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Shaping the future of animal health
This November issue marks one year since our relaunch – and what a year it has been! We have been working hard to develop our online resources and I’m pleased to say that more and more people are utilising the Veterinary Practice website, which has seen, on average, a 30 percent increase in pageviews every month.

Follow us on social media for regular updates and links to useful articles, and don’t forget that our website is mobile-responsive, so you can access the wide range of content anywhere, anytime.

In this issue, look out for reports from the Official Vet Conference and start planning your time at London Vet Show using our handy guide to the event.

Our regular columns are supplemented with some interesting interviews. Marie-Clare Russell talks about her brave move from large animal practice to aquaculture, and we visit Lincolnshire Wildlife Park, where CEO Steve Nichols shares his inspiring vision for the UK’s captive parrots.

Pet nutrition myths are busted in our small animal section and while David Grant provides a guide to diagnostic dermatology tests, Remi Mandray explains the importance of keeping a firm eye on leishmaniosis in dogs.

Our In Focus topic is parasites; turn to this section for a discussion of Lyme disease by Ian Wright, a guide to ecto-parasites in sheep and cattle and an update on liver fluke.

Richard Gard asks whether the profession will embrace government plans to control future disease threats in the large animal section and in the first of a two-part article in equine, Derek Knottenbelt talks about tumours.

Towards the back of the magazine, there are articles on a range of hot business topics, including wills, pensions and subject access requests.

A GREAT LOSS FOR THE PROFESSION

It was with considerable sadness that we learned of the death of Pip Boydell in October. Renowned veterinary ophthalmologist and neurologist, champion kick-boxer and all-round bright character, Pip never failed to enthuse and entertain at VetsNorth and VetsSouth conferences. His buoyant personality will be sorely missed.

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Email michael@teamworkprofessionals.co.uk to update our records
No-deal Brexit risks shortages, delays and lower standards

A no-deal Brexit will exacerbate current shortages in the veterinary profession and create significant risks for trade, animal health and food safety, according to a new briefing published by the BVA. Informed by the technical notices released by the government, the briefing outlines the impacts of the UK leaving the EU on 29 March 2019 without a withdrawal agreement in place.

The profession is already experiencing shortages and recent figures from the RCVS show that 32 percent of non-UK EU veterinary surgeons are considering a move back home and 18 percent are actively looking for work outside the UK.

A no-deal Brexit will require more work from vets to meet increased demands for the certification needed for export of animals and animal products and for pet travel. In addition, exiting from EU surveillance systems and uncertainty around access to medicines could have negative impacts on animal health and welfare further down the line, requiring more veterinary capacity.

Under a no-deal Brexit, the UK would lose or have limited access to a range of EU systems and organisations central to safeguarding public and animal health. These include the Animal Disease Notification System, which permits access to information about contagious animal disease outbreaks, the European Food Safety Authority, which provides scientific advice and communication on risks to food safety, and the Trade Control and Expert System (TRACES), which records the outcome of biosecurity and food safety checks on imported commodities.

Alternative systems need to be in place to ensure the UK’s reputation in animal disease surveillance, food safety and biosecurity is maintained, and vets should be involved in the development of these systems. Currently it is not clear what, if any, form these systems will take and the level of veterinary involvement in their development and application is not known.

With no deal in place, there will be increasing demands in terms of signing Export Health Certificates as well as certification, testing and vaccination for pet travel and equine transport. Without approval from the EU, the UK will not achieve listed third country status on Brexit day and there could be a delay of several months during which animals may not be able to travel and abattoirs may not be able to operate, which could lead to overstocking on farms with negative impacts on animal health and welfare.

BVA President, Simon Doherty, said: “Going forward, it is critical that the government fully engages with the veterinary profession on matters that affect their work in maintaining standards and we have continuing concerns that this is not happening in time to put something meaningful in place. For example, the £27.5 million system intended to replace TRACES is planned to be fully operational for March 2019 and vets would be one of the primary users of this system, but we have yet to be approached to be involved in the testing and training process for the new system. We are proud of our profession and the meticulous care with which we uphold standards and any post-Brexit systems or procedures must allow us to maintain our responsibilities to public health and animal health and welfare.”

RVC awarded grant to build leading One Health vaccine and stem cell research centre

The Royal Veterinary College (RVC) has been awarded a £7 million grant by Hertfordshire Local Enterprise Partnership to support the creation of a state-of-the-art Veterinary Vaccinology and Cell Therapy Hub on its Hawkshead campus in Hatfield.

The hub will bring together top veterinary and human medical science researchers to advance the “One Health” approach. The work conducted at this facility, in Brookmans Park, will accelerate the development of next-generation vaccines and cell therapies that will fight key animal infections and ultimately protect humans.

Livestock, in particular cattle, pigs and poultry, will be the main focus of the hub because they provide much of our animal-derived dietary protein. These animals are intensively reared to meet the global demand and as a result, they are increasingly susceptible to infections, hence the need for the development of effective vaccines.

The hub’s facilities will support the use of large animal models in vaccine development to create species-specific immunological tools or reagents, replacing the more common use of mice to formulate vaccines for livestock.

Due to open in the summer of 2020, the hub will contain specialist facilities, such as laboratories, housing for animals and an incubator for small businesses, and is part of a multi-million-pound redevelopment plan for the RVC’s Hawkshead campus.
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BVA supports MPs’ call for overhaul of ineffective dangerous dogs law

The BVA has welcomed the recommendations put forward by the Environment, Food and Rural Affairs (EFRA) committee on breed-specific legislation, which calls on the government to conduct a full-scale review of current dog control legislation and policy to better protect the public.

The report, “Controlling dangerous dogs”, recommends an alternative dog control model that focuses on prevention through education, early intervention and consistently robust sanctions for offenders. In the absence of sufficient evidence to back breed-specific legislation, the report also calls on the government to conduct a comprehensive independent evidence review into the factors behind canine aggression and to introduce a centralised database to record information on dog bites.

The BVA has campaigned for many years for consolidated, effective and evidence-based dog control legislation that recognises the principle of “deed not breed”. The BVA and BSAVA submitted a joint written response to the inquiry and veterinary surgeon Robin Hargreaves gave oral evidence to the committee on behalf of the BVA in June 2018. In the evidence, the BVA emphasised that a dog’s behaviour, including how and when it displays aggression, is largely dependent on its socialisation, rearing, training and environmental circumstances, and called for the government to take a more holistic approach to minimising the occurrence of dog bites.

RUMA confirms position on “antibiotic-free” product labelling

Recent moves to label produce “antibiotic-free”, “reared without antibiotics” or similar have led the Responsible Use of Medicines in Agriculture (RUMA) Alliance to restate its position that while it welcomes efforts to minimise antibiotic use through improved health and welfare, it does not support the use of these claims for marketing.

Labelling products as “antibiotic-free” or “reared without antibiotics” has the potential to mislead consumers by implying that meat or milk not marketed as such contains antibiotics, which is not the case, as there are strict rules governing the administration of antibiotics to farm animals in the UK.

If claims of “antibiotic-free” or similar mean the animals from which the milk or meat is derived have not been given antibiotics in their lifetime, this presents the risk of driving unintended consequences. The main concern is causing unnecessary suffering and associated welfare issues by withholding treatment from sick animals in order to comply with the label.

While the term “antibiotic-free” or similar may be used to differentiate produce in some countries where use of antibiotics for growth promotion is still permitted, it is not relevant nor helpful in the EU where this practice is banned.

Nominations open for the RCVS Honours and Awards 2019

The RCVS is looking for veterinary surgeons, veterinary nurses and laypeople who are working above and beyond for the benefit of animal health and welfare, the veterinary professions and/or public health, as it launches its honours and awards scheme for 2019.

This year, the College is seeking nominations for six awards:

- The Queen’s Medal: the highest honour that can be bestowed upon a veterinary surgeon for a highly distinguished career with sustained and outstanding achievements throughout.
- The Veterinary Nursing Golden Jubilee Award: aimed at veterinary nurses who have had a distinguished career, demonstrate a leadership role within the profession and act as an ambassador for the value of veterinary nurses.
- The RCVS International Award: for vets, vet nurses or laypeople who work internationally, from within or outside the UK, in making an outstanding contribution to, for example, raising veterinary standards, veterinary education and improving animal health and welfare.
- The RCVS Impact Award: for vets or vet nurses who have recently undertaken an initiative that has had a significant impact on the profession, animal health and welfare or public health.
- The RCVS Inspiration Award: for vets or vet nurses at any stage of their career who have demonstrated the ability to inspire and enthuse others consistently.
- Honorary Associateship: conferred to a small number of laypeople each year, in recognition of their special contribution to the veterinary sphere. It recognises individuals who contribute to the veterinary sphere including scientists, lecturers, journalists, charity workers, farriers, farmers and those in the commercial field.

To make a nomination, visit the honours and awards web page at: rcsvs.org.uk/honours and click on the link for the specific award. The deadline for nominations is 18 January 2019.
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Mind Matters Initiative to be extended

The RCVS Council has agreed to extend the Mind Matters Initiative on a rolling three-year basis and to increase its funding to £250,000 per year. This investment will allow the initiative to continue to address and improve mental health and well-being within the veterinary profession.

Mind Matters will continue to donate £100,000 per year to independent charity Vetlife, for its Health Support service. The remaining £150,000 will be spent on other initiatives, which include providing training, research and a culture-change programme.

The initiative has already garnered much support and collaboration from stakeholders on its taskforce, including joint mental health awareness courses run with the BSAVA, mental health for managers courses with the Veterinary Management Group, the joint Wellbeing Awards with the Society of Practising Veterinary Surgeons and supporting students with the Association of Veterinary Students. The initiative also launched the destigmatising campaign "&me" with the Doctors’ Support Network at the House of Commons in January 2017.

This further funding will ensure the Mind Matters Initiative can continue to build on its success, highlighting the importance of individual well-being and seeking to “prevent, protect and support” all members of the veterinary team.

Celebrate achievements with the Ceva Animal Welfare Awards 2019

Nominations are now open for the prestigious Ceva Animal Welfare Awards 2019, which will once again celebrate the achievements of remarkable people from the farming, veterinary, charity and education sectors.

Ceva has identified the importance of highlighting the welfare achievements of farming professionals by launching two exciting new agricultural awards – the Farmer of the Year Award and Farm Educator of the Year. Another new award for 2019 is the Outstanding Contribution to Animal Welfare Award, which is for an individual or team that stands out from the crowd by influencing and significantly contributing to making a visible difference in the world of animal welfare.

Outstanding farmers, vets, vet nurses, animal welfare professionals and animal welfare teams can now be nominated to receive an award by their peers and the general public. The winners and runners up will be honoured at a glittering ceremony taking place on the eve of BSAVA Congress on 3 April 2019.

If there is a farmer, vet, vet nurse, animal welfare professional or animal welfare team that you feel deserves to be recognised, visit ceawelfareawards.com to nominate them before 11 January 2019.

Calm pets within two hours

Calm pets within two hours

If there is a farmer, vet, vet nurse, animal welfare professional or animal welfare team that you feel deserves to be recognised, visit ceawelfareawards.com to nominate them before 11 January 2019.

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Join the celebrations at London Vet Show

On top of an excellent clinical programme and renowned social events, a giant cake will be featuring at the tenth London Vet Show

The 2018 London Vet Show is taking place on 15 and 16 November, returning to Excel London in the Royal Victoria Dock. Over the last 10 years, London Vet Show has grown tremendously. The annual event outgrew Olympia, and now has over 430 exhibitors showcasing everything you can imagine you might need to run a veterinary practice.

A decade since the first London Vet Show, the event continues to represent the entire veterinary profession, staying true to its original aim: to give the veterinary industry the best education at an affordable price.

In 2009, there were three streams – two with a clinical focus and one covering business topics. Some theatres will now seat over 1,800 delegates and the show boasts 21 theatres in total, covering every aspect of practice, from small animal clinical practice to nursing, career development and diagnostics. This means delegates can alter their learning track to suit their needs, effectively creating their own personalised stream throughout the two-day event.

A decade of London Vet Shows

The official anniversary celebration is taking the form of an afternoon tea on day one of the show. A giant birthday cake will feature and at 3pm all delegates are invited to have a cup of tea and slice of cake while catching up with old friends and making new ones. This will also be a good opportunity for delegates to share what they have learnt on their first morning at the show and plan how they are going to attack the exhibition hall throughout the event.

In honour of the anniversary, the companion animal programme includes various themed sessions, which will consider how much certain areas of clinical practice have developed since the first London Vet Show. Topics such as feline diabetes, hyperthyroidism, endocrine disease and antimicrobial therapy will be included, among others; look out for titles beginning “The 10th LVS”.

What’s new for 2018?

As part of the show’s new focus on reducing waste and encouraging vets to be more “green”, delegates will be given a reusable water bottle in their bags, with water points distributed around the show. The organisers have also cut down on single-use carpet this year and have arranged for recycling bins on site. There will be lots of opportunities to recycle; food scraps will be donated to a wormery and unwanted stationery will be given to local education charities. It’s not just about making the show green, the organisers explain – it’s about passing that message on to vets and encouraging a greener lifestyle.

Also new this year, look out for the big “video wall”, which will be displaying live videos of interviews with delegates, exhibitors and speakers. The initiative was designed to form a sense of community, encouraging discussions among colleagues. Debates will be initiated, and the live footage will be shown in the exhibition hall, as well as being disseminated via social media.

Companion animal theatres

There are two main themes running throughout the companion animal streams: “the 10th LVS” and “quality of life”. Session titles beginning with “The 10th LVS” will each consider an area of clinical practice, looking at what we do now and what has changed over the past decade.

Sessions on the quality of life theme will consider aspects of practice from the perspective of both pets and their owners. The talks will encourage veterinary professionals to view cases from an ethical point of view. Zoe Belshaw from the University of Nottingham will provide tips on improving quality of life for chronically ill pets and their owners and Vicki Adams will look at the importance of senior wellness programmes for pets, as well as explaining the steps necessary for practices to incorporate a “life course perspective” into day-to-day practice.

There is also an introduction to managing osteoarthritis in dogs by Richard Meeson and a discussion of quality of life assessments for pets and owners by Stijn Niessen, which will consider how these assessments should guide clinical decisions.

On the second day, Elizabeth Mullineaux, a specialist in wildlife medicine, will present two interesting talks on
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British wildlife. She will consider the ethical and triage principles for wildlife, as well as the treatment and rehabilitation principles – useful information for anybody working in a practice that receives the occasional wildlife patient from concerned members of the public.

Elsewhere in the companion animal streams, Amanda Boag will be presenting an interesting talk on the development of evidence-based guidelines for emergency care – important information for vets in any area of clinical practice.

Sticking to the evidence-based medicine theme, Zoe Belshaw will be explaining how to integrate evidence-based guidance about owner expectations of preventative care consultations into your practice.

Farm animal theatres
The farm animal stream, programmed by the BVA CPD Group, covers a wide variety of important issues, ranging from Brexit to mental health. Delegates can choose between sessions in the BVA Farm stream, which provides a broad selection of lectures on all areas of farm animal practice, and the Farm Associates stream, which brings in speakers from key veterinary associations.

The Sheep Veterinary Society is providing most of the sessions in the Farm Associates stream on day one, and on day two, the programme is delivered by the Pig Veterinary Society and the British Cattle Veterinary Association.

Some interesting sessions in this theatre include Kathy Anzuino’s talk on assessing goat welfare, Cornelia Bidewell’s session entitled “Diagnostic sampling for common disease presentations in smallholder pigs” and a session on understanding and diagnosing the down cow by James Russell.

In the BVA Farm theatre, be sure to check out Steve Smith’s talk on first-line chicken medicine and Lisa Morgans’s talk on changing farmer behaviour with regards to antibiotics. Also in this stream, Gareth Hateley is providing an update on the surveillance of notifiable, new and re-emerging cattle diseases. And if you have clients with camelids, Alex McSloy’s talk on camelid parasitology will be a great session for you.
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Equine theatres
Three equine streams have been carefully designed to offer equine vets updates on the latest learning and research. With a primary focus on disease, a great range of equine conditions are covered in the equine theatres over the two days. Equine vets will have the opportunity to revise their knowledge of strangles, equine grass sickness, acute colic and sacroiliac disease.

There will also be chance to brush-up on the processes of dealing with complicated wounds, diagnosing the causes of lameness, worming, managing cervical pain, working up the ataxic horse and dealing with complicated castrations.

In equine behaviour, Gemma Pearson will be presenting two talks on dealing with difficult horses, including an introduction to the science of equine behaviour modification. Melanie Perrier looks ahead in her session on “Rehabilitation of the equine patient now and in the future”, and Alex Thiemann is set to describe quality of life assessment in companion and geriatric donkeys.

Finally, don’t forget to pencil in the practical equine dentistry workshop, which will be based on case studies and run by Pete Ravenhill on day two of the show.

Non-clinical theatres
Besides the clinical programmes, it would also be worth finding time to visit the BVA careers development, BVA Congress and business streams.

If you’re looking for career inspiration, make sure you clear your schedule for the Ted-style talks in the BVA careers development stream. There will be two sessions organised with the popular Facebook group “Vets: Stay, Go, Diversify” on day one of the show. Four or five speakers who have followed interesting career paths will discuss their experiences and answer questions in each session. The first focuses on clinical careers and the second on clinical career alternatives. This is set to be a fascinating addition to the programme and a must-see for young vets or those thinking about a career change.

The BVA has also been working with the student association and will be presenting the results of an extensive EMS survey designed to evaluate how EMS can be improved – both for students and practices. This session, also in the careers stream, will include a panel of students at different levels of their education who will describe their experiences and facilitate discussion on the topic.

