MICHAEL CLARK
PHOTOGRAPHY

NEWSLETTER

summer 2005

contents

Michael Clark Photography

Summer 2005 NEWSLETTER

Cover: The Colorado river in the Grand Canyon as seen from the Nankoweap Anasazi Ruins.
Above: Nate Mckay high on a near vertical wall ride in Canfield Canyon near Moab, Utah.

Going Digital

The time has finally come...

Last August, I had the honor of sitting on a panel discussion about photography in the outdoor industry. During the discussion, Rob Haggart, photo editor for *Outside Magazine* was asked his thoughts on digital photography. He said flat out, "We will not work with or hire a photographer that shoots digital." Having heard his distaste for digital I was shocked to hear three months ago that *Outside* was not only publishing digital images but Rob was leaning towards digital as opposed to film capture. This is just one example of how far digital has come in the last year. The tide is turning and even the outdoor industry is starting to sit up and take notice.

About this time last year, I thought I would never go completely digital for my 35mm action photography. Film has served me well for quite a few years now and I have no bias between film and digital save for the time I have to spend scanning film for submissions. But that has all changed with the introduction of Nikon's 12.4 MP D2x. I did not expect it to change my shooting habits so much but the first few images completely changed my perspective on 35mm film. 35mm film is now lower quality than what I can get out of my digital counterpart and that was a wake up call. I still shoot medium format film with my Hasselblad but aside from that I have decided to shoot everything else now digitally.

Why you might ask? There are a number of factors. First, it saves me precious time in the office scanning film. Second, the digital images are higher quality (see comparison in my review). Third, I can know that I have the shot while out in the field by looking at the histogram on the back of the camera. And lastly, very few photo editors are asking for film these days. Most editors would rather see a few Jpeg's via email instead of actual film. I have only sent actual film out to three clients so far in 2005. And that is out of hundreds of submissions.

I must say that one of the other major reasons digital is becoming so popular is that it is addictive. As a photographer the ability to view your images immediately is a great help in the creative process. The instant feedback on composition and exposure (via the histogram) is something that film just can't compete with. And now that I have a camera that is comparable to my Hasselblad in terms of image quality in a 35mm package it would be hard to go back. In fact the only roll of 35mm film I have shot since I got the D2x was for the review in this issue. That is not to say that I will not shoot any 35mm film in the future. If a client requests it I will shoot 35mm film but otherwise I will be shooting either digital or medium format film.

This edition of the Newsletter is devoted to helping educate you the photo buyer on digital capture - how and why I think it is better than 35mm film at this time. And also the means of dealing with digital images and the costs associated with doing so. Much ado has been made about pricing for digital capture - both on the part of the photographer and the photo buyer. Now that more and more photographers are shooting digital a fee structure for digital capture is a hot topic and one I'll try to tackle as well.

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The Outdoor Collection

Michael contributes to Aurora Photos exclusive high end Outdoor Stock Archive

Two images from some of Michael's recent stock shoots that are available through Aurora Photos *Outdoor Collection*.

Last fall, Michael was invited to join *The Outdoor Collection*; a brand new collection of stock images "bringing together the highest quality photography in the outdoor realm." The collection is run by Aurora Photos, a high-end editorial stock agency based out of Portland, Maine. The idea behind *The Outdoor Collection* was to bring together the world's finest outdoor adventure photographers and build a stock library of the best of the best outdoor adventure images available. This is the first stock collection of its kind including both outdoor lifestyle and action adventure images of a caliber never before seen in the stock world. Another caveat to the collection is that the most marketable images are also being licensed through Getty Images. So if you have been wondering what I have been up to this spring, I have been shooting up a storm trying to build up my cadre of stock images with Aurora Photos and my other main stock agency Workbookstock.com, who is by the way also licensing images via Getty. Sadly, it seems all roads lead to Getty. If you would like to check out the collection go to http://www.outdoorcollection.com

3rd Annual TOPA meetings: TOPA (Travel and Outdoor Photographers Alliance) formerly Travel_EP, a subgroup of Editorial Photographers is at it again. We are holding our 3rd Annual Series of Workshops and Seminars in conjunction with the Outdoor Retailer Show in Salt Lake City, Utah next month from August 6 - 13. Once again we are having a panel discussion with both photo buyers and photographers from the outdoor industry. This years panel will be moderated by Jose Azel, owner and founder of Aurora Photos. We are also having a photographer get together, a seminar by Amanda Sosa-Stone on marketing, and a Digital Workflow Seminar sponsored by Canon. And for those of you that are in need of digital savvy there is a three day D-65 digital workshop before the show. For more info go to http://www.t-o-p-a.com/summer.html.

