

PROTECTING WILDLIFE

REMOVING LOCATION METADATA
FROM IMAGES





RHINO UNDER THREAT

On account of the human impact of poaching and habitat loss, Black rhino, *Diceros bicornis*, have seen the most drastic decline of all rhino species. Black rhino remain on less than 10% of their former natural habitat. From an estimated 70,000 in the late 1960s today there are only 3,610 black rhino left alive.

White Rhino, with an estimated population of 24000, are not in as terrible a situation, however they too are being slaughtered by poachers at a frightening pace. Unless this situation is turned around both rhinos species face imminent extinction.

However tempting simplistic responses may appear to complex issues there is no single silver bullet solution in the effort to counter the devastating poaching of rhinoceros. Approximately ten initiatives need to be implemented and coordinated simultaneously. This is a holistic approach. These range from rhino horn devaluation (e.g. dehorning), rhino range counter-poaching patrols and community outreach, right the way through to end-user market education and sensitization.

Across the range of these ten initiatives the one that comes nearest to offering a silver bullet is intelligence gathering, which is why it's always preferable to capture poachers.

On the flip side intelligence is equally advantageous for those with murder of rhinos on their minds. An easy source of accurate GPS data of the location of rhinos can be sourced from pictures taken with increasingly sophisticated GPS enabled cameras.

To avoid inadvertently providing criminals with this valuable rhino location information wildlife photographer Olwen Evans has kindly assembled this how-to guide. Please action the steps set out and share this information widely.

Thank you.

Rob Moffett

Ongava Game Reserve and Save the Rhino Trust

METADATA

In the case of images, metadata refers to additional information about the actual images, which is stored in the image files along with the images.

Metadata within an image file can tell a lot about you and where your images were captured. Cameras record data about when a picture was taken, what camera was used and if GPS data has been recorded, where the image was captured. Removing location data is vital to images of sensitive species such as rhino. User-created tags, are useful on a local copy but are unwise to disclose to the wider world.

POACHING DETERRANTS

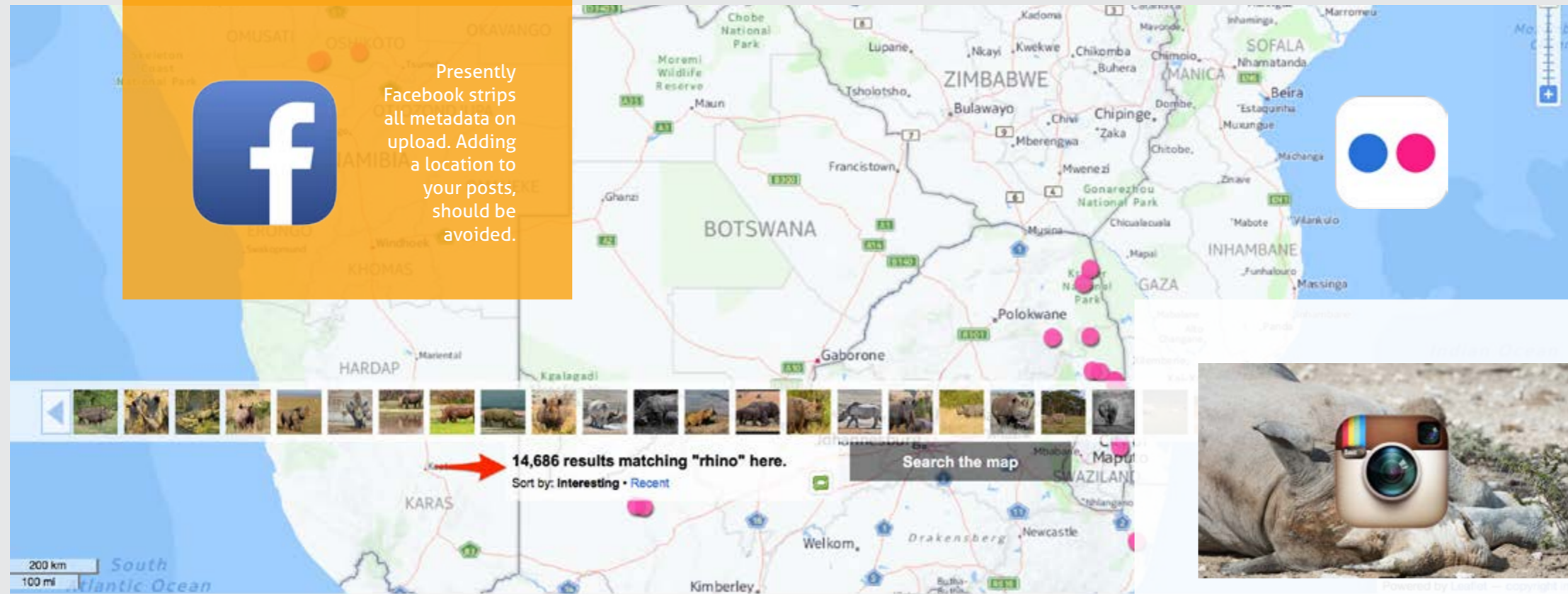
Despite intensive conservation efforts, poaching of this iconic species is dramatically increasing, pushing the remaining rhino closer towards extinction. As photographers we have an obligation to do our part towards rhino conservation, and by removing location data from images, limit the dissemination of GPS data to poachers.

