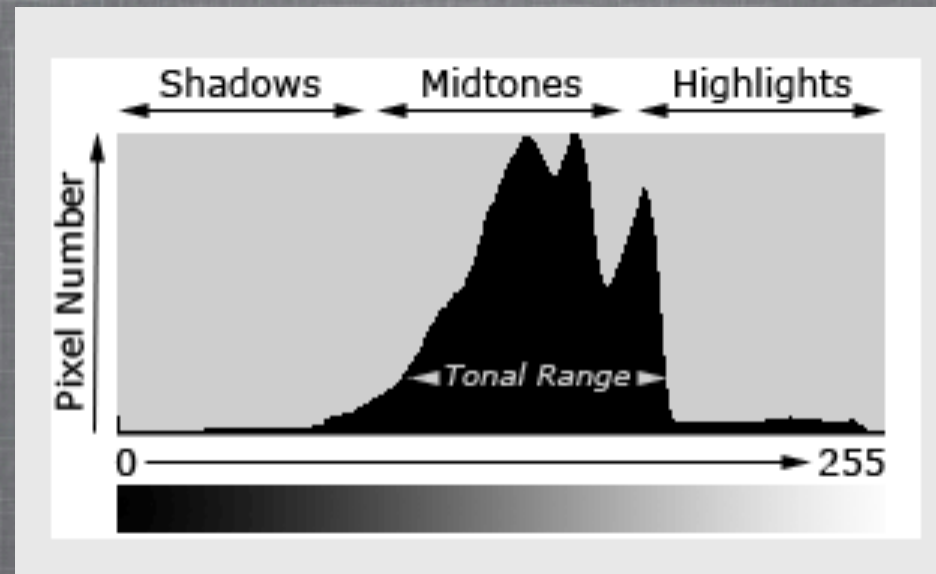
# What does a Histogram Represent?



A graphical representation of the tonal distribution in a digital image.



# How is this information useful?



1. Zone System is used before the shot.
  - a. Evaluate the scene, adjust, shoot, and maybe bracket.
  - b. Cross your fingers (at least I would) until you got your film back.

VS

2. Histogram is used after the shot.
  - a. Evaluate the scene, maybe adjust, and shoot.
  - b. Review Histogram, adjust exposure if necessary, and shoot again.
  - c. Continue with step b until you have a histogram you're happy with so there's no crossing your fingers. You know you have a good exposure.