The veterinary workforce is the focus of several talks in the BVA Congress stream this year. Sessions by key figures in the profession, including Christine Middlemiss, the UK’s Chief Veterinary Officer, and Amanda Boag, RCVS President, will be supplemented with information and advice from Michelle Ryan, Professor of Social and Organisational Psychology, and Christopher Begeny, Postdoctoral Research Fellow, from the University of Exeter.

In the business theatre, look out for sessions on practice management systems, digital marketing, leadership and generating more revenue in your practice.

The social calendar
The big social event this year will be the 10th anniversary party. Last year’s party event sold out, reinforcing the importance of having an informal social aspect to the show.

The party has been moved to a bigger venue this year – the Pearson Room – which is described as a “1950s Hitchcockian-style cocktail bar” in the heart of Canary Wharf. On the Thursday evening, delegates will be able to relax and enjoy tasting boards, dancing and cocktails with their friends and colleagues.

This year’s BVA gala dinner takes place during the show, also on the evening of 15 November. Enjoy catching up with colleagues at this black-tie event, which will be held at the luxurious five-star London Marriott Hotel and will include a three-course dinner, wine and entertainment.
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Lessons in TB control from home and abroad

At the Official Vet Conference 2018, discussions around bovine TB ranged from badger ecology in the UK to white-tailed deer hunting in the US

It may not have occurred to many veterinary surgeons that tins of beans, spaghetti and other comestibles could help to explain issues with cattle TB. A full-size tin represents a high level of control and a smaller tin partial control.

In comparing the control of BVD and TB, both have full tins of surveillance, with BVD showing good biosecurity and good resilience, whereas TB has inadequate biosecurity and resilience. BVD has better biocontainment than TB, but both need an upgrade. As James Russell, Director of VetCo, piled up the tins, delegates of the Official Vet Conference were predicting whether a full tin or half tin was to appear out of the bag.

The title of the talk was “TB – Does it deserve its pedestal?” Recognising that TB is given special status internationally, whole strategies are demanded of the UK to control and eradicate the disease. The speaker discussed the need to question whether the high level of activity taking place is matched by the disease occurrence. Further sessions explored the importance of understanding badger ecology, learnings from Cymorth TB in Wales, the test options for TB detection and the impact of deer hunting on bovine TB in Michigan.

Lessons in badger ecology

More farms need to engage with biocontainment, and one way of reducing the disease risk is to make farms less attractive to badgers. Testing and surveillance are expected to increase, particularly within the High Risk Area, and it is anticipated that more cases of cattle disease will be diagnosed. The involvement of veterinary practices with practical measures to assist on-farm control may also mean that more vets will take advantage of the TB Advisory Service.

Andy Robertson, a scientist at Exeter University, explained how a better understanding of badger ecology can help vets advise on TB biosecurity. The speaker pointed out that there was considerable misunderstanding at farm level about the activity of badgers. Badger activity and movements dictate how the animals interact with the farm and the cattle, and the ability of vets to relay aspects of badger ecology to farmers could help to reduce disease risk.

A primary consideration is the availability of food and delegates were shown various examples of means that could be used to prevent badgers entering yards and buildings. Sheeting on gates and raised feeding troughs are expected to limit the availability of food for the badgers, for example, potentially reducing contact with cattle.

TB in badgers can remain latent for many years. As with humans, the triggers for clinical disease remain unclear, but many badgers carrying the disease will show no outward signs of the disease. Mycobacterium bovis can survive in cattle and badger faeces for up to six months and in soil for up to three months. Keeping cattle away from badger latrines is therefore another recommended exclusion measure. It is accepted that cattle are at risk from infection during the grazing season, where badgers and cattle are cohabiting, but only a small proportion of the badgers on a farm are expected to be infected.

Extensive measures to keep badgers out of buildings are based on ecology and common sense; it should be noted that there is no study that shows how effective the measures are, particularly if the cattle herd is already infected. Understanding the local bTB situation is important and to assist awareness, the current disease status of neighbouring herds is available on the TB Hub website.

An update from Wales

A review of Cymorth TB in Wales is taking place, three years after the project was rolled out across the country, with the aim of identifying the lessons learned, progress in achieving the aims of the project and how best to take the programme forward. Katie Rose, who leads the Cymorth TB programme from the APHA, explained that the basis of
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the programme initially was for the farmer to take responsibility for farm animal disease, the private vet to provide good quality advice and for APHA to share current validated research and best practice disease control measures.

With a current bovine TB breakdown, a three-hour visit assessment by the farmer’s own vet, who has been trained, is available and paid for by the Welsh government. The findings will be reported to APHA. At the end of the breakdown, a one-hour visit is provided. To date, 135 OVs have been trained, and 76 are currently being trained.

There have been 497 completed farm visits and 2,279 recommendations made to farmers, with multiple measures for each farm. Sixty-seven veterinary practices are participating, with 500 vets carrying out TB testing in Wales; many testing vets have not yet engaged with the training. Vouchers are issued for the free visits – a total of 2,932 have been given to farmers, but only 22 percent of the new breakdown herds have taken advantage of the scheme. A farm-level report is available to support the farm visit that includes the results of past tests, the genotypes, details of reactors, cattle purchase history and whether cattle have been bought in from herds with a history of bTB.

Road casualty badgers have been collected and cultures indicate that it is common to find a badger from outside the home range of local badgers. Feedback from all concerned makes up an important part of the review and the results will be integrated to guide future activity. Improved communication between the practice vets and Cymorth is already being enacted through the provision of OV workshops.

**Blood testing of cattle and camelids**

Experiences with TB blood testing of cattle and camelids was discussed by Shelley Rhodes, test consultant for APHA’s TB Research Group. Gamma interferon testing improves the sensitivity in cattle to 90 percent, with the blood test detecting infected animals earlier. Skin test negatives can be shown to be positive with the blood test, but 3.5 percent of false positives are recorded with gamma interferon, compared to 0.2 percent with the skin test, Shelley explained.

In a study, 936 inconclusive reactors to the skin test were shown to be positive with gamma, and 3 to 20 percent of cattle slaughtered with no visible lesions at post-mortem are thought to be gamma positive. Antibody testing has shown that 3.6 percent of gamma negative samples are antibody positive.

Camelids are considered to be “spill-over” hosts for bovine TB. The skin test in camelids has a low sensitivity of 0 to 15 percent, whereas antibody testing shows a high specificity and sensitivity when used as serial and parallel tests. Antibody testing in camelids can identify TB-positive animals. In 2014, antibody testing for camelids was made available, providing test options for confirmed infected herds and TB-free camelid herds in a contiguous situation. The speaker concluded that an increasing use of blood testing is assisting TB control, helping on the road to disease eradication.

**The impact of deer on TB transmission abroad**

Paul Bartlett, Professor at Michigan State University, explained that endemic bovine TB in white-tailed deer is an important source of infection for cattle. Cattle herd-to-herd transmission is rare in Michigan, whereas contact with infected deer is commonplace. To increase deer numbers for hunting, deer have been fed and there have been feed station deer in large groups that stay close to the food, with wild deer in the woods.

Deer hunting is of greater economic benefit than cattle farming in the area studied. The concentration of deer in an unnatural environment leads to transfer of infection. Feeding deer is now illegal, but baiting (putting out feed prior to shooting) is legal and it is difficult for the authorities to enforce the law.

In 2016, 586,000 deer were shot. There is a strong local hunting tradition for meat as well as trophies. There is a low actual clinical incidence of human TB. The deer have TB lesions but appear healthy. Haemorrhagic disease in deer is an ongoing problem and the incidence of chronic wasting disease is increasing.

Rules for the control of TB in cattle are the same for each state but it appears to be a waste of time doing cattle tracing in Michigan as a bovine TB control activity. In conclusion, the speaker indicated that, for the control of bovine TB in Michigan, the social and political situation dwarfs the biological problems.
From farms to fisheries

Marie-Clare Russell, Managing Director of FAI Aquaculture, discusses her move from mixed practice to aquaculture

Marie-Clare began her career as a livestock vet in a mixed practice in the Highlands. Her role was “as close to a James Herriot type practice as you could get”, and she loved it. In the mid ‘80s, however, she found herself moving into the world of aquaculture and has stayed there ever since.

What inspired you to move into aquaculture from being a livestock vet?

I met my husband [John Russell], who at that time was a farm manager for Marine Harvest, and although I tried to continue practising as a livestock vet, the logistics of where we lived made it nearly impossible. At that point, Marine Harvest were advertising for their first vet. They had previously been using the practice I was in for prescriptions and wanted to bring this in-house. I applied and got the job. In 2014 I started with Benchmark working in a consultancy role for three months, but the challenge and aims of Benchmark kept me there, and in 2016 I took over as Managing Director of FAI Aquaculture.

How does a day in the life of a fish vet vary from a day in mixed practice?

I very much enjoyed the one-to-one interaction with my livestock patients – something I miss as a fish vet. However, the principles of caring for health, welfare and husbandry are the same and there are great challenges to be overcome, even now, particularly within salmon farming. I love a challenge.

When I started with Marine Harvest, the fish health team knew far more than me. As much as I was employed to dispense prescription-only medicines, they soon realised that I wanted to see everything and be involved in it all. The industry has changed now – the company vet is at the centre of healthcare and involved in health decisions at all levels – but that was a new concept back when I started. I loved learning something new.

My daily routine in my present role, on the other hand, is focused on problem solving. Cleanerfish [species such as wrasse and lumpfish that are deployed in fish farms to pick parasitic sea lice from the skin of salmon] are part of the sea lice solution and I love that Benchmark wants to offer a holistic approach. My role as MD of FAI Aquaculture allows me to help with that.

What is the most interesting experience you’ve had in aquaculture?

The people I meet or work with on a daily basis. We are a varied bunch but the one thing in common is the enthusiasm and knowledge and quest to improve that each person has. Anyone speaking with passion is interesting. I work with one member of staff who has worked at Ardtoe for 45 years and is still trying new things and modestly passing on to others all that he has learned over the years.

What is the most unusual experience you’ve had?

When I was first married and living on a salmon farm we made a lobsterpot and caught lobsters and crabs. We were trying to be frugal and lived off lobster most nights until I couldn’t think of another way to cook it and became sick of it – much to the horror of my city friends who were paying a fortune for it! My two most vivid memories of the farm in Alisary are of constant lobster dinners and “romantic” evenings spent hand feeding salmon.

Have you faced any particular challenges as a woman in aquaculture?

I have to say that I haven’t really. The only challenges I can think of involved dealing with a dyed-in-the-wool, old-style crofter who also happened to be one of our contractors and who clearly preferred talking to a man! Also, when visiting Stofnfskur in Iceland I did face the challenge of wearing an all-weather suit designed for a six-foot man when I am a five-foot woman – more of a height issue than a gender one!

On a more serious note, I don’t believe in quotas for women. I believe that it should always be the best person for the job. However, I do think that we should encourage women to put themselves forward more and to progress in their chosen field. It is also important to actively support those returning to work having raised their family and to ensure that they are not disadvantaged in the workplace by doing so.
The operative microscope in modern neurosurgery

Having developed with the times, the operative microscope is an essential piece of equipment in the modern neurosurgical theatre

The oldest neurosurgical procedure, trephination, first appeared during the Neolithic period. Modern understanding of optic law was started by Arabic scientists, between AD 1027 and 1040. Two hundred years later, in western countries, Roger Bacon published his works on optics. The possibility of magnification using a serial array of lenses was then later described by Dominican monks in Italy at the end of the 14th century.

A microscope is an inversed telescope, and the lens array was developed by Hans Lippershey, Zacharias Janssen and Hans Janssen in 1590. In 1686, Italian inventor and scientist Giuseppe Campani (1635 to 1715) described the first recorded use of a microscope to analyse wounds, sores and anatomic specimens in medical and surgical settings.

The industrial production of microscopes was initiated by Carl Zeiss in the mid 1800s in collaboration with Ernst Carl Abbe, Professor of Physics at Jena University, as well as a team of surgeons. Initially, an operating microscope was used by an otologist at the University of Stockholm, Carl Olf Nylen (1892 to 1978), to operate on a patient with inner ear disease in 1921, instead of using an operating loupe.

In 1957, at the University of Southern California, Theodor Kurz removed a benign, encapsulated Schwann cell tumour of the cranial nerve VII. This was the first use of the microscope in neurosurgery. Since then, the operating microscope has become, through trial and error, and refinement and collaboration with neurosurgeons, an important device in human neurosurgery.

Operating microscopes have improved greatly since they were first introduced. More sophisticated devices have also entered the human neurosurgical theatre, which have good magnification, good illumination without significant aberration or production of excessive heat and a great internal stability, which allows operational flexibility.

First and foremost, although the learning curve associated with the use of the microscope has been steep and requires time, it is naturally more than just using endoscopic associated magnification tools, because there is direct visual control of the instrumentation.

The possibility to have magnifications up to x10, with a good depth of field, allows a more natural three-dimensional vision. In fact, compared to loupes where the magnification and the working distance is fixed, surgical microscopes allow multiple different magnifications, maintaining constant working distances and in turn, leading to excellent flexibility and versatility during surgical procedures.

During neurosurgery, for example, low magnification is used during the drilling of the vertebral lamina or the skull and to ensure that the whole surgical field is clean before suturing the muscle layers.

Higher magnification, coupled with a good depth of view and stable three-dimensional vision, increases the security and safety when manipulating microsurgical instruments near the nervous tissue.

Having developed with the times, the operative microscope is an essential piece of equipment in the modern neurosurgical theatre
in rate of post-operative infection was observed during multiple studies in human neurosurgery. In our experience, the post-operative infection rate has also not been changed. In human neurosurgery, although single macrodiscectomy (discectomy without use of operative microscope) and microdiscectomy in the hands of extremely experienced surgeons does not change the short and medium (one year) outcomes, in general, their use allows a lower rate of post-operative complications (ie dural tears), better patient satisfaction, lower pain scores and functional outcome comparable with surgical loupes.

Importantly, modern operative microscopes are no longer fixed on the patient, but either to the ceiling or to a tripod, allowing multiple spatial configuration to ensure a perfect vision of the surgical field. This has also had a positive outcome on the health and well-being of the surgeons. A 2013 study found that for nearly 85 percent of the time spent operating, surgeons have asymmetrical non-neutral head-neck postures, even further exaggerated when wearing loupes or headlamps. These postures determine higher biomechanical loading of the cervical spine, and are recognised factors for occupational health disease, such as headache and chronic neck pain.

From a training point of view, microscopes with multiple binoculars allow two or more surgeons to operate simultaneously in the same restricted operative field without reciprocal interference (Figure 2). Moreover, with adding high resolution cameras, it is possible to project and record the surgery performed with a clear vision and high definition. The latter is of utter importance in the context of training and teaching environments.

Neurosurgical microscopes are not often used in veterinary medicine. In the context of veterinary neurosurgery, we strongly believe that the operative microscope is an essential piece of equipment when dissecting close to the brain or spinal cord in small animals. The lesson learnt by constantly using the operating microscope is that we have already improved our surgical abilities to deal with complex spinal and brain surgeries. We are confident that the use of this tool will continue to promote progress to the benefit of our pets that deserve the best treatment available for their neurological conditions.

Watch a video of a spinal cord decompression due to intervertebral disc extrusion in a 1kg chihuahua at: veterinary-practice.com/article/the-operative-microscope-in-modern-neurosurgery

Further reading


A full list of references is available on request.
Establishing a successful journal club

Help members keep up to date with the latest evidence, build skills and improve knowledge with a journal club

Utter the term "book club" and everyone immediately knows how to start one but swap out "book" for "journal" and it can be a bit more difficult to fathom. Here are some tips on what exactly a journal club is, its benefits and how one might work in your practice.

What is a journal club?
At its core, a journal club is a regularly held meeting in which members of the veterinary team discuss articles in the scientific literature.

Journal clubs bring with them a number of benefits, such as:

- Helping to link research and clinical practice
- Helping participants keep abreast of current research and new literature
- Helping to develop the critical appraisal skills of participants
- Stimulating debate and improved understanding of current topics within a practice
- Assisting with generating practice guidelines or protocols
- Encouraging evidence-based veterinary medicine
- Supporting continuous quality improvement initiatives
- Providing CPD
- Encouraging teamwork

There are two main types: critical appraisal journal clubs, which are more focused on building up academic and soft skills; and evidence-based journal clubs, which intend to influence current practice by assessing evidence and implementing it.

What’s best?
What is best totally depends on what the practice or group wants to achieve. Evidence-based clubs are more in-depth by their very nature – you are likely to require numerous sessions to properly appraise, consider and implement the evidence – and are longer-term endeavours that have tangible effects on clinical practice. Critical appraisal clubs, however, are a good starting point if it would be beneficial for participants to grow confidence in their critiquing skills.

Whichever option the practice chooses, there are a series of "musts" to give the club the best chance of success.

- **Choose a facilitator** – someone who will be committed to the concept and has experience of critical appraisal.
- **Set goals** – identify the topics you want to consider. These could be clinical queries arising from recent patients, timely issues such as Alabama rot or firework season or any other evidence gaps you’ve spotted.
- **Find relevant articles** – decide if the search for relevant literature will be part of the club or carried out by the facilitator. Consider whether participants will read the articles before or during the meetings.
- **Make sure club members have the material they need** – not just the article(s) you are assessing, but also other tools such as literature searching advice and critical appraisal checklists.
- **Choose a time and place** – will the club be carried out in person or online via a group discussion? When, where and how often?
- **Hold the meeting** – the facilitator should welcome staff and set out the agenda. Keeping minutes and a record of each meeting is helpful for future discussions and CPD certification.
- **Clinical bottom line** – this one is specific to evidence-based clubs. Once the evidence relevant to a topic has been critically appraised, discuss as a team what the bottom line of each study/all studies is. This is an important step, from which new guidelines or checklists can be formed to influence current practice.

