BBC SPRINGWATCH HOW TO SEE THE SHOW'S BEST WILDLIFE

Wildlife

June 2011 £3.60 US $7.99 CAN $10.95
Volume 29 Number 6

YOU DO IT
12 BABY BIRDS
TO SPOT IN YOUR GARDEN

PHOTO TIPS
GREAT ANIMAL PORTRAITS
Expert advice on how to frame your shot

EXCLUSIVE PHOTOS
AFRICA AFTER DARK
What the 'Big Five' get up to when night falls

BRITISH BIRDS
SHEARWATER SPECTACLE
Witness the arrival of Skomer's devil bird

YOUR PERFECT SAFARI
Discover Africa's finest wildlife experiences
* walk with big cats * help elephant conservation
* follow the great migration * spot wild dogs

HUMMINGBIRDS
Meet the acrobatic fighter pilots of

CHRIS PACKHAM
The *Springwatch* nature expert answers your

YOUR WILD WEEK
Take part in our new survey: tell us what wildlife

MAGAZINE
DISCOVERWILDLIFE.COM
PODCAST
DIGITAL EDITION

downloaded from: lib.ommolketab.ir

NEW 2012 BROCHURES OUT NOW

WILDLIFE & CULTURE HOLIDAYS

EXPERIENCE THE BEST OF BOTH WORLDS IN ONE SPECIAL HOLIDAY

7 NIGHTS FROM £799

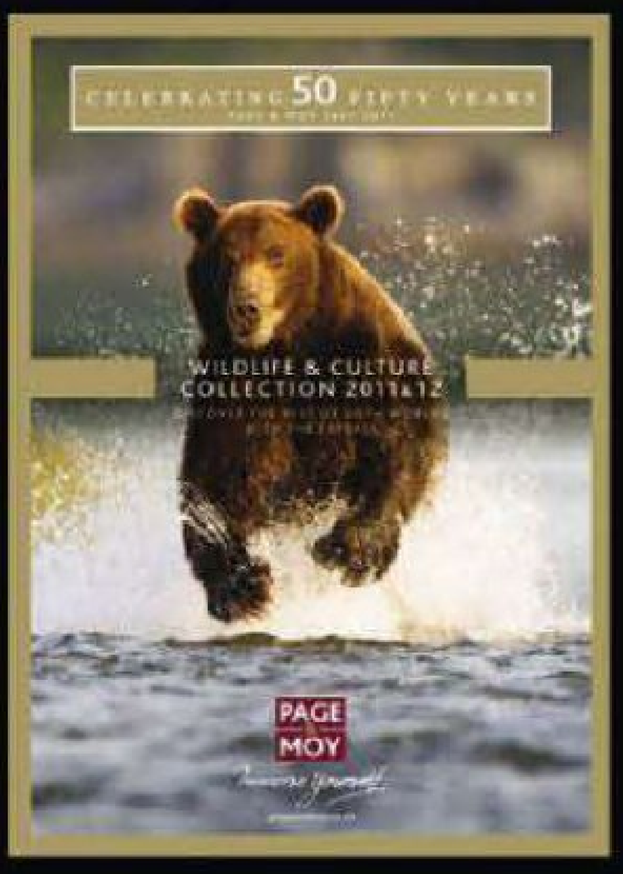
LOWEST PRICE GUARANTEED...

if you book and pay in full before 31st May 2011

- If prices go up after you have booked, you won't pay a penny more
- If the price of your holiday goes down after booking, we will refund the difference
- If you find the same holiday cheaper elsewhere, we will refund the difference

So book your 2012 holiday before 31st May 2011 and you will always get the best price - guaranteed*

Order your copy today



CALL OR GO ONLINE TO REQUEST YOUR COPY OF THE NEW WILDLIFE & CULTURE BROCHURE

CELEBRATING 50 YEARS OF EXCELLENCE 1961-2011

ATOL 1091 PROTECTED

ABTA No.V6345

0800 043 9417

pageandmoy.co.uk/wildlife

or text wildlife to 60006

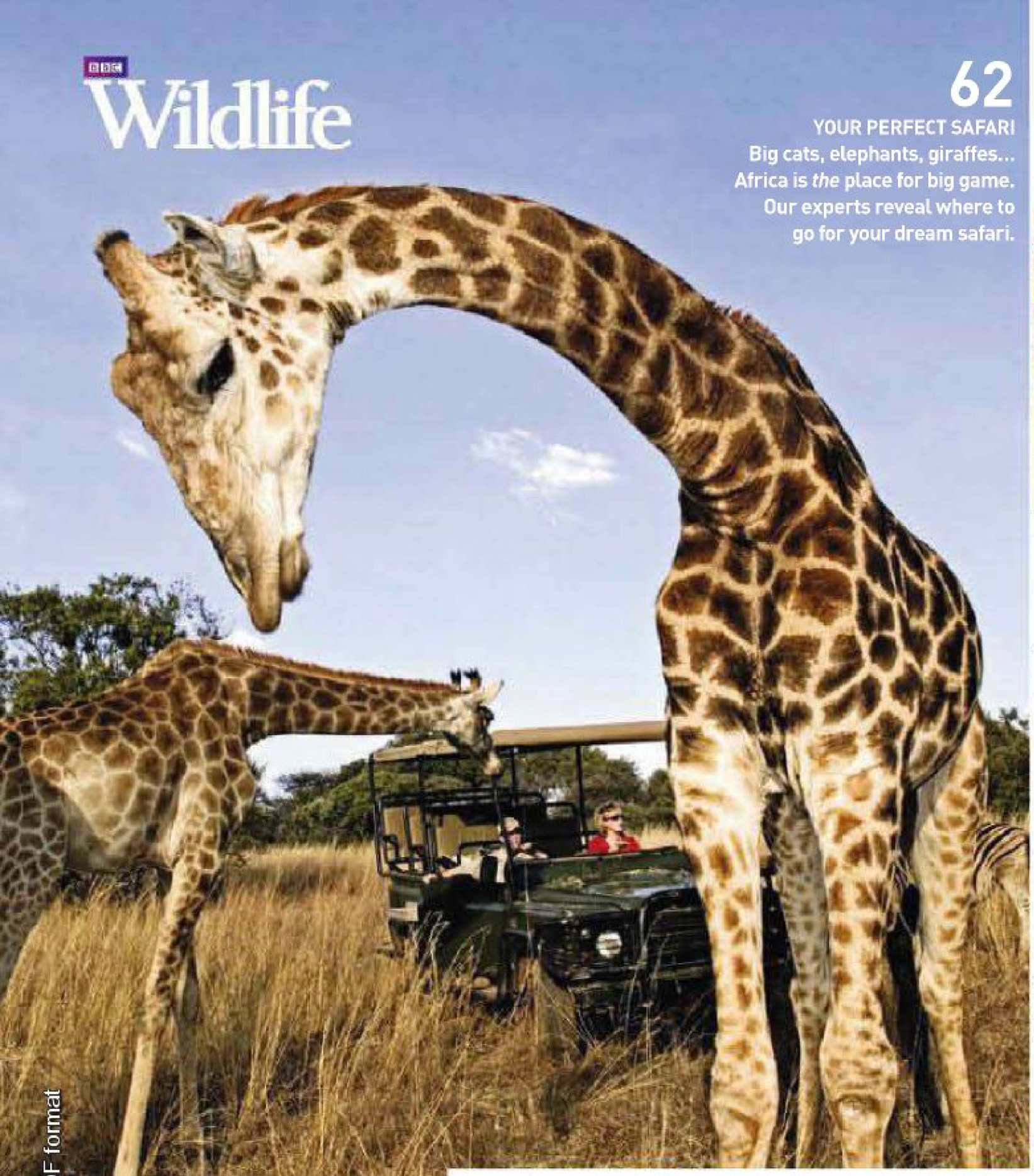
Immerse Yourself

PAGE & MOY

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

BBC Wildlife



62
YOUR PERFECT SAFARI
Big cats, elephants, giraffes... Africa is *the* place for big game. Our experts reveal where to go for your dream safari.

40
HUMMINGBIRDS
"Though the performance appears effortless, this shape-shifting is anything but." Jonathan Elphick

55
YOUR WILD WEEK
Take part in our new survey – tell us what wildlife you see on your daily commute.

StoreMags.com - Free Magazines Download in True PDF format

Giraffes: Martin Harvey/Photolibrary.com (captive); hummingbird: fogdenphotos.com; fox: Laurent Geslin/naturepl.com

Contents June 2011

ON THIS MONTH'S COVER

SPRINGWATCH 6
Brett Westwood explains how to see the stars of the show.

AFRICA AFTER DARK 18
Stunning new infra-red photos show what *really* happens on the savannah when night falls.

HUMMINGBIRDS 40
Take flight with the world's most dazzling, high-revving, aerobatic family of birds.

CHRIS PACKHAM 50
BBC Wildlife readers quiz the *Springwatch* presenter on pandas, rewilding and more.

YOUR PERFECT SAFARI 62
Our travel experts reveal where to go for the wildlife-watching experience of a lifetime.

ELEPHANT COVER James Warwick
GIRAFFE COVER Jeff Vanuga/naturepl.com
INSETS David Tipling; Rob Scott

WORLDWIDE WONDERS 14
The month's amazing wildlife events, from beluga gatherings in Canada to Pyrenean butterfly bonanzas.

RICHARD MABEY 16
Earth is becoming a plastic planet, with potentially catastrophic consequences for biodiversity.

NEWS OF THE EARTH 31
Good news for tigers? Plus Mark Carwardine asks how online people power can aid conservation.

DISCOVERIES 36
Amazing revelations from the natural world.

SPECIAL READER OFFER 38
Don't miss out – act today!

YOUR WILD WEEK 55
ON THE COVER Take part in our new Wildlife to Work survey – finding our what mammals and birds Britons see on our daily journeys.

BLAST FROM THE PAST 58
Meet the bizarre nautilus, a jet-propelled marine wonder that's barely changed in 70 million years.

TRAVEL-WRITING AWARD RESULTS 72
The wait is over: we announce the winner.

PHOTO TIPS: GREAT ANIMAL PORTRAITS 75
ON THE COVER How cropping tight and shooting wide can improve your wildlife pictures.

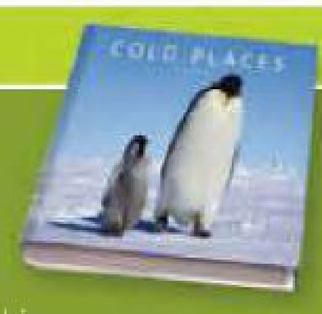
Q&A 81
Your questions answered by our team of experts.

YOUR LETTERS 103
Share your opinions on any issues raised.

YOUR PHOTOS 109
The editor chooses your best pictures.

TALES FROM THE BUSH 114
How to rescue an albatross that's all at sea.

W2



84 BOOKS
Our experts review June's top nature reads.

89 TV, RADIO & FILM
Rachel Ashton selects the month's best natural-history films, TV and radio.

90 SHEARWATER SPECTACLE
ON THE COVER James Fair searches for fallen angels on Skomer Island.

downloaded from: lib.ommolketab.ir

WILDLIFE WORLDWIDE

theafricaexperts

Get up close and personal with lion, leopard, elephant and much more…

Established twenty years ago, Wildlife Worldwide continue to offer the widest choice of unique itineraries and use only the best lodges and guides.

Zimbabwe | Tanzania | Uganda | Zambia | Kenya

Plus a huge choice of destinations worldwide

Group tours and tailor-made holidays

10 days from £1145 per person

Hand-Crafted Specialist Holidays

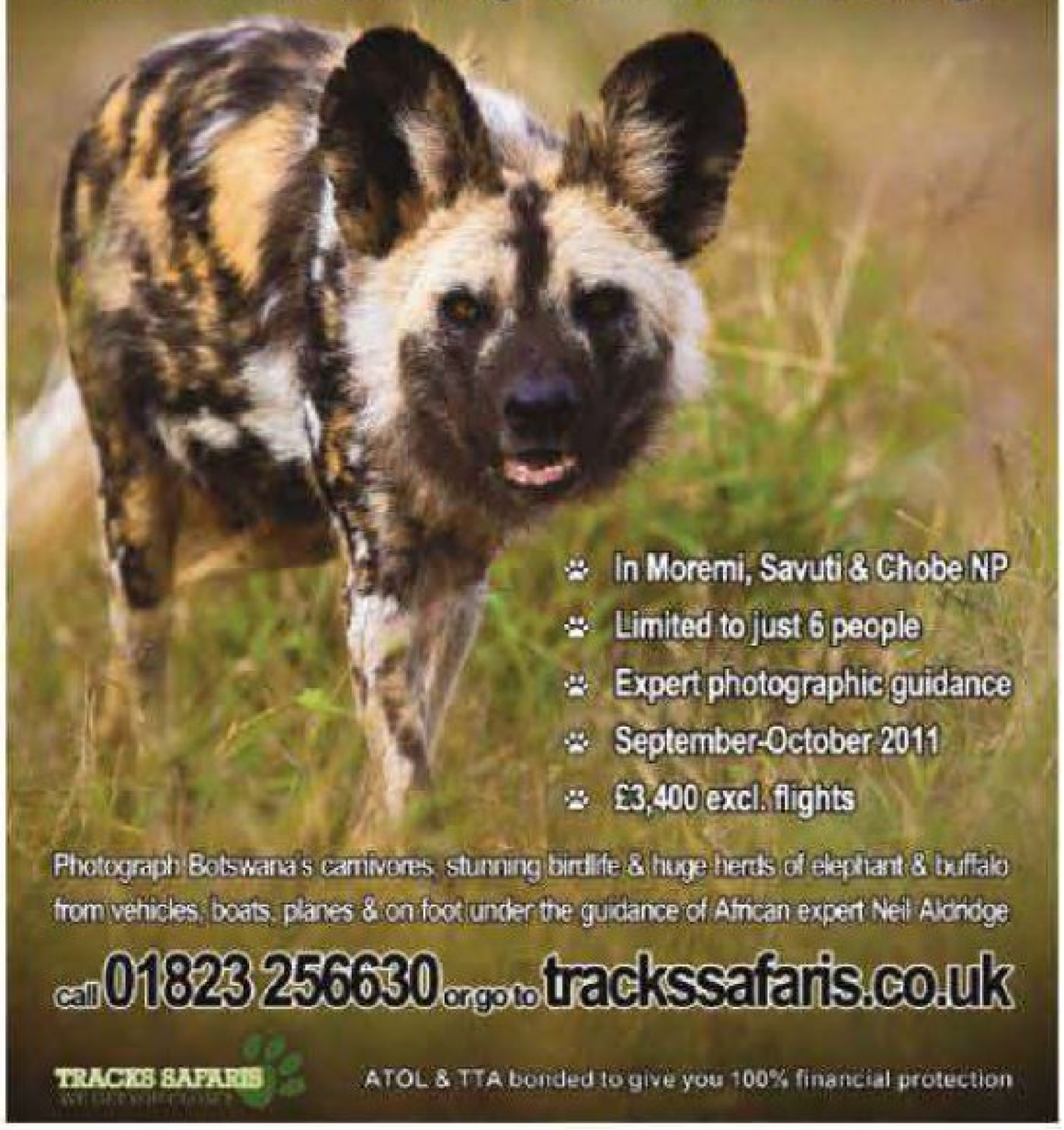
0845 130 6982

www.wildlifeworldwide.com

BOTSWANA EXPOSED

11-night Photo Safari

with wildlife photographer **Neil Aldridge**



- In Moremi, Savuti & Chobe NP
- Limited to just 6 people
- Expert photographic guidance
- September-October 2011
- £3,400 excl. flights

Photograph Botswana's carnivores, stunning birdlife & huge herds of elephant & buffalo from vehicles, boats, planes & on foot under the guidance of African expert Neil Aldridge

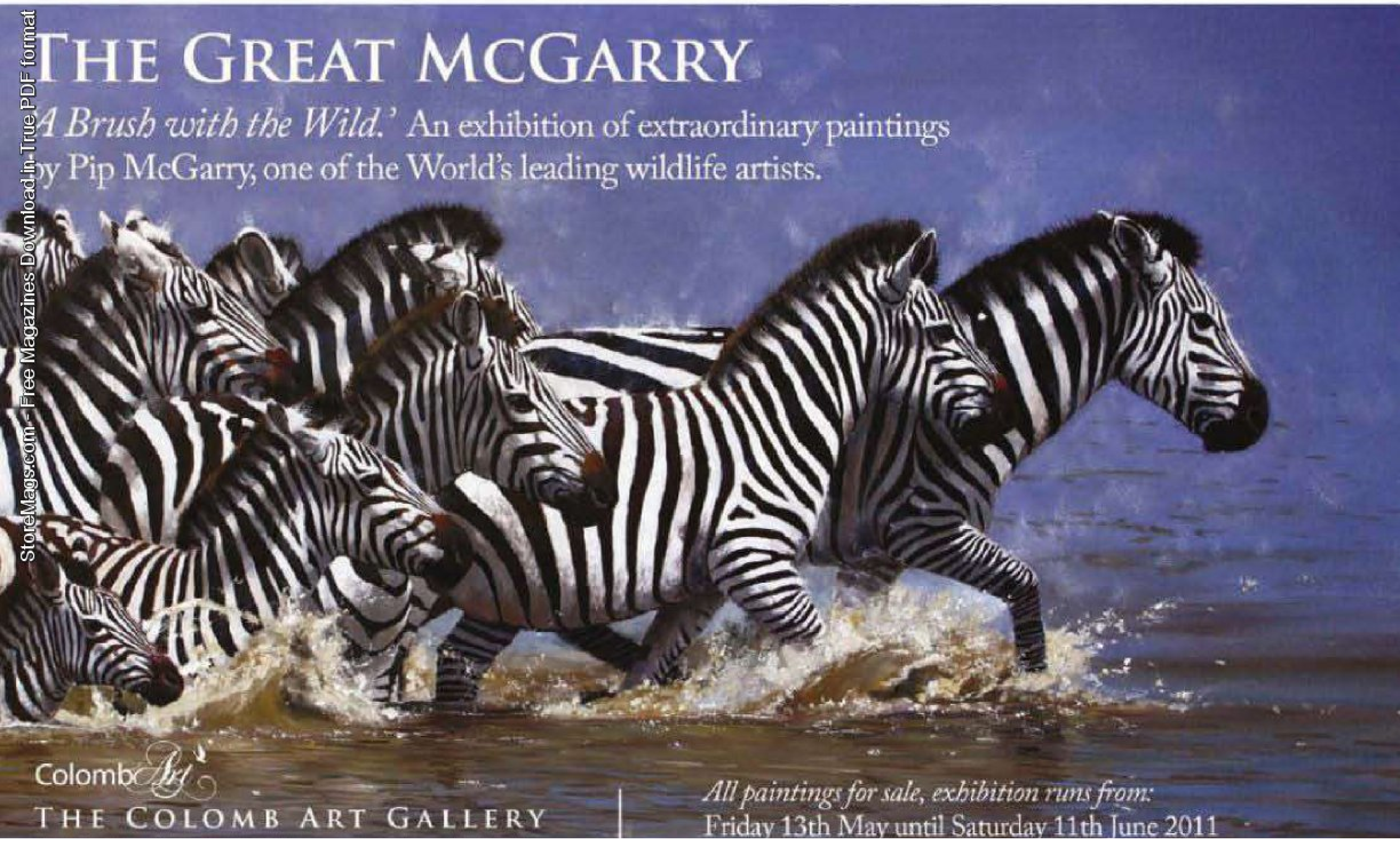
call **01823 256630** or go to **trackssafaris.co.uk**

TRACKS SAFARIS

ATOL & TTA bonded to give you 100% financial protection

THE GREAT McGARRY

'A Brush with the Wild.' An exhibition of extraordinary paintings by Pip McGarry, one of the World's leading wildlife artists.



Colomb Art

THE COLOMB ART GALLERY

All paintings for sale, exhibition runs from:
Friday 13th May until Saturday 11th June 2011

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

BBC Wildlife

THIS MONTH'S CONTRIBUTORS

MARTIN DOHRN
Africa after dark, p18
Martin has been a naturalist all his life and a cameraman since he was 11. Dissatisfied with existing cameras, he created his own systems to gain new insights into nature. His 1996 film *Mara Nights* confirmed his suspicion that what goes on after dark is more interesting than what's on plain view during the day.

CHRIS PACKHAM
Q&A, p50
Chris likes nothing better than a difficult question. He admits that he may not have the answer; indeed, he is *pleased* not to know the answer as it means he will learn a little bit more. But this month he tackles a rich potpourri of readers' queries – ranging from the serious to the sublime and the surreal – in his usual frank and pragmatic style.

PAUL CHAMBERS
Blast from the past, p58
Paul is a writer specialising in fossils and the history of science. His two passions are palaeontology and conchology (the study of mollusc shells) and, as a 'living fossil', the nautilus covers both of these areas. It is such a fascinating creature that he found it difficult to fit in everything he wanted to say.

PHILIP BRIGGS
Your perfect safari, p62
The author of 10 Bradt guidebooks and countless articles about Africa, Philip has visited most of the continent's major sanctuaries. "Growing up in South Africa, the Kruger was my introduction to the bush," he says. "It is an ideal starting point for independent or budget-conscious travellers."

Unforgettable Africa

Act now!
Don't miss out on this month's special offer – see p38.

SAFARI. IT'S A MAGICAL word.

For me, it conjures up countless memories: rescuing a crippled baby elephant from a snare in Zimbabwe; swapping yarns around the camp fire until the wee hours; tagging an enormous white rhino in South Africa; breakfasting on the best porridge I've ever tasted; my first glorious, slinky leopard; the smell of hot African dust and warm elephant dung in my nostrils; and soaring in a hot-air balloon over the Serengeti. Unforgettable.

"My first slinky leopard and the smell of hot African dust: unforgettable."

Africa has so much to offer the wildlife-lover – where do you start? To help you plan your perfect safari, we asked three of our experts to select the best places to enjoy iconic species and experiences, whether you want to admire elephants, track wild dogs, creep up on lions on foot or persuade your kids to stop staring at the goggle box (**p62**). And for additional inspiration we reveal what *really* goes on after dark in Africa with an exclusive gallery of new nocturnal photos (**p18**).

AFTER ONE OF the most exciting springs ever, with a bumper crop of wildlife produced by the warmest April on record hot on the heels of the coldest December, I'm expecting great things from this year's *Springwatch*.

This series, Chris Packham and chums have a new base – Ynys-hir, a beautiful ancient oak woodland in Wales, home to such stunners as redstarts (**p8**), pied flycatchers and red kites. And yes, they're hoping that the local badgers will co-operate. They're even putting geolocators on cuckoos. Further afield, cameraman Gordon Buchanan will be in Knapdale to capture intimate images of beaver families and their new babies, and Iolo Williams will be on Skomer. Meet some of that island's stars in these pages: puffins (**p6**) and Manx shearwaters (**p90**).

Thank you to everyone who sent in questions for Chris. We made him climb a tree in Bristol, then bombarded him with your extremely tricky conundrums (**p50**).

Now we need your help again: this time with our Wildlife to Work survey (**p55**). Whenever you're out and about – on your daily commute or errands – we'd love to know what wildlife you see. We look forward to hearing from you!

Sophie

Sophie Stafford, Editor

Don't miss our stunning Sark art gallery and great giveaways at www.discoverwildlife.com

HERE'S HOW TO GET IN TOUCH WITH US

PHONE
SUBSCRIPTION ENQUIRIES & BACK ISSUES: 0844 844 0251
EDITORIAL ENQUIRIES: 0117 314 7366

EMAIL
SUBSCRIPTION ENQUIRIES & BACK ISSUES: wildlife@servicehelpline.co.uk
EDITORIAL ENQUIRIES: wildlifemagazine@discoverwildlife.com

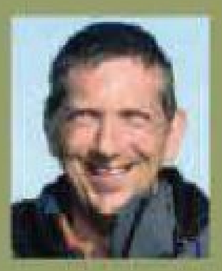
POST
SUBSCRIPTION ENQUIRIES & BACK ISSUES: *BBC Wildlife Magazine*, FREEPOST LON16059, Sittingbourne, Kent ME9 8DF
EDITORIAL ENQUIRIES: *BBC Wildlife Magazine*, 8th Floor, Tower House, Fairfax St, Bristol BS1 3BN

downloaded from: lib.ommolketab.ir

StoreMags.com

downloaded from: lib.ommolketab.ir

HIGHLIGHTS JUNE



Our pick of the wildlife spectacles to enjoy in Britain this month

WITH BRETT WESTWOOD

Naturalist, writer and BBC radio presenter

PUFFIN

Clifftop canoodle

As seen on Springwatch

The puffin seduces even hardened biologists with its bizarre bill, upright – and thus human-like – stance and mournful, clownish expression. Add to that a penchant for nesting in stunning clifftop locations and you have 18cm of pure charisma.

In spring, after months chasing fish across stormy winter oceans, the puffin grows gaudy coverings over its beak. Dressed to impress, it then swims back to its colony to meet its mate or find a new one. The affectionate couple pictured are on the seabird citadel of Skomer Island and, by mid-June, will have a sooty chick in their burrow. The peckish youngster will need five to eight fishy feeds a day, so keeping it happy will be hard work.

BBC TWO

Skomer's puffins are among the stars of *Springwatch*, which starts on 30 May. Chris Packham answers *your* questions in our special interview on p50.

Craig Jones

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

HIGHLIGHTS
JUNE

THREE TO SPOT

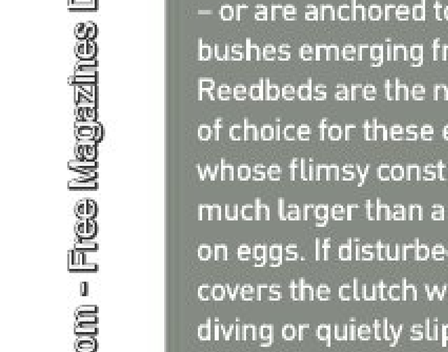
FLOATING NESTS

Laurie Campbell

▲ The largest examples of avian architecture in Britain, MUTE SWAN nests can reach 80cm deep and 4m wide. The huge mounds of aquatic vegetation may be reused for several years, but are given a fresh lining of soft down first. Though most pairs of swans don't tolerate neighbours on their stretch of water, in a few places (such as the Abbotsbury Swannery in Dorset) they nest in loose colonies.

Eric Médard

▲ GREAT CRESTED GREBE nests are usually soggy mats of reeds and waterweed that float among – or are anchored to – branches or bushes emerging from the water. Reedbeds are the nesting location of choice for these elegant birds, whose flimsy constructions aren't much larger than a parent sitting on eggs. If disturbed, it quickly covers the clutch with weed before diving or quietly slipping away.



Frederic Desmette

▼ COOTS are show-offs: in urban parks they will happily breed next to footpaths. Their nests are untidy heaps of sticks and twigs decorated with fresh greenery, and are often built up from the bottom of the pool or lake. Some birds incorporate bits of plastic rubbish. If there's a risk of flooding, both parents will bulk up the nest by adding extra twigs to the top.

Steve Round

A handsome male redstart pauses briefly on a lichen-encrusted branch with a beakful of insects for his young.

REDSTART

Restless beauties

As seen on Springwatch

WITH HIS TAIL a quivering russet blur, a male redstart in full breeding plumage energises his chosen oakwood glade as he flits in search of food for his hungry young. He arrived from his African winter quarters in April, flashing his white forehead from potential nest holes in tree-trunks to prick the interest of the duller, browner female.

Together with two other charismatic summer migrants, the pied flycatcher and wood warbler, the species is closely associated with Welsh sessile oakwoods. The woods at Ynys-hir, where the *Springwatch* team is based this year, are a fine example of the habitat and now is the best time to savour it.

Though redstarts occur throughout the British Isles, nowadays they are a distinctly local speciality in the south and east. They become more common the further the north and west you go, where they frequent open deciduous woods, orchards, and heaths and moorland with scattered trees.

These members of the chat family invariably seem restless, and have a quirky, tail-trembling character. A good way to locate them is by voice. Both sexes call loudly – a penetrating 'hoo-eet' – and from April to mid-June the males sing from the tops of trees. Their melody is a rich, sweet rattle consisting of two or three phrases, starting strongly but then usually fizzling out. The naturalist WH Hudson described it as "only the prelude of a song – a promise never performed".

NOW YOU DO IT

See redstarts at Ynys-hir RSPB, Powys; the New Forest, Hampshire; Coombes Valley RSPB, Staffs; Strid Wood, Yorkshire; Carstramon Wood, Galloway.

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

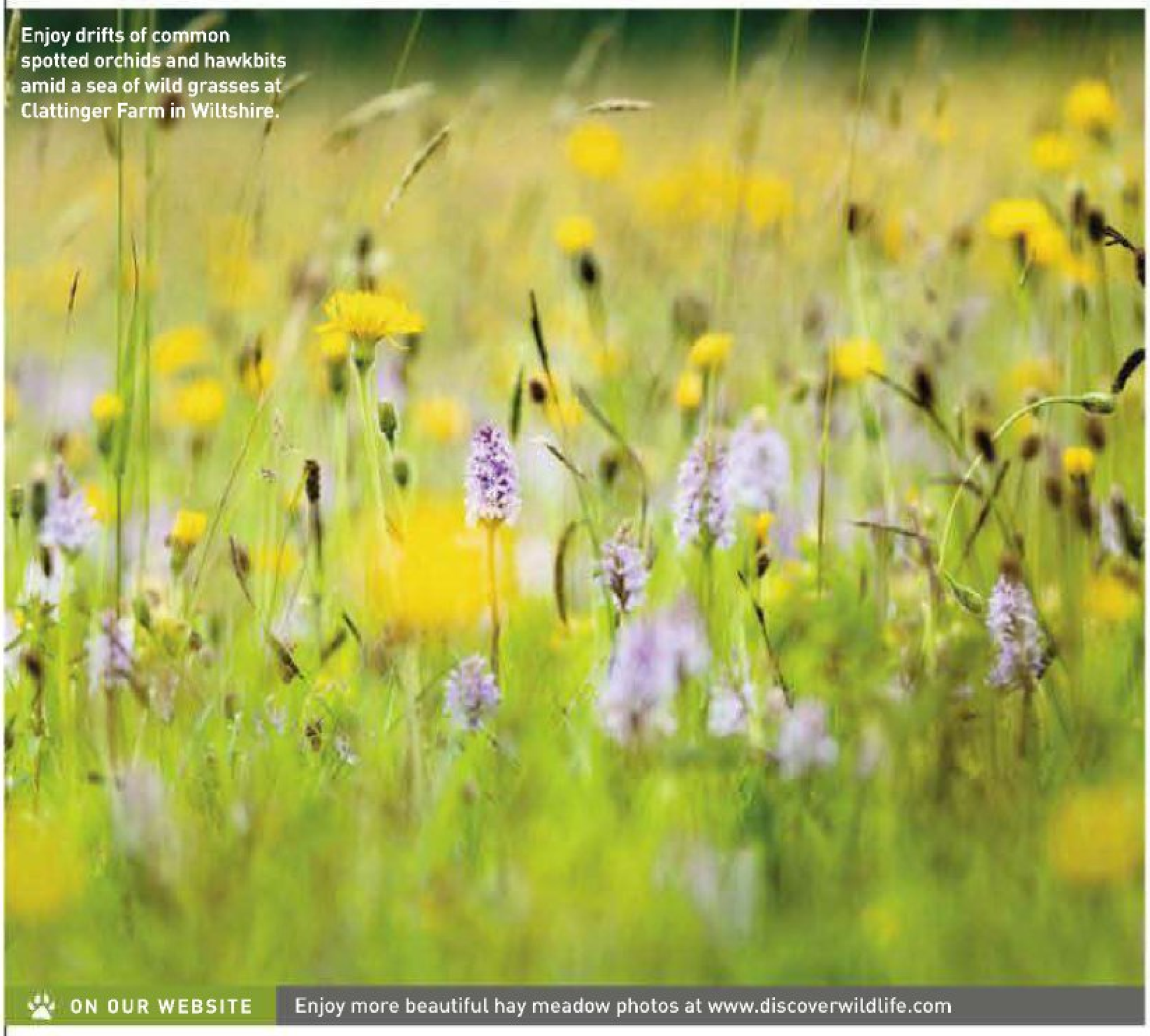
New series

Best of British HAY MEADOWS

June's heady, flower-filled meadows hark back to a bygone age of low-intensity farming.

"NEVER GO on a picnic with an ecologist," a naturalist friend of mine is fond of saying. "They'll only tell you how bad things have become." Midsummer meadows are a case in point: picnickers are conditioned to expect them to look lush and green, but those are just the 'improved' ones. If you stumble across a genuine old hay meadow or – better still – a landscape full of them, green is merely part of a dazzlingly wide palette.

Hay meadows are old grasslands allowed to grow until late June or July and then cut. They're usually grazed by cattle in late summer or autumn, and over the centuries this management regime has favoured an eye-catching array of wildflowers. Sadly, we have lost most of our hay meadows, but there are still enough gems to satisfy even those nit-picking, picnicking ecologists.



Enjoy drifts of common spotted orchids and hawkbits amid a sea of wild grasses at Clattinger Farm in Wiltshire.

Barney Wilczak

ON OUR WEBSITE Enjoy more beautiful hay meadow photos at www.discoverwildlife.com

TOP SPOTS

The flora of Britain's meadows exhibits a distinct north-south divide. In the upland meadows of Yorkshire and the Peak District, stone hay barns and drystone walls stand firm against tides of meadow buttercups, bulbous globeflowers, cow parsley and wood cranesbill. But further south, sorrel and ox-eye daisies often dominate.

1 VANE FARM BUMBLEBEE MEADOW, PERTH & KINROSS
Not an old meadow but a floral carpet planted by the RSPB: the world's first bumblebee reserve.

2 GOWK BANK NNR, CUMBRIA
A fine upland hay meadow with swathes of melancholy thistle, globeflower and great burnet.

3 FEYSTOWN NR, CO ANTRIM
This spot in the Glens of Antrim has greater butterfly orchid, yellow rattle and wood cranesbill (rare in Northern Ireland).

4 UPPER TEESDALE, MIDDLETON CO DURHAM
This upland area has superb northern hay meadows with globeflower and lady's mantle.

5 RIVER SHANNON CALLOWS, IRELAND
Flood meadows stretching 50km between Athlone and Portumna.

Meadow magic: devil's-bit scabious.

Unai Peña/Alamy

6 EADES AND FOSTER'S GREEN MEADOWS, WORCS
Green-winged orchid, saw-wort and devil's-bit scabious are prominent plants at this site.

7 ELAN VALLEY HAY MEADOWS, POWYS
26ha of picturesque meadows along the Elan Valley.

8 CLATTINGER FARM, WILTS
Hosts a fabulous flora, including knapweeds, meadow cranesbill and the rare burnt-tip orchid.

9 LOWER KINGCOMBE MEADOWS, DORSET
A wide array of orchids and other meadow flowers flourish here.

downloaded from: lib.ommolketab.ir

StoreMags.com

ID PARADE

Baby birds

As seen on Springwatch

As spring melts into summer, new and often puzzling birds appear in the garden. It's tempting to assume that you've found something exotic, but what you're really looking at are the first fledglings of the year.

By June many young birds have left the nest: juvenile tits are already roaming the neighbourhood in noisy bands, for example. Once their parents stop feeding them, working out the identity of the new kids on the block can be hard (few field guides illustrate recently fledged individuals), but our exclusive ID parade should help.

Start by asking yourself which adult birds the youngsters most resemble in size, profile, bill-shape and behaviour. Plumage colour and pattern are much less important. Many young birds retain their juvenile plumage for several months until their first moult – and it's this that can be confusing.

The robin looks unfamiliar as a youngster because it starts out with no trace of the red breast sported by its parents: only in autumn do the first scarlet feathers begin to appear.

When I first started watching birds as a boy, I was also foxed by young mistle thrushes, whose scaly appearance made them look quite different to the more uniform adults. Young greenfinches can be confusing, too, until you spot a flash of yellow in the wing. And many budding birders have been left red in the face by failing to appreciate that young goldfinches aren't (red-faced, that is).

Blackbird

TURDUS MERULA

Variable, but usually brown with rusty streaks and spots. Breast and flanks often speckled or 'scaly'.

Mistle thrush

TURDUS VISCIVORUS

Pale centres to upper back and wing feathers create a 'scaly' look unlike the more uniform adult.

Robin

ERITHACUS RUBECULA

Speckled breast and head; pale-centred feathers on upper back. Lacks adult's red breast and face.

Spotted flycatcher

MUSCICAPA STRIATA

Appears more spotty than adult due to large pale blobs on upper back and shoulders.

Great tit

PARUS MAJOR

Looks 'washed out', with only a faint belly stripe (bold in adult) and overall yellow tinge to plumage.

Blue tit

CYANISTES CAERULEUS

Looks 'jaundiced', with yellowish cheeks, forehead and eye-stripe. Lacks adult's black throat patch.

Goldfinch

CARDUELIS CARDUELIS

Lacks adult's red face patch and black cap, with streakier underparts. Tweezer-like bill.

Greenfinch

CARDUELIS CHLORIS

Often grey-brown with just a hint of green. Much streakier than adult. Chunky, triangular bill.

Bullfinch

PYRRHULA PYRRHULA

Resembles a very plain adult female, but with no black cap or chin. Stubby bill.

Starling

STURNUS VULGARIS

Greyish, sandy-brown plumage, with paler throat. All-black bill (yellow in summer adult).

Woodpigeon

COLUMBA PALUMBUS

Duller, dirtier grey than adult, without pink tone, and lacks bold white slash on neck.

Pied wagtail

MOTACILLA ALBA

Much paler grey than adult, often with overall yellowish wash, and lacks black cap.

Illustrations by Felicity Rose Cole; not to scale

DON'T TOUCH!

If you find a baby bird, leave it alone: its parents are probably nearby. For more advice go to www.rspb.org.uk/advice/helpingbirds/health/babybirds.aspx

ON OUR WEBSITE

For expert advice on how to attract birds to your garden, identify bird nests and many more gardening tips, visit www.discoverwildlife.com/wildlife-gardens

downloaded from: lib.ommolketab.ir

StoreMags.com

Chris Gomersall

Head west this month and scan coastal waters for the silhouette of a basking shark loitering offshore.

BASKING SHARK

Cruise control

LEVIATHANS ARE heading purposefully towards our shores with maws agape. Every year they come at this time, and the carnage they create is immense – millions of lives are lost with every piano-sized mouthful of seawater that they engulf. Thankfully – for us at least – those lives belong to plankton, and the monsters hoovering them up are basking sharks, which are harmless to humans.

High numbers of baskers appear off the western seaboard of the British Isles from June to August, tracking the plankton blooms northwards. For such large fish, they will swim amazingly close to shore. Reliable hotspots include Cornish bays, the Isle of Man, Malin Head in County Donegal and the Scottish islands of Coll and Tiree.

I still treasure my first sighting, in a sheltered bay on the Isle of Barra, with corncrakes calling in the background. Two slightly floppy tarpaulin triangles circled lazily over kelp beds just offshore, giving me great views from the cliff above. Occasionally a tail-tip would emerge, and once I stared straight down into that enormous open mouth.

Where these huge fish come from is a mystery, but researchers are using archival tags to learn more about their movements in British waters. A project run by the Save Our Seas Foundation found that a female travelled from the Isle of Man to Newfoundland, covering over 9,500km and diving deeper than 1,250m *en route*, so perhaps eastern and western Atlantic populations regularly mingle.

FIND OUT MORE

For more information about basking sharks in British waters visit www.baskingsharks.org

WHITE-CLAWED CRAYFISH

Britain's only native crayfish is a compact, clay-coloured creature. It likes unpolluted streams, rivers and pools, but is retreating in the face of the much larger American signal crayfish, which has escaped from crayfish farms. The aggressive invader carries crayfish plague – a fungal disease fatal to 'white claws'.

There is good news, though. It seems that our indigenous crayfish can hang on in surprising places: last year more than 400 were found in one night in tiny rivulets in a Midlands forest. Handling the crustaceans requires a licence, but there's no harm in shining a torch into local streams at night (when crayfish emerge to feed). Disinfect your wellies if you're travelling between streams to avoid spreading the deadly pox.

GET INVOLVED

Send sightings of native crayfish to Buglife at www.buglife.org.uk

Andy Sands/naturepl.com (captive)

THREE TO SPOT

MIDSUMMER NIGHT'S FLOWERS

Colin Varndell

▲ Oberon, the king of the fairies in *A Midsummer Night's Dream*, has this to say about June flowers: "I know a bank where the wild thyme blows, / Where oxlips and the nodding violet grows, / Quite over-canopied with luscious woodbine, / With sweet musk-roses, and with eglantine." His mention of WILD THYME is particularly appropriate: on Midsummer's Day (24 June) this fragrant plant carpets our downs.

John Bebbington

▲ The "luscious woodbine" that Oberon refers to is HONEYSUCKLE, whose cream and pink, tubular blooms give off a sweet perfume at night to attract pollinating moths. In shady woodlands this creeper's foliage is the food plant for the green, spiky caterpillar of the white admiral butterfly. Honeysuckle bark peels easily and is used by dormice, which line their nests with it and lick nectar from the flowers.

▼ "Eglantine" is the old English name for SWEET BRIAR, one of the many very similar species of dog-rose, most of which are at their best by Midsummer's Day. It looks like common dog rose, but has smaller, neater leaves covered with glands that release a delicious apple scent when crushed. Eglantine favours well-drained neutral or chalky soils, for example on downland or in old quarries, and is often overlooked. Why not search for it this month?

Jason Smalley

downloaded from: lib.ommolketab.ir

StoreMags.com

Brown long-eared bat

WHEN YOU SEE a long-eared bat for the first time, the obvious question that springs to mind is "Why the big ears?". Our two native species – the brown and the much rarer grey – are indeed aurally gifted.

The enormous ears consist of an outer membrane surrounding a pointed inner structure, called the tragus. Both parts are visible when the bats are settled and alert, but are tucked out of the way beneath the wings when they roost or hibernate.

The outer membrane, or conch, has a number of folds that contract the ear into a ramshorn position as the bats relax. In flight (as this photo shows), the ears are held erect and pointing forwards, making it easy to identify these bats in the beam of a torch.

Unlike most native British bat species, long-eareds often feed by gleaning – that is, by plucking their prey from objects such as leaves, twigs or spiders' webs during flight. This means that they can forage in wet or cool weather when few insects are moving, and it also enables them to take flightless prey. But echolocation is less effective at locating perched meals, so bats that glean need more powerful hearing – and hence bigger ears – if they are to pick up low-frequency sounds such as scuttling legs.

You might think that huge ears would be a hindrance in midair, since they generate drag. But long-eared bats are slow fliers, patrolling leisurely up and down to listen for prey to glean from foliage, and so the adverse effect on their manoeuvrability and speed appears to be no great handicap.

Eric Médard

GET INVOLVED

Discover more about British bats and how you can help them at the Bat Conservation Trust website: www.bats.org.uk

ON OUR WEBSITE

Brown long-eared bats often use bat boxes. Find out how to attract them to your garden at www.discoverwildlife.com/wildlife-gardens/how-attract-bats-your-garden

downloaded from: lib.ommolketab.ir

High-speed flash demonstrates the agility of a brown long-eared bat leaving its rocky roost site at dusk.

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

HIGHLIGHTS
JUNE

Anup Shah/naturepl.com

ETHIOPIA

Mountain monkeys

June heralds the rainy season in the Ethiopian Highlands and sees a peak of breeding activity among the gelada baboons of the alpine grasslands. These grazing primates – only distantly related to true baboons – live in complex, multi-tiered communities known as herds, each divided into numerous reproductive units. Females in oestrus acquire a red flush across the patch of bare skin on their chests, an 'I'm ready if you are' signal to the dominant male in their group. He has a preferred partner, occasionally mating with other females that take his fancy. The young geladas, born six months later, hang onto their mothers' stomachs for five weeks and then ride on their backs, clinging on tightly as the group climbs to its cliff-face sleeping site.

FIND OUT MORE

www.bbc.co.uk/nature/life/Gelada

ARCTIC CANADA

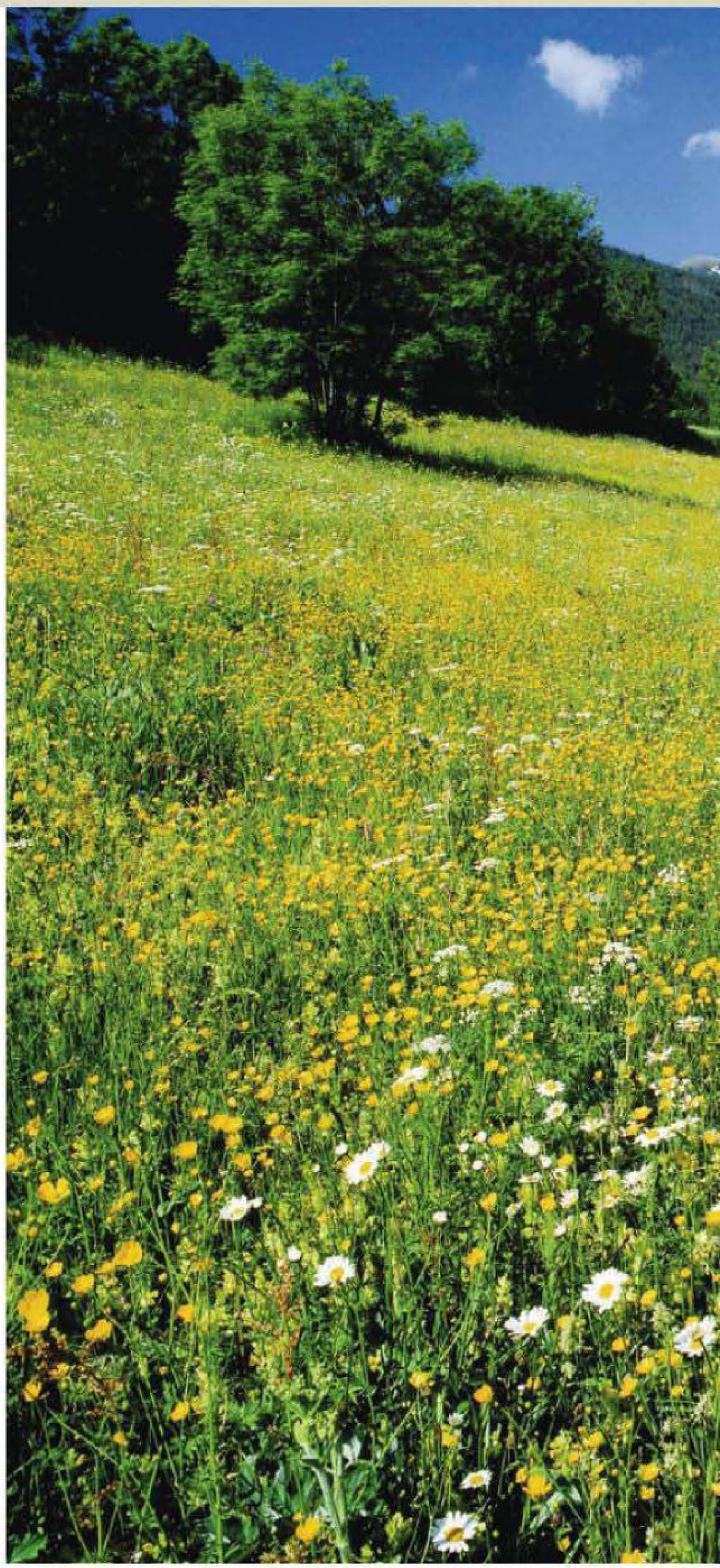
Beluga gathering

By the month's end, pods of beluga whales are starting to congregate in the shallow waters of the west side of Hudson Bay. More than 3,000 of these highly sociable cetaceans spend the summer in the Churchill River area, giving birth and hunting the abundant stocks of capelin. From the air, their creamy-white bodies – interspersed with the smaller, grey forms of their calves – litter the estuary like a sprinkling of rice grains. Below the surface, the murky waters resound to the bird-like squeals, clicks and chirrups with which they communicate. The belugas also take advantage of the shallows to complete their seasonal moult, rubbing against the seabed to slough off old skin. When summer draws to a close the pods will return north to the Arctic Ocean.

FIND OUT MORE

www.acsonline.org/factpack/BelugaWhale.htm

Saul Gonor/NHPA



Massimo Ripani/4Corners Images

downloaded from: lib.ommolketab.ir

WORLDWIDE WONDERS

StoredMags.com

What's going on in the wild world this month with MIKE UNWIN

SPAIN

Peak perfection

A short-toed eagle sweeps over the flower-studded meadow, its shadow eclipsing a patch of thistles and launching a Queen of Spain fritillary into flight. The butterfly flutters and glides over the carpet of blooms – irises, primroses, globe daisies and round-headed rampions. As more species lift off – graylings, blues, clouded yellows – bee-eaters dart among the confetti of wings, snatching prey with a snap of the bill.

June brings a prolific floral display to the Parc Nacional d'Aigüestortes, its diversity reflecting the unique combination of Mediterranean, northern European and alpine influences that characterises the Catalonian Pyrenees. From the orchids of the forest edges to the saxifrages and gentians of the mountain slopes, each habitat has its gems. The butterflies drawn to this bonanza of nectar are equally impressive. Local specialities, such as mountain fritillary and purple-edged copper, offer an ID challenge even to the expert.

FIND OUT MORE

www.bc-europe.org; www.eurobutterflies.com

David Hosking/FLPA

SRI LANKA

This month the fruit of the palu tree offers SLOTH BEARS in Sri Lanka's Yala National Park a juicy supplement to their usual termite diet. Normally shy and nocturnal, the animals can now be seen by daylight. Females carry their young piggyback-style (sloth bears are the only members of their family to do so) as they forage for fallen fruit or pluck it from the branches.

Ferrero-Labat/ardea.com

TANZANIA

ELAND follow their own course during the great migration of Serengeti herbivores. By June, the area's eastern grasslands have dried up and these big, ox-like antelope head north, supplementing their grazing by browsing in woodland. They move in groups of 50 or more, the knees of the larger bulls clicking softly as they walk.

Steve Maslowski/Getty

SIBERIA

By late June, the BEWICK'S SWANS that wintered on European wetlands will be incubating their eggs on the boggy tundra of Siberia. Having arrived in May, each pair now vigorously defends its nest mound. The clutch of three to five eggs takes 29–30 days to hatch. In late September, the cygnets will join their parents on the long southward migration.

downloaded from: lib.ommolketab.ir

StoreKeg.com

A BRUSH WITH NATURE

RICHARD MABEY

Our world has become a plastic planet, littered with PVC, polystyrene and polythene. The impact on biodiversity could be devastating.

OF ALL THE bizarre weather last year, the wind was the most exceptional. There were ferocious gales every month. In mid-April, the volcanic-ash-laden north-westerlies that grounded air traffic also stopped migrating birds in their tracks. The main body of swifts arrived nearly a month late. In June, the south-westerlies blew down trees; in August, they kept butterflies hunched in the grass, even on days when the air temperature reached 25°C.

When December's blizzards finally ended, and the snow had melted from a flattened, leafless landscape, it became all too obvious what else the ceaseless gusts had done. They had strewn the entire countryside with plastic debris. The hedges were draped with carrier bags and black agricultural polythene. Where the snow had lain were drifts of hamburger cartons, Tetra Paks and crumbling styrofoam.

As visible litter, it was (and still is) hideous. But more ominous was the way in which the wind and frost were starting to break it up. The catastrophic build-up of plastic detritus in the oceans is now all too familiar: California sea otters have been choked by polythene rings from six-packs, for example, and a Hawaiian green turtle was found dead with a pocket comb, a foot of nylon rope and a wheel from a toy truck lodged in its gut.

When marine biologist Richard Thompson surveyed fulmar carcasses washed up on North Sea coasts, he found an average of 44 pieces of plastic in each bird's stomach. Meanwhile, the notorious 'Great Pacific Garbage Patch' covers 26 million km² and contains six times more plastic (by weight) than plankton. We're now creating a land-based garbage patch to match.

Plastics – long-chain hydrocarbon polymers – are supposed to be chemically and biologically inert. That is partly why we value them, and why, paranoid about contamination, we cling-wrap them around food, toothbrushes and even books. But they are not physically inert. They are ground down to ever smaller particles by the weather – particularly the already minute pellets called nurdles, which are the basic raw materials of plastic manufacturing industries.

Minuscule particles of ground plastic have been found in jellyfish and sand fleas, with unknown consequences. When plastic debris is eventually abraded to fine powder, it will be ingested by plankton and then bacteria – the basic engines of the planet's life-support system.

Polymers occur in nature. Spiders' webs, rubber, even our fingernails are polymers. But highly modified forms such as polystyrene and PVC (almost all derived from petroleum hydrocarbons) are entirely new, and we have no notion of what their impact on small organisms might be. One billion tonnes of alien plastic molecules have been created over the past half-century, and the vast majority are still circulating, undegraded, through the biosphere.

But not all of them. They degrade, for instance, in sunlight. The plastic water bottles carried around by so many people in summer – the very symbol of healthy living – leach toxic molecules into the water in hot sunlight.

As for the marginally less complex hydrocarbons from which plastics are synthesised, and the chemicals added to them, many are both volatile and biologically active. Forget, for a moment, known toxins such as oil-based pesticides. Consider the planet-wide cocktail of organic chemicals, unknown in nature, that we're pouring into our atmosphere and water systems: the evaporations of printing ink, cosmetics, paint, non-stick cooking utensils, fabric conditioner, hot tyres and coolants. Our lifestyles depend on chemicals we're assured are safe for us, but the wider biological effects of which have scarcely been thought of, let alone investigated.