The following guidelines are on how to go about this while keeping other metadata intact, using commonly used software. It isn't possible to cover all apps, but similar principles apply.

The easiest way to avoid the trouble of removing location metadata, is to simply not capture it in the first place.



Presently Facebook strips all metadata on upload. Adding a location to your posts, should be avoided.



flickr You Explore Create

Yahoo! New Zealand Mail Search: _____

Your account / Geo Preferences

When you upload a photo with geo data (i.e. from a mobile device) or manually geotag your photo, the photo's location can be shown on a map. Set your geo privacy to decide who can see the location of your photos by default.

Please note: If you upload a photo with geo data, that info will be embedded in the EXIF data of the original file. If you don't want people to have access to this information,

Who can see where your photos were taken?

Your global default privacy setting determines who can see your images on a map. You can also change the geo privacy on individual photos.

CHANGE MY DEFAULT

SOCIAL NETWORKING SITES

Flickr's [The Map](#) shows thousands of images of rhino with precise geo-tagging. This feature can be [turned off](#) and setting your privacy level to Only Me for Geo Preferences.

Instagram

'If you geotag your photo or tag your photo using other's APIs then, your latitude and longitude will be stored with the photo and searchable (e.g., through a location or map feature) if your photo is made public by you in accordance with your privacy settings.'



Tumblr

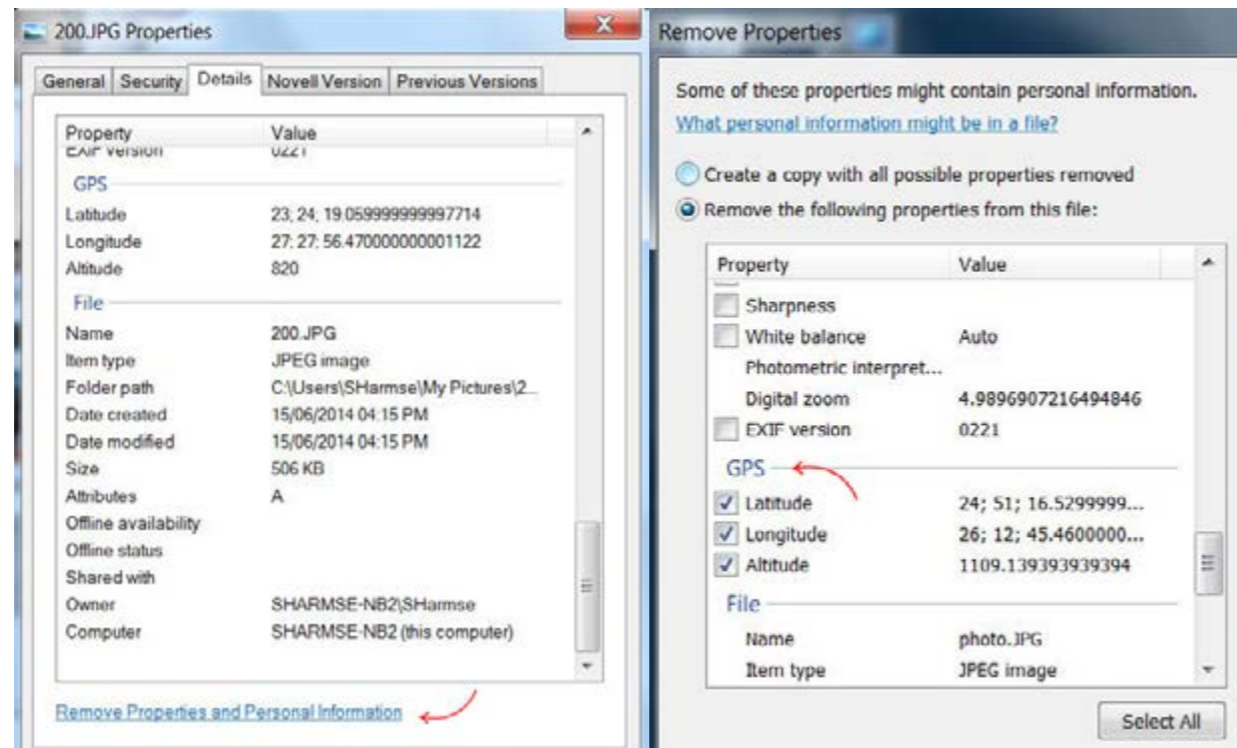
'At its heart, Tumblr is a public platform. Don't be afraid to share amazing things, but do understand that it can be hard to completely remove things from the internet once they've been reblogged a few times.'
EXIF data is collected.



Issues arise mainly when photographers upload images to their own websites and some image libraries. All social networking sites should be considered as unsafe.