If you want support setting up or participating in a journal club, RCVS Knowledge can help:

- Join the Library for unbeatable access to veterinary literature and assistance with literature searching
- Peruse the guidance on "Setting up and running a journal club in practice" ([bit.ly/2xRBfwK](https://bit.ly/2xRBfwK))
- Download the free critical appraisals checklists
- Visit and sign up to inFOCUS to receive updates on the best new studies and ideas for journal club topics ([infocusvj.org](http://infocusvj.org))

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Frightful fireworks and tempting treats

From chocolate ingestion to noise phobias and firework injuries, this time of year can be challenging for vets

W working in practice you will all be very familiar with the negative side of the fireworks season. The celebration that was traditionally a display of fireworks on one or two nights of the year has turned into a season spanning two weeks or more from the weekend before Halloween to at least the weekend after Bonfire Night, with many trying to outdo their neighbours with award-winning back garden displays.

Pet owners have many concerns during this time. Aside from noise phobic dogs and cats, there is the worry about: discarded fireworks, injury from stray fireworks, bonfire injuries, animals running away in fright and of course misuse of fireworks and injury to pets.

Many pet owners do not realise that noise phobia is a recognised condition and as such, behavioural therapy and treatment, including pheromone therapy and medication, could be covered by their insurance policy to make fireworks season less stressful for their pets.

Halloween has become more popular in the UK with many communities competing for the scariest displays and creepiest costumes. A lot of households now leave big tubs of sweets and chocolate on the doorstep so they are not disturbed by trick or treaters; this is a potentially serious hazard for pets. We settle many claims for accidental ingestion of chocolate, whether it’s been put outside by well-meaning householders or the family dog has snaffled it from the table. Creating awareness of what your practice can do for your clients is important at this time of year. Many pet owners will be unaware that they can help their pets get through this stressful period by desensitising the noise phobia, using the correct medication well in advance of the event, ensuring that they have done their evening walk before sundown and keeping their cats and rabbits indoors on the noisiest nights.

During puppy and kitten classes, new pet owners can be educated on how to prevent noise phobia by teaching the owner how to react to fireworks around their new pets.

 CLAIM EXAMPLE
A Labrador called Alf took the “treating” a little too literally and helped himself to two bags of treat-size chocolate bars that were meant for trick or treating children. Luckily his owners acted quickly and the out of hours veterinary care ensured that there was no long-lasting organ damage from the chocolate. Alf had to stay in the surgery overnight and was allowed home the next day. His owners put in a direct claim for £320 for this unexpected treatment and the claim was settled within a few days.

You are in a very unique position of being able to speak to and educate new and current owners to prevent stress and illness at this time of year. Putting up posters and making it part of your puppy and kitten parties will make a huge difference to your client and their pets.

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The empathy-profitability link

Could combating the apparent lack of empathy in the profession boost practice profitability?

A truly empathic vet or nurse can directly increase profitability on a daily basis. In the November 2017 issue, I introduced the idea that there are three different kinds of empathy. In brief, the three types of empathy are:

1. **Cognitive empathy** – this means that I understand the way your mind works, and I understand the language you use. I can communicate with you, reflecting back to you with the language you understand, and I can show you that I understand you.

2. **Emotional empathy** – “I feel with you.” In other words, I can sense when you are happy, distressed, stressed or concerned, whether you have expressed those thoughts out loud or not.

3. **Empathic concern** – the most powerful kind of empathy, empathic concern means that when I see that you are distressed, I have an overwhelming need to help you out.

As vets and nurses on the front line as regards customer care, we need to have all three kinds of empathy running at high levels if we are to offer the best service to our clients and the best care to their pets. Increased profitability naturally follows on from this. Cognitive empathy and emotional empathy combined could be called marketing. Empathic concern serves as the ethical rudder when marketing in our profession.

Cognitive empathy training improves our communication skills with clients and with each other. I can actively listen to the client; they feel listened to and understood. I can ask the right questions in a way that puts the client at ease and gets me the history I need. The client trusts me because they know that I can hear what they are saying. When I suggest options for diagnosis and treatment, because I am on their wavelength, they are more likely to proceed because of that trust.

When I discuss the client and their pet at handovers, hospital rounds, referrals, etc, I have an exact picture of their requirements. More importantly, because I can also understand the way my colleagues communicate and the varying ways that their individual minds work, we can all understand what the client wants, and I can hand this case over to my colleagues with confidence knowing that communication is excellent.

**Empathic concern serves as the ethical rudder when marketing in our profession**

Emotional empathy, when running at high levels, enables me to see beyond the words that can be so hastily spoken in the consulting room, especially when stress levels are running high.

I can see and feel the emotions of the client and of their pet. By sensing emotions and putting them into words for the client: “I imagine you’re worried about the anaesthetic”, we create a rapport with them which further strengthens their trust and faith in us.

The body language of a pet owner can speak volumes about their fears, money concerns, sadness and even distrust. The vet and nurse with good emotional empathy can interpret body language and put it into words for the client. Profit wise, the nervous client may be reassured by more detailed pre-anaesthetic tests. The anxious client may feel less anxious if we are more in depth with our investigations. The stressed client may want their pet hospitalised rather than undergo an anaesthetic.

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**Laura Woodward**

Laura Woodward has been the surgeon at Village Vet Hampstead for over 10 years. Laura is also a qualified therapeutic counsellor and is affiliated with the ACPNL and the ISPC. She runs Laurawoodward.co.uk – a counselling service for vets and nurses.

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**LAURA WOODWARD**

**LAURA WOODWARD COUNSELLING**

Laura Woodward has been the surgeon at Village Vet Hampstead for over 10 years. Laura is also a qualified therapeutic counsellor and is affiliated with the ACPNL and the ISPC. She runs Laurawoodward.co.uk – a counselling service for vets and nurses.

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Could combating the apparent lack of empathy in the profession boost practice profitability?
than observed at home. If we offer, the client may take us up on it and be pleased that we thought to see beyond their words and "read their mind". If they don’t take us up on what we offer, they are likely to feel the same degree of trust and relief that we felt their distress and offered what was appropriate to them at that time as opposed to a bunch of “extras” for the hell of it. Offering in the right way, at the right time shows good rapport rather than a thirst for commission.

Emotional empathy within a team creates strong bonds. We celebrate each other’s joy and offer support in times of need. We can feel when our colleague is swamped and doesn’t want to get involved in another case. Similarly, we can identify the team member who is eager to get involved and take the case forward appropriately.

Empathic concern is the type of empathy which we would wish all vets and nurses to have as a natural strong personality trait. Empathic concern is the kind of empathy which earns us five-star Google reviews, boxes of chocolate and fully paid bills. And it is the type of empathy which makes us truly compassionate people who gain pleasure each day from our work, despite the many daily events which could turn our mood in the other direction.

This is the vet who sees that the owner needs us to keep their pet overnight and offers it before the client has even realised it’s an option. It’s the nurse who senses the terror in their client and bumps their pet up to the top of the ops list, thus reducing their hours of anxious waiting to a minimum. Or the vet who makes it a matter of urgency to phone the client as soon as their pet is recovered from their anaesthesia, and if there is no answer, sends a reassuring text. It’s the nurse who phones the day after a procedure to see how the pet and client are, and the PCA who lets the owner know that we are aware that their pet likes ear scratches, neck massage, squeaky toys, etc.

In summary, while being aware of empathy in its various and wonderful forms and knowing how and why it increases profitability and work satisfaction, there is a sad lack of true, purist empathy within our profession. That is according to most of the 42 percent of vets who are seriously considering leaving the profession.

In next month’s issue, I will focus on how to maximise empathy in yourself as a people manager and thus create a practice where all three kinds of empathy are running at full throttle throughout.
A new direction for parrot conservation

CEO of the Lincolnshire Wildlife Park, Steve Nichols, explains his vision for the future of captive psittacines in the UK

When I arrive at the Lincolnshire Wildlife Park to meet its CEO Steve Nichols, his son Liam offers to take me on a tour first and show me the tigers. “My old man’s in the cafeteria flipping burgers. We’re short staffed.” It’s that kind of place – an endearing mixture between a serious, ambitious conservation project and down to earth family enterprise.

Eventually Steve Nichols himself emerges, a talkative Yorkshireman with tattoos and infectious enthusiasm. He worked in construction for many years before a chance adoption of a friend’s umbrella cockatoo led him to develop an all-consuming passion for these intelligent, complicated birds and their experiences in captivity. He would take his bird to schools around the country, giving talks on psittacines and explaining why they weren’t suitable as pets. He also started to get to know the parrot world. “The breeders were petrified of me,” he chuckles. “They either thought I was a thief or a tax man under cover.”

These days his unorthodox style is more likely to open doors, backed up as he is by an enormous wealth of knowledge and experience. And this comes with a serious respect for the specialist veterinarians who treat his birds (over 1,000 of them) and other animals.

“I never walked into a vet’s saying, ‘I think this parrot’s got this,’” he says. “I was just very good at telling them what all the symptoms were, which gave us plenty of time to talk lots about parrots afterwards.”

Two vets regularly support the wildlife park’s population – Andrew Cook of the James Street Veterinary Centre in Louth, who specialises in parrots, and Ian Bates of the Fenwold Veterinary Group, who mostly sees to the tigers – though the park also hosts reindeer, emus, meerkats, lemurs and a partially blind puma called Nigel. You get the impression that Steve would adopt anything if he could – his original Bengal tigers were circus rescues of questionable heritage that mainstream zoos would have rejected. He seems to be forging his own path between the big players and inexpert backyard collections – and is often critical of both.

The park’s next big project is a new medical suite, set to open by Christmas and combining a rehoming centre with new capabilities in disease treatment and research. The stringent parrot admissions process is currently limited by space: every bird has a medical assessment and faecal diagnostics, and is quarantined for 24 hours before being weighed, microchipped and photographed and given a unique ID and an assigned keeper.
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Quarantine then continues in stages, as hand-reared parrots may never have seen another of their species – “some of these parrots, like cockatoos, don’t recognise they are crested, so when they see another one, it frightens them to death. And sometimes the best form of defence is attack, so they try and attack a streetwise old cockatoo that would beat it up.”

Conditions brought on by boredom and stress are also very common, with feather-plucking a particular issue that is still only partially understood.

Changing the diet can be an issue. “These animals are all ex-pets and a lot of them are very old and have been in unusual situations. Just last night, an African grey came in very late – and she looks perfect – but all she’s ever eaten for 14 years is black sunflower seeds, minute ones, and millet. It’s probably like me just having Mars bars and champagne. They’re very Hardy creatures, though the chances are her immune system won’t be the best in the world.”

Conditions brought on by boredom and stress are also very common, with feather-plucking a particular issue that is still only partially understood. “We noticed many years ago that many hens just plucked a few abdominal feathers out and we thought they were regulating the egg temperature because they wanted to breed. When people saw that, they would start changing things, so the parrot’s thinking ‘this is quite good’, so it keeps plucking feathers because it gets attention for doing a negative behaviour.” The act also releases endorphins, which can develop the behaviour to astonishing degrees.

The new centre features a reception area with information and a welcome desk for worried parrot parents; a hatchery; two veterinary treatment rooms; one veterinary ward; four quarantine rooms; and a kitchen for preparing the special food mixes used in the park, all heated and with negative air pressure to avoid disease spread.

The reception area is of particular importance to Steve – from taking in around 10 birds a year when he first started, the centre now accepts between 100 and 120 a year, and isn’t equipped to process them during the colder months when disease and exposure risks are much higher; he has found himself distracted by the growing responsibilities of the park but distressed at the loss of personal touch.

He isn’t exaggerating when he says: “it’s a big investment, but it’s probably the most important thing for parrots that this country’s ever done.” Steve’s passion and ambition are clear, as is his willingness to build from the ground up to support ideas. “We’re working with a number of vets and hopefully we’re enticing a couple of big retired avian vets to get involved, who would say ‘in a dream world, I’d like to do this’ and we’d say, ‘Well we can do that. Let’s do it.’

“The idea of the [health centre] is to give us more facilities for vets to get involved in exotic birds because at the moment, if I remember rightly, out of the six or seven years of veterinary study, I think there’s about five or six weeks on ornithology and about two days on exotics, so unless you’re actually interested in parrots, you’re not going to get any kind of experience.

“We want to provide training here… we are official partners of Lincoln University and we want to provide facilities for anyone who wants hands-on experience. All the vets have the theory but we can help out with the practical side. We don’t charge any of these vets. They come from all over Europe [and are] taught how to hold it, feed it, where to inject it, microchip it. Vets usually just have a general idea of everything, unless they have a specific interest.”

Steve is going to enormous strategic efforts to support the conservation and welfare of psittacines, with an active investment of £1.2 million over the next two years for a captive parrot conservation programme. “I personally believe that for every species, [we need to have] a core blood group, so that nobody increases the value anywhere,” says Steve, “[and] if we need to learn about them, there’s somewhere we can go and see them.” This is his solution to black market trade in fashionable parrot breeds and unscrupulous breeder practices.

Steve’s forward research thinking has got him involved with projects such as a collaboration with Defra on Quaker parakeets, elaborate nest-builders whose growing feral population in London is a serious potential threat to man-made structures. Steve and his team are working to design an entrapment nest: “we let them build and then put a little gadget in and see if they’ll carry on building round it, which we can then use to remote control the entrance.”

Looking ever further into the future, Steve’s next project is creating a state-of-the-art classroom at the park. Due to open at the end of 2019, it is part of an initiative he calls “Wild for Learning” that will allow schools to visit for free. In typical fashion, the project grew out of a family anecdote, when his granddaughter’s wildlife park school trip was cancelled because so many of the children in her class couldn’t afford it. “I said, ‘find the others and I’ll pay for them so you can all still go’. But it made me think, ‘I wonder how many should be coming here.’”

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Busting pet nutrition myths

Tips for guiding clients away from misinformation and biases and towards better feeding decisions

MARGE CHANDLER

Marge Chandler, DVM, MS, MANZCVS, DACVN, DAVIM, MRCVS, is a Clinical Nutritionist at Vets Now Referrals (Glasgow) and a private consultant in small animal medicine and nutrition. She is a diplomate of the American College of Veterinary Nutrition and of the American College of Veterinary Internal Medicine (Small Animal Medicine).

What should I feed my pet? Owners and veterinary surgeons are bombarded with marketing concepts and terms about pet foods, which may be branded as grain free, gluten free, natural, organic, vegetarian, raw, wild, holistic, premium, hypoallergenic, etc. Veterinary surgeons may feel that giving nutrition advice will be perceived as trying to sell pet food and that their nutrition knowledge and training is inadequate.

Veterinary surgeons may depend on pet food representatives for nutrition education and the information provided by larger companies is often research based and useful, but it can also be impacted by an emphasis on products they are selling. Some veterinary surgeons aren’t addressing nutrition in consultations, but it is perceived as very important to many of our clients. Feeding is an interaction that owners have with their pet every day and many of them value it highly.

Owners vary from those who want veterinary advice to those who are receptive but don’t ask and those who are adamantly against listening to their veterinary surgeon and are convinced their feeding programme is ideal. We live in an era where experts are more often questioned and less relied upon than in past decades. The information or misinformation of other sources such as the internet, breeders or pet store nutrition advisors can be compelling to owners.

We also deal with the Dunning–Kruger effect – a cognitive bias in which people with a lack of expertise and knowledge mistakenly assess their cognitive ability and expertise as much greater than it is. However, even when you know that a diet is inadequate and that the owner’s information is incorrect, it is important to treat their feeding decisions respectfully. People are more receptive to new information if they are relaxed and feel they are in a safe environment.

It is very difficult to deal with misinformation. There is no simple method for addressing this or we would not be inundated with “alternative facts”. It is not as easy as just providing evidence-based information and hoping that will encourage people to change their minds. How do people process changing an idea or updating knowledge? How do we approach misinformation and myths?

Repeat the facts, omit the myths

There are many articles about pet food myths; unfortunately, every time we repeat a myth, we make it more familiar, which can actually strengthen it. A better approach is to focus clearly on the facts and keep repeating them to the owner.

Keep it simple and use pictures

The complexity of scientific information can be daunting for some owners. Claiming a dog should be fed like its wolf ancestor is cognitively easier and more attractive for many owners than an explanation of the genetic changes in metabolism which have occurred over the centuries. Information that is succinct and easy to read and process is more likely to be accepted as true.

Are Homemade Diets a Viable Alternative to Prepared Pet Food?

For some pet owners providing homemade prepared diets for their pet is an appealing choice. Shopping, hand-selecting the ingredients and preparing the meal oneself is a good way to show their love. Whilst this might seem straightforward enough, reality is different and unless you have developed a meal plan with a dedicated veterinary nutritionist, there is a strong risk you won’t be providing the necessary nutrients. A dog for instance needs around 92% nutrients in his daily diet for healthy body function and a cat, over 80%.

Wichtig: Nutritional guidelines for cats and dogs are different, and the nutritional needs of cats and dogs are changing and are being reviewed by independent veterinary nutrition experts throughout Europe. Providing a diet with a complete pet feed is also in a person having their needs eventually met together by a human nutritionist.

