



*A leopard eyes the camera in the JungleWorld exhibit. Taken at ISO 1000, f/4.5, 1/80 second with a 300mm lens.*



**The Bronx Zoo**



# Why It's Worth a Photograph

The Bronx Zoo, just a short trip north of Manhattan, is a great place to take photos. Over 4,000 animals — including many endangered and threatened species — live on its 265 acres. The zoo has a focus on naturalistic habitats both indoors and out, so you can photograph animals including tigers, rare snow leopards, and bears in such a way that people viewing your photo won't be able to tell that it was taken at a zoo. Whether you just plan a day trip or combine it with a visit to the neighboring New York Botanical Garden, the Bronx Zoo is an enjoyable and exciting photographic opportunity.

## Where Can I Get the Best Shot?

The Bronx Zoo has many photo opportunities. The best locations to visit first are the Zoo Center, Big Bears, Congo Gorilla Forest, JungleWorld, Tiger Mountain, and the Sea Bird Aviary.



The best vantage points from which to photograph the Bronx Zoo: (A) Zoo Center, (B) Big Bears, (C) Congo Gorilla Forest, (D) JungleWorld, (E) Tiger Mountain, and (F) Sea Bird Aviary. Other photo ops: (17) New York Botanical Gardens.

## Zoo Center

Originally known as the Elephant House when it opened in 1908, the Zoo Center is one of the original six Beaux-Arts style buildings designed for the zoo. This large, heavily ornamented building is the gateway to other original zoo buildings of Astor Court.

The Zoo Center hosts small exhibits and only a few animals, but the outside is a beautiful sight. It is flanked on the south by two large rhinoceros statues and often some roaming peacocks. A telephoto zoom lens lets you capture the entire building from a distance or isolate some of the intricate details (see Figure 1.1).

## Big Bears

Polar and grizzly bears live next door to each other in the Big Bears exhibits. The grizzlies' enclosure includes swimming holes and a high ridge where the bears can play and patrol. The naturally aquatic polar bears spend a lot of time in their pool. Both bear exhibits offer excellent photo opportunities whether the bears are lounging, playing, or waving to the crowds.

Although you can get closer to these animals than you ever might in nature, a telephoto zoom or super-telephoto lens is still going to be your best bet to get a close-up shot of these creatures (see Figure 1.2).



Consider renting gear if you want to try new equipment, such as a super-telephoto lens. Whether you want to try something before buying or only have an occasional use for an expensive piece of gear, local or online rentals are a great option. Make sure to give yourself enough time to practice with the rental gear if you have never used it before.

- 1.1 A large stone elephant head adorns the Zoo Center (see A on the map). Taken on a wet, winter afternoon at ISO 1000, f/5.6, 1/80 second with a 70-200mm lens.**







**1.2** A polar bear relaxes by his swimming hole on a late winter afternoon. Taken at ISO 400, f/6.3, 1/400 second with a 300mm lens and 1.4x teleconverter.

## Congo Gorilla Forest

This 6.5 acre rainforest is home to more than 20 western lowland gorillas. The outdoor exhibit takes you through a range of views, from the forest floor to treetop lookouts. During colder months you can still photograph the gorillas in their indoor habitat, but the warmer months bring them back out to the forest environment.

Bring your telephoto to super-telephoto lenses to capture the gorillas up close (see Figure 1.3). A standard zoom lens lets you create images of them amongst their families.

## JungleWorld

The indoor JungleWorld exhibit re-creates an Asian jungle with over 800 animals on display. This warm and humid environment is home to an army of assorted apes, tapirs, and a variety of jungle insects.

A telephoto zoom lens is a great choice here, because you can get close-up images when fully zoomed in or include a few animals in the frame at the short telephoto end (see Figure 1.4).



**1.3** A gorilla in repose at the Congo Gorilla Forest (see C on the map). Taken at ISO 2000,  $f/4$ , 1/30 second with a 300mm lens.



**1.4** An ebony lemur hangs out inside JungleWorld (see D on the map). Taken at ISO 1600,  $f/4.5$ , 1/320 second with a 300mm lens.