Recent Clients: Men's Journal, Outside, Climbing Magazine, Black Diamond, Prana, and Gatorade/Propel Water and Outdoor Photographer.

Dealing with digital 101

A primer on digital basics and starting the digital capture pricing debate

It seems like all we photographers talk about these days is digital. The reason is because the learning curve with digital is extremely steep both for us as photographers and also for our clients. Here are the basics for photographers and photo buyers when dealing with digital:

- Getting digital right begins and ends with good color management. If you aren't looking at images on a calibrated and profiled monitor expect disaster.
- When you profile your monitor, use a color temperature of 6500K and a gamma of 2.2 - this is what 99% of the four color print houses use. Be aware that some photo buyers do not use these settings when they profile their monitors and always let the photo buyer know what your profile settings are.
- Profile your monitor at least once a month especially if you are working on an older CRT monitor.
- For film scans, leave them unsharpened so your clients can get the best image quality when they resize the images. Let the client sharpen the images after resizing them.
- Beyond these basic rules, communicate with the photo buyer anything out of the ordinary you did with the images.

I would encourage all photo buyers to help educate their printers on how to deal with printing digital images - they are the key and as digital becomes more and more popular color management will be less and less an issue - one can only hope!

Now on the topic of how to charge for digital capture, I realize that there are many out there that assume since there is no film digital should be free and hence, cheaper than shooting film. Unfortunately, the reality is just the opposite. It is vastly more expensive for me to shoot digital than film. The reasons are many including the cost of the cameras ($5000 to $8000 for a pro body), memory cards, portable hard drives, fast computers, software, and huge hard drives for storage. And that doesn't even include all of the little gadgets you suddenly need for cleaning the sensor, getting perfect white balance and on and on. They have us coming and going now and on top of that we'll have to replace everything in a minimum of three to four years! I'm not complaining. The new technology is impressive and we have to charge for the extra work we do processing and prepping RAW images for you the client. We have now become the photographer and the photo lab.

My pricing for digital capture varies depending on the project. I have charged anywhere from $50/GB up to $500 per day of shooting depending on the clients needs and budget. If you are a photo editor at a magazine reading this I would start thinking seriously about what you expect to pay for digital capture processing - and remember you no longer have to pay for film scans or film and processing.

I would also highly recommend that you set up an FTP server so photographers can send hi res images directly. This will make it easier for you to get images and save you money on Fed Ex but please realize that we will need to charge for this service since we have to pay for high speed internet and an FTP client to send the images.

I have compiled a list of the basics in the side bar at left. This pricing is not set in stone but it is a starting place for negotiations if it should come to that. I would also highly recommend that you read the digital manifesto written by the photography association Editorial Photographers. It might be a little aggressive in it's language but the finer points are all laid out. You can find it online at: http://editorialphoto.com/outreachep/digital_manifesto.asp.

Digital Fees:

Digital Capture Fee: $50/GB up to $500/day. (includes image download and backup, edit, and RAW processing)

CD Burn: $25

DVD Burn: $35

FTP transfer: $35 to $70 depends on # of hi res transmitted

Post-Production services: $100/hour (done by Photoshop expert)

Inkjet Proof Print: $20

Research Fees: $75 to $150 (depends on size of submission and includes images posted to a private webpage or FTP'd)

Note: On assignments I prefer to negotiate a "Digital Production Fee" that encompasses all expenses. This helps the client know the total cost and protects clients from unexpected charges.

The Nikon D2x

Nikon's new 12.4 MP digital camera opens up a whole new world for 35mm Photography

Nikon's D2x has completely changed my perception of digital photography. There are so many good things about this camera that I have decided to take five pages for this review making this the longest and most detailed review I have ever written for the newsletter. Along with this review, I have also decided to compare the D2x to 35mm and medium format film. Please note that these comparisons are not scientific, my comments here are based on looking at images from all three image formats and comparing large format prints.

First off, I have to say that Nikon did a great job with the ergonomics of the D2x. Everything is laid out very logically and the controls are just about perfectly placed in my opinion. When I first pulled the camera out of the box I was amazed that it felt lighter than my F5 and when you hold the D2x the first thing you notice is the hand grip. It fits my hands perfectly and feels rock solid.

