

“After an intensive week, it was hard to fault this lens for anything but minor niggles”

LENS REVIEW

Sigma 150-500mm

The Sigma 150-500mm DG OS HSM APO f/5-6.3 telephoto zoom offers professional image quality and super telephoto reach for a budget price.

Words and images by **Ewen Bell**

Pushing out to a 500mm focal length is a challenging achievement for lens designers and is typically beyond affordability for consumers. We took the Sigma 150-500mm zoom into the wetlands of Arnhem Land to see how it performs in real-world situations. Of course there is always room for improvement with a budget lens – but at less than half the price, the Sigma 150-500mm stacked up nicely against professional alternatives.

Size matters

There's nothing worse than finding yourself in a great location for wildlife photography and then realising that your telephoto lens simply isn't long enough for the job. Regular telephoto zooms are usually too short for anything more challenging than your puppy dog, and when tracking down creatures in their natural habitats, you often can't get anywhere near close enough to employ a 200mm focal range.

In the flood plains of Arnhem Land, we took a few long lenses out for a wetlands bird safari to see if the budget-friendly Sigma 150-500mm lens could match some

of the more expensive options. Over the course of a week, we tested the Sigma in a wide variety of light and chased a huge variety of birds. We came home with memory cards jammed full of eagles, herons, kingfishers, ducks, ibis, jabiru and a few dozen others.

WILDLIFE TIP NO.1

Most lenses are sharpest in the middle of the aperture range, not at either end, and in daylight, you can take the ISO to 1600 and continue shooting at speeds of 1/1000sec or higher.



■ Jacana walks on water
Shot with Canon 1DMkIV; Sigma 150-500mm; 1/800sec; f/10; ISO 1000; focal length 500mm

After an intensive week, it was hard to fault this lens for anything but minor niggles. In good light, this lens produces sharp images and the autofocus is adequate for most things short of chasing birds in flight.

Birds of a feather

There's a little bird in Australia's Top End called the Jacana, and its evolutionary trick is walking on water. At least it can look that way until you get close enough to see them strutting about on the leaves of water lilies. If you can get really close, you'll even spot a bizarre rear-facing claw that is elongated to half the length of their body, but you have to get very close to see such detail. Or get a very long telephoto zoom lens.

In recent years, I've been lucky enough to visit Arnhem Land and Kakadu wetlands to shoot the wildlife, but I always leave wishing I owned a longer telephoto lens; 200mm is not enough for most bird photography, and 400mm can still struggle. Adding extenders to high-quality lenses is one way to boost your optical range, but in »

MINOR NIGGLE

Pulling zoom is a little stiff at the long end, and at the short end the lock switch has a tendency to trip easily. A bit of practice is required to avoid this.

» **DETAILS**

- Price:** \$1399
- Manufacturer:** Sigma
- Website:** sigmaphoto.com
- Supported Mounts:** Canon EF, Canon EFS, Nikon FX, Nikon DX, Sony A-mount
- Features:** Maximum aperture of f/5 at 150mm focal length, achieved with 21 elements in 15 groups
- Minimum focal distance:** 2.2M
- Filter thread:** 86mm
- Angle of View:** 150-500mm, offering 16.4 to 5 degrees FOV
- Focus Engine:** Hyper-Sonic Motor (HSM) is very quiet and efficient
- Size:** 9.4cm diameter and 25.1cm long
- Weight:** 1.9kg

» **VERDICT**

Offering professional image quality at this zoom range and price point is an astonishing achievement.

» **RATING** 9/10





■ Kakadu wetlands
Canon 1DMkIV; 14mm f/2.8L lens; 1/400sec; f/13; ISO 1250



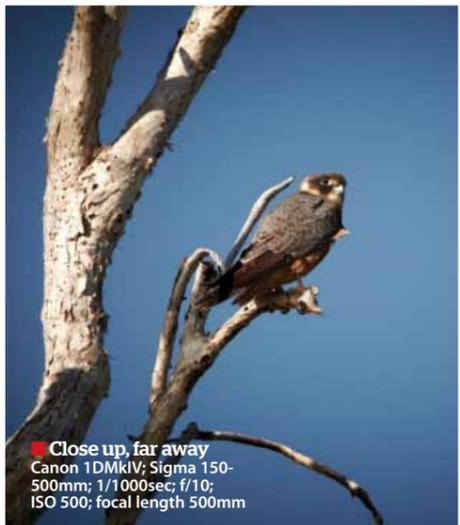
■ Azure Kingfisher
Canon 1DMkIV; Sigma 150-500mm; 1/640sec; f/6.3; ISO 2000

POOR LIGHT, FAIR RESULTS
In challenging conditions, such as this dimly lit Azure Kingfisher, the Sigma is pushed to the limits of clarity and autofocus. The results, while not perfect, are definitely passable.



VERSATILE
Ewen's field experience for this article was with the Canon mount version of the lens, but the Sigma 150-500mm also ships for Nikon and Sony DSLR formats.