# HOW TO READ A HISTOGRAM



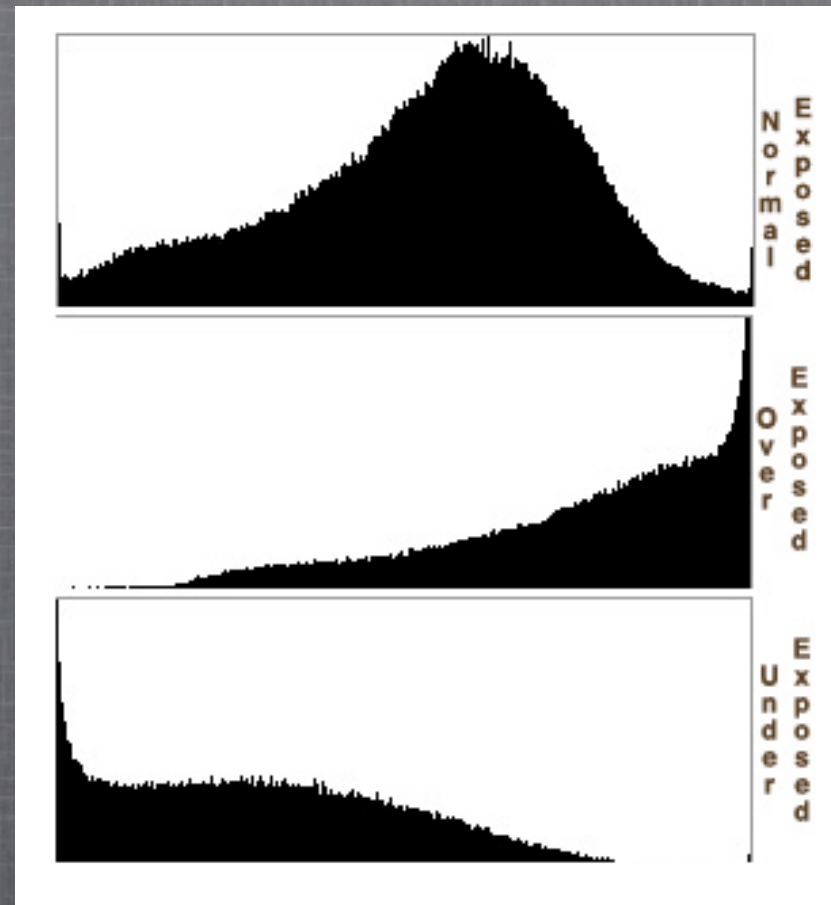
SHADOWS <<<MIDTONES>>>HIGHLIGHTS

HISTOGRAM AS IT RELATES TO THE ACTUAL IMAGE



# HOW TO READ A HISTOGRAM

SHADOWS <<<MIDTONES>>>HIGHLIGHTS



SHADOWS <<<MIDTONES>>>HIGHLIGHTS

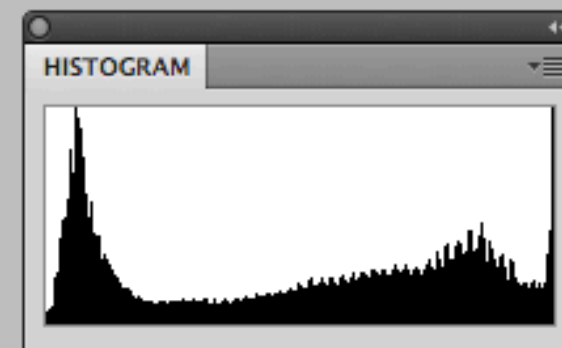
Why can't I just look at my LCD ?



# THIS IMAGE IS OVER-EXPOSED!

CLIPPED HIGHLIGHTS - LOSING DATA

You would want to decrease your exposure slightly and review it again on your camera LCD screen after your next shot.

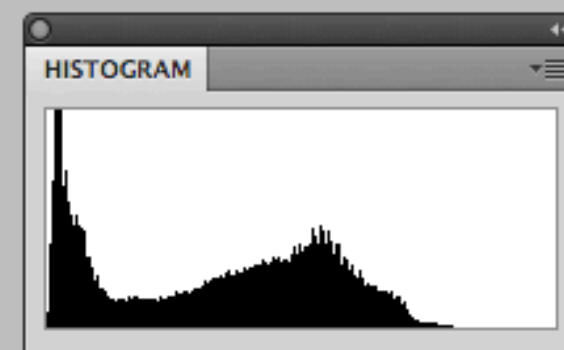




# THIS IMAGE IS UNDER-EXPOSED!

NOT AS SERIOUS AS PREVIOUS IMAGE.

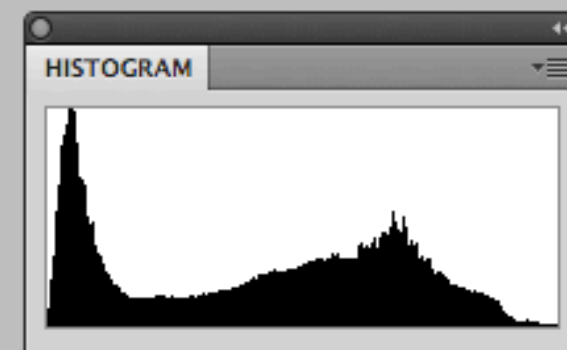
You would want to increase your exposure slightly and review it again on your camera LCD screen after your next shot. Having large empty gaps on the right side of the histogram is usually not ideal.





# THIS IMAGE IS PROPERLY EXPOSED!

There are no blown out highlights. No lost shadow detail to be concerned about. No empty gaps on the right side (highlight side) of the histogram.

