

Switching from a Nikon to a Canon System

Text and Photos by James Wiseman (Except as noted)

In November 2004, I decided to switch camera systems from Nikon to Canon and I thought I would share my thoughts and experiences in case other photographers are considering doing the same thing I've done.

I began digital underwater photography with the best-in-class 3 megapixel Nikon Coolpix 990 in an Ikelite housing. About a year later I upgraded to the newer version of the Coolpix – a redesigned body with a 5 megapixel sensor. Both of these compact cameras retailed for under \$1,000 and there were excellent compact Ikelite housings available.

Eventually, I decided that I'd like a camera with interchangeable lenses and a better sensor. At the time, there were only two cameras available in my price range, the Canon D30 and the Fuji S1pro. I decided on the Fuji so I sold all my Coolpix equipment and bought the S1ProDSLR body and a 60mm Micro lens. I didn't think I'd house the S1pro, but I thought it would be a good chance for me to learn about SLR photography – and that I could then sell it to purchase the upcoming D100 or S2pro whilst the S1Pro still had some value. That first DSLR with its no-lag shutter and great image quality served its purpose – it had me hooked! When the Nikon F-mount D100 and the Fuji S2pro were announced, I had a hard time deciding which body to upgrade to, but I decided that the TTL flash-metering and higher resolution made the S2pro a better camera for me, despite the \$400 additional cost.

Personally, I've tried to follow a guideline of not buying a new camera until something on the camera doubles – usually this is the sensor megapixels, but it can also be a two-fold increase in lens and autofocus quality (consumer to DSLR) or a cropped to full-frame sensor (S2pro to Kodak ProSLRn). This guideline keeps me from jumping to purchase a new camera that won't greatly benefit my results.

So why did I go to the trouble of switching from Nikon to Canon? The first thing I need to say is that I didn't switch because I didn't like the camera I owned, I switched because I thought I could do better with Canon for the total underwater system of camera, housing, ports, and lenses. To best explain this, I've put together a short list:

Nikon Delays

For underwater use, there isn't an f-mount camera available that is a significant improvement over the D100 or Fuji S2pro. These two bodies are small and light, but they could both use bigger viewfinders and they are “only” 6 megapixels. Fuji has finally started selling their S3pro with great image quality, but it's bigger, has the same viewfinder and is still a 6 megapixel DX cropped sensor camera. Nikon has delayed and delayed the D2x and it's still (at the time of writing) not for sale. It's a big pro camera, but it still has a DX cropped sensor. Nikon hasn't announced a replacement for



The Nikon D2x has been a long time coming and still uses a cropped sensor

the D100 yet, and even when they do, given Nikon's track record, it will be 6 months to a year before it's for sale and perhaps even over a year before a housing will be available.

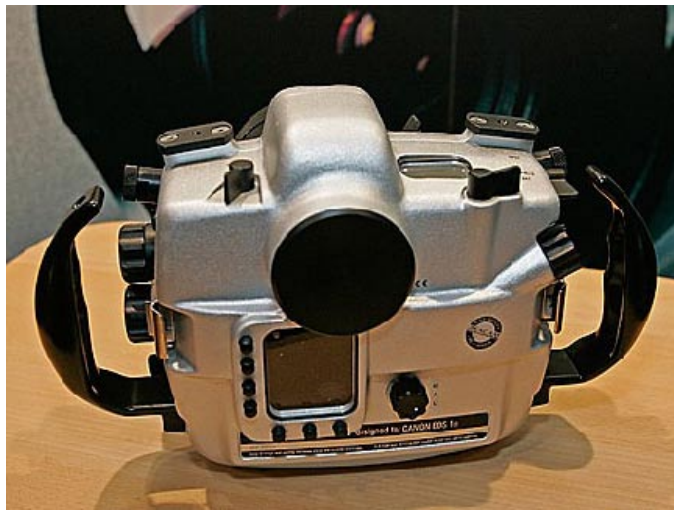
Clear Upgrade Path

Canon's pro camera upgrade path is clear for me, as their 1D series body has not changed significantly since the original 1D was introduced in 2001. Currently, there are four Canon bodies that will all fit in the same housing: the 1D, 1Ds, 1DmkII, and 1DsmkII. I can't currently afford the new 1DsmkII with its 16 megapixel full frame sensor, but I can afford the 8 megapixel 1DmkII. Some day in the future, the price of the 16 megapixel camera will come down and I'll be able to buy one and use it in my housing. The housings for this body are expensive, but the units made by Subal and Seacam are both excellent and I'd expect



Canon full size chip camera bodies have not changed so will fit existing housings

either of them to provide years of service. I think I'll be happily using the 1DsmkII through 2006 – that means a housing purchased for the 1D or 1Ds in 2003 could still be in use 3 or 4 years later – something unprecedented for an underwater digital camera system.



