Oreganois had some real winter this year along with the usual linked chain of gray drizzly days. We know how to shoot in it and we do. We know how to find indoor shooting alternatives and we do. We call it paying our wet-weather dues. But it’s so much more fun to shoot when the sun is observable and the temperature is tolerable letting us know that our summer has finally arrived.

When this happens it’s time for EPSers to take a break from meetings and concentrate on having some outdoor fun for a couple of months. We certainly know how to do that, so just like kids in grade school at the end of June we’re gonna run out the door and not miss a minute of our summer recess.

Summer field trips will continue, (check your email), and have some great photographic summer adventures!

EPS Vacation Time
No Meetings in July and August

Long-time members can skip the next article this month, but that’s OK as I’m sure many others skip more than one every month. Skipping an issue is the standard lament of all newsletter editors, yet we persevere knowing there are always the faithful few who do read and make it worthwhile.

The article starting on page 2 saw first ink way back in film days and has been dusted off a couple of times since. So, here it is again upgraded in new pixels to maintain relevancy for beginners who might learn some on-the-road specialized photographers etiquette.

“How to Ride Shotgun in a Photo Car” is timely at the beginning of the photographers high season. Newbies should at least scan the article, seasoned travelers can skip or peruse which is standard for summer reading. No?
How To Ride “Shotgun” In a Photo Car

Back in the days of real cowboys, stagecoaches, and bad guys, a new job was created out of necessity. No sooner did the stagecoaches begin to roll than the bad guys like, Black Bart of the P.O. 8, saw them as mobile paydays that were easy pickins’ way out in the middle of nowhere.

They never did find out who Black Bart was, or for that matter what “P.O. 8” meant in the hand written notes that he/she left behind. (There was speculation at the time that Bart might be a woman.)

However, all the bad guys, and Bart, had to do, was raise bandana and gun, block the road and holler “Halt, or I’ll shoot,” then grab the loot and hightail it outta there. Leaving notes was evidently optional.

The stagecoach companies in retaliation, placed a second man up on the driver’s seat to do nothing but keep a sharp eye on the look-out, and carry a shotgun in plain sight. The “Shotgun” rider constituted travel security of the day. Curiously, there are more duties for “shotgun” riders in today’s photo cars when compared with those stagecoach riders of yesteryear. Luckily today the actual shotgun can be left at home.

When you’re in a photo vehicle with another photographer, (or photographers), the trip should be seen as a cooperative venture. Many well-meaning photographers don’t know that the responsibilities of a shotgun rider can equal those of the driver.

So, here are a dozen suggested shotgun rider responsibilities:

1. **First of all** – you have been afforded the privilege and pleasure of not having to drive. Therefore, just like the guys on the stagecoaches, you can be far more observant of the countryside than can your driver. This is your number one responsibility. Keep a sharp look out. Going to sleep is not an option no matter how dull some of the miles in Eastern Oregon. Always at least offer to swap driving duties every two hours. This will keep both positions alert and productive.

Before the trip, plan ahead. If there isn’t going to be much to see along the way, bring something photo related, or of mutual interest, that you can read out loud and discuss with your driver. A book on tape, or reading questions from a box of Trivial Pursuit cards might also be good, especially if trip time is a day or more in length.

2. **Responsibility number two** – Share the photo gear space in the back of the car equitably especially with additional passengers. Try not to have your gear obstruct access to the gear of others.

You can do this by remembering your high school locker, i.e., store your stuff “back to front” then “stack.” Place your largest camera bag in the narrowest back-to-front orientation close to the door opening for easy access. Then secondary bags go in front (toward the seats) or on top of that one. Tripods should always be completely collapsed and stored back-to-front along side you bag.

If any of your gear is placed crosswise or angled on top of the gear of others, will guarantee that it will be an annoyance to others.

Travel with gear that is light, tight and small as possible. Zippered bags are way better than bags with open tops.

One camera can easily be in your lap or at your feet on the floor while underway. Never drive at highway speed with a camera or other gear on the dash.

For safety, don’t let your gear obstruct the view of the drivers inside rear view mirror.