At first using the D2x, the sound it makes when you take a photo seems strange - at least coming from a film camera. With the D2x there is a noticeably short click of the shutter and that is it. Gone is the fake film advance sound I have heard in other DSLR's. In that respect the D2x reacts so quickly, my F5 feels sluggish in comparison and that is saying a lot.

The autofocus is as fast as it gets, in fact Popular Photography even went so far as to say that the autofocus (with Nikon's AF-S lenses) was just a hair faster than Canon's autofocus - that is the first time I have heard that. The autofocus system has 11 focus points that span practically the entire focusing screen and are laid out in a grid pattern. Some might even say that the points are a little too spread out but it is nice to have so many options and to be able to move from point to point so quickly and easily with the focus point selector on the back of the camera. Nikon has also gone to great lengths to make the autofocus as customizable as anyone could wish. In that regard it can be quite confusing if you don't figure out all the possible varieties but the ability to customize the autofocus is a welcome addition.

On the topic of custom settings there are so many options it is dizzying. You can set the camera up ten different ways and switch between the custom settings with the push of a button. Also of note is the menu system and the LCD. First the LCD is the largest of it's kind on any digital camera out there and that includes medium format digital backs. I still find it is hard to get a really good sense of the image on the camera's LCD but it is fairly easy to check for sharp focus. And you can zoom into an image to 200%. Major kudos go to Nikon for the menu system as well. It is laid out logically and with the large LCD it is easy to read even in bright sunlight. Nikon has also added a "last setting changed" menu that is super useful and saves time trying to hunt down that setting you just changed.

A few other features worth mentioning are High Speed Crop mode and multiple exposures. In it's normal mode the D2x shoots 12.4 MP images at 5 fps, but by pushing a button and rotating the thumb wheel you can switch to "High Speed Crop" mode which crops the sensor down to 6.8 MP and increases the framing rate to 8 fps thus creating an incredibly versatile camera. As a result of the cropped sensor you also have a 2x focal length magnification factor instead of the normal 1.5x factor. Hence, my 80-200mm f/2.8 effectively becomes a 160-400mm f/2.8 in high speed crop mode which in

certain circumstances becomes incredibly useful. The viewfinder also has guides (see figure 1 below) so that you can frame in high speed crop mode - these guides also create a "sports" finder so that you can see when the action is coming into frame and going out. And while 6.8 MP might not seem like much it is still about the same image quality as 35mm film from my tests.

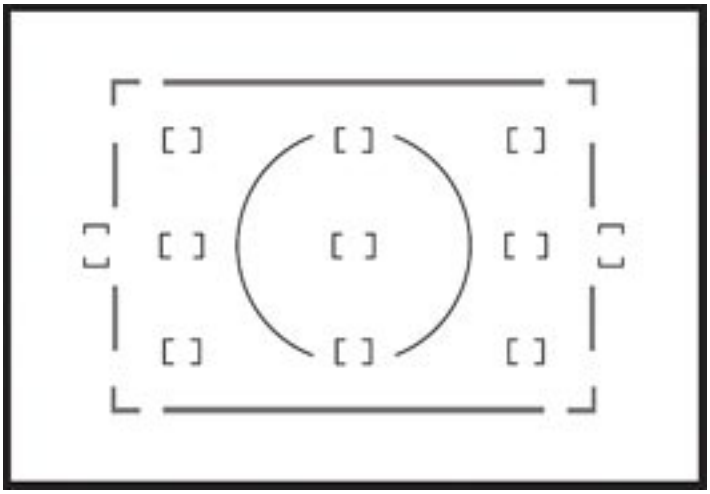


Figure 1: The Nikon D2x focusing screen layout with 11 Autofocus points and the High Speed Crop Mode guides.

Another fancy new feature only available on the D2x is multiple exposures. This is the first and only digital camera that can blend separate image captures to effectively create a double (or multiple) exposure image. And you can also control each image in the multiple exposure individually to create the effect you want.

There are many more nifty camera functions and what not but let's get to what you really want to hear about: image quality. To assess just how good the image quality of the D2x is I compared it to 35mm and medium format film. I did comparisons on screen by blowing up the images to the same size (20x30 inches) from the highest resolution files/scans I could. I also made sample prints of each and compared them since a fine art print is the ultimate comparison and on screen comparisons can be tricky. Please note that I did not favor one camera over another when I performed these tests and I did not try to give an advantage to one camera over another. All cameras were mounted on a tripod and give equal opportunity to excel.

