Focus Stacking of Digital Images

Achieve Stunning Depth and Clarity in Your Photos

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What is Focus Stacking?

- Focus stacking enhances depth of field by merging multiple focused shots
- Focus stacking is commonly used for both for macro and landscape
- Focus stacking can achieve sharp focus across the entire image
- Focus stacking overcomes limitations of the camera's aperture settings
- Focus stacking achieves sharp focus across the entire image
- Focus stacking allows precise control over what is in sharp focus
- Focus stacking is easy and fun!

What affects DOF?

Shallow depth of field means smaller area in focus

1. Aperture: wide open (f/2.8) is shallower than stopped down (F/16)
2. Focal length: longer lenses produce shallower DOF
3. The greater the magnification, shallower DOF
4. Distance: Closer the subject, the shallower DOF
5. Sensor Size: Full frame is shallower than cropped sensor cameras at same aperture and focal length

Your camera may have special features you can use such as Focus Bracketing, In-Camera Focus Stacking, or DOF Preview

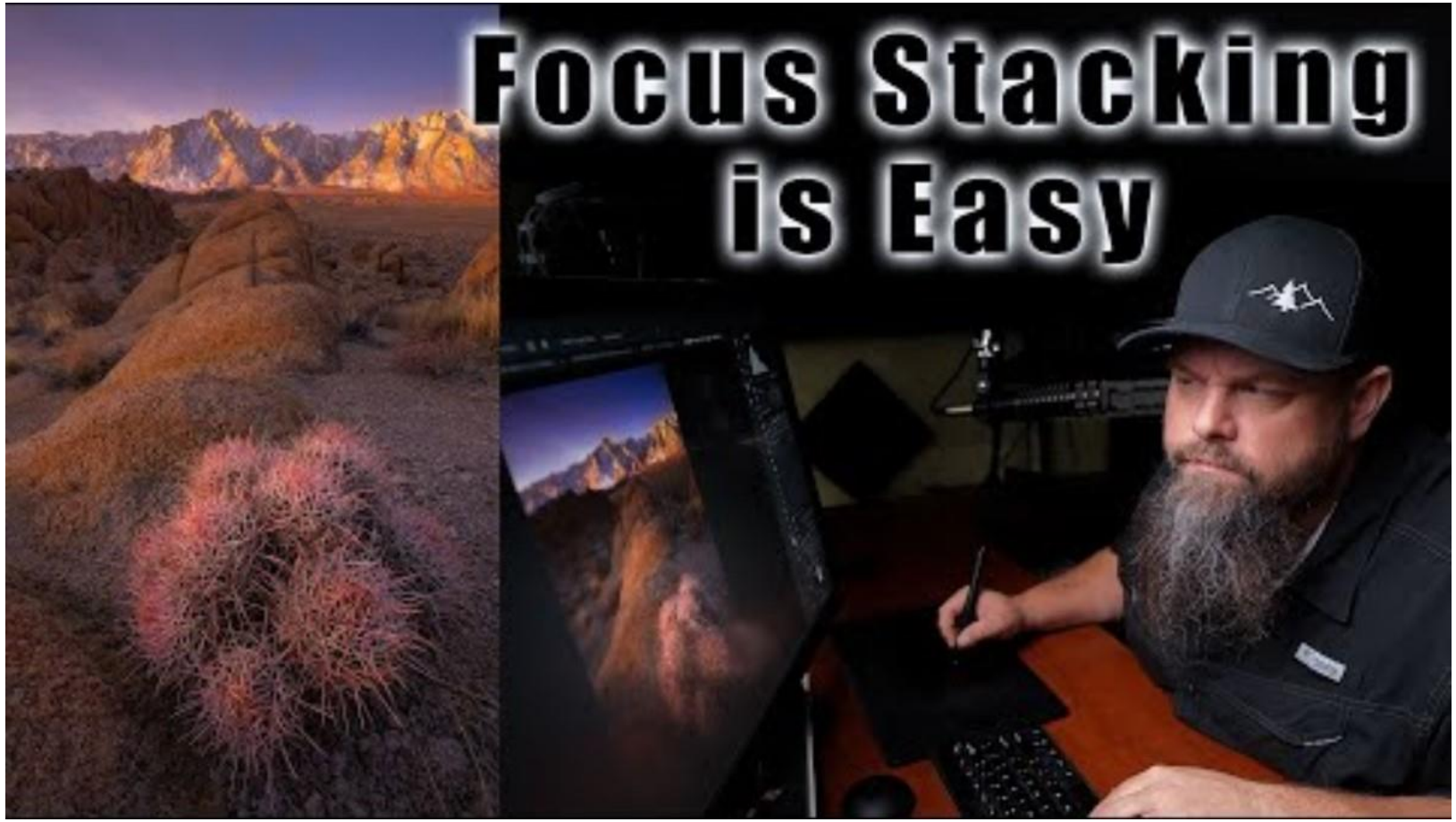
Getting Started

- Stable shooting: use tripod and cable release or self timer
- For Macro:
  - Bellows and extension tubes can bring subject closer
  - Focus Rail for precise and consistent focus adjustments
- Compose the shot and lock the framing
- Manual focus is more precise and preferred (vary only the focus)
- Start with nearest point of subject
  - The closer the subject, the more images needed
- Incrementally adjust focus to cover the entire depth of the subject (overlap focus)

How Many Shots?

- Landscape: 3-6 depending on distance to subject
- Macro: Several to Several dozen. You'll find out….

According to Nick...



Combining the Images (Photoshop)

- Optional: Preprocess images in Lightroom and sync images
- Open the images in Photoshop as layers from Lightroom or Bridge
- Inspect the images for any issues
- Open as Layers in Photoshop
- Optional: Group images and duplicate the group
- Select all images in a group and align them (Edit -> Auto Align Images)
- Blend the Images (Edit -> Auto Blend Images)

Demo