



ELLOW

Perfect day - Soft light - No rain - Big fun

Junkyard, Always Popular Photo Op







"Beautiful Junk Yard Babe"

he annual EPS photo trek to a junk yard last month found a couple dozen shooters looking for any visual composition that might have winning possibilities.

To an average person any junk yard looks like a total chaotic mess, but to photographers they are a gold mine full of nuggets just waiting to be snapped up that others simply can't see.

Thanks to EPS Field Trip coordinator, Adrienne Adam, for choosing one of only

three days of the month that it didn't pour down rain. More pictures on the next page.

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Junk Yard continued:



"Spot Paint"



"No Ice Cream Tonight"



Photos by – **Bruce Bittle**



"Triple Bling"

Long-Distance Field Trip Attracting Big Interest

Plans are quickly being put in place for a spring EPS Field Trip to the Grand Teton and Yellowstone National Parks.

Sixteen EPSers and invited guests have plans in place to be in the parks from the 22nd to the 25th of May which is the prime time for

spring flowers and snow covered mountains.

Motel and RV reservations are still available in downtown Jackson and a tentative travel itinerary to and from has been suggested. However, getting there and coming back are entirely open ended for everyone. This field trip is shaping up to be the best attended long-distance EPS Field Trip in the history of the club. Anyone still interested should contact **Bruce Bittle** (541.343.2386) or **Graham Smith** (541.683.8899) for complete details.

Bruce Bittle



Baby Murres Take Giant Leap Of Faith

On Education Night last month. EPSers were treated to a very knowledgeable presentation by Floyd Weitzel, a retired LCC biology instructor, on birds of the Oregon coast. We learned a lot about one species, the Murres and saw photos of their huge rookery near the Heceta Lighthouse north of Newport.

The very next morning on-line, I found the newest research about the Murres of the North Atlantic ocean in the daily posting of Science Daily. The article corroborated much of what Mr. Weitzel presented and adds considerable additional detail to the life of these remarkable birds.

(The best chance for close-up photos of these birds is at the Newport Aquarium.)

Before they have the wing span to actually permit them to fly, young guillemots (also known as murres) leap hundreds of metres off towering cliffs and flutter down towards the sea, guided by their fathers. Scientists have long wondered why these tiny -chicks make this remarkable leap, hoping to avoid the rocks below them, in what seems an unlikely evolution survival strategy for a species.

It had earlier been suggested that this seemingly death-defying behaviour could be better understood as being, in some ways, a trade-off between the seeming safety offered in the colony and fast growth rates at sea, where more food is available.

But after tracking the behaviour of murre fathers and their offspring using a new kind of state-of-the-art recorders that are now available, sci-



Murre and chick



Murres lay a single egg that rolls in a circle and not off the high cliff where rookeries always locate.

entists discovered that mortality rates were similar between chicks at sea and in the colonies. Moreover, the team discovered that chicks at sea grew at roughly twice the speed of those at the colony, because the murre fathers no longer needed to fly back and forth to the colony to feed them.

Dads work hard - mothers party

Researchers from McGill and Memorial Universities in Canada and Aarhus and Lund Universities in Denmark and Sweden, spent weeks in murre colonies in some of the most remote locations on the globe, in Nunavut, Greenland, and islands off

Newfoundland, where the Arctic summer is short.

The mother must produce an egg quickly and since the Murres have high flight costs for a bird, the female works hard at the front end flying back-and-forth to the colony, leaving her exhausted by mid-summer.

After three weeks of care by both parents, it is the father who then spends five to seven weeks rearing the offspring by himself on the high seas. Meanwhile, the mother of that pair spends her time partying back at the colony, copulating with paramours to choose a potential suitor should her mate not return the next year.

"Nonetheless, we were astonished to see how hard the father worked through late summer, spending virtually every daylight hour diving to feed the chick," says Kyle Elliott, the lead author on a paper that was published online March 8 in The American Naturalist. Elliott teaches in McGill University's Department of Natural Resource Sciences.

The team recorded males spending up to six hours underwater each day to feed the chick, while the female spent only one to two hours feeding chicks each day in the colony.

Making sense of a death-defying leap

"Once you know that there are both higher growth rates for the chicks at sea, and similar survival rates compared with life in the colony," said Elliot, "It then makes sense to see this seemingly death-defying leap as a win-win strategy when it comes to survival,"

Science Daily - March 14, 2017



EPSer Wins "AM" In 4Cs Competition



Photo - Richard Stanton



Photo - Barbara Tricarico



Photo - Gene Davis



Photo - Karen McClymonds

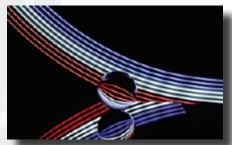


Photo - Gary Thurman



AM Photo by **Stephanie Ames** (EPSer Stephanie enters the 4Cs competition as a member of the club in Florence.)



