

# THE KNOWLEDGE

HOW TO | SKILLS | BOOKS | APPS | WEB | PHOTO WORKSHOP | KIT REVIEWS | Q&A

How to...

## TRACK A LION



Tracking a lion on foot is one of Africa's most thrilling experiences, says Alex van den Heever from South Africa's Tracker Academy. Here, he passes on tips for those brave enough to follow in a big cat's paw prints

Lions move in groups of anything between three and 25 individuals in a pride and so you can expect to find more than one set of tracks. The number of lions being followed can grow without warning when an individual or multiple lions join the initial group so it is important to keep a mental note of the number of animals being tracked.

Expert trackers will take note of nocturnal vocalisations (roars) and their intensity, including hyena calls and any distress calls from prey. This helps the tracker form a mental picture of happenings the night before going tracking.

Expert tracker Renias Mhlongo believes the best way to learn to track lions is to do so barefoot. He explains that this is because lions, as soft-footed animals, usually choose the path of least resistance and so, when tracking them, you need to 'read the terrain' – in other words look ahead and predict which route the lion is most likely to have taken.

Rarely does one see perfectly clear tracks along a trail. The main pad and toes will often create little disturbances or scuff marks in the soil which show up as a slightly darker colour to an experienced tracker.

When moving through tall



Here: grass helps lions stalk their prey. Below: an adult male's tracks visible in the dirt

grass the lion will create a very slight trail of bent grass. However, other animals such as zebra also leave similar trails, which can be confusing. Under such circumstances, one needs to look carefully for the lion tracks on the ground in between the grass.

Lions will scent mark their territory by scraping the ground with their hind feet, creating shallow parallel scrapes of bare soil measuring approximately 12cm in width and 20cm in length. Drying, sticky urine sprayed on a prominent bush, such as a gwarrie (*Euclea divinorum*), is also a common sign left by lions. They will also rub their heads in bushes, leaving inconspicuous

blonde hairs behind.

When encountered on foot at a safe distance in an open area, lions will usually stand up and face the tracker. They may growl, but this is simply a warning. If the tracker backs off, they will usually relax again. However, aggressive lions may approach the tracker, growling and finally charging, stopping only a few metres away. There will be a lot of noise, the lion will lash its tail, flatten its ears and focus closely on the tracker. If a lion charges, stand dead still, do not run, and back off slowly once the animal has calmed down.

It is important to note that lions sleep very soundly during the



day, and may easily be stumbled upon in long grass or thick bush if the tracker is not vigilant. It's a good idea to make some noise if you think this might happen.

The Tracker Academy teaches its students to track lions over a year-long course as following animal trails is one of the most complex traditional tracking skills. [www.trackeracademy.co.za](http://www.trackeracademy.co.za)

Have you ever had a close encounter with a lion? We would love to see your pictures of it! ([www.facebook.com/wildtravelmag](http://www.facebook.com/wildtravelmag)). Or write and tell us about it by emailing [editorial@wildtravelmag.com](mailto:editorial@wildtravelmag.com)



Insider's guide to...

## UNDERWATER PHOTOGRAPHY

Mark Evans, editor of *Sport Diver* magazine, passes on his tips for capturing great images below the waterline

We've all seen stunning, dramatic shots of whales, dolphins and sharks gracing the pages of magazines, but have you ever wondered what goes into taking such an image? Getting these amazing action shots takes practice, patience and luck, but you can get decent underwater shots if you remember a few top tips.

You might be a dab hand at topside photography, but below the surface, it is a whole different ball game.

Firstly, get close: when you are shooting a subject, you have water between it and yourself, and the size of this water column has a dramatic effect on your strobes and ability to capture accurate colours. You need to get close, really close, to maximise your chances of getting a good shot. Two to three metres is about the most you want to be away from your subject, especially if you are using a point-and-shoot compact. If in doubt, get closer!

Never shoot down: you might be targeting the rarest critter in the sea, but shoot down on top of it with a vibrant reef in the background and you will lose your subject in a riot of colours. You need to



shoot horizontally, or ideally slightly upwards, so that you can frame your subject against a blue-water background, making it 'pop' from the image.