When they are, the results are terrifying. A few years ago, José Fuentes of the University of Virginia discovered that this cocktail of pollutants (especially residues from unleaded petrol) bonded with and neutralised flower scents, so that bees were unable to track down their nectar plants, leading them to starve.

My hunch is that more effects of this sort will soon be proved. Long before global warming's impact is evident, oil – in the form of its long molecular-chain derivatives – will turn out to be a major cause of the collapse in biodiversity, from the disappearance of fungi to that of insects and insect-eating birds. It's happening *now*.

This poor hedgehog is evidently suffering, another victim of the plastic despoiling every corner of the modern world. The full extent of the harm it does to wildlife and ecosystems is still unknown.

"One billion tonnes of alien plastic molecules have been created over the past half-century, and almost all of them are still circulating."

RICHARD MABEY has written a column for *BBC Wildlife* since 1984. Order his latest book, *The Perfumier and the Stinkhorn*, on p86 (RRP £9.99, reader price £8.99, subscriber price £8.50) quoting W0611/09.

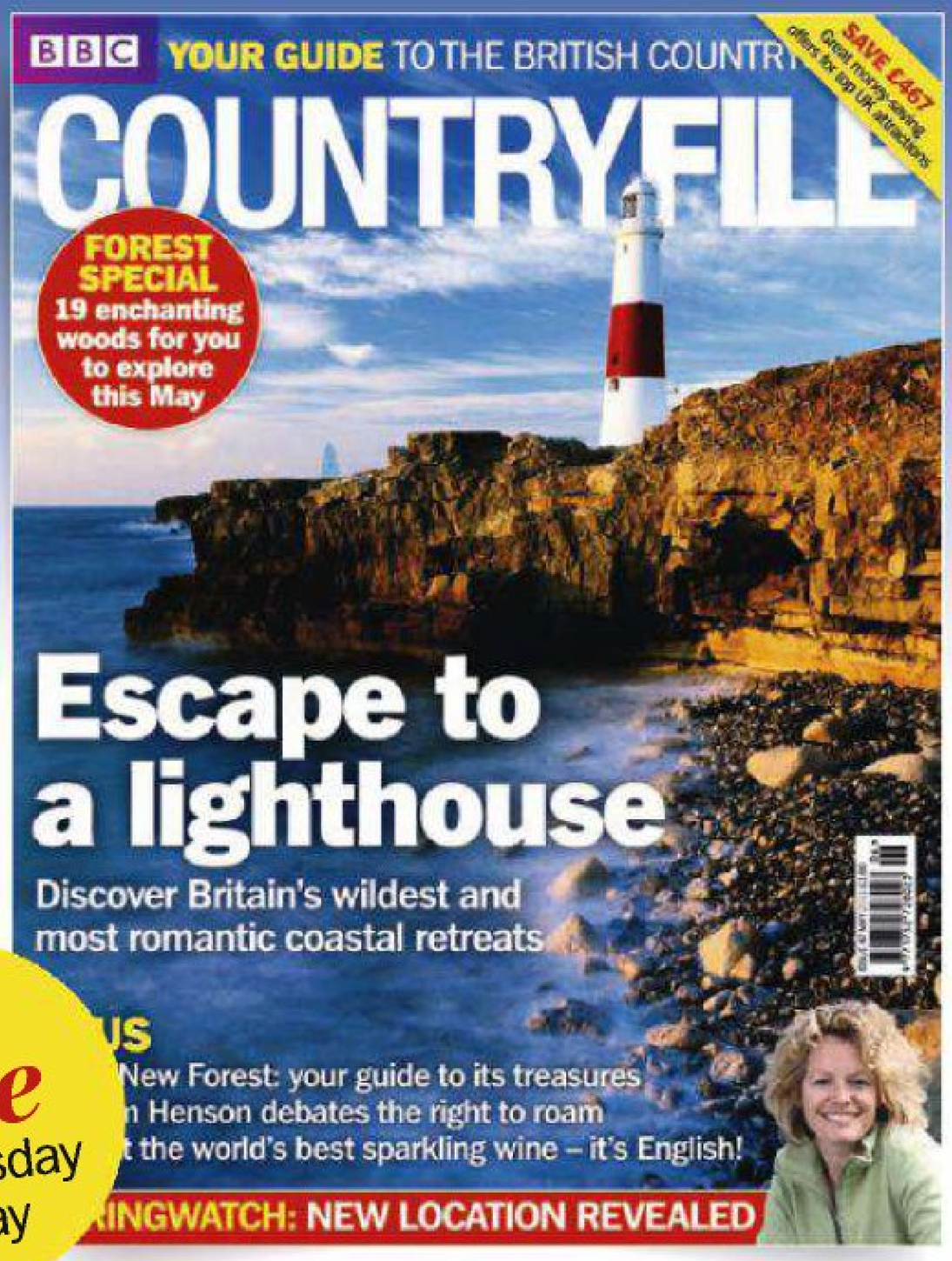
Photoshot Holdings Ltd/Alamy

downloaded from: lib.ommolketab.ir

BBC YOUR GUIDE TO THE BRITISH COUNTRYSIDE

COUNTRYFILE MAGAZINE

Love the countryside?



Great days out • Beautiful photography • Inspirational features

Try 5 issues for just £5*

ORDER ONLINE
www.bbcsubscriptions.com/countryfilemagazine
or call us on **0844 844 0260†** Quote code **WIHA611**

BBC Magazines

*Sorry, 5 issues for £5 saving is available to UK Direct Debit orders only. After your trial period, your subscription will continue at just £17.10 every 6 issues by Direct Debit, saving 25% on the shop price. If you cancel within 2 weeks of receiving your 4th issue, you will pay no more than £5. Offer ends 12 June 2011.

StoreMags.com - Free Magazines Download in True PDF format
downloaded from: lib.ommolketab.ir

PORTFOLIO: AFRICA AFTER DARK

Natural-history programmes tell only half

AFRICA CHANGES AT night. Animals wake, hunt, mate and sleep, and those species that seem so familiar during daylight take on different personae.

By developing new camera technologies, we are able to observe behaviour previously hidden by a cloak of darkness. The thermal camera, for example, gives a novel view of the night world.

At night, elephants usually halt their near-incessant search for food for a few hours of sleep. In this group in Kenya's Masai Mara only the youngsters lay down, while the adults slept standing up. The matriarch was the least sleepy; now and again she would flick open an eye just to check that we were behaving ourselves.

Elephants use their ears to keep cool during the day; unsurprisingly, then, these appendages appear very light in this image – indicating a cool temperature – in contrast with the black (hot) mammary glands of the lactating mothers.

All photos: naturepl.com

downloaded from: lib.ommolketab.ir

of the story. Martin Dohrn's exclusive images reveal what really goes on when night falls in Africa.

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

Zebra kill camera operator: Tom Stephens

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

◀ **FRIDAY THE 13TH:** unlucky for this zebra, but not for these lions. On a moonless night, while filming for National Geographic's *Night Of The Lion,* we took our thermal camera to track a group of lions wandering, unseen, among the zebras in the Masai Mara.

The predators padded through the herd for a couple of hours, apparently looking for a particular animal. When they found their quarry, they gave chase; before long, one had pulled down a stallion.

The thermal camera reveals a swollen, hot section on the victim's right front leg; we think it was a limping individual we had filmed half an hour earlier. Did the lions identify a vulnerable target, then somehow track it down in the darkness by listening for its irregular footfalls? Or did they just get lucky on Friday the 13th?

▲ **THE STARLIGHT CAMERA** we developed has revolutionised night filming. Using a special wide-angle lens and image intensifier, we can capture unique footage lit only by the stars.

This infra-red image was taken in South Africa's Sabi Sabi Game Reserve using an early version of the Starlight camera. Three lionesses watched as their impetuous offspring teased a young white rhino. Its mother was content to let her baby learn a few valuable lessons about big-cat behaviour, but was ready to trample any feline that overstepped the mark.

After a lengthy stand-off the lions tired of the game and wandered off. Despite the intimidating situation and being outnumbered, the young rhino was not in any real danger... this time.

downloaded from: lib.ommolketab.ir

StoreMags.com

downloaded from: lib.ommolketab.ir

DARKNESS HIDES A multitude of sins for young lions learning their trade. During filming for National Geographic's *Night Of The Lion*, our Starlight camera allowed us to capture the action with infra-red light – invisible to the animals, so it didn't affect the natural behaviour of our subjects.

These two delinquents are 'hippo surfing' – the name we gave to the almost nightly harassment of hippos inflicted by a gang of nine young lions living in and around Bila Shaka in the Masai Mara. Once again, there was no real threat to this big bull – he was healthy and strong enough to defend himself – but the lions seemed to enjoy the moment when his defiance gave way to fear, and he broke for the safety of the river.

Camera operator: Richard Jones

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMars.com

PORTFOLIO: AFRICA AFTER DARK

Camera operator: Justine Evans

downloaded from: lib.ommolketab.ir

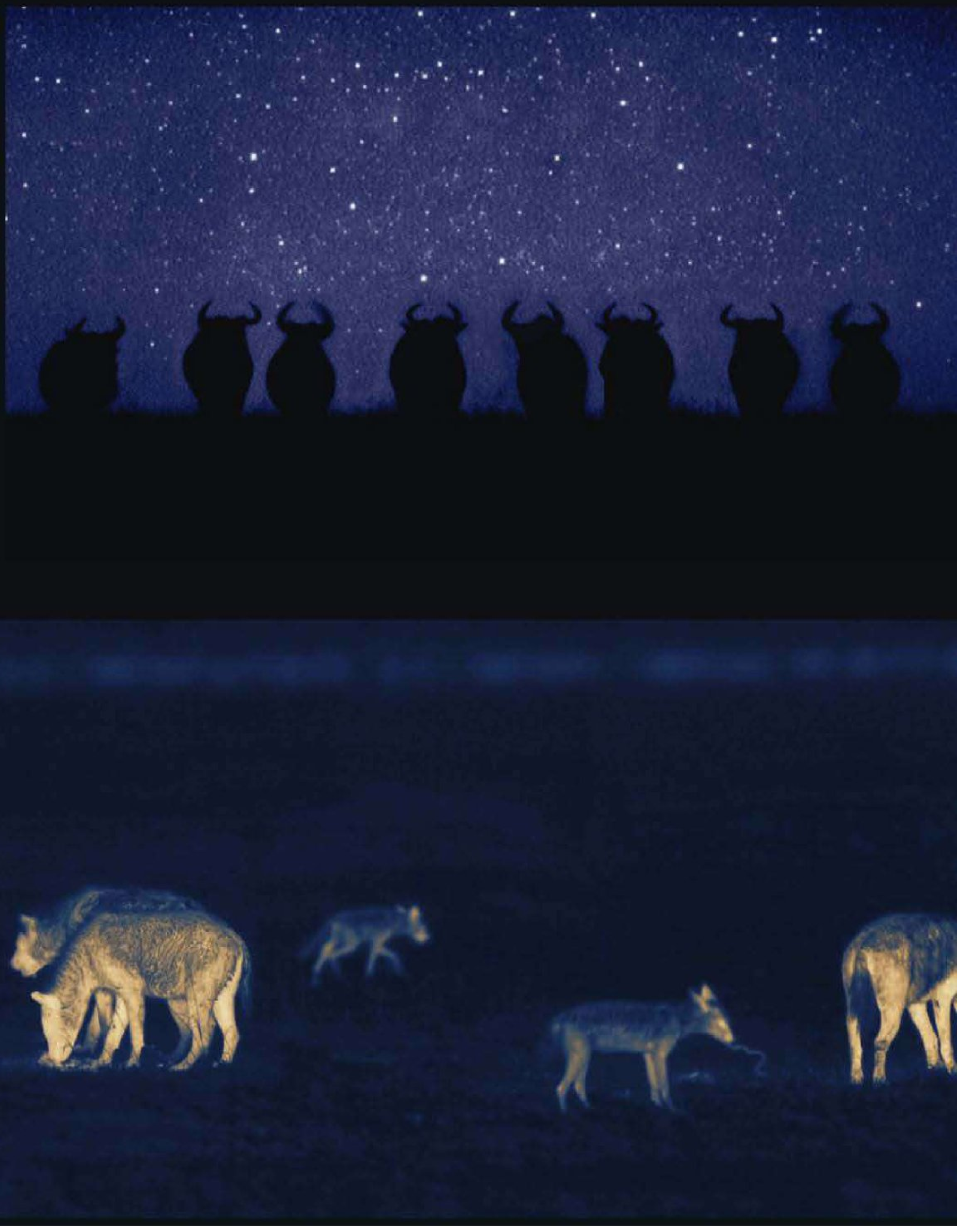
▲ EVERY NIGHT IS different on the Masai Mara – and it's certainly not all action. Generally, on moonless nights, many grazing animals simply rest and chew the cud. Giraffes are no exception – when visibility is poor, they tend to sit down, behaviour that is rarely seen during the day. This might explain why we so rarely saw giraffes at night: we were accustomed to searching for movement. This image, produced with our thermal camera, represents warm areas as yellow, becoming white in the hottest spots. Interestingly, it reveals that giraffes have very hot heads.

◀ USING A STARLIGHT camera is the opposite of point-and-shoot photography, as this image of elephants in the Masai Mara demonstrates. Taken with an early model, it was the result of a huge amount of work. A crane arm was fixed to our car that held the camera low enough to encompass the stars shining behind the elephants. Then we trundled around the savannah with this contraption shaking itself to bits. The matriarch elephant was less than impressed by our efforts and threatened us and the cameras. This was pretty much the only moment we captured, but it demonstrated the value of the set-up for still photography as well as for TV footage.

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com



downloaded from: lib.ommolketab.ir

StoreMags.com

◀ **DO WILDEBEEST APPRECIATE** natural wonders? If this photo is anything to go by, then yes. Of course, they're not actually stargazing – but when they line up in serried ranks like this, all staring intently towards the same potential threat (us?), we imagine all sorts of thoughts going through their herbivore brains. And this image also showcases the accidental beauty revealed serendipitously by our night-filming techniques.

▼ **THE THERMAL CAMERA** creates unique images. In particular, after dark, it provides clear views that are hard to achieve with either infra-red or Starlight cameras.

When hyenas make a kill at night, as in this shot taken in the Masai Mara, the whole clan gathers to enjoy the feast. It is fascinating to watch the social interactions between group members, and to spot jackals sneaking in under the cover of a cloudy night to steal morsels of wildebeest meat for themselves.

downloaded from: lib.ommolketab.ir

THESE LIONS IN Botswana's Moremi Game Reserve were having a bad day.

Earlier, a lioness had caught a young warthog – and immediately one of the two pride males arrived to commandeer the entire pig for himself. The other male sneaked in later, inadvertently betraying a fling he was enjoying with a lioness from another pride – guaranteed to put the noses of his own harem out of joint.

We followed the mothers and their subadult cubs for many hours and kilometres on this bright moonlit night as they searched for prey in vain. At this rest stop, in between bouts of tail flicking, the young males on the right of the scene resorted to testing the palatability of tree bark. Life can be hard for lions.

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

THE PHOTOGRAPHER: **MARTIN DOHRN**

Martin's first attempts at night photography, over 30 years ago, began by serenading a family of badgers with the sound of a remote camera and infra-red flash firing. A spell at the BBC's Natural History Unit prompted a migration from still to moving pictures. He now makes wildlife films as well as developing techniques and cameras to operate in darkness without disturbing animals. Shoots for *Night Of The Lion* and a collection of films for the Nat Geo Wild channel – to be screened later this year – utilised a suite of these innovative cameras to reveal previously unseen behaviours. You can see samples of Martin's film footage at www.ammonite.co.uk

Night driver-guides: Andrew Karanga, Wilson Shange, Stanley Kinyolo, Kibet Ropke, Zawadi, Clinton Edwards

downloaded from: lib.ommolketab.ir

WILDLIFE ADVENTURES

WITH COX & KINGS

KENYAN EXPERIENCE

Experience a taste of Kenya on this outstanding introductory tour to the country's most beautiful and varied wildlife areas, including Samburu National Park, Lake Nakuru and the Masai Mara. Transport is by private minibus, accompanied by an English-speaking guide.

WILDLIFE TO SEEK...

African elephant, cheetah, leopard, Nile crocodile, wildebeest, zebra, lion.

THE OFFER...

Save £250 per person when travelling between 1 Jun and 31 Oct 2011. 9 days from £2,269pp. Price includes international flights, 7 nights' twin-share accommodation, breakfast daily, six lunches, six dinners, escorted sightseeing, transfers, tour guide and entrance fees. Tour departs every Saturday.

For the full itinerary, please call **0844 576 8077,** quoting reference **'QBBCWILKEN'**

MADAGASCAR: WILDLIFE ADVENTURE

Madagascar's stunning scenery, varied forests and fascinating culture provide the ideal backdrop against which to view mammals, reptiles and a variety of bird species, 120 of which are endemic.

WILDLIFE TO SEEK...

Ring-tailed lemur, red fronted brown lemur, dancing sifaka, mouse lemur, white-footed sportive lemur, indri indri, Parson's chameleon.

THE OFFER...

Save up to £200 per person on 10 Jun, 1 Jul, 5 Aug, 9 Sep, 7 Oct and 11 Nov departures. 10 days / 7 nights from £2,415pp. Price includes international flights, 7 nights' twin-share accommodation, breakfast daily, eight lunches, seven dinners, escorted sightseeing, transfers, tour guide and entrance fees.

For the full itinerary, please call **0844 576 8077,** quoting reference **'QBBCWILMAD'**

BOTSWANA EXPLORER

This exclusive camping safari travels through the Okavango delta to some of the wildest areas of Chobe National Park, ending at Victoria Falls. Travelling in a specially customised 4x4 vehicle, a maximum of six guests are accompanied by an expert &Beyond safari guide throughout.

WILDLIFE TO SEEK...

Elephant, lion, buffalo, leopard, wild dog, cheetah and a whole variety of plains game like zebra and antelope.

THE OFFER...

Save £600 per person when travelling between 1 Jun and 30 Nov 2011. 12 days from £4,439pp. Price includes international flights, 9 nights' twin-share accommodation, breakfast daily, seven lunches, nine dinners, escorted sightseeing, transfers, tour guide and entrance fees.

For the full itinerary, please call **0844 576 8077,** quoting reference **'QBBCWILBOT'**

To speak to a sales consultant, call 020 7873 5000

www.coxandkings.co.uk

*Cox & Kings cannot guarantee sightings of any of the species listed.

ABTA No.V2999

downloaded from: lib.ommolketab.ir

Wild words

"CAN ANYONE WITH AN OUNCE OF COMPASSION ACCEPT THE SIGHT OF A MONKEY BEING EXPERIMENTED ON IN CRUEL AND PAINFUL WAYS?"

TV presenter Michaela Strachan on a new campaign to end the use in scientific research of the offspring of wild-caught primates.

Coining it

To mark WWF's 50th anniversary, the Royal Mint is releasing a new 50p coin, depicting wildlife icons representing 50 aspects of the charity's work. The coin will go into circulation in the autumn.

Royal Mint/WWF

NEWS OF THE EARTH

Everything you need to know about what's happening to wildlife around the world

This dolphin was found on a beach in Louisiana 100 days after the disaster. But how many more have died?

GULF SPILL: WAITING FOR THE FACTS

How many dolphins died as a result of the Gulf oil spill and will we ever know for sure? Tim Deere-Jones reports on a growing scientific controversy.

Julie Dermansky/Corbis

THE COLLECTION OF environmental impact data in the wake of last year's Gulf oil spill is becoming an increasingly contentious issue as independent and academic researchers object to US government attempts to control the publication of results.

Scientists say that reliable data is needed to quantify the ecological damage caused by the spill in order to form and cost a restoration plan.

The controversy comes at a time when major oil companies, including BP – which owned the Deepwater Horizon rig where the disaster occurred – and Chevron, are lobbying strongly to resume drilling in the Gulf of Mexico.

Concerns were first raised in August 2010, a few months after the disaster, when US congressmen Henry Waxman and Edward Markey from the House Energy and Commerce Committee wrote to BP America demanding an explanation for confidentiality agreements imposed on scientists. "Any effort to muzzle scientists or shield their findings under doctrines of legal privileges could seriously impede the recovery," they said.

LACK OF TRANSPARENCY?

Then, in March this year, the National Oceanic and Atmospheric Administration (NOAA) said that both its own researchers and contractors were bound by confidentiality clauses.

Stan Senner, of The Ocean Conservancy, said that there was growing concern among non-contracted scientists, NGOs and fishing organisations about the lack of transparency. "The government could at least provide summary information on impacts without compromising its ability to pursue a legal case," he said.

Particular concern surrounds the number of dead dolphins and marine turtles that have been recorded in the spill area (see box, *right*). Data that has been released suggests that these are well above typical levels, but the NOAA has ordered that "no findings may be released... outside the investigative team without prior approval".

BBC Wildlife contacted the NOAA for comment but received no response.

DOLPHIN DEATHS

- Between January and April 2011, approximately 200 dead dolphins (about half of them juveniles or premature calves) were recorded within the Gulf spill area.
- This is approximately 14 times higher than the average count for the January to April period between 2002 and 2007.
- During the same period, 46 sea turtle carcasses were recovered, compared with none in the same period in previous years.
- A paper published in *Conservation Letters* in March claimed that only 2 per cent of marine mammal deaths may be recorded.
- Using this figure, extrapolating from the 101 dolphin deaths attributed to the spill produces a total mortality count of 5,050.

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

Wild words

"THEY'RE BIG, BOLD BEETLES WITH A LUSTRE THAT PUTS ANY OIL DROPLET TO SHAME."

Buglife vice-president Nick Baker on oil beetles, which are at risk of extinction in the UK. Buglife is asking the public to help map the species' distribution nationwide. www.buglife.org.uk

Ben Lee/Buglife

Heritage harriers

The Heritage Lottery Fund has awarded £317,700 to the RSPB to help fund a new programme to protect breeding English hen harriers, as well as delivering a programme to educate local people and schoolchildren about the species.

Jason Venus/Naturalis Visions

Farmers may be allowed to shoot badgers on their land as part of a new move to reduce levels of bovine TB.

TAKING THE BLAME

With the Government due to announce its decision on badger culling soon, Julian Rollins investigates the current situation.

A YEAR AGO, in May 2010, the Conservative-Liberal Democrat coalition took power. Within a few weeks it had signalled its intention to re-examine the vexed issue of badger culling.

By September 2010, agriculture minister Jim Paice had issued a consultation paper on a proposal to issue licences to farmers and landowners who wished to cull badgers at their own expense.

In a written statement, Paice said that he would publish "a comprehensive and balanced bovine TB (bTB) eradication programme early in 2011". This has so far failed to appear, though the latest indications are that it will come out in May.

Opponents of the cull, however, believe that their position will have been strengthened if allegations are proven that some farmers in Gloucestershire and the Midlands – two bTB hotspot areas – have been deliberately keeping cattle they know to be infected with TB while sending less productive cows for slaughter in their place.

TRUSTING FARMERS?

In a statement to MPs, Paice admitted that such infringements of regulations could have an impact on nationwide efforts to bring the disease under control.

"Anyone who retains TB test-positive cattle increases the risk of the disease spreading within their herd, to their neighbours' herds and to wildlife," he said. "We are introducing new measures to prevent this occurring in future."

But the Badger Trust felt that ministerial action should go much further than this. "Any plans to kill badgers in both England and Wales should be abandoned pending a full and thorough investigation into this shameful, fraudulent practice," it said.

In particular, the trust pointed out that these breaches should rule out a role for farmers in any culling operation. In a letter sent to Prime Minister David Cameron and Deputy PM Nick Clegg, the trust asked: "How can your government possibly trust farmers to carry out a badger cull when a significant number of them clearly have no regard for the existing rules on TB prevention?"

But while describing himself as "absolutely appalled" by the revelations, Paice exonerated farmers. "The majority with TB in their herds are doing the right thing," he said.

NFU president Peter Kendall agreed. "In my discussions with farmers, I have seen nothing other than an overwhelming commitment and desire to get this dreadful disease under control," he said in a statement.

Press reports in mid-April suggested that the Government will introduce regulations allowing farmers to shoot badgers on their land where bTB is a problem.

AND IN WALES...

- A cull of badgers in north Pembrokeshire has moved a step closer – the Welsh Assembly has voted through the Badger (Control Area) (Wales) Order 2011.
- The Badger Trust halted the cull last July with a successful High Court appeal, but the new order allows the programme to go ahead.
- Rural affairs minister Elin Jones says that the cull is a key part of a larger campaign to eradicate bovine TB (bTB). The Badger Trust says other measures are already working.
- Figures show that the number of bTB-infected cattle slaughtered in Wales during 2010 was 26 per cent down on the previous year.
- As of mid-April, there was no timetable for the cull, and opponents claim that it is already too late for it to happen this year because badgers will have produced cubs.
- Elections on 5 May could change the political make-up of the Welsh Assembly, leading to uncertainty about whether the cull will go ahead.

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

Genevieve Leaper/RSPB

Birdwatch bonanza

70 The number of species counted by the 609,177 participants in the RSPB's Big Garden Birdwatch in January. There were big increases in sightings of smaller birds such as coal tits and goldcrests.

Toad testers

6,000 The number of UK frogs, toads and newts that scientists from the ZSL aim to test for the chytrid fungus in new research into this fatal amphibian disease.

Adrian Davies/NPL

Is the luck of the Irish running out?

Ireland's unique subspecies of hare could be threatened by European colonisers.

Irish hares are larger than mountain hares and don't turn white in winter.

The Irish hare – a subspecies of the mountain hare – has been declining because of intensive agriculture, but it is now facing a new threat. The spread of the European or brown hare, which is not native to Ireland, could have a devastating effect on its cousin, say scientists.

Introduced to Northern Ireland in the 19th century, the brown hare has yet to colonise the Republic.

That could soon change, says Dr Neil Reid from Queen's University, Belfast. Writing in *Biological Invasions*, Reid describes how, over a period of 100 to 150 years, the mountain hare has been completely displaced by the brown hare in an area of southern Sweden twice the size of Ireland.

GOING UP

On mainland Europe and in Britain, mountain hares can seek refuge at higher elevations where they outperform brown hares.

Ireland has few mountains, so few barriers to the invader's advance.

Disease may be another problem, warns Reid, because brown hares appear to be less susceptible to a number of infections. Moreover, "the Irish hare is a quirky species that produces fertile offspring when it breeds with brown hares", and interbreeding would dilute its genetic lineage.

Reid is calling for the urgent implementation of a strategy to deal with the expected expansion of brown hares. "The Irish hare is our panda – a uniquely Irish species that must be protected," he said. *Gemma Hall*

BACKGROUND

» The Irish hare is classified as a subspecies of the mountain hare, though some scientists believe that it is an entirely separate species.

» It is larger than the mountain hare, as well as having a preference for lowlands and a coat that doesn't turn white in winter.

Elephant: TillenDove/Mark Carroll; hare: John Hayward/NHPA

Goodbye to the circus

The UK's last circus elephant, Annie, has begun her retirement at Longleat Safari Park. The 57-year-old elephant left Bobby Roberts Super Circus after footage captured by Animal Defenders International (ADI) showed her being beaten with a pitchfork. Annie has been moved to a purpose-built enclosure, which she shares with five rhinos. Meanwhile, ADI says that the Government must act to make the use of wild animals in circuses illegal. A 2010 Defra consultation found that more than 90 per cent of the public would support such a ban.

IN BRIEF

RSPCA

BAT BREAKTHROUGH

A soprano pipistrelle bat, rescued and later released by Cheshire Bat Group in 2007, has been seen feeding at an RSPCA centre in Nantwich. Tracking bats post-release is very difficult, so learning that this hand-reared bat developed the necessary skills to survive three winters is an important breakthrough.

Scottish Wildlife Trust

LADY OF THE LAKE

A Scottish **osprey** has returned from overwintering in Africa to spend her 21st breeding season in Loch of the Lowes. Female ospreys have a life expectancy of eight years and produce about 20 chicks in that time, but 'Lady' has successfully raised 48 chicks to date and it is hoped that 2011 will see her pass the half-century mark.

FISHERIES REFORM

An opinion poll commissioned by WWF-UK has revealed overwhelming public demand for the UK Government to take action to ensure the recovery of **fish stocks**. Nearly 80 per cent of people want to buy fish from sustainable sources, but only 21 per cent believe that they receive enough information about where their fish comes from.

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

Food for thought

20% The proportion of the Asiatic lion's diet that consists of livestock. This creates considerable human-animal conflict in the species' only refuge, the Gir Protected Area of western India, scientists report in the *Journal of Zoology*.

Mark Kelley/SpecialistStock

Crab invasion

A team of scientists has captured images of king crabs in Antarctica. Until now, these crabs have been unable to survive in Antarctica because it was too cold, said the team's leader Sven Thatje, but climate change could alter that.

TURNING THE TIDE OF THE TIGER'S DECLINE

New data suggests India's tigers have recovered slightly in the past four years, but this may not be the whole story, reports Sanjay Kumar.

NOT SO LONG ago, India's tigers appeared to be heading inexorably towards extinction. A survey carried out in 2006 and published in 2007 suggested that the population was less than half of the previously accepted figure, and that this most-revered of big cats had disappeared entirely from some tiger reserves.

Today, the situation looks surprisingly better. A new census carried out in 2010 has shown the tiger population rising from an estimated 1,411 to 1,706 individuals, providing some relief for beleaguered conservation managers and hope that the tide of decline has been stemmed.

Crucially, it is the first piece of positive news since tiger range state governments agreed, at a summit in St Petersburg last November, to work to double global wild tiger numbers by 2022 from 3,200 to 6,400.

But beneath the headline figure, the situation is more complicated. First, the increase has been partially attributed to the inclusion of new reserve areas in the 2010 survey, which have never before been properly covered.

These include the vast mangrove swamps of the Sunderbans in the state of Assam, which host an additional 70 tigers, and the Sahayadri Mountains of Maharashtra.

Second, the methodology used has been questioned by some wildlife biologists. This is despite the scale of the exercise, which was conducted under the aegis of the governmental Wildlife Institute of India (WII) and involved nearly 500,000 forest department personnel walking 625,000km. In addition, 550 tigers were individually identified through camera-trapping.

800

The number of camera-traps deployed during the census. They were used over an area of 10,500km^2 and snapped 550 individual tigers.

"Monitoring of tracks by forest guards is no substitute for intensive camera-trapping or DNA sampling. This has been proved before in places where tigers vanished even as guards carried out similar patrol-based monitoring," said wildlife biologist K Ullas Karanth, the director of the Centre for Wildlife Studies in Bangalore.

Most of India's significant tiger populations are now concentrated in just 10 per cent of all of its habitat, Karanth said, adding that these 40 or so 'source populations' are under grave threat and need to be monitored every year using intensive camera-trapping.

Prashant Kumar Sen, the former director of Project Tiger – now called the National Tiger Conservation Authority (NTCA) – argued that the results were no cause for celebration. "There is nothing on the ground to show improvement in the overall condition," he said.

Officials agree that there is no room for complacency and that the main threats to wild tigers – habitat loss and poaching – have not diminished in the past four years. "But this definitely does not spell doom," said Yadvendra Singh Jhala, the WII senior scientist who co-ordinated the census.

Nevertheless, the WII drew attention to the alarming loss of habitat, with tiger-occupied areas

TIGER RESERVES IN INDIA

Steve Winter/Getty Images

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

Wild words

"HE MADE NAMIBIANS PROUD OF THEIR NATURAL HERITAGE."
Dr Laurie Marker, founder of the Cheetah Conservation Fund, following the death of the charity's 'animal ambassador', Chewbaaka.

CCF/cheetah.org

Raising Betsy

53 The age, in days, of Betsy, an Angolan colobus monkey at the Colobus Trust in Kenya. Infants of this species are hard to rear in captivity and have never previously survived past 21 days. A diet that included goat's milk supplemented with special gut bacteria from colobus faeces has been the key, the trust said.

A camera-trap shot of a tiger in Assam in the north-east of India. This relatively new method of taking photos has enable more accurate population estimates to be obtained.

dropping from 93,600km² to 72,800km². "We can bring back tigers to poached-out areas from other source populations," said Jhala, "but in a country with more than 1.21 billion people, getting back lost habitats is a difficult if not impossible task."

"Monitoring of tracks is no substitute for camera-trapping or DNA sampling."

Jhala also pointed to several areas that have yet to be surveyed due to Maoist insurgencies, including Orissa's 35,000km² Indravati region and Udanti in Chhattisgarh. Tiger numbers could, therefore, be higher than even this survey suggests.

BACKGROUND

» Tiger numbers at the turn of the 19th century are believed to have been as high as 100,000.
» The first all-India census carried out in 1971 produced a figure of 1,800 tigers. The alarm this caused led to the creation of Project Tiger.
» Subsequent surveys showed numbers increasing until an estimate of 4,334 was released in 1989. Many Indian biologists disputed this figure.
» The census released in 2007 indicated that the tiger population could be as low as 1,300, just over one-third of the estimate of 3,600 produced in 2002.
» Biologists said that this demonstrated that India had been overestimating its tiger numbers by relying on counting footprints.
» Park officials, it was said, had a vested interest in producing high estimates because their job success was based on tiger numbers.

MARK CARWARDINE
WILD THOUGHTS

More than 11 million people, from 130 countries, have been following the life-and-death struggle of a pair of nesting bald eagles. They've been watching a live video feed (www.ustream.tv/decoraheagles) from an eyrie 25m up in a cottonwood tree in Decorah, Iowa. The camera was installed by the Raptor Resource Project, and I have to admit that it makes compulsive viewing – I'm not at all surprised that it has gone viral on the internet.

But how on Earth did 11 million people get to hear about a pair of nesting bald eagles? I'm a complete dinosaur when it comes to the internet. I have email and a website, of course, and I do a lot of research on the web, but I'm the only person I know who isn't on Facebook. I would rather be tied up in a sack and dumped on a compost heap than Tweet, I rarely look at YouTube, and I've absolutely no idea what people mean when they say they are 'LinkedIn'.

The point is that I *should* know – and the conservation movement should know, too. Gone are the days when we could rely on TV, radio, newspapers and magazines to get our conservation messages across, simply because more and more people are getting their news and views from the web. How many of the people who've watched the feed would ever read a magazine article about bald eagles? Not 11 million, that's for sure.

Neil Rettig

Internet star: one of the bald eagles watched by the world's Web surfers.

"How many of the people who've watched the feed would read an article about bald eagles? Not 11 million, that's for sure."

Attracting such a massive audience – one that the eagles wouldn't otherwise get – is a laudable achievement. I have them playing in the corner of my computer screen right now and, as I write, with occasional sideways glances, I can see that I'm among no fewer than 161,486 people watching and that one of the parents has just returned to feed the two lively eaglets.

But so what? I know that people will say that it's 'raising awareness', but is this enough, and what does it actually achieve? Surely the real challenge is to turn all of those newly fledged eagle fans into something more concrete: 11 million campaigning signatures, for example, or even £11 million? Now, that would be using the internet effectively.

Mark Carwardine is a zoologist, photographer and tv presenter.

Storelmags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

Super UV-ray vision

The Augrabies flat lizard *Platysaurus broadleyi* sees ultraviolet light three times better than any other lizard. Since males with more intense UV colouring are tougher, this may help rivals to size each other up in detail before picking a fight.

Martin Whiting

Really fast food

Aquatic bladderworts *Utricularia* spp. have bladder-like leaves with trapdoors that flip open, causing water and insect prey to flow in. This occurs in about 0.0005 second – the quickest motion recorded in a plant, and faster than prey can detect, let alone evade.

NEWS OF THE EARTH

IN BRIEF

HAPPY FAMILIES

In zebra finch *Taeniopygia guttata* families, personality matters. Couples with similar habits make better parents. Their chicks are bigger and healthier than those of parents that are less of a match, regardless of genetic make-up. This may be due to reduced conflict over parenting tasks (Anim. Behav.,vol 81, pp609–18).

BEARS DON'T CHILL

Unlike other hibernators, a denning black bear *Ursus americanus* can actively lower its metabolism – by 75 per cent, breathing just once or twice per minute – without a large drop in body temperature. How it 'shuts down' without also turning off its thermostat is unknown, but studying the phenomenon could lead to new medical breakthroughs (Science, vol 331, pp906–9).

CREATIVE CAPUCHINS

The Brazilian blonde capuchin *Cebus flavius* has invented a new twist on termite fishing, a common behaviour in chimps. It taps a nest to rile the residents, then pokes a stick into it to fish out the defending swarm. This preliminary tapping triples the yield. The sly simian also rotates the stick as it is inserted to prevent it from breaking before it breaches the nest (Biology Letters, doi:10.1098/rsbl.2011.0034).

Bruna Bezerra

Luis Quinta/naturepl.com

Sperm whale populations in different parts of the world use distinct and different patterns of clicks, possibly to reinforce group identity.

Sperm whales use baby talk

Sperm whale conversation just got personal.

Little is known about how sperm whales *Physeter macrocephalus* communicate, other than that they produce patterns of clicks and that each pod may have its own repertoire. Research reveals that it gets a lot more personal than that.

A team led by Luke Rendell, from the University of St Andrews, and Hal Whitehead, from Dalhousie University, Nova Scotia, recorded more than 300 calls from a whale pod near the Caribbean island of Dominica. The whales remained in the area for 41 days – during which time no other whales joined them – making it possible, for the first time, to identify which individuals made which calls.

The team found that most of the whales did, indeed, usually sing the same song, so to speak. This may help to maintain social bonds and/or announce group identity.

However, there were two striking exceptions: a mother, who repeated a slightly different tune, and her calf, which pretty much babbled. The researchers think that mum may have been using a type of 'baby talk' that tells her offspring where she is at all times. Regardless of its social significance, the finding shows that individual whales can, and do, change their tunes.

Indeed, most of the whales also produced a steady pattern of five clicks, which varied only slightly depending on the individual's size. Since it is unlikely that any two whales in a pod will be exactly the same size, this call could signal one's personal identity.

The study offers the first such detail on sperm whale 'language' and shows that it is more complex – and flexible – than thought.

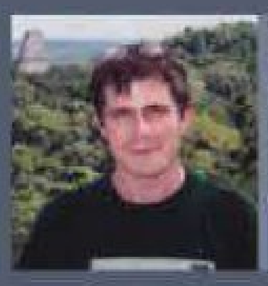
CALL OUTS

- The click of a sperm whale is purportedly the loudest sound made by an animal – it can exceed 230dB underwater.
- The researchers identified a total of 16 distinct calls. The pod- and possibly identity-specific ones comprised up to 60 per cent of all vocalisations.
- Adult females do most of the talking. The calf's calls were all over the map, as if it were trying to find its voice.
- Pod members co-operate in many ways, both in defence and in the care of young. Group-specific calls may help in this respect.
- Indeed, the calf in this study was watched over by a regular babysitter when its mother was away. The 'nanny', too, sometimes engaged in 'baby talk'.

SOURCE: Mar. Mammal Sci., vol 27, pp149–66 LINK: www.nmfs.noaa.gov/pr/species/mammals/cetaceans/spermwhale.htm

Storelwags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir



DAVID BRIAN BUTVILL, ZOOLOGIST
Our *Discoveries* sleuth David writes about science and nature for magazines, radio and tv. He lives in Costa Rica, where he eagerly assists his marine-biologist wife in the field.

Elephants cry "Bees!"

Africa's giants seem to have a vocal bee warning system.

It takes a lot to scare an African elephant *Loxodonta africana* – unless you're an African honeybee *Apis mellifera scutellata*. The elephants turn tail and flee at the mere sound of the insects. New research shows that these mammoth beasts may use a bee-specific call to warn other elephants of the threat.

A team of researchers led by Lucy King, from the University of Oxford, broadcast the sound of disturbed bees to several elephant families in two different reserves in Kenya. They did this via a wireless speaker hidden inside a fake tree; as a comparison, the sound of a waterfall was also broadcast in some trials.

Only the sound of bees elicited a significant response – almost all families moved swiftly away from the speaker. They also shook their heads and tossed dust in the air, as if fending off a swarm.

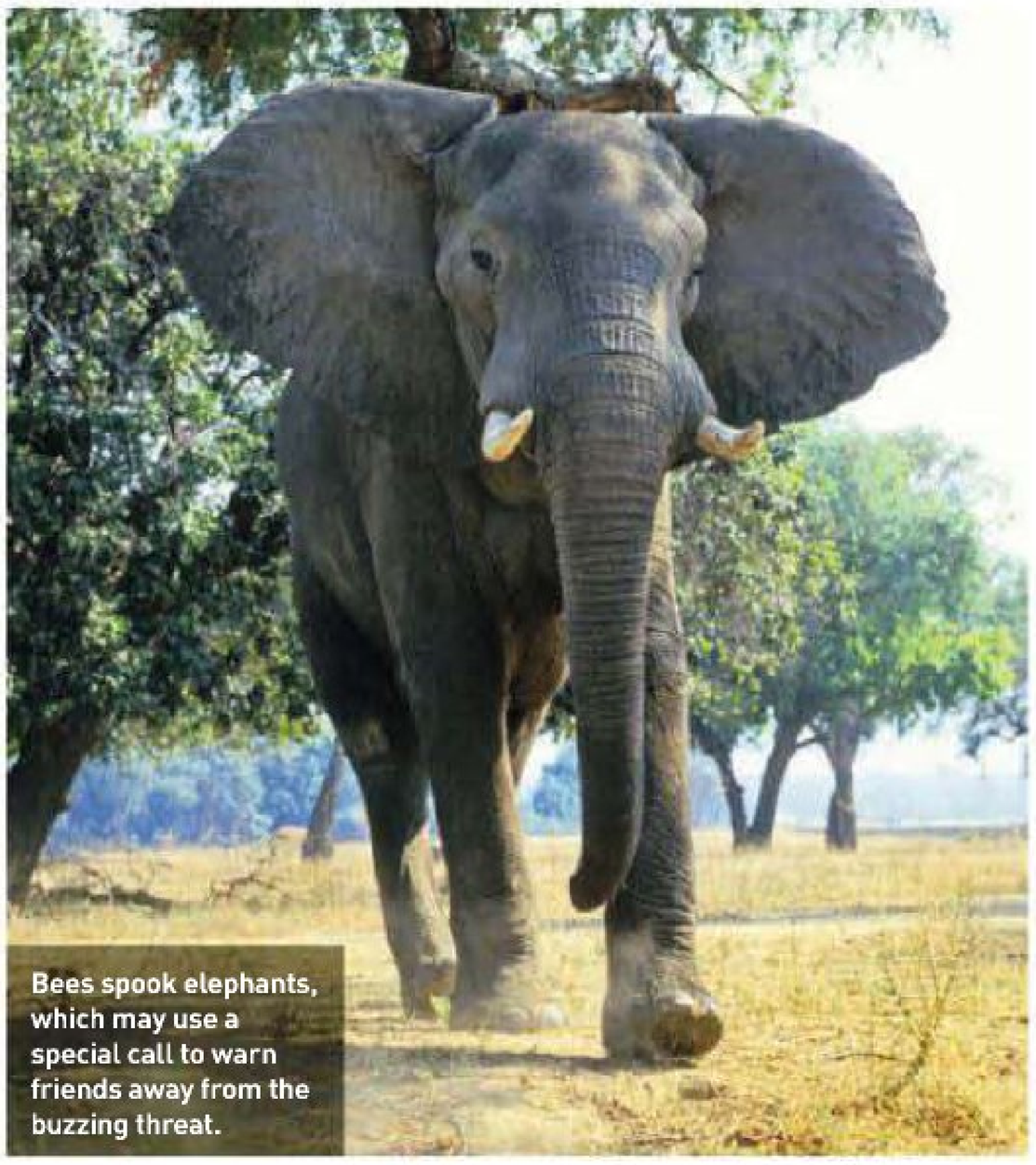
Most intriguing to the team, however, was that fleeing elephants always produced a unique rumbling sound.

To investigate that call further, the researchers recorded it and played it back to other herds in the area. The targeted elephants exhibited the same reaction, even though there were no bees or alarmed-looking elephants in sight.

Moreover, upon analysing the rumble, the researchers identified an acoustic feature not heard in any other known elephant vocalisation, even those associated with fear. And when they broadcast the exact same rumble that had spooked the animals, but with that feature modified, targeted elephants barely batted an ear. In other words, the rumble is clearly a warning – and that specific feature seems to scream "Bees! Run!" in elephant language.

The team is still looking into whether or not it really is specific to bees, but it seems likely. African elephants are not often challenged by foes. And when they are – say, by a lion or pack of hyenas – the goliaths typically charge while making a deafening roar or trumpeting. But if attacked by a swarm of bees, there's little an elephant can do but grumble – and tell its friends and family to run.

SOURCE: PLoS One, vol 5, e10346 LINK: www.eol.org/pages/289808



Bees spook elephants, which may use a special call to warn friends away from the buzzing threat.

Tom & Pat Leeson/ardea.com

STINGING TRUTHS

- Throwing dust in the air may be an elephant's way of swatting bees – it may knock them down or away.
- Elephants are vulnerable to bee stings in sensitive spots such as around the eyes and inside the trunk.
- The elephants' fear of bees is surprisingly profound. They avoid even empty beehives.
- This fear seems to be transmitted socially. In earlier work by King and others, only 1 of 17 groups did not react to bee sounds: a young couple with a calf. They'd probably never been stung, and there was no one else to teach them of the threat.
- The phenomenon could be used to reduce human-elephant conflicts, for example, by playing bee sounds in crop fields disturbed by elephants.

A bat gains shelter, a plant is fed – both win.

Michael Schöner/University of Wurzburg

Bat outhouse

A plant trades shelter for bat poo.

The Bornean pitcher plant *Nepenthes rafflesiana elongata* may have evolved as an insect eater, but now it's hungry for bat manure.

Like all pitchers, the smooth cup-like leaves of *N. r. elongata* cause insect visitors to slip and tumble into a pool of digestive enzymes inside. But this species is puzzling: it's much longer than its close relatives but catches far fewer insects and thus 'eats' a lot less than smaller kin. Or so it was thought.

A group led by T Ulmar Grafe, from the University of Brunei Darussalam, has discovered that woolly bats *Kerivoula hardwickii hardwickii* regularly take naps inside *N. r. elongata* pitchers – and nowhere else, though there are plenty of other siesta sites around.

The structure is a perfect place for a nap. The deep tubular neck can comfortably hide two of the golf-ball-sized bats from predators, and the thick cuticle blocks direct sunlight. An umbrella-like 'lid' above the entrance keeps out rain. And the tube quickly tapers, so that even if a bat slips, it won't fall into the acidic liquid below.

The guest pays for its stay in faeces. The researchers calculate that bat scat provides up to half of this pitcher's total nitrogen needs. It is currently the only plant known to consume bat guano.

SOURCE: Biology Letters, doi:10.1098/rsbl.2010.1141 LINK: http://nepenthes.merbach.net/english/_rafflesiana.html

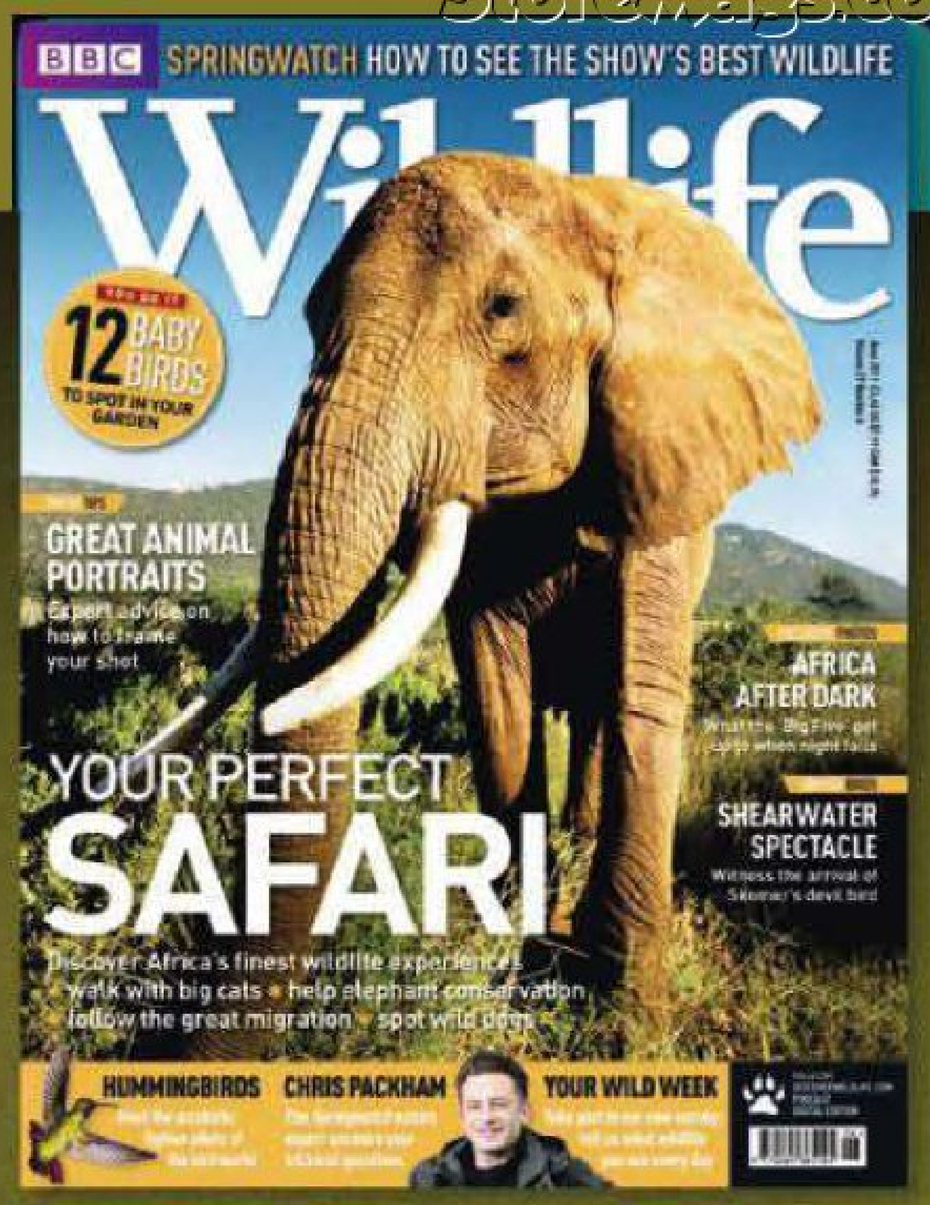
StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

Every month, *BBC Wildlife Magazine* brings you...

- **STUNNING PHOTOGRAPHY**
  Breathtaking images from the finest nature photographers
- **INSPIRATIONAL STORIES**
  Expert insights into the world's most fascinating animals and their behaviour
- **BRITISH WILDLIFE**
  Everything you need to get closer and understand more



Wildlife ORDER FORM

WLP348

PAYMENT OPTIONS

☑ **YES**, I would like to subscribe to/renew *BBC Wildlife Magazine*

UK – Just £23.40 for your first 13 issues by Direct Debit – **save 50%***

(please complete the form below)

Instructions to your Bank or Building Society to pay by Direct Debit DIRECT Debit

To: the Manager (Bank/Building Society)

Address

Postcode

Name(s) of account holder(s)

Bank/Building Society account number

Branch sort code

Reference number (internal use only)

Originator's identification number

7 1 0 6 4 4

Instructions to your Bank or Building Society. Please pay Bristol Magazines Ltd Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Bristol Magazines Ltd and, if so, details will be passed electronically to my Bank/Building Society.

Signature

Date / /

Banks and Building Societies may not accept Direct Debit mandates from some types of account

If you would like to give a gift subscription, please tick this box ☐ and include the recipient's address details on a separate sheet.

YOUR DETAILS (essential)

Title: Initial: Surname:

Address:

Postcode: Country:

Home tel number: Mobile tel number**:

Email address**:

Post your completed form to:
BBC Wildlife Magazine, FREEPOST
LON16059, Sittingbourne, Kent ME9 8DF
Fax your completed form to: 0870 444 2526

Overseas subscribers post form to:
BBC Wildlife Magazine, PO Box 279,
Sittingbourne, Kent ME9 8DF, UK

*Offer only available to UK residents paying by Direct Debit. After your first 13 issues your subscription will continue at £28 every 13 issues, saving 40% on the shop price. Your subscription will start with the next available issue.

**Please enter this information so that *BBC Wildlife Magazine* can keep you informed of newsletters, special offers and promotions via email or free text messages. You may unsubscribe from receiving these messages at any time. Please tick here if you do not wish to receive similar offers via email from BBC Worldwide ☐
BBC Magazines (publishers of *BBC Wildlife Magazine*) and BBC Worldwide would love to keep you informed of special offers and promotions via post or telephone. Please tick the box if you do not wish to receive these from us ☐ or BBC Worldwide ☐

downloaded from: lib.ommolketab.ir

SPRINGWATCH SPECIAL

SUBSCRIPTION OFFER

SAVE 50%

YOUR SPECIAL OFFER

- **Save 50%***
- **Spread the cost and pay just £23.40 for your first 13 issues by Direct Debit**
- **Every issue delivered direct to your door**
- **Never miss an issue of the world's best natural-history magazine**
- **Hurry! Offer ends 9 June 2011**

Subscribe online at www.bbcsubscriptions.com/wildlifemagazine PLEASE QUOTE **WLP348**

Or call us on 0844 844 0260† PLEASE QUOTE **WLP348**

† Calls to this number from a BT landline will cost no more than 5p per minute. Calls from mobiles and other providers may vary. Lines are open Monday to Friday 8am to 8pm and Saturday 9am to 1pm.

