EPS dues are due this month.
Just $35 for an entire year of professional level info, image competitions, workshops, speakers, field trips & a whole lot of fun!

The Bellows

This field trip deserves your serious consideration

First EPS 2013 Field Trip In The Works
CHEMULT SLED DOG RACES
January 19-20, 2013

If you’ve never been to a sled dog race, this is the year to go. Plenty of fun, extremely affordable and just an hour or so from Eugene and Springfield.

Bring your cold-weather gear, boots, jackets, gloves and sunglasses. Sunglasses? Right! They have way more sunshine over there.

Carpools can be organized depending on the number of folks who want to join the fun.

Plan for an overnight stay if you’d like and shoot both days. Find accommodations at:
http://www.sleddogchemult.org
Ron Seguin, Field Trip Contact

Yes, this event had to be cancelled last year for lack of snow.
This year is already looking much better.
Watch your EPS email.

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- Monsters & Midgets (New technology) 4
- Tim Grey, Q & A “Sharpening & Color” 5
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THE FIRST RULE OF PHOTOGRAPHY...“BE THERE!”
Letter To The Editor

Hi Bruce,

Just wanted to let your club members know how much we appreciate the new photos that have been coming in. All of a sudden my park photo catalog has boomed, and I have beautiful images of people playing at Dorris Ranch, Kelly Butte, Willamette Heights, Ruff Park, and more. And we have some great shots from Noche de Lotería!

We really appreciate all the time and talent that your members put into these assignments.

Thanks to all!

JANET DONNELLY
Public Affairs Coordinator
Willamalane Park & Recreation
250 S. 32nd St., Springfield, OR 97478

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EPS 2013 Floating Categories

<table>
<thead>
<tr>
<th>January - February</th>
<th>May - June</th>
<th>September - October</th>
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</thead>
<tbody>
<tr>
<td>Long Exposures</td>
<td>Simplicity</td>
<td>Business/Store Front</td>
</tr>
<tr>
<td></td>
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<td>/ Window Display</td>
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<td>March - April</td>
<td>July - August</td>
<td>November - December</td>
</tr>
<tr>
<td>Yin and Yang</td>
<td>(Summer Break</td>
<td>Macro / Close-ups</td>
</tr>
<tr>
<td></td>
<td>No meetings)</td>
<td></td>
</tr>
</tbody>
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2014 Calendar Theme - “Let There Be Light”

I'm not particularly interested in artificial light like city-scapes. However, sunsets, sunrises, sun breaking through the clouds...that type of thing is all fair game. In short, "natural" light or a combination with heavy emphasis on the natural as opposed to artificial. If we used this theme for 2013 we could have a re-run of the 2011 calendar on our hands. So, for the light theme, see the images below.

Thanks, Eric Pearson

Not Like These

More Like These

We have 8 months to shoot for this 2014 calendar, which affords us ample time to shoot for the specific theme “Light.” As soon as we have notice from TechnaPrint of a new theme for 2015 we will post it.

Deadline for 2014 theme “Light” will be the first Tuesday meeting in September 2013.
Upscale Frames Donated For Fundraising

Many thanks to EPSer Tom Bruno for donating twenty expensive frames for purchase by members to help generate funds for club expenses.

These wooden frames were used once for a final show by a local photographer and are in pristine condition. They are all of an unusual size and will need mats cut to nonstandard sizes, but they have been evaluated by a local frame shop at approximately $100 retail value for just the frame and glass.

Eleven have been purchased so far for a members agreed upon price of $30 each, all of which goes directly to the club. The following dimensions denote the inside viewable area with beautifully finished frames measuring an additional 1-3/4” all around.

- 3 each at: 16 1/4”x 23 1/8”
- 2 each at: 15”x 19 1/4”
- 1 each at: 12 3/4”x 19 1/2” 15 3/4”x 17 1/2” 16 1/4”x 19 1/4” 16 3/4”x 22 3/8”

Contact Tom or myself for purchases.

Bruce Bittle
Monsters or Midgets, Take Your Pick

The $2 million Leica lens you’ll never get to see.

This Leica APO-Telyt-R was prototyped and built in Leica’s Solms, Germany factory, where the prototype can still be seen on display. The lens has a bayonet mount for Leica’s R-series manual focus SLR cameras. The body of the lens is 1.2-meters long, and it’s 42cm wide at the end and tips the scales at 132lbs. It goes without saying that this thing requires a very sturdy tripod.