Photo - Don McIntyre



Photo - Su Zhou

'Put your best thinking, not your face, into every photo you make." The Photo Curmudgeon Top Awards of Merit were judged in March to be the best entries in the interclub digital competition sponsored by the Columbia Council of Camera Clubs. (4Cs)

EPS is not a part of this competition, but may do so again next year that begins in September.

All it takes is one EPSer to step up and take charge of entering our images in this monthly competition.

Help "getting started" will be available to anyone.



Photo - Albert Ryckman



Photo - Scott Shuey



Potential Holy Grail of Solid-State Battery Density

esearchers at University of Maryland are developing game-changing solid-state battery technology, and have made a key advance by inserting a layer of ultra-thin aluminum oxide between lithium electrodes and a solid non-flammable ceramic electrolyte known as garnet.

"This is a revolutionary advancement in the field of solid-state batteries -- particularly in light of recent battery fires, from Boeing 787s to hoverboards to Samsung smartphones," said Liangbing Hu, associate

professor of materials science and one of the authors of the paper. "Our garnet-based solid-state battery is a triple threat, solving the typical problems that trouble existing lithium-ion batteries: safety, performance, and cost."

In addition, the high stability of these garnet electrolytes enable the team to use metallic lithium anodes, which contain the greatest possible theoretical energy density and are considered the 'holy grail' of batteries. Combined with high-capacity sulfur cathodes, this all solid-state battery technology offers a potentially unmatched energy density that far outperforms any lithium-ion battery currently on the market.

"This technology is on the verge of changing the landscape of energy storage increasing the flexibility of how and when energy is used. These solid-state batteries will both increase the safety and decrease size, weight, and cost of batteries," said Eric Wachsman, director of the University of Maryland Energy Research Center.

University of Maryland Energy Research Center

Science Daily, Dec. 20, 2016



Record-setting Flexible Photo-transistor Revealed

nspired by mammals' eyes, University of Wisconsin-Madison electrical engineers have created the fastest, most responsive flexible silicon phototransistor ever made.

The innovative phototransistor could improve the performance of myriad products -- ranging from digital cameras, night-vision goggles and smoke detectors to surveillance systems and satellites -- that rely on electronic light sensors. Integrated into a digital camera lens, for example, it could reduce bulkiness and boost both the acquisition speed and quality of video or still photos.

Like human eyes, phototransistors essentially sense and collect light, then convert that light into an electrical charge proportional to its intensity and wavelength. In the case of our eyes, the electrical impulses transmit the image to the brain. In a digital camera, that electrical charge becomes the long string of 1s and 0s that create the digital image.

While many phototransistors are fabricated on rigid surfaces, "We actually can make the curve any shape we like to fit the optical system," researchers say. "Currently, there's no easy way to do that."

Science Daily, Oct. 30, 2015 Univ. of Wisconsin-Madison



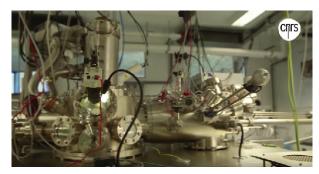
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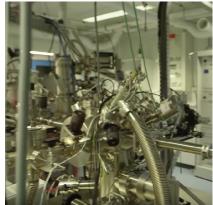
Shutterbug Camera Stores Coburg Road – Valley River Center

Coburg Road – Valley River Center

10% discount on all camera accessories and photo finishing

First International Nano Car Race – 36hrs Non Stop

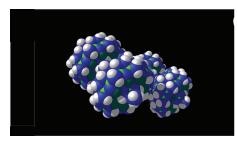






Equipment in Clean-Room Pits • 4 Scanning-Tunnel Microscopes

- Track temp. -250°



April 18-19 or USA Entry

28 5pm

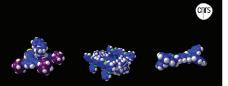
Seems to be some uncertainty about race date.

German **Entry**

> Cars are invisible to the naked eye
> WATCH ON
> YOUTUBE

The Track 1/2 in circle Highly polished gold surface with natural obstacles





Others

Cars Must Be Constructed With **Fewer Than 100 Atoms**

- Estimated top speed 5 nph (nanometers per hr)
- Winner to receive a Nano trophy? Undecided





to me.

Q & A With Tim Grey





There are advantages (and disadvantages) to both approaches, but in general I recommend the Export [because it] is less likely to result in an incomplete backup.

Copying the catalog and your image files to a backup location can be simpler and faster. But in my opinion it also introduces a greater risk of user error. There is a chance that not all photos will be copied, for example, if the user neglected to select all folders. I have also had issues where attempting to copy a large number of folders results in errors at the operating system level.

For users who are completely comfortable managing files and folders at the operating system level, I certainly understand that it may be faster and easier to manually copy your catalog and photos. In general, however, I recommend against this approach.

