



Kodak Max Zoom 800

ISO 800 and great image quality? You bet!

by Jack & Sue Drafahl

Photographers now have an enormous choice of films. For some, this becomes a problem deciding which film will provide the best results. Many amateur photographers just want great pictures without worrying about film speed, f-stops or shutter speeds. Kodak recognizes this fact, and has introduced a new film that may be the best solution. Kodak's Max Zoom 800 is a new breed of film designed to cover a wide range of photographic situations without demanding extensive photo technical knowledge.

When you analyze most photographic problem areas, the answer to most situations is to use a higher-speed film. Higher-speed films cover more situations effectively, but the trade-off has always been increased grain and decreased image quality. Now Kodak's Max film technology has changed everything by offering an ISO 800 color-negative film with a fine grain pattern, great image quality, and a wide exposure latitude. This is all possible because of Kodak's patented T-grain technology, and some new image layer

enhancements. Kodak Max Zoom 800 provides a quality level similar to ISO 200 films from just a few years ago.

You may wonder why the word Zoom is included in this new high-speed film's name. The reason is that the film solves some of the problems associated with point-and-shoot zoom cameras. What many photographers don't realize is that these zoom camera's lenses decrease aperture size as the lens is zoomed to its longest focal length—the maximum aperture at the maximum focal length might be in the $f/9$ – $f/11$ range. This translates to more underexposure, more blur in moving subjects, and an overall decrease in depth of field. The solution is to compensate for this loss of light with a higher speed film. To better understand how an ISO 800 film can improve your images, let's look at some typical situations you might encounter.

Opposite page: This photo of a peacock showing off for his lady demonstrates that you don't give up rich color when you use new Max Zoom 800 film.

Below: Max Zoom 800 is great for general snapshotting.

Bottom: Colors look great in flash pictures, too.

Below right: ISO 800 makes it easy to shoot in dim lighting.



Low Light Levels

As the light level drops, the camera compensates to achieve a good exposure by either decreasing the shutter speed, opening the lens aperture, or a combination of both. When the shutter speed drops, subjects that move even the slightest become blurred. When you switch from ISO 200 to ISO 800 film, the shutter speed is increased, and you get 4X the action-stopping power, resulting in a sharper action image.

On the other side of the exposure equation, larger lens apertures due to low light levels decrease the amount of the

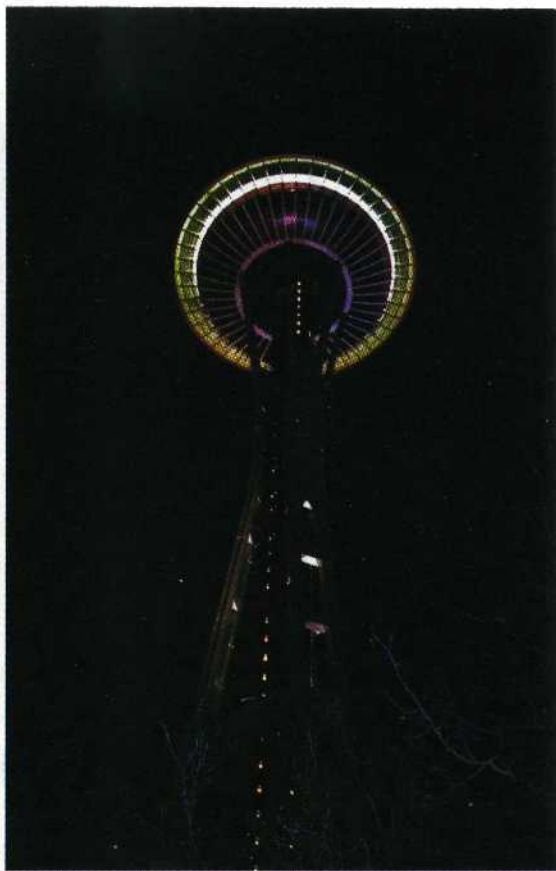


PHOTO BY KRISTY DRAFAHL

Above and right: Nature photography by natural light is a great test for any color film. And Max Zoom 800 passed with flying colors. **Top right:** Night photography requires fast film or a steady tripod. Max Zoom 800 lets you leave the tripod behind, yet you don't give much in terms of image quality for the privilege.

scene which is in focus. This decreased depth of field means that subjects at different points in your photo may not all be in focus. An increased film speed will have a definite effect on the focus range of your scene. For example, if you used a 35mm lens and ISO 200 film to photograph a subject eight feet away, your depth of field in low light might be about 6–11 feet. If you switched to ISO 800 film, the depth-of-field would increase to about 4.5–25 feet, or 4X the distance of ISO 200 film.

Increased Flash Distance

One of the basic laws of physics in photography is the inverse square law. Simply stated, light falls off with the square of the distance. The light from a flash will be 1/16 as strong at four feet from a subject than at one foot. At 5 feet it will be 1/25, and at 8 feet it will be 1/64 as strong. You can see that the light from a flash falls off quickly as the distance increases. If the maximum range of a flash with ISO 100 film is 8 feet, it can be increased to 22 feet with the use of ISO 800 film.