With that in mind I was incredibly impressed by the D2x's performance. As you can see in Figure 2 (next page) the D2x out resolved 35mm film by a huge margin. Even with these test photos only at 72 ppi in this newsletter it is easy to see the lack of detail in the 35mm film image when compared to the D2x image. Granted the film was not scanned on a drum scanner so it might actually show a little more detail than it does here. For this test I scanned all of the film on a Nikon 8000ED at 4000dpi which is very close to drum scan quality so I don't think a drum scan would have changed the outcome. If anything this may be more accurate to what actually gets published since these days most clients are asking for my high res film scans to print the images in their magazines and ads. So to all of you photo buyers out there, please let this reassure you that indeed the digital files from the D2x are superior to 35mm film.

Compared to medium format film shot with a Hasselblad the results are not quite as clear cut - see figure 3 (on page 8). It is very hard for me looking at the prints or at the screen images to say that the 120 film is better than the digital or vice versa. I would have to call it a tie. There is about the same amount of detail in both images, they just look different. The digital has a cleaner look to it while the film created a much more saturated image. I am a little shocked myself I have to say that the D2x is this good! I was pretty sure it was significantly better than 35mm film but I didn't know just how it stacked up against medium format film - I thought it might be close but I didn't think it would be just as good. I must say I think that for really huge prints, upwards of 30 x 40 inches, I think the Hasselblad might still create a better print but that is such a rare occurrence that it doesn't even matter.

So, now we have a 35mm camera that can produce the same resolution as medium format and the D2x is a far more versatile camera than any medium format option out there! I must say I still love the square format and the D2x's sensor size seems a little too rectangular. I'd love it if Nikon would increase the sensor size on the top and bottom just a little to create a 6x4.5 shaped sensor. That would increase the resolution a little and match magazine page sizes better which would mean less cropping of the image. I don't feel the need for a full frame sensor. And seeing how hard my lenses have been pushed at 12 MP, full frame might do more harm than good. *American Photo* reported that the D2x "was noticeably sharper in the corners than the Canon 1DS Mark II" with is full frame sensor. And on that note, almost everyone who has directly compared the D2x and Canon's 16.7 MP 1DS Mark II have found the D2x to hold it's own against a camera with four more MP.