**SPORT DIVER is the official magazine of the PADI Diving Society and an essential guide to all things diving-related; from trip reports to comprehensive gear tests, expert columnists and the latest news.**  
[www.sportdiver.co.uk](http://www.sportdiver.co.uk)



## FOUR OF THE BEST... DIVING APPS



### DIVING GRAND CAYMAN

This app from Pocket Tours features shore dive sites around Grand Cayman. The dives selected all have excellent dive shops on shore and easy access to the water. Highlights include videos of each site and general advice.  
**£6.38, iPhone, iPad or iPod Touch**  
[www.pockettours.wordpress.com](http://www.pockettours.wordpress.com)

### IGILLS

This sophisticated app acts as a dive computer, underwater still and video camera, digital dive log, and compass. Used with the iGills SE-35 housing (£210.55 and designed for iPhone 4S, iPhone 4, and iPhone 3GS) it is the first smart diving system.  
**Free, iPhone**  
[www.igills.com](http://www.igills.com)

### PADI

Find a PADI dive shop, resort or centre all around the world. Click on a listing and you'll get contact information and PADI membership level. Other features include a PADI eCard, so you can leave your certification at home.  
**Free, Apple, android, Blackberry**  
[www.padi.com/scuba/padi-mobile](http://www.padi.com/scuba/padi-mobile)



### DIVE LOG

Tired of keeping a binder full of dive logs? This app could be the answer. You can manually enter diving data, transfer recorded dives from certain dive computers and manage information about dive sites, trips, centres, certification and equipment. Extras include a marine life photo library.  
**£7.65, Apple, android, Windows**  
[www.divinglog.de](http://www.divinglog.de)



## SURVIVAL SKILLS: FIND WATER IN THE DESERT

Simon Ellar, editor of *Bushcraft & Survival Skills* magazine, explains how you can gather water in an emergency situation

My first piece of advice would be not to find yourself wanting in the first place, and to plan effectively by taking more water than you

need. However, if you do find yourself in a survival situation, I recommend a transpiration bag.

Trees and plants draw moisture from the ground to and cool their leaves and as a result, some of this evaporates. Find a non-toxic tree or plant - the bigger the better, as a bigger tree will have a larger, far-reaching root system to find water. Take a clear bag and place over some

foliage. Tie the bag around the branch making it as airtight as possible and then ensure that a corner of the bag sits low to collect the water - a stone can be placed inside to ensure that the corner is weighted down. Choose a branch that is in direct sunlight for as much of the day as possible and you should find around a cupful of water by the end of the day. The water collected will not need purifying, but may need filtering as pollen or debris may drop in from the foliage. The bigger the bag, the better off you are, as there will be a greater surface area for water to condense on.

[www.bushcraftmagazine.com](http://www.bushcraftmagazine.com)





**5 minutes with... CYRIL CHRISTO**

Husband and wife photography team Cyril Christo and Marie Wilkinson's latest book *In Predatory Light: Lions and Tigers and Polar Bears* is a tribute to these beautiful, endangered animals (Merrell Publishers, £35)

**What was the inspiration for the book?**

We've been photographing predators since our first trip to Africa together in 1998 and had seen polar bears in the Svalbard archipelago, but it wasn't until we spent three weeks photographing tigers in India in 2009 that the idea came to us to do a book on all three predators. These animals inhabit the childhood imagination like few other creatures. They've resided in our myths and consciousness for millennia and they're a foil to our supremacy. Without them, we become the only land predator of consequence. What stories will we tell our children if they disappear?

**What does the future hold for these three species?**

We have to decide today if we want anything ecologically or spiritually for the next

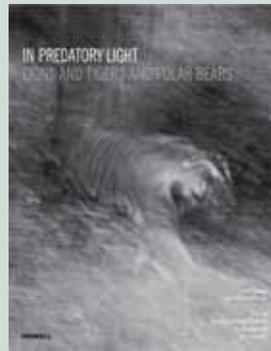
generation. We simply can't afford to tell the next generation - in a tragic twist on the title of Maurice Sendak's classic children's picture book - this is where the wild things were.