Another advantage of faster films is decreased flash recycle time. Some of the more-advanced flash units on the market use a light cutoff system to save power and recycle time. With lower ISO films, it may take a couple of seconds for the flash ready light to illuminate.

With ISO 800 film, the flash will use less light for an exposure, so it will be ready for the next picture sooner. If the action is fast a higher film speed allows you to take a series of pictures with shorter intervals between pictures.

Another unseen advantage of these more-advanced flash systems is the speed of the flash itself. As the ISO film speed becomes higher and higher, the duration of the flash itself become shorter and shorter. The result is flash images that are more crisp than those taken with lower ISO film speeds.

Putting It to the Test

Testing films from month to month is a lot of fun, but we still need variations in our testing locales or we get stuck in a rut. We decided to split this test into two totally different directions. For the first test, we would give half the film to a group of college kids with no specific instructions. They were supposed to just shoot the film any way they wanted, and we would hope that at least some of the pictures could be used in this article. Knowing college kids, we assumed that some of the images would have to be

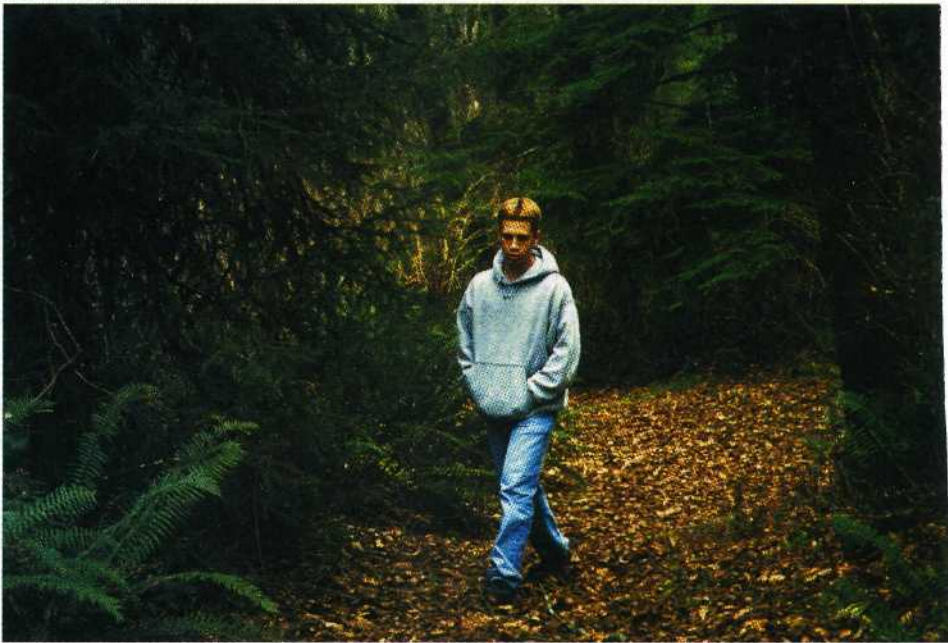


PHOTO BY KRISTY DRAFAHL

eliminated due to inappropriate subject matter, but we still had high hopes for these budding photographers.

As we stared at the box of Max Zoom 800 film, a piece of paper partially blocked part of the box and all we saw was Zoom Film. What a great idea! The zoo would be the perfect place for us to test this Zoom 800 film and we hadn't been in more than a year. Zoos present their own photographic problems, as the animals are usually far away and require long lenses. The lighting can be poor, and the animals seldom stay stationary.

When we arrived at the Portland Zoo, we found it under massive construction. As we surveyed the area, it was obvious that this new design had photographers in mind. No bars, open fields, and very natural environments were being constructed. But we had a film to test!

Even with the construction, there were still many areas that were perfect for our tests. To photograph the larger distant