The Seacam housing for the Canon 1DmkII series bodies. Photo Eric Cheng

Camera Body Lineup

Currently, Canon has the consumer 300D, the prosumer 20D, and the professional 1D bodies. The 20D camera is a D100 replacement, with its excellent low-noise 8 megapixel sensor, snappy internal software, and 5 fps shooting ability. I intend to house one of these for my dive buddy to use. A side benefit of switching to the Canon system is that I can use my lenses with their bigger lineup of DSLR bodies.



The Canon 1DmkII and the 20D. The difference in size is dramatic.

TTL Flash Control

With their eTTL2, Canon has finally developed a digital flash system that is on the same level as Nikon's. eTTL2 is a preflash system like the Nikon iTTL, so requires special strobes, but it's been decoded by Ikelite who offers an eTTL2 housing. The housing is small and light and with the eTTL2 circuit and Ike's manual/autofocus port it will be easy to use for great macro photography.

How I Did It

I knew that I was going to have to sell all of my photo equipment as I simply cannot afford to keep two different systems. Surprisingly enough the cost of migrating to Canon was not as expensive as you might think. I was able to sell my Nikon equipment and buy an equivalent Canon system for just over \$1400 extra. One of the reasons is that lenses hold their value very well and by using my knowledge of E-bay selling techniques, I was also able to get the "high end" of the fair market value for my equipment. Here are my four tips for maximising your sales on Ebay:

Take good photographs of your equipment: A good photo of the actual item for sale will beat out a stock photo every time. Set up a "studio" using a nice backdrop – you can even use your strobes and diffusers as studio slaves.

Save all the original packaging and include this in your E-bay photo and when you sell the item.

Don't bundle anything. You will actually get more money selling everything individually than if you try to put together a "package deal."

Selling internationally: Since the dollar is weak right now, overseas buyers – especially from Europe – can afford to spend more dollars on camera equipment.

Body Differences

Canon and Nikon bodies are significantly different, so if you switch, the first couple of weeks of shooting will require an adjustment period. I found that the Canon controls were not intuitive, and I actually had to refer to the manual and a few online resources in order to get everything set up the



way I wanted it. I think the same would be true for a Canon owner switching to Nikon – but I want to mention it here so that people know what to expect.

Some significant changes that I noticed right away:

The lens mounts in the opposite direction to the Nikon F-mount

Canon zoom and focus rings may or may not rotate the opposite direction to Nikon

Canon cameras (save the new 20D) have no directional pad. To scroll down through menus you must use a wheel on the back while holding a button down.

Scrolling through menus and making selections requires that you hold a button down and turn a wheel. Then press a different button, release it, then press and hold it while scrolling again, then release on the selection you want. The directional pad is about 100 times more intuitive and ergonomic.

The “wheel” is fast. Rather than push a left or right arrow to scroll through images to review, just rotate the wheel smoothly and quickly with your thumb.

Some buttons you have to press and hold, others you press and let go. For example, press the Flash Compensation/Metering button and turn the wheel and you change the flash compensation. Press the Exposure Compensation and LET GO then turn the command dial to change the exposure compensation.

Sometimes you have to press TWO buttons while turning a wheel or dial. This is something I’ve NEVER had to do on a Nikon.

No M-S-C switch. If you want to change focus modes, you will have to press buttons or go into a menu. No longer do you have single or continuous focus, now you have AI-Focus and AI-Servo. To learn more about the Canon AF system, check out this excellent article by Chuck Westfall: http://photoworkshop.com/canon/EOS_Digital.pdf

With the 20D, the CF card mounts in the side of the camera, not the back. This is convenient when using the camera in an underwater housing.

Canon calls the AE/AF lock button the “*” button. When set up using the custom function menu on the Canon camera, it can be made to perform any of the functions that the AE/AF lock button can do. On popular use it to set it to AF-ON, in which case, the shutter button has no AF function. When the * button is pressed, the camera locks focus and you can take as many photos as you want, before changing and locking focus again.

Lens Selection:

Because my Fuji S2Pro was a 1.5x cropped camera my Nikkor 105mm behaved like a 150mm. When I upgraded, I took this into account with my macro lens purchases and didn’t get another 60mm equivalent macro lens.