Photo by Andrew Parkinson

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

Flights of fancy

Hyperactive hummers can hover, loop the loop, fly upside down and reverse in midair. **JONATHAN ELPHICK** is entranced by a family of bejewelled birds that live life in the fast lane.

THE EXPERT

JONATHAN ELPHICK has been watching birds for 50 years. He doesn't have a sweet tooth, but envies hummers their energy.

Store Mags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

Perfectly poised, a male Andean emerald hummingbird hovers in front of a bloom to sip its nectar. Hummers show a strong preference for red and orange flowers.

Photo Researchers/FLPA

downloaded from: lib.ommolketab.ir

StoreMags.com

Hummers have superb midair manoeuvrability, as demonstrated by this male violet sabrewing.

HOWEVER MUCH YOU think wildlife TV will have prepared you for the moment you first encounter a hummingbird, the reality is visceral and not intellectual. This is particularly true if, as often happens, one suddenly materialises, with a filmy blur of wings and a startlingly loud buzz, just inches in front of your nose.

No other bird seems to scrutinise you in this unnerving manner and, by the time you have regained your composure, the hummingbird has zipped away. I have always found it difficult – if not impossible – to follow these real-life Tinkerbells in my binoculars when they are airborne.

My hummingbird epiphany, over 20 years ago, was in an Argentine wildlife reserve with a common species, the glittering-bellied emerald. But it matters not where and which one deigns to grace you with its fleeting presence – all members of this large family of some 330 species are miraculous and endlessly entrancing.

Since that encounter I have marvelled at 'hummers', as they are affectionately known by enthusiasts of all stripes, at both ends of the family's vast range: against a backdrop of the snowy peaks of Washington and the Canadian Rockies and – over 12,000km to the south – in similarly cold and lofty terrain in Tierra del Fuego.

I've also fallen under the spell of these flashy birds in various places in between, from steamy lowland rainforests, home to a plethora of stunningly beautiful and typically hyperactive species, to the bleak Andean Altiplano, where I watched the comparatively slow-flying giant hummingbird.

This high-altitude denizen is a whopper, but only in relation to the rest of its kind: it seldom weighs over 20g – rather less than a house sparrow. Most of its relatives are seriously small. The hummingbird family name, Trochilidae, derives from the Greek word that Aristotle used for a small bird (probably the species we now know as the European wren).

Even that little creature, a feathery ball that tips the scales at 8–12g, looks like a hunk in this company. Most hummers are in the 2.5–6.5g range, and the smallest, the bee hummingbird of Cuba, weighs just 1.6–1.9g (little more than a standard paperclip). It is dwarfed by many insects, and half of its total length of 5.5cm is bill and tail. Its dainty nest measures barely 2.5cm across; its eggs are smaller than coffee beans.

DID YOU KNOW?

Many languages have poetic names for the hummingbird. In Portuguese it is the *beija-flor* (flower kisser); in Spanish it is the *picaflor* (flower nibbler) or *chupaflor* (flower sucker).

FLAIR IN THE AIR

Albatrosses amaze us by circling the oceans with scarcely a wing beat, and swifts can stay aloft for several years without landing, but no other birds are a match for the manoeuvrability or hovering prowess of hummingbirds.

Swifts and hummingbirds are quite closely related, in fact: both are classified in the Apodiformes, an order named after the Greek for 'without feet'. To such supremely aerial beings, their feet (yes, they do have them, albeit minute, weak ones) are of little consequence, except for gripping a perch when resting. They are useless for walking or climbing.

Again like swifts, the wings of hummers have a very different anatomy to that of most birds. The 'arm' bones are greatly reduced,

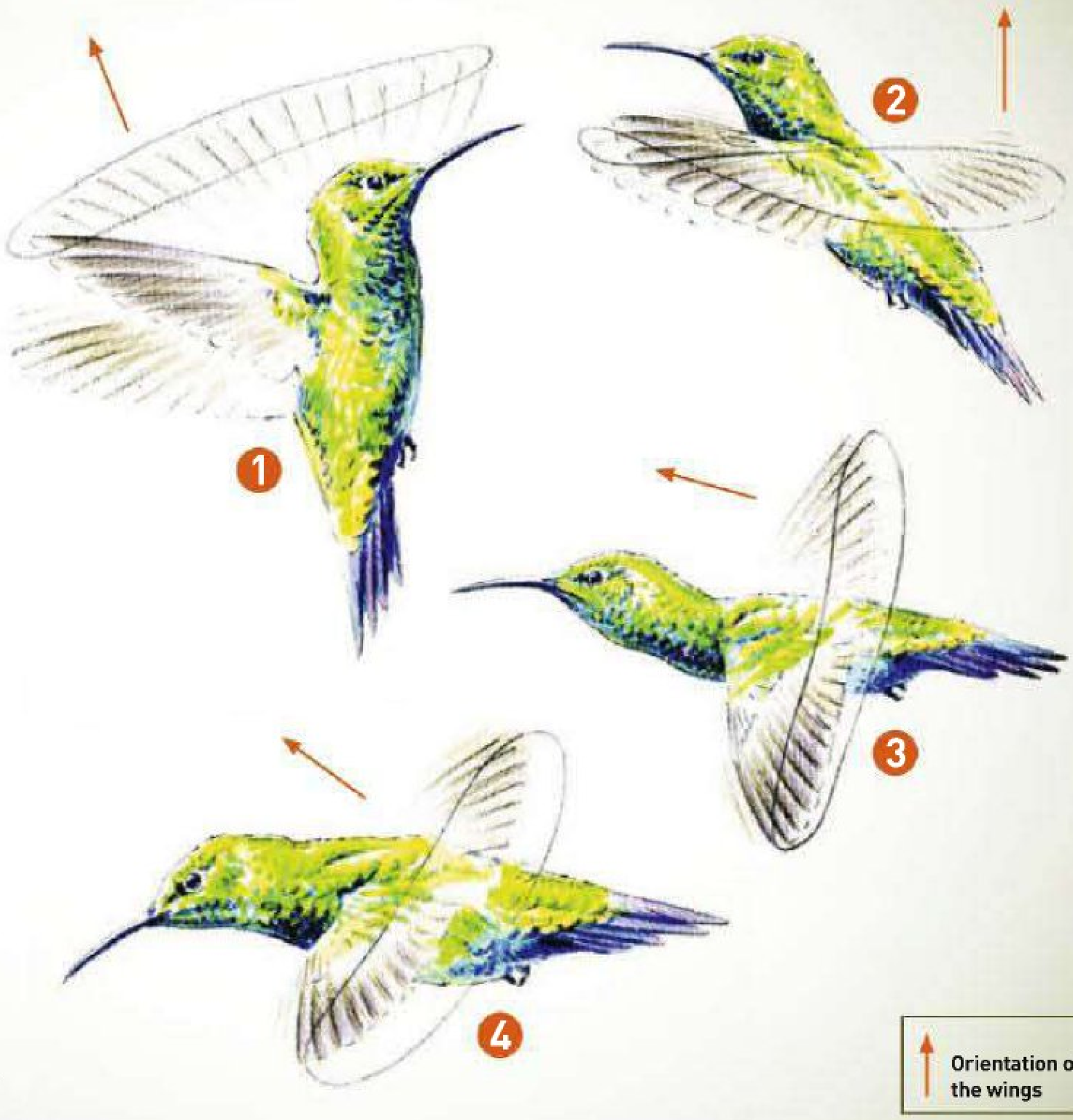
Tim Fitzharris/Minden/FLPA

downloaded from: lib.ommolketab.ir

THE SECRET OF HUMMINGBIRD FLIGHT

Recent research has revealed that the hummingbirds' trick is to use an avian wing structure to achieve insect-like flight performance. In other birds, the necessary lift comes almost entirely from the downstroke; the upstroke is 'wasted' in aerodynamic terms.

By contrast, the rigid wings of insects support 50 per cent of their weight with the downstroke and 50 per cent with the upstroke. Hummers, too, make use of the upstroke, but due to the limitations of their bird-wing design it contributes only 25 per cent of the total lift.



1 BACKWARDS

To reverse, the hummingbird holds its body almost vertical and its wings beat in a more horizontal plane.

2 HOVERING

To hover, the wings beat horizontally in a flattened figure-of-eight pattern. The slight lift and drag forces balance out so that the bird hangs almost motionless.

3 FORWARDS FAST

At top speed, the body is near-horizontal and the wings beat almost vertically to produce maximum forward thrust.

4 FORWARDS SLOW

At slower forward speeds the wings are rather more angled, so thrust is reduced.

Illustrations by Dan Cole/The Art Agency

while the 'hand' bones, supporting the 10 primary feathers that power the birds through the air, are unusually long.

The extreme flexibility of the shoulder joints allows hummingbirds to angle their wings in improbable positions, enabling them to not only dash forwards or hover seemingly motionless, but also to dart up,

"Though pea-sized, hummer hearts are proportionally huge: five times as big as ours, relative to body size."

down, upside down or backwards. As with ballet dancers, though the performance may appear effortless, this shape-shifting is anything but. It is achieved only through considerable effort from an array of muscles acting in complex combinations.

The flight muscles of hummingbirds constitute almost one-third of their overall mass. To provide enough oxygen to power them, the birds must take about 500 breaths per minute. Even at rest, the figure is 300 (compared with a feral pigeon's 30, or a paltry 14–18 in a typical adult human).

PRETTY BUT PUGNACIOUS

Hummingbirds beat their little wings astonishingly fast. A typical rate is 70–80 movements per second, but during high-speed dashes this may soar to over 200 per second. The flight speed of various species measured in lab conditions was 48–85kph. In the wild, speeds of up to 96kph have been recorded, briefly rising to 150kph during courtship displays. Hummers also change into top gear during their midair squabbles (these birds may look pretty, but they are pugnacious, too).

You will often see hummers duelling over choice blooms. In Panama I once watched, dazzled, as a male rufous coquette, his teeny head adorned by a long, spiky reddish crest, repeatedly shot forwards to steal nectar from a flowering shrub 'owned' by a male rufous-tailed hummingbird. The latter, though able to chase off other species attempting to raid his private food supply, was not quite fast enough to keep the gutsy little coquette at bay.

This kind of high-octane lifestyle calls for a specialised circulation system. Though pea-sized, the hearts of hummingbirds are proportionally huge – about five times as big as ours, relative to body size. They pump 500–600 times per minute when the birds are resting, and this rate doubles during aerial dogfights.

Like top athletes, hummers burn calories at a phenomenal rate. It is no coincidence that their favourite food, nectar, is one of the richest, most efficient forms of fuel there is. ▶

A hummingbird's tongue is long, thin and fork-tipped. It flicks in and out up to 13 times per second during feeding.

Violet-fronted brilliant: Pete Oxford/naturepl.com

downloaded from: lib.ommolketab.ir

A rufous-tailed hummingbird narrowly escapes an eyelash viper's ambush. This is not a staged picture.

Michael & Patricia Fogden/fogdenphotos.com

Typically, a hummer needs to visit 1,000–2,000 blooms in a day's foraging to obtain enough energy. The throughput is astoundingly rapid. It can take less than five minutes for a nectar meal to travel from the bird's crop into its intestines. Within another 15 minutes, it will pass through them, up to 99 percent of the glucose will be extracted, and a white arc of waste products will be squirted from the cloaca.

One of John Gould's display cases packed with stuffed hummingbirds. This Victorian relic is now kept at the Natural History Museum in London.

The Natural History Museum, London

Sugar alone is not enough. To satisfy their need for protein, hummers catch insects, too. These are snapped up during midair sallies or picked delicately from foliage; some hummers also pluck their prey from spiders' webs – a dangerous ruse, since the tables may be turned and the birds fatally ensnared by the sticky silk.

POCKET ROCKETS

Though hummingbirds may end up in the jaws of arachnids far smaller than themselves, their frequent description as 'tiny waifs' or 'sprites' is no more than a timeworn caricature. Among the most remarkable features of these birds are their resilience and resourcefulness.

As well as engaging in a constant round of frenetic activity as they feed and flirt, or chase rivals, hummingbirds carry out impressive migrations. All of the species that breed in North America are long-distance migrants. Take the ruby-throated

"As with a ballet dancers, the performance appears effortless yet the shape-shifting is anything but."

hummingbird: the only one regularly encountered in the eastern USA and southern Canada, it spends the winter in Central America. Some individuals fly south via the overland route through Texas and Mexico, but many save time by making a hazardous crossing of the Gulf of Mexico, a nonstop 800–960km journey.

To avoid being blown off course to a watery grave, the diminutive migrants fly low (on occasion, ruby-throats have been seen whirring along in the troughs between waves). One can only marvel that the orientation-processing systems needed to survive the odyssey are contained in a brain only 1cm in diameter.

More visible than migratory prowess, the glittering plumages of hummingbirds ▶

Free Magazines Download in True PDF format - StoreMags.com

downloaded from: lib.ommolketab.ir

StoreLaes.com

MEET THE FAMILY HUMMINGBIRDS

Hummingbirds are found only in the New World, where they are one of the largest bird families. They reach their greatest diversity near the equator in the Andes of South America; only 17 species (about 5 per cent of the total) breed in North America.

1 BIGGEST GIANT HUMMINGBIRD
Drab in plumage but still an impressive sight, this starling-sized hummer inhabits arid mountainsides in the Andes, from Colombia to central Chile.

2 SHOWIEST TAIL MARVELLOUS SPATULETAIL The stunning male uses his tail in dramatic display flights. Endangered: fewer than 1,000 mature birds survive, in one valley in Peru.

3 FANCIEST CREST FRILLED COQUETTE
This small Brazilian hummer woos a prospective mate by erecting his glowing russet crest while fanning his emerald throat feathers.

4 CURVIEST BILL BUFF-TAILED SICKLEBILL Though it looks deformed, the strongly hooked bill of this Andean species is a perfect fit for similarly curved flower corollas.

5 LONGEST BILL SWORD-BILLED HUMMINGBIRD This Andean hummingbird's 12cm bill enables it to drink the nectar inside long tubular blooms that other species cannot reach.

6 SMALLEST BEE HUMMINGBIRD
Many insects are bigger than this midget from Cuba. Only the male has the fiery scarlet face-mask – the female's throat is white and her crown is green.

1. Glenn Bartley/Alamy; 2. Andre Baertschi/wildlropix.com; 3. Anthony Mercieca/Science Photo Library; 4. Michael & Patricia Fogden/fogdenphotos.com; 5. Rolf Nussbaumer/naturepl.com; 6. Robert Tyrrell/Photolibrary.com

downloaded from: lib.ommolketab.ir

Storedmags.com

Rival male chestnut-breasted coronets engage in a dogfight, perhaps a squabble over feeding rights.

A male purple-throated woodstar in action. Hummingbirds are major pollinators.

Male hummers are all polygamous: the females, like this rufous hummingbird, are single parents.

Clockwise from top left: Arthur Morris/Corbis; Michael & Patricia Fogden/fogdenphotos.com; Sumio Harada/Minden/FLPA; AeroVironment Inc/avinc.com

INSPIRED BY NATURE
THE HUMMINGBIRD DRONE

'Hummers' are muses for artists, poets, photographers... and now military planners.

Always on the lookout for new ways to mimic nature in the name of defence – or offence – military technologists have found inspiration in hummingbirds' astonishing flying capabilities.

A Californian company that makes UAVs (unmanned aerial vehicles), or spy drones, has added a new model to a product range that includes the Raven, Wasp and Puma. The Nano Hummingbird is a miniature remote-controlled craft that weighs 19g and has a 16.5cm wingspan. It can hover for eight minutes before its battery runs out.

The prototype Nano Hummingbird: one of the world's smallest spy craft.

are another source of wonder. The spectacular colours are not produced by pigments in the feathers, but by microscopic platelets containing stacks of air bubbles. These refract light in much the same way as a film of oil, producing a spectrum of brilliant, metallic shades.

The colours we see depend on the angle of the light. This explains the sudden, seemingly magical transformation of a dull, blackish breast or crown into a shimmering vision of ruby, bronze, gold, violet, turquoise or emerald.

SUNANGELS AND SUNBEAMS

Enthralled by these visual effects, naturalists from the 18th century onwards have given hummingbirds a host of exotic common names that read like the offerings of a high-class jeweller. Among them are such gems as the amethyst-throated sunangel, shining sunbeam, hyacinth visorbearer, fire-throated metaltail, rainbow starfrontlet, fiery-tailed awlbill, blossomcrown, bearded helmetcrest, green sapphirewing and ruby topaz.

DID YOU KNOW?

Hummingbirds are the key ingredient of *passarinho com polenta*, a traditional dish from southern Brazil. In Costa Rica, dried hummingbird nests are hung up as lucky charms.

It's a mouthwatering list, and one man gripped by an insatiable desire for these animated jewels was John Gould. The great 19th-century 'Bird Man' ended up surrounded by over 5,000 of the little birds, from no fewer than 320 species. Every single one was dead. Gould, the most extraordinary natural-history publishing impresario of all, had bought the skins from collectors to study them for one of his monumental, sumptuously illustrated monographs.

Gould did eventually enjoy watching living ruby-throated hummingbirds. He wrote that his first such encounter at last satisfied his "earnest day thoughts and not infrequent night dreams of 30 years". Anyone who has seen a hummingbird appear and then disappear, as if by magic, will know exactly how he felt.

FIND OUT MORE

Watch the spectacular courtship of the marvellous spatuletail hummingbird at http://news.bbc.co.uk/earth/hi/earth_news/newsid_8338000/8338728.stm

downloaded from: lib.ommolketab.ir

Ask the experts at

londoncameraexchange

28 branches nationwide

Limited special offer

Only 2 units per store!

Nikon

COOLPIX S5100 DIGISCOPING KIT

Ideal all-in-one kit that will enable you to capture super-telescopic photo shots.
Includes all you need to start Digiscoping:

- High-performance Nikon Spotting Scope RAIII 65 A WP
- Low-light capable Nikon CoolPix S5100
- Nikon 20x DS eyepiece
- Nikon Digital Camera Bracket FSB-7

ALL THIS FOR ONLY £499.99

SAVE £165 off RRP

Birder's Choice

Can't get into a shop? call 0845 6018030 to order (tripod offer not applicable)

PLUS FREE VELBON SHERPA 538 TRIPOD WORTH £69.99 WITH IN-STORE PURCHASES OF THE S5100 DIGISCOPING KIT

See us at our special Optics & Photo event at the Hawk Conservancy Trust
near Andover, Hampshire
Sat/Sun 14/15th MAY 10am-5.30pm

Trade Awards 2010 Winner MULTIPLE RETAILER OF THE YEAR

Good Service Award 2011

28 local branches at:

Bath 13 Cheap Street
Tel: 01225 462234
Bristol Baldwin Street
Tel: 0117 929 1935
Bristol 53 The Horsefair
Tel: 0117 9276185
Chester 9 Bridge Street Row
Tel: 01244 326 531
Chesterfield 1a South Street
Tel: 01246 211891
Cheltenham 10-12 The Promenade
Tel: 01242 519851
Colchester 12 Eld Lane
Tel: 01206 573444
Derby 17 Sadler Gate
Tel: 01332 348644
Exeter 174 Fore Street
Tel: 01392 279024
Fareham 135 West Street
Tel: 01329 236441
Gloucester 12 Southgate Street
Tel: 01452 304513
Guildford 8/9 Tunsgate
Tel: 01483 504040
Leamington Clarendon Avenue
Tel: 01926 886166
London 98 The Strand
Tel: 020 7379 0200
Lincoln 6 Silver Street
Tel: 01522 514131
Manchester 37 Parker St.
Tel: 0161 236 5819
Norwich 12 Timber Hill
Tel: 01603 612 537
Nottingham 7 Pelham Street
Tel: 0115 9417486
Paignton 71 Hyde Road
Tel: 01803 553077
Plymouth 10 Frankfort Gate
Tel: 01752 664894
Portsmouth Cascades Centre
Tel: 023 92839933
Reading 7 Station Road
Tel: 0118 9592149
Salisbury 6 Queen Street
Tel: 01722 335436
Southampton 10 High Street
Tel: 023 8022 1597
Southampton 11 Civic Centre Rd
Tel: 023 8033 1720
Taunton 6 North Street
Tel: 01823 259955
Winchester 15 The Square
Tel: 01962 866203
Worcester 8 Pump Street
Tel: 01905 22314

Most branches open 9am-5.30pm Mon-Sat. Please check your local store for availability before making a special journey.

UK Mail Order Next day delivery available from all LCE branches Postage & Insurance £7 for most items.

E. & O. E. Prices quoted include VAT @ 20%. Prices subject to change. Goods subject to availability.

Search our used equipment selection at:

www.LCEgroup.co.uk or follow us on: twitter

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

The distinctive ridge of Cradle Mountain is one of the most recognisable natural features in Tasmania.

TASMANIA

PART three

CENTRAL HIGHLANDS

Head for the hills to find wombats hiding in the buttongrass moorlands, eagles soaring overhead and a 'kangaroo' no bigger than a rabbit.

StoreMags.com - Free Magazines Download In True PDF format

Once you've seen the jagged dolerite cliffs of Cradle Mountain – looming over Dove Lake like a sleeping stegosaur – with your own eyes, you'll never be able to look at a photo of it again and feel the same. You'll hear the wind whistling through the alpine air and see the ripples on the surface of the water, and you'll yearn to go back there.

If areas such as Bruny Island and the Bay of Fires – covered in the previous two parts in this series on Tasmania – are the soul of the state's wilderness experiences, then this, surely, is the heart. Starting here is Tasmania's most famous outdoor experience: the Overland Track, 60km of undulating boardwalk that takes you over the buttongrass roof of this island world. The start of the route is known as 'Wombat Way' – for reasons that quickly become obvious – so this is for wildlife lovers as well as walkers.

GOLDEN WONDER

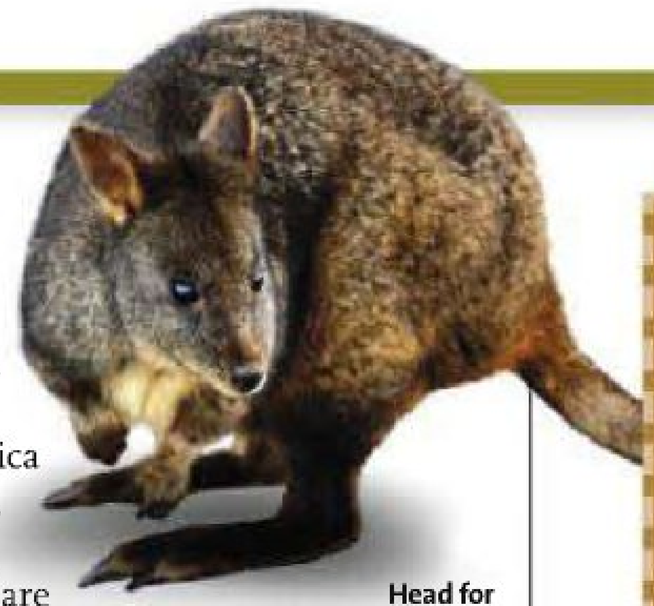
Those with more modest ambitions, however, do not need to feel cheated. A circumnavigation of Dove Lake – accessible from a carpark – only takes a few hours, but here you'll find great swathes of fagus or tanglefoot, Tasmania's only native deciduous tree, that turns the lower slopes of Cradle Mountain red and gold in the autumn.

"The Overland Track is 60km of boardwalk that takes you over the buttongrass roof of this island world."

Look for wedge-tailed eagles in Walls of Jerusalem National Park.

downloaded from: lib.ommolketab.ir

Fagus has another claim to fame, too: its existence first prompted speculation that Tasmania was once joined to New Zealand and South America as part of Gondwanaland, because other plants to which it is closely related are found in those regions.



Head for Trowunna Wildlife Park for a guaranteed sighting of a pademelon.

PROMISED LAND

Visible from the higher reaches of Cradle Mountain is an even wilder spot: Walls of Jerusalem National Park, an area of conifer forests and bleak moorlands. Only accessible on foot, you're best off venturing into this remote wilderness with experienced guides.

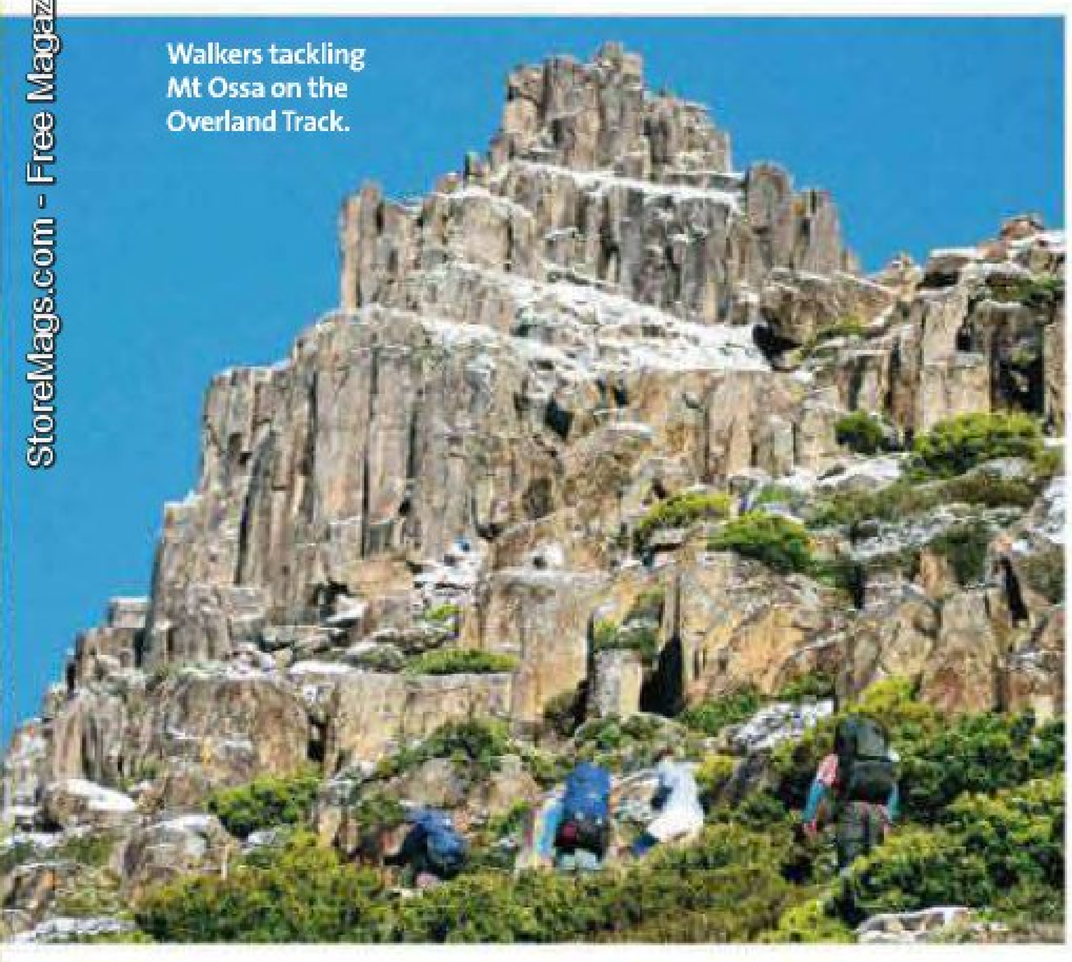
Much of the park lies above 1,200m, making the weather unpredictable: snowfalls are possible even in summer. Wedge-tailed eagles nest here, and in the pencil-pine forest – later named Dixon's Kingdom – a trapper called Reg Dixon allegedly saw a Tasmanian tiger in the 1960s, long after the last known individual died in captivity.

Less remote are the Alum Cliffs or Tulampanga, near Mole Creek, said to be of spiritual significance to Tasmania's Aboriginal people. A short walk from the carpark will take you to a viewpoint with spectacular vistas over the Mersey gorge.

For closer wildlife encounters, Trowunna Wildlife Park provides a sanctuary for many of the state's threatened mammals, including the Tasmanian devil, which has suffered so much from devil facial tumour disease. Park owner Androo Kelly remains optimistic about the devil's future. "I am confident that with our breeding programme, and through our links with many other institutions, the Tasmanian devil won't become extinct," he says.

But Trowunna is not all about devils. "The secret of this park is that it's a sanctuary for the potoroo," he says, referring to one of Tasmania's smallest macropods – a relative of the kangaroo to you and me. And as with the island's other secrets, it's one well worth seeking out.

▶ **NEXT MONTH** West Coast: Strahan and the rainforest



Walkers tackling Mt Ossa on the Overland Track.

CENTRAL HIGHLANDS

6 OF THE BEST...

BEST FOR ADVENTURE

CRADLE MOUNTAIN HUTS

To get a feel for Tasmanian wilderness, do the six-day hike along the Overland Track. Cradle Mountain Huts has perfected a trek that combines walking, wildlife and a bit of comfort.

BEST FOR ESCAPE

TARRALEAH COTTAGES

The Art Deco-style Tarraleah Cottages are set amid stunning mountains and highland lakes. A pair of wedge-tailed eagles and numerous superb fairy wrens are the little and large of this award-winning resort.

BEST FOR PANORAMAS

EAGLES NEST RETREAT

Spectacular, luxury accommodation with fantastic views of the Cradle Mountain range, these two lodges (Eagles Nest I and II) offer a touch of romance amid the Tasmanian outback. There are ringtail possums to feed at night, a platypus on the farm reservoir and wedge-tailed eagles breeding nearby.

Lemonthyme Lodge: charming log cabins in temperate rainforest.

BEST FOR LUXURY

LEMONTHYME LODGE

With its log cabins scattered amid temperate rainforest, Lemonthyme Lodge is *the* wilderness resort of the central highlands. If you don't find a possum or pademelon outside your balcony, you're not looking hard enough.

BEST FOR BUDGET

CRADLE MOUNTAIN HIGHLANDERS COTTAGES

Set in four hectares of woodland and bush, these self-catering cottages are on Cradle Mountain's doorstep and provide a great base for exploring the area. All the usual species, from Bennett's wallabies to spotted-tailed quolls, are here.

TOP SPECIES TO SPOT

WOMBAT

Famed for leaving tell-tale, cube-shaped dung as territory markers on rocks and logs (the square shape ensures they don't roll off), the common wombat is antipodean robustness personified. Harmless herbivores, these marsupials are as cute as a button but tougher than rawhide.

Buttongrass burrower: the rough, tough Tasmanian wombat.

★ BOOK YOUR TASMANIAN ADVENTURE

Create your ideal itinerary through the region. A 10-day package, including two nights at Tarraleah, the six-day Cradle Mountain Huts Walk and two days at Lemonthyme Lodge, costs from around £2,500 per person including car hire but excluding international flights. For more information and fares to Tasmania, call Tailor Made Travel on 0800 988 5912 or visit www.tailor-made.co.uk/tasmania

TAILOR MADE TRAVEL

For more information about this promotion visit www.discoverwildlife.com/tasmania

Cradle Mountain image courtesy of Pure Tasmania (www.wildernessgallery.com.au); pademelon: Virginia Star/Photolibrary.com; other images: Tourism Tasmania (Chris McLellan; Don Fuchs; Gabi Mocatta; Lap Fung Lam)

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StarMaps.com

YOUR QUESTIONS FOR...

Chris Packham

As seen on Springwatch

We asked you to send us your questions for the *Springwatch* presenter and naturalist. Here, Chris shares his deepest thoughts on everything from poodles to panda-eating.

IN EARLY MARCH, with an icy wind blowing and the first sing-song notes of the chiffchaff still a couple of weeks away, I began wondering whether it had been a good idea to stage a photo shoot in a chilly wood with one of the nation's favourite wildlife TV presenters. Then Richard, *BBC Wildlife*'s art editor, asked Chris to climb a tree. It was all going horribly wrong...

Your questions came to the rescue. Chris, who has been writing for *BBC Wildlife* since 1988 (long before *Springwatch* was dreamed up), was soon talking nineteen to the dozen as he got to grips with your posers. Edgy, well-informed and passionate as ever, he had some fascinating things to say.

Ben Hoare

What sight, sound or smell do you most look forward to when spring approaches?

Heidi Lett Worcestershire

The bitter scent of crushed bluebells. When you lie among them and sniff the bruised leaves... it's not exactly a nice smell, but it reminds me of a spring in my childhood, sprawled amid the blue haze to watch a family of foxes outside their den. Today, some would say it's wrong to sacrifice even a few of these precious blooms, but I was just a kid, enjoying nature.

What species, if any, do you think should be reintroduced to Britain?

Max Beech Via email

Beaver. Properly and NOW! It's a disgrace that this rodent is not yet fully at large in the UK. It shows how we have not really got conservation into top gear at the moment.

Would you have liked a career in science?

Liz Turner Via email

For a long time I very much regretted giving up academia (I started researching badgers for a PhD but never finished my study), even though I knew it wouldn't have suited my impatient and restless ways. I'd like to have studied wasps and hornets.

Do you ever go twitching?

@Ollista Via Twitter

No! I like to enjoy my birding, not have my 'scope kicked over by idiots. ▶

downloaded from: lib.ommolketab.ir

StoreMags.com

Possibly Britain's best-dressed natural-history TV presenter, Chris was photographed for *BBC Wildlife* in March. Makes a change from blue shirts and khaki chinos...

Rob Scott

downloaded from: lib.ommolketab.ir

I saw your face light up on *Springwatch* when someone showed you a capercaillie tail feather. Do you collect feathers?

Mark Turner Via email

Yes, I collect nearly everything: even poo! My best-ever feathery find was a tail plume from a resplendent quetzal, a Central American megastar. It was for sale at a roadside shack. I didn't buy it: I couldn't be sure that it hadn't been plucked from a bird killed for its feathers. But I still dream of that plume.

Is there a British wildlife hotspot that you've not been to but would love to visit?

Jennifer Gray Dewsbury, Yorkshire

Maybe the Monarch Isles, just off North Uist in the Outer Hebrides. Or Handa Island, which lies off the west coast of Sutherland. On a fine summer's day, though.

What was your best wildlife encounter?

Jan Barker Via email

Recently, a male hen harrier flew right past me and I nearly burst. That may have been my 'once in a lifetime' encounter with this species. Stunning, fleeting, rare, private: it had all the ingredients for a magical moment.

If you could bring back just one extinct creature, what would you choose?

@TinaThudBump Via Twitter

No brainer. *T rex*. The world's most famous and fantastic animal... and we missed it. Just imagine what it'd be like to meet one. I do!

What do you think about the idea of cloning and rewilding mammoths?

Paul Bloomfield *BBC Wildlife*

Bring it on! Sadly, I don't think I'll live long enough to see it happen. But I'm always up for the appliance of science – otherwise what's the point?

How do we get people to become planet caretakers, not consumers?

@Shyman33 Via Twitter

We *are* consumers. We eat and need energy to live. We need to see ourselves as organisms, not above nature and its laws. If we don't, we will be taught a salutary lesson.

Why poodles? What is it about the breed that you like so much?

@Christina_HH Via Twitter

Are there any other breeds of dog? Poods are simply the smartest canines around.

What species of animal do you most enjoy photographing?

@dom_fan Via Twitter

I don't enjoy wildlife photography at all. It's a frustrating and horribly dissatisfying assault on the impossible goal of perfection. I do it as I hope to gradually approach that level. For me, the subject is largely immaterial – it's the picture that counts.

How can I get a great photo of a fox?

Amanda Jaynes Via Facebook

Well, controversial though it's bound to be, I would bait my fox into a lovely location and concentrate on getting a great photo rather than stalking the subject. It's the result that counts and not the story behind it (so long as the animal isn't harmed).

You are famous for claiming that you would happily eat the last panda on Earth. Surely you were misquoted?

Sarah Baxter Via email

I was pointing out that a disproportionate amount of money has been spent trying to save one animal from extinction. This method of conservation is outdated: we must think more critically about how we spend our precious resources. I'm 'veggie' so would only eat a panda metaphorically... but if I could have all of that money to spend again, pass me the metaphorical sauce.

Who is your wildlife hero? And villain?

Ben Hoare *BBC Wildlife*

Bill Oddie says it like it is – and is a brilliant birder. As for villains, I've run out of patience for 'fence-sitters'. The worst are those putting the 'con' in conservation: organisations that care more about blindfolding their members than making a real difference.

Is moorland managed for grouse shooting better for wildlife than unmanaged moorland?

@hornerj197 Via Twitter

Moorland – like every other square metre of the UK – needs management. It is part of a 'manscape', not a remnant of untouched wilderness. I don't want to kill animals for pleasure, but others do and shooting can be an important part of the rural economy. However, the shooting fraternity must regulate the minority in its midst that fails to accept that times have changed and that certain practices, such as the persecution of raptors, are not

"Killing in all species except our own is beautiful. Not because death is enjoyable, but because it is necessary for nature to work in harmony."

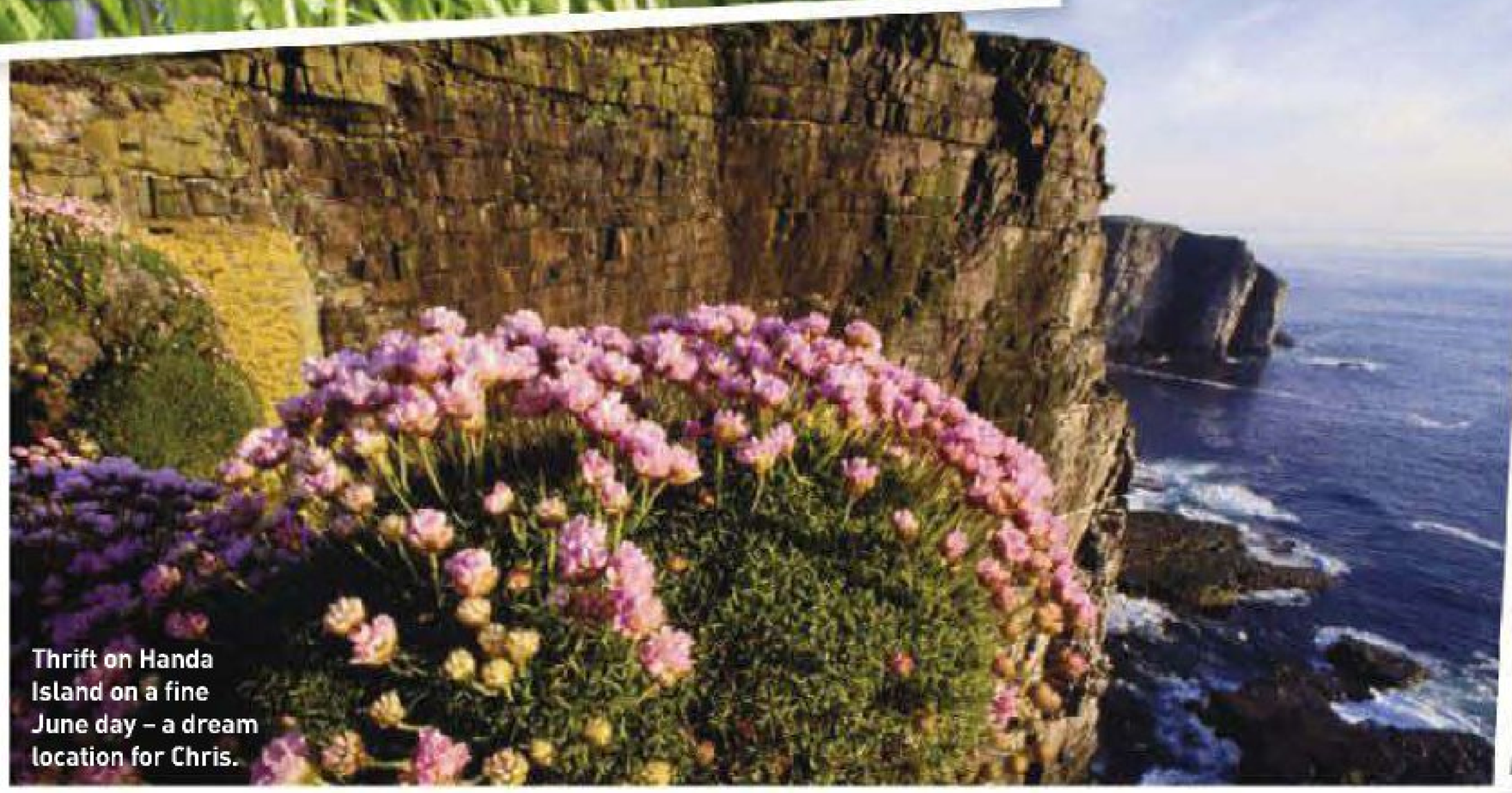
StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

A fox cub and the aroma of crushed bluebells: the essence of spring for Chris.

A hen harrier flyby was Chris' ultimate brush with wildlife.



Thrift on Handa Island on a fine June day – a dream location for Chris.

Chris still needs a quetzal tail plume for his collection.

tolerable. We need a practical, effective partnership here, not lines in the sand nor finger wagging from conservationists.

Some species have several organisations dedicated to their conservation. Is this a good use of resources?

@GabrielaS171 Via Twitter

If the overlap is significant, then no – it's an embarrassment. If people could honestly just stay focused on the bigger picture and work together in real partnerships, we would achieve so much more.

Are crows, raptors and grey squirrels to blame for the decline in British songbirds?

@jennyclairedunn Via Twitter

Absolutely not. It is desperately annoying that these sorts of ideas persist despite thorough scientific evaluation. The real culprit (though the issues are complex) is decades of intensive agriculture.

Chris admits that he fantasises about watching *T rex* in action. "It would be amazing to settle the debate of how it foraged."

Should we exterminate grey squirrels in the UK to help our native reds?

@hornerj197 Via Twitter

It's not feasible, given the wide distribution and sizeable population of these invaders. If there was a magic button I'd be the first in line to push it, but, as it stands, we should target grey squirrels only where doing so would definitely have a positive impact on conserving the reds. Elsewhere, it's just a waste of time and money.

Cheetahs are beautiful, but they only evolved that shape to help them kill. Do you think that killing can be beautiful, too?

@EdieMorrissey Via Twitter

Killing in all species except our own is beautiful. Not because death is enjoyable, but because it is necessary for nature to work in harmony. A pristine ecosystem has a greater beauty than the sum of its parts. Death, extinction, birth and speciation are all essential parts of the process. This is why I marvel at, and take pleasure in, watching a sparrowhawk taking a blue tit.

What advice would you give a young naturalist who wants a career in wildlife?

@MrUltraSensitiv Via Twitter

Get an alarm clock and never not set it. If you are not out there where the action is, you'll never *feel* wildlife. You have to get scratched, stung and slimed to love it enough – it needs to come from the heart, not the hard drive.

Having thrown a few dance moves on *Springwatch* last year, do you have any plans to appear on *Strictly Come Dancing*?

@tawnychick Via Twitter

Clint Eastwood, a man not renowned for his philosophy, said: "A man's gotta know his limitations." That's a maxim I stick to. I can't sing and I can't dance.

What's your proudest achievement in TV?

Christine Watson Coventry

I don't take pride in anything I've done. I have a deep-rooted fear of conceit and complacency. I'll keep trying to do my best.

BBC TWO

See Chris on *Springwatch* and *Springwatch Unsprung*, broadcast live from Wales, starting 30 May.

Chris Packham: Rob Scott; fox: Frederic Desmotte/BIOS/Specialist Stock; hen harrier: Blickwinkel/Alamy; Handa: Laurie Campbell/naturepl.com; quetzal: Konrad Wothe/Minden/FLPA; *T rex*: Gaspar R Avila/Alamy

downloaded from: lib.ommolketab.ir

StoreMags.com - Free Magazines Download in True PDF format

Botswana

put yourself in the picture

a safari destination with maximum exposure

This incredible photograph was supplied courtesy of African Horseback Safaris

botswana tourism

Botswana Tourism
6 Stratford Place, London, W1C 1AY
+44 (0)207 647 1018
Email: dparr@botswanatourism.org.uk
www.botswanatourism.org.uk

downloaded from: lib.ommolketab.ir

BBC Wildlife SURVEY

What do you see on your way to work?

Wildlife to WORK

BBC Wildlife wants to know what our readers see on their commutes and errands. Wherever you go, whatever you spot, we want to hear from you.

Illustration by Sam Symonds

MY JOURNEY TO work begins with a bike ride. I scan the sky for swifts as I head down to the cycle track that runs through a small woodland, and here look out for muntjac deer, though I tend to see these at dusk on my way home.

I emerge from the track onto a main road, where I often see buzzards and foxes in the adjacent field. Forking off into quiet country lanes, I count the chiffchaffs for the last few kilometres – my record is six – and in the summer I watch for swallows over the farm just past the pub. One blustery autumnal morning, a windswept little egret flew over my head.

Arriving at the train station, I check to see if last year's chiffchaff, who regularly sung his heart out while perched in full view on the phone lines above the platform, is still around. I see plenty of wildlife on my train ride to Bristol, too; then, once in town, there's always a chance of a peregrine staring down from the old brewery or a cormorant on the river.

On the bike ride home again, I may take a breather at the common to admire the orchid display and the last few cowslips. There are skylarks here, and as evening falls a badger might emerge from one of the numerous setts to begin its night's feasting.

Of course, few of these sightings constitute anything unusual, but they do make my trip to the *BBC Wildlife* office more enjoyable. In short, your commute – or any daily journey you make – doesn't have to be dead time. There are so many opportunities to watch wildlife, whether you're on foot or a bike, or in a car, train, bus or ferry.

Now we want *you* to start looking and send in your observations. We want to build up a picture of what readers across the country are seeing on a daily basis, and try to work out what that says about the state of wildlife in Britain today. And we'll be publishing the results of your observations in a special report in the autumn.

The more of you who get involved, the better. So, over to you.

James Fair

"There are many opportunities to watch wildlife, whether you're on foot or a bike, or in a car, train, bus or ferry."

Store Mags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

5 ALIVE GREAT BRITISH WILDLIFE JOURNEYS

1 PEREGRINES AT THE TATE
If you pass Tate Modern on your way to work, walking, cycling or even aboard a Thames Clipper, look up – peregrine falcons nest nearby and use the iconic chimney as a perch. In summer RSPB volunteers can help you spot them. *www.london-peregrine-partnership.org.uk*

2 RED KITES ON THE M40
Anyone who has driven along the M40 to or from Oxford will have seen the red kites that now frequent this stretch of motorway. They are also spreading west along the M4 to Swindon and beyond. *www.redkites.net*

Look up for red kites above the M40.

3 THE AVOCET RAILWAY LINE
Following the course of the River Exe, the Avocet Line is well named because the journey offers an excellent chance of seeing the avocets that overwinter in their thousands on the estuary. Also look out for little egrets throughout the year. *www.heartofdevon.com/site/travel-to-exeter/the-avocet-line-p1096083*

4 THE GREEN CIRCULAR
The Green Circular is an easy route for cyclists and walkers, covering over 40km around the city of Dundee. Wildlife highlights to enjoy include red squirrels and roe deer. *www.dundeetravelinfo.com/cycle.asp*

5 THE TARKA TRAIL
Following the route of a disused railway line and suitable for cyclists, the Tarka Trail runs for nearly 300km through the north Devon countryside. River otters are notoriously hard to spot, but you never know your luck. *www.northdevonbiosphere.org.uk/the-tarka-trail*

Will you see an otter on the Tarka Trail?

Otter: Andy Rouse/naturepl.com; squirrel: Georgette Douwma/naturepl.com; heron: Laurent Geslin/naturepl.com; kite: David Tipling/rspb-images.com

Storemags.com - Free Magazines Download In True PDF format

What will you see on your way to work today? And what will see you?

Wildlife tales from the city

Ospreys, red kites and waxwings: it's amazing what city dwellers would see if they only bothered to look up, says 'Urban Birder' **David Lindo**.

FROM THE MOMENT I walk out of my front door in West London, I'm on the lookout for birdlife. Glancing up, I will certainly see gulls but a sparrowhawk is not out of the question. On my road, blue and great tits are noisily going about their business and, though there are no house sparrows here any more, I occasionally hear chaffinches calling from some of the lusher gardens that I pass.

Once I noticed a group of crows flying low in hot pursuit of an unseen assailant. Expecting to see a beleaguered heron, I was startled when a red kite suddenly rose above the low-rise rooftops, flanked by its pursuers. How many of my fellow pedestrians noticed that wildlife spectacle, I wondered?

Walking through Hyde Park and Kensington Gardens on the way to central London is always a pleasure, if only to see the squirrels scampering from tree to tree. In summer, the air is filled with birdsong: robins, blackbirds and starlings are all prominent. If you're lucky, you may catch the strains of a coal tit over the din of squawking ring-necked parakeets and yelling dog walkers. Again, looking up can pay dividends: one April morning a few years ago I was rewarded with a migrating osprey.

You might have thought that, by the time I hit central London, the wildlife would have run out. Wrong. Gulls and cormorants regularly traverse Oxford Street, and once I spied a rare black redstart singing from the rooftop aerial of a department store.

Watching my fellow city dwellers is fascinating, too. One winter's morning a few years ago, I detoured to see about 150 waxwings feeding on rowan berries by Tottenham Court Road. Masses of commuters marched past on their way to work, totally oblivious to these gorgeous Scandinavian visitors. No one looked up: if they had, their day at work would have been infinitely brightened.

"Looking up can pay dividends: one April morning I was rewarded with a migrating osprey."

The antics of squirrels can lift your mood on a grey day.

downloaded from: lib.ommolketab.ir

StefanKeys.com

Wildlife to WORK

How *you* can get involved

» Wildlife to Work is all about you: your sightings, your local wildlife, your stories.

» To make taking part as easy as possible, you can get in touch in several ways – write to us, post us the form below, send us an email or fill in the online form on our website (www.discoverwildlife.com).*

» You need to record all of the wildlife that you see on your regular commute or any other daily journey between the dates Monday 6 and Friday 10 June 2011.

» Let us know about any especially memorable encounters, too – and send photos. We can't wait to hear from you!

WILDLIFE TO WORK WHAT I SAW FROM MONDAY 6 TO FRIDAY 10 JUNE 2011*

Name

Email**

Date

LOCATION (tick box) **England** ☐ South-east ☐ South-west ☐ West Midlands ☐ East Midlands ☐ North-east ☐ North-west ☐ **Scotland** ☐ **Wales** ☐ **Northern Ireland**

ENVIRONMENT (tick box) ☐ **urban** ☐ **suburban** ☐ **rural**

MODE OF TRANSPORT (tick all that apply) ☐ **car** ☐ **bus** ☐ **train** ☐ **foot** ☐ **bike** ☐ **train** ☐ **other** (please specify) .....

My memorable wildlife encounter:

Continue on a separate sheet if necessary

SPECIES I SPOTTED (list below)

MAMMALS

1 ..... 6 .....

2 ..... 7 .....

3 ..... 8 .....

4 ..... 9 .....

5 ..... 10 .....

BIRDS

1 ..... 6 .....

2 ..... 7 .....

3 ..... 8 .....

4 ..... 9 .....

5 ..... 10 .....

DON'T FORGET YOU CAN ALSO SEND US YOUR SIGHTINGS...

» By post – type (or handwrite) your wildlife list and send it to the address below;

» By email – wildlifetowork@bbcmagazines.com;

» On our website – fill out the online form at www.discoverwildlife.com

Post this form by 30 June to: *BBC Wildlife Magazine*, 8th Floor, Tower House, Fairfax Street, Bristol BS1 3BN

*By submitting your text or photos, you grant to Bristol Magazines Ltd, the publisher of *BBC Wildlife*, a royalty-free perpetual licence to publish your entry in any media, with attribution.
**Please enter this information so that *BBC Wildlife* can keep you informed of newsletters, special offers and promotions via email. You may unsubscribe from receiving these messages at any time. Please tick here if you do not wish to receive similar offers via email from BBC Worldwide ☐

Wildlife to WORK

To complete our simple form online visit www.discoverwildlife.com/wildlife-to-work

downloaded from: lib.ommolketab.ir

BLAST FROM THE PAST

From its lustrous shell to its unblinking eye, the jet-propelled nautilus is unlike any other animal alive today. **PAUL CHAMBERS** meets a mollusc out of time.

A nautilus swims through the azure waters off the Great Barrier Reef. It travels shell first with tentacles trailing, so can't see where it's going.

Reinhard Dirscherl/FLPA

FOR CENTURIES THE nautilus was one of the great mysteries of the natural world. Its peculiar coiled shell, with its gorgeous pearly lustre and radiating internal chambers, was known to the ancient Greeks, but the living animal eluded scientific study. Then, in 1829, a freshly dead specimen was found floating near a Polynesian island. At first it was mistaken for a dead cat. Luckily, a ship's surgeon saw fit to retrieve the creature and preserve it.

Two years later the specimen reached London where it was dissected by Richard Owen (a leading anatomist, whose achievements included dreaming up the word dinosaur). He declared that it was a cephalopod, the group to which squid, cuttlefish and octopuses belong. He also noted the similarity between its exquisite, compartmentalised shell and the fossils of extinct animals such as ammonites.

Owen deduced that the nautilus possessed many biological features that were 'inferior' to or 'less progressive' than those seen in cuttlefish or squid. It seemed to have more in common with fossilised cephalopods from the Jurassic and Cretaceous periods than with those alive in the modern world. Though our understanding of evolutionary biology has come a long way since then, he did have a point.