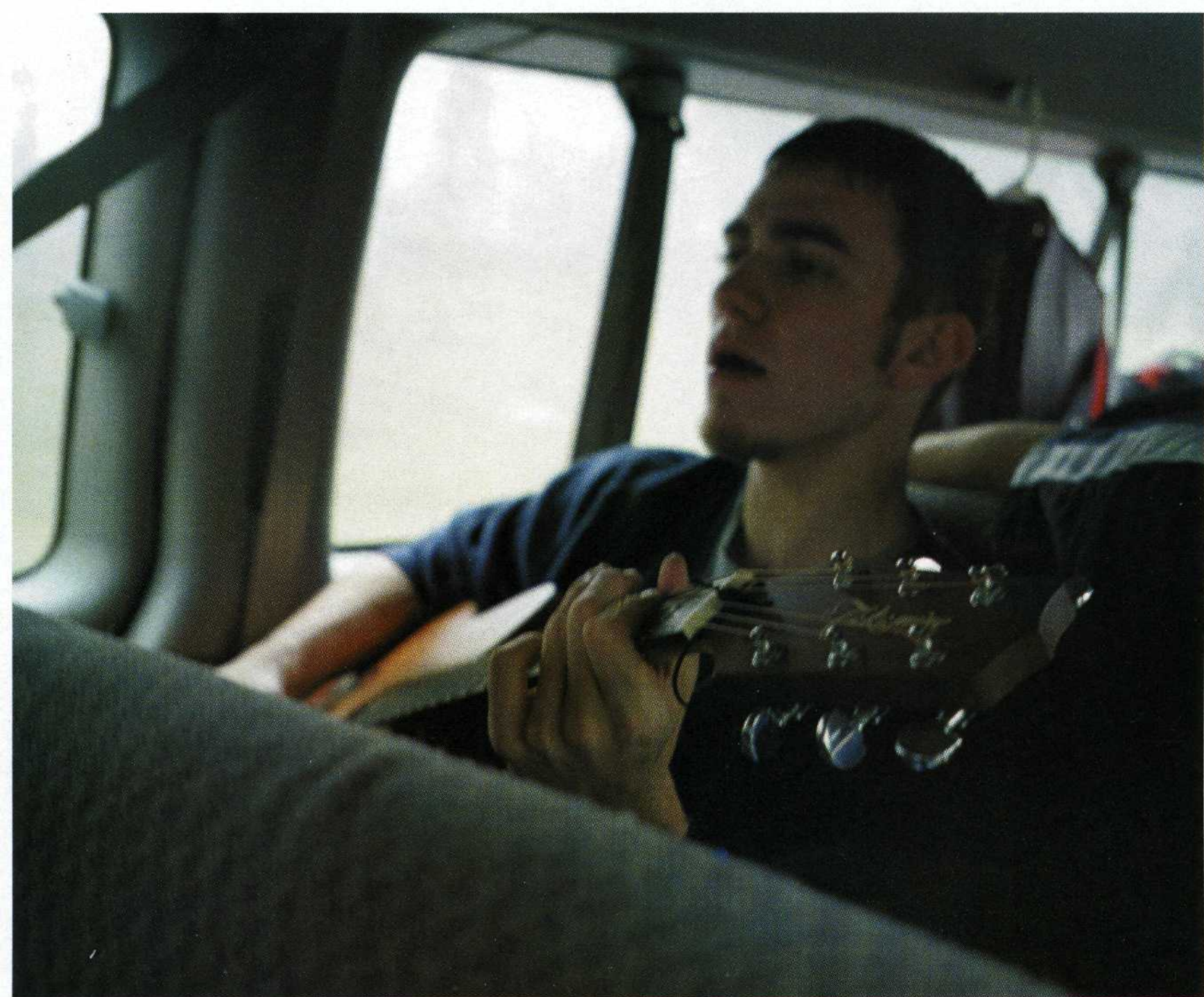


PHOTO BY AARON COTTAM

Our college-kid testers came up with some effective shots in tricky existing light, thanks in part to Max Zoom 800 film.

animals, we used a 75–300mm zoom lens. Even with low lighting and an increased f-stop of $f/6.3$ at 300mm, we were able to get shutter speeds in excess of $\frac{1}{2000}$.

The most challenging test was in a new exhibit full of hundreds of parrots. They flew everywhere and landed on your arms, head, camera gear, or anywhere they could get into trouble. We continued to use the 75–300mm zoom, but added a flash to fill in the colors, and slow down the subject movement. We also decided to use the lens close to wide open in order to eliminate distracting backgrounds. The combination of ISO 800 film and a wider aperture let us shoot faster than one frame per second and still have quick flash recycle. Very impressive, but we almost ran out of film before we got to the other exhibits.

As we were exiting the zoo, the best subject strutted right in front of us stopped. A male peacock, in full plumage,

seemed to be saying, “Take my picture.” Actually, we think the peahen standing behind us was probably more responsible for this vivid color display, but oh well.

Test Analysis

The true film speed is definitely ISO 800, and the film has printable exposure latitude of at least five stops. The color saturation was excellent, and the contrast less than we have seen in previous high-speed films. The grain structure was excellent for an ISO 800 film, and offers a very smooth look. When we enlarged the film to high magnifications, the grain tended to blend or fit together better than we have seen in past films. The result is much cleaner backgrounds, especially when you purposefully keep the background out of focus. This has always been a gripe from wildlife photographers, since many of their images require soft backgrounds.

The images from the college kids definitely challenged this film. With limited photo knowledge, they were successfully able to document their college life. They encountered some very poor lighting situations, yet their prints looked like prints from ISO 100 or 200 film. The higher speed film allowed them to shoot in many situations where ISO 100 films couldn't compete. They were all pleased with their images, and are anxious to take more pictures as the school year progresses.

One thing we know for sure is that Kodak keeps making it easier to take better pictures. The college kids will attest to that with a high five. If you want to get the most out of your zoom camera, give Kodak's Max Zoom 800 a try. We think you'll be impressed with its performance.

For more information, contact Eastman Kodak Co., 800/242-2424; on the Internet www.kodak.com. ■