3. **Responsibility number three** — Be a good navigator. Today this means keep your eye on the real-time GPS map so your driver won’t have to. Know where you are, then relay timely turn information so your driver can form a clear mental map. Be sure to estimate miles or minutes to all

*continues on next page*
Shotgun continued

turns. If you do get lost, (usually in urban or remote rural areas), when you see someone who might be able to give you directions, roll down the window and “ask” even if you are a male.

4. Responsibility number four — You are the radio person. Tune the car radio to mutually agreed upon stations, and find a new one when the old ones fade. Keep the volume at a level that allows easy conversation. Many photographers prefer not to be distracted by any radio at all when serious about finding shots. Discuss this at the beginning of the trip.

If you’re in a caravan with car-to-car radio communication you are unequivocally in charge of staying in frequent touch with the other cars in the group. Don’t let others guess what you are doing and make sure you promptly respond to all inquiries from others especially if you are the lead car. Most of all don’t be a motor-mouth on the radio, but don’t be so intimidated that you can’t have fun making comments that can help everyone stay alert.

Remember, too, to be cognizant of how long your partner or others in the car take to shoot at photo stops. Try not to always be the last person to get set up and the last person to finish. Shooters are far more tolerant about this than non-shooters, that’s why we choose to ride together. Just don’t be rude and always find yourself being the straggle-butt.

5. Responsibility number five – When you see what might be a photo op, a good rule of thumb is, “When in doubt, stop anyway.” When you see a possible photo op, describe out loud what you see. Paint a verbal picture for your driver because he/she has other things to tend to. Describe the details; Foreground, middle ground, background, light and shadows, colors, textures, center of interest, distinctive elements.

Your driver has photo preferences that may not be similar to yours. Learn them and then look for them. You make the call, and stop even if there is some doubt. This is the purpose of your trip. It satisfies the first rule of photography, “Be there!”

Keeping things upbeat and positive all along the way ensures that everyone comes home knowing it was a happy outing.

6. Responsibility number six — Be cognizant of how long your partner or others in the car take to shoot at photo stops. Try not to always be the last person to get set up and the last person to finish. Shooters are far more tolerant about this than non-shooters, that’s why we choose to ride together. Just don’t be rude and always find yourself being the straggle-butt.

7. Responsibility number seven — At many photo locations you’ll be getting back into the car with heavy dust, mud, rocks, pine needles, etc. on your shoes. Remember to sit first and whack your shoes together or tap them on the rocker panel outside before swinging your feet inside. Most drivers don’t mind you dragging stuff into the car when they’re doing the same. But giving your shoes a good whack is a little courtesy that says at least you’re trying. Keeping your feet on the floor mat will be appreciated, and puhleze, never put your feet on the dashboard, with or without shoes.

8. Responsibility number eight — For safety reasons, when the car is moving, the driver always gets gum, candy bars or other wrapped snacks handed to him/her in partially unwrapped, ready-to-eat fashion. A nice gesture is to discuss quantity and type of snacks prior to starting a trip. Offering to provide snacks will just about compensate for all invisible expenses of operating a car, i.e. oil, insurance, normal wear and tear. Homemade snacks are always appreciated, but don’t make them so complicated that you have to make a special stop (unless previously arranged) to eat them. Food is not the most important thing on a photo trip. You’re making this trip to feed your eyes, not your stomach.

9. Responsibility number nine — If you have a nicotine habit, find a photo partner with a similar habit, or make smoke breaks as seldom as possible. Always, always ask if smoking is allowed in the car. If you are so addicted that you have to chew in a non-smoking car, be discreet as possible, have a container with a
Functional Camera Lens Two Atoms Thick?

Researchers from CIC nanoGUNE, in collaboration with ICFO and Graphenea, introduce a platform technology for controlling light with the one-atom-thick graphene material. The experiments show that the dramatically squeezed graphene-guided light can be focused and bent, following the fundamental principles of conventional optics.

Transforming light efficiently into graphene plasmons and manipulating them with a compact device has been a major challenge.

The wonder material graphene, a single layer of carbon atoms with extraordinary properties, has been proposed as one solution.