The term 'living fossil' is contradictory and overused, yet is an apt description of the nautilus, whose fossil history reaches back over 400 million years. For much of this time the world's shallow seas swarmed with hundreds of different nautilus species, as well as those of their cousins, the ammonites. Then, 65 million years ago, came the extinction event that wiped out the dinosaurs. This also saw off the ammonites, and marked a steep decline in the diversity

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

Store.ags.com

THE EXPERT

PAUL CHAMBERS writes about palaeontology. He worked on the smash-hit BBC series *Walking with Dinosaurs* and its sequels.

downloaded from: lib.ommolketab.ir

StoreMags.com

"Astonishingly, it would appear that the nautilus has changed very little in about 70 million years."

The tentacle-ringed jaws of a nautilus loom large in this crab's-eye view. Below them is the hyponome, which jet-propels it through the water.

downloaded from: lib.ommolketab.ir

A diver's buoyancy jacket and a nautilus' chambered shell work on the same principle.

Lobsters, crabs and prawns are the favourite prey of the nautilus.

Opposite & diver: Jurgen Freund/naturepl.com; feeding: Daniel Heuclin/NHPA; shell: Jean-Yves Grospas/Bios/Specialist Stock

and number of nautilus species. Today just six kinds are left. Truly, they are molluscs out of time.

Watch a nautilus in the ocean (or an aquarium – it has become a popular novelty exhibit) and its prehistoric heritage is obvious. Its smooth, tightly coiled shell is unlike that of any other living mollusc. Most of the owner's soft parts are hidden, except for the bristling mass of short tentacles protruding at the front. Either side of this is a strange, primeval-looking eye that consists of little more than a round plate with an unblinking pinhole at the centre.

Though unique today, these features are also present in exceptionally well-preserved nautilus fossils. Astonishingly, it would appear that the nautilus body plan has changed very little in about 70 million years.

Even the behaviour of the nautilus is out of step with the modern world. It shows none of the intelligence possessed by octopuses, which can solve puzzles, indulge in play and even have personalities. And it moves like no other creature alive today. Rather than actively swimming, it hangs in the water as though tethered by an invisible wire. It propels itself by sucking water into its body cavity and then squirting it out through a siphon-like structure called a hyponome.

DID YOU KNOW?

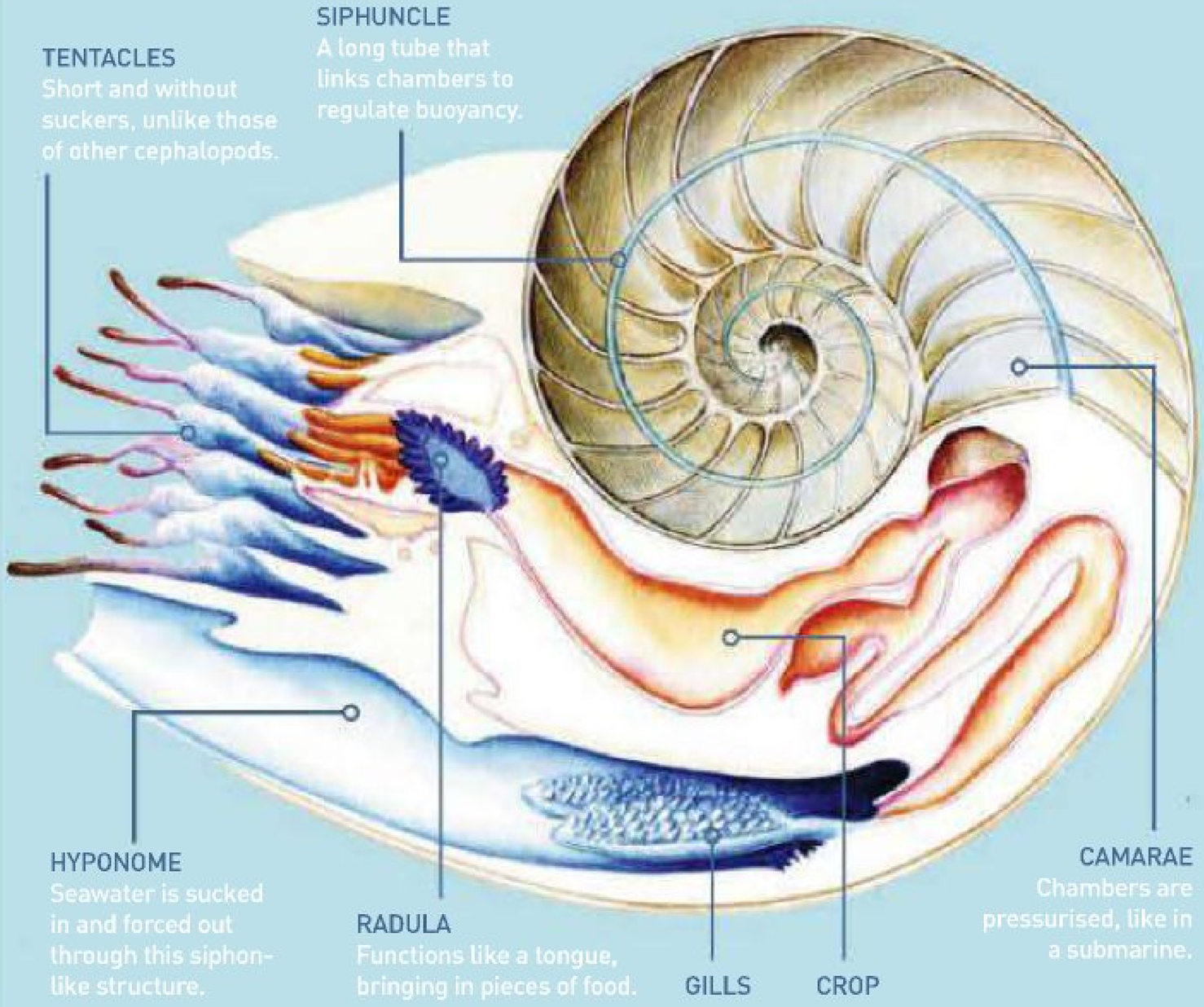
The pressurised shell of a nautilus will implode if it swims deeper than 800m. But it cannot survive for long in shallow water since the warmth of the sea will kill it.

But the nautilus has a problem. Whereas jet propulsion turns squid and cuttlefish into dashing hunters, it is restricted by its shell. It can't fit enough water inside to create a high-pressure blast. So it has to make do with swimming backwards in a jerky bobbing style.

Since the nautilus also has poor eyesight, it is limited to stalking crustaceans on the seabed. But it has an ace up its multi-tentacled sleeve: it is ultra-energy-efficient, needing to find just one good meal every couple of weeks.

To see a wild nautilus in action, you must visit the tropical Indo-Pacific, where the six species live close to the seabed at depths of 100m or more. Perhaps competition for food forced their ancestors out of shallow seas and into deeper water. This would have placed them out of reach of many large predators, such as dolphins, and away from overcrowded coral reefs, where there is more competition for food from fish and other cephalopods.

But there's a downside to being an iconic, beautiful, 'out of this world' kind of creature. Nautilus shells have become collector's items and now several nautilus populations are under pressure from overfishing. There's a danger that some species might end up going the same way as the ammonites.



INSIDE A NAUTILUS

The complex structure of the nautilus shell has long puzzled naturalists.

In 1726, it was suggested that the nautilus flooded individual chambers in its shell with water or air to help it sink or float. Later, another theory was that they were gas-filled. The animal (which occupies the final, largest chamber) was said to have little or no control over their contents.

We now know that the key to understanding the anatomy of this enigmatic mollusc lies in a thin tube of tissue, the siphuncle, that runs through the centre of all of its chambers. Each of these is, in effect, a sealed, pressurised compartment – like an aircraft fuselage – from which the nautilus uses the siphuncle to add or remove air and water.

By carefully adjusting the air-to-water ratio, the nautilus can achieve neutral buoyancy. This reduces the energy needed to swim and allows it to support the weight of a big shell. Some of its giant fossil ancestors, such as orthocones, could stay afloat while carrying heavy shells up to 9m long.

Illustration by Dan Cole/The Art Agency

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

Safari SPECIAL

The array of wildlife-watching opportunities in Africa is dizzying. But with a wealth of species to spot and a vast range of parks, reserves, lodges and camps, how do you pick your perfect safari? *BBC Wildlife* asked the experts.

SAFARI: IT'S ONE of the most resonant words in the wildlife-lovers' lexicon. Swahili for journey, the term is pregnant with the sights, sounds and smells of the African savannah. If it doesn't conjure up images in your mind of lions resting under an acacia tree or elephants standing in the heat of the tropical sun, ears flapping like giant wings, then English probably isn't your first language – or even your second, third or fourth.

A safari of some description is the first choice for many people who go on a wildlife holiday. That's not just because of the great diversity and biomass of Africa's megafauna, but also because of its visibility. You want elephants? You can't miss 'em.

But the wide distribution of the traditional safari – from South Africa's private reserves to the plains of Kenya's Masai Mara – make it hard to know how you can guarantee the wildlife experience you are hoping for.

With this in mind, we asked three of our most experienced Africa writers to choose their top spots for specific experiences or animals. If big cats are your thing or you want a self-drive adventure, they know the very best places to go. Some destinations may be known to you, but others won't. And this experts' guide is a great starting point for making your next big trip the holiday of a lifetime. *James Fair*

downloaded from: lib.ommolketab.ir

StoreMags.com

Close-up, intimate views of big cats such as cheetahs (here in Namibia) are among the great pleasures of a traditional African safari.

Martin Harvey/NHPA (captive)

THE EXPERTS

PHILIP BRIGGS has visited more than 20 African countries in the course of writing numerous travel guides and wildlife articles.

WILLIAM GRAY writes about family, wildlife and adventure holidays, often travelling with his wife and 10-year-old twins.

BRIAN JACKMAN is a former staff travel writer for *The Sunday Times* and now specialises in safari destinations.

downloaded from: lib.ommolketab.ir

Store.Maps.com

Best for **big cats**

Olare Orok Conservancy, Kenya

A good guide can make all the difference to a safari, and they don't come any better than Jackson Saiyalel. With his beads, bangles and blood-red *shuka* – the distinctive red, checked blanket – there is no mistaking him for anything but a true Maasai, born and bred on the Mara plains. Today he works in the Olare Orok Conservancy, which covers 8,000ha and borders the Masai Mara National Reserve itself.

At a time when lion numbers are declining, it is heartening to find somewhere that is bucking the trend. Since Olare Orok was founded in 2006, the local feline population has increased dramatically. There are now 51 lions, comprising three healthy prides, and one of the joys of staying here is getting to recognise them as individuals. There's no mistaking Nguro, one of the Ridge Pride lionesses – her Maasai name means 'short tail'. Nor does it take long to identify Mzee and Lolalai, grizzled Moniko Pride males.

Another bonus is that low-density tourism rules, so you can usually watch big cats with no other vehicles around – something that is much harder in the National Reserve. *Brian Jackman*

NOW YOU DO IT

» Stay at **Porini Lion Camp**, one of only three camps with exclusive game-viewing rights on this private wildlife reserve. Details from Gamewatchers Safaris ☎ 0870 471 7122; www.porini.com

» Go any time except April and May, which is the rainy season.

ALSO RECOMMENDED

- Duba Plains Camp, Okavango Delta, Botswana; www.wilderness-safaris.com
- Mwagusi Safari Lodge, Ruaha National Park, Tanzania; www.mwagusicamp.com

Federico Veronesi/Getty Images

A lioness and a cheetah eye each other warily in the Olare Olok Conservancy – and not another 4x4 in sight.

downloaded from: lib.ommolketab.ir

Storeklegg.com

Best for canoeing

The Zambezi, Zambia

Few tasks concentrate the mind so much as steering a canoe between a pair of hippos submerged in a channel of the Lower Zambezi. Stick to the shallows, says our guide, and you'll be in no danger. But the problem is that I don't see any signposts reading 'Shallow water' or 'Here be hippos'.

As the current nudges me forward, I focus on the wake of the lead canoe that runs between the banks. The crossing takes only 30 seconds, but it feels like an eternity.

Canoeing the Zambezi is mostly a serene activity, and some moments are etched on my memory forever – for instance, floating within 10m of a pride of lions, whose guileless yellow eyes followed our passage across the knee-deep water. It is one of Africa's most compelling experiences, offering the immediacy of being right there, on the river, without an engine in earshot or a window frame in sight. *Philip Briggs*

NOW YOU DO IT

- **Sausage Tree Camp** offers one-hour to one-day canoe trips; www.sausagetreecamp.com All-inclusive packages can be booked through Expert Africa ☎ 020 8232 9777; www.expertafrica.com
- The best time to visit is June to September, the dry winter months.

ALSO RECOMMENDED

- Okavango Delta, Botswana; www.okavango-delta.net
- Arusha National Park, Tanzania; www.greenfootprintactive.com

Roger de La Harpe/Photolibrary.com

If you're looking for close-up encounters with hippos and other river wildlife, a canoe is the only way to travel.

Best for volunteering

Tuli Block, Botswana

Elephants can be masters of suspense. An entire herd can hide nearby in dense scrub, teasing you with glimpses of questing trunks, before they melt away into even thicker vegetation. In Tuli Block, however, we were rewarded with a far more intimate encounter when a herd of 30 encircled us and showed off their full range of dust-tossing, ear-flapping and head-shaking.

Getting up-close and personal with elephants takes on new meaning with the Tuli Conservation Project. Working as a volunteer, your job is to develop ID cards and record behaviour for the 1,400 or so elephants found in the study area. This is one of southern Africa's last free-roaming populations, and research into their movements is key to the success of the Limpopo-Shashe Transfrontier Conservation Area that allows wildlife to migrate between Botswana, South Africa and Zimbabwe. Other activities focus on recording predator and baboon behaviour, game counts and habitat restoration. *William Gray*

Suzi Eszterhas/naturepl.com

Feed rescued cheetahs on a volunteer project in Namibia.

NOW YOU DO IT

- Contact **African Conservation Experience** ☎ 01454 269182; www.conservationafrica.net
- Accommodation is in huts and tents, with outdoor showers and flush toilets.

ALSO RECOMMENDED

- Frontier has a wildlife conservation project in Tanzania's Kilombero Valley ☎ 020 7613 2422; www.frontier.ac.uk
- Earthwatch has a cheetah conservation project in Namibia ☎ 01865 318838; www.earthwatch.org

downloaded from: lib.ommolketab.ir

Get in touch with the real Africa on a walking safari – you never know what might saunter past.

Storeflags.com – Free Magazines Download in True PDF format

Safari: John Warburton-Lee/Photolibrary.com; wild dog: Shem Compion/FLPA

Best for **wild dogs**

The Selous, Tanzania

When I first see the herd of impalas fleeing headlong across the hillside, I assume that they must have noticed a leopard among the rocks. But I should know better. No other predators create as much panic as a wild dog pack.

Sure enough, moments later I pick out three familiar brindled shapes, their bushy white tail-tips raised like flags. In the Selous, where this encounter takes place, the dogs are known as *chaka-chaka* – 'the ones that trot' – but this trio is racing flat-out. By the time we catch up with them, they have already pulled down an impala – their favourite prey – and are eating it as fast as they can.

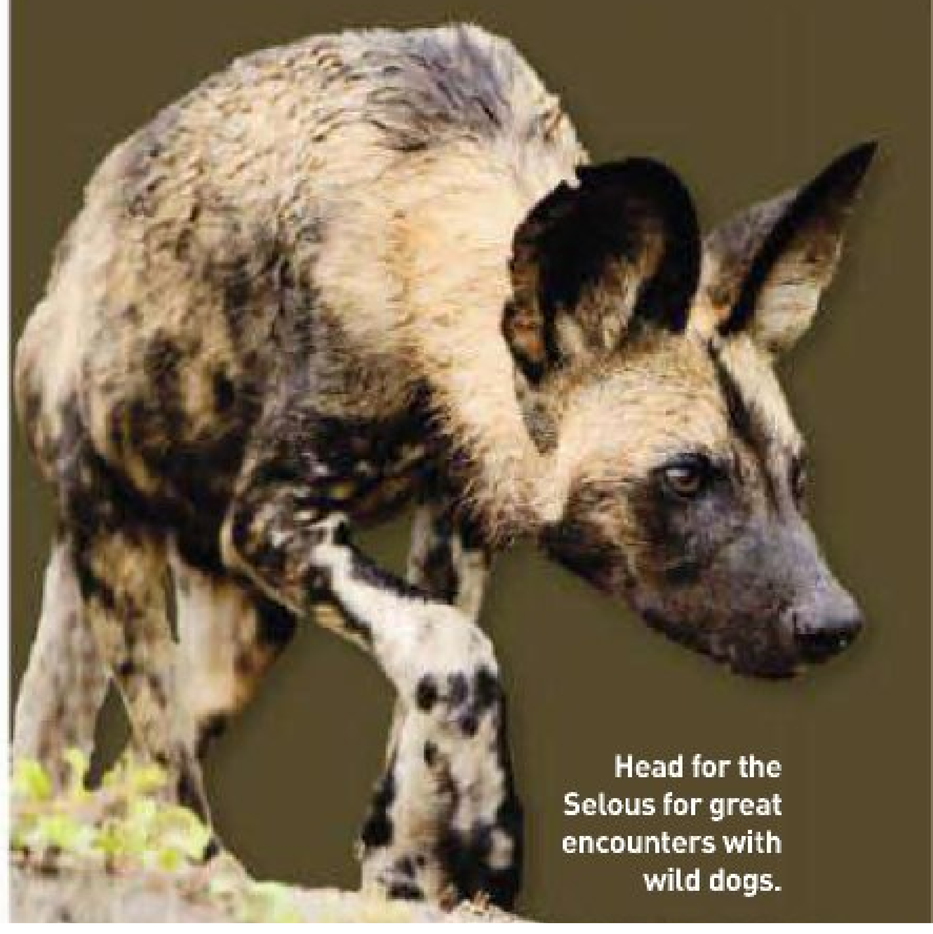
The Selous in southern Tanzania is Africa's biggest game reserve, a wilderness the size of Ireland and the best place to see wild dogs. In the whole of Africa there are perhaps as few as 4,000 of these Critically Endangered canids left, of which about 800 can be found in the Selous. It's here that you are most likely to spot their four-toed tracks, hear their mournful contact calls and – because they are daylight hunters – watch them streaming in full cry through the bush. *BJ*

NOW YOU DO IT

» Base yourself at **Beho Beho Safari Lodge** in the northern Selous. Represented in the UK by Africa Reps ☎ 01932 260618; www.africa-reps.com

ALSO RECOMMENDED

- Chitabe Camp, Okavango Delta, Botswana; www.wilderness-safaris.com
- Vundu Camp, Mana Pools National Park, Zimbabwe; www.bushlifesafaris.com



Head for the Selous for great encounters with wild dogs.

Best for **walking**

South Luangwa National Park, Zambia

A herd of buffalos marches slowly towards the life-sustaining Luangwa River. Our guide signals us to keep still as the front few animals stop to sniff the fresh morning air, their heads lowered, brown eyes staring intently ahead. Slowly, they resume their thirsty journey.

After watching them for a while, we walk on, too, stopping occasionally to enjoy the minutiae of the African bush: a chameleon wobbling goggle-eyed along a branch, or a palm-sized spider huddling expectantly in a corner of her web.

South Luangwa is a superb reserve on so many levels. There is the Luangwa River, its sluggish brown waters passing through dry-season pools dense with hippos, and its tall banks pockmarked with the breeding holes of dazzling carmine bee-eaters.

Then there are the night drives, renowned for their leopard sightings but also good for other 'nocturnals' such as the handsome genet, twitchy-nosed elephant-shrew and quill-rattling porcupine.

But South Luangwa can also claim to be the home of the walking safari – whether it is a half-day hike or multi-day trek between fly-camps. Either way, you get to experience a richer Africa than the one you see from a vehicle: the zebras look bigger, the giraffes tower higher and, faced with the stare of a buffalo or trumpeting of an elephant, your sense of being an intruder is painfully, thrillingly manifest. *PB*

NOW YOU DO IT

» **Norman Carr Safaris** (www.normancarrsafaris.com) and **Robin Pope Safaris** (www.robinpopesafaris.net) offer excellent walking; these tours can be booked through Expert Africa (www.expertafrica.com).

» Unless you're a birder, visit during the dry season – May to October.

ALSO RECOMMENDED

- Rufiji River Camp, Selous Game Reserve, Tanzania; www.tanzaniasafaris.info
- Tok Tokkie Trails, NamibRand Nature Reserve, Namibia; www.toktokkietrails.com

downloaded from: lib.ommolketab.ir

Amboseli features the perfect combination: the stunning backdrop of Mt Kilimanjaro and a huge population of elephants.

Top: Steve Bloom Images/Alamy; below: Jenny E Ross/naturepl.com

Best for **elephants**

Amboseli National Park, Kenya

Mesmerising orange hues filter through a suspension of volcanic dust kicked up by thousands of hooves. On the horizon, a cloudy shroud lifts to reveal the origin of these particles: the snow-capped peak of Kilimanjaro. Not for the first time, I am struck by how dusk transforms the Amboseli plains into such a wondrous place.

This small park on the Tanzanian border supports one of the world's densest daytime elephant populations. This, too, is thanks to the great mountain, whose springs and molten snow feed a network of wetlands where up to 1,000 individuals converge to drink and play, having spread far beyond the park's confines to graze by night.

These elephants are incredibly well habituated thanks to the Amboseli Elephant Research Project, founded by Cynthia Moss in 1975 and the source of much of what is known today about elephant social behaviour and communication.

The protection afforded by the project means that Amboseli's elephants sport tusks of sizes that are elsewhere consigned to memory. And there's no finer place to observe their behaviour and social interaction at close quarters. Whether it's a convention of bulls foraging shoulder-deep in a marsh, or a mother and her impossibly tiny newborn baby walking tail-in-trunk across the plain, the action, complemented by the spectacular backdrop of Kilimanjaro, makes Amboseli a delight and a joy to visit. *PB*

Two elephants play-fight – but

NOW YOU DO IT

- A full safari including accommodation can be booked through companies including **Rainbow Tours** ☎ 020 7226 1004; www.rainbowtours.co.uk
- Elephant sightings are plentiful throughout the year.

ALSO RECOMMENDED

- Ruaha and Lake Manyara National Parks, Tanzania; www.tanzaniaparks.com
- Addo Elephant National Park, South Africa; www.sanparks.org

downloaded from: lib.ommolketab.ir

StoreKaggs.com

Wildebeest massing on migration in Serengeti National Park – one of the world's greatest wildlife spectacles.

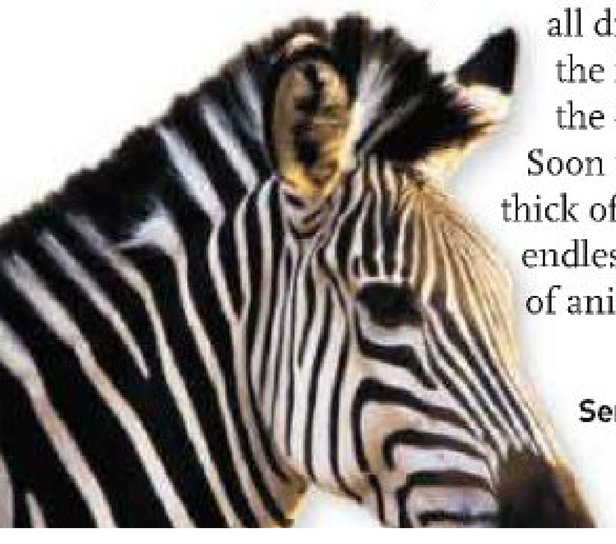
Left: Anup Shah/naturepl.com; zebra: Ariadne Van Zandbergen/africaimagelibrary.com

Best for **big herds**

Serengeti National Park

February in the Serengeti, and the short grass plains are black with wildebeest.

How many? Let's settle for a million, all drawn here by the imperative of the calving season. Soon we are in the thick of them, an endless, grunting tide of animals stretching as far as the eye can see. And the wildebeest are not alone: in the middle of a grass arena stands a solitary lion, his battle-scarred muzzle smothered in flies.



Zebras are the Serengeti's second-most numerous herbivore.

Over the next three weeks, a flood of babies will be born. Not only wildebeest, but also zebra foals and young Thomson's gazelles. Many will fall prey to the carnivores: lions, cheetahs and spotted hyenas. But, by calving almost simultaneously, the herbivores ensure that most of their progeny survive the onslaught.

At this time of year, when the plains are green, there is nowhere so vibrantly alive. But when the dry season comes and the grass is exhausted, the herds must move on. I watched them once, moving away in long columns under a banner of dust, like a retreating army. They left nothing behind them but an emptiness of stubble and a few kori bustards. *BJ*

NOW YOU DO IT

» Follow the migration on a mobile safari. Try **Audley Travel** ☎ 01993 838500; www.audleytravel.com

» Wildebeest calving takes place in February each year.

ALSO RECOMMENDED

- For zebra and gemsbok migration between January and April, try Jack's Camp, Makgadikgadi Pans, Botswana; www.unchartedafrica.com
- For huge numbers of blue wildebeest, zebra and tsessebe between November and June, try Liuwa Plains, Zambia. Try Robin Pope Safaris; www.robinpopesafaris.net

downloaded from: lib.ommolketab.ir

StoreMags.com

Best for **families**

Eastern Cape, South Africa

Weaving between stands of euphorbia, Bruce can simultaneously drive a 4x4 vehicle, identify countless birds and relate a children's story about why warthogs run with their tails held aloft. Much to the delight of our kids, he also has a fascination with dung, scooping up giraffe droppings as if they were chocolate-coated raisins.

We are in the small, private reserve of Kwandwe, and Bruce frequently pauses to show us small wonders, such as a shed cobra skin turned inside out or the graffiti of animal tracks around a waterhole. Kwandwe may not be the wildest area in Africa, but the Eastern Cape is the cat's whiskers for family safaris. Not only is the region malaria-free, but you can easily combine your safari with the 'Garden Route' for beaches and dolphin-watching.

And just because it's not Kruger, don't feel you get short-changed. Several Eastern Cape reserves boast the 'Big Five' (lions, leopards, rhinos, buffalos and elephants), while Addo Elephant National Park is a good self-drive option. More upmarket reserves have child-friendly lodges. *WG*

NOW YOU DO IT

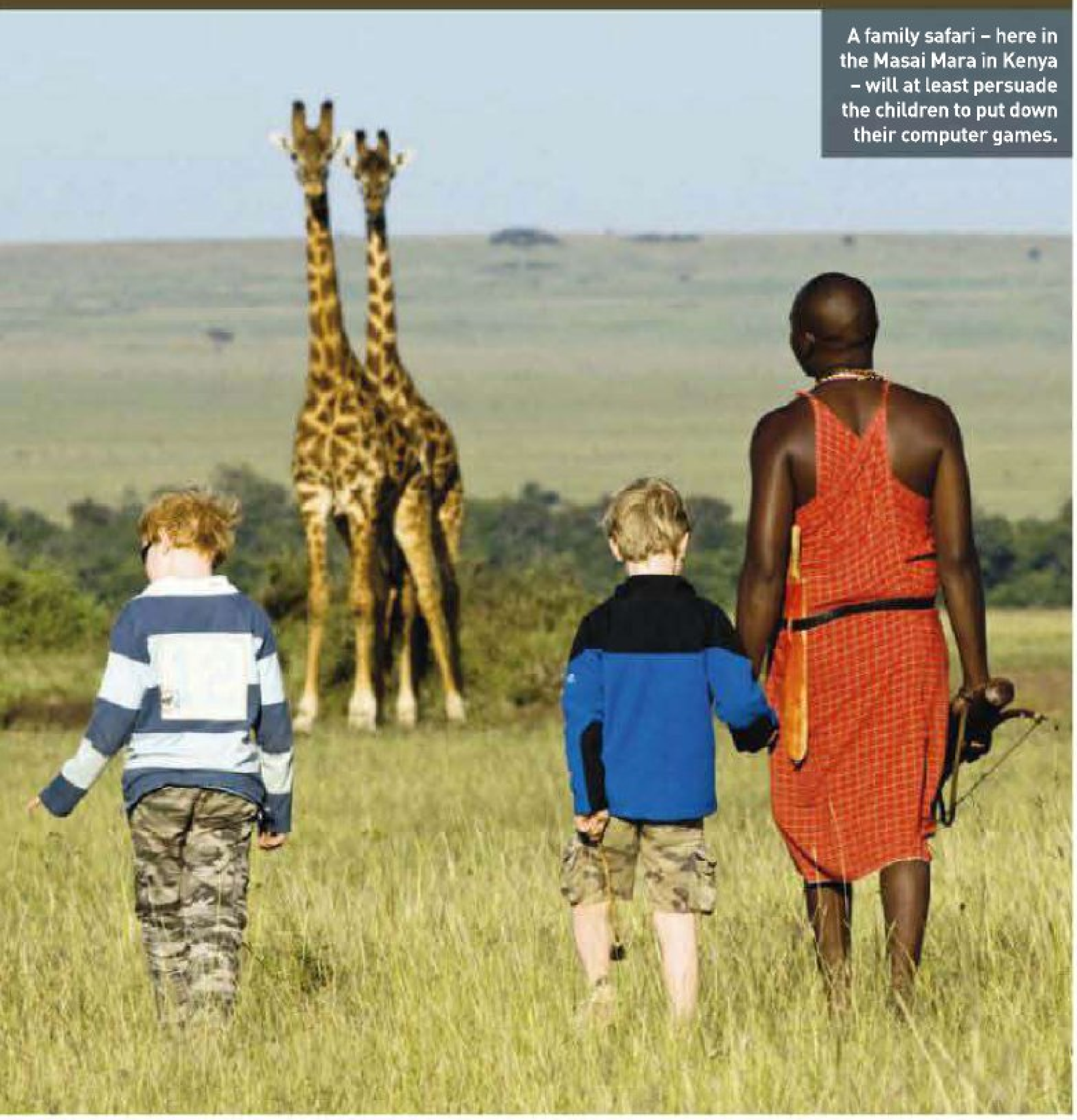
» **Kwandwe Game Reserve**
☎ 00 27 11 809 4314;
www.kwandwereserve.com

» **Addo Elephant National Park**
☎ 00 27 12 428 9111; www.sanparks.org

» Good to visit throughout the year.

ALSO RECOMMENDED

- Malaria-free Madikwe Game Reserve, north of Johannesburg ☎ 00 27 21 424 1037; www.madikwe.safari.co.za
- Tanzania also offers family-friendly safaris – try Families Worldwide ☎ 0845 051 4567; www.familiesworldwide.co.uk



A family safari – here in the Masai Mara in Kenya – will at least persuade the children to put down their computer games.

John Warburton-Lee/Photolibrary.com

DODGING THE DANGERS

A safari can be perfectly safe if you take some simple precautions.

» Malaria is present in most safari destinations, and the greatest risk is during the rainy seasons. Before you fly consult your GP or local travel clinic for advice about malaria pills. Take prophylactics, use repellent and cover up between dusk and dawn – when *Anopheles* mosquitoes are active – and be alert to malarial symptoms after you return home.

» Don't underestimate the African sun, particularly in open vehicles or on walking or boat safaris. Apply sunblock liberally, wear a hat and bring some long-sleeved shirts for protection.

» Water at most camps isn't piped. Ask whether it is safe to drink, but otherwise stick to bottled water, even when you are brushing your teeth.

» Never leave food in your tent. Fruit might attract baboons or elephants, while meat could pique the curiosity of hyenas – or even lions.

» Big cats seldom view people as prey, but if you come into contact with one on foot, the worst thing you can do is run – this triggers its instinct to chase.

Leave the wild swimming to hippos and other wildlife.

Daryl Balfour/Getty Images

» Hippos and crocodiles are responsible for many deaths. Don't swim (except in a swimming pool) without seeking local advice first, and avoid walking near lakes and rivers at dusk and dawn, when hippos are out feeding and may bulldoze anything that gets between them and the water.

» Listen to your guide in the presence of potentially dangerous wildlife such as hippos, buffalos or elephants, especially on walking or boat safaris.

» Snakes and scorpions are secretive and seldom seen unless actively searched for, for instance by turning over rocks. Still, wearing solid walking shoes and trousers will greatly reduce the (already infinitesimal) risk of a bite. *PB*

downloaded from: lib.ommolketab.ir

See a lion from the comfort of your hire car on safari in Kruger National Park.

Best for **self-drive**

Kruger National Park, South Africa

It's barely 10am, and as I pull into Satara Camp for brunch I reflect on a near-perfect morning. Five hours earlier, as dawn broke over Olifants Camp, I saw a pack of African wild dogs cross the road in front of me. Just 15 minutes later, a pair of spotted hyenas, sniffing around an acacia trunk, led my eyes to the branch where a leopard was hoarding its kill. Approaching Satara, I came across lions feeding on a carcass, and a female cheetah and her two cubs pacing through the open grass.

Kruger has its quiet times, too; indeed, I have gone a couple of days here without seeing a single large predator. But it is easily the best park in Africa for DIY safaris, thanks to its surfaced roads suitable for any car – not just 4x4s – and a network of affordable rest camps with restaurants and grocery shops for self-caterers.

Shorter safaris generally stick to the more accessible south, where my favourite camp is Lower Sabie, which is located at the junction of three top-notch game-viewing roads. The H4-1 along the river is excellent for elephants, leopards and woodland birds; the H4-2 south to Crocodile Bridge passes through an area with plenty of rhinos; and – going north – the scenic H10 almost always presents some good 'Big Five' sightings.

With more time to spare, you could head to Satara, where herds of wildebeest and zebras are preyed upon by the park's densest concentrations of lions and cheetahs. Further north still are Shingwedzi and Punda Maria, the latter offering access to the lushly forested Luvuvhu River, one of my favourite birding sites in South Africa. *PB*

NOW YOU DO IT

- Book your **rest camp** or **accommodation** through South Africa's comprehensive national parks website; www.sanparks.org
- To reach the park, fly with SAA to Kruger Mpumalanga Airport and hire a car there; www.flysaa.com
- Game-viewing is best July–October.

ALSO RECOMMENDED

- Etosha National Park, Namibia; www.etoshanationalpark.co.za
- Hluhluwe-Imfolozi Game Reserve, South Africa; www.kznwildlife.com

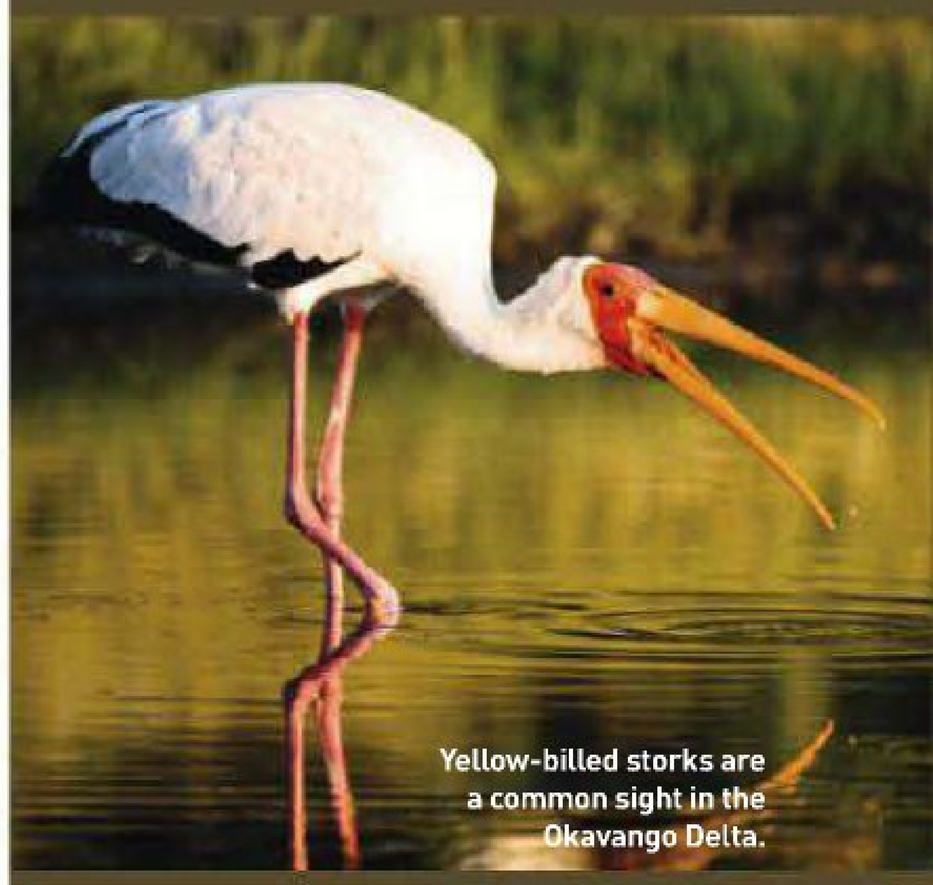
Best for **birds**

Okavango Delta, Botswana

Where better to go birding than in the Okavango Delta? This oasis in the northern Kalahari is the world's largest Ramsar site – more than 26,000km² of rivers, lagoons, floodplains and reedbeds – and every square centimetre throbs with life.

Numerous species of kingfisher haunt its reed-lined channels, while marsh harriers drift over the papyrus beds and pygmy geese float among the waterlilies. Fish eagles – the authentic voice of the Okavango – cry from the riverine treetops, and wherever you look there are storks, herons, bitterns, egrets, grebes, crakes and cormorants.

In all, about 350 species frequent these 'African Everglades', including Okavango specials such as wattled cranes and slaty egrets. The rarity everyone wants to see is Pel's fishing owl, though there are only an estimated 100 breeding pairs in the whole of the delta. And don't forget that there are interesting mammals here, too, including the water-loving sitatunga antelopes. *BJ*



Yellow-billed storks are a common sight in the Okavango Delta.

NOW YOU DO IT

- Located on the banks of the Khwai River in the heart of Moremi Game Reserve, **Xakanaxa Camp** is good year round
- ☎ 00 27 11 463 3999; www.xakanaxa-camp.com

ALSO RECOMMENDED

- Nsefu Lodge and Tena Tena Safari Camp, South Luangwa National Park, Zambia; www.robinpopesafaris.net
- Shompole Lodge, Lake Natron, northern Tanzania – a breeding area for flamingos; www.wilderness-ventures.com

Lions: Laurent Geslin/naturepl.com; stork: Christophe Courteau/naturepl.com

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreKags.com

Booking your ultimate safari

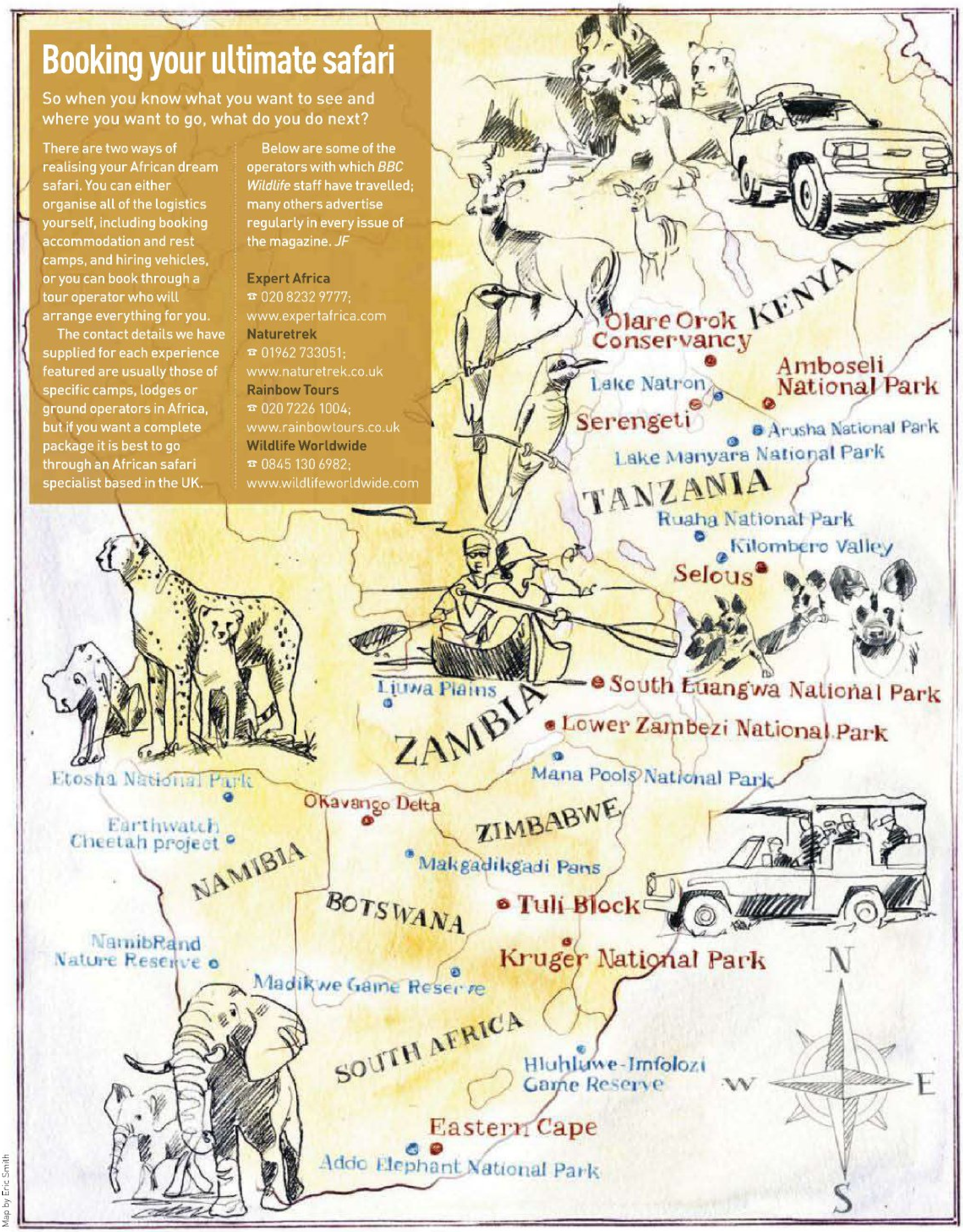
So when you know what you want to see and where you want to go, what do you do next?

There are two ways of realising your African dream safari. You can either organise all of the logistics yourself, including booking accommodation and rest camps, and hiring vehicles, or you can book through a tour operator who will arrange everything for you.

The contact details we have supplied for each experience featured are usually those of specific camps, lodges or ground operators in Africa, but if you want a complete package it is best to go through an African safari specialist based in the UK.

Below are some of the operators with which *BBC Wildlife* staff have travelled; many others advertise regularly in every issue of the magazine. *JF*

Expert Africa
☎ 020 8232 9777;
www.expertafrica.com
Naturetrek
☎ 01962 733051;
www.naturetrek.co.uk
Rainbow Tours
☎ 020 7226 1004;
www.rainbowtours.co.uk
Wildlife Worldwide
☎ 0845 130 6982;
www.wildlifeworldwide.com



Map by Eric Smith

downloaded from: lib.ommolketab.ir

TRAVEL WRITER OF THE YEAR 2011

HOW WE PICKED THE WINNER

We received more than 200 entries this year, and it was a tough choice between the final trio: Carol Donaldson's encounter in the Australian outback; Malcolm Whitehead's look at the life of a house mouse in the London Underground; and Helen Whittle's journey into the Namib Desert. In the end, *A harsh lesson* won because it combines original descriptions of nocturnal wildlife sightings with Carol's attempts to come to terms with life – and death – in the bush.

CAROL DONALDSON is an Essex girl currently living in Kent, where she works for the Kentish Stour Countryside Partnership. She spends her days wading through ditches doing wildlife surveys and chopping down scrub with her band of volunteers.

A harsh lesson

Cruising the outback roads at night, Carol Donaldson learns how to spot wildlife and alert Bill to the presence of quolls, bandicoots and wallabies. But, one day, Bill doesn't swerve and she discovers that not everything has an equal right to life in Australia.

"The Aborigines have a lack of fit," says Bill, one hand on the wheel of the Ute, the other hanging out of the window holding a bottle of VB. "They no longer fit into a country that was once their own."

Bill is a man of few words, but the ones he utters often have that knack of hitting the nail on the head. I nod and fall silent as the tarmac clicks away beneath us, and my own lack of fit weighs heavily on me.

Sometimes I feel I fit so well into this life. Sitting on Bill's porch amid the croc jaws and rows of singlets hung out to dry as Patsy Cline wails into the Australian night. Somehow this rough, hairy, wild, soft-as-all-hell bushman and I fit. This dirt beneath my feet, close to the land, cattle station life and I crazily fit. I feel centred here, calm, able to get on with my own business.

"Eyes," I call out as a pair of amber lights shine up ahead. Bill slows to a crawl. A nightjar sits in the path of the oncoming truck, soaking up the warmth of the tarmac, blinded by the truck beams.

I lean out of the window. "Get off the road," I yell.

The bird takes off, fluttering towards the headlights in confusion, the black well of its eyes not meant for glare and dazzle. I relax my grip on the dash as it swoops off, only for it to career past again.

'Soft birds' Bill calls them. He should know. He's still picking feathers out of the Ute after one flew in the window last week. Its beautiful camouflage crumpled and bent, a powder puff of feathers arising from where it fell.

We slalom along the outback roads at night, avoiding quolls, bandicoots and wallabies, always in pairs. "Watch out for its partner," says Bill. Frilled lizards look like blown-out tyres as they stand on their

"Bill speeds up and I stare in horror as he smashes into the animal's side, pitting his bullbar against the pig's soft flesh."

hindlegs so that even my 20:20 vision fails to spot them. I see eyes everywhere: "One on the left, on the right, watch it." Bill peers into the darkness.

"Get out of the road," I yell at them, even the crocs, baby freshies, which leap up and run on high-stepping toes, giving away the fact that they're just big lizards after all. Sometimes I yell at rocks and litter by mistake or the eight white gleaming eyes of spiders. Bill laughs and avoids them.

A full moon seeps out from behind a cloud. "The Lord has put His light out for us," Bill says.

There is the faint smell of forest fire in the air, because the rangers have been burning around Batchelor all day. Kenny Rogers' *The Gambler* comes on the radio, and Bill and I sing along. How do I even know this song?

There it is again, that fit. Sometimes I feel like a part of me has always been here, sitting with my feet up on the dash in Bill's truck. That there was always a spot prepared for me among these ghost gums and termite mounds.

A large shape appears on the road ahead,

Illustration by Tim Marrs

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

Patrick Benley/NHPA

rooting along the boundary between its world and ours. It trots onto the tarmac, a feral pig.

I start to yell, "Get off the..."

But this time Bill doesn't swerve, he speeds up and I stare in horror as he smashes into the animal's side, pitting his bullbar against the pig's soft flesh. The pig rolls under the truck and I lurch forward, my face making alarmingly close contact with the windscreen before jerking back against the headrest.

Bill finishes his bottle of beer. "Good," he says, "I'll feed him to the dogs." I look down at my hands, knowing I've just got to sit there and pretend I'm not shocked. Knowing that, to Bill, the pig is vermin, a pest species, with no right to life. He'd do the same to a whole host of other animals that have unwittingly been released into this country.

"Help me chuck it in the back," Bill says. I climb out of the truck, trying not to notice the blood sprayed up the door. I love this country and I'm despicably fond of this guy, but sometimes I feel I don't fit here at all.

ROLL OF HONOUR

WINNER

A harsh lesson by Carol Donaldson, Kent

Carol wins a nine-day 'emerald season' safari to South Luangwa National Park in Zambia with Expert Africa. She will stay at Norman Carr Safaris' Kapani Lodge and the tented bushcamp of Kakuli, exploring the Luangwa Valley on walking, canoeing and driving excursions.
www.expertafrica.com

RUNNER-UP

Metro mouse in commuter hell by Malcolm Whitehead, London
Picnic by Helen Whittle, Lincolnshire

COMMENDED

Alone in Amsterdam by Bryony Thomson, Bristol
The night of the Metswedi males by Marcus Janssen, Bucks

The two runners-up and two commended entries each receive two Lonely Planet guidebooks of their choice.

ALSO SHORTLISTED

Build up at shady camp by Royston Donald Hunt, Somerset
Blue hour by James Andrew Stevenson, Cambridgeshire
Floating with puffins by Nicholas Hill, London
Karumbe by Steven Rennie, London
Astral travelling by Raoul Slater, Australia
Solo by Alan James Castle, Aylesbury
The bat cave by Sheena Harvey, Lincolnshire
What's the catch? by Anthony Smith, Amsterdam

ON OUR WEBSITE

The winner, both runners-up and the two commended entries are all available to read online. Which of them is *your* favourite? You can find the five articles at www.discoverwildlife.com/competitions

downloaded from: lib.ommolketab.ir

GARDENS
ILLUSTRATED

Special *Chelsea issue* offer

YOUR SUBSCRIPTION OFFER
- **12 issues for £23*** – saving **50%** on the shop price
- Just **£1.92** per copy
- **Never miss an issue** with free UK delivery

12 issues for £23*

GARDENS ILLUSTRATED.

subscribe online at

www.bbcsubscriptions.com/gardensillustrated

OR CALL OUR SUBSCRIBER HOTLINE ON **0844 844 0260**†

†Calls to this number from a BT landline will cost no more than 5p per minute. Calls from mobiles and other providers may vary. Overseas readers call +44 1795 414721.

QUOTING CODE WLHA611

*SAVE 50% available to UK annual Direct Debit orders only. After your first 12 issues your payments will continue at £33.18 every 12 issues saving 30%. Your subscription will start with the next available issue. **Offer ends 8 June, 2011.**

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreKaga.com

Photo Masterclass

Framing is a key skill for a wildlife photographer – it's vital to know when to crop in tight, what to leave out and when to embrace your subject's environment. Six pro photographers explain when to close in and when to be expansive.

With wildlife photographer **MARK CARWARDINE**

New series

PART THREE

Shoot wide or tight

MOST PHOTOGRAPHERS have an almost overwhelming urge to fill the frame with their subject. It's understandable: if you've remortgaged the house to buy a really long lens, you want to get your money's worth. Besides, getting in close for truly intimate portraits is a sure way of grabbing the viewer's attention.

But up close and personal is not the only option. Some of the most memorable and powerful wildlife images ever taken include large tracts of long grass, rocks, sky, reflections, waves or whatever else happened to be surrounding the animal at the time. In fact, it doesn't actually matter whether you get in really close or pull right back: there is potential for prize-winning shots either way.

The problem is that many pictures fall somewhere in between these two extremes, where the animal is small but not small enough or big but not big enough. They show a medium-sized blob bang in the middle of the frame that looks as if it were taken by accident.

So our aim this month is to avoid wildlife snapshots in this 'no-man's-land'. That means making conscious decisions – are we going to shoot wide or tight? – and then adjusting our composition to suit.

Mark Carwardine

▲ **ENSURE CLARITY OF VISION**
It's important to make your intentions obvious: did you intend to shoot wide or tight? If the viewer understands the concept immediately, as with this picture of a king penguin on South Georgia, they tend to feel more 'comfortable'.

TECHNICAL SPECS
Nikon D2X + 70-200mm f2.8 lens; 1/800 sec at f6

downloaded from: lib.ommolketab.ir

1 EMPHASISE ENVIRONMENT

ANDY ROUSE SNOWY OWL IN WHITEOUT

Andy is an award-winning writer, photographer and presenter. Read a review of his new book about gorillas on p85. www.andyrouse.co.uk

Pulling back is not an easy option for wildlife photographers. When the animal occupies a very small part of the frame, the trick is to use a clever combination of light and composition to make it draw your attention like a beacon.

That's exactly what Andy has done under difficult conditions in Arctic Canada, with this stylish and striking image of a snowy owl at one with its environment. Notice how he has placed the owl in the top left-hand corner, rather than in the middle of the frame, to achieve a more comfortable balance. There is astonishingly little in this picture and yet – because the owl isn't so small that it gets lost altogether – Andy has captured the essence of the bird and a real sense of wilderness.

"Shooting animals in their environment," he says, "is not a fall-back option for when you can't get close enough to shoot frame-filling portraits. I was able to get surprisingly close to this snowy owl, but consciously went for something a little different."

TECHNICAL SPECS

Nikon D3X + 600mm lens; 1/600 sec at f4; ISO 400; Gitzo tripod

Framing this snowy owl adrift in an expanse of snowy whiteness emphasises rather than negates its habitat.

A shallow depth of field blows out the background of this family portrait, bringing softness to the scene.

2 CROP CLOSE FOR INTIMACY

SUZI ESZTERHAS BAT-EARED FOX FAMILY

Suzi is an American photographer working mainly in Africa; her tale of raising a serval kitten was our May cover story. www.suzieszterhas.com

If ever a picture demanded the 'shoot tight' approach, this is it: a family of bat-eared foxes at the entrance to their den in the Masai Mara, Kenya. By removing everything but the most essential elements, Suzi has perfectly captured a delightfully tender scene.

She spent a total of three months sitting in her Jeep outside the den. "I didn't take a single picture for at least two weeks," she says, "because it took that long for the 'batties' to get used to me. I started a long distance away and inched a little bit closer every day."

Suzi shot tight to create a real feeling of intimacy. "The only way to achieve this was to cut off most of the adult fox," she explains, "to ensure that the viewer's eye goes straight to the newborn pup and then moves to the watchful gaze of its father."