WINDOWS

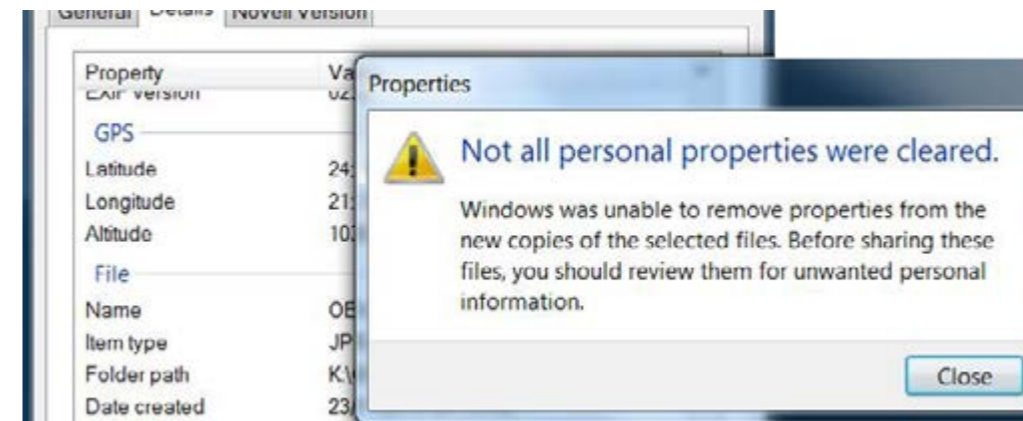
ERASING EXIF METADATA WITH WINDOWS EXPLORER



Windows includes a way to quickly wipe EXIF metadata from one or more image files at the same time. First, open Windows Explorer and select all the image files you want to remove the metadata from. Right-click them and select Properties.

LET WINDOWS CREATE COPIES

Click over to the Details tab and click the Remove Properties and Personal Information link. You can have Windows create copies of the images with the personal data removed or remove specific EXIF tags such as GPS information.



However, Windows isn't perfect. It can't remove some EXIF tags. Windows has problems handling images with embedded GPS coordinates in their EXIF metadata. That's a problem!



Batch Purifier
Free version only for JPEGs



ExifTool
Windows, Mac and Unix



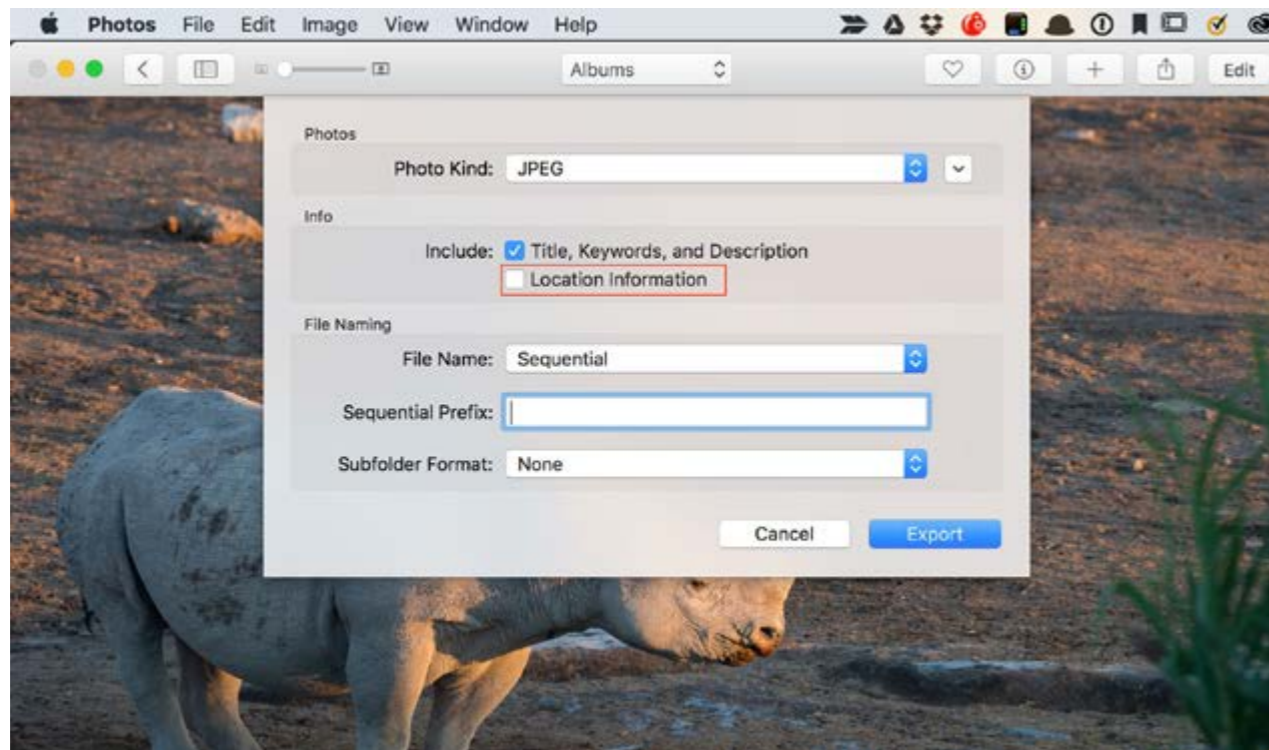
PhotoMe
Windows and Linux

THIRD PARTY TOOLS

The Internet is full of tools for this purpose. Almost any of them should work for you. Just be sure to download a reputable one that isn't full of adware.