Most recipes for homemade diets are nutritionally deficient.

In a study at the University of California, Davis School of Veterinary Medicine 1 , analysed 200 different recipes for homemade dog foods. Recipes were selected from veterinary textbooks, pet care books, and pet care websites. The findings highlighted that 70% of the recipes were actually nutritionally deficient and 88% were lacking in multiple required nutrients. Whilst providing a nutritionally balanced diet from home is not impossible, these results show it is a complicated task with very little margin for error. Clinical control can also be difficult.

Expert formulated diets

Most pet food producers on the market are designing products that totally nutrition for pets. These products will have the same components on the pet food label. Complete is a legal definition and the product must by law contain all of the nutrients pets need in right proportions. Rations are as time-consuming for product development and labelling. It can be very time-consuming to do the work on a product responsibly in pet food manufacturing.

Can I home cook occasionally?

An occasional homemade prepared meal can be enjoyably and or dog and owner alike. Fruits, vegetables support the overall feeding regime but please be careful to avoid foods that are toxic to pets.

Human foods to avoid

Certain foods cause toxic effects including: onions, garlic, ricin, raisins, grapes, chocolate, avocados, certain nuts and xylitol sweetened foods.

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More advice can be found at www. fediaf.org

1 University of California, Davis School of Veterinary Medicine. Nutrition of Veterinary and Wildlife. Website last updated 20-07-2017

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Figure 1: fediaf.org and pfma.org.uk both provide factsheets which can be useful as client handouts, such as this FEDIAF factsheet on homemade diets.
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Pictures or graphics are often more impactful and easier to understand than words (Figure 1). The Pet Food Manufacturers’ Association (PFMA) and the European Pet Food Industry Association (FEDIAF) both provide straightforward and evidence-based information on their websites and the World Small Animal Veterinary Association Global Nutrition Committee has a toolkit which provides FAQs on small animal nutrition.

Cognitive bias
Another factor in decision making is cognitive bias – the process of selectively seeking or agreeing with information which supports a world view and ignoring or refuting without evidence opposing ideas. When people are presented with a balanced set of facts, they gravitate towards those which reinforce their pre-existing views. This is especially true of people with strongly held views. Often, these people will not change their minds even when presented with incontrovertible evidence.

Fake experts
Nutrition also seems to have its fair share of fake experts. Nutritionist is not a protected term, so anyone may use it (although they cannot claim to be a diplomate of the European College of Veterinary Comparative Nutrition or the American College of Veterinary Nutrition). Fake experts purport to have expertise but their views are inconsistent with evidence and established knowledge. They may also denigrate established researchers and experts.

In nutrition, this often takes the form of implying or saying that trained nutritionists are influenced by rewards from large pet food companies in making their recommendations. Large pet food companies do support much of their own and university research; however, at universities they usually do not have control of the results or publications. Some fake experts may have a financial stake, eg they may be employed by a boutique pet food company supporting a brand marketed on misinformation. Some like to be seen as mavericks bravely taking on large corporations.

Pick your battles
For those people with strongly fixed views, there may not be much chance of a meaningful discussion. The people you are most likely to reach with good information are the undecided majority rather than the unswayable minority. It helps to find a common ground with clients, which is easily done as you both have their pet’s well-being uppermost. Sometimes just asking if an owner would be interested in trying another diet is effective.

Work with the owners’ world view
If possible, frame the information in a way which fits the owner’s world view. For example, the use of by-products or meat derivatives in pet food is a sustainable use of these ingredients as well as providing good protein sources. If not used in pet foods, by-products may be disposed of in landfills or incinerated; both these methods increase the potential for contamination of land and water.

Replacing the mental models
When a person has a belief based on myth or misinformation, they build a mental model using that myth. If the myth is debunked, it leaves an incomplete model which requires an alternative explanation. Explain why a myth is incorrect – it may have been cherry-picked or misrepresented information, an anecdote instead of evidence or an association which is not causation.

Cats with type 2 diabetes mellitus are more likely to go into remission if fed a low carbohydrate, high protein diet; however, this does not mean that carbohydrates in the diet cause diabetes mellitus. Obesity and the use of dry dog food have increased in the last couple of decades; however, this does not mean that there is a correlation between these trends. (See tylervigen.com/spurious-correlations for some interesting associations without causation.)

Provide written information
If owners are feeding a diet which is incomplete, unbalanced or otherwise potentially damaging, providing information, especially written information and comments included in your clinic notes, is still a good idea. Again, the PFMA and FEDIAF factsheets can be helpful as client handouts. If things go wrong in the future, it is a good idea to be able to prove that you provided advice. This is also a welfare issue as the Animal Welfare Act of 2006 includes “the need for a suitable diet”.

Summary
Facts rather than myths should usually be presented, and repeated. If a myth is stated, there should be a large warning before the myth that it is untrue. An alternative, correct, explanation or information should be presented, including if possible why the myth is wrong. Include the diet history and your recommendations in your clinic notes. Written information in straightforward language, possibly with pictures, should be provided for owners, as it is easy to forget or only partially recall information only provided orally.

A full reference list is available on request.
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Skin cases benefit from a detailed history, a physical examination to determine the health status of the patient and a dermatological examination. From this, a differential diagnosis list can be formulated, which, once ranked in order of most likely to least likely, can suggest the diagnostic tests necessary to confirm a diagnosis. Ranking is important since it enables tests to be targeted, avoiding the unnecessary expense of tests that may not be relevant to the case in question.

Involvement of veterinary nurses trained in the investigation of skin diseases can be very important. Not only can the nurse be present in the initial consultation to establish a relationship with the owner, and thereby act as a contact for subsequent queries and problem solving, they can also be responsible for the rapid in-house tests necessary for many cases, including the six procedures described in this article.

The equipment required for the six essential tests is minimal, consisting of Diff-Quik stains, glass slides/cover slips, a microscope with low, medium and high power (including oil immersion) and a good quality Wood’s lamp.

Coat brushing
This very simple test, perhaps underutilised in practice, is a useful screen for ectoparasites, eggs, flea faeces and follicular abnormalities.

The animal should be brushed over a black consulting table or over brown paper. The hairs and epithelial debris should be collected and the hair separated from scale. The hairs are placed in a petri dish enabling them to be examined with the Wood’s lamp and mounted in liquid paraffin with a cover slip for microscopic examination. The scale is also mounted in liquid paraffin and a cover slip applied.

Lice, nits, Cheyletiella and fragmented flea faeces, perhaps missed macroscopically in cases of fleabite hypersensitivity, may be found (Figure 1).

Hair plucks (trichoscopy)
Hair plucks are an inexpensive and rapid test for demodicosis, especially in areas such as the feet, where skin scraping is difficult. Hairs are selected from diseased areas determined by the dermatological examination. Hair at the periphery of lesions is selected, plucked using tweezers, placed in liquid paraffin and a cover slip applied.

Under low power magnification (x40), Demodex mites (Figure 2) are often found in association with the hair shafts, and the need for more invasive skin scrapings avoided. Cheyletiella may also be diagnosed by hair plucks (either the mite itself, or more frequently, the cocooned eggs) (Figure 3). Apart from parasites, evidence of hair damage from diseases such as dermatophytosis (Figure 4), follicular casts (Figure 2), and evidence of keratinisation problems may be found. In addition, feline pruritus is suggested by broken hair shafts (Figure 5).
Skin scraping
Skin scraping is slightly more time consuming than the previous tests but is essential in cases suspected of parasitic involvement if less invasive tests are negative. It is used primarily to identify surface and burrowing mites causing demodicosis or scabies or, in some cases, other mites such as Cheyletiella.

For demodicosis, deep scraping is required. Clip to remove hair if necessary. Squeeze the skin in the area to be scraped and apply liquid paraffin to the skin. This has the effect of lubricating and penetrating the skin and facilitating collection of material.

Use a blunt blade scrape in the direction of hair growth. The first few scrapes can be superficial and then subsequently deep (enough to cause capillary ooze). Material should be transferred to a slide, mixed with liquid paraffin, a cover slip applied and examination performed under low power.

For scabies, multiple scrapings, both superficial and deep, in non-excoriated areas are required. This is because many cases are associated with hypersensitivity to Sarcoptes scabiei and few mites may be present. Scanning of the slide under low power and not high facilitates the identification of a limited number of mites. Liquid paraffin does not kill the mite and subtle movement may help to locate its position.
Tape strips

Tape stripping is an extremely useful and versatile diagnostic test. It is quick, inexpensive and often yields valuable diagnostic information. It is a technique employed by veterinary dermatologists in the majority of cases, as it can be used to diagnose superficial pyoderma (Figure 6), bacterial overgrowth, some autoimmune diseases and parasites. Tape stripping is the most common technique for diagnosing Malassezia dermatitis or overgrowth (Figure 9).

Several 10cm pieces of tape are pressed onto the surface of the skin. One sample is examined under low power for parasites such as Demodex, Sarcoptes, Cheyletiella and lice. For the identification of bacteria or Malassezia, tape is partially attached to the slide and stained with Diff-Quik and then completely attached for examination under high power with oil immersion.

Some brands of tape disintegrate with fixative and in these cases, fixation can be dispensed with. Ultra transparent tapes can be fixed without loss of the tape and generally deliver better results.

Slide impressions and swab smears

Slide impressions of the surface of a lesion should be used for any purulent or exudative lesion. This technique is valuable for differentiating between bacterial infection and sterile lesions such as those seen in pemphigus foliaceus (Figures 7 and 8).

Suitable areas for microscopic examination are located under low power and identification of bacteria and Malassezia (Figure 9) is facilitated under high power with oil immersion. The glass slide is pressed against the moist lesion, fixed and stained with Diff-Quik. Alternatively, for purulent material, including pricked pustules, a swab is used to collect material, which is then gently rolled over the surface of the slide.

Wood's lamp examination

Wood's lamp examination is a very useful inexpensive screening test for dermatophytosis caused by Microsporum canis only (other dermatophytes of veterinary significance do not fluoresce). It is important that the Wood's lamp is of a suitable standard from a recognised veterinary supplier. It should produce ultraviolet light at a wavelength of 253.7 nanometres. Good quality Wood's lamps have two bars and an inbuilt magnifying lens.

Examination must take place in a very dark room. Warm the lamp for five minutes. Scan the animal for a few minutes as sometimes fluorescence is delayed. Position the lamp over hairs collected by brushing, as many dermatophytosis hairs are damaged and therefore easily removed by brushing.

Only infected hairs fluoresce (not surrounding skin or scale) and the apple green colour is very important as it distinguishes true fluorescence from false (Figure 10). Positive fluorescing hairs can be plucked, examined microscopically and cultured for confirmation. It is also useful to demonstrate positive fluorescence to all clinical staff, vets and nurses, as the fluorescence is striking and educational.

The often-quoted figure that only 50 percent of M. canis hairs fluoresce is incorrect. Many authorities have achieved positive results between 80 and 90 percent, with attention to detail outlined above, although a negative result should not be considered conclusive.
Don’t forget leishmaniosis

The importance of staying alert to *Leishmania* in dogs returning from sunnier climes

With soaring numbers of animals crossing the channel every year, as well as rescue dogs from abroad and owners moving to this country, UK vets are confronted with diseases that were very rarely identified before the Pet Travel Scheme made travelling beloved pets to EU countries much easier.

*Leishmania infantum* is a protozoan parasite transmitted by female phlebotomine vectors (sand flies). However, other routes of transmission have been demonstrated, such as congenital or sexual, or even direct dog to dog. The dogs are the main reservoir host, but hares and humans also can harbour the parasite.

Canine leishmaniosis is endemic in the Mediterranean basin, as well as parts of the world such as South America, Africa and the southern US. It is worth noting that many dogs will be completely asymptomatic and it may take years before they become overtly ill. The clinical disease is usually fatal and is a major zoonosis, with dogs being the main reservoir. Human leishmaniasis (note the spelling is different) will typically affect young children and immunodeficient individuals, and is a serious public health issue.

In practice, the highly variable clinical manifestations and relative rarity of the disease complicates the diagnosis. Cutaneous leishmaniosis is a common form. Skin lesions are observed in over 80 percent of the clinically affected animals and are varied: hyperkeratosis, alopecia, papules, pustules, nodules, erosion/ulceration, etc. Peripheral lymphadenomegaly is also commonly found. Visceral leishmaniosis will cause a range of signs, typically systemic and affecting multiple organs, for example, weight loss, lethargy, PUPD, vomiting and diarrhoea, kidney failure or epistaxis.

When the disease is suspected, a thorough history and clinical examination is crucial. Indeed, dogs can be asymptomatic for a very long time before developing symptoms, and a pet owner might not find it relevant to tell you about a holiday several years before. A range of tools are available to confirm the suspicion, such as in-house antibody testing, quantitative serology, PCR and cytology/histology.

Once confirmed, the prognosis varies from fair to very poor based on the severity of the symptoms. Signs of kidney failure will be one of the main negative factors. The treatment is based on allopurinol combined with miltefosine (oral treatment, available in the UK via a special import certificate) or meglumine antimoniate (injectable).

Owners have to be warned that the treatment is long, costly and requires close monitoring. Allopurinol is typically given for 6 to 12 months, while miltefosine and meglumine antimoniate will require 28 days and four to six weeks’ administration respectively. A lack of clinical response, as well as a relapse whilst on treatment or shortly after, will mean the prognosis is guarded.

**How should first opinion UK vets tackle canine leishmaniosis?**

Offer testing to any animal imported, especially rescues from southern European countries. A positive result needs to be discussed with the owner but does not mean the animal will ever show any clinical signs. Don’t forget other vector-borne diseases.

As a simplified rule based on common symptoms, any dog presented with peripheral lymphadenomegaly and skin lesions and having travelled in endemic regions should be tested.

Prevention is the key! Convincing clients to protect their pets against an unfamiliar disease will always be more challenging. However, the severity of the potential symptoms and implications of treatment should be explained, as well as the zoonotic potential. Any owner enquiring about a pet passport should be asked what part of the EU they are planning to visit.

Some basic information about the disease and vector should be provided, and prevention discussed. Sand fly repellent collars are available, and a vaccine is fully licensed in the UK. The importance of training support staff cannot be stressed enough, as they will be the first line of contact and information with clients, who will appreciate being made aware of this complex condition.

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**Further reading**


White spirit exposure in pets

How to identify and manage cases of white spirit exposure in small animals

White spirit is a colourless volatile liquid found in many homes and used as a paintbrush cleaner and to remove adhesive residue from surfaces. It is irritant to the skin and mucous membranes, including the gastrointestinal tract. It dries and de-fats the tissues leading to irritation and erythema. Burns may occur from prolonged contact. Petroleum distillates are thought to cause effects on mucous membranes and skin by dissolving lipid membranes and damaging cells. Petroleum distillates can also cause central nervous system (CNS) depression, and although the exact mechanism is unclear, hypoxia is thought to be a contributing factor.

The most severe clinical problems associated with exposure to white spirit are due to aspiration, resulting in severe pulmonary dysfunction and rapid onset hypoxaemia. The risk of aspiration and lung damage is high; white spirit has a low surface tension, low viscosity and high volatility. The pulmonary dysfunction and rapid onset hypoxaemia can also cause central nervous system (CNS) depression, and although the exact mechanism is unclear, hypoxia is thought to be a contributing factor.

Aspiration causes severe intrapulmonary shunting, which results in hypoxaemia and acidemia. Studies have shown that aspiration of petroleum distillates results in changes in the surface tension properties of pulmonary surfactant, haemorrhagic necrosis, intra-alveolar oedema, epithelial destruction and inflammatory exudation.

Clinical effects

Breath and hair may smell strongly after exposure to white spirit. Ingestion or oral exposure following grooming after dermal exposure may cause a burning sensation which can manifest as hypersalivation, head shaking and pawing at the mouth. There may be local irritation and ulceration in the mouth, vomiting, diarrhoea and inappetence. Animals may be distressed due to the discomfort, irritation and pain.

Aspiration can occur after ingestion (including grooming) or if vomiting has occurred. Clinical effects include choking, coughing, dyspnoea, cyanosis, pyrexia and in severe cases, pulmonary oedema. There may also be leucocytosis. Signs can progress for the first 24 to 48 hours with recovery over 3 to 10 days. Ingestion of a large volume or inhalation of white spirit (eg following a spill in an enclosed space) could result in CNS depression with ataxia, disorientation, tremor, drowsiness and, in (rare) severe cases, coma. Tremors and convulsions may also occur but are rare.

White spirit on the skin may cause erythema, dermatitis, blisters, alopecia, inflammation and burns. Splashes in the eye may cause conjunctivitis and ocular oedema.

Management

When managing animals with dermal exposure to white spirit, remember that white spirit is flammable, so avoid any sources of ignition. Ensure the area is well ventilated, particularly when handling animals with heavy contamination, to prevent staff becoming unwell.

Use of emetics or gastric lavage after ingestion of white spirit are contraindicated because of the risk of aspiration. An anti-emetic can be given to prevent vomiting and reduce the risk of aspiration. Activated charcoal is not recommended and may increase the risk of vomiting. Sedation is best avoided where practical as it can depress the gag reflex and increase the risk of aspiration. If there is evidence of oral discomfort, it may be helpful to wash the mouth out with water, depending on the clinical condition of the animal. Contaminated eyes should be irrigated with water or saline, stained with fluorescein and examined for corneal injury.

Animals with dermal exposure should be thoroughly washed. Petroleum distillates are not miscible with water so detergents or commercially available hand degreasers should be used. If not available, the use of animal or vegetable fat can be helpful when rubbed into hair and skin before washing with soap and water. A collar to prevent grooming may be required. Mild irritation of the skin will usually respond to an emollient, but a topical steroid may be required for moderate to severe dermatitis and severe irritation should be managed as a thermal burn injury.