TECHNICAL SPECS

Canon EOS-1D Mark II + 500mm lens; 1/320 sec at f7.1; ISO 640

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

3 CREATE A COMFORT ZONE

CHRIS GOMERSALL COMMON CRANE CLOSE-UP

Chris is best known for his photos of birds – he was formerly the staff photographer of the RSPB.

www.chrisgomersall.com

It is possible to shoot so tight that most of the animal disappears. But this only works if the cut-off points look intentional and natural: even extreme close-ups often need a little room to breathe around the edges.

Chris has captured a perfect moment with this intimate portrait of a common crane. Though most of his subject is out of sight, there is still sufficient space above and to the left of its head to make the picture feel 'comfortable'.

"I wanted to get in really close to concentrate on the bird preening," says Chris, "and that meant removing anything else that wasn't relevant – I also cropped the image further after scanning the slide. What's left in the frame is absolutely essential to the main purpose of the picture."

TECHNICAL SPECS

Nikon F5 + AF-S Nikkor 500mm f4 lens; 1.4x teleconverter; 1/250 sec at f5.6; Fuji Provia 100F film

The eye of this common crane in Sweden is pin-sharp – crucial in frame-filling close-ups like this.

Using a narrow depth of field reduces the background to an undistracting colour wash.

The hare is clearly the focal point here, but this image is strong because the subject is anchored in its environment.

4 BEST OF BOTH WORLDS

MARK HAMBLIN BROWN HARES NEAR AND FAR

Scotland-based photographer Mark's blog about the 2020VISION project is at www.discoverwildlife.com.

www.markhamblin.com

It is sometimes possible to shoot both wide and tight to get entirely different images.

Mark ably demonstrates the potential with these two pictures of brown hares: the same species, but poles apart in style and approach.

"When you're shooting animals in their environment *[left]*," he says, "the picture must convey a feeling of the relationship between the two. At the same time, you have to be careful not to lose the animal altogether: you need to use the light and the surroundings to make it really stand out. It's not as simple as throwing on a wide-angle lens and hoping for the best."

Composition is a little more straightforward for frame-filling portraits *[far left]*; here, though, it's important to make your subject 'pop' by isolating it from the background, as Mark has done by getting down low and using a narrow depth of field.

TECHNICAL SPECS

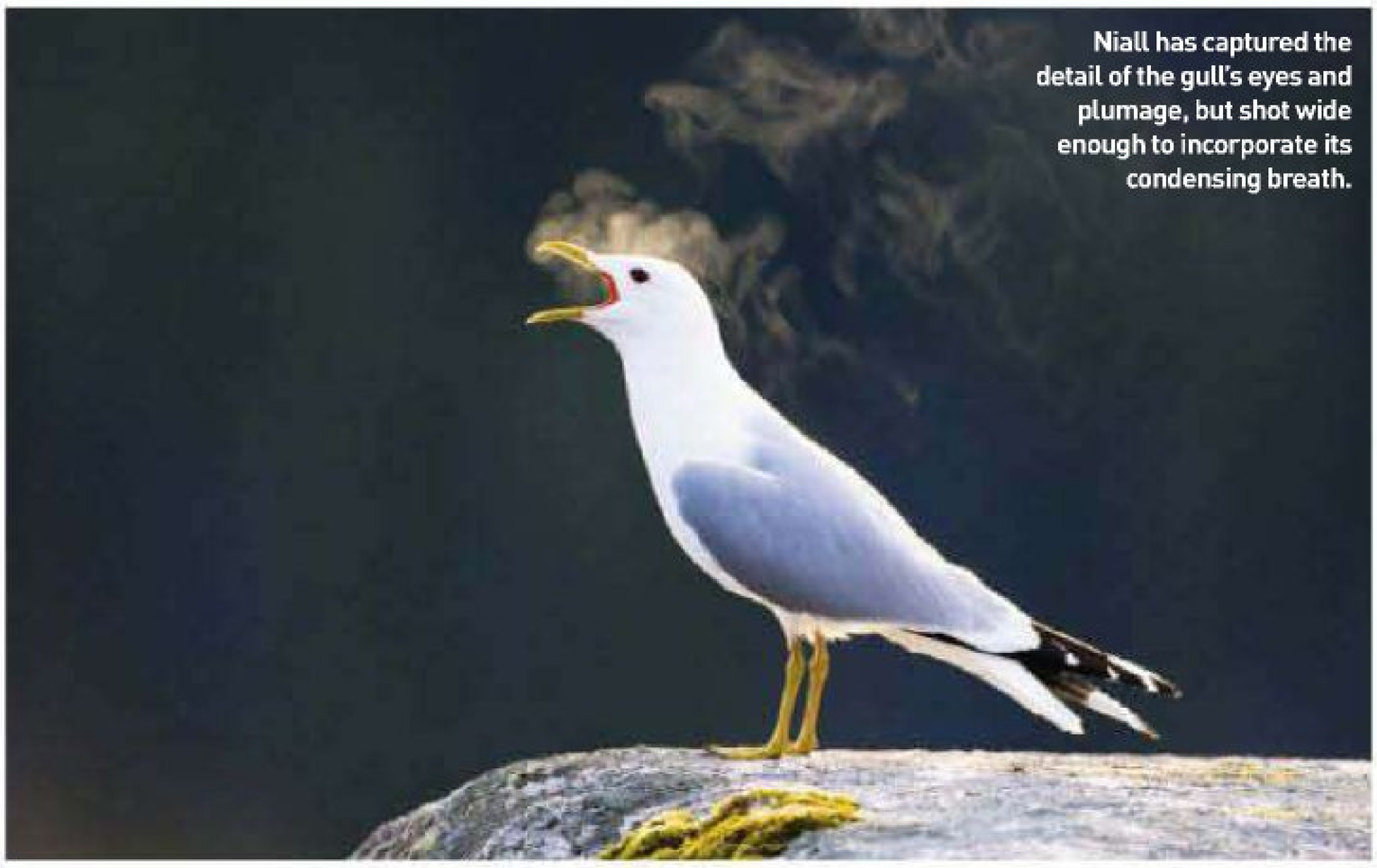
Canon EOS-1D Mark II at 700mm (left)/500mm (right); 1/800 sec at f5.6; ISO 250

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

BREAKING THE RULES

Once you know the rules, bending them can result in an even better picture.



Niall has captured the detail of the gull's eyes and plumage, but shot wide enough to incorporate its condensing breath.

5 LEAVE ROOM TO BREATHE

NIALL BENVIE VOCALISING COMMON GULL

Niall is a nature photographer based in Scotland, and is an organiser of the 2020VISION project.

www.imagesfromtheedge.com

Many successful wildlife photographers break the 'shoot wide or tight' rule by composing somewhere in the middle ground. But this only works if they understand the rules in the first place – otherwise, their subjects would be lost in that dreaded no-man's-land; anyone looking at their pictures would assume that they simply couldn't get close enough to fill the frame.

That's certainly not the case with Niall, who took this evocative picture of a vocalising common gull early one morning in Norway. "It's important to look for elements that will positively add to a scene," he says. "In this case, I didn't want to zoom in too close because I felt it was important to leave plenty of space for the gull to call to the rest of the world." But of course what really lifts the picture to another level is the misty breath. Again, pulling back has given enough room for it to float across the frame.

Notice how the uncluttered background – and, in particular, the gorgeous backlighting – helps make the gull's breath instantly visible.

TECHNICAL SPECS

Nikon D2X + 500mm f4 lens; 1/160 sec at f5.6; ISO 200

TRICKS OF THE TRADE

Our pro photographers share their top tips to help you ensure that your compositions shine.

▶ **GO WIDE FIRST** It's a good idea to shoot animals in their environment first. Once you're close enough to shoot frame-filling portraits, it's surprisingly hard to pull back.

▶ **LEARN FROM THE BEST** Study other people's photographs of animals in their environment to work out why some feel more balanced and natural than others. In particular, look for the position of the main subject and the way lines can lead your eye in.

Mark Carwardine

Composition is key to cropping close – don't lose key elements.

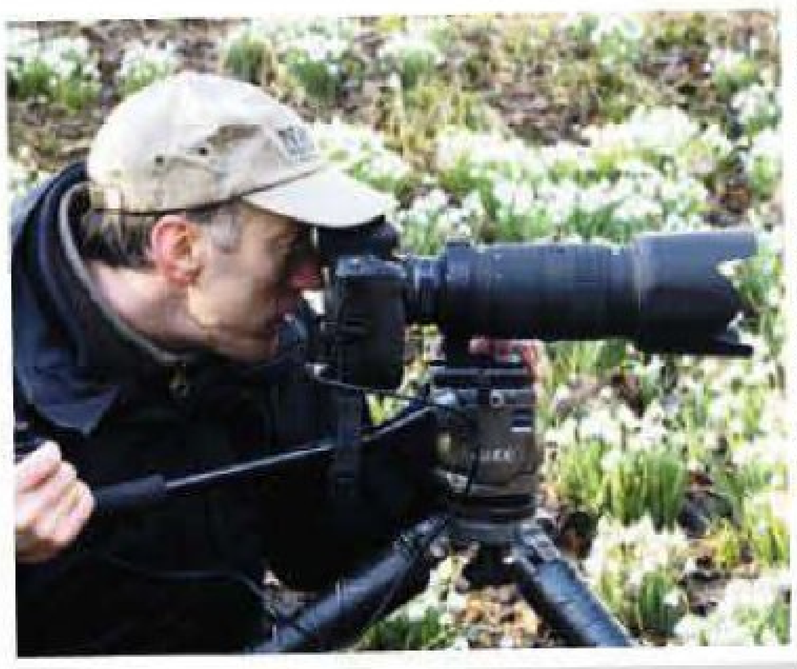
▶ **CROP CAREFULLY** Be careful not to crop your subject in awkward places (don't cut it off at the knee, for example).

▶ **LEAVE ROOM TO EDIT** Consider shooting a little wider than you are likely to need and then crop later in the computer, when you have more time to choose the best composition.

▶ **AVOID UNWANTED EXTRAS** Whether you're shooting wide or tight, do a quick 'border patrol' (check around the frame for anything that shouldn't be there).

TECH ZONE ZOOM LENSES: YOUR FLEXIBLE FRIENDS

Zoom lenses enable you to switch from shooting wide to shooting tight in an instant, but cheaper zooms rarely have the optical quality of fixed focal-length lenses. As a general rule, the wider the zoom range the lower the image quality, though there are exceptions (Nikon's new 28–300mm is particularly good). A 70–200mm lens is standard issue for many professional wildlife photographers, but not all: Chris Gomersall always takes his AF-S Nikkor 200–400 f4 VR lens. "The perfect travel lens, it gives me scope for creative framing, and also focuses very close," he says.



Niall Benvie

NOW YOU DO IT

Read Mark's previous Photo Masterclasses, admire our experts' picture galleries and enter our online photo contests at DiscoverWildlife.com

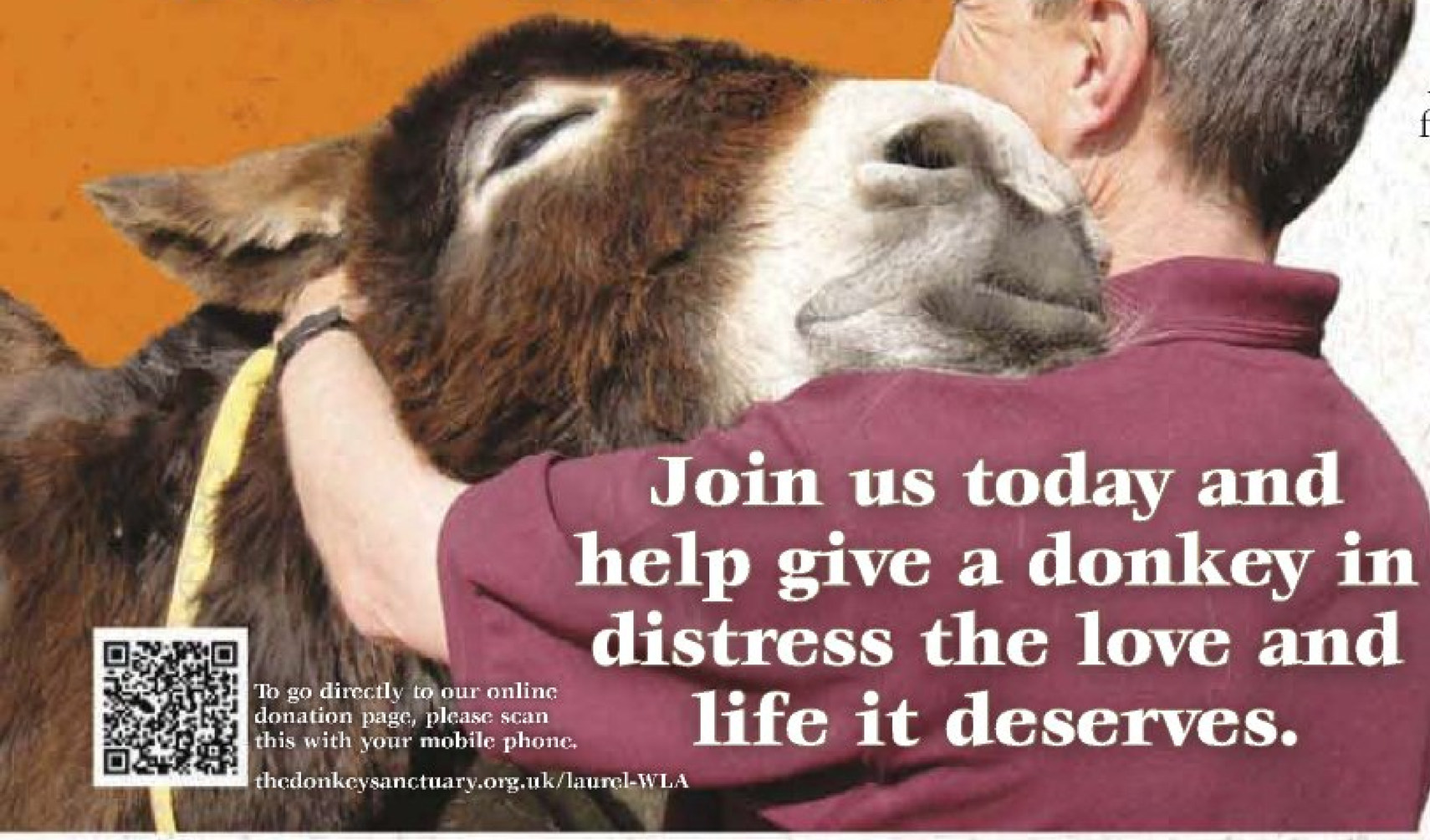
NEXT MONTH SEE THE LIGHT How to harness available light to illuminate your images

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

Make me a friend for life!



Our donkeys here in our sanctuary would love you to be their friend. They're loyal and lovable friends who adore all the fuss and attention they get. Many of our donkeys were abandoned, and only knew neglect and cruelty before we gave them a happy life, thanks to donations from our supporters.

We also help overseas donkeys who work long hard hours for their owners, every day. They need your support too.

As one of the Sanctuary's friends, we'll tempt you with:

- **An exclusive supporters' newsletter**
- **Access to our 24/7 donkey webcam**
- **An invitation to meet the donkeys at our Sidmouth farm**

Join us today and help give a donkey in distress the love and life it deserves.

To go directly to our online donation page, please scan this with your mobile phone.

thedonkeysanctuary.org.uk/laurel-WLA

The Donkey Sanctuary

Registered charity no. 264818

The Direct Debit Guarantee. This Guarantee should be detached and retained by the payer. • This Guarantee is offered by all banks and building societies that accept instructions to pay Direct Debits • If there are any changes to the amount, date or frequency of your Direct Debit The Donkey Sanctuary will notify you within 10 working days in advance of your account being debited or as otherwise agreed. If you request The Donkey Sanctuary to collect a payment, confirmation of the amount and date will be given to you at the time of the request • If an error is made in the payment of your Direct Debit, by The Donkey Sanctuary or your bank or building society you are entitled to a full and immediate refund of the amount paid from your bank or building society. If you receive a refund you are not entitled to, you must pay it back when The Donkey Sanctuary asks you to • You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please also notify us.

Please fill in your name and address.

Title ☐ Full Name

Address

Postcode

Tel (in case of query)

Email

I would like to make a regular donation of £3☐ other £☐

Each month ☐ Quarter ☐ Annually ☐

Starting on MM / YY until further notice

My preferred donation collection day is

1st ☐ 15th ☐

Please complete and return this form, to:

The Donkey Sanctuary, FREEPOST EX201, Sidmouth, Devon, EX10 8ZZ

NO STAMP NEEDED

Instruction to your Bank or Building Society to pay by Direct Debit

DIRECT Debit

Service User Number

4	3	4	0	3	0

Please fill in the whole form using a ball point pen and send to:

The Donkey Sanctuary, Sidmouth, Devon, EX10 0NU

Name & full postal address of your Bank/Building Society

To: The Manager

(name of Bank/Building Society)

Address

Postcode

Name(s) of account holder(s)

Branch sort code: ☐☐-☐☐-☐☐

Bank or Building Society Account No: ☐☐☐☐☐☐☐☐

Reference (Office use only):

Instruction to your Bank or Building Society: Please pay The Donkey Sanctuary Direct Debits, from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with The Donkey Sanctuary and, if so, details will be passed electronically to my Bank/Building Society.

Signature(s) Date / /

Date / /

Banks and building societies may not accept Direct Debit Instructions for some types of account.

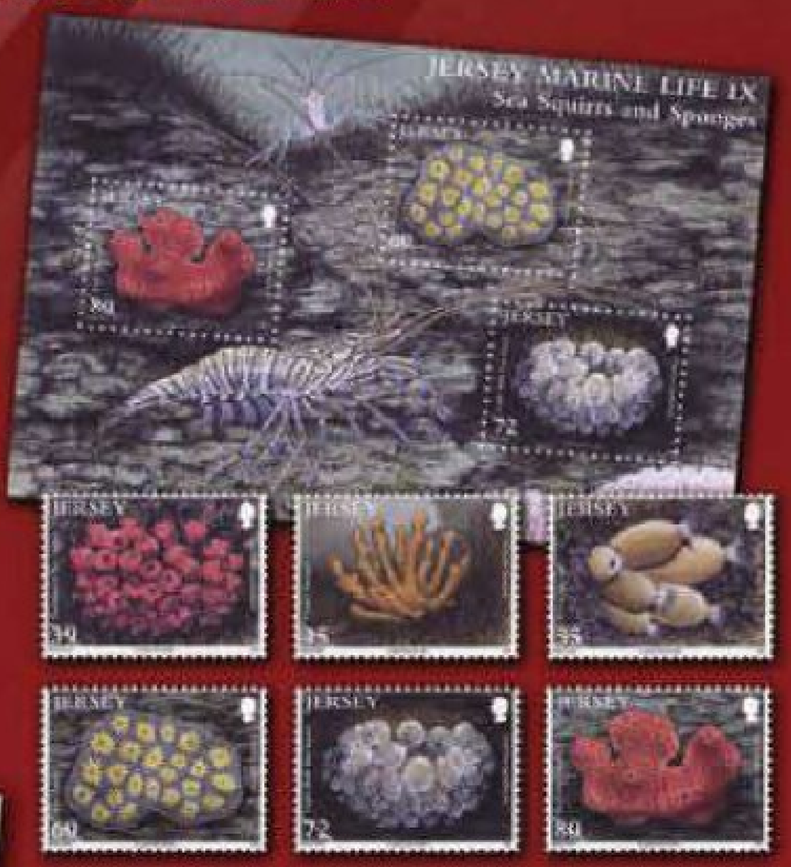
FundRaising Standards Board

Data Protection: The Donkey Sanctuary, The Elisabeth Svendsen Trust for Children and Donkeys, Donkey World Limited and all their branches and subsidiaries will process your personal data for the purposes of achieving their charitable objectives and conducting fundraising activities. It is our policy not to transfer your data to any other organisation other than our duly appointed agents, who have undertaken not to disclose such personal data, and all information is kept confidential. If you would prefer that we cease to send you further information about any of the above organisations please write to The Data Compliance Officer, The Donkey Sanctuary, Sidmouth, Devon, EX10 0NU. CARROT WLA

downloaded from: lib.ommolketab.ir

Birds Anemones Sponges Squirts

Jersey's wildlife beautifully presented on Jersey stamps



View our complete collection of stamps,
souvenir sheets, First Day Covers and Presentation Packs

www.jerseystamps.com

Email us: stamps@jerseypost.com or call us on 01534 516320
Write to us at Jersey Philatelic Bureau, POHQ, JERSEY JE1 1AB

Jersey Post

Big Cat Photography
supporting Wildlife Conservation

and offering

1-day Photography Courses

for small groups or on a 1-to-1 basis

ideal if you plan to go on safari and want to get a better understanding about your digital SLR camera and photography in general
(beginners and intermediate level)

Our Big Cat venues in the UK are

Colchester Zoo

Cat Survival Trust

Other venues are with birds of prey, British wildlife and goats

For more information visit our web page
www.bigcatphotography.co.uk

WILDLIFE TRAILS

We offer unique wildlife tours that are tailored to your personal requirements.

We have just returned from a fantastic 3 week trip to Uganda and Rwanda in October 2010 and have negotiated significant cost savings which we can pass onto our clients. For 2011 we have private one week camping tours starting at £1490 per person and private luxury lodge tours from £2150 per person. **All costings are based on two people travelling and include one Gorilla Permit; they do not include international flights.**

Tel: +44 (0) 844 686 553

AITO | HOLIDAYS WITH 100% FINANCIAL PROTECTION

www.wildlifetrails.co.uk

downloaded from: lib.ommolketab.ir

Store.bbcf.com

Your Q&A...

Send us your wildlife questions – our experts have all the answers.

OUR EXPERTS

MIKE TOMS
Mike is head of garden ecology at the British Trust for Ornithology. He has written and co-written several bird books, including *BTO Garden Birds and Wildlife*.

PETER MARREN
Peter is a natural-history writer and all-round naturalist with a special interest in fungi. His books include *The New Naturalists* and *Bugs Britannica*.

STUART BLACKMAN
Stuart started out as a zoologist, with a PhD in evolutionary biology. He is now a science writer and editor, specialising in biology and the environment.

RICHARD JONES
Richard has been fascinated by insects since childhood. A former president of the British Entomological Society, he now works as a surveyor and writer.

STEVE HARRIS
Professor of biological sciences at Bristol University, Steve is one of the UK's leading mammal experts as well as a regular contributor to *BBC Wildlife*.

WE'D LOVE TO HEAR FROM YOU

SEND YOUR QUESTIONS TO
Q&A, *BBC Wildlife*,
8th Floor, Tower House,
Fairfax St, Bristol BS1 3BN
OR EMAIL
wildquestions
@bbcmagazines.com

We are very sorry, but due to the high volume of questions we receive, we are not able to acknowledge or answer any personally.

Antarctic antifreeze

How do penguins cope with sub-zero Antarctic temperatures? Why don't their feet freeze?
Sarah Baxter Via email

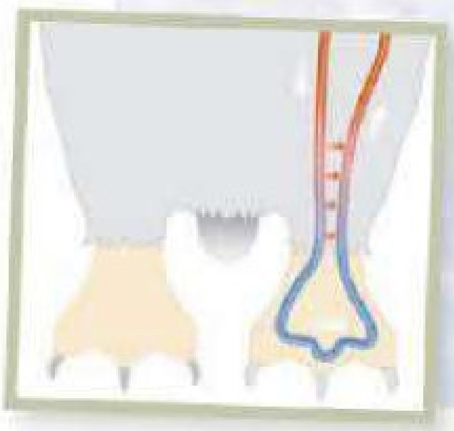
The short answer is that a penguin cannot allow its feet to freeze. When the ambient temperature falls below 0°C a penguin increases the circulation of warm blood to its feet. But, while this prevents the feet from freezing, it also increases the heat loss.

Balancing the need to keep the feet warm against the problem of heat (and therefore energy) loss from the body is a key issue in penguin thermoregulation. These birds are well insulated, with a well-defined fat layer and a waterproof coat of specialised feathers.

They also have a highly developed vascular system, complete with counter-current heat-exchange systems for their extremities. Both the flippers and feet are a major source of heat loss, so the birds' heat-exchange systems work by passing warm arterial blood from the body through fine arteries in close contact with veins returning from the feet and flippers. The warm arterial blood is cooled before it reaches the extremities, while the returning blood is warmed before it can chill the body.

Though this combination of adaptations works well in the cold high latitudes, it could cause penguins to overheat where temperatures are higher. This is why species in warmer places, such as South Africa, have large flippers and bare areas on the face.

Mike Toms BTO



Penguins' feet look prone to chills, but an effective vascular heat-exchange system reduces heat loss.

Main: Doug Allan/naturepl.com; inset: Dorling Kindersley

DID YOU KNOW?

The Galápagos penguin – endemic to the eponymous islands – is the only penguin species north of the equator.

Slime time

Can you identify this vividly hued object? I believe it is a fungus, though it looks like insect eggs.
Ricardo Cid Portugal

This growth is a slime mould. These organisms – myxomycetes – are neither animals nor plants but protists, distantly related to soil amoebae.

Their life-cycle involves two distinct phases. In the first they form a kind of slime, generally hidden away in the soil or among decaying vegetation. Later they transform into rigid fruiting bodies in which spores ripen. These are often brightly coloured.

Though most slime moulds are small and best viewed through a hand lens, a few are much larger.

This one is probably *Leocarpus fragilis* (it has no accepted English name). The fruiting bodies are golden yellow when fresh, later darkening to a shiny chestnut brown, but here seen at the orange halfway stage. The species is common on decaying vegetation in early autumn, especially in conifer plantations. It is not feeding on the vegetation directly, but on the micro-organisms within the decaying leaves.

Peter Marren Naturalist

These colourful fruiting bodies house the spores

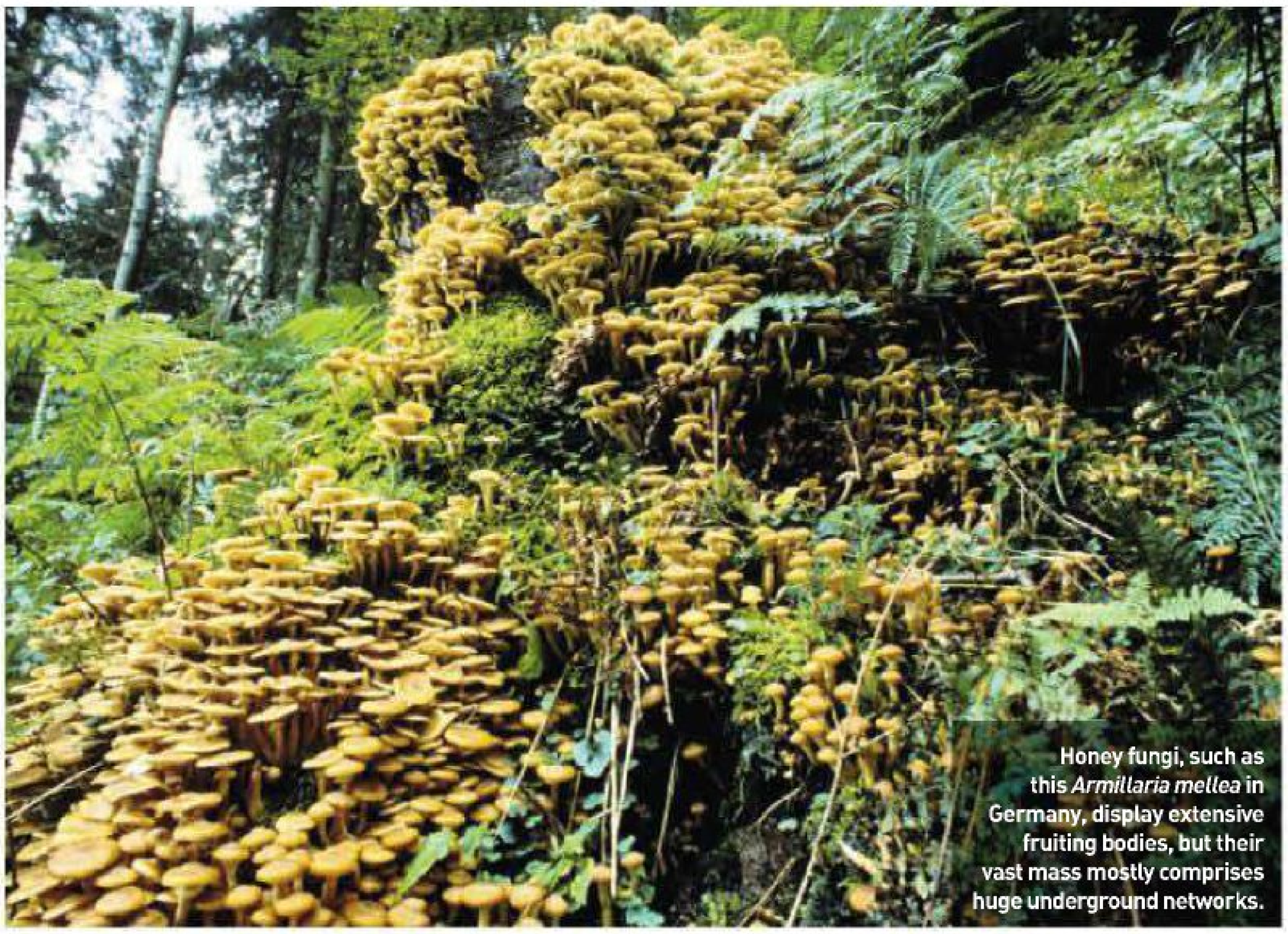
Ricardo Cid

downloaded from: lib.ommolketab.ir

StoreKaps.com

Parasite poser

What is the world's biggest parasite species?
Bryony Harrop Via email



Honey fungi, such as this *Armillaria mellea* in Germany, display extensive fruiting bodies, but their vast mass mostly comprises huge underground networks.

Imagebroker/FLPA

A good place to look for a big parasite is in a big host. The whale tapeworms *Polygonoporus* spp., for example, can reach 40m in length – longer even than a blue whale, which grows to 33m.

However, in comparison with their hosts, horsehair worms are longer still. The larvae develop in the bodies of grasshoppers, crickets and other insects; the adults, once matured, must disperse into freshwater to breed. At this stage the worm may manipulate its host, compelling it to jump into water, where the parasite – usually 30–40cm long, though it can grow to over 2m – makes a spectacular exit through the insect's rear end.

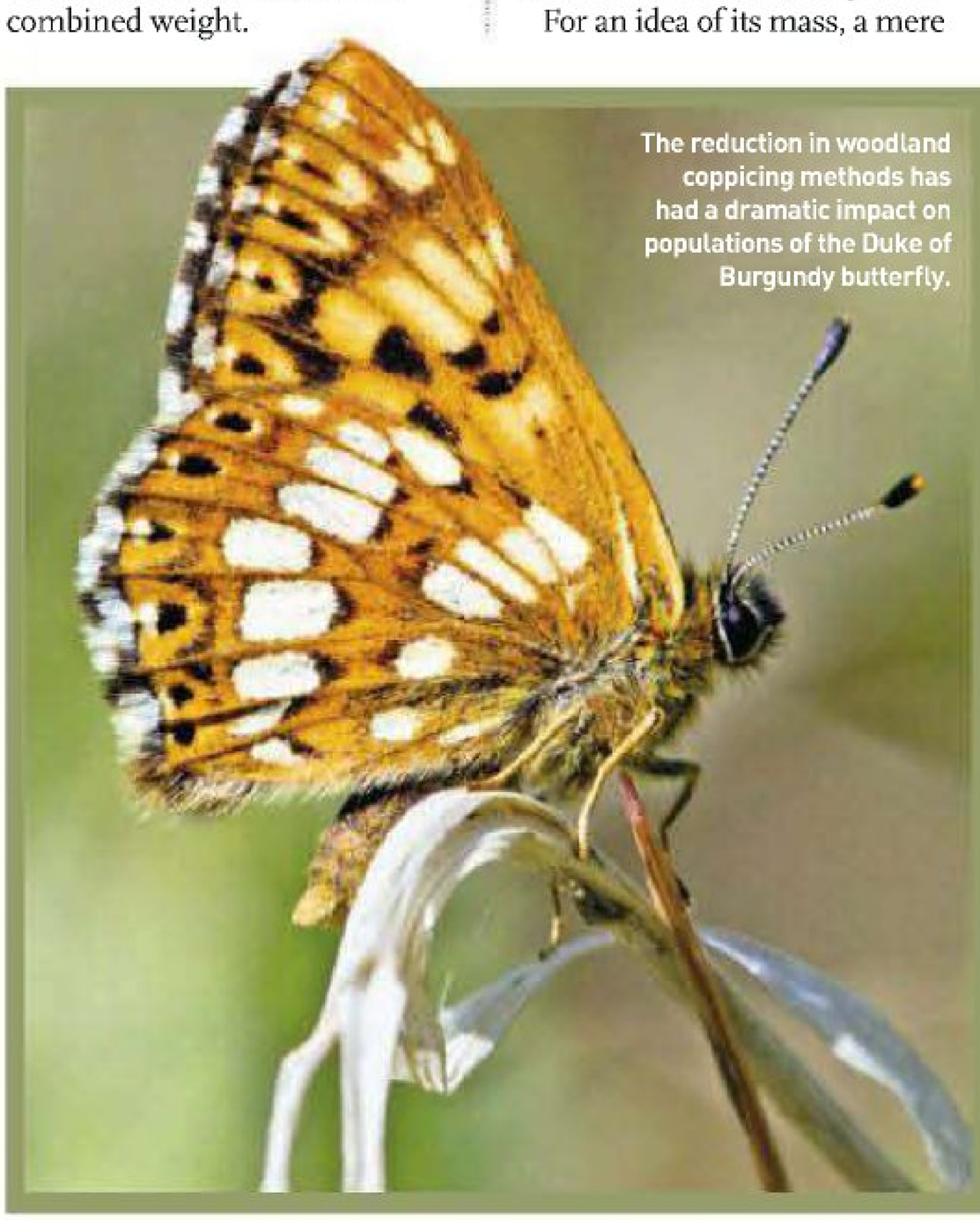
What worms boast in length, however, they tend to lack in volume. Sheer bulk can be found among the brood parasites. A pair of reed warblers, for example, may raise a cuckoo chick that could be four times their own combined weight.

But trumping all of these are the honey fungi *Armillaria* spp. These form subterranean networks of woody fibres that tap into tree roots. In 1992, a specimen of *A. solidipes* in Washington state, USA, was found to cover 900ha.

For an idea of its mass, a mere 15ha specimen of a related species weighed 100 tonnes, so the Washington example may weigh many hundreds of tonnes. The world's biggest parasite is, therefore, a contender for the title of the world's biggest organism.

Stuart Blackman Science writer

DID YOU KNOW?
The whale tapeworm *Diplogonoporus balaenopterae* has been known to infect humans via their ingestion of raw fish, which is the parasite's intermediate host. Most such infections occur in the Far East.



The reduction in woodland coppicing methods has had a dramatic impact on populations of the Duke of Burgundy butterfly.

David Kjaer/naturepl.com

Insect plight

The waning of bee populations has been widely publicised. Have declines in other insect species also been observed?
Stephen Davies Malmesbury

Long-term monitoring of insects in the countryside is fraught with difficulties, but it is generally agreed that both numbers and species diversity are declining.

The picture is clouded by the fact that common species are, well, common. These are the widespread, mobile and generalist feeders, able to exploit a wide variety of habitats, adapt to changing land use and cope with habitat fragmentation. Honeybees are generalists; though they suffer the particular threats of increased pesticide use and higher disease risk, they are not vanishing from the British countryside.

Bumblebees, however, exhibit dramatic declines. Some generalists, including the buff-tailed and red-tailed species, are still abundant and widespread. But the shrill carder and brown-banded carder bumblebees, which depend largely on plants such as vetches and clovers, have vanished from vast swathes of Britain as once flower-rich hay meadows have been used for drab and flower-poor silage crops.

This same trend has been observed in British butterflies and moths, which rank among the best-studied insects on the planet. Generalist and adaptable species such as the comma and speckled wood butterflies are increasing their ranges. Conversely, specialists such as the high brown fritillary and Duke of Burgundy are in population freefall; sadly, one of them is likely to be the next British butterfly to become extinct.

Richard Jones Entomologist

downloaded from: lib.ommolketab.ir

Storeknet.com

STRANGE BUT TRUE...

Cuke nuke

IT MAY BE spineless and about as tough as a sausage but the holothuroid sea cucumber *Holothuria* spp. is full of hidden strengths. When pestered by a hungry fish or crab, this squishy invertebrate found worldwide can erect rock-solid armour in seconds. Special compounds in its skin allow it to stiffen (and liquefy) its body wall on demand. This is particularly useful on a reef – the critter can ooze into a crevice, harden in place and be virtually impossible to extract.

If harassed in open terrain, the cucumber may draw from a deeper, nastier place and violently eject its intestine and stomach out of its anus. This distraction buys it time to slip away. The innards are laced with poison, so the slightest nibble by its foe is sure to nip further pursuit in the bud.

But if the attack escalates, the annoyed cucumber finally explodes – literally tearing its body cavity and expelling toxins that can kill most organisms on contact, a chemical onslaught known as the 'cuke nuke'.

The defence mechanisms of sea cucumbers – this *Holothuria argus* is ejecting Cuvierian tubules – poison or entangle potential predators.

Wolfgang Poelzer/waterframe/Specialist Stock

It also blasts its adversary with sticky tentacle-like organs called Cuvierian tubules. These unusual tissues, which contain muscle fibre, expand to 20 times their initial size, then tighten as the captive struggles. The hunter is left entangled and anchored in place, if it is not already dead.

The gutless cucumber, unable to eat, absorbs nutrients through its skin and immediately starts rebuilding its insides. In about a month, the cuke is whole again – with the inner strength to take on what lies ahead.

David Butvill

COOL CUCUMBERS

- The sea cucumber's ability to change its hardness so quickly is being studied with a view to developing copycat materials for everything from brain implants to flexible bulletproof vests.
- The cucumber spends a lot of time filtering mud for anything edible.
- It is prone to bacterial infections. Small clams and fish have even been found living inside non-toxic areas of cucumbers.
- Some species eject their guts seasonally. Thus this odd defence tactic may also purge parasites and unhealthy organs to 'reset' its insides instead of repairing sick stuff.

QUICKFIRE

Why do birds show awareness of injuries in other individuals of their own species?
Helen Stainer Via email

We sometimes risk interpreting bird behaviour from an overtly human viewpoint. For example, the interest that a bird takes in an injured individual is not empathy or compassion; it is a purely behavioural response, often triggered by the injured bird displaying a pattern of behaviour that lacks the usual social signals. Alternatively, the distress calls of an injured bird may attract conspecifics, drawn perhaps to an individual that has been pinned down by a predator. In such cases, the arrival of other birds may drive away the predator.
Mike Toms BTO

The *Prionus*, one of the UK's largest insects, rivals the stag beetle in size.

Helen Shute

What is this large beetle I found dying in my garden a couple of days ago? It measured just over 4cm long, and I cannot find it anywhere in my beetle reference book.
Helen Shute Via email

What a fabulous insect! This is *Prionus coriarius*, also called the tanner or sawyer beetle. Like the stag beetle – its equal in size, though unrelated – *Prionus* lives most of its three to five years as a grub eating rotten wood in tree stumps and half-buried logs. Its short adult stage lasts only a few days or weeks – just long enough to mate and lay eggs. This species is found across Wales, central and southern England, mainly on the sandy soils from Dorset to East Anglia, but it is very uncommon: I have not seen one for 35 years.
Richard Jones Entomologist

Whose poo?

In March I found what I think is an otter spraint at my village pond. There is no river nearby and it did not look like a typical scat, nor did it have the distinctive smell. I found similar faeces this time last year; if it is from an otter, why do they only visit in spring?
Debbie Lee Via email

It *is* otter scat: you can see the characteristic finely chewed bones and fish scales. Otter spraints (faeces) range in appearance from black, tarry blobs to cylindrical droppings about 10cm long and 1cm wide. Their longevity depends on where they were deposited. Those left on rocks and ledges under bridges are protected from the weather. Since this one was in the open, it has been flattened and spread by the rain, which may also have washed away much of the characteristic sweet-musky odour. After a while, all that will be left is a pile of clean bone fragments and fish scales.

Otters are great overland travellers, visiting village and other ponds in the spring to eat spawning frogs and toads. The latter are skinned before being eaten. If the frog eaten is a gravid female, all that will be left is a pile of unfertilised spawn. This is characteristic not just of otters: foxes, badgers and crows similarly reject the spawn in gravid frogs.

Otters also sometimes swim a long way offshore to reach remote islands where they can exploit seabird nests. In 2008, for instance, one visited Brownsman, one of the Farne Islands off Northumberland, for the first time.

Steve Harris Mammalogist

Otter spraint contains small bones and fish scales.

Debbie Lee

downloaded from: lib.ommolketab.ir

W2

Everything you need to enjoy wildlife more

The real-life setting of *Happy Feet* – Cape Washington – is home to one of Antarctica's largest colonies of emperor penguins.

StoreMags.com - Free Magazines Download In True PDF format

FEATHERS

By Thor Hanson

BOOK OF THE MONTH

Basic Books, 256pp, £18.99

ISBN 9780465020133 (hb)

A natural history of feathers from a conservation biologist takes flight – and soars.

Sue Flood

We have all had the experience. You are walking along and see a feather. Maybe it is stuck in some mud. Maybe it just floats on the breeze. In *Feathers: The evolution of fluff, flight, and fancy*, Thor Hanson finds the feathers that the rest of us missed. He looks at, thinks about, dreams of and chases them across the globe.

In doing so, he writes the story of the world as seen through the story of feathers. It is a tale that includes the origins of flight, the science of how feathers push up through the skin of birds, the lives of other scientists (and yes, there are many) obsessed with feathers and much, much more.

If you have ever looked up into the sky and wondered how it is possible that a bird can be so light and you can be so heavy; if you have ever wondered whether someone can identify the feathers you find in your car radiator; if you have ever wondered what turns some birds – cardinals, for example – red but makes others, like starlings, a shimmering black, then this book is for you.

But if you have never wondered about any of those things, it might be for you, too.

Feathers will encourage you to look at flight differently. In fact, it will make you want to gently pick up a sparrow and take a good look at what you have been missing. The title reminds you not just of feathers, but also of all the other billions of specifics that we take for granted, details that, just as you lunge for them, burst into the air. Damn quick sparrows. Damn good book.

Verdict ★★★★★

Rob Dunn Science writer

BBC WILDLIFE SHOP

Reader price £18.99. Code W0611/02

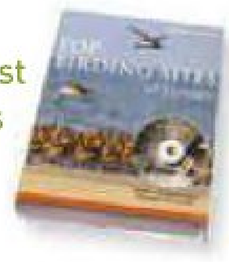
TOP BIRDING SITES OF EUROPE

By Dominic Couzens

New Holland, 192pp, £22.99

ISBN 9781847737670 (hb)

An inspirational guide to the greatest European locations for seeing – and hearing – birds.

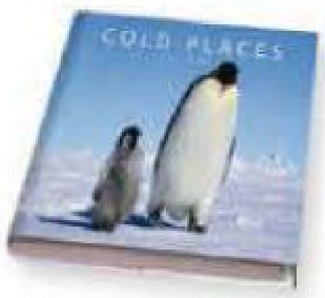


With more than 4,000 Important Bird Areas in Europe alone, choosing the top 30 is a real challenge. Already a prolific champion of birding, Dominic Couzens provides a snapshot of the riches available in the prosaically titled *Top Birding Sites of Europe*. Spanning Iceland to Russia, Spain to Svalbard, this is

downloaded from: lib.ommolketab.ir

STAR RATINGS

★★★★★ Excellent – a classic
★★★★ Very good – outstanding in places
★★★ Good – definitely worth a look
★★ Fair – may be of interest
★ Poor – not worth the time



COLD PLACES

By Sue Flood

Cold, yes – but not lacking in life. Photographer Sue Flood's new book proves just how much wild activity is going on in both polar regions. From battle-scarred belugas keeping a breathing hole open in the Canadian ice to emperor penguin chicks playing on the frozen Ross Sea, her images reveal a great eye for detail. But it is the panoramas – white skies, still waters and chunks of blue ice – that send a shiver down your spine.

BBC WILDLIFE SHOP

RRP £24.99. Reader price £24.99. Code W0611/01

not a tool for planning holidays, but a lively celebration of some stunning bird-filled places.

Couzens aims to inspire, and he does exactly that with well-informed text, brilliant photos and a CD containing 60 evocative bird voices – including one of my favourites, the thrush nightingale.

With our own summer migrants finally back home and breeding, here is a neat book to remind us why they – and we – badly need uncompromised wild nature.

Verdict ★★★☆☆

John Fanshawe Author and conservationist

BBC WILDLIFE SHOP

Reader price £19.99. Subscriber price £17.99. Code W0611/03

Sharing the joy

GORILLAS – LIVING ON THE EDGE

By Andy Rouse

Electric Squirrel, 96pp, £24.99

ISBN 9780956457516 (hb)

A top photographer shares his experience with gorillas.

Sir David was right. There *is* "more meaning and mutual understanding in exchanging a glance with a gorilla than any other animal". But his words couldn't quite prepare me for my own encounter with a silverback and his family. In a soggy clearing on a misty volcano, the feelings of a long-lost connection were overwhelming.

Strong emotions are what make Andy Rouse's glossy, self-published account of his adventures with Rwanda's mountain gorillas so special. This fabulous photographer has made the most of his 45 journeys "into the lives of these peaceful great apes".

His vivid, intimate shots of dark, mountain-like animals and their dark, mountainous world bear witness to his skill and perseverance. And the accompanying text not only reveals how to emulate him, but inspires the reader to share his passion for gorilla conservation.

The simple combination of illuminating pictures and heartfelt words gives a very personal story broad appeal.

Verdict ★★★★☆

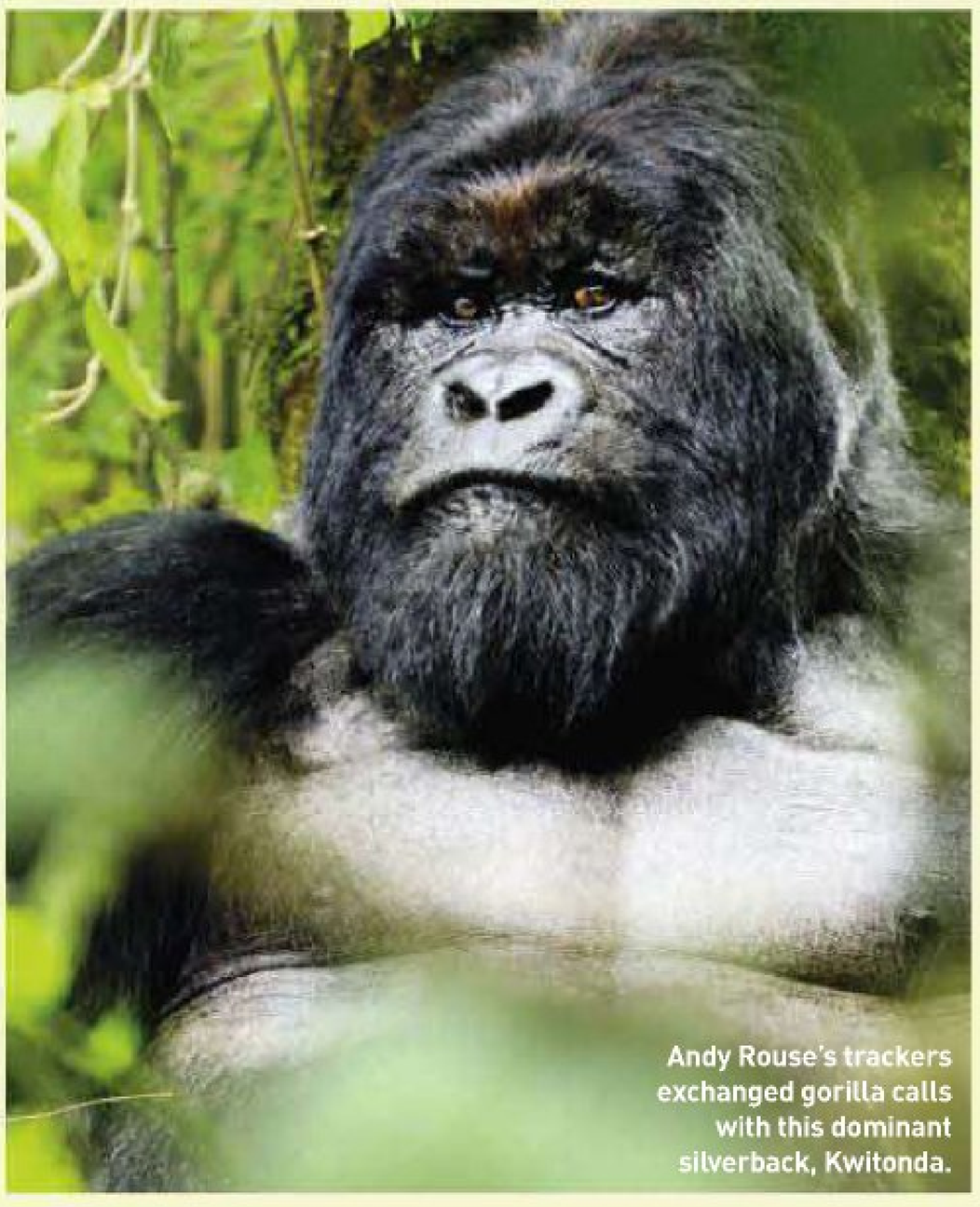
Bill Markham Wildlife TV producer

BBC WILDLIFE SHOP

Reader price £22.99. Subscriber price £21.99. Code W0611/04

ON OUR WEBSITE

See more of Andy Rouse's amazing gorilla photographs at www.discoverwildlife.com



Andy Rouse's trackers exchanged gorilla calls with this dominant silverback, Kwitonda.

Andy Rouse

THE EXULTANT ARK

By Jonathan Balcombe

University of California, 224pp, £24.95

ISBN 9780520260245 (hb)

Do sunbathing turtles and necking giraffes feel pleasure in the way humans do?

Here is a book to put a spring into anyone's step. *The Exultant Ark* is a celebration of animal behaviour at its most uplifting. No dog-eat-dog, cat-and-mouse or rat races here, but plenty of dogs, cats, mice and rats getting loved up and blissed out.

The book's glossy format and subtitle, *A pictorial tour of animal pleasure*, suggest that its natural habitat is the coffee table, where its place would be justified by the gorgeous photographs alone. But Jonathan Balcombe has higher ambitions. He wants to convince us that animals experience pleasure in much the same way as humans do.

He argues his case with a well-referenced survey of research from behavioural and evolutionary science. Less scientific, however, are his frequently credulous interpretations of behaviour. For example, he attributes chickens with an understanding of the motivations and intentions of other individuals, when it remains contentious whether even great apes have such an ability.

Neither does the author consider pleasure as a philosophical state of mind – just an emotional or physiological one – so he fails to address basic questions such as whether pleasure (or its flipside, suffering) in a human sense is possible without notions of one's own mortality, time passing or the meaning of experiences.

His thesis might be unconvincing, but keep this book on the coffee table where it belongs, and there's much pleasure to be had from it.

Verdict ★★★☆☆

Stuart Blackman Science writer

BBC WILDLIFE SHOP

Reader price £22.99. Subscriber price £20.99. Code W0611/05

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoredAges.com

W2 BOOKS

THE GREAT SPERM WHALE

By Richard Ellis

University of Kansas, 432pp, £30.50
ISBN 9780700617722 (hb)

A noted whale artist explores the natural history of the sperm whale, to spectacular effect.

The sperm whale is an animal wreathed in superlatives. Up to 18m long, it is the largest predator on Earth. It lives for up to 100 years, and possesses the biggest brain of any animal.

It is the mythic star of Herman Melville's *Moby-Dick*, and was hunted for two centuries for its oil – the strange spermaceti wax that fills its bulbous head (or, more correctly, its nose) and was once prized for lamps and lubrication. Today the same oil is used by NASA's space programme because it does not freeze in the extreme cold of outer space.