<u>Nikon Mount</u>	<u>Canon Mount</u>
60mm	100mm USM
105mm	150mm Sigma
70-180mm	70-200 New
24-85 AFS	24-85 USM
16mm Fisheye	15mm Sigma
17-35 AFS	12-24 Sigma



My Canon underwater lens selection. The 15mm fisheye is not shown as I have not received mine yet : -)

Macro:

Canon offers a 50mm, a 100mm USM, and a 180mm macro lens. Unlike the Nikon 60mm equivalent, the Canon 50mm will not focus to 1:1 equivalent. An option that many are using is the Sigma 50mm DG EX lens which is comparably priced and will focus to 1:1. On the flip-side, the 100mm USM provides better performance than the Nikon as the Canon lens will allow full-time manual focusing. In essence, with the Canon lens you can switch between auto and manual focusing by pressing a button on the camera (the * button), and just grabbing the focus knob, this means that no AF-MF shift collar is needed with USM lenses. I decided to buy a Sigma 150mm f2.8 instead of the Canon 180mm because of the Sigma’s faster f2.8 rating as well as the fact that it costs over half as much. I had a tough time finding a way to replace my Nikkor 70-180 macro zoom as Canon does not

have an exact equivalent. What they do have is a 70-200 f4 L lens with USM focusing. When used with a +2 diopter, at 200mm this lens will close focus on a frame 50mm wide (in air) when using my 1DmkII and a field 35mm wide when using the cropped sensor 20D. With the diopter mounted, the lens's infinity focus, yields a 120mm frame when using the 1DmkII and about an 85mm frame, when used with the 20D. This is all at about one foot from the tip of the lens which is great for macro. Since a diopter is used, the infinity focus is about 2 feet from the lens tip, which is fine.



The Nikon 70-180 Micro and the Canon 70-200 F4L. The Canon lens has a removable tripod collar, which is not shown. The tripod collar on the Nikon lens is not user-removable.

Wideangle:

Canon makes a 16-35 f2.8 and a 17-40 f4 lens for use on any camera body. They also make a 10-22mm f3.5-4.5 which will at the time of this writing only work on the 300D and the 20D as it will only fill the image circle for a 1.6x crop sensor, and requires a special lens mount/mirror system. I considered buying the Canon 17-40L for use with the 1DmkII and the Canon 10-22 for the 20D, but at a combined cost of ~\$1500, I decided it would be a better idea to get a Sigma 12-24 as it is compatible with both bodies. It's equivalent to a 16-32mm on the MkII and 20-38mm on the 20D. I have read that this lens performs very well if you get one that is aligned properly – Sigma apparently has poor quality control so some of them will show softness on one side or the other. I tried 4 samples at the store and examined the results, then purchased the best one. After testing the Sigma 12-24 in the Seacam Superdome, I think it is as good, or slightly better than the Canon wide zoom.

Users have been reporting that for use on a full frame camera, lenses must be of the highest quality, or the corners will blur. There appears to be a high degree of variability in the Canon wide zooms, with some users very happy with theirs and others disappointed. Canon does not yet offer a



full frame fisheye specially designed for a cropped sensor camera, like Nikon has done with their 10.5DX. On my 1DmkII, a 15mm fisheye yields a very wide field of view, but on the 20D it acts much like a wide angle lens of 22mm with a lot of barrel distortion. With the 20D the photos look much like what comes out on film when you use a Nikonos + 15mm. I can't say I'm unhappy with it, but 20D users would sure benefit from a true fullframe fisheye.

Underwater Support



The Seacam housing for the Canon 1DmkII series bodies. Photo Eric Cheng

Underwater support for Canon film cameras has historically been poor. This changed dramatically with the introduction of Canon's digital SLR camera, the D30. It was one of the first digital SLR cameras used underwater because of its price (~\$3,000) and because UK-Germany made a compact aluminum housing for it. At the time, the dollar was strong vs. the Euro, so it was possible to order one from Germany for a "reasonable" price. It was certainly considered reasonable when compared to the only other digital competition, the Nikon D1x (\$5,000) in a Seacam housing (\$5,000). At the time of this writing, here in the US there are three popular housings available for the Canon 1D series cameras (Subal, UK Germany, and Seacam) and four for the 20D (Ikelite, Subal, UK Germany,



“dive family” and share the ports.

I haven't yet had a chance to dive with my new Canon system, but based on some dives in the pool, I think I am going to be very pleased. As with every new purchase, right now I feel happy with the “latest and greatest” and I'm cautiously optimistic that it will serve me for years to come.

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and Aquatica). I'm projecting that in the next few months, there will be a housing available from Sea and Sea as well.

This gives a good selection of housings and ports, and the fact that Subal and UK Germany will be making housings for both cameras means that if you go with that brand, you can have one of each in your

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