After decontamination, treatment is symptomatic and supportive. A bland diet is recommended if there is evidence of severe buccal irritation. In animals with aspiration, pneumonia care will be required because of the risk of pulmonary oedema.

Animals with white spirit exposure should be assessed for respiratory effects. X-ray evidence of pulmonary changes may occur within an hour of aspiration or take 6 to 12 hours to manifest and be maximal at 48 hours. Aspiration should be managed conventionally with oxygen supplementation and cage rest. Routine use of antibiotics is not necessary in animals with aspiration since petroleum distillate pneumonitis is non-bacterial in origin. Steroids are not recommended in these cases since they can increase the risk of infection and have been shown to be ineffective. Salbutamol can be used as a bronchodilator, if required.

Animals that remain asymptomatic for 6 to 12 hours after white spirit exposure are likely to remain well, but animals with pulmonary oedema have a more guarded prognosis.
There are two ways to prevent Angiostrongylosis:

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Note: X-ray image for artistic purposes only; not intended to show clinical information or differences. † or pulmonary arteries. Products containing moxidectin & milbemycin oxime are licensed to prevent angiostrongylosis; see SPCs/datasheets for details of how this is achieved in different ways. *Schnyder M et al, Vet. Parasitol. (2009);168:226-232. Milbemycin oxime & afoxolaner study example: ~95% prevention worm count reduction, however 9 out of 10 dogs still had low numbers of larval worms. 1 dog was free of lungworms, Labon et al, Parasites & Vectors (2016) 9:485. Advocate for dogs contains imidacloprid & moxidectin (UK) POM-V (IRL). Advice should be sought from the medicine prescriber. Further information from the datasheet at www.noahcompendium.co.uk or on request. Registered Trade Mark of Bayer AG. Bayer plc, 400 South Oak Way, Green Park, Reading, RG2 6AD. Tel: 0118 206 3000. Bayer Ltd, The Atrium, Blackthorn Road, Dublin 18. Tel: (01) 293 9333. L GB: M1:12.2018.18327
The risk of Lyme disease exposure to UK dogs

With an increasing number of dogs at risk of Lyme disease, prevention is key

T

ick-borne disease represents an ongoing and growing risk to UK dogs and their owners. This comes from both increasing numbers of endemic ticks and increased outdoor activity and creation of green spaces bringing people and their pets into closer proximity with them. The most common ticks found on UK dogs continue to be *Ixodes* spp. ticks (Figure 1), the vectors of Lyme disease (Abdullah et al., 2016). Lyme disease is caused by spirochaete bacteria of the *Borrelia burgdorferi* complex and has been reported in a wide variety of mammals. Canines and humans, however, appear to be relatively more susceptible to disease.

Clinical signs in dogs and people are immune mediated. Most infections with *B. burgdorferi* are subclinical with 5 to 10 percent of infected dogs developing clinical signs. Dogs that do develop Lyme disease can be severely affected with acute arthritis in one or more joints with associated lameness, joint swelling and heat. Other acute signs may follow, including fever, anorexia, lethargy and lymphadenopathy. The acute form is often transient with relapses occurring.

Response to treatment with four weeks of doxycycline or amoxicillin is good if recognised early but if missed, chronic disease can develop. This can potentially lead to non-erosive polyarthritis and protein losing nephropathy. Rarely, heart disease, seizures and behavioural changes may also occur. The common primary human clinical presentation of a circular skin rash known as erythema migrans, which can act as an early sign of infection (Figure 2), is absent in dogs and the lack of a pathognomonic sign in canines means that infection can easily be missed.

Prevention is therefore infinitely preferable to treating existing disease and preventative measures for dogs at high risk will also reduce transmission of other tick-borne pathogens present in the UK such as *Anaplasma* and *Babesia* spp. While the reported incidence of Lyme disease in people is increasing year on year, there is no similar prevalence or disease incidence data for dogs. It has been suggested that dog owners might be at greater risk of infection from Lyme disease than people without dogs, but studies have found no correlation between dog ownership and risk of infection, and infected dogs pose little or no direct risk to humans. On dogs, however, 2.37 percent of *Ixodes* ticks have been found to be infected with *Borrelia burgdorferi* complex bacteria, demonstrating that dogs are being exposed to infection. This prevalence of infection has not increased.

**FIGURE (1)** *Ixodes* ticks are still the most common ticks found on dogs in the UK (photo courtesy of John McGarry, University of Liverpool)

**FIGURE (2)** The erythema migrans rash is a common presentation in humans, but does not occur in dogs
The risk of Lyme disease exposure to UK dogs over the past 10 years but the number of ticks that dogs have been exposed to has. This increase in tick exposure is likely to be driven by two significant changes over the past decade: increases in tick activity and increases in outdoor activity and green space.

Increases in tick activity
Ticks in the UK demonstrate increased activity and questing behaviour for hosts in the spring and autumn, but real-time data from the Liverpool University SAVSNET scheme and the Public Health England Tick Surveillance Scheme (TSS) (Wright, 2018) have demonstrated that this increase in exposure now occurs in dogs throughout the summer months as well, with the potential to be exposed to tick bites at any time of year. It is uncertain what has driven this increase in activity, but it is likely that a milder, wetter climate, promotion of green spaces and corridors into urban areas and increasing numbers of deer and wildlife reservoirs are all factors.

Increases in outdoor activity and green space
Outdoor recreational activity is becoming more popular and many dog owners are now travelling with their pets to rural green locations to exercise and enjoy outdoor holiday activities. This will inevitably lead to increased tick exposure, particularly where this land is shared by deer and livestock. In addition to this, there is a trend known as the “crossroads phenomenon”.

High numbers of ticks will thrive in pristine wilderness, but few domestic pets or humans will ever encounter them. Increased housing development on rural land, green corridors for wildlife and overall urban encroachment by wildlife, however, will bring ticks increasingly into closer contact with people and their pets.

These trends are unlikely to be reversed over the coming years and forestation across the whole of Europe is steadily increasing. Increased green space and outdoor recreational activity carries many benefits but means that protection from ticks and tick-borne transmission in dogs requires preventative treatments and physical removal of ticks.

Use of tick preventative products
The use of routine preventative products that rapidly kill or repel ticks is useful in reducing tick feeding and therefore transmission of infection. Products containing an isoxazoline (eg Bravecto, Credelio, Nexgard, Nexgard Spectra and Simparica), permethrin (Activyl plus, Advantix and Vectra 3D), deltamethrin (Scalibor collar) and flumethrin (Seresto collar) all fulfil these criteria. These should be recommended for dogs walking in tall grass, bracken, pasture or woodland and environments shared by ruminants or deer. Any dog with a history of tick exposure should be routinely treated as it is likely that lifestyle will re-expose them.

It is important to consider compliance when discussing which product to use, as well as lifestyle. Whether a client prefers or is able to administer a tablet, collar or spot-on, and whether the dog has had reactions to products in the past, should be established. Frequent swimming or bathing of dogs may make some topical products unsuitable. No product is 100 percent effective, so owners should still be advised to check their dog for ticks at least every 24 hours.

Daily monitoring for ticks
As the bulk of Borrelia spp. infection is thought to be transmitted at least 24 hours after attachment, clients should be advised to check their pets every 24 hours and carefully remove any ticks found (Figure 3) with a tick hook, using a simple “twist and pull” action. It is important that owners are instructed how to remove ticks without stressing them and without leaving the mouthparts in situ. Removal can also be performed with tweezers with a “straight pull” technique. They should be fine pointed and not blunt, as crushing will stress the tick, causing it to release stomach and salivary gland contents, increasing the risk of disease transmission. The application of petroleum jellies or burning will also increase this likelihood and are contraindicated.

Vaccination
A licensed vaccine is available for Lyme disease prevention (Merilyme3) in high-risk dogs. The vaccine prevents migration of the spirochaete to the salivary glands, reducing the risk of infection as a result.

Conclusions
Lyme disease is a significant threat to dogs exposed to ticks in the UK. Although early treatment can carry a favourable prognosis, prevention is desirable in pets that are at significant risk of exposure. Environmental, climate and lifestyle trends are putting dogs at increased risk of infection, so it is vital that veterinary professionals give appropriate risk-based prevention advice to help keep dogs safe.

A full reference list is available on request
Ectoparasites can be an important cause of disease and welfare concerns in farmed ruminants in the UK and are more common in the autumn and winter. In this article, the conditions that are more likely to be brought to the practising veterinary surgeon’s attention are summarised and other parasitic skin diseases that may be diagnosed in the future are discussed.

**Sheep scab (Psoroptes ovis)**
This disease is endemic in the UK and notifiable in Scotland and Northern Ireland. Although its prevalence is not known with certainty, it is likely to have increased since the 1990s (Bisdorff et al., 2006). Disease is caused by an allergic reaction (Figures 1 and 2) to *Psoroptes ovis*, a mite which is capable of infecting sheep and surviving in the environment for approximately 15 days. Sheep scab does not affect humans and rarely affects cattle.

Diagnosis is made by examining skin scrapes and scab material taken from the edge of the lesion. The APHA will examine the sample by direct microscopy (Figure 3), but will also carry out a potassium hydroxide (KOH) digest, which may detect mites if numbers are small, or they are hidden in scab material.

There is also a recently introduced commercial ELISA test that detects antibodies to *P. ovis* mites. It is to be used in groups of animals and can aid early diagnosis as the antibody response can be detected within two weeks of infection. It can also indicate infection in chronically affected animals where clinical signs and mite numbers may be reduced.

There are only two types of treatment for sheep scab: the organophosphate (OP) dips or the injectable macrocyclic lactones (MLs). All of the affected group should be treated.

The ML treatments vary as to their persistency, leading to variations in whether animals have to be moved from the infected areas after treatment (necessary for all ML treatments apart from moxidectin) and the amount of time before they can mix with untreated sheep. They are also all anthelmintics, so their use will have implications for the development of anthelmintic resistance.
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The recent publication of detection of *P. ovis* mites resistant to MLs on four farms in England and Wales (Doherty et al., 2018) highlights the importance of diagnosis of the cause of pruritus and correct treatment. The Sheep Veterinary Society has published updated guidance on this disease.

**Further Information**
Sheep Veterinary Society: sheepvetsoc.org.uk/sites/default/files/SVS%20Sheep%20scab%20guidance%20for%20vets%202018_0.pdf

**Chewing lice in sheep (*Bovicola ovis*)**
Chewing lice are an important differential diagnosis for sheep scab in pruritic sheep. It is, however, possible to have sheep infested with both *Psoroptes ovis* mites and *Bovicola ovis* lice. Diagnosis is by direct microscopic examination of skin scrapes or wool plucks from affected areas.

Treatment of chewing lice in sheep is by OP dip or by topical synthetic pyrethroids. Injectable MLs are not licensed against chewing lice. Topical pyrethroids will only have limited efficacy against lice in full-fleeced sheep.

**Further Information**
SCOPS: scops.org.uk/external-parasites/

**Psoroptic mange in cattle**
Psoroptic mange is an important disease in cattle present in Europe, and outbreaks in the UK (Figure 4) have been linked to imported live animals and bought-in cattle. It is not a notifiable disease in the UK and it does not affect humans. The *Psoroptes* species found in cattle, though indistinguishable from *P. ovis* in sheep, appears to be a cattle-adapted strain and has failed to establish in sheep (Jones et al., 2008).

Like the disease in sheep, clinical signs are more apparent in the autumn and winter, allowing sub-clinically infected cattle to be moved at other times. Pruritus and secondary infection (Figure 5) can be severe, particularly in animals receiving poor nutrition and those suffering concurrent disease (Mitchell, 2012).

Diagnosis is by microscopic examination of skin scrapes for *Psoroptes* spp. mites.

Treatment is difficult. Ivermectin injection and moxidectin and doramectin pour-on and injections (all MLs) are licensed for the treatment of psoroptic mange in cattle in the UK, but nothing is licensed for lactating dairy cattle.

However, in the outbreaks investigated in the UK (Jones et al., 2008), the MLs were not fully effective and repeated treatments or alternative products (permethrin pour-on or amitraz) have to be used under veterinary supervision, under the cascade. The treatment should be given to all animals in the group and any in-contact animals. Movement from infected housing should also be advised.

It is very important to repeat the skin scrapes to check the efficacy of the treatment used as clinical signs may improve, but live mites may still be present.
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Sucking lice in cattle
Cattle sucking lice (Linognathus vituli, Solenopotes capillatus or Haematopinus eurysternus) are commonly seen on the head, neck and around the eyes. In young calves, severe infections can cause severe anaemia and malaise and in extreme cases, are associated with death (Figure 6). It is important to remember that a heavy louse infestation may itself be a sign of another underlying condition, such as malnutrition or chronic disease, as debilitated animals may not groom themselves effectively.

Transfer of lice between animals or flocks/herds is usually by direct physical contact as, unlike mites, they cannot survive for long in the environment. Diagnosis can be achieved through microscopic examination to identify adult louse populations and eggs adherent to hairs. Treatment is by pour-on synthetic pyrethroid preparations or injectable or pour-on MLs. All cattle in direct contact must be treated.

Exotic parasitic skin diseases in cattle
Parahilaria bovicola
Summer "bleeding disease" is caused by a nematode in the subcutaneous tissues of cattle. The nematode punctures through the skin to lay eggs on the skin surface, causing cutaneous bleeding points. Eggs and first-stage larvae are present in the exudate and flies (Musca autumnalis) are infected by feeding. The parasite develops to the infective stage (L3) in the fly and cattle are infected by them feeding on wounds or lachrymal secretions, transmitting the nematode. The disease is present in many European countries.

Besnoitia besnoiti
Besnoitia besnoiti is an emerging protozoan parasite in cattle, present in Europe. It can be spread by biting insects. A proportion of animals show severe clinical signs of progressive thickening, folding or wrinkling of the skin with hair loss. They will also have scleral, conjunctival or vulval cysts.

Further Information

Further Information
For further information, see apha.defra.gov.uk/documents/surveillance/diseases/vetinfonote-bovine-besnoitiosis.pdf

A full reference list is available on request
APHA would be interested to investigate potential cases of the diseases above. If you have queries about these, contact your local Veterinary Investigation Centre.
You can also check the APHA Vet Gateway web page (apha.defra.gov.uk/vet-gateway/index.htm), a portal for vets with guidance, news and intelligence on new and re-emerging animal health threats.
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Preparing for fluke this winter

Following one of the hottest summers on record, how vigilant should we be against liver fluke?

Douglas Palmer, BVMS, MRCVS, graduated from the University of Glasgow in 2002. Douglas went into a largely farm animal practice in rural Northumberland. Since then, he has worked in several other mixed practices in the North East of England before joining Norbrook in 2015.

Asciola hepatica, more commonly referred to as liver fluke, is now considered endemic in certain areas of the UK, particularly in the wetter regions to the west. Despite our increased knowledge of liver fluke, the presence of this parasite is still on the increase.

Climate change may be contributing to this increase, with many wet summers and milder winters leading to a longer window where the intermediate host, the mud snail, is active on pastures. Intensification of farming practices, increased animal movements, increased drug resistance and wildlife hosts also play their part.

The incidence of fluke disease diagnosed post-mortem in cattle and sheep has risen year on year (VIDA), and is estimated to cost UK agriculture around £300 million per annum due to production losses; liver condemnations alone cost over £3 million each year (AHDB, 2016).

According to the National Animal Disease Information Service (NADIS), the overall UK average temperature in August 2018 was 15.3°C (0.3°C above the long-term average), while rainfall was 5 percent less than the long-term average. What does this mean for liver fluke?

The provisional fluke forecast for autumn 2018 (based on monthly rainfall and temperature data from May to August 2018) is predicting a low risk across the UK, although some parts of Scotland have been flagged as medium to high risk. These risk levels may change dependant on weather conditions in the following months (NADIS, 2018).

A joint press release issued by Sustainable Control of Parasites in Sheep and Control of Worms Sustainably highlighted that when considering liver fluke risk on individual farms, local factors must be considered. It must not be assumed that the dry hot weather this summer will guarantee low infection levels on all farms across the UK.

Triclabendazole is the only active ingredient available that should be effective against all stages of liver fluke. However, historical over-reliance on this flukicide has contributed to the development of resistance in F. hepatica. This resistance has been confirmed repeatedly in the UK (Hanna et al., 2015), particularly in sheep-rearing areas (Williams et al., 2014). Triclabendazole resistance in fluke causes the biggest disease issues in sheep as they are far more susceptible than cattle to the acute syndrome, where most often the initial clinical signs are multiple sudden deaths (up to 10 percent of the flock).

Triclabendazole resistance in liver fluke is a one-way street. Once resistance has developed, reversion to susceptibility is unlikely; strategies must be discussed with farmers to decrease the likelihood of triclabendazole resistance developing.

Advising farmers on management changes, eg considering fencing off wetter areas of pasture and not grazing sheep on high-risk pastures during the periods of highest risk, can help reduce fluke burdens. When treatment is necessary, it is crucial to make a choice of correct active ingredient based on the season and likely lifecycle stage of the fluke infecting sheep. Triclabendazole should be reserved for times of the year when acute liver fluke disease is most likely.