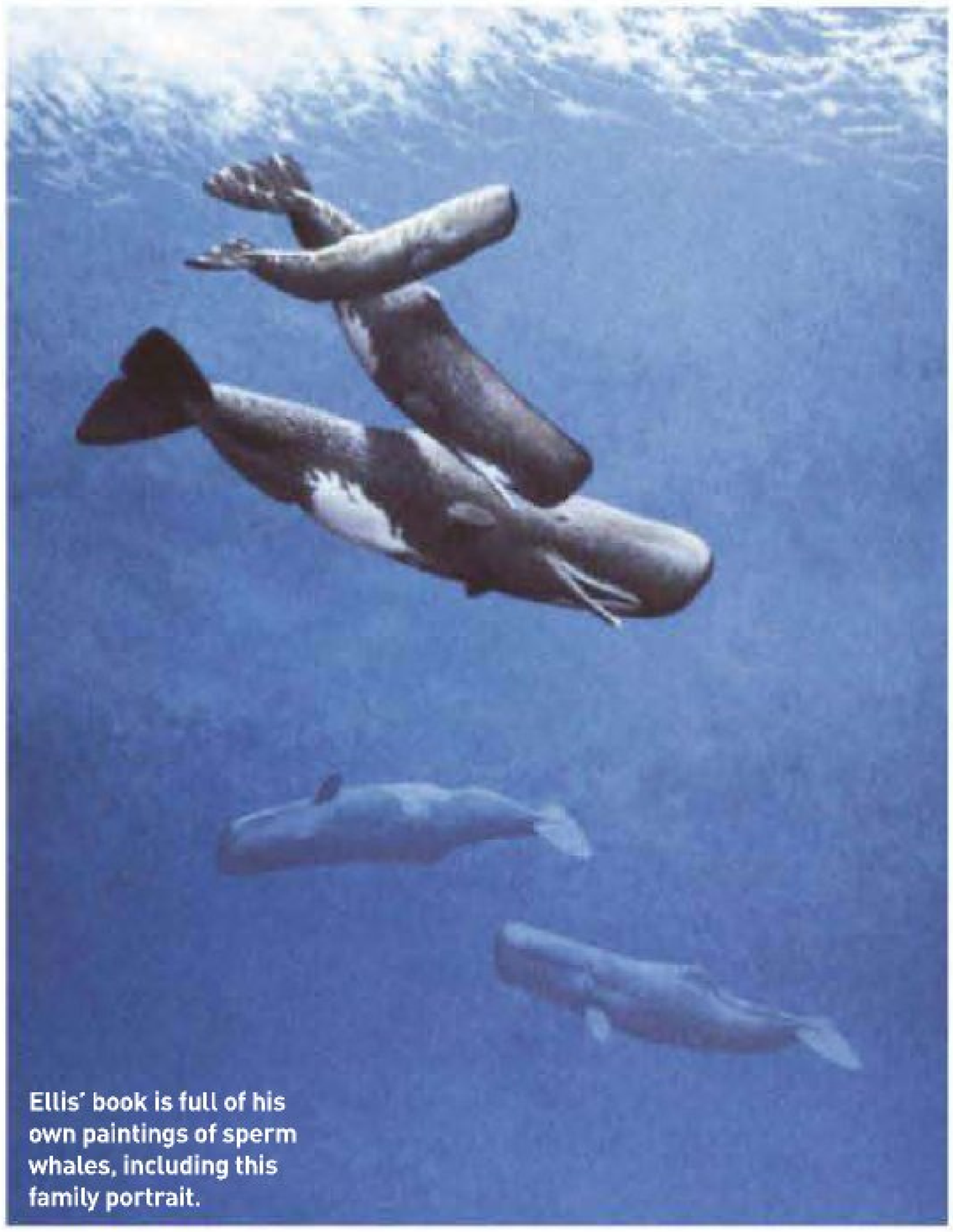
Given such a subject, Richard Ellis could hardly fail to write a fascinating book. His work as an artist will be well known to anyone familiar with whale literature; indeed, a principal joy of *The Great Sperm Whale* is its wonderful illustrations. But he also evokes the leviathan in all its guises – scientific, literary and legendary – from the history of whaling to the sperm whale's great adversary, the giant squid.

For me, however, the most fascinating chapter covers new research by scientists such as Hal Whitehead, who has spent 30 years studying the sperm whale and drawn some remarkable conclusions. Not only does the animal appear to possess a matrilineal culture, but its highly convoluted neo-cortex could indicate an ability for complex communication, emotion and even, potentially, abstract thought.

As comprehensive and up to date as it is, *The Great Sperm Whale* only underlines how much more we have to learn about these amazing mammals.

Verdict ★★★★☆

Philip Hoare Author of *Leviathan or, The Whale* (Fourth Estate)



Ellis' book is full of his own paintings of sperm whales, including this family portrait.

Illustration by Richard Ellis, courtesy of the University Press of Kansas

BBC WILDLIFE SHOP

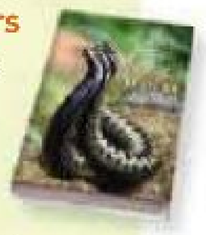
Reader price £30.50. Code W0611/06

Also out now...

A Planet of Viruses

There are 1,000,000,000,000,000,000,000,000,000,000 viruses in the world's oceans alone. Yet, despite their mind-boggling numbers, there are few popular science books devoted to the smallest organisms known to humanity, whose influence on the planet belies their size. In this slim tome Carl Zimmer covers our research into, and battle against, HIV, influenza, *E. coli* and more in an accessible and compelling take on an enormous topic.

RRP £12.99. Reader price £11.99. Subscriber price £10.99. Code W0611/07



The Private Life of Adders

When giving birth, female adders slither rapidly, pausing every few minutes to deliver a baby, so that their brood is spread out over a wide area. These and other intimate details of the British viper's behaviour have been painstakingly observed by adder aficionado Rodger McPhail. During 25 years of getting close to the snakes of Lancashire, the naturalist has photographed hunting and feeding, mating and the shedding of skin. His interesting natural history is accompanied by many rare and fascinating images.

RRP £14.99. Reader price £14.99. Code W0611/08

nhbs

Credit card hotline:
For credit card orders and general enquiries contact NHBS on:
☎ 01803 865913
FAX: 01803 865280
EMAIL: bbcwm@nhbs.com

Overseas sales
Contact NHBS for a quote on:
☎ +44 1803 865913
FAX: +44 1803 865280

All prices include 20% VAT, if applicable. Allow up to 28 days for delivery. You may pay by credit card or sterling cheque. VAT No: GB 407484644 (overseas/EU only). All prices are subject to change without notice.

BBC WILDLIFE BOOKS ORDER FORM

Closing date: 22 August 2011

I enclose a cheque/postal order for £_____ with my name and address on the back, made payable to *BBC Wildlife Magazine*.

Please charge £_____ to my credit/payment card

☐ Am Express ☐ Visa ☐ MasterCard ☐ Switch

Card number:

Start date: Expiry date: Issue no (Switch):

Security code (the 3 digit verification number on the reverse of the card)

CARDHOLDER'S SIGNATURE:

NAME (MR/MRS/MS/MISS/DR):

ADDRESS:

POSTCODE: EMAIL*:

HOME TEL. NO.*: MOBILE TEL. NO.*:

SUBSCRIPTION NO. (TO QUALIFY FOR DISCOUNT):

CODE	TITLE	PRICE	QTY	SUBTOTAL
			POST & PACKING	£1.99 (UK)
			TOTAL	

Please continue on a separate sheet if necessary.
You may photocopy this form. Send your form...

BY FAX: 01803 865280 OR BY POST: *BBC Wildlife* Shop, NHBS, 2-3 Wills Rd, Totnes, Devon TQ9 5XN

BBC Magazines (publishers of *BBC Wildlife Magazine*) and BBC Worldwide would love to keep you informed of special offers and promotions via post or telephone. Please tick the box if you do not wish to receive these from us ☐ or BBC Worldwide ☐

*Please enter this information so that *BBC Wildlife Magazine* can keep you informed of newsletters, special offers and promotions via email or free text messages. You may unsubscribe from receiving these messages at any time. Please tick here if you do not wish to receive similar offers via email from BBC Worldwide ☐

downloaded from: lib.ommolketab.ir

ATOL Protected 2944 AITO ABTA W7866

WONDERFULLY *Slow* HOLIDAYS

ANTONIO

the muleteer

QUESO FRESCO:
How to make a perfect goats' cheese
100 goats = 270 litres of milk
Yeah! There's a family
secret ingredient added. Strain the curds.
Press by hand into cheese. Eat.

Como mamá solía hacer!

EXPLORE THE QUIET LANES OF ANDALUCIA

Discover hidden Europe
by foot, by bike, by Inntravel

inntravel
INDIVIDUAL | INDEPENDENT

See our Slow Stories at www.slowholidays.co.uk

01653 617031

Relish delicious local cuisine. Savour the moments and taste into the slow life with Inntravel.

Discover the leisurely path of a self-guided slow holiday. Journey at your own pace through timeless landscapes, experience traditional ways of life, share authentic encounters with local people. Relax in family-run hotels and inns.

StoreMags.com - Free Magazines Download in True PDF format

I AM *Adventure* AT EVERY TURN

I am an island-long trail. I am river deep. Mountain high. Boiling lake and plunging waterfall. Volcanic peak and rainforest canopy. I am Carnival. I am Creole. I am unlike any other Caribbean destination. I am nature, unspoilt.

I AM DOMINICA. ARE YOU?

Dominica
THE NATURE ISLAND

www.DiscoverDominica.com
Toll Free: 0800 012 1467

14 - 15 OCTOBER 2011
ALEXANDRA PALACE, LONDON

MAJOR NEW
WILDLIFE EXHIBITION!

WILDLIFE
·XPO·

www.wildlifexpo.com
01285 865223

Supporting
THE wildlife TRUSTS

£2
from each ticket sold
will be donated to your
local Wildlife Trust

downloaded from: lib.ommolketab.ir

StoreMags.com

BIG CATS OF THE MASAI MARA WILDLIFE PHOTOGRAPHY WORKSHOP

* Hosted throughout by professional wildlife photographer Richard Costin *

* Total flexibility, tracking on private game reserve with no return time limits *

* Exclusive use of large game vehicles, limited to only 4 per vehicle *

* Fully tutored throughout by Richard, both in the field and back at camp for RAW processing *

* Includes flights, meals, transfers to and from luxury bush camp with 10 safari drives *

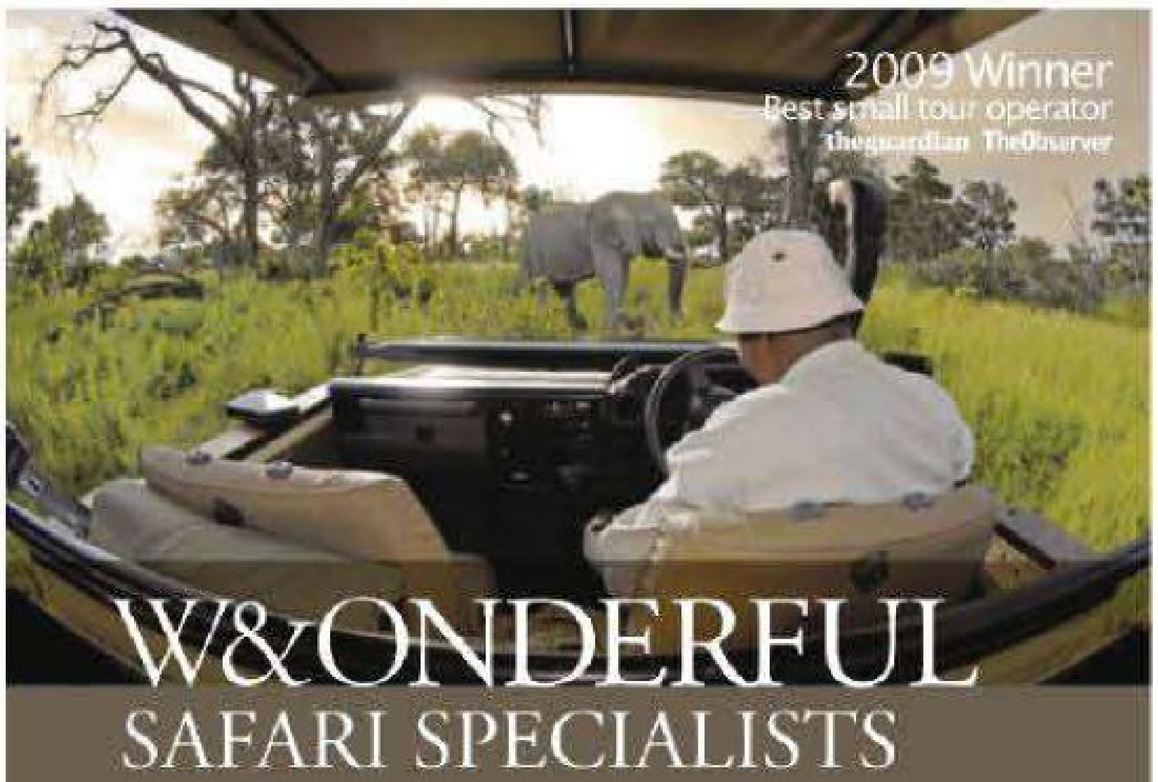
ATOL PROTECTED

AITO THE ASSOCIATION OF INDEPENDENT TOUR OPERATORS

15 - 22nd July 2011

For full details visit **www.richardcostin.com/tours**

email: **info@richardcostin.com** or call **02081449304**



W&ONDERFUL

SAFARI SPECIALISTS

For first-timers & seasoned travellers to Africa

Our comprehensive Southern and East Africa safari programme offers the finest selection of tailor-made holidays and small group escorted tours, with the very best guides.

Call us for a brochure

0845 277 3330

www.rainbowtours.co.uk

ABTA

W&O TRAVEL

Rainbow Tours
AFRICA & MADAGASCAR

Lion walks at

STANLEY SAFARI LODGE
VICTORIA FALLS, ZAMBIA

WHITE RHINO AREA

STANLEY SAFARIS

Website: www.StanleySafaris.com e-mail: info@stanleysafaris.com

Tel: +260 97-848.615 /+263-91-262.042

Tel: +32-496-67.20.40 Fax/Voicemail: +1-206-350-0259

Around the Victoria Falls there are some excursions allowing tourists to physically walk with lion cubs.

downloaded from: lib.ommolketab.ir

A bison at home on the range in Yellowstone National Park. It's a time-honoured scene, but just how natural is it?

Ron Niebrugge/Alamy

Free Magazines Download In True PDF format - StoreMags.com

PICK OF THE MONTH

Uncovering the unnatural

UNNATURAL HISTORIES

BBC FOUR, THREE EPISODES (CHECK RT)

This unusual trilogy asks the simple question: how natural *is* the natural world? The series showcases three of the world's most iconic wild places – the Serengeti, Yellowstone National Park and the Amazon – and investigates how people have influenced their development. They are not, it turns out, as 'natural' as you might think.

It's an interesting premise for a TV series, though the narrative is rather convoluted and the logic can be hard to follow. But the programmes reap the rewards of solid research. Revealing insights are scattered throughout, such as the fact that 19th-century tourists flocked to Yellowstone in their Sunday best, or that the presenter of an early Serengeti wildlife documentary triumphantly shot her lion star dead.

The first episode looks at Serengeti National Park in Tanzania, a place that epitomises wilderness. Yet humans have been an integral part of this landscape for millennia. We were altering the nature of the savannah as long as 500,000 years ago by burning the grass to encourage fresh growth – and by the end of the 19th century, colonists had introduced viruses that wiped out livestock and many of the indigenous people. Colonial hunters later moved in and when the park was created in 1951, the resident Maasai were relocated to preserve the big game.

Episode two focuses on Yellowstone, created in 1872 as the world's first national park. The intention was to satisfy public demand for a 'true' wilderness (that is, one without people). Railroads opened up the area to tourism and the Native Americans were driven out. As in the Serengeti, hunting nearly finished off the wildlife – by 1926, the last wolf had been shot and the ecosystem began to fall apart.

The concluding instalment features archaeological research demonstrating that about six million people lived in cities in the heart of the Amazon forest until at least the 16th century. The Europeans then arrived and most of the indigenous population died from their diseases. But proof that the Amazon isn't virgin territory sends the wrong message to logging companies hell-bent on clear-felling the rainforest.

Unnatural Histories suggests that we need a vision that transcends the unnatural divide we have created between people and wilderness. We are all part of the natural order and need to work with it, though it is clear that this is no simple matter if you consider how remote from nature many Westerners have become.

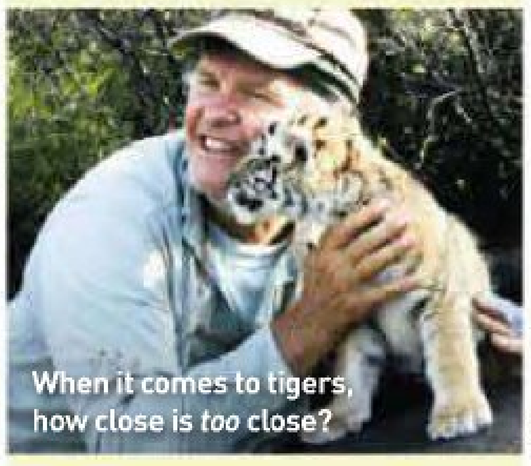
Rachel Ashton

WILDLIFE HIGHLIGHTS: 11 MAY – 8 JUNE

TIGER MAN

NAT GEO WILD, THREE EPISODES, THURSDAYS FROM 12 MAY, 8PM

The 'Tiger Man' is John Varty, the founder of Tiger Canyons, a reservation in South Africa on which he breeds the cats. Varty set up the project to study the species' behaviour and help its conservation, but he is quite intrusive and extremely tactile with the animals. The programmes include interesting footage, such as tiger births filmed so closely that the cubs practically bond with the camera, and a mother eating her dead runt then covering it with leaves so that nothing else can devour it. But getting as close as Varty does to a tiger kill has more to do with ratings than research.



When it comes to tigers, how close is *too* close?

John Varty/JV Images

THE INVADERS

NAT GEO WILD, TWO EPISODES, FRIDAYS FROM 13 MAY, 8PM

These two programmes cover our vicious wars against rodents (*Giant Swamp Rats*, 13 May) and feral pigs apparently rampaging through Australia (*Feral Pig Plague*, 20 May). Has the world gone mad? The rodent in question – the coypu – is a species imported to New Orleans from South America for the fur trade, which escaped and now stands accused of everything from destructive chewing to spreading the Black Death.

BEAR WHISPERER RETURNS

ANIMAL PLANET, THREE EPISODES, MONDAYS FROM 16 MAY, 9PM

This is the second series following wildlife patrol officer Steve Searles, who protects the Californian town of Mammoth Lakes from miscreant bears. Steve clearly understands his bumbling charges – we see him carefully pepper-spraying them out from under homes and the like – but, for me, one series was easily enough.

Due to last-minute schedule changes, *BBC Wildlife* regrets that we cannot guarantee the accuracy of transmission information. Please check *Radio Times* magazine or www.radiotimes.com for channel listings.

downloaded from: lib.ommolketab.ir

Manx shearwaters gather in St Bride's Bay off Skomer before returning – under the cover of darkness – to their burrows on the island.

Store Mags.com - Free Magazines Download in True PDF format

Razorbill: Richard Ford/Natural Visions; main: David Tipling

NATURE'S GREAT EVENTS MANX SHEARWATERS, PEMBROKESHIRE

Where angels fear to tread

As seen on Springwatch

As night falls and darkness envelops the island of Skomer, demonic wails fill the air and a remarkable influx of tiny seabirds begins. **James Fair** witnesses the nocturnal return of the Manx shearwaters.

AT A GLANCE

WHAT?

» The spectacle of the world's largest breeding colony of Manx shearwaters returning to their burrows at night.

WHERE?

» Skomer Island, off the coast of Pembrokeshire, Wales.

WHEN?

» Between March and August.

ALSO LOOK FOR

» Puffins, razorbills and guillemots nest here, as do shags and short-eared owls. In May and June, the red campion is ablaze.

The razorbill is another charismatic Skomer bird.

LIKE MOST VISITORS to Skomer, my first port of call on a sunny June morning is The Neck, and I go there to get my puffin fix.

The scene is faintly reminiscent of a movie premiere, with a phalanx of photographers snapping away at the red-carpet celebrities who proudly display the silver jewels crammed in their rainbow-hued beaks before disappearing, Alice-like, down rabbit-holes to feed their chicks.

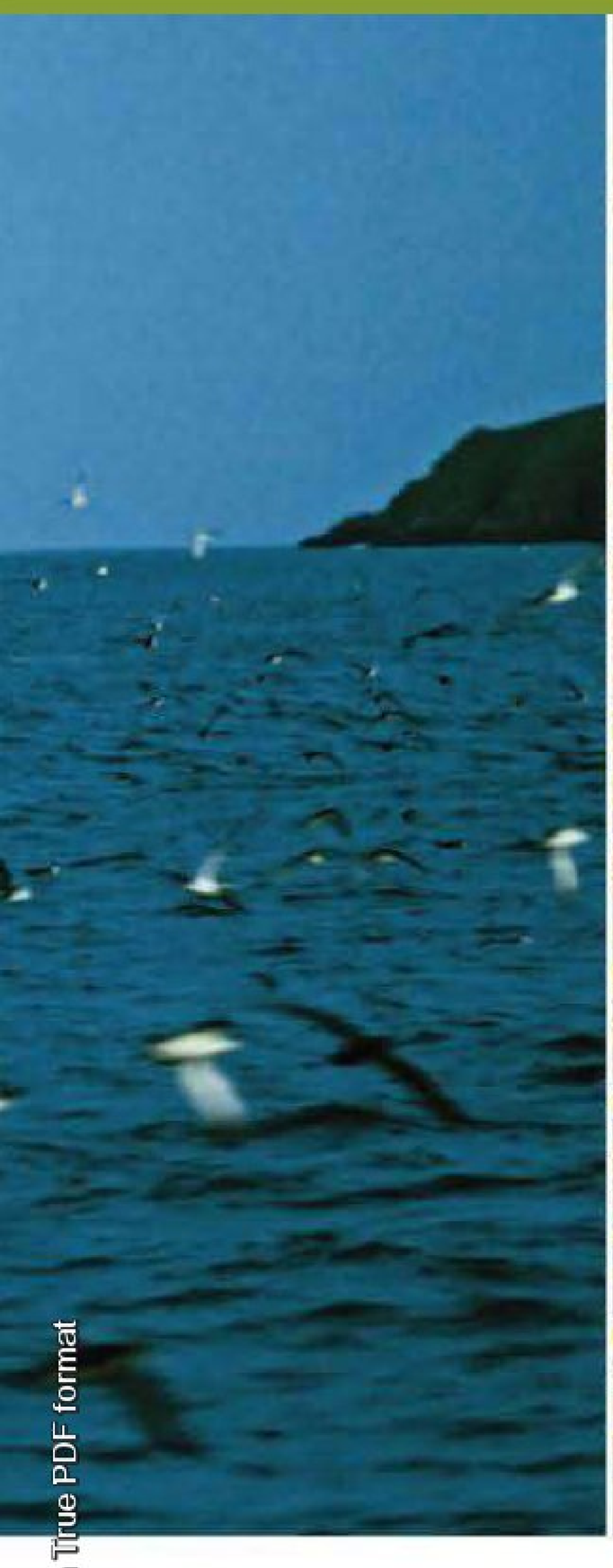
Retreating from the puffin show, I take to the paths in the centre of the island. Here and there the ground is littered with small pairs of wings, usually attached to skeletons that have been picked clean of flesh. They are sad and forlorn, as if tiny angels have fallen from the sky. But, as surprising as it may sound, these angels are the reason I am here.

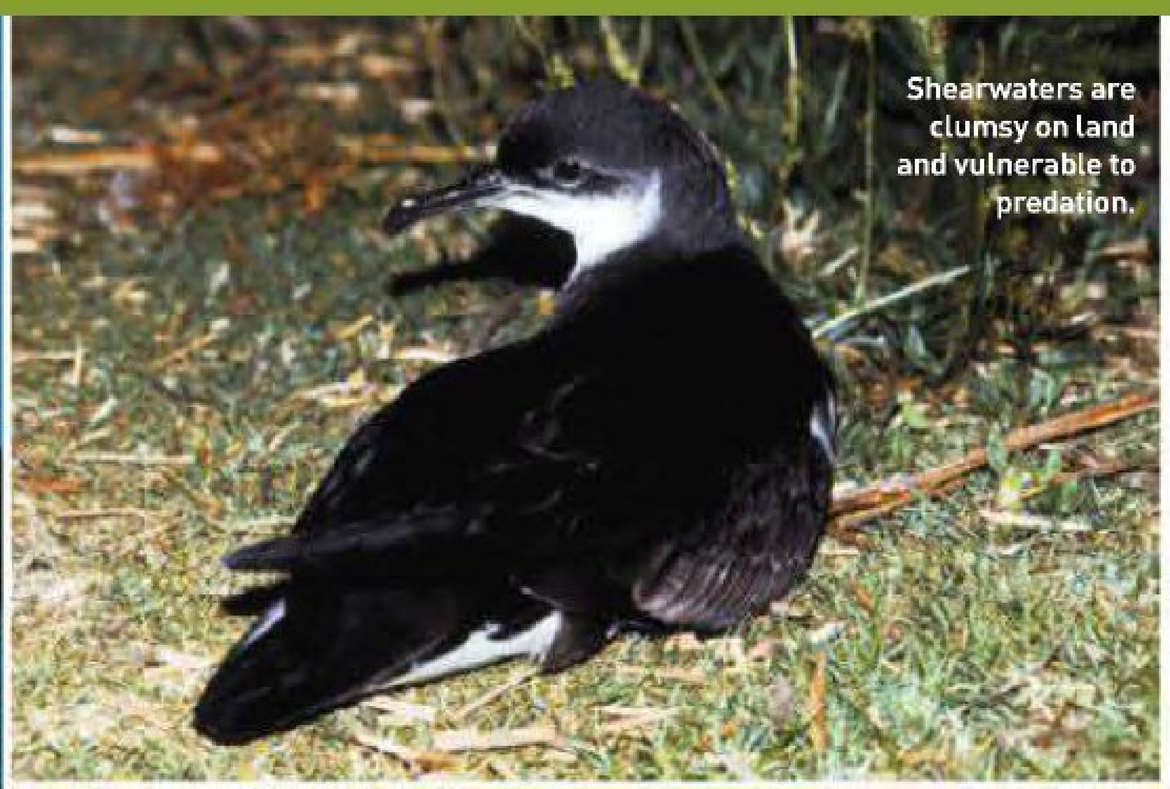
DEVIL IN DISGUISE

The action doesn't start until after midnight and, by the time I set out, the weather has closed in and there's a spit of rain in the air. As I wait, I amuse myself by counting the improbably high number of toads. And there's still no sign of the angels. Not yet, anyway.

Then I hear high-pitched, tortured screams, somewhere out in the darkness and the drizzle. It is the same wailing that, according to the Icelandic *Njáls* saga, terrified Vikings anchored off the Isle of Man in 1104, and earned these creatures the nickname 'devil birds'. I can understand how chilling the sound would be to someone who believed in witchcraft, but for me, here on Skomer in the 21st century, it's not frightening so much as electrifying.

downloaded from: lib.ommolketab.ir





Shearwaters are clumsy on land and vulnerable to predation.

Shearwater wings are a common sight on Skomer.

The wailing comes closer and I hear the flapping of wings. Then, as if the bird has been spat out from a centrifuge or even another dimension, a solitary, wide-eyed, Manx shearwater hits terra firma with an almost audible thump.

Shearwaters spend most of their lives out at sea, but for five months every year they must come ashore to breed. Their legs are adapted to propel them through water, but leave them hapless on land – making them easy pickings for the army of great and lesser black-backed gulls that live on Skomer. So they return under cover of night when these and other predators are inactive. Even so, some unlucky shearwaters get caught: even angels will fall.

Suddenly I become aware of ghostly, otherworldly noises all around; I sense dozens of birds flying overhead, arrowing in to their burrows, using those hellish shrieks to communicate with their partners.

A second bird lands close by, and then a third, fourth and fifth. They pick themselves up and stagger off across the tussocky grassland to their burrows. There they will take over egg- or baby-sitting duties, while their mates fly out to sea for a week or more to sate their hunger and bring back food for their chicks.

And next morning, new sets of angels' wings litter the paths, while well-fed gulls loiter nonchalantly on the boulders and fence posts.

James Fair's three-year-old son also loves Skomer, though on his last visit he was more excited by the tractor than the birds.

NOW YOU DO IT

GETTING THERE

- Skomer is managed by The Wildlife Trust of South and West Wales. Boat trips run from Martin's Haven between 1 April and 31 October. ☎ 01656 724100; *www.welshwildlife.org/VisitingSkomer_en.link*
- At busy times (ie weekends), arrive early at Martin's Haven to book your ticket (you can only book on the day).

SEEING WILDLIFE

- There are 120,000 pairs of Manx shearwaters on Skomer (and a further 45,000 on nearby Skokholm) – about half of the global population.
- They return to the islands in March and stay until September, when they head for their winter quarters off the east coast of South America.
- To see the shearwaters returning to their burrows, you have to stay the night. Accommodation on the island is limited and gets booked up early. Contact the trust (left) for details.

WHERE ELSE TO GO

1 BARDSEY ISLAND

Up to 16,000 Manx shearwaters breed on Bardsey Island. It's not quite in the league of the Skomer (and Skokholm) spectacle, but still well worth experiencing. There is plenty of accommodation and other wildlife to see, too. ☎ 08458 112233; *www.bardsey.org*

2 LIGHT HOUSE ISLAND

Just outside the mouth of Belfast Lough, Light House Island is home to about 3,000 pairs of Manx shearwaters. There's accommodation at Copeland Bird Observatory; you can stay for a weekend or a week, but you must book in advance. ☎ 028 9443 3068; *www.habitas.org.uk/cbo*

Shearwaters have nested on Light House Island for only a century.

3 CALF OF MAN

Once home to thousands of breeding pairs – and where the Manx shearwater gets its name – the Calf of Man is no longer the sanctuary for this species that it once was, due to an invasion of rats. But the rodents are slowly being eliminated, and there are now about 100 breeding shearwater pairs here, as well as choughs and other seabirds. You can stay in the observatory. ☎ 01624 648000; *www.gov.im/mnh/heritage/countryside/sound/intro.xml*

Robert Thompson/naturepl.com

Top: Chris Packham/naturepl.com; below: Emanuele Biggi/Photolibrary.com

StoreMags.com - Free Magazines Download In True PDF format
downloaded from: lib.ommolketab.ir

StandAGES.com

THE DIRECTORY

To advertise in the Classified section, please call **Sam Jones: 0117 314 8847**

1. TIDE RIP GRIZZLY TOURS

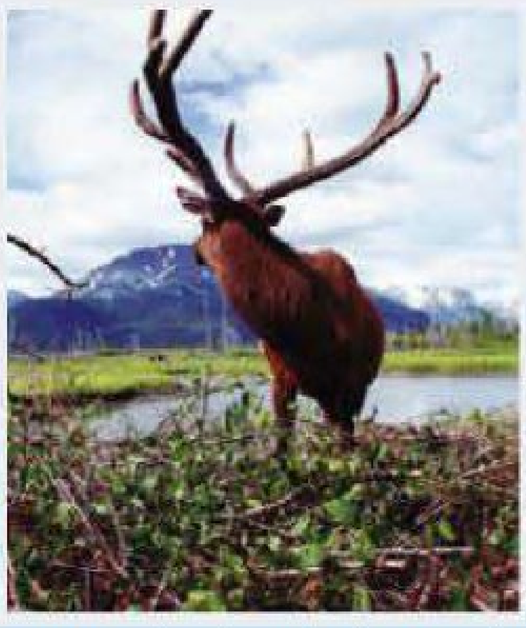
See grizzly bears in the wilds of Knight Inlet. The southern Great Bear Rainforest is home to the magnificent coastal grizzly bear and it is here where you can watch them eat salmon. We depart daily by boat from Telegraph Cove, the epicentre of orca watching on northern Vancouver Island.

www.tiderip.com tiderip@telus.net

2. SEE YELLOWSTONE

Yellowstone, the world's first National Park, is North America's answer to the Serengeti. Every season offers a unique experience as wildlife adjusts to the harsh environment. With two-thirds of the world's thermal features, Yellowstone provides an opportunity to see more of these geological wonders than anywhere else.
Providing complete packages – including airfares – See Yellowstone your way with SeeYellowstone.com.

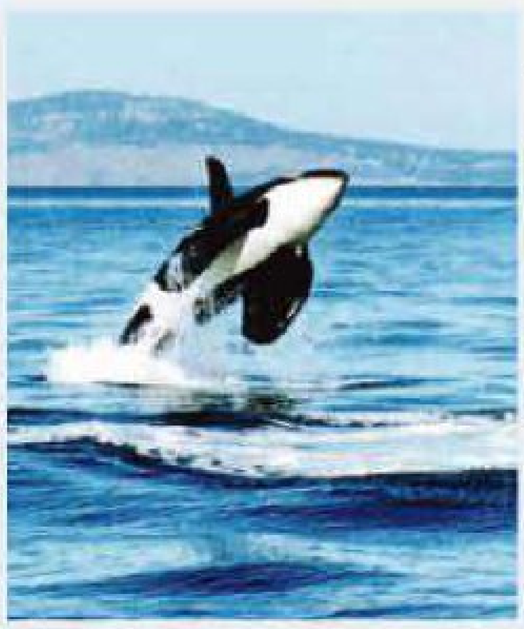
www.seeyellowstone.com Info@seeyellowstone.com



12. GRAND AMERICAN ADVENTURES

Discover the best of the Americas!
No other region on Earth offers such diversity and with over 40 unique itineraries to choose from, we hope to inspire you to explore more of these fascinating lands. Spectacular natural sights, challenging and rewarding activities, and encounters with some of the world's most colourful cultures and wildlife – all make up the amazing experience that is Grand American Adventures.

www.grandamericanadventures.com/bw ☎ 0844 346 3015



11. CANADIAN SKY

Visit urban centres, remote wilderness destinations and the unrivalled beauty of Vancouver Island. From the bustling city of Vancouver, you head into a whale watching journey from Victoria and Pacific Rim National Park. Aboard a floatplane you will go in search of grizzly bears, eagles and foxes near Knight Inlet. The final leg of your adventure takes you back to the mainland en route to Vancouver.
Departures June-Oct nine days/eight nights from £2079.

www.canadiansky.co.uk ☎ 0844 3329 385

10. FRONTIERS NORTH ADVENTURES

Find your true north with Frontiers North Adventures in Churchill, Manitoba. Gaze across the tundra at the majestic polar bear, snorkel with 3,000 beluga whales and marvel at the breathtaking northern lights. For over 30 years Frontiers North has been offering incredible wildlife adventures. Join us for your next authentic Arctic experience.

www.frontiersnorth.com ☎ +1 204 949 2050

9. WILD AMBITIONS

Churchill, in Arctic Canada, is simply the best place in the world to see polar bears and the aurora borealis! Join us throughout August to October 2011 to witness these awe-inspiring animals in the most pristine of wildernesses, and experience what could be the Arctic adventure of a lifetime!

www.wildambitions.co.uk ☎ 01305 267994

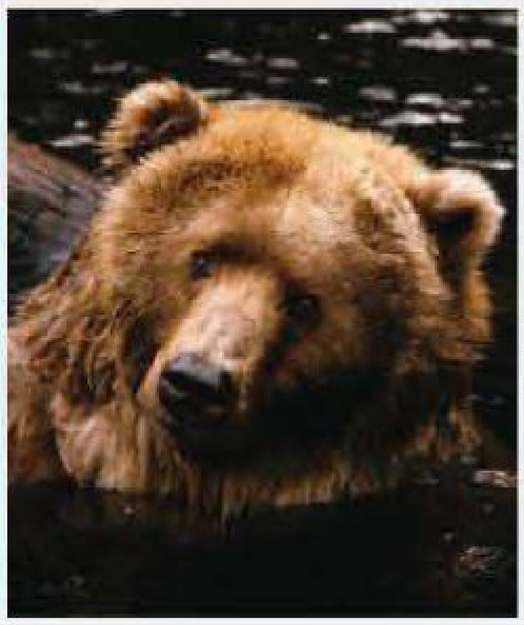
downloaded from: lib.ommolketab.ir

StoreMags.com

3. KINGFISHER ADVENTURES

Go sea kayaking with the orcas and humpback whales of Vancouver Island. Our four-day "Orca Waters Base Camp" tour is designed to responsibly view whales, dolphins, sea lions, seals and other wildlife from the comforts of a permanent base camp. No experience is necessary and family friendly departures are available. Optional grizzly bear viewing tours are also available.

www.kingfisher.ca ☎ 020 3239 7378



4. WILDLIFE WORLDWIDE

Canada's vast wilderness areas are the bears' last stronghold. Home to black, brown (grizzly) and polar bear it is undoubtedly the best bear-viewing location in the world. Our Wildlife Worldwide specialists will tailor-make your trip combining the perfect blend of classic self-drive road journeys to fully-guided marine and wildlife tours with some of the best stand-alone lodges for bear-viewing.

www.wildlifeworldwide.com ☎ 0845 130 6982

NORTH AMERICA AND CANADA

The USA and Canada are home to some of the world's greatest wildernesses. With iconic wildlife, breathtaking landscapes and unforgettable experiences, they have all the ingredients of a once-in-a-lifetime holiday.

5. CANADIAN SKY

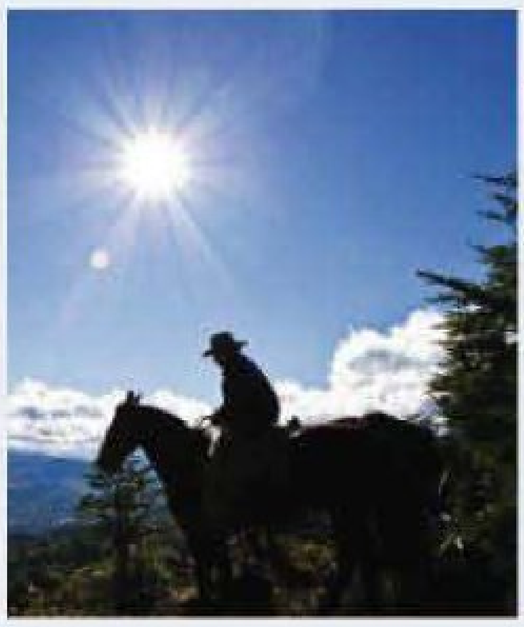
The Churchill Town & Tundra Experience is one of the most diverse wildlife viewing packages offered in the world. Your adventure takes place on a world-famous Tundra Buggy in the Churchill Wildlife Management Area, home to the largest concentration of polar bears. The tour offers an interactive polar bear experience with exceptional photo opportunities and memories that will last forever. Prices for October/November departures (6 day/5 night tour) start from £3,949.

www.canadiansky.co.uk ☎ 0844 3329 385

6. BRUSHBUCK GUIDE SERVICES

Offering exciting wildlife tours through Grand Teton and Yellowstone National Parks out of Jackson Hole, Wyoming and West Yellowstone, Montana! Call today to book your adventure!

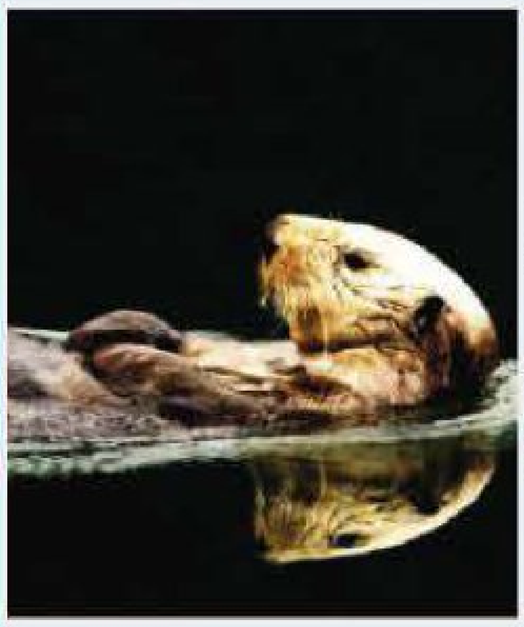
www.brushbuckphototours.com ☎ 0888 282 5868



8. W&O TRAVEL

A ranching holiday is an experience like no other – aside from the thrill of horse riding through spectacular scenery, you can also try your hand at many activities such as rafting, fly fishing and mountain biking. Speak to one of Western & Oriental Travel's expert specialists to tailor-make your ranch holiday.

www.WandOtravel.com/ranch ☎ 0845 277 3306



7. MAJESTIC OCEAN KAYAKING

Kayak the west coast of Vancouver Island, British Columbia, Canada, with Majestic Ocean Kayaking. We run professionally guided kayaking day trips and multi day trips to the Broken Group Islands, Pacific Rim National Park and Clayoquot Sound. Enjoy gourmet food, top of the line equipment and abundant wildlife. There are hundreds of islands to explore with white sandy beaches and temperate rainforests.

www.oceankayaking.com ☎ 0800 889 7644

downloaded from: lib.ommolketab.ir

To advertise in the Classified section, please call **Sam Jones: 0117 314 8847**

GO REALLY WILD IN BRITAIN

Anyone who wants an authentic wildlife experience but doesn't want to fly to some exotic location will find a wealth of exciting opportunities right on the doorstep. So why not discover what the UK has to offer this summer?

1 Monkey World

With over 240 primates of 16 different species, Monkey World is the largest ape and monkey rescue centre in the world. The 65-acre park is a great day out for all the family! Come and see the stars of TV's *'Monkey Business'* and the new series *'Monkey Life'*, then 'monkey around' in the south's largest adventure play area!

T: 01929 462537
www.monkeyworld.org

2 Dartmoor Nature Tours

Dartmoor Nature Tours offer wildlife walks and tours to suit individual customer requirements. Local guide Phil Page has been working and leading guided walks on Dartmoor since 1986. Activities include Bird Tours (all year), Butterfly Walks (May to August) and Fungi Forays (September to November).

T: 07858 421148
www.dartmoornaturetours.co.uk

3 Bird Watching Tours

Stay at Best Western Ufford Park Hotel, Golf & Spa set in 120 acres of historic parkland with over 50 species of bird on site. Make the most of your stay and visit Minsmere, Dunwich Heath and Snape Marshes. One night breaks from only £85pp or residential tours with Brian Small available on request.

T: 0844 499 1632
www.uffordpark.co.uk

5 Paradise Wildlife Park

Paradise Wildlife Park's exciting animal feeding experiences offer you the opportunity to feed a big cat. You'll receive welcome drinks, followed by a guided tour of our Big Cat Territory, where you can see tigers, lions, cheetahs, jaguars and snow leopards. Finish off by feeding one of the cats by hand.

T: 01992 470490
www.pwpark.com

4 Falconry Scotland

Falconry Scotland offers individual private flying sessions with our birds giving you a very up-close-and-personal experience with us. We have children's activities and a tailor-made family hour with something for everyone. Booking is essential and we will give a 10% discount to those bringing their *BBC Wildlife* magazine with them!

T: 01875 825728
www.falconryscotland.co.uk

6 The Lundy Company

Over the past 40 years, Lundy has led the way with four major achievements in marine conservation around the UK. The island set up the UK's first voluntary and statutory marine nature reserves, the first *No Take Zone* and first marine conservation zone in 2010.

T: 01271 863636
www.lundyisland.co.uk

StoreMags.com - Free Magazines Download in True PDF format

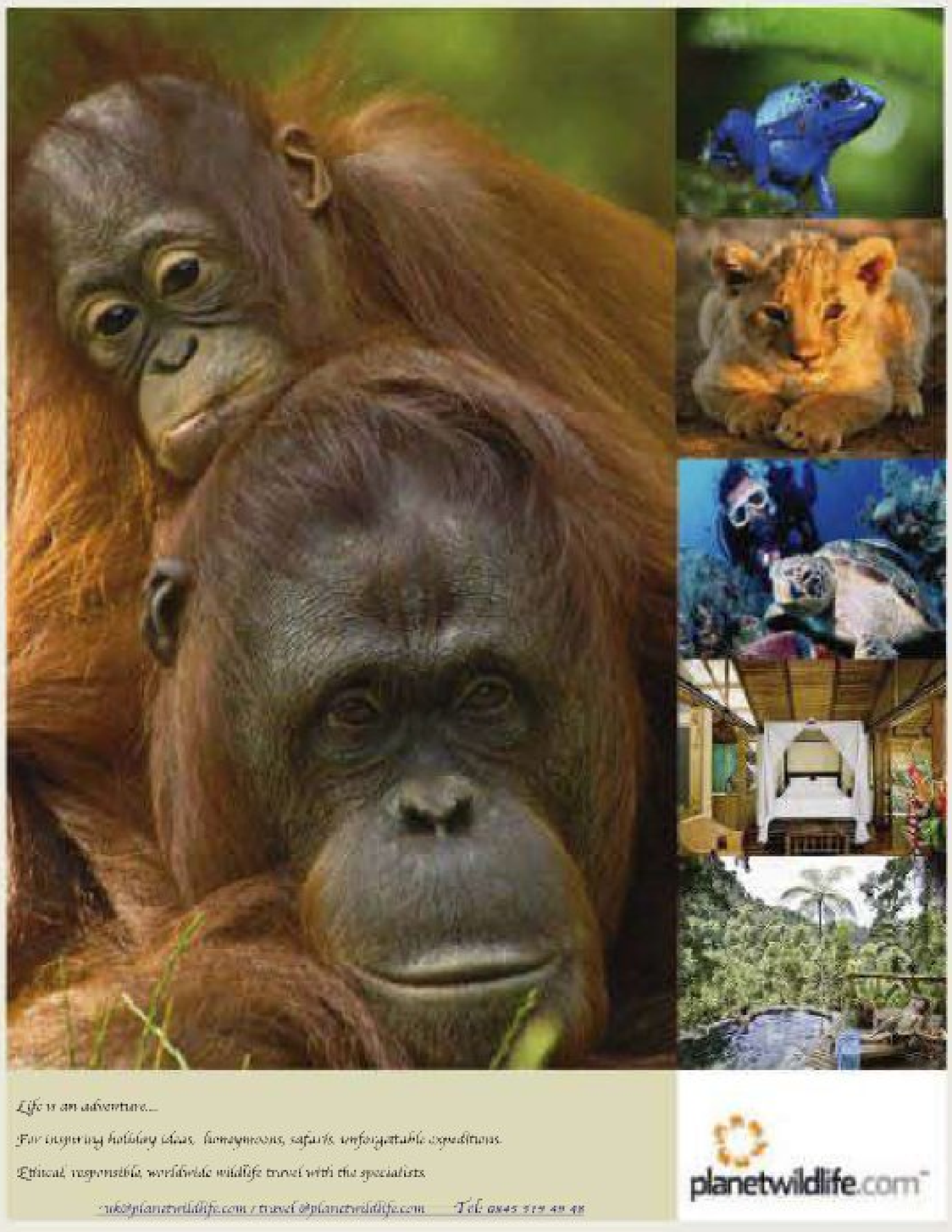
downloaded from: lib.ommolketab.ir

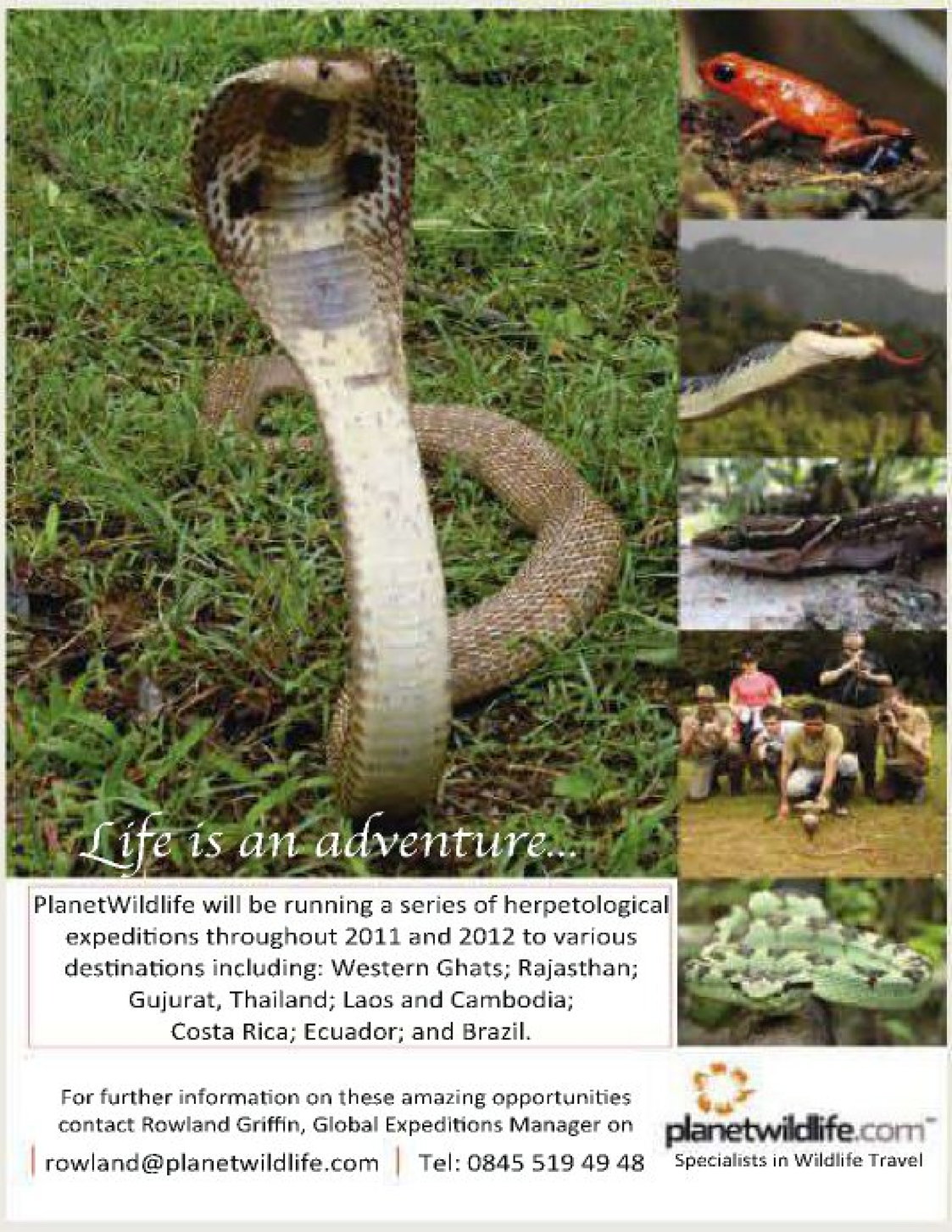
WORLDWIDE

WORLDWIDE

WORLDWIDE

CAMERA SYSTEMS





StoreMags.com - Free Magazines Download In True PDF format

To advertise in the Directory please call Sam Jones: 0117 314 8847 or email SamJones@bbcmagazines.com

downloaded from: lib.ommolketab.ir

GREENTOURS

SEE PANDAS IN THE WILD!

EST. 1994 • EXPERT GUIDES • SMALL GROUPS

01298 83563 • www.greentours.co.uk

enquiries@greentours.co.uk

WHALE WATCHING

WITH NATURETREK THE UK'S LEADING WILDLIFE TOUR SPECIALIST

- New 2011 Atlantic Islands Cruise
- Blues, Greys, Humpbacks, Orcas & Dolphins
- Expert Naturalist Guides
- 20+ Destinations Worldwide
- Tours from £895

Naturetrek

NATURETRK.CO.UK 01962 733051

Classic Journeys Adventure Travel

small group wildlife & photography holidays

India for Tigers

Borneo for Orangutans & Komodo Dragons

Sri Lanka for Whales Dolphins, Leopards

Tanzania Classic Safari

Galapagos Island Cruise

25 years experience
ATOL Protected 3022

Tel: 01773 873497
www.classicjourneys.co.uk

SOUTH AMERICA ADVENTURE TOURS

The Adventure begins here...

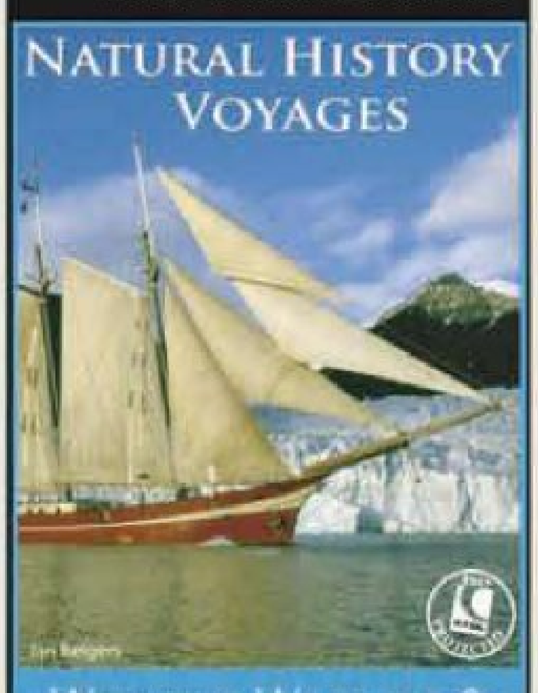
Specialised tailor-made holidays:
Costa Rica, Ecuador & Galapagos
Peru, Bolivia and Argentina

Phone: 0044 845 4633389

enquiries@southamericaadventuretours.com
www.southamericaadventuretours.com

AQUA-FIRMA

Water Wilderness Wildlife



WITH THE WILDLIFE & MARINE LIFE EXPERTS

Arctic & Antarctica

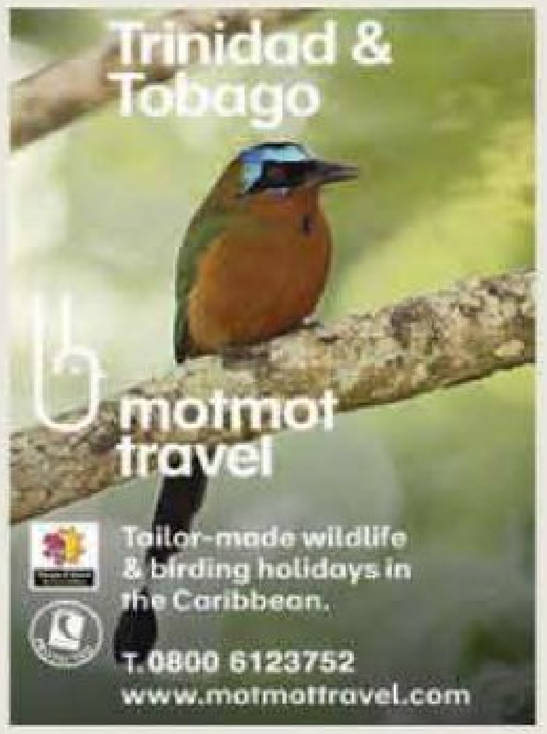
Sailing & Polar Ship Voyages

Committed to Nature

www.aqua-firma.co.uk
Tel: 0844 412 0848

AQUA-FIRMA
Water Wilderness Wildlife

Trinidad & Tobago



motmot travel

Tailor-made wildlife & birding holidays in the Caribbean.