In order to test whether the two-dimensional propagation of light waves along a one-atom-thick carbon layer the researchers showed that the graphene plasmons focus similar to the light beam that is concentrated with a lens or concave mirror.

The experiments show that the fundamental and most important principles of conventional optics also apply for graphene plasmons, in other words, squeezed light propagating along a one-atom-thick layer of carbon atoms. Future developments based on these results could lead to extremely miniaturized optical circuits and devices that could be useful for sensing and computing, among other applications.

Science Daily 5/26/2014
Crow, Raven? Birdsnap App Uses Photos To ID

Using computer vision and machine learning techniques, researchers have developed Birdsnap, a free new iPhone app that’s an electronic field guide featuring 500 of the most common North American bird species. The App enables users to identify bird species through uploaded photos with a comprehensive website.

Researchers at Columbia Engineering, led by Computer Science Professor Peter Belhumeur, have taken bird-watching to a new level. The free app enables users to identify bird species through uploaded photos into a comprehensive website that includes some 50,000 images. Birdsnap, which also features bird-calls for each species, offers users numerous ways to organize species.

“Our goal is to use computer vision and artificial intelligence to create a digital field guide that will help people learn to recognize birds,” says Belhumeur, who launched Leafsnap, a similar electronic field guide for trees, with colleagues two years ago. “We’ve been able to take an incredible collection of data -- thousands of photos of birds -- and use technology to organize the data in a useful and fun way."

Belhumeur and his colleague, Computer Science Professor David Jacobs of the University of Maryland, realized that techniques developed for face recognition, could also be applied to automatic species identification.

State-of-the-art face recognition algorithms rely on methods that find correspondences between comparable parts of different faces. Birdsnap works the same way, detecting the parts of a bird by visual similarity of 17 comparable parts and makes visual suggestions for how they can be distinguished.

What’s really exciting about Birdsnap is that not only does it do well at identifying species, but it can also identify which parts of the bird the algorithm uses to identify each species. Birdsnap then automatically annotates images of the bird to show these distinctive parts -- birders call them ‘field marks’ -- so the user can learn what to look for.”

The team also took advantage of the fact that modern cameras, especially those on phones, embed the date and location in their images and used that information to improve classification accuracy. Not only did they come up with a fully automatic method to teach users how to identify visually similar species, but they also designed a system that can pinpoint which birds are arriving, departing, or migrating. “You can ID birds in the U.S. wherever you are at any time of year,” Berg notes.

The maps were based on data from eBird, a joint venture of Cornell University’s Lab of Ornithology and the National Audubon Society, and BirdLife, an international network of conservation groups.

Belhumeur hopes next to bring audio and visual recognition together. He also wants to create “smart” binoculars that use this technology to identify and tag species within the field of view.

Source: Columbia University School of Engineering and Applied Science.
Q&A With Tim Grey

Q: How far should I move the black and white sliders in Levels adjustment in the Photoshop?

A: For most images, dragging each slider inward (black slider to the right, white slider to the left) to the first data point on the histogram display is good advice. However, there is a way [to be] a bit more precise.

Hold the Alt key on Windows or the Option key on Mac while dragging the white slider to the left. The image, will generally start off as entirely black, [then drag until] some pixels show colored or white. Then drag [back] slightly to the right just to the point where those pixels disappear again.

Repeat for the black slider. The image will initially appear all (or mostly) white, and color (or black) pixels will [begin to] appear. Drag back to the left until those pixels disappear.

For lower contrast you [may] need to pull one or both sliders back out [and for] stronger contrast bring the sliders in a little.

This clipping preview enables you to make a more informed adjustments in an image.

Q: When noise is minor would it not make more sense not to use Noise Reduction at all?

A: This absolutely makes tremendous sense! Noise reduction, as far as I’m concerned, always represents compromise in terms of image quality. Color noise reduction is primarily related to overall color saturation and a bit of unwanted spreading (or blooming) of colors within the image.

When it comes to luminance noise reduction, the risks are significant. Luminance noise reduction can very quickly degrade overall detail and sharpness in the photo.

Because of these issues, I highly recommend taking a very cautious approach, using the minimum amount of noise reduction that is necessary. It is important not to take things too far.