Because the APO-Telyt-R was a one-off production, the exact specs are not available, but some figures are known. The focal length is 1600mm, which means it can be used to take pictures extremely far away in a very narrow field of view, about 1.5 degrees. It also fits Leica’s 1.4x and 2x APO-teleconverters, which boost the focal length to 2240mm or 3200mm respectively.

Toshiba to make Lytro-style camera for smartphones.

Since the release of the incredibly cool Lytro camera, the big question has been, when will we see this kind of technology in our existing mobile devices. According to Toshiba, we need only wait until the end of 2013 to see this tech in smartphones and tablets.

It’s difficult to imagine 500,000 lenses in a 1cm space, but that is exactly what Toshiba claims will happen with their camera. The camera will be able to measure the distance between you and the objects in the shot, and allow you to apply focus after the shot has been taken between those objects.

If smartphone manufacturers pick up the technology from Toshiba, we’ll see a return to the camera bulge that had finally gone away in the second half of 2012, but we’ll also see some very impressive images.

Sigma’s new lens is a 200-500mm f2.8 monster.

Sigma has spent the last twenty years as a third tier lens manufacturer, but suddenly, the photography world is going nuts over Sigma’s new, eye-boggling Zoom lens larger than a human torso.

It weighs nearly fifty pounds, and in addition to covering the 200 to 500mm range at f2.8, it can double the focal length to work at f5.6.

Additional features include a multi-layer coating that reduces glare and ghosting, a specially designed lens hood to block out natural ambient light and a built-in LCD live view when you can’t quite manage to lift the camera to check out the SLR viewfinder.

Needless to say, this much zoom doesn’t come cheap: the cost comes in at $29,000. But what else would you expect?
Tim Grey Q & A

Q: If the human eye does not detect things smaller than 1/200 of an inch, your prints should be in good shape if your image is 300ppi when you print it, meaning a halo can be up to 1.5 pixels with no problem. Your thoughts?

A: I’m not qualified to quantify the limits of human vision. However, I’ve read that the human eye is capable of seeing objects as small as 0.1mm. or about 1/250th of an inch. So let’s assume you’re correct.

Keeping the Radius setting at 1.5 pixels to exclude edge halos is probably true, but this isn’t the only factor nor the most important. In fact, I would consider this extrapolation to be poor advice.

First, sharpening artifacts shouldn’t be invisible. If they are, sharpening is ineffective. In many cases you need to apply exaggerated sharpening to achieve an ideal print. When evaluating the monitor some translation is required to predict how the print will actually appear. That comes from experience.

Beyond the image itself, you need to consider dot gain, which is the spreading of ink on the paper and the viewing distance you anticipate for the print. After all, being able to see an object that is 1/200th of an inch across depends greatly on how far away from that object you are.

[There is little if any dot gain on glossy photo paper, a tiny bit more on matte paper. And most display prints larger than 8x10 are usually viewed at arm’s length or greater. Ed.]

I highly recommend evaluating the image at a 100% zoom setting. However, the actual print will never look precisely the same as on the monitor, because one is emitting light while the other is reflecting light (there are other factors at play as well).

I recommend not limiting the Radius setting. I take an approach that considers all of the many variables. Those factors will often lead to the use of a Radius setting higher than 1.5 to achieve optimal print results.

Q: [in Photoshop] you’ve discussed Selective Color and Hue/Saturation as ways to deal with color issues. I’m hardly an expert at Photoshop, but why not [use] Color Balance?

A: This is an excellent question. It is indeed very important to understand the differences.

In short, the Color Balance adjustment is used to correct the overall color throughout the entire image. In other words, when you apply a Color Balance adjustment, you’re affecting pixels of all colors within the photo.

The Selective Color and Hue/Saturation adjustments, on the other hand, enable you to apply adjustments that only affect a specific range of colors. The Color Balance adjustment doesn’t allow fine-tuning a range of colors [only] all colors.

So, for a basic correction of color for the entire image, Color Balance is the first step. Then use Hue/Saturation or Selective Color to focus an adjustment on just specific colors.