MAC OSX

ERASING EXIF METADATA ON A MAC

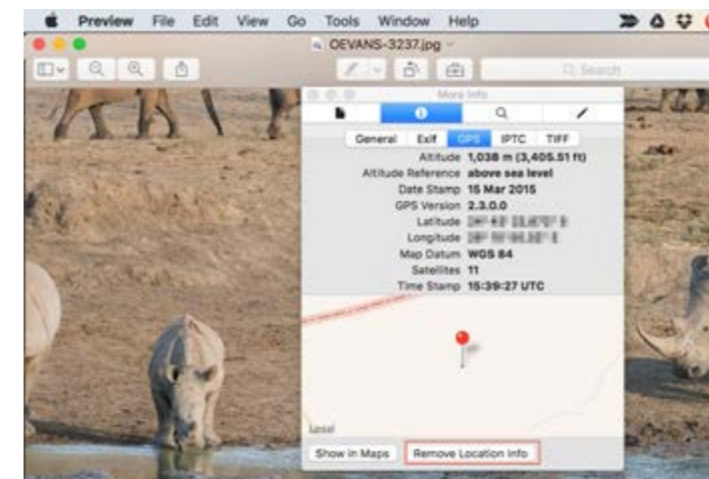


On a Mac open Photos, then select the images you want to remove the metadata from and go to File > Export > uncheck Location Information. And that's it!

REMOVE GPS METADATA USING PREVIEW

In Mac OSX you can view metadata by opening an image in **Preview**. Under Tools select Show Inspector.

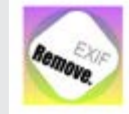
Select the **GPS** tab, then **Remove Location Info**.



Keep in mind that performing this function in Preview will prevent you from seeing where you took your photos in the future. You just won't have the data available to you.



ImageOptim
Free



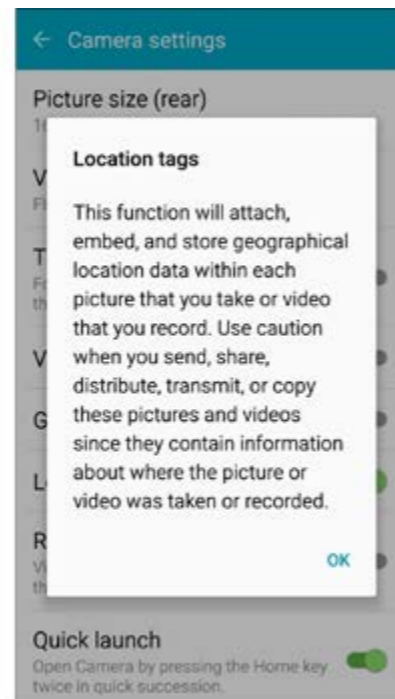
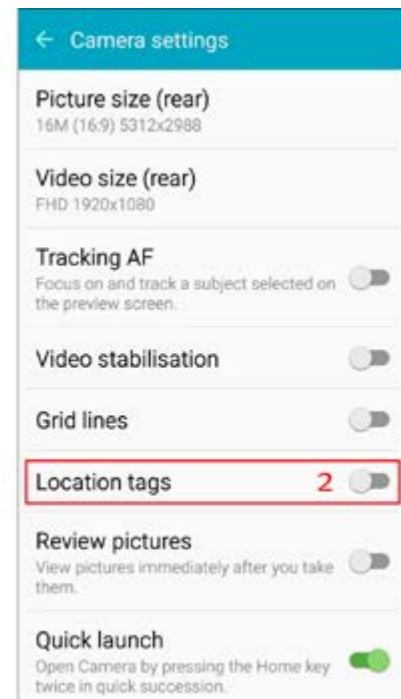
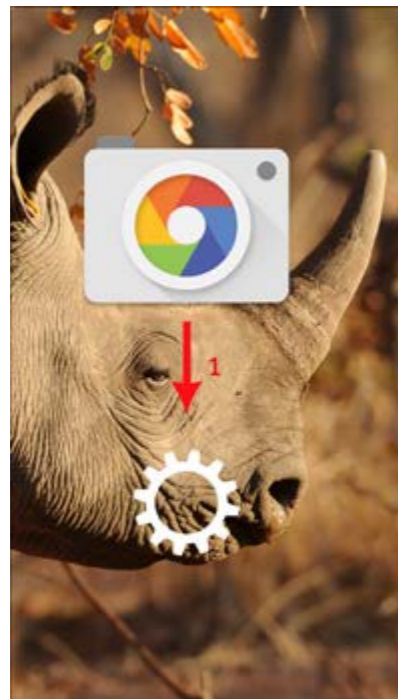
Remove Photo Exif
Cheap, paid. Non-destructive removal

THIRD PARTY APPS

ImageOptim overwrites the files with their optimized versions, preserving image quality. If you're not comfortable with that, you can create copies of the files before dropping them into ImageOptim. Also, as a precaution, ImageOptim puts original files in Trash, so you can easily restore them if you ever need to.