T. 0800 6123752
www.motmottravel.com

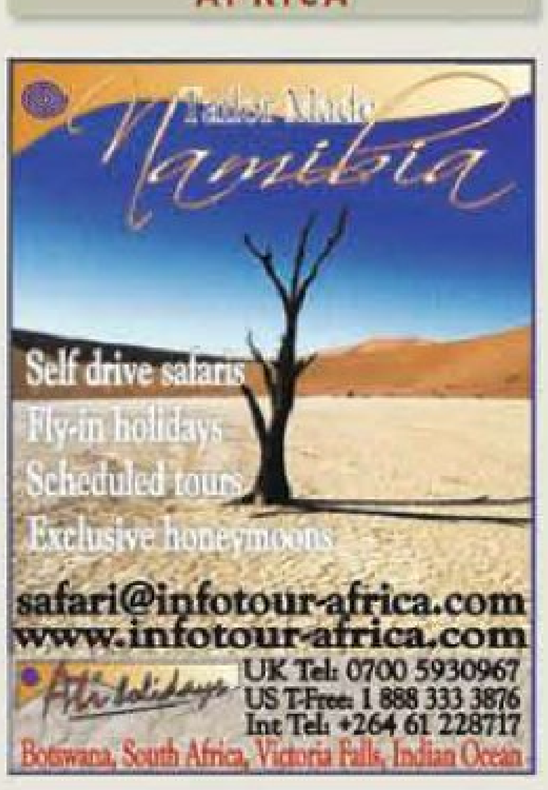
AFRICA

Get closer to Gorillas in Uganda and Rwanda!

Expertly tailor made safaris to Botswana, Zimbabwe, Namibia, Zambia, Malawi, Mozambique, South Africa, Kenya, Tanzania, Uganda, Rwanda and beach

www.trackssafaris.co.uk ☎ 01823 256630

ATOL AND TTA BONDED TO GIVE YOU 100% FINANCIAL PROTECTION tta



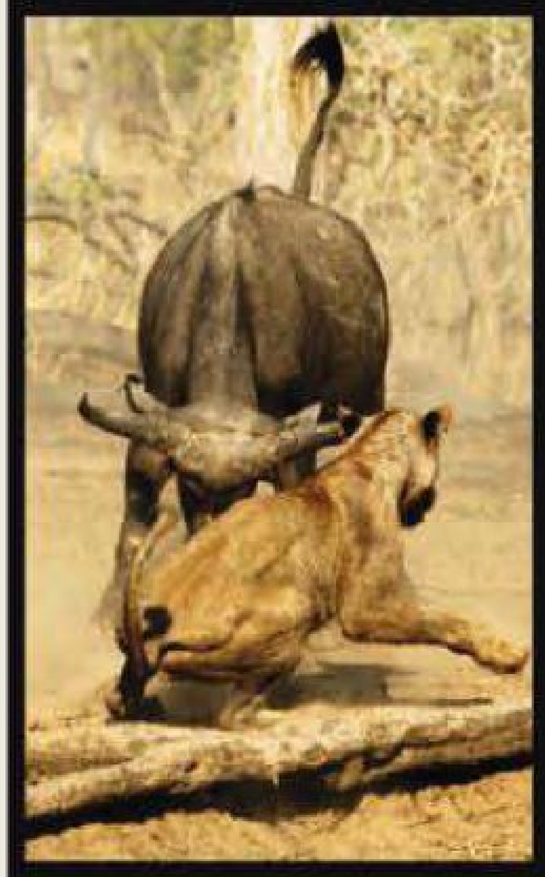
To advertise in the Directory please call 01962 733051 or email StoreMags.com Free Magazines Download this PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

SHENTON SAFARIS

Zambia's leading wildlife and photographic operator



Kaingo Camp and Mwamba Bush Camp are situated deep within the best game viewing area of the South Luangwa National Park. The area is exceptionally rich in wildlife, in particular the big cats. With our expert guides and dedicated photographic hides, spectacular wildlife photos are guaranteed.

'Derek Shenton's network of photographic blinds are both a tribute to Derek's ingenuity and to his superb knowledge of the wildlife of South Luangwa"
– Frans Lanting, National Geographic

" An African safari how it really should be experienced"
– Andy Rouse, star of Animal Planet's The wildlife photographer

www.kaingo.com • info@kaingo.com

LEMUR WATCHING

WITH NATURETREK THE UK'S LEADING WILDLIFE TOUR SPECIALIST

- *Visit Madagascar's Top 4 Lemur Reserves*
- *Expert Naturalist Guides*
- *Lemurs & other Malagasy Wildlife*
- *Tours September - November*
- *Cost from £3,695*

Naturetrek

NATURETREK.CO.UK 01962 733051

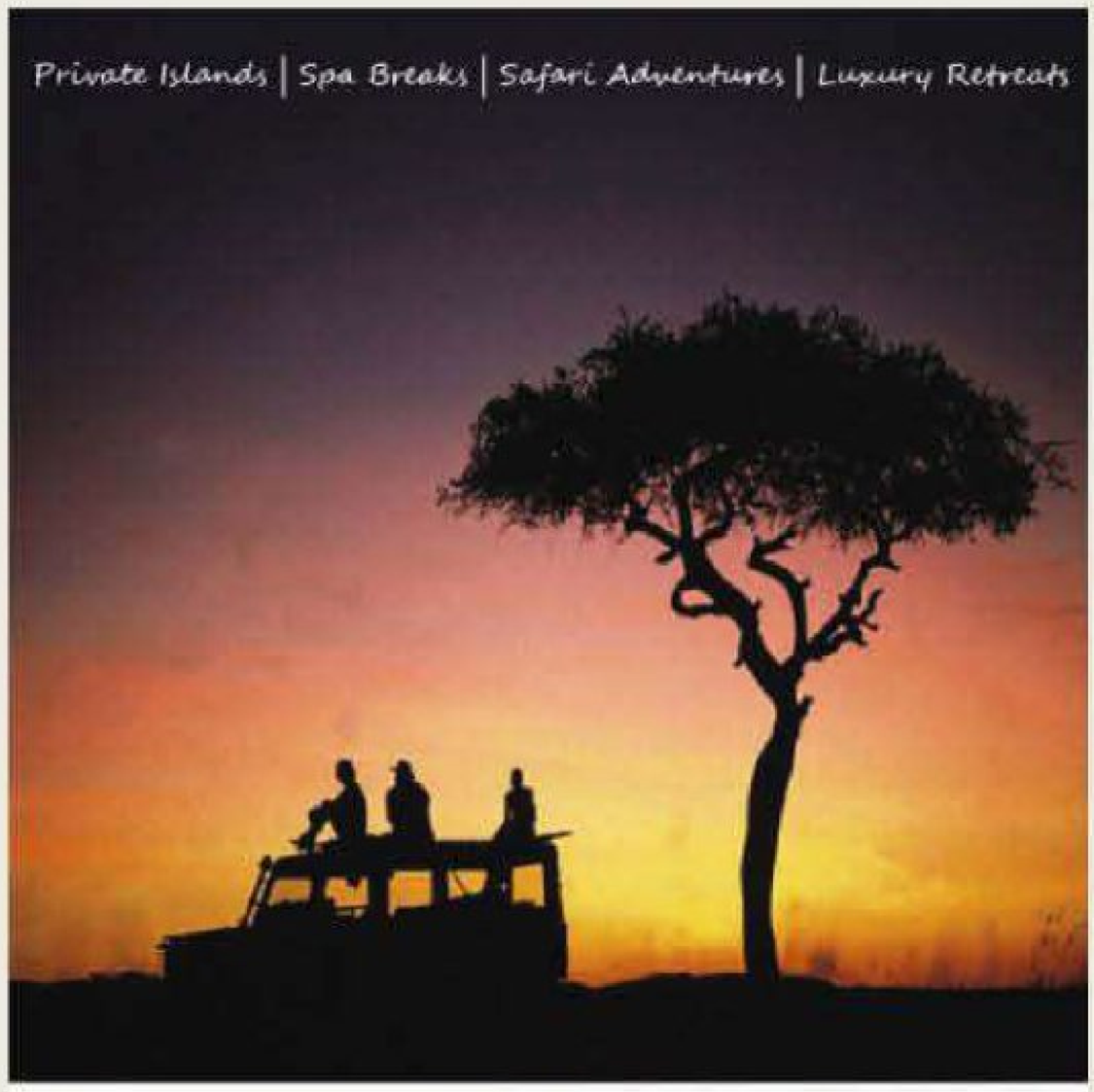
GAMEWATCHERS
SAFARIS & PORINI CAMPS

Offering Exclusive Kenya and African wildlife safaris for discerning travellers

Book via our UK team quoting "BBC" for your free *bush dinner experience.*

WWW.PORINI.COM

Call Our UK Office On
0870-471-7122



PureSafari.co.uk

Specialists in luxury safaris and tailor made adventures

Call: 01227 753181 to start planning your perfect trip.

EDUCATION AND CONSERVATION

Want to study animal courses from home?

COMPASS
EDUCATION AND TRAINING

Learndirect SCOTLAND

Lantra Awards Approved Training Provider

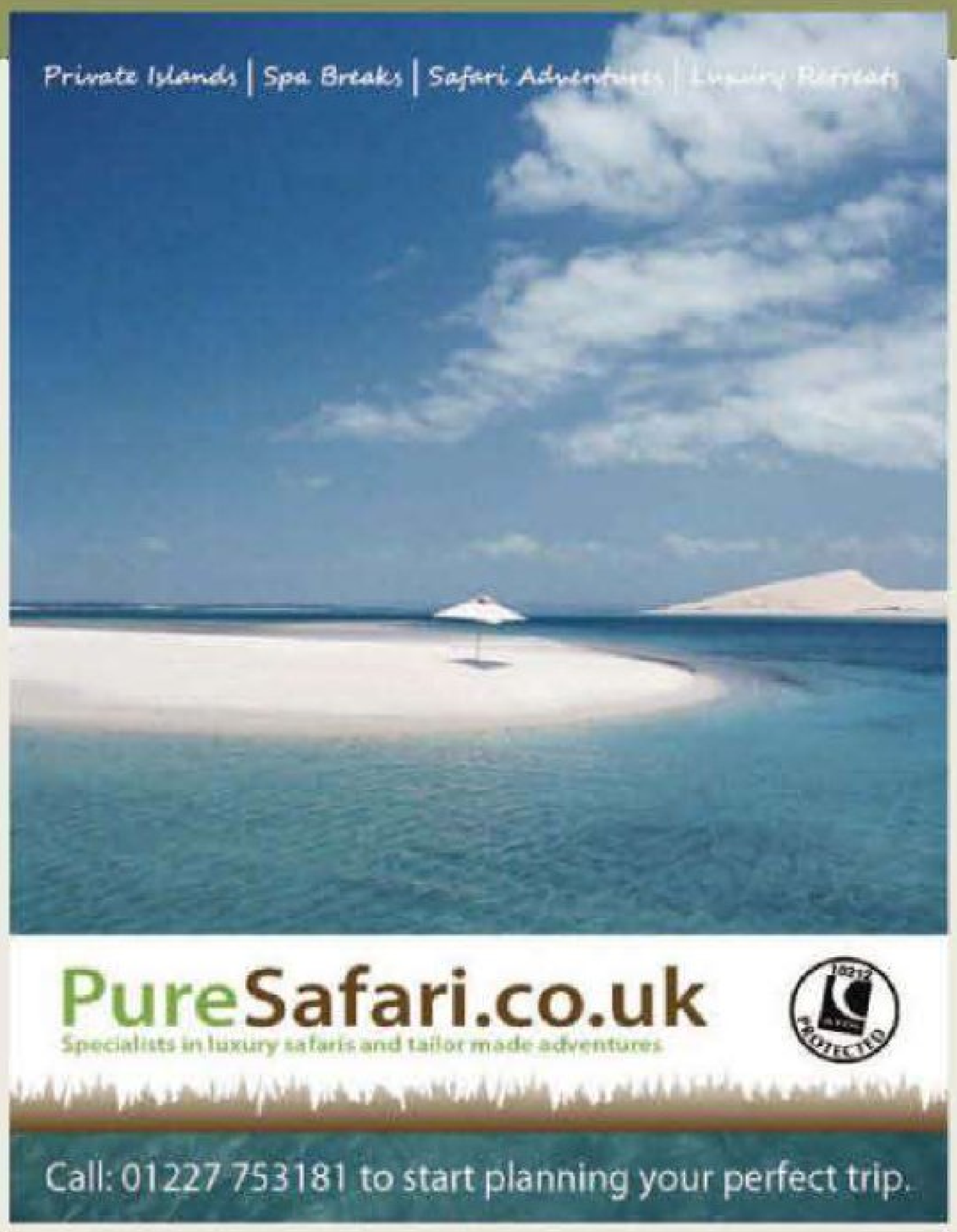
Choose from the widest range of animal related courses in the UK & get qualified in specialist subjects up to HND level from home. Interested in a career with animals? All of our courses are nationally recognised & accredited.

for more information visit: www.compass-education.co.uk
email: info@compass-education.co.uk or phone: (lo-call) 0845 458 5981

To advertise here please contact
Sam Jones
on 0117 314 8847

downloaded from: lib.ommolketab.ir

AFRICA



PureSafari.co.uk

Specialists in luxury safaris and tailor made adventures

Call: 01227 753181 to start planning your perfect trip.

The Mara migration, big cats and more!

If you want to experience the migration, big cats and the best that Kenya has to offer, then I invite you to join me.

I guarantee you will not be disappointed. With solitude, patience and knowledge of the game, I will get you upfront and personal with Africa's wildest animals.

Kenya is my home, my backyard, so let me share it with you! I can offer you fantastic wildlife experiences and photographic opportunities, of different durations, at unbeatable all-inclusive prices.

For your **FREE** copy of our safari DVD contact:
(0) 1295 711 595 or **enquiries@freemansafaris.com**

Please read some of our testimonials online at
www.freemansafaris.com

WILDLIFE CAMERAS

gardenature
WILDLIFE CAMERA SYSTEMS
Nest Box & Feeder Camera Systems from only £49.00!
Tel 0844 35 10 987
gardenature.co.uk

INDIA

TIGER WATCHING
WITH NATURETRK THE UK'S LEADING WILDLIFE TOUR SPECIALIST

- 100% Success Rate
- Visit India's Top Tiger Reserves
- 20+ Years Experience
- Expert Naturalist Guides
- Tours from £1,595

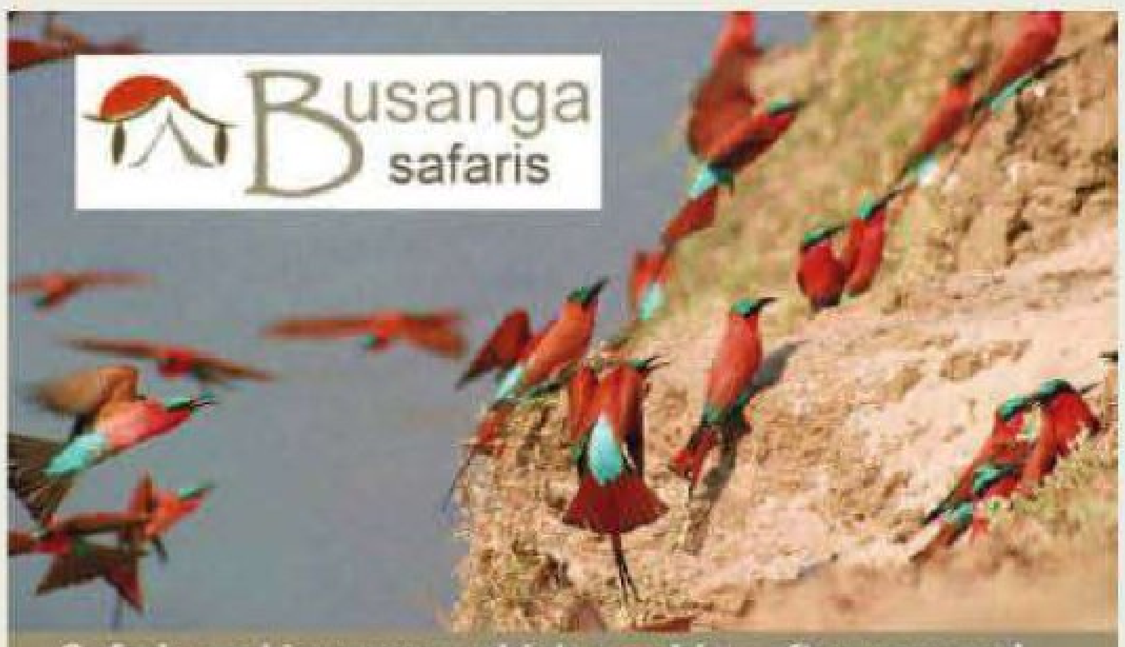
Naturetrek

ATTO NATURETREK.CO.UK 01962 733051

Extensive programme of Group Tours and full Tailor Made Service
Our expertise in tracking & viewing wild tigers is second to none
Unrivalled Experience ~ Unbelievable Choices ~ Unbeatable Value
Phone **+44 (0)115 9877796** or visit **www.lionscape.co.uk**

Lionscape indus

AFRICA



Safaris and journeys, which combine often rare and always interesting wildlife with wonderfully wild places

~ New 2011 dates for our very popular guided safaris
~ Camps with viewing blinds - Photography - Walking
~ Specific species (Wild dog - Lion - Gorilla - Rhino).
~ Green Season - Great Value & Great Wildlife
~ Safaris with a Birding Emphasis
~ Our website is full of great safari ideas which we can arrange just for you

FEATURED SAFARI

Dry Season Bush Experience in the Luangwa Valley:
A time of excitement drama and beauty. Small camps great guides. June to Nov **6 nights from only £1600.**
Can extend or combine with other areas

Choice Of Special Offers & No Single Supplements

Tel : 01628 621685 (7 days)
Email : info@busangasafari.co.uk
Web : busangasafari.co.uk

Atol bonded
Flight inc packages available

downloaded from: lib.ommolketab.ir

AFRICAN CONSERVATION EXPERIENCE

Make a difference as a conservation volunteer

WORK WITH THE WILDLIFE

- Conservation & wildlife management
- Elephant and cheetah monitoring
- Marine conservation
- Veterinary care and rehabilitation

T. +44 (0)1454 269182
www.conservationafrica.net
E. info@conservationafrica.net

BRITISH WILDLIFE EXPERIENCES

ARDNAMURCHAN ESTATES

Escape to the Highlands

Plan your escape to an idyllic cottage or country house in the West Highlands

With deer, eagles and otters on the doorstep, secluded beaches, breathtaking sunsets and views over island vistas, beautiful Ardnamurchan is almost an island itself. Relax into the gentle pace of life and spend your days fishing, walking, sightseeing and bird watching, or simply put your feet up and listen to the sound of waves on the shore. Whether it's seclusion you're seeking, or an activity-packed break with nature walks, wilderness drives and whale watching, your trip will certainly be one to remember.

Cottages AND houses sleep from 4 - 11 • Short breaks & special offers available

Call Ardnamurchan Estate on 01972 510208 or email: escape@west-highlands.co.uk • www.west-highlands.com

HOLIDAY BREAKS

imagine Ireland

- ✔ 100s of holiday cottages
- ✔ **Half-price deals** available
- ✔ Ferry travel & car hire available
- ✔ **FREE** 2011 brochure

7 nts Self-Catering From just £5 pppn Accommodation only

Find out more or Book Now call 01756 707785 or visit www.imagineireland.com

HOTELS AND LODGES

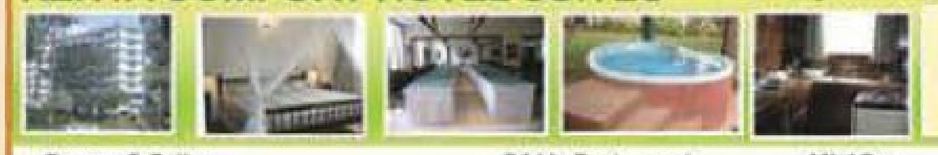
KENYA COMFORT HOTEL City Centre Opp Jeevanjee Gdns

Sgl US $ 45 (bo)

- 91 rooms
- Safe Deposit Facility
- Sun Lounge
- 24 Hr. Restaurant
- Coffee Shop
- Steam/ Sauna
- Blue Spirits Bar
- Conference Rooms
- Free Wi Fi

SMART CHOICE SUPERIOR VALUE HOTELS(NBI)

KENYA COMFORT HOTEL SUITES Lively Milimani Suburb



Sgl US $ 50 (bo) On going Improvement!

- Rooms & Suites
- Safe Deposit Facility
- Swimming Pool
- 24 Hr. Restaurant
- Parking
- Free Wi Fi
- Mini Bar
- Conference Rooms
- On Going Renovations

KCHS - TEL: (254) 0720/733-608867 or 0737-111-111
KCH - TEL: (254) 0722/733-608866 or 0737-777-777
comfort@kenyacomfort.com
www.kenyacomfort.com

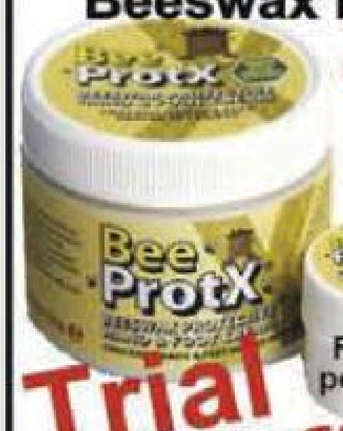
CONSERVATION

To advertise here please contact Sam Jones on **0117 314 8847**

MISC

BeeProtX®

Beeswax Barrier Hand & Foot Cream



Cracked Hands & Feet Healed in 10 Days!

Major breakthrough!

However bad they are our **Beeswax Barrier Hand & Foot Cream** works fast healing your cracked hands and feet. It penetrates deeply, moisturising your skin and is **non greasy.** It's also **water, chemical, oil & dirt resistant** so protects your hands from getting stained and chapped.

Tip: Refill this pocket tub!

Trial Offer!

FREE 1/4oz Pocket Tub worth £3.95 when you buy a 2oz Tub £9.95 + £3.95 P&P = £13.90

A very grateful Russ Waring writes: "...I have tried virtually every cream on the market and some on prescription but nothing has been effective. My wife bought me a 2oz pot of your Beeswax Barrier Hand Cream at a show and **I have been astounded by the results!!! The cracks on my hands (13 at the last count) healed in just over a week** and no-one in my family could believe it's from one small pot of cream."

This cream will really work for you!

Order with complete confidence as you have our 100% No Risk Money Back Guarantee!

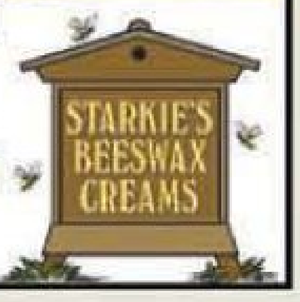
Order on line or phone and Pay by Credit/Debit Card

CALL FREE 0800 0588 911 (24/7)

More offers on our new website

www.StarkiesBeeswaxCreams.com

Cheques to:
Richard Starkie Associates, WL 5/11, Timber Cottage, Wistow, Leicester, LE8 0QF Email:sales@starkies.com



To advertise in the Directory please call Sam Jones: 0117 314 8847 or email SamJones@bbcmagazines.com

StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

WILDLIFE PHOTOGRAPHY

Wildlife Photography Workshops

With Sussex Wildlife Trust photographer David Plummer

Workshops include: Beginning Nature Photography, Woodland Birds, Woodland Butterflies, Red Deer Rut, Adders, Badgers, Bluebells and Orchids.

Tours to Brazil, Africa, Galapagos and India.

www.davidplummerimages.co.uk

or call **01273 494 753**

Exciting and original courses in Wildlife Photography in Devon

Learn how to find and photograph British wildlife

Visit the website for other courses plus those at Devon Wildlife Centre

www.wildlifephotographyfieldcraft.co.uk or Tel: 01803 813265

focus4nature

wildlife photography tours

Join focus4nature on one of our wildlife photography tours to:

Botswana - Chobe River from a boat with Brian Matthews

Mauritius - The Lost Land with Terry Whittaker

USA - Yellowstone in Winter with Mike Read

Gambia - Bee-eaters, Rollers and Kingfishers with Ashley Grove

Tasmania - Devils, Kangaroos and Wallabies with Dave Watts

Alaska - Coastal Bears with Bill Coster

Full details & tour programme at

www.focus4nature.co.uk

Contact us at: info@focus4nature.co.uk or 07736 948341

Advertise here... prices start from just **£100** per month

WILDLIFE CAMERAS

WILDLIFE PRODUCTS

WILDLIFE WATCHING SUPPLIES

ALL YOU NEED TO GET YOU CLOSER TO THE WILDLIFE

Protect your kit whatever the weather

Wildlife — Landscape — Sports

ONLINE SHOP

WEBSITE PHOTO TIPS
How to photograph wildlife, feeding stations and hides, Infra red trips

Wide range of hides, lens, camera and scope covers, scrim, bean bags, clothing, trail cameras and outdoor equipment.

Kevin Keatley, Wildlife Watching Supplies, Tiverton Way
Tiverton Business Park, Tiverton EX16 6TG
Tel: 01884 254191 • Fax: 01884 250460

www.wildlifewatchingsupplies.co.uk

SCOTLAND

Something very special

Northern Wanderer

6 or 12 day West Scottish Sailing Wildlife & Exploration Cruises

Join David Leavet
Well known Hebridean Wildlife Guide and Photographer (33 years' experience in the area)
All inclusive 6 & 12 day trips
Hebrides throughout Season
Western Isles &St Kilda June & August
Orkney & Shetland June & July
Maximum of only four guests

www.northernwanderer.co.uk
info@northernwanderer.co.uk
tel.01470 532393 mob/yacht 0780 8899356

SCOTLAND

GLENLOY WILDLIFE

Wildlife Holidays in the West Highlands

Stunning Locations

Wonderful Wildlife

01397 712700

www.glenloy-wildlife.org.uk

WILDLIFE GIFTS

Baobab Trading Co.

Reclaimed Metal Sculptures - Fairly Traded

Baobab Trading Co.

Perfect for gardens & interiors, priced £10-£350 & free delivery within mainland UK.

Contact us for a free catalogue.

www.baobabtrading.co.uk Tel: 01728 861889

To advertise in the Directory please call Sam Jones: 0117 314 8847 or email SamJones@bbcmagazines.com

downloaded from: lib.ommolketab.ir

WILD SCOTLAND

Scotland is Europe's top wildlife-watching destination, and offers everything from bird and whale-watching to boat and land safaris. All of Wild Scotland's members are committed to delivering first class wildlife experiences, so why not call us on 0845 226 0978 or visit www.wild-scotland.co.uk for your free guide?

NB. Map for illustration purposes only

1 WILD ABOUT GAIRLOCH FESTIVAL

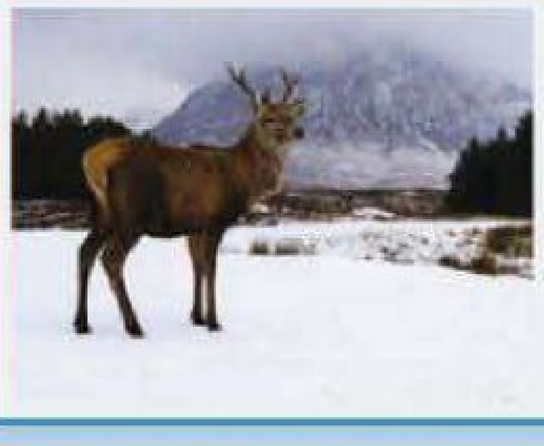
See amazing wildlife – including sea eagles, bats and dolphins - at the first ever Gairloch Wildlife Festival from June 23rd to 27th 2011. The exciting programme includes boat trips, guided walks, talks and social events.

www.wildaboutgairloch.co.uk

2 TORRIDON SEA TOURS

Experience breathtaking beauty, spectacular wildlife and exceptional service aboard the luxurious, newly built Seaflower. Operating from Shieldaig all year round to the beautiful Isle of Rona and Shiant Islands.

www.torridonseatours.com



3 UK WILDLIFE FILM SCHOOL

Equipped with HD television cameras, tent and camping kit, we'll visit some of Scotland's most remote and beautiful locations. Here you'll learn the logistical, camp-craft and camera skills needed to become a professional wildlife camera operator.

www.wildlifefilmschool.com

4 ROTHIEMURCHUS

Described by Simon King as the "best place in the world to watch ospreys fishing at close quarters". Fully guided, early-morning trips for all levels of photographic ability from enthusiast to professional. Other iconic species available.

☎ 01479 812345
info@rothie.net
www.rothiemurchus.net

5 SPEYSIDE WILDLIFE

From fully-inclusive holidays, in Scotland and around the world, for guests of all ages, interests and abilities, to day guiding, evening wildlife watching experiences and tailor-made tours for individuals and groups.

☎ 01479 812498
www.speysidewildlife.co.uk

6 ATHOLL ESTATES

Pony trekking on traditional Highland ponies through the stunning scenery of the Cairngorms National Park. Regular 1 & 2 hour treks for all abilities. Abundant wildlife including red squirrels, birds of prey, mountain hares and red deer.

☎ 01796 481568
www.blaircastletrekking.co.uk

7 FORESTRY COMMISSION SCOTLAND

From the Isle of Mull sea eagles and Knapdale beavers, to the Huntly peregrines, Aberfoyle red squirrels and much more besides, discover the wildlife and wild places within Scotland's forests.

☎ 0845 367 3787
www.forestry.gov.uk/scotland

8 SCOTTISH SEABIRD CENTRE

See amazing wildlife – including puffins and the Bass Rock gannets – at the world's leading remote wildlife viewing attraction. Boat trips (Mar-Oct) with exclusive Bass Rock landing – advance booking recommended.

☎ 01620 890202
www.seabird.org

9 ELIZABETH G CHARTERS

Outer Hebrides Explorer: 25 Jun - 4 Jul 2011. Join us on this cruise to the islands of Canna, Mingulay, the Monach Islands, St Kilda, the Shiant Islands with leading guide Stewart Richardson of Caledonian Adventures.

☎ 01688 302495
www.elizabethgcharters.co.uk

10 TURUS MARA

Take a walk on the wild side. Seabird and wildlife cruise tours. Landings on the Treshnish Isles, Staffa and Iona. Daily cruises from Ulva ferry on the Isle of Mull and Oban.

☎ 0800 085 8786
www.turusmara.com

www.wild-scotland.co.uk

Store Mags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

Stordiags.com

steppesdiscovery
conservation travel to protect

Kingdom of the Gorilla

July, August and September 2011 departures, guide price £1,425*

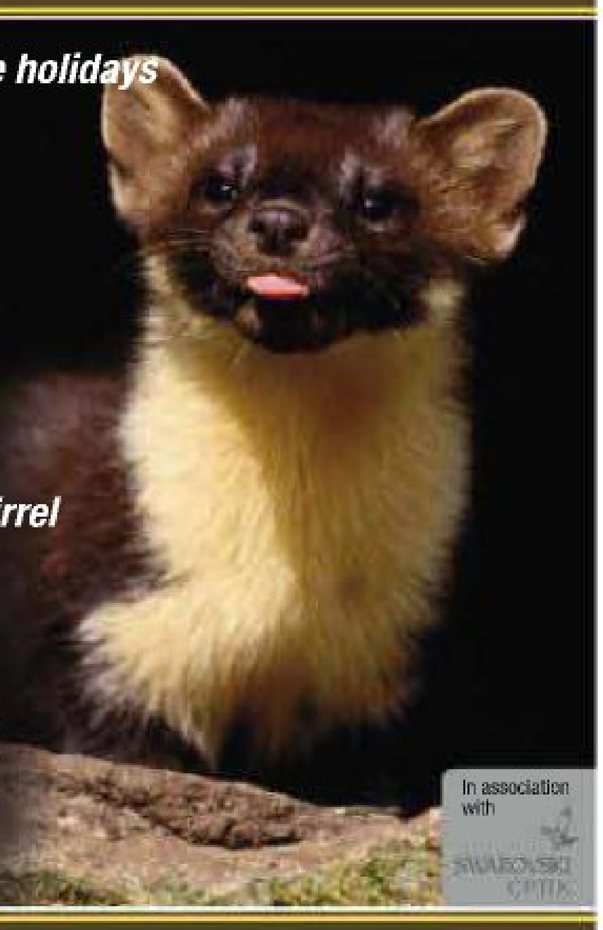
- 15 years experience of running gorilla tracking tours
- Meet researchers from the Mountain Gorilla Veterinary Project for a unique insight into primate conservation
- Small group tour of 8 places only, staying in comfortable lodges

Pioneers in ethical wildlife travel
enquiry@steppesdiscovery.co.uk
01285 643 333
www.steppesdiscovery.co.uk
*plus gorilla permits at £350 per permit subject to availability

AIGAS Sharing the Wonders of the Wild Highlands

Aigas Field Centre

The internationally acclaimed and award winning field centre for the Highlands and Islands



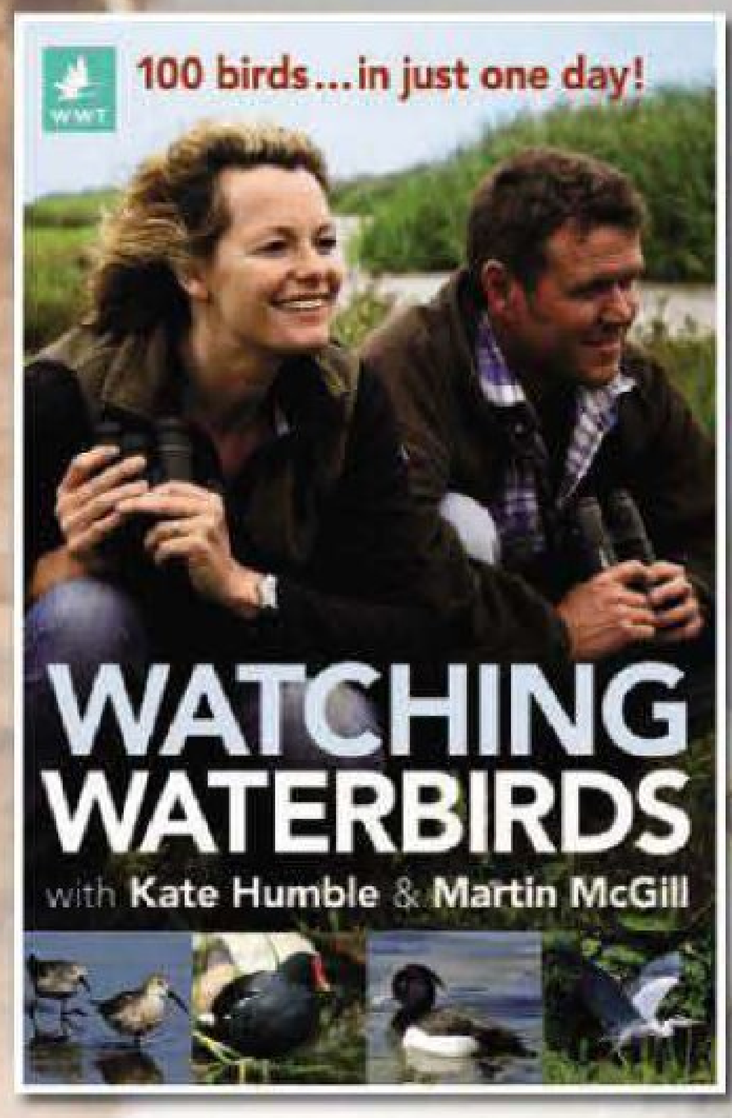
- All-inclusive Scottish wildlife holidays with no single supplement
- Brilliant birdwatching & wonderful wildlife
- Cosy lodge accommodation & exceptional food
- Private pine marten, red squirrel & beaver hides on our own reserve, nature trails & loch
- Discover the wild Highlands, Orkney, Shetland & Hebrides
- Holiday prize draw online

In association with SWAROVSKI OPTIK

Contact us for more information or a brochure

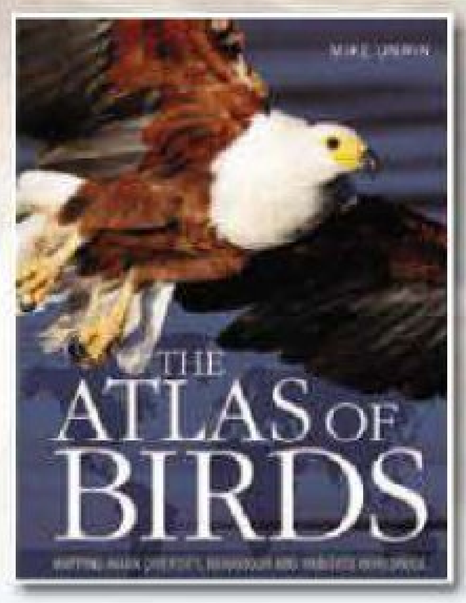
www.aigas.co.uk | info@aigas.co.uk | 01463 782443
Aigas Field Centre, Beauly, Inverness-shire, IV4 7AD

NEW
BIRD AND NATURE TITLES



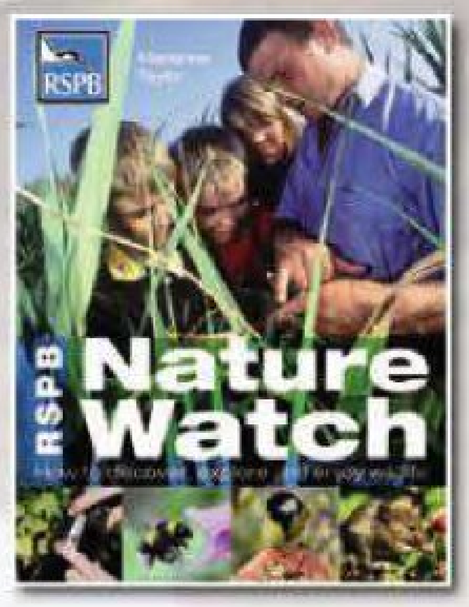
9781408130223 • £12.99

Kate Humble and Martin McGill invite you to take their great waterbird challenge - 100 birds in just one day!



9781408134702
£16.99

A stunning atlas of bird life complete with maps, illustrations and photographs.



9781408139745
£12.99

Discover and enjoy wildlife all around you – in gardens, fields, forests, along the river or by the sea.

Available from good bookshops

Read our blog: acbwildlife.wordpress.com
Follow us: **twitter.com/chiffchat**

BLOOMSBURY

downloaded from: lib.ommolketab.ir

Storiyeh.com

Your letters

We would love to hear your thoughts on any issue covered in *BBC Wildlife*, so please write to us.

PLEASE EMAIL YOUR LETTERS TO ME AT
wildlifeletters@bbcmagazines.com
OR POST THEM TO Letters, *BBC Wildlife*, 8th Floor, Tower House, Fairfax Street, Bristol BS1 3BN.

We really want to hear from you, but please keep your letters short (no more than 150 words). I'm sorry, but we can't acknowledge them and must reserve the right to edit as necessary.

JOINED-UP THINKING

I liked Mark Glover's harp seal pup picture that was chosen as April's Photo of the Month (Your Photos). But, in the caption, Mark wrote, "The ice is vanishing fast due to climate change. In 2009 there was enough ice to land a helicopter... [but] in 2010 most of the pups born in the southern Gulf of St Lawrence drowned." Perhaps he and a lot of other people should try joining up the dots.

Al Ritemann
Oundle

CAN WE SEE CETACEANS?

I have subscribed to *BBC Wildlife* for a year, and every month I am impressed by the standard of the photography and articles. I particularly enjoy the Discoveries section – it is fantastic to learn about the latest scientific revelations without having to trawl through all the journals.

One thing that strikes me is that many of the recent animal behaviour features have focused on terrestrial mammals. I would love to learn more about the behaviour of cetaceans. What about orcas, for example?

Charlene Butler
Via email

BBC Wildlife features editor **BEN HOARE** responds:
Charlene, the July issue (on sale 9 June) is packed with articles about whales and dolphins. Look out for the feature exploring the lives of Britain's orcas, an interview with one of the world's leading experts on cetacean intelligence in News, and a trip to see the bottlenose dolphins of Cardigan Bay in our new series about the UK's natural spectacles.

Alan Mould/www.clikpic.com/amould

READER LETTER OF THE MONTH

Sheep turn the tables on foxes

I really enjoyed Laurent Geslin's country foxes portfolio (April). The variety of behaviour showcased reminded me of an unusual incident I witnessed last year.

A vixen and her cub, which were evidently going somewhere in a hurry, entered a field full of sheep and began threading their way through the flock, completely ignoring the grazers.

The sheep seemed to see the situation somewhat differently, however, and flocked together to 'herd' the foxes around the field. This happened several times at an ever-increasing speed. Forced into a fast trot, the foxes finally took refuge in a ruined barn. Seemingly satisfied, the flock posted two sentries at the barn door and returned to grazing.

An hour later, when the sentries had lost interest, the poor foxes emerged and slipped away, unseen, over the nearest wall.

Mike Gibson
Via email

WIN A PAIR OF HIKING BOOTS

The Letter of the Month wins a pair of HI-TEC V-Lite Fasthike waterproof boots, worth £50 and perfect for hiking. They're available in sizes 7–13 for men and 4–8 for women. For more information, visit www.hi-tec.com/uk

FAMILY TIME

My daughter Lauren and my mother Pat – an avid reader of *BBC Wildlife* – enjoy nothing more than spending time together in the garden looking at wildlife. Lauren often comes home with all sorts of gems. Recently, she asked if I knew that a butterfly has 10 eyes. When I questioned this, Lauren replied, "Granny said it has antennae!"

Claire Smith
Macclesfield, Cheshire

FARMYARD FRIENDS

Your article on junglefowl (March) reminded me of the chickens we kept on our farm in the 1970s. One of them was christened Long John Chicken after one of her feet froze off. We took her into the house, and she lived in a box in the TV room. She was a particular fan of hockey games, getting very excited during a match, especially when a goal was scored.

One day, we made the mistake of putting her back with the flock. Within a week we found her flattened like a chicken placemat.

Graeme Gibson
Via email

HIGH JINX

Two weeks ago, my husband and I noticed a crow and a squirrel playing a game of 'tag' in our local park. The bird stalked the squirrel as it foraged, presumably searching for its hidden food caches. Every time the crow got too close, the squirrel whirled around and chased it off. The bird then flapped a metre away before resuming its observation. At one point the crow appeared to try to grab the squirrel's tail. Were the animals just having fun or was something else going on?

Lizzie Elhamri
Via email

HANDS OFF OUR CROWS

With regard to your news story on plans for a scientific magpie cull (May), it seems that SongBird Survival is still obsessed with the need for a predator cull in the UK to 'protect' our songbirds.

Most bird species found in Britain today have evolved

downloaded from: lib.ommolketab.ir

YOUR LETTERS

UNWELCOME DINNER GUEST

I came across this red-tailed hawk on the side of the road near where I live in Kentucky. Thinking it may be injured, I got out of my car and approached slowly, my camera slung around my neck. I couldn't understand why such an apparently healthy individual would allow me to get so close until I saw the remains of a mouse at its feet.

The hawk seemed to think that I wanted a share of the spoils as it ruffled its feathers indignantly. I backed off quickly and left it to its lunch.

Danielle Mussman USA

alongside each other and it goes against the laws of evolutionary survival for a predator to wipe out its prey. In some instances, it may be that species such as crows find it easier to plunder nests in thinner, flayed hedgerows, but the answer to this is to return the hedgerow to its former glory, not to kill the crows.

We may well have more woodland now than we did 50 years ago, but much of it is young and of poor quality due to a lack of management. We need better habitats, not scapegoats.

Shooting corvids is just fire-fighting. It is an expensive, inefficient and time-wasting pursuit that will not change the big picture for songbirds.

Jenny Holden
Cumbria

CARING FOR CHEETAHS

I have just returned from working on the most wonderful conservation project in Namibia. PAWS (People and Wildlife Solutions) is the volunteer 'arm' of AfriCat, which was seen last year on TV's *Cheetah Kingdom*.

Anyone looking for a professionally run, exciting project to work on could not find better. Not only did we help to improve the environment for the cheetahs, we even had hands-on experience with the cats and game drives every afternoon.

We also helped out at another project, run by the Rare and Endangered Species Trust, which is doing sterling work to protect the disappearing vulture population. Find out more at www.pawsnamibia.org

Sally-Anne Pinnington
Via email

CANINE COUSINS

I was interested to read that what until now has been called the Egyptian jackal is, in fact, more closely related to the grey wolf (News, April). On the same day I read your article, I also browsed an extract from the travel writings of Herodotus. In about 415BC, he noted that "the Egyptian wolf is not much bigger than a fox". So he clearly believed that it wasn't a jackal – and now the passage of time has proved him right.

It would be interesting to know at what point, and why, the animal's name changed from 'wolf' to 'jackal'.

Barry Pettit
Truro, Cornwall

TRADITION OR TORTURE?

If someone could come up with a humane way of killing whales, then the indigenous people of the Arctic – who kill one whale a year and waste nothing – could be a lesson to us all and a tradition worth saving (Letters, April).

But with the weapons they use, how long does it take for the whale to die? Now that we are aware of the pain and suffering we can cause (and have devised other ways to feed ourselves), is it not a high price we expect other creatures to pay for the luxury of preserving our traditions?

Jenny Mallinson
National Oceanography Centre

SAVE ORANGS, SHOP SMARTER

I could not agree more with the reader who asked for more information about the threats to the habitats of countries such as Madagascar (Letters, May). For those of us concerned about the environment, there is a desperate need to understand which products are okay to buy and which should be avoided.

My wife and I recently visited Borneo to see orangutans and were shocked to learn that more and more of their habitat is being cut down and replaced with endless palm-oil plantations. On our return to Britain, we vowed to try to shop more responsibly and boycott products that encouraged further deforestation.

Yet a year on, we are struggling to find the information that will enable us to make informed decisions. Can anyone provide a list of products that are wildlife-friendly so that we can support them and help the wildlife?

Vince Burton
Via email

BACK TO BEAVERS

It was interesting to read Simon Jones' response to my beaver letter (April). While some beavers in mainland Europe do live in areas with relatively low woodland cover, these are largely not under the same grazing pressure as they are in Scotland.

Restoring habitats would also enhance the long-term survival of beavers in our landscape. So riparian woodland health and expansion does, therefore, have a key role to play in establishing a thriving beaver population.

The return of the beaver also needs to be part of an integrated reintroduction of other keystone mammal species in Scotland – but that is a much bigger issue!

Alan Drever
Isle of Skye

FANTASTIC FOX PHOTOS

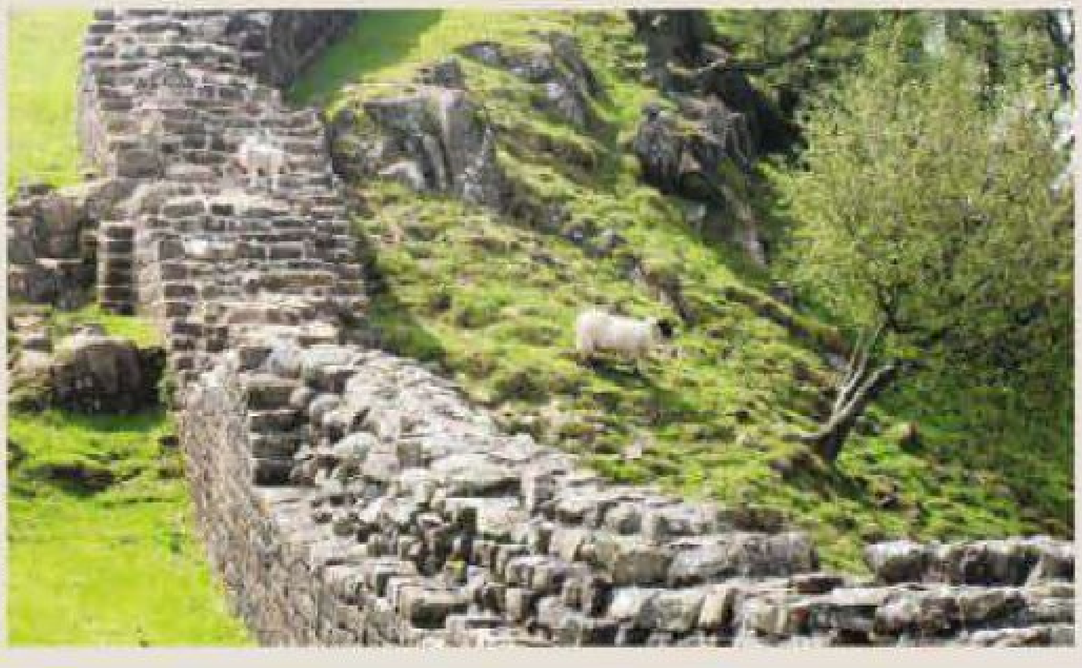
The grace and beauty of these amazing, intelligent animals was wonderfully captured in Laurent Geslin's photography (April). Mr Fox is, indeed, fantastic!

Chris Gale
Chippenham, Wilts

LITTLE LOST LAMB

I took this photo while on a family holiday trekking along Hadrian's Wall. The lamb had somehow managed to climb up on the wall, but was now stuck. As its mother munched on, oblivious, it kept looking for a way to get down. We paused under a nearby tree for lunch and watched. Eventually, the courageous youngster took a leap of faith.

Martin Heavisides Via email



StoreMags.com - Free Magazines Download In True PDF format

downloaded from: lib.ommolketab.ir

Sarkpaintings.com

SPECIAL INVESTIGATION

THIS LITTLE TURTLE WENT TO MARKET...

THE TRUTH ABOUT THE TRADE

As a biologist who recently assisted the US state authorities in the seizure and after-care of almost 26,000 animals from one of the world's major exotic pet wholesalers, who is also a UK supplier, I note that James Fair's article on the wildlife trade (April) revealed some disturbingly familiar truths: animal abuse, species and ecological threats, and pathogen transportation, to name a few.

I also saw some familiar, trade-inspired untruths. For instance: 8–10 million reptiles are kept as pets in the UK; 80–85 per cent of reptiles are captive-bred; and reptiles are easier to keep than dogs.

In the US case, of the 26,000 animals we confiscated, about 80 per cent were formally declared sick, injured or dead on inspection.

In court, the dealer's own 'experts' argued that overall conditions (including the roughly 500 animals, mostly reptiles, that were thrown daily into the bin, not always dead) were "in accordance with industry standards of the exotic animal trade". The judge, however, found that "all animals had been treated cruelly". Some industry standards are not always a good thing.

Clifford Warwick
Consultant biologist and medical scientist, Kensington, London

James Fair's article provided some important insights into life at the Heathrow Animal Reception Centre, but some errors warrant correction.

Available trade data suggests that there are, on average, about 500,000 reptiles kept as pets in the UK – not 8–10 million. Furthermore, UK reptile imports officially total about 300,000 a year and probably a bit more with 'unofficial' trade. This suggests that most reptiles die and are replaced on an annual basis.

Secondly, a statement by the Companion Animal Welfare Council was taken out of context. In its report, the council poses the possibility that a small hardy reptile (arguably, very uncommon in the pet trade) may be more manageable than some breeds of dog, such as a Great Dane.

Elaine Toland
Animal Protection Agency

Thank you for exposing the horrific trade in exotic animals in your special investigation. Unfortunately, the article seemed to gloss over and even miss some crucial factors integral to the pet trade. Unlike cats and dogs, 'pet' reptiles are largely imprisoned in small cages or vivaria and often succumb to stress-related disease and premature death. They are hardly ideal pets.

The bullet point quoting 8–10 million reptiles kept as pets in the UK may reflect the situation in the USA, where reptile-keeping dwarfs that of Britain.

Catrina Steedman
Reptile biologist

Data from the Pet Food Manufacturers Association suggests that about six million British homes (23 per cent) have dogs, and 650,000 (1.8 per cent) hold reptiles. But many are lone tortoises or single impulse buys. An old 'trade trick' is to exaggerate the market, and argue that unrestricted trade is significant to the economy. But analysis suggests that the cost to the public of removing abandoned and escaped reptiles and amphibians and dealing with introduced disease in Europe is in the millions of pounds – and rising. There are further costs for the RSPCA and other organisations that have to clear up the growing wreckage.

Tom Langton
Via email

DON'T STEP ON US!

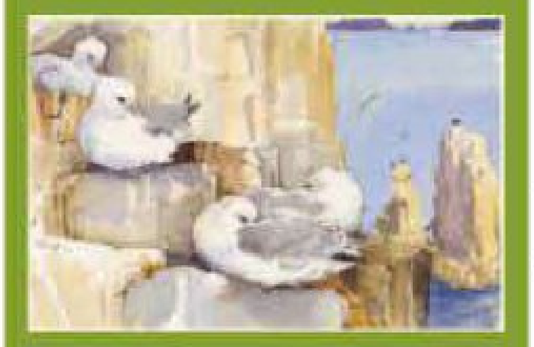
While walking across a field I almost stepped on these two tiny leverets. They couldn't have been more than 10cm long and I realised how vulnerable these tiny creatures are. There was another baby just out of frame, so a brown hare had given birth to triplets. Please remind people who walk their dogs across fields to keep them on a lead at this time of year, because baby hares and the chicks of ground-nesting birds are easily disturbed – and worse.