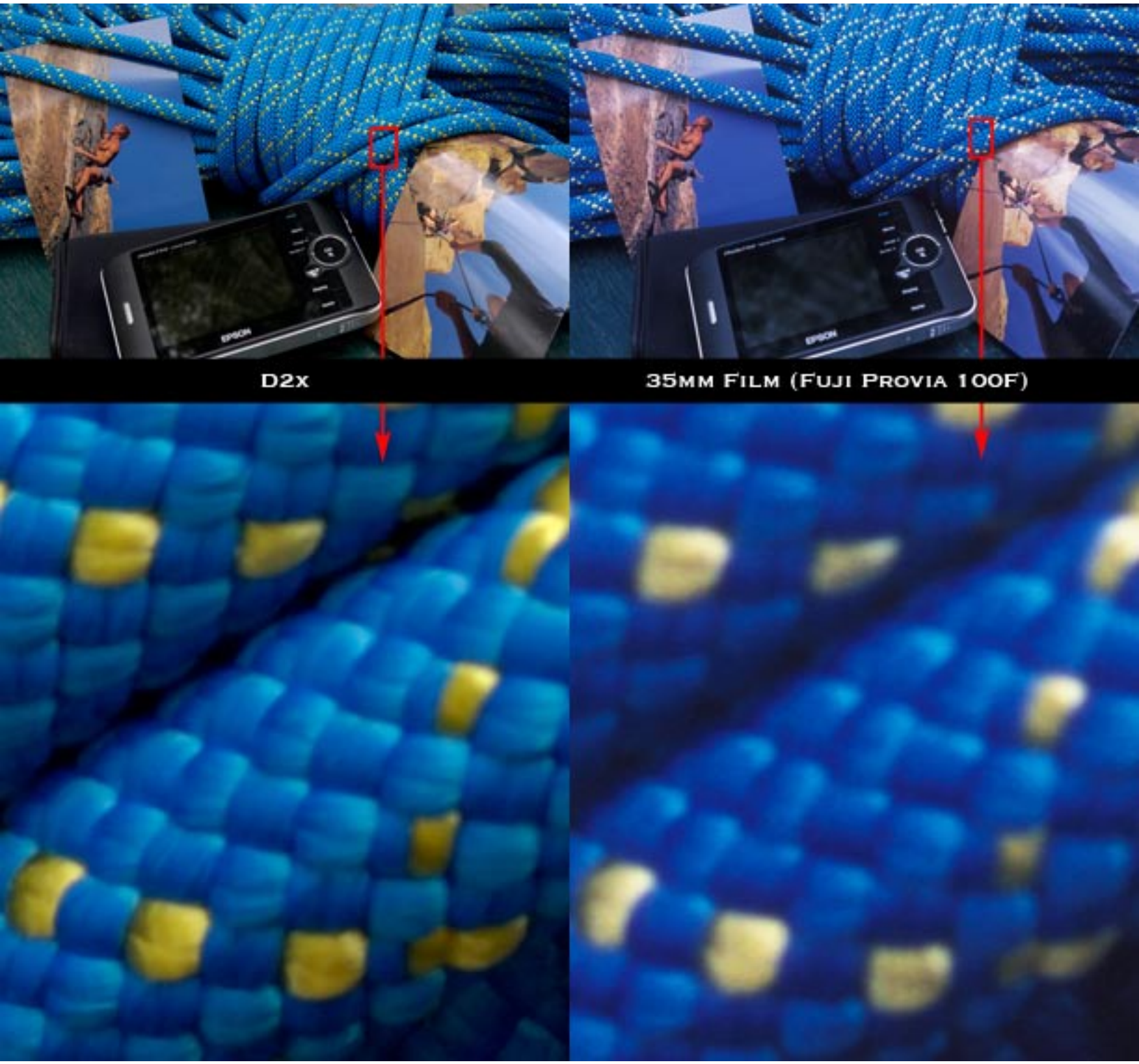


Figure 2 - The D2x vs. 35mm film: As is plainly obvious (even at screen resolution) the D2x blows the doors off 35mm film. I enlarged each image to 20x30 inches so the differences would be magnified and the D2x image on the left still has incredible detail. You can see individual fibers in the ropes sheath with the D2x image while the film image shows no fiber detail. The film's image detail is marred by the film grain. *Test Specifics*: Film image shot on Fuji Provia 100F film at ASA 100 with Nikon F5 at f/8 & 1/30th sec. D2x image shot in uncompressed RAW at 100 ASA at f/8 & 1/30th sec, Adobe RGB, Color Mode II, no sharpening, all other settings default. Both images shot with the 28-70mm f/2.8 AF-S Nikkor (no filter) to allow similar crops and both cameras were mounted on a tripod. No sharpening was applied to either image. Film image scanned on Nikon 8000ED with ICE on at 4000dpi.