Tim Grey is one of the top educators in digital photography and imaging offering clear guidance on complex subjects.

Tim has written more than a dozen books on digital imaging for photographers. He has also had hundreds of articles published in magazines and is a member of the Photoshop World Dream Team of Instructors.

[Ed Note: These articles are being reprinted with permission.]
Red River Tests True Cost Of Inkjet Prints

Cost of photo printing using inkjet printers as determined by Red River Paper Company, an EPS preferred vendor. The tiny Red River square on the splash page of the EPS web site is a direct link to this vendor’s web site.

Report Summary

This report addresses concerns and arguments about the true cost of ink in desktop photo printing. Using the Canon PRO-1, we conducted a series of print tests to determine how much ink is used in a full coverage 8”x10” print. From that figure we extrapolated ink usage per square inch. The objective is to share a realistic cost per print vision with inkjet users. The choice to pursue photo inkjet printing is in the end an individual economic choice.

Preface

The “true cost of inkjet printing” is a source of constant debate in the media and on web forums. With claims of ink costing five to ten thousand dollars per gallon, it’s not a mystery why the debate continues. Still, inkjet printer sales and printing continue to increase and studies indicate this trend will continue in the short and mid-term. Do the majority of end users simply not care about the cost, or do they know something that is missing from the discussion? This report looks at the cost of ink per square inch for two Canon desktop printers. The goal is to determine the cost for various popular print sizes, and to report those numbers. Further, we hope to spark more discussion and debate about the merits of inkjet printing in light of its unique ability to offer on-demand continuous tone photo reproductions that will last many decades.

Methodology

Two hundred 8x10 prints of Bill Atkinson’s printer test were made. The montage of photos in Atkinson’s image provided around 95% coverage, used a wide variety of colors, and presented what amounts to a worst-case scenario of ink usage. A pre-primed printer was loaded with new and previously unopened ink cartridges. The image was resized to 8”x 10” at 300ppi.

Prints were made using the High Quality setting within a color-managed workflow. Inks were changed only when the printer stopped and indicated an empty tank. At the 200th print, a count was made of ink cartridges used plus an estimate of remaining ink cartridges. From that information, total use of ink in equivalent number of ink cartridges used was obtained. The ink usage was equated to amount per square inch and then converted to specific photo sizes.

Ink cartridge use calculations

• New cartridges were installed at the beginning of the test.

At the end of printing:

• Number of cartridges replaced (including the starting cartridge) was tallied.

• Remaining cartridges were evaluated for amount remaining and thus volume used.

• For final ink estimates, a screen capture was made of the Bill Atkinson’s test image.

Screen grabs of ink levels at the end of test. Blue lines are set at 10% intervals to estimate ink usage of each tank.

continues on next page
Ink Cost  continued

Canon Status Monitor, which shows a display of ink cartridge status. From the screen grab, a graph breaking the ink level into 10% increments was used to make an estimate of ink remaining. From previous experience we observed the printer quitting immediately or just after a cartridge displayed “dry”. That proved helpful in making estimates of ink left per cartridge. When the printer quit then effectively the cartridge had run dry. The final results focus was on actual yields, not questions of lost milliliters in spent cartridges.

Cartridge Equivalent Usage
In order to quantify the total amount of ink used for 200 prints, the number of tanks replaced must be added to the amount of ink remaining in the printer. To describe that number, we created the (CEU) Cartridge Equivalent Usage measure.

To depict the ink used in the remaining cartridges, a chart was created using the graph mentioned above. From that graph the amount of ink used in each remaining cartridge was recorded in percent terms. The percentage for each tank was added, then divided by 100 to provide the CEU of the remaining ink cartridges.

The CEU of the remaining tanks was added to the number of cartridges physically changed. This number was the total CEU for the 200 prints. Dividing the total CEU by 200 gave CEU per 8” x 10” print.

Equation

(Cartridge per Square Inch) x (Square Inches) x (Cost of one ink cartridge) = Ink Cost Per Print

Our calculations are based on the current market price for the Canon PRO-1. Cost $35.99

If you pay more or less for inks, just use the equation below, and substitute your cost.

Sources of Error
We acknowledge that there are potential errors in testing and calculations. They are listed below:

Inaccuracy or accuracy of the Canon Status Monitor could be called into question. From observations during the printing phase however, the display was consistent in its changes downward. Also, the printer stops immediately or very soon after the display shows no ink.

