



Focusing on Wildlife Preservation

Dell products help acclaimed photographer Moose Peterson preserve wildlife by serving as the backbone for a powerful and efficient digital workflow

Crouched down in the bottom of a sump pond in Bakersfield, California, wildlife photographer Moose Peterson was poised to capture images of four-week-old San Joaquin kit foxes the very first time they emerged from their den. These “fuzz heads,” as the young foxes are sometimes called, had never before been photographed so early in life. Using his digital camera, a Dell mobile workstation, and a few peripherals, Peterson was able to take the pictures and quickly share those rare images with biologists around the country to help them work toward protecting the foxes from extinction.

Though his stunning photography has been published in more than 130 magazines and 23 books, Peterson prefers to be known for his work toward wildlife preservation, including his participation in the Endangered Species Recovery Program. “I have been working with biologists for more than 30 years to help them protect and preserve wildlife,” says Peterson. “By capturing the wildlife images they need, I can help them make important decisions about habitat management and critter management while helping with the process of having animals listed as endangered.”

Digitizing nature

To facilitate his work with biologists, Peterson has implemented an all-digital workflow. “On a typical project, I capture images with my Nikons and then import images from memory cards to one of two Dell notebooks that I carry with me into the field. I can send images to biologists while I’m traveling and then import the images to my Dell Precision workstation for further processing and finishing when I get home,” says Peterson. “Before these digital technologies existed, that workflow took a lot more time and effort.”

Peterson uses Dell Precision™ M65 and M70 mobile workstations for his fieldwork because of their outstanding performance, rugged reliability, and compact size. “Both of the notebooks are hot-rodded,” says Peterson. “They use Intel Core 2 duo processors, and I’ve outfitted the Precision M65 with 4 GB of RAM and 200 GB hard drives. They give me the processing power and storage space I need to work with digital images while I’m traveling.”

The Dell Precision notebooks also provide the dependability Peterson needs when working in remote locations. “I’m often in the middle of nowhere, running these notebooks off of a solar panel or a car’s cigarette lighter,” says

ABOUT MOOSE PETERSON

Recipient of the John Muir Conservation Award and a Research Associate with the Endangered Species Recovery Program, Moose Peterson is dedicated to contributing to wildlife preservation through photography. www.moosepeterson.com

TOOLS OF THE TRADE

HARDWARE

- Dell Precision™ 390 workstation
- Dell Precision M65 mobile workstation
- Dell Precision M70 mobile workstation
- Dell™ 5100MP projector

SOFTWARE

- Adobe® Creative Suite 3 with Adobe Photoshop®
- DigitalPro4
- Nikon Capture NX



Peterson. "With the Dell Precision notebooks I don't have to worry about finding an Internet connection to download the latest driver or having to call tech support. I plug them in, and they work. That's the kind of dependability I need."

The compact size of the notebooks also helps Peterson travel light without sacrificing processing performance. "I have to cart a lot of gear with me on airplanes and in the field. In addition to my camera equipment, I have two notebooks, power supplies, and peripherals," says Peterson. "Having thin, lightweight notebooks that can still deliver the processing power I need is a huge advantage."

Capitalizing on raw processing power

At home, Peterson relies on a Dell Precision 390 workstation for the rigorous performance required to process raw images and prepare them for publication. Designed for heavy data analysis and graphics-intensive applications, the Dell Precision 390 features a dual-core Intel® Core™2 Duo processor. Peterson has equipped his workstation with 4 GB of RAM and two internal 160 GB, 10,000 rpm hard drives. The workstation is connected to two multi-terabyte storage arrays that Peterson uses to store images.

Peterson worked with his Dell sales representative to select the right configuration equipment for his specialized needs. "The Dell representative was particularly helpful in finding the right video card and the right drivers for the workstation," says Peterson. "I use an LCD-tablet monitor that lets me work with a tablet pen directly on the screen. My Dell representative recommended using an NVIDIA Quadro FX 3450/4000 SDI graphics card, which allows me to run dual monitors with separate color profiles—a very important feature. Not all monitors are created equally. But with this card, I can calibrate these monitors very precisely so what I see on screen is exactly what I'll see when an image is printed."

Peterson learned very quickly how the processing power of the Dell Precision workstation could help him save hours of time preparing images for publication. "The very first day I had my

Dell Precision 390 I needed to deliver about 250 GB worth of images to a book publisher," says Peterson. "I had the Dell Precision 390 up and running quickly, and I let it process all those Photoshop images overnight. The next day I was able to burn a DVD and send it off to the publisher. With another machine, it might have taken several days to do that processing."

The Dell Precision workstation will also help Peterson save time if and when he decides to make changes to the internal hardware components. "If I want to add a card to the motherboard or add a disk drive, it's easy to do," says Peterson. "I don't have to deal with screws or disconnect all the cables in the back. I just unplug the power and remove the swing-out side panel. I can make changes in minutes."

For Peterson, all of these time savings allow him to concentrate on his work. "In some sense, the Dell Precision workstation is helping me make money. I only make money when I'm out taking photographs," says Peterson. "By speeding up processor-intensive tasks and making it easy to change components, the Dell Precision 390 lets me get back out into the field and do my job."

Accessing essential software tools

With Dell hardware as the backbone to his workflow, Peterson has access to a large and rapidly expanding collection of Microsoft® Windows®-based photography applications. "There are more programs available on the Windows platform for photographers today than there ever were before," says Peterson, "Increasingly, creative professionals are discovering that their favorite applications, like Adobe Photoshop, work pretty much the same in the Windows environment as on a Mac. I've always used these applications on Dell hardware, but for other photographers, switching to Dell would be easy."

In addition to using Photoshop for photo finishing, Peterson uses Nikon's Capture NX as the processing engine for raw image files and DigitalPro—a digital asset management tool that Peterson co-developed with wildlife photographer

and experienced software engineer David Cardinal. DigitalPro provides simple ways to quickly load, review, catalog, and publish images. "In creating DigitalPro, we took my conventional workflow and transformed it into an effortless digital workflow," says Peterson. "Images come in, go to a light table, get sorted, and then go into a file cabinet for safe keeping. Most of those tasks can be accomplished in a single click."

DigitalPro also includes some additional features that help minimize the time Peterson spends away from the camera. "We recently integrated a GPS Mapping feature. I use a GPS device attached to my camera that records the exact location a photograph was taken. Someone reviewing the photos in a gallery can then click on a link and instantly see that location on a topographical map—it's a huge benefit for biologists, who need to know where their subjects are," says Peterson.

Preserving a heritage

Dell products not only help Peterson with his own work, they help him share his technical skills with other photographers so they too can contribute to wildlife preservation. In the classroom, Peterson uses his Dell Precision M70 along with a Dell 5100MP projector to display wildlife images in pristine resolution. "The Dell 5100MP is an amazing projector. It has a native resolution of 1,600 by 1,200, so when I show an image on the screen, the audience sees a homogenous, beautiful image, not a bunch of pixels," says Peterson. "The tonalities meld together the way they are supposed to, without rigid lines. When you're a photographer, these subtle differences are extremely important."

Whether in the classroom, at home, or in the field, Dell products allow Peterson to concentrate on preserving a wildlife heritage. "Technology is incredibly important in what I do, but technology is not my primary calling," says Peterson. "Dell products let me focus on what's truly important—for me, that's preserving wildlife through photography."