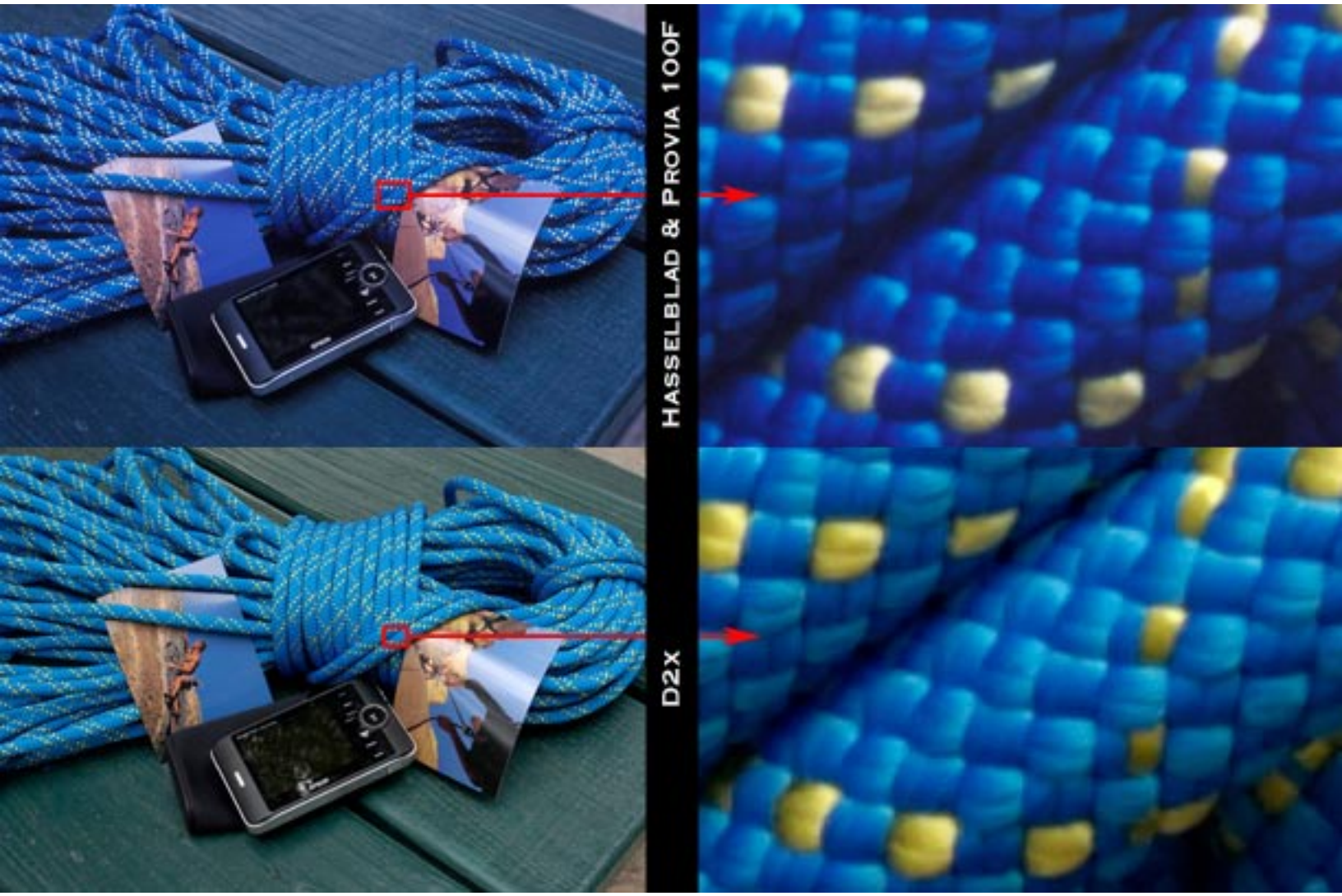


Figure 3 - The D2x vs. Medium Format (120) film: Again both images were enlarged to 30" along the horizontal axis since the Hasselblad image is square. Visible in this comparison the D2x is very close if not just as good as the Hasselblad and 120 film. I'd call it a tie. Of note the D2x was sharper in the corners than the Hasselblad but this might be a result of the greater depth of field inherent in the D2x. *Test Specifics*: Film image shot on Fuji Provia 100F film at ASA 100 with a Hasselblad 503CW and Zeiss 80mm f/2.8 lens at f/8 & 1/30th sec. The film image is cropped top and bottom but not on the horizontal axis. D2x has the same settings as in Figure 2. Both cameras were mounted on a tripod. No sharpening was applied to either image. Film image scanned on Nikon 8000ED with ICE on at 4000dpi.

Another hot topic these days with digital cameras is noise build up at higher ASA settings. Not having directly compared the D2x's noise with the competition I can't say how it fares, but I do know that it has the least amount of noise in any DSLR that Nikon has ever made. I have gone all the way up to ASA 800 on the D2x (it goes to 3200) and even at 800 with a little help from Noise Ninja the images are very publishable for magazine work. For a 12 MP CMOS sensor in a DX format (i.e. smaller than 35mm film) the lack of noise is nothing short of amazing and I think that fact shocked a lot of people when this camera came out. Along those same lines Nikon spent a lot of time in their marketing materials talking about "faithful color reproduction, smoother transitions and color stability." I'm not sure what all that adds up to but the color accuracy of this camera is superb. In all of the test shots with the rope the D2x images are right on in terms of color accuracy while the film images are exaggerated. Part of this color accuracy is the excellent auto white balance. With earlier digital cameras I found that setting a custom white balance in the camera - set by metering off a pure white

litedisc made for a serious improvement in image quality. With the D2x I have yet to run into a lighting situation where a custom set white balance beat the auto white balance setting and that just makes my job easier. I can tell that Nikon has gone to great lengths with the D2x to not only make a high resolution camera but also to make an excellent all around camera. Maybe that is why it took so long for them to bring this machine to market but it was well worth the wait.