SMARTPHONES

ERASE EXIF METADATA ON A DEVICE



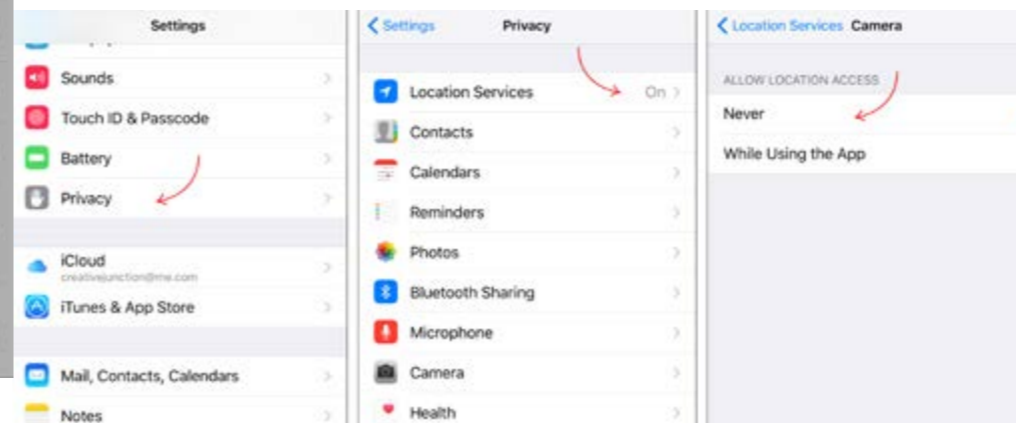
On a **Android** phone open Camera. Tap on the Settings icon (1), then under Camera Settings, turn off Location Tags.

PREEMPTIVELY REMOVE GPS METADATA

You may also want to make your camera stop creating EXIF metadata in the first place.

If you're using a smartphone camera and don't want your photos tagged with their GPS coordinates, simply open your Camera app and dig through its settings until you find the Location option. This will be in a different place on different smartphones.