It is equally important to only prescribe flukicides when strictly necessary, taking into account individual farm history, forecasting and specific diagnostics. Advising farmers on proper dosing procedures can also help ensure effective fluke control. Weighing individual animals would be the gold standard for good dosing practice. Where this is not possible, animals should be grouped according to estimated size and dosed according to the heaviest animal in the group. If there is a wide variation in size, farmers should take care to split the group appropriately, then dose accordingly. Underdosing may increase the risk of fluke surviving, while overdosing may increase the likelihood of adverse events.

In conjunction with farmers, it is crucial to implement a robust quarantine strategy for all parasites, including liver fluke, particularly with the risk of introducing fluke resistant to triclabendazole to farms.

Treatment of liver fluke is not straightforward; different active ingredients are effective against different fluke stages and choice of product should take into consideration the time of year and which stages of fluke you are trying to target.

For example, sheep are most at risk of acute fluke disease caused by migration of a huge number of immature fluke stages in the autumn. Therefore, an active ingredient such as triclabendazole, which targets younger fluke, should be considered. Follow-up testing after treatment with triclabendazole would be prudent to ensure this has worked. Later in the year, active ingredients that target older fluke, such as closantel or nitroxinil, should be used. Where adult fluke are likely to be present, oxyclozanide or albendazole could be considered. No flukicide offers a persistency of action and in high-risk areas, treatments will need to be rotated and possibly repeated throughout the year.

A full reference list is available on request.
Pulse therapy treatment of *Microsporum canis* infection with itraconazole

Christopher Puls and others, Elianco Animal Health, Greenfield, Indiana

*Microsporum canis* is the organism involved in more than 90 percent of cases of feline dermatophytosis. Itraconazole is widely used in treating this condition and is usually given as a daily oral dose for several weeks. The authors investigated the efficacy of a 10mg/ml oral solution using an alternating-week pulse therapy regimen which has been shown to be effective in treating human patients with the same condition. Their results show that treatment at a dose of 5mg/kg produced a clinical cure and reduced the time to mycological cure compared with untreated controls.


Comparison of methods for detecting canine angiostrongylosis

Morgane Canonne-Guibert and others, University of Liege, Belgium

Angiostrongylosis, caused by the lungworm *Angiostrongylus vasorum*, is an emerging parasitic disease in western Europe. It produces various non-specific clinical signs and can be fatal if left untreated. The authors compare the accuracy of laboratory diagnosis by the Baermann faecal test with other, more modern serological and molecular techniques. Seven dogs with characteristic clinical signs of coughing, exercise intolerance and dyspnoea were investigated using the Baermann test, three blood tests (the AngioDetect rapid assay, antigen ELISA and antibody ELISA) and quantitative polymerase chain reaction (qPCR) using bronchoalveolar lavage samples. Their results demonstrated that the qPCR test was the most accurate technique of the five. However, this is a more invasive technique and requires the sample material to be collected under general anaesthesia, which can be particularly risky in dogs with respiratory distress. Nevertheless, the authors suggest that it may be useful in clinically suspect dogs which have tested negative with the Baermann and AngioDetect methods.

*Journal of Veterinary Internal Medicine, 32*, 951-955.

Larvicidal potential of piperovatine in the control of cattle ticks

Carla Maria Fernandez and others, State University of Maringa, Brazil

The cattle tick *Rhipicephalus microplus* is one of the most important ectoparasites in the world, causing economic losses worth millions of dollars for the global beef and dairy industries. Resistance has developed to each of the parasiticides commonly used in controlling this organism. The authors investigated the efficacy of a novel larvicidal product extracted from the roots of *Piper corcovadensis*, a plant native to Brazil. The product, piperovatine, caused 100 percent mortality in doses at or above 20ug/mL.

*Veterinary Parasitology, 263*, 5-9.

Nonstrangulating intestinal infarctions in horses due to *Strongylus vulgaris*

Tina Pihl and others, University of Copenhagen, Denmark

Nonstrangulating intestinal infarction occurs when arteries in the intestinal wall are occluded by migrating larva of the helminth *Strongylus vulgaris*. The authors describe the clinical features and outcomes in 30 cases. The most consistent findings were mild colic, increased peritoneal fluid, increased serum amyloid and a positive *S. vulgaris*-specific antibody titre. Exploratory laparoscopy was performed in 21 cases while 11 horses were euthanised due to the presumed poor prognosis. Nine horses underwent intestinal resection, of which three survived to discharge.


Survey of practitioners’ approaches to canine heartworm treatment

Amy Dixon-Jimenez and others, University of Georgia, Athens

The heartworm *Dirofilaria immitis* can be controlled using preventive parasiticides but where it is endemic, many dogs do not receive regular treatment. The authors surveyed the advice given to clients by practitioners who graduated from one veterinary college. Nearly all (99 percent) of the respondents recommended meellaromine dihydrochloride as a first-line treatment. However, when that recommendation was declined, 74 percent suggested long-term administration of ivermectin, a policy counter to the advice of the American Heartworm Society.

*Journal of the American Animal Hospital Association, 54*, 246-256.
“Looking at the animal is key, not just focusing on the numbers the machine gives us”

It had to come to an end sometime, I guess. Janice and I had been together for years – she had accompanied me wherever I went. But eventually I’m afraid to say she ended up just getting on my nerves. Her requests were becoming more and more abrupt. “At the next junction, turn left” without a please or thank you was OK, but often now her demands were simply unreasonable. “Where possible, perform a U-turn” just wasn’t appropriate halfway down a dual carriageway – surely she could tell that such a manoeuvre would not be achievable for the next few miles. And yet I had come to depend on her in a way I would have thought ridiculous 10 years ago, when a map spread out on the passenger seat was quite sufficient.

This reliance became particularly obvious when Janice wouldn’t respond any more. Pressing “A” on her yielded no result, so trying to head for Abacus Avenue in Aylesbury became an impossible task. Eventually, I had to ditch Janice and choose a new travel companion. And truth be told, I liked Candice from the get-go: her calmer voice and more reasonable requests. Thanks, by the way, to Brett, a vet student working with me during that tricky transition, who gave Candice her name.

Realising how dependent I had become on this electronic gadgetry made me consider the wider veterinary world.

I’ve just had the delight of hosting two veterinary surgeons from India who run a trap, neuter, vaccinate, release scheme with tremendous benefits on reducing dog bites and rabies. We were watching a dog with a tumour have a CT scan before radiotherapy. They said that their clinic was fortunate to have a plain X-ray machine; they managed quite well with that. How, they asked, did we teach students what to do when advanced technologies weren’t available, or funds didn’t allow expensive diagnostics?

The vet school runs the RSPCA clinic in town and provides veterinary services for the Blue Cross too, so students get to see the routine cases presented to general practice and those where finances are more constrained than the cases referred to our second opinion clinic.

We want to teach students “gold standard” care in all types of practice, and that means, for instance, that anaesthetised patients have pulse oximeters attached and end tidal CO₂ monitored together with a host of other bells and whistles I don’t even understand! But we do need to remember to feel a pulse as well – sats of 97 percent won’t tell me if that pulse is weak and thready or strong and bounding, will it?

Just as my reliance on Janice or Candice can be insufficient when there is an accident up ahead or a flooded ford in my path, we need to teach students not only how to make best use of all the modern technology that is available but also the basics of using their own senses in diagnosis.

Looking at the animal is key, not just focusing on the numbers the machine gives us.

David Williams
Associate Lecturer, Veterinary Ophthalmology
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Delegates at the Official Vet Conference 2018 had the opportunity to question the APHA’s proposals for adapting the workforce post-Brexit.

When asked whether he was confident that the veterinary profession would be able to meet the demands of a no-deal Brexit in six months’ time, John answered: “Yeah, I think I am. There are a huge number of moving pieces in this and it’s quite a complicated picture, but we’re working very hard with the vet profession and with businesses around awareness, making sure there are good communications, so that should be manageable.”

John Bourne, Director of Biosecurity and Food Projects, Defra, has responsibility for the UK’s exit from the EU as one of 14 projects currently ongoing. He discussed some aspects of Brexit at the conference. “For OV, there will be uncertainty until the outcome of the negotiations has been agreed. The most difficult outcome will be no deal with the EU.” For countries outside the EU, there will be little change in the requirements for the movement of goods to and from the UK, he clarified, noting that a series of technical notices are being written to help OV prepare for the possible outcomes.

John used the example of the lead time needed for tests to take animals to the EU. If these change and the details are not known until the end of March next year, there may not be time for the tests to be completed before animal movement is sought. The intention is to have a risk-based regime that is suitable for the UK, and OVs are encouraged to talk to Defra and highlight any issues that are of concern, he said.
Will the profession embrace government plans to control future disease threats?

Approved Tuberculin Testers (ATTs). If agreed, the earliest date for roll-out would likely be 2020. This may coincide with the tendering process for the next raft of TB testing, which will give project managers another consideration for costings, training and responsibilities. The use of lay testers would apply to England only.

The consultation closed a few days before the OV Conference and the responses had not been collated, but the results are due to be published by the year end. The factors that have led to the need for a consultation include an increase in disease surveillance, six-monthly testing within the TB High Risk Area and a shortage of cattle vets. The speaker highlighted that the involvement of lay TB testers is intended to provide an additional role for paraprofessionals, allow vets to focus on more specific tasks requiring veterinary judgement and improve cost effectiveness, while maintaining high quality standards. Whether testing practices choose to engage ATTs would be considered a business decision.

A training module is available now, and a pilot project is planned to start immediately. The pilot project is designed to ascertain whether the developed module is fit for purpose, to provide a platform for farmer feedback about lay testers on their farm and to monitor results and outcomes. It was not indicated where the pilot project would take place, but any practices that wish to have hands-on experience of trained lay testers may wish to contact APHA.

The APHA does recognise some concerns about ATT introduction. The speaker emphasised that the quality of the testing must be maintained and the tester seen to be competent. There will be an online course, theory and practical training with an examination and ongoing performance audits. During training, an ATT will be under direct and constant supervision with assessment of cattle injections and readings. It is expected that there will be six-monthly checks, with revalidation every two years.

It was emphasised that the introduction of lay testers is not to replace veterinary surgeons and the use of ATTs will not be compulsory. An ATT will work as part of a veterinary surgeon-led team. It is considered that a combination of the two would build strong relationships with farmers and that 60-day repeat testing may be carried out by vets in some circumstances and an ATT in others, according to the specific situation. There were many questions from delegates, the answers to which provided some clarifications:

- An ATT cannot confirm a reactor without veterinary involvement
- An ATT cannot perform testing for exports
- An ATT can clear a herd from restrictions (eg second 60-day test) as there will be confidence in their ability
- No decision has yet been taken on whether an ATT should be involved in pre- and post-movement testing
- An ATT will be involved in skin testing, not blood tests for gamma interferon
- The intention is not to have large testing organisations with many ATTs; the ATTs will be linked to and led by a veterinary practice
- There might be a limit on the number of ATTs at a practice; this is one of the outcomes sought from the consultation

It was mentioned that the baseline qualifications for an ATT to enter the training programme would be three GCSEs and six months of on-farm experience. This is the same baseline for an animal health officer, but it was pointed out that many of the current officers carrying out TB testing for APHA considerably exceed those qualifications. It is anticipated that veterinary practices will offer candidates for training.

It was also not difficult to hear views from members of veterinary practices at the South West Dairy Show with regards to these proposals. There are many aspects to consider and the results of the consultation will no doubt highlight the benefits and concerns. It is a challenging time for large animal practices; the introduction of six-monthly testing within the High Risk Area is seen as a real problem in terms of testing days and personnel. However, there is a view that the introduction of ATTs is being rushed because of Brexit and that “the profession” needs time to consider how best to adapt to the changes.

John Bourne said that he is confident that in the event of a no-deal Brexit in six months’ time, the UK veterinary workforce would be able to meet the demands.
The purchase of a horse or pony can appear to be a simple business transaction. This transaction may, however, involve considerable sums of money and high levels of emotion. In many situations, the purchaser may have unrealistic expectations, too. Veterinary surgeons step directly into this highly charged situation every time they perform a pre-purchase examination (PPE).

If, for whatever reason, disappointment follows, or something goes wrong, the modern consumer society dictates that someone must be to blame, and the finger is frequently pointed at the vet.

There is no other transaction where it is easier for the seller to offload all responsibility for defective goods, and it is a tribute to our profession that negligence claims are not more frequent.

This is in no small part due to the excellent design of the approved PPE Certificate, supported by BEVA, RCVS, VCI and Veterinary Ireland (2012). This certificate was most recently modified this year, when it was confirmed that a mouth examination with a speculum should not be included in the standard procedure, but that it could be included as an additional procedure.

Veterinary Defence Society (VDS) figures from 2001 to 2017 show that just over one in three equine negligence claims involve a PPE. Missed features (including those missed on radiographs) top the list at 38 percent, followed by lameness (32 percent) and claims involving sarcoids and melanomas (19 percent).

Dental claims make up less than 5 percent of equine claims. Of the dental claims, most involve ageing and issues with the incisor teeth (2.5 percent of all claims) with only 1.3 percent of all equine PPE claims involving the cheek teeth. Put another way, less than one equine PPE claim per year involves an issue with the cheek teeth.

VDS members declare that they undertake between 30,000 and 40,000 PPEs per year, thus the approximate risk of a dental claim involving cheek teeth is 1 in 35,000 which suggests it is entirely appropriate to resist widening the scope of the PPE to include a dental examination using a speculum, remembering the old maxim “if it ain’t broke, don’t fix it!”

Around one in 500 PPEs result in a negligence claim. Well over half of these claims are successfully defended by the VDS and a small percentage are settled with an ex gratia payment, with very few cases proceeding to court. So, when one considers the difficulty of the PPE, it is testament to the skill of the veterinary surgeons performing the examination combined with the excellent design of the PPE certificate that relatively few PPEs end up as negligence claims.

Well done BEVA and VDS for putting on those wonderful annual PPE courses to help ensure that the high standards remain. And well done BEVA for taking a considered look at the current certificate and ensuring it is up to date and reflective, and ticks the box to ensure that the PPE continues to be a fabulous example of the equine veterinary profession successfully serving the equine community.

Though we mustn’t be complacent, the way the PPE is handled in the UK and Ireland is first class and is most definitely a success story we can feel good about.
Detecting tumours in horses

In the first of a two-part article on equine skin cancers, common conditions are described to aid cancer identification and treatment decisions

M any tumour conditions in horses are common and affect the skin – but there are some significant internal tumours to be aware of. Often these have cutaneous manifestations either as a similar tumorous appearance (eg melanoma, lymphoma) or paraneoplastic cutaneous evidences (eg pruritus, paraneoplastic pephigus). The management of cutaneous neoplastic diseases has improved over the past 40 years, but despite significant progress in other species in a range of neoplastic conditions, in the horse, progress lags – especially in the management of internal neoplastic disease.

The early detection of internal cancer is critical to its potential management – managing severe, disseminated tumours, whether cutaneous or internal, is easier when tumours are small and localised. However, in the equine species, cutaneous neoplasia has been consistently belittled and, therefore, owners have developed a casual approach to tumour medicine that regrettably has also transferred to the veterinary profession. This has been a major constraint on progress in cutaneous cancers.

There are many reports of single or short series of equine cases for almost all the known tumours in mammals, but these are seldom properly documented and are even less often incorporated into larger, multicentre studies that could provide genuine evidence-based information on prognosis and treatment options.

Oncology has not become a significant speciality in equine medicine. Specialist opinion can usually be obtained, and some cases can be admitted to specialist centres for treatment; this should maximise the chance of successful treatment. However, it is important to remember that no specialist will have a 100 percent success rate – any person or organisation that claims remarkable results should be viewed with suspicion.

The major emphasis in equine oncology is on:

1. **Equine sarcoid**: A cutaneous tumour; the main complications involve the fact that it encompasses a spectrum of fibroblastic tumours, including neurofibroma, spindle cell sarcoma, fibrosarcoma and myxofibrosarcoma.

2. **Equine melanoma**: There are variations, some of which are highly malignant, but the majority are singularly benign and have only space-occupying and cosmetic effects.

3. **Squamous cell carcinoma**: The most aggressive form is in the stomach, but there are highly dangerous variants of the cutaneous form that occur in the mouth, nasal passages and sinuses, bladder, and preputial and vulvar regions.

4. **Mast cell tumour**: Mostly cutaneous or conjunctival presentations, as well as in the skin of the face/head and distal limb regions.

5. **Lymphoma**: Cutaneous forms are recognised (and these may be related to granulosa cell tumours, directly or indirectly); intestinal, mediastinal and generalised forms are encountered occasionally.

6. **Granulosa (theca) cell tumour**: The most common reproductive tumour, it has well recognised clinical and endocrinological manifestations (Figures 1 and 2).

7. **Lipoma**: Rare in horses but mesenteric lipomas are common in older horses, with ponies probably being over-represented. They are invariably benign, but do have serious consequences with a high proportion of strangulating intestinal obstructions due to lipoma in older horses.

These tumour types make up over 98 percent of equine tumours in the horse, with surveys of tumours largely focusing on cutaneous tumours (Jackson, 1936; Baker and Leyland, 1975). There are also several less common skin tumours such as keratoma, keratoacanthoma, sebaceous adenoma and giant cell tumour. Little evidence is available on most of these. Rarer tumours include mesothelioma, haemangiomatos, pheochromocytoma, intestinal adenocarcinoma, basal cell carcinoma, haemangiosarcoma, seminoma, dysgerminoma.