I must also say that the D2x is murder on lenses. This camera will find any faults in your lenses and show them to you big as day. I have the best lenses Nikon makes, all AF-S zooms and the sharpest primes and still my 17-35 shows significant chromatic aberrations (i.e. color fringing) when shot at 17mm. Luckily this is easily dealt with in post processing but it makes me wonder how much more resolution can be had with 35mm lenses. I think we are very close to the limit of what 35mm lenses can resolve. And I have also found that the D2x is merciless when it comes to camera technique - at slow shutter speeds you need to have incredibly steady hands or you will see the motion blurs in your images. I now tend to crank up the ASA to avoid this if my shutter speeds creep below 1/200th second.

Conclusion: Medium format image quality in a 35mm body with wicked fast autofocus and color matrix metering that surpasses everything else on the market. The D2x may not be the highest MP DSLR out there but even so many other reviews online show that the D2x is on par with the Canon 1DS Mark II, and some reviews even found that the D2x had higher resolution than it's 16.7 MP competitor. I'm not bashing the Canon - it is a great camera as well. But this just goes to show you that Megapixels aren't everything. There is only one fault I can find with the D2x and I found that out when I went to clean the CMOS sensor. You have to buy a $75 AC cord to access the "cleaning mode" on the D2x. I find it a little chincy on Nikon's part that they don't include that cord with the camera. And further the competition has a cleaning mode that doesn't require an extra cord at all. Maybe it's safer to use the AC cord while cleaning the sensor instead of using battery power but it's a pain to have to cart around an extra cord. Nikon, if you are reading this, please correct this in the next go around. Otherwise, the D2x is the best DSLR I have ever used and easily the fastest and most versatile digital camera on the market. Kudos Nikon - you hit a home run with the D2x.

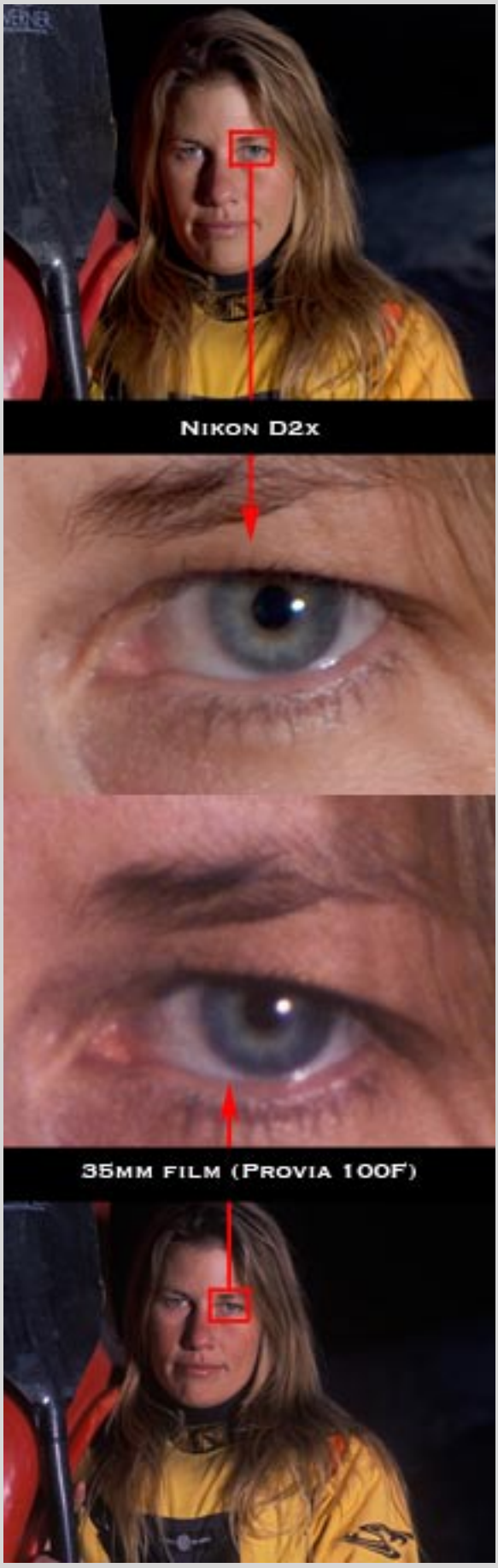
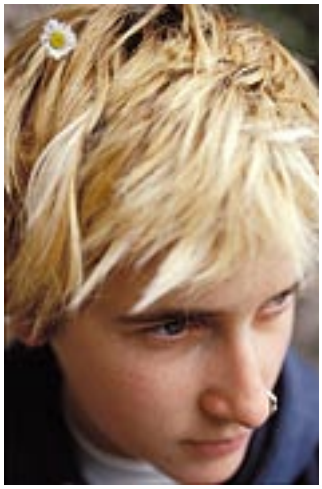


Figure 4: One more 35mm film and D2x comparison. These images were shot with the same settings as Figure 2 though they were handheld using a studio flash outdoors. Still the D2x has significantly more resolution especially apparent in the eyelashes.