**Why monochrome images?**

Black and white photography is more about the essential gravity of the moment rather than the overwhelming visual spectacle that wildlife photography has become.

**What are your backgrounds?**

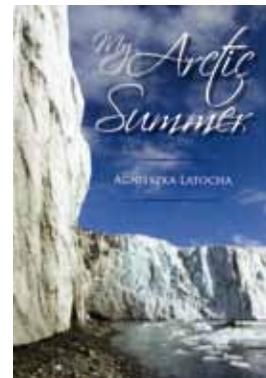
Marie is an architect and I'm a writer. We travelled around the world together in 1997 and that's when we started taking notes. We're really documentarians who are interested in stories as well as images, as in the film we're working on now: *Walking Thunder - The Last Stand of the African Elephant*.



**Where does your passion for wildlife come from?**

My first trip to Kenya in 1975 was hugely significant for me and now seeing our son take his first steps in Africa affirms the need to salvage what's left of the biosphere. Wildlife inhabits us and we can't forget that we are animals.

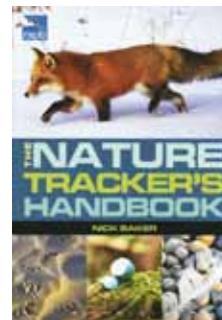
*For the chance to win a copy of this book, enter our caption competition on pages 78-79!*



**My Arctic Summer**  
**Agnieszka Latocha**  
**(Whittles Publishing, £16.99)**

Agnieszka Latocha recounts her experiences of three summer polar expeditions to the Arctic in this book, which

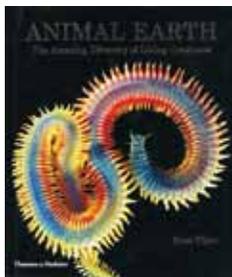
is filled with enthralling accounts of the Arctic's landscape, nature and people, and how they captured her imagination.



**RSPB Nature Tracker's Handbook**  
**Nick Baker**  
**(Bloomsbury, £14.99)**

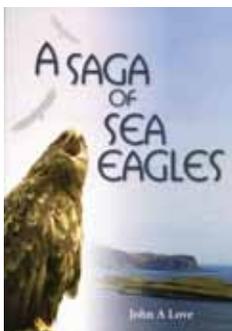
Learn to read the signs wildlife leave behind with the help of wildlife television presenter Nick Baker

and discover what has just passed you by. From footprints and bent blades of grass to soil disturbances and freshly nibbled leaves, the clues are there.



**Animal Earth**  
**Ross Piper**  
**(Thames & Hudson, £29.95)**

Filled with close-up, beautiful macro images that capture the sheer diversity and colourful beauty of some of the world's smallest living creatures, this fascinating book explains their evolutionary process from a relatively small number of lineages.



**A Saga of Sea Eagles**  
**John A. Love**  
**(Whittles Publishing, £19.99)**

Former manager of the Sea Eagle Reintroduction for the Nature Conservancy Council on the Isle of Rum from 1975 to 1985, author Love charts the

successful reintroduction of sea eagles to Scotland. A part-sequel to his book *The Return of the Sea Eagle*, it brings the story up to date from his personal viewpoint and includes facts, the bird's role through history and folklore, and habitat details.

**WORLDWILDWEB**

Don't forget the little creatures! Here are four great websites full of fascinating facts about bugs



**INSECTS.ORG**  
[www.insects.org](http://www.insects.org)  
Learn about insects from all over the world and understand how intertwined our cultures have become with these miniature marvels. The index currently contains more than 150 photographs of insects from exotic locations such as Brazil, Ecuador, Hawaii, and Indonesia.

**BRITISH BUGS**  
[www.britishbugs.org.uk](http://www.britishbugs.org.uk)  
Did you know there are nearly 2,000 species of true bugs (in Latin

*Hemiptera*) found in the UK? This site aims to illustrate as many of these as possible and features include anatomy, taxonomy and ecology guides to each, along with the latest news, a gallery and identification advice.