## Tiger Mountain

Tiger Mountain showcases not only the endangered Siberian tiger but also the zoo's enrichment program. The keepers use toys, training, and games three to four times a day to keep the tigers in shape and stimulated.

Although you can get relatively close, a telephoto zoom or super-telephoto lens is your best choice, so you can fill the frame with your subject (see Figure 1.5).



The feeding and enrichment programs are a great time to visit an exhibit. Arrive 15-20 minutes before the scheduled start time because the animals are often most active when they know feeding or play time is coming. Check the zoo's Web site for daily schedules and incorporate them into your plans.



**1.5 A tiger prowls at Tiger Mountain (see E on the map). Taken at ISO 400, f/7.1, 1/500 second with a 300mm lens.**

## Sea Bird Aviary

Next to the indoor Aquatic Bird House, the outdoor Sea Bird Aviary is home to Magellanic penguins and other birds native to the Patagonia region of South America. The penguins swim and walk across the lands and are very active at their daily feeding time. The whole area is enclosed in netting with many birds in flight.

This exhibit offers a spectacular opportunity to practice avian photography, a popular and challenging photographic discipline (see Figure 1.6).



**1.6** Inca terns in the Sea Bird Aviary on a blustery winter afternoon (see F on the map). Taken at ISO 640, f/2.8, 1/1250 second with a 70-200mm lens.

## How Can I Get the Best Shot?

Just as the eyes are the window to a person's soul, the same is true for animals. An image with the eyes in perfect, sharp focus draws your viewer's attention every time. To create a more natural composition, shoot at the animal's eye level if at all possible. Also, because you generally can't comply here with the adage of *take two steps closer*, you want to consider a longer lens than you might initially expect. Your subject should fill the frame, and at most exhibits, you need a telephoto zoom lens to accomplish this.

When creating your composition, be extra vigilant for intruders in the edges of the frame. You want to create a shot that looks like it could have been taken on a safari, not in a zoo. Finally, the intangibles may be the biggest challenge. All the animals at the zoo have a mind of their own. Although you may have a photo you want to take, a gorilla may have another idea altogether! Lots of patience is required if you want the perfect shot (see Figure 1.7).

## Equipment

A number of lenses are available to create great images at the zoo. Tripods and monopods are also allowed at most exhibits.



## Lenses

There are many choices available when selecting a lens or lenses to bring to the zoo. While many options are outlined below, including some more expensive options, good photos are available at the zoo with any camera and lens combination.

- ▶ **A standard zoom lens in the 24-105mm range.** A standard zoom can be useful for shooting some of the indoor exhibits. These lenses often offer a close minimum focusing distance, which is great for animals just on the other side of a glass enclosure. Their small size and weight make them easy to keep in a bag when not in use.
- ▶ **A telephoto zoom in the 70-200mm range.** A standard telephoto zoom lens in the 70-200mm range is a great place to start your quest to get close to the animals. These lenses are often available with image stabilization, which means they can be handheld even at longer focal lengths that might otherwise require a tripod.

There are longer telephoto zoom lenses available from most manufacturers as well, up to 400mm at the longer end and 500mm if you go with a third-party brand. These end up getting a bit more difficult to handhold, requiring a tripod or monopod to create sharp pictures.



**1.7** After half an hour, this bird at the Northern Ponds finally wandered close enough for a full-frame headshot. Taken at ISO 640, f/4.5, 1/2000 second with a 300mm lens.

- ▶ **A telephoto or super-telephoto prime lens.** Beyond 200mm, consider a prime lens instead of a zoom. These tend to have larger apertures than equivalent zoom lenses, offering a faster shutter speed and better background blur, or *bokeh*. You can find reasonably priced lenses for the non-specialized professional available up to 400mm, although they are still not inexpensive. Consider planning ahead and renting a longer lens if you would like to try one at the zoo.
- ▶ **A 1.4x or 2x teleconverter.** In some cases, a 1.4x or 2x teleconverter can be a good alternative to a super-telephoto lens. Although you lose a bit of light and sharpness, many lenses, such as the 70-200mm zoom lens will still produce excellent images. As a general rule, use a teleconverter by the same manufacturer as the lens with which it is paired.