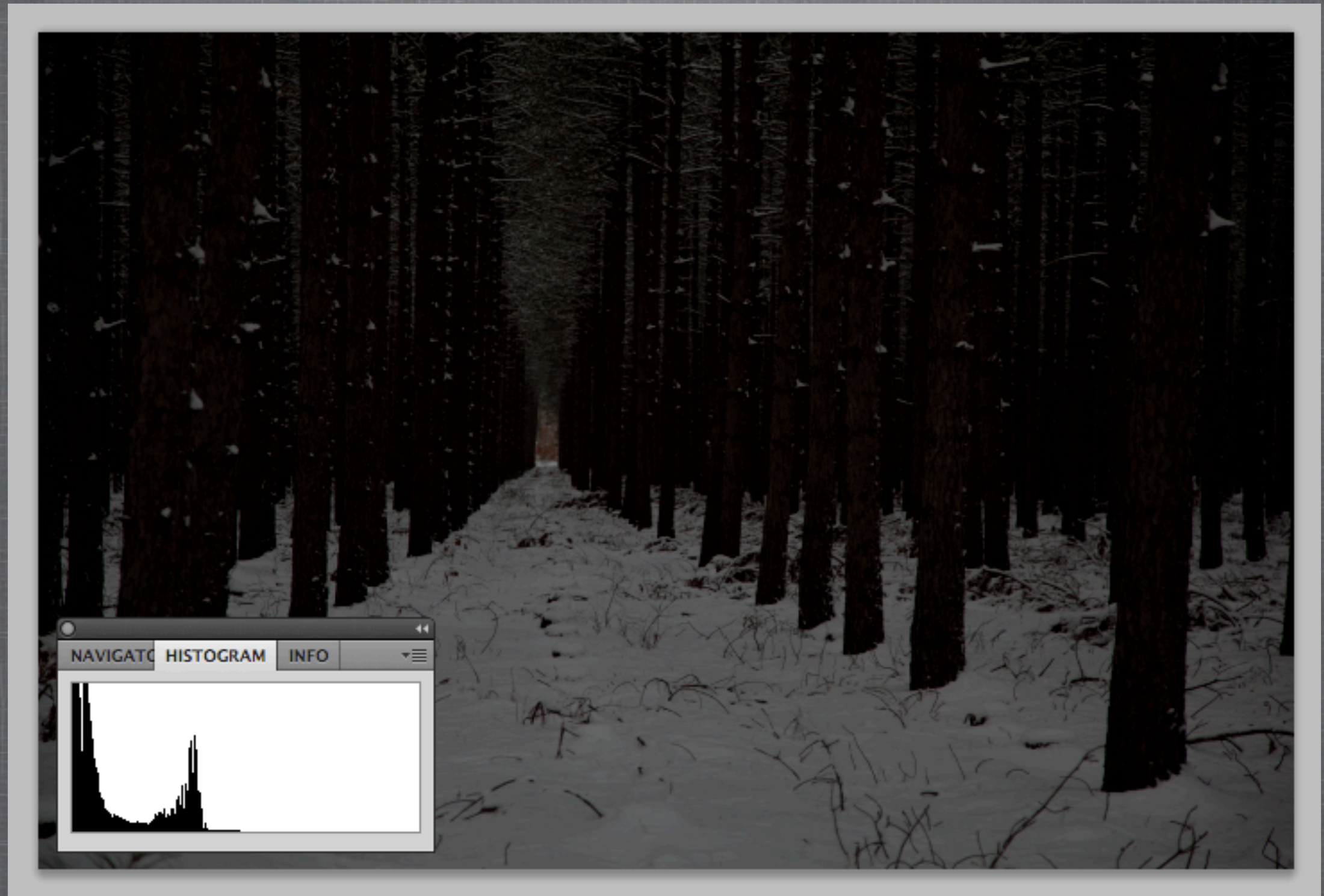






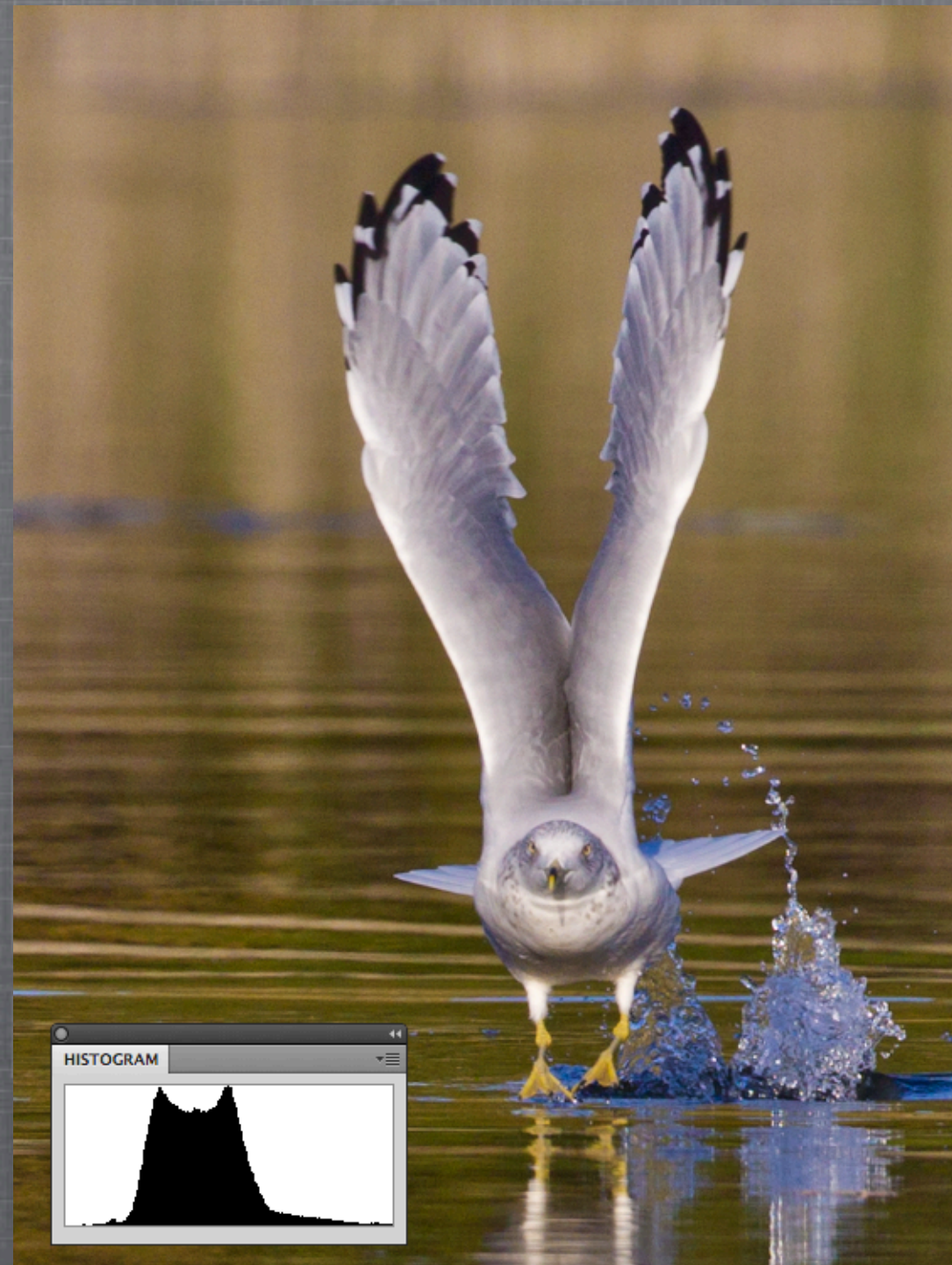
Over Exposed - Highlight detail is lost.





Under Exposed - Losing shadow detail





# Properly Exposed

Canon 1d MK4 + 500mm 1/1600 @ f8 ISO 200  
Minus 1/3 stop exposure compensation.



# SUMMARY

1. Watch for (clipping) particularly on the right side of the histogram (highlights) and adjust your exposure if necessary, and review again.
2. Review occasionally as the lighting conditions change, particularly when the highlights or shadows are very important to the success of your image.
3. Your camera's meter does a pretty good job in most cases but it's not very smart, it works in averages. The histogram will verify how you're doing and help you to correct your exposures as needed.