**BUGLIFE**  
[www.buglife.org.uk](http://www.buglife.org.uk)  
Buglife is Europe's only organisation devoted to

the conservation of all invertebrates, from bees and beetles to spiders and snails. The website is filled with the latest news, ways you can help and fascinating facts.

**NATIONAL INSECT WEEK**  
[www.nationalinsectweek.co.uk](http://www.nationalinsectweek.co.uk)

This site is not just about National Insect Week in June but is also designed to teach you more about the insect world in all its incredible diversity. It includes fact files, ID guides and information on how to make your garden more insect-friendly.



## It's a jungle out there...

...So if you are planning a trip to tropical climes make sure you are well prepared. We take a look at some of the latest kit it's worth investing in

### 1 Staying safe

The Travelproof Jungle Medical Kit has been designed specifically for the jungle and contents include paracetamol, rehydration sachets, water purification tablets, Loperamide as well as wound dressings and bandages. £35, [www.nomadtravel.co.uk](http://www.nomadtravel.co.uk)

### 2 Buzz off

This Lifesystems Geonet freestanding mosquito net is the perfect solution for backpackers and campers. No support points are needed and it is ready to use in seconds. Features include a built-in waterproof ground sheet and secure, zipped entry. £49.99, [www.lifesystems.co.uk](http://www.lifesystems.co.uk)

### 3 Towel dry

This luxurious lightweight towel weighs half the amount of an equivalent cotton towel and has high water absorption, rapid drying properties and is ideal for expeditions to hot climates and general travel use. From £15.50, [www.paramo.co.uk](http://www.paramo.co.uk)

### 4 Dry matter

Face it: the jungle will be wet, so protect essentials in a waterproof dry bag. This dry bag multipack includes three bags, which come with base grab handles for easy access. £29.99, [www.overboard.com](http://www.overboard.com)

### 5 Looking cool

Made from rapid evaporation fabric, these light yet durable cargo trousers will protect you from the elements, provide active cooling, and will easily face any challenge your jungle adventure unexpectedly throws at you. £60, [www.paramo.co.uk](http://www.paramo.co.uk)

### 6 On the safe side

Help protect yourself from insect-transmitted diseases including malaria with Jungle Formula Maximum Plus. It contains 50 per cent DEET, offers up to 10 hours of protection and is reassuringly endorsed by the Hospital for Tropical Diseases. From £7.05, [www.jungleformula.co.uk](http://www.jungleformula.co.uk)

### 7 Stay in the shade

This squashy canvas hat folds in half and comes with a neck cord and wide brim so it can keep the sun off your face, as well as protect you against creepy-crawlies. £29, [www.safaristore.co.uk](http://www.safaristore.co.uk)

### 8 Walk in comfort

Footwear is important when it comes to clocking up the miles on a trek in tropical conditions. The Bryce Mid WP boot is comfortable, lightweight, waterproof and breathable, wicking away any excess sweat. £120, [www.keenfootwear.com](http://www.keenfootwear.com)

### 9 Keep your shirt on

Staying cool and dry is essential in humid conditions and this shirt, made from RipStop MaraTech is lightweight and quick-drying with the ability to wick moisture. It also has hidden vents for air circulation and provides sun protection due to the built-in SPF. £35, [www.safaristore.co.uk](http://www.safaristore.co.uk)

### 10 Sock it to them

Protect yourself from those troublesome leeches with these handy leech socks from Nomad, designed to be worn over your socks but inside your boots. £18, [www.nomadtravel.co.uk](http://www.nomadtravel.co.uk)



Official website of



# 100,000 readers every month can't be wrong!



Visit our dedicated wildlife website for news, jobs and more

### Wildlife and conservation news

100+ news articles appear every month, focusing on the latest wildlife and conservation news from around the globe

### Wildlife watching in the UK

We list more than 1,000 places to see wildlife in the UK. Wherever you are, we can point you in the right direction

### Wildlife jobs

A regularly updated list of incredible wildlife and conservation jobs, and volunteering opportunities at home and abroad

### Wildlife photography

Tips to improve your images, reviews of equipment and links to wildlife photography competitions

### Wildlife and conservation events

There is always plenty going on, from festivals to lectures and wildlife watching events. Get out there and join in!