## Filters

A polarizing filter can be very useful at the zoo. The most typical benefits of a polarizer are more saturated colors in the sky and foliage due to reduced reflections. At the zoo, you will also see the benefits of using a filter when you are shooting animals in the water. By cutting the reflections off the water's surface, you can photograph animals partially or fully underwater.

## Extras

There are a number of extras that can be beneficial for a trip to the zoo. The first is a tripod or a monopod to help hold your camera steady, especially when using a longer lens. The monopod provides greater mobility, but the tripod offers the most stability. Some exhibits do not allow such an accessory, so be sure to have a way to carry it comfortably; a shoulder strap or belt hook works well. Even when you are shooting during the daytime, a flash can be a key component to a great shot. By using a fill flash, you can help fill in the shadows under an animal's eyes and create a catchlight. Both of these serve to draw your viewer's attention to your subject's gaze (see Figure 1.8). There are also flash accessories called *flash extenders* that magnify your flash for even far-off subjects.

For indoor images, you may want to bring a pocket gray card to help ensure proper white balance. Finally, a good way to carry this equipment is very important. A backpack, belt pack, or shoulder bag can all offer the extra space needed while being comfortable enough to carry all day. When choosing a bag, consider comfort but also ease of use and accessibility.





**1.8** An accessory flash with an extender added some light to a red panda's face and created catchlights in his eyes. Taken at ISO 400, f/6.3, 1/200 second with a 300mm lens and 1.4x teleconverter.

## Camera settings

There are two main setups for capturing images of animals at the zoo. The first is for fast-moving subjects, such as birds or sea lions. The second setup is for more sedentary animals, such as tigers or bears. In either scenario, a low f/stop creates a shallow depth of field, reducing distractions in the background of your frame.

### Fast-moving subjects

The movement of these animals means that you need to ensure a constantly adjusted focus and a sufficiently high shutter speed to freeze their movements. Don't get discouraged when you have some shots that don't come out. Many of your images may not be sharp or even in focus. But when you get *that shot* of a bird in flight or a sea lion leaping from the pool, the effort will be worth it (see Figure 1.9).

- **Exposure mode.** Because your subject is moving quickly, you will need to ensure a sufficiently high shutter speed to freeze the motion. Shutter Priority mode allows you to set your shutter speed, and the camera's internal meter sets an appropriate aperture and ISO. Start at 1/500 second, shoot a few

images, and review them to check for sharpness. Keep increasing the shutter speed until you find that you are able to freeze the action.

- ▶ **Focusing mode.** Use your camera's continuous focusing mode when tracking moving subjects. This mode not only tracks your subject by constantly adjusting the focus but actually predicts where the focus should be in the brief moment it takes to depress the shutter button and release the shutter.
- ▶ **Image stabilization.** Make sure that your lens offers Mode 2 image stabilization, which disables the feature in the direction you are panning. Otherwise, disable image stabilization completely. Your very high shutter speeds mostly obviate the need for this feature in this scenario.
- ▶ **File format.** Although RAW format files give you the most latitude in the digital darkroom, they are larger and cause your camera's buffer and memory card to fill up faster. If you find that your camera is unable to keep up with your shooting, consider utilizing high-quality JPEG format instead.
- ▶ **Drive mode.** Trying to predict when to take a single shot of a fast-moving subject is difficult. Use your camera's continuous burst mode instead to shoot a number of photos before, during, and after the decisive moment.
- ▶ **White balance.** Utilize your camera's white balance presets as appropriate. These presets are very reliable outdoors. Indoors, in mixed lighting, use a pocket gray card to dial in the proper white balance.
- ▶ **ISO.** Always try to use the lowest ISO possible that still allows a sufficient shutter speed and aperture combination. Doing this minimizes the potential for digital noise in your images. ISO 200 to 400 on most days should be sufficient, although 800 or even higher might be required if you are using an exceptionally high shutter speed.



**1.9** A female California sea lion leaps from the water during an afternoon enrichment session on a rainy winter afternoon. Taken at ISO 800, f/4.5, 1/1600 second with a 70-200mm lens.

## Slow-moving subjects

For the slower moving subjects, you can focus more on the animals' expressions and composition in the frame while utilizing a much simpler set of settings. You still need to be quick when you see the image you want. Being prepared when it arrives is important (see Figure 1.10).