As always, there is more than one possible answer to a given question and I tend to recommend the more cautious approach that is less prone to error, even if [it] isn't the fastest.

I would point out, that simply copying files from one location to another isn't always the most reliable approach to creating a backup. That is especially true for backing up important files, which is one of the reasons I

recommend GoodSync (http://timgrey.me/greybackup) as backup synchronization software.

When using smart previews [in Lightroom] so I can edit on a mobile device or laptop, will the XMP sidecar files [see] the new [edit] data or do I have to do something to ensure that it gets updated?



If you have enabled the option to have Lightroom automatically update

the XMP sidecar files, those updates will begin as soon as the source image files are available as soon as Lightroom is connected to the Internet for synchronization.

To enable automatic updates, go to the Metadata tab in the Catalog Settings dialog, (under Edit on Windows, Lightroom on a Mac). Then click, "Automatically write changes into XMP" checkbox, and Lightroom will update the source images based on changes you apply in the Lightroom catalog.

It is important to note that features specific to Lightroom (such as pick or reject flags, collections, virtual copies, and more) cannot be saved in this way, and will only exist within the catalog.

But, after you apply an adjustment to an image with the mobile version of Lightroom, then when your mobile device and your computer have been connected to the Internet, the Lightroom catalog will be updated to reflect the changes you've applied as soon as synchronization is possible.



Lightroom Web is something I've never heard of. I know Lightroom and Lightroom Mobile,

but what is "Lightroom Web"?

Photos from devices you have synchronized for access to Lightroom Mobile can

be viewed and updated on any Internetconnected [desktop or laptop computer.]

Once you have enabled synchronization within Lightroom on a desktop or laptop and have installed the Lightroom Mobile App on your mobile device(s), then sign in with an Adobe ID to Lightroom at, https://lightroom.adobe.com you'll be able to review, edit, and update synchronized photos on any web connected computer.

All updates applied via Lightroom Mobile will be synchronized back and reflected within your Lightroom catalog on a desktop or laptop.



Tim Grey currently publishes the monthly on-line magazine PIXOL-OGY. He is a top educator in digital photography imaging, offering clear guidance on complex photo subjects. Tim has written many books, hundreds of magazine articles and is a member of the Photoshop World Dream Team.

[Ed Note: Articles are reprinted with permission & abridged to fit available space.]



What To Know

NEW MEETING LOCATION

Northwood Christian Church 2425 Harvest Lane (Corner of Harvest Lane & Hayden Br. Road, Springfield)

New Meeting Night THURSDAYS

April 2017

- 6 Challenge Night Theme "Liquid"
- 13 Ed. Night, TBA
- 20 Print & Digital Competition night
- 27 Photo Forum Night, Q & A, Demos

May 2017

- 4 Challenge Night Theme TBA Apr. 6
- 11 Ed. Night, TBA
- 18 Print & Digital Competition night
- 25 Photo Forum Night, Q & A, Demos

June 2017

- 1 Challenge Night Theme TBA May 4
- 8 Ed. Night, TBA
- 15 Print & Digital Competition night
- 22 Photo Forum Night, Q & A, Demo
- 29 EPS Board Meeting All welcome

No EPS
Meetings in
July & August
Happy Summer Shooting

Where To Go

Got a show?

We want to know!

Send details (location, time, theme, etc.)

Have your photos been published?

- Magazines
- Brochures
- Newspapers
- Scientific Journals

Send complete details to:

Sittled70@gmail.com>

"If you don't blow your own horn, somebody else will use it for a spittoon."

Ambrose Bierce

Classified

Classified Ads Free to all EPS members



BEST PRICES in town EPS WHOLESALE print show supplies

\$7 MATS (16"x 20" OD).

Double whites, acid-free surfaces with stiff backers.

Center-cut with 10"x 15" or 12"x 16" openings.

\$14 WHITE MATS BLACK CORE Available only with 10"x 15" center-cut opening.

\$17 FRAMES (16"x 20" OD). Black or Silver aluminum, with hardware & glass.

\$5 TRANSPORT BOXES

for framed images. (some assembly req.)

\$2 from each mat, frame or box purchase goes to EPS.

Contact:

Bruce Bittle 541.343.2386 FREE Delivery to club meetings!

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15% Discounts on in-house processing (including slide processing)

Your camera's home Focal Point Photography 161 West Ellendale, Dallas, OR away from home

Equipment Rentals, Trade Ins, discounts on most items Call Mike Lowery, 503.623.6300

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

Red River Paper
Professional quality papers of all types for much less than printer mfg. brands
10% rebate to EPS when ordered directly from our web site

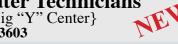
The Shutterbug Camera Stores

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



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411 West 4th Street, Eugene 20% discount on printing, matting & framing, Up to 30% on orders over \$500