On an **iPhone**, you'll need to open the Location Services configuration pane and disable location access for the Camera app.



Keep in mind that this will prevent you from seeing where you took your photos in the future. You just won't have the data available to you. There's generally not a way to prevent other EXIF metadata from being created by smartphone camera.



Metadata Remover
Free



NoIMGdata
Free

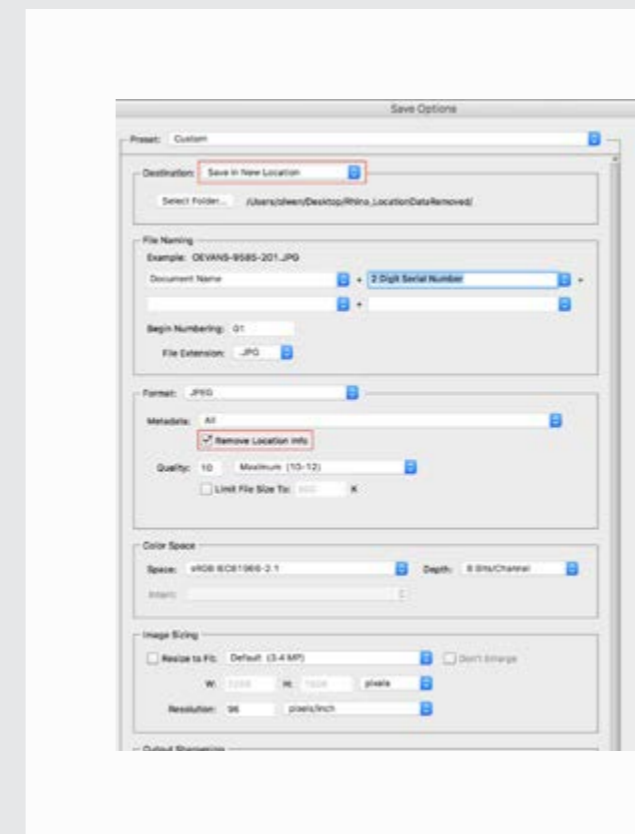
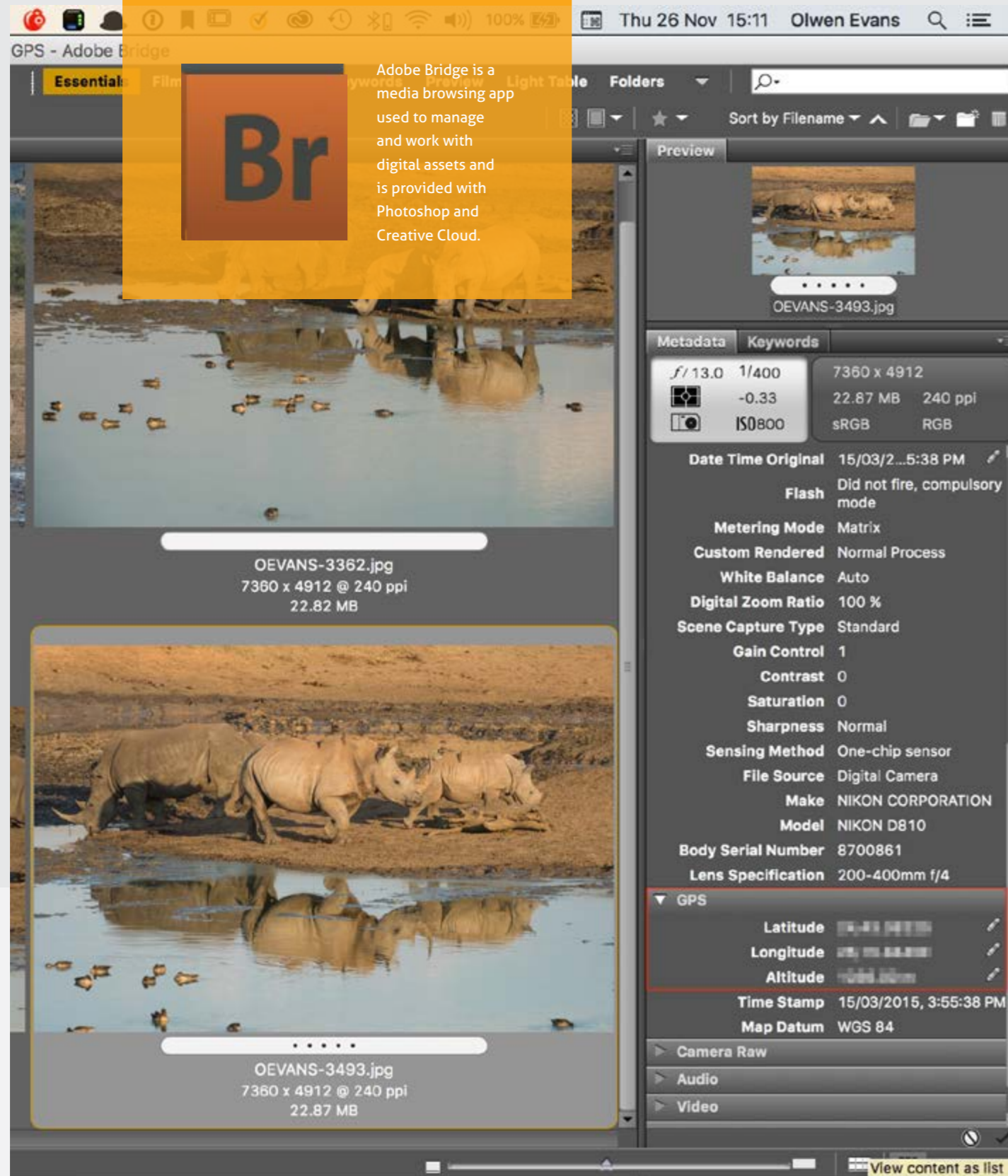


