Image Stabiliser or a Tripod

Image stabilisation (IS) is now common. Historically the technology was built into upmarket lenses. More recently some cameras come with it built into the camera so that it works with all lenses.

IS helps a photographer to hand hold a camera at a lower shutter speed. With modern, short focal length lenses (less than 100mm) the effect is about 4 stops slower; with longer focal length (greater than 200mm), three stops. This means that, if you are able to hold a particular camera/lens combination at 1/500 second without IS, you will get a similar result at 1/60 second with IS turned on -3 stops slower shutter speed.

NB IS deals with camera shake. It does not deal with subject movement. In fact it is a nuisance when the subject is moving and it has to be turned off or partially deactivated when the subject is moving or if you are panning with the movement of a subject.

But it sounds pretty appealing – perhaps I can leave my tripod at home?

Firstly, and very important, a tripod does more than hold the camera steady. It is an outstanding aid to composing and setting up pictures. Using a tripod forces you to be more deliberate. The compositional quality of your image benefits.

Secondly, although you may think you can hand hold a camera at 1/500 second, the same picture taken with the same shutter speed will be significantly sharper when a tripod is used. Hand holding a camera implies that you find the pictures sharp enough – not that they will be as sharp as possible. You need the tripod for that – even with IS.

Thirdly, IS systems take a finite time to activate after you half press the shutter button. The twin gyroscopes that sense camera movement have to achieve maximum speed before the system functions. The longer the focal length of the lens the slower the response. This makes IS less valuable in action photography or photography where a quick shoot is required and even less valuable if long lenses are involved.

Lastly, be aware that many IS systems have to be turned off when you are using a tripod. If the camera is absolutely steady some systems prevent you from taking the picture until the IS is turned off.

Yes it is appealing but not a panacea. If you want quality you will still have to use a tripod. IS has a role to play with medium focal length lenses (70 to 200mm) when shooting in reasonably static conditions in deteriorating light. However, if the subject is moving, if you need a quick reaction time to grab the shot or if you are using a long lens, IS does not really perform adequately.

I have a very large, heavy 400mm lens that I sometimes want to carry on foot in the bush. I use a monopod under these circumstances. If I am very careful to hold the monopod steady against a tree, I find the IS in this lens allows me to get sharp enough pictures at slow shutter speeds. Note "sharp enough". If I could carry my heavy duty tripod into the bush I would get sharper pictures. But this is not a practical option because, for some reason, my wife and friends refuse to carry my tripod.