“Real world” variables – The types of images printed can make a difference in the overall ink usage. Also, how often a printer is used will change ink usage. Long periods of being left on, automatic cleaning, and manual cleaning cycles all play a role in ink usage.

Red River Ink Calculations

<table>
<thead>
<tr>
<th>Printer</th>
<th>4x6</th>
<th>5x7</th>
<th>8x10</th>
<th>11x14 &amp;1.62</th>
<th>13x19</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO-1</td>
<td>$0.25</td>
<td>$0.37</td>
<td>$0.84</td>
<td>$1.62</td>
<td>$2.61</td>
</tr>
</tbody>
</table>

EPS Modified Equation for Ink Plus Paper Cost

(Cart per sq. in.) x (Sq. In.) x (Cart cost ea.) - (Recycle) = Ink Cost per Print

Then: (Ink Cost per Print) + (Paper Cost per Print) = Total Cost per Print

Printer Test Details

- Canon PRO-1 (Using 12 Carts)
- Paper: Red River UltraPro Satin
- ICC profile, clear coat AUTO

It is fair to attach a margin of error of +/- 10% to our results.

Conclusion

Red River Paper always assumed and communicated with customers that $1.00 worth of ink per 8”x10” print was to be expected. At current ink prices, that is probably an overestimate. However, given potential sources of error, using the $1 figure could be applicable for those pessimistic of our calculations.

What does this mean then to the photographic community at large?

In our opinion it is and always has been up to the end user. The value one places on print quality, convenience, speed, control, and media availability is what determines if inkjet is right for them. Given that the quality of the average $700 inkjet printer rivals or may exceed a $50,000 photo lab printer, the typical inkjet users indeed have a great tool at their disposal.
Stolen From The Internet
Graffiti or art? Could you have thought of these?
January 2013
8 Print competition night
15 Ed. Night, Walt Biddle, “Photoshop ‘Til You Drop” hands-on how-to workshop
22 Digital competition night
29 Social Night - Q & A, demo night

February 2013
5 Print competition night
12 Ed. Night, Star trails, Dave Putzier
19 Digital competition night
26 Social Night - Q & A, demo night

March 2013
5 Print competition night
12 Ed. Night, TBA
19 Digital competition night
26 Social Night - Q & A, demo night

April 2013
2 Print competition night
9 Ed. Night, Flash photos, Tom Bruno
16 Digital competition night
23 Social Night - Q & A, demo night

May 2013
7 Print competition night
14 Ed. Night, TBA
21 Digital competition night
28 Social Night - Q & A, demo night

June 2013
4 Print competition night
11 Ed. Night, TBA
18 Digital competition night
25 Social Night - Q & A, demo night

• Gilhouse - Starr, Show
  Donna Gilhouse and Susan Starr have a show at the Full City Coffee House (Pearl St. btwn. Brdwy & 8th) for the rest of this month.

• Keith Munson Show
  Keith has a Paris and France show in Harris Hall Lobby of the Lane Co. Courthouse for the rest of this month. Hours 8-5, 125 East 8th Avenue.

• Cottage Grove, Show
  Don Lown is assembling an “all comers” show at the Cottage Grove Community Center, viewable for the next few weeks at 700 East Gibbs Avenue.

• NEDCO Show
  “A Small Look at a LARGE Harvest” How Farming is Changing in the Willamette Valley. An educational photo show by Bruce Bittle, Tom Elder & Keith Munson. Hours are 8-5 week days at 212 Main St., Springfield.

• NEXT June
  EPS all members show
  The Lane County Courthouse lobby has been reserved for an all EPS members show next June. Theme will be “Stunning Landscapes.” This show will go up Monday the 3rd and come down Friday the 28th of June. All members welcome with two or three images matted and framed to “old club standard” (double white mats and black frames).

Do you have a show date for your work? Let us know where and when, so others will know how to find it. <bittled70@gmail.com>

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Inquiries about, or submissions for The Bellows (article deadline — 3rd Tues. for following month publication) may be directed to the editor, c/o Emerald Photographic Society, 1236 Debrick Rd., Eugene, OR 97401, or by email <bittled70@gmail.com>
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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