Clear EXIF
Free

SMARTPHONE APPS

Android Market and the iTunes store are full of tools for stripping metadata. Many have free versions or cost in the region of \$1.99.

One big advantage of using metadata stripping apps on smartphones, is that not all inames are captured using the phone's native camera.



ADOBE BRIDGE

The metadata panel in Bridge reveals location information under the GPS tab. Deleting the information here, deletes it permanently, so a better method is to create a copy of the file you wish to upload.

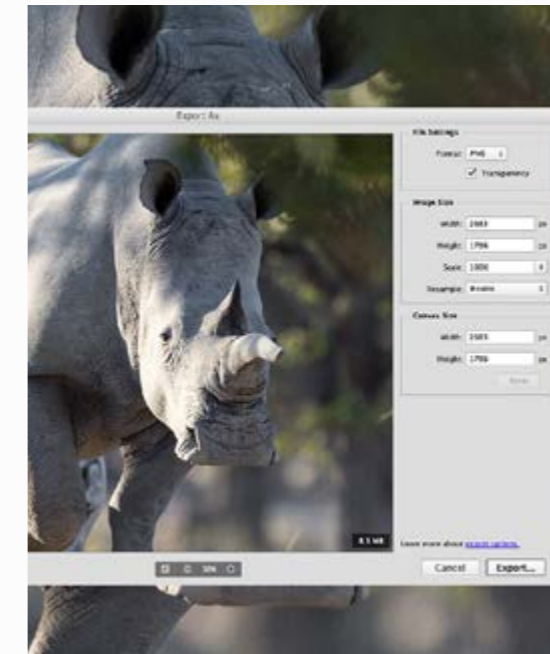
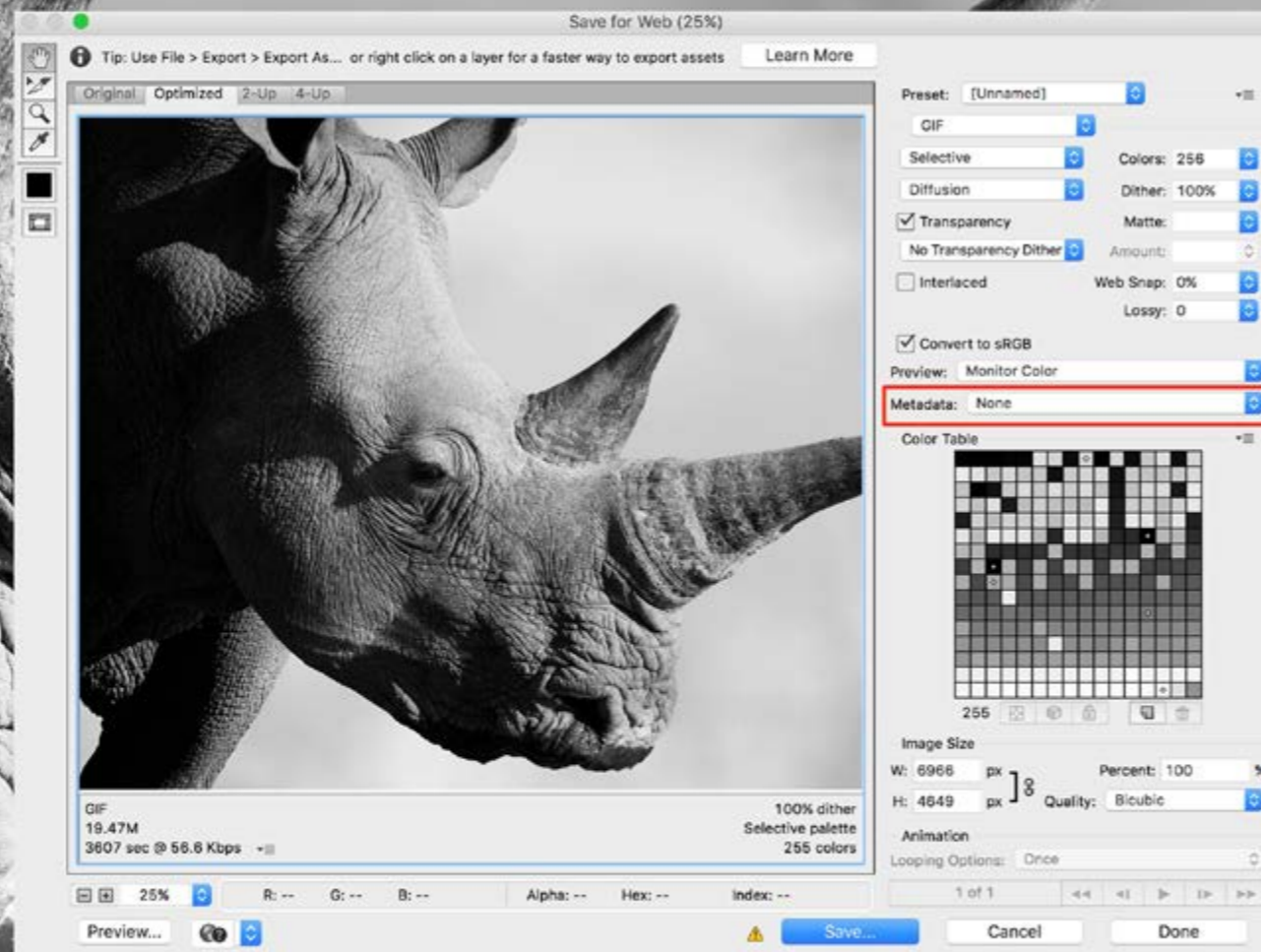
Do this by selecting you image(s) and going to the File menu > Open In Camera Raw. Or tap Cmd (Ctrl)+R. Without making any changes, go to Save File and set a destination folder. Then under Format, check **Remove Location Info** > Save. This will return you to the previous dialogue box. Tap **Cancel**. This will leave the original image unchanged.

STRIPPING METADATA USING APPS

[Bridge](#)
[Photoshop](#)
[Lightroom](#)



Adobe Photoshop is the industry standard photo editing and manipulation software.



ADOBE PHOTOSHOP

In older versions of Photoshop, simply go to File > Save for Web & Devices and make sure that Metadata is set to None. This legacy version is still available in Photoshop, but the quickest way is by using the new Quick Export option under the File menu.

By default, Quick Export generates assets as PNG but your preference for the export format can be set up from the Preferences menu to a JPEG, PNG, SVG or GIF file.

