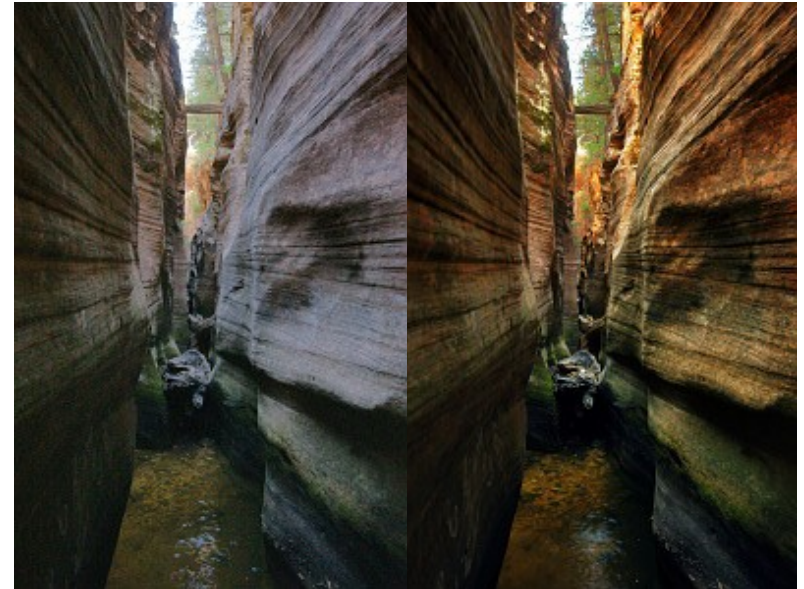


# Canyoneering Photo Tutorial

*I'm not a photo-geek, is this for me?*

- **Basic** (a pre-requisite for this pdf). *ACA\_photoTutorial\_Basic1.pdf*
- **Harder** (this pdf)
  - DSLR (polarizer, long exp.) get the most from your camera
  - HDR (point-and-shoots or DSLR)
- **Difficult** *ACA\_photoTutorial\_Difficult1.pdf*
  - Alpha channels



# Why don't photos look like my eye saw them?

- Color theory – your eye has a dynamic iris much faster than a camcorders, a camera doesn't.
- Your eye is analog and can differentiate millions of each color (some hues more than others).
- Your camera only captures 4,096 shades of 3 colors
  - JPG: 8 bit ( $3 * 256$  levels) = 16.7 million colors
  - Raw: 12 bit ( $3 * 4,096$  levels) = many more colors

# The Right Camera

- DSLR – *easy canyons*
  - in-camera motion compensation, ISO to 64,000 (usable 3200)
  - Heavy, bulky, expensive – careful! They don't like water.
- DSLR hybrid (Canon G10, Lieca) – *easy canyons*
  - Good ISO sensitivity to 3200 (usable 800)
  - Light, compact, better sensor, limited lenses (builtin options)
- PAS (point-and-shoot) – *hard canyons*
  - Bad ISO sensitivity to 1600 (usable 400)
  - Very light, ultra-compact, waterproof, ”disposable”
  - Manual mode cameras are better

# DSLR guidelines

- Polarizer: Longest shot & lowest ISO & F9(+)
- "Set" polarizer to minimize glare to key points
- Shoot +3 DR (dynamic range) – shots will look gray
- "Set" ISO, ~800 low light, 100 for timed
- In-camera stabilization:
  - Long exposure, ~1/4+ sec. hand-held
- In-lens stabilization:
  - Long exposure, ~1/16+ sec. max hand-held
- Shoot 5 brackets (twice for good shots) with DR, you will typically use 2 best in post

# Prep for Print

- Color correct photos = carefree printing
- 4x6 prints silver (1/4 tones will be darker)
- 4x6 prints digital (colors will be brighter)
- Giclee – get color profile or convert to cmyk SWOP
- Web – resize to 800x600 at 72 dpi, sharpen, save as
- Cool tool: Jalbum (creates web photo albums)
- Upload to ACA forums (max 800 Kb)
- Color profile questions will be addressed in Q&A

# Conclusion

- Summary
  - JPG vs. Raw
  - Pick the camera for the canyon
  - Make the most of your DSLR
  - Prep photos for print
- If you're not interested in the next section, thanks for attending