“It’s not a perfect lens by any means, but you’d have to spend a lot more money to get a better image”



■ Close up, far away
Canon 1DMkIV; Sigma 150-500mm; 1/1000sec; f/10; ISO 500; focal length 500mm

the process you lose a little light, reduce image quality and impair the autofocus system. For many camera bodies, the addition of a 2x extender can render the autofocus inoperable. For this visit to see the Jacana I brought along the Sigma 150-500mm lens – and a little healthy scepticism. My experience with most affordable telephoto zooms is they produce a flat image and deliver terrible autofocus. After the first afternoon drifting around water lilies and chasing Jacana chicks, I was impressed with the image output of the Sigma lens. It's not a perfect lens by any means, but you'd have to spend a lot more money to get a better image.

In the field
Build quality of the Sigma 150-500mm does not feel 100% like a professional lens, but neither does the price tag. The lack of weather

sealing and the plastic exterior components detract from the finished product. The barrel extends as you move through the zoom range, which is less than ideal but rather essential if you still want to pack the lens in a normal-sized camera bag. This is a very practical lens that produces a bright and vibrant image.

Pulling zoom is a little stiff at the long end, and at the short end the lock switch has a tendency to trip easily. Several times I found myself trying to zoom in for some action only to be stifled by the lock, causing a delay of critical seconds. However, with repeated practice you do learn to avoid that problem.

Our field experience was with the Canon mount version of the lens, but it also ships for Nikon and Sony DSLR formats. Up against the ageing design of the Canon 100-400mm f/5.6, the Sigma option showed just how far lens technology has advanced, offering equal if not better image quality through the matching range – and matching the Canon for autofocus performance.

In our boat we also had the Canon 100-400mm f/5.6, 70-200mm f/2.8 L IS USM II and 300mm f/4 IS. The Sigma 150-500mm quickly became the lens we most wanted to reach for.

PRIME QUALITY
Zoom lenses can never match primes for image quality and speed. Canon's 300mm f/4 L IS is more expensive than the Sigma 150-500mm, but delivers better image quality and autofocus performance, even with a 1.4x extender matched to push the focal range out to 420mm. Canon also make 300mm and 400mm primes that stop down to f/2.8, with the additional performance coming at the cost of serious weight and dollars.

Not bad for a lens selling for half the price or less of the other Canon options.

Size matters when pursuing small birds of a shy nature, and the 500mm reach does become rather seductive. In more challenging light, such as an Azure Kingfisher hiding in the branches of mangrove trees, the autofocus and clarity of the lens is tested severely.

A fast prime lens has a major advantage in the most adverse of conditions, but the Sigma 150-500mm still got acceptable shots.

To zoom or not to zoom
For a lens so light, this is a seriously impressive »



■ Sea Eagle
Canon 1DMkIV; Sigma 150-500mm; 1/1000sec; f/8; ISO 250; focal length 500mm

zoom, making it an attractive option in transit as well as in the field. The Sigma does not work with any of the Canon extenders but Sigma has its own variants to add range if desired. This lens will work with extension tubes, however, and combined with 40mm of tube you can achieve a powerful macro effect plus shoot from a safe distance. Good news when trying to snap snakes – or the eyes on a crocodile.

Prime lenses will always offer superior quality to a zoom lens of similar length, by virtue of the physics involved, but there's a price to pay for the quality increase. Not just the dollars, but in flexibility. While waiting and watching a Sea Eagle on a tree (below), I noticed his claws shift on the branch. It's a

subtle movement that precedes the moment of flight, but you get about half a second to decide whether to keep your full zoom at 500mm or pull back a little. As the eagle throws his wings wide to create enough lift for flight, his wing span triples the room required in your frame.

If you have a 500mm prime locked on to that eagle, then you're going to crop the wings or maybe something more important. With a good zoom lens you can ease off the super-telephoto a little and give yourself room to capture the entire story. Half a second doesn't sound like much but you'd be surprised at how quickly you can react after a few days of practice with a lens.



■ **Blazing sunset**
Canon 1DMkIV; Sigma 150-500mm; 1/800sec; f/13; ISO 800; focal length 164mm



ADVANTAGE, ZOOM

The ability to quickly ease off the zoom and create space in your frame when the need arises will mean you'll miss fewer opportunities for perfect composition.

Conclusion

We were sceptical that a \$1400 lens with 150-500mm zoom range could offer professional image quality, but this lens delivers. For the price, it punches well above its weight – literally.

“The Sigma 150-500mm quickly became the lens we most wanted to reach for”



■ **Step lightly**
Canon 1DMkIV; Sigma 150-500mm; 1/1000sec; f/8; ISO 640; focal length 500mm



WILDLIFE TIP NO.2

If your lens has good auto-tracking, learn to use it. It means the lens will continue to follow the subject and keep it focused while it moves towards or away from you. That, coupled with shooting continuous frames, will help you capture the optimum moment, that split second when a creature of the wild reveals a hint of its character.



EXTENDING YOUR RANGE

For this expedition, we found that the Sigma 150-500mm would not accept any of the Canon extenders on hand – Sigma produces its own extenders to add range if needed.

■ **Wetlands sentinel**
Canon 1DMkIV; Sigma 150-500mm; 1/800sec; f/8; ISO 800; focal length 500mm