- ▶ **Exposure mode.** Although you will still use your camera's internal meter, for a slower-moving subject use Aperture Priority mode. This mode allows you to directly control the aperture, setting the depth of field as you like for a particular composition. The internal meter sets an appropriate shutter speed and ISO.
- ▶ **Drive mode.** You may still want to use your camera's burst mode even for more stationary subjects. Many of the animals may still make quick motions with their eyes or head, and having the ability to capture three to five images increases your chances of capturing the perfect shot.
- ▶ **White balance.** Use your camera's presets for white balance outdoors. Indoors, if the presets are not accurate in a mixed-light environment, use your pocket gray card. Shooting in RAW mode allows you the most latitude with the color settings in the digital darkroom.
- ▶ **ISO.** Keep your ISO as low as possible to minimize the digital noise. Outdoors, use 100-200 on a clear day and 400 if it is overcast. Indoors, many of the exhibits are fairly well lit, so you can start at 400 but don't hesitate to move to 800 or even 1600. A sharp picture with digital noise is better than a blurry picture without.



**1.10** Two ring-tailed lemurs hang out in the Madagascar exhibit. Taken at ISO 1000, f/2.8, 1/80 second with a 70-200mm lens.

## Ideal time to shoot

The zoo offers year-round photographic opportunities. Different animals are viewable and active at various times of the year. Check the Bronx Zoo's Web site for more details about what exhibits are open when you are visiting. Weekdays and the colder months are generally less crowded than weekends and the summertime. If



you plan on bringing a lot of equipment, you will have much more room to work and walk during off-peak times.

Many animals are very sensitive to weather conditions and may not be out in heavy wind, rain, or temperature extremes. The zoo's Web site has some of this information published, but you may need to call to get specific information for the day. However, plenty of indoor exhibits are open in all weather. Ensure that both you and your equipment are appropriately protected from the elements. Visit on a cold or rainy day and you may find you have the run of the zoo (see Figure 1.11).

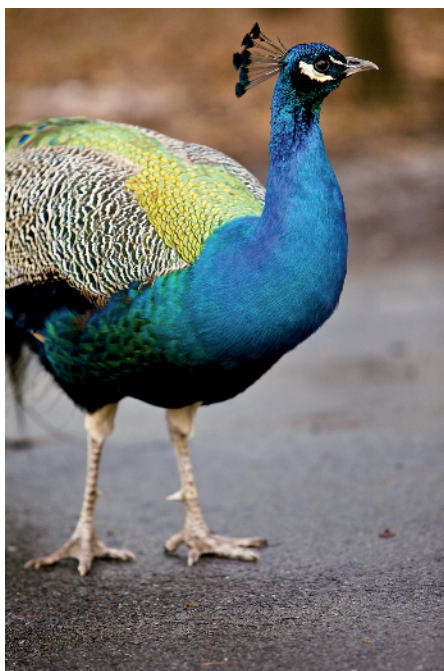
## Low-light and night options

There are numerous low-light and even nighttime indoor exhibits around the zoo. At some exhibits, you are not allowed to use your tripod, so you need to ensure your camera remains stable. Increase your ISO to 800 or 1600 and set your aperture to its largest setting. Look for something to help balance your camera against, such as a support beam or railing.

You can also put the front of your camera directly against the glass of the exhibit if that is an option, which not only serves to help stabilize the camera but to reduce any glare on the glass. Shoot in two- to three-shot bursts. The second image is often the sharpest because you aren't actively depressing the shutter.

## Getting creative

Capturing the perfect composition relies on preparation and patience. After viewing an animal's habitat, try to visualize an image that you want to create. Look in the scene for the background and light that you want to create the image, and set up your camera to take that shot, including prefocusing. To pre-focus, point the camera where the animal will be, press down the shutter halfway to focus on that spot, and then disable autofocus. The hard part now is to wait for and be ready when your subject comes into your frame.



**1.11** A friendly peacock approaches the camera at a nearly-empty Bronx Zoo on a rainy winter afternoon. Taken at ISO 1000, f/3.5, 1/125 second with a 70-200mm lens.