Kathy Langbridge
Suffolk

COPYCAT CORVID

Living in south Bedfordshire, I am lucky enough to see one or two red kites a week, and I am always in awe of them. A few days ago, I spotted a particularly low-flying individual. Moments later, a crow began following the kite closely, mimicking its every

THE BEST OF DiscoverWildlife.com



SEE STUNNING IMAGES

Breathtaking new galleries go live every week. Watch out for our beautiful art gallery of Sark wildlife by the Artists for Nature Foundation and Rosanne Guille.

ENTER OUR CONTESTS

Calling all researchers! Enter our camera-trap photo competition online and you could win a £3,000 grant. Closing date: 15 July 2011.

WIN GREAT GOODIES

Win top prizes in our monthly giveaways, such as this stunning silk scarf, inspired by the wildlife of Paraguay, courtesy of the World Land Trust and Liberty.

MORE THAN A MAGAZINE...

Digital edition available from Zinio (gb.zinio.com)

Chart-topping podcast – download it free from iTunes

facebook www.facebook.com/bbcwildlifemagazine

twitter twitter.com/bbcwildlifemag

Eland: Lorraine Boast

World Land Trust/Liberty

downloaded from: lib.ommolketab.ir

VINE HOUSE FARM bird foods

Wild Bird Food direct from our farm

High quality, low prices FREE next day delivery, and a low carbon footprint

All our bird food and other products are delivered to you direct from our conservation award winning farm, but what's even better is that we also grow as much of our own seed as possible. So not only do you get very high quality, low prices and free next day delivery, but you buy in the confidence that our carbon footprint is relatively low.

For more details on what seeds we grow at Vine House Farm, how we manage the farm for wildlife, and to see our full range of products, go to **www.vinehousefarm.co.uk** or call **01775 630208** for a free copy of our latest catalogue.

THE wildlife TRUSTS

5% of our takings go straight to the Wildlife Trusts

VINE HOUSE FARM BIRD FOODS
Deeping St Nicholas, Spalding, Lincolnshire PE11 3DG

Order online today at
www.vinehousefarm.co.uk
or call 01775 630208

SEE THEM IN TOTAL DARKNESS

THE FLIR H-SERIES HANDHELD NIGHT VISION CAMERA ENABLES YOU TO SEE IN DARKNESS USING PROVEN THERMAL IMAGING TECHNOLOGY. THE BENEFITS INCLUDE:

- PERSONAL SAFETY
- SAFE NIGHTTIME NAVIGATION OF SAFARI TERRAIN
- OBSERVATION OF WILDLIFE AND INDIVIDUALS UP TO 1.5KM

01285 740 543
www.iddynamics.com

SALES, LEASE OR RENT

ID DYNAMICS™

SEE HIM IN TOTAL DARKNESS

FLIR HANDHELD THERMAL IMAGING CAMERAS ENABLE YOU TO SEE OBJECTS IN TOTAL DARKNESS USING ADVANCED MILITARY TECHNOLOGY. WEIGHING ONLY 600gms - THEY TRANSFORM NIGHT INTO DAY. APPLICATIONS INCLUDE:

- PERSONAL & FAMILY SAFETY ON SAFARI
- DETECT POACHERS & BANDITS UP TO 1.5KM
- NOCTURNAL OBSERVATION OF WILDLIFE IN GAME RESERVES AND PARKS

SALES, LEASE OR RENT

01285 740 543
www.iddynamics.com/wildlife

ID DYNAMICS™

downloaded from: lib.ommolketab.ir

Storeklegg.com

NO ROOM FOR MAIL

I walked to the end of my road today to post a letter and discovered a polite notice placed on the letterbox by the Royal Mail. It explained that, for a short time, the box would be out of commission as it was acting as a bird box – a pair of blue tits are busily nesting inside it!

Michael J Vickers
Ashington

move. The red kite seemed annoyed, ducking and turning sharply, its movements mirrored exactly by the crow.

I have never seen this sort of behaviour before. Is it normal or just a mischievous crow?

Dominique Rhoades
Dunstable

BBC Wildlife features editor **BEN HOARE** responds:
The crow's behaviour is called mobbing and it's a common response to a perceived threat, especially during the breeding season. This behaviour is instinctive and may be triggered by the raptor's distinctive, fingered wingtip silhouette. But it's not just birds of prey that are mobbed – herons and roosting owls are often harried, too.

MINNOW MAGIC

Your photo of a male minnow in all its glory is the most beautiful I have seen (Q&A, May). Few naturalists or anglers are aware of this jewel. It is the net-wielding, risk-taking child who is most likely to discover the perky minnow's dazzling alter ego, and be changed forever by the experience. I remember a mossy, choppy rapid and two welly-fulls of water – was it really 50 years ago? Do today's children still know this kind of wild magic?

Steve Smailes
Warminster, Wiltshire

A MAMMOTH MISTAKE

I was concerned to read that scientists are attempting to bring the woolly mammoth back to life (News, April). Surely the considerable investment of money needed would be better spent on preserving existing endangered species?

Even if they succeed, the mammoth is going to be lonely so they will have to clone it a mate, and then try to grow a herd without inbreeding. It's just daft.

Howard Bowser
Fraserburgh, Aberdeenshire

BBC WILDLIFE ADVISORY PANEL

SIR DAVID ATTENBOROUGH
BBC natural history presenter

DR MARK AVERY
Conservation Director, RSPB

PROF CHRIS BAINES
Conservationist & gardener

JEFFERY BOSWALL
Wildlife film-maker

JOHN A BURTON
CEO, World Land Trust

MARK CARWARDINE
Zoologist, writer & photographer

DR PETER EVANS
Scientific Director, Sea Watch Foundation

DR PHIL GATES
Botanist, University of Durham

DR JANE GOODALL
Primatologist

MIKE GUNTON
BBC Natural History Unit producer

PROF STEPHEN HARRIS
Zoologist, University of Bristol

DR PETER HAYWARD
Honorary Research Fellow, University of Swansea

ANDREW JACKSON
Head, BBC Natural History Unit

TREVOR JAMES
Chairman, British Naturalists' Association

RICHARD A JONES
Entomologist

TONY JUNIPER
Environmental campaigner

SIMON KING
Wildlife presenter & film-maker

DR ANDREW KITCHENER
Principal Curator of Vertebrates, National Museums Scotland

TOM LANGTON
Herpetologist

RICHARD MABEY
Naturalist & author

PROF DAVID MACDONALD
Director, Wildlife Conservation Research Unit, University of Oxford

PROF ROBBIE MCDONALD
Head, Wildlife and Emerging Diseases Programme, Food and Environment Research Agency

STEPHEN MILLS
Naturalist & conservationist

DR PAT MORRIS
Mammalogist

STEPHEN MOSS
BBC Natural History Unit producer

DOUGLAS PALMER
Palaeontologist & science writer

VASSILI PAPASTAVROU
Whale biologist, International Fund for Animal Welfare

BRUCE PEARSON
Wildlife artist

ROBIN PRYTHERCH
Ornithologist

IAN REDMOND
Chief Consultant, UNEP/UNESCO Great Apes Survival Project

VALMIK THAPAR
Conservationist

BBC

BBC Wildlife Magazine is a BBC Worldwide magazine published by BBC Magazines Bristol. Our profits are returned to the BBC for the benefit of the licence-fee payer.

HEARING-IMPAIRED CALLERS
☎ 01795 418688

EDITORIAL
Editor Sophie Stafford
Deputy Editor Paul Bloomfield
Features Editor Ben Hoare
Environment Editor James Fair
Production Editor Seth Burgess
Art Editor Richard Eccleston
Designers Gary Nickolls
Picture Researcher Wanda Sowry
Editorial Assistant Heather McKay
Contributor Laura Churchill

ADVERTISING
Ad Director Caroline Herbert
Senior Ad Manager Laura Gibbs
☎ 0117 314 8760
Senior Account Executives Emma Muddimer & Tom Parker ☎ 0117 314 8387/8781
Classified Sales Executive Sam Jones
☎ 0117 314 8847

INSERTS
Laurence Robertson ☎ 00353 876 902208

MARKETING
Acting Head of Marketing Julie Sewell
Marketing Co-ordinator Mark Summerton
Press and PR Manager Carolyn Wray

SYNDICATION
Syndication Manager Simon Goodman
☎ 020 8433 1277;
simon.goodman@bbc.co.uk
Head of Licensing & Syndication James Hewes

PRODUCTION
Ad Co-ordinator Rachel White
Ad Designer Lisa Burridge
Production Director Sarah Powell
Production Co-ordinator Emily Mounter

BRISTOL MAGAZINES LTD
Publisher Jemima Ransome
Managing Director Andy Marshall
Editorial Director Nick Brett
Chairman Peter Phippen

PRICES
Subscriptions UK £46.80; Europe including Eire (printflow air) £43.45; Rest of World (printflow airsaver) £45

BBC Wildlife prefers to use images of wild animals in their natural habitats. Photographers, please help us by indicating clearly if you submit images of captive or semi-captive/rehabilitated animals.

BBC Wildlife provides trusted, independent travel advice and information that has been gathered without fear or favour. We aim to provide you with options that cover a range of budgets and we reveal the positive and negative points of all the locations we visit.

The publisher, editor and authors accept no responsibility in respect of any products, goods or services that may be advertised or referred to in this issue or for any errors, omissions, mis-statements or mistakes in any such advertisements or references.

© BBC Magazines Bristol 2011. All rights reserved. No part of *BBC Wildlife* may be reproduced in any form or by any means either wholly or in part, without prior written permission of the publisher.

Not to be resold, lent, hired out or otherwise disposed of by way of trade at more than the recommended retail price (subject to VAT in the Republic of Ireland) or in mutilated condition.

Printed by William Gibbons Ltd.

Competition terms and conditions
1. The BBC Code of Conduct for competitions can be found at www.bbc.co.uk/competitioncode and all BBC Magazines promotions comply with the Code. **2.** Competitions are open to all residents of the UK, including the Channel Islands, except BBC employees and anyone connected with the competitions. **3.** By entering a competition, the participants agree: to be bound by these terms and conditions; that their surname and county of residence may be released if they win a prize; that should they win the competition, their name and likeness may be used by BBC Magazines for pre-arranged promotional purposes. **4.** Entrants should follow the instructions for each competition carefully in order to enter. Entries received after the specified closing date and time will not be considered, and cannot be returned. **5.** All entries must be the original work of the entrant and must not contravene the rights of third parties. By entering the competition, the entrant grants to BBC Magazines a perpetual, irrevocable, non-exclusive licence to use the work for all purposes connected with the competition, including but not limited to post-promotion publicity. **6.** Entrants must supply to BBC Magazines their full name, postal address and daytime telephone number. You can read more about the BBC Privacy Policy at www.bbc.co.uk/privacy. **7.** Only one entry will be permitted per person, regardless of method of entry. Bulk entries made by third parties will not be permitted. **8.** The winning entrant will be the first correct entry drawn at random after the closing time, or, in creative competitions, the one that in the judges' opinion is the best. **9.** There is no cash alternative and prizes will not be transferable. **10.** BBC Magazines' decision as to the winner is final and no correspondence relating to a competition will be entered. **11.** The winner(s) will be notified by post, telephone or email. **12.** BBC Magazines reserves the right to amend these terms and conditions or to cancel, alter or amend a competition at any stage, if deemed necessary in its opinion, or if circumstances arise outside its control. **13.** If the winner is unable to be contacted within one calendar month of a competition's closing date, BBC Magazines reserves the right to offer the prize to a runner-up, or to re-offer the prize in any future BBC Magazines competition. **14.** BBC Magazines excludes liability to the full extent permitted by law for any loss, damage or injury occurring to the participant arising from his or her entry into a competition or occurring to the winner(s) arising from his or her acceptance of a prize. **15.** The competitions are subject to the laws of England.

FSC www.fsc.org MIX Paper from responsible sources FSC® C015155

BBC Magazines is working to ensure that all of its paper is sourced from well-managed forests. This magazine is printed on Forest Stewardship Council (FSC) certified paper.

This magazine can be recycled, for use in newspapers and packaging. Please remove any gifts, samples or wrapping and dispose of it at your local collection point.

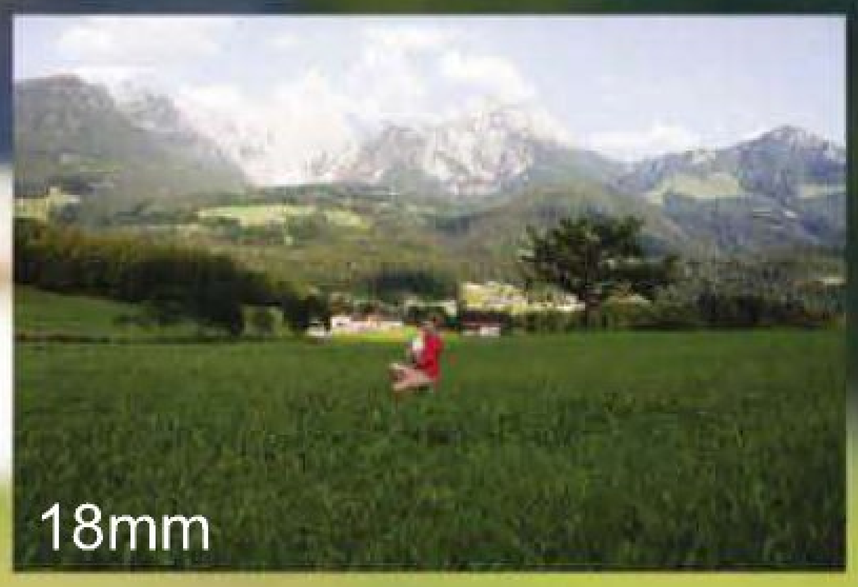
recycle
When you have finished with this magazine please recycle it

ABC Jul–Dec 10 45,131

NRS Oct 09–Nov 10 323,000

downloaded from: lib.ommolketab.ir

StoreMags.com



Main image: Focal length 270mm
Exposure F6.2

One lens
Every moment

PZD VC

Features Tamron's PZD (piezo ultrasonic motor) technology for superfast and silent autofocusing

18-270mm F/3.5-6.3 Di II VC PZD

NEW - 60th Anniversary Model

The world's lightest, most compact 15x Zoom (i)
Features Tamron's first piezoelectric autofocus motor PZD (Piezo Drive)
Built-in VC (Vibration Compensation)

(i) For SLR camera high-zoom-ratio lenses with 15x magnification capability. Current as of December 2010. (Source: Tamron).

Available in Canon, Nikon and Sony mounts: The Sony mount does not include the VC (Vibration Compensation) image stabilization functionality, as the body of Sony digital SLR

TAMRON STOCKISTS

Bristol Cameras - Bristol 01179 140089 www.bristolcameras.co.uk **Cambrian Photography** - Colwyn Bay 01492 532510 www.cambrianphoto.co.uk
Camera Centre Cardiff - Cardiff 02920 394182. Newport 01633 262738 www.cameracentrecardiff.co.uk **Camera Solutions** - Chester 01244 403540 www.camerasolutions.co.uk
Cameraworld Ltd - London & Chelmsford 0844 264 0664 www.cameraworld.co.uk **Carmarthen Camera Centre** - Carmarthen 01267 223355 www.carmarthencameras.co.uk
Castle Cameras - Bournemouth 01202 526606 www.castlecameras.co.uk **Clifton Cameras** - Dursley 01453 548128 www.cliftoncameras.co.uk
Conns Cameras - Dublin 00353 1 677 7179 www.connscameras.ie **Devon Camera Centre** - Exeter 01392 201718 www.devoncamera.co.uk
Jacobs Ltd - 0845 600 6055 www.jacobsdigital.co.uk **Jessop Group Ltd** - 0800 083 3113 www.jessops.com **London Camera Exchange** - Bath 01225 462234.
Bristol 0117 9276185. Cheltenham 01242 519851. Colchester 01206 573444 Derby 01332 348644. Guildford 01483 504040. Leamington Spa 01926 886166.
London (Strand) 0207 3790200. Portsmouth 023 9283 9933. www.lcegroup.co.uk **Mifsud Photographic** – Brixham 01803 852400 www.mifsuds.com
Morris Photographic Centre - Chipping Norton 0845 430 2030 www.morrisphoto.co.uk **O'Learys Camera World** - Cork 00353 214 273988 www.olearyscameraworld.ie
Pantiles Cameras - Sevenoakes 01732 742988 www.pantilescameras.co.uk **Park Cameras** - Burgess Hill 08450 502266 www.parkcameras.com
S.R.S.Micros - Watford 01923 226602 www.srsmicrosystems.co.uk **Walters Photo Video** - Merthyr Tydfil 01685 723419 www.waltersphotovideo.co.uk
Warehouse Express - 01603 486413 www.warehouseexpress.com **Frank Wilkinson Cameras** - Preston 01772 556250. Southport 01704 534534 www.wilkinson.co.uk

Intro 2020 Ltd. Priors Way, Maidenhead, Berkshire SL6 2HP
Tel: 01628 674411 sales@intro2020.co.uk www.tamron.co.uk

TAMRON
New eyes for industry

downloaded from: lib.ommolketab.ir

StorkEgg.com

Your photos

Share your most special moments with wildlife, at home and abroad.

EMAIL YOUR PHOTOS AND STORIES TO
wildlifephotos@bbcmagazines.com

- Please submit your photos as 300dpi jpegs (at largest possible size) labelled with your name and subject. Accompany each photo with a 70-word story.*
- Submission of your photos to Your Photos constitutes a grant to *BBC Wildlife* to publish them at any time in any media with attribution.

PHOTO OF THE MONTH

1

1 EXOTIC LOOKS
Early one morning I noticed petals falling like confetti from the cherry trees in London's Bushy Park. I went over and found a flock of ring-necked parakeets pecking the spring blossom, presumably to drink the nectar. They are destructive birds, but their bright green plumage was so beautiful against the pink flowers and blue sky.
Emma Durnford
Teddington

2 PLAYFUL CUBS
Walking through a Polish forest last May, I heard a commotion. Creeping closer, I saw two fox cubs chasing each other through the trees. When one paused to scratch, we made eye contact for several magical moments. Staying very still I captured this unforgettable scene and then the game of tag resumed.
Celine Clark Age 14
Chelmsford, Essex

2

WIN, WIN, WIN

The photo of the month wins Powertraveller's award-winning powergorilla, a portable charger that gives laptop users 2–5 hours of power and over 20 hours on other 5V devices. The powergorilla works with devices up to 24V, from laptops to mobile phones and iPods, and comes with a mains charger and a host of adaptors. Weighing just 631g, the powergorilla gives you power... without boundaries.
www.powertraveller.com

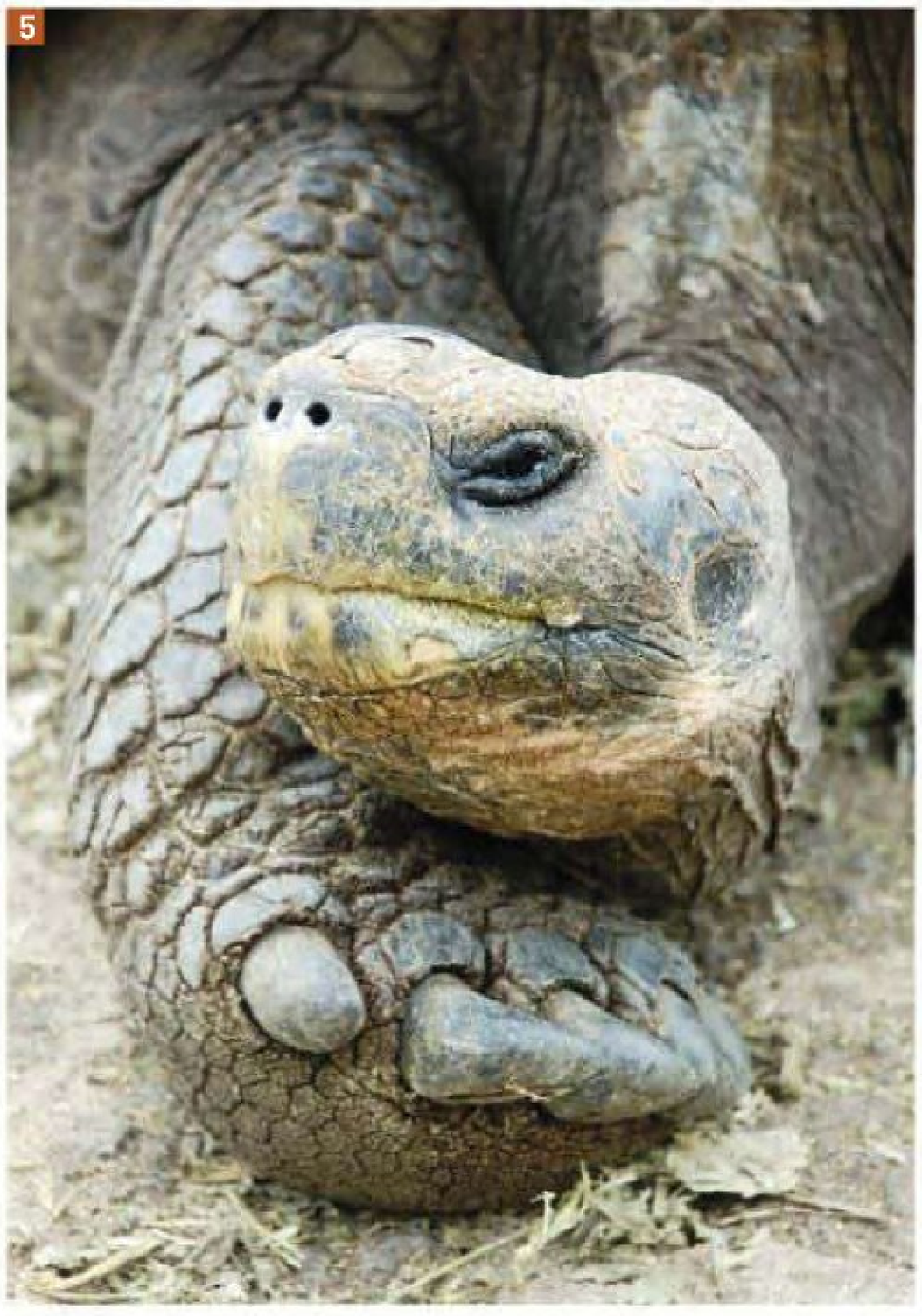
** Sorry – we can't acknowledge receipt of photos and reserve the right to crop and edit as necessary.*

downloaded from: lib.ommolketab.ir

Your photos

3

4


5

3 SUPERSTAR CAT

I visited the Sabi Sand Reserve in South Africa hoping to finally get close to a leopard. We spotted one known as Nyeleti, meaning 'star', lying in a tree. She was so graceful and peaceful that it was hard not to fall in love. After a wonderful hour, we left her to sleep.

Danny Laredo
Via email

4 FEEDING TIME

I was enjoying my morning cereal when I noticed this little sparrow receiving its own breakfast on my bird table.

Alan Derrett
Via email

5 PATIENCE PAYS

On Santa Cruz Island, the Charles Darwin Research Centre runs a giant tortoise breeding programme. The older individuals are so large that their movements are slow and deliberate, and I waited an eternity for this ancient fellow to raise his head.

Sarah Langford
Via email

StoreMags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

BookKage.com

6

7

9

6 SUNNY DELIGHT
You don't have to go far to find wildlife that is worth photographing. This handsome wasp was resting on chrysanthemums outside my back door last October. He posed in the sun for ages, so I was able to get some good shots.
Barbara Graham
Ashington

8

7 TETCHY MONKEYS
In southern India I came across a troop of monkeys. This baby had tried to drink from a nearby borewell but couldn't get at the water, so it tugged at its parent's arm for help. The adult just wanted to lie in the shade and snarled at it!
Ravi Prakash Parvatharaju
Essex

8 BATHING BEAUTY
On an early morning visit to Hickling Broad Nature Reserve in Norfolk, we spotted this female adder coiled around the reeds at the side of the track basking. She stayed still just long enough for us to get a picture.
Tim and Liz Illson
Loughborough

9 TRESPASSERS BEWARE!
On holiday in the Svalbard archipelago, we stumbled across an Arctic tern's nest, and the homeowner wasn't best pleased. After attacking my brother for a bit, it moved on to me. Dodging its needle-sharp beak, I couldn't resist a quick snap before fleeing!
Helena Barton
Hereford

PHOTO CONTEST Some of your best photos from April's online competition

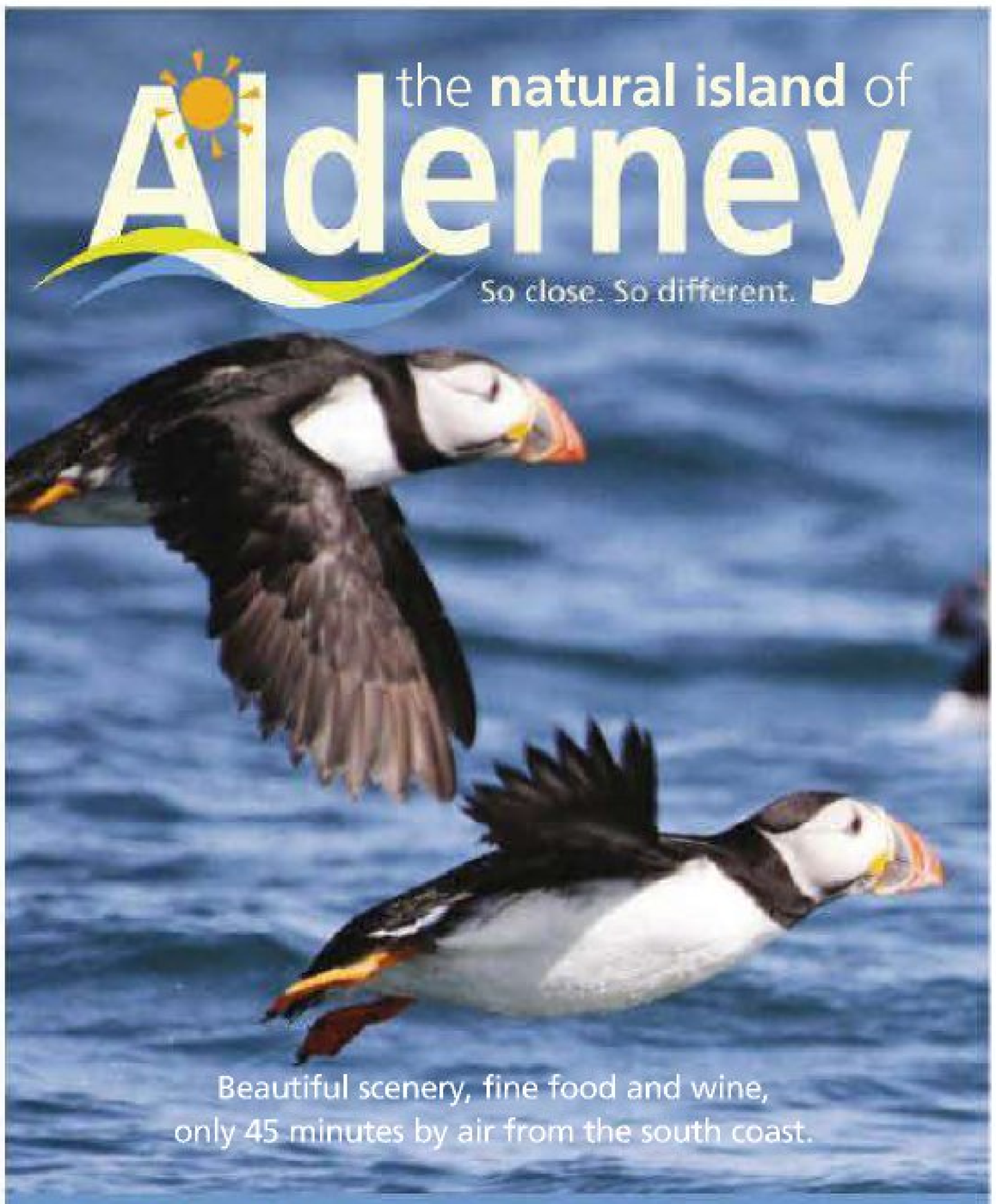
LITTLE RHINO By Anuradha Marwah

WHERE'S MUM? By Mike Paterson

MUMMY I'M HUNGRY By Andrew Hutchison

For galleries, contests and expert Photo Masterclasses, visit us online at DiscoverWildlife.com

downloaded from: lib.ommolketab.ir



Tel: 01481 822333 Email: brochures@visitalderney.com

www.visitalderney.com/wildlife

Regal™ F-ED

by CELESTRON

Choose from
Regal 65F-ED
Regal 80F-ED
Regal 100F-ED

The new Regal Flouro ED APO Spotting Scopes are the finest ever offered by Celestron. The APO optical system utilises a fluorite mineral element and multi-coatings on all air to glass surfaces to deliver superior levels of contrast, colour fidelity and sharpness.

The new dual speed focuser ensures fine detail is perfectly focused every time. In addition to the included Wide Angle zoom eyepiece, Celestron's optional 31.7mm eyepieces will attach easily to make this not only the best value but most flexible Spotting Scope series available now.

To discover more and to find your nearest Celestron dealer please visit **www.celestron.uk.com**

Celestron is distributed in the UK, Ireland and Scandinavia by:

Dealer enquiries welcomed.

Celestron® and Regal™ is a trademark or a registered trademark of Celestron Acquisition, LLC in the United States and in dozens of other countries around the world. All rights reserved. David Hinds Ltd is an authorised distributor and reseller of Celestron products.

dh DavidHinds Ltd

David Hinds Ltd Unit B, Chiltern Industrial Estate, Grovebury Road, Leighton Buzzard, Bedfordshire LU7 4TU

PARKCameras 40

KEEPING YOU IN THE PICTURE 1971 - 2011

www.ParkCameras.com/Wildlife

Tel: 01444 23 70 52

Photographic Experts since 1971!

Visit www.ParkCameras.com/40 and celebrate our 40th Anniversary!

Nikon | **PROFESSIONAL** Dealer

SPECIAL OFFER!

Nikon EDG Binoculars

Class-leading binoculars with superior ergonomics

7x42 | 8x32 | 8x42 | 10x32 | 10x42

Prices from £1,449.99

Only £19.99 Normally £30

Purchase any Nikon binocular or scope and receive a Nikon backpack at 1/2 PRICE!*

*Subject to availability

Please quote BBC Wildlife: 336007888

Nikon 9x25 CF Travelite V

Only £69.99

SRP £161.99

Nikon 12x25 CF Travelite V

Only £69.99

SRP £142.99

Visit our showroom in West Sussex & try before you buy!

Nikon Fieldscope EDG 65mm + FSA-L2 DSLR Attachment

Special Deal £1,848.99

Combined SRP £2,243.98

Swarovski 8x20 Compact

Only £440.00

SRP £490.00

SWAROVSKI

Swarovski EL 8x32 WB

Only £1,335.00

SRP £1,480.00

Swarovski EL 10x32 Green

Only £1,395.00

SRP £1,560.00

Swarovski ATM 65 HD Scope

Only £1,290.00

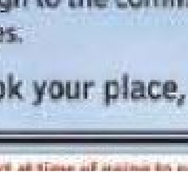
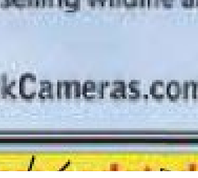
SRP £1,595.00

Swarovski ATM 80 HD Scope

Only £1,790.00

SRP £2,210.00

Visit our website for even more Swarovski Optical products

Canon EOS 600D + 18-55mm IS	Nikon D90 + 18-105mm ED VR	Panasonic G2 + 14-42mm O.I.S
Our Price £739.00	 Our Price £679.99	 Our Price £419.99
• 18 megapixel sensor • Full-HD EOS Movie • 3.7fps continuous shooting • 3.0" Vari-angle LCD Screen SRP £769.00	• 12.3 megapixel sensor • Innovative D-Movie function • 4fps continuous shooting • 3.0" LCD Screen SRP £1,029.99	• 12.1 megapixel sensor • HD Movie AVCHD Lite (720p) • 3.2fps continuous shooting • 3.0" LCD Touchscreen SRP £639.99

Beyond Basics with George McCarthy

24th June or 23rd September 2011 - £119.99

This is a new in-house course brought to you by Park Cameras in association with professional wildlife & nature photographer George McCarthy.

Filled with numerous tips and tricks, George has created this course specifically for aspiring wildlife photographers, who really want to fast track their nature photography skills and techniques. It deals with the initial complexities of buying the correct equipment right through to the commercial aspects of selling wildlife and nature images.

For full details and to book your place, visit www.ParkCameras.com/Wildlife

downloaded from: lib.ommolketab.ir

StoreMags.com

Next month

BBC Wildlife

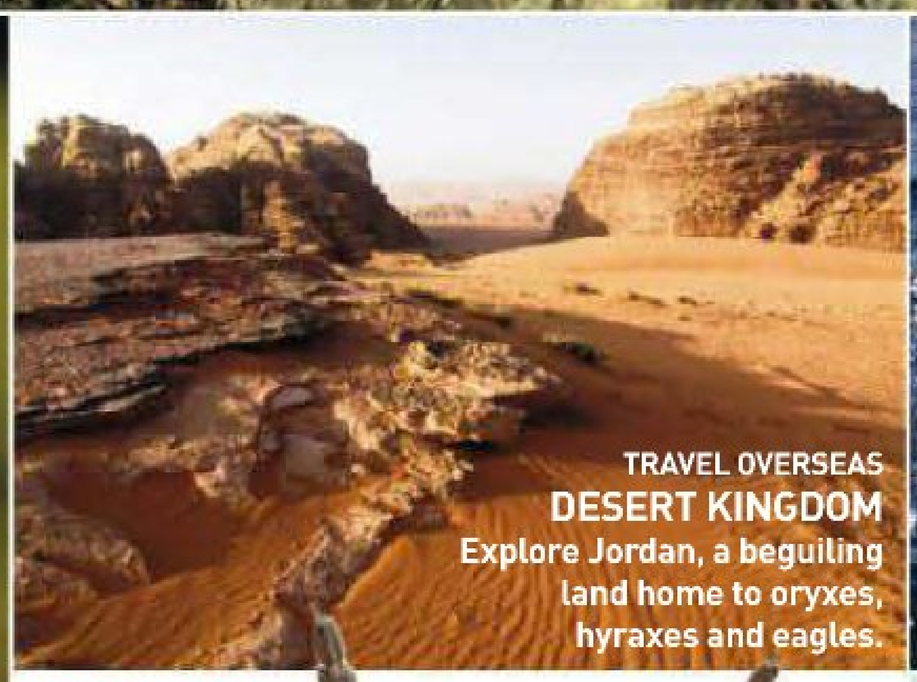
MASKED BANDIT

Hang out with the raccoon: America's mischief-maker that's running riot in the city.

ANIMAL BEHAVIOUR

STINK BIRD

Meet the hoatzin – the leaf-munching *Archaeopteryx* lookalike creating a pong in the Amazon.



TRAVEL OVERSEAS

DESERT KINGDOM

Explore Jordan, a beguiling land home to oryxes, hyraxes and eagles.

BRITISH WILDLIFE

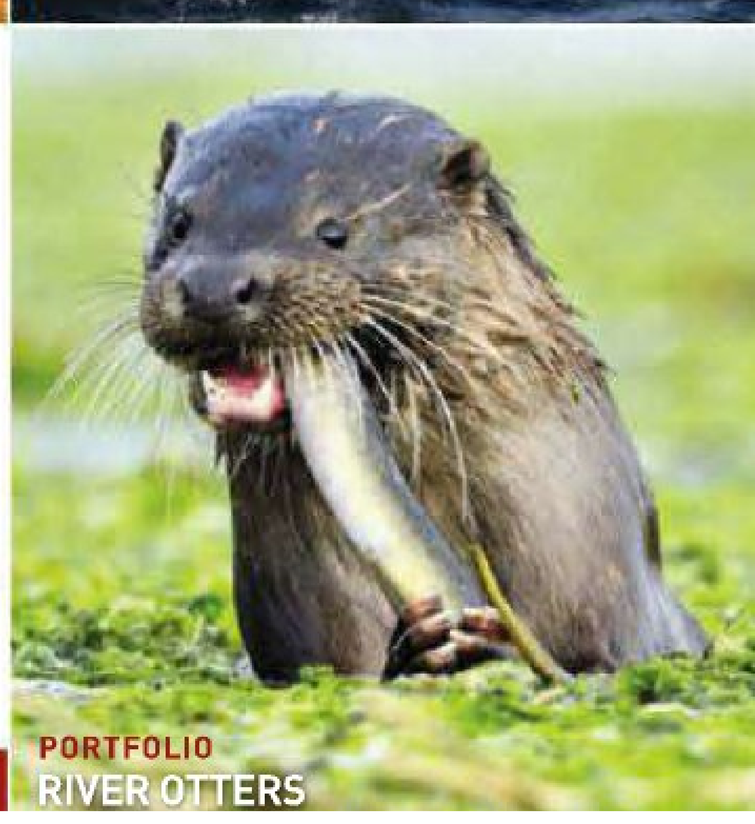
ORCA WATCH UK

Discover the secret life of 'John Coe' and the rest of his pod.

PEOPLE AND ANIMALS

WHO'S AFRAID OF SPIDERS?

Why do arachnids frighten us – and is there a cure?



PORTFOLIO

RIVER OTTERS

PLUS...

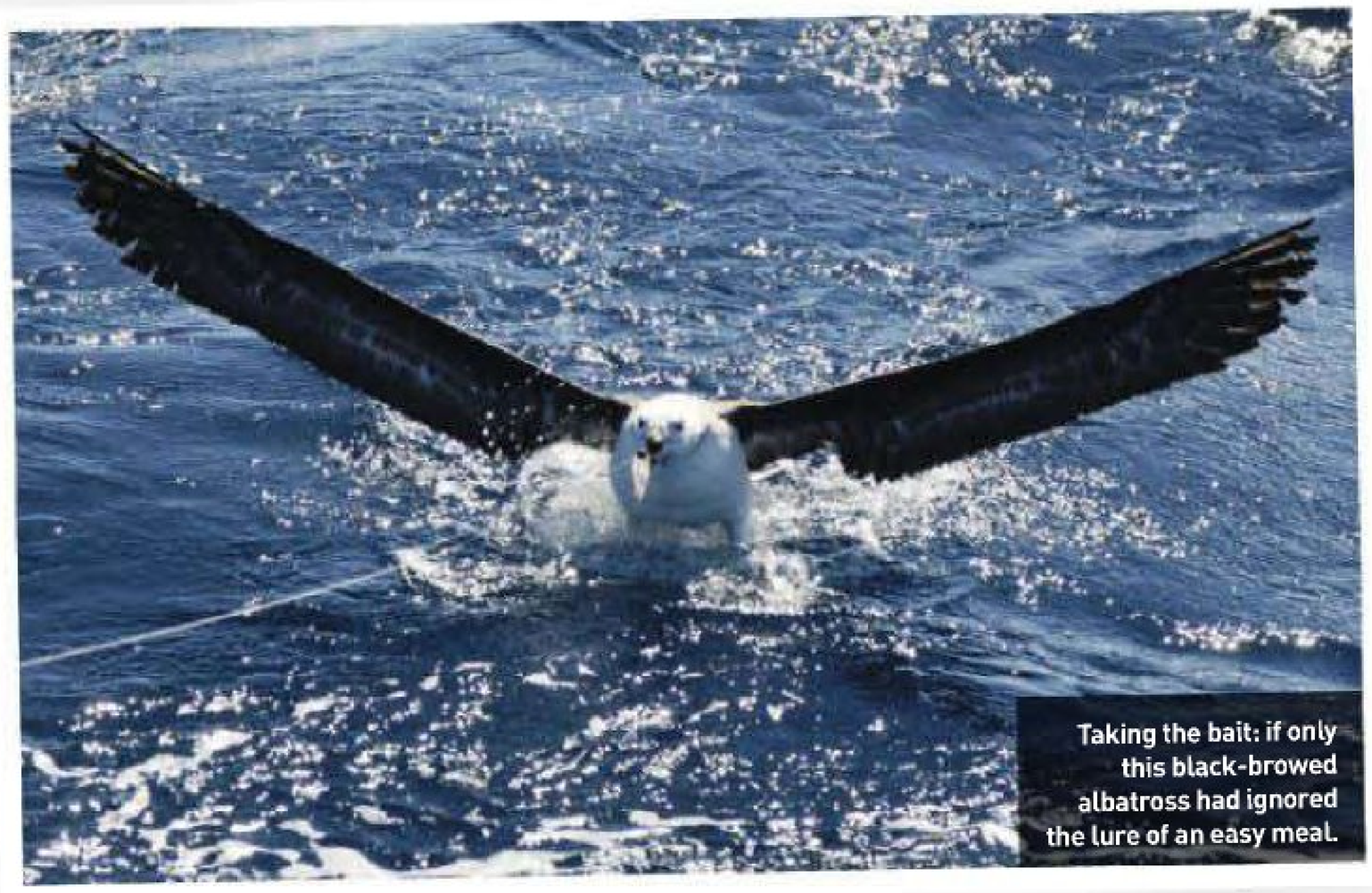
MARVEL AT CARDIGAN BAY'S BOTTLENOSE DOLPHINS • BRITISH SEAL ENCOUNTERS • 12 HEATHLAND SPECIES TO SPOT • TAKE BETTER PHOTOS IMPROVE YOUR USE OF LIGHT

Clockwise from top left: Affo/naturepl.com (captive); Hugh Harrop; Laurie Campbell; Gerry Pearce/NHPA (captive); Pete Oxford/naturepl.com; Alessandra Sarti/Imagebroker/FLPA

downloaded from: lib.ommolketab.ir

Off the hook

As the Ancient Mariner knew all too well, killing an albatross brings bad luck. So if you see one in trouble, act fast...

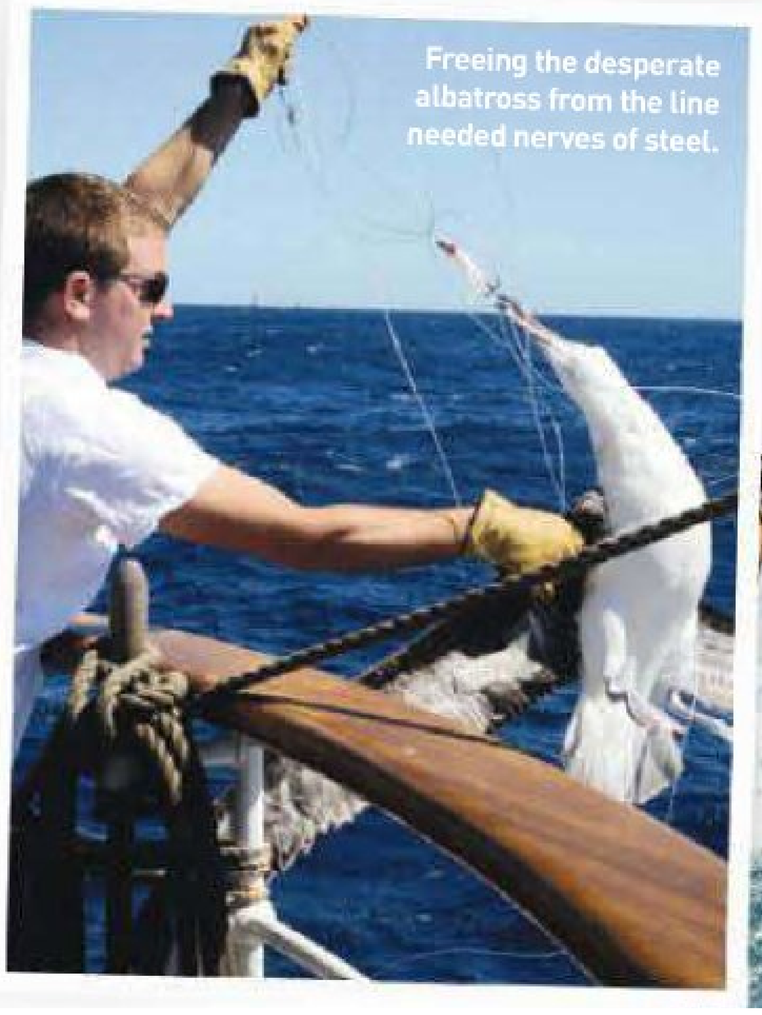


Taking the bait: if only this black-browed albatross had ignored the lure of an easy meal.

ANTHONY SMITH
Artist
South Atlantic

THE THREE-MASTED tall ship is slicing its way down the Atlantic, bound for Rio de Janeiro, on a journey recreating Darwin's voyage on the *Beagle*. Sails billow overhead as I step onto the deck to gaze at the green Brazilian coast slipping by. Spectacled petrels, sooty shearwaters and black-browed albatrosses glide in our wake, swooping across the crests of the waves, disappearing into the hollows and then rocketing out again.

A shout makes me jump. I look up to see an albatross splash violently into the sea off our stern. It is immediately dragged back into the air by the tug of a fishing line that appears to be snagged in its beak. The bird spreads its wings, fighting the pull, but it's caught fast. Other black-brows swoop down and try to force it to regurgitate its catch. If only it could.



Freeing the desperate albatross from the line needed nerves of steel.

Common dolphins rode the ship's bow wave.

Photos by Anthony Smith/anthonysmithart.co.uk

The lure on our fishing line had been trailing below the surface, well out of reach of our hungry avian pursuers. But as the wind picked up and drove us faster through the water, it must have risen to within the bird's striking range.

"A gruesome vision forms in my mind's eye of the viciously barbed hook tearing its way through the bird's throat."

One of the sailors rushes forward, grabs the line and starts reeling in the albatross. It wheels from side to side like a kite in a gale, then stalls and hits another wave. Hand over hand, the bird is slowly, painfully, pulled in, but I still can't see if it has swallowed the lure. A gruesome vision forms in my mind's eye of the viciously barbed hook tearing its way through the black-brow's tender throat. I cringe as it splashes once more into the sea.

I scold myself for not being quick enough to spot the danger. I feel the same gut-wrenching guilt I experienced as a child when, cycling home as fast as I could to show my mother a cinnabar moth caterpillar, I skidded and crushed its delicate body.

At last, the albatross is dangling below the stern, spinning on its nylon tether, and I can finally make out the flailing rubber arms of the lure pinned to the tip of its beak – it *hasn't* swallowed it. A couple more tugs and the ship's third officer is able to reach down and seize the base of its right wing. He maintains tension on the line to control the bird's head, and sweeps it over the railing and onto the deck.

Only now do I truly appreciate the size of our reluctant pursuer. It has the dark beak and underwings of a juvenile, but is already gargantuan, stretching its wings almost 2m across the deck.

Tiny toenails projecting from its paddle-like feet scratch against the wooden deck, while two of the crew step forward and pin the giant wings to its sides; the bird blinks its big black eyes, shakes its snowy-white head and claps its beak in protest. There is a slight dip in the feathers on its cheek, forming a line behind the formidable bill, which gives the impression of a sinister smile.

THANKFULLY, THE ALBATROSS appears to have come through its ordeal unharmed. A tea towel draped over its eyes calms it.

"Look out for the line!" someone shouts. I reach out and unwind the nylon fishing line now coiling around one of the bird's wings – my hand brushes against feathers as soft as silk. The officer grabs a pair of pliers to remove the lure, but the hook pops out of its own accord and falls to the deck.

"Okay," he says, "let's get this bird back where it belongs."

He cradles the albatross in his arms and raises it to the railing. The tea towel is whipped off and our patient unfurls its wings. It stares down at the waves and kicks its legs, and the officer lets go.

The albatross plummets down and splashes into the sea, but is up again in an instant, racing across the waves, heaving its great wings. The wind catches them and its feet leave the water. Climbing higher and higher in the air, it heads into the distance.

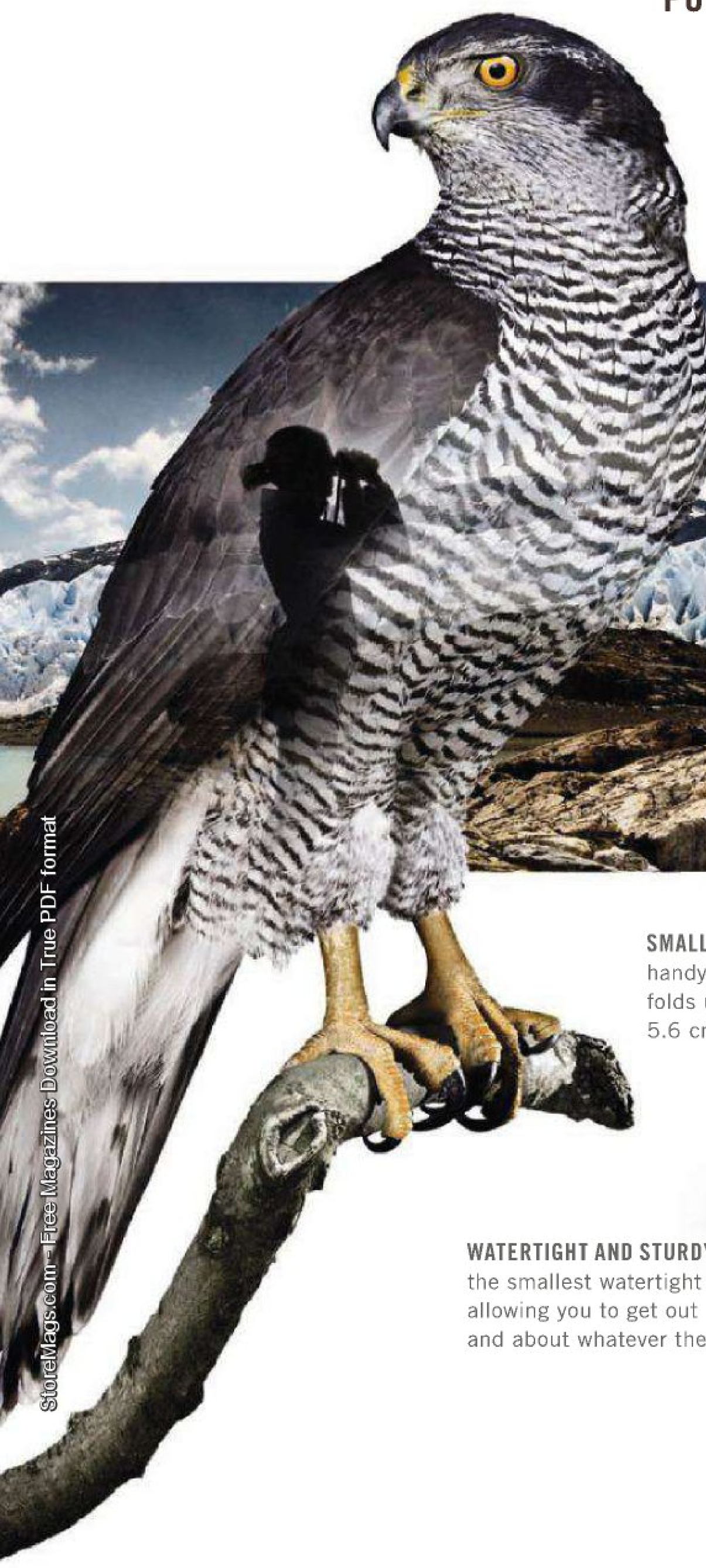
Our little crowd disperses, but I continue to cling to the ship's railing, watching until the albatross is but a faint speck drifting above the horizon and I can finally heave a sigh of relief.

downloaded from: lib.ommolketab.ir

ALWAYS TO HAND

POCKET TRAVELER. FOR IMPRESSIVE EXPERIENCES

The Pocket Traveler is the ideal companion for every trip.
An outstanding optical performance, high contrast spectacular
diamond-bright images and impressive optical system all
wrapped up inside a handy lightweight compact construction.
Bring the world closer in vivid lifelike colours.



SMALL AND LIGHTWEIGHT
handy, lightweight and
folds up to
5.6 cm (2.2 in)

WATERTIGHT AND STURDY
the smallest watertight pocket binoculars –
allowing you to get out
and about whatever the weather

HIGH-QUALITY COATING
maximum colour fidelity and bright,
high-contrast images thanks to high-quality
coating technologies

SEE THE UNSEEN
WWW.SWAROVSKIOPTIK.COM

SWAROVSKI U.K. LTD.
Perrywood Business Park, Salfords
Surrey RH1 5JQ

BY APPOINTMENT TO
HER MAJESTY QUEEN ELIZABETH II
SWAROVSKI OPTIK

SWAROVSKI
OPTIK

Store Mags.com - Free Magazines Download in True PDF format

downloaded from: lib.ommolketab.ir

StoreMags.com

Nikon

EDG

Edge-to-Edge Experience

Nikon's latest glass and lens coating technologies offer you unparalleled clarity and colour fidelity throughout your field of view, while legendary ergonomics ensure comfortable and intuitive use for hours on end.
See nature the way it deserves to be seen: through a Nikon.

Since 1917

www.nikon.co.uk

Nikon *Sport Optics*

downloaded from: lib.ommolketab.ir