### Newly discovered species

Amazingly, new species are still found and described all the time. Visit the website to learn about the latest discoveries



**SUBSCRIBE TODAY**

to receive our **FREE** weekly newsletter

### TOP NEWS STORIES THIS MONTH:

- A new survey reveals that there are more than 700 seals living in the River Thames
- An albino jackal has been spotted on camera in the Ravar Wildlife Refuge in south eastern Iran
- Awareness of elephant massacres for ivory has been raised in China by new advertising campaign

For the full stories go to [www.wildlifeextra.com](http://www.wildlifeextra.com)





*Here: This image was all about timing. I specifically wanted the splash behind the bird, and the wings curled over to create a dramatic composition*

*Below: The light at dawn and dusk can be magical. I captured this image during the dying minutes of light as the sun turned the sky pink*

*Below right: I used the line of the mountain ridge to lead the viewer's eye into the picture, placing the condor close to the intersecting third*

*Far right: The intense backlighting from the setting sun has created a wonderful translucency to the wings of these swans*

## Part Ten

# BIRDS IN FLIGHT



Whether it's a flock against the sunset or a an individual, producing a successful image of a bird in flight will earn you your wings as a wildlife photographer, writes **Ben Hall**

**B**irds appear most spectacular in full flight but their movements are often fast and unpredictable. Therefore it's no surprise that capturing the beauty of flight is regarded as the benchmark in wildlife photography. Advances in technology have thankfully made the task a little easier, but to be successful still requires skill, patience and perseverance.

Due to their slower and more measured wing beats, larger birds will be easier to track. I would recommend practising with the swans and geese at a local park. The added benefit of working with a large and approachable subject is that it should not require the use of a long telephoto lens. A mid-range zoom in the region of 200-400mm should give you ample reach and will demand less precision, making it much easier to handle. As with all wildlife

photography, observing the behaviour of your subject is a prerequisite for success. The more time you spend watching and waiting, the easier it will be to predict your subject's flight path.

### Technique

Regardless of the subject, capturing any moving object will require a good panning technique. When using lenses with a focal length up to 400mm I prefer to hand-hold the camera as it allows a much greater freedom of movement. This will make quick changes to composition much easier. You will need to keep a close eye on the shutter speed to ensure maximum sharpness. As a general rule, shutter speeds over 1/1000th of a second should be fast enough to freeze a slow flying bird, although with good panning technique and lenses with image



stabilisation, it is possible to work at slower speeds. The ultimate key to successful panning is smoothness and anticipation. To adopt the correct posture, your feet should be shoulder width apart with your elbows tucked into your sides. This creates a stable support. As your subject passes, try to anticipate the position it will be in when you fire your shots, and swivel the upper half of your body in one constant movement. Cameras with a higher burst rate are much more suited to flight photography, as they

© BEN HALL

## SEASON'S HIGHLIGHTS - OCTOBER

October is one of my favourite months; as autumn colour sweeps the land, opportunities for photography abound.

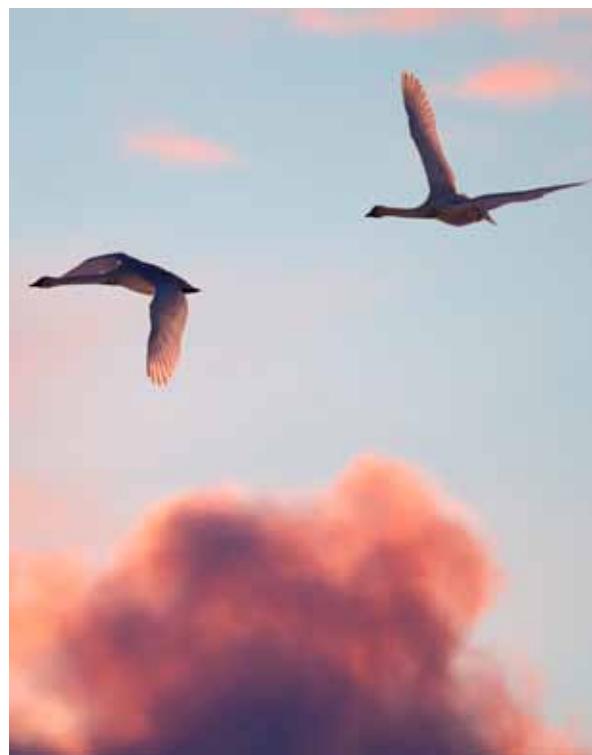
Red deer start to rut in October. This impressive annual event usually lasts all month, with activity peaking during the second and third week. Stags roar to warn off rival males and battles for supremacy inevitably break out. Be sure to set your camera to the high-speed drive mode

and fire a burst of frames at a time.

