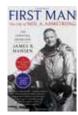
# **Book Case**

The Editor reviews 6 favourites from his bookshelf.

FIRST MAN. THE LIFE OF NEIL A ARMSTRONG.

James R Hansen. Simon & Schuster UK. ISBN-13: 978-1471177873. Paperback. RRP £8.99



I must admit that I haven't seen the recent movie but I found the book quite worthwhile. Neil grows up as a small-town boy but is interested in flight and space so joins the US Navy as an aviator where he benefits from generous military scholarship schemes to take a Master's in Engineering. The book documents his combat history flying some early jet fighters in the Korean war.

After this, he becomes a test pilot, eventually flying the Mach 6 sub-orbital X15 rocket plane in the 1960s. Unlike many of his peers, Neil is noted for his calm stance and ability to give proper feedback about problems to the engineers on the ground. He joins NASA and after flying in the Gemini program joins the roster of astronauts waiting for a chance to fly Apollo to the Moon. Fellow pilots die all the time in this book - whether its combat, the tragedy of the Apollo 1 capsule fire or just random accidents as the astronauts must fly small jet trainers to keep up their flight logs. I guess Formula 1 in the 1960s probably had a similar mortality rate.

The book really comes into its own during the Apollo 11 mission. I wont spoil things but suffice to say that Neil's relationship with the somewhat prickly Buzz Aldrin comes to the fore and eventually it's NASA that decides Neil must be first out of the hatch to step onto the Moon.

The aftermath of the historic flight is that Neil never gets to fly in space again but for the rest of his life becomes an ambassador for the event. Plagued by reporters, he learns that the best way to ensure accurate coverage is to give press conferences rather than one-on-one interviews. Buzz suffers problems with depression and alcohol abuse and it becomes clear that NASA made the right long term choice.

#### ENDURANCE.

Scott Kelly. Doubleday. ISBN-13: 978-0857524751. Paperback. RRP £8.99



From 1969 to 2017. Most people will have heard of Tim Peake and Chris Hadfield as International Space Station astronauts, but I wonder if you have come across Scott Kelly. Like Neil Armstrong, Scott was a naval aviator and test pilot before joining NASA. He commanded Space Shuttle missions before being tasked with a very unusual mission - spending a year on the ISS whilst his twin brother Mark - also an astronaut - didn't! Essentially Scott has committed himself to a life-long twin study experiment on the effects of one year's exposure to radiation at Low Earth Orbit levels. Just like Neil Armstrong, his mission will have lifelong consequences.

The book details modern US astronaut training – the need to learn Russian and practice on the Soyuz simulators before launching from Baikonur, Kazakhstan. One can read how much the US is dependent on Russia for launches in the post Shuttle era – 2019 should see the first US commercial crew launches for Space X and Boeing.

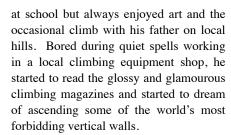
On board, Scott paints an excellent picture of the day to day running of the ISS. His particular bugbear is the CO2 scrubber which removes a potentially fatal buildup of CO2 in the atmosphere. The technology is old and the system (and spare) require a lot of maintenance. Scott dreads having a full crew of 6 on board as the extra CO2 load puts the system under strain and he suffers headaches as the CO2 level rises. One wonders how such a system would cope on a long Mars mission!

Overall a very enjoyable and technical account of modern-day astronaut training and living on the edge of space.

## PSYCHO VERTICAL.

Andy Kirkpatrick. Arrow. ISBN-13: 978-0099519522. Paperback RRP £10.99.

This is the story of specialist vertical rock climber Andy Kirkpatrick. Dyslexic and with a borderline attention deficit disorder, he struggled



His first few trips involved scrounging some kit and driving to the Alps with whatever mate was available for a week or so and climbing the first slope to hand. His naivety led him to take on ascents way above his league - sometimes he failed but more often he succeeded and started to make a reputation solo-climbing some of the most difficult routes. The sheer strength of will to spend a week or ten days solo climbing a vertical face is impressive sleeping in a narrow hammock (Portaledge) on the face, hundreds on feet above the ground secured by just 2 or 3 ropes anchored in turn to a steel wedge inserted into a crack in the rock isn't something I would take on. A 13-day solo ascent of the Reticent Wall on El Capitan in California is detailed.

Two things related to his disabilities help him – firstly, he can visualise the 3-D route of a climb up a face much better than his peers. Secondly, he develops an almost obsessive knowledge of the "kit" involved in rock climbing – hexes, nuts, knifeblades, cams and copperheads.

With success comes sponsorship and the opportunity to write for the very magazines he used to read in the shop. His attempts at writing are initially mocked by his English teacher wife but he perseveres and finds his own style. The desire to climb more brings him into conflict with his wife and young family who worry about his safety. A very enjoyable and well-written book packed with technical info about rock climbing and kit. His struggles with fitness (he can't see the point of training!) and leaving his young family make this a very human and rewarding read.