[PORTFOLIO]



[PORTFOLIO]

I recently had the opportunity to raft the Colorado River through the Grand Canyon all the way down to Lake Mead. I shot both film and digital; medium format film with a Hasselblad and digital with the Nikon D2x. This was the first extended backcountry trip where I shot predominately digital with no external power sources. Hence I had no laptop, and no way to recharge batteries. To store my images, I used an Epson P2000 pocket hard drive which has a very nice LCD that also allowed me to view and edit images in the field.

I took one extra D2x battery and one extra P2000 battery for the two week excursion and with extra care I never had to use the backup batteries. My cameras were sealed in Pelican boxes to protect them from water and sand and I also

shot in a few rapids with a water proof housing on the D2x. All in all, the digital worked seamlessly and allowed me to deal with the very tricky exposure issues in the dark side canyons. I was warned by many who had rafted the Grand that sand would be a huge issue for my cameras and some were shocked I was taking a Hasselblad. I photographed a little bit on the boat but mostly my cameras only came out when I could protect them to some degree. Because of this I didn't have any issues with the cameras getting sand in them.

My agenda was not only to capture the adventurous side of rafting the Grand Canyon but also to produce some marketable stock images for Aurora Photos whom I just started working with this year and who also licenses photography through Getty Images - the grand daddy of the stock world. Hence, I organized conceptual and portrait photo shoots as often as possible each day. The side canyons were the gems, both in terms of scenery and photography; especially the Little Colorado River, Elves Chasm and Havasu. Most of these images are available through Aurora Photos' Outdoor Collection (www.outdoorcollection.com).

Risky Business

by Michael Clark

A few months ago I photographed some good friends, Ryon Reed and Nate McKay doing some extreme mountain biking (aka Freeriding) at a brand new secret location near Moab, Utah named Canfield Canyon. Having photographed these guys before I knew it was going to be extremely dangerous, not for myself but for the riders. When we got to the canyon, which was basically a set of sandstone bowls dropping into one another Nate gave me the scoop on what he had done and what he wanted to do that day. As I usually do, I encouraged the riders to start off casual and I gave them the lecture "don't do anything you aren't sure you can do." After some casual warm ups, or at least what the riders would call casual - 20 foot jumps off the lip of one of the bowls they moved onto jumping off another drop - this time the lip of a 25 to 30 foot overhanging cave. All of this went off without a hitch and without too much fanfare.

"When Nate told us what he was going to do Ryon and I stood there Silent with our mouths agape. I had never seen anything like this before."

But the *piece de resistance* was an 80 foot near vertical wall ride Nate had done only a few times before (see photo on the contents page). When Nate told us what he was going to do Ryon and I stood there silent with our mouths agape. I had never seen or heard of anything like this or on this scale before. The upper part of the wall was at least 80 degrees, just off vertical and it also had an overhanging cave in the middle of the wall so that if something went wrong Nate would free fall from 80 feet at the top of his arc onto sandstone rock! On his first go Nate hit the line perfectly and it was unbelievable. By the time he dropped into the lower bowl he was going in excess of 80 mph. He thought it was so fun he did it three more times for the camera (so I could get different angles) and on the last ride he almost stalled over the cave - so we called it quits.

On the way out, Nate told us about another drop he had been looking at and we went over to check it out. I looked over the edge and the rock climber in me took over. I was looking down an 80 foot sheer vertical rock face. The bottom was a smooth transition but that wasn't what alarmed me. A small ledge halfway down was the only break in the cliff. I tried to talk Nate out of doing it. If he hit the ledge he would go headfirst all the way to the bottom but he was sure he could do it. At that point I told Nate I wouldn't photograph it even if he did do it and that I was going to hike out. I didn't want to watch someone die. He was still adamant that he was going to drop in and got on his bike. Luckily, Ryon, an EMT talked him into waiting until he could get down there on another day and Nate took his advice. I was very much relieved. But I would not be surprised if he has since dropped that line. I still would not want to see it.

Andy Lyons bracing himself in the middle of Sow's
Hole on the Rio Grande river in northern New Mexico.
Nikon D2x, 80-200mm f/2.8 AF-S Nikkor, SanDisk Extreme III CF Card