Wintering geese and swans start to arrive in the UK during late autumn, offering plenty of opportunities for flight shots. Venture out early and late in the day to capture them in silhouette against a colourful sky. Large flocks often work well when taken with a slow shutter speed. If executed correctly, images with intentional blur can

reveal both the movement and beauty of the birds.

Trees that line the banks of lakes and ponds provide colourful reflections in the water in autumn, and can be used as effective backgrounds for birds swimming. The colour of the trees can also be used as a background for birds in flight. Flocks of pale gulls feeding on the water can look particularly effective against the intense autumnal hues.



allow you to capture a sequence of shots in quick succession. I always keep my camera set to the high-speed mode and fire a burst of six to 10 frames at a time. Predictive auto-focus comes into its own when photographing moving targets. Most digital SLRs have a predictive-focus function which enables the lens to constantly re-adjust its focus while the autofocus is active. The camera predicts the speed of the subject to keep it in focus as it moves. The most challenging part for the photographer is to keep the focusing point over the head of the bird as it flies. Smooth panning undoubtedly helps, but it also requires practice and perseverance. Some digital SLRs have a feature which enables you to activate the surrounding focus points, which will help you to retain focus for longer if the subject moves off the main focus point.

### Composition

When it comes to composition, there are several factors which should be taken into consideration. If you are aiming for a wider shot to show the bird in context, you may be able to find leading lines in the landscape to draw the viewer's eye to the subject – perhaps a hill top, a mountain ridge, or a dry stone wall. The rule of thirds can also be used to good effect, especially if your subject appears small in the frame, but take care not to neglect the rest of the picture. Look for elements in the landscape that can be used to balance the composition and give the image a sense of place. For an aesthetically pleasing composition, place the bird off-centre, so that it has space in the frame to 'fly' into. This negative space is important and will nearly always lead to a more effective image. Your choice of

focusing point is critical. If the light is strong, select a focus point towards the edge of the viewfinder, so that you can compose the image in camera and not have to resort to cropping at the post-processing stage. This isn't always easy as the outer focusing points are less sensitive. In situations where light levels are low, or your background is distracting, it is safer to use the centre focus point as it is more accurate.

### Light and exposure

Light plays a crucial role in all wildlife photography. Flight images work best when the sun is low in the sky, as it will light up the underside of the bird revealing important feather detail. Do not dismiss cloudy days, however, as a bird against a plain blue sky can look a little uninspiring. My favourite type of light occurs when the sun lights the bird against dark clouds. Stormy light can add a huge amount of impact and drama. Care should be taken to ensure the correct exposure, however. When the sky occupies a large part of the frame, you will need to add some plus exposure compensation to prevent an underexposed subject. Start with +1 stop and check the histogram, if it needs more, increase in 1/3 increments until you reach the desired result. Shooting into the light can create very atmospheric results. Backlighting your subject when the sun is low in the sky will create a rim-lighting effect and add a beautiful translucency to the bird's wings. This type of lighting can reveal the true beauty of a bird in flight.

# Q&A

## Ask the experts

Our team tackles questions on medical training for expeditions, becoming a wildlife veterinary nurse and packing for different climate zones

Don't forget to upload your wildlife images and videos to our Facebook page as we would love to see them!  
www.facebook.com/wildtravelmag

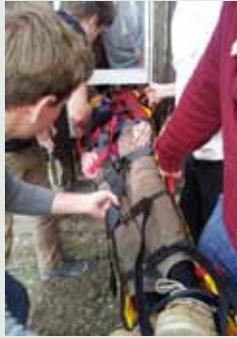
**Q** Next spring a group of friends and I are planning a wildlife expedition to a remote area but have very limited medical knowledge. What skills do we need?