# THE SPARROWHAWK.

Ian Newton. Poyser. ISBN-13: 978-1408138342. OOP – Paperback around £3.00



UMJ is an open access publication of the Ulster Medical Society (http://www.ums.ac.uk). The Ulster Medical Society grants to all users on the basis of a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence the right to alter or build upon the work non-commercially, as long as the author is credited and the new creation is licensed under identical terms.



I was brought up as a city boy but moving to the North West in 1995 has introduced me to many new interests and hobbies. My wife, Caroline, likes feeding finches and small birds and sometimes we would have 30 or 40 birds in the garden at one time. This also tends to attract local apex predators in from woodland about half a mile away – Sparrowhawks. Next door's ginger cat doesn't really count as an apex predator.

These birds are small – a large female is no bigger than a wood pigeon and the male is considerably smaller – during the breeding season, he hunts to bring food for the female who broods and rears the chicks.

I find them quite beautiful and they are extremely agile flyers. We would probably be visited by a Sparrowhawk at least once a day and I try to keep a camera handy to catch some images.

This book is a comprehensive and scientific reference source for all things related to the bird. Originally written in 1986, it was reproduced in 2010 and is regarded as a standard reference text.

The chapter about hunting techniques is quite relevant to my attempts at photography! Usually visits to the garden are *short stay perch hunting* where the Sparrowhawk races in to alight on a fence or tree, scattering and raising prey in the approach. The hawk pauses to scan the surrounding opportunities before moving on – maybe 10 seconds on the perch. *Still hunting* offers the best photo opportunities for me – the hawk keeps very still, hoping unwary prey will come close – I've observed and photographed a male sitting for more than 40 minutes near some bird feeders— just pretending not to be there.

High soaring and swooping – essentially dive bombing (!) is fantastic to watch but impossible to for me to photograph. A specialist book but a great insight into the life of this woodland bird who has become a suburban garden visitor.



Not there for the peanuts. A yearling female Sparrowhawk perched on a bird feeder in the Editor's garden

## BRITISH BAT CALLS. A GUIDE TO SPECIES IDENTIFICATION.

Jon Russ. Pelagic Publishing. ISBN 978-1-907807-25-1. Paperback. RRP £31.99



Another garden visitor, this time at twilight from April through to about September. For some years, I had noticed these small and supremely agile flyers appearing each night at dusk just a few feet above my head. Sometimes there might be 6 or 7 in the garden weaving about catching insects and moths, then as the night darkened, they would seem to move further afield.

I didn't really think too much more about it until last year when I decided to buy a bat detector. This converts the high frequency ultrasound used by the bats down to something that is audible to humans — different modes of transformation are used, most simple bat detectors use Heterodyne or Frequency Division modes and produce clicking noises. The gold standard used by serious hobbyists is Time Expansion mode which produces rich, plaintive calls not unlike whale song.

I bought a BatBox Duet (both Heterodyne and FD) recorder and armed with this book, ventured into the garden with the detector set at 47 kHz, the frequency used for communication and hunting by the commonest UK bat, the Pipistrelle. Recordings can be saved and analysed later in software. Bats are really loud at ultrasonic frequencies! The detector could pick them up from several gardens away and I found it fascinating to hear their clicks suddenly go into a high cadence targeting mode as they detected a moth and swooped on their prey.

It appears that we have two common bat species resident in our garden, Common (max = 47kHz) and Soprano Pipistrelles (max = 55kHz).

If you enjoy watching bats then a detector and this book will add to your interest and knowledge.

# COLLINS BTO GUIDE TO BRITISH BIRDS.

Paul Sterry and Paul Stancliffe. Collins. ISBN-13: 978-0007551521. Paperback. RRP £19.99



After attracting birds to your garden, you will no doubt wish to identify interesting and rare visitors. This handy A5 paperback manual is supported by the British Trust for Ornithology and conveniently groups birds together into broad families so this book is ideal when you know the object of your attention looks a bit like something else.

When I started, I thought most grey-brown birds were Sparrows but thanks to this guide, I've been able to spot Dunnocks, Lesser Redpolls and Reed Buntings in our garden where I previously thought they were slightly odd-looking Sparrows. What I thought was a very large Chaffinch was a Brambling – much rarer in Northern Ireland and a migrant winter visitor.

Each page contains a small distribution map in the UK so that you can see if a bird is common, rare or never seen in your area. A clock face type graphic gives monthly abundance for migratory birds or when the resident population is supplemented by migrants. Images of males and females aid identification and each bird has a write-up about appearance, voice, habits, abundance and any migratory activity.

Frequently grabbed from the bookshelf when something odd is spotted – highly recommended.



Looks like a Sparrow is actually a male Reed Bunting – Thank you Collins BTO guide!