The main problem with many of these is that so few cases have been reported that evidence-based approaches are difficult and, in any case, most of those involving serious internal tumours are diagnosed at necropsy or are destroyed when the diagnosis is made. The “pituitary adenoma” that is usually viewed as a neoplasm of the pars intermedia is not now considered to be a tumour in most cases – it is probably best viewed as a benign but functional hyperplasia. What is certain, however, is that brain and central nervous system tumours are extremely rare in horses. Similarly, the ethmoid haemangiomatos is widely viewed as a non-cancerous neoplasm, but a few cases have anecdotaly been associated with subsequent adenocarcinoma.

Young foals may also have cutaneous haemangioma;
Detecting tumours in horses

these are both difficult to treat and highly dangerous if left. The most difficult cutaneous tumours to treat are those that are cutaneous manifestations of internal or widely disseminated tumours such as lymphosarcoma.

Despite the high prevalence of the major tumour types, little therapeutic progress has been made. The problems of individual tumour types have influenced progress. The equine melanoma occurs predominately in grey horses and, despite the often reported near 100 percent prevalence in grey horses over the age of 10 to 15 years, little is known about the condition. Grey horses are the only ones materially affected by melanoma and so there is likely little incentive to research this condition.

Squamous cell carcinoma affects various skin sites, so the numbers of cases are low – again, this slows progress. Furthermore, it commonly affects difficult anatomical sites such as the penile skin, the eyelids and the mouth, so again the therapeutic options are limited by anatomic considerations. There has also been little progress in our understanding of the equine sarcoid; the belief of many pathologists that the disease behaves as a virus infection rather than a “cancer” condition has hindered therapeutic progress.

This has led to an unhelpful and introspective attitude towards the disease with veterinarians inclined to advise benign neglect: “Monitor its progress and let me know when it gets bad.” This attitude is counter to all recognised policies on neoplastic disease in any species. The owner can ask the veterinarian: “Is this small tumour on my horse going to get smaller, easier and less dangerous with time, or is it going to get bigger, more difficult and more dangerous?” The next question could be: “Would you prefer to do something about it now while it is small, easy and relatively safe, or would you prefer to operate when it is larger, difficult and pathologically dangerous?” Given the melanoma is almost invariably benign when it is small and invariably becomes malignant, the choice is obvious.

The wide variety of treatment options implies that no single method is universally applicable or effective. The surgeon needs to consider the likely prognosis and should avoid any treatment attempts unless there is reasonable expectation of an improved outlook for the horse. Failure to remove the whole tumour usually results in recurrence and, in some cases, such as the equine sarcoid, this can be in a dramatically more aggressive form. Therefore, careful clinical assessment must be performed before embarking on treatment and the owner must be apprised of likely outcomes. Referral to a specialist centre is a valuable option in all cases.

Where melanomas occur in non-grey horses, they usually have a more malignant implication. Squamous cell carcinoma is an aggressive, often invasive tumour but only rarely does it metastasise to other organs. Cutaneous lymphosarcoma is a serious problem but the cutaneous histiocytic form has a much better prognosis than the multicentric forms. What is possible to treat depends primarily on the tumour type and extent, available technology, and skill and experience of the veterinarian.

Squamous cell carcinoma is an aggressive, often invasive tumour but only rarely does it metastasise to other organs

This is part one of the third article in a series written by veterinarians from the Vets with Horsepower team, in partnership with Norbrook Laboratories. The articles are excerpts from the continuing professional development lectures delivered during a recent charity ride.

References
Do you have an up-to-date will?

Why you should join the minority - particularly if you have your own veterinary practice

Adam Bernstein is a freelance writer and small business owner based in Oxfordshire who writes on all matters of interest to small and medium-sized businesses.

Around 60 percent of the UK population does not have a will, including a third of those aged over 55. For any business owner, dying without making a will and/or planning the succession can have a devastating effect, not only on the family but on the business too.

Angharad Lynn, a solicitor in the Private Client team at law firm VWV, says that if you die without a will, your estate will be passed on according to the intestacy rules which changed in October 2014 when the Inheritance and Trustees Powers Act came into force. “Under the new rules,” says Lynn, “if an individual dies, leaving a spouse and children, the spouse will take the statutory legacy (currently £250,000) and the rest of the estate will be divided equally between the spouse and the children. If there are no children, the spouse inherits the whole estate.”

She warns that it is particularly important for unmarried couples to have a will as the intestacy rules take no account of such relationships: “If the couple have children, they will inherit everything. If not, the estate will go to other blood relatives. The surviving unmarried partner will receive nothing.”

Choosing an executor

It’s an executor who administers estates after death. There is no limit on the number you can name in your will. However, the maximum number of people who can take the grant of probate is four.

Lynn says it’s quite normal to appoint a spouse or children as executors but suggests that it is also worth appointing a professional who can ensure that business assets are dealt with as you would wish. This can be an individual, such as your solicitor or accountant; alternatively, many professional firms have a trustee company that can act as an executor. The advantage of this is that while your own lawyer or accountant may have retired (or died) by the time of your death, the trustee company will provide continuity for the appointment of executors, enabling partners from the firm to act. The retirement of your own lawyer will not mean that you need to update your will.

Plan to save on inheritance tax

Tax planning after death must be a consideration and Lynn notes that one of the reliefs from inheritance tax is Business Property Relief (BPR), which is available for a business or an interest in a business, as well as land, buildings, plant and machinery used for the business and shares in unquoted trading companies. “BPR is currently awarded at 50 or 100 percent,” says Lynn, “it’s a very generous relief and it is possible that its use will be curtailed in a future budget. So, when planning your succession, ensure your business will qualify for BPR by checking it meets the scheme requirements.” To qualify, businesses must be trading, and if the proportion of assets held in investments is too high, the business may not be able to use BPR.

“when planning your succession, ensure your business will qualify for BPR by checking it meets the scheme requirements”

Use trusts for flexibility

Business owners often want flexibility after death and it’s for this reason that Lynn says it can be useful to leave business assets in a discretionary trust in the will, with the surviving spouse and children as potential beneficiaries of the trust. “These very flexible arrangements allow decisions to be taken after death, rather than trying to predict at the time the will is made what the situation will be in the future. After death the business interests can be kept in trust and income paid to the children, or shares can be transferred out to the children in appropriate proportions, depending on who is most involved in the business.”

If there is any doubt whether the business assets will qualify for BPR, or if the business owner is concerned that BPR may be curtailed, a trust that has as potential beneficiaries both exempt (the spouse) and non-exempt (the children) beneficiaries can be useful. Lynn explains: “On the death of the business owner, the beneficiaries can ascertain whether the business assets will qualify for BPR. If it does apply, then under s.144 of the Inheritance Tax Act 1984 the trustees may decide to transfer the assets out to the children and wind up the trust. No inheritance tax will be payable.

“If the shares do not qualify for BPR, the assets could be

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“If the shares do not qualify for BPR, the assets could be
transferred out to the spouse, again ensuring that no inheritance tax is payable (thanks to the spouse exemption)." Provided this is done within two years of the death of the business owner, these steps can be "read back" into the will so that it is as if the deceased had left the assets in this way for inheritance tax and capital gains tax purposes.

If there are family members who are not involved in the business, a trust can protect a business. If uninvolved family members inherit shares directly, they may want a say in the running of the business, even if they do not have the skills or experience to be involved. Using a trust means the beneficiaries would not have a direct right to any interest in the business and therefore would have no direct influence.

Lynn says that if you are including a trust in your will, you should also include a letter of wishes to be stored with your will, giving guidance to your trustees about how you envisage the trust being used after your death. "A letter of wishes is not legally binding, and it is important to state that you do not intend to fetter the discretion of the trustees. However, the letter can explain to your trustees how you see the capital and income of the trust fund being used after your death."

**Review business documentation**

Another piece of advice from Lynn is to ensure that business documents, such as the articles of incorporation and shareholders’ agreement, accord with the wishes set out in your will. Further, she says, ensure your business has the correct documentation in place. "Take a partnership – in the absence of a partnership agreement, the provisions of the Partnership Act 1890 apply. Under this Act, on the death of a partner, the partnership is dissolved. This could leave a surviving partner in a very difficult position. They would have to wind up the business, pay the debts of the partnership, and distribute whatever is left."

**Assets that can be left by will**

In your planning, it is important to remember a spouse as assets held jointly can be owned in either of two ways. Lynn says that they can be owned as joint tenants or tenants in common – and this is true for all assets, from your family home to shares in your business: "In essence, if an asset is owned as a joint tenancy, it will pass outside your will, by the law of survivorship. This means that if the shares in your business are held with your spouse as a joint tenancy, they will pass automatically to your spouse on your death and not by your will, regardless of the provisions of the will."

**Conclusion**

The vast majority of people do not have a will in place and when their business interests are considered, they are sending their family into dangerous territory should they die. Quite simply, the wishes of the deceased will not be known; the law will step in and determine how assets are distributed, leaving survivors in a position that they had not expected.
How to deal with sexual harassment in the workplace

What is your liability as an employer and how should you deal with any complaints raised by your staff?

Sexual harassment in the workplace is a hot topic. The #MeToo campaign has brought such behaviour into the media spotlight, which will undoubtedly lead to an increase in complaints. It’s not just Hollywood that has an issue, but many businesses across a number of sectors.

In March 2018, the Equality and Human Rights Commission recommended that a mandatory duty and code of practice be introduced with the aim of eliminating sexual harassment in the workplace by transforming workplace culture, promoting transparency and strengthening legal protections.

Who is protected?
Both female and male employees have the right not to be sexually harassed in the workplace pursuant to the Equality Act 2010.

Are you liable?
As an employer you are vicariously liable for acts of harassment carried out by members of your staff unless you can show you took all reasonable steps to prevent that harassment occurring.

It is also worth remembering that the conduct does not necessarily have to occur in the working environment. Employees can bring complaints when the conduct occurs away from the physical working environment if it is an extension of the workplace, for example at a social function organised by your practice or at a works outing. The Employment Tribunal will study the facts of each case when considering whether or not an employer is liable.

What if there is an existing relationship between the complainant and the perpetrator?
In some cases, employees will be involved with each other outside of the workplace. This scenario makes it even more difficult to establish an employer’s liability. Case law has established that behaviour by a male employee to a female employee which happened in the workplace following the breakdown of a personal relationship amounted to sexual harassment for which the employer was vicariously liable when the male employee was in a more senior role than the female employee.

What should I do if I receive a complaint about a member of my staff?
Any complaint should be properly investigated. Depending on the seriousness of the allegation, you should consider suspending the alleged perpetrator pending that investigation being concluded. In the absence of any specific policy, the complaint should be treated as a grievance and dealt with under the grievance procedure.

If, following the investigation, the grievance is upheld, then the perpetrator should be dealt with under the practice’s disciplinary process in the usual way and remain suspended on full pay until the outcome of that process.

What are the risks of ignoring a complaint?
Ultimately, an employee could bring a claim against the practice in the Employment Tribunal. All judgments are now automatically published online for the world to see, which could cause significant reputational damage to your practice.

Can I dismiss the alleged perpetrator?
Assuming the employee has requisite length of service, if you do not follow a proper procedure to end the employment, you will be at risk of an unfair dismissal claim.

Can I terminate one or other’s employment using a settlement agreement?
Settlement agreements are commonly used to settle employment disputes and are attractive to employers where they are faced with an accusation of inappropriate behaviour as it saves them having to make a factual finding about what happened.

Settlement agreements will usually contain a non-disclosure clause preventing the recipient from disclosing the background to the agreement to third parties. In cases of sexual harassment, the complaint may amount to a protected disclosure under Section 43B of the Employment Rights Act 1996 – sexual harassment is in breach of the Equality Act 2010 and may also endanger the health and safety of the complainant. As such, there is argument as to whether that non-disclosure clause will be valid.

FURTHER ADVICE
For further advice on this subject, contact the author, Clare Riches, at: clare.riches@rudlings-wakelam.co.uk

CLARE RICHES
RUDLINGS WAKELAM
Clare Riches specialises in employment law. She is a solicitor at Rudlings Wakelam who works with many veterinary practices, providing advice in relation to their employment issues. Clare is a member of the Employment Lawyers Association and deals with all aspects of employment.
When will you receive your state pension?

With several updates to the state pension in recent years, find out when you are due to receive yours.

There have been lots of changes to the state pension in recent years and it is important to stay up to date. The new state pension scheme was introduced in April 2016. Men born on or after 6 April 1951 and women born on or after 6 April 1953 now qualify for the new state pension, not the old one. Anyone who reached state pension age before 6 April 2016 falls under the old system – whether or not they have claimed their pension.

The state pension is paid every four weeks in arrears. Tax is never deducted from a state pension, but the amount paid is aggregated with any other income to establish if there is a tax liability and tax is often deducted from another pension through a tax coding.

As one of the changes in 2016, the state pension age increased for people after that date. The age for claiming depends when your state pension age falls. State pension age is due to increase as follows:

- Between December 2018 and October 2020: age 66
- Between 2026 and 2028: age 67
- Between 2044 and 2046: age 68

The government has announced plans to bring this timetable forward, which will see the increase to age 68 happen between 2037 and 2039.

The new state pension maximum is set at £164.35 per week in 2018/19 – and 35 qualifying years are required in order to obtain the full amount. Ten qualifying years are required to be entitled to any amount. A qualifying year is one in which an individual has made adequate National Insurance contributions.

An individual may have a gap in their National Insurance record for a number of reasons – perhaps if they have lived abroad for a period of time, were not working, or were employed on low earnings. A gap in a National Insurance record does not necessarily mean the person will not receive a full new state pension – as long as 35 qualifying years are accumulated by the time they reach state pension age, they will receive payment in full. However, if gaps in a record will prevent full payment, then the person could choose to make voluntary contributions to make up for these, although there are time limits for paying these.

Individuals can get an estimate of their state pension based on their current National Insurance contribution record and the assumption that they will continue to make contributions until they reach state pension age. This service is available online at gov.uk/check-state-pension.

A person can also increase the starting level of their state pension through deferment. The increase they gain from deferring depends on when they reach state pension age – before April 2016, the pension increase as a result of deferring was equivalent to 10.4 percent for every full year deferred. But anyone reaching state pension age after 6 April 2016 will only receive an increase equivalent to 5.8 percent for every full year.

You wouldn’t want to rely solely on the state pension in retirement, but it remains a valuable benefit; private or occupational provision alongside this is essential.

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Merging or acquiring a practice

If you follow the right steps, merging or acquiring a practice may not be as difficult as it first sounds

Merging or acquiring another practice probably seems like a daunting task, but with the right approach it may not be as difficult as you first thought. With careful planning at an early stage and the support of a good professional team, it is possible to minimise your commercial risks and the impact on your valuable time throughout the process.

The deal
It is likely that you will already have a target in mind. If you haven’t got this far, your professional adviser network would be a good place to start. For a fee, you could also instruct a corporate finance adviser to help.

The next step is your “heads of terms”. This is an important document that sets out the terms of the deal. You should note that this document will not be legally binding and either party can “walk away” at any time before the final agreement is signed.

You should also ask the seller to enter into an exclusivity agreement to prevent them from entering any third-party negotiations. Such an agreement also provides a useful timetable during which negotiations are to be concluded.

Transaction structure
Each deal is unique, but some factors should always be considered. Firstly, note the current corporate structure of both practices. Are they sole traders, partnerships or private companies? Each comes with its own transaction challenges and tax considerations.

If the target practice is a company, you would normally buy the shares by way of a share purchase agreement, or “SPA”. Note that most businesses have assets and liabilities – you will be purchasing both.

Alternatively, you can purchase the business and assets of the target. In this scenario, you may pick and choose which assets of the practice you are purchasing.

Due diligence
A thorough due diligence exercise is crucial. You will want to know exactly what assets, goodwill, IP rights, employees, properties, contracts and debts you are acquiring. You will also gain an understanding of the precise liabilities that exist. Legal due diligence is carried out by solicitors, and financial and tax due diligence by your accountants. At this point, it is common for the buyer to be asked to enter into a confidentiality agreement with the seller (otherwise known as a “non-disclosure agreement”).

The acquisition agreement and disclosure letter
The acquisition agreement sets out the full terms of the transaction. It will include the purchase price, the completion logistics and any indemnities, warranties and restrictive covenants or other buyer protections that are agreed. The agreement will be a point of negotiation and may take some time to conclude.

The disclosure letter sits alongside the acquisition agreement. It should disclose all liabilities that are adverse to the warranties in the acquisition agreement. Generally, if the seller makes the necessary disclosures, their position will be protected with regard to a later breach of warranty claim.

Exchange and completion can take place simultaneously or by exchange of contracts followed by completion some days, weeks or months later. For the latter method, the parties will need to consider who will take on the responsibilities and risks during the interim. Any conditions to completion will also need to be considered.

Property
The premises are normally very important to a deal. If the sellers hold the freehold of the property, it can either be transferred on completion or a new lease can be granted. If the property is leasehold, the landlord’s consent may be required to transfer the premises or, alternatively, you may ask the seller to underlet the premises to you. Obtaining the landlord’s consent can take some time.

Employees and pensions
However the deal is structured, the employees’ contracts are usually transferred to you automatically on completion. You will take on the employees with their existing terms. You may also be asked to take on the practice’s current pension scheme or, alternatively, offer a pension scheme to employees that are being transferred to your business.

Seek advice early and plan, plan, plan
Thorough and comprehensive planning will have a significant effect on the outcome of a deal. Seek professional advice; a good legal, accounting and tax team will have been through similar transactions before and they should spot potential difficulties at an early stage.

The drivers in making your decision are likely to include how urgently the funds are required, how much funding is required, what security is available and how much control over your business you are willing to relinquish.