Medical training for people with no medical knowledge does exist, but your needs for a trip like this will go beyond a simple first-aid course. You need training from a remote environment specialist.

In remote areas, particularly in developing countries, you can't rely on emergency services to arrive quickly, and for non-urgent problems, the nearest medical care may be a long way away.

Unfortunately, healthcare is often an aspect of trip-planning which is overlooked. If you are going to prepare properly, you need to budget for training at least two people and obtaining medical kit. This kind of training should cover:

- Pre-expedition medical planning
- Basic first aid
- Basic trauma management
- Management of common expedition medical problems
- Recognition and treatment of relevant environmental medical conditions (for



example, altitude sickness and cold injuries in mountainous environments, or heat exhaustion in tropical/desert environments)

- Patient evacuation
- Medical kit selection.

The best courses will also incorporate scenario training to test you properly. You have two options with training: 'off-the-shelf' courses (usually a weekend course costing anything from £75 to £300 depending on the company), or tailored training (which can work out significantly better value if you have a group of six-plus people). Any good company should be happy to provide quotes. Some companies will even travel to deliver the training at a venue to suit you.



**DR CHRIS HUMPHRIES** is an instructor for Wilderness Medical Education. [www.wildernessmedical.co.uk](http://www.wildernessmedical.co.uk)

**Q** My 16 year-old daughter would like to become a veterinary nurse who specialises in wildlife. What advice can you give her?

The British Veterinary Nursing qualification is recognised worldwide and once gained can open up many opportunities to work with wildlife and zoo species. To become a veterinary nurse you must have a minimum of five GCSEs at grade C or above (including two sciences and English) or hold an 'Animal Nursing Assistant' (ANA) or 'Veterinary Care Assistant' (VCA) qualification.

During your time as a trainee veterinary nurse you will be based in a registered training practice and will hopefully nurse a wild range of British wildlife as well as pets. However the knowledge gained from working with familiar/domestic species will also help you develop a greater understanding of the more exotic species you may encounter as a qualified nurse.

The next step is to volunteer in a wildlife centre or zoo. There are some fantastically knowledgeable people working in these places, who not only offer you great insight into nursing wild and exotic animals but also on how to progress your career, but the main thing is to stick with it. I was a qualified veterinary nurse for 13 years before the opportunity came up for me to get my veterinary nurse position at ZSL London Zoo and I enjoy every day here and every day I learn something new. For example did you know octopuses have three hearts?



**Q** We're off to South America for an extended stay and are struggling to know what to pack as we'll be crossing climate zones from jungle to the Andes mountains. Any advice on what to take?

Versatility is everything when every ounce counts – but don't skimp on protection, comfort or durability. Look for garments where the fabric protects from insects and the sun and doesn't rely on treatments (which wash out).

Choose garments that double-up; wicking base layers shed water better than cotton T-shirts. Reversible base layers are practical – a warm fleecy side and a smooth side to cool. Similarly, trousers that roll up and a breathable waterproof are essentials.

For extra warmth, an over-layer to wear over your waterproof is more practical. Choose synthetic insulation – down is lovely but doesn't like getting wet or being squashed in a pack.

Carry a washing product (Nikwax BaseWash speeds drying and reduces smell) instead of too many clothes. Lastly, a dry bag will ensure you always have a set of dry clothes. **Don't forget to enter our competition on p9 where you can win a Paramo jacket and trousers worth £250.**



**CATHERINE WHITEHEAD** is marketing manager for ethical outdoor gear company Paramo. [www.paramo.co.uk](http://www.paramo.co.uk)



**MATTHEW RENDLE RVN** is the senior clinical veterinary nurse at London Zoo. [www.bvna.org.uk](http://www.bvna.org.uk) or [www.rcvs.org.uk](http://www.rcvs.org.uk)

Got a wildlife or travel question you want our team to answer? Email [editorial@wildtravelmag.com](mailto:editorial@wildtravelmag.com)