Mastering Flight Shots

The most challenging photography subject on Earth is a bird that is flying. So says Scott Bourne, a professional bird photographer, author, lecturer, and Olympus Visionary. He specializes in photographing raptors, especially Bald Eagles, and has taken tens of thousands of photos of birds in flight.

On a 1-10 degree-of-difficulty scale, he says, “This is a 12.”

Unlike the majority of photo subjects, taking pictures of flying birds means “You have to go find them, they aren’t going to hang around, they usually try to leave, and they do it via the air,” Bourne explains. Here are his six field-tested ways to improve your skills at taking photos of birds in flight.

1. **Learn about birds**

As with all bird photography, the more you know about the subject, the better your pictures will be. “Ornithological knowledge is more important than photographic knowledge because if you can’t find birds, you can’t photograph them,” Bourne says.

It’s equally important to understand birds’ habits. For example, just before taking flight, a perched eagle will raise its tail feathers and defecate “to make itself as light as possible,” Bourne notes. “So when you see that behavior, you should think about starting to press the shutter button because they’re probably going to take off. Some birds have certain leaning behaviors, like Sandhill Cranes. They’ll kind of lean into the wind, almost starting to make their bodies perpendicular to the ground, and then they’ll start running and take off. These are just two examples of many. Knowing the bird’s behavior is really important because you want to be able to predict what they’re going to do.”

Egrets and herons make great flight subjects, he adds. They nest in trees, often in colonies, and once a pair starts nesting, they’ll typically fly the same route over and over again. “Once you know their pattern,” Bourne says, “and if that pattern is on a favorable sun angle and comports with the wind direction, then you can set up and get consistent shots because you know they’re going
to come back every three or four minutes with twigs.”

2. Get in position
No matter whether the bird you want to photograph is standing still, feeding, incubating eggs, or flying, make sure the sun is at your back, so the bird is front-lit. And when you’re aiming to capture flight shots, know the wind direction, Bourne explains.

“Wind direction will help you predict what the bird is going to do. Birds take off and land into the wind.” If the wind is in your face, birds will be taking off away from you and landing away from you.

“The glorious moments are when the sun and wind are at your back,” he adds. “That is how you get shots like an eagle flying straight at you with a fish in the talons.”

Bourne has also learned to shoot with both eyes open because that makes it easier to see the bird coming into the shot.

As with other types of photography, always pay attention to the background.

““You want a clean background whether you’re shooting birds in flight, portraits, or anything else.”

While it’s not always possible, Bourne suggests adjusting your elevation to where the birds are flying.

“I have sat in a hunter’s tree stand to get photos of birds. Or I’ll find a hill that has 10 or 12 feet of elevation. Any little bit helps to take photos that connect better to the audience.”

3. Get Olympus
As we noted in the first article in the “An Eye for Birds” series, Bourne uses Olympus cameras and lenses. He is a big fan of the Pro Capture mode on the OM-D EM-1 Mark II camera. He explains: “When you set that mode and press the shutter button halfway to acquire autofocus, which is the way most people do it, the camera starts running a buffer of full-resolution, 20-megapixel files until you actually press the shutter button, at which point it will capture the image you wanted, plus it will go back and save the 14 previous frames. It’s incredible. So if you’re tracking a bird that is in flight or about to take flight, you press the shutter button halfway down to roll the camera.

4. Go manual
Bourne recommends that photographers shoot in manual mode, even though it’s challenging for beginners.

“A lot of people prefer shutter-speed priority, which is a good argument because you need a certain shutter speed to freeze the wings if that is what you’re going for,” he notes. “But the problem with shooting either in aperture priority or shutter-speed mode is that the light meter will start changing the exposure as you’re panning with the bird. And as you pan across darker or lighter backgrounds, it’ll influence the exposure and throw things off.”
range because that’s where the birds are,” he explains. “It’s just milliseconds, but it does reduce the amount of time it takes to acquire focus. And when you’re dealing with birds that can change their direction on a dime, that’s really important. We want to be able to focus on the bird quicker, and the way to do that is to set the distance range limit to the far setting.”

When you’re taking shots of large birds, Bourne suggests setting the exposure to 1/1500th of a second at a minimum to get wingtip-to-wingtip sharpness. “Depending on how much light there is and how much movement the bird does, it might need to be 1/2000th of a second. And when you’re dealing with birds that have six-foot wingspans, we need more depth of field. If you’re at a reasonable distance, typically between f/5.6 and f/8 will be the sweet spot for depth of field necessary to capture the wings tip to tip sharp while the bird is in flight.”