Richard Pull is a Senior Associate in the corporate team at Goodman Derrick LLP. He advises businesses and individual clients in relation to private and public corporate transactions.
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<table>
<thead>
<tr>
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<th>Small Animal Medicine</th>
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<th>Nursing</th>
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<td>09:30 Patellar luxation in the dog</td>
<td>09:30 Nursing the emergency ophthalmic patient</td>
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<td>10:30 Fluid therapy in the emergency patient</td>
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<td>12:00 Treatment of cranial cruciate ligament disease in practice</td>
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<td>Feline hypoadrenocorticism</td>
<td>13:45 Adrenalectomy in the dog</td>
<td>12:45 Anaesthetising the emergency patient</td>
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<tr>
<td>14:30</td>
<td>Acute vomiting and diarrhoea in the dog</td>
<td>14:30 Surgical treatment of feline hyperthyroidism</td>
<td>14:30 Wound care products for my practice - what should I choose?</td>
</tr>
<tr>
<td>16:00</td>
<td>Treatment of dry eye (KCS) in the dog</td>
<td>16:00 Parathyroidectomy in the dog</td>
<td>16:00 Top tips for effective bandaging</td>
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17:00 Hot topics facing the veterinary industry today - Interactive Q&A

<table>
<thead>
<tr>
<th>DAY 2</th>
<th>Small Animal Medicine</th>
<th>Small Animal Surgery</th>
<th>Nursing</th>
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<tr>
<td>09:30</td>
<td>Viral Haemorrhagic Disease in rabbits</td>
<td>09:30 Emergency respiratory tract surgery in the dog</td>
<td>09:30 Running effective weight loss programmes in your practice</td>
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<tr>
<td>10:30</td>
<td>Researching that difficult case - where to find information for free!</td>
<td>10:30 Gastric-dilatation volvulus in the dog</td>
<td>10:30 Brachycephalic breeds - the welfare issues!</td>
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<tr>
<td>12:00</td>
<td>Cardiovascular emergencies and CPR in dogs and cats</td>
<td>12:00 Ophthalmological surgical emergencies in dogs and cats</td>
<td>12:00 Anaesthesia in pet rabbits</td>
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<tr>
<td>12:45</td>
<td>The dangers within your dental unit</td>
<td>13:45 Perineal surgery in the dog</td>
<td>12:45 Resolving conflict in practice</td>
</tr>
<tr>
<td>14:30</td>
<td>Medical therapeutic lasers</td>
<td>14:30 Common surgical conditions in the pet rabbit</td>
<td>14:30 Practical approach to multi-modal analgesia</td>
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<td>16:00</td>
<td>Blood transfusions in dogs and cats</td>
<td>16:00 Ear surgery in the dog explained</td>
<td>16:00 Triage and assessment of the emergency patient</td>
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</tbody>
</table>

Programme subject to change.

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VETS NORTH

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How to prepare for subject access requests

The EU General Data Protection Regulation (GDPR) and Data Protection Act 2018 have now been in force for nearly five months, and our veterinary clients are starting to feel the effects in practice. One of the most common queries we are fielding is “How do I deal with a subject access request (SAR) under the GDPR?”

The right of access grants a data subject the right to obtain a copy of their personal data as well as other supplementary information. This is usually referred to as an SAR. SARs, alongside a GDPR compliant privacy policy, help data subjects to understand how and why their personal data is being processed, and allows them to check that it is being done in a lawful manner.

How will this affect my practice?
Following the implementation of the GDPR, we have highlighted some key problem areas that our clients have asked for help with when dealing with SARs:

1. Dealing with requests in a shorter timescale. The previous 40-day window has been shortened to one month.
2. SARs will generally (but not always) be free and data subjects will be entitled to receive the information in an electronic format, or in a format requested by them. Previously, a practice could charge a £10 fee.
3. Handling large numbers of indiscriminate SARs (blanket requests for “all data”).

The reality of implementation appears to have taken many practices by surprise. The greater the volume of personal data a practice holds, the harder it is to respond quickly and in a compliant manner. We recommend implementing a clear procedure for handling SARs and to provide data subjects with a tailored SAR form, to request details of the specific information they seek and reduce the number of indiscriminate SARs requesting all personal data held by the practice about that data subject.

Recognising a subject access request
The GDPR does not specify a specific format that qualifies as a valid SAR. A data subject can therefore make an SAR in a multitude of different ways, either verbally or in writing. An SAR can also be made to any member or part of your practice (including by social media) and does not have to be to a specific person or contact point. Again, having a clearly signposted and accessible SAR form will assist in streamlining the process.

Responding to a subject access request
Under the GDPR, you must provide the data subject with the information requested by an SAR within one month and with undue delay. You may be entitled to extend this period for particularly complex requests.

Where you are asking for further information, such as to verify the data subject’s identification or asking the data subject for further information on what they require, it is advisable that you set the information out clearly and provide dates in your letter to the data subject to provide proof of correspondence.

If you would like further advice on GDPR, please contact Dan De Saulles at: ddesaulles@hcrlaw.com
When we assess the net worth of a practice, there is often a glaring omission when it comes to assets: people – both clients and the practice team. It is important that a practice does its utmost to recruit the right individual for a position. There is also a responsibility to ensure the position is right for that individual. So, what can you do to optimise recruitment and retention?

Recruiting the right person for the job

Do you know who you’re looking for? What type of person do you need? What attributes are negotiable, and which are essential? Are there any gaps in your current team? Do you need a leader or a follower? Answering these questions will help you focus on finding who you need, rather than being distracted by “nice-to-haves”.

Look beyond skills and qualifications to find someone who fits your team. Behavioural profiling can help by:

- Increasing the chances of hiring the right individual first time, by matching person to role.
- Informing competency-based interview questions.
- Identifying any “interview smokescreens” where the interviewee may be tempted to say what you want to hear rather than being honest.
- Enabling communication tailored to personality type, leading to more open and honest answers.
- Creating a common language where feedback is direct but need not be offensive.

Plan carefully for recruitment, allocate sufficient time to ensure the best outcome, and remember, the cost of employing the wrong person is high.

Retaining engaged employees

Employees’ visions need to be in line with practice vision. Discuss what provides fulfilment within their role, and why they chose it. This should also be discussed at interview. Development is crucial. Knowing team members’ aspirations and ensuring that loyalty is rewarded is key to personal development and motivation. Contracts and appraisals should detail this fair exchange.

In the CIPD UK Working Lives Survey (April 2018), 6,000 responses from UK workers provided a picture of what job quality looks like. The “seven dimensions for consideration” certainly represent the veterinary sector. These are: voice and representation; pay and benefits; terms of employment; work-life balance; job design and the nature of work; social support and cohesion; and health and well-being.

Rewarding beyond remuneration

Many people automatically equate “reward” with remuneration when talking about employee retention. Remuneration and benefits are influencing factors when employees are deciding on jobs, but once employed, these are not the only factors to consider.

Summary

Your people are your greatest asset; you must allocate appropriate resources to this crucial aspect of your business. Work at your team’s cohesiveness but recognise that team members are individuals; one size won’t fit all. If you’re finding yourself with recruitment or retention challenges, avoid falling into a constant cycle of “panic buying” recruitment. Understand causes rather than symptoms and take action to resolve issues.

KIRSTY STURMAN

Kirsty Sturman, BSc (Hons), Dip Stress Management and Wellbeing, is a trainer and consultant, with expertise in time management, stress management, communication, resilience, leadership and coaching.

Autumn 2018 Seminars and Workshops

Managing Difficult Situations
Would you like support in dealing with difficult situations at work, be them client focused or otherwise?

- Friday 2 November 2018
- Cambridge

Introduction to the UK Veterinary Profession
Are you an overseas veterinary professional looking to settle into UK veterinary life?

- Wednesday 21 November
- Cambridge
“The public should be guaranteed a certain standard from vet practices”

Whatever your criticism of the PSS, I think the public should be guaranteed a certain standard from vet practices. The fact that it is currently voluntary would, I think, surprise the public. They may not know what the PSS is if asked, but I bet they assume there is some sort of standard that vet practices must reach.

I assume my dentist has some sort of practice inspection, but I couldn’t name it. I inspect kennels and catteries for the council. Without their annual inspection, they would lose their licence and business. I always find it a bit ironic that I check their sneeze barriers, cleaning protocols, records, etc, but have no obligation to do the same as someone running a vet practice. (For the record, our practice has passed its PSS inspection.)

As individuals, we also have to live to, and practise our clinical work to, a certain standard. This is, as we all know, enforced by the RCVS. Failure to live and work to this standard can lead to us losing our veterinary livelihood, identity, life’s work... Although the RCVS is the ultimate arbiter of vets’ standards, I have been struck recently by how our own standards are set very high. This has been evident at work with colleagues and from being exposed to the daily chatter on a vets-only Facebook group.

Many vets have huge expectations for what they should be able to do/provide, and what the RCVS expects of them. It is the gap between these self-imposed highest of standards (often based on university experiences or human medicine comparisons) and the realistic level of care achievable in practice where stress and worry set in. The narrower the gap, the less worry. And I want to add in an important point here – the standard expected by the RCVS is actually pretty fair. They do not expect you to function as a one-vet university department or referral centre. To narrow the gap between what we expect from ourselves and what we can do is something that can be approached from both ends, raising standards in the practice and making sure that vets and nurses are realistic in their self-expectations.

As well as standards in the workplace, we are expected to maintain a certain standard of behaviour out of work, or again, could lose our MRCVS. This is something of a burden, but we are a profession, and although I hate any sort of monitoring or interference in my life, I think it is reasonable to expect the profession at large to behave to a certain standard. As a non-veterinary example – our eldest is at an age where she is starting to go to parties but is way too young to be drinking. Recently, she was begging us to let her go to a sleepover party. She clinched it by saying “Her mum is a teacher; if any drinking went on she could lose her job.” Professional standards outside the workplace in action.

My biggest failure in personal standards in public happened last year. I had just started to get into open water swimming and was out in the sea just before school pickup. As it turns out, I am a very slow swimmer compared to my running abilities and misjudged the return to shore. I ran up the beach, jumped in the car and drove up to school. All the decent car parking spots had gone so I abandoned the car and ran up the road about half a mile, barefoot in a wet T-shirt and trunks, dripping with an unpleasant mix of seawater and sweat. I made it to the playground about a minute before the bell went and tried to look inconspicuous – a mid-life crisis made real – sweating, puffing, beetroot red and barely dressed. A little preschool-aged girl looked at me and smiled, tugged her mum’s sleeve and pointed at me: “Mummy, mummy,” she said, “that’s our vet.”
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**SELF TAPPING SCREW - DIAMETER (MM)**

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**SELF TAPPING LOCKING TITANIUM SCREW - DIAMETER (MM)**

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<td>Star drive screwdriver T8 - 2.4/2.7mm</td>
<td>Star drive screwdriver T15 - 3.5mm</td>
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**Self Tapping Screws and Screwdrivers, Drill Bits and DCP Load/Neutral Guides**

**Self Tapping Screw - Diameter (mm)**

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**Screwdriver Type for the Self tapping Screw**

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<th>Hex screwdriver 1.5mm - for 1.5/2.0/2.4mm screws</th>
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<th>Hex screwdriver 3.5mm - for 4.5mm screws</th>
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**Self Tapping Locking Titanium Screw - Diameter (mm)**

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**Screwdriver Type for the Self tapping Screw**

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<th>Stardrive screwdriver T15 - 3.5mm</th>
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**Plate Dimensions**

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<td>2.6 ± 0.15</td>
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<td>4+5</td>
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<td>5+6</td>
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<tr>
<td><strong>3.5mm</strong></td>
<td>2+2</td>
<td>57.7</td>
<td>11.0 ± 0.15</td>
<td>3.3 ± 0.15</td>
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<td>3+4</td>
<td>96.0</td>
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<td>4+4</td>
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<td>6+6</td>
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**TPLO Locking Plate Titanium**

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<th>Number of holes</th>
<th>Total length (mm)</th>
<th>Width (mm)</th>
<th>Thickness (mm)</th>
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<td>30.3</td>
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<td>35.0</td>
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<tr>
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<td>45.6</td>
<td>head - 17</td>
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<td>total - 8.5</td>
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<td>total - 11.4</td>
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</table>
### How to calculate the TPLO rotation

**PREOPERATIVE ANGLE OF THE TIBIAL PLATEAU**

| Saw Blade (mm) | 15°  | 16°  | 17°  | 18°  | 19°  | 20°  | 21°  | 22°  | 23°  | 24°  | 25°  | 26°  | 27°  | 28°  | 29°  | 30°  | 31°  | 32°  | 33°  | 34°  | 35°  | 36°  | 37°  | 38°  | 39°  | 40°  |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 12            | 2.0  | 2.2  | 2.4  | 2.6  | 2.9  | 3.1  | 3.3  | 3.5  | 3.7  | 3.9  | 4.1  | 4.3  | 4.5  | 4.7  | 4.9  | 5.1  | 5.3  | 5.5  | 5.7  | 5.9  | 6.1  | 6.3  | 6.4  | 6.6  | 6.8  | 7    |
| 15            | 2.6  | 2.8  | 3.1  | 3.3  | 3.6  | 3.8  | 4.1  | 4.3  | 4.6  | 4.9  | 5.1  | 5.4  | 5.6  | 5.9  | 6.1  | 6.4  | 6.6  | 6.9  | 7.1  | 7.4  | 7.6  | 7.9  | 8.1  | 8.4  | 8.6  | 8.8  |
| 18            | 3.1  | 3.4  | 3.7  | 4.0  | 4.3  | 4.6  | 4.9  | 5.2  | 5.5  | 5.8  | 6.1  | 6.5  | 6.8  | 7.1  | 7.4  | 7.7  | 8    | 8.3  | 8.6  | 8.9  | 9.2  | 9.5  | 9.8  | 10.1 | 10.3 | 10.6 |
| 21            | 3.6  | 4.0  | 4.3  | 4.7  | 5.1  | 5.4  | 5.8  | 6.1  | 6.5  | 6.8  | 7.2  | 7.5  | 7.9  | 8.3  | 8.6  | 9    | 9.3  | 9.7  | 10  | 10.4 | 10.7 | 11.1 | 11.4 | 11.8 | 12.1 | 12.4 |
| 24            | 4.1  | 4.5  | 5.0  | 5.4  | 5.8  | 6.2  | 6.6  | 7    | 7.4  | 7.8  | 8.2  | 8.6  | 9    | 9.5  | 9.9  | 10.3 | 10.7 | 11.1 | 11.5 | 11.9 | 12.3 | 12.7 | 13.1 | 13.5 | 13.9 | 14.3 |
| 27            | 4.7  | 5.1  | 5.6  | 6.0  | 6.5  | 7    | 7.4  | 7.9  | 8.4  | 8.8  | 9.3  | 9.7  | 10.2 | 10.6 | 11.1 | 11.6 | 12  | 12.5 | 12.9 | 13.4 | 13.8 | 14.3 | 14.7 | 15.2 | 15.6 | 16.1 |
| 30            | 5.2  | 5.7  | 6.2  | 6.7  | 7.2  | 7.8  | 8.3  | 8.8  | 9.3  | 9.8  | 10.3 | 10.8 | 11.3 | 11.8 | 12.3 | 12.9 | 13.4 | 13.9 | 14.4 | 14.9 | 15.4 | 15.9 | 16.4 | 16.9 | 17.4 | 17.9 |

**Rotation (mm) to provide the resulting 5°TPA**

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For more information, contact:

- info@blueveterinary.com
- +44 1793 384 018
- www.blueveterinary.com
PREOPERATIVE ANGLE OF THE TIBIAL PLATEAU

15º 16º 17º 18º 19º 20º 21º 22º 23º 24º 25º 26º 27º 28º 29º 30º 31º 32º 33º 34º 35º 36º 37º 38º 39º 40º

TPLO

Saw Blade

12

2.0 2.2 2.4 2.6 2.9 3.1 3.3 3.5 3.7 3.9 4.1 4.3 4.5 4.7 4.9 5.1 5.3 5.5 5.7 5.9 6.1 6.3 6.4 6.6 6.8 7

15

2.6 2.8 3.1 3.3 3.6 3.8 4.1 4.3 4.6 4.9 5.1 5.4 5.6 5.9 6.1 6.4 6.6 6.9 7.1 7.4 7.6 7.9 8.1 8.4 8.6 8.8

18

3.1 3.4 3.7 4 4.3 4.6 4.9 5.2 5.5 5.8 6.1 6.5 6.8 7.1 7.4 7.7 8 8.3 8.6 8.9 9.2 9.5 9.8 10 10.3 10.6

21

3.6 4 4.3 4.7 5 5.4 5.8 6.1 6.5 6.8 7.2 7.5 7.9 8.3 8.6 9 9.3 9.7 10 10.4 10.7 11.1 11.4 11.8 12.1 12.4

24

4.1 4.5 5 5.4 5.8 6.2 6.6 7 7.4 7.8 8.2 8.6 9 9.5 9.9 10.3 10.7 11.1 11.5 11.9 12.3 12.7 13.1 13.5 13.9 14.3

27

4.7 5.1 5.6 6 6.5 7 7.4 7.9 8.4 8.8 9.3 9.7 10.2 10.6 11.1 11.6 12 12.5 12.9 13.4 13.8 14.3 14.7 15.2 15.6 16.1

30

5.2 5.7 6.2 6.7 7.2 7.8 8.3 8.8 9.3 9.8 10.3 10.8 11.3 11.8 12.3 12.9 13.4 13.9 14.4 14.9 15.4 15.9 16.4 16.9 17.4 17.9

Rotation (mm) to provide the resulting 5ºTPA

How to calculate the TPLO rotation

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