REVIEW
nikon goes big

African Birdlife's review of entry-level birding lenses for SLR cameras stated that neither Canon nor Nikon makes a zoom lens longer than 400 mm, but that was out of date even before the survey was published. Peter Ryan and John Graham took Nikon's competitively priced 200–500-mm f5.6 zoom for a test drive.

JOHN GRAHAM (2)

above *The lens obtained a more than adequate record shot of a vagrant African Jacana at Strandfontein.*

The September/October 2015 issue of *African Birdlife* reviewed lenses for SLR cameras that are suitable for birding, aren't too expensive and have a focal length of at least 400 mm. We struggled to include Nikon in the review because at more than R40 000 in price its 80–400-mm zoom was too expensive to compete with Canon's 100–400-mm zoom or third-party lenses from Sigma and Tamron. In August 2015, however, Nikon announced the imminent release of a 200–500-mm f5.6 zoom lens. Even better, it was priced to compete directly with Canon's 100–400-mm zoom. We were itching to try it out but such is the demand for the new model that it took until the end of November before we could get our hands on one to review.

As one might expect, this is not a small lens. Weighing 2.3 kilograms, it is about 40 per cent heavier than Nikon's 80–400-mm zoom or Canon's 100–400-mm. You can shave more than 200 grams from its weight by removing the tripod collar, but we found the generous tripod foot useful for carrying the lens and to be a convenient palm rest when zooming while the camera is hand-held. Despite its size, the zoom is nicely balanced and feels positively light compared to a 500-mm prime lens. It has a 95-mm objective lens (larger than the 77-mm objectives on the two 40-mm zooms), so a protective UV filter is going to set you back another R1 000 or so.

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The 200–500-mm zoom range is ideal for birders, giving an effective 4–10x magnification on a full-frame body or 6–15x on a Nikon DX body. We tested it on John's trusty Nikon D300s, so had the benefit of the added 1.5x crop factor. And thanks to the fixed f5.6 aperture, the lens can take a 1.4x teleconverter if you need even greater reach. However, this markedly slows the autofocus, so is mainly an option for static subjects. The zoom action is quite long, turning 180 degrees to move the full range from 200 to 500 mm (compared to barely 90 degrees in Nikon's 80–400-mm zoom), which is a little slow and unwieldy, especially when hand-held. The lens extends some 20 centimetres in length over its zoom range.

Image quality is excellent, remaining admirably sharp across the frame irrespective of zoom level. At just over two metres, the close focus distance is tolerable – better than that of much more expensive prime lenses, but not in the same league as that of Canon's 100–400-mm zoom.

Our biggest concern was the autofocus which, although quiet, assured and perfectly competent for slow-moving subjects, was appreciably slower than that of Canon's 100–400-mm zoom and was sluggish at times in capturing birds in flight.

Despite its relatively modest R24 300 price tag* and largely plastic construction, the Nikon 200–500-mm zoom appears robust and solidly engineered and exudes a feel of precision that one expects of a pricier lens. Nikon's press releases are not too forthcoming about its degree of weather proofing, but it seems to be at least on a par with its more expensive 80–400-mm zoom. It certainly appears to be a lot more rugged than the less expensive Sigma Contemporary and Tamron 150–600-mm zooms, but isn't in the same league as the Sigma Sports 150–600-mm.

This is a very good birding lens. It is not as fast or as close focusing as the Canon 100–400 zoom, but the extra reach is welcome. Several reviews have commented on the limitations of only going to 200 mm, but this is seldom likely to be an issue for birders. Overall, it is a very attractive option for Nikon users.

PETER RYAN & JOHN GRAHAM

**Recommended retail price at time of going to print.*

PETER RYAN

above *The lens is quite long when zoomed to 500 mm, but is light enough to hand-hold.*

top *The f5.6 aperture gives reasonable depth of field while still isolating this Cattle Egret from the background.*

FAQs

Wildlife photographer and safari guide Grant Atkinson answers readers' questions.

What is the ideal aperture setting?

There is no one ideal aperture setting that I favour – I prefer to select it depending on the bird or its activity that I am trying to photograph.

Factors I consider when selecting the aperture are the lens I am using, the shutter speed at which I would like to shoot, my distance from the bird and the ambient light. I also take into account how distant the background is and how much of the subject I want in focus.

The aperture setting will control how much depth of field there is in my image. Most telephoto lenses used for bird photography have maximum apertures that range from f2.8 to f6.3. F2.8 is a wide aperture, which will result in an image with a shallow depth of field, whereas a maximum aperture setting of f6.3 will typically produce a greater depth of field. A wide-open aperture will also result in the lens letting in the maximum amount of light, which will give the fastest possible shutter speed.

When photographing birds, shutter speed is often the most important factor to take into consideration when selecting an aperture setting. I typically begin the decision-making process by judging how fast the birds are moving, if at all. From experience, I choose the minimum shutter speed that I think will result in a sharp image; this might range from 1/320 sec. to 1/5000 sec. I then set my ISO sensitivity to a level that will produce acceptable image quality.

With the camera in AV mode for Canon (A for Nikon and Sony), I select an aperture setting that will give me a sufficiently fast shutter speed for the situation I am about to photograph. Frequently, if ambient light is not that bright, I may end up shooting with my lens wide open at f4 to f5.6. In those conditions, I would rather opt for less depth of field than try to work with a shutter speed that is too slow.

If there is sufficient ambient light, I might close down the aperture one or two stops as doing this and increasing the depth of field will most likely enable me to get more of a bird in focus. It will also give me some leeway in case I don't get my focus point exactly on the bird's eye. In such instances I may shoot at a setting between f6.3 and f8.0.

Sometimes it is preferable to keep the aperture wide open and limit the depth of field in order to blur the background behind the bird. I will then shoot at an aperture setting of around f4 or f5.6.

I also factor in the orientation of my subject: a bird perched or flying across the frame needs less depth of field than a bird that is facing the camera, and this is even more important if that bird has a long neck and bill.

If I'm photographing a bird at very close range, I close down my aperture settings (while still maintaining a sufficiently fast shutter speed) as depth of field becomes progressively less at short-focusing distances.

Some lenses, especially older zoom models, may not be at their sharpest when used with the aperture wide open. It may then be necessary to stop down the aperture until the optimum sharpness is achieved. This can be limiting to the photographer, especially if it results in having to use a less-than-ideal shutter speed.

With experience, it is possible to control depth of field and exposure on a DSLR in M (manual) or AV mode, as I have described above. However, the basic needs and effects of the different settings remain the same, regardless of the camera mode.

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Aperture f8.0, 1/2500 sec. and ISO 400. The long bill of the Yellow-billed Stork and the bird's orientation towards the camera meant that closing down the aperture to f8 gave me sufficient depth of field to get the bird's eye as well as the fish in its bill sharp.