Read this article from Bourne to learn how to use tracking autofocus on the Olympus OM-D EM-1 Mark II camera.

5. Focus down range
The M.Zuiko 300mm F4.0 IS PRO lens from Olympus has a focus-limit switch that Bourne notes is important to adjust, especially when you’re photographing birds that are a significant distance from you. “To speed up the process of acquiring focus, I turn off the lens’s ability to focus anywhere close to me and set the distance limit so that the lens is focusing down range because that’s where the birds are,” he explains. “It’s just milliseconds, but it does reduce the amount of time it takes to acquire focus. And when you’re dealing with birds that can change their direction on a dime, that’s really important. We want to be able to focus on the bird quicker, and the way to do that is to set the distance range limit to the far setting.”

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6. Stabilize the image
Among the many reasons Bourne chooses Olympus equipment: it’s lighter than other brands’ products, making it easy to handhold a camera and lens, and select Olympus M.Zuiko PRO lenses have an image-stabilization feature called Sync-IS.

The 300mm F4.0 IS PRO lens, for example, has the field of view of a much heavier 600mm DSLR lens (600mm in 35mm equivalent). “Because these lenses are smaller and lighter,” he says, “and because the Sync-IS is so good, we have six and a half stops of compensation, which means that I can use a far slower shutter speed than would normally be acceptable for hand holding and still get a sharp image.”

In the days when he used a heavy DSLR, Bourne had to set it on a tripod with a gimbal head. “Your range of movement was limited to whatever the pivots on the


When using manual mode, Bourne says the key is “to make sure I have a good exposure and that I have the ISO, which is the sensitivity of the sensor, set high enough that I can get a high shutter speed. And then as the bird flies across different backgrounds, I don’t have to worry about the meter being fooled and end up with an exposure that’s too bright or too dark. To do that, I point at open sky, and whatever the meter says it should be, I add 1⅔ stop of exposure compensation. And then I look at the histogram, which lets you see the data in terms of whether it’s too light or too dark. I make sure the exposure is right, and then as long as the light doesn’t change, I just leave it on manual exposure.”

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gimbal head could be. So it was hard, with birds in flight, to move fast enough to track them. But now because of the Sync-IS on select M.Zuiko PRO lenses, I am able to handhold all of my shots. I don’t use a tripod anymore. This has freed me up to get way better birds in flight because I don’t have to worry if the bird goes off at angles from the tripod; I can swing around and still get it.”

Scott Bourne shoots with Olympus equipment. He says it’s extremely lightweight, easy to pack, and best of all, it produces photographs on par with more expensive gear. He notes that his work can be printed at dimensions of 6 feet by 9 feet.

“Image stabilization is built into the camera body, so you don’t need a tripod with Olympus gear,” he adds. “It’s much easier to carry around, and the image quality is stupendous. The tracking autofocus is another thing that bird photographers really need. You can’t fake it when you’re trying to photograph an eagle that switches its dive angle toward the water 90 degrees in one tenth of a millisecond. Autofocus has to be able to keep up.”

Here’s what Bourne carries into the field:
• OM-D E-M1 Mark II (2)
• M.Zuiko 40-150mm F2.8 PRO (80-300mm in 35mm equivalent)
• M.Zuiko 300mm F4.0 IS PRO (600mm in 35mm equivalent)
• M.Zuiko 12-100mm F4.0 IS PRO (24-200mm in 35mm equivalent)
• M.Zuiko 7-14mm F2.8 PRO (14-28mm in 35mm equivalent)
• MC-14 1.4x Teleconverter
• HLD-9 Power Battery Grip
• EE-1 Dot Sight
• FL-900R Flash


The power of flight shots
Creating a memorable photo of a flying bird requires a good deal of skill and practice, of course, but a successful image brings a significant level of satisfaction.

“We associate birds with flight, so it’s obviously more powerful if we match that association with our imagery,” Bourne says. “For example, an eagle with its wings spread fully is a vivid image — much more powerful than an eagle on a perch, even if it’s a nice full-frame headshot. When you see an eagle with its wings spread and a jackrabbit in its talons, that’s always more impactful, or if you see two birds fighting in mid-air or spreading their wings to take off or to land, those are stronger shots.”

In other words, a top-notch photo of a bird in flight will leave a lasting impression on your audience.

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