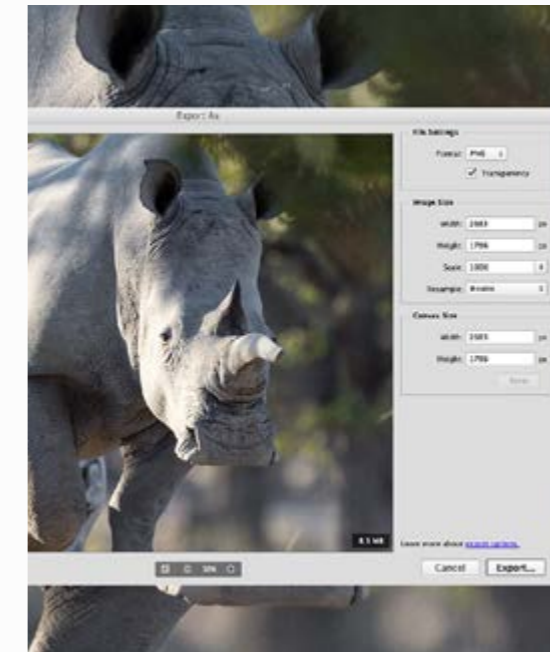
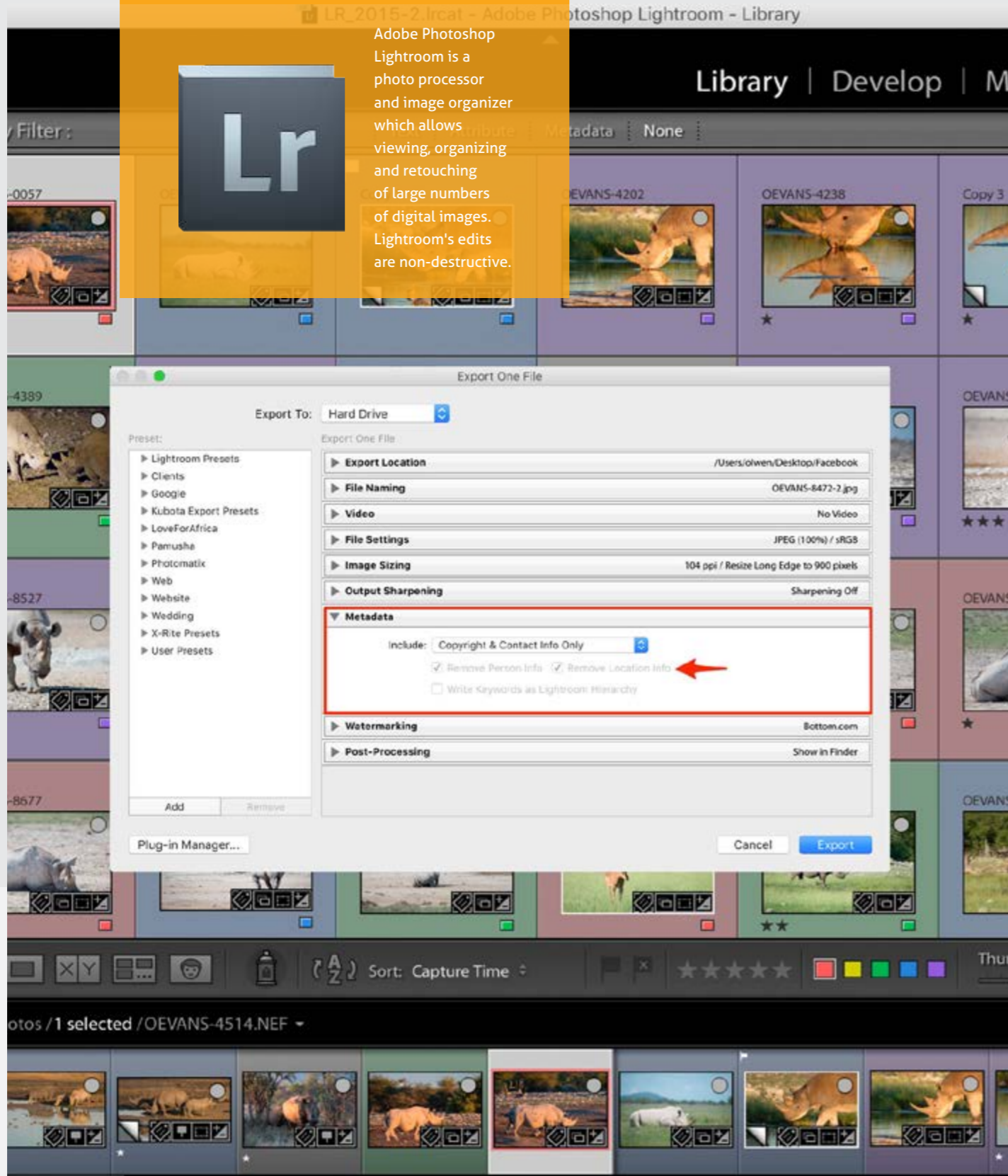
A third method method is also via the Export menu. File > Export > Save As. This is different to the usual File > Save As which retains metadata.

CAVEAT

Quick Export and Export > Save As strip all metadata from the file, not only GPS data, whereas when using Save for Web and Devices you have options.



Adobe Photoshop Lightroom is a photo processor and image organizer which allows viewing, organizing and retouching of large numbers of digital images. Lightroom's edits are non-destructive.



LIGHTROOM

Removing location metadata in Lightroom is as simple as tapping the Export button in the Library Module and unchecking Remove Location Info.

This can be applied to single or multiple images.

The Lightroom Preset below has been set up for exporting images to social networking sites or for email, with locaton info removed, and copyright and contact info included.

The download is a .zip file which includes installation instructions.

DOWNLOAD

- Export preset for Lightroom
- Resizes to 1000px on long edge
- 96ppi
- Sharpened for screen

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NATURE FIRST at ONGAVA GAME RESERVE – we have always needed the wild. Now more than ever, for its energy, its inspiration and a sense of hope for the future of our planet. This is why Ongava exists; the next generation in ecotourism.



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GET IN TOUCH - SAVE THE RHINO TRUST NAMIBIA

SAVE THE RHINO TRUST NAMIBIA has worked tirelessly to protect the desert-adapted black rhino of the wild north-western Namibia. From the point of near extinction, the rhino population has rebounded, and SRT is proud to be part of this success.



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