Since noise reduction can have a negative impact on the quality of an image, I recommend only applying noise reduction when it is necessary. When necessary it can provide a tremendous benefit for the image. However, applying noise reduction when it isn’t necessary will cause more harm than good.

Q: Is there an advantage to converting from 8-bits/channel to 16-bits/channel AFTER processing?

A: None whatsoever. There is virtually no benefit to converting an 8-bit image to 16-bit [even] BEFORE applying adjustments.

An image optimized with all adjustments [while] in 8-bit then converted to 16-bit mode doubles file size with absolutely no benefit to image quality.

Q: What on earth is this and why I should want it?

A: “Gapless On-Chip Lens Design.”

This refers to tiny lenses focusing light on pixels to capture as much light as possible, to increase content and minimizing noise.

The term “gapless” [means] all of those tiny lenses are arranged [so] there is no gap between them. All available light is being focused to the light-gathering portion of each pixel on the image sensor as in the Sony a7S mirrorless camera.
Stolen From The Internet

*Interesting civil engineering from around the world*

*The one above looks more like vegetation engineering, but what the heck it’s an interesting image.*
**What To Know**

- **June 2014**
  - 3 Challenge Night - Theme CURVES
  - 10 Ed. Night, Susan Starr; Histograms
  - 17 Print & Digital Competition night
  - 24 Beginners Q & A – Demo night

**NO MEETINGS JULY & AUGUST**

- **September 2014**
  - 2 Challenge Night - Theme TBA Jun. 3
  - 9 Ed. Night, TBA
  - 16 Print & Digital Competition night
  - 23 Beginners Q & A – Demo night

- **October 2014**
  - 7 Challenge Night - Theme TBA Sept. 2
  - 14 Ed. Night, TBA
  - 21 Print & Digital Competition night
  - 28 Beginners Q & A – Demo night

- **November 2014**
  - 4 Challenge Night - Theme TBA Oct. 7
  - 11 Ed. Night, TBA
  - 18 Print & Digital Competition night
  - 25 Beginners Q & A – Demo night

- **December 2014**
  - 2 Challenge Night - Theme TBA Nov. 4
  - 9 Ed. Night, TBA
  - ONLY TWO MEETINGS THIS MONTH

**Happy Holidays**

**Next meeting Jan. 6**

**Where To Go**

- **EPS Membership Show**
  - A club show will be displayed for the entire month of June in Harris Hall Lobby of the Lane County Courthouse, 125 E. 8th Ave.

- **David Becker Show**
  - Has a show at Soriah restaurant 384 West 13th Ave. June 1 to July 15.

- **Keith Munson Show**
  - A one person show of scenes from the ghost town Bodie, California, in Harris Hall Lobby of the Lane County Courthouse during the month of July from 8-5, M-F.

**Classified**

**Classified Ads**
Free to all EPS members

**EPS sells mats & frames wholesale**

- $6 MATS (16”x 20” OD).
  - Double whites, acid-free surfaces with backers.
  - Center cut with 10”x 15” or 12”x 16” openings.
  - Either size $6 ea. (White mats/black core available only with 10”x 15” image opening, $14 ea.)

- $15 FRAMES (16”x 20” OD).
  - Aluminum, Black or Silver with hardware & glass, $15 each.
  - $2 from each mat or frame purchase goes to EPS.

**Contact:**
Bruce Bittle  541.343.2386

**Do you have a show?**
Send complete details (location, time, theme, etc.)

**Have photos published?**
Send complete details (Publication, date, etc.)

Before the last week of the month to:
<bittled70@gmail.com>

**Legal Stuff**

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Show your membership card to these vendors for nice discounts. Be a good ambassador for EPS each time you receive these discounts by letting these folks know how much you appreciate their support.

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199 East Fifth Avenue, Eugene
15% discount on all matting and framing

The Shutterbug Camera Stores
Two Stores 207 Coburg Rd. & Valley River Center
10% discount on photo accessories and photo finishing

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Corner of 13th Ave. & Alder St.
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160 East Broadway, Eugene
20% discount on printing, matting & framing, Up to 30% on orders over $500